

Appendix J.
Transportation Assessment



MEMORANDUM

TO: Joel Bareng, Ian Pari, and Cesar Romo, City of Santa Clarita

FROM: Patrick A. Gibson, P.E., PTOE, Richard Gibson, and David Roachford

DATE: February 1, 2024

RE: EIR Supplemental Transportation Analysis for the Revised Riverview Mixed-Use Project
Santa Clarita, California

Ref: J1977

Gibson Transportation Consulting, Inc. (GTC) prepared two transportation studies to evaluate the potential environmental and operational effects of the Riverview Mixed-Use Project (Original Project) as part of the Project entitlement process in the City of Santa Clarita (City): *Access Study for the Riverview Mixed-Use Project, Soledad Canyon Road, Santa Clarita, California* (November 9, 2022) and *Transportation Assessment for the Riverview Mixed-Use Development Project, Santa Clarita, California* (August 2023).

Both studies were reviewed by the City's consultant and were approved for inclusion in the draft environmental impact report (Draft EIR) for the Project. Since the publication of the studies, the land uses within the Original Project have changed.

GTC was asked by City staff to evaluate the Revised Project land use plan to determine the potential environmental and operational impacts of the Revised Project on the area transportation system. This memorandum summarizes the analysis.

PROJECT DESCRIPTION

The Project Site is located on the south side of Soledad Canyon Road on the site of the former Saugus Raceway, as shown in Figure 1.

Original Project

As shown in Figure 2, the Original Project consisted of 318 dwelling units, including several configurations of both attached and detached single family units, and a commercial movie and television studio with six sound stages totaling approximately 66,000 square feet (sf) of stages and supporting production offices on the western portion of the Project Site.

The residential portion of the Project would provide a total of 839 parking spaces, while the studio component would provide 370 automobile spaces plus 60 spaces for production and delivery trucks, approximately 50 of which would be provided in marked spaces within the parking lots and 10 spaces of which would be provided in base camps immediately adjacent to the stages.

Revised Project

The Revised Project retains all the residential components of the Original Project and changes the studio component to a manufacturing/industrial building located on the western portion of the Project Site (the site of the previously proposed studio).

As shown in Figure 3, the manufacturing building will be a single building containing 116,790 sf of manufacturing/industrial space and 5,000 sf of ancillary office space and will provide 144 automobile parking spaces including 25 electric vehicle spaces and 22 parking spaces for truck trailers.

PROJECT ACCESS

Residential access remains as proposed in the Original Project and shown in Figure 2.

The manufacturing building would be accessed via a main driveway (Main Manufacturing Driveway) at the northeast corner of the manufacturing site and a minor right-turn in-and-out driveway at the northwest corner of the site, as shown in Figure 3. The developer has requested that the Main Manufacturing Driveway be controlled by a traffic signal.

All Project driveways would be served by Soledad Canyon Road.

TRIP GENERATION ANALYSIS

Revised Project Trip Generation

Table 1 shows the daily, morning peak hour and afternoon peak hour trip generation for the Revised Project, based on *Trip Generation Manual, 11th Edition* (Institute of Transportation Engineers, 2021) rates.

As shown, the 318 residential dwelling units would generate 2,435 vehicle trips per day, with 167 trips occurring in the morning peak hour and 214 in afternoon peak hour. As expected, the residential traffic flow would be primarily outbound in the morning and inbound in the afternoon.

The manufacturing and ancillary office uses would generate 609 trips per day, with 87 trips occurring in the morning peak hour and 93 trips in the afternoon peak hour.

For informational purposes, the commercial portion of the Revised Project was tested as both a manufacturing use and a light industrial use and the trip generation results were very similar.

Trip Generation Comparison

Table 2 compares the total trip generation of the Revised Project to that of the Original Project. As shown, the Revised Project generates 419 fewer trips per day than the Original Project. The morning and afternoon peak hour trips are comparable between the Original and Revised

Projects, with a reduction of five trips in the morning and 25 trips in the afternoon peak hours as a result of the change in land use from a studio to a manufacturing building.

EIR REVIEW

The Transportation Assessment for the Original Project found no significant impacts in any of the following analysis categories:

- Consistency with Policy
- Vehicle Miles Traveled (VMT)
- Geometric Design and Land Use Hazards
- Freeway Safety
- Pedestrian, Bicycle, and Transit Analysis

The Revised Project is consistent with the findings in all the above areas and, therefore, the conclusions of the Transportation Assessment for the Original Project would apply to the Revised Project.

The Revised Project generates fewer trips than the Original Project and meets the five guidelines for screening out of the VMT analysis.

OPERATIONAL ANALYSIS

Figure 4 shows the location of the 16 study intersections evaluated for both the Original Project and the Revised Project.

Trip Distribution

Given the distribution of residential and commercial land uses in the area, it was assumed that the residential trips would be split 60% to/from the west and 40% to/from the east. The manufacturing trips are likely to be more regionally distributed via Interstate 5 (I-5) and, therefore, the distribution was assumed to be 66% to/from the west and 33% to/from the east. These assumptions are consistent with other recent traffic impact studies which were based on the Santa Clarita Valley Consolidated Traffic Model. Figure 5 shows the distribution of the Revised Project manufacturing trips through the 16 study intersections.

Project Traffic Assignment

The Revised Project residential and manufacturing trip generation totals were assigned to the Project driveways according to the distribution patterns described above. The resulting assignment of Revised Project trips (residential and manufacturing) assigned to the Project driveways and to the study intersections is shown in Figure 6.

Existing and Future Traffic Levels

Figures 7 shows the Existing 2023 volumes and Figure 8 shows the Future without Project (Year 2026) volumes at the study intersections. Figures 9 and 10, respectively, show the Existing and Future base conditions with the addition of Revised Project traffic.

Capacity Calculations

The level of service (LOS) performance of the 16 study intersections under morning and afternoon peak hour conditions was calculated using the Highway Capacity Manual delay methodology and Synchro software, as required by the City.

Existing with Revised Project Conditions. As shown in Table 3, under Existing with Revised Project conditions, only one intersection met the criteria for operational impact:

<u>Intersection</u>	<u>Peak Hour</u>	<u>LOS</u>	<u>Increase in Delay (seconds)</u>
7. Bouquet Canyon Rd & Valencia Blvd/Soledad Canyon Rd	PM	F	2.7

With the Original Project, the increased delay at this location was 3.5 seconds.

Future Plus Revised Project Conditions. As shown in Table 4, under Future with Revised Project conditions, two intersections met the criteria for an operational impact:

<u>Intersection</u>	<u>Peak Hour</u>	<u>LOS</u>	<u>Increase in Delay (seconds)</u>
7. Bouquet Canyon Rd & Valencia Blvd/Soledad Canyon Rd	PM	F	6.6
13. Golden Valley Rd & Center Pointe Dr	PM	F	5.2

With the Original Project, the increased delay at these two locations was 7.7 and 5.7 seconds, respectively.

Thus, the Revised Project experiences the same number of operational impacts, with slightly lower levels of increased delay, as the Original Project.

The capacity calculation worksheets are provided in the Attachment.

Revised Project Intersection Operational Improvements

As part of the Project Design, the Project would add an eastbound U-turn lane at the intersection of Soledad Canyon Road & Commuter Way to serve the traffic leaving the residential portion of the Project and traveling west toward I-5. The lane would be added into the existing center median

along Soledad Canyon Road. This improvement would require modifications to the traffic signal equipment and phasing at the location.

To improve study intersections affected by Revised Project traffic, the Revised Project proposes to implement the same two intersection improvements proposed by the Original Project:

- At Intersection #7, Bouquet Canyon Road & Valencia Boulevard / Soledad Canyon Road, the Project would modify the eastbound approach to include a new right-turn lane. The modification can be accomplished within the existing right-of-way by shifting the existing center median to the north and restriping the existing travel lanes. A small widening would be necessary along the north side of Valencia Boulevard. The new eastbound approach would consist of three left-turn lanes, three through lanes, and one right-turn lane. Further, the Revised Project proposes an additional receiving lane on the east leg of the intersection that would provide a trap right-turn lane into the nearby commercial area, which includes a gas station. The additional receiving lane would allow the northbound right-turn movement to more easily flow into eastbound traffic.
- At Intersection #13, Golden Valley Road & Center Pointe Drive, the Project would modify the northbound approach by widening the intersection to add a separate right-turn lane. The revised lane configuration for the northbound approach would be one left-turn lane, three through lanes, and one right-turn lane.

Conceptual drawings of the proposed improvements at Intersections 7 and 13 are included in *Transportation Assessment for the Riverview Mixed-Use Development Project*.

With the intersection operational improvement described above in place, the operational effects of the Revised Project are fully mitigated.

Queue Lengths at Driveways

Per the City's Unified Development Code, Section 17.53.020, project access locations shall have a minimum stacking distance of 100 feet from the face of curb at signalized locations and a minimum stacking distance of 40 feet from the face of curb at non-signalized locations. This is to be measured from the final curb line (flow line) to the first parking stall or drive aisle. The proposed access plan meets these criteria in all cases.

Queue length studies were conducted and summarized in Table 5, which shows the peak hour volumes, turn lane storage distance, and turn lane queues predicted by the Synchro analyses. As shown, all turn lanes and intersection storage lengths are adequately sized to accommodate the peak hour turning movement queues in both peak hours for the Revised Project.

Driveway Operations

The Main Manufacturing Driveway would operate at LOS A in the morning and afternoon peak hours under both Existing and Future with Revised Project conditions. The signalization of the Main Manufacturing Driveway would have minimal impact on the operation of Soledad Canyon Road.

Given the number of heavy trucks in and out of the manufacturing site per day, the signalization of the Main Manufacturing Driveway is critically important from a safety standpoint. Operating speeds along Soledad Canyon Road are high and turning trucks in and out of the manufacturing site without the traffic signal would present collision hazards for the arterial street traffic.

SIGNAL WARRANTS

The Main Manufacturing Driveway was evaluated to determine whether it met traffic signal warrants per *California Manual on Uniform Traffic Control Devices* (California Department of Transportation), as required by the City.

When passenger car equivalent factors were applied to the Revised Project truck trips in and out of the manufacturing site, the site would generate a total of 770 automobile-equivalent trips per day.

Table 6 shows the inbound and outbound trip generation of the manufacturing site on an hour-by-hour basis throughout the day and identifies the peak, fourth- and eighth-highest hour of the day for Main Manufacturing Driveway traffic.

As shown, the Main Manufacturing Driveway meets the Peak- and Eight-Hour Warrants of 100 and 56 minor street trips, respectively, and is within one vehicle per hour of meeting the Four-Hour warrant as well. These warrant levels have been adjusted to account for the operating speeds along Soledad Canyon Road.

SUMMARY AND CONCLUSION

The Revised Project land use plan with 121,790 sf of manufacturing/industrial uses would generate slightly lower trip levels than the Original Project that included the studio uses.

The Revised Project would have lesser, but similar, operational impacts as the Original Project on one intersection (Bouquet Canyon Road & Valencia Boulevard / Soledad Canyon Road) under Existing with Revised Project conditions and two intersections (Bouquet Canyon Road & Valencia Boulevard / Soledad Canyon Road and Golden Valley Road & Center Pointe Drive) under Future with Revised Project conditions. Operational improvements identified in the Transportation Assessment for the Original Project would also fully mitigate the operational effects of the Revised Project.

The Revised Project proposes the installation of a traffic signal at the Main Manufacturing Driveway, which would work from a public roadway operational standpoint without undue operational effects along Soledad Canyon Road. The proposed signalized driveway meets State of California signal warrants and would operate at LOS A in both the morning and afternoon peak hours.

Based on this analysis, the Original Project conclusion of no significant environmental transportation impacts remains valid for the Revised Project.



LEGEND

 Project Site



PROJECT SITE OVERVIEW

FIGURE
1

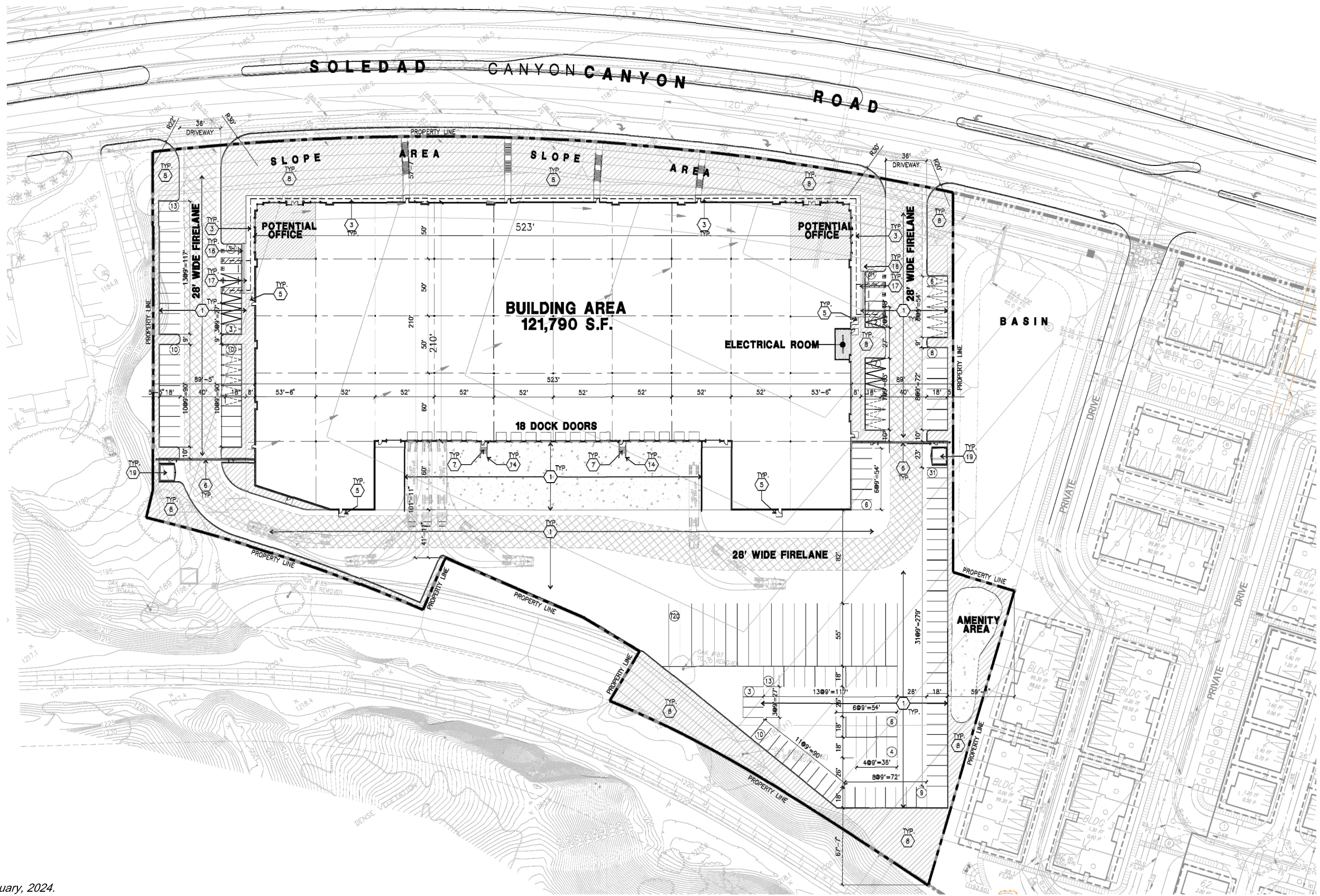


Source: Alliance. October, 2021.



ORIGINAL PROJECT SITE PLAN

FIGURE
2

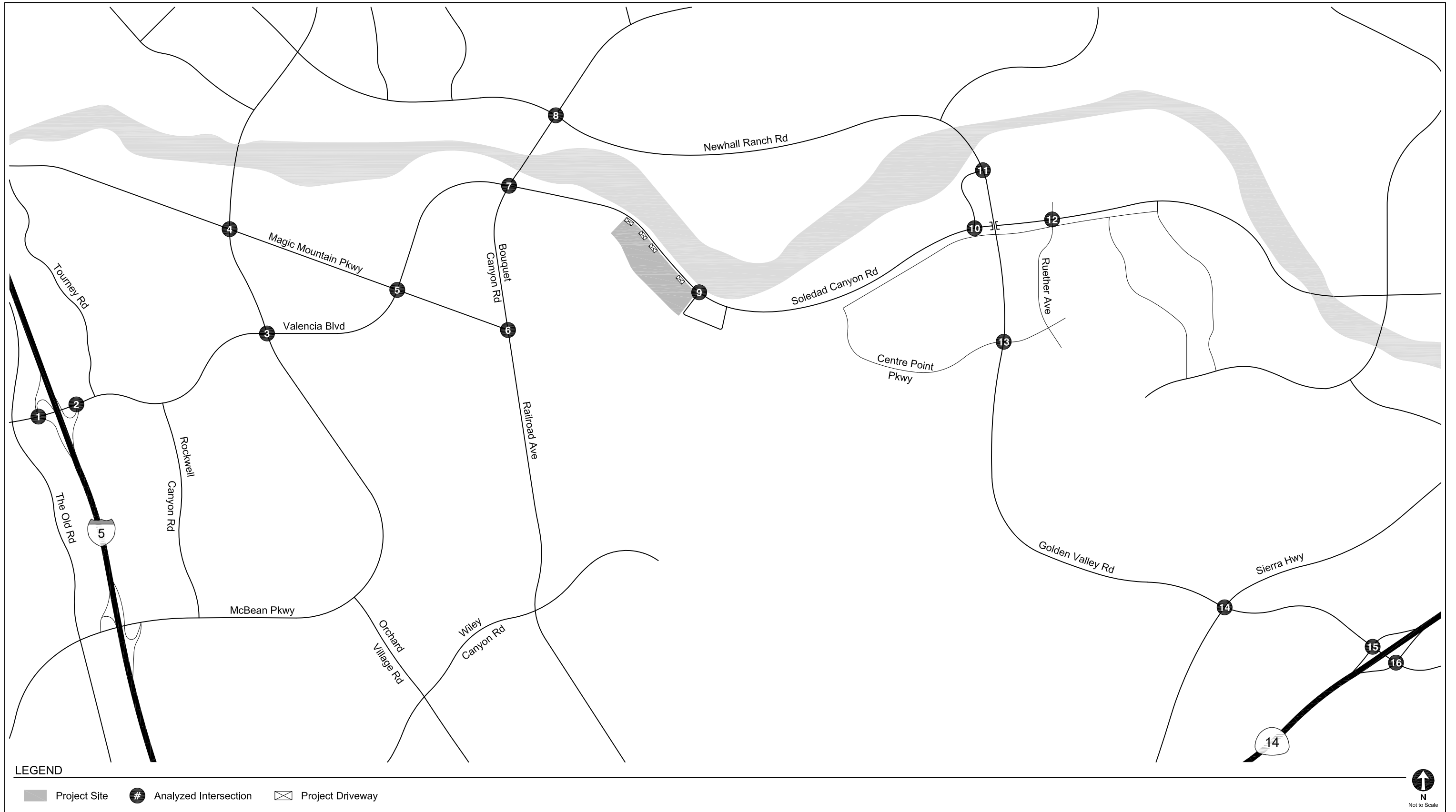


Source: HPA Architecture. January, 2024.



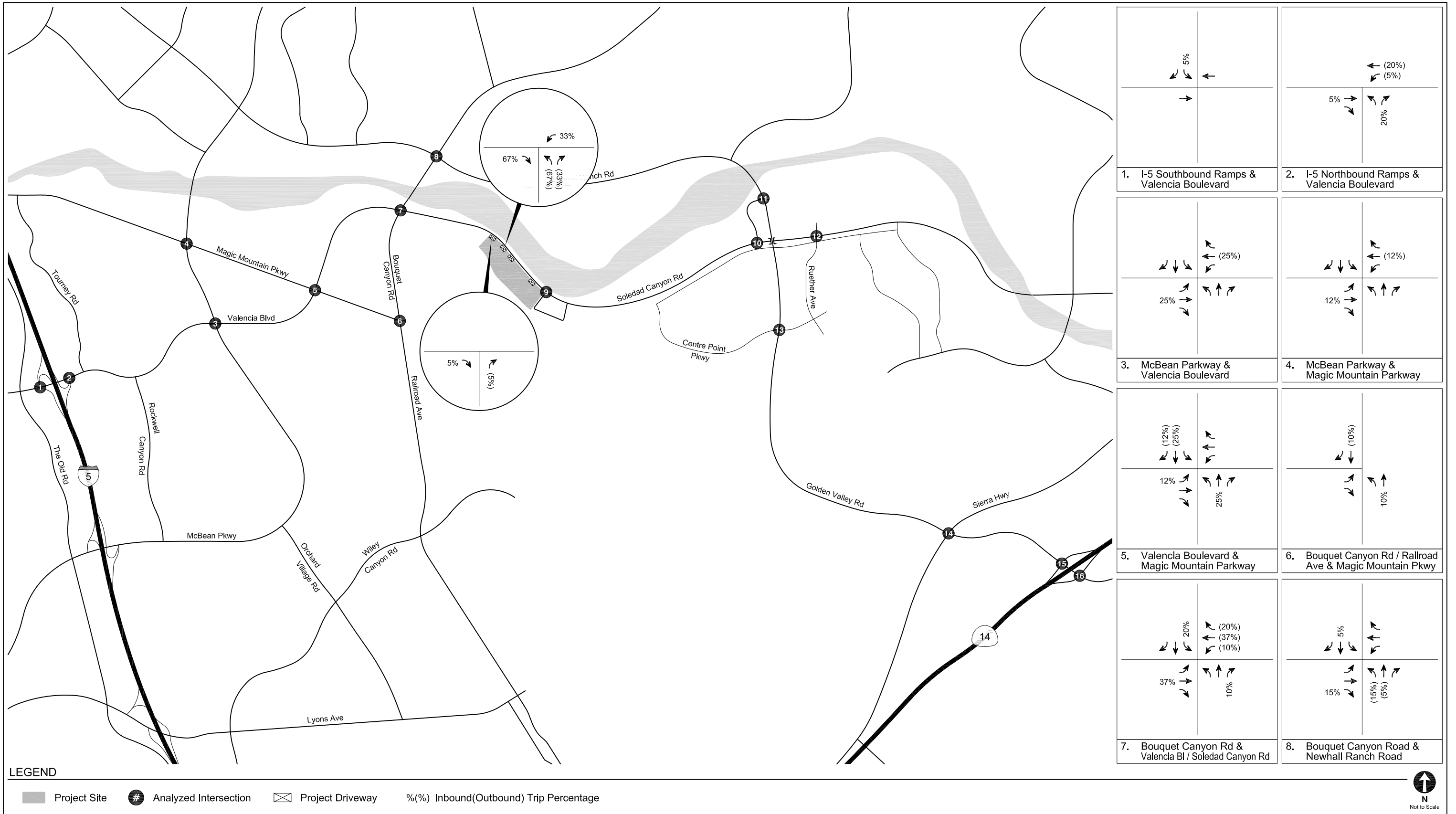
REVISED PROJECT
MANUFACTURING SITE PLAN

FIGURE
3



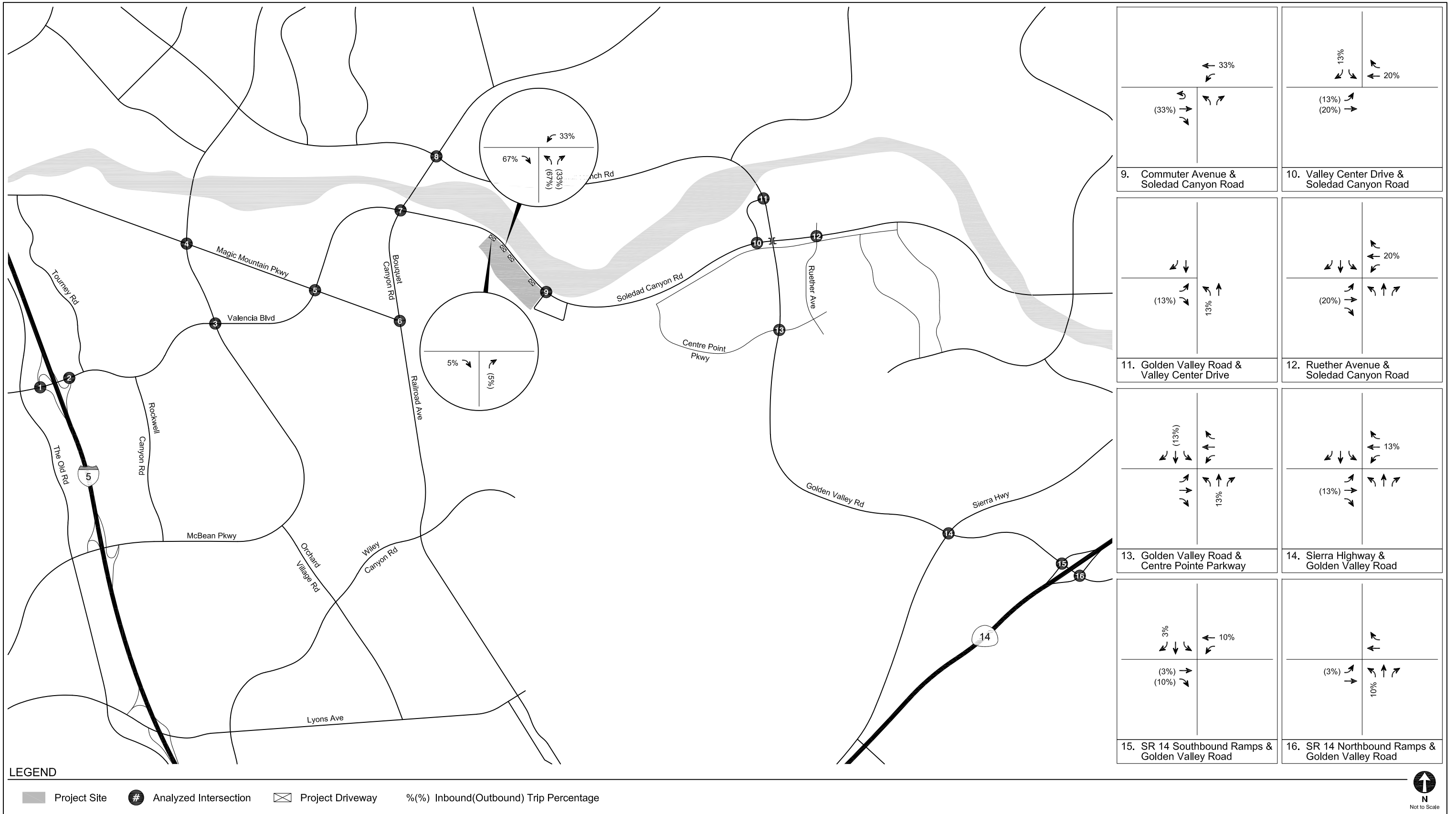
STUDY AREA AND ANALYZED INTERSECTIONS

FIGURE 4



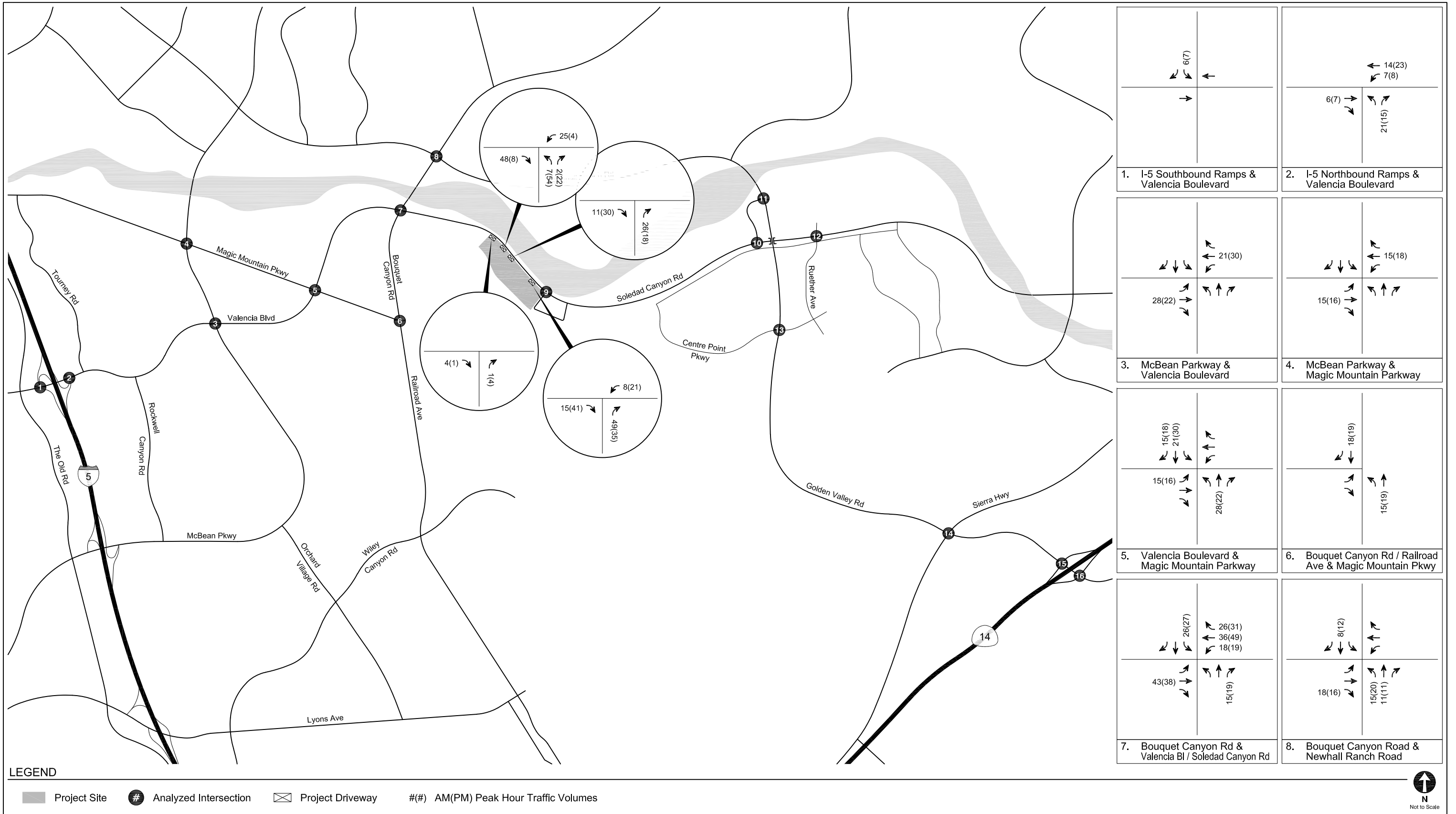
PROJECT TRIP DISTRIBUTION
MANUFACTURING

FIGURE
5



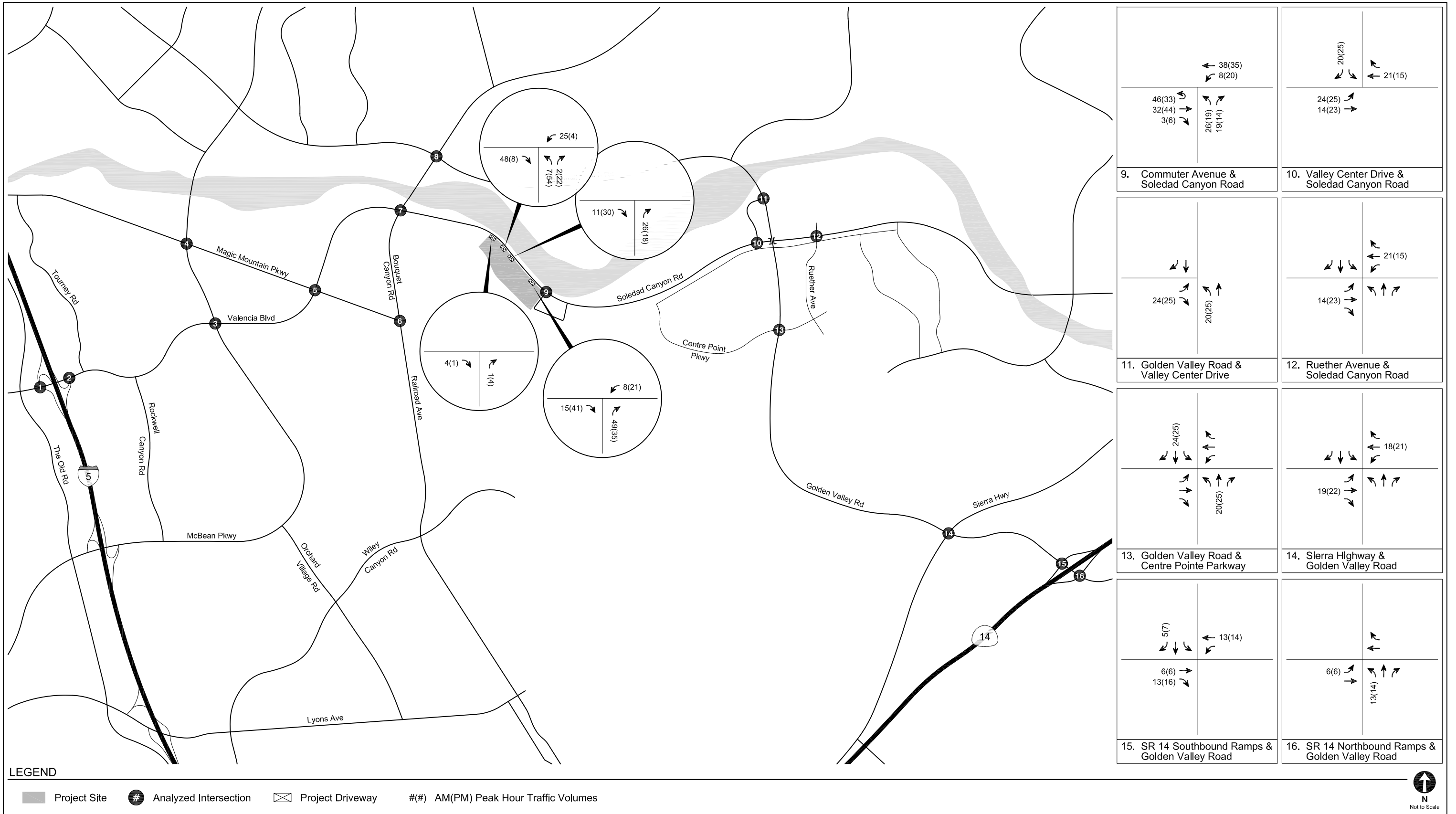
PROJECT TRIP DISTRIBUTION
MANUFACTURING

FIGURE
5 (CONT.)



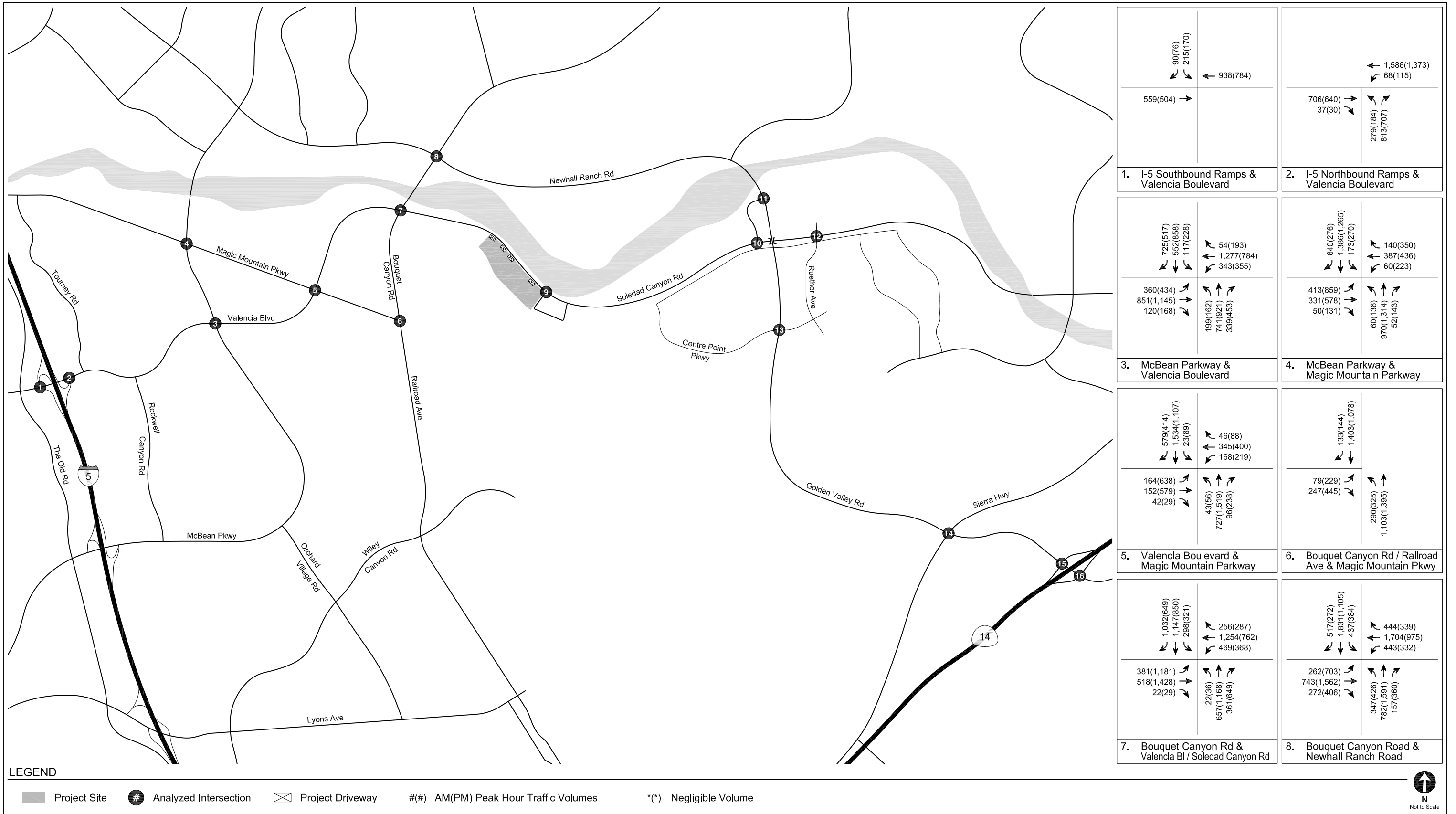
PROJECT-ONLY
PEAK HOUR TRAFFIC VOLUMES

FIGURE
6



PROJECT-ONLY
PEAK HOUR TRAFFIC VOLUMES

FIGURE
6 (CONT.)

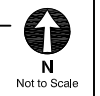


EXISTING CONDITIONS (YEAR 2023)
PEAK HOUR TRAFFIC VOLUMES

FIGURE
7

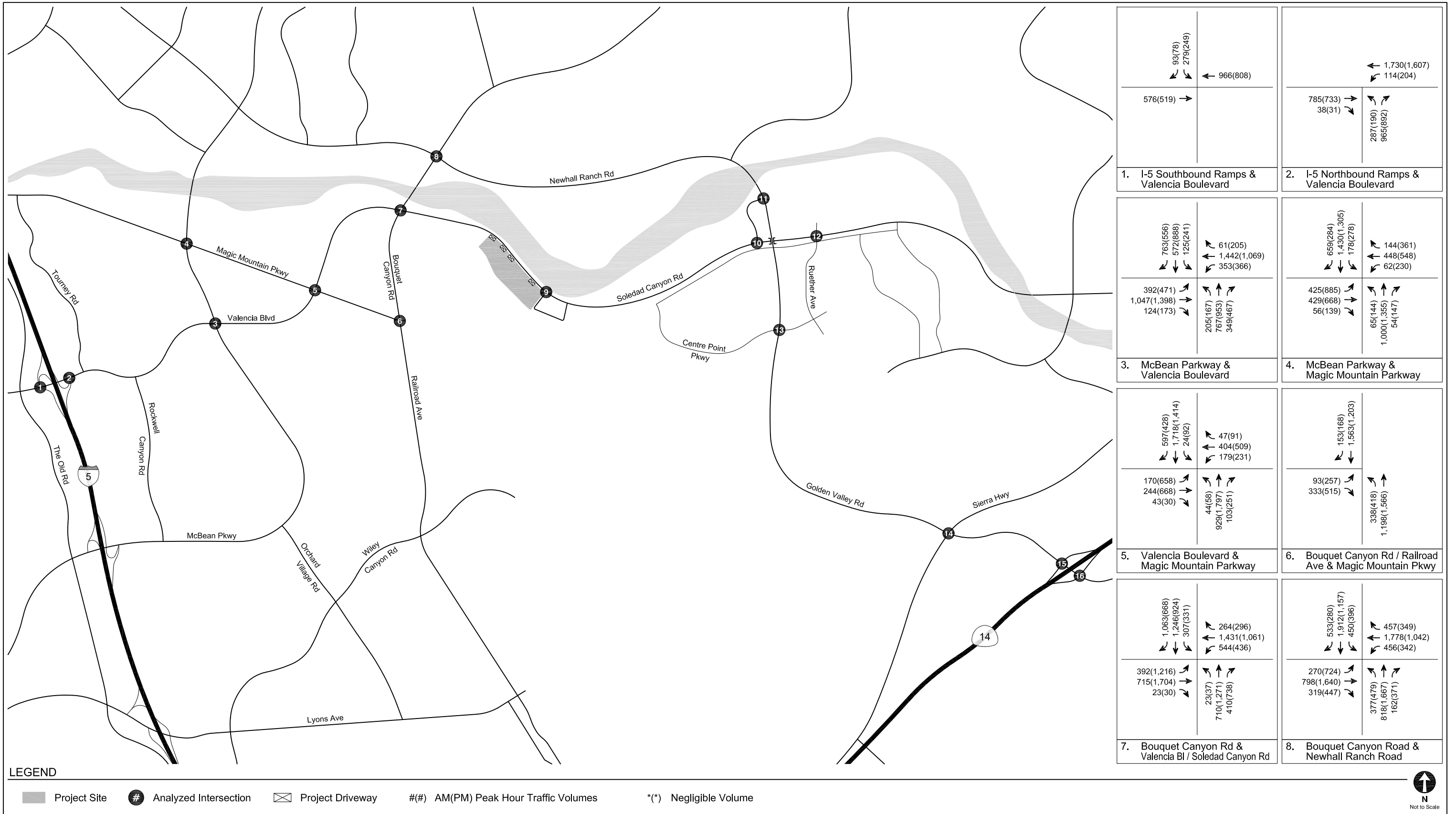


LEGEND
 ■ Project Site # Analyzed Intersection ⊠ Project Driveway #(#) AM(PM) Peak Hour Traffic Volumes *(*) Negligible Volume



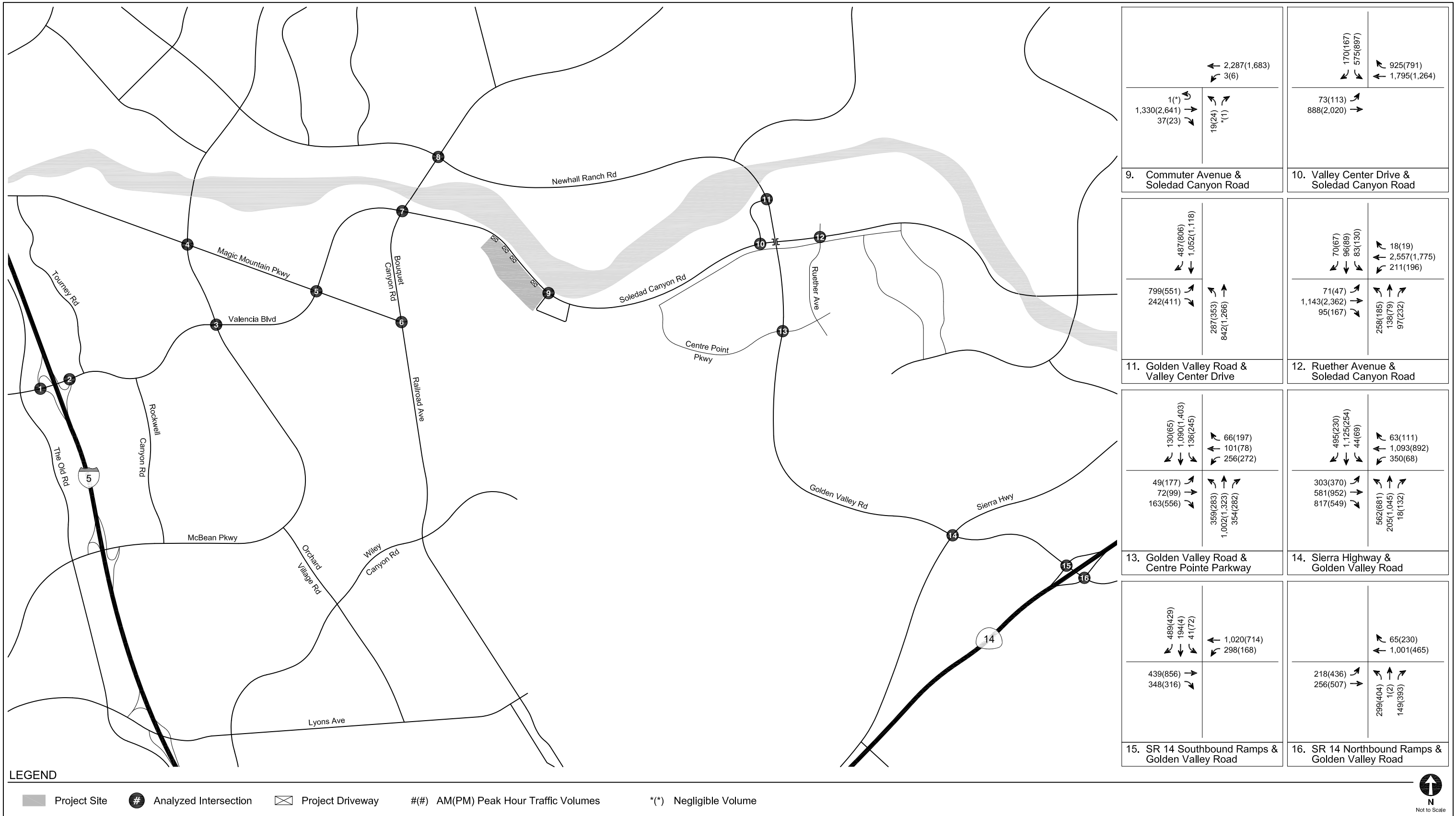
EXISTING CONDITIONS (YEAR 2023)
PEAK HOUR TRAFFIC VOLUMES

FIGURE 7 (CONT.)



FUTURE WITHOUT PROJECT CONDITIONS (YEAR 2026)
PEAK HOUR TRAFFIC VOLUMES

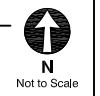
FIGURE
8



<p>2,287(1,683) 3(6)</p> <p>1330(2,641) 37(23)</p> <p>19(24) *(1)</p>	<p>170(167) 575(697)</p> <p>73(113) 888(2,020)</p> <p>925(791) 1,795(1,264)</p>
<p>9. Commuter Avenue & Soledad Canyon Road</p>	<p>10. Valley Center Drive & Soledad Canyon Road</p>
<p>487(806) 1,052(1,118)</p> <p>799(551) 242(411)</p> <p>287(353) 842(1,266)</p>	<p>70(67) 96(89) 83(130)</p> <p>18(19) 2,557(1,775) 211(196)</p> <p>71(47) 1,143(2,362) 95(167)</p> <p>258(185) 138(79) 97(232)</p>
<p>11. Golden Valley Road & Valley Center Drive</p>	<p>12. Ruether Avenue & Soledad Canyon Road</p>
<p>130(65) 1,090(1,403) 136(245)</p> <p>49(177) 72(99) 163(556)</p> <p>358(283) 1,002(1,323) 354(282)</p> <p>66(197) 101(78) 256(272)</p>	<p>495(230) 1,125(254) 44(69)</p> <p>63(111) 1,093(892) 350(68)</p> <p>303(370) 581(952) 817(549)</p> <p>562(681) 205(1,045) 18(132)</p>
<p>13. Golden Valley Road & Centre Point Parkway</p>	<p>14. Sierra Highway & Golden Valley Road</p>
<p>489(429) 194(4) 41(72)</p> <p>439(856) 348(316)</p> <p>1,020(714) 298(168)</p>	<p>65(230) 1,001(465)</p> <p>218(436) 256(507)</p> <p>299(404) 1(2) 149(393)</p>
<p>15. SR 14 Southbound Ramps & Golden Valley Road</p>	<p>16. SR 14 Northbound Ramps & Golden Valley Road</p>

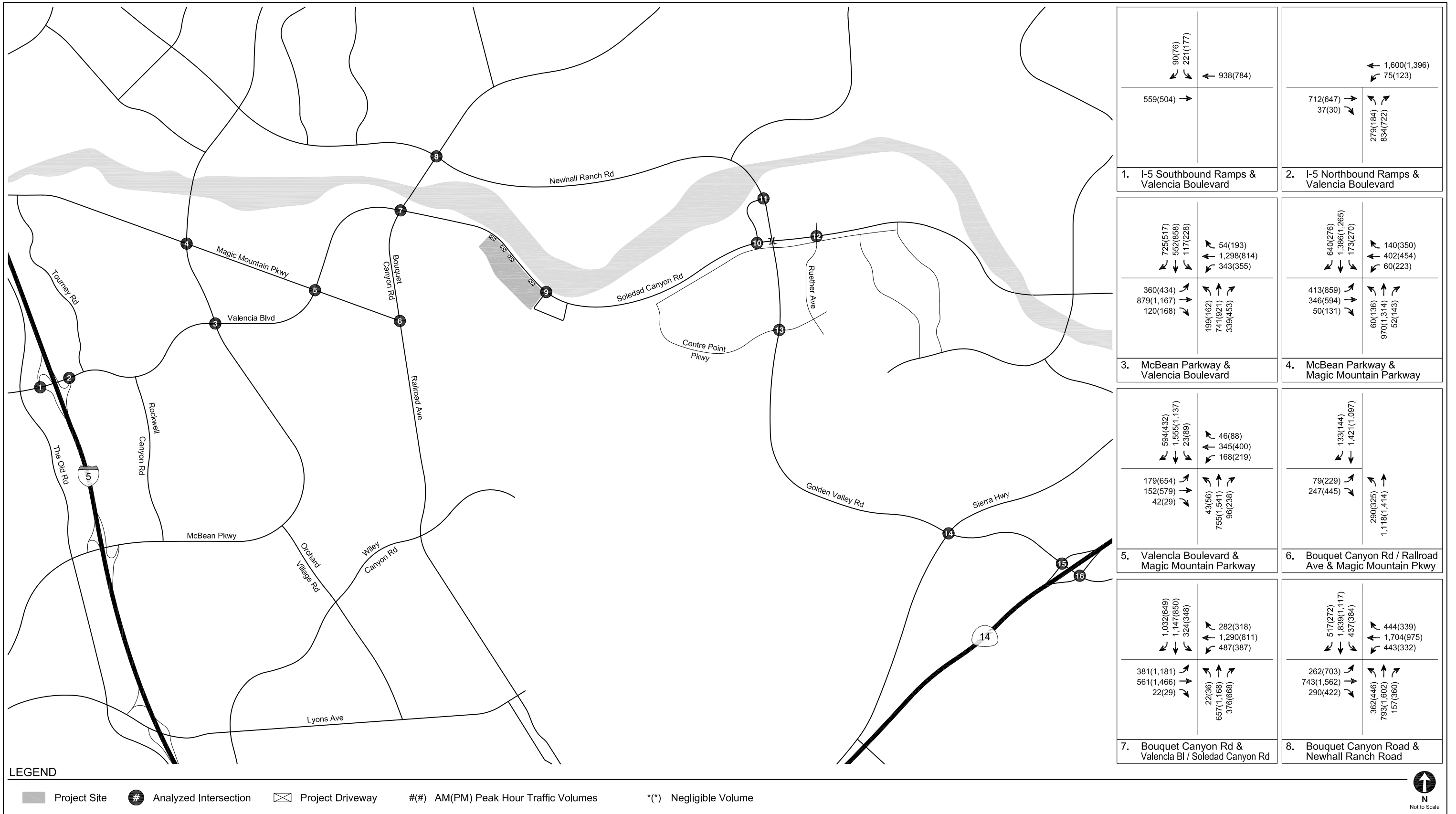
LEGEND

■ Project Site # Analyzed Intersection ⊠ Project Driveway #(#) AM(PM) Peak Hour Traffic Volumes *(*) Negligible Volume



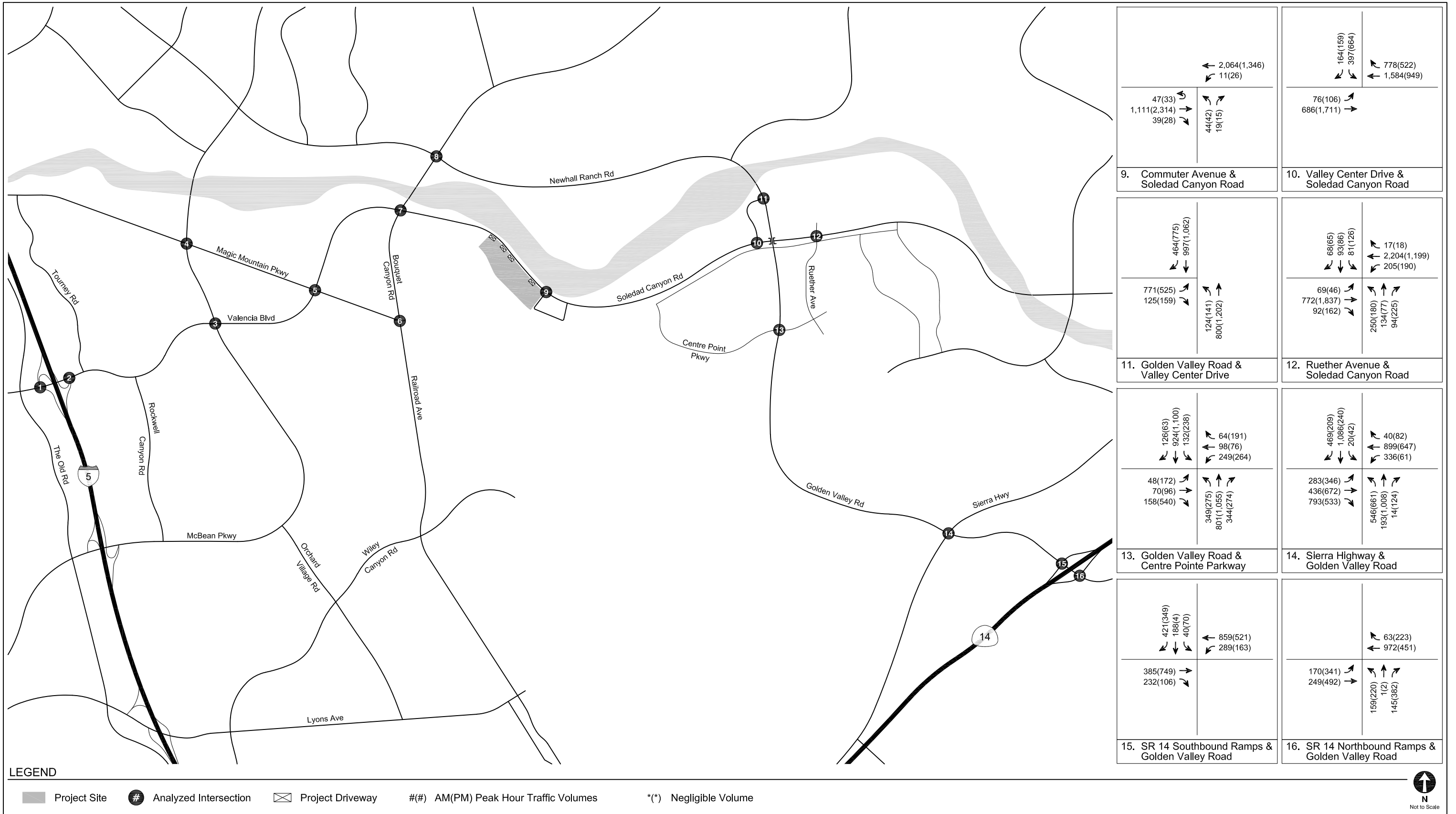
**FUTURE WITHOUT PROJECT CONDITIONS (YEAR 2026)
PEAK HOUR TRAFFIC VOLUMES**

FIGURE 8 (CONT.)



EXISTING WITH PROJECT CONDITIONS (YEAR 2023)
PEAK HOUR TRAFFIC VOLUMES

FIGURE
9



EXISTING WITH PROJECT CONDITIONS (YEAR 2023)
PEAK HOUR TRAFFIC VOLUMES

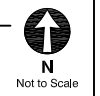
FIGURE
9 (CONT.)



<p>93(78) ↙ ↘ 285(256) ↖ ↗</p> <p>576(519) →</p>	<p>← 1,744(1,630) ↖ ↗ 121(212)</p> <p>791(740) → ↖ ↗ 38(31) ↘ ↙ 287(190) ↖ ↗ 986(907) ↖ ↗</p>
<p>1. I-5 Southbound Ramps & Valencia Boulevard</p>	<p>2. I-5 Northbound Ramps & Valencia Boulevard</p>
<p>763(656) ↙ ↘ 572(888) ↖ ↗ 125(241) ↖ ↗</p> <p>392(471) ↖ ↗ ↘ ↙ 1,075(1,420) → ↖ ↗ 124(173) ↖ ↗</p> <p>205(167) ↖ ↗ ↘ ↙ 767(953) ↖ ↗ ↘ ↙ 349(467) ↖ ↗ ↘ ↙</p>	<p>61(205) ↖ ↗ ↘ ↙ 1,463(1,099) ↖ ↗ ↘ ↙ 353(366) ↖ ↗ ↘ ↙</p> <p>659(284) ↖ ↗ ↘ ↙ 1,430(1,305) ↖ ↗ ↘ ↙ 178(278) ↖ ↗ ↘ ↙</p> <p>144(361) ↖ ↗ ↘ ↙ 463(566) ↖ ↗ ↘ ↙ 62(230) ↖ ↗ ↘ ↙</p>
<p>3. McBean Parkway & Valencia Boulevard</p>	<p>4. McBean Parkway & Magic Mountain Parkway</p>
<p>612(446) ↙ ↘ 1,739(1,444) ↖ ↗ 24(92) ↖ ↗</p> <p>185(674) ↖ ↗ ↘ ↙ 244(668) → ↖ ↗ 43(30) ↖ ↗</p> <p>44(68) ↖ ↗ ↘ ↙ 957(1,819) ↖ ↗ ↘ ↙ 103(251) ↖ ↗ ↘ ↙</p>	<p>47(91) ↖ ↗ ↘ ↙ 404(509) ↖ ↗ ↘ ↙ 179(231) ↖ ↗ ↘ ↙</p> <p>153(168) ↖ ↗ ↘ ↙ 1,581(1,222) ↖ ↗ ↘ ↙</p> <p>93(257) ↖ ↗ ↘ ↙ 333(515) ↖ ↗ ↘ ↙</p> <p>338(418) ↖ ↗ ↘ ↙ 1,213(1,585) ↖ ↗ ↘ ↙</p>
<p>5. Valencia Boulevard & Magic Mountain Parkway</p>	<p>6. Bouquet Canyon Rd / Railroad Ave & Magic Mountain Pkwy</p>
<p>1,063(668) ↙ ↘ 1,246(924) ↖ ↗ 333(358) ↖ ↗</p> <p>392(1,216) ↖ ↗ ↘ ↙ 758(1,742) → ↖ ↗ 23(30) ↖ ↗</p> <p>23(37) ↖ ↗ ↘ ↙ 710(1,271) ↖ ↗ ↘ ↙ 425(757) ↖ ↗ ↘ ↙</p>	<p>290(327) ↖ ↗ ↘ ↙ 1,467(1,110) ↖ ↗ ↘ ↙ 562(455) ↖ ↗ ↘ ↙</p> <p>533(280) ↖ ↗ ↘ ↙ 1,920(1,169) ↖ ↗ ↘ ↙ 450(396) ↖ ↗ ↘ ↙</p> <p>457(349) ↖ ↗ ↘ ↙ 1,778(1,042) ↖ ↗ ↘ ↙ 456(342) ↖ ↗ ↘ ↙</p> <p>270(724) ↖ ↗ ↘ ↙ 798(1,640) → ↖ ↗ 337(463) ↖ ↗ ↘ ↙</p> <p>392(499) ↖ ↗ ↘ ↙ 829(1,678) ↖ ↗ ↘ ↙ 162(371) ↖ ↗ ↘ ↙</p>
<p>7. Bouquet Canyon Rd & Valencia Bl / Soledad Canyon Rd</p>	<p>8. Bouquet Canyon Road & Newhall Ranch Road</p>

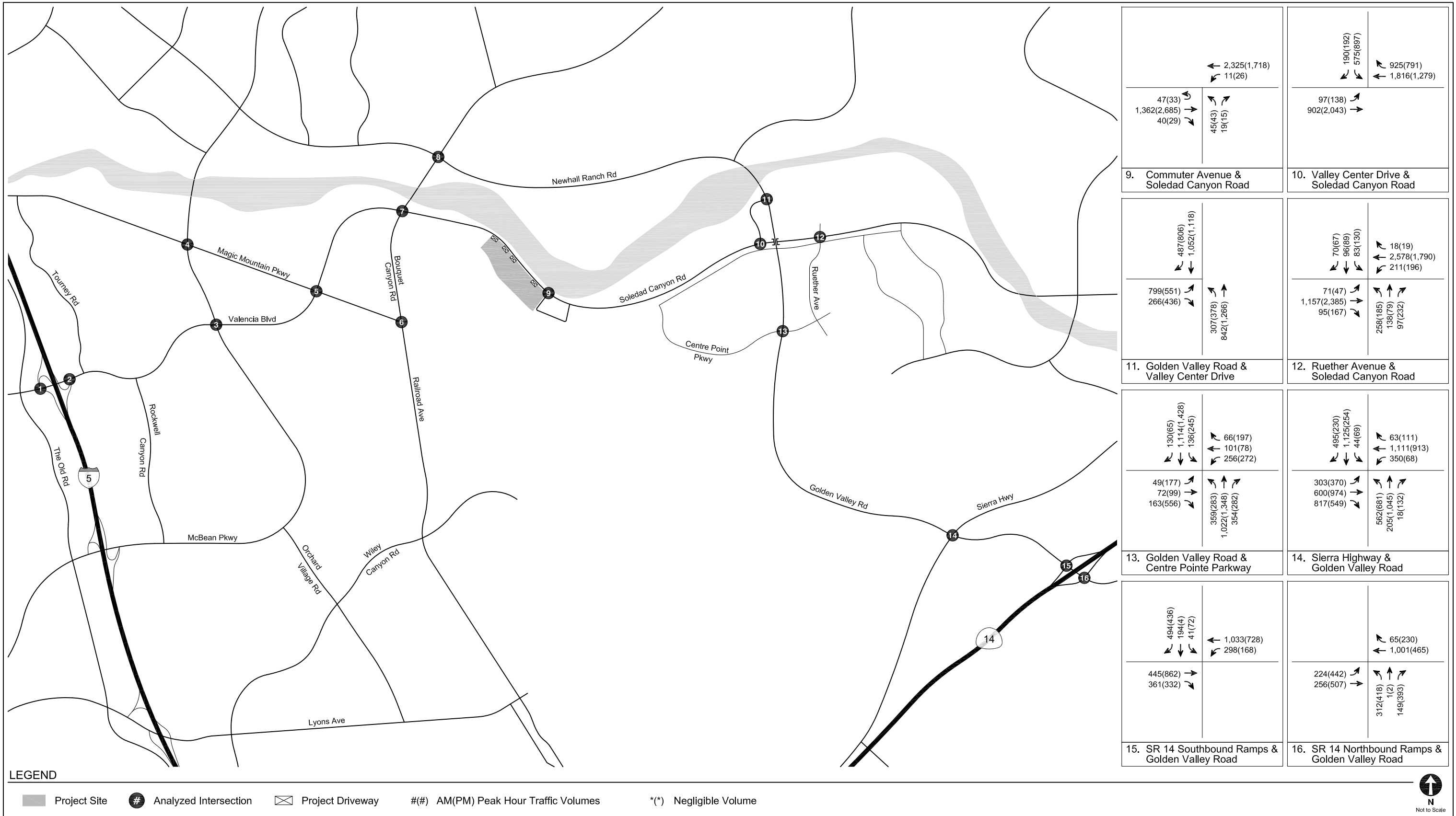
LEGEND

■ Project Site # Analyzed Intersection ⊠ Project Driveway #(##) AM(PM) Peak Hour Traffic Volumes *(*) Negligible Volume



FUTURE WITH PROJECT CONDITIONS (YEAR 2026)
PEAK HOUR TRAFFIC VOLUMES

FIGURE
10



FUTURE WITH PROJECT CONDITIONS (YEAR 2026)
PEAK HOUR TRAFFIC VOLUMES

FIGURE
10 (CONT.)

**TABLE 1
REVISED PROJECT TRIP GENERATION ESTIMATES**

Land Use	ITE Land Use	Rate	Daily	Morning Peak Hour			Afternoon Peak Hour		
				In	Out	Total	In	Out	Total
<u>Trip Generation Rates [a]</u>									
Single Family Detached Housing	210	per dwelling unit	9.43	26%	74%	0.70	63%	37%	0.94
Single Family Attached Housing	215	per dwelling unit	7.20	31%	69%	0.48	57%	43%	0.57
Manufacturing	140	per ksf	4.75	88%	12%	0.68	14%	86%	0.74
Office	710	per ksf	10.84	88%	12%	1.52	17%	83%	1.44
<u>Proposed Project - Lot 1</u>									
Single Family Attached Housing	215	95 du	684	14	32	46	31	23	54
			(103)	(1)	(2)	(3)	(2)	(1)	(3)
Total - Lot 1			581	13	30	43	29	22	51
<u>Proposed Project - Lot 2</u>									
Single Family Detached Housing	210	60 du	566	11	31	42	35	21	56
			(85)	(1)	(2)	(3)	(2)	(1)	(3)
Total - Lot 2			481	10	29	39	33	20	53
<u>Proposed Project - Lot 3</u>									
Single Family Detached Housing	210	62 du	585	11	32	43	37	21	58
			(88)	(1)	(2)	(3)	(2)	(1)	(3)
Total - Lot 3			497	10	30	40	35	20	55
<u>Proposed Project - Lot 4</u>									
Single Family Attached Housing	215	101 du	727	15	33	48	33	25	58
			(109)	(1)	(2)	(3)	(2)	(1)	(3)
Total - Lot 4			618	14	31	45	31	24	55
<u>Proposed Project - Commercial/Industrial</u>									
Manufacturing	140	116.790 ksf	555	70	9	79	12	74	86
Office	710	5.000 ksf	54	7	1	8	1	6	7
Total - Commercial / Industrial			609	77	10	87	13	80	93
PROPOSED PROJECT TRIPS			2,786	124	130	254	141	166	307

Notes:

du: dwelling unit, ksf: 1,000 square feet

[a] Source: *Trip Generation, 11th Edition*, Institute of Transportation Engineers, 2021.

[b] The Project Site is located less than 0.5 miles from the Santa Clarita Metrolink Station. Therefore, a 5% adjustment was applied to account for transit usage and pedestrian connections to/from the station.

**TABLE 2
COMPARISON OF ORIGINAL AND REVISED PROJECT TRIP GENERATION ESTIMATES**

Land Use	Rate	Daily	Morning Peak Hour			Afternoon Peak Hour		
			In	Out	Total	In	Out	Total
<u>ORIGINAL PROJECT</u>								
Residential [a]	318 du	2,562	51	128	179	136	90	226
<i>Transit/Walk-In Adjustment - 5% [c]</i>		(385)	(4)	(8)	(12)	(8)	(4)	(12)
Total Residential		2,177	47	120	167	128	86	214
Studio [b]	66 ksf	1,028	61	31	92	51	67	118
TOTAL ORIGINAL PROJECT TRIPS		3,205	108	151	259	179	153	332
<u>REVISED PROJECT</u>								
Residential [a]	318 du	2,562	51	128	179	136	90	226
<i>Transit/Walk-In Adjustment - 5% [c]</i>		(385)	(4)	(8)	(12)	(8)	(4)	(12)
Total Residential		2,177	47	120	167	128	86	214
Manufacturing [a]	116.790 ksf	555	70	9	79	12	74	86
Office [a]	5.000 ksf	54	7	1	8	1	6	7
Total - Commercial / Industrial		609	77	10	87	13	80	93
TOTAL REVISED PROJECT TRIPS		2,786	124	130	254	141	166	307
<u>DIFFERENCE</u>								
Residential		0	0	0	0	0	0	0
Commercial		(419)	16	(21)	(5)	(38)	13	(25)
TOTAL		(419)	16	(21)	(5)	(38)	13	(25)

Notes:

du: dwelling unit, ksf: 1,000 square feet

[a] Trip Generation Rate Source: *Trip Generation, 11th Edition*, Institute of Transportation Engineers, 2021.

[b] Rate based on empirical rate from *Transportation Study for the NBC Universal Evolution Plan Environmental Impact Report*, Gibson Transportation Consulting, Inc. and Raju Associates, Inc., March 2010.

[c] The Project Site is located less than 0.5 miles from the Santa Clarita Metrolink Station. Therefore, a 5% adjustment was applied to account for transit usage and pedestrian connections to/from the station.

**TABLE 3
EXISTING CONDITIONS (YEAR 2023)
INTERSECTION LEVELS OF SERVICE**

No.	Intersection	Peak Hour	Existing Conditions		Existing with Project Conditions			
			Delay	LOS	Delay	LOS	Δ Delay	Impact
1.	I-5 Southbound Ramps & Valencia Boulevard	A.M.	5.6	A	5.7	A	0.1	No
		P.M.	6.7	A	6.8	A	0.1	No
2.	I-5 Northbound Ramps & Valencia Boulevard	A.M.	8.6	A	9.0	A	0.4	No
		P.M.	7.3	A	7.6	A	0.3	No
3.	McBean Parkway & Valencia Boulevard	A.M.	37.0	D	36.8	D	-0.2	No
		P.M.	43.6	D	43.6	D	0.0	No
4.	McBean Parkway & Magic Mountain Parkway	A.M.	33.2	C	33.2	C	0.0	No
		P.M.	107.0	F	106.5	F	-0.5	No
5.	Valencia boulevard & Magic Mountain Parkway	A.M.	33.9	C	34.7	C	0.8	No
		P.M.	34.3	C	34.9	C	0.6	No
6.	Railroad Avenue / Bouquet Canyon Road & Magic Mountain Parkway	A.M.	24.0	C	24.2	C	0.2	No
		P.M.	25.3	C	25.3	C	0.0	No
7.	Bouquet Canyon Road & Valencia Boulevard/Soledad Canyon Road	A.M.	29.5	C	30.6	C	1.1	No
		P.M.	53.1	D	55.8	E	2.7	Yes
8.	Bouquet Canyon Road & Newhall Ranch Road	A.M.	55.7	E	55.7	E	0.0	No
		P.M.	48.3	D	48.5	D	0.2	No
9. [a]	Commuter Way & Soledad Canyon Road	A.M.	0.9	A	1.9	A	1.0	No
		P.M.	3.4	A	7.1	A	3.7	No
10.	Valley Center Drive & Soledad Canyon Road	A.M.	9.1	A	9.3	A	0.2	No
		P.M.	18.5	B	19.4	B	0.9	No
11.	Golden Valley Drive & Valley Center Drive	A.M.	17.5	B	18.1	B	0.6	No
		P.M.	13.4	B	13.3	B	-0.1	No
12.	Ruether Avenue & Soledad Canyon Road	A.M.	36.5	D	36.8	D	0.3	No
		P.M.	31.6	C	29.9	C	-1.7	No

Notes:

Intersections are signalized except as otherwise noted.

[a] Project access with signalized intersection

[b] Project access with one-way stop controlled intersection.

**TABLE 3 (CONTINUED)
EXISTING CONDITIONS (YEAR 2023)
INTERSECTION LEVELS OF SERVICE**

No.	Intersection	Peak Hour	Existing Conditions		Existing with Project Conditions			
			Delay	LOS	Delay	LOS	Δ Delay	Impact
13.	Golden Valley Road & Center Pointe Drive	A.M.	42.0	D	42.1	D	0.1	No
		P.M.	50.2	D	51.5	D	1.3	No
14.	Sierra Highway & Golden Valley Road	A.M.	53.8	D	54.1	D	0.3	No
		P.M.	38.6	D	38.8	D	0.2	No
15.	SR-14 Southbound Ramps & Golden Valley Road	A.M.	19.0	B	19.1	B	0.1	No
		P.M.	16.6	B	16.6	B	0.0	No
16.	SR-14 Northbound Ramps & Golden Valley Road	A.M.	20.8	C	20.8	C	0.0	No
		P.M.	21.5	C	21.7	C	0.2	No
17. [a]	Manufacturing Driveway & Soledad Canyon Road	A.M.	New Intersection		3.3	A	N/A	No
		P.M.	New Intersection		6.7	A	N/A	No
18. [b]	Residential Driveway 1 & Soledad Canyon Road	A.M.	New Intersection		13.1	B	N/A	No
		P.M.	New Intersection		12.9	B	N/A	No
19. [b]	Residential Driveway 2 & Soledad Canyon Road	A.M.	New Intersection		13.5	B	N/A	No
		P.M.	New Intersection		13.0	B	N/A	No

Notes:

Intersections are signalized except as otherwise noted.

[a] Project access with signalized intersection

[b] Project access with one-way stop controlled intersection.

**TABLE 4
FUTURE CONDITIONS (YEAR 2026)
INTERSECTION LEVELS OF SERVICE**

No.	Intersection	Peak Hour	Future without Project Conditions		Future with Project Conditions				Future with Project with Mitigation Conditions			
			Delay	LOS	Delay	LOS	Δ Delay	Impact	Delay	LOS	Δ Delay	Impact
1.	I-5 Southbound Ramps & Valencia Boulevard	A.M.	6.5	A	6.6	A	0.1	No	6.6	A	0.1	No
		P.M.	7.4	A	7.5	A	0.1	No	7.5	A	0.1	No
2.	I-5 Northbound Ramps & Valencia Boulevard	A.M.	11.7	B	12.2	B	0.5	No	12.2	B	0.5	No
		P.M.	11.4	B	11.8	B	0.4	No	11.8	B	0.4	No
3.	McBean Parkway & Valencia Boulevard	A.M.	37.4	D	37.0	D	-0.4	No	37.0	D	-0.4	No
		P.M.	45.5	D	45.8	D	0.3	No	45.8	D	0.3	No
4.	McBean Parkway & Magic Mountain Parkway	A.M.	34.9	C	34.9	C	0.0	No	34.9	C	0.0	No
		P.M.	110.3	F	109.9	F	-0.4	No	109.9	F	-0.4	No
5.	Valencia boulevard & Magic Mountain Parkway	A.M.	46.1	D	48.0	D	1.9	No	47.9	D	1.8	No
		P.M.	44.6	D	46.5	D	1.9	No	46.5	D	1.9	No
6.	Railroad Avenue / Bouquet Canyon Road & Magic Mountain Parkway	A.M.	25.9	C	26.2	C	0.3	No	26.4	C	0.5	No
		P.M.	25.2	C	25.3	C	0.1	No	25.3	C	0.1	No
7.	Bouquet Canyon Road & Valencia Boulevard/Soledad Canyon Road	A.M.	35.0	C	37.5	D	2.5	No	36.8	D	1.8	No
		P.M.	81.7	F	88.3	F	6.6	Yes	77.7	E	-4.0	No
8.	Bouquet Canyon Road & Newhall Ranch Road	A.M.	60.9	E	60.9	E	0.0	No	60.8	E	-0.1	No
		P.M.	53.2	D	53.7	D	0.5	No	53.8	D	0.6	No
9. [a]	Commuter Way & Soledad Canyon Road	A.M.	1.3	A	2.2	A	0.9	No	2.2	A	0.9	No
		P.M.	3.0	A	6.2	A	3.2	No	6.3	A	3.3	No
10.	Valley Center Drive & Soledad Canyon Road	A.M.	12.0	B	12.5	B	0.5	No	12.5	B	0.5	No
		P.M.	24.3	C	25.3	C	1.0	No	25.1	C	0.8	No
11.	Golden Valley Drive & Valley Center Drive	A.M.	19.6	B	20.2	C	0.6	No	20.4	C	0.8	No
		P.M.	13.1	B	13.1	B	0.0	No	13.3	B	0.2	No
12.	Ruether Avenue & Soledad Canyon Road	A.M.	49.8	D	51.4	D	1.6	No	51.3	D	1.5	No
		P.M.	46.0	D	47.7	D	1.7	No	47.7	D	1.7	No

Notes:

Intersections are signalized except as otherwise noted.

[a] Project access with signalized intersection

[b] Project access with one-way stop controlled intersection.

**TABLE 4 (CONTINUED)
FUTURE CONDITIONS (YEAR 2026)
INTERSECTION LEVELS OF SERVICE**

No.	Intersection	Peak Hour	Future without Project Conditions		Future with Project Conditions				Future with Project with Mitigation Conditions			
			Delay	LOS	Delay	LOS	Δ Delay	Impact	Delay	LOS	Δ Delay	Impact
13.	Golden Valley Road & Center Pointe Drive	A.M.	44.4	D	44.7	D	0.3	No	47.5	D	3.1	No
		P.M.	96.0	F	101.2	F	5.2	Yes	87.1	F	-8.9	No
14.	Sierra Highway & Golden Valley Road	A.M.	63.1	E	63.4	E	0.3	No	63.4	E	0.3	No
		P.M.	43.0	D	43.4	D	0.4	No	43.4	D	0.4	No
15.	SR-14 Southbound Ramps & Golden Valley Road	A.M.	22.1	C	22.2	C	0.1	No	22.2	C	0.1	No
		P.M.	21.2	C	21.4	C	0.2	No	21.4	C	0.2	No
16.	SR-14 Northbound Ramps & Golden Valley Road	A.M.	21.1	C	21.1	C	0.0	No	21.1	C	0.0	No
		P.M.	22.6	C	22.8	C	0.2	No	22.8	C	0.2	No
17. [a]	Manufacturing Driveway & Soledad Canyon Road	A.M.	New Intersection		3.7	A	N/A	No	3.6	A	N/A	No
		P.M.	New Intersection		8.2	A	N/A	No	8.7	A	N/A	No
18. [b]	Residential Driveway 1 & Soledad Canyon Road	A.M.	New Intersection		15.9	C	N/A	No	15.9	C	N/A	No
		P.M.	New Intersection		16.8	C	N/A	No	16.8	C	N/A	No
19. [b]	Residential Driveway 2 & Soledad Canyon Road	A.M.	New Intersection		16.2	C	N/A	No	16.2	C	N/A	No
		P.M.	New Intersection		17.1	C	N/A	No	17.1	C	N/A	No

Notes:

Intersections are signalized except as otherwise noted.

[a] Project access with signalized intersection

[b] Project access with one-way stop controlled intersection.

**TABLE 5
FUTURE CONDITIONS (YEAR 2026)
INTERSECTION QUEUES**

Intersection	Turn Pocket Length	Peak Hour	Queue Length		
			Future without Project Conditions	Future with Project Conditions	Project Contribution to Queue Length
Intersection #1, I-5 Southbound Ramps & Valencia Boulevard					
Southbound Left-Turn [a] <i>from I-5 Southbound Off-Ramp to Valencia Boulevard</i>	800	A.M.	82	84	2
		P.M.	77	77	0
Intersection #2, I-5 Northbound Ramps & Valencia Boulevard					
Westbound Left-Turn <i>from Valencia Boulevard to I-5 Northbound On-Ramp</i>	200	A.M.	36	38	2
		P.M.	87	89	2
Northbound Left-Turn [a] <i>from I-5 Northbound Off-Ramp to Valencia Boulevard</i>	220	A.M.	86	86	0
		P.M.	60	60	0
Intersection #3, McBean Parkway & Valencia Boulevard					
Eastbound Left-Turn <i>from Valencia Boulevard to McBean Parkway</i>	350	A.M.	234	230	-4
		P.M.	335	332	-3
Westbound Left-Turn <i>from Valencia Boulevard to McBean Parkway</i>	290	A.M.	132	130	-2
		P.M.	192	190	-2
Northbound Left-Turn <i>from McBean Parkway to Valencia Boulevard</i>	130	A.M.	140	140	0
		P.M.	117	117	0
Southbound Left-Turn [a] <i>from McBean Parkway to Valencia Boulevard</i>	190	A.M.	95	95	0
		P.M.	153	153	0
Intersection #4, McBean Parkway & Magic Mountain Parkway					
Eastbound Left-Turn [a] <i>from Magic Mountain Parkway to McBean Parkway</i>	360	A.M.	342	342	0
		P.M.	810	810	0
Westbound Left-Turn <i>from Magic Mountain Parkway to McBean Parkway</i>	210	A.M.	52	52	0
		P.M.	155	154	-1
Northbound Left-Turn <i>from McBean Parkway to Magic Mountain Parkway</i>	175	A.M.	53	53	0
		P.M.	95	95	0
Southbound Left-Turn [a] <i>from McBean Parkway to Magic Mountain Parkway</i>	300	A.M.	119	119	0
		P.M.	178	178	0
Intersection #5, Valencia Boulevard & Magic Mountain Parkway					
Eastbound Left-Turn [a] <i>from Magic Mountain Parkway to Valencia Boulevard</i>	310	A.M.	115	118	3
		P.M.	573	590	17
Westbound Left-Turn <i>from Magic Mountain Parkway to Valencia Boulevard</i>	250	A.M.	130	130	0
		P.M.	156	156	0
Northbound Left-Turn <i>From Magic Mountain Parkway to Valencia Boulevard</i>	180	A.M.	68	66	-2
		P.M.	69	69	0
Southbound Left-Turn [a] <i>From Magic Mountain Parkway to Valencia Boulevard</i>	190	A.M.	21	20	-1
		P.M.	99	96	-3
Intersection #6, Railroad Avenue / Bouquet Canyon Road & Magic Mountain Parkway					
Eastbound Left-Turn [a] <i>from Magic Mountain Parkway to Bouquet Canyon Road</i>	265	A.M.	63	63	0
		P.M.	163	163	0
Northbound Left-Turn <i>from Railroad Avenue to Magic Mountain Parkway</i>	260	A.M.	198	198	0
		P.M.	246	246	0

**TABLE 5 (CONTINUED)
FUTURE CONDITIONS (YEAR 2026)
INTERSECTION QUEUES**

Intersection	Turn Pocket Length	Peak Hour	Queue Length		
			Future without Project Conditions	Future with Project Conditions	Project Contribution to Queue Length
Intersection #7, Bouquet Canyon Road & Velencia Boulevard / Soledad Canyon Road					
Eastbound Left-Turn [a] <i>from Velencia Boulevard to Bouquet Canyon Road</i>	360	A.M.	70	76	6
		P.M.	415	410	-5
Westbound Left-Turn <i>from Soledad Canyon Road to Bouquet Canyon Road</i>	330	A.M.	232	239	7
		P.M.	163	173	10
Northbound Left-Turn <i>From Bouquet Canyon Road to Velencia Boulevard</i>	250	A.M.	51	51	0
		P.M.	70	70	0
Southbound Left-Turn [a] <i>From Bouquet Canyon Road to Soledad Canyon Road</i>	435	A.M.	185	212	27
		P.M.	252	282	30
Intersection #8, Bouquet Canyon Road & Newhall Ranch Road					
Eastbound Left-Turn [a] <i>from Newhall Ranch Road to Bouquet Canyon Road</i>	290	A.M.	115	115	0
		P.M.	339	339	0
Westbound Left-Turn <i>from Newhall Ranch Road to Bouquet Canyon Road</i>	410	A.M.	358	358	0
		P.M.	242	242	0
Northbound Left-Turn <i>From Bouquet Canyon Road to Newhall Ranch Road</i>	475	A.M.	260	275	15
		P.M.	226	242	16
Southbound Left-Turn <i>From Bouquet Canyon Road to Newhall Ranch Road</i>	260	A.M.	264	264	0
		P.M.	243	243	0
Intersection #9, Commuter Way & Soledad Canyon Road					
Westbound Left-Turn <i>from Soledad Canyon Road to Commuter Way</i>	285	A.M.	6	19	13
		P.M.	12	37	25
Northbound Left-Turn [a] <i>from Commuter Way to Soledad Canyon Road</i>	205	A.M.	23	45	22
		P.M.	27	43	16
Intersection #10, Valley Center Drive & Soledad Canyon Road					
Eastbound Left-Turn <i>from Soledad Canyon Road to Valley Center Drive</i>	250	A.M.	62	77	15
		P.M.	81	88	7
Southbound Left-Turn [a] <i>from Valley Center Drive to Soledad Canyon Road</i>	235	A.M.	244	247	3
		P.M.	501	502	1
Intersection #11, Golden Valley Road & Valley Center Drive					
Eastbound Left-Turn [a] <i>from Valley Center Drive to Golden Valley Road</i>	260	A.M.	269	273	4
		P.M.	198	199	1
Northbound Left-Turn <i>from Golden Valley Road to Valley Center Drive</i>	290	A.M.	170	180	10
		P.M.	93	100	7
Intersection #12, Ruther Avenue & Soledad Canyon Road					
Eastbound Left-Turn [a] <i>from Newhall Ranch Road to Bouquet Canyon Road</i>	285	A.M.	110	111	1
		P.M.	45	45	0
Westbound Left-Turn <i>from Newhall Ranch Road to Bouquet Canyon Road</i>	250	A.M.	139	139	0
		P.M.	130	130	0
Southbound Left-Turn <i>From Bouquet Canyon Road to Newhall Ranch Road</i>	125	A.M.	136	136	0
		P.M.	178	178	0

TABLE 5 (CONTINUED)
FUTURE CONDITIONS (YEAR 2026)
INTERSECTION QUEUES

Intersection	Turn Pocket Length	Peak Hour	Queue Length		
			Future without Project Conditions	Future with Project Conditions	Project Contribution to Queue Length
Intersection #13, Golden Valley Road & Center Pointe Parkway					
Eastbound Left-Turn <i>from Center Pointe Parkway to Golden Valley Road</i>	150	A.M.	86	86	0
		P.M.	285	285	0
Westbound Left-Turn [a] <i>from Center Pointe Parkway to Golden Valley Road</i>	150	A.M.	157	157	0
		P.M.	165	165	0
Northbound Left-Turn <i>from Golden Valley Road to Center Pointe Parkway</i>	300	A.M.	405	401	-4
		P.M.	364	364	0
Southbound Left-Turn <i>from Golden Valley Road to Center Pointe Parkway</i>	700	A.M.	134	134	0
		P.M.	315	317	2
Intersection #14, Sierra Highway & Golden Valley Road					
Eastbound Left-Turn <i>from Sierra Highway to Golden Valley Road</i>	280	A.M.	120	115	-5
		P.M.	166	164	-2
Westbound Left-Turn <i>from Sierra Highway to Golden Valley Road</i>	285	A.M.	207	207	0
		P.M.	57	57	0
Northbound Left-Turn <i>from Golden Valley Road to Sierra Highway</i>	285	A.M.	428	428	0
		P.M.	410	410	0
Southbound Left-Turn <i>from Golden Valley Road to Sierra Highway</i>	410	A.M.	81	81	0
		P.M.	113	113	0
Intersection #15, SR-14 Southbound Ramps & Golden Valley Road					
Westbound Left-Turn <i>from Golden Valley Road to SR-14 Southbound On-Ramp</i>	220	A.M.	306	307	1
		P.M.	207	204	-3
Southbound Left-Turn <i>from SR-14 Southbound Off-Ramp to Golden Valley Road</i>	300	A.M.	33	33	0
		P.M.	40	40	0
Intersection #16, SR-14 Northbound Ramps & Golden Valley Road					
Eastbound Left-Turn <i>from Golden Valley Road to SR-14 Northbound On-Ramp</i>	220	A.M.	102	105	3
		P.M.	203	205	2
Northbound Left-Turn [a] <i>from SR-14 Northbound Off-Ramp to Golden Valley Road</i>	655	A.M.	146	152	6
		P.M.	168	175	7

Notes:

All lengths shown in feet based on 25 feet per vehicle. Queues based on 95th percentile queue calculated by the HCM methodology.

[a] The travel lane ends in a left-turn pocket, and therefore the queue does not block through traffic.

[b] Estimated distance as turn lane has not yet been constructed

**TABLE 6
SIGNAL WARRANT ANALYSIS
SOLEDAD CANYON ROAD & MAIN MANUFACTURING DRIVEWAY**

ITE Trip Generation Rates (trips/1000 sf)

	Manufacturing	Office
Square Feet	116,790	5,000
24-Hour ADT	4.75	10.84
AM Peak Hr	0.68	1.52
PM Peak Hr	0.74	1.44

Total	Inbound	Outbound
609	305	304
87	77	10
94	13	81

TIME	% of ADT	Hourly Volume								MUTCD Warrant Target	Meets Warrant	
		Total Veh	% Trucks	# Trucks	Tot PCE	Inbound %	Inbound	Outbound	Total			RANK
12M -1A	0	0	0%	0	0	0.88	0	0	0			
1-2	0	0	0%	0	0	0.88	0	0	0			
2-3	0	0	0%	0	0	0.88	0	0	0			
3-4	0	0	0%	0	0	0.88	0	0	0			
4-5	0	0	0%	0	0	0.88	0	0	0			
5-6	3	18	7%	1	21	0.88	18	2	21			
6-7	8	49	12%	6	60	0.88	53	7	60	5		
7-8	14.3	87	15%	13	113	0.88	100	14	113	2		
8-9	10	61	15%	9	79	0.88	70	10	79	4	80	NO
9-10	7.5	46	15%	7	59	0.80	48	12	59	7		
10-11	2	12	10%	1	15	0.75	11	4	15			
11-12	3	18	10%	2	22	0.60	13	9	22			
12N-1P	4	24	10%	2	29	0.60	18	12	29			
1-2	2	12	12%	1	15	0.40	6	9	15			
2-3	3	19	12%	2	23	0.40	9	14	23			
3-4	8	49	12%	6	60	0.10	6	54	60	6		
4-5	11	67	12%	8	83	0.12	10	73	83	3		
5-6	15.6	95	15%	14	124	0.12	15	109	124	1	100	YES
6-7	7.5	46	15%	7	59	0.12	7	52	59	8	56	YES
7-8	1	6	6%	0	7	0.12	1	6	7			
8-9	0	0	0%	0	0	0.12	0	0	0			
9-10	0	0	0%	0	0	0.12	0	0	0			
10-11	0	0	0%	0	0	0.12	0	0	0			
11-12M	0	0	0%	0	0	0.12	0	0	0			
TOTAL	100	609	11.9%		770		384	386	770			

Peak Hour Warrant
 Four-Hour Warrant
 Eight-Hour Warrant

Trip Generation rates from *Trip Generation, 11th Edition*, Institute of Transportation Engineers, Washington D.C.,

Total PCE includes passenger car equivalent factor for trucks.

MUTCD Warrant includes factor for operating speeds on Soledad Canyon Road

Attachment
Capacity Calculation Worksheets

***Existing with Revised Project Conditions
Morning Peak Hour***

Lanes, Volumes, Timings
 1: Valencia Blvd & 5 Fwy SB Ramp

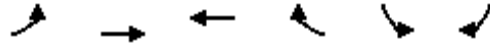
01/18/2024



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑		↑↑	↑
Traffic Volume (vph)	0	559	938	0	221	90
Future Volume (vph)	0	559	938	0	221	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	15	12	14
Storage Length (ft)	0			0	0	455
Storage Lanes	0			0	2	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.91	0.95	1.00	0.97	1.00
Fr _t						0.850
Fl _t Protected					0.950	
Satd. Flow (prot)	0	5085	3539	0	3433	1689
Fl _t Permitted					0.950	
Satd. Flow (perm)	0	5085	3539	0	3433	1689
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)						98
Link Speed (mph)		50	50		30	
Link Distance (ft)		616	917		417	
Travel Time (s)		8.4	12.5		9.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	608	1020	0	240	98
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	608	1020	0	240	98
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		24	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	0.88	1.00	0.92
Turning Speed (mph)	15			9	15	9
Number of Detectors		1	1		1	1
Detector Template						
Leading Detector (ft)		50	50		50	50
Trailing Detector (ft)		0	0		0	0
Detector 1 Position(ft)		0	0		0	0
Detector 1 Size(ft)		50	50		50	50
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)		0.0	0.0		0.0	0.0
Detector 1 Queue (s)		0.0	0.0		0.0	0.0
Detector 1 Delay (s)		0.0	0.0		0.0	0.0
Turn Type		NA	NA		Prot	Perm
Protected Phases		2	6		4	
Permitted Phases						4
Detector Phase		2	6		4	4
Switch Phase						
Minimum Initial (s)		4.0	4.0		4.0	4.0
Minimum Split (s)		20.0	35.2		20.0	20.0

Lanes, Volumes, Timings
 1: Valencia Blvd & 5 Fwy SB Ramp

01/18/2024



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Total Split (s)		41.0	41.0		25.0	25.0
Total Split (%)		62.1%	62.1%		37.9%	37.9%
Maximum Green (s)		34.8	34.8		19.2	19.2
Yellow Time (s)		5.2	5.2		4.8	4.8
All-Red Time (s)		1.0	1.0		1.0	1.0
Lost Time Adjust (s)		-2.2	-2.2		-1.8	-1.8
Total Lost Time (s)		4.0	4.0		4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Recall Mode		C-Max	C-Max		Min	Min
Walk Time (s)			5.0			
Flash Dont Walk (s)			18.0			
Pedestrian Calls (#/hr)			0			
Act Effect Green (s)		46.3	46.3		11.7	11.7
Actuated g/C Ratio		0.70	0.70		0.18	0.18
v/c Ratio		0.17	0.41		0.39	0.26
Control Delay		3.7	2.1		25.5	7.4
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		3.7	2.1		25.5	7.4
LOS		A	A		C	A
Approach Delay		3.7	2.1		20.3	
Approach LOS		A	A		C	

Intersection Summary

Area Type:	Other
Cycle Length:	66
Actuated Cycle Length:	66
Offset:	14 (21%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle:	60
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.41
Intersection Signal Delay:	5.7
Intersection LOS:	A
Intersection Capacity Utilization:	38.9%
ICU Level of Service:	A
Analysis Period (min):	15

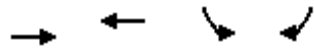
Splits and Phases: 1: Valencia Blvd & 5 Fwy SB Ramp



Queues

1: Valencia Blvd & 5 Fwy SB Ramp

01/18/2024



Lane Group	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	608	1020	240	98
v/c Ratio	0.17	0.41	0.39	0.26
Control Delay	3.7	2.1	25.5	7.4
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	3.7	2.1	25.5	7.4
Queue Length 50th (ft)	24	24	44	0
Queue Length 95th (ft)	41	71	70	33
Internal Link Dist (ft)	536	837	337	
Turn Bay Length (ft)				455
Base Capacity (vph)	3565	2481	1092	604
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.17	0.41	0.22	0.16

Intersection Summary

Lanes, Volumes, Timings
 2: 5 Fwy NB Ramp & Valencia Blvd

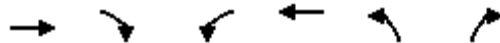
01/18/2024

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↙↘	↑↑↑	↙↘	↗↘
Traffic Volume (vph)	712	37	75	1600	279	834
Future Volume (vph)	712	37	75	1600	279	834
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	12	12	12	12	14
Storage Length (ft)		0	200		220	220
Storage Lanes		0	2		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	0.97	0.86	0.97	0.88
Fr _t	0.993					0.850
Fl _t Protected			0.950		0.950	
Satd. Flow (prot)	5386	0	3433	6408	3433	2972
Fl _t Permitted			0.950		0.950	
Satd. Flow (perm)	5386	0	3433	6408	3433	2972
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	14					659
Link Speed (mph)	50			50	30	
Link Distance (ft)	917			476	493	
Travel Time (s)	12.5			6.5	11.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	774	40	82	1739	303	907
Shared Lane Traffic (%)						
Lane Group Flow (vph)	814	0	82	1739	303	907
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	24			24	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.92	1.00	1.00	1.00	1.00	0.92
Turning Speed (mph)		9	15		15	9
Number of Detectors	1		1	1	1	1
Detector Template						
Leading Detector (ft)	50		50	50	50	50
Trailing Detector (ft)	0		0	0	0	0
Detector 1 Position(ft)	0		0	0	0	0
Detector 1 Size(ft)	50		50	50	50	50
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0
Turn Type	NA		Prot	NA	Prot	Prot
Protected Phases	2		1	6	8	8
Permitted Phases						
Detector Phase	2		1	6	8	8
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	31.0		14.0	20.0	20.0	20.0

Lanes, Volumes, Timings

2: 5 Fwy NB Ramp & Valencia Blvd

01/18/2024

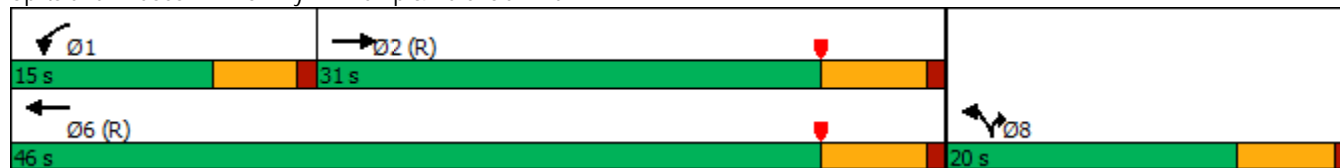


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Total Split (s)	31.0		15.0	46.0	20.0	20.0
Total Split (%)	47.0%		22.7%	69.7%	30.3%	30.3%
Maximum Green (s)	24.8		9.9	39.8	14.2	14.2
Yellow Time (s)	5.2		4.1	5.2	4.8	4.8
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-2.2		-1.1	-2.2	-1.8	-1.8
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max		None	C-Max	None	None
Walk Time (s)	5.0					
Flash Dont Walk (s)	24.0					
Pedestrian Calls (#/hr)	0					
Act Effect Green (s)	33.4		8.1	43.4	14.6	14.6
Actuated g/C Ratio	0.51		0.12	0.66	0.22	0.22
v/c Ratio	0.30		0.20	0.41	0.40	0.77
Control Delay	8.6		26.7	4.7	23.2	11.5
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	8.6		26.7	4.7	23.2	11.5
LOS	A		C	A	C	B
Approach Delay	8.6			5.7	14.4	
Approach LOS	A			A	B	

Intersection Summary

Area Type:	Other
Cycle Length:	66
Actuated Cycle Length:	66
Offset:	8 (12%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle:	65
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.77
Intersection Signal Delay:	9.0
Intersection LOS:	A
Intersection Capacity Utilization	50.4%
ICU Level of Service	A
Analysis Period (min)	15

Splits and Phases: 2: 5 Fwy NB Ramp & Valencia Blvd



Queues

2: 5 Fwy NB Ramp & Valencia Blvd

01/18/2024



Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	814	82	1739	303	907
v/c Ratio	0.30	0.20	0.41	0.40	0.77
Control Delay	8.6	26.7	4.7	23.2	11.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	8.6	26.7	4.7	23.2	11.5
Queue Length 50th (ft)	70	15	141	52	47
Queue Length 95th (ft)	91	m26	64	84	112
Internal Link Dist (ft)	837		396	413	
Turn Bay Length (ft)		200		220	220
Base Capacity (vph)	2732	572	4209	832	1219
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.30	0.14	0.41	0.36	0.74

Intersection Summary

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

Lanes, Volumes, Timings
 3: McBean Pkwy & Valencia Blvd

01/18/2024

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	360	879	120	343	1298	54	199	741	339	117	552	725
Future Volume (vph)	360	879	120	343	1298	54	199	741	339	117	552	725
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	11	11	13	11	11	12	11	11	12
Storage Length (ft)	350		280	290		225	130		200	190		300
Storage Lanes	2		1	2		1	2		2	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	0.88	0.97	0.91	0.88
Fr _t			0.850			0.850			0.850			0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3319	4916	1583	3319	4916	1636	3319	4916	2787	3319	4916	2787
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3319	4916	1583	3319	4916	1636	3319	4916	2787	3319	4916	2787
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			74			70			178			120
Link Speed (mph)		50			50			45			45	
Link Distance (ft)		1919			721			765			966	
Travel Time (s)		26.2			9.8			11.6			14.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	391	955	130	373	1411	59	216	805	368	127	600	788
Shared Lane Traffic (%)												
Lane Group Flow (vph)	391	955	130	373	1411	59	216	805	368	127	600	788
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		22			22			22			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.00	1.04	1.04	0.96	1.04	1.04	1.00	1.04	1.04	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	1	6	7	5	2	3	7	4	5	3	8	1
Permitted Phases			6			2			4			8
Detector Phase	1	6	7	5	2	3	7	4	5	3	8	1
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	44.0	12.0	12.0	47.0	12.0	12.0	41.0	12.0	12.0	44.0	12.0

Lanes, Volumes, Timings
3: McBean Pkwy & Valencia Blvd

01/18/2024

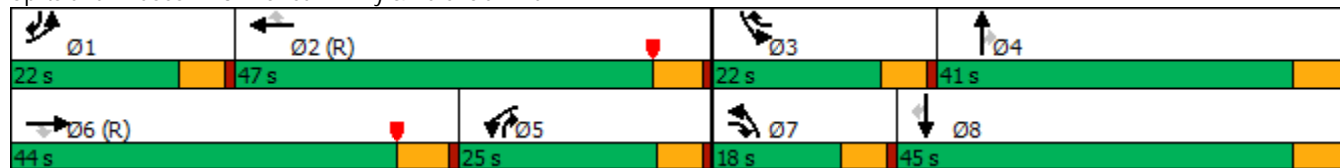


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	22.0	44.0	18.0	25.0	47.0	22.0	18.0	41.0	25.0	22.0	45.0	22.0
Total Split (%)	16.7%	33.3%	13.6%	18.9%	35.6%	16.7%	13.6%	31.1%	18.9%	16.7%	34.1%	16.7%
Maximum Green (s)	16.5	38.0	12.5	19.5	41.0	16.5	12.5	35.0	19.5	16.5	39.0	16.5
Yellow Time (s)	4.5	5.0	4.5	4.5	5.0	4.5	4.5	5.0	4.5	4.5	5.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.5	-2.0	-1.5	-1.5	-2.0	-1.5	-1.5	-2.0	-1.5	-1.5	-2.0	-1.5
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Max	None	None	C-Max	None	None	None	None	None	None	None
Walk Time (s)		5.0			5.0			5.0			5.0	
Flash Dont Walk (s)		32.0			33.0			30.0			33.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effect Green (s)	23.6	53.4	66.9	21.0	50.8	66.7	13.5	29.7	50.7	11.9	28.1	55.7
Actuated g/C Ratio	0.18	0.40	0.51	0.16	0.38	0.51	0.10	0.22	0.38	0.09	0.21	0.42
v/c Ratio	0.66	0.48	0.16	0.71	0.75	0.07	0.64	0.73	0.31	0.42	0.57	0.63
Control Delay	52.7	30.9	4.0	28.8	12.5	0.1	66.0	51.3	9.1	39.2	59.7	63.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.7	30.9	4.0	28.8	12.5	0.1	66.0	51.3	9.1	39.2	59.7	63.6
LOS	D	C	A	C	B	A	E	D	A	D	E	E
Approach Delay		34.3			15.4			42.4			60.0	
Approach LOS		C			B			D			E	

Intersection Summary

Area Type:	Other
Cycle Length:	132
Actuated Cycle Length:	132
Offset:	35 (27%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle:	115
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.75
Intersection Signal Delay:	36.8
Intersection LOS:	D
Intersection Capacity Utilization:	66.3%
ICU Level of Service:	C
Analysis Period (min):	15

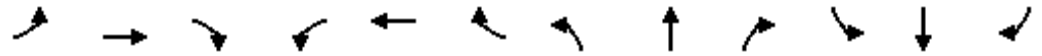
Splits and Phases: 3: McBean Pkwy & Valencia Blvd



Queues

3: McBean Pkwy & Valencia Blvd

01/18/2024



























Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	391	955	130	373	1411	59	216	805	368	127	600	788
v/c Ratio	0.66	0.48	0.16	0.71	0.75	0.07	0.64	0.73	0.31	0.42	0.57	0.63
Control Delay	52.7	30.9	4.0	28.8	12.5	0.1	66.0	51.3	9.1	39.2	59.7	63.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.7	30.9	4.0	28.8	12.5	0.1	66.0	51.3	9.1	39.2	59.7	63.6
Queue Length 50th (ft)	153	243	0	137	52	0	92	235	44	55	200	379
Queue Length 95th (ft)	227	295	m14	m145	m127	m0	136	269	62	90	243	452
Internal Link Dist (ft)	1839						641		685		886	
Turn Bay Length (ft)	350		280	290			225	130	200	190	300	
Base Capacity (vph)	593	1990	844	528	1893	934	352	1377	1179	452	1526	1245
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.66	0.48	0.15	0.71	0.75	0.06	0.61	0.58	0.31	0.28	0.39	0.63

Intersection Summary

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

Lanes, Volumes, Timings
 4: McBean Parkway & Magic Mountain Pkwy

01/18/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	413	346	50	60	402	140	60	970	52	173	1386	640
Future Volume (vph)	413	346	50	60	402	140	60	970	52	173	1386	640
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	16	12	12	14	11	11	16	11	11	16
Storage Length (ft)	360		360	210		0	175		175	300		340
Storage Lanes	1		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.91	1.00	0.97	0.86	1.00	0.97	0.86	1.00
Fr _t			0.850			0.850			0.850			0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	1794	3433	5085	1689	3319	6194	1794	3319	6194	1794
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1794	3433	5085	1689	3319	6194	1794	3319	6194	1794
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			99			152			198			633
Link Speed (mph)		50			45			45			50	
Link Distance (ft)		809			1452			1622			1219	
Travel Time (s)		11.0			22.0			24.6			16.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	449	376	54	65	437	152	65	1054	57	188	1507	696
Shared Lane Traffic (%)												
Lane Group Flow (vph)	449	376	54	65	437	152	65	1054	57	188	1507	696
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			22			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	0.85	1.00	1.00	0.92	1.04	1.04	0.85	1.04	1.04	0.85
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			Free			Free
Detector Phase	5	2	2	1	6	6	3	8		7	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Minimum Split (s)	12.0	41.0	41.0	12.0	40.0	40.0	12.0	37.0		12.0	37.0	

Lanes, Volumes, Timings
 4: McBean Parkway & Magic Mountain Pkwy

01/18/2024

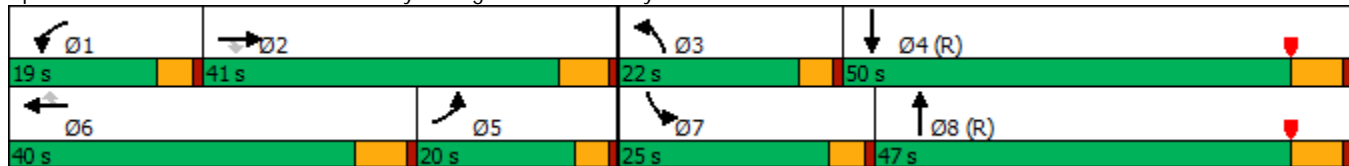


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	20.0	41.0	41.0	19.0	40.0	40.0	22.0	47.0		25.0	50.0	
Total Split (%)	15.2%	31.1%	31.1%	14.4%	30.3%	30.3%	16.7%	35.6%		18.9%	37.9%	
Maximum Green (s)	15.5	35.0	35.0	14.5	34.0	34.0	17.5	41.0		20.5	44.0	
Yellow Time (s)	3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.0		3.5	5.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	-0.5	-2.0	-2.0	-0.5	-2.0	-2.0	-0.5	-2.0		-0.5	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	Max	Max	None	Max	Max	None	C-Max		None	C-Max	
Walk Time (s)		5.0	5.0		5.0	5.0		5.0			5.0	
Flash Dont Walk (s)		30.0	30.0		29.0	29.0		26.0			26.0	
Pedestrian Calls (#/hr)		0	0		0	0		0			0	
Act Effect Green (s)	16.0	45.7	45.7	8.4	36.0	36.0	8.5	50.7	132.0	13.3	57.6	132.0
Actuated g/C Ratio	0.12	0.35	0.35	0.06	0.27	0.27	0.06	0.38	1.00	0.10	0.44	1.00
v/c Ratio	1.08	0.31	0.08	0.30	0.32	0.27	0.31	0.44	0.03	0.56	0.56	0.39
Control Delay	120.7	33.4	0.7	66.9	39.5	13.3	83.8	16.1	0.0	62.9	29.3	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	120.7	33.4	0.7	66.9	39.5	13.3	83.8	16.1	0.0	62.9	29.3	0.6
LOS	F	C	A	E	D	B	F	B	A	E	C	A
Approach Delay		76.0			36.1			19.1			23.6	
Approach LOS		E			D			B			C	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 28 (21%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow
 Natural Cycle: 105
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.08
 Intersection Signal Delay: 33.2
 Intersection LOS: C
 Intersection Capacity Utilization 56.3%
 ICU Level of Service B
 Analysis Period (min) 15

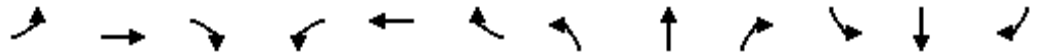
Splits and Phases: 4: McBean Parkway & Magic Mountain Pkwy



Queues

4: McBean Parkway & Magic Mountain Pkwy

01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	449	376	54	65	437	152	65	1054	57	188	1507	696
v/c Ratio	1.08	0.31	0.08	0.30	0.32	0.27	0.31	0.44	0.03	0.56	0.56	0.39
Control Delay	120.7	33.4	0.7	66.9	39.5	13.3	83.8	16.1	0.0	62.9	29.3	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	120.7	33.4	0.7	66.9	39.5	13.3	83.8	16.1	0.0	62.9	29.3	0.6
Queue Length 50th (ft)	~221	126	0	27	98	21	30	60	0	80	283	0
Queue Length 95th (ft)	#329	175	4	50	132	52	m50	114	m0	117	331	0
Internal Link Dist (ft)		729			1372			1542			1139	
Turn Bay Length (ft)	360		360	210			175		175	300		340
Base Capacity (vph)	416	1224	685	390	1386	571	452	2379	1794	528	2702	1794
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.08	0.31	0.08	0.17	0.32	0.27	0.14	0.44	0.03	0.36	0.56	0.39

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
5: Valencia Blvd & Magic Mountain Pkwy

01/18/2024

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	179	152	42	168	345	46	43	755	96	23	1555	594
Future Volume (vph)	179	152	42	168	345	46	43	755	96	23	1555	594
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	13	12	11	12	11	11	14	12	11	11	12
Storage Length (ft)	310		0	250		200	180		200	190		190
Storage Lanes	1		0	2		0	1		1	1		2
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	0.95	0.97	0.95	0.95	1.00	0.91	1.00	1.00	0.91	0.88
Fr _t		0.967			0.982				0.850			0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3319	3537	0	3319	3476	0	1711	5424	1583	1711	4916	2787
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3319	3537	0	3319	3476	0	1711	5424	1583	1711	4916	2787
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		28			11				112			482
Link Speed (mph)		45			45			45				45
Link Distance (ft)		1046			2748			1989				572
Travel Time (s)		15.8			41.6			30.1				8.7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	195	165	46	183	375	50	47	821	104	25	1690	646
Shared Lane Traffic (%)												
Lane Group Flow (vph)	195	211	0	183	425	0	47	821	104	25	1690	646
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		22			22			11				11
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.04	0.96	1.00	1.04	1.00	1.04	1.04	0.92	1.00	1.04	1.04	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Size(ft)	50	50		50	50		50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	3	8		7	4		1	6		5	2	3
Permitted Phases									6			2
Detector Phase	3	8		7	4		1	6	6	5	2	3
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	45.0		12.0	45.0		12.0	38.0	38.0	12.0	39.0	12.0

Lanes, Volumes, Timings
5: Valencia Blvd & Magic Mountain Pkwy

01/18/2024

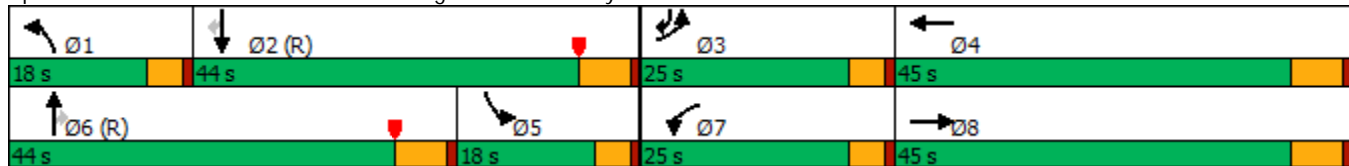


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	25.0	45.0		25.0	45.0		18.0	44.0	44.0	18.0	44.0	25.0
Total Split (%)	18.9%	34.1%		18.9%	34.1%		13.6%	33.3%	33.3%	13.6%	33.3%	18.9%
Maximum Green (s)	20.5	39.0		20.5	39.0		13.5	38.0	38.0	13.5	38.0	20.5
Yellow Time (s)	3.5	5.0		3.5	5.0		3.5	5.0	5.0	3.5	5.0	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-0.5	-2.0		-0.5	-2.0		-0.5	-2.0	0.0	-0.5	-2.0	-0.5
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	6.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lead	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Max		None	Max		None	C-Max	C-Max	Max	C-Max	None
Walk Time (s)		7.0			7.0			7.0	7.0		7.0	
Flash Dont Walk (s)		28.0			32.0			25.0	25.0		26.0	
Pedestrian Calls (#/hr)		0			0			0	0		0	
Act Effect Green (s)	14.7	48.9		13.1	47.3		9.5	40.0	38.0	14.0	46.5	65.2
Actuated g/C Ratio	0.11	0.37		0.10	0.36		0.07	0.30	0.29	0.11	0.35	0.49
v/c Ratio	0.53	0.16		0.56	0.34		0.38	0.50	0.19	0.14	0.98	0.40
Control Delay	58.3	25.9		94.1	14.9		51.8	39.1	10.9	42.6	42.1	3.6
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	58.3	25.9		94.1	14.9		51.8	39.1	10.9	42.6	42.1	3.6
LOS	E	C		F	B		D	D	B	D	D	A
Approach Delay		41.4			38.8			36.7			31.6	
Approach LOS		D			D			D			C	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 116 (88%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
 Natural Cycle: 110
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.98
 Intersection Signal Delay: 34.7
 Intersection LOS: C
 Intersection Capacity Utilization 61.8%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 5: Valencia Blvd & Magic Mountain Pkwy



Queues

5: Valencia Blvd & Magic Mountain Pkwy

01/18/2024



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	195	211	183	425	47	821	104	25	1690	646
v/c Ratio	0.53	0.16	0.56	0.34	0.38	0.50	0.19	0.14	0.98	0.40
Control Delay	58.3	25.9	94.1	14.9	51.8	39.1	10.9	42.6	42.1	3.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	58.3	25.9	94.1	14.9	51.8	39.1	10.9	42.6	42.1	3.6
Queue Length 50th (ft)	87	57	83	49	40	244	30	16	~453	32
Queue Length 95th (ft)	118	115	122	176	80	287	70	m22	m#670	m34
Internal Link Dist (ft)		966		2668		1909			492	
Turn Bay Length (ft)	310		250		180		200	190		190
Base Capacity (vph)	528	1328	528	1253	181	1643	535	181	1731	1730
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.37	0.16	0.35	0.34	0.26	0.50	0.19	0.14	0.98	0.37

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings

6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy

01/18/2024



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	79	247	290	1118	1421	133
Future Volume (vph)	79	247	290	1118	1421	133
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	265	265	260			270
Storage Lanes	1	1	2			1
Taper Length (ft)	25		25			
Lane Util. Factor	0.97	0.88	0.97	0.91	0.95	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3433	2787	3433	5085	3539	1583
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	3433	2787	3433	5085	3539	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		24				111
Link Speed (mph)	45			50	45	
Link Distance (ft)	2748			2280	1194	
Travel Time (s)	41.6			31.1	18.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	86	268	315	1215	1545	145
Shared Lane Traffic (%)						
Lane Group Flow (vph)	86	268	315	1215	1545	145
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	34			24	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	1	1	1
Detector Template						
Leading Detector (ft)	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	pt+ov	custom	NA	NA	Perm
Protected Phases	8	8 1	1	6	2	
Permitted Phases			1			2
Detector Phase	8	8 1	1	6	2	2
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	20.0		20.0	20.0	41.0	41.0
Total Split (s)	34.0		30.0	98.0	68.0	68.0

Lanes, Volumes, Timings

6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy

01/18/2024

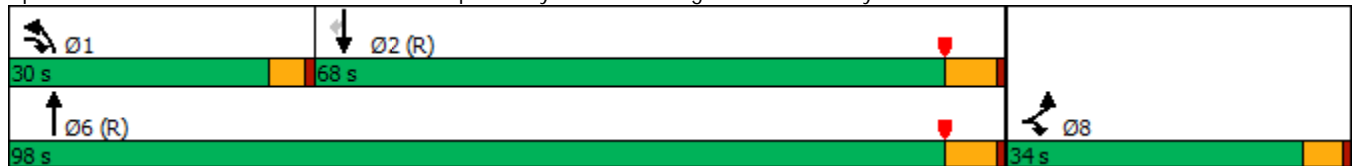


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Total Split (%)	25.8%		22.7%	74.2%	51.5%	51.5%
Maximum Green (s)	29.0		25.5	92.0	62.0	62.0
Yellow Time (s)	4.0		3.5	5.0	5.0	5.0
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0		-0.5	-2.0	-2.0	-2.0
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	Max		Min	C-Min	C-Min	C-Min
Walk Time (s)					7.0	7.0
Flash Dont Walk (s)					28.0	28.0
Pedestrian Calls (#/hr)					0	0
Act Effct Green (s)	33.9	56.1	18.2	90.1	67.9	67.9
Actuated g/C Ratio	0.26	0.42	0.14	0.68	0.51	0.51
v/c Ratio	0.10	0.22	0.67	0.35	0.85	0.17
Control Delay	34.0	17.2	60.7	8.9	31.1	5.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.0	17.2	60.7	8.9	31.1	5.9
LOS	C	B	E	A	C	A
Approach Delay	21.2			19.6	28.9	
Approach LOS	C			B	C	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 77 (58%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
 Natural Cycle: 85
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.85
 Intersection Signal Delay: 24.2
 Intersection LOS: C
 Intersection Capacity Utilization 60.9%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy



Queues

6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy

01/18/2024



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	86	268	315	1215	1545	145
v/c Ratio	0.10	0.22	0.67	0.35	0.85	0.17
Control Delay	34.0	17.2	60.7	8.9	31.1	5.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.0	17.2	60.7	8.9	31.1	5.9
Queue Length 50th (ft)	34	92	134	130	735	19
Queue Length 95th (ft)	63	125	176	151	813	m37
Internal Link Dist (ft)	2668			2200	1114	
Turn Bay Length (ft)	265	265	260			270
Base Capacity (vph)	882	1361	676	3621	1819	867
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.10	0.20	0.47	0.34	0.85	0.17

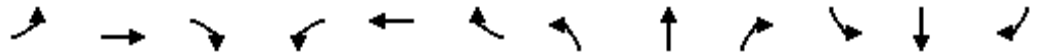
Intersection Summary

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

Lanes, Volumes, Timings

7: Bouquet Canyon Rd & Valencia Blvd/Soledad Canyon Rd

01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔↔	↕↕↕		↔↔↔	↕↕↕	↔	↔	↕↕↕	↔	↔↔↔	↕↕↕	↕↕↕
Traffic Volume (vph)	381	561	22	487	1290	282	22	657	376	324	1147	1032
Future Volume (vph)	381	561	22	487	1290	282	22	657	376	324	1147	1032
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	10	10	11	11	11	11	10	10	11
Storage Length (ft)	360		0	330		330	250		0	435		400
Storage Lanes	2		0	3		1	1		1	2		2
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.94	0.91	0.91	0.94	0.91	1.00	1.00	0.91	1.00	0.97	0.91	0.88
Fr _t		0.994				0.850			0.850			0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	4824	4886	0	4658	4746	1531	1711	4916	1531	3204	4746	2694
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	4824	4886	0	4658	4746	1531	1711	4916	1531	3204	4746	2694
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4				99			112			459
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		2282			2858			2196			1054	
Travel Time (s)		34.6			43.3			33.3			12.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	414	610	24	529	1402	307	24	714	409	352	1247	1122
Shared Lane Traffic (%)												
Lane Group Flow (vph)	414	634	0	529	1402	307	24	714	409	352	1247	1122
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		33			33			20			20	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.00	1.09	1.09	1.04	1.04	1.04	1.04	1.09	1.09	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50		50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50		50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4		3	8	1	5	2	3	1	6	7
Permitted Phases						8			2			6
Detector Phase	7	4		3	8	1	5	2	3	1	6	7
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	44.0		12.0	48.0	12.0	12.0	46.0	12.0	12.0	44.0	12.0

Queues

7: Bouquet Canyon Rd & Valencia Blvd/Soledad Canyon Rd

01/18/2024



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	414	634	529	1402	307	24	714	409	352	1247	1122
v/c Ratio	0.56	0.69	0.41	0.94	0.43	0.24	0.50	0.42	0.91	0.69	0.65
Control Delay	22.1	21.7	41.2	58.9	13.5	58.9	35.7	6.8	59.6	19.8	11.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.1	21.7	41.2	58.9	13.5	58.9	35.7	6.8	59.6	19.8	11.0
Queue Length 50th (ft)	34	52	147	469	85	20	191	12	162	313	425
Queue Length 95th (ft)	48	61	209	#558	156	50	234	240	m#220	380	523
Internal Link Dist (ft)		2202		2778			2116			974	
Turn Bay Length (ft)	360		330		330	250			435		400
Base Capacity (vph)	804	1298	1305	1490	721	194	1428	965	388	1819	1756
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.49	0.41	0.94	0.43	0.12	0.50	0.42	0.91	0.69	0.64

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

Lanes, Volumes, Timings
8: Bouquet Canyon Rd & Newhall Ranch Rd

01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	262	743	290	443	1704	444	362	793	157	437	1839	517
Future Volume (vph)	262	743	290	443	1704	444	362	793	157	437	1839	517
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	290		265	410		410	475		230	260		150
Storage Lanes	3		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.94	0.86	1.00	0.97	0.86	1.00	0.97	0.86	1.00	0.97	0.86	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	4990	6408	1583	3433	6408	1583	3433	6408	1583	3433	6408	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	4990	6408	1583	3433	6408	1583	3433	6408	1583	3433	6408	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			107			329			182			112
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		870			2469			1012			1082	
Travel Time (s)		13.2			37.4			15.3			16.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	285	808	315	482	1852	483	393	862	171	475	1999	562
Shared Lane Traffic (%)												
Lane Group Flow (vph)	285	808	315	482	1852	483	393	862	171	475	1999	562
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		36			36			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	3	8	1	7	4		1	6		5	2	3
Permitted Phases			8			4			6			2
Detector Phase	3	8	1	7	4	4	1	6	6	5	2	3
Switch Phase												
Minimum Initial (s)	4.0	5.0	4.0	4.0	5.0	5.0	4.0	10.0	10.0	4.0	10.0	4.0
Minimum Split (s)	12.0	43.0	12.0	12.0	43.0	43.0	12.0	49.0	49.0	12.0	50.0	12.0
Total Split (s)	21.0	36.0	22.0	21.0	36.0	36.0	22.0	45.0	45.0	30.0	53.0	21.0

Lanes, Volumes, Timings
 8: Bouquet Canyon Rd & Newhall Ranch Rd

01/18/2024

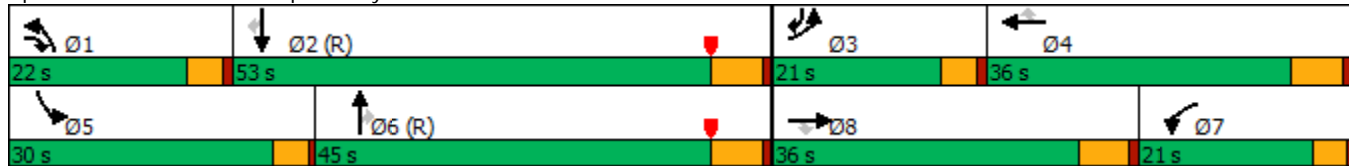


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	15.9%	27.3%	16.7%	15.9%	27.3%	27.3%	16.7%	34.1%	34.1%	22.7%	40.2%	15.9%
Maximum Green (s)	16.5	30.0	17.5	17.0	30.0	30.0	17.5	39.0	39.0	26.0	47.0	16.5
Yellow Time (s)	3.5	5.0	3.5	3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.0	3.5
All-Red Time (s)	1.0	1.0	1.0	0.5	1.0	1.0	1.0	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	-0.5	-2.0	-0.5	-0.5	-2.0	-2.0	-0.5	-2.0	-2.0	-0.5	-2.0	-0.5
Total Lost Time (s)	4.0	4.0	4.0	3.5	4.0	4.0	4.0	4.0	4.0	3.5	4.0	4.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes		Yes	Yes			Yes			Yes		Yes
Vehicle Extension (s)	3.0	5.5	3.0	3.0	5.5	5.5	3.0	5.5	5.5	3.0	5.5	3.0
Minimum Gap (s)	3.0	2.5	3.0	3.0	2.5	2.5	3.0	4.5	4.5	3.0	4.5	3.0
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	10.0	0.0	10.0	0.0
Time To Reduce (s)	0.0	24.0	0.0	0.0	24.0	24.0	0.0	10.0	10.0	0.0	10.0	0.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	None
Walk Time (s)		5.0			5.0	5.0		5.0	5.0		5.0	
Flash Dont Walk (s)		32.0			32.0	32.0		38.0	38.0		39.0	
Pedestrian Calls (#/hr)		2			2	2		1	1		1	
Act Effect Green (s)	14.2	26.8	44.5	22.7	34.8	34.8	17.7	44.2	44.2	23.3	49.3	67.6
Actuated g/C Ratio	0.11	0.20	0.34	0.17	0.26	0.26	0.13	0.33	0.33	0.18	0.37	0.51
v/c Ratio	0.53	0.62	0.52	0.82	1.10	0.73	0.86	0.40	0.26	0.79	0.83	0.65
Control Delay	59.0	49.9	15.5	63.5	97.8	23.7	63.3	52.8	19.8	61.5	41.6	22.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.0	49.9	15.5	63.5	97.8	23.7	63.3	52.8	19.8	61.5	41.6	22.2
LOS	E	D	B	E	F	C	E	D	B	E	D	C
Approach Delay		44.0			79.2			51.7			41.1	
Approach LOS		D			E			D			D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 105 (80%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
 Natural Cycle: 130
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.10
 Intersection Signal Delay: 55.7
 Intersection LOS: E
 Intersection Capacity Utilization 80.0%
 ICU Level of Service D
 Analysis Period (min) 15

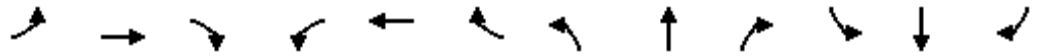
Splits and Phases: 8: Bouquet Canyon Rd & Newhall Ranch Rd



Queues

8: Bouquet Canyon Rd & Newhall Ranch Rd

01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	285	808	315	482	1852	483	393	862	171	475	1999	562
v/c Ratio	0.53	0.62	0.52	0.82	1.10	0.73	0.86	0.40	0.26	0.79	0.83	0.65
Control Delay	59.0	49.9	15.5	63.5	97.8	23.7	63.3	52.8	19.8	61.5	41.6	22.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.0	49.9	15.5	63.5	97.8	23.7	63.3	52.8	19.8	61.5	41.6	22.2
Queue Length 50th (ft)	82	184	86	199	-521	122	144	222	40	201	451	277
Queue Length 95th (ft)	112	211	145	#345	#631	255	#245	254	101	257	501	389
Internal Link Dist (ft)		790			2389			932			1002	
Turn Bay Length (ft)	290		265	410		410	475		230	260		150
Base Capacity (vph)	642	1553	608	589	1687	659	468	2145	651	689	2395	896
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.44	0.52	0.52	0.82	1.10	0.73	0.84	0.40	0.26	0.69	0.83	0.63

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

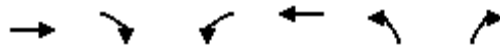
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Lanes, Volumes, Timings
9: Commuter Way & Soledad Cyn

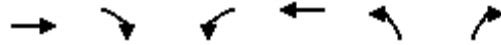
01/18/2024



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↑	↓	↑↑↑	↓	↓
Traffic Volume (vph)	1111	39	11	2064	44	19
Future Volume (vph)	1111	39	11	2064	44	19
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		150	285		0	0
Storage Lanes		1	1		2	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	1.00	1.00	0.91	0.97	0.95
Frt		0.850			0.954	
Flt Protected			0.950		0.966	
Satd. Flow (prot)	5085	1583	1770	5085	3330	0
Flt Permitted			0.950		0.966	
Satd. Flow (perm)	5085	1583	1770	5085	3330	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		39			21	
Link Speed (mph)	50			50	30	
Link Distance (ft)	928			2825	392	
Travel Time (s)	12.7			38.5	8.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1208	42	12	2243	48	21
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1208	42	12	2243	69	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	1	1	1	1	1	
Detector Template						
Leading Detector (ft)	50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	
Turn Type	NA	Perm	Prot	NA	Prot	
Protected Phases	2		1	6	8	
Permitted Phases		2				
Detector Phase	2	2	1	6	8	
Switch Phase						
Minimum Initial (s)	10.0	10.0	4.0	10.0	4.0	
Minimum Split (s)	26.0	26.0	12.0	22.0	37.0	
Total Split (s)	75.0	75.0	20.0	95.0	37.0	

Lanes, Volumes, Timings
 9: Commuter Way & Soledad Cyn

01/18/2024

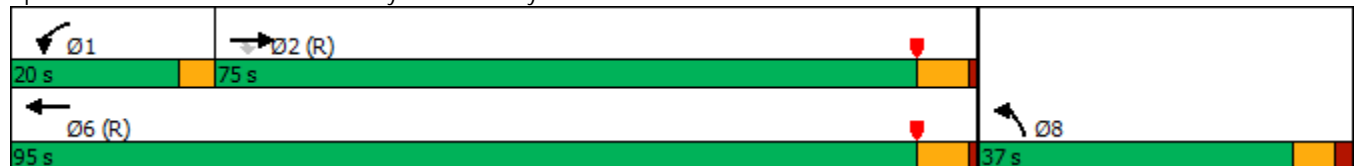


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Total Split (%)	56.8%	56.8%	15.2%	72.0%	28.0%	
Maximum Green (s)	69.0	69.0	16.5	89.0	31.0	
Yellow Time (s)	5.0	5.0	3.5	5.0	4.0	
All-Red Time (s)	1.0	1.0	0.0	1.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	0.5	-2.0	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Vehicle Extension (s)	5.0	5.0	1.5	5.0	2.0	
Minimum Gap (s)	4.0	4.0	1.5	4.0	2.0	
Time Before Reduce (s)	15.0	15.0	0.0	15.0	0.0	
Time To Reduce (s)	15.0	15.0	0.0	15.0	0.0	
Recall Mode	C-Max	C-Max	None	C-Max	None	
Walk Time (s)	7.0	7.0			7.0	
Flash Dont Walk (s)	13.0	13.0			24.0	
Pedestrian Calls (#/hr)	0	0			0	
Act Effect Green (s)	114.7	114.7	4.5	118.5	8.4	
Actuated g/C Ratio	0.87	0.87	0.03	0.90	0.06	
v/c Ratio	0.27	0.03	0.20	0.49	0.30	
Control Delay	0.9	0.1	82.7	0.7	45.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	0.9	0.1	82.7	0.7	45.1	
LOS	A	A	F	A	D	
Approach Delay	0.9			1.2	45.1	
Approach LOS	A			A	D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 16 (12%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Natural Cycle: 75
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.49
 Intersection Signal Delay: 1.9
 Intersection LOS: A
 Intersection Capacity Utilization 49.9%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 9: Commuter Way & Soledad Cyn



Queues

9: Commuter Way & Soledad Cyn

01/18/2024



Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Group Flow (vph)	1208	42	12	2243	69
v/c Ratio	0.27	0.03	0.20	0.49	0.30
Control Delay	0.9	0.1	82.7	0.7	45.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	0.9	0.1	82.7	0.7	45.1
Queue Length 50th (ft)	13	0	11	25	20
Queue Length 95th (ft)	32	0	m24	21	44
Internal Link Dist (ft)	848			2745	312
Turn Bay Length (ft)		150	285		
Base Capacity (vph)	4417	1380	214	4564	848
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.27	0.03	0.06	0.49	0.08

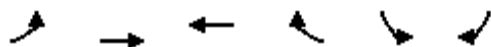
Intersection Summary

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

Lanes, Volumes, Timings

10: Soledad Cyn/Soledad Cyn Rd & Valley Center

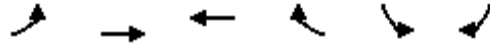
01/18/2024



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø4
Lane Configurations	↖↖	↑↑↑	↑↑↑	↗	↘↘	↘	
Traffic Volume (vph)	76	686	1584	778	397	164	
Future Volume (vph)	76	686	1584	778	397	164	
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	250			310	235	0	
Storage Lanes	2			1	1	1	
Taper Length (ft)	25				25		
Lane Util. Factor	0.97	0.91	0.91	1.00	0.97	1.00	
Frt				0.850		0.850	
Flt Protected	0.950				0.950		
Satd. Flow (prot)	3433	5085	5085	1583	3433	1583	
Flt Permitted	0.950				0.950		
Satd. Flow (perm)	3433	5085	5085	1583	3433	1583	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)				490		178	
Link Speed (mph)		50	50		30		
Link Distance (ft)		2935	1764		1172		
Travel Time (s)		40.0	24.1		26.6		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	83	746	1722	846	432	178	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	83	746	1722	846	432	178	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Left	Left	Right	Left	Right	
Median Width(ft)		24	24		24		
Link Offset(ft)		0	0		0		
Crosswalk Width(ft)		16	16		16		
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (mph)	15			9	15	9	
Number of Detectors	1	1	1	1	1	1	
Detector Template							
Leading Detector (ft)	50	50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Turn Type	Prot	NA	NA	Free	Prot	pt+ov	
Protected Phases	5	2	6		3	3 5	4
Permitted Phases				Free			
Detector Phase	5	2	6		3	3 5	
Switch Phase							
Minimum Initial (s)	4.0	4.0	4.0		4.0		4.0
Minimum Split (s)	20.0	22.0	29.0		20.0		35.0
Total Split (s)	20.0	72.0	52.0		25.0		35.0

Lanes, Volumes, Timings
 10: Soledad Cyn/Soledad Cyn Rd & Valley Center

01/18/2024

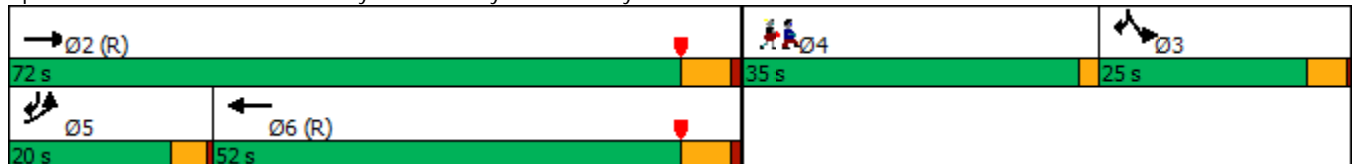


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø4	
Total Split (%)	15.2%	54.5%	39.4%		18.9%		27%	
Maximum Green (s)	16.0	66.0	46.0		20.5		33.0	
Yellow Time (s)	3.5	5.0	5.0		4.0		2.0	
All-Red Time (s)	0.5	1.0	1.0		0.5		0.0	
Lost Time Adjust (s)	0.0	-2.0	-2.0		-0.5			
Total Lost Time (s)	4.0	4.0	4.0		4.0			
Lead/Lag	Lead		Lag		Lag		Lead	
Lead-Lag Optimize?	Yes		Yes		Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		0.2	
Recall Mode	None	C-Max	C-Max		None		None	
Walk Time (s)				7.0				7.0
Flash Dont Walk (s)				16.0				26.0
Pedestrian Calls (#/hr)				0				0
Act Effct Green (s)	8.6	101.0	88.5	132.0	23.0		35.5	
Actuated g/C Ratio	0.07	0.77	0.67	1.00	0.17		0.27	
v/c Ratio	0.37	0.19	0.51	0.53	0.72		0.32	
Control Delay	50.6	9.2	2.7	2.9	43.0		3.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay	50.6	9.2	2.7	2.9	43.0		3.6	
LOS	D	A	A	A	D		A	
Approach Delay	13.3		2.8		31.5			
Approach LOS	B		A		C			

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 37 (28%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Natural Cycle: 115
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.72
 Intersection Signal Delay: 9.3
 Intersection Capacity Utilization 50.5%
 Analysis Period (min) 15
 Intersection LOS: A
 ICU Level of Service A

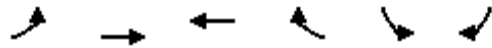
Splits and Phases: 10: Soledad Cyn/Soledad Cyn Rd & Valley Center



Queues

10: Soledad Cyn/Soledad Cyn Rd & Valley Center

01/18/2024



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	83	746	1722	846	432	178
v/c Ratio	0.37	0.19	0.51	0.53	0.72	0.32
Control Delay	50.6	9.2	2.7	2.9	43.0	3.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.6	9.2	2.7	2.9	43.0	3.6
Queue Length 50th (ft)	36	121	36	0	139	8
Queue Length 95th (ft)	64	151	52	m415	211	19
Internal Link Dist (ft)		2855	1684		1092	
Turn Bay Length (ft)	250			310	235	
Base Capacity (vph)	416	3891	3407	1583	621	627
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.20	0.19	0.51	0.53	0.70	0.28

Intersection Summary

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

Lanes, Volumes, Timings
 11: Golden Valley Road & Valley Center Drive

01/18/2024



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4	Ø5	Ø12
Lane Configurations	↶↶↶	↷↷	↶↶	↑↑↑	↑↑↑	↷			
Traffic Volume (vph)	771	125	124	800	997	464			
Future Volume (vph)	771	125	124	800	997	464			
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900			
Storage Length (ft)	260	260	290			150			
Storage Lanes	2	1	2			1			
Taper Length (ft)	25		25						
Lane Util. Factor	0.94	0.88	0.97	0.91	0.91	1.00			
Frt		0.850				0.850			
Flt Protected	0.950		0.950						
Satd. Flow (prot)	4990	2787	3433	5085	5085	1583			
Flt Permitted	0.950		0.950						
Satd. Flow (perm)	4990	2787	3433	5085	5085	1583			
Right Turn on Red		Yes				Yes			
Satd. Flow (RTOR)		136				340			
Link Speed (mph)	30			50	50				
Link Distance (ft)	513			2601	1605				
Travel Time (s)	11.7			35.5	21.9				
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92			
Adj. Flow (vph)	838	136	135	870	1084	504			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	838	136	135	870	1084	504			
Enter Blocked Intersection	No	No	No	No	No	No			
Lane Alignment	Left	Right	Left	Left	Left	Right			
Median Width(ft)	36			24	24				
Link Offset(ft)	0			0	0				
Crosswalk Width(ft)	16			16	16				
Two way Left Turn Lane									
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00			
Turning Speed (mph)	15	9	15			9			
Number of Detectors	1	1	1	1	1	1			
Detector Template									
Leading Detector (ft)	50	50	50	50	50	50			
Trailing Detector (ft)	0	0	0	0	0	0			
Detector 1 Position(ft)	0	0	0	0	0	0			
Detector 1 Size(ft)	50	50	50	50	50	50			
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel									
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Turn Type	Prot	pt+ov	Prot	NA	NA	Perm			
Protected Phases	3	5 12	5 12	2	6		4	5	12
Permitted Phases						6			
Detector Phase	3	5 12	5 12	2	6	6			
Switch Phase									
Minimum Initial (s)	3.0			10.0	10.0	10.0	4.0	4.0	4.0
Minimum Split (s)	25.0			30.0	40.0	40.0	35.0	15.0	20.0
Total Split (s)	30.0			67.0	42.0	42.0	35.0	25.0	35.0

Lanes, Volumes, Timings
 11: Golden Valley Road & Valley Center Drive

01/18/2024

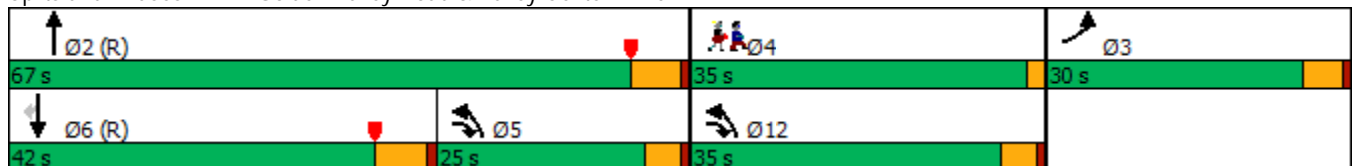


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4	Ø5	Ø12
Total Split (%)	22.7%			50.8%	31.8%	31.8%	27%	19%	27%
Maximum Green (s)	25.0			61.0	36.0	36.0	33.0	20.5	30.5
Yellow Time (s)	4.0			5.0	5.0	5.0	2.0	3.5	3.5
All-Red Time (s)	1.0			1.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)	-1.0			-2.0	-2.0	-2.0			
Total Lost Time (s)	4.0			4.0	4.0	4.0			
Lead/Lag					Lead	Lead		Lag	
Lead-Lag Optimize?					Yes	Yes		Yes	
Vehicle Extension (s)	3.0			3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None			C-Min	C-Min	C-Min	None	None	None
Walk Time (s)					7.0	7.0	7.0		5.0
Flash Dont Walk (s)					24.0	24.0	26.0		10.0
Pedestrian Calls (#/hr)					0	0	0		0
Act Effect Green (s)	29.6	20.5	20.5	84.2	69.8	69.8			
Actuated g/C Ratio	0.22	0.16	0.16	0.64	0.53	0.53			
v/c Ratio	0.75	0.25	0.25	0.27	0.40	0.51			
Control Delay	42.6	7.8	39.0	4.1	13.1	9.3			
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0			
Total Delay	42.6	7.8	39.0	4.1	13.1	9.3			
LOS	D	A	D	A	B	A			
Approach Delay	37.8			8.8	11.9				
Approach LOS	D			A	B				

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 26 (20%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 115
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.75
 Intersection Signal Delay: 18.1
 Intersection Capacity Utilization 47.5%
 Analysis Period (min) 15
 Intersection LOS: B
 ICU Level of Service A

Splits and Phases: 11: Golden Valley Road & Valley Center Drive



Queues

11: Golden Valley Road & Valley Center Drive

01/18/2024



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	838	136	135	870	1084	504
v/c Ratio	0.75	0.25	0.25	0.27	0.40	0.51
Control Delay	42.6	7.8	39.0	4.1	13.1	9.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.6	7.8	39.0	4.1	13.1	9.3
Queue Length 50th (ft)	252	6	61	41	158	110
Queue Length 95th (ft)	274	21	97	43	181	264
Internal Link Dist (ft)	433			2521	1525	
Turn Bay Length (ft)	260	260	290			150
Base Capacity (vph)	1133	1048	1181	3245	2689	997
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.74	0.13	0.11	0.27	0.40	0.51

Intersection Summary

Lanes, Volumes, Timings
12: Ruther Ave & Soledad Cyn Rd

01/18/2024

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	69	772	92	205	2204	17	250	134	94	81	93	68
Future Volume (vph)	69	772	92	205	2204	17	250	134	94	81	93	68
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	285		300	250		0	0		0	125		0
Storage Lanes	1		1	2		0	1		2	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	0.91	0.95	0.95	0.88	0.95	0.95	1.00
Frt			0.850		0.999				0.850		0.937	
Flt Protected	0.950			0.950			0.950	0.979		0.950		
Satd. Flow (prot)	1770	5085	1583	3433	5080	0	1681	1732	2787	1681	1658	0
Flt Permitted	0.950			0.950			0.950	0.979		0.950		
Satd. Flow (perm)	1770	5085	1583	3433	5080	0	1681	1732	2787	1681	1658	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			103		1				102		23	
Link Speed (mph)		50		50				40			30	
Link Distance (ft)		1764		2200				220			327	
Travel Time (s)		24.1		30.0				3.8			7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	75	839	100	223	2396	18	272	146	102	88	101	74
Shared Lane Traffic (%)							42%			0%		
Lane Group Flow (vph)	75	839	100	223	2414	0	158	260	102	88	175	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24		24				12			12	
Link Offset(ft)		0		0				0			0	
Crosswalk Width(ft)		16		16				16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1	1	1	1	
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50		50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	pt+ov	Split	NA	
Protected Phases	1	6		5	2		3	3	3 5	4	4	
Permitted Phases			6									
Detector Phase	1	6	6	5	2		3	3	3 5	4	4	
Switch Phase												
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	12.0	42.0	42.0	12.0	27.0		35.0	35.0		15.0	15.0	
Total Split (s)	18.0	52.0	52.0	30.0	64.0		30.0	30.0		20.0	20.0	

Lanes, Volumes, Timings
 12: Ruther Ave & Soledad Cyn Rd

01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	13.6%	39.4%	39.4%	22.7%	48.5%		22.7%	22.7%		15.2%	15.2%	
Maximum Green (s)	14.0	46.0	46.0	26.0	58.0		27.0	27.0		15.5	15.5	
Yellow Time (s)	3.5	5.0	5.0	3.5	5.0		3.0	3.0		3.5	3.5	
All-Red Time (s)	0.5	1.0	1.0	0.5	1.0		0.0	0.0		1.0	1.0	
Lost Time Adjust (s)	0.0	-2.0	-2.0	0.0	-2.0		1.0	1.0		-0.5	-0.5	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	4.5	4.5	1.5	4.5		3.0	3.0		3.0	3.0	
Minimum Gap (s)	1.5	3.0	3.0	1.5	3.0		3.0	3.0		3.0	3.0	
Time Before Reduce (s)	0.0	7.5	7.5	0.0	7.5		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	22.5	22.5	0.0	22.5		0.0	0.0		0.0	0.0	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None		None	None	
Walk Time (s)		7.0	7.0		7.0		5.0	5.0				
Flash Dont Walk (s)		25.0	25.0		11.0		27.0	27.0				
Pedestrian Calls (#/hr)		0	0		0		0	0				
Act Effect Green (s)	9.5	65.2	65.2	12.5	70.1		22.8	22.8	35.3	15.5	15.5	
Actuated g/C Ratio	0.07	0.49	0.49	0.09	0.53		0.17	0.17	0.27	0.12	0.12	
v/c Ratio	0.59	0.33	0.12	0.69	0.90		0.54	0.87	0.12	0.45	0.81	
Control Delay	98.3	8.3	1.3	68.7	34.9		56.6	80.2	3.9	61.7	77.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	98.3	8.3	1.3	68.7	34.9		56.6	80.2	3.9	61.7	77.1	
LOS	F	A	A	E	C		E	F	A	E	E	
Approach Delay		14.3			37.8			58.1			71.9	
Approach LOS		B			D			E			E	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
 Natural Cycle: 125
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.90
 Intersection Signal Delay: 36.8
 Intersection LOS: D
 Intersection Capacity Utilization 77.3%
 ICU Level of Service D
 Analysis Period (min) 15

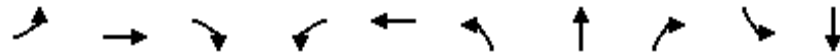
Splits and Phases: 12: Ruther Ave & Soledad Cyn Rd



Queues

12: Ruther Ave & Soledad Cyn Rd

01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	75	839	100	223	2414	158	260	102	88	175
v/c Ratio	0.59	0.33	0.12	0.69	0.90	0.54	0.87	0.12	0.45	0.81
Control Delay	98.3	8.3	1.3	68.7	34.9	56.6	80.2	3.9	61.7	77.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	98.3	8.3	1.3	68.7	34.9	56.6	80.2	3.9	61.7	77.1
Queue Length 50th (ft)	64	104	1	96	719	129	227	0	73	133
Queue Length 95th (ft)	m105	146	m8	136	#909	203	#352	16	134	#261
Internal Link Dist (ft)		1684			2120		140			247
Turn Bay Length (ft)	285		300	250					125	
Base Capacity (vph)	187	2512	834	676	2696	331	341	1159	207	225
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.33	0.12	0.33	0.90	0.48	0.76	0.09	0.43	0.78

Intersection Summary

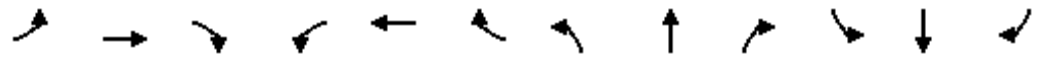
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

Lanes, Volumes, Timings
 13: Golden Valley Road & Centre Pointe Parkway

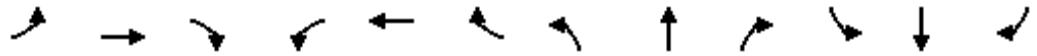
01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	48	70	158	249	98	64	349	801	344	132	924	126
Future Volume (vph)	48	70	158	249	98	64	349	801	344	132	924	126
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		260	150		250	375		300	700		0
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850		0.941				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	3433	1753	0	1770	3539	1583	1770	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1863	1583	3433	1753	0	1770	3539	1583	1770	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			109		25				374			136
Link Speed (mph)		30			30			50				50
Link Distance (ft)		1149			802			7898				1445
Travel Time (s)		26.1			18.2			107.7				19.7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	52	76	172	271	107	70	379	871	374	143	1004	137
Shared Lane Traffic (%)												
Lane Group Flow (vph)	52	76	172	271	177	0	379	871	374	143	1004	137
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50		50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	3	8	5	7	4		5	2	7	1	6	
Permitted Phases			8						2			6
Detector Phase	3	8	5	7	4		5	2	7	1	6	6
Switch Phase												
Minimum Initial (s)	4.0	6.0	4.0	4.0	6.0		4.0	10.0	4.0	4.0	10.0	10.0
Minimum Split (s)	12.0	25.0	20.0	20.0	39.0		20.0	33.0	20.0	15.0	34.0	34.0
Total Split (s)	19.0	25.0	33.0	34.0	40.0		33.0	40.0	34.0	33.0	40.0	40.0

Lanes, Volumes, Timings
 13: Golden Valley Road & Centre Pointe Parkway

01/18/2024

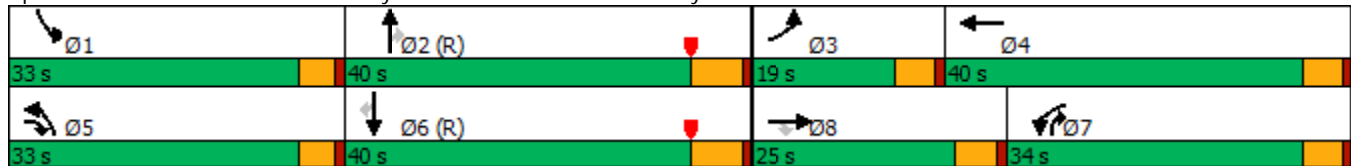


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	14.4%	18.9%	25.0%	25.8%	30.3%		25.0%	30.3%	25.8%	25.0%	30.3%	30.3%
Maximum Green (s)	14.0	20.0	28.5	29.0	35.0		28.5	34.0	29.0	28.5	34.0	34.0
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0		3.5	5.0	4.0	3.5	5.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0	-1.0	-0.5	-1.0	-1.0		-0.5	-2.0	-1.0	-0.5	-2.0	-2.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Min	None	None	C-Min	C-Min
Walk Time (s)					7.0			7.0			7.0	7.0
Flash Dont Walk (s)					27.0			20.0			21.0	21.0
Pedestrian Calls (#/hr)					0			0			0	0
Act Effct Green (s)	10.2	11.7	47.0	17.4	18.8		36.8	72.7	90.9	16.5	52.3	52.3
Actuated g/C Ratio	0.08	0.09	0.36	0.13	0.14		0.28	0.55	0.69	0.12	0.40	0.40
v/c Ratio	0.38	0.46	0.27	0.60	0.66		0.77	0.45	0.31	0.65	0.72	0.19
Control Delay	65.0	65.4	6.5	59.1	56.8		38.7	42.5	6.9	64.3	51.9	20.9
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.0	65.4	6.5	59.1	56.8		38.7	42.5	6.9	64.3	51.9	20.9
LOS	E	E	A	E	E		D	D	A	E	D	C
Approach Delay		31.6			58.2			33.4			50.0	
Approach LOS		C			E			C			D	

Intersection Summary

Area Type:	Other
Cycle Length:	132
Actuated Cycle Length:	132
Offset:	125 (95%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle:	105
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.77
Intersection Signal Delay:	42.1
Intersection LOS:	D
Intersection Capacity Utilization	70.6%
ICU Level of Service	C
Analysis Period (min)	15

Splits and Phases: 13: Golden Valley Road & Centre Pointe Parkway



Queues

13: Golden Valley Road & Centre Pointe Parkway

01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	52	76	172	271	177	379	871	374	143	1004	137
v/c Ratio	0.38	0.46	0.27	0.60	0.66	0.77	0.45	0.31	0.65	0.72	0.19
Control Delay	65.0	65.4	6.5	59.1	56.8	38.7	42.5	6.9	64.3	51.9	20.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.0	65.4	6.5	59.1	56.8	38.7	42.5	6.9	64.3	51.9	20.9
Queue Length 50th (ft)	43	63	24	114	124	338	384	108	123	474	46
Queue Length 95th (ft)	85	112	43	154	195	m405	m442	m162	125	#640	123
Internal Link Dist (ft)		1069			722		7818			1365	
Turn Bay Length (ft)	150		260	150		375		300	700		
Base Capacity (vph)	201	296	633	780	496	493	1948	1321	388	1403	709
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.26	0.26	0.27	0.35	0.36	0.77	0.45	0.28	0.37	0.72	0.19

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

Lanes, Volumes, Timings
 14: Sierra Highway & Golden Valley Road

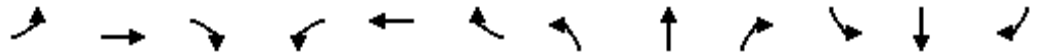
01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑	↔↔	↔↔	↑↑↑	↔	↔↔	↑↔		↔	↑↑	↔
Traffic Volume (vph)	283	436	793	336	899	40	546	193	14	20	1086	469
Future Volume (vph)	283	436	793	336	899	40	546	193	14	20	1086	469
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	280		280	285		300	285		0	410		540
Storage Lanes	2		2	2		1	2		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	0.88	0.97	0.91	1.00	0.97	0.95	0.95	1.00	0.95	1.00
Frt			0.850			0.850		0.990				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	2787	3433	5085	1583	3433	3504	0	1770	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	2787	3433	5085	1583	3433	3504	0	1770	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			481			136		6				510
Link Speed (mph)		50		50			30			30		
Link Distance (ft)		2032		1202			1801			1671		
Travel Time (s)		27.7		16.4			40.9			38.0		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	308	474	862	365	977	43	593	210	15	22	1180	510
Shared Lane Traffic (%)												
Lane Group Flow (vph)	308	474	862	365	977	43	593	225	0	22	1180	510
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24		24			24			24		24
Link Offset(ft)		0		0			0			0		0
Crosswalk Width(ft)		16		16			16			16		16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50		50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50		50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	custom
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						8
Detector Phase	7	4	4	3	8	8	5	2		1	6	8
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	8.5	29.6	29.6	8.5	40.0	40.0	15.0	49.0		8.5	46.0	40.0
Total Split (s)	29.0	41.0	41.0	29.0	41.0	41.0	25.0	44.0		18.0	37.0	41.0

Lanes, Volumes, Timings
 14: Sierra Highway & Golden Valley Road

01/18/2024

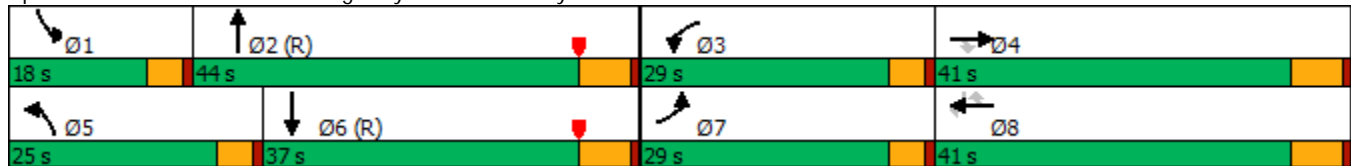


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	22.0%	31.1%	31.1%	22.0%	31.1%	31.1%	18.9%	33.3%		13.6%	28.0%	31.1%
Maximum Green (s)	24.5	35.0	35.0	24.5	35.0	35.0	20.5	38.0		13.5	31.0	35.0
Yellow Time (s)	3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.0		3.5	5.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	-0.5	-2.0	-2.0	-0.5	-2.0	-2.0	-0.5	-2.0		-0.5	-2.0	-2.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	None
Walk Time (s)					5.0	5.0		5.0			5.0	5.0
Flash Dont Walk (s)					29.0	29.0		33.0			30.0	29.0
Pedestrian Calls (#/hr)					0	0		0			0	0
Act Effct Green (s)	17.6	33.7	33.7	19.7	35.9	35.9	21.0	59.0		7.7	41.5	35.9
Actuated g/C Ratio	0.13	0.26	0.26	0.15	0.27	0.27	0.16	0.45		0.06	0.31	0.27
v/c Ratio	0.67	0.52	0.81	0.71	0.71	0.08	1.09	0.14		0.21	1.06	0.64
Control Delay	47.6	32.9	24.2	61.2	46.2	0.3	115.2	24.1		63.5	87.7	6.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	47.6	32.9	24.2	61.2	46.2	0.3	115.2	24.1		63.5	87.7	6.9
LOS	D	C	C	E	D	A	F	C		E	F	A
Approach Delay		31.1			48.7			90.1			63.3	
Approach LOS		C			D			F			E	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 96 (73%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 130
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.09
 Intersection Signal Delay: 54.1
 Intersection LOS: D
 Intersection Capacity Utilization 84.4%
 ICU Level of Service E
 Analysis Period (min) 15

Splits and Phases: 14: Sierra Highway & Golden Valley Road



Queues

14: Sierra Highway & Golden Valley Road

01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	308	474	862	365	977	43	593	225	22	1180	510
v/c Ratio	0.67	0.52	0.81	0.71	0.71	0.08	1.09	0.14	0.21	1.06	0.64
Control Delay	47.6	32.9	24.2	61.2	46.2	0.3	115.2	24.1	63.5	87.7	6.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.6	32.9	24.2	61.2	46.2	0.3	115.2	24.1	63.5	87.7	6.9
Queue Length 50th (ft)	113	180	238	155	273	0	-293	61	18	-597	0
Queue Length 95th (ft)	134	233	302	201	316	0	#411	102	47	#822	89
Internal Link Dist (ft)		1952			1122			1721		1591	
Turn Bay Length (ft)	280		280	285		300	285		410		540
Base Capacity (vph)	650	991	1127	650	1458	551	546	1568	187	1113	817
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.47	0.48	0.76	0.56	0.67	0.08	1.09	0.14	0.12	1.06	0.62

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Lanes, Volumes, Timings

15: SR-14 SB Ramp & Newhall Ranch Road/Golden Valley Road

01/18/2024

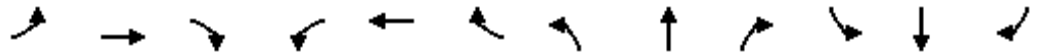


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗	↖	↑↑					↖	↗	↗
Traffic Volume (vph)	0	385	232	289	859	0	0	0	0	40	188	421
Future Volume (vph)	0	385	232	289	859	0	0	0	0	40	188	421
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	220		0	0		0	300		0
Storage Lanes	0		1	1		0	0		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850									0.850
Flt Protected				0.950						0.950	0.999	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	1681	1768	1583
Flt Permitted				0.950						0.950	0.999	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	1681	1768	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			252									107
Link Speed (mph)		50			50			30			30	
Link Distance (ft)		807			717			580			626	
Travel Time (s)		11.0			9.8			13.2			14.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	418	252	314	934	0	0	0	0	43	204	458
Shared Lane Traffic (%)										10%		
Lane Group Flow (vph)	0	418	252	314	934	0	0	0	0	39	208	458
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94							94
Detector 2 Size(ft)		6			6							6
Detector 2 Type		Cl+Ex			Cl+Ex							Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							0.0
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		6		5	2						4	
Permitted Phases		6								4		4

Lanes, Volumes, Timings

15: SR-14 SB Ramp & Newhall Ranch Road/Golden Valley Road

01/18/2024

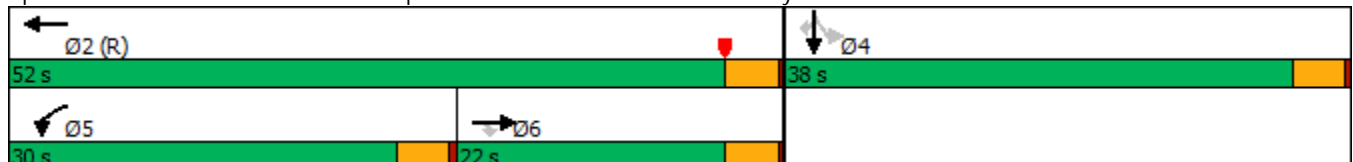


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase		6	6	5	2					4	4	4
Switch Phase												
Minimum Initial (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Minimum Split (s)		20.0	20.0	12.0	20.0					20.0	20.0	20.0
Total Split (s)		22.0	22.0	30.0	52.0					38.0	38.0	38.0
Total Split (%)		24.4%	24.4%	33.3%	57.8%					42.2%	42.2%	42.2%
Maximum Green (s)		18.0	18.0	26.0	48.0					34.0	34.0	34.0
Yellow Time (s)		3.5	3.5	3.5	3.5					3.5	3.5	3.5
All-Red Time (s)		0.5	0.5	0.5	0.5					0.5	0.5	0.5
Lost Time Adjust (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Total Lost Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lead/Lag		Lag	Lag	Lead								
Lead-Lag Optimize?		Yes	Yes	Yes								
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Recall Mode		Max	Max	None	C-Max					Max	Max	Max
Walk Time (s)		5.0	5.0		5.0					5.0	5.0	5.0
Flash Dont Walk (s)		10.0	10.0		10.0					10.0	10.0	10.0
Pedestrian Calls (#/hr)		0	0		0					0	0	0
Act Effect Green (s)		23.3	23.3	20.7	48.0					34.0	34.0	34.0
Actuated g/C Ratio		0.26	0.26	0.23	0.53					0.38	0.38	0.38
v/c Ratio		0.46	0.42	0.77	0.49					0.06	0.31	0.69
Control Delay		31.1	6.6	29.9	10.6					18.3	21.4	24.1
Queue Delay		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Total Delay		31.1	6.6	29.9	10.6					18.3	21.4	24.1
LOS		C	A	C	B					B	C	C
Approach Delay		21.9			15.5						23.0	
Approach LOS		C			B						C	

Intersection Summary

Area Type: Other
 Cycle Length: 90
 Actuated Cycle Length: 90
 Offset: 0 (0%), Referenced to phase 2:WBT, Start of Yellow
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.77
 Intersection Signal Delay: 19.1
 Intersection LOS: B
 Intersection Capacity Utilization 56.5%
 ICU Level of Service B
 Analysis Period (min) 15

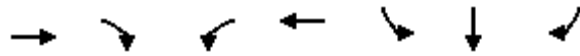
Splits and Phases: 15: SR-14 SB Ramp & Newhall Ranch Road/Golden Valley Road



Queues

15: SR-14 SB Ramp & Newhall Ranch Road/Golden Valley Road

01/18/2024


























Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	418	252	314	934	39	208	458
v/c Ratio	0.46	0.42	0.77	0.49	0.06	0.31	0.69
Control Delay	31.1	6.6	29.9	10.6	18.3	21.4	24.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.1	6.6	29.9	10.6	18.3	21.4	24.1
Queue Length 50th (ft)	105	0	166	239	14	86	165
Queue Length 95th (ft)	163	61	247	268	36	144	280
Internal Link Dist (ft)	727			637		546	
Turn Bay Length (ft)			220		300		
Base Capacity (vph)	917	597	511	1887	635	667	664
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.46	0.42	0.61	0.49	0.06	0.31	0.69

Intersection Summary

Lanes, Volumes, Timings
 16: SR 14 NB Ramp & Golden Valley Road

01/18/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 			 			 				
Traffic Volume (vph)	170	249	0	0	972	63	159	1	145	0	0	0
Future Volume (vph)	170	249	0	0	972	63	159	1	145	0	0	0
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	230		0	0		280	0		140	0		0
Storage Lanes	2		0	0		1	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt						0.850			0.850			
Flt Protected	0.950						0.950	0.953				
Satd. Flow (prot)	3433	3539	0	0	3539	1583	1681	1686	1583	0	0	0
Flt Permitted	0.950						0.950	0.953				
Satd. Flow (perm)	3433	3539	0	0	3539	1583	1681	1686	1583	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						68			158			
Link Speed (mph)		50			50			30				30
Link Distance (ft)		717			541			632				618
Travel Time (s)		9.8			7.4			14.4				14.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	185	271	0	0	1057	68	173	1	158	0	0	0
Shared Lane Traffic (%)							50%					
Lane Group Flow (vph)	185	271	0	0	1057	68	86	88	158	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1	1	2	1			
Detector Template	Left	Thru			Thru	Right	Left	Thru	Right			
Leading Detector (ft)	20	100			100	20	20	100	20			
Trailing Detector (ft)	0	0			0	0	0	0	0			
Detector 1 Position(ft)	0	0			0	0	0	0	0			
Detector 1 Size(ft)	20	6			6	20	20	6	20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Prot	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	7	4			8			2				
Permitted Phases						8	2		2			

Lanes, Volumes, Timings
 16: SR 14 NB Ramp & Golden Valley Road

01/18/2024

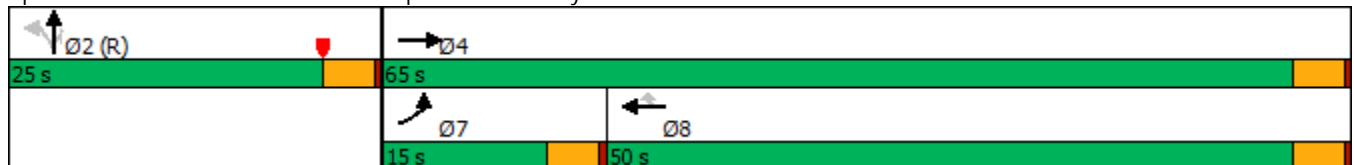


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4			8	8	2	2	2			
Switch Phase												
Minimum Initial (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Minimum Split (s)	12.0	20.0			20.0	20.0	20.0	20.0	20.0			
Total Split (s)	15.0	65.0			50.0	50.0	25.0	25.0	25.0			
Total Split (%)	16.7%	72.2%			55.6%	55.6%	27.8%	27.8%	27.8%			
Maximum Green (s)	11.0	61.0			46.0	46.0	21.0	21.0	21.0			
Yellow Time (s)	3.5	3.5			3.5	3.5	3.5	3.5	3.5			
All-Red Time (s)	0.5	0.5			0.5	0.5	0.5	0.5	0.5			
Lost Time Adjust (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Total Lost Time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Lead/Lag	Lead				Lag				Lag			
Lead-Lag Optimize?	Yes				Yes				Yes			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Recall Mode	None	None			None	None	C-Max	C-Max	C-Max			
Walk Time (s)		5.0			5.0	5.0	5.0	5.0	5.0			
Flash Dont Walk (s)		10.0			10.0	10.0	10.0	10.0	10.0			
Pedestrian Calls (#/hr)		0			0	0	0	0	0			
Act Effct Green (s)	9.7	49.8			36.1	36.1	32.2	32.2	32.2			
Actuated g/C Ratio	0.11	0.55			0.40	0.40	0.36	0.36	0.36			
v/c Ratio	0.50	0.14			0.74	0.10	0.14	0.15	0.24			
Control Delay	20.4	12.1			26.1	3.9	23.5	23.5	5.5			
Queue Delay	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Total Delay	20.4	12.1			26.1	3.9	23.5	23.5	5.5			
LOS	C	B			C	A	C	C	A			
Approach Delay		15.4			24.7			14.9				
Approach LOS		B			C			B				

Intersection Summary

Area Type: Other
 Cycle Length: 90
 Actuated Cycle Length: 90
 Offset: 0 (0%), Referenced to phase 2:NBTL and 6:, Start of Yellow
 Natural Cycle: 55
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.74
 Intersection Signal Delay: 20.8
 Intersection LOS: C
 Intersection Capacity Utilization 56.5%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 16: SR 14 NB Ramp & Golden Valley Road



Queues

16: SR 14 NB Ramp & Golden Valley Road

01/18/2024

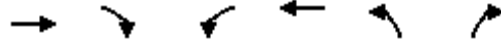


Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	185	271	1057	68	86	88	158
v/c Ratio	0.50	0.14	0.74	0.10	0.14	0.15	0.24
Control Delay	20.4	12.1	26.1	3.9	23.5	23.5	5.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.4	12.1	26.1	3.9	23.5	23.5	5.5
Queue Length 50th (ft)	54	75	262	0	34	35	0
Queue Length 95th (ft)	81	115	286	21	81	82	46
Internal Link Dist (ft)		637	461			552	
Turn Bay Length (ft)	230			280			140
Base Capacity (vph)	419	2398	1808	842	600	602	667
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.44	0.11	0.58	0.08	0.14	0.15	0.24

Intersection Summary

Lanes, Volumes, Timings
17: Studio Driveway & Soledad Cyn

01/18/2024



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↵	↑↑↑	↵	
Traffic Volume (vph)	802	55	27	1929	7	4
Future Volume (vph)	802	55	27	1929	7	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Fr _t	0.990				0.955	
Fl _t Protected			0.950		0.968	
Satd. Flow (prot)	5034	0	1770	5085	1722	0
Fl _t Permitted			0.288		0.968	
Satd. Flow (perm)	5034	0	536	5085	1722	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	28				4	
Link Speed (mph)	50			50	30	
Link Distance (ft)	469			185	392	
Travel Time (s)	6.4			2.5	8.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	872	60	29	2097	8	4
Shared Lane Traffic (%)						
Lane Group Flow (vph)	932	0	29	2097	12	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2		1	2	1	
Detector Template	Thru		Left	Thru	Left	
Leading Detector (ft)	100		20	100	20	
Trailing Detector (ft)	0		0	0	0	
Detector 1 Position(ft)	0		0	0	0	
Detector 1 Size(ft)	6		20	6	20	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA		Perm	NA	Prot	
Protected Phases	6			2	4	
Permitted Phases			2			
Detector Phase	6		2	2	4	
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	

Lanes, Volumes, Timings
 17: Studio Driveway & Soledad Cyn

01/18/2024

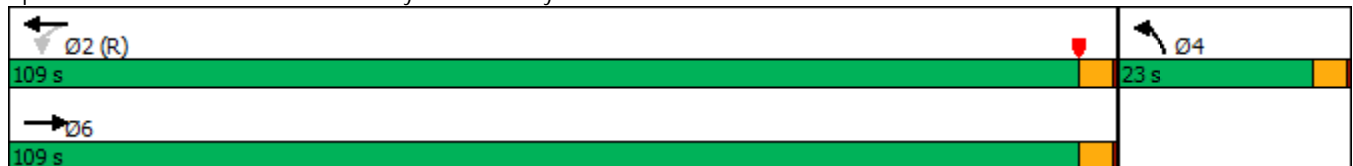


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Minimum Split (s)	20.0		20.0	20.0	20.0	
Total Split (s)	109.0		109.0	109.0	23.0	
Total Split (%)	82.6%		82.6%	82.6%	17.4%	
Maximum Green (s)	105.0		105.0	105.0	19.0	
Yellow Time (s)	3.5		3.5	3.5	3.5	
All-Red Time (s)	0.5		0.5	0.5	0.5	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	4.0		4.0	4.0	4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Recall Mode	Max		C-Max	C-Max	Max	
Walk Time (s)	5.0		5.0	5.0	5.0	
Flash Dont Walk (s)	10.0		10.0	10.0	10.0	
Pedestrian Calls (#/hr)	0		0	0	0	
Act Effect Green (s)	105.0		105.0	105.0	19.0	
Actuated g/C Ratio	0.80		0.80	0.80	0.14	
v/c Ratio	0.23		0.07	0.52	0.05	
Control Delay	0.8		3.6	4.2	39.0	
Queue Delay	0.0		0.0	0.0	0.0	
Total Delay	0.8		3.6	4.2	39.0	
LOS	A		A	A	D	
Approach Delay	0.8			4.2	39.0	
Approach LOS	A			A	D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 0 (0%), Referenced to phase 2:WBTL, Start of Yellow
 Natural Cycle: 45
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.52
 Intersection Signal Delay: 3.3
 Intersection LOS: A
 Intersection Capacity Utilization 47.3%
 ICU Level of Service A
 Analysis Period (min) 15

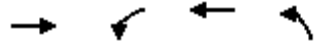
Splits and Phases: 17: Studio Driveway & Soledad Cyn



Queues

17: Studio Driveway & Soledad Cyn

01/18/2024



Lane Group	EBT	WBL	WBT	NBL
Lane Group Flow (vph)	932	29	2097	12
v/c Ratio	0.23	0.07	0.52	0.05
Control Delay	0.8	3.6	4.2	39.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	0.8	3.6	4.2	39.0
Queue Length 50th (ft)	13	4	134	6
Queue Length 95th (ft)	m15	m9	153	26
Internal Link Dist (ft)	389		105	312
Turn Bay Length (ft)				
Base Capacity (vph)	4010	426	4044	251
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.23	0.07	0.52	0.05

Intersection Summary

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

Lanes, Volumes, Timings
 18: Residential Driveway 1 & Soledad Cyn

01/18/2024



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↵	↑↑↑		↵
Traffic Volume (vph)	795	11	4	1956	0	26
Future Volume (vph)	795	11	4	1956	0	26
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	100		0	0
Storage Lanes		0	1		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt	0.998					0.865
Flt Protected			0.950			
Satd. Flow (prot)	5075	0	1770	5085	0	1611
Flt Permitted			0.950			
Satd. Flow (perm)	5075	0	1770	5085	0	1611
Link Speed (mph)	50			50	30	
Link Distance (ft)	185			460	286	
Travel Time (s)	2.5			6.3	6.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	864	12	4	2126	0	28
Shared Lane Traffic (%)						
Lane Group Flow (vph)	876	0	4	2126	0	28
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	41.1%
Analysis Period (min)	15
	ICU Level of Service A

HCM 6th TWSC
 18: Residential Driveway 1 & Soledad Cyn

01/18/2024

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↑	↑↑↑		↑
Traffic Vol, veh/h	795	11	4	1956	0	26
Future Vol, veh/h	795	11	4	1956	0	26
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	864	12	4	2126	0	28

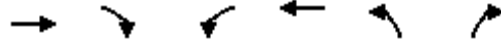
Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	876	0	438
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	5.34	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	3.12	-	3.92
Pot Cap-1 Maneuver	-	-	449	-	484
Stage 1	-	-	-	-	0
Stage 2	-	-	-	-	0
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	449	-	484
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	12.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	484	-	-	449	-
HCM Lane V/C Ratio	0.058	-	-	0.01	-
HCM Control Delay (s)	12.9	-	-	13.1	-
HCM Lane LOS	B	-	-	B	-
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Lanes, Volumes, Timings
 19: Residential Driveway 2 & Soledad Cyn

01/18/2024



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↵	↑↑↑		↵
Traffic Volume (vph)	806	15	8	1960	0	49
Future Volume (vph)	806	15	8	1960	0	49
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	100		0	0
Storage Lanes		0	1		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt	0.997					0.865
Flt Protected			0.950			
Satd. Flow (prot)	5070	0	1770	5085	0	1611
Flt Permitted			0.950			
Satd. Flow (perm)	5070	0	1770	5085	0	1611
Link Speed (mph)	50			50	30	
Link Distance (ft)	460			928	378	
Travel Time (s)	6.3			12.7	8.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	876	16	9	2130	0	53
Shared Lane Traffic (%)						
Lane Group Flow (vph)	892	0	9	2130	0	53
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	41.2%
ICU Level of Service	A
Analysis Period (min)	15

HCM 6th TWSC
 19: Residential Driveway 2 & Soledad Cyn

01/18/2024

Intersection						
Int Delay, s/veh	0.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↖ ↑↑↑			↗
Traffic Vol, veh/h	806	15	8	1960	0	49
Future Vol, veh/h	806	15	8	1960	0	49
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	876	16	9	2130	0	53

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	892	0	446
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	5.34	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	3.12	-	3.92
Pot Cap-1 Maneuver	-	-	441	-	479
Stage 1	-	-	-	-	0
Stage 2	-	-	-	-	0
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	441	-	479
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	13.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	479	-	-	441	-
HCM Lane V/C Ratio	0.111	-	-	0.02	-
HCM Control Delay (s)	13.5	-	-	13.3	-
HCM Lane LOS	B	-	-	B	-
HCM 95th %tile Q(veh)	0.4	-	-	0.1	-

Lanes, Volumes, Timings
 20: Studio Driveway 2 & Soledad Cyn

01/18/2024



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑		↗
Traffic Volume (vph)	857	0	0	1936	0	0
Future Volume (vph)	857	0	0	1936	0	0
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Fr						
Flt Protected						
Satd. Flow (prot)	5085	0	0	5085	0	1863
Flt Permitted						
Satd. Flow (perm)	5085	0	0	5085	0	1863
Link Speed (mph)	50			50	30	
Link Distance (ft)	557			469	476	
Travel Time (s)	7.6			6.4	10.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	932	0	0	2104	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	932	0	0	2104	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	40.7%
Analysis Period (min)	15
	ICU Level of Service A

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑		↑
Traffic Vol, veh/h	857	0	0	1936	0	0
Future Vol, veh/h	857	0	0	1936	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	932	0	0	2104	0	0

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	-	-	466
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	3.92
Pot Cap-1 Maneuver	-	0	-	0	465
Stage 1	-	0	-	0	-
Stage 2	-	0	-	0	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	465
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

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

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

***Existing with Revised Project Conditions
Afternoon Peak Hour***

Lanes, Volumes, Timings
 1: Valencia Blvd & 5 Fwy SB Ramp

01/18/2024



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑		↑↑	↑
Traffic Volume (vph)	0	504	784	0	177	76
Future Volume (vph)	0	504	784	0	177	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	15	12	14
Storage Length (ft)	0			0	0	455
Storage Lanes	0			0	2	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.91	0.95	1.00	0.97	1.00
Fr _t						0.850
Fl _t Protected					0.950	
Satd. Flow (prot)	0	5085	3539	0	3433	1689
Fl _t Permitted					0.950	
Satd. Flow (perm)	0	5085	3539	0	3433	1689
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)						83
Link Speed (mph)		50	50		30	
Link Distance (ft)		616	917		417	
Travel Time (s)		8.4	12.5		9.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	548	852	0	192	83
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	548	852	0	192	83
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		24	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	0.88	1.00	0.92
Turning Speed (mph)	15			9	15	9
Number of Detectors		1	1		1	1
Detector Template						
Leading Detector (ft)		50	50		50	50
Trailing Detector (ft)		0	0		0	0
Detector 1 Position(ft)		0	0		0	0
Detector 1 Size(ft)		50	50		50	50
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)		0.0	0.0		0.0	0.0
Detector 1 Queue (s)		0.0	0.0		0.0	0.0
Detector 1 Delay (s)		0.0	0.0		0.0	0.0
Turn Type		NA	NA		Prot	Perm
Protected Phases		2	6		4	
Permitted Phases						4
Detector Phase		2	6		4	4
Switch Phase						
Minimum Initial (s)		4.0	4.0		4.0	4.0
Minimum Split (s)		20.0	35.2		20.0	20.0

Lanes, Volumes, Timings
 1: Valencia Blvd & 5 Fwy SB Ramp

01/18/2024



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Total Split (s)		41.0	41.0		25.0	25.0
Total Split (%)		62.1%	62.1%		37.9%	37.9%
Maximum Green (s)		34.8	34.8		19.2	19.2
Yellow Time (s)		5.2	5.2		4.8	4.8
All-Red Time (s)		1.0	1.0		1.0	1.0
Lost Time Adjust (s)		-2.2	-2.2		-1.8	-1.8
Total Lost Time (s)		4.0	4.0		4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Recall Mode		C-Max	C-Max		Min	Min
Walk Time (s)			5.0			
Flash Dont Walk (s)			18.0			
Pedestrian Calls (#/hr)			0			
Act Effect Green (s)		47.2	47.2		10.8	10.8
Actuated g/C Ratio		0.72	0.72		0.16	0.16
v/c Ratio		0.15	0.34		0.34	0.24
Control Delay		3.3	4.7		25.7	8.1
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		3.3	4.7		25.7	8.1
LOS		A	A		C	A
Approach Delay		3.3	4.7		20.4	
Approach LOS		A	A		C	

Intersection Summary

Area Type: Other
 Cycle Length: 66
 Actuated Cycle Length: 66
 Offset: 56 (85%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.34
 Intersection Signal Delay: 6.8
 Intersection LOS: A
 Intersection Capacity Utilization 33.4%
 ICU Level of Service A
 Analysis Period (min) 15

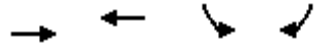
Splits and Phases: 1: Valencia Blvd & 5 Fwy SB Ramp



Queues

1: Valencia Blvd & 5 Fwy SB Ramp

01/18/2024



Lane Group	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	548	852	192	83
v/c Ratio	0.15	0.34	0.34	0.24
Control Delay	3.3	4.7	25.7	8.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	3.3	4.7	25.7	8.1
Queue Length 50th (ft)	20	87	36	0
Queue Length 95th (ft)	34	86	59	32
Internal Link Dist (ft)	536	837	337	
Turn Bay Length (ft)				455
Base Capacity (vph)	3634	2529	1092	594
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.15	0.34	0.18	0.14
Intersection Summary				

Lanes, Volumes, Timings
2: 5 Fwy NB Ramp & Valencia Blvd

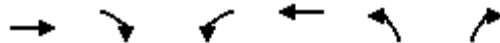
01/18/2024

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↙↘	↑↑↑	↙↘	↗↘
Traffic Volume (vph)	647	30	123	1396	184	722
Future Volume (vph)	647	30	123	1396	184	722
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	12	12	12	12	14
Storage Length (ft)		0	200		220	220
Storage Lanes		0	2		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	0.97	0.86	0.97	0.88
Fr _t	0.993					0.850
Fl _t Protected			0.950		0.950	
Satd. Flow (prot)	5386	0	3433	6408	3433	2972
Fl _t Permitted			0.950		0.950	
Satd. Flow (perm)	5386	0	3433	6408	3433	2972
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	13					689
Link Speed (mph)	50			50	30	
Link Distance (ft)	917			476	493	
Travel Time (s)	12.5			6.5	11.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	703	33	134	1517	200	785
Shared Lane Traffic (%)						
Lane Group Flow (vph)	736	0	134	1517	200	785
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	24			24	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.92	1.00	1.00	1.00	1.00	0.92
Turning Speed (mph)		9	15		15	9
Number of Detectors	1		1	1	1	1
Detector Template						
Leading Detector (ft)	50		50	50	50	50
Trailing Detector (ft)	0		0	0	0	0
Detector 1 Position(ft)	0		0	0	0	0
Detector 1 Size(ft)	50		50	50	50	50
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0
Turn Type	NA		Prot	NA	Prot	Prot
Protected Phases	2		1	6	8	8
Permitted Phases						
Detector Phase	2		1	6	8	8
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	36.0		14.0	20.0	20.0	20.0

Lanes, Volumes, Timings

2: 5 Fwy NB Ramp & Valencia Blvd

01/18/2024

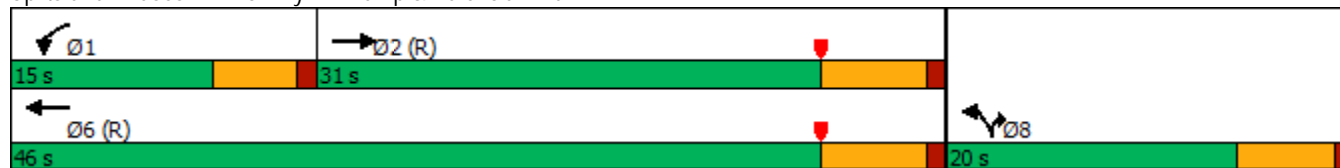


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Total Split (s)	31.0		15.0	46.0	20.0	20.0
Total Split (%)	47.0%		22.7%	69.7%	30.3%	30.3%
Maximum Green (s)	24.8		9.9	39.8	14.2	14.2
Yellow Time (s)	5.2		4.1	5.2	4.8	4.8
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-2.2		-1.1	-2.2	-1.8	-1.8
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max		None	C-Max	None	None
Walk Time (s)	5.0					
Flash Dont Walk (s)	24.0					
Pedestrian Calls (#/hr)	0					
Act Effect Green (s)	34.4		9.0	45.2	12.8	12.8
Actuated g/C Ratio	0.52		0.14	0.68	0.19	0.19
v/c Ratio	0.26		0.29	0.35	0.30	0.69
Control Delay	7.9		30.3	3.7	23.2	7.2
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	7.9		30.3	3.7	23.2	7.2
LOS	A		C	A	C	A
Approach Delay	7.9			5.9	10.5	
Approach LOS	A			A	B	

Intersection Summary

Area Type: Other
 Cycle Length: 66
 Actuated Cycle Length: 66
 Offset: 45 (68%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Natural Cycle: 70
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.69
 Intersection Signal Delay: 7.6
 Intersection LOS: A
 Intersection Capacity Utilization 45.1%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 2: 5 Fwy NB Ramp & Valencia Blvd



Queues

2: 5 Fwy NB Ramp & Valencia Blvd

01/18/2024



























Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	736	134	1517	200	785
v/c Ratio	0.26	0.29	0.35	0.30	0.69
Control Delay	7.9	30.3	3.7	23.2	7.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	7.9	30.3	3.7	23.2	7.2
Queue Length 50th (ft)	35	34	45	36	18
Queue Length 95th (ft)	89	55	94	58	63
Internal Link Dist (ft)	837		396	413	
Turn Bay Length (ft)		200		220	220
Base Capacity (vph)	2816	572	4392	832	1242
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.26	0.23	0.35	0.24	0.63

Intersection Summary

Lanes, Volumes, Timings
3: McBean Pkwy & Valencia Blvd

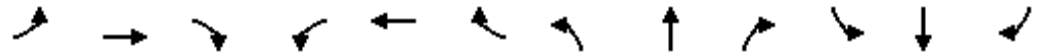
01/18/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	434	1167	168	355	814	193	162	921	453	228	858	517
Future Volume (vph)	434	1167	168	355	814	193	162	921	453	228	858	517
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	11	11	13	11	11	12	11	11	12
Storage Length (ft)	350		280	290		225	130		200	190		300
Storage Lanes	2		1	2		1	2		2	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	0.88	0.97	0.91	0.88
Fr _t			0.850			0.850			0.850			0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3319	4916	1583	3319	4916	1636	3319	4916	2787	3319	4916	2787
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3319	4916	1583	3319	4916	1636	3319	4916	2787	3319	4916	2787
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			70			70			70			81
Link Speed (mph)		50			50			45			45	
Link Distance (ft)		1919			721			765			1359	
Travel Time (s)		26.2			9.8			11.6			20.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	472	1268	183	386	885	210	176	1001	492	248	933	562
Shared Lane Traffic (%)												
Lane Group Flow (vph)	472	1268	183	386	885	210	176	1001	492	248	933	562
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		22			22			22			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.00	1.04	1.04	0.96	1.04	1.04	1.00	1.04	1.04	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	1	6	7	5	2	3	7	4	5	3	8	1
Permitted Phases			6			2			4			8
Detector Phase	1	6	7	5	2	3	7	4	5	3	8	1
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	43.0	12.0	12.0	44.0	12.0	12.0	41.0	12.0	12.0	44.0	12.0

Queues

3: McBean Pkwy & Valencia Blvd

01/18/2024



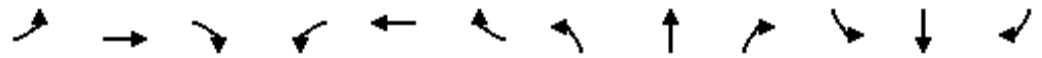
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	472	1268	183	386	885	210	176	1001	492	248	933	562
v/c Ratio	0.82	0.76	0.24	0.72	0.55	0.26	0.54	0.78	0.38	0.63	0.68	0.40
Control Delay	70.0	42.3	16.7	74.8	20.4	4.8	63.1	50.0	20.5	41.0	54.4	48.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	70.0	42.3	16.7	74.8	20.4	4.8	63.1	50.0	20.5	41.0	54.4	48.0
Queue Length 50th (ft)	211	377	53	125	231	72	74	289	127	100	309	264
Queue Length 95th (ft)	#294	440	102	179	265	86	113	338	168	146	357	326
Internal Link Dist (ft)		1839			641			685			1279	
Turn Bay Length (ft)	350		280	290		225	130		200	190		300
Base Capacity (vph)	580	1664	788	578	1604	830	352	1377	1333	427	1489	1396
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.81	0.76	0.23	0.67	0.55	0.25	0.50	0.73	0.37	0.58	0.63	0.40

Intersection Summary

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

Lanes, Volumes, Timings
4: McBean Parkway & Magic Mountain Pkwy

01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	859	594	131	223	454	350	136	1314	143	270	1265	276
Future Volume (vph)	859	594	131	223	454	350	136	1314	143	270	1265	276
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	16	12	12	14	11	11	16	11	11	16
Storage Length (ft)	360		360	210		0	175		175	300		340
Storage Lanes	1		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.91	1.00	0.97	0.86	1.00	0.97	0.86	1.00
Fr _t			0.850			0.850			0.850			0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	1794	3433	5085	1689	3319	6194	1794	3319	6194	1794
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1794	3433	5085	1689	3319	6194	1794	3319	6194	1794
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			142			255			198			299
Link Speed (mph)		50			45			45			50	
Link Distance (ft)		809			1452			1203			1219	
Travel Time (s)		11.0			22.0			18.2			16.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	934	646	142	242	493	380	148	1428	155	293	1375	300
Shared Lane Traffic (%)												
Lane Group Flow (vph)	934	646	142	242	493	380	148	1428	155	293	1375	300
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			22			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	0.85	1.00	1.00	0.92	1.04	1.04	0.85	1.04	1.04	0.85
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			Free			Free
Detector Phase	5	2	2	1	6	6	3	8		7	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Minimum Split (s)	12.0	41.0	41.0	12.0	40.0	40.0	12.0	37.0		12.0	37.0	

Lanes, Volumes, Timings

4: McBean Parkway & Magic Mountain Pkwy

01/18/2024

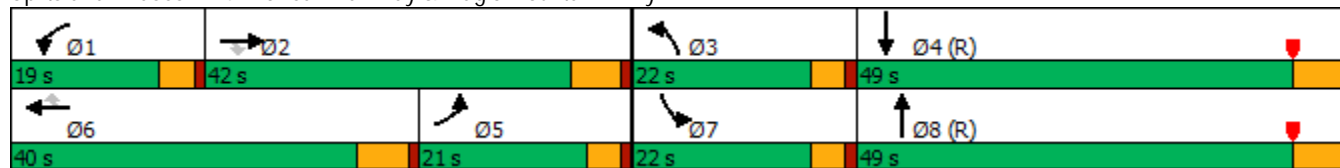


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	21.0	42.0	42.0	19.0	40.0	40.0	22.0	49.0		22.0	49.0	
Total Split (%)	15.9%	31.8%	31.8%	14.4%	30.3%	30.3%	16.7%	37.1%		16.7%	37.1%	
Maximum Green (s)	16.5	36.0	36.0	14.5	34.0	34.0	17.5	43.0		17.5	43.0	
Yellow Time (s)	3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.0		3.5	5.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	-0.5	-2.0	-2.0	-0.5	-2.0	-2.0	-0.5	-2.0		-0.5	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	Max	Max	None	Max	Max	None	C-Max		None	C-Max	
Walk Time (s)		5.0	5.0		5.0	5.0		5.0			5.0	
Flash Dont Walk (s)		30.0	30.0		29.0	29.0		26.0			26.0	
Pedestrian Calls (#/hr)		0	0		0	0		0			0	
Act Effect Green (s)	17.0	39.1	39.1	13.9	36.0	36.0	11.7	46.7	132.0	16.3	51.3	132.0
Actuated g/C Ratio	0.13	0.30	0.30	0.11	0.27	0.27	0.09	0.35	1.00	0.12	0.39	1.00
v/c Ratio	2.11	0.62	0.23	0.67	0.36	0.59	0.50	0.65	0.09	0.71	0.57	0.17
Control Delay	536.3	43.3	6.4	72.3	47.6	25.4	78.4	27.6	0.1	65.7	33.2	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	536.3	43.3	6.4	72.3	47.6	25.4	78.4	27.6	0.1	65.7	33.2	0.2
LOS	F	D	A	E	D	C	E	C	A	E	C	A
Approach Delay		307.7			45.4			29.5			33.0	
Approach LOS		F			D			C			C	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 30 (23%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow
 Natural Cycle: 125
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 2.11
 Intersection Signal Delay: 106.5
 Intersection LOS: F
 Intersection Capacity Utilization 75.2%
 ICU Level of Service D
 Analysis Period (min) 15

Splits and Phases: 4: McBean Parkway & Magic Mountain Pkwy



Queues

4: McBean Parkway & Magic Mountain Pkwy

01/18/2024


































Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	934	646	142	242	493	380	148	1428	155	293	1375	300
v/c Ratio	2.11	0.62	0.23	0.67	0.36	0.59	0.50	0.65	0.09	0.71	0.57	0.17
Control Delay	536.3	43.3	6.4	72.3	47.6	25.4	78.4	27.6	0.1	65.7	33.2	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	536.3	43.3	6.4	72.3	47.6	25.4	78.4	27.6	0.1	65.7	33.2	0.2
Queue Length 50th (ft)	~653	254	0	103	126	102	68	156	0	125	266	0
Queue Length 95th (ft)	#784	320	50	149	169	221	m93	175	m0	173	318	0
Internal Link Dist (ft)		729			1372			1123			1139	
Turn Bay Length (ft)	360		360	210			175		175	300		340
Base Capacity (vph)	442	1048	631	390	1386	646	452	2189	1794	452	2406	1794
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	2.11	0.62	0.23	0.62	0.36	0.59	0.33	0.65	0.09	0.65	0.57	0.17

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
5: Valencia Blvd & Magic Mountain Pkwy

01/18/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 		 	 			  			  	 
Traffic Volume (vph)	654	579	29	219	400	88	56	1541	238	89	1137	432
Future Volume (vph)	654	579	29	219	400	88	56	1541	238	89	1137	432
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	13	12	11	12	11	11	14	12	11	11	12
Storage Length (ft)	310		0	250		200	180		200	190		190
Storage Lanes	1		0	2		0	1		1	1		2
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	0.95	0.97	0.95	0.95	1.00	0.91	1.00	1.00	0.91	0.88
Frt		0.993			0.973				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3319	3632	0	3319	3444	0	1711	5424	1583	1711	4916	2787
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3319	3632	0	3319	3444	0	1711	5424	1583	1711	4916	2787
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			19				161			443
Link Speed (mph)		50			45			45				45
Link Distance (ft)		1046			2778			1989				572
Travel Time (s)		14.3			42.1			30.1				8.7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	711	629	32	238	435	96	61	1675	259	97	1236	470
Shared Lane Traffic (%)												
Lane Group Flow (vph)	711	661	0	238	531	0	61	1675	259	97	1236	470
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		22			22			11				11
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.04	0.96	1.00	1.04	1.00	1.04	1.04	0.92	1.00	1.04	1.04	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Size(ft)	50	50		50	50		50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	3	8		7	4		1	6		5	2	3
Permitted Phases									6			2
Detector Phase	3	8		7	4		1	6	6	5	2	3
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	35.0		12.0	39.0		12.0	38.0	38.0	12.0	41.0	12.0

Lanes, Volumes, Timings
5: Valencia Blvd & Magic Mountain Pkwy

01/18/2024

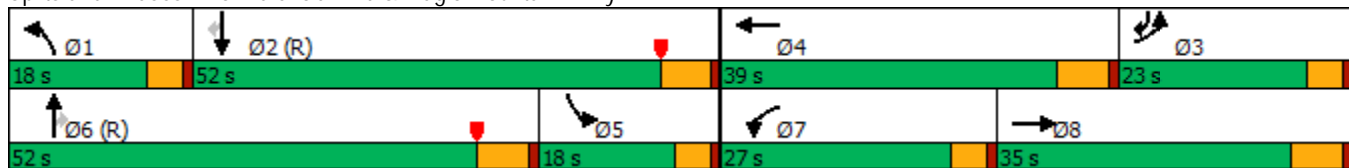


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	23.0	35.0		27.0	39.0		18.0	52.0	52.0	18.0	52.0	23.0
Total Split (%)	17.4%	26.5%		20.5%	29.5%		13.6%	39.4%	39.4%	13.6%	39.4%	17.4%
Maximum Green (s)	18.5	29.0		22.5	33.0		13.5	46.0	46.0	13.5	46.0	18.5
Yellow Time (s)	3.5	5.0		3.5	5.0		3.5	5.0	5.0	3.5	5.0	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-0.5	-2.0		-0.5	-2.0		-0.5	-2.0	0.0	-0.5	-2.0	-0.5
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	6.0	4.0	4.0	4.0
Lead/Lag	Lag	Lag		Lead	Lead		Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None		None	C-Max	C-Max	Max	C-Max	None
Walk Time (s)		5.0			5.0			5.0	5.0		5.0	
Flash Dont Walk (s)		24.0			28.0			21.0	21.0		22.0	
Pedestrian Calls (#/hr)		0			0			0	0		0	
Act Effect Green (s)	26.9	38.7		15.3	27.1		10.5	48.0	46.0	14.0	53.7	81.4
Actuated g/C Ratio	0.20	0.29		0.12	0.21		0.08	0.36	0.35	0.11	0.41	0.62
v/c Ratio	1.05	0.62		0.62	0.74		0.45	0.85	0.39	0.54	0.62	0.25
Control Delay	94.3	38.5		47.0	43.8		87.8	29.5	6.8	45.9	15.6	0.6
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	94.3	38.5		47.0	43.8		87.8	29.5	6.8	45.9	15.6	0.6
LOS	F	D		D	D		F	C	A	D	B	A
Approach Delay		67.4			44.8			28.3			13.3	
Approach LOS		E			D			C			B	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 115 (87%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
 Natural Cycle: 115
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.05
 Intersection Signal Delay: 34.9
 Intersection LOS: C
 Intersection Capacity Utilization 80.6%
 ICU Level of Service D
 Analysis Period (min) 15

Splits and Phases: 5: Valencia Blvd & Magic Mountain Pkwy



Queues

5: Valencia Blvd & Magic Mountain Pkwy

01/18/2024



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	711	661	238	531	61	1675	259	97	1236	470
v/c Ratio	1.05	0.62	0.62	0.74	0.45	0.85	0.39	0.54	0.62	0.25
Control Delay	94.3	38.5	47.0	43.8	87.8	29.5	6.8	45.9	15.6	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	94.3	38.5	47.0	43.8	87.8	29.5	6.8	45.9	15.6	0.6
Queue Length 50th (ft)	~346	298	107	234	52	267	17	75	103	1
Queue Length 95th (ft)	#549	366	148	292	m77	260	m44	m110	m181	m9
Internal Link Dist (ft)		966		2698		1909			492	
Turn Bay Length (ft)	310		250		180		200	190		190
Base Capacity (vph)	676	1068	578	927	181	1972	656	181	1998	1887
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.05	0.62	0.41	0.57	0.34	0.85	0.39	0.54	0.62	0.25

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings

6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy

01/18/2024



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔↔	↔↔	↔↔	↑↑↑	↑↑	↔
Traffic Volume (vph)	229	445	325	1414	1097	144
Future Volume (vph)	229	445	325	1414	1097	144
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	265	265	260			270
Storage Lanes	1	1	2			1
Taper Length (ft)	25		25			
Lane Util. Factor	0.97	0.88	0.97	0.91	0.95	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3433	2787	3433	5085	3539	1583
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	3433	2787	3433	5085	3539	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		70				156
Link Speed (mph)	45			50	45	
Link Distance (ft)	2778			2280	1171	
Travel Time (s)	42.1			31.1	17.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	249	484	353	1537	1192	157
Shared Lane Traffic (%)						
Lane Group Flow (vph)	249	484	353	1537	1192	157
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	34			24	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	1	1	1
Detector Template						
Leading Detector (ft)	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	pt+ov	custom	NA	NA	Perm
Protected Phases	8	8 1	1	6	2	
Permitted Phases			1			2
Detector Phase	8	8 1	1	6	2	2
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	20.0		20.0	20.0	41.0	41.0
Total Split (s)	34.0		30.0	98.0	68.0	68.0

Lanes, Volumes, Timings

6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy

01/18/2024

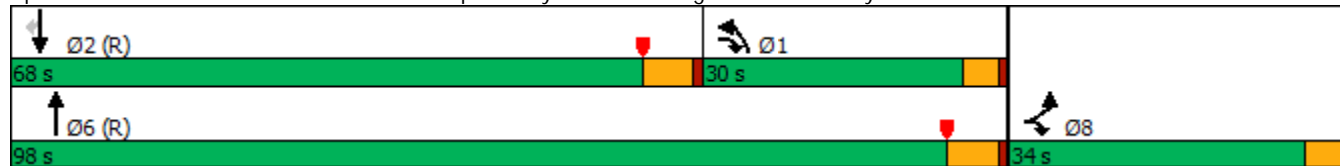


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Total Split (%)	25.8%		22.7%	74.2%	51.5%	51.5%
Maximum Green (s)	29.0		25.5	92.0	62.0	62.0
Yellow Time (s)	4.0		3.5	5.0	5.0	5.0
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0		-0.5	-2.0	-2.0	-2.0
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0
Lead/Lag			Lag		Lead	Lead
Lead-Lag Optimize?			Yes		Yes	Yes
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	Max		Min	C-Min	C-Min	C-Min
Walk Time (s)					7.0	7.0
Flash Dont Walk (s)					28.0	28.0
Pedestrian Calls (#/hr)					0	0
Act Effect Green (s)	43.8	68.3	20.5	80.2	55.7	55.7
Actuated g/C Ratio	0.33	0.52	0.16	0.61	0.42	0.42
v/c Ratio	0.22	0.33	0.66	0.50	0.80	0.21
Control Delay	30.0	9.5	58.2	14.8	37.4	3.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.0	9.5	58.2	14.8	37.4	3.6
LOS	C	A	E	B	D	A
Approach Delay	16.5			22.9	33.5	
Approach LOS	B			C	C	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 75 (57%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
 Natural Cycle: 85
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.80
 Intersection Signal Delay: 25.3
 Intersection LOS: C
 Intersection Capacity Utilization 56.1%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy



Queues

6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy

01/18/2024







































Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	249	484	353	1537	1192	157
v/c Ratio	0.22	0.33	0.66	0.50	0.80	0.21
Control Delay	30.0	9.5	58.2	14.8	37.4	3.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.0	9.5	58.2	14.8	37.4	3.6
Queue Length 50th (ft)	101	70	148	255	458	1
Queue Length 95th (ft)	149	164	190	205	494	38
Internal Link Dist (ft)	2698		2200		1091	
Turn Bay Length (ft)	265	265	260			270
Base Capacity (vph)	1138	1471	679	3621	1715	847
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.33	0.52	0.42	0.70	0.19

Intersection Summary

Lanes, Volumes, Timings
7: Bouquet Canyon Rd & Valencia Blvd

01/18/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	  	 		  	 		 	 	 	  	 	 
Traffic Volume (vph)	1181	1466	29	387	811	318	36	1168	668	348	850	649
Future Volume (vph)	1181	1466	29	387	811	318	36	1168	668	348	850	649
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	10	10	11	11	11	11	10	10	11
Storage Length (ft)	360		0	330		330	250		0	435		400
Storage Lanes	2		0	3		1	1		1	2		2
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.94	0.91	0.91	0.94	0.91	1.00	1.00	0.91	1.00	0.97	0.91	0.88
Fr _t		0.997				0.850			0.850			0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	4824	4901	0	4658	4746	1531	1711	4916	1531	3204	4746	2694
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	4824	4901	0	4658	4746	1531	1711	4916	1531	3204	4746	2694
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2				124			112			459
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		2282			2684			2196			1017	
Travel Time (s)		34.6			40.7			33.3			12.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1284	1593	32	421	882	346	39	1270	726	378	924	705
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1284	1625	0	421	882	346	39	1270	726	378	924	705
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		33			33			20			20	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.00	1.09	1.09	1.04	1.04	1.04	1.04	1.09	1.09	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50		50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50		50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4		3	8	1	5	2	3	1	6	7
Permitted Phases						8			2			6
Detector Phase	7	4		3	8	1	5	2	3	1	6	7
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	44.0		12.0	48.0	12.0	12.0	46.0	12.0	12.0	44.0	12.0

Lanes, Volumes, Timings
7: Bouquet Canyon Rd & Valencia Blvd

01/18/2024

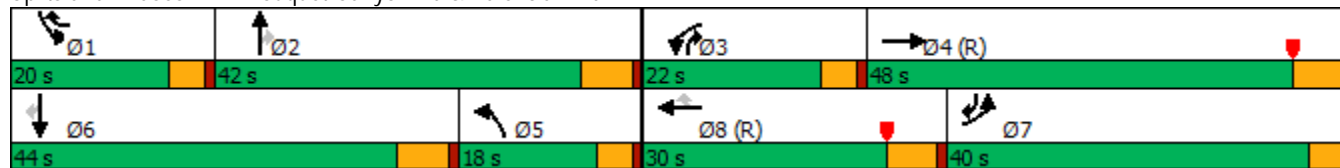


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	40.0	48.0		22.0	30.0	20.0	18.0	42.0	22.0	20.0	44.0	40.0
Total Split (%)	30.3%	36.4%		16.7%	22.7%	15.2%	13.6%	31.8%	16.7%	15.2%	33.3%	30.3%
Maximum Green (s)	35.5	42.0		17.5	24.0	15.5	13.5	36.0	17.5	15.5	38.0	35.5
Yellow Time (s)	3.5	5.0		3.5	5.0	3.5	3.5	5.0	3.5	3.5	5.0	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-0.5	-2.0		-0.5	-2.0	-0.5	-0.5	-2.0	-0.5	-0.5	-2.0	-0.5
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lag	Lag		Lead	Lead	Lead	Lag	Lag	Lead	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Max		None	C-Max	None	None	Max	None	None	None	None
Walk Time (s)		5.0			5.0			5.0				
Flash Dont Walk (s)		33.0			37.0			35.0				
Pedestrian Calls (#/hr)		0			0			0				
Act Effect Green (s)	36.0	44.0		18.0	26.0	42.0	12.8	38.0	60.0	16.0	45.4	85.4
Actuated g/C Ratio	0.27	0.33		0.14	0.20	0.32	0.10	0.29	0.45	0.12	0.34	0.65
v/c Ratio	0.98	0.99		0.66	0.94	0.61	0.23	0.90	0.96	0.97	0.57	0.37
Control Delay	74.0	71.7		46.3	48.6	6.9	56.8	54.6	54.0	90.5	53.5	13.5
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	74.0	71.7		46.3	48.6	6.9	56.8	54.6	54.0	90.5	53.5	13.5
LOS	E	E		D	D	A	E	D	D	F	D	B
Approach Delay		72.7			39.3			54.5			46.4	
Approach LOS		E			D			D			D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 51 (39%), Referenced to phase 4:EBT and 8:WBT, Start of Yellow
 Natural Cycle: 150
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.99
 Intersection Signal Delay: 55.8
 Intersection LOS: E
 Intersection Capacity Utilization 90.3%
 ICU Level of Service E
 Analysis Period (min) 15

Splits and Phases: 7: Bouquet Canyon Rd & Valencia Blvd



Queues

7: Bouquet Canyon Rd & Valencia Blvd

01/18/2024



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	1284	1625	421	882	346	39	1270	726	378	924	705
v/c Ratio	0.98	0.99	0.66	0.94	0.61	0.23	0.90	0.96	0.97	0.57	0.37
Control Delay	74.0	71.7	46.3	48.6	6.9	56.8	54.6	54.0	90.5	53.5	13.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	74.0	71.7	46.3	48.6	6.9	56.8	54.6	54.0	90.5	53.5	13.5
Queue Length 50th (ft)	410	537	89	217	16	30	383	527	171	302	170
Queue Length 95th (ft)	m#465	m#599	135	#347	39	69	#447	#805	m#274	338	225
Internal Link Dist (ft)		2202		2604			2116			937	
Turn Bay Length (ft)	360		330		330	250			435		400
Base Capacity (vph)	1315	1635	635	934	571	204	1415	757	388	1697	1905
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.98	0.99	0.66	0.94	0.61	0.19	0.90	0.96	0.97	0.54	0.37

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

Lanes, Volumes, Timings
 8: Bouquet Canyon Rd & Newhall Ranch Road

01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	703	1562	422	332	975	339	446	1602	360	384	1117	272
Future Volume (vph)	703	1562	422	332	975	339	446	1602	360	384	1117	272
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	290		265	410		410	475		230	260		150
Storage Lanes	3		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.94	0.86	1.00	0.97	0.86	1.00	0.97	0.86	1.00	0.97	0.86	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	4990	6408	1583	3433	6408	1583	3433	6408	1583	3433	6408	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	4990	6408	1583	3433	6408	1583	3433	6408	1583	3433	6408	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			62			295			301			99
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		2675			2485			1030			669	
Travel Time (s)		40.5			37.7			15.6			10.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	764	1698	459	361	1060	368	485	1741	391	417	1214	296
Shared Lane Traffic (%)												
Lane Group Flow (vph)	764	1698	459	361	1060	368	485	1741	391	417	1214	296
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		36			36			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	2	1	1	2	1
Detector Template	Left		Right	Left		Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	50	20	20	50	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	50	20	20	50	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)								94			94	
Detector 2 Size(ft)								6			6	
Detector 2 Type								Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)								0.0			0.0	
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	3	8	1	7	4		1	6		5	2	3
Permitted Phases			8			4			6			2

Lanes, Volumes, Timings
 8: Bouquet Canyon Rd & Newhall Ranch Road

01/18/2024

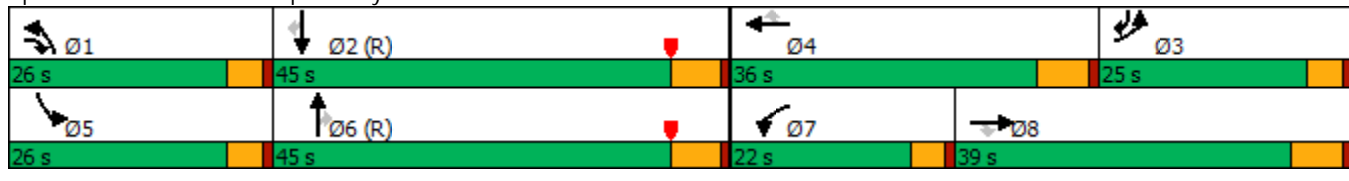


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	3	8	1	7	4	4	1	6	6	5	2	3
Switch Phase												
Minimum Initial (s)	4.0	5.0	4.0	4.0	5.0	5.0	4.0	10.0	10.0	4.0	10.0	4.0
Minimum Split (s)	12.0	43.0	12.0	12.0	43.0	43.0	12.0	49.0	49.0	12.0	50.0	12.0
Total Split (s)	25.0	39.0	26.0	22.0	36.0	36.0	26.0	45.0	45.0	26.0	45.0	25.0
Total Split (%)	18.9%	29.5%	19.7%	16.7%	27.3%	27.3%	19.7%	34.1%	34.1%	19.7%	34.1%	18.9%
Maximum Green (s)	20.5	33.0	21.5	17.5	30.0	30.0	21.5	39.0	39.0	21.5	39.0	20.5
Yellow Time (s)	3.5	5.0	3.5	3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.0	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	-2.0	0.0	0.0	-2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.0	4.5	4.5	4.0	6.0	4.5	6.0	6.0	4.5	6.0	4.5
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes		Yes	Yes			Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	5.5	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Minimum Gap (s)	3.0	2.5	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	24.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	Max	C-Max	None
Walk Time (s)		5.0			5.0	5.0		5.0	5.0		5.0	
Flash Dont Walk (s)		32.0			32.0	32.0		38.0	38.0		39.0	
Pedestrian Calls (#/hr)		2			5	5		1	1		1	
Act Effect Green (s)	21.9	35.6	60.6	16.9	30.6	28.6	21.0	39.0	39.0	21.5	39.5	63.0
Actuated g/C Ratio	0.17	0.27	0.46	0.13	0.23	0.22	0.16	0.30	0.30	0.16	0.30	0.48
v/c Ratio	0.92	0.98	0.60	0.82	0.71	0.64	0.89	0.92	0.58	0.75	0.63	0.37
Control Delay	71.5	65.8	26.8	77.5	40.5	14.6	54.9	47.5	12.8	61.8	41.9	8.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	71.5	65.8	26.8	77.5	40.5	14.6	54.9	47.5	12.8	61.8	41.9	8.8
LOS	E	E	C	E	D	B	D	D	B	E	D	A
Approach Delay		61.2			42.7			43.7			41.1	
Approach LOS		E			D			D			D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 33 (25%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
 Natural Cycle: 140
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.98
 Intersection Signal Delay: 48.5
 Intersection LOS: D
 Intersection Capacity Utilization 82.1%
 ICU Level of Service E
 Analysis Period (min) 15

Splits and Phases: 8: Bouquet Canyon Rd & Newhall Ranch Road



Queues

8: Bouquet Canyon Rd & Newhall Ranch Road

01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	764	1698	459	361	1060	368	485	1741	391	417	1214	296
v/c Ratio	0.92	0.98	0.60	0.82	0.71	0.64	0.89	0.92	0.58	0.75	0.63	0.37
Control Delay	71.5	65.8	26.8	77.5	40.5	14.6	54.9	47.5	12.8	61.8	41.9	8.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	71.5	65.8	26.8	77.5	40.5	14.6	54.9	47.5	12.8	61.8	41.9	8.8
Queue Length 50th (ft)	234	424	251	158	198	75	195	360	88	177	263	54
Queue Length 95th (ft)	#323	#515	367	#229	246	142	m220	m417	m111	236	304	91
Internal Link Dist (ft)		2595			2405			950			589	
Turn Bay Length (ft)	290		265	410		410	475		230	260		150
Base Capacity (vph)	829	1728	766	455	1553	587	559	1893	679	559	1918	806
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.92	0.98	0.60	0.79	0.68	0.63	0.87	0.92	0.58	0.75	0.63	0.37

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

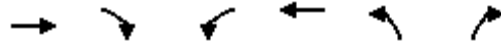
Lanes, Volumes, Timings
9: Commuter Way & Soledad Cyn

01/18/2024

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↗	↙	↑↑↑	↖↗	
Traffic Volume (vph)	2314	28	26	1346	42	15
Future Volume (vph)	2314	28	26	1346	42	15
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		150	285		0	0
Storage Lanes		1	1		2	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	1.00	1.00	0.91	0.97	0.95
Frt		0.850			0.961	
Flt Protected			0.950		0.964	
Satd. Flow (prot)	5085	1583	1770	5085	3348	0
Flt Permitted			0.950		0.964	
Satd. Flow (perm)	5085	1583	1770	5085	3348	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		13			16	
Link Speed (mph)	50			50	30	
Link Distance (ft)	911			2825	388	
Travel Time (s)	12.4			38.5	8.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2515	30	28	1463	46	16
Shared Lane Traffic (%)						
Lane Group Flow (vph)	2515	30	28	1463	62	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	1	1	1	1	1	
Detector Template						
Leading Detector (ft)	50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	
Turn Type	NA	Perm	Prot	NA	Prot	
Protected Phases	2		1	6	8	
Permitted Phases		2				
Detector Phase	2	2	1	6	8	
Switch Phase						
Minimum Initial (s)	10.0	10.0	4.0	10.0	4.0	
Minimum Split (s)	26.0	26.0	12.0	22.0	37.0	
Total Split (s)	75.0	75.0	20.0	95.0	37.0	

Lanes, Volumes, Timings
 9: Commuter Way & Soledad Cyn

01/18/2024



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Total Split (%)	56.8%	56.8%	15.2%	72.0%	28.0%	
Maximum Green (s)	69.0	69.0	16.5	89.0	31.0	
Yellow Time (s)	5.0	5.0	3.5	5.0	4.0	
All-Red Time (s)	1.0	1.0	0.0	1.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	0.5	-2.0	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Vehicle Extension (s)	5.0	5.0	1.5	5.0	2.0	
Minimum Gap (s)	4.0	4.0	1.5	4.0	2.0	
Time Before Reduce (s)	15.0	15.0	0.0	15.0	0.0	
Time To Reduce (s)	15.0	15.0	0.0	15.0	0.0	
Recall Mode	C-Max	C-Max	None	C-Max	None	
Walk Time (s)	7.0	7.0			7.0	
Flash Dont Walk (s)	13.0	13.0			24.0	
Pedestrian Calls (#/hr)	0	0			0	
Act Effect Green (s)	112.1	112.1	5.6	118.6	8.3	
Actuated g/C Ratio	0.85	0.85	0.04	0.90	0.06	
v/c Ratio	0.58	0.02	0.37	0.32	0.28	
Control Delay	6.1	2.8	77.2	5.9	47.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	6.1	2.8	77.2	5.9	47.6	
LOS	A	A	E	A	D	
Approach Delay	6.1			7.2	47.6	
Approach LOS	A			A	D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 58 (44%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Natural Cycle: 100
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.58
 Intersection Signal Delay: 7.1
 Intersection LOS: A
 Intersection Capacity Utilization 54.7%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 9: Commuter Way & Soledad Cyn



Queues

9: Commuter Way & Soledad Cyn

01/18/2024

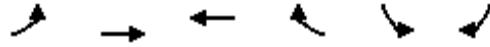


Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Group Flow (vph)	2515	30	28	1463	62
v/c Ratio	0.58	0.02	0.37	0.32	0.28
Control Delay	6.1	2.8	77.2	5.9	47.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	6.1	2.8	77.2	5.9	47.6
Queue Length 50th (ft)	269	3	20	317	19
Queue Length 95th (ft)	350	11	52	147	43
Internal Link Dist (ft)	831			2745	308
Turn Bay Length (ft)		150	285		
Base Capacity (vph)	4319	1346	214	4568	849
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.58	0.02	0.13	0.32	0.07

Intersection Summary

Lanes, Volumes, Timings
10: Soledad Cyn & Valley Center

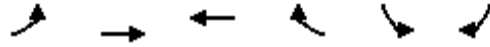
01/18/2024



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø4
Lane Configurations	↖↖	↑↑↑	↑↑↑	↗	↖↖	↗	
Traffic Volume (vph)	106	1711	949	522	664	159	
Future Volume (vph)	106	1711	949	522	664	159	
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	250			310	235	0	
Storage Lanes	2			1	1	1	
Taper Length (ft)	25				25		
Lane Util. Factor	0.97	0.91	0.91	1.00	0.97	1.00	
Fr _t				0.850		0.850	
Fl _t Protected	0.950				0.950		
Satd. Flow (prot)	3433	5085	5085	1583	3433	1583	
Fl _t Permitted	0.950				0.950		
Satd. Flow (perm)	3433	5085	5085	1583	3433	1583	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)				548		173	
Link Speed (mph)		50	50		30		
Link Distance (ft)		2935	1764		1116		
Travel Time (s)		40.0	24.1		25.4		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	115	1860	1032	567	722	173	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	115	1860	1032	567	722	173	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Left	Left	Right	Left	Right	
Median Width(ft)		24	24		24		
Link Offset(ft)		0	0		0		
Crosswalk Width(ft)		16	16		16		
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (mph)	15			9	15	9	
Number of Detectors	1	1	1	1	1	1	
Detector Template							
Leading Detector (ft)	50	50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Turn Type	Prot	NA	NA	Free	Prot	pt+ov	
Protected Phases	5	2	6		3	3 5	4
Permitted Phases				Free			
Detector Phase	5	2	6		3	3 5	
Switch Phase							
Minimum Initial (s)	4.0	4.0	4.0		4.0		4.0
Minimum Split (s)	20.0	22.0	29.0		20.0		35.0
Total Split (s)	20.0	72.0	52.0		25.0		35.0

Lanes, Volumes, Timings
 10: Soledad Cyn & Valley Center

01/18/2024

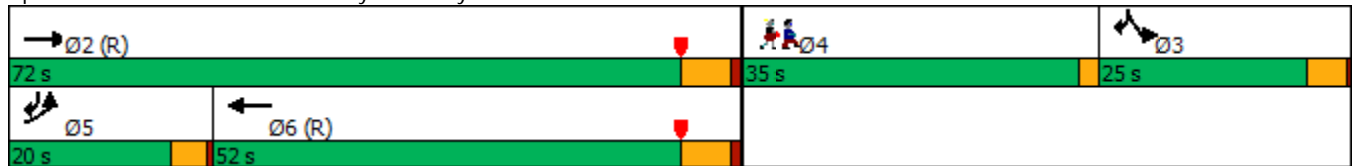


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø4	
Total Split (%)	15.2%	54.5%	39.4%		18.9%		27%	
Maximum Green (s)	16.0	66.0	46.0		20.5		33.0	
Yellow Time (s)	3.5	5.0	5.0		4.0		2.0	
All-Red Time (s)	0.5	1.0	1.0		0.5		0.0	
Lost Time Adjust (s)	0.0	-2.0	-2.0		-0.5			
Total Lost Time (s)	4.0	4.0	4.0		4.0			
Lead/Lag	Lead		Lag		Lag		Lead	
Lead-Lag Optimize?	Yes		Yes		Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		0.2	
Recall Mode	None	C-Max	C-Max		None		None	
Walk Time (s)				7.0				7.0
Flash Dont Walk (s)				16.0				26.0
Pedestrian Calls (#/hr)				0				0
Act Effct Green (s)	9.8	80.0	66.2	132.0	44.0	57.8		
Actuated g/C Ratio	0.07	0.61	0.50	1.00	0.33	0.44		
v/c Ratio	0.45	0.60	0.40	0.36	0.63	0.22		
Control Delay	58.1	20.5	10.3	2.3	39.3	8.8		
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		
Total Delay	58.1	20.5	10.3	2.3	39.3	8.8		
LOS	E	C	B	A	D	A		
Approach Delay	22.7		7.4	33.4				
Approach LOS	C		A	C				

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 35 (27%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Natural Cycle: 105
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.63
 Intersection Signal Delay: 19.4
 Intersection LOS: B
 Intersection Capacity Utilization 58.7%
 ICU Level of Service B
 Analysis Period (min) 15

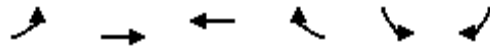
Splits and Phases: 10: Soledad Cyn & Valley Center



Queues

10: Soledad Cyn & Valley Center

01/18/2024



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	115	1860	1032	567	722	173
v/c Ratio	0.45	0.60	0.40	0.36	0.63	0.22
Control Delay	58.1	20.5	10.3	2.3	39.3	8.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	58.1	20.5	10.3	2.3	39.3	8.8
Queue Length 50th (ft)	49	454	60	33	321	37
Queue Length 95th (ft)	75	508	64	339	387	m56
Internal Link Dist (ft)		2855	1684		1036	
Turn Bay Length (ft)	250			310	235	
Base Capacity (vph)	416	3081	2549	1583	1144	856
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.60	0.40	0.36	0.63	0.20

Intersection Summary

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

Lanes, Volumes, Timings
 11: Golden Valley Road & Valley Center Drive

01/18/2024



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4	Ø5	Ø12
Lane Configurations	↶↶↶	↷↷	↶↶	↕↕↕	↕↕↕	↷			
Traffic Volume (vph)	525	159	141	1202	1062	775			
Future Volume (vph)	525	159	141	1202	1062	775			
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900			
Storage Length (ft)	260	260	290			150			
Storage Lanes	2	1	2			1			
Taper Length (ft)	25		25						
Lane Util. Factor	0.94	0.88	0.97	0.91	0.91	1.00			
Frt		0.850				0.850			
Flt Protected	0.950		0.950						
Satd. Flow (prot)	4990	2787	3433	5085	5085	1583			
Flt Permitted	0.950		0.950						
Satd. Flow (perm)	4990	2787	3433	5085	5085	1583			
Right Turn on Red		Yes				Yes			
Satd. Flow (RTOR)		173				534			
Link Speed (mph)	30			50	50				
Link Distance (ft)	456			2527	1665				
Travel Time (s)	10.4			34.5	22.7				
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92			
Adj. Flow (vph)	571	173	153	1307	1154	842			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	571	173	153	1307	1154	842			
Enter Blocked Intersection	No	No	No	No	No	No			
Lane Alignment	Left	Right	Left	Left	Left	Right			
Median Width(ft)	36			24	24				
Link Offset(ft)	0			0	0				
Crosswalk Width(ft)	16			16	16				
Two way Left Turn Lane									
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00			
Turning Speed (mph)	15	9	15			9			
Number of Detectors	1	1	1	1	1	1			
Detector Template									
Leading Detector (ft)	50	50	50	50	50	50			
Trailing Detector (ft)	0	0	0	0	0	0			
Detector 1 Position(ft)	0	0	0	0	0	0			
Detector 1 Size(ft)	50	50	50	50	50	50			
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel									
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Turn Type	Prot	pt+ov	Prot	NA	NA	Perm			
Protected Phases	3	5 12	5 12	2	6		4	5	12
Permitted Phases						6			
Detector Phase	3	5 12	5 12	2	6	6			
Switch Phase									
Minimum Initial (s)	3.0			10.0	10.0	10.0	4.0	4.0	4.0
Minimum Split (s)	25.0			30.0	40.0	40.0	35.0	15.0	20.0
Total Split (s)	30.0			67.0	42.0	42.0	35.0	25.0	35.0

Lanes, Volumes, Timings
 11: Golden Valley Road & Valley Center Drive

01/18/2024

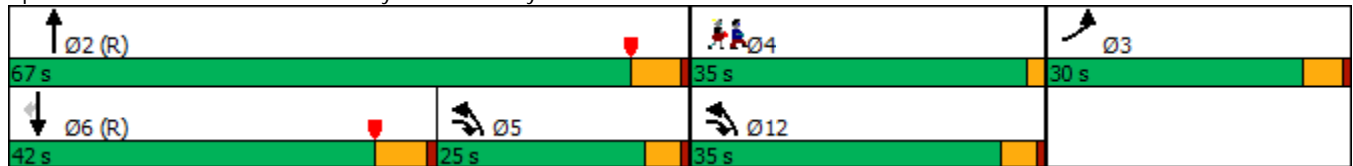


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4	Ø5	Ø12
Total Split (%)	22.7%			50.8%	31.8%	31.8%	27%	19%	27%
Maximum Green (s)	25.0			61.0	36.0	36.0	33.0	20.5	30.5
Yellow Time (s)	4.0			5.0	5.0	5.0	2.0	3.5	3.5
All-Red Time (s)	1.0			1.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)	-1.0			-2.0	-2.0	-2.0			
Total Lost Time (s)	4.0			4.0	4.0	4.0			
Lead/Lag					Lead	Lead		Lag	
Lead-Lag Optimize?					Yes	Yes		Yes	
Vehicle Extension (s)	3.0			3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None			C-Min	C-Min	C-Min	None	None	None
Walk Time (s)					7.0	7.0	7.0		5.0
Flash Dont Walk (s)					24.0	24.0	26.0		10.0
Pedestrian Calls (#/hr)					0	0	0		0
Act Effect Green (s)	21.6	21.3	21.3	92.3	77.1	77.1			
Actuated g/C Ratio	0.16	0.16	0.16	0.70	0.58	0.58			
v/c Ratio	0.70	0.29	0.28	0.37	0.39	0.73			
Control Delay	40.9	11.5	27.0	7.8	4.2	13.3			
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0			
Total Delay	40.9	11.5	27.0	7.8	4.2	13.3			
LOS	D	B	C	A	A	B			
Approach Delay	34.1			9.9	8.1				
Approach LOS	C			A	A				

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 115
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.73
 Intersection Signal Delay: 13.3
 Intersection LOS: B
 Intersection Capacity Utilization 58.7%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 11: Golden Valley Road & Valley Center Drive



Queues

11: Golden Valley Road & Valley Center Drive

01/18/2024



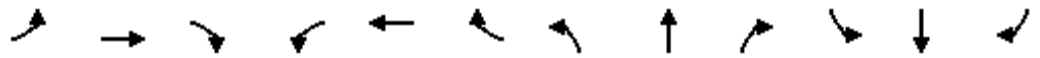
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	571	173	153	1307	1154	842
v/c Ratio	0.70	0.29	0.28	0.37	0.39	0.73
Control Delay	40.9	11.5	27.0	7.8	4.2	13.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.9	11.5	27.0	7.8	4.2	13.3
Queue Length 50th (ft)	172	2	45	105	37	476
Queue Length 95th (ft)	172	38	m44	135	m60	m344
Internal Link Dist (ft)	376			2447	1585	
Turn Bay Length (ft)	260	260	290			150
Base Capacity (vph)	984	1087	1201	3554	2969	1146
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.58	0.16	0.13	0.37	0.39	0.73

Intersection Summary

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

Lanes, Volumes, Timings
12: Ruther & Soledad Cyn

01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	46	1837	162	190	1199	18	180	77	225	126	86	65
Future Volume (vph)	46	1837	162	190	1199	18	180	77	225	126	86	65
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	285		300	250		0	0		0	125		0
Storage Lanes	1		1	2		0	1		2	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	0.91	0.95	0.95	0.88	0.95	0.95	1.00
Frt			0.850		0.998				0.850		0.938	
Flt Protected	0.950			0.950			0.950	0.977		0.950	0.998	
Satd. Flow (prot)	1770	5085	1583	3433	5075	0	1681	1729	2787	1681	1657	0
Flt Permitted	0.950			0.950			0.950	0.977		0.950	0.998	
Satd. Flow (perm)	1770	5085	1583	3433	5075	0	1681	1729	2787	1681	1657	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			129		2				126		22	
Link Speed (mph)		50			50			40			30	
Link Distance (ft)		1764			2480			220			327	
Travel Time (s)		24.1			33.8			3.8			7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	50	1997	176	207	1303	20	196	84	245	137	93	71
Shared Lane Traffic (%)							37%			5%		
Lane Group Flow (vph)	50	1997	176	207	1323	0	123	157	245	130	171	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1	1	1	1	
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50		50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	pt+ov	Split	NA	
Protected Phases	1	6		5	2		3	3	3 5	4	4	
Permitted Phases			6									
Detector Phase	1	6	6	5	2		3	3	3 5	4	4	
Switch Phase												
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	12.0	42.0	42.0	12.0	27.0		37.0	37.0		15.0	15.0	
Total Split (s)	26.0	49.0	49.0	25.0	48.0		38.0	38.0		20.0	20.0	

Lanes, Volumes, Timings
12: Ruther & Soledad Cyn

01/18/2024

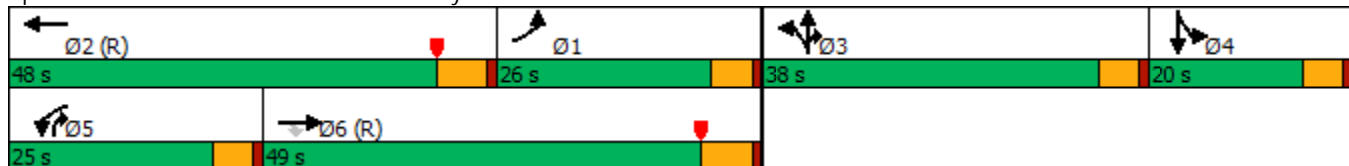


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	19.7%	37.1%	37.1%	18.9%	36.4%		28.8%	28.8%		15.2%	15.2%	
Maximum Green (s)	21.0	43.0	43.0	20.0	42.0		33.0	33.0		15.0	15.0	
Yellow Time (s)	4.0	5.0	5.0	4.0	5.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	-1.0	-2.0	-2.0	-1.0	-2.0		-1.0	-1.0		-1.0	-1.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead		Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	4.5	4.5	1.5	4.5		3.0	3.0		3.0	3.0	
Minimum Gap (s)	1.5	3.0	3.0	1.5	3.0		3.0	3.0		3.0	3.0	
Time Before Reduce (s)	0.0	7.5	7.5	0.0	7.5		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	22.5	22.5	0.0	22.5		0.0	0.0		0.0	0.0	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None		None	None	
Walk Time (s)		7.0	7.0		7.0		5.0	5.0				
Flash Dont Walk (s)		25.0	25.0		11.0		27.0	27.0				
Pedestrian Calls (#/hr)		0	0		0		0	0				
Act Effect Green (s)	18.6	66.0	66.0	12.9	62.0		18.5	18.5	31.3	18.7	18.7	
Actuated g/C Ratio	0.14	0.50	0.50	0.10	0.47		0.14	0.14	0.24	0.14	0.14	
v/c Ratio	0.20	0.79	0.21	0.62	0.55		0.52	0.65	0.32	0.55	0.68	
Control Delay	36.8	21.6	3.3	65.2	29.6		59.8	65.7	11.8	60.5	59.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	36.8	21.6	3.3	65.2	29.6		59.8	65.7	11.8	60.5	59.5	
LOS	D	C	A	E	C		E	E	B	E	E	
Approach Delay		20.5			34.4			39.1			60.0	
Approach LOS		C			C			D			E	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
 Natural Cycle: 110
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.79
 Intersection Signal Delay: 29.9
 Intersection LOS: C
 Intersection Capacity Utilization 69.0%
 ICU Level of Service C
 Analysis Period (min) 15

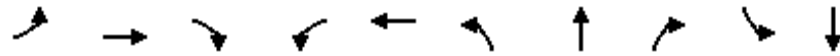
Splits and Phases: 12: Ruther & Soledad Cyn



Queues

12: Ruther & Soledad Cyn

01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	50	1997	176	207	1323	123	157	245	130	171
v/c Ratio	0.20	0.79	0.21	0.62	0.55	0.52	0.65	0.32	0.55	0.68
Control Delay	36.8	21.6	3.3	65.2	29.6	59.8	65.7	11.8	60.5	59.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.8	21.6	3.3	65.2	29.6	59.8	65.7	11.8	60.5	59.5
Queue Length 50th (ft)	35	264	16	89	315	104	135	33	110	128
Queue Length 95th (ft)	m56	#788	32	127	432	163	203	47	173	203
Internal Link Dist (ft)		1684			2400		140			247
Turn Bay Length (ft)	285		300	250					125	
Base Capacity (vph)	295	2541	855	546	2386	432	445	1226	248	263
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.79	0.21	0.38	0.55	0.28	0.35	0.20	0.52	0.65

Intersection Summary

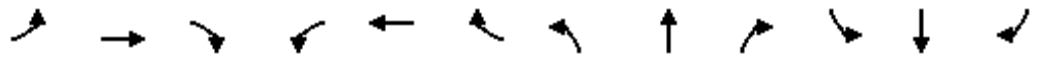
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

Lanes, Volumes, Timings
 13: Golden Valley Road & Centre Pointe Parkway

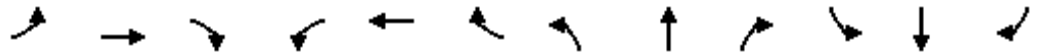
01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	172	96	540	264	76	191	275	1055	274	238	1100	63
Future Volume (vph)	172	96	540	264	76	191	275	1055	274	238	1100	63
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		260	150		250	300		300	700		0
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850		0.893				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	3433	1663	0	1770	3539	1583	1770	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1863	1583	3433	1663	0	1770	3539	1583	1770	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			98		94				298			136
Link Speed (mph)		30		30				50			50	
Link Distance (ft)		1149		802				7902			1475	
Travel Time (s)		26.1		18.2				107.8			20.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	187	104	587	287	83	208	299	1147	298	259	1196	68
Shared Lane Traffic (%)												
Lane Group Flow (vph)	187	104	587	287	291	0	299	1147	298	259	1196	68
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24		24				12			12	
Link Offset(ft)		0		0				0			0	
Crosswalk Width(ft)		16		16				16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50		50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	3	8	5	7	4		5	2	7	1	6	
Permitted Phases			8						2			6
Detector Phase	3	8	5	7	4		5	2	7	1	6	6
Switch Phase												
Minimum Initial (s)	4.0	6.0	4.0	4.0	6.0		4.0	10.0	4.0	4.0	10.0	10.0
Minimum Split (s)	12.0	25.0	20.0	20.0	39.0		20.0	33.0	20.0	15.0	34.0	34.0
Total Split (s)	19.0	25.0	33.0	34.0	40.0		33.0	40.0	34.0	33.0	40.0	40.0

Lanes, Volumes, Timings
 13: Golden Valley Road & Centre Pointe Parkway

01/18/2024

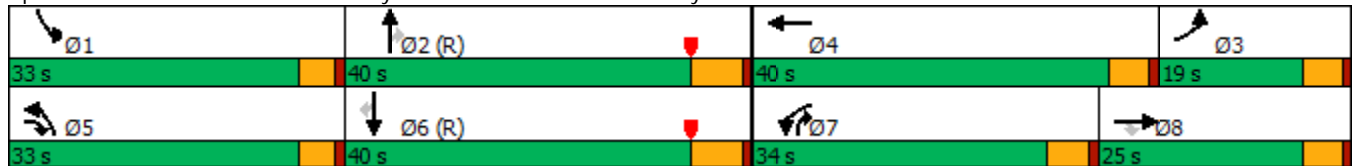


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	14.4%	18.9%	25.0%	25.8%	30.3%		25.0%	30.3%	25.8%	25.0%	30.3%	30.3%
Maximum Green (s)	14.0	20.0	28.5	29.0	35.0		28.5	34.0	29.0	28.5	34.0	34.0
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0		3.5	5.0	4.0	3.5	5.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0	-1.0	-0.5	-1.0	-1.0		-0.5	-2.0	-1.0	-0.5	-2.0	-2.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lag	Lag	Lead	Lead	Lead		Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Min	None	None	C-Min	C-Min
Walk Time (s)					7.0			7.0			7.0	7.0
Flash Dont Walk (s)					27.0			20.0			21.0	21.0
Pedestrian Calls (#/hr)					0			0			0	0
Act Effct Green (s)	20.5	25.7	55.8	17.7	22.9		26.1	48.5	70.1	24.2	46.5	46.5
Actuated g/C Ratio	0.16	0.19	0.42	0.13	0.17		0.20	0.37	0.53	0.18	0.35	0.35
v/c Ratio	0.68	0.29	0.81	0.63	0.80		0.85	0.88	0.30	0.80	0.96	0.11
Control Delay	65.9	46.3	36.3	59.8	50.4		74.9	42.0	11.1	52.3	70.8	8.3
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.9	46.3	36.3	59.8	50.4		74.9	42.0	11.1	52.3	70.8	8.3
LOS	E	D	D	E	D		E	D	B	D	E	A
Approach Delay		43.8			55.1			42.4			64.9	
Approach LOS		D			E			D			E	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 103 (78%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 125
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.96
 Intersection Signal Delay: 51.5
 Intersection Capacity Utilization 84.2%
 Analysis Period (min) 15
 Intersection LOS: D
 ICU Level of Service E

Splits and Phases: 13: Golden Valley Road & Centre Pointe Parkway



Queues

13: Golden Valley Road & Centre Pointe Parkway

01/18/2024



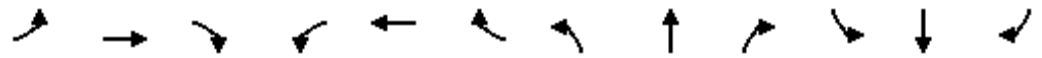
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	187	104	587	287	291	299	1147	298	259	1196	68
v/c Ratio	0.68	0.29	0.81	0.63	0.80	0.85	0.88	0.30	0.80	0.96	0.11
Control Delay	65.9	46.3	36.3	59.8	50.4	74.9	42.0	11.1	52.3	70.8	8.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.9	46.3	36.3	59.8	50.4	74.9	42.0	11.1	52.3	70.8	8.3
Queue Length 50th (ft)	150	75	344	121	166	269	401	74	202	-612	3
Queue Length 95th (ft)	#264	129	498	162	251	m349	#750	m112	310	#827	34
Internal Link Dist (ft)		1069			722		7822			1395	
Turn Bay Length (ft)	150		260	150		300		300	700		
Base Capacity (vph)	274	373	758	780	521	389	1299	1100	388	1247	646
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.68	0.28	0.77	0.37	0.56	0.77	0.88	0.27	0.67	0.96	0.11

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
 14: Sierra Highway & Golden Valley Road

01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑	↔↔	↔↔	↑↑↑	↔	↔↔	↑↔		↔	↑↑	↔
Traffic Volume (vph)	346	672	533	61	647	82	661	1008	124	42	240	209
Future Volume (vph)	346	672	533	61	647	82	661	1008	124	42	240	209
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	280		280	285		300	285		0	410		540
Storage Lanes	2		2	2		1	2		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	0.88	0.97	0.91	1.00	0.97	0.95	0.95	1.00	0.95	1.00
Fr _t			0.850			0.850		0.984				0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	2787	3433	5085	1583	3433	3483	0	1770	3539	1583
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	2787	3433	5085	1583	3433	3483	0	1770	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			579			186		10				227
Link Speed (mph)		50		50			30			30		
Link Distance (ft)		1983		1208			1801			1671		
Travel Time (s)		27.0		16.5			40.9			38.0		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	376	730	579	66	703	89	718	1096	135	46	261	227
Shared Lane Traffic (%)												
Lane Group Flow (vph)	376	730	579	66	703	89	718	1231	0	46	261	227
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24		24			24			24		
Link Offset(ft)		0		0			0			0		
Crosswalk Width(ft)		16		16			16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50		50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50		50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	custom
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						8
Detector Phase	7	4	4	3	8	8	5	2		1	6	8
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	8.5	29.6	29.6	8.5	40.0	40.0	15.0	49.0		8.5	46.0	40.0
Total Split (s)	29.0	50.0	50.0	20.0	41.0	41.0	37.0	44.0		18.0	25.0	41.0

Lanes, Volumes, Timings
 14: Sierra Highway & Golden Valley Road

01/18/2024

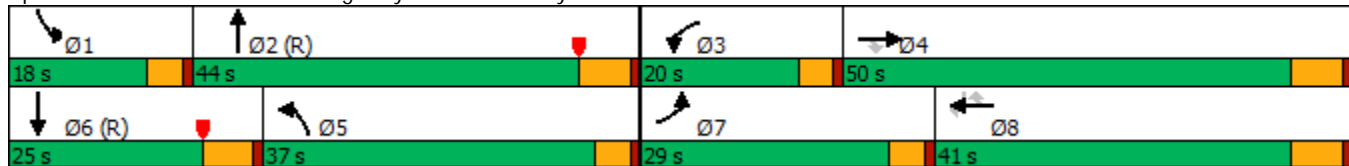


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	22.0%	37.9%	37.9%	15.2%	31.1%	31.1%	28.0%	33.3%		13.6%	18.9%	31.1%
Maximum Green (s)	24.5	44.0	44.0	15.5	35.0	35.0	32.5	38.0		13.5	19.0	35.0
Yellow Time (s)	3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.0		3.5	5.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	-0.5	-2.0	-2.0	-0.5	-2.0	-2.0	-0.5	-2.0		-0.5	-2.0	-2.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lag		Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	None
Walk Time (s)					5.0	5.0		5.0			5.0	5.0
Flash Dont Walk (s)					29.0	29.0		33.0			30.0	29.0
Pedestrian Calls (#/hr)					0	0		0			0	0
Act Effct Green (s)	20.2	41.5	41.5	8.4	27.7	27.7	33.0	60.8		9.3	35.1	27.7
Actuated g/C Ratio	0.15	0.31	0.31	0.06	0.21	0.21	0.25	0.46		0.07	0.27	0.21
v/c Ratio	0.72	0.66	0.45	0.30	0.66	0.19	0.84	0.76		0.37	0.28	0.44
Control Delay	46.9	42.1	12.0	62.1	50.5	0.9	56.8	35.6		66.1	41.4	7.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	46.9	42.1	12.0	62.1	50.5	0.9	56.8	35.6		66.1	41.4	7.7
LOS	D	D	B	E	D	A	E	D		E	D	A
Approach Delay		32.8			46.3			43.4			29.2	
Approach LOS		C			D			D			C	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 65 (49%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 130
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.84
 Intersection Signal Delay: 38.8 Intersection LOS: D
 Intersection Capacity Utilization 70.9% ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 14: Sierra Highway & Golden Valley Road



Queues

14: Sierra Highway & Golden Valley Road

01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	376	730	579	66	703	89	718	1231	46	261	227
v/c Ratio	0.72	0.66	0.45	0.30	0.66	0.19	0.84	0.76	0.37	0.28	0.44
Control Delay	46.9	42.1	12.0	62.1	50.5	0.9	56.8	35.6	66.1	41.4	7.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.9	42.1	12.0	62.1	50.5	0.9	56.8	35.6	66.1	41.4	7.7
Queue Length 50th (ft)	159	309	96	28	204	0	302	461	38	93	0
Queue Length 95th (ft)	m185	m338	m129	52	234	0	377	#740	78	149	63
Internal Link Dist (ft)		1903			1128			1721		1591	
Turn Bay Length (ft)	280		280	285		300	285		410		540
Base Capacity (vph)	650	1247	1357	416	1425	577	858	1610	187	941	607
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.58	0.59	0.43	0.16	0.49	0.15	0.84	0.76	0.25	0.28	0.37

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

Lanes, Volumes, Timings
 15: SR 14 SB Ramp & Golden Valley Road

01/18/2024

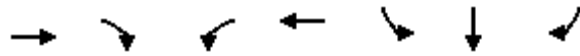


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗	↖	↑↑					↘	↙	↗
Traffic Volume (vph)	0	749	106	163	521	0	0	0	0	70	4	349
Future Volume (vph)	0	749	106	163	521	0	0	0	0	70	4	349
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	220		0	0		0	300		0
Storage Lanes	0		1	1		0	0		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850									0.850
Flt Protected				0.950						0.950	0.957	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	1681	1694	1583
Flt Permitted				0.950						0.950	0.957	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	1681	1694	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			115									343
Link Speed (mph)		50			50			30			30	
Link Distance (ft)		861			697			508			640	
Travel Time (s)		11.7			9.5			11.5			14.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	814	115	177	566	0	0	0	0	76	4	379
Shared Lane Traffic (%)										47%		
Lane Group Flow (vph)	0	814	115	177	566	0	0	0	0	40	40	379
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94		94							94	
Detector 2 Size(ft)		6		6							6	
Detector 2 Type		Cl+Ex		Cl+Ex							Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0		0.0							0.0	
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		6		5	2						4	
Permitted Phases		6								4		4

Queues

15: SR 14 SB Ramp & Golden Valley Road

01/18/2024

























Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	814	115	177	566	40	40	379
v/c Ratio	0.53	0.15	0.65	0.25	0.09	0.09	0.55
Control Delay	20.9	4.2	49.1	7.4	24.8	24.8	7.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.9	4.2	49.1	7.4	24.8	24.8	7.8
Queue Length 50th (ft)	174	0	106	64	17	17	15
Queue Length 95th (ft)	250	32	173	84	43	43	90
Internal Link Dist (ft)	781			617		560	
Turn Bay Length (ft)			220		300		
Base Capacity (vph)	1537	752	354	2241	466	470	687
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.15	0.50	0.25	0.09	0.09	0.55

Intersection Summary

Lanes, Volumes, Timings
 16: SR 14 NB Ramp & Golden Valley Road

01/18/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 			 							
Traffic Volume (vph)	341	492	0	0	451	223	220	2	382	0	0	0
Future Volume (vph)	341	492	0	0	451	223	220	2	382	0	0	0
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	230		0	0		280	0		140	0		0
Storage Lanes	2		0	0		1	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt						0.850			0.850			
Flt Protected	0.950						0.950	0.953				
Satd. Flow (prot)	3433	3539	0	0	3539	1583	1681	1686	1583	0	0	0
Flt Permitted	0.950						0.950	0.953				
Satd. Flow (perm)	3433	3539	0	0	3539	1583	1681	1686	1583	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						242			297			
Link Speed (mph)		50			50			30				30
Link Distance (ft)		697			616			615				491
Travel Time (s)		9.5			8.4			14.0				11.2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	371	535	0	0	490	242	239	2	415	0	0	0
Shared Lane Traffic (%)							50%					
Lane Group Flow (vph)	371	535	0	0	490	242	119	122	415	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1	1	2	1			
Detector Template	Left	Thru			Thru	Right	Left	Thru	Right			
Leading Detector (ft)	20	100			100	20	20	100	20			
Trailing Detector (ft)	0	0			0	0	0	0	0			
Detector 1 Position(ft)	0	0			0	0	0	0	0			
Detector 1 Size(ft)	20	6			6	20	20	6	20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Prot	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	1	6			2			8				
Permitted Phases						2	8		8			

Lanes, Volumes, Timings
 16: SR 14 NB Ramp & Golden Valley Road

01/18/2024

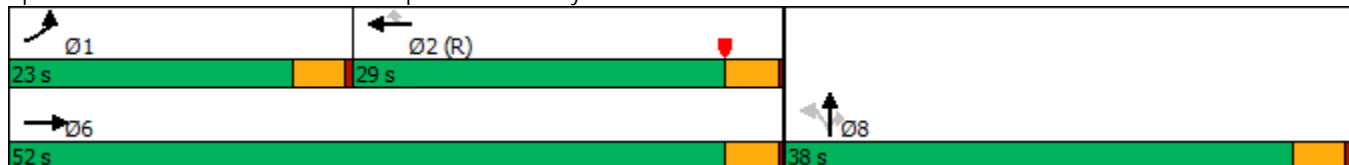


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	1	6			2	2	8	8	8			
Switch Phase												
Minimum Initial (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Minimum Split (s)	12.0	20.0			20.0	20.0	20.0	20.0	20.0			
Total Split (s)	23.0	52.0			29.0	29.0	38.0	38.0	38.0			
Total Split (%)	25.6%	57.8%			32.2%	32.2%	42.2%	42.2%	42.2%			
Maximum Green (s)	19.0	48.0			25.0	25.0	34.0	34.0	34.0			
Yellow Time (s)	3.5	3.5			3.5	3.5	3.5	3.5	3.5			
All-Red Time (s)	0.5	0.5			0.5	0.5	0.5	0.5	0.5			
Lost Time Adjust (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Total Lost Time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Lead/Lag	Lead				Lag		Lag					
Lead-Lag Optimize?	Yes				Yes		Yes					
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Recall Mode	None	Max			C-Max	C-Max	Max	Max	Max			
Walk Time (s)		5.0			5.0	5.0	5.0	5.0	5.0			
Flash Dont Walk (s)		10.0			10.0	10.0	10.0	10.0	10.0			
Pedestrian Calls (#/hr)		0			0	0	0	0	0			
Act Effct Green (s)	14.9	48.0			29.1	29.1	34.0	34.0	34.0			
Actuated g/C Ratio	0.17	0.53			0.32	0.32	0.38	0.38	0.38			
v/c Ratio	0.65	0.28			0.43	0.36	0.19	0.19	0.53			
Control Delay	64.8	6.2			26.0	5.1	19.8	19.8	9.0			
Queue Delay	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Total Delay	64.8	6.2			26.0	5.1	19.8	19.8	9.0			
LOS	E	A			C	A	B	B	A			
Approach Delay		30.2			19.1			13.0				
Approach LOS		C			B			B				

Intersection Summary

Area Type: Other
 Cycle Length: 90
 Actuated Cycle Length: 90
 Offset: 0 (0%), Referenced to phase 2:WBT, Start of Yellow
 Natural Cycle: 55
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.65
 Intersection Signal Delay: 21.7
 Intersection LOS: C
 Intersection Capacity Utilization 43.9%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 16: SR 14 NB Ramp & Golden Valley Road



Queues

16: SR 14 NB Ramp & Golden Valley Road

01/18/2024



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	371	535	490	242	119	122	415
v/c Ratio	0.65	0.28	0.43	0.36	0.19	0.19	0.53
Control Delay	64.8	6.2	26.0	5.1	19.8	19.8	9.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	64.8	6.2	26.0	5.1	19.8	19.8	9.0
Queue Length 50th (ft)	119	33	114	0	47	48	44
Queue Length 95th (ft)	165	42	170	54	87	89	125
Internal Link Dist (ft)		617	536			535	
Turn Bay Length (ft)	230			280			140
Base Capacity (vph)	724	1887	1145	675	635	636	782
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.28	0.43	0.36	0.19	0.19	0.53

Intersection Summary

Lanes, Volumes, Timings
17: Studio Driveway & Soledad Cyn

01/18/2024

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↙	↑↑↑	↘	
Traffic Volume (vph)	751	8	4	1610	47	23
Future Volume (vph)	751	8	4	1610	47	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt	0.998				0.956	
Flt Protected			0.950		0.968	
Satd. Flow (prot)	5075	0	1770	5085	1724	0
Flt Permitted			0.320		0.968	
Satd. Flow (perm)	5075	0	596	5085	1724	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	3				16	
Link Speed (mph)	50			50	30	
Link Distance (ft)	419			233	380	
Travel Time (s)	5.7			3.2	8.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	816	9	4	1750	51	25
Shared Lane Traffic (%)						
Lane Group Flow (vph)	825	0	4	1750	76	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2		1	2	1	
Detector Template	Thru		Left	Thru	Left	
Leading Detector (ft)	100		20	100	20	
Trailing Detector (ft)	0		0	0	0	
Detector 1 Position(ft)	0		0	0	0	
Detector 1 Size(ft)	6		20	6	20	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA		Perm	NA	Prot	
Protected Phases	6			2	4	
Permitted Phases			2			
Detector Phase	6		2	2	4	
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	

Lanes, Volumes, Timings
 17: Studio Driveway & Soledad Cyn

01/18/2024

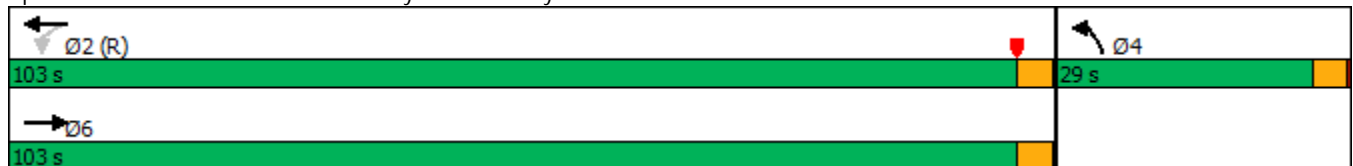


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Minimum Split (s)	20.0		20.0	20.0	20.0	
Total Split (s)	103.0		103.0	103.0	29.0	
Total Split (%)	78.0%		78.0%	78.0%	22.0%	
Maximum Green (s)	99.0		99.0	99.0	25.0	
Yellow Time (s)	3.5		3.5	3.5	3.5	
All-Red Time (s)	0.5		0.5	0.5	0.5	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	4.0		4.0	4.0	4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Recall Mode	Max		C-Max	C-Max	Max	
Walk Time (s)	5.0		5.0	5.0	5.0	
Flash Dont Walk (s)	10.0		10.0	10.0	10.0	
Pedestrian Calls (#/hr)	0		0	0	0	
Act Effect Green (s)	99.0		99.0	99.0	25.0	
Actuated g/C Ratio	0.75		0.75	0.75	0.19	
v/c Ratio	0.22		0.01	0.46	0.22	
Control Delay	7.8		3.5	4.8	37.6	
Queue Delay	0.0		0.0	0.0	0.0	
Total Delay	7.8		3.5	4.8	37.6	
LOS	A		A	A	D	
Approach Delay	7.8			4.8	37.6	
Approach LOS	A			A	D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 0 (0%), Referenced to phase 2:WBTL, Start of Yellow
 Natural Cycle: 40
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.46
 Intersection Signal Delay: 6.7
 Intersection LOS: A
 Intersection Capacity Utilization 41.8%
 ICU Level of Service A
 Analysis Period (min) 15

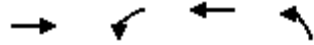
Splits and Phases: 17: Studio Driveway & Soledad Cyn



Queues

17: Studio Driveway & Soledad Cyn

01/18/2024



Lane Group	EBT	WBL	WBT	NBL
Lane Group Flow (vph)	825	4	1750	76
v/c Ratio	0.22	0.01	0.46	0.22
Control Delay	7.8	3.5	4.8	37.6
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	7.8	3.5	4.8	37.6
Queue Length 50th (ft)	101	1	103	44
Queue Length 95th (ft)	m102	m2	136	91
Internal Link Dist (ft)	339		153	300
Turn Bay Length (ft)				
Base Capacity (vph)	3807	447	3813	339
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.22	0.01	0.46	0.22

Intersection Summary

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

Lanes, Volumes, Timings
 18: Residential Driveway 1 & Soledad Cyn

01/18/2024



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↵	↑↑↑	↵	
Traffic Volume (vph)	744	30	10	1614	0	18
Future Volume (vph)	744	30	10	1614	0	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	100		0	0
Storage Lanes		0	1		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt	0.994				0.865	
Flt Protected			0.950			
Satd. Flow (prot)	5055	0	1770	5085	1611	0
Flt Permitted			0.950			
Satd. Flow (perm)	5055	0	1770	5085	1611	0
Link Speed (mph)	50			50	30	
Link Distance (ft)	233			397	318	
Travel Time (s)	3.2			5.4	7.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	809	33	11	1754	0	20
Shared Lane Traffic (%)						
Lane Group Flow (vph)	842	0	11	1754	20	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	41.2%
Analysis Period (min)	15
	ICU Level of Service A

HCM 6th TWSC
 18: Residential Driveway 1 & Soledad Cyn

01/18/2024

Intersection						
Int Delay, s/veh	0.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↑	↑↑↑	↑	
Traffic Vol, veh/h	744	30	10	1614	0	18
Future Vol, veh/h	744	30	10	1614	0	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	809	33	11	1754	0	20

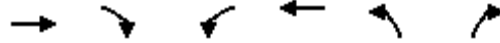
Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	842	0	1550
Stage 1	-	-	-	-	826
Stage 2	-	-	-	-	724
Critical Hdwy	-	-	5.34	-	5.74
Critical Hdwy Stg 1	-	-	-	-	6.64
Critical Hdwy Stg 2	-	-	-	-	6.04
Follow-up Hdwy	-	-	3.12	-	3.82
Pot Cap-1 Maneuver	-	-	466	-	162
Stage 1	-	-	-	-	308
Stage 2	-	-	-	-	401
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	466	-	158
Mov Cap-2 Maneuver	-	-	-	-	158
Stage 1	-	-	-	-	308
Stage 2	-	-	-	-	391

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	12.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	497	-	-	466	-
HCM Lane V/C Ratio	0.039	-	-	0.023	-
HCM Control Delay (s)	12.5	-	-	12.9	-
HCM Lane LOS	B	-	-	B	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-

Lanes, Volumes, Timings
 19: Residential Driveway 2 & Soledad Cyn

01/18/2024



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↵	↑↑↑		↵
Traffic Volume (vph)	721	41	21	1623	0	35
Future Volume (vph)	721	41	21	1623	0	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	100		0	0
Storage Lanes		0	1		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt	0.992					0.865
Flt Protected			0.950			
Satd. Flow (prot)	5045	0	1770	5085	0	1611
Flt Permitted			0.950			
Satd. Flow (perm)	5045	0	1770	5085	0	1611
Link Speed (mph)	50			50	30	
Link Distance (ft)	397			911	422	
Travel Time (s)	5.4			12.4	9.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	784	45	23	1764	0	38
Shared Lane Traffic (%)						
Lane Group Flow (vph)	829	0	23	1764	0	38
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	34.7%
ICU Level of Service	A
Analysis Period (min)	15

HCM 6th TWSC
 19: Residential Driveway 2 & Soledad Cyn

01/18/2024

Intersection						
Int Delay, s/veh	0.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↘	↑↑↑		↗
Traffic Vol, veh/h	721	41	21	1623	0	35
Future Vol, veh/h	721	41	21	1623	0	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	784	45	23	1764	0	38

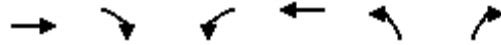
Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	829	0	415
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	5.34	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	3.12	-	3.92
Pot Cap-1 Maneuver	-	-	473	-	501
Stage 1	-	-	-	-	0
Stage 2	-	-	-	-	0
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	473	-	501
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	12.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	501	-	-	473	-
HCM Lane V/C Ratio	0.076	-	-	0.048	-
HCM Control Delay (s)	12.8	-	-	13	-
HCM Lane LOS	B	-	-	B	-
HCM 95th %tile Q(veh)	0.2	-	-	0.2	-

Lanes, Volumes, Timings
 20: Studio Driveway 2 & Soledad Cyn

01/18/2024



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑		↗
Traffic Volume (vph)	759	0	0	1656	0	0
Future Volume (vph)	759	0	0	1656	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frnt						
Flt Protected						
Satd. Flow (prot)	5085	0	0	5085	0	1863
Flt Permitted						
Satd. Flow (perm)	5085	0	0	5085	0	1863
Link Speed (mph)	50			50	30	
Link Distance (ft)	765			419	381	
Travel Time (s)	10.4			5.7	8.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	825	0	0	1800	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	825	0	0	1800	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	35.3%
Analysis Period (min)	15
	ICU Level of Service A

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑		↑
Traffic Vol, veh/h	759	0	0	1656	0	0
Future Vol, veh/h	759	0	0	1656	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	825	0	0	1800	0	0

Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	-	-	-	413
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.92
Pot Cap-1 Maneuver	-	-	0	-	0	503
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	-	503
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

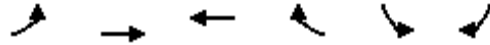
Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

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

***Future with Revised Project Conditions
Morning Peak Hour***

Lanes, Volumes, Timings
 1: Valencia Blvd & 5 Fwy SB Ramp

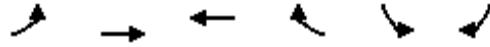
01/18/2024



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑		↑↑	↑
Traffic Volume (vph)	0	576	966	96	285	93
Future Volume (vph)	0	576	966	96	285	93
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	15	12	14
Storage Length (ft)	0			0	0	455
Storage Lanes	0			0	2	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.91	0.95	0.95	0.97	1.00
Fr _t			0.986			0.850
Fl _t Protected					0.950	
Satd. Flow (prot)	0	5085	3490	0	3433	1689
Fl _t Permitted					0.950	
Satd. Flow (perm)	0	5085	3490	0	3433	1689
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			26			91
Link Speed (mph)		50	50		30	
Link Distance (ft)		616	917		417	
Travel Time (s)		8.4	12.5		9.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	626	1050	104	310	101
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	626	1154	0	310	101
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		24	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	0.88	1.00	0.92
Turning Speed (mph)	15			9	15	9
Number of Detectors		1	1		1	1
Detector Template						
Leading Detector (ft)		50	50		50	50
Trailing Detector (ft)		0	0		0	0
Detector 1 Position(ft)		0	0		0	0
Detector 1 Size(ft)		50	50		50	50
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)		0.0	0.0		0.0	0.0
Detector 1 Queue (s)		0.0	0.0		0.0	0.0
Detector 1 Delay (s)		0.0	0.0		0.0	0.0
Turn Type		NA	NA		Prot	Perm
Protected Phases		2	6		4	
Permitted Phases						4
Detector Phase		2	6		4	4
Switch Phase						
Minimum Initial (s)		4.0	4.0		4.0	4.0
Minimum Split (s)		20.0	35.2		20.0	20.0

Lanes, Volumes, Timings
 1: Valencia Blvd & 5 Fwy SB Ramp

01/18/2024



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Total Split (s)		41.0	41.0		25.0	25.0
Total Split (%)		62.1%	62.1%		37.9%	37.9%
Maximum Green (s)		34.8	34.8		19.2	19.2
Yellow Time (s)		5.2	5.2		4.8	4.8
All-Red Time (s)		1.0	1.0		1.0	1.0
Lost Time Adjust (s)		-2.2	-2.2		-1.8	-1.8
Total Lost Time (s)		4.0	4.0		4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Recall Mode		C-Max	C-Max		Min	Min
Walk Time (s)			5.0			
Flash Dont Walk (s)			18.0			
Pedestrian Calls (#/hr)			0			
Act Effect Green (s)		44.8	44.8		13.2	13.2
Actuated g/C Ratio		0.68	0.68		0.20	0.20
v/c Ratio		0.18	0.49		0.45	0.25
Control Delay		4.3	2.7		24.9	7.9
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		4.3	2.7		24.9	7.9
LOS		A	A		C	A
Approach Delay		4.3	2.7		20.7	
Approach LOS		A	A		C	

Intersection Summary

Area Type:	Other
Cycle Length:	66
Actuated Cycle Length:	66
Offset:	14 (21%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle:	60
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.49
Intersection Signal Delay:	6.6
Intersection LOS:	A
Intersection Capacity Utilization	44.6%
ICU Level of Service	A
Analysis Period (min)	15

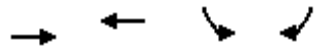
Splits and Phases: 1: Valencia Blvd & 5 Fwy SB Ramp



Queues

1: Valencia Blvd & 5 Fwy SB Ramp

01/18/2024



Lane Group	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	626	1154	310	101
v/c Ratio	0.18	0.49	0.45	0.25
Control Delay	4.3	2.7	24.9	7.9
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	4.3	2.7	24.9	7.9
Queue Length 50th (ft)	27	15	57	3
Queue Length 95th (ft)	48	91	84	35
Internal Link Dist (ft)	536	837	337	
Turn Bay Length (ft)				455
Base Capacity (vph)	3453	2378	1092	599
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.18	0.49	0.28	0.17
Intersection Summary				

Lanes, Volumes, Timings

2: 5 Fwy NB Ramp & Valencia Blvd

01/18/2024

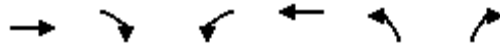


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↵↵	↑↑↑	↵↵	↵↵
Traffic Volume (vph)	791	38	121	1744	287	986
Future Volume (vph)	791	38	121	1744	287	986
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	12	12	12	12	14
Storage Length (ft)		0	200		220	220
Storage Lanes		0	2		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	0.97	0.86	0.97	0.88
Fr _t	0.993					0.850
Fl _t Protected			0.950		0.950	
Satd. Flow (prot)	5386	0	3433	6408	3433	2972
Fl _t Permitted			0.950		0.950	
Satd. Flow (perm)	5386	0	3433	6408	3433	2972
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	13					631
Link Speed (mph)	50			50	30	
Link Distance (ft)	917			476	493	
Travel Time (s)	12.5			6.5	11.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	860	41	132	1896	312	1072
Shared Lane Traffic (%)						
Lane Group Flow (vph)	901	0	132	1896	312	1072
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	24			24	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.92	1.00	1.00	1.00	1.00	0.92
Turning Speed (mph)		9	15		15	9
Number of Detectors	1		1	1	1	1
Detector Template						
Leading Detector (ft)	50		50	50	50	50
Trailing Detector (ft)	0		0	0	0	0
Detector 1 Position(ft)	0		0	0	0	0
Detector 1 Size(ft)	50		50	50	50	50
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0
Turn Type	NA		Prot	NA	Prot	Prot
Protected Phases	2		1	6	8	8
Permitted Phases						
Detector Phase	2		1	6	8	8
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	31.0		14.0	20.0	20.0	20.0

Lanes, Volumes, Timings

2: 5 Fwy NB Ramp & Valencia Blvd

01/18/2024

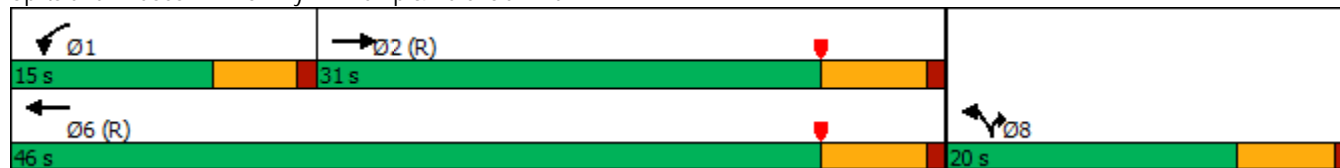


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Total Split (s)	31.0		15.0	46.0	20.0	20.0
Total Split (%)	47.0%		22.7%	69.7%	30.3%	30.3%
Maximum Green (s)	24.8		9.9	39.8	14.2	14.2
Yellow Time (s)	5.2		4.1	5.2	4.8	4.8
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-2.2		-1.1	-2.2	-1.8	-1.8
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max		None	C-Max	None	None
Walk Time (s)	5.0					
Flash Dont Walk (s)	24.0					
Pedestrian Calls (#/hr)	0					
Act Effect Green (s)	31.5		9.0	42.3	15.7	15.7
Actuated g/C Ratio	0.48		0.14	0.64	0.24	0.24
v/c Ratio	0.35		0.28	0.46	0.38	0.90
Control Delay	9.4		26.1	5.2	22.6	22.3
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	9.4		26.1	5.2	22.6	22.3
LOS	A		C	A	C	C
Approach Delay	9.4			6.5	22.4	
Approach LOS	A			A	C	

Intersection Summary

Area Type: Other
 Cycle Length: 66
 Actuated Cycle Length: 66
 Offset: 8 (12%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Natural Cycle: 65
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.90
 Intersection Signal Delay: 12.2
 Intersection LOS: B
 Intersection Capacity Utilization 57.3%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 2: 5 Fwy NB Ramp & Valencia Blvd



Queues

2: 5 Fwy NB Ramp & Valencia Blvd

01/18/2024



Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	901	132	1896	312	1072
v/c Ratio	0.35	0.28	0.46	0.38	0.90
Control Delay	9.4	26.1	5.2	22.6	22.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	9.4	26.1	5.2	22.6	22.3
Queue Length 50th (ft)	82	28	96	54	96
Queue Length 95th (ft)	104	m38	65	86	#231
Internal Link Dist (ft)	837		396	413	
Turn Bay Length (ft)		200		220	220
Base Capacity (vph)	2580	572	4108	832	1198
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.35	0.23	0.46	0.38	0.89

Intersection Summary

























95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

Lanes, Volumes, Timings
3: McBean Pkwy & Valencia Blvd

01/18/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	392	1075	124	353	1463	61	205	767	349	125	572	763
Future Volume (vph)	392	1075	124	353	1463	61	205	767	349	125	572	763
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	11	11	13	11	11	12	11	11	12
Storage Length (ft)	350		280	290		225	130		200	190		300
Storage Lanes	2		1	2		1	2		2	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	0.88	0.97	0.91	0.88
Fr _t			0.850			0.850			0.850			0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3319	4916	1583	3319	4916	1636	3319	4916	2787	3319	4916	2787
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3319	4916	1583	3319	4916	1636	3319	4916	2787	3319	4916	2787
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			74			70			152			120
Link Speed (mph)		50			50			45			45	
Link Distance (ft)		1919			721			765			966	
Travel Time (s)		26.2			9.8			11.6			14.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	426	1168	135	384	1590	66	223	834	379	136	622	829
Shared Lane Traffic (%)												
Lane Group Flow (vph)	426	1168	135	384	1590	66	223	834	379	136	622	829
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		22			22			22			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.00	1.04	1.04	0.96	1.04	1.04	1.00	1.04	1.04	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	1	6	7	5	2	3	7	4	5	3	8	1
Permitted Phases			6			2			4			8
Detector Phase	1	6	7	5	2	3	7	4	5	3	8	1
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	44.0	12.0	12.0	47.0	12.0	12.0	41.0	12.0	12.0	44.0	12.0

Lanes, Volumes, Timings
 3: McBean Pkwy & Valencia Blvd

01/18/2024

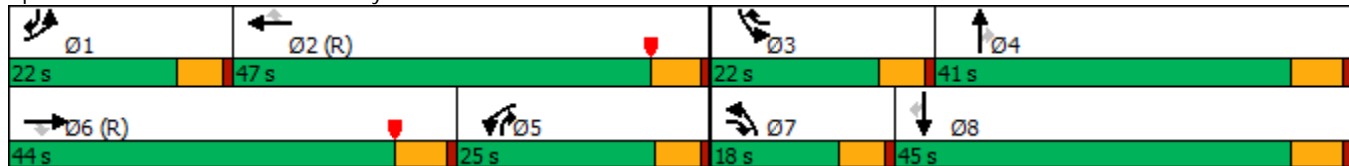


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	22.0	44.0	18.0	25.0	47.0	22.0	18.0	41.0	25.0	22.0	45.0	22.0
Total Split (%)	16.7%	33.3%	13.6%	18.9%	35.6%	16.7%	13.6%	31.1%	18.9%	16.7%	34.1%	16.7%
Maximum Green (s)	16.5	38.0	12.5	19.5	41.0	16.5	12.5	35.0	19.5	16.5	39.0	16.5
Yellow Time (s)	4.5	5.0	4.5	4.5	5.0	4.5	4.5	5.0	4.5	4.5	5.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.5	-2.0	-1.5	-1.5	-2.0	-1.5	-1.5	-2.0	-1.5	-1.5	-2.0	-1.5
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Max	None	None	C-Max	None	None	None	None	None	None	None
Walk Time (s)		5.0			5.0			5.0			5.0	
Flash Dont Walk (s)		32.0			33.0			30.0			33.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effect Green (s)	24.8	52.2	65.7	21.0	48.4	64.6	13.5	30.6	51.6	12.2	29.3	58.1
Actuated g/C Ratio	0.19	0.40	0.50	0.16	0.37	0.49	0.10	0.23	0.39	0.09	0.22	0.44
v/c Ratio	0.68	0.60	0.16	0.73	0.88	0.08	0.66	0.73	0.32	0.44	0.57	0.64
Control Delay	53.1	33.0	4.3	25.6	14.7	0.1	66.6	50.8	10.3	39.1	59.4	64.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.1	33.0	4.3	25.6	14.7	0.1	66.6	50.8	10.3	39.1	59.4	64.3
LOS	D	C	A	C	B	A	E	D	B	D	E	E
Approach Delay		35.7			16.3			42.5			60.2	
Approach LOS		D			B			D			E	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 35 (27%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
 Natural Cycle: 115
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.88
 Intersection Signal Delay: 37.0
 Intersection LOS: D
 Intersection Capacity Utilization 71.2%
 ICU Level of Service C
 Analysis Period (min) 15

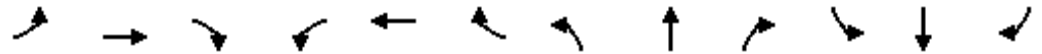
Splits and Phases: 3: McBean Pkwy & Valencia Blvd



Queues

3: McBean Pkwy & Valencia Blvd

01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	426	1168	135	384	1590	66	223	834	379	136	622	829
v/c Ratio	0.68	0.60	0.16	0.73	0.88	0.08	0.66	0.73	0.32	0.44	0.57	0.64
Control Delay	53.1	33.0	4.3	25.6	14.7	0.1	66.6	50.8	10.3	39.1	59.4	64.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.1	33.0	4.3	25.6	14.7	0.1	66.6	50.8	10.3	39.1	59.4	64.3
Queue Length 50th (ft)	174	302	10	142	208	0	95	243	52	59	208	400
Queue Length 95th (ft)	m230	m361	m13	m130	m133	m0	140	277	69	95	250	473
Internal Link Dist (ft)		1839			641			685			886	
Turn Bay Length (ft)	350		280	290		225	130		200	190		300
Base Capacity (vph)	624	1943	830	528	1801	904	352	1377	1181	452	1526	1293
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.68	0.60	0.16	0.73	0.88	0.07	0.63	0.61	0.32	0.30	0.41	0.64

Intersection Summary

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

Lanes, Volumes, Timings
4: McBean Parkway & Magic Mountain Pkwy

01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	425	444	56	62	463	144	65	1000	54	178	1430	659
Future Volume (vph)	425	444	56	62	463	144	65	1000	54	178	1430	659
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	16	12	12	14	11	11	16	11	11	16
Storage Length (ft)	360		360	210		0	175		175	300		340
Storage Lanes	1		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.91	1.00	0.97	0.86	1.00	0.97	0.86	1.00
Fr _t			0.850			0.850			0.850			0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	1794	3433	5085	1689	3319	6194	1794	3319	6194	1794
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1794	3433	5085	1689	3319	6194	1794	3319	6194	1794
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			99			157			198			631
Link Speed (mph)		50			45			45			50	
Link Distance (ft)		809			1452			1622			1219	
Travel Time (s)		11.0			22.0			24.6			16.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	462	483	61	67	503	157	71	1087	59	193	1554	716
Shared Lane Traffic (%)												
Lane Group Flow (vph)	462	483	61	67	503	157	71	1087	59	193	1554	716
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			22			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	0.85	1.00	1.00	0.92	1.04	1.04	0.85	1.04	1.04	0.85
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			Free			Free
Detector Phase	5	2	2	1	6	6	3	8		7	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Minimum Split (s)	12.0	41.0	41.0	12.0	40.0	40.0	12.0	37.0		12.0	37.0	

Lanes, Volumes, Timings
 4: McBean Parkway & Magic Mountain Pkwy

01/18/2024

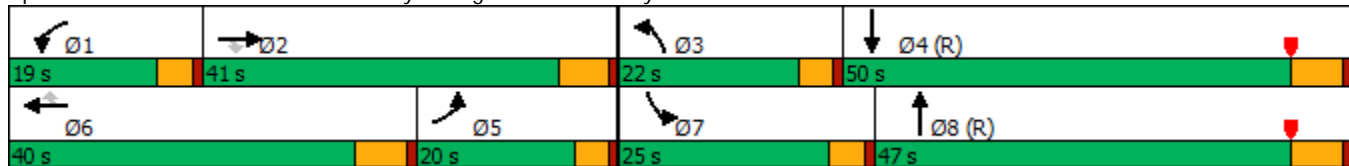


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	20.0	41.0	41.0	19.0	40.0	40.0	22.0	47.0		25.0	50.0	
Total Split (%)	15.2%	31.1%	31.1%	14.4%	30.3%	30.3%	16.7%	35.6%		18.9%	37.9%	
Maximum Green (s)	15.5	35.0	35.0	14.5	34.0	34.0	17.5	41.0		20.5	44.0	
Yellow Time (s)	3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.0		3.5	5.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	-0.5	-2.0	-2.0	-0.5	-2.0	-2.0	-0.5	-2.0		-0.5	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	Max	Max	None	Max	Max	None	C-Max		None	C-Max	
Walk Time (s)		5.0	5.0		5.0	5.0		5.0			5.0	
Flash Dont Walk (s)		30.0	30.0		29.0	29.0		26.0			26.0	
Pedestrian Calls (#/hr)		0	0		0	0		0			0	
Act Effect Green (s)	16.0	45.6	45.6	8.5	36.0	36.0	8.7	50.5	132.0	13.5	57.4	132.0
Actuated g/C Ratio	0.12	0.35	0.35	0.06	0.27	0.27	0.07	0.38	1.00	0.10	0.43	1.00
v/c Ratio	1.11	0.39	0.09	0.30	0.36	0.27	0.33	0.46	0.03	0.57	0.58	0.40
Control Delay	129.8	34.8	1.7	66.8	40.4	13.6	82.2	18.4	0.0	62.9	29.9	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	129.8	34.8	1.7	66.8	40.4	13.6	82.2	18.4	0.0	62.9	29.9	0.7
LOS	F	C	A	E	D	B	F	B	A	E	C	A
Approach Delay		76.4			37.1			21.3			24.0	
Approach LOS		E			D			C			C	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 28 (21%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow
 Natural Cycle: 105
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.11
 Intersection Signal Delay: 34.9
 Intersection LOS: C
 Intersection Capacity Utilization 58.5%
 ICU Level of Service B
 Analysis Period (min) 15

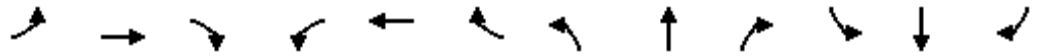
Splits and Phases: 4: McBean Parkway & Magic Mountain Pkwy



Queues

4: McBean Parkway & Magic Mountain Pkwy

01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	462	483	61	67	503	157	71	1087	59	193	1554	716
v/c Ratio	1.11	0.39	0.09	0.30	0.36	0.27	0.33	0.46	0.03	0.57	0.58	0.40
Control Delay	129.8	34.8	1.7	66.8	40.4	13.6	82.2	18.4	0.0	62.9	29.9	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	129.8	34.8	1.7	66.8	40.4	13.6	82.2	18.4	0.0	62.9	29.9	0.7
Queue Length 50th (ft)	~232	168	0	28	118	24	33	73	0	82	295	0
Queue Length 95th (ft)	#342	225	10	52	153	55	m53	121	m0	119	345	0
Internal Link Dist (ft)		729			1372			1542			1139	
Turn Bay Length (ft)	360		360	210			175		175	300		340
Base Capacity (vph)	416	1223	684	390	1386	574	452	2370	1794	528	2693	1794
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.11	0.39	0.09	0.17	0.36	0.27	0.16	0.46	0.03	0.37	0.58	0.40

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
5: Valencia Blvd & Magic Mountain Pkwy

01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↕↔		↔↔	↕↔		↔	↕↕↕	↔	↔	↕↕↕	↔↔
Traffic Volume (vph)	185	244	43	179	404	47	44	957	103	24	1739	612
Future Volume (vph)	185	244	43	179	404	47	44	957	103	24	1739	612
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	13	12	11	12	11	11	14	12	11	11	12
Storage Length (ft)	310		0	250		200	180		200	190		190
Storage Lanes	1		0	2		0	1		1	1		2
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	0.95	0.97	0.95	0.95	1.00	0.91	1.00	1.00	0.91	0.88
Fr _t		0.977			0.984				0.850			0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3319	3573	0	3319	3483	0	1711	5424	1583	1711	4916	2787
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3319	3573	0	3319	3483	0	1711	5424	1583	1711	4916	2787
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		16			10				112			444
Link Speed (mph)		45			45			45				45
Link Distance (ft)		1046			2748			1989				572
Travel Time (s)		15.8			41.6			30.1				8.7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	201	265	47	195	439	51	48	1040	112	26	1890	665
Shared Lane Traffic (%)												
Lane Group Flow (vph)	201	312	0	195	490	0	48	1040	112	26	1890	665
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		22			22			11				11
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.04	0.96	1.00	1.04	1.00	1.04	1.04	0.92	1.00	1.04	1.04	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Size(ft)	50	50		50	50		50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	3	8		7	4		1	6		5	2	3
Permitted Phases									6			2
Detector Phase	3	8		7	4		1	6	6	5	2	3
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	45.0		12.0	45.0		12.0	38.0	38.0	12.0	39.0	12.0

Queues

5: Valencia Blvd & Magic Mountain Pkwy

01/18/2024



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	201	312	195	490	48	1040	112	26	1890	665
v/c Ratio	0.53	0.24	0.57	0.39	0.39	0.63	0.21	0.14	1.09	0.41
Control Delay	52.3	30.9	95.6	15.4	47.8	39.4	10.0	42.0	76.4	3.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.3	30.9	95.6	15.4	47.8	39.4	10.0	42.0	76.4	3.7
Queue Length 50th (ft)	90	99	88	54	39	315	35	16	~674	33
Queue Length 95th (ft)	118	141	130	234	m66	371	75	m20	m#715	m26
Internal Link Dist (ft)		966		2668		1909			492	
Turn Bay Length (ft)	310		250		180		200	190		190
Base Capacity (vph)	528	1321	528	1244	181	1643	535	181	1730	1712
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.38	0.24	0.37	0.39	0.27	0.63	0.21	0.14	1.09	0.39

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings

6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy

01/18/2024



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	93	333	338	1213	1581	153
Future Volume (vph)	93	333	338	1213	1581	153
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	265	265	260			270
Storage Lanes	1	1	2			1
Taper Length (ft)	25		25			
Lane Util. Factor	0.97	0.88	0.97	0.91	0.95	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3433	2787	3433	5085	3539	1583
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	3433	2787	3433	5085	3539	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		14				115
Link Speed (mph)	45			50	45	
Link Distance (ft)	2748			2280	1194	
Travel Time (s)	41.6			31.1	18.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	101	362	367	1318	1718	166
Shared Lane Traffic (%)						
Lane Group Flow (vph)	101	362	367	1318	1718	166
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	34			24	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	1	1	1
Detector Template						
Leading Detector (ft)	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	pt+ov	custom	NA	NA	Perm
Protected Phases	8	8 1	1	6	2	
Permitted Phases			1			2
Detector Phase	8	8 1	1	6	2	2
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	20.0		20.0	20.0	41.0	41.0
Total Split (s)	34.0		30.0	98.0	68.0	68.0

Lanes, Volumes, Timings

6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy

01/18/2024

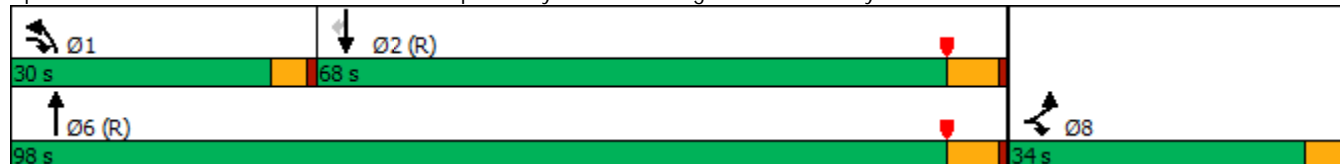


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Total Split (%)	25.8%		22.7%	74.2%	51.5%	51.5%
Maximum Green (s)	29.0		25.5	92.0	62.0	62.0
Yellow Time (s)	4.0		3.5	5.0	5.0	5.0
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0		-0.5	-2.0	-2.0	-2.0
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	Max		Min	C-Min	C-Min	C-Min
Walk Time (s)					7.0	7.0
Flash Dont Walk (s)					28.0	28.0
Pedestrian Calls (#/hr)					0	0
Act Effect Green (s)	30.0	54.4	20.4	94.0	69.6	69.6
Actuated g/C Ratio	0.23	0.41	0.15	0.71	0.53	0.53
v/c Ratio	0.13	0.31	0.69	0.36	0.92	0.19
Control Delay	30.5	18.8	59.5	7.7	36.6	6.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.5	18.8	59.5	7.7	36.6	6.4
LOS	C	B	E	A	D	A
Approach Delay	21.3			19.0	34.0	
Approach LOS	C			B	C	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 77 (58%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
 Natural Cycle: 85
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.92
 Intersection Signal Delay: 26.2
 Intersection LOS: C
 Intersection Capacity Utilization 66.7%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy



Queues

6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy

01/18/2024



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	101	362	367	1318	1718	166
v/c Ratio	0.13	0.31	0.69	0.36	0.92	0.19
Control Delay	30.5	18.8	59.5	7.7	36.6	6.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.5	18.8	59.5	7.7	36.6	6.4
Queue Length 50th (ft)	42	139	155	144	824	26
Queue Length 95th (ft)	63	179	198	168	#972	m43
Internal Link Dist (ft)	2668		2200		1114	
Turn Bay Length (ft)	265	265	260			270
Base Capacity (vph)	780	1274	676	3621	1864	888
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.28	0.54	0.36	0.92	0.19

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

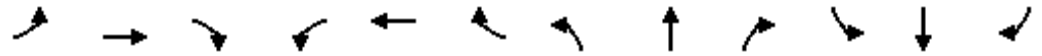
Queue shown is maximum after two cycles.

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

Lanes, Volumes, Timings

7: Bouquet Canyon Rd & Valencia Blvd/Soledad Canyon Rd

01/18/2024

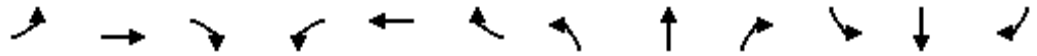


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔↔	↕↕↕		↔↔↔	↕↕↕	↔	↔	↕↕↕	↔	↔↔↔	↕↕↕	↕↕↕
Traffic Volume (vph)	392	758	23	562	1467	290	23	710	425	333	1246	1063
Future Volume (vph)	392	758	23	562	1467	290	23	710	425	333	1246	1063
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	10	10	11	11	11	11	10	10	11
Storage Length (ft)	360		0	330		330	250		0	435		400
Storage Lanes	2		0	3		1	1		1	2		2
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.94	0.91	0.91	0.94	0.91	1.00	1.00	0.91	1.00	0.97	0.91	0.88
Fr _t		0.996				0.850			0.850			0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	4824	4896	0	4658	4746	1531	1711	4916	1531	3204	4746	2694
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	4824	4896	0	4658	4746	1531	1711	4916	1531	3204	4746	2694
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3				99			112			453
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		2282			2858			2196			1054	
Travel Time (s)		34.6			43.3			33.3			12.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	426	824	25	611	1595	315	25	772	462	362	1354	1155
Shared Lane Traffic (%)												
Lane Group Flow (vph)	426	849	0	611	1595	315	25	772	462	362	1354	1155
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		33			33			20			20	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.00	1.09	1.09	1.04	1.04	1.04	1.04	1.09	1.09	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50		50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50		50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4		3	8	1	5	2	3	1	6	7
Permitted Phases						8			2			6
Detector Phase	7	4		3	8	1	5	2	3	1	6	7
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	44.0		12.0	48.0	12.0	12.0	46.0	12.0	12.0	44.0	12.0

Lanes, Volumes, Timings

7: Bouquet Canyon Rd & Valencia Blvd/Soledad Canyon Rd

01/18/2024

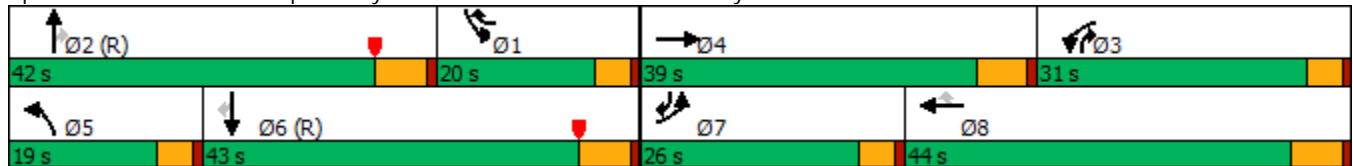


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	26.0	39.0		31.0	44.0	20.0	19.0	42.0	31.0	20.0	43.0	26.0
Total Split (%)	19.7%	29.5%		23.5%	33.3%	15.2%	14.4%	31.8%	23.5%	15.2%	32.6%	19.7%
Maximum Green (s)	21.5	33.0		26.5	38.0	15.5	14.5	36.0	26.5	15.5	37.0	21.5
Yellow Time (s)	3.5	5.0		3.5	5.0	3.5	3.5	5.0	3.5	3.5	5.0	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-0.5	-2.0		-0.5	-2.0	-0.5	-0.5	-2.0	-0.5	-0.5	-2.0	-0.5
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lead		Lag	Lag	Lag	Lead	Lead	Lag	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None	None	None	C-Max	None	None	C-Max	None
Walk Time (s)		5.0			5.0			5.0				
Flash Dont Walk (s)		33.0			37.0			35.0				
Pedestrian Calls (#/hr)		0			0			0				
Act Effect Green (s)	20.4	30.8		31.2	41.6	57.6	8.0	38.0	73.2	16.0	50.2	74.6
Actuated g/C Ratio	0.15	0.23		0.24	0.32	0.44	0.06	0.29	0.55	0.12	0.38	0.57
v/c Ratio	0.57	0.74		0.55	1.07	0.44	0.24	0.55	0.51	0.93	0.75	0.67
Control Delay	29.7	18.6		46.5	85.1	15.4	59.1	37.7	12.0	61.3	21.3	11.1
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.7	18.6		46.5	85.1	15.4	59.1	37.7	12.0	61.3	21.3	11.1
LOS	C	B		D	F	B	E	D	B	E	C	B
Approach Delay		22.3			67.1			28.7			22.2	
Approach LOS		C			E			C			C	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 117 (89%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 120
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.07
 Intersection Signal Delay: 37.5
 Intersection LOS: D
 Intersection Capacity Utilization 78.9%
 ICU Level of Service D
 Analysis Period (min) 15

Splits and Phases: 7: Bouquet Canyon Rd & Valencia Blvd/Soledad Canyon Rd



Queues

7: Bouquet Canyon Rd & Valencia Blvd/Soledad Canyon Rd

01/18/2024



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	426	849	611	1595	315	25	772	462	362	1354	1155
v/c Ratio	0.57	0.74	0.55	1.07	0.44	0.24	0.55	0.51	0.93	0.75	0.67
Control Delay	29.7	18.6	46.5	85.1	15.4	59.1	37.7	12.0	61.3	21.3	11.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.7	18.6	46.5	85.1	15.4	59.1	37.7	12.0	61.3	21.3	11.1
Queue Length 50th (ft)	37	57	195	~587	113	21	209	197	167	365	444
Queue Length 95th (ft)	76	65	239	#687	170	51	254	314	m#212	436	536
Internal Link Dist (ft)		2202		2778			2116			974	
Turn Bay Length (ft)	360		330		330	250			435		400
Base Capacity (vph)	804	1300	1102	1495	723	194	1415	899	388	1805	1746
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.65	0.55	1.07	0.44	0.13	0.55	0.51	0.93	0.75	0.66

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
8: Bouquet Canyon Rd & Newhall Ranch Rd

01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	270	798	337	456	1778	457	392	829	162	450	1920	533
Future Volume (vph)	270	798	337	456	1778	457	392	829	162	450	1920	533
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	290		265	410		410	475		230	260		150
Storage Lanes	3		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.94	0.86	1.00	0.97	0.86	1.00	0.97	0.86	1.00	0.97	0.86	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	4990	6408	1583	3433	6408	1583	3433	6408	1583	3433	6408	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	4990	6408	1583	3433	6408	1583	3433	6408	1583	3433	6408	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			107			326			182			112
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		870			2469			1012			1082	
Travel Time (s)		13.2			37.4			15.3			16.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	293	867	366	496	1933	497	426	901	176	489	2087	579
Shared Lane Traffic (%)												
Lane Group Flow (vph)	293	867	366	496	1933	497	426	901	176	489	2087	579
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		36			36			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	3	8	1	7	4		1	6		5	2	3
Permitted Phases			8			4			6			2
Detector Phase	3	8	1	7	4	4	1	6	6	5	2	3
Switch Phase												
Minimum Initial (s)	4.0	5.0	4.0	4.0	5.0	5.0	4.0	10.0	10.0	4.0	10.0	4.0
Minimum Split (s)	12.0	43.0	12.0	12.0	43.0	43.0	12.0	49.0	49.0	12.0	50.0	12.0
Total Split (s)	21.0	36.0	22.0	21.0	36.0	36.0	22.0	45.0	45.0	30.0	53.0	21.0

Lanes, Volumes, Timings
 8: Bouquet Canyon Rd & Newhall Ranch Rd

01/18/2024

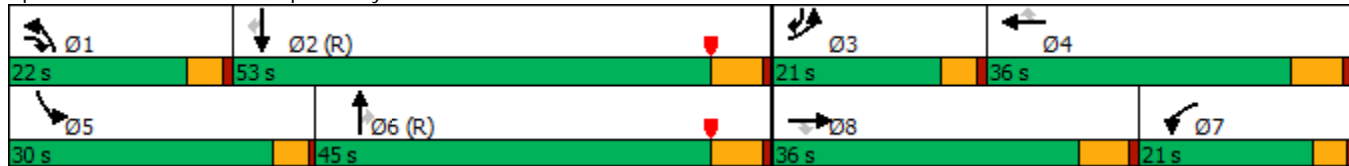


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	15.9%	27.3%	16.7%	15.9%	27.3%	27.3%	16.7%	34.1%	34.1%	22.7%	40.2%	15.9%
Maximum Green (s)	16.5	30.0	17.5	17.0	30.0	30.0	17.5	39.0	39.0	26.0	47.0	16.5
Yellow Time (s)	3.5	5.0	3.5	3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.0	3.5
All-Red Time (s)	1.0	1.0	1.0	0.5	1.0	1.0	1.0	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	-0.5	-2.0	-0.5	-0.5	-2.0	-2.0	-0.5	-2.0	-2.0	-0.5	-2.0	-0.5
Total Lost Time (s)	4.0	4.0	4.0	3.5	4.0	4.0	4.0	4.0	4.0	3.5	4.0	4.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes		Yes	Yes			Yes			Yes		Yes
Vehicle Extension (s)	3.0	5.5	3.0	3.0	5.5	5.5	3.0	5.5	5.5	3.0	5.5	3.0
Minimum Gap (s)	3.0	2.5	3.0	3.0	2.5	2.5	3.0	4.5	4.5	3.0	4.5	3.0
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	10.0	0.0	10.0	0.0
Time To Reduce (s)	0.0	24.0	0.0	0.0	24.0	24.0	0.0	10.0	10.0	0.0	10.0	0.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	None
Walk Time (s)		5.0			5.0	5.0		5.0	5.0		5.0	
Flash Dont Walk (s)		32.0			32.0	32.0		38.0	38.0		39.0	
Pedestrian Calls (#/hr)		2			2	2		1	1		1	
Act Effect Green (s)	14.4	27.9	45.9	21.6	34.6	34.6	18.0	43.8	43.8	23.7	49.0	67.4
Actuated g/C Ratio	0.11	0.21	0.35	0.16	0.26	0.26	0.14	0.33	0.33	0.18	0.37	0.51
v/c Ratio	0.54	0.64	0.59	0.88	1.15	0.76	0.91	0.42	0.27	0.80	0.88	0.67
Control Delay	59.1	49.6	17.6	69.1	116.6	24.2	72.6	51.9	20.0	61.8	43.9	23.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.1	49.6	17.6	69.1	116.6	24.2	72.6	51.9	20.0	61.8	43.9	23.1
LOS	E	D	B	E	F	C	E	D	B	E	D	C
Approach Delay		43.7			92.8			54.1			42.9	
Approach LOS		D			F			D			D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 105 (80%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
 Natural Cycle: 130
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.15
 Intersection Signal Delay: 60.9
 Intersection LOS: E
 Intersection Capacity Utilization 83.2%
 ICU Level of Service E
 Analysis Period (min) 15

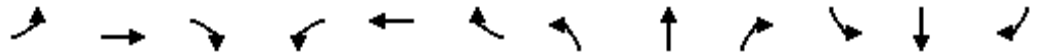
Splits and Phases: 8: Bouquet Canyon Rd & Newhall Ranch Rd



Queues

8: Bouquet Canyon Rd & Newhall Ranch Rd

01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	293	867	366	496	1933	497	426	901	176	489	2087	579
v/c Ratio	0.54	0.64	0.59	0.88	1.15	0.76	0.91	0.42	0.27	0.80	0.88	0.67
Control Delay	59.1	49.6	17.6	69.1	116.6	24.2	72.6	51.9	20.0	61.8	43.9	23.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.1	49.6	17.6	69.1	116.6	24.2	72.6	51.9	20.0	61.8	43.9	23.1
Queue Length 50th (ft)	85	198	114	210	-564	123	169	222	44	207	480	292
Queue Length 95th (ft)	115	227	181	#358	#675	275	#275	262	103	264	532	410
Internal Link Dist (ft)		790			2389			932			1002	
Turn Bay Length (ft)	290		265	410		410	475		230	260		150
Base Capacity (vph)	642	1553	620	562	1679	655	468	2127	647	689	2378	892
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.46	0.56	0.59	0.88	1.15	0.76	0.91	0.42	0.27	0.71	0.88	0.65

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lanes, Volumes, Timings
9: Commuter Way & Soledad Cyn

01/18/2024



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↗	↖	↑↑↑	↘↗	
Traffic Volume (vph)	1362	40	11	2325	45	19
Future Volume (vph)	1362	40	11	2325	45	19
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		150	285		0	0
Storage Lanes		1	1		2	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	1.00	1.00	0.91	0.97	0.95
Frt		0.850			0.955	
Flt Protected			0.950		0.966	
Satd. Flow (prot)	5085	1583	1770	5085	3334	0
Flt Permitted			0.950		0.966	
Satd. Flow (perm)	5085	1583	1770	5085	3334	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		33			21	
Link Speed (mph)	50			50	30	
Link Distance (ft)	928			2825	392	
Travel Time (s)	12.7			38.5	8.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1480	43	12	2527	49	21
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1480	43	12	2527	70	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	1	1	1	1	1	
Detector Template						
Leading Detector (ft)	50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	
Turn Type	NA	Perm	Prot	NA	Prot	
Protected Phases	2		1	6	8	
Permitted Phases		2				
Detector Phase	2	2	1	6	8	
Switch Phase						
Minimum Initial (s)	10.0	10.0	4.0	10.0	4.0	
Minimum Split (s)	26.0	26.0	12.0	22.0	37.0	
Total Split (s)	75.0	75.0	20.0	95.0	37.0	

Lanes, Volumes, Timings
 9: Commuter Way & Soledad Cyn

01/18/2024



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Total Split (%)	56.8%	56.8%	15.2%	72.0%	28.0%	
Maximum Green (s)	69.0	69.0	16.5	89.0	31.0	
Yellow Time (s)	5.0	5.0	3.5	5.0	4.0	
All-Red Time (s)	1.0	1.0	0.0	1.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	0.5	-2.0	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Vehicle Extension (s)	5.0	5.0	1.5	5.0	2.0	
Minimum Gap (s)	4.0	4.0	1.5	4.0	2.0	
Time Before Reduce (s)	15.0	15.0	0.0	15.0	0.0	
Time To Reduce (s)	15.0	15.0	0.0	15.0	0.0	
Recall Mode	C-Max	C-Max	None	C-Max	None	
Walk Time (s)	7.0	7.0			7.0	
Flash Dont Walk (s)	13.0	13.0			24.0	
Pedestrian Calls (#/hr)	0	0			0	
Act Effect Green (s)	114.6	114.6	4.5	118.4	8.5	
Actuated g/C Ratio	0.87	0.87	0.03	0.90	0.06	
v/c Ratio	0.34	0.03	0.20	0.55	0.30	
Control Delay	1.0	0.1	80.4	1.4	45.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	1.0	0.1	80.4	1.4	45.2	
LOS	A	A	F	A	D	
Approach Delay	1.0			1.8	45.2	
Approach LOS	A			A	D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 16 (12%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Natural Cycle: 80
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.55
 Intersection Signal Delay: 2.2
 Intersection LOS: A
 Intersection Capacity Utilization 54.9%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 9: Commuter Way & Soledad Cyn



Queues

9: Commuter Way & Soledad Cyn

01/18/2024



Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Group Flow (vph)	1480	43	12	2527	70
v/c Ratio	0.34	0.03	0.20	0.55	0.30
Control Delay	1.0	0.1	80.4	1.4	45.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	1.0	0.1	80.4	1.4	45.2
Queue Length 50th (ft)	14	0	11	13	21
Queue Length 95th (ft)	37	1	m19	21	45
Internal Link Dist (ft)	848			2745	312
Turn Bay Length (ft)		150	285		
Base Capacity (vph)	4416	1379	214	4562	849
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.34	0.03	0.06	0.55	0.08

Intersection Summary

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

Lanes, Volumes, Timings
 10: Soledad Cyn/Soledad Cyn Rd & Valley Center

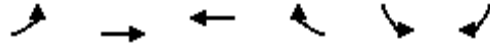
01/18/2024



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø4
Lane Configurations	↖↖	↑↑↑	↑↑↑	↗	↘↘	↘	
Traffic Volume (vph)	97	902	1816	925	575	190	
Future Volume (vph)	97	902	1816	925	575	190	
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	250			310	235	0	
Storage Lanes	2			1	1	1	
Taper Length (ft)	25				25		
Lane Util. Factor	0.97	0.91	0.91	1.00	0.97	1.00	
Frt				0.850		0.850	
Flt Protected	0.950				0.950		
Satd. Flow (prot)	3433	5085	5085	1583	3433	1583	
Flt Permitted	0.950				0.950		
Satd. Flow (perm)	3433	5085	5085	1583	3433	1583	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)				508		207	
Link Speed (mph)		50	50		30		
Link Distance (ft)		2935	1764		1172		
Travel Time (s)		40.0	24.1		26.6		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	105	980	1974	1005	625	207	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	105	980	1974	1005	625	207	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Left	Left	Right	Left	Right	
Median Width(ft)		24	24		24		
Link Offset(ft)		0	0		0		
Crosswalk Width(ft)		16	16		16		
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (mph)	15			9	15	9	
Number of Detectors	1	1	1	1	1	1	
Detector Template							
Leading Detector (ft)	50	50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Turn Type	Prot	NA	NA	Free	Prot	pt+ov	
Protected Phases	5	2	6		3	3 5	4
Permitted Phases				Free			
Detector Phase	5	2	6		3	3 5	
Switch Phase							
Minimum Initial (s)	4.0	4.0	4.0		4.0		4.0
Minimum Split (s)	20.0	22.0	29.0		20.0		35.0
Total Split (s)	20.0	72.0	52.0		25.0		35.0

Lanes, Volumes, Timings
 10: Soledad Cyn/Soledad Cyn Rd & Valley Center

01/18/2024

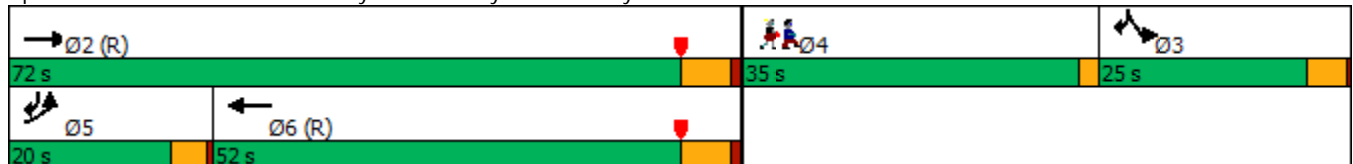


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø4	
Total Split (%)	15.2%	54.5%	39.4%		18.9%		27%	
Maximum Green (s)	16.0	66.0	46.0		20.5		33.0	
Yellow Time (s)	3.5	5.0	5.0		4.0		2.0	
All-Red Time (s)	0.5	1.0	1.0		0.5		0.0	
Lost Time Adjust (s)	0.0	-2.0	-2.0		-0.5			
Total Lost Time (s)	4.0	4.0	4.0		4.0			
Lead/Lag	Lead		Lag		Lag		Lead	
Lead-Lag Optimize?	Yes		Yes		Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		0.2	
Recall Mode	None	C-Max	C-Max		None		None	
Walk Time (s)				7.0				7.0
Flash Dont Walk (s)				16.0				26.0
Pedestrian Calls (#/hr)				0				0
Act Effct Green (s)	9.4	87.1	73.7	132.0	36.9	50.3		
Actuated g/C Ratio	0.07	0.66	0.56	1.00	0.28	0.38		
v/c Ratio	0.43	0.29	0.70	0.63	0.65	0.28		
Control Delay	51.5	17.5	6.4	6.7	30.0	1.7		
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		
Total Delay	51.5	17.5	6.4	6.7	30.0	1.7		
LOS	D	B	A	A	C	A		
Approach Delay	20.8		6.5		22.9			
Approach LOS	C		A		C			

Intersection Summary

Area Type:	Other
Cycle Length:	132
Actuated Cycle Length:	132
Offset:	37 (28%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle:	135
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.70
Intersection Signal Delay:	12.5
Intersection LOS:	B
Intersection Capacity Utilization	64.6%
ICU Level of Service	C
Analysis Period (min)	15

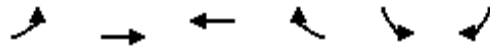
Splits and Phases: 10: Soledad Cyn/Soledad Cyn Rd & Valley Center



Queues

10: Soledad Cyn/Soledad Cyn Rd & Valley Center

01/18/2024



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	105	980	1974	1005	625	207
v/c Ratio	0.43	0.29	0.70	0.63	0.65	0.28
Control Delay	51.5	17.5	6.4	6.7	30.0	1.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.5	17.5	6.4	6.7	30.0	1.7
Queue Length 50th (ft)	46	196	39	427	155	4
Queue Length 95th (ft)	77	223	m47	m460	247	9
Internal Link Dist (ft)		2855	1684		1092	
Turn Bay Length (ft)	250			310	235	
Base Capacity (vph)	416	3356	2839	1583	959	799
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.29	0.70	0.63	0.65	0.26

Intersection Summary

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

Lanes, Volumes, Timings
 11: Golden Valley Road & Valley Center Drive

01/18/2024



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4	Ø5	Ø12
Lane Configurations	↙↙↙	↘↘	↙↙	↑↑↑	↓↓↓	↘			
Traffic Volume (vph)	799	266	307	842	1052	487			
Future Volume (vph)	799	266	307	842	1052	487			
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900			
Storage Length (ft)	260	260	290			150			
Storage Lanes	2	1	2			1			
Taper Length (ft)	25		25						
Lane Util. Factor	0.94	0.88	0.97	0.91	0.91	1.00			
Frt		0.850				0.850			
Flt Protected	0.950		0.950						
Satd. Flow (prot)	4990	2787	3433	5085	5085	1583			
Flt Permitted	0.950		0.950						
Satd. Flow (perm)	4990	2787	3433	5085	5085	1583			
Right Turn on Red		Yes				Yes			
Satd. Flow (RTOR)		289				338			
Link Speed (mph)	30			50	50				
Link Distance (ft)	513			2601	1605				
Travel Time (s)	11.7			35.5	21.9				
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92			
Adj. Flow (vph)	868	289	334	915	1143	529			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	868	289	334	915	1143	529			
Enter Blocked Intersection	No	No	No	No	No	No			
Lane Alignment	Left	Right	Left	Left	Left	Right			
Median Width(ft)	36			24	24				
Link Offset(ft)	0			0	0				
Crosswalk Width(ft)	16			16	16				
Two way Left Turn Lane									
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00			
Turning Speed (mph)	15	9	15			9			
Number of Detectors	1	1	1	1	1	1			
Detector Template									
Leading Detector (ft)	50	50	50	50	50	50			
Trailing Detector (ft)	0	0	0	0	0	0			
Detector 1 Position(ft)	0	0	0	0	0	0			
Detector 1 Size(ft)	50	50	50	50	50	50			
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel									
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Turn Type	Prot	pt+ov	Prot	NA	NA	Perm			
Protected Phases	3	5 12	5 12	2	6		4	5	12
Permitted Phases						6			
Detector Phase	3	5 12	5 12	2	6	6			
Switch Phase									
Minimum Initial (s)	3.0			10.0	10.0	10.0	4.0	4.0	4.0
Minimum Split (s)	25.0			30.0	40.0	40.0	35.0	15.0	20.0
Total Split (s)	30.0			67.0	42.0	42.0	35.0	25.0	35.0

Lanes, Volumes, Timings
 11: Golden Valley Road & Valley Center Drive

01/18/2024

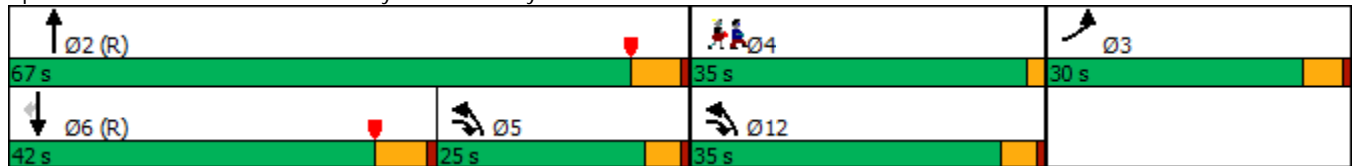


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4	Ø5	Ø12
Total Split (%)	22.7%			50.8%	31.8%	31.8%	27%	19%	27%
Maximum Green (s)	25.0			61.0	36.0	36.0	33.0	20.5	30.5
Yellow Time (s)	4.0			5.0	5.0	5.0	2.0	3.5	3.5
All-Red Time (s)	1.0			1.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)	-1.0			-2.0	-2.0	-2.0			
Total Lost Time (s)	4.0			4.0	4.0	4.0			
Lead/Lag					Lead	Lead		Lag	
Lead-Lag Optimize?					Yes	Yes		Yes	
Vehicle Extension (s)	3.0			3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None			C-Min	C-Min	C-Min	None	None	None
Walk Time (s)					7.0	7.0	7.0		5.0
Flash Dont Walk (s)					24.0	24.0	26.0		10.0
Pedestrian Calls (#/hr)					0	0	0		0
Act Effect Green (s)	30.5	28.6	28.6	82.3	60.9	60.9			
Actuated g/C Ratio	0.23	0.22	0.22	0.62	0.46	0.46			
v/c Ratio	0.75	0.35	0.45	0.29	0.49	0.58			
Control Delay	43.8	5.9	37.1	4.1	17.6	11.9			
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0			
Total Delay	43.8	5.9	37.1	4.1	17.6	11.9			
LOS	D	A	D	A	B	B			
Approach Delay	34.3			12.9	15.8				
Approach LOS	C			B	B				

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 26 (20%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 115
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.75
 Intersection Signal Delay: 20.2
 Intersection LOS: C
 Intersection Capacity Utilization 54.3%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 11: Golden Valley Road & Valley Center Drive



Queues

11: Golden Valley Road & Valley Center Drive

01/18/2024



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	868	289	334	915	1143	529
v/c Ratio	0.75	0.35	0.45	0.29	0.49	0.58
Control Delay	43.8	5.9	37.1	4.1	17.6	11.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.8	5.9	37.1	4.1	17.6	11.9
Queue Length 50th (ft)	271	12	147	31	162	113
Queue Length 95th (ft)	273	27	180	35	189	286
Internal Link Dist (ft)	433			2521	1525	
Turn Bay Length (ft)	260	260	290			150
Base Capacity (vph)	1159	1265	1341	3169	2344	912
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.75	0.23	0.25	0.29	0.49	0.58

Intersection Summary

Lanes, Volumes, Timings
12: Ruther Ave & Soledad Cyn Rd

01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	71	1157	95	211	2578	18	258	138	97	83	96	70
Future Volume (vph)	71	1157	95	211	2578	18	258	138	97	83	96	70
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	285		300	250		0	0		0	125		0
Storage Lanes	1		1	2		0	1		2	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	0.91	0.95	0.95	0.88	0.95	0.95	1.00
Frt			0.850		0.999				0.850		0.937	
Flt Protected	0.950			0.950			0.950	0.978		0.950		
Satd. Flow (prot)	1770	5085	1583	3433	5080	0	1681	1731	2787	1681	1658	0
Flt Permitted	0.950			0.950			0.950	0.978		0.950		
Satd. Flow (perm)	1770	5085	1583	3433	5080	0	1681	1731	2787	1681	1658	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			103		1				105		23	
Link Speed (mph)		50		50				40			30	
Link Distance (ft)		1764		2200				220			327	
Travel Time (s)		24.1		30.0				3.8			7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	77	1258	103	229	2802	20	280	150	105	90	104	76
Shared Lane Traffic (%)							42%			0%		
Lane Group Flow (vph)	77	1258	103	229	2822	0	162	268	105	90	180	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24		24				12			12	
Link Offset(ft)		0		0				0			0	
Crosswalk Width(ft)		16		16				16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1	1	1	1	
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50		50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	pt+ov	Split	NA	
Protected Phases	1	6		5	2		3	3	3 5	4	4	
Permitted Phases			6									
Detector Phase	1	6	6	5	2		3	3	3 5	4	4	
Switch Phase												
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	12.0	42.0	42.0	12.0	27.0		35.0	35.0		15.0	15.0	
Total Split (s)	18.0	52.0	52.0	30.0	64.0		30.0	30.0		20.0	20.0	

Lanes, Volumes, Timings
 12: Ruther Ave & Soledad Cyn Rd

01/18/2024

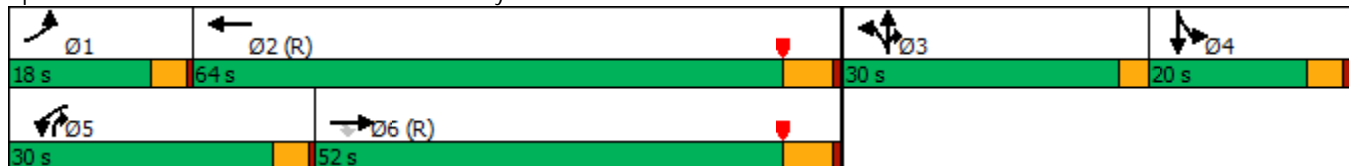


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	13.6%	39.4%	39.4%	22.7%	48.5%		22.7%	22.7%		15.2%	15.2%	
Maximum Green (s)	14.0	46.0	46.0	26.0	58.0		27.0	27.0		15.5	15.5	
Yellow Time (s)	3.5	5.0	5.0	3.5	5.0		3.0	3.0		3.5	3.5	
All-Red Time (s)	0.5	1.0	1.0	0.5	1.0		0.0	0.0		1.0	1.0	
Lost Time Adjust (s)	0.0	-2.0	-2.0	0.0	-2.0		1.0	1.0		-0.5	-0.5	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	4.5	4.5	1.5	4.5		3.0	3.0		3.0	3.0	
Minimum Gap (s)	1.5	3.0	3.0	1.5	3.0		3.0	3.0		3.0	3.0	
Time Before Reduce (s)	0.0	7.5	7.5	0.0	7.5		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	22.5	22.5	0.0	22.5		0.0	0.0		0.0	0.0	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None		None	None	
Walk Time (s)		7.0	7.0		7.0		5.0	5.0				
Flash Dont Walk (s)		25.0	25.0		11.0		27.0	27.0				
Pedestrian Calls (#/hr)		0	0		0		0	0				
Act Effect Green (s)	9.6	64.5	64.5	12.7	69.4		23.2	23.2	35.9	15.6	15.6	
Actuated g/C Ratio	0.07	0.49	0.49	0.10	0.53		0.18	0.18	0.27	0.12	0.12	
v/c Ratio	0.60	0.51	0.12	0.69	1.06		0.55	0.88	0.13	0.45	0.83	
Control Delay	94.0	8.5	1.1	68.7	66.2		56.4	81.5	3.8	61.9	79.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	94.0	8.5	1.1	68.7	66.2		56.4	81.5	3.8	61.9	79.7	
LOS	F	A	A	E	E		E	F	A	E	E	
Approach Delay		12.6			66.4			58.7			73.8	
Approach LOS		B			E			E			E	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
 Natural Cycle: 145
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.06
 Intersection Signal Delay: 51.4
 Intersection LOS: D
 Intersection Capacity Utilization 85.2%
 ICU Level of Service E
 Analysis Period (min) 15

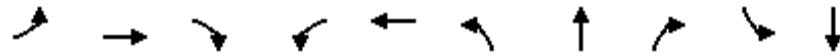
Splits and Phases: 12: Ruther Ave & Soledad Cyn Rd



Queues

12: Ruther Ave & Soledad Cyn Rd

01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	77	1258	103	229	2822	162	268	105	90	180
v/c Ratio	0.60	0.51	0.12	0.69	1.06	0.55	0.88	0.13	0.45	0.83
Control Delay	94.0	8.5	1.1	68.7	66.2	56.4	81.5	3.8	61.9	79.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	94.0	8.5	1.1	68.7	66.2	56.4	81.5	3.8	61.9	79.7
Queue Length 50th (ft)	67	154	0	99	~1034	131	233	0	75	140
Queue Length 95th (ft)	m111	212	m6	139	#1175	208	#369	16	136	#272
Internal Link Dist (ft)		1684			2120		140			247
Turn Bay Length (ft)	285		300	250					125	
Base Capacity (vph)	187	2484	826	676	2672	331	340	1161	207	224
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.41	0.51	0.12	0.34	1.06	0.49	0.79	0.09	0.43	0.80

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
 13: Golden Valley Road & Centre Pointe Parkway

01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	72	163	256	101	66	359	1022	354	136	1114	130
Future Volume (vph)	49	72	163	256	101	66	359	1022	354	136	1114	130
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		260	150		250	375		300	700		0
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850		0.941				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	3433	1753	0	1770	3539	1583	1770	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1863	1583	3433	1753	0	1770	3539	1583	1770	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			103		25				385			136
Link Speed (mph)		30		30				50			50	
Link Distance (ft)		1149		802				7898			1445	
Travel Time (s)		26.1		18.2				107.7			19.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	53	78	177	278	110	72	390	1111	385	148	1211	141
Shared Lane Traffic (%)												
Lane Group Flow (vph)	53	78	177	278	182	0	390	1111	385	148	1211	141
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24		24				12			12	
Link Offset(ft)		0		0				0			0	
Crosswalk Width(ft)		16		16				16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50		50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	3	8	5	7	4		5	2	7	1	6	
Permitted Phases			8						2			6
Detector Phase	3	8	5	7	4		5	2	7	1	6	6
Switch Phase												
Minimum Initial (s)	4.0	6.0	4.0	4.0	6.0		4.0	10.0	4.0	4.0	10.0	10.0
Minimum Split (s)	12.0	25.0	20.0	20.0	39.0		20.0	33.0	20.0	15.0	34.0	34.0
Total Split (s)	19.0	25.0	33.0	34.0	40.0		33.0	40.0	34.0	33.0	40.0	40.0

Lanes, Volumes, Timings
 13: Golden Valley Road & Centre Pointe Parkway

01/18/2024

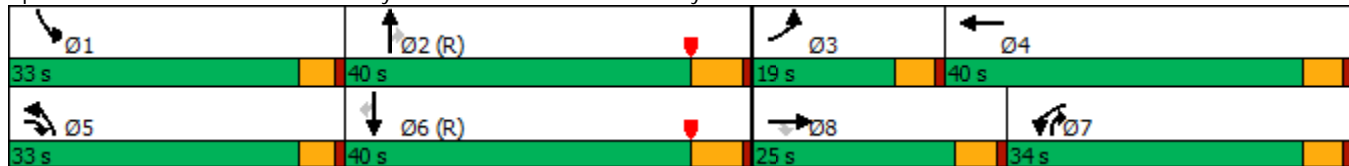


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	14.4%	18.9%	25.0%	25.8%	30.3%		25.0%	30.3%	25.8%	25.0%	30.3%	30.3%
Maximum Green (s)	14.0	20.0	28.5	29.0	35.0		28.5	34.0	29.0	28.5	34.0	34.0
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0		3.5	5.0	4.0	3.5	5.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0	-1.0	-0.5	-1.0	-1.0		-0.5	-2.0	-1.0	-0.5	-2.0	-2.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Min	None	None	C-Min	C-Min
Walk Time (s)					7.0			7.0			7.0	7.0
Flash Dont Walk (s)					27.0			20.0			21.0	21.0
Pedestrian Calls (#/hr)					0			0			0	0
Act Effct Green (s)	10.3	11.9	48.6	17.7	19.0		38.3	71.9	90.4	16.8	50.5	50.5
Actuated g/C Ratio	0.08	0.09	0.37	0.13	0.14		0.29	0.54	0.68	0.13	0.38	0.38
v/c Ratio	0.38	0.47	0.27	0.60	0.66		0.76	0.58	0.32	0.66	0.90	0.20
Control Delay	64.9	65.4	7.0	59.1	57.2		36.2	46.7	5.7	62.0	57.1	18.7
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	64.9	65.4	7.0	59.1	57.2		36.2	46.7	5.7	62.0	57.1	18.7
LOS	E	E	A	E	E		D	D	A	E	E	B
Approach Delay		31.8			58.3			36.2			54.0	
Approach LOS		C			E			D			D	

Intersection Summary

Area Type:	Other
Cycle Length:	132
Actuated Cycle Length:	132
Offset:	125 (95%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle:	125
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.90
Intersection Signal Delay:	44.7
Intersection LOS:	D
Intersection Capacity Utilization	76.7%
ICU Level of Service	D
Analysis Period (min)	15

Splits and Phases: 13: Golden Valley Road & Centre Pointe Parkway



Queues

13: Golden Valley Road & Centre Pointe Parkway

01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	53	78	177	278	182	390	1111	385	148	1211	141
v/c Ratio	0.38	0.47	0.27	0.60	0.66	0.76	0.58	0.32	0.66	0.90	0.20
Control Delay	64.9	65.4	7.0	59.1	57.2	36.2	46.7	5.7	62.0	57.1	18.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	64.9	65.4	7.0	59.1	57.2	36.2	46.7	5.7	62.0	57.1	18.7
Queue Length 50th (ft)	44	65	27	117	128	348	502	78	125	574	52
Queue Length 95th (ft)	86	115	47	157	200	m401	m560	m102	134	#843	123
Internal Link Dist (ft)		1069			722		7818			1365	
Turn Bay Length (ft)	150		260	150		375		300	700		
Base Capacity (vph)	201	296	648	780	496	513	1928	1317	388	1353	689
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.26	0.26	0.27	0.36	0.37	0.76	0.58	0.29	0.38	0.90	0.20

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

Lanes, Volumes, Timings
 14: Sierra Highway & Golden Valley Road

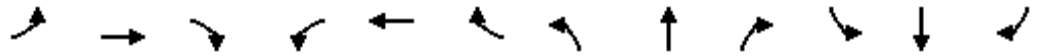
01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑	↔↔	↔↔	↑↑↑	↔	↔↔	↑↔		↔	↑↑	↔
Traffic Volume (vph)	303	600	817	350	1111	63	562	205	18	44	1125	495
Future Volume (vph)	303	600	817	350	1111	63	562	205	18	44	1125	495
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	280		280	285		300	285		0	410		540
Storage Lanes	2		2	2		1	2		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	0.88	0.97	0.91	1.00	0.97	0.95	0.95	1.00	0.95	1.00
Fr _t			0.850			0.850		0.988				0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	2787	3433	5085	1583	3433	3497	0	1770	3539	1583
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	2787	3433	5085	1583	3433	3497	0	1770	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			476			136		7				538
Link Speed (mph)		50			50			30				30
Link Distance (ft)		2032			1202			1801				1671
Travel Time (s)		27.7			16.4			40.9				38.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	329	652	888	380	1208	68	611	223	20	48	1223	538
Shared Lane Traffic (%)												
Lane Group Flow (vph)	329	652	888	380	1208	68	611	243	0	48	1223	538
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24				24
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1		1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50		50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50		50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	custom
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						8
Detector Phase	7	4	4	3	8	8	5	2		1	6	8
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	8.5	29.6	29.6	8.5	40.0	40.0	15.0	49.0		8.5	46.0	40.0
Total Split (s)	29.0	41.0	41.0	29.0	41.0	41.0	25.0	44.0		18.0	37.0	41.0

Lanes, Volumes, Timings
 14: Sierra Highway & Golden Valley Road

01/18/2024

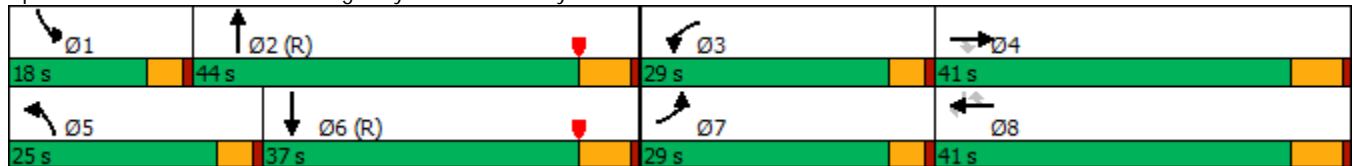


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	22.0%	31.1%	31.1%	22.0%	31.1%	31.1%	18.9%	33.3%		13.6%	28.0%	31.1%
Maximum Green (s)	24.5	35.0	35.0	24.5	35.0	35.0	20.5	38.0		13.5	31.0	35.0
Yellow Time (s)	3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.0		3.5	5.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	-0.5	-2.0	-2.0	-0.5	-2.0	-2.0	-0.5	-2.0		-0.5	-2.0	-2.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	None
Walk Time (s)					5.0	5.0		5.0			5.0	5.0
Flash Dont Walk (s)					29.0	29.0		33.0			30.0	29.0
Pedestrian Calls (#/hr)					0	0		0			0	0
Act Effct Green (s)	18.4	35.9	35.9	20.3	37.8	37.8	21.0	52.4		9.5	38.9	37.8
Actuated g/C Ratio	0.14	0.27	0.27	0.15	0.29	0.29	0.16	0.40		0.07	0.29	0.29
v/c Ratio	0.69	0.68	0.80	0.72	0.83	0.12	1.12	0.17		0.38	1.17	0.64
Control Delay	45.0	35.0	24.8	61.1	49.9	0.5	125.4	27.6		66.2	129.9	6.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	45.0	35.0	24.8	61.1	49.9	0.5	125.4	27.6		66.2	129.9	6.8
LOS	D	D	C	E	D	A	F	C		E	F	A
Approach Delay		31.9			50.5			97.6			91.6	
Approach LOS		C			D			F			F	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 96 (73%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 130
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.17
 Intersection Signal Delay: 63.4
 Intersection LOS: E
 Intersection Capacity Utilization 90.6%
 ICU Level of Service E
 Analysis Period (min) 15

Splits and Phases: 14: Sierra Highway & Golden Valley Road



Queues

14: Sierra Highway & Golden Valley Road

01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	329	652	888	380	1208	68	611	243	48	1223	538
v/c Ratio	0.69	0.68	0.80	0.72	0.83	0.12	1.12	0.17	0.38	1.17	0.64
Control Delay	45.0	35.0	24.8	61.1	49.9	0.5	125.4	27.6	66.2	129.9	6.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.0	35.0	24.8	61.1	49.9	0.5	125.4	27.6	66.2	129.9	6.8
Queue Length 50th (ft)	120	261	261	161	357	0	-309	69	40	-651	0
Queue Length 95th (ft)	m115	m304	m319	207	408	0	#428	113	81	#869	91
Internal Link Dist (ft)		1952			1122			1721		1591	
Turn Bay Length (ft)	280		280	285		300	285		410		540
Base Capacity (vph)	650	991	1123	650	1459	551	546	1393	187	1041	837
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.66	0.79	0.58	0.83	0.12	1.12	0.17	0.26	1.17	0.64

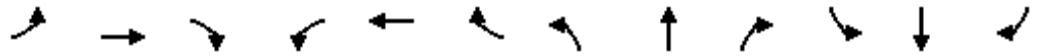
Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings

15: SR-14 SB Ramp & Newhall Ranch Road/Golden Valley Road

01/18/2024

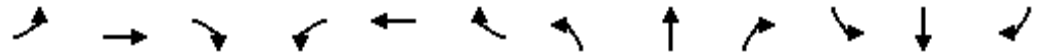


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗	↖	↑↑					↖	↗	↗
Traffic Volume (vph)	0	445	361	298	1033	0	0	0	0	41	194	494
Future Volume (vph)	0	445	361	298	1033	0	0	0	0	41	194	494
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	220		0	0		0	300		0
Storage Lanes	0		1	1		0	0		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850									0.850
Flt Protected				0.950						0.950	0.999	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	1681	1768	1583
Flt Permitted				0.950						0.950	0.999	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	1681	1768	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			392									61
Link Speed (mph)		50			50			30			30	
Link Distance (ft)		807			717			580			626	
Travel Time (s)		11.0			9.8			13.2			14.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	484	392	324	1123	0	0	0	0	45	211	537
Shared Lane Traffic (%)										10%		
Lane Group Flow (vph)	0	484	392	324	1123	0	0	0	0	40	216	537
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94							94
Detector 2 Size(ft)		6			6							6
Detector 2 Type		Cl+Ex			Cl+Ex							Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							0.0
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		6		5	2						4	
Permitted Phases		6								4		4

Lanes, Volumes, Timings

15: SR-14 SB Ramp & Newhall Ranch Road/Golden Valley Road

01/18/2024

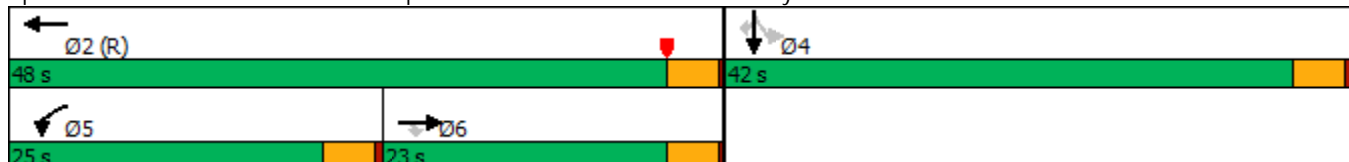


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase		6	6	5	2					4	4	4
Switch Phase												
Minimum Initial (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Minimum Split (s)		20.0	20.0	12.0	20.0					20.0	20.0	20.0
Total Split (s)		23.0	23.0	25.0	48.0					42.0	42.0	42.0
Total Split (%)		25.6%	25.6%	27.8%	53.3%					46.7%	46.7%	46.7%
Maximum Green (s)		19.0	19.0	21.0	44.0					38.0	38.0	38.0
Yellow Time (s)		3.5	3.5	3.5	3.5					3.5	3.5	3.5
All-Red Time (s)		0.5	0.5	0.5	0.5					0.5	0.5	0.5
Lost Time Adjust (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Total Lost Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lead/Lag		Lag	Lag	Lead								
Lead-Lag Optimize?		Yes	Yes	Yes								
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Recall Mode		Max	Max	None	C-Max					Max	Max	Max
Walk Time (s)		5.0	5.0		5.0					5.0	5.0	5.0
Flash Dont Walk (s)		10.0	10.0		10.0					10.0	10.0	10.0
Pedestrian Calls (#/hr)		0	0		0					0	0	0
Act Effect Green (s)		20.6	20.6	19.4	44.0					38.0	38.0	38.0
Actuated g/C Ratio		0.23	0.23	0.22	0.49					0.42	0.42	0.42
v/c Ratio		0.60	0.59	0.85	0.65					0.06	0.29	0.76
Control Delay		35.2	7.5	42.8	13.8					15.8	18.5	28.2
Queue Delay		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Total Delay		35.2	7.5	42.8	13.8					15.8	18.5	28.2
LOS		D	A	D	B					B	B	C
Approach Delay		22.8			20.3						24.9	
Approach LOS		C			C						C	

Intersection Summary

Area Type:	Other
Cycle Length:	90
Actuated Cycle Length:	90
Offset:	0 (0%), Referenced to phase 2:WBT, Start of Yellow
Natural Cycle:	65
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.85
Intersection Signal Delay:	22.2
Intersection LOS:	C
Intersection Capacity Utilization:	65.8%
ICU Level of Service:	C
Analysis Period (min):	15

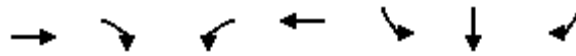
Splits and Phases: 15: SR-14 SB Ramp & Newhall Ranch Road/Golden Valley Road



Queues

15: SR-14 SB Ramp & Newhall Ranch Road/Golden Valley Road

01/18/2024



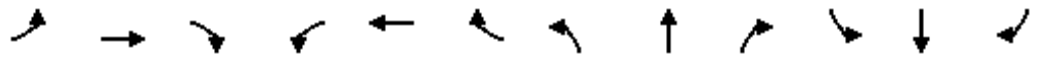
Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	484	392	324	1123	40	216	537
v/c Ratio	0.60	0.59	0.85	0.65	0.06	0.29	0.76
Control Delay	35.2	7.5	42.8	13.8	15.8	18.5	28.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.2	7.5	42.8	13.8	15.8	18.5	28.2
Queue Length 50th (ft)	133	0	183	276	13	83	226
Queue Length 95th (ft)	186	75	#307	323	33	137	362
Internal Link Dist (ft)	727			637		546	
Turn Bay Length (ft)			220		300		
Base Capacity (vph)	808	664	413	1730	709	746	703
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.60	0.59	0.78	0.65	0.06	0.29	0.76

Intersection Summary

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

Lanes, Volumes, Timings
 16: SR 14 NB Ramp & Golden Valley Road

01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑			↑↑	↔	↔	↔	↔			
Traffic Volume (vph)	224	256	0	0	1001	65	312	1	149	0	0	0
Future Volume (vph)	224	256	0	0	1001	65	312	1	149	0	0	0
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	230		0	0		280	0		140	0		0
Storage Lanes	2		0	0		1	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt						0.850			0.850			
Flt Protected	0.950						0.950	0.953				
Satd. Flow (prot)	3433	3539	0	0	3539	1583	1681	1686	1583	0	0	0
Flt Permitted	0.950						0.950	0.953				
Satd. Flow (perm)	3433	3539	0	0	3539	1583	1681	1686	1583	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						71			162			
Link Speed (mph)		50			50			30				30
Link Distance (ft)		717			541			632				618
Travel Time (s)		9.8			7.4			14.4				14.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	243	278	0	0	1088	71	339	1	162	0	0	0
Shared Lane Traffic (%)							50%					
Lane Group Flow (vph)	243	278	0	0	1088	71	169	171	162	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1	1	2	1			
Detector Template	Left	Thru			Thru	Right	Left	Thru	Right			
Leading Detector (ft)	20	100			100	20	20	100	20			
Trailing Detector (ft)	0	0			0	0	0	0	0			
Detector 1 Position(ft)	0	0			0	0	0	0	0			
Detector 1 Size(ft)	20	6			6	20	20	6	20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Prot	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	7	4			8			2				
Permitted Phases						8	2		2			

Lanes, Volumes, Timings
 16: SR 14 NB Ramp & Golden Valley Road

01/18/2024

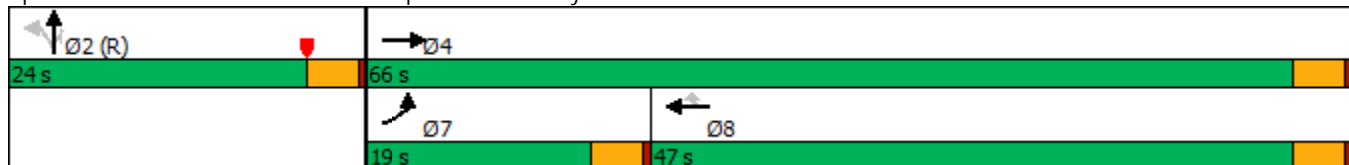


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4			8	8	2	2	2			
Switch Phase												
Minimum Initial (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Minimum Split (s)	12.0	20.0			20.0	20.0	20.0	20.0	20.0			
Total Split (s)	19.0	66.0			47.0	47.0	24.0	24.0	24.0			
Total Split (%)	21.1%	73.3%			52.2%	52.2%	26.7%	26.7%	26.7%			
Maximum Green (s)	15.0	62.0			43.0	43.0	20.0	20.0	20.0			
Yellow Time (s)	3.5	3.5			3.5	3.5	3.5	3.5	3.5			
All-Red Time (s)	0.5	0.5			0.5	0.5	0.5	0.5	0.5			
Lost Time Adjust (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Total Lost Time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Lead/Lag	Lead				Lag				Lag			
Lead-Lag Optimize?	Yes				Yes				Yes			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Recall Mode	None	None			None	None	C-Max	C-Max	C-Max			
Walk Time (s)		5.0			5.0	5.0	5.0	5.0	5.0			
Flash Dont Walk (s)		10.0			10.0	10.0	10.0	10.0	10.0			
Pedestrian Calls (#/hr)		0			0	0	0	0	0			
Act Effct Green (s)	11.6	51.8			36.2	36.2	30.2	30.2	30.2			
Actuated g/C Ratio	0.13	0.58			0.40	0.40	0.34	0.34	0.34			
v/c Ratio	0.55	0.14			0.76	0.10	0.30	0.30	0.25			
Control Delay	16.0	10.1			26.7	3.9	26.8	26.8	5.9			
Queue Delay	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Total Delay	16.0	10.1			26.7	3.9	26.8	26.8	5.9			
LOS	B	B			C	A	C	C	A			
Approach Delay		12.9			25.3			20.0				
Approach LOS		B			C			C				

Intersection Summary

Area Type: Other
 Cycle Length: 90
 Actuated Cycle Length: 90
 Offset: 0 (0%), Referenced to phase 2:NBTL and 6:, Start of Yellow
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.76
 Intersection Signal Delay: 21.1
 Intersection LOS: C
 Intersection Capacity Utilization 65.8%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 16: SR 14 NB Ramp & Golden Valley Road



Queues

16: SR 14 NB Ramp & Golden Valley Road

01/18/2024



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	243	278	1088	71	169	171	162
v/c Ratio	0.55	0.14	0.76	0.10	0.30	0.30	0.25
Control Delay	16.0	10.1	26.7	3.9	26.8	26.8	5.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	16.0	10.1	26.7	3.9	26.8	26.8	5.9
Queue Length 50th (ft)	69	78	272	0	74	75	0
Queue Length 95th (ft)	105	119	303	22	152	153	49
Internal Link Dist (ft)		637	461			552	
Turn Bay Length (ft)	230			280			140
Base Capacity (vph)	572	2437	1690	793	563	565	638
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.42	0.11	0.64	0.09	0.30	0.30	0.25

Intersection Summary

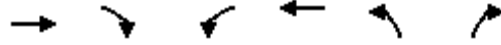
Lanes, Volumes, Timings
17: Studio Driveway & Soledad Cyn

01/18/2024

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↘	↑↑↑	↖	
Traffic Volume (vph)	1044	55	27	2185	7	4
Future Volume (vph)	1044	55	27	2185	7	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Fr _t	0.992				0.955	
Fl _t Protected			0.950		0.968	
Satd. Flow (prot)	5045	0	1770	5085	1722	0
Fl _t Permitted			0.215		0.968	
Satd. Flow (perm)	5045	0	400	5085	1722	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	22				4	
Link Speed (mph)	50			50	30	
Link Distance (ft)	469			185	392	
Travel Time (s)	6.4			2.5	8.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1135	60	29	2375	8	4
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1195	0	29	2375	12	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2		1	2	1	
Detector Template	Thru		Left	Thru	Left	
Leading Detector (ft)	100		20	100	20	
Trailing Detector (ft)	0		0	0	0	
Detector 1 Position(ft)	0		0	0	0	
Detector 1 Size(ft)	6		20	6	20	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA		Perm	NA	Prot	
Protected Phases	6			2	4	
Permitted Phases			2			
Detector Phase	6		2	2	4	
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	

Lanes, Volumes, Timings
 17: Studio Driveway & Soledad Cyn

01/18/2024



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Minimum Split (s)	20.0		20.0	20.0	20.0	
Total Split (s)	110.0		110.0	110.0	22.0	
Total Split (%)	83.3%		83.3%	83.3%	16.7%	
Maximum Green (s)	106.0		106.0	106.0	18.0	
Yellow Time (s)	3.5		3.5	3.5	3.5	
All-Red Time (s)	0.5		0.5	0.5	0.5	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	4.0		4.0	4.0	4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Recall Mode	Max		C-Max	C-Max	Max	
Walk Time (s)	5.0		5.0	5.0	5.0	
Flash Dont Walk (s)	10.0		10.0	10.0	10.0	
Pedestrian Calls (#/hr)	0		0	0	0	
Act Effect Green (s)	106.0		106.0	106.0	18.0	
Actuated g/C Ratio	0.80		0.80	0.80	0.14	
v/c Ratio	0.29		0.09	0.58	0.05	
Control Delay	1.0		4.2	4.8	39.7	
Queue Delay	0.0		0.0	0.0	0.0	
Total Delay	1.0		4.2	4.8	39.7	
LOS	A		A	A	D	
Approach Delay	1.0			4.8	39.7	
Approach LOS	A			A	D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 0 (0%), Referenced to phase 2:WBTL, Start of Yellow
 Natural Cycle: 55
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.58
 Intersection Signal Delay: 3.7
 Intersection LOS: A
 Intersection Capacity Utilization 52.2%
 ICU Level of Service A
 Analysis Period (min) 15

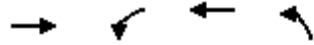
Splits and Phases: 17: Studio Driveway & Soledad Cyn



Queues

17: Studio Driveway & Soledad Cyn

01/18/2024



Lane Group	EBT	WBL	WBT	NBL
Lane Group Flow (vph)	1195	29	2375	12
v/c Ratio	0.29	0.09	0.58	0.05
Control Delay	1.0	4.2	4.8	39.7
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	1.0	4.2	4.8	39.7
Queue Length 50th (ft)	15	4	158	6
Queue Length 95th (ft)	m34	m10	207	26
Internal Link Dist (ft)	389		105	312
Turn Bay Length (ft)				
Base Capacity (vph)	4055	321	4083	238
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.29	0.09	0.58	0.05

Intersection Summary

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

Lanes, Volumes, Timings
 18: Residential Driveway 1 & Soledad Cyn

01/18/2024



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↵	↑↑↑		↵
Traffic Volume (vph)	1037	11	4	2212	0	26
Future Volume (vph)	1037	11	4	2212	0	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	100		0	0
Storage Lanes		0	1		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt	0.998					0.865
Flt Protected			0.950			
Satd. Flow (prot)	5075	0	1770	5085	0	1611
Flt Permitted			0.950			
Satd. Flow (perm)	5075	0	1770	5085	0	1611
Link Speed (mph)	50			50	30	
Link Distance (ft)	185			460	286	
Travel Time (s)	2.5			6.3	6.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1127	12	4	2404	0	28
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1139	0	4	2404	0	28
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	46.1% ICU Level of Service A
Analysis Period (min)	15

HCM 6th TWSC
 18: Residential Driveway 1 & Soledad Cyn

01/18/2024

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↑	↑↑↑		↑
Traffic Vol, veh/h	1037	11	4	2212	0	26
Future Vol, veh/h	1037	11	4	2212	0	26
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1127	12	4	2404	0	28

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	1139	0	- 570
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	5.34	-	- 7.14
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	3.12	-	- 3.92
Pot Cap-1 Maneuver	-	-	335	-	0 398
Stage 1	-	-	-	-	0 -
Stage 2	-	-	-	-	0 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	335	-	- 398
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	14.7
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	398	-	-	335	-
HCM Lane V/C Ratio	0.071	-	-	0.013	-
HCM Control Delay (s)	14.7	-	-	15.9	-
HCM Lane LOS	B	-	-	C	-
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Lanes, Volumes, Timings
 19: Residential Driveway 2 & Soledad Cyn

01/18/2024



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↵	↑↑↑		↵
Traffic Volume (vph)	1048	15	8	2216	0	49
Future Volume (vph)	1048	15	8	2216	0	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	100		0	0
Storage Lanes		0	1		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt	0.998					0.865
Flt Protected			0.950			
Satd. Flow (prot)	5075	0	1770	5085	0	1611
Flt Permitted			0.950			
Satd. Flow (perm)	5075	0	1770	5085	0	1611
Link Speed (mph)	50			50	30	
Link Distance (ft)	460			928	378	
Travel Time (s)	6.3			12.7	8.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1139	16	9	2409	0	53
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1155	0	9	2409	0	53
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	46.1% ICU Level of Service A
Analysis Period (min)	15

HCM 6th TWSC
 19: Residential Driveway 2 & Soledad Cyn

01/18/2024

Intersection						
Int Delay, s/veh	0.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↘	↑↑↑		↗
Traffic Vol, veh/h	1048	15	8	2216	0	49
Future Vol, veh/h	1048	15	8	2216	0	49
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1139	16	9	2409	0	53

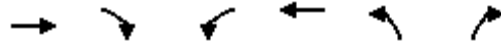
Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	1155	0	578
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	5.34	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	3.12	-	3.92
Pot Cap-1 Maneuver	-	-	329	0	393
Stage 1	-	-	-	0	-
Stage 2	-	-	-	0	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	329	-	393
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	15.6
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	393	-	-	329	-
HCM Lane V/C Ratio	0.136	-	-	0.026	-
HCM Control Delay (s)	15.6	-	-	16.2	-
HCM Lane LOS	C	-	-	C	-
HCM 95th %tile Q(veh)	0.5	-	-	0.1	-

Lanes, Volumes, Timings
 20: Studio Driveway 2 & Soledad Cyn

01/18/2024



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑		↗
Traffic Volume (vph)	1099	0	0	2192	0	0
Future Volume (vph)	1099	0	0	2192	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frnt						
Flt Protected						
Satd. Flow (prot)	5085	0	0	5085	0	1863
Flt Permitted						
Satd. Flow (perm)	5085	0	0	5085	0	1863
Link Speed (mph)	50			50	30	
Link Distance (ft)	557			469	476	
Travel Time (s)	7.6			6.4	10.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1195	0	0	2383	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1195	0	0	2383	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	45.7%
Analysis Period (min)	15
	ICU Level of Service A

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑		↑
Traffic Vol, veh/h	1099	0	0	2192	0	0
Future Vol, veh/h	1099	0	0	2192	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1195	0	0	2383	0	0

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	-	-	598
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	3.92
Pot Cap-1 Maneuver	-	-	0	-	382
Stage 1	-	-	0	-	-
Stage 2	-	-	0	-	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	382
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

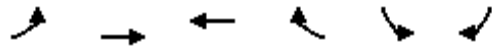
Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

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

***Future with Revised Project Conditions
Afternoon Peak Hour***

Lanes, Volumes, Timings
 1: Valencia Blvd & 5 Fwy SB Ramp

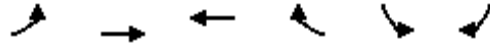
01/18/2024



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑		↑↑	↑
Traffic Volume (vph)	0	519	808	193	256	78
Future Volume (vph)	0	519	808	193	256	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	15	12	14
Storage Length (ft)	0			0	0	455
Storage Lanes	0			0	2	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.91	0.95	0.95	0.97	1.00
Flt			0.971			0.850
Flt Protected					0.950	
Satd. Flow (prot)	0	5085	3437	0	3433	1689
Flt Permitted					0.950	
Satd. Flow (perm)	0	5085	3437	0	3433	1689
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			72			85
Link Speed (mph)		50	50		30	
Link Distance (ft)		616	917		417	
Travel Time (s)		8.4	12.5		9.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	564	878	210	278	85
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	564	1088	0	278	85
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		24	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	0.88	1.00	0.92
Turning Speed (mph)	15			9	15	9
Number of Detectors		1	1		1	1
Detector Template						
Leading Detector (ft)		50	50		50	50
Trailing Detector (ft)		0	0		0	0
Detector 1 Position(ft)		0	0		0	0
Detector 1 Size(ft)		50	50		50	50
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)		0.0	0.0		0.0	0.0
Detector 1 Queue (s)		0.0	0.0		0.0	0.0
Detector 1 Delay (s)		0.0	0.0		0.0	0.0
Turn Type		NA	NA		Prot	Perm
Protected Phases		2	6		4	
Permitted Phases						4
Detector Phase		2	6		4	4
Switch Phase						
Minimum Initial (s)		4.0	4.0		4.0	4.0
Minimum Split (s)		20.0	35.2		20.0	20.0

Lanes, Volumes, Timings
 1: Valencia Blvd & 5 Fwy SB Ramp

01/18/2024



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Total Split (s)		41.0	41.0		25.0	25.0
Total Split (%)		62.1%	62.1%		37.9%	37.9%
Maximum Green (s)		34.8	34.8		19.2	19.2
Yellow Time (s)		5.2	5.2		4.8	4.8
All-Red Time (s)		1.0	1.0		1.0	1.0
Lost Time Adjust (s)		-2.2	-2.2		-1.8	-1.8
Total Lost Time (s)		4.0	4.0		4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Recall Mode		C-Max	C-Max		Min	Min
Walk Time (s)			5.0			
Flash Dont Walk (s)			18.0			
Pedestrian Calls (#/hr)			0			
Act Effect Green (s)		45.4	45.4		12.6	12.6
Actuated g/C Ratio		0.69	0.69		0.19	0.19
v/c Ratio		0.16	0.46		0.43	0.22
Control Delay		4.0	4.9		25.1	7.1
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		4.0	4.9		25.1	7.1
LOS		A	A		C	A
Approach Delay		4.0	4.9		20.9	
Approach LOS		A	A		C	

Intersection Summary

Area Type: Other
 Cycle Length: 66
 Actuated Cycle Length: 66
 Offset: 56 (85%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.46
 Intersection Signal Delay: 7.5
 Intersection LOS: A
 Intersection Capacity Utilization 42.5%
 ICU Level of Service A
 Analysis Period (min) 15

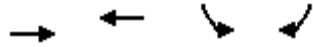
Splits and Phases: 1: Valencia Blvd & 5 Fwy SB Ramp



Queues

1: Valencia Blvd & 5 Fwy SB Ramp

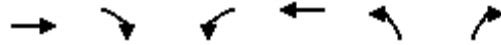
01/18/2024



Lane Group	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	564	1088	278	85
v/c Ratio	0.16	0.46	0.43	0.22
Control Delay	4.0	4.9	25.1	7.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	4.0	4.9	25.1	7.1
Queue Length 50th (ft)	23	88	51	0
Queue Length 95th (ft)	41	88	77	30
Internal Link Dist (ft)	536	837	337	
Turn Bay Length (ft)				455
Base Capacity (vph)	3499	2387	1092	595
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.16	0.46	0.25	0.14
Intersection Summary				

Lanes, Volumes, Timings
2: 5 Fwy NB Ramp & Valencia Blvd

01/18/2024

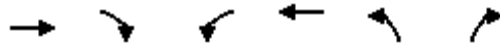


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↶↶	↑↑↑	↶↶	↷↷
Traffic Volume (vph)	740	31	212	1630	190	907
Future Volume (vph)	740	31	212	1630	190	907
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	12	12	12	12	14
Storage Length (ft)		0	200		220	220
Storage Lanes		0	2		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	0.97	0.86	0.97	0.88
Fr _t	0.994					0.850
Fl _t Protected			0.950		0.950	
Satd. Flow (prot)	5392	0	3433	6408	3433	2972
Fl _t Permitted			0.950		0.950	
Satd. Flow (perm)	5392	0	3433	6408	3433	2972
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	11					648
Link Speed (mph)	50			50	30	
Link Distance (ft)	917			476	493	
Travel Time (s)	12.5			6.5	11.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	804	34	230	1772	207	986
Shared Lane Traffic (%)						
Lane Group Flow (vph)	838	0	230	1772	207	986
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	24			24	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.92	1.00	1.00	1.00	1.00	0.92
Turning Speed (mph)		9	15		15	9
Number of Detectors	1		1	1	1	1
Detector Template						
Leading Detector (ft)	50		50	50	50	50
Trailing Detector (ft)	0		0	0	0	0
Detector 1 Position(ft)	0		0	0	0	0
Detector 1 Size(ft)	50		50	50	50	50
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0
Turn Type	NA		Prot	NA	Prot	Prot
Protected Phases	2		1	6	8	8
Permitted Phases						
Detector Phase	2		1	6	8	8
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	36.0		14.0	20.0	20.0	20.0

Lanes, Volumes, Timings

2: 5 Fwy NB Ramp & Valencia Blvd

01/18/2024

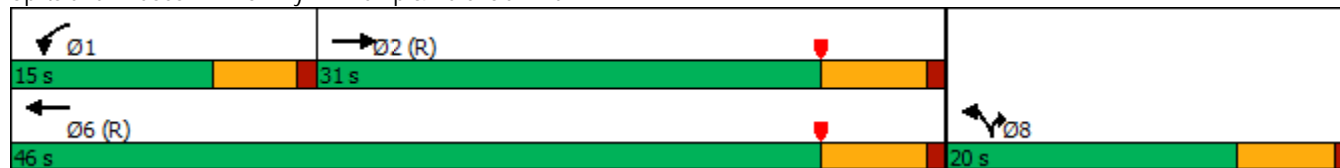


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Total Split (s)	31.0		15.0	46.0	20.0	20.0
Total Split (%)	47.0%		22.7%	69.7%	30.3%	30.3%
Maximum Green (s)	24.8		9.9	39.8	14.2	14.2
Yellow Time (s)	5.2		4.1	5.2	4.8	4.8
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-2.2		-1.1	-2.2	-1.8	-1.8
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max		None	C-Max	None	None
Walk Time (s)	5.0					
Flash Dont Walk (s)	24.0					
Pedestrian Calls (#/hr)	0					
Act Effect Green (s)	29.2		10.1	43.3	14.7	14.7
Actuated g/C Ratio	0.44		0.15	0.66	0.22	0.22
v/c Ratio	0.35		0.44	0.42	0.27	0.85
Control Delay	9.5		30.0	6.9	21.7	16.3
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	9.5		30.0	6.9	21.7	16.3
LOS	A		C	A	C	B
Approach Delay	9.5			9.5	17.2	
Approach LOS	A			A	B	

Intersection Summary

Area Type: Other
 Cycle Length: 66
 Actuated Cycle Length: 66
 Offset: 45 (68%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Natural Cycle: 70
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.85
 Intersection Signal Delay: 11.8
 Intersection LOS: B
 Intersection Capacity Utilization 53.4%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 2: 5 Fwy NB Ramp & Valencia Blvd



Queues

2: 5 Fwy NB Ramp & Valencia Blvd

01/18/2024



Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	838	230	1772	207	986
v/c Ratio	0.35	0.44	0.42	0.27	0.85
Control Delay	9.5	30.0	6.9	21.7	16.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	9.5	30.0	6.9	21.7	16.3
Queue Length 50th (ft)	82	67	150	34	66
Queue Length 95th (ft)	104	m89	198	60	#155
Internal Link Dist (ft)	837		396	413	
Turn Bay Length (ft)		200		220	220
Base Capacity (vph)	2393	572	4207	832	1211
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.35	0.40	0.42	0.25	0.81

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

Lanes, Volumes, Timings
3: McBean Pkwy & Valencia Blvd

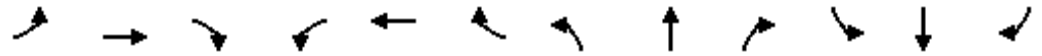
01/18/2024

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	471	1420	173	366	1099	205	167	953	467	241	888	556
Future Volume (vph)	471	1420	173	366	1099	205	167	953	467	241	888	556
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	11	11	13	11	11	12	11	11	12
Storage Length (ft)	350		280	290		225	130		200	190		300
Storage Lanes	2		1	2		1	2		2	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	0.88	0.97	0.91	0.88
Fr _t			0.850			0.850			0.850			0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3319	4916	1583	3319	4916	1636	3319	4916	2787	3319	4916	2787
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3319	4916	1583	3319	4916	1636	3319	4916	2787	3319	4916	2787
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			70			70			70			70
Link Speed (mph)		50			50			45			45	
Link Distance (ft)		1919			721			765			1359	
Travel Time (s)		26.2			9.8			11.6			20.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	512	1543	188	398	1195	223	182	1036	508	262	965	604
Shared Lane Traffic (%)												
Lane Group Flow (vph)	512	1543	188	398	1195	223	182	1036	508	262	965	604
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		22			22			22			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.00	1.04	1.04	0.96	1.04	1.04	1.00	1.04	1.04	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	1	6	7	5	2	3	7	4	5	3	8	1
Permitted Phases			6			2			4			8
Detector Phase	1	6	7	5	2	3	7	4	5	3	8	1
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	43.0	12.0	12.0	44.0	12.0	12.0	41.0	12.0	12.0	44.0	12.0

Queues

3: McBean Pkwy & Valencia Blvd

01/18/2024



























Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	512	1543	188	398	1195	223	182	1036	508	262	965	604
v/c Ratio	0.87	0.95	0.25	0.73	0.77	0.28	0.56	0.80	0.39	0.66	0.69	0.43
Control Delay	72.2	54.6	16.2	76.8	22.1	4.1	63.4	50.3	20.4	41.4	54.3	48.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	72.2	54.6	16.2	76.8	22.1	4.1	63.4	50.3	20.4	41.4	54.3	48.8
Queue Length 50th (ft)	233	-525	55	131	347	63	77	299	128	106	319	287
Queue Length 95th (ft)	m#332	#627	m91	m190	348	m58	117	352	176	153	367	353
Internal Link Dist (ft)		1839			641			685			1279	
Turn Bay Length (ft)	350		280	290		225	130		200	190		300
Base Capacity (vph)	587	1623	776	581	1559	815	352	1377	1347	427	1489	1410
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.87	0.95	0.24	0.69	0.77	0.27	0.52	0.75	0.38	0.61	0.65	0.43

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

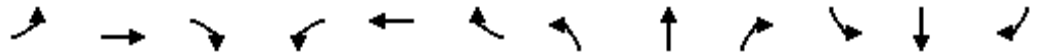
Lanes, Volumes, Timings
4: McBean Parkway & Magic Mountain Pkwy

01/18/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	885	684	139	230	566	361	144	1355	147	278	1305	284
Future Volume (vph)	885	684	139	230	566	361	144	1355	147	278	1305	284
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	16	12	12	14	11	11	16	11	11	16
Storage Length (ft)	360		360	210		0	175		175	300		340
Storage Lanes	1		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.91	1.00	0.97	0.86	1.00	0.97	0.86	1.00
Fr _t			0.850			0.850			0.850			0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	1794	3433	5085	1689	3319	6194	1794	3319	6194	1794
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1794	3433	5085	1689	3319	6194	1794	3319	6194	1794
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			151			254			198			299
Link Speed (mph)		50			45			45			50	
Link Distance (ft)		809			1452			1203			1219	
Travel Time (s)		11.0			22.0			18.2			16.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	962	743	151	250	615	392	157	1473	160	302	1418	309
Shared Lane Traffic (%)												
Lane Group Flow (vph)	962	743	151	250	615	392	157	1473	160	302	1418	309
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			22			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	0.85	1.00	1.00	0.92	1.04	1.04	0.85	1.04	1.04	0.85
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			Free			Free
Detector Phase	5	2	2	1	6	6	3	8		7	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Minimum Split (s)	12.0	41.0	41.0	12.0	40.0	40.0	12.0	37.0		12.0	37.0	

Lanes, Volumes, Timings
4: McBean Parkway & Magic Mountain Pkwy

01/18/2024

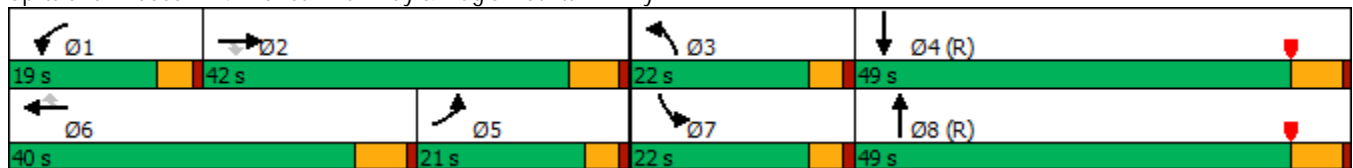


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	21.0	42.0	42.0	19.0	40.0	40.0	22.0	49.0		22.0	49.0	
Total Split (%)	15.9%	31.8%	31.8%	14.4%	30.3%	30.3%	16.7%	37.1%		16.7%	37.1%	
Maximum Green (s)	16.5	36.0	36.0	14.5	34.0	34.0	17.5	43.0		17.5	43.0	
Yellow Time (s)	3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.0		3.5	5.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	-0.5	-2.0	-2.0	-0.5	-2.0	-2.0	-0.5	-2.0		-0.5	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	Max	Max	None	Max	Max	None	C-Max		None	C-Max	
Walk Time (s)		5.0	5.0		5.0	5.0		5.0			5.0	
Flash Dont Walk (s)		30.0	30.0		29.0	29.0		26.0			26.0	
Pedestrian Calls (#/hr)		0	0		0	0		0			0	
Act Effect Green (s)	17.0	39.0	39.0	14.0	36.0	36.0	12.1	46.5	132.0	16.5	50.9	132.0
Actuated g/C Ratio	0.13	0.30	0.30	0.11	0.27	0.27	0.09	0.35	1.00	0.12	0.39	1.00
v/c Ratio	2.18	0.71	0.24	0.69	0.44	0.61	0.52	0.68	0.09	0.73	0.59	0.17
Control Delay	563.9	46.2	6.2	72.2	51.4	28.9	77.5	29.1	0.1	66.1	33.8	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	563.9	46.2	6.2	72.2	51.4	28.9	77.5	29.1	0.1	66.1	33.8	0.2
LOS	F	D	A	E	D	C	E	C	A	E	C	A
Approach Delay		311.3			48.5			30.8			33.5	
Approach LOS		F			D			C			C	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 30 (23%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow
 Natural Cycle: 125
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 2.18
 Intersection Signal Delay: 109.9 Intersection LOS: F
 Intersection Capacity Utilization 77.2% ICU Level of Service D
 Analysis Period (min) 15

Splits and Phases: 4: McBean Parkway & Magic Mountain Pkwy



Queues

4: McBean Parkway & Magic Mountain Pkwy

01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	962	743	151	250	615	392	157	1473	160	302	1418	309
v/c Ratio	2.18	0.71	0.24	0.69	0.44	0.61	0.52	0.68	0.09	0.73	0.59	0.17
Control Delay	563.9	46.2	6.2	72.2	51.4	28.9	77.5	29.1	0.1	66.1	33.8	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	563.9	46.2	6.2	72.2	51.4	28.9	77.5	29.1	0.1	66.1	33.8	0.2
Queue Length 50th (ft)	~679	302	0	106	168	122	73	163	0	128	279	0
Queue Length 95th (ft)	#810	376	51	154	219	245	m95	192	m0	178	331	0
Internal Link Dist (ft)		729			1372			1123			1139	
Turn Bay Length (ft)	360		360	210			175		175	300		340
Base Capacity (vph)	442	1044	635	390	1386	645	452	2179	1794	452	2390	1794
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	2.18	0.71	0.24	0.64	0.44	0.61	0.35	0.68	0.09	0.67	0.59	0.17

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
5: Valencia Blvd & Magic Mountain Pkwy

01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↖	↖↗		↖↖	↖↗		↖	↖↖↖	↖	↖	↖↖↖	↖↖
Traffic Volume (vph)	674	668	30	231	509	91	58	1819	251	92	1444	446
Future Volume (vph)	674	668	30	231	509	91	58	1819	251	92	1444	446
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	13	12	11	12	11	11	14	12	11	11	12
Storage Length (ft)	310		0	250		200	180		200	190		190
Storage Lanes	1		0	2		0	1		1	1		2
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	0.95	0.97	0.95	0.95	1.00	0.91	1.00	1.00	0.91	0.88
Fr _t		0.993			0.977				0.850			0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3319	3632	0	3319	3458	0	1711	5424	1583	1711	4916	2787
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3319	3632	0	3319	3458	0	1711	5424	1583	1711	4916	2787
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3			15				161			367
Link Speed (mph)		50			45			45				45
Link Distance (ft)		1046			2778			1989				572
Travel Time (s)		14.3			42.1			30.1				8.7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	733	726	33	251	553	99	63	1977	273	100	1570	485
Shared Lane Traffic (%)												
Lane Group Flow (vph)	733	759	0	251	652	0	63	1977	273	100	1570	485
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		22			22			11				11
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.04	0.96	1.00	1.04	1.00	1.04	1.04	0.92	1.00	1.04	1.04	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Size(ft)	50	50		50	50		50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	3	8		7	4		1	6		5	2	3
Permitted Phases									6			2
Detector Phase	3	8		7	4		1	6	6	5	2	3
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	35.0		12.0	39.0		12.0	38.0	38.0	12.0	41.0	12.0

Lanes, Volumes, Timings
 5: Valencia Blvd & Magic Mountain Pkwy

01/18/2024

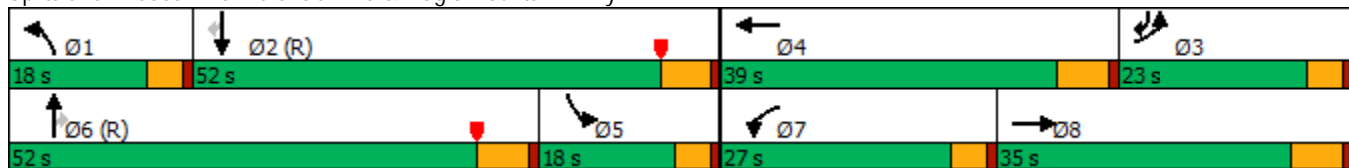


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	23.0	35.0		27.0	39.0		18.0	52.0	52.0	18.0	52.0	23.0
Total Split (%)	17.4%	26.5%		20.5%	29.5%		13.6%	39.4%	39.4%	13.6%	39.4%	17.4%
Maximum Green (s)	18.5	29.0		22.5	33.0		13.5	46.0	46.0	13.5	46.0	18.5
Yellow Time (s)	3.5	5.0		3.5	5.0		3.5	5.0	5.0	3.5	5.0	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-0.5	-2.0		-0.5	-2.0		-0.5	-2.0	0.0	-0.5	-2.0	-0.5
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	6.0	4.0	4.0	4.0
Lead/Lag	Lag	Lag		Lead	Lead		Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None		None	C-Max	C-Max	Max	C-Max	None
Walk Time (s)		5.0			5.0			5.0	5.0		5.0	
Flash Dont Walk (s)		24.0			28.0			21.0	21.0		22.0	
Pedestrian Calls (#/hr)		0			0			0	0		0	
Act Effect Green (s)	22.9	38.2		15.8	31.1		10.6	48.0	46.0	14.0	53.6	77.3
Actuated g/C Ratio	0.17	0.29		0.12	0.24		0.08	0.36	0.35	0.11	0.41	0.59
v/c Ratio	1.27	0.72		0.63	0.79		0.46	1.00	0.42	0.55	0.79	0.27
Control Delay	175.5	41.5		42.9	42.4		88.9	41.9	6.2	41.0	16.6	0.6
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	175.5	41.5		42.9	42.4		88.9	41.9	6.2	41.0	16.6	0.6
LOS	F	D		D	D		F	D	A	D	B	A
Approach Delay		107.3			42.5			39.0			14.1	
Approach LOS		F			D			D			B	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 115 (87%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
 Natural Cycle: 135
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.27
 Intersection Signal Delay: 46.5
 Intersection LOS: D
 Intersection Capacity Utilization 89.8%
 ICU Level of Service E
 Analysis Period (min) 15

Splits and Phases: 5: Valencia Blvd & Magic Mountain Pkwy



Queues

5: Valencia Blvd & Magic Mountain Pkwy

01/18/2024



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	733	759	251	652	63	1977	273	100	1570	485
v/c Ratio	1.27	0.72	0.63	0.79	0.46	1.00	0.42	0.55	0.79	0.27
Control Delay	175.5	41.5	42.9	42.4	88.9	41.9	6.2	41.0	16.6	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	175.5	41.5	42.9	42.4	88.9	41.9	6.2	41.0	16.6	0.6
Queue Length 50th (ft)	~420	346	112	292	56	~276	16	79	118	0
Queue Length 95th (ft)	#590	418	156	357	m69	m#697	m27	m96	m166	m5
Internal Link Dist (ft)		966		2698		1909			492	
Turn Bay Length (ft)	310		250		180		200	190		190
Base Capacity (vph)	576	1054	578	927	181	1972	656	181	1995	1784
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.27	0.72	0.43	0.70	0.35	1.00	0.42	0.55	0.79	0.27

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings

6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy

01/18/2024



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	257	515	418	1585	1222	168
Future Volume (vph)	257	515	418	1585	1222	168
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	265	265	260			270
Storage Lanes	1	1	2			1
Taper Length (ft)	25		25			
Lane Util. Factor	0.97	0.88	0.97	0.91	0.95	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3433	2787	3433	5085	3539	1583
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	3433	2787	3433	5085	3539	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		47				164
Link Speed (mph)	45			50	45	
Link Distance (ft)	2778			2280	1171	
Travel Time (s)	42.1			31.1	17.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	279	560	454	1723	1328	183
Shared Lane Traffic (%)						
Lane Group Flow (vph)	279	560	454	1723	1328	183
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	34			24	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	1	1	1
Detector Template						
Leading Detector (ft)	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	pt+ov	custom	NA	NA	Perm
Protected Phases	8	8 1	1	6	2	
Permitted Phases			1			2
Detector Phase	8	8 1	1	6	2	2
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	20.0		20.0	20.0	41.0	41.0
Total Split (s)	34.0		30.0	98.0	68.0	68.0

Lanes, Volumes, Timings

6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy

01/18/2024

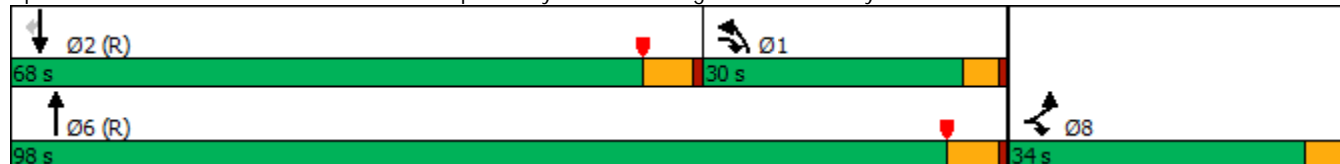


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Total Split (%)	25.8%		22.7%	74.2%	51.5%	51.5%
Maximum Green (s)	29.0		25.5	92.0	62.0	62.0
Yellow Time (s)	4.0		3.5	5.0	5.0	5.0
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0		-0.5	-2.0	-2.0	-2.0
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0
Lead/Lag			Lag		Lead	Lead
Lead-Lag Optimize?			Yes		Yes	Yes
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	Max		Min	C-Min	C-Min	C-Min
Walk Time (s)					7.0	7.0
Flash Dont Walk (s)					28.0	28.0
Pedestrian Calls (#/hr)					0	0
Act Effect Green (s)	36.9	64.5	23.5	87.1	59.5	59.5
Actuated g/C Ratio	0.28	0.49	0.18	0.66	0.45	0.45
v/c Ratio	0.29	0.40	0.74	0.51	0.83	0.23
Control Delay	34.9	13.6	59.1	11.9	36.9	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.9	13.6	59.1	11.9	36.9	4.5
LOS	C	B	E	B	D	A
Approach Delay	20.7			21.8	33.0	
Approach LOS	C			C	C	

Intersection Summary

Area Type:	Other
Cycle Length:	132
Actuated Cycle Length:	132
Offset:	75 (57%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle:	85
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.83
Intersection Signal Delay:	25.3
Intersection LOS:	C
Intersection Capacity Utilization	63.0%
ICU Level of Service	B
Analysis Period (min)	15

Splits and Phases: 6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy



Queues

6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy

01/18/2024



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	279	560	454	1723	1328	183
v/c Ratio	0.29	0.40	0.74	0.51	0.83	0.23
Control Delay	34.9	13.6	59.1	11.9	36.9	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.9	13.6	59.1	11.9	36.9	4.5
Queue Length 50th (ft)	120	208	189	241	506	9
Queue Length 95th (ft)	163	211	246	241	575	48
Internal Link Dist (ft)	2698			2200	1091	
Turn Bay Length (ft)	265	265	260			270
Base Capacity (vph)	960	1373	679	3621	1715	852
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.41	0.67	0.48	0.77	0.21

Intersection Summary

Lanes, Volumes, Timings
 7: Bouquet Canyon Rd & Valencia Blvd

01/18/2024

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1216	1742	30	455	1110	327	37	1271	757	358	924	668
Future Volume (vph)	1216	1742	30	455	1110	327	37	1271	757	358	924	668
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	10	10	11	11	11	11	10	10	11
Storage Length (ft)	360		0	330		330	250		0	435		400
Storage Lanes	2		0	3		1	1		1	2		2
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.94	0.91	0.91	0.94	0.91	1.00	1.00	0.91	1.00	0.97	0.91	0.88
Fr _t		0.997				0.850			0.850			0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	4824	4901	0	4658	4746	1531	1711	4916	1531	3204	4746	2694
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	4824	4901	0	4658	4746	1531	1711	4916	1531	3204	4746	2694
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2				124			112			452
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		2282			2684			2196			1017	
Travel Time (s)		34.6			40.7			33.3			12.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1322	1893	33	495	1207	355	40	1382	823	389	1004	726
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1322	1926	0	495	1207	355	40	1382	823	389	1004	726
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		33			33			20			20	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.00	1.09	1.09	1.04	1.04	1.04	1.04	1.09	1.09	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50		50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50		50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4		3	8	1	5	2	3	1	6	7
Permitted Phases						8			2			6
Detector Phase	7	4		3	8	1	5	2	3	1	6	7
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	44.0		12.0	48.0	12.0	12.0	46.0	12.0	12.0	44.0	12.0

Lanes, Volumes, Timings
7: Bouquet Canyon Rd & Valencia Blvd

01/18/2024

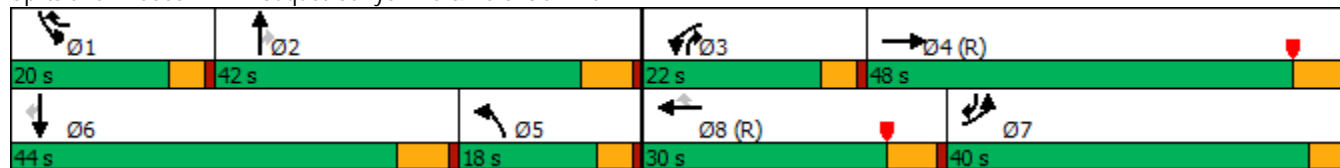


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	40.0	48.0		22.0	30.0	20.0	18.0	42.0	22.0	20.0	44.0	40.0
Total Split (%)	30.3%	36.4%		16.7%	22.7%	15.2%	13.6%	31.8%	16.7%	15.2%	33.3%	30.3%
Maximum Green (s)	35.5	42.0		17.5	24.0	15.5	13.5	36.0	17.5	15.5	38.0	35.5
Yellow Time (s)	3.5	5.0		3.5	5.0	3.5	3.5	5.0	3.5	3.5	5.0	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-0.5	-2.0		-0.5	-2.0	-0.5	-0.5	-2.0	-0.5	-0.5	-2.0	-0.5
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lag	Lag		Lead	Lead	Lead	Lag	Lag	Lead	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Max		None	C-Max	None	None	Max	None	None	None	None
Walk Time (s)		5.0			5.0			5.0				
Flash Dont Walk (s)		33.0			37.0			35.0				
Pedestrian Calls (#/hr)		0			0			0				
Act Effect Green (s)	36.0	44.0		18.0	26.0	42.0	14.5	38.0	60.0	16.0	41.5	81.5
Actuated g/C Ratio	0.27	0.33		0.14	0.20	0.32	0.11	0.29	0.45	0.12	0.31	0.62
v/c Ratio	1.01	1.18		0.78	1.29	0.62	0.21	0.98	1.09	1.00	0.67	0.40
Control Delay	73.6	129.4		57.0	170.8	7.5	55.8	65.5	89.4	96.0	56.2	14.0
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	73.6	129.4		57.0	170.8	7.5	55.8	65.5	89.4	96.0	56.2	14.0
LOS	E	F		E	F	A	E	E	F	F	E	B
Approach Delay		106.7			115.2			74.1			49.1	
Approach LOS		F			F			E			D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 51 (39%), Referenced to phase 4:EBT and 8:WBT, Start of Yellow
 Natural Cycle: 150
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.29
 Intersection Signal Delay: 88.3
 Intersection LOS: F
 Intersection Capacity Utilization 101.4%
 ICU Level of Service G
 Analysis Period (min) 15

Splits and Phases: 7: Bouquet Canyon Rd & Valencia Blvd



Queues

7: Bouquet Canyon Rd & Valencia Blvd

01/18/2024



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	1322	1926	495	1207	355	40	1382	823	389	1004	726
v/c Ratio	1.01	1.18	0.78	1.29	0.62	0.21	0.98	1.09	1.00	0.67	0.40
Control Delay	73.6	129.4	57.0	170.8	7.5	55.8	65.5	89.4	96.0	56.2	14.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	73.6	129.4	57.0	170.8	7.5	55.8	65.5	89.4	96.0	56.2	14.0
Queue Length 50th (ft)	~428	~738	123	~469	46	31	430	~736	~177	328	176
Queue Length 95th (ft)	m410	m#691	173	#568	77	70	#536	#987	m#282	361	234
Internal Link Dist (ft)		2202		2604			2116			937	
Turn Bay Length (ft)	360		330		330	250			435		400
Base Capacity (vph)	1315	1635	635	934	571	208	1415	757	388	1567	1836
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.01	1.18	0.78	1.29	0.62	0.19	0.98	1.09	1.00	0.64	0.40

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
 8: Bouquet Canyon Rd & Newhall Ranch Road

01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	724	1640	463	342	1042	349	499	1678	371	396	1169	280
Future Volume (vph)	724	1640	463	342	1042	349	499	1678	371	396	1169	280
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	290		265	410		410	475		230	260		150
Storage Lanes	3		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.94	0.86	1.00	0.97	0.86	1.00	0.97	0.86	1.00	0.97	0.86	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	4990	6408	1583	3433	6408	1583	3433	6408	1583	3433	6408	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	4990	6408	1583	3433	6408	1583	3433	6408	1583	3433	6408	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			62			295			299			99
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		2675			2485			1030			669	
Travel Time (s)		40.5			37.7			15.6			10.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	787	1783	503	372	1133	379	542	1824	403	430	1271	304
Shared Lane Traffic (%)												
Lane Group Flow (vph)	787	1783	503	372	1133	379	542	1824	403	430	1271	304
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		36			36			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	2	1	1	2	1
Detector Template	Left		Right	Left		Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	50	20	20	50	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	50	20	20	50	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)								94			94	
Detector 2 Size(ft)								6			6	
Detector 2 Type								Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)								0.0			0.0	
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	3	8	1	7	4		1	6		5	2	3
Permitted Phases			8			4			6			2

Lanes, Volumes, Timings
 8: Bouquet Canyon Rd & Newhall Ranch Road

01/18/2024

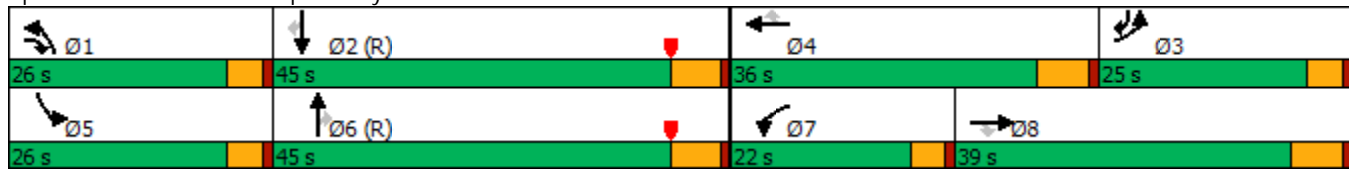


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	3	8	1	7	4	4	1	6	6	5	2	3
Switch Phase												
Minimum Initial (s)	4.0	5.0	4.0	4.0	5.0	5.0	4.0	10.0	10.0	4.0	10.0	4.0
Minimum Split (s)	12.0	43.0	12.0	12.0	43.0	43.0	12.0	49.0	49.0	12.0	50.0	12.0
Total Split (s)	25.0	39.0	26.0	22.0	36.0	36.0	26.0	45.0	45.0	26.0	45.0	25.0
Total Split (%)	18.9%	29.5%	19.7%	16.7%	27.3%	27.3%	19.7%	34.1%	34.1%	19.7%	34.1%	18.9%
Maximum Green (s)	20.5	33.0	21.5	17.5	30.0	30.0	21.5	39.0	39.0	21.5	39.0	20.5
Yellow Time (s)	3.5	5.0	3.5	3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.0	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	-2.0	0.0	0.0	-2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.0	4.5	4.5	4.0	6.0	4.5	6.0	6.0	4.5	6.0	4.5
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes		Yes	Yes			Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	5.5	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Minimum Gap (s)	3.0	2.5	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	24.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	Max	C-Max	None
Walk Time (s)		5.0			5.0	5.0		5.0	5.0		5.0	
Flash Dont Walk (s)		32.0			32.0	32.0		38.0	38.0		39.0	
Pedestrian Calls (#/hr)		2			5	5		1	1		1	
Act Effect Green (s)	21.3	35.5	61.0	17.0	31.2	29.2	21.5	39.0	39.0	21.5	39.0	61.8
Actuated g/C Ratio	0.16	0.27	0.46	0.13	0.24	0.22	0.16	0.30	0.30	0.16	0.30	0.47
v/c Ratio	0.98	1.03	0.66	0.84	0.75	0.65	0.97	0.96	0.59	0.77	0.67	0.38
Control Delay	82.3	78.1	28.9	71.8	47.1	18.5	62.8	50.9	13.1	63.1	43.0	9.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	82.3	78.1	28.9	71.8	47.1	18.5	62.8	50.9	13.1	63.1	43.0	9.2
LOS	F	E	C	E	D	B	E	D	B	E	D	A
Approach Delay		71.1			46.2			47.7			42.2	
Approach LOS		E			D			D			D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 33 (25%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
 Natural Cycle: 140
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.03
 Intersection Signal Delay: 53.7
 Intersection LOS: D
 Intersection Capacity Utilization 85.0%
 ICU Level of Service E
 Analysis Period (min) 15

Splits and Phases: 8: Bouquet Canyon Rd & Newhall Ranch Road



Queues

8: Bouquet Canyon Rd & Newhall Ranch Road

01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	787	1783	503	372	1133	379	542	1824	403	430	1271	304
v/c Ratio	0.98	1.03	0.66	0.84	0.75	0.65	0.97	0.96	0.59	0.77	0.67	0.38
Control Delay	82.3	78.1	28.9	71.8	47.1	18.5	62.8	50.9	13.1	63.1	43.0	9.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	82.3	78.1	28.9	71.8	47.1	18.5	62.8	50.9	13.1	63.1	43.0	9.2
Queue Length 50th (ft)	~247	~482	290	172	268	87	228	402	91	184	278	57
Queue Length 95th (ft)	#339	#559	420	#242	318	224	m#242	m420	m99	243	320	95
Internal Link Dist (ft)		2595			2405			950				589
Turn Bay Length (ft)	290		265	410		410	475		230	260		150
Base Capacity (vph)	803	1723	765	455	1553	587	559	1893	678	559	1893	793
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.98	1.03	0.66	0.82	0.73	0.65	0.97	0.96	0.59	0.77	0.67	0.38

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
9: Commuter Way & Soledad Cyn

01/18/2024

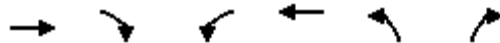


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↗	↖	↑↑↑	↘↗	
Traffic Volume (vph)	2685	29	26	1718	43	15
Future Volume (vph)	2685	29	26	1718	43	15
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		150	285		0	0
Storage Lanes		1	1		2	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	1.00	1.00	0.91	0.97	0.95
Frt		0.850			0.962	
Flt Protected			0.950		0.964	
Satd. Flow (prot)	5085	1583	1770	5085	3351	0
Flt Permitted			0.950		0.964	
Satd. Flow (perm)	5085	1583	1770	5085	3351	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		12			16	
Link Speed (mph)	50			50	30	
Link Distance (ft)	911			2825	388	
Travel Time (s)	12.4			38.5	8.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2918	32	28	1867	47	16
Shared Lane Traffic (%)						
Lane Group Flow (vph)	2918	32	28	1867	63	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	1	1	1	1	1	
Detector Template						
Leading Detector (ft)	50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	
Turn Type	NA	Perm	Prot	NA	Prot	
Protected Phases	2		1	6	8	
Permitted Phases		2				
Detector Phase	2	2	1	6	8	
Switch Phase						
Minimum Initial (s)	10.0	10.0	4.0	10.0	4.0	
Minimum Split (s)	26.0	26.0	12.0	22.0	37.0	
Total Split (s)	75.0	75.0	20.0	95.0	37.0	

Lanes, Volumes, Timings

9: Commuter Way & Soledad Cyn

01/18/2024



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Total Split (%)	56.8%	56.8%	15.2%	72.0%	28.0%	
Maximum Green (s)	69.0	69.0	16.5	89.0	31.0	
Yellow Time (s)	5.0	5.0	3.5	5.0	4.0	
All-Red Time (s)	1.0	1.0	0.0	1.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	0.5	-2.0	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Vehicle Extension (s)	5.0	5.0	1.5	5.0	2.0	
Minimum Gap (s)	4.0	4.0	1.5	4.0	2.0	
Time Before Reduce (s)	15.0	15.0	0.0	15.0	0.0	
Time To Reduce (s)	15.0	15.0	0.0	15.0	0.0	
Recall Mode	C-Max	C-Max	None	C-Max	None	
Walk Time (s)	7.0	7.0			7.0	
Flash Dont Walk (s)	13.0	13.0			24.0	
Pedestrian Calls (#/hr)	0	0			0	
Act Effect Green (s)	112.1	112.1	5.6	118.5	8.4	
Actuated g/C Ratio	0.85	0.85	0.04	0.90	0.06	
v/c Ratio	0.68	0.02	0.37	0.41	0.28	
Control Delay	7.3	2.6	98.6	1.7	47.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	7.3	2.6	98.6	1.7	47.6	
LOS	A	A	F	A	D	
Approach Delay	7.3			3.1	47.6	
Approach LOS	A			A	D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 58 (44%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Natural Cycle: 120
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.68
 Intersection Signal Delay: 6.2
 Intersection LOS: A
 Intersection Capacity Utilization 61.9%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 9: Commuter Way & Soledad Cyn



Queues

9: Commuter Way & Soledad Cyn

01/18/2024



Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Group Flow (vph)	2918	32	28	1867	63
v/c Ratio	0.68	0.02	0.37	0.41	0.28
Control Delay	7.3	2.6	98.6	1.7	47.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	7.3	2.6	98.6	1.7	47.6
Queue Length 50th (ft)	331	2	23	30	20
Queue Length 95th (ft)	431	11	m37	13	43
Internal Link Dist (ft)	831			2745	308
Turn Bay Length (ft)		150	285		
Base Capacity (vph)	4318	1346	214	4566	849
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.68	0.02	0.13	0.41	0.07

Intersection Summary

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

Lanes, Volumes, Timings
 10: Soledad Cyn & Valley Center

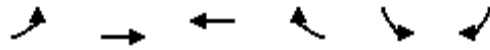
01/18/2024



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø4
Lane Configurations							
Traffic Volume (vph)	138	2043	1279	791	897	192	
Future Volume (vph)	138	2043	1279	791	897	192	
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	250			310	235	0	
Storage Lanes	2			1	1	1	
Taper Length (ft)	25				25		
Lane Util. Factor	0.97	0.91	0.91	1.00	0.97	1.00	
Fr _t				0.850		0.850	
Fl _t Protected	0.950				0.950		
Satd. Flow (prot)	3433	5085	5085	1583	3433	1583	
Fl _t Permitted	0.950				0.950		
Satd. Flow (perm)	3433	5085	5085	1583	3433	1583	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)				617		181	
Link Speed (mph)		50	50		30		
Link Distance (ft)		2935	1764		1116		
Travel Time (s)		40.0	24.1		25.4		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	150	2221	1390	860	975	209	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	150	2221	1390	860	975	209	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Left	Left	Right	Left	Right	
Median Width(ft)		24	24		24		
Link Offset(ft)		0	0		0		
Crosswalk Width(ft)		16	16		16		
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (mph)	15			9	15	9	
Number of Detectors	1	1	1	1	1	1	
Detector Template							
Leading Detector (ft)	50	50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Turn Type	Prot	NA	NA	Free	Prot	pt+ov	
Protected Phases	5	2	6		3	3 5	4
Permitted Phases				Free			
Detector Phase	5	2	6		3	3 5	
Switch Phase							
Minimum Initial (s)	4.0	4.0	4.0		4.0		4.0
Minimum Split (s)	20.0	22.0	29.0		20.0		35.0
Total Split (s)	20.0	72.0	52.0		25.0		35.0

Lanes, Volumes, Timings
10: Soledad Cyn & Valley Center

01/18/2024

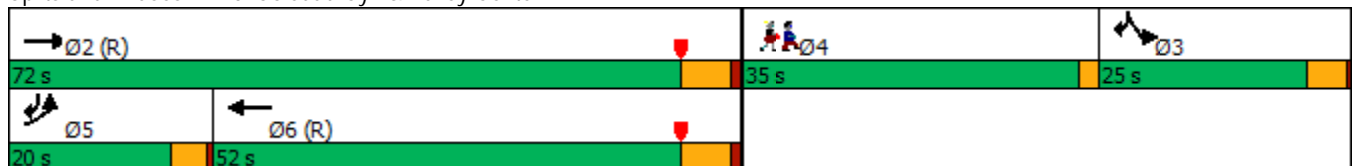


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø4	
Total Split (%)	15.2%	54.5%	39.4%		18.9%		27%	
Maximum Green (s)	16.0	66.0	46.0		20.5		33.0	
Yellow Time (s)	3.5	5.0	5.0		4.0		2.0	
All-Red Time (s)	0.5	1.0	1.0		0.5		0.0	
Lost Time Adjust (s)	0.0	-2.0	-2.0		-0.5			
Total Lost Time (s)	4.0	4.0	4.0		4.0			
Lead/Lag	Lead		Lag		Lag		Lead	
Lead-Lag Optimize?	Yes		Yes		Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		0.2	
Recall Mode	None	C-Max	C-Max		None		None	
Walk Time (s)				7.0				7.0
Flash Dont Walk (s)				16.0				26.0
Pedestrian Calls (#/hr)				0				0
Act Effct Green (s)	11.1	68.9	53.8	132.0	55.1	70.2		
Actuated g/C Ratio	0.08	0.52	0.41	1.00	0.42	0.53		
v/c Ratio	0.52	0.84	0.67	0.54	0.68	0.23		
Control Delay	53.4	34.4	15.8	7.7	33.7	5.6		
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		
Total Delay	53.4	34.4	15.8	7.7	33.7	5.6		
LOS	D	C	B	A	C	A		
Approach Delay	35.6		12.7	28.7				
Approach LOS	D		B	C				

Intersection Summary

Area Type:	Other
Cycle Length:	132
Actuated Cycle Length:	132
Offset:	35 (27%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle:	145
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.84
Intersection Signal Delay:	25.3
Intersection LOS:	C
Intersection Capacity Utilization:	71.7%
ICU Level of Service:	C
Analysis Period (min):	15

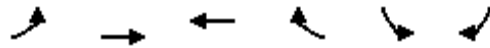
Splits and Phases: 10: Soledad Cyn & Valley Center



Queues

10: Soledad Cyn & Valley Center

01/18/2024



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	150	2221	1390	860	975	209
v/c Ratio	0.52	0.84	0.67	0.54	0.68	0.23
Control Delay	53.4	34.4	15.8	7.7	33.7	5.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.4	34.4	15.8	7.7	33.7	5.6
Queue Length 50th (ft)	62	678	313	389	430	27
Queue Length 95th (ft)	m88	778	155	631	502	m42
Internal Link Dist (ft)		2855	1684		1036	
Turn Bay Length (ft)	250			310	235	
Base Capacity (vph)	416	2652	2070	1583	1434	979
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.84	0.67	0.54	0.68	0.21

Intersection Summary

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

Lanes, Volumes, Timings
 11: Golden Valley Road & Valley Center Drive

01/18/2024



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4	Ø5	Ø12
Lane Configurations	↶↶↶	↷↷	↶↶	↑↑↑	↑↑↑	↷			
Traffic Volume (vph)	551	436	378	1266	1118	806			
Future Volume (vph)	551	436	378	1266	1118	806			
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900			
Storage Length (ft)	260	260	290			150			
Storage Lanes	2	1	2			1			
Taper Length (ft)	25		25						
Lane Util. Factor	0.94	0.88	0.97	0.91	0.91	1.00			
Frt		0.850				0.850			
Flt Protected	0.950		0.950						
Satd. Flow (prot)	4990	2787	3433	5085	5085	1583			
Flt Permitted	0.950		0.950						
Satd. Flow (perm)	4990	2787	3433	5085	5085	1583			
Right Turn on Red		Yes				Yes			
Satd. Flow (RTOR)		474				528			
Link Speed (mph)	30			50	50				
Link Distance (ft)	456			2527	1665				
Travel Time (s)	10.4			34.5	22.7				
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92			
Adj. Flow (vph)	599	474	411	1376	1215	876			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	599	474	411	1376	1215	876			
Enter Blocked Intersection	No	No	No	No	No	No			
Lane Alignment	Left	Right	Left	Left	Left	Right			
Median Width(ft)	36			24	24				
Link Offset(ft)	0			0	0				
Crosswalk Width(ft)	16			16	16				
Two way Left Turn Lane									
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00			
Turning Speed (mph)	15	9	15			9			
Number of Detectors	1	1	1	1	1	1			
Detector Template									
Leading Detector (ft)	50	50	50	50	50	50			
Trailing Detector (ft)	0	0	0	0	0	0			
Detector 1 Position(ft)	0	0	0	0	0	0			
Detector 1 Size(ft)	50	50	50	50	50	50			
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel									
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Turn Type	Prot	pt+ov	Prot	NA	NA	Perm			
Protected Phases	3	5 12	5 12	2	6		4	5	12
Permitted Phases						6			
Detector Phase	3	5 12	5 12	2	6	6			
Switch Phase									
Minimum Initial (s)	3.0			10.0	10.0	10.0	4.0	4.0	4.0
Minimum Split (s)	25.0			30.0	40.0	40.0	35.0	15.0	20.0
Total Split (s)	30.0			67.0	42.0	42.0	35.0	25.0	35.0

Lanes, Volumes, Timings
 11: Golden Valley Road & Valley Center Drive

01/18/2024

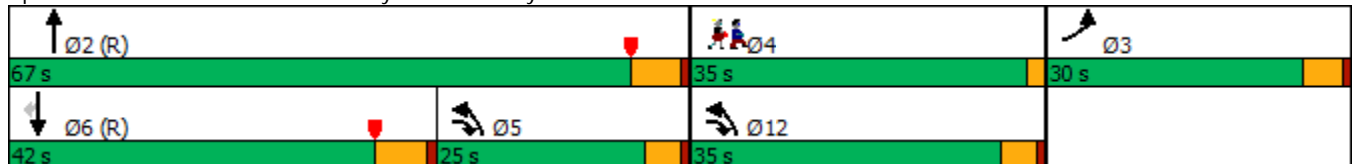


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4	Ø5	Ø12
Total Split (%)	22.7%			50.8%	31.8%	31.8%	27%	19%	27%
Maximum Green (s)	25.0			61.0	36.0	36.0	33.0	20.5	30.5
Yellow Time (s)	4.0			5.0	5.0	5.0	2.0	3.5	3.5
All-Red Time (s)	1.0			1.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)	-1.0			-2.0	-2.0	-2.0			
Total Lost Time (s)	4.0			4.0	4.0	4.0			
Lead/Lag					Lead	Lead		Lag	
Lead-Lag Optimize?					Yes	Yes		Yes	
Vehicle Extension (s)	3.0			3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None			C-Min	C-Min	C-Min	None	None	None
Walk Time (s)					7.0	7.0	7.0		5.0
Flash Dont Walk (s)					24.0	24.0	26.0		10.0
Pedestrian Calls (#/hr)					0	0	0		0
Act Effect Green (s)	22.3	31.6	31.6	89.6	66.0	66.0			
Actuated g/C Ratio	0.17	0.24	0.24	0.68	0.50	0.50			
v/c Ratio	0.71	0.46	0.50	0.40	0.48	0.83			
Control Delay	43.2	7.1	22.9	3.9	5.7	15.9			
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0			
Total Delay	43.2	7.1	22.9	3.9	5.7	15.9			
LOS	D	A	C	A	A	B			
Approach Delay	27.2			8.3	10.0				
Approach LOS	C			A	B				

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 115
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.83
 Intersection Signal Delay: 13.1
 Intersection LOS: B
 Intersection Capacity Utilization 67.4%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 11: Golden Valley Road & Valley Center Drive



Queues

11: Golden Valley Road & Valley Center Drive

01/18/2024



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	599	474	411	1376	1215	876
v/c Ratio	0.71	0.46	0.50	0.40	0.48	0.83
Control Delay	43.2	7.1	22.9	3.9	5.7	15.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.2	7.1	22.9	3.9	5.7	15.9
Queue Length 50th (ft)	161	25	125	80	42	439
Queue Length 95th (ft)	199	61	m100	m60	m65	m348
Internal Link Dist (ft)	376			2447	1585	
Turn Bay Length (ft)	260	260	290			150
Base Capacity (vph)	990	1422	1407	3449	2543	1055
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.61	0.33	0.29	0.40	0.48	0.83

Intersection Summary

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

Lanes, Volumes, Timings
12: Ruther & Soledad Cyn

01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	47	2385	167	196	1790	19	185	79	232	130	89	67
Future Volume (vph)	47	2385	167	196	1790	19	185	79	232	130	89	67
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	285		300	250		0	0		0	125		0
Storage Lanes	1		1	2		0	1		2	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	0.91	0.95	0.95	0.88	0.95	0.95	1.00
Frt			0.850		0.998				0.850		0.938	
Flt Protected	0.950			0.950			0.950	0.977		0.950	0.998	
Satd. Flow (prot)	1770	5085	1583	3433	5075	0	1681	1729	2787	1681	1657	0
Flt Permitted	0.950			0.950			0.950	0.977		0.950	0.998	
Satd. Flow (perm)	1770	5085	1583	3433	5075	0	1681	1729	2787	1681	1657	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			103		1				121		22	
Link Speed (mph)		50		50				40			30	
Link Distance (ft)		1764		2480				220			327	
Travel Time (s)		24.1		33.8				3.8			7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	51	2592	182	213	1946	21	201	86	252	141	97	73
Shared Lane Traffic (%)							37%			5%		
Lane Group Flow (vph)	51	2592	182	213	1967	0	127	160	252	134	177	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24		24				12			12	
Link Offset(ft)		0		0				0			0	
Crosswalk Width(ft)		16		16				16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1	1	1	1	
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50		50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	pt+ov	Split	NA	
Protected Phases	1	6		5	2		3	3	3 5	4	4	
Permitted Phases			6									
Detector Phase	1	6	6	5	2		3	3	3 5	4	4	
Switch Phase												
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	12.0	42.0	42.0	12.0	27.0		37.0	37.0		15.0	15.0	
Total Split (s)	26.0	49.0	49.0	25.0	48.0		38.0	38.0		20.0	20.0	

Lanes, Volumes, Timings
12: Ruther & Soledad Cyn

01/18/2024

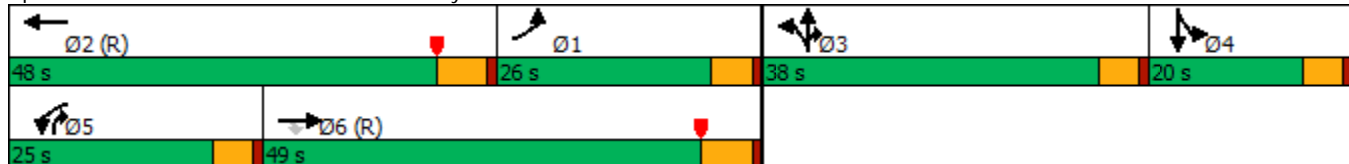


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	19.7%	37.1%	37.1%	18.9%	36.4%		28.8%	28.8%		15.2%	15.2%	
Maximum Green (s)	21.0	43.0	43.0	20.0	42.0		33.0	33.0		15.0	15.0	
Yellow Time (s)	4.0	5.0	5.0	4.0	5.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	-1.0	-2.0	-2.0	-1.0	-2.0		-1.0	-1.0		-1.0	-1.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead		Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	4.5	4.5	1.5	4.5		3.0	3.0		3.0	3.0	
Minimum Gap (s)	1.5	3.0	3.0	1.5	3.0		3.0	3.0		3.0	3.0	
Time Before Reduce (s)	0.0	7.5	7.5	0.0	7.5		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	22.5	22.5	0.0	22.5		0.0	0.0		0.0	0.0	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None		None	None	
Walk Time (s)		7.0	7.0		7.0		5.0	5.0				
Flash Dont Walk (s)		25.0	25.0		11.0		27.0	27.0				
Pedestrian Calls (#/hr)		0	0		0		0	0				
Act Effect Green (s)	18.6	64.9	64.9	13.1	61.1		18.9	18.9	32.0	19.2	19.2	
Actuated g/C Ratio	0.14	0.49	0.49	0.10	0.46		0.14	0.14	0.24	0.15	0.15	
v/c Ratio	0.20	1.04	0.22	0.63	0.84		0.53	0.65	0.33	0.55	0.68	
Control Delay	48.0	56.4	12.2	65.2	38.0		59.4	64.9	12.4	60.3	59.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	48.0	56.4	12.2	65.2	38.0		59.4	64.9	12.4	60.3	59.8	
LOS	D	E	B	E	D		E	E	B	E	E	
Approach Delay		53.4			40.6			39.1			60.0	
Approach LOS		D			D			D			E	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
 Natural Cycle: 140
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.04
 Intersection Signal Delay: 47.7
 Intersection LOS: D
 Intersection Capacity Utilization 80.2%
 ICU Level of Service D
 Analysis Period (min) 15

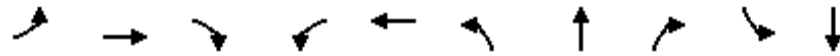
Splits and Phases: 12: Ruther & Soledad Cyn



Queues

12: Ruther & Soledad Cyn

01/18/2024



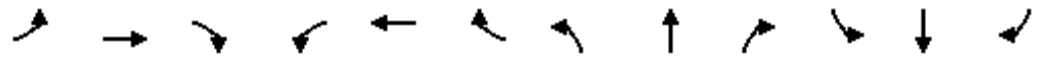
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	51	2592	182	213	1967	127	160	252	134	177
v/c Ratio	0.20	1.04	0.22	0.63	0.84	0.53	0.65	0.33	0.55	0.68
Control Delay	48.0	56.4	12.2	65.2	38.0	59.4	64.9	12.4	60.3	59.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.0	56.4	12.2	65.2	38.0	59.4	64.9	12.4	60.3	59.8
Queue Length 50th (ft)	32	-864	35	91	574	107	138	36	113	133
Queue Length 95th (ft)	m45	#1156	m69	130	#829	168	206	50	178	211
Internal Link Dist (ft)		1684			2400		140			247
Turn Bay Length (ft)	285		300	250					125	
Base Capacity (vph)	295	2498	830	546	2351	432	445	1226	252	267
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	1.04	0.22	0.39	0.84	0.29	0.36	0.21	0.53	0.66

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
 13: Golden Valley Road & Centre Pointe Parkway

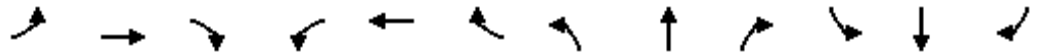
01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	177	99	556	272	78	197	283	1348	282	245	1428	65
Future Volume (vph)	177	99	556	272	78	197	283	1348	282	245	1428	65
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		260	150		250	300		300	700		0
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850		0.893				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	3433	1663	0	1770	3539	1583	1770	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1863	1583	3433	1663	0	1770	3539	1583	1770	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			91		94				301			136
Link Speed (mph)		30		30				50			50	
Link Distance (ft)		1149		802				7902			1475	
Travel Time (s)		26.1		18.2				107.8			20.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	192	108	604	296	85	214	308	1465	307	266	1552	71
Shared Lane Traffic (%)												
Lane Group Flow (vph)	192	108	604	296	299	0	308	1465	307	266	1552	71
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24		24				12			12	
Link Offset(ft)		0		0				0			0	
Crosswalk Width(ft)		16		16				16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50		50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	3	8	5	7	4		5	2	7	1	6	
Permitted Phases			8						2			6
Detector Phase	3	8	5	7	4		5	2	7	1	6	6
Switch Phase												
Minimum Initial (s)	4.0	6.0	4.0	4.0	6.0		4.0	10.0	4.0	4.0	10.0	10.0
Minimum Split (s)	12.0	25.0	20.0	20.0	39.0		20.0	33.0	20.0	15.0	34.0	34.0
Total Split (s)	19.0	25.0	33.0	34.0	40.0		33.0	40.0	34.0	33.0	40.0	40.0

Lanes, Volumes, Timings
 13: Golden Valley Road & Centre Pointe Parkway

01/18/2024

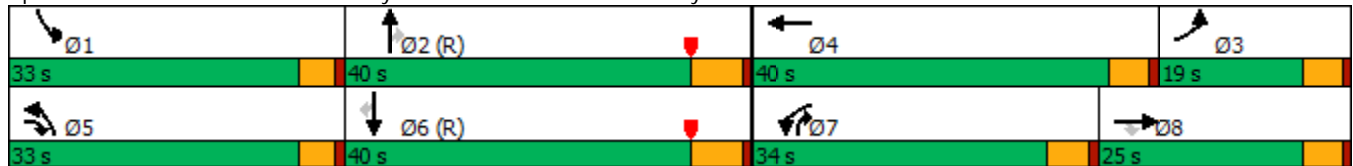


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	14.4%	18.9%	25.0%	25.8%	30.3%		25.0%	30.3%	25.8%	25.0%	30.3%	30.3%
Maximum Green (s)	14.0	20.0	28.5	29.0	35.0		28.5	34.0	29.0	28.5	34.0	34.0
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0		3.5	5.0	4.0	3.5	5.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0	-1.0	-0.5	-1.0	-1.0		-0.5	-2.0	-1.0	-0.5	-2.0	-2.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lag	Lag	Lead	Lead	Lead		Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Min	None	None	C-Min	C-Min
Walk Time (s)					7.0			7.0			7.0	7.0
Flash Dont Walk (s)					27.0			20.0			21.0	21.0
Pedestrian Calls (#/hr)					0			0			0	0
Act Effct Green (s)	20.8	26.1	56.7	18.2	23.6		26.6	47.1	69.3	24.6	45.1	45.1
Actuated g/C Ratio	0.16	0.20	0.43	0.14	0.18		0.20	0.36	0.52	0.19	0.34	0.34
v/c Ratio	0.69	0.29	0.83	0.63	0.80		0.87	1.16	0.32	0.81	1.28	0.11
Control Delay	66.1	46.4	38.0	59.2	50.6		69.1	114.0	12.8	55.8	175.4	8.6
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	66.1	46.4	38.0	59.2	50.6		69.1	114.0	12.8	55.8	175.4	8.6
LOS	E	D	D	E	D		E	F	B	E	F	A
Approach Delay		45.0			54.9			92.4			152.3	
Approach LOS		D			D			F			F	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 103 (78%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 145
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.28
 Intersection Signal Delay: 101.2
 Intersection Capacity Utilization 94.5%
 Analysis Period (min) 15
 Intersection LOS: F
 ICU Level of Service F

Splits and Phases: 13: Golden Valley Road & Centre Pointe Parkway



Queues

13: Golden Valley Road & Centre Pointe Parkway

01/18/2024



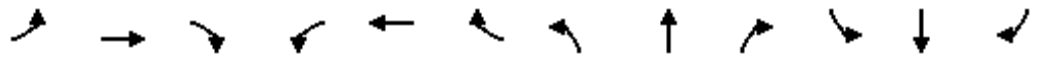
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	192	108	604	296	299	308	1465	307	266	1552	71
v/c Ratio	0.69	0.29	0.83	0.63	0.80	0.87	1.16	0.32	0.81	1.28	0.11
Control Delay	66.1	46.4	38.0	59.2	50.6	69.1	114.0	12.8	55.8	175.4	8.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	66.1	46.4	38.0	59.2	50.6	69.1	114.0	12.8	55.8	175.4	8.6
Queue Length 50th (ft)	154	77	357	125	173	278	-836	83	218	-981	1
Queue Length 95th (ft)	#285	134	541	165	258	m#364	#1057	m134	317	#1168	38
Internal Link Dist (ft)		1069			722		7822			1395	
Turn Bay Length (ft)	150		260	150		300		300	700		
Base Capacity (vph)	278	375	761	780	521	391	1262	1088	388	1209	630
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.69	0.29	0.79	0.38	0.57	0.79	1.16	0.28	0.69	1.28	0.11

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
 14: Sierra Highway & Golden Valley Road

01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑	↔↔	↔↔	↑↑↑	↔	↔↔	↑↔		↔	↑↑	↔
Traffic Volume (vph)	370	974	549	68	913	111	681	1045	132	69	254	230
Future Volume (vph)	370	974	549	68	913	111	681	1045	132	69	254	230
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	280		280	285		300	285		0	410		540
Storage Lanes	2		2	2		1	2		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	0.88	0.97	0.91	1.00	0.97	0.95	0.95	1.00	0.95	1.00
Frt			0.850			0.850		0.983				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	2787	3433	5085	1583	3433	3479	0	1770	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	2787	3433	5085	1583	3433	3479	0	1770	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			547			186		11				250
Link Speed (mph)		50			50			30				30
Link Distance (ft)		1983			1208			1801				1671
Travel Time (s)		27.0			16.5			40.9				38.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	402	1059	597	74	992	121	740	1136	143	75	276	250
Shared Lane Traffic (%)												
Lane Group Flow (vph)	402	1059	597	74	992	121	740	1279	0	75	276	250
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24				24
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50		50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50		50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	custom
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						8
Detector Phase	7	4	4	3	8	8	5	2		1	6	8
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	8.5	29.6	29.6	8.5	40.0	40.0	15.0	49.0		8.5	46.0	40.0
Total Split (s)	29.0	50.0	50.0	20.0	41.0	41.0	37.0	44.0		18.0	25.0	41.0

Lanes, Volumes, Timings
 14: Sierra Highway & Golden Valley Road

01/18/2024

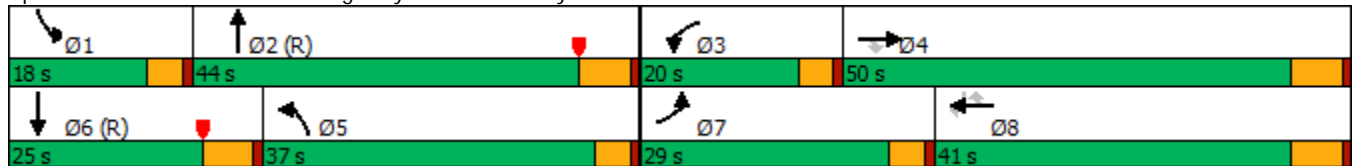


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	22.0%	37.9%	37.9%	15.2%	31.1%	31.1%	28.0%	33.3%		13.6%	18.9%	31.1%
Maximum Green (s)	24.5	44.0	44.0	15.5	35.0	35.0	32.5	38.0		13.5	19.0	35.0
Yellow Time (s)	3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.0		3.5	5.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	-0.5	-2.0	-2.0	-0.5	-2.0	-2.0	-0.5	-2.0		-0.5	-2.0	-2.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lag		Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	None
Walk Time (s)					5.0	5.0		5.0			5.0	5.0
Flash Dont Walk (s)					29.0	29.0		33.0			30.0	29.0
Pedestrian Calls (#/hr)					0	0		0			0	0
Act Effect Green (s)	20.9	49.2	49.2	8.7	34.9	34.9	33.0	51.3		11.1	27.2	34.9
Actuated g/C Ratio	0.16	0.37	0.37	0.07	0.26	0.26	0.25	0.39		0.08	0.21	0.26
v/c Ratio	0.74	0.80	0.43	0.33	0.74	0.22	0.86	0.94		0.51	0.38	0.42
Control Delay	40.8	42.5	14.2	62.2	47.9	1.4	58.8	53.9		69.1	48.5	6.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	40.8	42.5	14.2	62.2	47.9	1.4	58.8	53.9		69.1	48.5	6.5
LOS	D	D	B	E	D	A	E	D		E	D	A
Approach Delay		33.9			44.0			55.7			33.6	
Approach LOS		C			D			E			C	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 65 (49%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 140
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.94
 Intersection Signal Delay: 43.4 Intersection LOS: D
 Intersection Capacity Utilization 80.5% ICU Level of Service D
 Analysis Period (min) 15

Splits and Phases: 14: Sierra Highway & Golden Valley Road



Queues

14: Sierra Highway & Golden Valley Road

01/18/2024















Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	402	1059	597	74	992	121	740	1279	75	276	250
v/c Ratio	0.74	0.80	0.43	0.33	0.74	0.22	0.86	0.94	0.51	0.38	0.42
Control Delay	40.8	42.5	14.2	62.2	47.9	1.4	58.8	53.9	69.1	48.5	6.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.8	42.5	14.2	62.2	47.9	1.4	58.8	53.9	69.1	48.5	6.5
Queue Length 50th (ft)	175	463	118	31	279	0	314	~613	62	110	0
Queue Length 95th (ft)	m164	m421	m111	57	331	5	#410	#840	113	162	64
Internal Link Dist (ft)		1903			1128			1721		1591	
Turn Bay Length (ft)	280		280	285		300	285		410		540
Base Capacity (vph)	650	1319	1382	416	1425	577	858	1359	187	728	623
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.62	0.80	0.43	0.18	0.70	0.21	0.86	0.94	0.40	0.38	0.40

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
15: SR 14 SB Ramp & Golden Valley Road

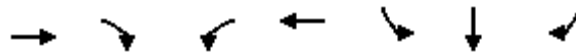
01/18/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗	↖	↑↑					↘	↙	↗
Traffic Volume (vph)	0	862	332	168	728	0	0	0	0	72	4	436
Future Volume (vph)	0	862	332	168	728	0	0	0	0	72	4	436
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	220		0	0		0	300		0
Storage Lanes	0		1	1		0	0		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850									0.850
Flt Protected				0.950						0.950	0.957	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	1681	1694	1583
Flt Permitted				0.950						0.950	0.957	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	1681	1694	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			361									175
Link Speed (mph)		50			50			30			30	
Link Distance (ft)		861			697			508			640	
Travel Time (s)		11.7			9.5			11.5			14.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	937	361	183	791	0	0	0	0	78	4	474
Shared Lane Traffic (%)										48%		
Lane Group Flow (vph)	0	937	361	183	791	0	0	0	0	41	41	474
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94		94							94	
Detector 2 Size(ft)		6		6							6	
Detector 2 Type		Cl+Ex		Cl+Ex							Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0		0.0							0.0	
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		6		5	2					4		
Permitted Phases		6								4		4

Queues

15: SR 14 SB Ramp & Golden Valley Road

01/18/2024



Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	937	361	183	791	41	41	474
v/c Ratio	0.69	0.43	0.76	0.39	0.07	0.07	0.72
Control Delay	26.5	4.0	59.8	13.5	20.4	20.4	23.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.5	4.0	59.8	13.5	20.4	20.4	23.0
Queue Length 50th (ft)	233	0	114	137	16	16	147
Queue Length 95th (ft)	303	54	#204	170	40	40	267
Internal Link Dist (ft)	781			617		560	
Turn Bay Length (ft)			220		300		
Base Capacity (vph)	1366	832	255	2005	579	583	659
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.69	0.43	0.72	0.39	0.07	0.07	0.72

Intersection Summary

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

Lanes, Volumes, Timings
 16: SR 14 NB Ramp & Golden Valley Road

01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↖	↗↗			↖↖	↗	↖	↗	↗			
Traffic Volume (vph)	442	507	0	0	465	230	418	2	393	0	0	0
Future Volume (vph)	442	507	0	0	465	230	418	2	393	0	0	0
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	230		0	0		280	0		140	0		0
Storage Lanes	2		0	0		1	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt						0.850			0.850			
Flt Protected	0.950						0.950	0.953				
Satd. Flow (prot)	3433	3539	0	0	3539	1583	1681	1686	1583	0	0	0
Flt Permitted	0.950						0.950	0.953				
Satd. Flow (perm)	3433	3539	0	0	3539	1583	1681	1686	1583	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						250			324			
Link Speed (mph)		50			50			30				30
Link Distance (ft)		697			616			615				491
Travel Time (s)		9.5			8.4			14.0				11.2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	480	551	0	0	505	250	454	2	427	0	0	0
Shared Lane Traffic (%)							50%					
Lane Group Flow (vph)	480	551	0	0	505	250	227	229	427	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1	1	2	1			
Detector Template	Left	Thru			Thru	Right	Left	Thru	Right			
Leading Detector (ft)	20	100			100	20	20	100	20			
Trailing Detector (ft)	0	0			0	0	0	0	0			
Detector 1 Position(ft)	0	0			0	0	0	0	0			
Detector 1 Size(ft)	20	6			6	20	20	6	20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Prot	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	1	6			2			8				
Permitted Phases						2	8		8			

Lanes, Volumes, Timings
 16: SR 14 NB Ramp & Golden Valley Road

01/18/2024

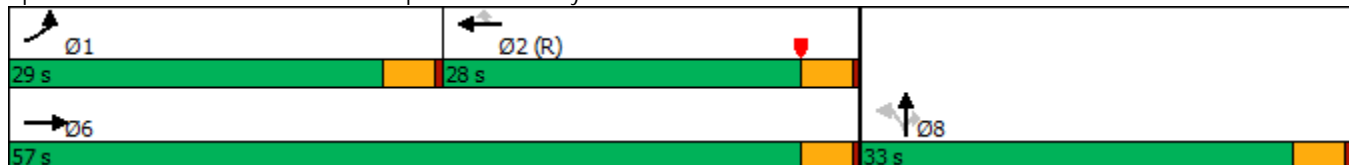


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	1	6			2	2	8	8	8			
Switch Phase												
Minimum Initial (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Minimum Split (s)	12.0	20.0			20.0	20.0	20.0	20.0	20.0			
Total Split (s)	29.0	57.0			28.0	28.0	33.0	33.0	33.0			
Total Split (%)	32.2%	63.3%			31.1%	31.1%	36.7%	36.7%	36.7%			
Maximum Green (s)	25.0	53.0			24.0	24.0	29.0	29.0	29.0			
Yellow Time (s)	3.5	3.5			3.5	3.5	3.5	3.5	3.5			
All-Red Time (s)	0.5	0.5			0.5	0.5	0.5	0.5	0.5			
Lost Time Adjust (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Total Lost Time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Lead/Lag	Lead				Lag		Lag					
Lead-Lag Optimize?	Yes				Yes		Yes					
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Recall Mode	None	Max			C-Max	C-Max	Max	Max	Max			
Walk Time (s)		5.0			5.0	5.0	5.0	5.0	5.0			
Flash Dont Walk (s)		10.0			10.0	10.0	10.0	10.0	10.0			
Pedestrian Calls (#/hr)		0			0	0	0	0	0			
Act Effct Green (s)	17.8	53.0			31.2	31.2	29.0	29.0	29.0			
Actuated g/C Ratio	0.20	0.59			0.35	0.35	0.32	0.32	0.32			
v/c Ratio	0.71	0.26			0.41	0.35	0.42	0.42	0.59			
Control Delay	57.7	5.7			24.4	4.8	26.9	26.9	10.1			
Queue Delay	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Total Delay	57.7	5.7			24.4	4.8	26.9	26.9	10.1			
LOS	E	A			C	A	C	C	B			
Approach Delay		29.9			17.9			18.8				
Approach LOS		C			B			B				

Intersection Summary

Area Type: Other
 Cycle Length: 90
 Actuated Cycle Length: 90
 Offset: 0 (0%), Referenced to phase 2:WBT, Start of Yellow
 Natural Cycle: 55
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.71
 Intersection Signal Delay: 22.8
 Intersection LOS: C
 Intersection Capacity Utilization 53.8%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 16: SR 14 NB Ramp & Golden Valley Road



Queues

16: SR 14 NB Ramp & Golden Valley Road

01/18/2024



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	480	551	505	250	227	229	427
v/c Ratio	0.71	0.26	0.41	0.35	0.42	0.42	0.59
Control Delay	57.7	5.7	24.4	4.8	26.9	26.9	10.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.7	5.7	24.4	4.8	26.9	26.9	10.1
Queue Length 50th (ft)	154	30	113	0	105	106	42
Queue Length 95th (ft)	205	57	171	53	175	175	132
Internal Link Dist (ft)		617	536			535	
Turn Bay Length (ft)	230			280			140
Base Capacity (vph)	953	2084	1227	712	541	543	729
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.50	0.26	0.41	0.35	0.42	0.42	0.59

Intersection Summary

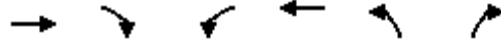
Lanes, Volumes, Timings
17: Studio Driveway & Soledad Cyn

01/18/2024

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↙	↑↑↑	↘	
Traffic Volume (vph)	1074	8	4	1990	47	23
Future Volume (vph)	1074	8	4	1990	47	23
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt	0.999				0.956	
Flt Protected			0.950		0.968	
Satd. Flow (prot)	5080	0	1770	5085	1724	0
Flt Permitted			0.217		0.968	
Satd. Flow (perm)	5080	0	404	5085	1724	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	3				16	
Link Speed (mph)	50			50	30	
Link Distance (ft)	419			233	380	
Travel Time (s)	5.7			3.2	8.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1167	9	4	2163	51	25
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1176	0	4	2163	76	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2		1	2	1	
Detector Template	Thru		Left	Thru	Left	
Leading Detector (ft)	100		20	100	20	
Trailing Detector (ft)	0		0	0	0	
Detector 1 Position(ft)	0		0	0	0	
Detector 1 Size(ft)	6		20	6	20	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA		Perm	NA	Prot	
Protected Phases	6			2	4	
Permitted Phases			2			
Detector Phase	6		2	2	4	
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	

Lanes, Volumes, Timings
 17: Studio Driveway & Soledad Cyn

01/18/2024



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Minimum Split (s)	20.0		20.0	20.0	20.0	
Total Split (s)	107.0		107.0	107.0	25.0	
Total Split (%)	81.1%		81.1%	81.1%	18.9%	
Maximum Green (s)	103.0		103.0	103.0	21.0	
Yellow Time (s)	3.5		3.5	3.5	3.5	
All-Red Time (s)	0.5		0.5	0.5	0.5	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	4.0		4.0	4.0	4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Recall Mode	Max		C-Max	C-Max	Max	
Walk Time (s)	5.0		5.0	5.0	5.0	
Flash Dont Walk (s)	10.0		10.0	10.0	10.0	
Pedestrian Calls (#/hr)	0		0	0	0	
Act Effect Green (s)	103.0		103.0	103.0	21.0	
Actuated g/C Ratio	0.78		0.78	0.78	0.16	
v/c Ratio	0.30		0.01	0.55	0.26	
Control Delay	7.3		5.2	7.6	41.0	
Queue Delay	0.0		0.0	0.0	0.0	
Total Delay	7.3		5.2	7.6	41.0	
LOS	A		A	A	D	
Approach Delay	7.3			7.6	41.0	
Approach LOS	A			A	D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 0 (0%), Referenced to phase 2:WBTL, Start of Yellow
 Natural Cycle: 50
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.55
 Intersection Signal Delay: 8.2
 Intersection Capacity Utilization 49.1%
 Analysis Period (min) 15
 Intersection LOS: A
 ICU Level of Service A

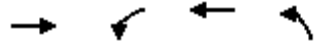
Splits and Phases: 17: Studio Driveway & Soledad Cyn



Queues

17: Studio Driveway & Soledad Cyn

01/18/2024



Lane Group	EBT	WBL	WBT	NBL
Lane Group Flow (vph)	1176	4	2163	76
v/c Ratio	0.30	0.01	0.55	0.26
Control Delay	7.3	5.2	7.6	41.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	7.3	5.2	7.6	41.0
Queue Length 50th (ft)	137	1	190	45
Queue Length 95th (ft)	m117	m2	269	94
Internal Link Dist (ft)	339		153	300
Turn Bay Length (ft)				
Base Capacity (vph)	3964	315	3967	287
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.30	0.01	0.55	0.26

Intersection Summary

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

Lanes, Volumes, Timings
 18: Residential Driveway 1 & Soledad Cyn

01/18/2024



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↵	↑↑↑	↵	
Traffic Volume (vph)	1067	30	10	1994	0	18
Future Volume (vph)	1067	30	10	1994	0	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	100		0	0
Storage Lanes		0	1		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt	0.996				0.865	
Flt Protected			0.950			
Satd. Flow (prot)	5065	0	1770	5085	1611	0
Flt Permitted			0.950			
Satd. Flow (perm)	5065	0	1770	5085	1611	0
Link Speed (mph)	50			50	30	
Link Distance (ft)	233			397	318	
Travel Time (s)	3.2			5.4	7.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1160	33	11	2167	0	20
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1193	0	11	2167	20	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	48.5%
Analysis Period (min)	15
	ICU Level of Service A

HCM 6th TWSC
 18: Residential Driveway 1 & Soledad Cyn

01/18/2024

Intersection						
Int Delay, s/veh	0.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↵	↑↑↑	↵	
Traffic Vol, veh/h	1067	30	10	1994	0	18
Future Vol, veh/h	1067	30	10	1994	0	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1160	33	11	2167	0	20

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	1193	0	2066
Stage 1	-	-	-	-	1177
Stage 2	-	-	-	-	889
Critical Hdwy	-	-	5.34	-	5.74
Critical Hdwy Stg 1	-	-	-	-	6.64
Critical Hdwy Stg 2	-	-	-	-	6.04
Follow-up Hdwy	-	-	3.12	-	3.82
Pot Cap-1 Maneuver	-	-	315	-	86
Stage 1	-	-	-	-	188
Stage 2	-	-	-	-	328
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	315	-	83
Mov Cap-2 Maneuver	-	-	-	-	83
Stage 1	-	-	-	-	188
Stage 2	-	-	-	-	317

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	14.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	382	-	-	315	-
HCM Lane V/C Ratio	0.051	-	-	0.035	-
HCM Control Delay (s)	14.9	-	-	16.8	-
HCM Lane LOS	B	-	-	C	-
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-

Lanes, Volumes, Timings
 19: Residential Driveway 2 & Soledad Cyn

01/18/2024



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↵	↑↑↑		↵
Traffic Volume (vph)	1044	41	21	2003	0	35
Future Volume (vph)	1044	41	21	2003	0	35
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	100		0	0
Storage Lanes		0	1		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt	0.994					0.865
Flt Protected			0.950			
Satd. Flow (prot)	5055	0	1770	5085	0	1611
Flt Permitted			0.950			
Satd. Flow (perm)	5055	0	1770	5085	0	1611
Link Speed (mph)	50			50	30	
Link Distance (ft)	397			911	422	
Travel Time (s)	5.4			12.4	9.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1135	45	23	2177	0	38
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1180	0	23	2177	0	38
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	42.0%
ICU Level of Service	A
Analysis Period (min)	15

HCM 6th TWSC
 19: Residential Driveway 2 & Soledad Cyn

01/18/2024

Intersection						
Int Delay, s/veh	0.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↑	↑↑↑		↑
Traffic Vol, veh/h	1044	41	21	2003	0	35
Future Vol, veh/h	1044	41	21	2003	0	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1135	45	23	2177	0	38

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	1180	0	590
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	5.34	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	3.12	-	3.92
Pot Cap-1 Maneuver	-	-	320	-	386
Stage 1	-	-	-	-	0
Stage 2	-	-	-	-	0
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	320	-	386
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	15.3
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	386	-	-	320	-
HCM Lane V/C Ratio	0.099	-	-	0.071	-
HCM Control Delay (s)	15.3	-	-	17.1	-
HCM Lane LOS	C	-	-	C	-
HCM 95th %tile Q(veh)	0.3	-	-	0.2	-

Lanes, Volumes, Timings
 20: Studio Driveway 2 & Soledad Cyn

01/18/2024



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑		↗
Traffic Volume (vph)	1082	0	0	2036	0	0
Future Volume (vph)	1082	0	0	2036	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frnt						
Flt Protected						
Satd. Flow (prot)	5085	0	0	5085	0	1863
Flt Permitted						
Satd. Flow (perm)	5085	0	0	5085	0	1863
Link Speed (mph)	50			50	30	
Link Distance (ft)	765			419	381	
Travel Time (s)	10.4			5.7	8.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1176	0	0	2213	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1176	0	0	2213	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	42.7%
Analysis Period (min)	15
	ICU Level of Service A

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑		↑
Traffic Vol, veh/h	1082	0	0	2036	0	0
Future Vol, veh/h	1082	0	0	2036	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1176	0	0	2213	0	0

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	-	-	588
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	3.92
Pot Cap-1 Maneuver	-	-	0	-	387
Stage 1	-	-	0	-	-
Stage 2	-	-	0	-	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	387
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

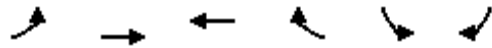
Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

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

***Future with Revised Project with Mitigation Conditions
Morning Peak Hour***

Lanes, Volumes, Timings
 1: Valencia Blvd & 5 Fwy SB Ramp

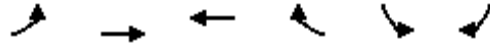
01/18/2024



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑		↑↑	↑
Traffic Volume (vph)	0	576	966	96	285	93
Future Volume (vph)	0	576	966	96	285	93
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	15	12	14
Storage Length (ft)	0			0	0	455
Storage Lanes	0			0	2	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.91	0.95	0.95	0.97	1.00
Fr _t			0.986			0.850
Fl _t Protected					0.950	
Satd. Flow (prot)	0	5085	3490	0	3433	1689
Fl _t Permitted					0.950	
Satd. Flow (perm)	0	5085	3490	0	3433	1689
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			26			91
Link Speed (mph)		50	50		30	
Link Distance (ft)		616	917		417	
Travel Time (s)		8.4	12.5		9.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	626	1050	104	310	101
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	626	1154	0	310	101
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		24	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	0.88	1.00	0.92
Turning Speed (mph)	15			9	15	9
Number of Detectors		1	1		1	1
Detector Template						
Leading Detector (ft)		50	50		50	50
Trailing Detector (ft)		0	0		0	0
Detector 1 Position(ft)		0	0		0	0
Detector 1 Size(ft)		50	50		50	50
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)		0.0	0.0		0.0	0.0
Detector 1 Queue (s)		0.0	0.0		0.0	0.0
Detector 1 Delay (s)		0.0	0.0		0.0	0.0
Turn Type		NA	NA		Prot	Perm
Protected Phases		2	6		4	
Permitted Phases						4
Detector Phase		2	6		4	4
Switch Phase						
Minimum Initial (s)		4.0	4.0		4.0	4.0
Minimum Split (s)		20.0	35.2		20.0	20.0

Lanes, Volumes, Timings
 1: Valencia Blvd & 5 Fwy SB Ramp

01/18/2024



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Total Split (s)		41.0	41.0		25.0	25.0
Total Split (%)		62.1%	62.1%		37.9%	37.9%
Maximum Green (s)		34.8	34.8		19.2	19.2
Yellow Time (s)		5.2	5.2		4.8	4.8
All-Red Time (s)		1.0	1.0		1.0	1.0
Lost Time Adjust (s)		-2.2	-2.2		-1.8	-1.8
Total Lost Time (s)		4.0	4.0		4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Recall Mode		C-Max	C-Max		Min	Min
Walk Time (s)			5.0			
Flash Dont Walk (s)			18.0			
Pedestrian Calls (#/hr)			0			
Act Effect Green (s)		44.8	44.8		13.2	13.2
Actuated g/C Ratio		0.68	0.68		0.20	0.20
v/c Ratio		0.18	0.49		0.45	0.25
Control Delay		4.3	2.7		24.9	7.9
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		4.3	2.7		24.9	7.9
LOS		A	A		C	A
Approach Delay		4.3	2.7		20.7	
Approach LOS		A	A		C	

Intersection Summary

Area Type: Other
 Cycle Length: 66
 Actuated Cycle Length: 66
 Offset: 14 (21%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.49
 Intersection Signal Delay: 6.6
 Intersection LOS: A
 Intersection Capacity Utilization 44.6%
 ICU Level of Service A
 Analysis Period (min) 15

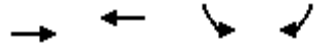
Splits and Phases: 1: Valencia Blvd & 5 Fwy SB Ramp



Queues

1: Valencia Blvd & 5 Fwy SB Ramp

01/18/2024














Lane Group	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	626	1154	310	101
v/c Ratio	0.18	0.49	0.45	0.25
Control Delay	4.3	2.7	24.9	7.9
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	4.3	2.7	24.9	7.9
Queue Length 50th (ft)	27	15	57	3
Queue Length 95th (ft)	48	91	84	35
Internal Link Dist (ft)	536	837	337	
Turn Bay Length (ft)				455
Base Capacity (vph)	3453	2378	1092	599
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.18	0.49	0.28	0.17
Intersection Summary				

Lanes, Volumes, Timings

2: 5 Fwy NB Ramp & Valencia Blvd

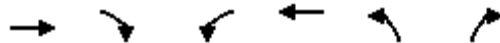
01/18/2024

						
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	791	38	121	1744	287	986
Future Volume (vph)	791	38	121	1744	287	986
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	12	12	12	12	14
Storage Length (ft)		0	200		220	220
Storage Lanes		0	2		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	0.97	0.86	0.97	0.88
Fr _t	0.993					0.850
Fl _t Protected			0.950		0.950	
Satd. Flow (prot)	5386	0	3433	6408	3433	2972
Fl _t Permitted			0.950		0.950	
Satd. Flow (perm)	5386	0	3433	6408	3433	2972
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	13					631
Link Speed (mph)	50			50	30	
Link Distance (ft)	917			476	493	
Travel Time (s)	12.5			6.5	11.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	860	41	132	1896	312	1072
Shared Lane Traffic (%)						
Lane Group Flow (vph)	901	0	132	1896	312	1072
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	24			24	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.92	1.00	1.00	1.00	1.00	0.92
Turning Speed (mph)		9	15		15	9
Number of Detectors	1		1	1	1	1
Detector Template						
Leading Detector (ft)	50		50	50	50	50
Trailing Detector (ft)	0		0	0	0	0
Detector 1 Position(ft)	0		0	0	0	0
Detector 1 Size(ft)	50		50	50	50	50
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0
Turn Type	NA		Prot	NA	Prot	Prot
Protected Phases	2		1	6	8	8
Permitted Phases						
Detector Phase	2		1	6	8	8
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	31.0		14.0	20.0	20.0	20.0

Lanes, Volumes, Timings

2: 5 Fwy NB Ramp & Valencia Blvd

01/18/2024

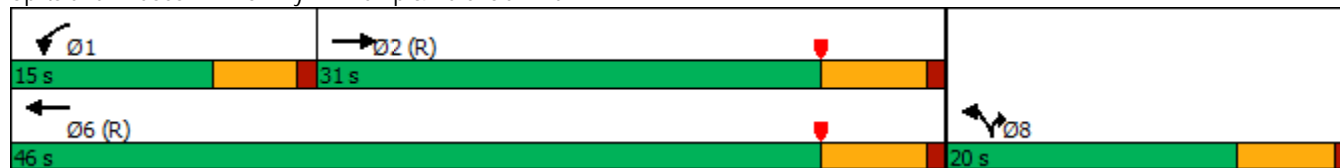


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Total Split (s)	31.0		15.0	46.0	20.0	20.0
Total Split (%)	47.0%		22.7%	69.7%	30.3%	30.3%
Maximum Green (s)	24.8		9.9	39.8	14.2	14.2
Yellow Time (s)	5.2		4.1	5.2	4.8	4.8
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-2.2		-1.1	-2.2	-1.8	-1.8
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max		None	C-Max	None	None
Walk Time (s)	5.0					
Flash Dont Walk (s)	24.0					
Pedestrian Calls (#/hr)	0					
Act Effect Green (s)	31.5		9.0	42.3	15.7	15.7
Actuated g/C Ratio	0.48		0.14	0.64	0.24	0.24
v/c Ratio	0.35		0.28	0.46	0.38	0.90
Control Delay	9.4		26.1	5.2	22.6	22.3
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	9.4		26.1	5.2	22.6	22.3
LOS	A		C	A	C	C
Approach Delay	9.4			6.5	22.4	
Approach LOS	A			A	C	

Intersection Summary

Area Type:	Other
Cycle Length:	66
Actuated Cycle Length:	66
Offset:	8 (12%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle:	65
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.90
Intersection Signal Delay:	12.2
Intersection LOS:	B
Intersection Capacity Utilization	57.3%
ICU Level of Service	B
Analysis Period (min)	15

Splits and Phases: 2: 5 Fwy NB Ramp & Valencia Blvd



Queues

2: 5 Fwy NB Ramp & Valencia Blvd

01/18/2024



Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	901	132	1896	312	1072
v/c Ratio	0.35	0.28	0.46	0.38	0.90
Control Delay	9.4	26.1	5.2	22.6	22.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	9.4	26.1	5.2	22.6	22.3
Queue Length 50th (ft)	82	28	96	54	96
Queue Length 95th (ft)	104	m38	65	86	#231
Internal Link Dist (ft)	837		396	413	
Turn Bay Length (ft)		200		220	220
Base Capacity (vph)	2580	572	4108	832	1198
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.35	0.23	0.46	0.38	0.89

Intersection Summary








































95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

Lanes, Volumes, Timings
3: McBean Pkwy & Valencia Blvd

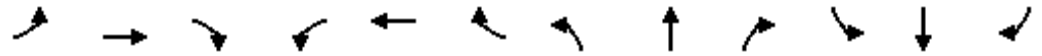
01/18/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	  		  	  		 	  	 	 	  	 
Traffic Volume (vph)	392	1075	124	353	1463	61	205	767	349	125	572	763
Future Volume (vph)	392	1075	124	353	1463	61	205	767	349	125	572	763
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	11	11	13	11	11	12	11	11	12
Storage Length (ft)	350		280	290		225	130		200	190		300
Storage Lanes	2		1	2		1	2		2	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	0.88	0.97	0.91	0.88
Fr _t			0.850			0.850			0.850			0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3319	4916	1583	3319	4916	1636	3319	4916	2787	3319	4916	2787
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3319	4916	1583	3319	4916	1636	3319	4916	2787	3319	4916	2787
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			74			70			152			120
Link Speed (mph)		50			50			45			45	
Link Distance (ft)		1919			721			765			966	
Travel Time (s)		26.2			9.8			11.6			14.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	426	1168	135	384	1590	66	223	834	379	136	622	829
Shared Lane Traffic (%)												
Lane Group Flow (vph)	426	1168	135	384	1590	66	223	834	379	136	622	829
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		22			22			22			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.00	1.04	1.04	0.96	1.04	1.04	1.00	1.04	1.04	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	1	6	7	5	2	3	7	4	5	3	8	1
Permitted Phases			6			2			4			8
Detector Phase	1	6	7	5	2	3	7	4	5	3	8	1
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	44.0	12.0	12.0	47.0	12.0	12.0	41.0	12.0	12.0	44.0	12.0

Queues

3: McBean Pkwy & Valencia Blvd

01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	426	1168	135	384	1590	66	223	834	379	136	622	829
v/c Ratio	0.68	0.60	0.16	0.73	0.88	0.08	0.66	0.73	0.32	0.44	0.57	0.64
Control Delay	53.1	33.0	4.3	25.6	14.7	0.1	66.6	50.8	10.3	39.1	59.4	64.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.1	33.0	4.3	25.6	14.7	0.1	66.6	50.8	10.3	39.1	59.4	64.3
Queue Length 50th (ft)	174	302	10	142	208	0	95	243	52	59	208	400
Queue Length 95th (ft)	m230	m361	m13	m130	m133	m0	140	277	69	95	250	473
Internal Link Dist (ft)		1839			641			685			886	
Turn Bay Length (ft)	350		280	290		225	130		200	190		300
Base Capacity (vph)	624	1943	830	528	1801	904	352	1377	1181	452	1526	1293
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.68	0.60	0.16	0.73	0.88	0.07	0.63	0.61	0.32	0.30	0.41	0.64

Intersection Summary

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

Lanes, Volumes, Timings
 4: McBean Parkway & Magic Mountain Pkwy

01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	425	444	56	62	463	144	65	1000	54	178	1430	659
Future Volume (vph)	425	444	56	62	463	144	65	1000	54	178	1430	659
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	16	12	12	14	11	11	16	11	11	16
Storage Length (ft)	360		360	210		0	175		175	300		340
Storage Lanes	1		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.91	1.00	0.97	0.86	1.00	0.97	0.86	1.00
Fr _t			0.850			0.850			0.850			0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	1794	3433	5085	1689	3319	6194	1794	3319	6194	1794
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1794	3433	5085	1689	3319	6194	1794	3319	6194	1794
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			99			157			198			631
Link Speed (mph)		50			45			45				50
Link Distance (ft)		809			1452			1622				1219
Travel Time (s)		11.0			22.0			24.6				16.6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	462	483	61	67	503	157	71	1087	59	193	1554	716
Shared Lane Traffic (%)												
Lane Group Flow (vph)	462	483	61	67	503	157	71	1087	59	193	1554	716
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			22				22
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	0.85	1.00	1.00	0.92	1.04	1.04	0.85	1.04	1.04	0.85
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			Free			Free
Detector Phase	5	2	2	1	6	6	3	8		7	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Minimum Split (s)	12.0	41.0	41.0	12.0	40.0	40.0	12.0	37.0		12.0	37.0	

Lanes, Volumes, Timings
 4: McBean Parkway & Magic Mountain Pkwy

01/18/2024

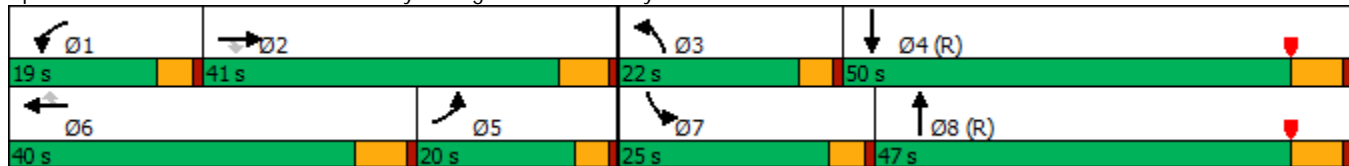


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	20.0	41.0	41.0	19.0	40.0	40.0	22.0	47.0		25.0	50.0	
Total Split (%)	15.2%	31.1%	31.1%	14.4%	30.3%	30.3%	16.7%	35.6%		18.9%	37.9%	
Maximum Green (s)	15.5	35.0	35.0	14.5	34.0	34.0	17.5	41.0		20.5	44.0	
Yellow Time (s)	3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.0		3.5	5.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	-0.5	-2.0	-2.0	-0.5	-2.0	-2.0	-0.5	-2.0		-0.5	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	Max	Max	None	Max	Max	None	C-Max		None	C-Max	
Walk Time (s)		5.0	5.0		5.0	5.0		5.0			5.0	
Flash Dont Walk (s)		30.0	30.0		29.0	29.0		26.0			26.0	
Pedestrian Calls (#/hr)		0	0		0	0		0			0	
Act Effect Green (s)	16.0	45.6	45.6	8.5	36.0	36.0	8.7	50.5	132.0	13.5	57.4	132.0
Actuated g/C Ratio	0.12	0.35	0.35	0.06	0.27	0.27	0.07	0.38	1.00	0.10	0.43	1.00
v/c Ratio	1.11	0.39	0.09	0.30	0.36	0.27	0.33	0.46	0.03	0.57	0.58	0.40
Control Delay	129.8	34.8	1.7	66.8	40.4	13.6	82.0	18.5	0.0	62.9	29.9	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	129.8	34.8	1.7	66.8	40.4	13.6	82.0	18.5	0.0	62.9	29.9	0.7
LOS	F	C	A	E	D	B	F	B	A	E	C	A
Approach Delay		76.4			37.1			21.3			24.0	
Approach LOS		E			D			C			C	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 28 (21%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow
 Natural Cycle: 105
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.11
 Intersection Signal Delay: 34.9
 Intersection LOS: C
 Intersection Capacity Utilization 58.5%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 4: McBean Parkway & Magic Mountain Pkwy



Queues

4: McBean Parkway & Magic Mountain Pkwy

01/18/2024

























Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	462	483	61	67	503	157	71	1087	59	193	1554	716
v/c Ratio	1.11	0.39	0.09	0.30	0.36	0.27	0.33	0.46	0.03	0.57	0.58	0.40
Control Delay	129.8	34.8	1.7	66.8	40.4	13.6	82.0	18.5	0.0	62.9	29.9	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	129.8	34.8	1.7	66.8	40.4	13.6	82.0	18.5	0.0	62.9	29.9	0.7
Queue Length 50th (ft)	~232	168	0	28	118	24	33	73	0	82	295	0
Queue Length 95th (ft)	#342	225	10	52	153	55	m53	121	m0	119	345	0
Internal Link Dist (ft)		729			1372			1542			1139	
Turn Bay Length (ft)	360		360	210			175		175	300		340
Base Capacity (vph)	416	1223	684	390	1386	574	452	2370	1794	528	2693	1794
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.11	0.39	0.09	0.17	0.36	0.27	0.16	0.46	0.03	0.37	0.58	0.40

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
5: Valencia Blvd & Magic Mountain Pkwy

01/18/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	185	244	43	179	404	47	44	957	103	24	1739	612
Future Volume (vph)	185	244	43	179	404	47	44	957	103	24	1739	612
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	13	12	11	12	11	11	14	12	11	11	12
Storage Length (ft)	310		0	250		200	180		200	190		190
Storage Lanes	1		0	2		0	1		1	1		2
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	0.95	0.97	0.95	0.95	1.00	0.91	1.00	1.00	0.91	0.88
Frt		0.977			0.984				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3319	3573	0	3319	3483	0	1711	5424	1583	1711	4916	2787
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3319	3573	0	3319	3483	0	1711	5424	1583	1711	4916	2787
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		16			10				112			444
Link Speed (mph)		45			45			45				45
Link Distance (ft)		1046			2748			1989				572
Travel Time (s)		15.8			41.6			30.1				8.7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	201	265	47	195	439	51	48	1040	112	26	1890	665
Shared Lane Traffic (%)												
Lane Group Flow (vph)	201	312	0	195	490	0	48	1040	112	26	1890	665
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		22			22			11				11
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.04	0.96	1.00	1.04	1.00	1.04	1.04	0.92	1.00	1.04	1.04	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Size(ft)	50	50		50	50		50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	3	8		7	4		1	6		5	2	3
Permitted Phases									6			2
Detector Phase	3	8		7	4		1	6	6	5	2	3
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	45.0		12.0	45.0		12.0	38.0	38.0	12.0	39.0	12.0

Lanes, Volumes, Timings
5: Valencia Blvd & Magic Mountain Pkwy

01/18/2024

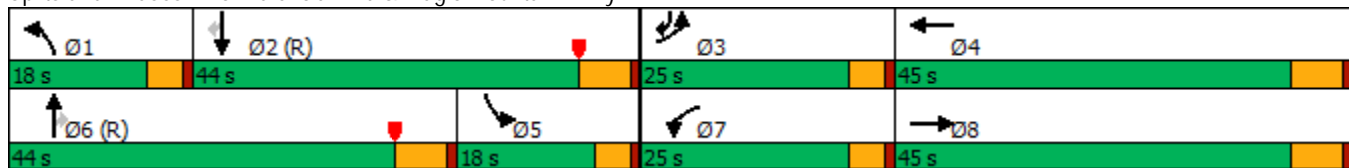


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	25.0	45.0		25.0	45.0		18.0	44.0	44.0	18.0	44.0	25.0
Total Split (%)	18.9%	34.1%		18.9%	34.1%		13.6%	33.3%	33.3%	13.6%	33.3%	18.9%
Maximum Green (s)	20.5	39.0		20.5	39.0		13.5	38.0	38.0	13.5	38.0	20.5
Yellow Time (s)	3.5	5.0		3.5	5.0		3.5	5.0	5.0	3.5	5.0	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-0.5	-2.0		-0.5	-2.0		-0.5	-2.0	0.0	-0.5	-2.0	-0.5
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	6.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lead	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Max		None	Max		None	C-Max	C-Max	Max	C-Max	None
Walk Time (s)		7.0			7.0			7.0	7.0		7.0	
Flash Dont Walk (s)		28.0			32.0			25.0	25.0		26.0	
Pedestrian Calls (#/hr)		0			0			0	0		0	
Act Effect Green (s)	15.1	48.4		13.6	46.9		9.6	40.0	38.0	14.0	46.5	65.5
Actuated g/C Ratio	0.11	0.37		0.10	0.36		0.07	0.30	0.29	0.11	0.35	0.50
v/c Ratio	0.53	0.24		0.57	0.39		0.39	0.63	0.21	0.14	1.09	0.41
Control Delay	52.3	30.9		95.6	15.3		47.8	39.4	10.0	42.0	76.4	3.7
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.3	30.9		95.6	15.3		47.8	39.4	10.0	42.0	76.4	3.7
LOS	D	C		F	B		D	D	A	D	E	A
Approach Delay		39.3			38.2			37.0			57.3	
Approach LOS		D			D			D			E	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 116 (88%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
 Natural Cycle: 110
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.09
 Intersection Signal Delay: 47.9
 Intersection LOS: D
 Intersection Capacity Utilization 64.5%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 5: Valencia Blvd & Magic Mountain Pkwy



Queues

5: Valencia Blvd & Magic Mountain Pkwy

01/18/2024



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	201	312	195	490	48	1040	112	26	1890	665
v/c Ratio	0.53	0.24	0.57	0.39	0.39	0.63	0.21	0.14	1.09	0.41
Control Delay	52.3	30.9	95.6	15.3	47.8	39.4	10.0	42.0	76.4	3.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.3	30.9	95.6	15.3	47.8	39.4	10.0	42.0	76.4	3.7
Queue Length 50th (ft)	90	99	88	54	39	315	35	16	~674	33
Queue Length 95th (ft)	118	141	130	234	m66	371	75	m20	m#715	m26
Internal Link Dist (ft)		966		2668		1909			492	
Turn Bay Length (ft)	310		250		180		200	190		190
Base Capacity (vph)	528	1321	528	1244	181	1643	535	181	1730	1712
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.38	0.24	0.37	0.39	0.27	0.63	0.21	0.14	1.09	0.39

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings

6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy

01/18/2024



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	93	333	338	1213	1581	153
Future Volume (vph)	93	333	338	1213	1581	153
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	265	265	260			270
Storage Lanes	1	1	2			1
Taper Length (ft)	25		25			
Lane Util. Factor	0.97	0.88	0.97	0.91	0.95	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3433	2787	3433	5085	3539	1583
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	3433	2787	3433	5085	3539	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		14				115
Link Speed (mph)	45			50	45	
Link Distance (ft)	2748			2280	1194	
Travel Time (s)	41.6			31.1	18.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	101	362	367	1318	1718	166
Shared Lane Traffic (%)						
Lane Group Flow (vph)	101	362	367	1318	1718	166
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	34			24	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	1	1	1
Detector Template						
Leading Detector (ft)	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	pt+ov	custom	NA	NA	Perm
Protected Phases	8	8 1	1	6	2	
Permitted Phases			1			2
Detector Phase	8	8 1	1	6	2	2
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	20.0		20.0	20.0	41.0	41.0
Total Split (s)	34.0		30.0	98.0	68.0	68.0

Lanes, Volumes, Timings

6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy

01/18/2024

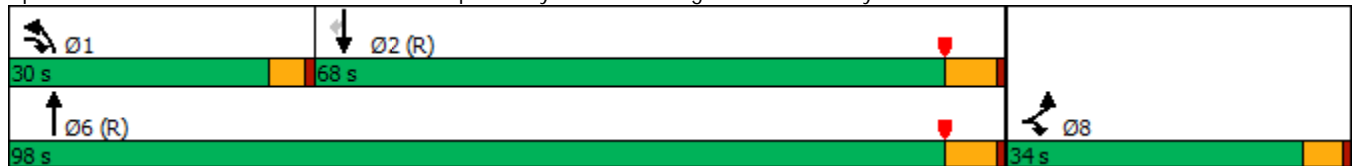


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Total Split (%)	25.8%		22.7%	74.2%	51.5%	51.5%
Maximum Green (s)	29.0		25.5	92.0	62.0	62.0
Yellow Time (s)	4.0		3.5	5.0	5.0	5.0
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0		-0.5	-2.0	-2.0	-2.0
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	Max		Min	C-Min	C-Min	C-Min
Walk Time (s)					7.0	7.0
Flash Dont Walk (s)					28.0	28.0
Pedestrian Calls (#/hr)					0	0
Act Effect Green (s)	30.0	54.4	20.4	94.0	69.6	69.6
Actuated g/C Ratio	0.23	0.41	0.15	0.71	0.53	0.53
v/c Ratio	0.13	0.31	0.69	0.36	0.92	0.19
Control Delay	30.5	18.8	59.5	7.7	37.1	6.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.5	18.8	59.5	7.7	37.1	6.5
LOS	C	B	E	A	D	A
Approach Delay	21.3			19.0	34.4	
Approach LOS	C			B	C	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 77 (58%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
 Natural Cycle: 85
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.92
 Intersection Signal Delay: 26.4
 Intersection LOS: C
 Intersection Capacity Utilization 66.7%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy



Queues

6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy

01/18/2024



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	101	362	367	1318	1718	166
v/c Ratio	0.13	0.31	0.69	0.36	0.92	0.19
Control Delay	30.5	18.8	59.5	7.7	37.1	6.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.5	18.8	59.5	7.7	37.1	6.5
Queue Length 50th (ft)	42	139	155	144	825	26
Queue Length 95th (ft)	63	179	198	168	#972	m43
Internal Link Dist (ft)	2668		2200		1114	
Turn Bay Length (ft)	265	265	260			270
Base Capacity (vph)	780	1274	676	3621	1864	888
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.28	0.54	0.36	0.92	0.19

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

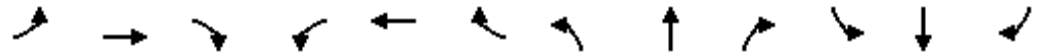
Queue shown is maximum after two cycles.

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

Lanes, Volumes, Timings

7: Bouquet Canyon Rd & Valencia Blvd/Soledad Canyon Rd

01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔↔	↑↑↑	↔	↔↔↔	↑↑↑	↔	↔	↑↑↑	↔	↔↔	↑↑↑	↔↔
Traffic Volume (vph)	392	758	23	562	1467	290	23	710	425	333	1246	1063
Future Volume (vph)	392	758	23	562	1467	290	23	710	425	333	1246	1063
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	10	10	11	11	11	11	10	10	11
Storage Length (ft)	360		0	330		330	250		0	435		400
Storage Lanes	2		1	3		1	1		1	2		2
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.94	0.91	1.00	0.94	0.91	1.00	1.00	0.91	1.00	0.97	0.91	0.88
Fr _t			0.850			0.850			0.850			0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	4824	4916	1583	4658	4746	1531	1711	4916	1531	3204	4746	2694
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	4824	4916	1583	4658	4746	1531	1711	4916	1531	3204	4746	2694
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			161			99			462			453
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		2282			2858			2196			1054	
Travel Time (s)		34.6			43.3			33.3			12.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	426	824	25	611	1595	315	25	772	462	362	1354	1155
Shared Lane Traffic (%)												
Lane Group Flow (vph)	426	824	25	611	1595	315	25	772	462	362	1354	1155
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		33			33			20			20	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.00	1.09	1.09	1.04	1.04	1.04	1.04	1.09	1.09	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Free	Prot	NA	pm+ov
Protected Phases	7	4		3	8	1	5	2		1	6	7
Permitted Phases			4			8			Free			6
Detector Phase	7	4	4	3	8	1	5	2		1	6	7
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	12.0	44.0	44.0	12.0	48.0	12.0	12.0	46.0		12.0	44.0	12.0

Queues

7: Bouquet Canyon Rd & Valencia Blvd/Soledad Canyon Rd

01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	426	824	25	611	1595	315	25	772	462	362	1354	1155
v/c Ratio	0.57	0.74	0.05	0.54	1.07	0.44	0.24	0.55	0.30	0.93	0.75	0.67
Control Delay	29.7	18.6	0.2	45.8	85.1	15.4	59.1	37.7	0.8	61.3	21.3	11.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.7	18.6	0.2	45.8	85.1	15.4	59.1	37.7	0.8	61.3	21.3	11.1
Queue Length 50th (ft)	37	57	0	193	-587	113	21	209	7	167	365	444
Queue Length 95th (ft)	76	68	m0	239	#687	170	51	254	20	m#212	436	536
Internal Link Dist (ft)		2202			2778			2116			974	
Turn Bay Length (ft)	360			330		330	250			435		400
Base Capacity (vph)	804	1303	516	1126	1495	723	194	1415	1531	388	1805	1746
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.63	0.05	0.54	1.07	0.44	0.13	0.55	0.30	0.93	0.75	0.66

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
 8: Bouquet Canyon Rd & Newhall Ranch Rd

01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	270	798	337	456	1778	457	392	829	162	450	1920	533
Future Volume (vph)	270	798	337	456	1778	457	392	829	162	450	1920	533
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	290		265	410		410	475		230	260		150
Storage Lanes	3		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.94	0.86	1.00	0.97	0.86	1.00	0.97	0.86	1.00	0.97	0.86	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	4990	6408	1583	3433	6408	1583	3433	6408	1583	3433	6408	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	4990	6408	1583	3433	6408	1583	3433	6408	1583	3433	6408	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			107			326			182			112
Link Speed (mph)		45		45			45			45		45
Link Distance (ft)		870		2469			1012			1082		
Travel Time (s)		13.2		37.4			15.3			16.4		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	293	867	366	496	1933	497	426	901	176	489	2087	579
Shared Lane Traffic (%)												
Lane Group Flow (vph)	293	867	366	496	1933	497	426	901	176	489	2087	579
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		36		36			24			24		
Link Offset(ft)		0		0			0			0		
Crosswalk Width(ft)		16		16			16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	3	8	1	7	4		1	6		5	2	3
Permitted Phases			8			4			6			2
Detector Phase	3	8	1	7	4	4	1	6	6	5	2	3
Switch Phase												
Minimum Initial (s)	4.0	5.0	4.0	4.0	5.0	5.0	4.0	10.0	10.0	4.0	10.0	4.0
Minimum Split (s)	12.0	43.0	12.0	12.0	43.0	43.0	12.0	49.0	49.0	12.0	50.0	12.0
Total Split (s)	21.0	36.0	22.0	21.0	36.0	36.0	22.0	45.0	45.0	30.0	53.0	21.0

Lanes, Volumes, Timings
8: Bouquet Canyon Rd & Newhall Ranch Rd

01/18/2024

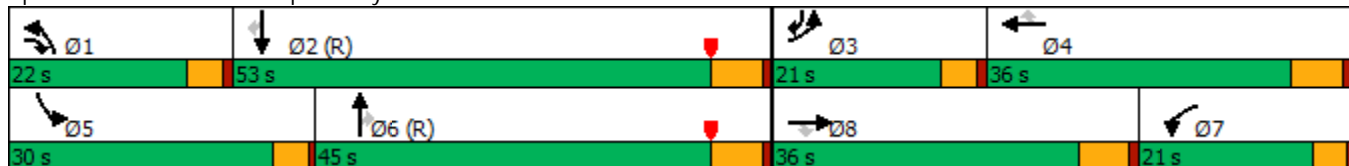


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	15.9%	27.3%	16.7%	15.9%	27.3%	27.3%	16.7%	34.1%	34.1%	22.7%	40.2%	15.9%
Maximum Green (s)	16.5	30.0	17.5	17.0	30.0	30.0	17.5	39.0	39.0	26.0	47.0	16.5
Yellow Time (s)	3.5	5.0	3.5	3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.0	3.5
All-Red Time (s)	1.0	1.0	1.0	0.5	1.0	1.0	1.0	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	-0.5	-2.0	-0.5	-0.5	-2.0	-2.0	-0.5	-2.0	-2.0	-0.5	-2.0	-0.5
Total Lost Time (s)	4.0	4.0	4.0	3.5	4.0	4.0	4.0	4.0	4.0	3.5	4.0	4.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes		Yes	Yes			Yes			Yes		Yes
Vehicle Extension (s)	3.0	5.5	3.0	3.0	5.5	5.5	3.0	5.5	5.5	3.0	5.5	3.0
Minimum Gap (s)	3.0	2.5	3.0	3.0	2.5	2.5	3.0	4.5	4.5	3.0	4.5	3.0
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	10.0	0.0	10.0	0.0
Time To Reduce (s)	0.0	24.0	0.0	0.0	24.0	24.0	0.0	10.0	10.0	0.0	10.0	0.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	None
Walk Time (s)		5.0			5.0	5.0		5.0	5.0		5.0	
Flash Dont Walk (s)		32.0			32.0	32.0		38.0	38.0		39.0	
Pedestrian Calls (#/hr)		2			2	2		1	1		1	
Act Effect Green (s)	14.4	27.9	45.9	21.6	34.6	34.6	18.0	43.8	43.8	23.7	49.0	67.4
Actuated g/C Ratio	0.11	0.21	0.35	0.16	0.26	0.26	0.14	0.33	0.33	0.18	0.37	0.51
v/c Ratio	0.54	0.64	0.59	0.88	1.15	0.76	0.91	0.42	0.27	0.80	0.88	0.67
Control Delay	59.1	49.6	17.6	68.4	116.2	23.8	72.6	51.9	20.0	61.8	43.9	23.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.1	49.6	17.6	68.4	116.2	23.8	72.6	51.9	20.0	61.8	43.9	23.1
LOS	E	D	B	E	F	C	E	D	B	E	D	C
Approach Delay		43.7			92.4			54.1			42.9	
Approach LOS		D			F			D			D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 105 (80%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
 Natural Cycle: 130
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.15
 Intersection Signal Delay: 60.8
 Intersection LOS: E
 Intersection Capacity Utilization 83.2%
 ICU Level of Service E
 Analysis Period (min) 15

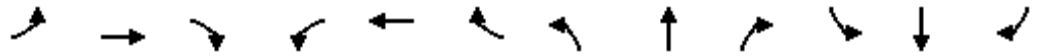
Splits and Phases: 8: Bouquet Canyon Rd & Newhall Ranch Rd



Queues

8: Bouquet Canyon Rd & Newhall Ranch Rd

01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	293	867	366	496	1933	497	426	901	176	489	2087	579
v/c Ratio	0.54	0.64	0.59	0.88	1.15	0.76	0.91	0.42	0.27	0.80	0.88	0.67
Control Delay	59.1	49.6	17.6	68.4	116.2	23.8	72.6	51.9	20.0	61.8	43.9	23.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.1	49.6	17.6	68.4	116.2	23.8	72.6	51.9	20.0	61.8	43.9	23.1
Queue Length 50th (ft)	85	198	114	210	-564	125	169	222	44	207	480	292
Queue Length 95th (ft)	115	227	181	#357	#674	272	#275	262	103	264	532	410
Internal Link Dist (ft)		790			2389			932			1002	
Turn Bay Length (ft)	290		265	410		410	475		230	260		150
Base Capacity (vph)	642	1553	620	562	1679	655	468	2127	647	689	2378	892
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.46	0.56	0.59	0.88	1.15	0.76	0.91	0.42	0.27	0.71	0.88	0.65

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Lanes, Volumes, Timings
9: Commuter Way & Soledad Cyn

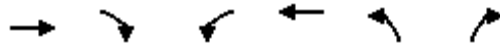
01/18/2024

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↗	↙	↑↑↑	↖↖	
Traffic Volume (vph)	1362	40	11	2325	45	19
Future Volume (vph)	1362	40	11	2325	45	19
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		150	285		0	0
Storage Lanes		1	1		2	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	1.00	1.00	0.91	0.97	0.95
Frt		0.850			0.955	
Flt Protected			0.950		0.966	
Satd. Flow (prot)	5085	1583	1770	5085	3334	0
Flt Permitted			0.950		0.966	
Satd. Flow (perm)	5085	1583	1770	5085	3334	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		33			21	
Link Speed (mph)	50			50	30	
Link Distance (ft)	928			2825	392	
Travel Time (s)	12.7			38.5	8.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1480	43	12	2527	49	21
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1480	43	12	2527	70	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	1	1	1	1	1	
Detector Template						
Leading Detector (ft)	50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	
Turn Type	NA	Perm	Prot	NA	Prot	
Protected Phases	2		1	6	8	
Permitted Phases		2				
Detector Phase	2	2	1	6	8	
Switch Phase						
Minimum Initial (s)	10.0	10.0	4.0	10.0	4.0	
Minimum Split (s)	26.0	26.0	12.0	22.0	37.0	
Total Split (s)	75.0	75.0	20.0	95.0	37.0	

Lanes, Volumes, Timings

9: Commuter Way & Soledad Cyn

01/18/2024

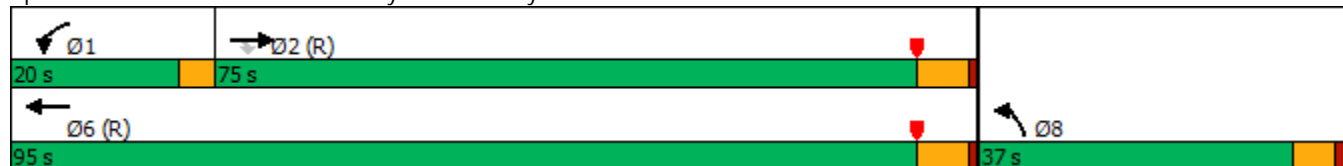


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Total Split (%)	56.8%	56.8%	15.2%	72.0%	28.0%	
Maximum Green (s)	69.0	69.0	16.5	89.0	31.0	
Yellow Time (s)	5.0	5.0	3.5	5.0	4.0	
All-Red Time (s)	1.0	1.0	0.0	1.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	0.5	-2.0	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Vehicle Extension (s)	5.0	5.0	1.5	5.0	2.0	
Minimum Gap (s)	4.0	4.0	1.5	4.0	2.0	
Time Before Reduce (s)	15.0	15.0	0.0	15.0	0.0	
Time To Reduce (s)	15.0	15.0	0.0	15.0	0.0	
Recall Mode	C-Max	C-Max	None	C-Max	None	
Walk Time (s)	7.0	7.0			7.0	
Flash Dont Walk (s)	13.0	13.0			24.0	
Pedestrian Calls (#/hr)	0	0			0	
Act Effect Green (s)	114.6	114.6	4.5	118.4	8.5	
Actuated g/C Ratio	0.87	0.87	0.03	0.90	0.06	
v/c Ratio	0.34	0.03	0.20	0.55	0.30	
Control Delay	0.8	0.1	80.4	1.4	45.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	0.8	0.1	80.4	1.4	45.2	
LOS	A	A	F	A	D	
Approach Delay	0.8			1.8	45.2	
Approach LOS	A			A	D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 16 (12%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Natural Cycle: 80
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.55
 Intersection Signal Delay: 2.2
 Intersection LOS: A
 Intersection Capacity Utilization 54.9%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 9: Commuter Way & Soledad Cyn



Queues

9: Commuter Way & Soledad Cyn

01/18/2024



Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Group Flow (vph)	1480	43	12	2527	70
v/c Ratio	0.34	0.03	0.20	0.55	0.30
Control Delay	0.8	0.1	80.4	1.4	45.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	0.8	0.1	80.4	1.4	45.2
Queue Length 50th (ft)	14	0	11	13	21
Queue Length 95th (ft)	32	0	m19	21	45
Internal Link Dist (ft)	848			2745	312
Turn Bay Length (ft)		150	285		
Base Capacity (vph)	4416	1379	214	4562	849
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.34	0.03	0.06	0.55	0.08

Intersection Summary

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

Lanes, Volumes, Timings
 10: Soledad Cyn/Soledad Cyn Rd & Valley Center

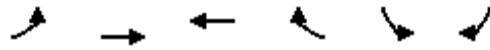
01/18/2024



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø4
Lane Configurations	↖↖	↑↑↑	↑↑↑	↗	↖↖	↗	
Traffic Volume (vph)	97	902	1816	925	575	190	
Future Volume (vph)	97	902	1816	925	575	190	
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	250			310	235	0	
Storage Lanes	2			1	1	1	
Taper Length (ft)	25				25		
Lane Util. Factor	0.97	0.91	0.91	1.00	0.97	1.00	
Frt				0.850		0.850	
Flt Protected	0.950				0.950		
Satd. Flow (prot)	3433	5085	5085	1583	3433	1583	
Flt Permitted	0.950				0.950		
Satd. Flow (perm)	3433	5085	5085	1583	3433	1583	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)				508		207	
Link Speed (mph)		50	50		30		
Link Distance (ft)		2935	1764		1172		
Travel Time (s)		40.0	24.1		26.6		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	105	980	1974	1005	625	207	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	105	980	1974	1005	625	207	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Left	Left	Right	Left	Right	
Median Width(ft)		24	24		24		
Link Offset(ft)		0	0		0		
Crosswalk Width(ft)		16	16		16		
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (mph)	15			9	15	9	
Number of Detectors	1	1	1	1	1	1	
Detector Template							
Leading Detector (ft)	50	50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Turn Type	Prot	NA	NA	Free	Prot	pt+ov	
Protected Phases	5	2	6		3	3 5	4
Permitted Phases				Free			
Detector Phase	5	2	6		3	3 5	
Switch Phase							
Minimum Initial (s)	4.0	4.0	4.0		4.0		4.0
Minimum Split (s)	20.0	22.0	29.0		20.0		35.0
Total Split (s)	20.0	72.0	52.0		25.0		35.0

Lanes, Volumes, Timings
 10: Soledad Cyn/Soledad Cyn Rd & Valley Center

01/18/2024

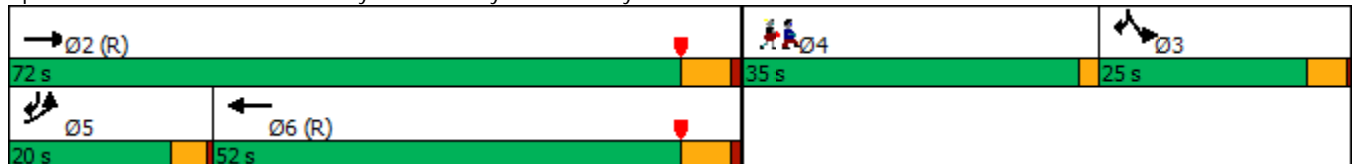


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø4
Total Split (%)	15.2%	54.5%	39.4%		18.9%		27%
Maximum Green (s)	16.0	66.0	46.0		20.5		33.0
Yellow Time (s)	3.5	5.0	5.0		4.0		2.0
All-Red Time (s)	0.5	1.0	1.0		0.5		0.0
Lost Time Adjust (s)	0.0	-2.0	-2.0		-0.5		
Total Lost Time (s)	4.0	4.0	4.0		4.0		
Lead/Lag	Lead		Lag		Lag		Lead
Lead-Lag Optimize?	Yes		Yes		Yes		Yes
Vehicle Extension (s)	3.0	3.0	3.0		3.0		0.2
Recall Mode	None	C-Max	C-Max		None		None
Walk Time (s)			7.0				7.0
Flash Dont Walk (s)			16.0				26.0
Pedestrian Calls (#/hr)			0				0
Act Effct Green (s)	9.4	87.1	73.7	132.0	36.9	50.3	
Actuated g/C Ratio	0.07	0.66	0.56	1.00	0.28	0.38	
v/c Ratio	0.43	0.29	0.70	0.63	0.65	0.28	
Control Delay	46.6	18.4	6.4	6.7	29.9	1.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	46.6	18.4	6.4	6.7	29.9	1.7	
LOS	D	B	A	A	C	A	
Approach Delay		21.2	6.5		22.9		
Approach LOS		C	A		C		

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 37 (28%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Natural Cycle: 135
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.70
 Intersection Signal Delay: 12.5
 Intersection LOS: B
 Intersection Capacity Utilization 64.6%
 ICU Level of Service C
 Analysis Period (min) 15

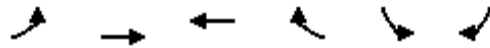
Splits and Phases: 10: Soledad Cyn/Soledad Cyn Rd & Valley Center



Queues

10: Soledad Cyn/Soledad Cyn Rd & Valley Center

01/18/2024



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	105	980	1974	1005	625	207
v/c Ratio	0.43	0.29	0.70	0.63	0.65	0.28
Control Delay	46.6	18.4	6.4	6.7	29.9	1.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.6	18.4	6.4	6.7	29.9	1.7
Queue Length 50th (ft)	44	212	39	427	154	4
Queue Length 95th (ft)	75	247	m47	m460	247	9
Internal Link Dist (ft)		2855	1684		1092	
Turn Bay Length (ft)	250			310	235	
Base Capacity (vph)	416	3356	2839	1583	959	799
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.29	0.70	0.63	0.65	0.26

Intersection Summary

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

Lanes, Volumes, Timings
 11: Golden Valley Road & Valley Center Drive

01/18/2024



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4	Ø5	Ø12
Lane Configurations									
Traffic Volume (vph)	799	266	307	842	1052	487			
Future Volume (vph)	799	266	307	842	1052	487			
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900			
Storage Length (ft)	260	260	290			150			
Storage Lanes	2	1	2			1			
Taper Length (ft)	25		25						
Lane Util. Factor	0.94	0.88	0.97	0.91	0.91	1.00			
Frt		0.850				0.850			
Flt Protected	0.950		0.950						
Satd. Flow (prot)	4990	2787	3433	5085	5085	1583			
Flt Permitted	0.950		0.950						
Satd. Flow (perm)	4990	2787	3433	5085	5085	1583			
Right Turn on Red		Yes				Yes			
Satd. Flow (RTOR)		289				338			
Link Speed (mph)	30			50	50				
Link Distance (ft)	513			2601	1605				
Travel Time (s)	11.7			35.5	21.9				
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92			
Adj. Flow (vph)	868	289	334	915	1143	529			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	868	289	334	915	1143	529			
Enter Blocked Intersection	No	No	No	No	No	No			
Lane Alignment	Left	Right	Left	Left	Left	Right			
Median Width(ft)	36			24	24				
Link Offset(ft)	0			0	0				
Crosswalk Width(ft)	16			16	16				
Two way Left Turn Lane									
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00			
Turning Speed (mph)	15	9	15			9			
Number of Detectors	1	1	1	1	1	1			
Detector Template									
Leading Detector (ft)	50	50	50	50	50	50			
Trailing Detector (ft)	0	0	0	0	0	0			
Detector 1 Position(ft)	0	0	0	0	0	0			
Detector 1 Size(ft)	50	50	50	50	50	50			
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel									
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Turn Type	Prot	pt+ov	Prot	NA	NA	Perm			
Protected Phases	3	5 12	5 12	2	6		4	5	12
Permitted Phases						6			
Detector Phase	3	5 12	5 12	2	6	6			
Switch Phase									
Minimum Initial (s)	3.0			10.0	10.0	10.0	4.0	4.0	4.0
Minimum Split (s)	25.0			30.0	40.0	40.0	35.0	15.0	20.0
Total Split (s)	30.0			67.0	42.0	42.0	35.0	25.0	35.0

Lanes, Volumes, Timings
 11: Golden Valley Road & Valley Center Drive

01/18/2024

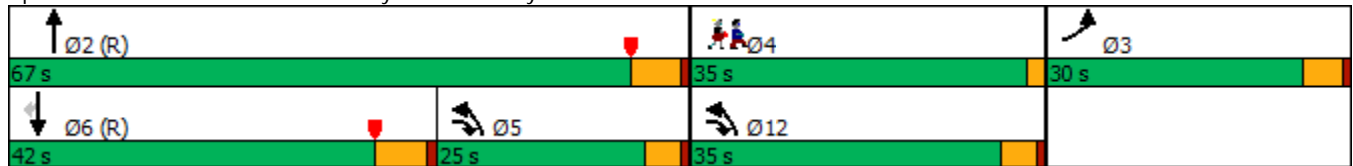


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4	Ø5	Ø12
Total Split (%)	22.7%			50.8%	31.8%	31.8%	27%	19%	27%
Maximum Green (s)	25.0			61.0	36.0	36.0	33.0	20.5	30.5
Yellow Time (s)	4.0			5.0	5.0	5.0	2.0	3.5	3.5
All-Red Time (s)	1.0			1.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)	-1.0			-2.0	-2.0	-2.0			
Total Lost Time (s)	4.0			4.0	4.0	4.0			
Lead/Lag					Lead	Lead		Lag	
Lead-Lag Optimize?					Yes	Yes		Yes	
Vehicle Extension (s)	3.0			3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None			C-Min	C-Min	C-Min	None	None	None
Walk Time (s)					7.0	7.0	7.0		5.0
Flash Dont Walk (s)					24.0	24.0	26.0		10.0
Pedestrian Calls (#/hr)					0	0	0		0
Act Effect Green (s)	30.5	28.6	28.6	82.3	60.9	60.9			
Actuated g/C Ratio	0.23	0.22	0.22	0.62	0.46	0.46			
v/c Ratio	0.75	0.35	0.45	0.29	0.49	0.58			
Control Delay	43.8	5.9	38.8	4.5	17.6	11.9			
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0			
Total Delay	43.8	5.9	38.8	4.5	17.6	11.9			
LOS	D	A	D	A	B	B			
Approach Delay	34.3			13.7	15.8				
Approach LOS	C			B	B				

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 26 (20%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 115
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.75
 Intersection Signal Delay: 20.4
 Intersection LOS: C
 Intersection Capacity Utilization 54.3%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 11: Golden Valley Road & Valley Center Drive



Queues

11: Golden Valley Road & Valley Center Drive

01/18/2024

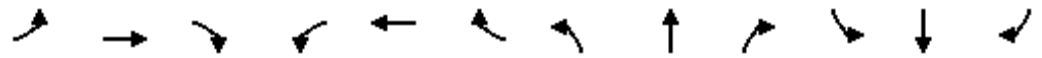


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	868	289	334	915	1143	529
v/c Ratio	0.75	0.35	0.45	0.29	0.49	0.58
Control Delay	43.8	5.9	38.8	4.5	17.6	11.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.8	5.9	38.8	4.5	17.6	11.9
Queue Length 50th (ft)	271	12	146	35	162	113
Queue Length 95th (ft)	273	27	196	40	189	286
Internal Link Dist (ft)	433			2521	1525	
Turn Bay Length (ft)	260	260	290			150
Base Capacity (vph)	1159	1265	1341	3169	2344	912
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.75	0.23	0.25	0.29	0.49	0.58

Intersection Summary

Lanes, Volumes, Timings
12: Ruther Ave & Soledad Cyn Rd

01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	71	1157	95	211	2578	18	258	138	97	83	96	70
Future Volume (vph)	71	1157	95	211	2578	18	258	138	97	83	96	70
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	285		300	250		0	0		0	125		0
Storage Lanes	1		1	2		0	1		2	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	0.91	0.95	0.95	0.88	0.95	0.95	1.00
Frt			0.850		0.999				0.850		0.937	
Flt Protected	0.950			0.950			0.950	0.978		0.950		
Satd. Flow (prot)	1770	5085	1583	3433	5080	0	1681	1731	2787	1681	1658	0
Flt Permitted	0.950			0.950			0.950	0.978		0.950		
Satd. Flow (perm)	1770	5085	1583	3433	5080	0	1681	1731	2787	1681	1658	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			103		1				105		23	
Link Speed (mph)		50		50				40			30	
Link Distance (ft)		1764		2200				220			327	
Travel Time (s)		24.1		30.0				3.8			7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	77	1258	103	229	2802	20	280	150	105	90	104	76
Shared Lane Traffic (%)							42%			0%		
Lane Group Flow (vph)	77	1258	103	229	2822	0	162	268	105	90	180	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24		24				12			12	
Link Offset(ft)		0		0				0			0	
Crosswalk Width(ft)		16		16				16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1	1	1	1	
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50		50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	pt+ov	Split	NA	
Protected Phases	1	6		5	2		3	3	3 5	4	4	
Permitted Phases			6									
Detector Phase	1	6	6	5	2		3	3	3 5	4	4	
Switch Phase												
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	12.0	42.0	42.0	12.0	27.0		35.0	35.0		15.0	15.0	
Total Split (s)	18.0	52.0	52.0	30.0	64.0		30.0	30.0		20.0	20.0	

Lanes, Volumes, Timings
12: Ruther Ave & Soledad Cyn Rd

01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	13.6%	39.4%	39.4%	22.7%	48.5%		22.7%	22.7%		15.2%	15.2%	
Maximum Green (s)	14.0	46.0	46.0	26.0	58.0		27.0	27.0		15.5	15.5	
Yellow Time (s)	3.5	5.0	5.0	3.5	5.0		3.0	3.0		3.5	3.5	
All-Red Time (s)	0.5	1.0	1.0	0.5	1.0		0.0	0.0		1.0	1.0	
Lost Time Adjust (s)	0.0	-2.0	-2.0	0.0	-2.0		1.0	1.0		-0.5	-0.5	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	4.5	4.5	1.5	4.5		3.0	3.0		3.0	3.0	
Minimum Gap (s)	1.5	3.0	3.0	1.5	3.0		3.0	3.0		3.0	3.0	
Time Before Reduce (s)	0.0	7.5	7.5	0.0	7.5		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	22.5	22.5	0.0	22.5		0.0	0.0		0.0	0.0	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None		None	None	
Walk Time (s)		7.0	7.0		7.0		5.0	5.0				
Flash Dont Walk (s)		25.0	25.0		11.0		27.0	27.0				
Pedestrian Calls (#/hr)		0	0		0		0	0				
Act Effect Green (s)	9.6	64.5	64.5	12.7	69.4		23.2	23.2	35.9	15.6	15.6	
Actuated g/C Ratio	0.07	0.49	0.49	0.10	0.53		0.18	0.18	0.27	0.12	0.12	
v/c Ratio	0.60	0.51	0.12	0.69	1.06		0.55	0.88	0.13	0.45	0.83	
Control Delay	93.9	8.3	1.0	68.7	66.2		56.4	81.5	3.8	61.9	79.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	93.9	8.3	1.0	68.7	66.2		56.4	81.5	3.8	61.9	79.7	
LOS	F	A	A	E	E		E	F	A	E	E	
Approach Delay		12.3			66.4			58.7			73.8	
Approach LOS		B			E			E			E	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
 Natural Cycle: 145
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.06
 Intersection Signal Delay: 51.3
 Intersection LOS: D
 Intersection Capacity Utilization 85.2%
 ICU Level of Service E
 Analysis Period (min) 15

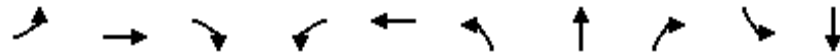
Splits and Phases: 12: Ruther Ave & Soledad Cyn Rd



Queues

12: Ruther Ave & Soledad Cyn Rd

01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	77	1258	103	229	2822	162	268	105	90	180
v/c Ratio	0.60	0.51	0.12	0.69	1.06	0.55	0.88	0.13	0.45	0.83
Control Delay	93.9	8.3	1.0	68.7	66.2	56.4	81.5	3.8	61.9	79.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	93.9	8.3	1.0	68.7	66.2	56.4	81.5	3.8	61.9	79.7
Queue Length 50th (ft)	66	161	1	99	~1034	131	233	0	75	140
Queue Length 95th (ft)	m111	201	m6	139	#1175	208	#369	16	136	#272
Internal Link Dist (ft)		1684			2120		140			247
Turn Bay Length (ft)	285		300	250					125	
Base Capacity (vph)	187	2484	826	676	2672	331	340	1161	207	224
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.41	0.51	0.12	0.34	1.06	0.49	0.79	0.09	0.43	0.80

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
 13: Golden Valley Road & Centre Pointe Parkway

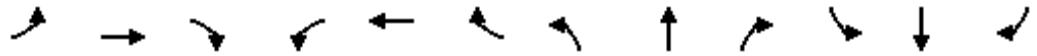
01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	72	163	256	101	66	359	1022	354	136	1114	130
Future Volume (vph)	49	72	163	256	101	66	359	1022	354	136	1114	130
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		260	150		250	375		300	700		0
Storage Lanes	1		1	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	0.91	1.00	0.95	1.00
Frt			0.850		0.941			0.961				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	3433	1753	0	1770	4887	0	1770	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1863	1583	3433	1753	0	1770	4887	0	1770	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			103		25			65				136
Link Speed (mph)		30			30			50				50
Link Distance (ft)		1149			802			7898				1445
Travel Time (s)		26.1			18.2			107.7				19.7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	53	78	177	278	110	72	390	1111	385	148	1211	141
Shared Lane Traffic (%)												
Lane Group Flow (vph)	53	78	177	278	182	0	390	1496	0	148	1211	141
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1		1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50		50	50	50
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Size(ft)	50	50	50	50	50		50	50		50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Turn Type	Prot	NA	pm+ov	Prot	NA		Prot	NA		Prot	NA	Perm
Protected Phases	3	8	5	7	4		5	2		1	6	
Permitted Phases			8									6
Detector Phase	3	8	5	7	4		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	4.0	6.0	4.0	4.0	6.0		4.0	10.0		4.0	10.0	10.0
Minimum Split (s)	12.0	25.0	20.0	20.0	39.0		20.0	33.0		15.0	34.0	34.0
Total Split (s)	19.0	25.0	33.0	34.0	40.0		33.0	40.0		33.0	40.0	40.0

Lanes, Volumes, Timings
 13: Golden Valley Road & Centre Pointe Parkway

01/18/2024

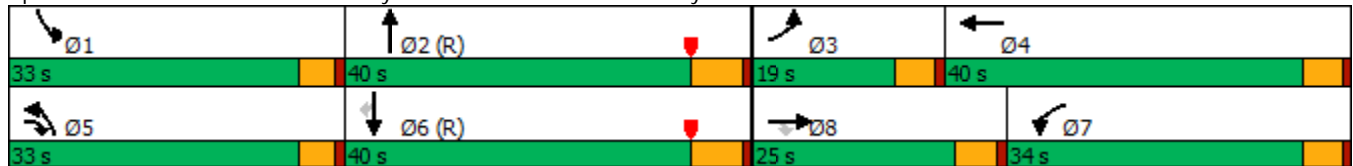


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	14.4%	18.9%	25.0%	25.8%	30.3%		25.0%	30.3%		25.0%	30.3%	30.3%
Maximum Green (s)	14.0	20.0	28.5	29.0	35.0		28.5	34.0		28.5	34.0	34.0
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0		3.5	5.0		3.5	5.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	-1.0	-1.0	-0.5	-1.0	-1.0		-0.5	-2.0		-0.5	-2.0	-2.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Min		None	C-Min	C-Min
Walk Time (s)					7.0			7.0			7.0	7.0
Flash Dont Walk (s)					27.0			20.0			21.0	21.0
Pedestrian Calls (#/hr)					0			0			0	0
Act Effct Green (s)	10.3	11.9	48.6	17.5	18.8		38.3	72.1		16.8	50.7	50.7
Actuated g/C Ratio	0.08	0.09	0.37	0.13	0.14		0.29	0.55		0.13	0.38	0.38
v/c Ratio	0.38	0.47	0.27	0.61	0.67		0.76	0.55		0.66	0.89	0.20
Control Delay	64.9	65.4	7.0	59.5	57.9		36.1	44.1		62.5	56.6	18.6
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	64.9	65.4	7.0	59.5	57.9		36.1	44.1		62.5	56.6	18.6
LOS	E	E	A	E	E		D	D		E	E	B
Approach Delay		31.8			58.8			42.4			53.6	
Approach LOS		C			E			D			D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 125 (95%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 125
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.89
 Intersection Signal Delay: 47.5
 Intersection LOS: D
 Intersection Capacity Utilization 76.7%
 ICU Level of Service D
 Analysis Period (min) 15

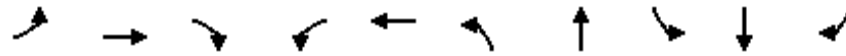
Splits and Phases: 13: Golden Valley Road & Centre Pointe Parkway



Queues

13: Golden Valley Road & Centre Pointe Parkway

01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	53	78	177	278	182	390	1496	148	1211	141
v/c Ratio	0.38	0.47	0.27	0.61	0.67	0.76	0.55	0.66	0.89	0.20
Control Delay	64.9	65.4	7.0	59.5	57.9	36.1	44.1	62.5	56.6	18.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	64.9	65.4	7.0	59.5	57.9	36.1	44.1	62.5	56.6	18.6
Queue Length 50th (ft)	44	65	27	118	130	348	458	128	573	52
Queue Length 95th (ft)	86	115	47	157	200	m401	m498	134	#843	123
Internal Link Dist (ft)		1069			722		7818		1365	
Turn Bay Length (ft)	150		260	150		375		700		
Base Capacity (vph)	201	296	648	780	496	513	2700	388	1358	691
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.26	0.26	0.27	0.36	0.37	0.76	0.55	0.38	0.89	0.20

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

Lanes, Volumes, Timings
 14: Sierra Highway & Golden Valley Road

01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑	↔↔	↔↔	↑↑↑	↔	↔↔	↑↔		↔	↑↑	↔
Traffic Volume (vph)	303	600	817	350	1111	63	562	205	18	44	1125	495
Future Volume (vph)	303	600	817	350	1111	63	562	205	18	44	1125	495
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	280		280	285		300	285		0	410		540
Storage Lanes	2		2	2		1	2		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	0.88	0.97	0.91	1.00	0.97	0.95	0.95	1.00	0.95	1.00
Frt			0.850			0.850		0.988				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	2787	3433	5085	1583	3433	3497	0	1770	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	2787	3433	5085	1583	3433	3497	0	1770	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			476			136		7				538
Link Speed (mph)		50		50			30			30		
Link Distance (ft)		2032		1202			1801			1671		
Travel Time (s)		27.7		16.4			40.9			38.0		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	329	652	888	380	1208	68	611	223	20	48	1223	538
Shared Lane Traffic (%)												
Lane Group Flow (vph)	329	652	888	380	1208	68	611	243	0	48	1223	538
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24		24			24			24		24
Link Offset(ft)		0		0			0			0		0
Crosswalk Width(ft)		16		16			16			16		16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1		1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50		50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50		50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	custom
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						8
Detector Phase	7	4	4	3	8	8	5	2		1	6	8
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	8.5	29.6	29.6	8.5	40.0	40.0	15.0	49.0		8.5	46.0	40.0
Total Split (s)	29.0	41.0	41.0	29.0	41.0	41.0	25.0	44.0		18.0	37.0	41.0

Lanes, Volumes, Timings
 14: Sierra Highway & Golden Valley Road

01/18/2024

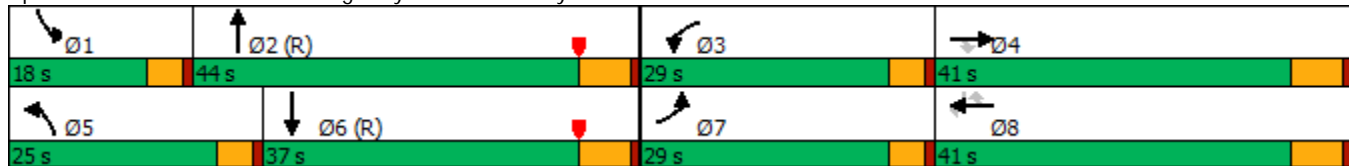


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	22.0%	31.1%	31.1%	22.0%	31.1%	31.1%	18.9%	33.3%		13.6%	28.0%	31.1%
Maximum Green (s)	24.5	35.0	35.0	24.5	35.0	35.0	20.5	38.0		13.5	31.0	35.0
Yellow Time (s)	3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.0		3.5	5.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	-0.5	-2.0	-2.0	-0.5	-2.0	-2.0	-0.5	-2.0		-0.5	-2.0	-2.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	None
Walk Time (s)					5.0	5.0		5.0			5.0	5.0
Flash Dont Walk (s)					29.0	29.0		33.0			30.0	29.0
Pedestrian Calls (#/hr)					0	0		0			0	0
Act Effect Green (s)	18.4	35.9	35.9	20.3	37.8	37.8	21.0	52.4		9.5	38.9	37.8
Actuated g/C Ratio	0.14	0.27	0.27	0.15	0.29	0.29	0.16	0.40		0.07	0.29	0.29
v/c Ratio	0.69	0.68	0.80	0.72	0.83	0.12	1.12	0.17		0.38	1.17	0.64
Control Delay	44.8	35.2	24.9	61.1	49.9	0.5	125.4	27.6		66.2	129.9	6.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	44.8	35.2	24.9	61.1	49.9	0.5	125.4	27.6		66.2	129.9	6.8
LOS	D	D	C	E	D	A	F	C		E	F	A
Approach Delay		32.0			50.5			97.6			91.6	
Approach LOS		C			D			F			F	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 96 (73%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 130
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.17
 Intersection Signal Delay: 63.4
 Intersection LOS: E
 Intersection Capacity Utilization 90.6%
 ICU Level of Service E
 Analysis Period (min) 15

Splits and Phases: 14: Sierra Highway & Golden Valley Road



Queues

14: Sierra Highway & Golden Valley Road

01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	329	652	888	380	1208	68	611	243	48	1223	538
v/c Ratio	0.69	0.68	0.80	0.72	0.83	0.12	1.12	0.17	0.38	1.17	0.64
Control Delay	44.8	35.2	24.9	61.1	49.9	0.5	125.4	27.6	66.2	129.9	6.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.8	35.2	24.9	61.1	49.9	0.5	125.4	27.6	66.2	129.9	6.8
Queue Length 50th (ft)	120	261	260	161	357	0	-309	69	40	-651	0
Queue Length 95th (ft)	m116	m304	m321	207	408	0	#428	113	81	#869	91
Internal Link Dist (ft)		1952			1122			1721		1591	
Turn Bay Length (ft)	280		280	285		300	285		410		540
Base Capacity (vph)	650	991	1123	650	1459	551	546	1393	187	1041	837
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.66	0.79	0.58	0.83	0.12	1.12	0.17	0.26	1.17	0.64

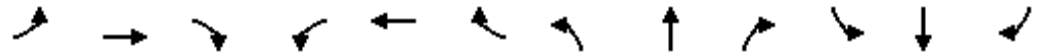
Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings

15: SR-14 SB Ramp & Newhall Ranch Road/Golden Valley Road

01/18/2024

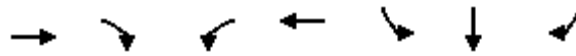


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗	↖	↑↑					↖	↗	↗
Traffic Volume (vph)	0	445	361	298	1033	0	0	0	0	41	194	494
Future Volume (vph)	0	445	361	298	1033	0	0	0	0	41	194	494
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	220		0	0		0	300		0
Storage Lanes	0		1	1		0	0		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850									0.850
Flt Protected				0.950						0.950	0.999	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	1681	1768	1583
Flt Permitted				0.950						0.950	0.999	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	1681	1768	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			392									61
Link Speed (mph)		50			50			30			30	
Link Distance (ft)		807			717			580			626	
Travel Time (s)		11.0			9.8			13.2			14.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	484	392	324	1123	0	0	0	0	45	211	537
Shared Lane Traffic (%)										10%		
Lane Group Flow (vph)	0	484	392	324	1123	0	0	0	0	40	216	537
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94							94
Detector 2 Size(ft)		6			6							6
Detector 2 Type		Cl+Ex			Cl+Ex							Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							0.0
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		6		5	2						4	
Permitted Phases		6								4		4

Queues

15: SR-14 SB Ramp & Newhall Ranch Road/Golden Valley Road

01/18/2024

























Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	484	392	324	1123	40	216	537
v/c Ratio	0.60	0.59	0.85	0.65	0.06	0.29	0.76
Control Delay	35.2	7.5	42.8	13.8	15.8	18.5	28.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.2	7.5	42.8	13.8	15.8	18.5	28.2
Queue Length 50th (ft)	133	0	183	276	13	83	226
Queue Length 95th (ft)	186	75	#307	323	33	137	362
Internal Link Dist (ft)	727			637		546	
Turn Bay Length (ft)			220		300		
Base Capacity (vph)	808	664	413	1730	709	746	703
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.60	0.59	0.78	0.65	0.06	0.29	0.76

Intersection Summary

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

Lanes, Volumes, Timings
 16: SR 14 NB Ramp & Golden Valley Road

01/18/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 			 							
Traffic Volume (vph)	224	256	0	0	1001	65	312	1	149	0	0	0
Future Volume (vph)	224	256	0	0	1001	65	312	1	149	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	230		0	0		280	0		140	0		0
Storage Lanes	2		0	0		1	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt						0.850			0.850			
Flt Protected	0.950						0.950	0.953				
Satd. Flow (prot)	3433	3539	0	0	3539	1583	1681	1686	1583	0	0	0
Flt Permitted	0.950						0.950	0.953				
Satd. Flow (perm)	3433	3539	0	0	3539	1583	1681	1686	1583	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						71			162			
Link Speed (mph)		50			50			30				30
Link Distance (ft)		717			541			632				618
Travel Time (s)		9.8			7.4			14.4				14.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	243	278	0	0	1088	71	339	1	162	0	0	0
Shared Lane Traffic (%)							50%					
Lane Group Flow (vph)	243	278	0	0	1088	71	169	171	162	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1	1	2	1			
Detector Template	Left	Thru			Thru	Right	Left	Thru	Right			
Leading Detector (ft)	20	100			100	20	20	100	20			
Trailing Detector (ft)	0	0			0	0	0	0	0			
Detector 1 Position(ft)	0	0			0	0	0	0	0			
Detector 1 Size(ft)	20	6			6	20	20	6	20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Prot	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	7	4			8			2				
Permitted Phases						8	2		2			

Lanes, Volumes, Timings
 16: SR 14 NB Ramp & Golden Valley Road

01/18/2024

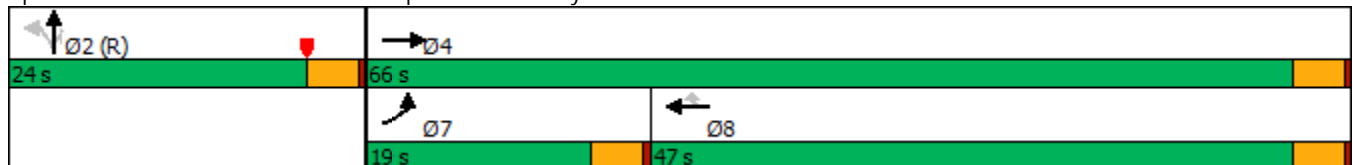


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4			8	8	2	2	2			
Switch Phase												
Minimum Initial (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Minimum Split (s)	12.0	20.0			20.0	20.0	20.0	20.0	20.0			
Total Split (s)	19.0	66.0			47.0	47.0	24.0	24.0	24.0			
Total Split (%)	21.1%	73.3%			52.2%	52.2%	26.7%	26.7%	26.7%			
Maximum Green (s)	15.0	62.0			43.0	43.0	20.0	20.0	20.0			
Yellow Time (s)	3.5	3.5			3.5	3.5	3.5	3.5	3.5			
All-Red Time (s)	0.5	0.5			0.5	0.5	0.5	0.5	0.5			
Lost Time Adjust (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Total Lost Time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Lead/Lag	Lead				Lag				Lag			
Lead-Lag Optimize?	Yes				Yes				Yes			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Recall Mode	None	None			None	None	C-Max	C-Max	C-Max			
Walk Time (s)		5.0			5.0	5.0	5.0	5.0	5.0			
Flash Dont Walk (s)		10.0			10.0	10.0	10.0	10.0	10.0			
Pedestrian Calls (#/hr)		0			0	0	0	0	0			
Act Effct Green (s)	11.6	51.8			36.2	36.2	30.2	30.2	30.2			
Actuated g/C Ratio	0.13	0.58			0.40	0.40	0.34	0.34	0.34			
v/c Ratio	0.55	0.14			0.76	0.10	0.30	0.30	0.25			
Control Delay	16.0	10.1			26.7	3.9	26.8	26.8	5.9			
Queue Delay	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Total Delay	16.0	10.1			26.7	3.9	26.8	26.8	5.9			
LOS	B	B			C	A	C	C	A			
Approach Delay		12.9			25.3			20.0				
Approach LOS		B			C			C				

Intersection Summary

Area Type: Other
 Cycle Length: 90
 Actuated Cycle Length: 90
 Offset: 0 (0%), Referenced to phase 2:NBTL and 6:, Start of Yellow
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.76
 Intersection Signal Delay: 21.1
 Intersection LOS: C
 Intersection Capacity Utilization 65.8%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 16: SR 14 NB Ramp & Golden Valley Road



Queues

16: SR 14 NB Ramp & Golden Valley Road

01/18/2024



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	243	278	1088	71	169	171	162
v/c Ratio	0.55	0.14	0.76	0.10	0.30	0.30	0.25
Control Delay	16.0	10.1	26.7	3.9	26.8	26.8	5.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	16.0	10.1	26.7	3.9	26.8	26.8	5.9
Queue Length 50th (ft)	69	78	272	0	74	75	0
Queue Length 95th (ft)	105	119	303	22	152	153	49
Internal Link Dist (ft)		637	461			552	
Turn Bay Length (ft)	230			280			140
Base Capacity (vph)	572	2437	1690	793	563	565	638
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.42	0.11	0.64	0.09	0.30	0.30	0.25
Intersection Summary							

Lanes, Volumes, Timings
17: Studio Driveway & Soledad Cyn

01/18/2024

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↘	↑↑↑	↖	
Traffic Volume (vph)	1044	55	27	2185	7	4
Future Volume (vph)	1044	55	27	2185	7	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Fr _t	0.992				0.955	
Fl _t Protected			0.950		0.968	
Satd. Flow (prot)	5045	0	1770	5085	1722	0
Fl _t Permitted			0.215		0.968	
Satd. Flow (perm)	5045	0	400	5085	1722	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	22				4	
Link Speed (mph)	50			50	30	
Link Distance (ft)	469			185	392	
Travel Time (s)	6.4			2.5	8.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1135	60	29	2375	8	4
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1195	0	29	2375	12	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2		1	2	1	
Detector Template	Thru		Left	Thru	Left	
Leading Detector (ft)	100		20	100	20	
Trailing Detector (ft)	0		0	0	0	
Detector 1 Position(ft)	0		0	0	0	
Detector 1 Size(ft)	6		20	6	20	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA		Perm	NA	Prot	
Protected Phases	6			2	4	
Permitted Phases			2			
Detector Phase	6		2	2	4	
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	

Lanes, Volumes, Timings
 17: Studio Driveway & Soledad Cyn

01/18/2024

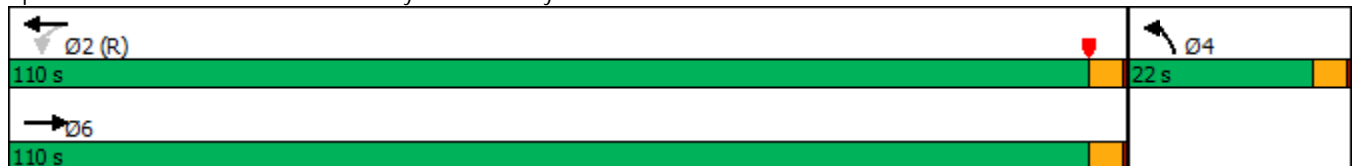


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Minimum Split (s)	20.0		20.0	20.0	20.0	
Total Split (s)	110.0		110.0	110.0	22.0	
Total Split (%)	83.3%		83.3%	83.3%	16.7%	
Maximum Green (s)	106.0		106.0	106.0	18.0	
Yellow Time (s)	3.5		3.5	3.5	3.5	
All-Red Time (s)	0.5		0.5	0.5	0.5	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	4.0		4.0	4.0	4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Recall Mode	Max		C-Max	C-Max	Max	
Walk Time (s)	5.0		5.0	5.0	5.0	
Flash Dont Walk (s)	10.0		10.0	10.0	10.0	
Pedestrian Calls (#/hr)	0		0	0	0	
Act Effect Green (s)	106.0		106.0	106.0	18.0	
Actuated g/C Ratio	0.80		0.80	0.80	0.14	
v/c Ratio	0.29		0.09	0.58	0.05	
Control Delay	0.8		4.2	4.8	39.7	
Queue Delay	0.0		0.0	0.0	0.0	
Total Delay	0.8		4.2	4.8	39.7	
LOS	A		A	A	D	
Approach Delay	0.8			4.8	39.7	
Approach LOS	A			A	D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 0 (0%), Referenced to phase 2:WBTL, Start of Yellow
 Natural Cycle: 55
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.58
 Intersection Signal Delay: 3.6
 Intersection Capacity Utilization 52.2%
 Analysis Period (min) 15
 Intersection LOS: A
 ICU Level of Service A

Splits and Phases: 17: Studio Driveway & Soledad Cyn



Queues

17: Studio Driveway & Soledad Cyn

01/18/2024



Lane Group	EBT	WBL	WBT	NBL
Lane Group Flow (vph)	1195	29	2375	12
v/c Ratio	0.29	0.09	0.58	0.05
Control Delay	0.8	4.2	4.8	39.7
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	0.8	4.2	4.8	39.7
Queue Length 50th (ft)	15	4	158	6
Queue Length 95th (ft)	m17	m10	207	26
Internal Link Dist (ft)	389		105	312
Turn Bay Length (ft)				
Base Capacity (vph)	4055	321	4083	238
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.29	0.09	0.58	0.05

Intersection Summary

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

Lanes, Volumes, Timings
 18: Residential Driveway 1 & Soledad Cyn

01/18/2024



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↵	↑↑↑		↵
Traffic Volume (vph)	1037	11	4	2212	0	26
Future Volume (vph)	1037	11	4	2212	0	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	100		0	0
Storage Lanes		0	1		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt	0.998					0.865
Flt Protected			0.950			
Satd. Flow (prot)	5075	0	1770	5085	0	1611
Flt Permitted			0.950			
Satd. Flow (perm)	5075	0	1770	5085	0	1611
Link Speed (mph)	50			50	30	
Link Distance (ft)	185			460	286	
Travel Time (s)	2.5			6.3	6.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1127	12	4	2404	0	28
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1139	0	4	2404	0	28
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	46.1% ICU Level of Service A
Analysis Period (min)	15

HCM 6th TWSC
 18: Residential Driveway 1 & Soledad Cyn

01/18/2024

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↑	↑↑↑		↑
Traffic Vol, veh/h	1037	11	4	2212	0	26
Future Vol, veh/h	1037	11	4	2212	0	26
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1127	12	4	2404	0	28

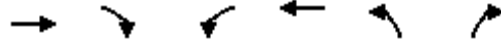
Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	1139	0	570
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	5.34	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	3.12	-	3.92
Pot Cap-1 Maneuver	-	-	335	-	398
Stage 1	-	-	-	-	0
Stage 2	-	-	-	-	0
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	335	-	398
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	14.7
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	398	-	-	335	-
HCM Lane V/C Ratio	0.071	-	-	0.013	-
HCM Control Delay (s)	14.7	-	-	15.9	-
HCM Lane LOS	B	-	-	C	-
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Lanes, Volumes, Timings
 19: Residential Driveway 2 & Soledad Cyn

01/18/2024



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↵	↑↑↑		↵
Traffic Volume (vph)	1048	15	8	2216	0	49
Future Volume (vph)	1048	15	8	2216	0	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	100		0	0
Storage Lanes		0	1		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt	0.998					0.865
Flt Protected			0.950			
Satd. Flow (prot)	5075	0	1770	5085	0	1611
Flt Permitted			0.950			
Satd. Flow (perm)	5075	0	1770	5085	0	1611
Link Speed (mph)	50			50	30	
Link Distance (ft)	460			928	378	
Travel Time (s)	6.3			12.7	8.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1139	16	9	2409	0	53
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1155	0	9	2409	0	53
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	46.1% ICU Level of Service A
Analysis Period (min)	15

HCM 6th TWSC
 19: Residential Driveway 2 & Soledad Cyn

01/18/2024

Intersection						
Int Delay, s/veh	0.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↘	↑↑↑		↗
Traffic Vol, veh/h	1048	15	8	2216	0	49
Future Vol, veh/h	1048	15	8	2216	0	49
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1139	16	9	2409	0	53

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	1155	0	578
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	5.34	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	3.12	-	3.92
Pot Cap-1 Maneuver	-	-	329	0	393
Stage 1	-	-	-	0	-
Stage 2	-	-	-	0	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	329	-	393
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	15.6
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	393	-	-	329	-
HCM Lane V/C Ratio	0.136	-	-	0.026	-
HCM Control Delay (s)	15.6	-	-	16.2	-
HCM Lane LOS	C	-	-	C	-
HCM 95th %tile Q(veh)	0.5	-	-	0.1	-

Lanes, Volumes, Timings
 20: Studio Driveway 2 & Soledad Cyn

01/18/2024



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑		↗
Traffic Volume (vph)	1099	0	0	2192	0	0
Future Volume (vph)	1099	0	0	2192	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frnt						
Flt Protected						
Satd. Flow (prot)	5085	0	0	5085	0	1863
Flt Permitted						
Satd. Flow (perm)	5085	0	0	5085	0	1863
Link Speed (mph)	50			50	30	
Link Distance (ft)	557			469	476	
Travel Time (s)	7.6			6.4	10.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1195	0	0	2383	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1195	0	0	2383	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	45.7% ICU Level of Service A
Analysis Period (min)	15

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑		↑
Traffic Vol, veh/h	1099	0	0	2192	0	0
Future Vol, veh/h	1099	0	0	2192	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1195	0	0	2383	0	0

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	-	-	598
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	3.92
Pot Cap-1 Maneuver	-	-	0	-	382
Stage 1	-	-	0	-	-
Stage 2	-	-	0	-	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	382
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

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

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

***Future with Revised Project with Mitigation Conditions
Afternoon Peak Hour***

Lanes, Volumes, Timings
 1: Valencia Blvd & 5 Fwy SB Ramp

01/18/2024



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑		↑↑	↑
Traffic Volume (vph)	0	519	808	193	256	78
Future Volume (vph)	0	519	808	193	256	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	15	12	14
Storage Length (ft)	0			0	0	455
Storage Lanes	0			0	2	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.91	0.95	0.95	0.97	1.00
Fr _t			0.971			0.850
Fl _t Protected					0.950	
Satd. Flow (prot)	0	5085	3437	0	3433	1689
Fl _t Permitted					0.950	
Satd. Flow (perm)	0	5085	3437	0	3433	1689
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			72			85
Link Speed (mph)		50	50		30	
Link Distance (ft)		616	917		417	
Travel Time (s)		8.4	12.5		9.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	564	878	210	278	85
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	564	1088	0	278	85
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		24	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	0.88	1.00	0.92
Turning Speed (mph)	15			9	15	9
Number of Detectors		1	1		1	1
Detector Template						
Leading Detector (ft)		50	50		50	50
Trailing Detector (ft)		0	0		0	0
Detector 1 Position(ft)		0	0		0	0
Detector 1 Size(ft)		50	50		50	50
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)		0.0	0.0		0.0	0.0
Detector 1 Queue (s)		0.0	0.0		0.0	0.0
Detector 1 Delay (s)		0.0	0.0		0.0	0.0
Turn Type		NA	NA		Prot	Perm
Protected Phases		2	6		4	
Permitted Phases						4
Detector Phase		2	6		4	4
Switch Phase						
Minimum Initial (s)		4.0	4.0		4.0	4.0
Minimum Split (s)		20.0	35.2		20.0	20.0

Lanes, Volumes, Timings
 1: Valencia Blvd & 5 Fwy SB Ramp

01/18/2024



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Total Split (s)		41.0	41.0		25.0	25.0
Total Split (%)		62.1%	62.1%		37.9%	37.9%
Maximum Green (s)		34.8	34.8		19.2	19.2
Yellow Time (s)		5.2	5.2		4.8	4.8
All-Red Time (s)		1.0	1.0		1.0	1.0
Lost Time Adjust (s)		-2.2	-2.2		-1.8	-1.8
Total Lost Time (s)		4.0	4.0		4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Recall Mode		C-Max	C-Max		Min	Min
Walk Time (s)			5.0			
Flash Dont Walk (s)			18.0			
Pedestrian Calls (#/hr)			0			
Act Effect Green (s)		45.4	45.4		12.6	12.6
Actuated g/C Ratio		0.69	0.69		0.19	0.19
v/c Ratio		0.16	0.46		0.43	0.22
Control Delay		4.0	4.9		25.1	7.1
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		4.0	4.9		25.1	7.1
LOS		A	A		C	A
Approach Delay		4.0	4.9		20.9	
Approach LOS		A	A		C	

Intersection Summary

Area Type: Other
 Cycle Length: 66
 Actuated Cycle Length: 66
 Offset: 56 (85%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.46
 Intersection Signal Delay: 7.5
 Intersection LOS: A
 Intersection Capacity Utilization 42.5%
 ICU Level of Service A
 Analysis Period (min) 15

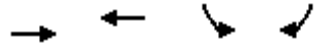
Splits and Phases: 1: Valencia Blvd & 5 Fwy SB Ramp



Queues

1: Valencia Blvd & 5 Fwy SB Ramp

01/18/2024

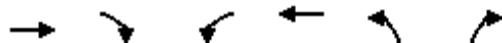


Lane Group	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	564	1088	278	85
v/c Ratio	0.16	0.46	0.43	0.22
Control Delay	4.0	4.9	25.1	7.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	4.0	4.9	25.1	7.1
Queue Length 50th (ft)	23	88	51	0
Queue Length 95th (ft)	41	88	77	30
Internal Link Dist (ft)	536	837	337	
Turn Bay Length (ft)				455
Base Capacity (vph)	3499	2387	1092	595
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.16	0.46	0.25	0.14
Intersection Summary				

Lanes, Volumes, Timings

2: 5 Fwy NB Ramp & Valencia Blvd

01/18/2024

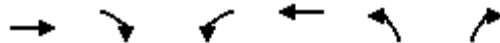


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↵↵	↑↑↑	↵↵	↵↵
Traffic Volume (vph)	740	31	212	1630	190	907
Future Volume (vph)	740	31	212	1630	190	907
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	12	12	12	12	14
Storage Length (ft)		0	200		220	220
Storage Lanes		0	2		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	0.97	0.86	0.97	0.88
Fr _t	0.994					0.850
Fl _t Protected			0.950		0.950	
Satd. Flow (prot)	5392	0	3433	6408	3433	2972
Fl _t Permitted			0.950		0.950	
Satd. Flow (perm)	5392	0	3433	6408	3433	2972
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	11					648
Link Speed (mph)	50			50	30	
Link Distance (ft)	917			476	493	
Travel Time (s)	12.5			6.5	11.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	804	34	230	1772	207	986
Shared Lane Traffic (%)						
Lane Group Flow (vph)	838	0	230	1772	207	986
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	24			24	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.92	1.00	1.00	1.00	1.00	0.92
Turning Speed (mph)		9	15		15	9
Number of Detectors	1		1	1	1	1
Detector Template						
Leading Detector (ft)	50		50	50	50	50
Trailing Detector (ft)	0		0	0	0	0
Detector 1 Position(ft)	0		0	0	0	0
Detector 1 Size(ft)	50		50	50	50	50
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0
Turn Type	NA		Prot	NA	Prot	Prot
Protected Phases	2		1	6	8	8
Permitted Phases						
Detector Phase	2		1	6	8	8
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	36.0		14.0	20.0	20.0	20.0

Lanes, Volumes, Timings

2: 5 Fwy NB Ramp & Valencia Blvd

01/18/2024

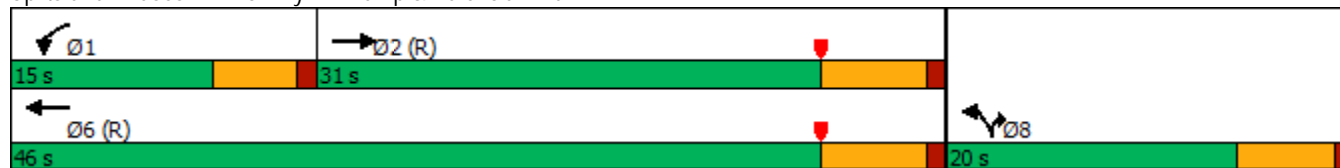


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Total Split (s)	31.0		15.0	46.0	20.0	20.0
Total Split (%)	47.0%		22.7%	69.7%	30.3%	30.3%
Maximum Green (s)	24.8		9.9	39.8	14.2	14.2
Yellow Time (s)	5.2		4.1	5.2	4.8	4.8
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-2.2		-1.1	-2.2	-1.8	-1.8
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max		None	C-Max	None	None
Walk Time (s)	5.0					
Flash Dont Walk (s)	24.0					
Pedestrian Calls (#/hr)	0					
Act Effect Green (s)	29.2		10.1	43.3	14.7	14.7
Actuated g/C Ratio	0.44		0.15	0.66	0.22	0.22
v/c Ratio	0.35		0.44	0.42	0.27	0.85
Control Delay	9.5		30.0	6.9	21.7	16.3
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	9.5		30.0	6.9	21.7	16.3
LOS	A		C	A	C	B
Approach Delay	9.5			9.5	17.2	
Approach LOS	A			A	B	

Intersection Summary

Area Type: Other
 Cycle Length: 66
 Actuated Cycle Length: 66
 Offset: 45 (68%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Natural Cycle: 70
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.85
 Intersection Signal Delay: 11.8
 Intersection LOS: B
 Intersection Capacity Utilization 53.4%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 2: 5 Fwy NB Ramp & Valencia Blvd



Queues

2: 5 Fwy NB Ramp & Valencia Blvd

01/18/2024



Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	838	230	1772	207	986
v/c Ratio	0.35	0.44	0.42	0.27	0.85
Control Delay	9.5	30.0	6.9	21.7	16.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	9.5	30.0	6.9	21.7	16.3
Queue Length 50th (ft)	82	67	150	34	66
Queue Length 95th (ft)	104	m89	198	60	#155
Internal Link Dist (ft)	837		396	413	
Turn Bay Length (ft)		200		220	220
Base Capacity (vph)	2393	572	4207	832	1211
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.35	0.40	0.42	0.25	0.81

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

Lanes, Volumes, Timings 3: McBean Pkwy & Valencia Blvd

01/18/2024

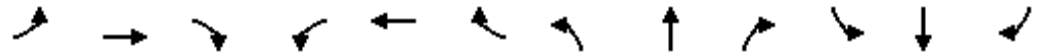


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑↑	↔	↔↔	↑↑↑	↔	↔↔	↑↑↑	↔↔	↔↔	↑↑↑	↔↔
Traffic Volume (vph)	471	1420	173	366	1099	205	167	953	467	241	888	556
Future Volume (vph)	471	1420	173	366	1099	205	167	953	467	241	888	556
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	11	11	13	11	11	12	11	11	12
Storage Length (ft)	350		280	290		225	130		200	190		300
Storage Lanes	2		1	2		1	2		2	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	0.88	0.97	0.91	0.88
Fr _t			0.850			0.850			0.850			0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3319	4916	1583	3319	4916	1636	3319	4916	2787	3319	4916	2787
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3319	4916	1583	3319	4916	1636	3319	4916	2787	3319	4916	2787
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			70			70			70			70
Link Speed (mph)		50			50			45			45	
Link Distance (ft)		1919			721			765			1359	
Travel Time (s)		26.2			9.8			11.6			20.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	512	1543	188	398	1195	223	182	1036	508	262	965	604
Shared Lane Traffic (%)												
Lane Group Flow (vph)	512	1543	188	398	1195	223	182	1036	508	262	965	604
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		22			22			22			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.00	1.04	1.04	0.96	1.04	1.04	1.00	1.04	1.04	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	1	6	7	5	2	3	7	4	5	3	8	1
Permitted Phases			6			2			4			8
Detector Phase	1	6	7	5	2	3	7	4	5	3	8	1
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	43.0	12.0	12.0	44.0	12.0	12.0	41.0	12.0	12.0	44.0	12.0

Queues

3: McBean Pkwy & Valencia Blvd

01/18/2024



























Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	512	1543	188	398	1195	223	182	1036	508	262	965	604
v/c Ratio	0.87	0.95	0.25	0.73	0.77	0.28	0.56	0.80	0.39	0.66	0.69	0.43
Control Delay	72.2	54.6	16.2	76.8	22.1	4.1	63.4	50.3	20.4	41.4	54.3	48.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	72.2	54.6	16.2	76.8	22.1	4.1	63.4	50.3	20.4	41.4	54.3	48.8
Queue Length 50th (ft)	233	-525	55	131	347	63	77	299	128	106	319	287
Queue Length 95th (ft)	m#332	#627	m91	m190	348	m58	117	352	176	153	367	353
Internal Link Dist (ft)		1839			641			685			1279	
Turn Bay Length (ft)	350		280	290		225	130		200	190		300
Base Capacity (vph)	587	1623	776	581	1559	815	352	1377	1347	427	1489	1410
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.87	0.95	0.24	0.69	0.77	0.27	0.52	0.75	0.38	0.61	0.65	0.43

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
 4: McBean Parkway & Magic Mountain Pkwy

01/18/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	885	684	139	230	566	361	144	1355	147	278	1305	284
Future Volume (vph)	885	684	139	230	566	361	144	1355	147	278	1305	284
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	16	12	12	14	11	11	16	11	11	16
Storage Length (ft)	360		360	210		0	175		175	300		340
Storage Lanes	1		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.91	1.00	0.97	0.86	1.00	0.97	0.86	1.00
Fr _t			0.850			0.850			0.850			0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	1794	3433	5085	1689	3319	6194	1794	3319	6194	1794
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1794	3433	5085	1689	3319	6194	1794	3319	6194	1794
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			151			254			198			299
Link Speed (mph)		50			45			45			50	
Link Distance (ft)		809			1452			1203			1219	
Travel Time (s)		11.0			22.0			18.2			16.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	962	743	151	250	615	392	157	1473	160	302	1418	309
Shared Lane Traffic (%)												
Lane Group Flow (vph)	962	743	151	250	615	392	157	1473	160	302	1418	309
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			22			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	0.85	1.00	1.00	0.92	1.04	1.04	0.85	1.04	1.04	0.85
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			Free			Free
Detector Phase	5	2	2	1	6	6	3	8		7	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Minimum Split (s)	12.0	41.0	41.0	12.0	40.0	40.0	12.0	37.0		12.0	37.0	

Lanes, Volumes, Timings
4: McBean Parkway & Magic Mountain Pkwy

01/18/2024

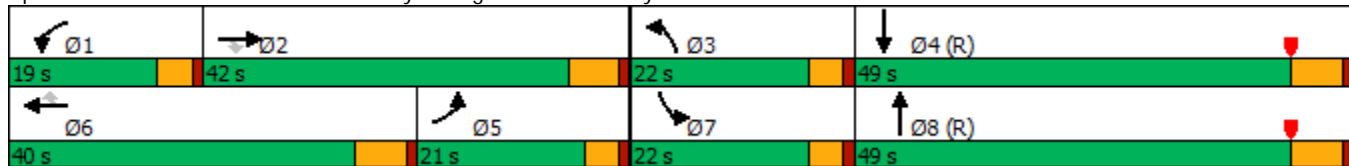


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	21.0	42.0	42.0	19.0	40.0	40.0	22.0	49.0		22.0	49.0	
Total Split (%)	15.9%	31.8%	31.8%	14.4%	30.3%	30.3%	16.7%	37.1%		16.7%	37.1%	
Maximum Green (s)	16.5	36.0	36.0	14.5	34.0	34.0	17.5	43.0		17.5	43.0	
Yellow Time (s)	3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.0		3.5	5.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	-0.5	-2.0	-2.0	-0.5	-2.0	-2.0	-0.5	-2.0		-0.5	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	Max	Max	None	Max	Max	None	C-Max		None	C-Max	
Walk Time (s)		5.0	5.0		5.0	5.0		5.0			5.0	
Flash Dont Walk (s)		30.0	30.0		29.0	29.0		26.0			26.0	
Pedestrian Calls (#/hr)		0	0		0	0		0			0	
Act Effect Green (s)	17.0	39.0	39.0	14.0	36.0	36.0	12.1	46.5	132.0	16.5	50.9	132.0
Actuated g/C Ratio	0.13	0.30	0.30	0.11	0.27	0.27	0.09	0.35	1.00	0.12	0.39	1.00
v/c Ratio	2.18	0.71	0.24	0.69	0.44	0.61	0.52	0.68	0.09	0.73	0.59	0.17
Control Delay	563.9	46.2	6.2	72.2	51.4	28.9	77.5	29.1	0.1	66.1	33.8	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	563.9	46.2	6.2	72.2	51.4	28.9	77.5	29.1	0.1	66.1	33.8	0.2
LOS	F	D	A	E	D	C	E	C	A	E	C	A
Approach Delay		311.3			48.5			30.8			33.5	
Approach LOS		F			D			C			C	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 30 (23%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow
 Natural Cycle: 125
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 2.18
 Intersection Signal Delay: 109.9
 Intersection LOS: F
 Intersection Capacity Utilization 77.2%
 ICU Level of Service D
 Analysis Period (min) 15

Splits and Phases: 4: McBean Parkway & Magic Mountain Pkwy



Queues

4: McBean Parkway & Magic Mountain Pkwy

01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	962	743	151	250	615	392	157	1473	160	302	1418	309
v/c Ratio	2.18	0.71	0.24	0.69	0.44	0.61	0.52	0.68	0.09	0.73	0.59	0.17
Control Delay	563.9	46.2	6.2	72.2	51.4	28.9	77.5	29.1	0.1	66.1	33.8	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	563.9	46.2	6.2	72.2	51.4	28.9	77.5	29.1	0.1	66.1	33.8	0.2
Queue Length 50th (ft)	~679	302	0	106	168	122	73	163	0	128	279	0
Queue Length 95th (ft)	#810	376	51	154	219	245	m95	192	m0	178	331	0
Internal Link Dist (ft)		729			1372			1123			1139	
Turn Bay Length (ft)	360		360	210			175		175	300		340
Base Capacity (vph)	442	1044	635	390	1386	645	452	2179	1794	452	2390	1794
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	2.18	0.71	0.24	0.64	0.44	0.61	0.35	0.68	0.09	0.67	0.59	0.17

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
5: Valencia Blvd & Magic Mountain Pkwy

01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↕↔		↔↔	↕↔		↔	↕↕↕	↔	↔	↕↕↕	↔↔
Traffic Volume (vph)	674	668	30	231	509	91	58	1819	251	92	1444	446
Future Volume (vph)	674	668	30	231	509	91	58	1819	251	92	1444	446
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	13	12	11	12	11	11	14	12	11	11	12
Storage Length (ft)	310		0	250		200	180		200	190		190
Storage Lanes	1		0	2		0	1		1	1		2
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	0.95	0.97	0.95	0.95	1.00	0.91	1.00	1.00	0.91	0.88
Fr _t		0.993			0.977				0.850			0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3319	3632	0	3319	3458	0	1711	5424	1583	1711	4916	2787
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3319	3632	0	3319	3458	0	1711	5424	1583	1711	4916	2787
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3			15				161			367
Link Speed (mph)		50			45			45				45
Link Distance (ft)		1046			2778			1989				572
Travel Time (s)		14.3			42.1			30.1				8.7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	733	726	33	251	553	99	63	1977	273	100	1570	485
Shared Lane Traffic (%)												
Lane Group Flow (vph)	733	759	0	251	652	0	63	1977	273	100	1570	485
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		22			22			11				11
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.04	0.96	1.00	1.04	1.00	1.04	1.04	0.92	1.00	1.04	1.04	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Size(ft)	50	50		50	50		50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	3	8		7	4		1	6		5	2	3
Permitted Phases									6			2
Detector Phase	3	8		7	4		1	6	6	5	2	3
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	35.0		12.0	39.0		12.0	38.0	38.0	12.0	41.0	12.0

Lanes, Volumes, Timings
5: Valencia Blvd & Magic Mountain Pkwy

01/18/2024

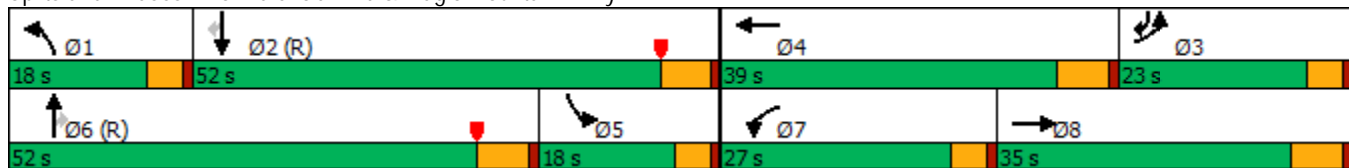


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	23.0	35.0		27.0	39.0		18.0	52.0	52.0	18.0	52.0	23.0
Total Split (%)	17.4%	26.5%		20.5%	29.5%		13.6%	39.4%	39.4%	13.6%	39.4%	17.4%
Maximum Green (s)	18.5	29.0		22.5	33.0		13.5	46.0	46.0	13.5	46.0	18.5
Yellow Time (s)	3.5	5.0		3.5	5.0		3.5	5.0	5.0	3.5	5.0	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-0.5	-2.0		-0.5	-2.0		-0.5	-2.0	0.0	-0.5	-2.0	-0.5
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	6.0	4.0	4.0	4.0
Lead/Lag	Lag	Lag		Lead	Lead		Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None		None	C-Max	C-Max	Max	C-Max	None
Walk Time (s)		5.0			5.0			5.0	5.0		5.0	
Flash Dont Walk (s)		24.0			28.0			21.0	21.0		22.0	
Pedestrian Calls (#/hr)		0			0			0	0		0	
Act Effect Green (s)	22.9	38.2		15.8	31.1		10.6	48.0	46.0	14.0	53.6	77.3
Actuated g/C Ratio	0.17	0.29		0.12	0.24		0.08	0.36	0.35	0.11	0.41	0.59
v/c Ratio	1.27	0.72		0.63	0.79		0.46	1.00	0.42	0.55	0.79	0.27
Control Delay	175.5	41.5		42.9	42.4		88.9	41.9	6.2	41.0	16.6	0.6
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	175.5	41.5		42.9	42.4		88.9	41.9	6.2	41.0	16.6	0.6
LOS	F	D		D	D		F	D	A	D	B	A
Approach Delay		107.3			42.5			39.0			14.1	
Approach LOS		F			D			D			B	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 115 (87%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
 Natural Cycle: 135
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.27
 Intersection Signal Delay: 46.5
 Intersection LOS: D
 Intersection Capacity Utilization 89.8%
 ICU Level of Service E
 Analysis Period (min) 15

Splits and Phases: 5: Valencia Blvd & Magic Mountain Pkwy



Queues

5: Valencia Blvd & Magic Mountain Pkwy

01/18/2024



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	733	759	251	652	63	1977	273	100	1570	485
v/c Ratio	1.27	0.72	0.63	0.79	0.46	1.00	0.42	0.55	0.79	0.27
Control Delay	175.5	41.5	42.9	42.4	88.9	41.9	6.2	41.0	16.6	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	175.5	41.5	42.9	42.4	88.9	41.9	6.2	41.0	16.6	0.6
Queue Length 50th (ft)	~420	346	112	292	56	~276	16	79	118	0
Queue Length 95th (ft)	#590	418	156	357	m69	m#697	m27	m96	m166	m5
Internal Link Dist (ft)		966		2698		1909			492	
Turn Bay Length (ft)	310		250		180		200	190		190
Base Capacity (vph)	576	1054	578	927	181	1972	656	181	1995	1784
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.27	0.72	0.43	0.70	0.35	1.00	0.42	0.55	0.79	0.27

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings

6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy

01/18/2024



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	257	515	418	1585	1222	168
Future Volume (vph)	257	515	418	1585	1222	168
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	265	265	260			270
Storage Lanes	1	1	2			1
Taper Length (ft)	25		25			
Lane Util. Factor	0.97	0.88	0.97	0.91	0.95	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3433	2787	3433	5085	3539	1583
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	3433	2787	3433	5085	3539	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		47				164
Link Speed (mph)	45			50	45	
Link Distance (ft)	2778			2280	1171	
Travel Time (s)	42.1			31.1	17.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	279	560	454	1723	1328	183
Shared Lane Traffic (%)						
Lane Group Flow (vph)	279	560	454	1723	1328	183
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	34			24	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	1	1	1
Detector Template						
Leading Detector (ft)	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	pt+ov	custom	NA	NA	Perm
Protected Phases	8	8 1	1	6	2	
Permitted Phases			1			2
Detector Phase	8	8 1	1	6	2	2
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	20.0		20.0	20.0	41.0	41.0
Total Split (s)	34.0		30.0	98.0	68.0	68.0

Lanes, Volumes, Timings

6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy

01/18/2024

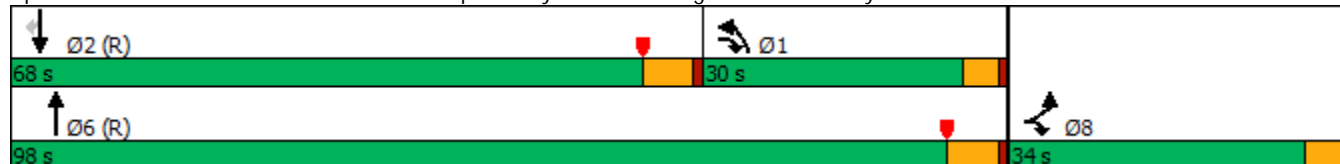


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Total Split (%)	25.8%		22.7%	74.2%	51.5%	51.5%
Maximum Green (s)	29.0		25.5	92.0	62.0	62.0
Yellow Time (s)	4.0		3.5	5.0	5.0	5.0
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0		-0.5	-2.0	-2.0	-2.0
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0
Lead/Lag			Lag		Lead	Lead
Lead-Lag Optimize?			Yes		Yes	Yes
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	Max		Min	C-Min	C-Min	C-Min
Walk Time (s)					7.0	7.0
Flash Dont Walk (s)					28.0	28.0
Pedestrian Calls (#/hr)					0	0
Act Effect Green (s)	36.9	64.5	23.5	87.1	59.5	59.5
Actuated g/C Ratio	0.28	0.49	0.18	0.66	0.45	0.45
v/c Ratio	0.29	0.40	0.74	0.51	0.83	0.23
Control Delay	34.9	13.6	59.1	11.9	36.9	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.9	13.6	59.1	11.9	36.9	4.5
LOS	C	B	E	B	D	A
Approach Delay	20.7			21.8	33.0	
Approach LOS	C			C	C	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 75 (57%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
 Natural Cycle: 85
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.83
 Intersection Signal Delay: 25.3
 Intersection LOS: C
 Intersection Capacity Utilization 63.0%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy



Queues

6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy

01/18/2024



























Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	279	560	454	1723	1328	183
v/c Ratio	0.29	0.40	0.74	0.51	0.83	0.23
Control Delay	34.9	13.6	59.1	11.9	36.9	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.9	13.6	59.1	11.9	36.9	4.5
Queue Length 50th (ft)	120	208	189	241	506	9
Queue Length 95th (ft)	163	211	246	241	575	48
Internal Link Dist (ft)	2698			2200	1091	
Turn Bay Length (ft)	265	265	260			270
Base Capacity (vph)	960	1373	679	3621	1715	852
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.41	0.67	0.48	0.77	0.21

Intersection Summary

Lanes, Volumes, Timings
7: Bouquet Canyon Rd & Valencia Blvd

01/18/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1216	1742	30	455	1110	327	37	1271	757	358	924	668
Future Volume (vph)	1216	1742	30	455	1110	327	37	1271	757	358	924	668
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	10	10	11	11	11	11	10	10	11
Storage Length (ft)	360		0	330		330	250		0	435		400
Storage Lanes	2		1	3		1	1		1	2		2
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.94	0.91	1.00	0.94	0.91	1.00	1.00	0.91	1.00	0.97	0.91	0.88
Fr _t			0.850			0.850			0.850			0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	4824	4916	1583	4658	4746	1531	1711	4916	1531	3204	4746	2694
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	4824	4916	1583	4658	4746	1531	1711	4916	1531	3204	4746	2694
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			149			124			488			452
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		2282			2684			2196			1017	
Travel Time (s)		34.6			40.7			33.3			12.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1322	1893	33	495	1207	355	40	1382	823	389	1004	726
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1322	1893	33	495	1207	355	40	1382	823	389	1004	726
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		33			33			20			20	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.00	1.09	1.09	1.04	1.04	1.04	1.04	1.09	1.09	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Free	Prot	NA	pm+ov
Protected Phases	7	4		3	8	1	5	2		1	6	7
Permitted Phases			4			8			Free			6
Detector Phase	7	4	4	3	8	1	5	2		1	6	7
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	12.0	44.0	44.0	12.0	48.0	12.0	12.0	46.0		12.0	44.0	12.0

Lanes, Volumes, Timings
7: Bouquet Canyon Rd & Valencia Blvd

01/18/2024

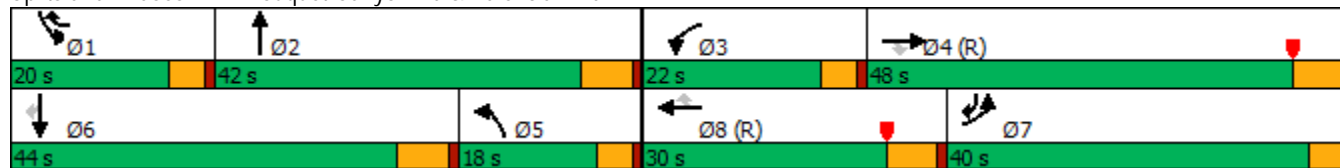


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	40.0	48.0	48.0	22.0	30.0	20.0	18.0	42.0		20.0	44.0	40.0
Total Split (%)	30.3%	36.4%	36.4%	16.7%	22.7%	15.2%	13.6%	31.8%		15.2%	33.3%	30.3%
Maximum Green (s)	35.5	42.0	42.0	17.5	24.0	15.5	13.5	36.0		15.5	38.0	35.5
Yellow Time (s)	3.5	5.0	5.0	3.5	5.0	3.5	3.5	5.0		3.5	5.0	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	-0.5	-2.0	0.0	-0.5	-2.0	-0.5	-0.5	-2.0		-0.5	-2.0	-0.5
Total Lost Time (s)	4.0	4.0	6.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lag		Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	Max		None	None	None
Walk Time (s)		5.0	5.0		5.0			5.0				
Flash Dont Walk (s)		33.0	33.0		37.0			35.0				
Pedestrian Calls (#/hr)		0	0		0			0				
Act Effect Green (s)	36.0	44.5	42.5	17.5	26.0	42.0	14.5	38.0	132.0	16.0	41.5	81.5
Actuated g/C Ratio	0.27	0.34	0.32	0.13	0.20	0.32	0.11	0.29	1.00	0.12	0.31	0.62
v/c Ratio	1.01	1.14	0.05	0.80	1.29	0.62	0.21	0.98	0.54	1.00	0.67	0.40
Control Delay	73.6	115.1	0.1	59.0	170.8	7.5	55.8	65.5	1.4	96.0	56.2	14.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	73.6	115.1	0.1	59.0	170.8	7.5	55.8	65.5	1.4	96.0	56.2	14.0
LOS	E	F	A	E	F	A	E	E	A	F	E	B
Approach Delay		97.1			115.7			41.8			49.1	
Approach LOS		F			F			D			D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 51 (39%), Referenced to phase 4:EBT and 8:WBT, Start of Yellow
 Natural Cycle: 150
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.29
 Intersection Signal Delay: 77.7
 Intersection LOS: E
 Intersection Capacity Utilization 92.7%
 ICU Level of Service F
 Analysis Period (min) 15

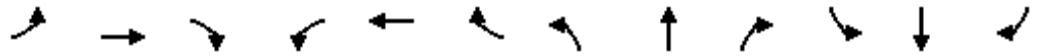
Splits and Phases: 7: Bouquet Canyon Rd & Valencia Blvd



Queues

7: Bouquet Canyon Rd & Valencia Blvd

01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	1322	1893	33	495	1207	355	40	1382	823	389	1004	726
v/c Ratio	1.01	1.14	0.05	0.80	1.29	0.62	0.21	0.98	0.54	1.00	0.67	0.40
Control Delay	73.6	115.1	0.1	59.0	170.8	7.5	55.8	65.5	1.4	96.0	56.2	14.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	73.6	115.1	0.1	59.0	170.8	7.5	55.8	65.5	1.4	96.0	56.2	14.0
Queue Length 50th (ft)	~428	~715	0	123	-469	46	31	430	0	-177	328	176
Queue Length 95th (ft)	m410	m#669	m0	173	#568	77	70	#536	0	m#282	361	234
Internal Link Dist (ft)		2202			2604			2116				937
Turn Bay Length (ft)	360			330		330	250			435		400
Base Capacity (vph)	1315	1656	610	635	934	571	208	1415	1531	388	1567	1836
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.01	1.14	0.05	0.78	1.29	0.62	0.19	0.98	0.54	1.00	0.64	0.40

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
8: Bouquet Canyon Rd & Newhall Ranch Road

01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	724	1640	463	342	1042	349	499	1678	371	396	1169	280
Future Volume (vph)	724	1640	463	342	1042	349	499	1678	371	396	1169	280
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	290		265	410		410	475		230	260		150
Storage Lanes	3		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.94	0.86	1.00	0.97	0.86	1.00	0.97	0.86	1.00	0.97	0.86	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	4990	6408	1583	3433	6408	1583	3433	6408	1583	3433	6408	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	4990	6408	1583	3433	6408	1583	3433	6408	1583	3433	6408	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			62			295			299			99
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		2675			2485			1030			669	
Travel Time (s)		40.5			37.7			15.6			10.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	787	1783	503	372	1133	379	542	1824	403	430	1271	304
Shared Lane Traffic (%)												
Lane Group Flow (vph)	787	1783	503	372	1133	379	542	1824	403	430	1271	304
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		36			36			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	2	1	1	2	1
Detector Template	Left		Right	Left		Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	50	20	20	50	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	50	20	20	50	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)								94			94	
Detector 2 Size(ft)								6			6	
Detector 2 Type								Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)								0.0			0.0	
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	3	8	1	7	4		1	6		5	2	3
Permitted Phases			8			4			6			2

Lanes, Volumes, Timings
 8: Bouquet Canyon Rd & Newhall Ranch Road

01/18/2024

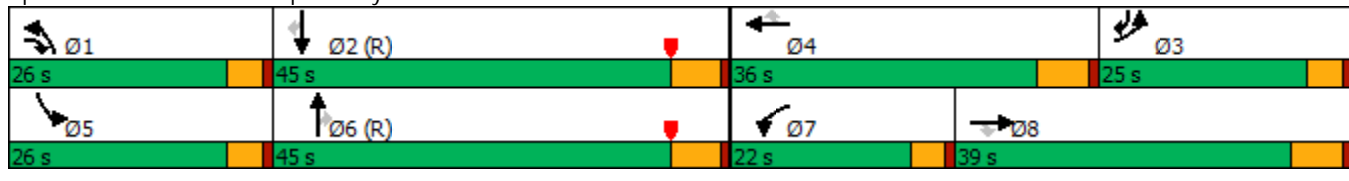


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	3	8	1	7	4	4	1	6	6	5	2	3
Switch Phase												
Minimum Initial (s)	4.0	5.0	4.0	4.0	5.0	5.0	4.0	10.0	10.0	4.0	10.0	4.0
Minimum Split (s)	12.0	43.0	12.0	12.0	43.0	43.0	12.0	49.0	49.0	12.0	50.0	12.0
Total Split (s)	25.0	39.0	26.0	22.0	36.0	36.0	26.0	45.0	45.0	26.0	45.0	25.0
Total Split (%)	18.9%	29.5%	19.7%	16.7%	27.3%	27.3%	19.7%	34.1%	34.1%	19.7%	34.1%	18.9%
Maximum Green (s)	20.5	33.0	21.5	17.5	30.0	30.0	21.5	39.0	39.0	21.5	39.0	20.5
Yellow Time (s)	3.5	5.0	3.5	3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.0	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	-2.0	0.0	0.0	-2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.0	4.5	4.5	4.0	6.0	4.5	6.0	6.0	4.5	6.0	4.5
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes		Yes	Yes			Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	5.5	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Minimum Gap (s)	3.0	2.5	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	24.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	Max	C-Max	None
Walk Time (s)		5.0			5.0	5.0		5.0	5.0		5.0	
Flash Dont Walk (s)		32.0			32.0	32.0		38.0	38.0		39.0	
Pedestrian Calls (#/hr)		2			5	5		1	1		1	
Act Effect Green (s)	21.3	35.5	61.0	17.0	31.2	29.2	21.5	39.0	39.0	21.5	39.0	61.8
Actuated g/C Ratio	0.16	0.27	0.46	0.13	0.24	0.22	0.16	0.30	0.30	0.16	0.30	0.47
v/c Ratio	0.98	1.03	0.66	0.84	0.75	0.65	0.97	0.96	0.59	0.77	0.67	0.38
Control Delay	82.3	78.1	28.9	72.6	47.9	19.1	62.8	50.9	13.1	63.1	43.0	9.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	82.3	78.1	28.9	72.6	47.9	19.1	62.8	50.9	13.1	63.1	43.0	9.2
LOS	F	E	C	E	D	B	E	D	B	E	D	A
Approach Delay		71.1			47.0			47.7			42.2	
Approach LOS		E			D			D			D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 33 (25%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
 Natural Cycle: 140
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.03
 Intersection Signal Delay: 53.8
 Intersection LOS: D
 Intersection Capacity Utilization 85.0%
 ICU Level of Service E
 Analysis Period (min) 15

Splits and Phases: 8: Bouquet Canyon Rd & Newhall Ranch Road



Queues

8: Bouquet Canyon Rd & Newhall Ranch Road

01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	787	1783	503	372	1133	379	542	1824	403	430	1271	304
v/c Ratio	0.98	1.03	0.66	0.84	0.75	0.65	0.97	0.96	0.59	0.77	0.67	0.38
Control Delay	82.3	78.1	28.9	72.6	47.9	19.1	62.8	50.9	13.1	63.1	43.0	9.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	82.3	78.1	28.9	72.6	47.9	19.1	62.8	50.9	13.1	63.1	43.0	9.2
Queue Length 50th (ft)	~247	~482	290	172	268	84	228	402	91	184	278	57
Queue Length 95th (ft)	#339	#559	420	#242	318	224	m#242	m420	m99	243	320	95
Internal Link Dist (ft)		2595			2405			950				589
Turn Bay Length (ft)	290		265	410		410	475		230	260		150
Base Capacity (vph)	803	1723	765	455	1553	587	559	1893	678	559	1893	793
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.98	1.03	0.66	0.82	0.73	0.65	0.97	0.96	0.59	0.77	0.67	0.38

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
9: Commuter Way & Soledad Cyn

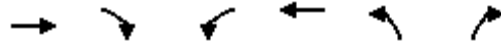
01/18/2024



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↑	↓	↑↑↑	↓	↓
Traffic Volume (vph)	2685	29	26	1718	43	15
Future Volume (vph)	2685	29	26	1718	43	15
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		150	285		0	0
Storage Lanes		1	1		2	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	1.00	1.00	0.91	0.97	0.95
Frt		0.850			0.962	
Flt Protected			0.950		0.964	
Satd. Flow (prot)	5085	1583	1770	5085	3351	0
Flt Permitted			0.950		0.964	
Satd. Flow (perm)	5085	1583	1770	5085	3351	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		12			16	
Link Speed (mph)	50			50	30	
Link Distance (ft)	911			2825	388	
Travel Time (s)	12.4			38.5	8.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2918	32	28	1867	47	16
Shared Lane Traffic (%)						
Lane Group Flow (vph)	2918	32	28	1867	63	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	1	1	1	1	1	
Detector Template						
Leading Detector (ft)	50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	
Turn Type	NA	Perm	Prot	NA	Prot	
Protected Phases	2		1	6	8	
Permitted Phases		2				
Detector Phase	2	2	1	6	8	
Switch Phase						
Minimum Initial (s)	10.0	10.0	4.0	10.0	4.0	
Minimum Split (s)	26.0	26.0	12.0	22.0	37.0	
Total Split (s)	75.0	75.0	20.0	95.0	37.0	

Lanes, Volumes, Timings
 9: Commuter Way & Soledad Cyn

01/18/2024



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Total Split (%)	56.8%	56.8%	15.2%	72.0%	28.0%	
Maximum Green (s)	69.0	69.0	16.5	89.0	31.0	
Yellow Time (s)	5.0	5.0	3.5	5.0	4.0	
All-Red Time (s)	1.0	1.0	0.0	1.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	0.5	-2.0	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Vehicle Extension (s)	5.0	5.0	1.5	5.0	2.0	
Minimum Gap (s)	4.0	4.0	1.5	4.0	2.0	
Time Before Reduce (s)	15.0	15.0	0.0	15.0	0.0	
Time To Reduce (s)	15.0	15.0	0.0	15.0	0.0	
Recall Mode	C-Max	C-Max	None	C-Max	None	
Walk Time (s)	7.0	7.0			7.0	
Flash Dont Walk (s)	13.0	13.0			24.0	
Pedestrian Calls (#/hr)	0	0			0	
Act Effect Green (s)	112.1	112.1	5.6	118.5	8.4	
Actuated g/C Ratio	0.85	0.85	0.04	0.90	0.06	
v/c Ratio	0.68	0.02	0.37	0.41	0.28	
Control Delay	7.5	2.9	98.6	1.7	47.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	7.5	2.9	98.6	1.7	47.6	
LOS	A	A	F	A	D	
Approach Delay	7.4			3.1	47.6	
Approach LOS	A			A	D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 58 (44%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Natural Cycle: 120
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.68
 Intersection Signal Delay: 6.3
 Intersection LOS: A
 Intersection Capacity Utilization 61.9%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 9: Commuter Way & Soledad Cyn



Queues

9: Commuter Way & Soledad Cyn

01/18/2024



Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Group Flow (vph)	2918	32	28	1867	63
v/c Ratio	0.68	0.02	0.37	0.41	0.28
Control Delay	7.5	2.9	98.6	1.7	47.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	7.5	2.9	98.6	1.7	47.6
Queue Length 50th (ft)	321	3	23	30	20
Queue Length 95th (ft)	403	12	m37	13	43
Internal Link Dist (ft)	831			2745	308
Turn Bay Length (ft)		150	285		
Base Capacity (vph)	4318	1346	214	4566	849
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.68	0.02	0.13	0.41	0.07

Intersection Summary

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

Lanes, Volumes, Timings
 10: Soledad Cyn & Valley Center

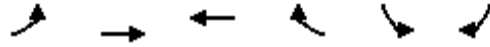
01/18/2024



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø4
Lane Configurations	↖↖	↑↑↑	↑↑↑	↗	↘↘	↘	
Traffic Volume (vph)	138	2043	1279	791	897	192	
Future Volume (vph)	138	2043	1279	791	897	192	
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	250			310	235	0	
Storage Lanes	2			1	1	1	
Taper Length (ft)	25				25		
Lane Util. Factor	0.97	0.91	0.91	1.00	0.97	1.00	
Fr _t				0.850		0.850	
Fl _t Protected	0.950				0.950		
Satd. Flow (prot)	3433	5085	5085	1583	3433	1583	
Fl _t Permitted	0.950				0.950		
Satd. Flow (perm)	3433	5085	5085	1583	3433	1583	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)				617		181	
Link Speed (mph)		50	50		30		
Link Distance (ft)		2935	1764		1116		
Travel Time (s)		40.0	24.1		25.4		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	150	2221	1390	860	975	209	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	150	2221	1390	860	975	209	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Left	Left	Right	Left	Right	
Median Width(ft)		24	24		24		
Link Offset(ft)		0	0		0		
Crosswalk Width(ft)		16	16		16		
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (mph)	15			9	15	9	
Number of Detectors	1	1	1	1	1	1	
Detector Template							
Leading Detector (ft)	50	50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Turn Type	Prot	NA	NA	Free	Prot	pt+ov	
Protected Phases	5	2	6		3	3 5	4
Permitted Phases				Free			
Detector Phase	5	2	6		3	3 5	
Switch Phase							
Minimum Initial (s)	4.0	4.0	4.0		4.0		4.0
Minimum Split (s)	20.0	22.0	29.0		20.0		35.0
Total Split (s)	20.0	72.0	52.0		25.0		35.0

Lanes, Volumes, Timings
 10: Soledad Cyn & Valley Center

01/18/2024

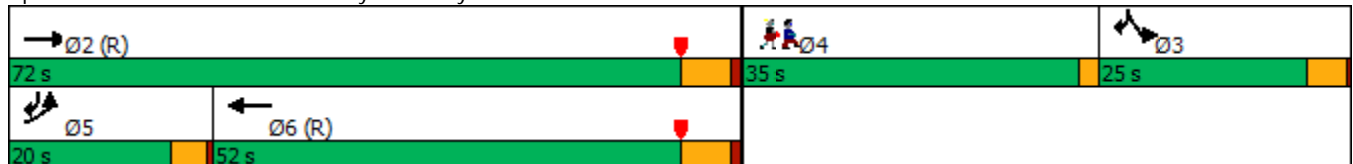


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø4
Total Split (%)	15.2%	54.5%	39.4%		18.9%		27%
Maximum Green (s)	16.0	66.0	46.0		20.5		33.0
Yellow Time (s)	3.5	5.0	5.0		4.0		2.0
All-Red Time (s)	0.5	1.0	1.0		0.5		0.0
Lost Time Adjust (s)	0.0	-2.0	-2.0		-0.5		
Total Lost Time (s)	4.0	4.0	4.0		4.0		
Lead/Lag	Lead		Lag		Lag		Lead
Lead-Lag Optimize?	Yes		Yes		Yes		Yes
Vehicle Extension (s)	3.0	3.0	3.0		3.0		0.2
Recall Mode	None	C-Max	C-Max		None		None
Walk Time (s)			7.0				7.0
Flash Dont Walk (s)			16.0				26.0
Pedestrian Calls (#/hr)			0				0
Act Effct Green (s)	11.1	68.9	53.8	132.0	55.1	70.2	
Actuated g/C Ratio	0.08	0.52	0.41	1.00	0.42	0.53	
v/c Ratio	0.52	0.84	0.67	0.54	0.68	0.23	
Control Delay	53.3	33.9	15.8	7.7	33.7	5.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	53.3	33.9	15.8	7.7	33.7	5.6	
LOS	D	C	B	A	C	A	
Approach Delay		35.1	12.7		28.8		
Approach LOS		D	B		C		

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 35 (27%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Natural Cycle: 145
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.84
 Intersection Signal Delay: 25.1
 Intersection LOS: C
 Intersection Capacity Utilization 71.7%
 ICU Level of Service C
 Analysis Period (min) 15

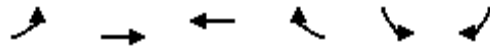
Splits and Phases: 10: Soledad Cyn & Valley Center



Queues

10: Soledad Cyn & Valley Center

01/18/2024



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	150	2221	1390	860	975	209
v/c Ratio	0.52	0.84	0.67	0.54	0.68	0.23
Control Delay	53.3	33.9	15.8	7.7	33.7	5.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.3	33.9	15.8	7.7	33.7	5.6
Queue Length 50th (ft)	61	679	313	389	430	27
Queue Length 95th (ft)	m88	778	155	631	501	m42
Internal Link Dist (ft)		2855	1684		1036	
Turn Bay Length (ft)	250			310	235	
Base Capacity (vph)	416	2652	2070	1583	1434	979
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.84	0.67	0.54	0.68	0.21

Intersection Summary

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

Lanes, Volumes, Timings
 11: Golden Valley Road & Valley Center Drive

01/18/2024



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4	Ø5	Ø12
Lane Configurations	↶↶↶	↷↷	↶↶	↑↑↑	↑↑↑	↷			
Traffic Volume (vph)	551	436	378	1266	1118	806			
Future Volume (vph)	551	436	378	1266	1118	806			
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900			
Storage Length (ft)	260	260	290			150			
Storage Lanes	2	1	2			1			
Taper Length (ft)	25		25						
Lane Util. Factor	0.94	0.88	0.97	0.91	0.91	1.00			
Frt		0.850				0.850			
Flt Protected	0.950		0.950						
Satd. Flow (prot)	4990	2787	3433	5085	5085	1583			
Flt Permitted	0.950		0.950						
Satd. Flow (perm)	4990	2787	3433	5085	5085	1583			
Right Turn on Red		Yes				Yes			
Satd. Flow (RTOR)		474				528			
Link Speed (mph)	30			50	50				
Link Distance (ft)	456			2527	1665				
Travel Time (s)	10.4			34.5	22.7				
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92			
Adj. Flow (vph)	599	474	411	1376	1215	876			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	599	474	411	1376	1215	876			
Enter Blocked Intersection	No	No	No	No	No	No			
Lane Alignment	Left	Right	Left	Left	Left	Right			
Median Width(ft)	36			24	24				
Link Offset(ft)	0			0	0				
Crosswalk Width(ft)	16			16	16				
Two way Left Turn Lane									
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00			
Turning Speed (mph)	15	9	15			9			
Number of Detectors	1	1	1	1	1	1			
Detector Template									
Leading Detector (ft)	50	50	50	50	50	50			
Trailing Detector (ft)	0	0	0	0	0	0			
Detector 1 Position(ft)	0	0	0	0	0	0			
Detector 1 Size(ft)	50	50	50	50	50	50			
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel									
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Turn Type	Prot	pt+ov	Prot	NA	NA	Perm			
Protected Phases	3	5 12	5 12	2	6		4	5	12
Permitted Phases						6			
Detector Phase	3	5 12	5 12	2	6	6			
Switch Phase									
Minimum Initial (s)	3.0			10.0	10.0	10.0	4.0	4.0	4.0
Minimum Split (s)	25.0			30.0	40.0	40.0	35.0	15.0	20.0
Total Split (s)	30.0			67.0	42.0	42.0	35.0	25.0	35.0

Lanes, Volumes, Timings
 11: Golden Valley Road & Valley Center Drive

01/18/2024

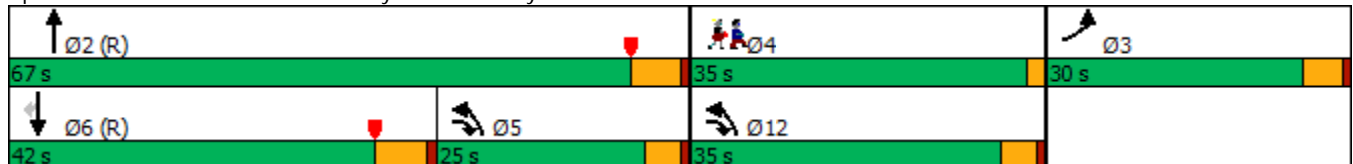


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4	Ø5	Ø12
Total Split (%)	22.7%			50.8%	31.8%	31.8%	27%	19%	27%
Maximum Green (s)	25.0			61.0	36.0	36.0	33.0	20.5	30.5
Yellow Time (s)	4.0			5.0	5.0	5.0	2.0	3.5	3.5
All-Red Time (s)	1.0			1.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)	-1.0			-2.0	-2.0	-2.0			
Total Lost Time (s)	4.0			4.0	4.0	4.0			
Lead/Lag					Lead	Lead		Lag	
Lead-Lag Optimize?					Yes	Yes		Yes	
Vehicle Extension (s)	3.0			3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None			C-Min	C-Min	C-Min	None	None	None
Walk Time (s)					7.0	7.0	7.0		5.0
Flash Dont Walk (s)					24.0	24.0	26.0		10.0
Pedestrian Calls (#/hr)					0	0	0		0
Act Effect Green (s)	22.3	31.6	31.6	89.6	66.0	66.0			
Actuated g/C Ratio	0.17	0.24	0.24	0.68	0.50	0.50			
v/c Ratio	0.71	0.46	0.50	0.40	0.48	0.83			
Control Delay	43.2	7.1	24.7	4.1	5.7	15.9			
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0			
Total Delay	43.2	7.1	24.7	4.1	5.7	15.9			
LOS	D	A	C	A	A	B			
Approach Delay	27.2			8.9	10.0				
Approach LOS	C			A	B				

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 115
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.83
 Intersection Signal Delay: 13.3
 Intersection LOS: B
 Intersection Capacity Utilization 67.4%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 11: Golden Valley Road & Valley Center Drive



Queues

11: Golden Valley Road & Valley Center Drive

01/18/2024



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	599	474	411	1376	1215	876
v/c Ratio	0.71	0.46	0.50	0.40	0.48	0.83
Control Delay	43.2	7.1	24.7	4.1	5.7	15.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.2	7.1	24.7	4.1	5.7	15.9
Queue Length 50th (ft)	161	25	126	84	42	439
Queue Length 95th (ft)	199	61	m121	m74	m65	m348
Internal Link Dist (ft)	376			2447	1585	
Turn Bay Length (ft)	260	260	290			150
Base Capacity (vph)	990	1422	1407	3449	2543	1055
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.61	0.33	0.29	0.40	0.48	0.83

Intersection Summary

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

Lanes, Volumes, Timings
12: Ruther & Soledad Cyn

01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	47	2385	167	196	1790	19	185	79	232	130	89	67
Future Volume (vph)	47	2385	167	196	1790	19	185	79	232	130	89	67
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	285		300	250		0	0		0	125		0
Storage Lanes	1		1	2		0	1		2	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	0.91	0.95	0.95	0.88	0.95	0.95	1.00
Frt			0.850		0.998				0.850		0.938	
Flt Protected	0.950			0.950			0.950	0.977		0.950	0.998	
Satd. Flow (prot)	1770	5085	1583	3433	5075	0	1681	1729	2787	1681	1657	0
Flt Permitted	0.950			0.950			0.950	0.977		0.950	0.998	
Satd. Flow (perm)	1770	5085	1583	3433	5075	0	1681	1729	2787	1681	1657	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			103		1				121		22	
Link Speed (mph)		50		50				40			30	
Link Distance (ft)		1764		2480				220			327	
Travel Time (s)		24.1		33.8				3.8			7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	51	2592	182	213	1946	21	201	86	252	141	97	73
Shared Lane Traffic (%)							37%			5%		
Lane Group Flow (vph)	51	2592	182	213	1967	0	127	160	252	134	177	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24		24				12			12	
Link Offset(ft)		0		0				0			0	
Crosswalk Width(ft)		16		16				16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1	1	1	1	
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50		50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	pt+ov	Split	NA	
Protected Phases	1	6		5	2		3	3	3 5	4	4	
Permitted Phases			6									
Detector Phase	1	6	6	5	2		3	3	3 5	4	4	
Switch Phase												
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	12.0	42.0	42.0	12.0	27.0		37.0	37.0		15.0	15.0	
Total Split (s)	26.0	49.0	49.0	25.0	48.0		38.0	38.0		20.0	20.0	

Lanes, Volumes, Timings
12: Ruther & Soledad Cyn

01/18/2024

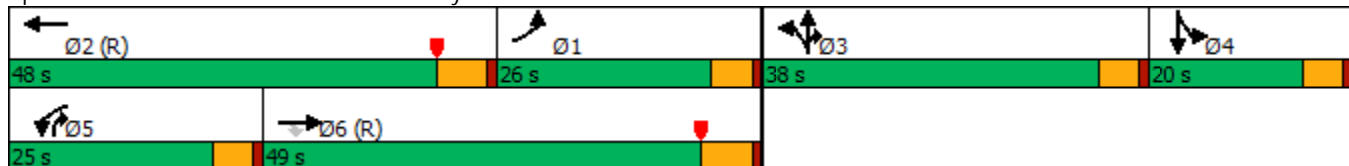


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	19.7%	37.1%	37.1%	18.9%	36.4%		28.8%	28.8%		15.2%	15.2%	
Maximum Green (s)	21.0	43.0	43.0	20.0	42.0		33.0	33.0		15.0	15.0	
Yellow Time (s)	4.0	5.0	5.0	4.0	5.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	-1.0	-2.0	-2.0	-1.0	-2.0		-1.0	-1.0		-1.0	-1.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead		Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	4.5	4.5	1.5	4.5		3.0	3.0		3.0	3.0	
Minimum Gap (s)	1.5	3.0	3.0	1.5	3.0		3.0	3.0		3.0	3.0	
Time Before Reduce (s)	0.0	7.5	7.5	0.0	7.5		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	22.5	22.5	0.0	22.5		0.0	0.0		0.0	0.0	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None		None	None	
Walk Time (s)		7.0	7.0		7.0		5.0	5.0				
Flash Dont Walk (s)		25.0	25.0		11.0		27.0	27.0				
Pedestrian Calls (#/hr)		0	0		0		0	0				
Act Effect Green (s)	18.6	64.9	64.9	13.1	61.1		18.9	18.9	32.0	19.2	19.2	
Actuated g/C Ratio	0.14	0.49	0.49	0.10	0.46		0.14	0.14	0.24	0.15	0.15	
v/c Ratio	0.20	1.04	0.22	0.63	0.84		0.53	0.65	0.33	0.55	0.68	
Control Delay	48.1	56.4	12.2	65.2	38.0		59.4	64.9	12.4	60.3	59.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	48.1	56.4	12.2	65.2	38.0		59.4	64.9	12.4	60.3	59.8	
LOS	D	E	B	E	D		E	E	B	E	E	
Approach Delay		53.4			40.6			39.1			60.0	
Approach LOS		D			D			D			E	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
 Natural Cycle: 140
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.04
 Intersection Signal Delay: 47.7
 Intersection LOS: D
 Intersection Capacity Utilization 80.2%
 ICU Level of Service D
 Analysis Period (min) 15

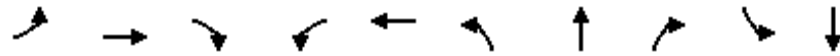
Splits and Phases: 12: Ruther & Soledad Cyn



Queues

12: Ruther & Soledad Cyn

01/18/2024



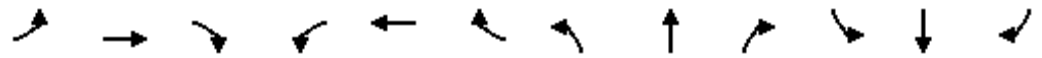
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	51	2592	182	213	1967	127	160	252	134	177
v/c Ratio	0.20	1.04	0.22	0.63	0.84	0.53	0.65	0.33	0.55	0.68
Control Delay	48.1	56.4	12.2	65.2	38.0	59.4	64.9	12.4	60.3	59.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.1	56.4	12.2	65.2	38.0	59.4	64.9	12.4	60.3	59.8
Queue Length 50th (ft)	32	-864	35	91	574	107	138	36	113	133
Queue Length 95th (ft)	m45	#1156	m69	130	#829	168	206	50	178	211
Internal Link Dist (ft)		1684			2400		140			247
Turn Bay Length (ft)	285		300	250					125	
Base Capacity (vph)	295	2498	830	546	2351	432	445	1226	252	267
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	1.04	0.22	0.39	0.84	0.29	0.36	0.21	0.53	0.66

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
 13: Golden Valley Road & Centre Pointe Parkway

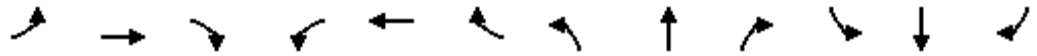
01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	177	99	556	272	78	197	283	1348	282	245	1428	65
Future Volume (vph)	177	99	556	272	78	197	283	1348	282	245	1428	65
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		260	150		250	300		300	700		0
Storage Lanes	1		1	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	0.91	1.00	0.95	1.00
Frt			0.850		0.893			0.974				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	3433	1663	0	1770	4953	0	1770	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1863	1583	3433	1663	0	1770	4953	0	1770	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			91		94			34				136
Link Speed (mph)		30			30			50				50
Link Distance (ft)		1149			802			7902				1475
Travel Time (s)		26.1			18.2			107.8				20.1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	192	108	604	296	85	214	308	1465	307	266	1552	71
Shared Lane Traffic (%)												
Lane Group Flow (vph)	192	108	604	296	299	0	308	1772	0	266	1552	71
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1		1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50		50	50	50
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Size(ft)	50	50	50	50	50		50	50		50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Turn Type	Prot	NA	pm+ov	Prot	NA		Prot	NA		Prot	NA	Perm
Protected Phases	3	8	5	7	4		5	2		1	6	
Permitted Phases			8									6
Detector Phase	3	8	5	7	4		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	4.0	6.0	4.0	4.0	6.0		4.0	10.0		4.0	10.0	10.0
Minimum Split (s)	12.0	25.0	20.0	20.0	39.0		20.0	33.0		15.0	34.0	34.0
Total Split (s)	19.0	25.0	33.0	34.0	40.0		33.0	40.0		33.0	40.0	40.0

Lanes, Volumes, Timings
 13: Golden Valley Road & Centre Pointe Parkway

01/18/2024

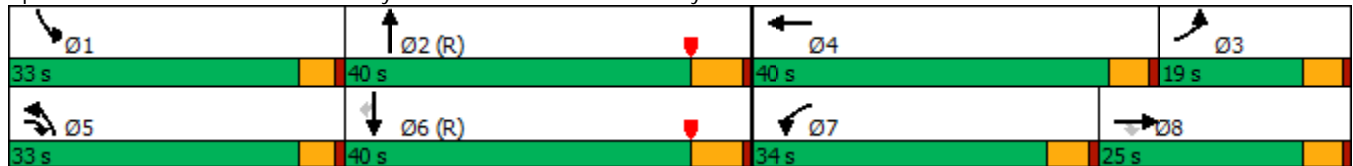


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	14.4%	18.9%	25.0%	25.8%	30.3%		25.0%	30.3%		25.0%	30.3%	30.3%
Maximum Green (s)	14.0	20.0	28.5	29.0	35.0		28.5	34.0		28.5	34.0	34.0
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0		3.5	5.0		3.5	5.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	-1.0	-1.0	-0.5	-1.0	-1.0		-0.5	-2.0		-0.5	-2.0	-2.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lag	Lag	Lead	Lead	Lead		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Min		None	C-Min	C-Min
Walk Time (s)					7.0			7.0			7.0	7.0
Flash Dont Walk (s)					27.0			20.0			21.0	21.0
Pedestrian Calls (#/hr)					0			0			0	0
Act Effct Green (s)	20.8	26.7	57.2	17.7	23.6		26.6	47.1		24.6	45.1	45.1
Actuated g/C Ratio	0.16	0.20	0.43	0.13	0.18		0.20	0.36		0.19	0.34	0.34
v/c Ratio	0.69	0.29	0.82	0.64	0.80		0.87	0.99		0.81	1.28	0.11
Control Delay	66.1	45.6	37.0	60.6	50.6		69.1	53.3		55.8	175.4	8.6
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	66.1	45.6	37.0	60.6	50.6		69.1	53.3		55.8	175.4	8.6
LOS	E	D	D	E	D		E	D		E	F	A
Approach Delay		44.2			55.6			55.6			152.3	
Approach LOS		D			E			E			F	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 103 (78%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 145
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.28
 Intersection Signal Delay: 87.1
 Intersection Capacity Utilization 94.5%
 Analysis Period (min) 15
 Intersection LOS: F
 ICU Level of Service F

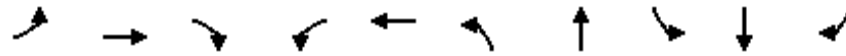
Splits and Phases: 13: Golden Valley Road & Centre Pointe Parkway



Queues

13: Golden Valley Road & Centre Pointe Parkway

01/18/2024



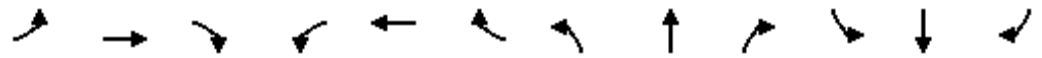
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	192	108	604	296	299	308	1772	266	1552	71
v/c Ratio	0.69	0.29	0.82	0.64	0.80	0.87	0.99	0.81	1.28	0.11
Control Delay	66.1	45.6	37.0	60.6	50.6	69.1	53.3	55.8	175.4	8.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	66.1	45.6	37.0	60.6	50.6	69.1	53.3	55.8	175.4	8.6
Queue Length 50th (ft)	154	77	357	125	173	278	-614	218	-981	1
Queue Length 95th (ft)	#285	132	526	168	258	m#364	#790	317	#1168	38
Internal Link Dist (ft)		1069			722		7822		1395	
Turn Bay Length (ft)	150		260	150		300		700		
Base Capacity (vph)	278	383	767	780	521	391	1788	388	1209	630
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.69	0.28	0.79	0.38	0.57	0.79	0.99	0.69	1.28	0.11

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
 14: Sierra Highway & Golden Valley Road

01/18/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑	↔↔	↔↔	↑↑↑	↔	↔↔	↑↔		↔	↑↑	↔
Traffic Volume (vph)	370	974	549	68	913	111	681	1045	132	69	254	230
Future Volume (vph)	370	974	549	68	913	111	681	1045	132	69	254	230
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	280		280	285		300	285		0	410		540
Storage Lanes	2		2	2		1	2		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	0.88	0.97	0.91	1.00	0.97	0.95	0.95	1.00	0.95	1.00
Fr _t			0.850			0.850		0.983				0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	2787	3433	5085	1583	3433	3479	0	1770	3539	1583
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	2787	3433	5085	1583	3433	3479	0	1770	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			547			186		11				250
Link Speed (mph)		50		50			30			30		
Link Distance (ft)		1983		1208			1801			1671		
Travel Time (s)		27.0		16.5			40.9			38.0		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	402	1059	597	74	992	121	740	1136	143	75	276	250
Shared Lane Traffic (%)												
Lane Group Flow (vph)	402	1059	597	74	992	121	740	1279	0	75	276	250
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24		24			24			24		24
Link Offset(ft)		0		0			0			0		0
Crosswalk Width(ft)		16		16			16			16		16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50		50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50		50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	custom
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						8
Detector Phase	7	4	4	3	8	8	5	2		1	6	8
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	8.5	29.6	29.6	8.5	40.0	40.0	15.0	49.0		8.5	46.0	40.0
Total Split (s)	29.0	50.0	50.0	20.0	41.0	41.0	37.0	44.0		18.0	25.0	41.0

Lanes, Volumes, Timings
 14: Sierra Highway & Golden Valley Road

01/18/2024

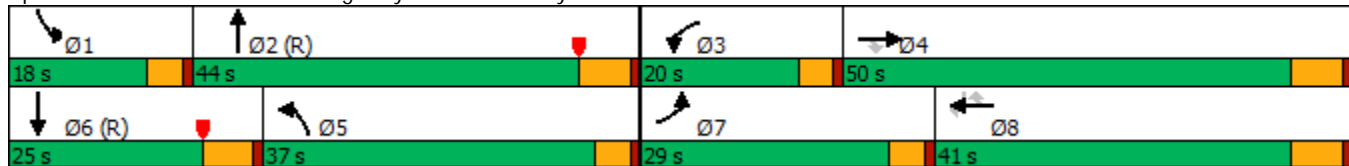


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	22.0%	37.9%	37.9%	15.2%	31.1%	31.1%	28.0%	33.3%		13.6%	18.9%	31.1%
Maximum Green (s)	24.5	44.0	44.0	15.5	35.0	35.0	32.5	38.0		13.5	19.0	35.0
Yellow Time (s)	3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.0		3.5	5.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	-0.5	-2.0	-2.0	-0.5	-2.0	-2.0	-0.5	-2.0		-0.5	-2.0	-2.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lag		Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	None
Walk Time (s)					5.0	5.0		5.0			5.0	5.0
Flash Dont Walk (s)					29.0	29.0		33.0			30.0	29.0
Pedestrian Calls (#/hr)					0	0		0			0	0
Act Effct Green (s)	20.9	49.2	49.2	8.7	34.9	34.9	33.0	51.3		11.1	27.2	34.9
Actuated g/C Ratio	0.16	0.37	0.37	0.07	0.26	0.26	0.25	0.39		0.08	0.21	0.26
v/c Ratio	0.74	0.80	0.43	0.33	0.74	0.22	0.86	0.94		0.51	0.38	0.42
Control Delay	40.9	42.3	14.2	62.2	47.9	1.4	58.8	53.9		69.1	48.5	6.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	40.9	42.3	14.2	62.2	47.9	1.4	58.8	53.9		69.1	48.5	6.5
LOS	D	D	B	E	D	A	E	D		E	D	A
Approach Delay		33.9			44.0			55.7			33.6	
Approach LOS		C			D			E			C	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 65 (49%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 140
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.94
 Intersection Signal Delay: 43.4 Intersection LOS: D
 Intersection Capacity Utilization 80.5% ICU Level of Service D
 Analysis Period (min) 15

Splits and Phases: 14: Sierra Highway & Golden Valley Road



Queues

14: Sierra Highway & Golden Valley Road

01/18/2024















Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	402	1059	597	74	992	121	740	1279	75	276	250
v/c Ratio	0.74	0.80	0.43	0.33	0.74	0.22	0.86	0.94	0.51	0.38	0.42
Control Delay	40.9	42.3	14.2	62.2	47.9	1.4	58.8	53.9	69.1	48.5	6.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.9	42.3	14.2	62.2	47.9	1.4	58.8	53.9	69.1	48.5	6.5
Queue Length 50th (ft)	175	463	118	31	279	0	314	~613	62	110	0
Queue Length 95th (ft)	m164	m421	m111	57	331	5	#410	#840	113	162	64
Internal Link Dist (ft)		1903			1128			1721		1591	
Turn Bay Length (ft)	280		280	285		300	285		410		540
Base Capacity (vph)	650	1319	1382	416	1425	577	858	1359	187	728	623
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.62	0.80	0.43	0.18	0.70	0.21	0.86	0.94	0.40	0.38	0.40

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
15: SR 14 SB Ramp & Golden Valley Road

01/18/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗	↖	↑↑					↘	↙	↗
Traffic Volume (vph)	0	862	332	168	728	0	0	0	0	72	4	436
Future Volume (vph)	0	862	332	168	728	0	0	0	0	72	4	436
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	220		0	0		0	300		0
Storage Lanes	0		1	1		0	0		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850									0.850
Flt Protected				0.950						0.950	0.957	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	1681	1694	1583
Flt Permitted				0.950						0.950	0.957	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	1681	1694	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			361									175
Link Speed (mph)		50			50			30			30	
Link Distance (ft)		861			697			508			640	
Travel Time (s)		11.7			9.5			11.5			14.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	937	361	183	791	0	0	0	0	78	4	474
Shared Lane Traffic (%)										48%		
Lane Group Flow (vph)	0	937	361	183	791	0	0	0	0	41	41	474
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94							94
Detector 2 Size(ft)		6			6							6
Detector 2 Type		Cl+Ex			Cl+Ex							Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							0.0
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		6		5		2				4		
Permitted Phases		6								4		4

Lanes, Volumes, Timings
 15: SR 14 SB Ramp & Golden Valley Road

01/18/2024

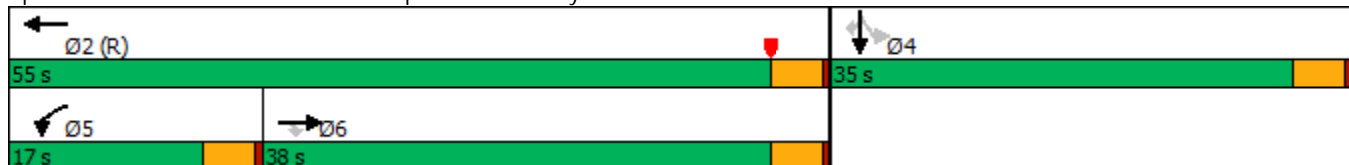


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase		6	6	5	2					4	4	4
Switch Phase												
Minimum Initial (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Minimum Split (s)		20.0	20.0	12.0	20.0					20.0	20.0	20.0
Total Split (s)		38.0	38.0	17.0	55.0					35.0	35.0	35.0
Total Split (%)		42.2%	42.2%	18.9%	61.1%					38.9%	38.9%	38.9%
Maximum Green (s)		34.0	34.0	13.0	51.0					31.0	31.0	31.0
Yellow Time (s)		3.5	3.5	3.5	3.5					3.5	3.5	3.5
All-Red Time (s)		0.5	0.5	0.5	0.5					0.5	0.5	0.5
Lost Time Adjust (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Total Lost Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lead/Lag		Lag	Lag	Lead								
Lead-Lag Optimize?		Yes	Yes	Yes								
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Recall Mode		Max	Max	None	C-Max					Max	Max	Max
Walk Time (s)		5.0	5.0		5.0					5.0	5.0	5.0
Flash Dont Walk (s)		10.0	10.0		10.0					10.0	10.0	10.0
Pedestrian Calls (#/hr)		0	0		0					0	0	0
Act Effect Green (s)		34.8	34.8	12.2	51.0					31.0	31.0	31.0
Actuated g/C Ratio		0.39	0.39	0.14	0.57					0.34	0.34	0.34
v/c Ratio		0.69	0.43	0.76	0.39					0.07	0.07	0.72
Control Delay		26.5	4.0	59.8	13.5					20.4	20.4	23.0
Queue Delay		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Total Delay		26.5	4.0	59.8	13.5					20.4	20.4	23.0
LOS		C	A	E	B					C	C	C
Approach Delay		20.2			22.2						22.6	
Approach LOS		C			C						C	

Intersection Summary

Area Type:	Other
Cycle Length:	90
Actuated Cycle Length:	90
Offset:	0 (0%), Referenced to phase 2:WBT, Start of Yellow
Natural Cycle:	55
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.76
Intersection Signal Delay:	21.4
Intersection LOS:	C
Intersection Capacity Utilization:	53.8%
ICU Level of Service:	A
Analysis Period (min):	15

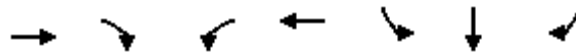
Splits and Phases: 15: SR 14 SB Ramp & Golden Valley Road



Queues

15: SR 14 SB Ramp & Golden Valley Road

01/18/2024

























Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	937	361	183	791	41	41	474
v/c Ratio	0.69	0.43	0.76	0.39	0.07	0.07	0.72
Control Delay	26.5	4.0	59.8	13.5	20.4	20.4	23.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.5	4.0	59.8	13.5	20.4	20.4	23.0
Queue Length 50th (ft)	233	0	114	137	16	16	147
Queue Length 95th (ft)	303	54	#204	170	40	40	267
Internal Link Dist (ft)	781			617		560	
Turn Bay Length (ft)			220		300		
Base Capacity (vph)	1366	832	255	2005	579	583	659
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.69	0.43	0.72	0.39	0.07	0.07	0.72

Intersection Summary

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

Lanes, Volumes, Timings
16: SR 14 NB Ramp & Golden Valley Road

01/18/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 			 							
Traffic Volume (vph)	442	507	0	0	465	230	418	2	393	0	0	0
Future Volume (vph)	442	507	0	0	465	230	418	2	393	0	0	0
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	230		0	0		280	0		140	0		0
Storage Lanes	2		0	0		1	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt						0.850			0.850			
Flt Protected	0.950						0.950	0.953				
Satd. Flow (prot)	3433	3539	0	0	3539	1583	1681	1686	1583	0	0	0
Flt Permitted	0.950						0.950	0.953				
Satd. Flow (perm)	3433	3539	0	0	3539	1583	1681	1686	1583	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						250			324			
Link Speed (mph)		50			50			30				30
Link Distance (ft)		697			616			615				491
Travel Time (s)		9.5			8.4			14.0				11.2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	480	551	0	0	505	250	454	2	427	0	0	0
Shared Lane Traffic (%)							50%					
Lane Group Flow (vph)	480	551	0	0	505	250	227	229	427	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1	1	2	1			
Detector Template	Left	Thru			Thru	Right	Left	Thru	Right			
Leading Detector (ft)	20	100			100	20	20	100	20			
Trailing Detector (ft)	0	0			0	0	0	0	0			
Detector 1 Position(ft)	0	0			0	0	0	0	0			
Detector 1 Size(ft)	20	6			6	20	20	6	20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Prot	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	1	6			2			8				
Permitted Phases						2	8		8			

Lanes, Volumes, Timings
 16: SR 14 NB Ramp & Golden Valley Road

01/18/2024

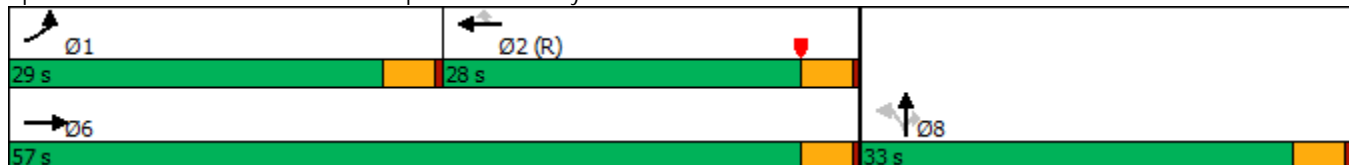


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	1	6			2	2	8	8	8			
Switch Phase												
Minimum Initial (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Minimum Split (s)	12.0	20.0			20.0	20.0	20.0	20.0	20.0			
Total Split (s)	29.0	57.0			28.0	28.0	33.0	33.0	33.0			
Total Split (%)	32.2%	63.3%			31.1%	31.1%	36.7%	36.7%	36.7%			
Maximum Green (s)	25.0	53.0			24.0	24.0	29.0	29.0	29.0			
Yellow Time (s)	3.5	3.5			3.5	3.5	3.5	3.5	3.5			
All-Red Time (s)	0.5	0.5			0.5	0.5	0.5	0.5	0.5			
Lost Time Adjust (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Total Lost Time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Lead/Lag	Lead				Lag				Lag			
Lead-Lag Optimize?	Yes				Yes				Yes			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Recall Mode	None	Max			C-Max	C-Max	Max	Max	Max			
Walk Time (s)		5.0			5.0	5.0	5.0	5.0	5.0			
Flash Dont Walk (s)		10.0			10.0	10.0	10.0	10.0	10.0			
Pedestrian Calls (#/hr)		0			0	0	0	0	0			
Act Effct Green (s)	17.8	53.0			31.2	31.2	29.0	29.0	29.0			
Actuated g/C Ratio	0.20	0.59			0.35	0.35	0.32	0.32	0.32			
v/c Ratio	0.71	0.26			0.41	0.35	0.42	0.42	0.59			
Control Delay	57.7	5.7			24.4	4.8	26.9	26.9	10.1			
Queue Delay	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Total Delay	57.7	5.7			24.4	4.8	26.9	26.9	10.1			
LOS	E	A			C	A	C	C	B			
Approach Delay		29.9			17.9			18.8				
Approach LOS		C			B			B				

Intersection Summary

Area Type: Other
 Cycle Length: 90
 Actuated Cycle Length: 90
 Offset: 0 (0%), Referenced to phase 2:WBT, Start of Yellow
 Natural Cycle: 55
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.71
 Intersection Signal Delay: 22.8
 Intersection LOS: C
 Intersection Capacity Utilization 53.8%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 16: SR 14 NB Ramp & Golden Valley Road



Queues

16: SR 14 NB Ramp & Golden Valley Road

01/18/2024



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	480	551	505	250	227	229	427
v/c Ratio	0.71	0.26	0.41	0.35	0.42	0.42	0.59
Control Delay	57.7	5.7	24.4	4.8	26.9	26.9	10.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.7	5.7	24.4	4.8	26.9	26.9	10.1
Queue Length 50th (ft)	154	30	113	0	105	106	42
Queue Length 95th (ft)	205	57	171	53	175	175	132
Internal Link Dist (ft)		617	536			535	
Turn Bay Length (ft)	230			280			140
Base Capacity (vph)	953	2084	1227	712	541	543	729
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.50	0.26	0.41	0.35	0.42	0.42	0.59
Intersection Summary							

Lanes, Volumes, Timings
17: Studio Driveway & Soledad Cyn

01/18/2024

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↙	↑↑↑	↘	
Traffic Volume (vph)	1074	8	4	1990	47	23
Future Volume (vph)	1074	8	4	1990	47	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt	0.999				0.956	
Flt Protected			0.950		0.968	
Satd. Flow (prot)	5080	0	1770	5085	1724	0
Flt Permitted			0.217		0.968	
Satd. Flow (perm)	5080	0	404	5085	1724	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	3				16	
Link Speed (mph)	50			50	30	
Link Distance (ft)	419			233	380	
Travel Time (s)	5.7			3.2	8.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1167	9	4	2163	51	25
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1176	0	4	2163	76	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2		1	2	1	
Detector Template	Thru		Left	Thru	Left	
Leading Detector (ft)	100		20	100	20	
Trailing Detector (ft)	0		0	0	0	
Detector 1 Position(ft)	0		0	0	0	
Detector 1 Size(ft)	6		20	6	20	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA		Perm	NA	Prot	
Protected Phases	6			2	4	
Permitted Phases			2			
Detector Phase	6		2	2	4	
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	

Lanes, Volumes, Timings
 17: Studio Driveway & Soledad Cyn

01/18/2024

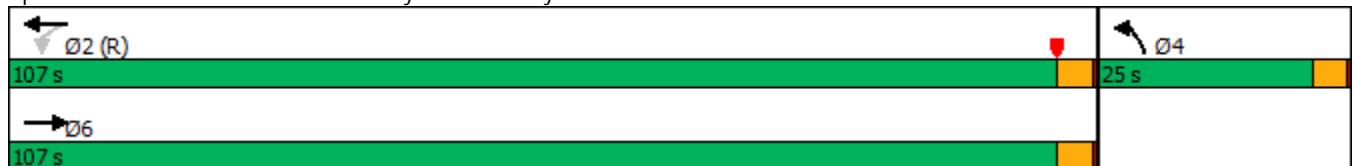


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Minimum Split (s)	20.0		20.0	20.0	20.0	
Total Split (s)	107.0		107.0	107.0	25.0	
Total Split (%)	81.1%		81.1%	81.1%	18.9%	
Maximum Green (s)	103.0		103.0	103.0	21.0	
Yellow Time (s)	3.5		3.5	3.5	3.5	
All-Red Time (s)	0.5		0.5	0.5	0.5	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	4.0		4.0	4.0	4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Recall Mode	Max		C-Max	C-Max	Max	
Walk Time (s)	5.0		5.0	5.0	5.0	
Flash Dont Walk (s)	10.0		10.0	10.0	10.0	
Pedestrian Calls (#/hr)	0		0	0	0	
Act Effect Green (s)	103.0		103.0	103.0	21.0	
Actuated g/C Ratio	0.78		0.78	0.78	0.16	
v/c Ratio	0.30		0.01	0.55	0.26	
Control Delay	8.7		5.2	7.6	41.0	
Queue Delay	0.0		0.0	0.0	0.0	
Total Delay	8.7		5.2	7.6	41.0	
LOS	A		A	A	D	
Approach Delay	8.7			7.6	41.0	
Approach LOS	A			A	D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 0 (0%), Referenced to phase 2:WBTL, Start of Yellow
 Natural Cycle: 50
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.55
 Intersection Signal Delay: 8.7
 Intersection Capacity Utilization 49.1%
 Analysis Period (min) 15
 Intersection LOS: A
 ICU Level of Service A

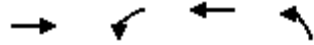
Splits and Phases: 17: Studio Driveway & Soledad Cyn



Queues

17: Studio Driveway & Soledad Cyn

01/18/2024



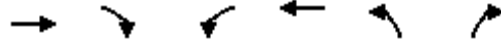
Lane Group	EBT	WBL	WBT	NBL
Lane Group Flow (vph)	1176	4	2163	76
v/c Ratio	0.30	0.01	0.55	0.26
Control Delay	8.7	5.2	7.6	41.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	8.7	5.2	7.6	41.0
Queue Length 50th (ft)	170	1	190	45
Queue Length 95th (ft)	m160	m2	269	94
Internal Link Dist (ft)	339		153	300
Turn Bay Length (ft)				
Base Capacity (vph)	3964	315	3967	287
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.30	0.01	0.55	0.26

Intersection Summary

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

Lanes, Volumes, Timings
 18: Residential Driveway 1 & Soledad Cyn

01/18/2024



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↵	↑↑↑	↵	
Traffic Volume (vph)	1067	30	10	1994	0	18
Future Volume (vph)	1067	30	10	1994	0	18
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	100		0	0
Storage Lanes		0	1		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt	0.996				0.865	
Flt Protected			0.950			
Satd. Flow (prot)	5065	0	1770	5085	1611	0
Flt Permitted			0.950			
Satd. Flow (perm)	5065	0	1770	5085	1611	0
Link Speed (mph)	50			50	30	
Link Distance (ft)	233			397	318	
Travel Time (s)	3.2			5.4	7.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1160	33	11	2167	0	20
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1193	0	11	2167	20	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	48.5%
Analysis Period (min)	15
	ICU Level of Service A

HCM 6th TWSC
 18: Residential Driveway 1 & Soledad Cyn

01/18/2024

Intersection						
Int Delay, s/veh	0.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↵	↑↑↑	↵	
Traffic Vol, veh/h	1067	30	10	1994	0	18
Future Vol, veh/h	1067	30	10	1994	0	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1160	33	11	2167	0	20

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	1193	0	2066
Stage 1	-	-	-	-	1177
Stage 2	-	-	-	-	889
Critical Hdwy	-	-	5.34	-	5.74
Critical Hdwy Stg 1	-	-	-	-	6.64
Critical Hdwy Stg 2	-	-	-	-	6.04
Follow-up Hdwy	-	-	3.12	-	3.82
Pot Cap-1 Maneuver	-	-	315	-	86
Stage 1	-	-	-	-	188
Stage 2	-	-	-	-	328
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	315	-	83
Mov Cap-2 Maneuver	-	-	-	-	83
Stage 1	-	-	-	-	188
Stage 2	-	-	-	-	317

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	14.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	382	-	-	315	-
HCM Lane V/C Ratio	0.051	-	-	0.035	-
HCM Control Delay (s)	14.9	-	-	16.8	-
HCM Lane LOS	B	-	-	C	-
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-

Lanes, Volumes, Timings
 19: Residential Driveway 2 & Soledad Cyn

01/18/2024



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↵	↑↑↑		↵
Traffic Volume (vph)	1044	41	21	2003	0	35
Future Volume (vph)	1044	41	21	2003	0	35
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	100		0	0
Storage Lanes		0	1		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt	0.994					0.865
Flt Protected			0.950			
Satd. Flow (prot)	5055	0	1770	5085	0	1611
Flt Permitted			0.950			
Satd. Flow (perm)	5055	0	1770	5085	0	1611
Link Speed (mph)	50			50	30	
Link Distance (ft)	397			911	422	
Travel Time (s)	5.4			12.4	9.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1135	45	23	2177	0	38
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1180	0	23	2177	0	38
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	42.0%
Analysis Period (min)	15
	ICU Level of Service A

HCM 6th TWSC
 19: Residential Driveway 2 & Soledad Cyn

01/18/2024

Intersection						
Int Delay, s/veh	0.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↘	↑↑↑		↗
Traffic Vol, veh/h	1044	41	21	2003	0	35
Future Vol, veh/h	1044	41	21	2003	0	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1135	45	23	2177	0	38

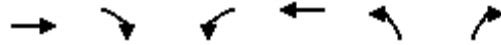
Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	1180	0	- 590
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	5.34	-	- 7.14
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	3.12	-	- 3.92
Pot Cap-1 Maneuver	-	-	320	-	0 386
Stage 1	-	-	-	-	0 -
Stage 2	-	-	-	-	0 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	320	-	- 386
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	15.3
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	386	-	-	320	-
HCM Lane V/C Ratio	0.099	-	-	0.071	-
HCM Control Delay (s)	15.3	-	-	17.1	-
HCM Lane LOS	C	-	-	C	-
HCM 95th %tile Q(veh)	0.3	-	-	0.2	-

Lanes, Volumes, Timings
 20: Studio Driveway 2 & Soledad Cyn

01/18/2024



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑		↗
Traffic Volume (vph)	1082	0	0	2036	0	0
Future Volume (vph)	1082	0	0	2036	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frnt						
Flt Protected						
Satd. Flow (prot)	5085	0	0	5085	0	1863
Flt Permitted						
Satd. Flow (perm)	5085	0	0	5085	0	1863
Link Speed (mph)	50			50	30	
Link Distance (ft)	765			419	381	
Travel Time (s)	10.4			5.7	8.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1176	0	0	2213	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1176	0	0	2213	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	42.7% ICU Level of Service A
Analysis Period (min)	15

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑		↑
Traffic Vol, veh/h	1082	0	0	2036	0	0
Future Vol, veh/h	1082	0	0	2036	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1176	0	0	2213	0	0

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	-	-	588
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	3.92
Pot Cap-1 Maneuver	-	0	-	0	387
Stage 1	-	0	-	0	-
Stage 2	-	0	-	0	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	387
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

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

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



**TRANSPORTATION ASSESSMENT
FOR THE
RIVERVIEW MIXED-USE DEVELOPMENT PROJECT
SANTA CLARITA, CALIFORNIA**

AUGUST 2023

PREPARED FOR
THE RIVERVIEW OWNER LPV, LLC

PREPARED BY



**TRANSPORTATION ASSESSMENT
FOR THE
SHADOWBOX STUDIOS - RIVERVIEW
PROJECT
SANTA CLARITA, CALIFORNIA**

August 2023

Prepared for:

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Chapter 1

Introduction

This report presents the transportation assessment for the Riverview Mixed-Use Development (Project), a mixed-use residential and studio development located along Soledad Canyon Road, approximately 0.6 miles east of Bouquet Canyon Road and immediately west of the Santa Clarita Metrolink Station, (Project Site) in the City of Santa Clarita (City). The Project is proposed by The Riverview Owner LPV, LLC (Applicant). The methodology and base assumptions used in the analysis were established in consultation with the City and in conformance with *Transportation Analysis Updates in Santa Clarita* (Fehr & Peers, May 19, 2020) (TAU).

PROJECT DESCRIPTION

Project Site Information

The Project proposes to construct an approximately 66,000 square feet (sf) studio consisting entirely of sound stages and a total of 318 residential units including 196 single family attached units and 122 single family detached units. As shown in Figure 1, the Project Site is bounded by Soledad Canyon Road to the north, vacant land to the west and south, and Commuter Way to the east.

The Project Site is assigned Parcel Number 2836-011-018 in the Los Angeles County Assessor's records.

The Project would be constructed continuously in one phase and be completed by 2026. A site plan for the Project is shown in Figure 2A and a detailed overview of the various components of the site are provided in Figure 2B. As shown in Figure 2B, the Project would be broken into five zones: the studio and four residential lots (labeled 1-4):

-
- Lot 1: 95 single family attached units.
 - Lot 2: 60 single family detached units.
 - Lot 3: 62 single family detached units.
 - Lot 4: 101 single family attached units.

Entitlement applications were filed with the City Planning Department in October 2021 and have been assigned Master Case Number 21-205.

Parking

The residential portion of the Project would provide a total of 839 parking spaces while the sound stage component would provide 370 automobile spaces plus 60 spaces for production and delivery trucks (approximately 50 truck parking spaces will be provided in marked spaces within the parking lots and an additional 10 spaces will be in base camps immediately adjacent to the stages).

Project Access and Infrastructure

Figure 3 shows the existing and proposed access for the Project. The Project proposes to utilize the existing signalized intersection of Commuter Way & Soledad Canyon Road plus four new access points along Soledad Canyon Road, including a new signalized studio driveway, a secondary studio driveway for emergency access only (Emergency Access Driveway), and two one-way stop-controlled intersections for residential access.

Studio Vehicle Access. The studio portion of the Project would have a primary driveway at the northeast corner of the sound stages that would provide full access to Soledad Canyon Road. The Applicant has requested that the main gate driveway to the studio be controlled by a traffic signal. This entrance has been evaluated to see if it meets traffic signal warrants, as seen in the *Access Study for the Riverview Mixed-Use Project* (Gibson Transportation Consulting, Inc., March 29, 2022, revised July 29, 2022 and November 9, 2022) (Access Memo), provided in Appendix A. As discussed in the Access Memo, the primary driveway for the project would meet signal warrants based on the anticipated traffic volumes at the studio. For the purposes of this

Report, this driveway is identified as Intersection #17 and all studio traffic is assumed to utilize this driveway.

The Emergency Access Driveway would be located at the northwest corner of the sound stages and would operate as right-turn in-and-out only. Since all vehicles entering the Project would be required to check in and out at the main gate, the Emergency Access Driveway would likely to be closed to traffic most of the time. Thus, it was not included in the analysis of queue lengths or capacity impacts and is not one of the study intersections identified in this report.

Residential Vehicle Access. The residential portion of the Project would be served by two additional driveways along Soledad Canyon Road and the existing intersection of Commuter Way & Soledad Canyon Road. The western and the center driveways would allow right and left turns into the residential neighborhood, but only right turns out of the Project site. Because of the outbound left turn restrictions at these driveways, residential traffic headed to the west would be required to make a U-turn at the intersection of Commuter Way & Soledad Canyon Road. The effects of the U-turn were accounted for within the study. These driveways are defined as Intersection #18 and #19, respectively.

Commuter Way & Soledad Canyon Road to the east is an existing signalized intersection providing full access. The intersection would be shared with the traffic to/from the adjacent Santa Clarita Metrolink Station. This intersection is identified as Intersection #9 in this Report.

The residential lots described above would primarily use the following driveways:

- Lot 1: Intersection #9 and #19
- Lot 2: Intersection #9 and #19
- Lot 3: Intersection #19 and #20
- Lot 4: Intersection #19 and #20

Pedestrian Access and Infrastructure. Soledad Canyon Road has paved sidewalks on both the north and south sides of the street adjacent to the Project Site. Pedestrian access to the studio buildings would be provided from Soledad Canyon Road, adjacent to vehicular access by the westernmost driveway, as shown in Figure 2. Residential units would provide pedestrian access from Soledad Canyon Road via the two driveways leading to private drives, and the one

driveway along Commuter Way. Within the residential portion of the Project, there would be internal paved sidewalks between units to provide pedestrian connectivity.

Bicycle Access and Infrastructure. Similar to pedestrian access, bicycle access to the studio buildings would be provided from Soledad Canyon Road, adjacent to vehicular access by the westernmost driveway, as shown in Figure 2. Residential units would provide bicycle access from Soledad Canyon Road by the two driveways leading to private drives, and along Commuter Way.

Roadway Dedication Requirements

The City's *Circulation Element of the General Plan* (June 2011) (Circulation Element) provides street designations and required right-of-way (ROW) and roadway widths for streets throughout the City, as summarized in Table 1. The Project Site borders two public roadways: Soledad Canyon Road and Commuter Way.

The Project would improve the adjacent sidewalks and roadways along Soledad Canyon Road and Commuter Way with added landscaping. The Project would also provide dedications along Soledad Canyon Road to add right-turn lanes at the Project driveways and sidewalk infrastructure.

Transportation Demand Management (TDM) Measures

Although the analysis of vehicle miles traveled (VMT) presented in Chapter 5 shows that the Project is screened out from a VMT analysis because of the Project's proximity to the Santa Clarita Metrolink Station, the Project proposes to incorporate several TDM features to help reduce VMT and vehicle trips to and from the Project Site. These actions are consistent with City and State of California (State) transportation and greenhouse gas (GHG) policies and objectives.

The Project is somewhat unique in that it primarily leases stage and production spaces and therefore would have a limited number of permanent staff on-site. The vast majority of the on-

site employees will be temporary or short-term (3-6 months) and therefore the effectiveness of transportation demand management strategies may be limited given the transient nature of the employment base. Shadowbox Studios – Riverview will operate in concert with the proposed Shadowbox Studios – Santa Clarita, located approximately 3.3 miles to the south along Railroad Avenue at 13th Street.

The studio portion of the Project is somewhat unique in that it primarily leases stage and production spaces and, therefore, would have a limited number of permanent staff on-site. Although the studio site would be active with employees on-site every day, the majority of the on-site employees will be on three to six month assignments and, therefore, the TDM strategies would be tailored to them. It is likely that the studio portion of the Project will operate in concert with the proposed Shadowbox Studios – Santa Clarita, located approximately 3.3 miles to the south, along Railroad Avenue at 13th Street.

The following measures could be incorporated into the Project to reduce VMT and vehicle trips:
The following measures could be incorporated into the commercial portion of the Project to reduce VMT and vehicle trips:

- TDM Strategies Focused on the Site Design (Project Design Features)
 - Flexible Work Schedules and Telecommuting Programs
 - Bicycle Amenities (Bicycle Racks, Lockers, Showers, etc.)
 - Transportation Information Center (TIC)
 - Flex Car Support
 - Preferential Parking Locations for high occupancy vehicles (HOV)
 - Membership in a Transportation Management Association (TMA) covering the area
- Flexible TDM Strategies Provided by Studio Tenants
 - Rideshare Services
 - Guaranteed Ride Home (GRH) program
 - Tax Benefits for Transit Users

Existing Land Uses

The Project Site currently contains an open paved lot and auto speedway with large surface lot, which hosts the Santa Clarita Swap Meet twice weekly.

Project Schedule

Project construction is expected to be completed in 2026. For the purposes of these analyses, it was assumed that the Project will be constructed continuously in one phase and be open in 2026.

ANALYSIS METHODOLOGY

Two broad categories of transportation analyses are required by the City in the TAU.

The first category relates to potential transportation impacts under the California Environmental Quality Act (CEQA). Should a project exceed thresholds identified in the TAU, its impact would be considered significant under CEQA and, thus, would require any feasible mitigation measures be implemented to reduce the impact below the threshold of significance. The City's CEQA thresholds identified in the TAU are consistent with State CEQA guidance.

The second category, non-CEQA transportation analysis, is the review of transportation issues relating to safety, access, and congestion as they may be affected by construction or operation of a project.

Specific screening criteria in the TAU determine whether the Project requires a VMT analysis. Screening criteria for each type of analysis are described and applied to the Project in Chapter 3 of this report. As detailed herein, the Project is subject to the following analyses:

CEQA Analyses

- Conflicting with Plans, Programs, Ordinances, or Policies
- Substantially Increasing Hazards Due to a Geometric Design Feature or Incompatible Use
- Freeway Safety Analysis

Non-CEQA Analyses

- Pedestrian, Bicycle, and Transit Access Assessment
- Project Access and Circulation Evaluation
- Project Construction
- Residential Street Cut-Through Analysis

In addition, this report includes a discussion of Project parking requirements and supply.

ORGANIZATION OF REPORT

This report is divided into 10 chapters:

1. Introduction
2. Project Context
3. Transportation Assessment Screening
4. CEQA Analysis: Consistency with Policy
5. CEQA Analysis: VMT
6. CEQA Analysis: Geometric Design and Land Use Hazards
7. CEQA Analysis: Freeway Safety
8. Non-CEQA Analysis: Pedestrian, Bicycle, and Transit Access
9. Non-CEQA Analysis: Project Access, Safety, and Circulation
10. Non-CEQA Analysis: Project Construction

The appendices contain supporting documentation and additional details supporting the technical analyses.



LEGEND

 Project Site



Not to Scale

PROJECT SITE OVERVIEW

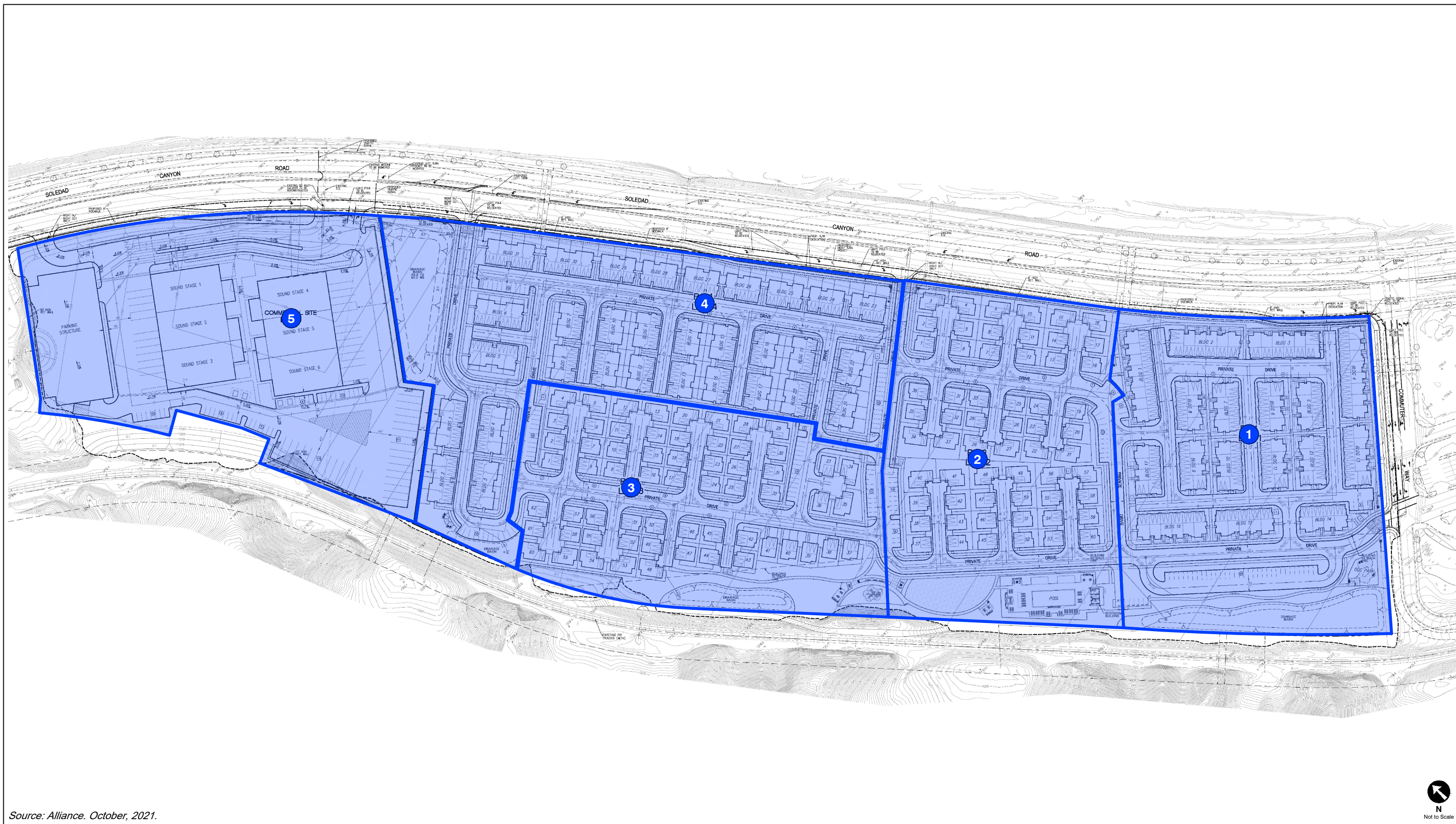
FIGURE
1



Source: Alliance. October, 2021.

PROJECT SITE PLAN

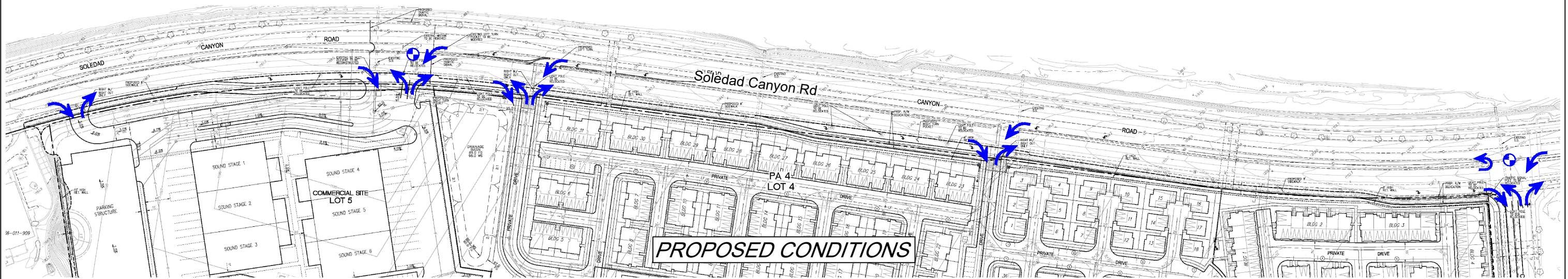
FIGURE
2A



Source: Alliance. October, 2021.

PROJECT SITE PLAN
TRIP DISTRIBUTION LOTS

FIGURE
2B



⊕ Traffic Signal

Source: Alliance. October, 2021.

EXISTING AND PROPOSED PROJECT SITE ACCESS

FIGURE 3

**TABLE 1
GENERAL PLAN STREET DESIGNATIONS**

Street Designation	Typical ROW (ft)	Travel Lanes	Streets within Study Area
Major Highways	116-138	6-8	Soledad Canyon Road, Magic Mountain Parkway, Valencia Boulevard, Newhall Ranch Road, McBean Parkway, Sierra Highway
Secondary Highways	88-92	2-4	Bouquet Canyon Road, Golden Valley Road
Limited Secondary Highways	84	2-5	None
Collector Streets	64-66	2	Commuter Way, Valley Center Drive, Ruether Avenue, Centre Pointe Parkway
Local Streets	58-60	2	None

Notes:

All widths in feet.

Source: *City of Santa Clarita General Plan Circulation Element* (City of Santa Clarita, June 2011).

Chapter 2

Project Context

This chapter presents a comprehensive summary of the area surrounding the Project Site in conformance with the requirements of the TAU. It describes key streets, transit routes, and freeway ramps within the Study Area.

EXISTING STREET SYSTEM

The existing street system in the Study Area consists of a regional roadway system including freeways, primary and secondary arterials, and collector and local streets that provide regional, sub-regional, or local access and circulation within the Study Area. These transportation facilities generally provide two to six travel lanes and usually allow parking on either side of the street. Typically, the speed limits range between 25 and 50 miles per hour (mph) on the streets and between 55 and 65 mph on freeways.

The Circulation Element outlines the classifications of streets within the City limits as follows:

- Regional Freeway Facilities are high-volume, high-speed roadways that provide regional access to the area. These generally have limited access provided by interchanges that carry regional through traffic and do not provide local access to adjacent land uses.
- The Surface Street System consists of five roadway types, including Major Highways, Secondary Highways, Limited Secondary Highways, Collector Streets, and Local Streets. Most roadways are further classified as “divided” or “undivided” to denote the inclusion of turning lanes to improve the vehicular capacity of the roadway.
 - Major Highways represent the widest streets and typically provide regional access to major destinations. These highways are at least six lanes wide, provide limited access to and from driveways and cross streets, and generally provide left-turn pockets at intersections. The intent of all Major Highways is to accommodate most traffic between different portions of the City and adjacent communities and the freeway system. Bicycle lanes are often delineated on major highways where parallel and adjacent bikeways are not available.

- Secondary Highways are typically four lanes wide, provide limited access from driveways and cross streets, and generally provide left-turn pockets at intersections. The intent of all Secondary Highways is to service most through traffic and collect traffic from Limited Secondary Highways. Bicycle lanes are delineated on Secondary Highways where parallel and adjacent bikeways are not available.
- Limited Secondary Highways are typically four lanes wide, provide partial control of vehicular and pedestrian access to the roadway from driveways, cross streets, and crosswalks, and do not typically have left-turn pockets at intersections. The roadway does provide limited on-street parking. The intent of all Limited Secondary Highways is to provide local access to Major and Secondary Highways.
- Collector Streets are typically two lanes wide, provide limited access from driveways and cross streets, and generally do not provide left-turn pockets at intersections. The intent of all Collector Streets is to service all local traffic from residential, commercial, and industrial uses and provide access to Major, Secondary, and Limited Secondary Highways.
- Local Streets are classified as any street that must be accessed through the use of any of the four previously identified roadways. Typical Local Streets include residential streets, private streets, service roads, and public alleys.

Freeways

Primary regional access to the Project Site is provided by Interstate 5 (I-5) and State Route 14 (SR 14). The following is a brief description of the freeways serving the Study Area:

- I-5 – I-5 generally runs in the north-south direction approximately 2.8 miles west of the Project Site. In the vicinity of the Study Area, I-5 provides four travel lanes in each direction. Access to and from I-5 is available via interchanges at Valencia Boulevard, Magic Mountain Parkway, and Newhall Ranch Road. I-5 carries between 200,000 and 286,000 Average Daily Traffic (ADT) in the Study Area.¹
- SR 14 – SR 14 generally runs in the northeast-southwest direction approximately 3.5 miles south and east of the Project Site. In the vicinity of the Study Area, SR 14 provides four travel lanes in each direction. Access to and from SR 14 is available via interchanges at Newhall Avenue, Placerita Canyon Road, Golden Valley Road, Via Princessa, and Soledad Canyon Road. SR 14 carries between 155,000 and 170,000 ADT in the Study Area.²

¹ Source: <https://dot.ca.gov/programs/traffic-operations/census/traffic-volumes/2017/route-5-6>

² Source: <https://dot.ca.gov/programs/traffic-operations/census/traffic-volumes/2017/route-11-15>

Roadways

The following is a brief description of the major roadways and their designations in the Circulation Element:

- Soledad Canyon Road – Soledad Canyon Road is a designated Major Highway that runs in the east-west direction along the north border of the Project Site. It provides four to six travel lanes, two to three in each direction, with additional left-turn lanes. On-street parking is generally not provided within the Study Area.
- Commuter Way – Commuter Way is a designated Collector Street that runs in the north-south direction adjacent to the east boundary of the Project Site. It provides four travel lanes, two in each direction, from Soledad Canyon Road to Squib County Road and two southbound travel lanes south of Squib County Road. On-street parking is not available within the Study Area.
- Bouquet Canyon Road – Bouquet Canyon Road is a designated Secondary Highway that runs in the north-south direction west of the Project Site. It provides six travel lanes, three in each direction. On-street parking is not available within the Study Area.
- Magic Mountain Parkway – Magic Mountain Parkway is a designated Major Highway that runs in the east-west direction north of the Project Site. It provides four travel lanes, two lanes in each direction. On-street parking is not provided within the Study Area.
- Valencia Boulevard – Valencia Boulevard is a designated Major Highway that runs in the east-west direction northwest of the Project Site. It provides six travel lanes, three lanes in each direction. On-street parking is not provided within the Study Area.
- Newhall Ranch Road – Newhall Ranch Road is a designated Major Highway that runs in the east-west direction north of the Project Site. The Project Site and Newhall Ranch Road are separated by the Santa Clara River running generally parallel to Soledad Canyon Road. It provides six travel lanes, three in each direction, with a landscaped median. A Class I bike lane runs along the southern, eastbound side of the road. The speed limit on Newhall Ranch Road within the study area is 50 mph, and on-street parking is not provided.
- Valley Center Drive – Valley Center Drive is a designated Collector Street that runs in the north-south direction northeast of the Project Site. Valley Center Drive provides four travel lanes, two in each direction, with protected left-turn lanes and a median. The north end of Valley Center Drive widens from approximately 28 feet to 52 feet to provide three left-turn lanes and two right-turn lanes at its intersection with Golden Valley Road. On-street parking is not provided within the Study Area.
- McBean Parkway – McBean Parkway is a designated Major Highway that runs in the north-south direction west of the Project Site. It provides eight travel lanes, four in each direction, with multiple designated turning lanes at intersections. The speed limit on McBean Parkway within the study area is generally 50 mph, and on-street parking is not provided.

-
- Golden Valley Road – Golden Valley Road is a designated Secondary Highway that runs in the north-south direction northeast of the Project Site. It provides four to six travel lanes, two to three in each direction. A Class I bike lane runs along the eastern, northbound side of Golden Valley Road. The speed limit on Golden Valley Road is generally 50 mph, and on-street parking is not provided.
 - Ruether Avenue – Ruether Avenue is a designated Collector Street that runs in the north-south direction east of the Project Site. It provides four travel lanes, two in each direction, with a two-way turning lane in the middle. The speed limit on Ruether Avenue is generally 40 mph, and on-street parking is not provided.
 - Centre Pointe Parkway – Centre Pointe Parkway is a designated Collector Street that travels in the east-west direction east of the Project Site. It generally provides two travel lanes, one in each direction, with a two-way turning lane in the middle. Class II bike lanes run in the eastbound and westbound directions. The speed limit along Centre Pointe Parkway is 40 mph outside the school zone, and on-street parking is not provided.
 - Sierra Highway – Sierra Highway is a designated Major Highway traveling in the north-south direction east of the Project Site. It provides four to six travel lanes, two to three in each direction, and left-turn lanes at major intersections. The speed limit is 45 mph, and on-street parking is not provided.

PEDESTRIAN, BICYCLE, AND TRANSIT FACILITIES

A comprehensive inventory of destinations and facilities serving pedestrians, bicyclists, and transit riders within 0.5 miles of the Project Site was conducted. Figure 4 identifies commercial, institutional, and recreational destinations to which pedestrians may be drawn, as well as the residential neighborhoods that may attract pedestrians. Figure 5 details the pedestrian, bicycle, and transit infrastructure.

As shown in Figure 4, the Santa Clarita River is north of the Project and provides a natural boundary between the Project Site and single-family homes. To the east, a Walmart Supercenter and several other large national retailers are located along Soledad Canyon Road and Golden Valley Road. The land to the south of the Project Site is undeveloped. West of the Project Site, Bouquet Canyon Road is a commercial corridor with various businesses including fast-food restaurants and several chain retailers.

Chuck Pontius Commuter Rail Trail is a Class I bike path north of the Project Site running in the east-west direction, parallel to Soledad Canyon Road. Further north, the Santa Clara River Trail

is a Class I bike path north of the Santa Clara River that generally runs parallel to Soledad Canyon Road within the vicinity of the Project.

Table 2 summarizes the transit stops within 0.5 miles of the Project Site, including the routes they serve. As shown, there are bus stops along Newhall Ranch Road, Commuter Way, Soledad Canyon Road, Bouquet Canyon and at the Santa Clarita Metrolink Station, served by Santa Clarita Transit Routes 4, 5, 6, 12, 14, 501, 502, 796, 797, and 799, Kern Transit Service Route 130, and Metrolink Rail Green Line. Santa Clarita Metrolink Station is located adjacent to Project Site on Soledad Canyon Road.

In addition to the bus lines that provide service within the Project vicinity, Metrolink operates the Antelope Valley Line in the Study Area. The Antelope Valley Line runs between Lancaster and downtown Los Angeles, where it connects with multiple services at Union Station. The Project Site is located approximately 400 feet west of the Santa Clarita Metrolink Station and shares an access point at Commuter Way & Soledad Canyon Road.

Figure 6 and Table 3 show the transit lines providing service within the Study Area, including the type of service (peak vs. off-peak, express vs local), frequency of service, service area, and hours of operation. The average frequency of transit service during the peak hour was derived from the number of peak period stops made nearest the Project Site.

FUTURE CUMULATIVE CONDITIONS

Project construction is anticipated to be completed in 2026. At that time, the Study Area would be affected by other development projects and transportation infrastructure improvements completed in the interim. This analysis accounts for Projects anticipated to be completed by 2026.

Related Projects

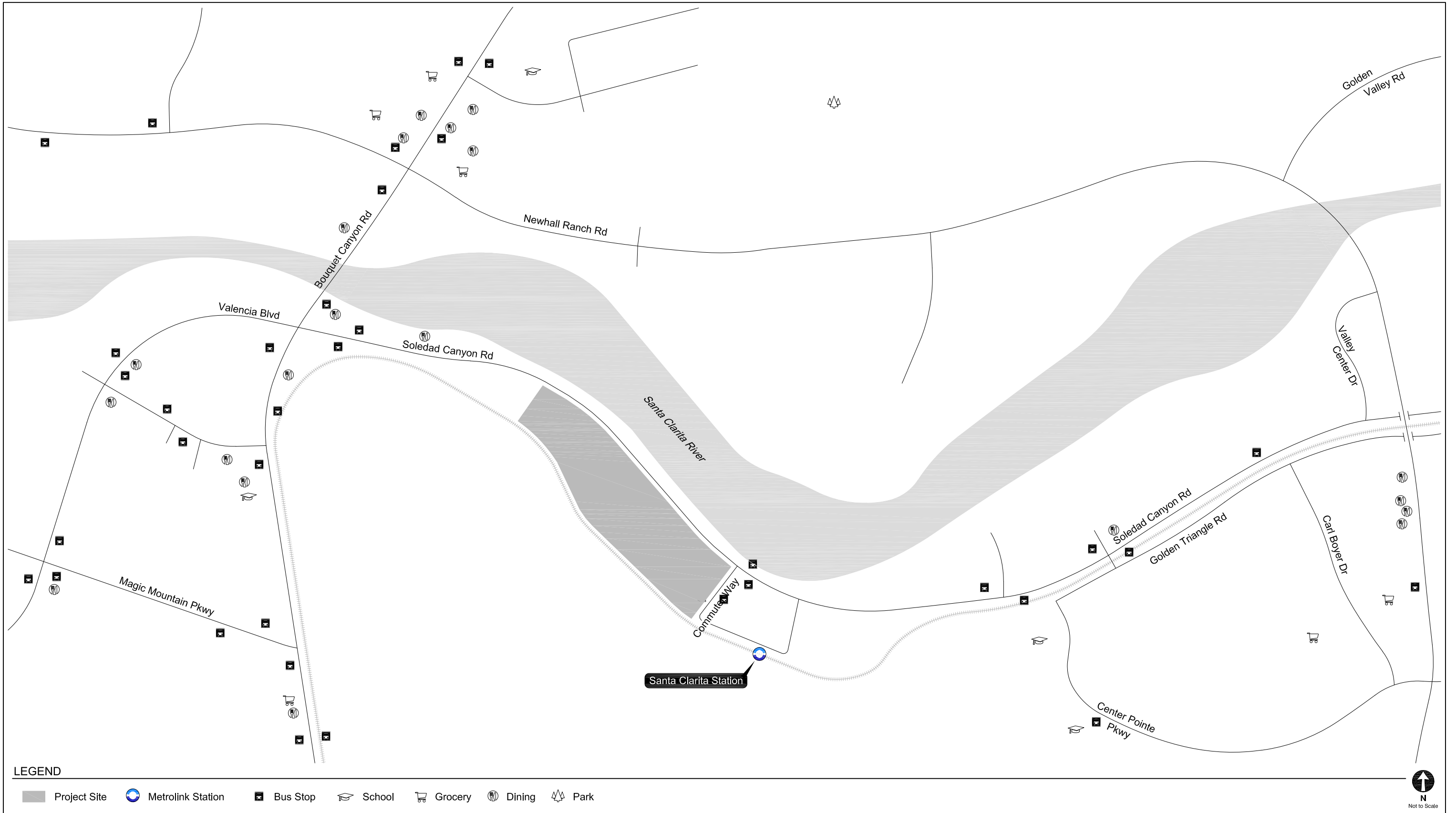
A list of developments that are proposed, approved, or under construction within the Study Area (collectively, the Related Projects) was prepared based on information provided by City and

verified during the development of this transportation assessment. This list includes any project that may contribute traffic to study intersections included in the operational analysis. The Related Projects, along with their vehicular trip generation estimates, are detailed in Table 4 and Figure 7. Where trip generation estimates were not provided by the City nor found in studies prepared for those projects, the estimates were prepared using rates from *Trip Generation Manual, 11th Edition* (Institute of Transportation Engineers, 2021) (Trip Generation Manual).

Future Infrastructure Improvements

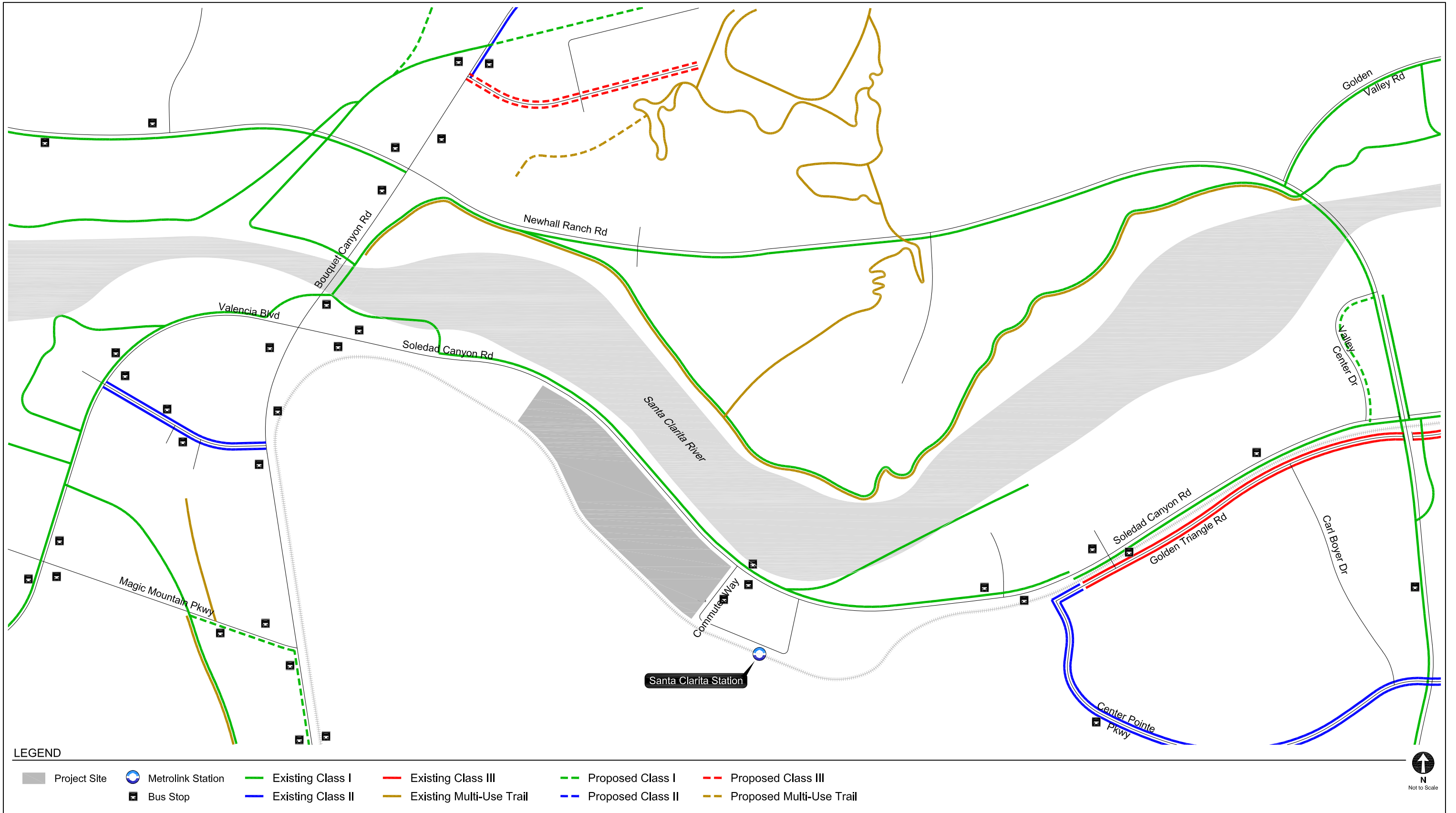
The transportation network within the Study Area could also be affected by the following regional improvement plans, local specific plans, and programmed improvements.

Non-Motorized Transportation Plan. *2020 City of Santa Clarita Non-Motorized Transportation Plan* (Alta Planning + Design, September 2020) (Non-Motorized Transportation Plan) identifies the City's vision for a more integrated bicycle and pedestrian network throughout the City, including within the Study Area. Class I bicycle lanes diverging from Bouquet Creek Trail in both the northwest and northeast directions are proposed. Class III bicycle lanes are proposed on Espuella Drive. Finally, the plan also proposes Class I bicycle lanes following the southwest corner of Magic Mountain Parkway and Railroad Avenue



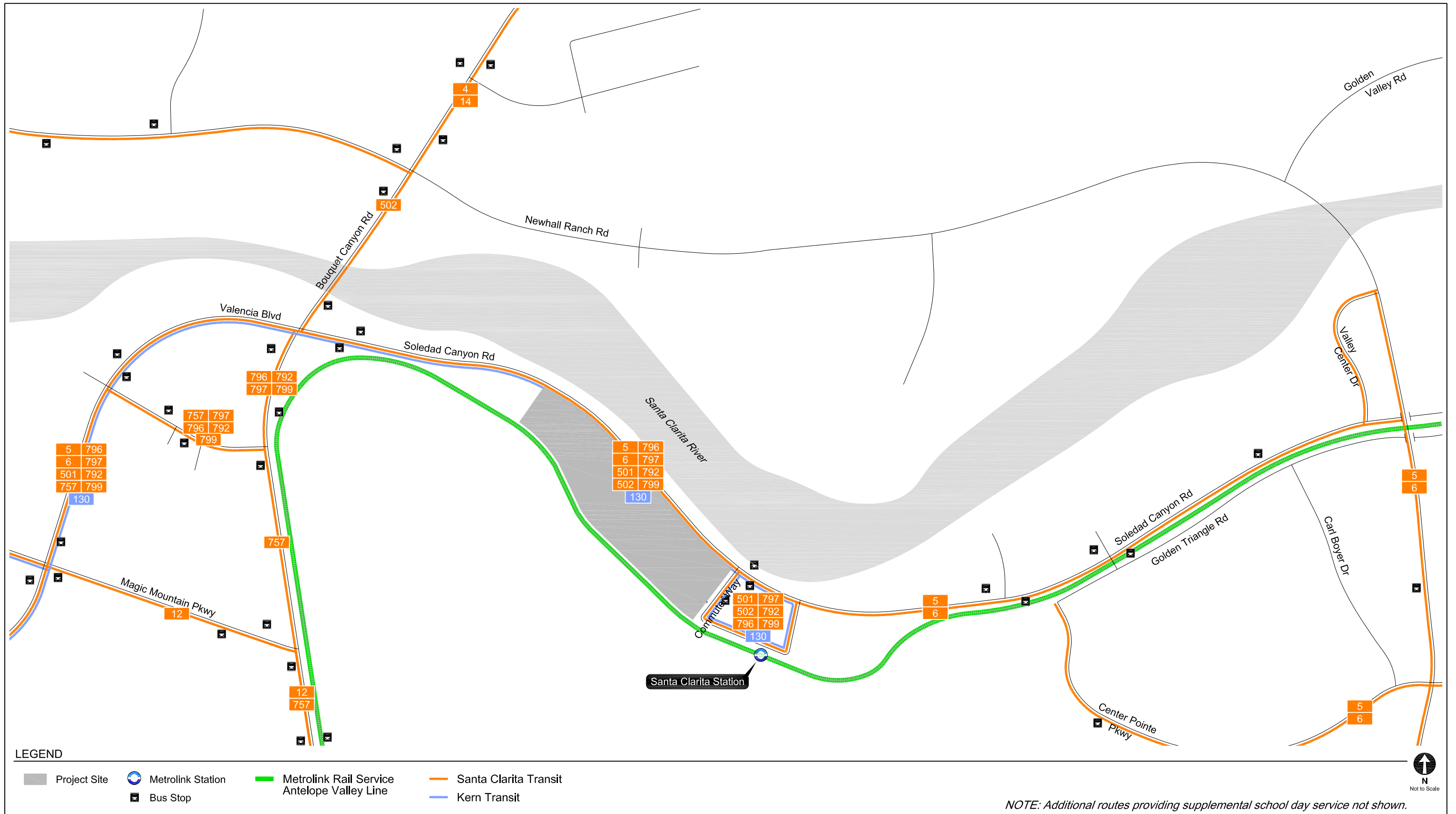
INVENTORY OF PEDESTRIAN AND BICYCLE DESTINATIONS

FIGURE 4



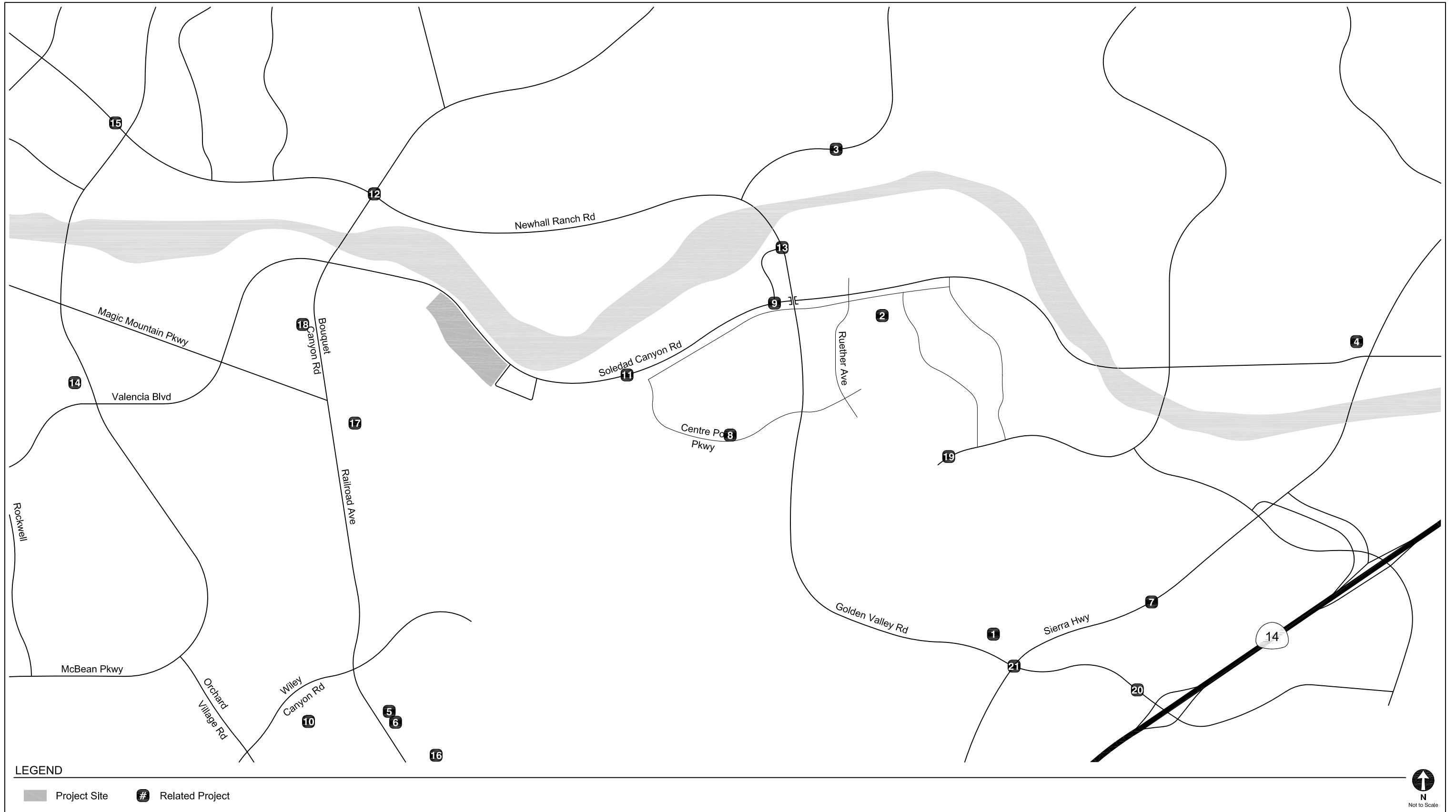
INVENTORY OF PEDESTRIAN / BIKE / TRANSIT FACILITIES

FIGURE 5



EXISTING TRANSIT SERVICE

FIGURE 6



LEGEND

- Project Site
- # Related Project



Not to Scale

LOCATIONS OF RELATED PROJECTS

FIGURE
7

**TABLE 2
LOCATIONS OF TRANSIT STOPS IN PROJECT VICINITY**

Stop Location	Route(s)
Santa Clarita Metrolink Station	Kern Transit: 130 SCT: 501, 502 Metrolink: Antelope Valley Line
Soledad Canyon / Commuter	SCT: 5, 6
Commuter / Soledad Canyon	SCT: 501, 502, 796, 797, 799
Soledad Canyon / Bouquet Canyon	SCT: 5, 6, 501, 502
Bouquet Canyon / Soledad Canyon	SCT: 4, 14, 502

**TABLE 3
EXISTING TRANSIT SERVICE**

Provider, Route, and Service Area		Service Type	Hours of Operation	Average Headway (minutes) [a]			
				Morning Peak Hour		Afternoon Peak Hour	
Santa Clarita Transit				NB/EB	SB/WB	NB/EB	SB/WB
5, 6	Newhall/Stevenson Ranch to Canyon Country	Local	5:30 AM - 9:30 PM	36	36	30	27
501, 502	Metrolink Stations - Santa Clarita Valley	Local	6:30 AM - 8:00 PM	90	60	120	80
12	McBean Transit Center to Whites Canyon	Local	6:15 AM - 9:00 PM	N/A	23	N/A	22
4, 14	LARC Ranch to Plum Canyon	Local	8:00 AM - 7:30 PM	45	45	30	30
796	Woodland Hills, Canoga Park, Chatsworth	Express	5:30 AM - 6:30 PM	90	90	120	120
797	UCLA, Westwood, Century City	Express	5:00 AM - 8:00 PM	N/A	180	N/A	240
799	Union Station, Downtown Los Angeles	Express	5:00 AM - 7:00 PM	N/A	60	N/A	48
Rail and Regional Bus Service				Number of Peak Hour Stops			
				Morning Peak Hour		Afternoon Peak Hour	
Kern Transit				NB/EB	SB/WB	NB/EB	SB/WB
130	Santa Clarita - Bakersfield	Regional	6:00 AM - 8:00 PM	180	180	240	240
Metrolink				NB/EB	SB/WB	NB/EB	SB/WB
Green	Antelope Valley Line	Regional	4:40 AM - 7:30 PM	2	3	4	2

Notes:

AM Peak from 6-9 AM

PM Peak from 3-7 PM

[a] Headway information based on operating data for April 2023.

[b] Services provide infrequent headways throughout the day.

**TABLE 4
RELATED PROJECTS**

No.	Project Name	Address	Description	Trip Generation Estimates [a]						
				Daily Trips	Morning Peak Hour Trips			Afternoon Peak Hour Trips		
					In	Out	Total	In	Out	Total
1.	Veluzat Condos	25800 Sierra Highway	9 residential units	61	1	3	4	3	2	5
2.	Golden Triangle Apartments	20600 Golden Triangle Road	164 residential units	1,105	16	50	66	53	31	84
3.	Galloway Five Knolls	Golden Valley & Five Knolls	44 residential units	297	4	14	18	14	8	22
4.	Porta Bella Specific Plan	Soledad Canyon Road	2,911 residential units, 539 ksf commercial, 971 ksf office, 974 ksf other development	59,570	2,268	1,673	3,941	2,913	3,487	6,401
5.	Oak Ridge Industrial	Oak Ridge and Railroad Avenue	300 ksf industrial park	1,101	83	19	102	22	80	102
6.	Oak Ridge Commercial	Oak Ridge and Railroad Avenue	15 ksf office, 15 ksf commercial	970	39	18	57	53	67	119
7.	Friendly Valley Gas Station	Sierra Highway & Friendly Valley	3 ksf gas station	1,872	60	62	122	72	74	146
8.	Salazar Self Storage	Diamond Place & Centre Pointe	1 ksf office, 112 ksf self-storage	162	6	4	10	8	9	17
9.	Valley Center Skilled Nursing	Valley Center and Soledad Canyon	51 ksf nursing home	215	14	5	19	8	17	24
10.	Rent A Bin Recycling	20745 Santa Clara	60 ksf industrial	220	17	4	20	4	16	20
11.	Prima Way Commercial	Soledad Canyon and Prima Way	6 ksf commercial	327	8	6	14	20	20	40
12.	Williams Homes Office	Bouquet Canyon & Newhall Ranch Road	14 ksf office	152	18	3	21	3	17	20

Notes:

Related project information provided by Department of City Planning. ksf = 1,000 square feet

[a] Trip generation estimates based on rates from *Trip Generation, 11th Edition* (Institute of Transportation Engineers, 2021).

**TABLE 4 (CONTINUED)
RELATED PROJECTS**

No.	Project Name and Address	Address	Description	Trip Generation Estimates						
				Daily Trips	Morning Peak Hour Trips			Afternoon Peak Hour Trips		
					In	Out	Total	In	Out	Total
13.	Valley Center Self Storage	Golden Valley and Valley Center	156 ksf self-storage	225	8	6	14	11	13	24
14.	Oliver Hotel	26501 McBean Parkway	134 room hotel	1,071	35	27	62	40	39	79
15.	River Village Area D	Newhall Ranch Road east of Bouquet Canyon Road	184 residential units	1,266	17	60	77	60	34	94
16.	Blackhall Studios	Northeast corner of Railroad Avenue & 13th Street	476,000 sf of sound stages, 608.5 ksf of support and catering uses, and 210 ksf of production office	1,020	387	218	605	297	387	684
17.	Bridge to Home	Dayton Street & Springbrook Ave	8 residential units	58	1	3	4	3	2	5
18.	Santa Clarita Plaza Mixed Use Project	26135 Bouquet Canyon Road	30 residential units, 7 ksf commercial	493	10	15	25	27	23	50
19.	Princessa Crossroads (+Sikand) Specific Plan	Via Princessa & Sheldon Avenue	710 residential units, 227 ksf retail, 227 ksf office, 227 ksf industrial	18,036	446	469	915	993	939	1,933
20.	Park Vista	San Rafael Drive & Golden Valley Road	182 residential units	1,241	17	59	75	59	33	92
21.	Veluzat Mixed Use (Condos, Hotel, Assisted Living)	Sierra Highway & Golden Valley Road	73 residential units, 144 ksf other development	1,010	41	35	76	41	54	95

Notes:

Related project information provided by Department of City Planning. ksf = 1,000 square feet

[a] Trip generation estimates based on rates from *Trip Generation, 11th Edition* (Institute of Transportation Engineers, 2021).

Chapter 3

Transportation Assessment Screening

As summarized in Chapter 1, the TAU provides a set of screening criteria for each of the CEQA and non-CEQA analyses that may be required in a transportation assessment. This chapter presents the screening criteria and applies them to the Project.

PROJECT TRIP GENERATION

Some of the screening criteria include a minimum daily Project trip generation threshold. The TAU specifies that this estimate should be prepared using the most recent version of the Trip Generation Manual.

As shown in Table 5, the Project is estimated to generate 2,567 daily trips, with 180 of these trips occurring in the morning peak hour and 242 in the afternoon peak hour, prior to accounting for any TDM measures the Project proposes to incorporate. A conservative 5% reduction to account for proximity to transit was applied to the Project.

SCREENING FOR CEQA ANALYSES

The screening criteria applicable to the project are as follows:

- **Project Size:** Projects that generate fewer than 110 daily trips may be screened from conducting a VMT analysis. Local serving retail projects less than 50,000 sf may be presumed to have a less than significant VMT impact, absent substantial evidence to the contrary. As shown in Table 5, the Project exceeds the 110 daily trip threshold and contains more than 50,000 sf of non-retail use; therefore, it exceeds the thresholds established by the screening criteria and requires further study
- **Low VMT:** Residential and office projects located within a low VMT generating area may be presumed to have a less than significant impact, as long as the new development in the traffic analysis zone (TAZ) is similar to the development already in the TAZ and

absent substantial evidence to the contrary. As shown in Figure 8, the Project Site lies within zones that have a greater daily home-based work VMT per employee than the City baseline and, therefore, requires further study.

- Transit Priority Area (TPA): Projects located within TPAs may also be exempt from VMT analysis if they do not have the following characteristics:
 - Floor Area Ratio (FAR) < 0.75
 - More parking than required by City
 - Inconsistent with the applicable Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS) (as determined by the City)
 - Replaces affordable residential units with a smaller number of moderate- or high-income residential units

As shown in Figure 9, the Project is located within a TPA. As further detailed in the *Riverview Mixed-Use Project Transportation Study Peer Review* (Fehr & Peers, January 13, 2023)(Peer Review), provided in Appendix B, the Project has a FAR greater than 0.75 and will not provide more parking than required by the City. Therefore, the Project would be screened out from VMT analysis.

- Affordable Housing: Affordable housing units can be presumed to have a less than significant impact on VMT, absent substantial evidence to the contrary, and can be screened from requiring further VMT analysis. The Project does not include any affordable housing units and therefore, this does not apply to the Project.

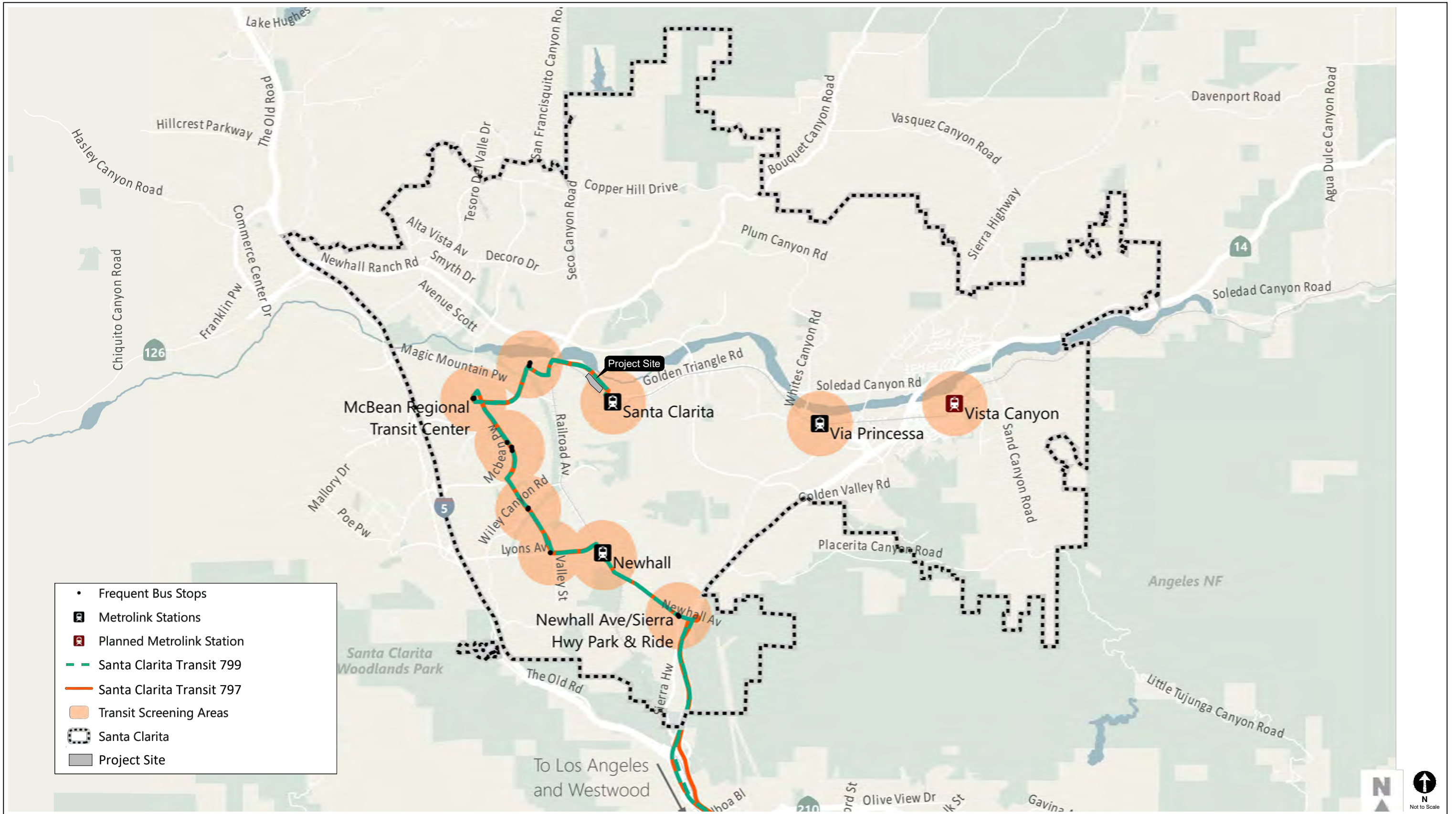
A Project only needs to satisfy one of the criteria to be exempt from VMT analysis. As shown above, the Project screens out from further VMT analysis because it is located within a Transit Priority Area and its characteristics are consistent with the screening threshold characteristics.

The remaining CEQA analyses, including further discussion on the Project's VMT, are provided in Chapters 4 through 7.

NON-CEQA ANALYSES REQUIREMENTS

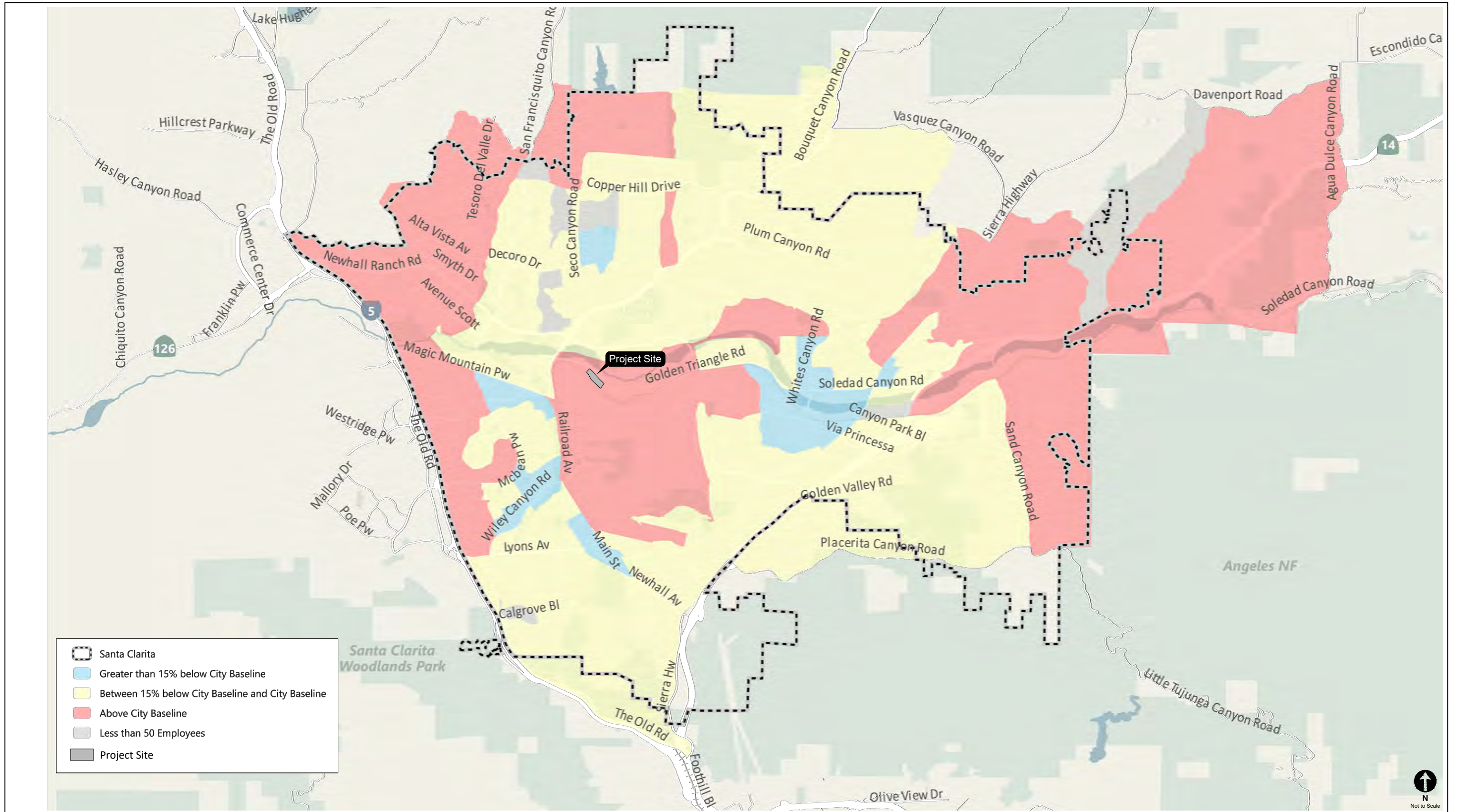
The City requires a set of non-CEQA related transportation analyses to determine if operational improvements are needed to accommodate the new traffic generated by a project. The scope and methodology of the non-CEQA analyses were established in consultation with the City Traffic Engineer.

The detailed analyses for the non-CEQA studies are provided in Chapters 8 through 10.



DAILY HOME-BASED WORK VMT PER EMPLOYEE
COMPARED TO CITY AVERAGE

FIGURE
8



CITY OF SANTA CLARITA TRANSIT PRIORITY AREAS

FIGURE 9

**TABLE 5
PROJECT TRIP GENERATION ESTIMATES**

Land Use	ITE Land Use	Rate	Daily	Morning Peak Hour			Afternoon Peak Hour		
				In	Out	Total	In	Out	Total
Trip Generation Rates [a]									
Single Family Detached Housing	210	per dwelling unit	9.43	26%	74%	0.70	63%	37%	0.94
Single Family Attached Housing	215	per dwelling unit	7.20	31%	69%	0.48	57%	43%	0.57
Studio (Sound Stage)	[b]	per ksf	5.91	63%	37%	0.20	40%	60%	0.43
Proposed Project - Lot 1									
Single Family Attached Housing	215	95 du	684	14	32	46	31	23	54
			(103)	(1)	(2)	(3)	(2)	(1)	(3)
			581	13	30	43	29	22	51
Proposed Project - Lot 2									
Single Family Detached Housing	210	60 du	566	11	31	42	35	21	56
			(85)	(1)	(2)	(3)	(2)	(1)	(3)
			481	10	29	39	33	20	53
Proposed Project - Lot 3									
Single Family Detached Housing	210	62 du	585	11	32	43	37	21	58
			(88)	(1)	(2)	(3)	(2)	(1)	(3)
			497	10	30	40	35	20	55
Proposed Project - Lot 4									
Single Family Attached Housing	215	101 du	727	15	33	48	33	25	58
			(109)	(1)	(2)	(3)	(2)	(1)	(3)
			618	14	31	45	31	24	55
Proposed Project - Studio									
Studio (Sound Stage)	[b]	66.000 ksf	390	8	5	13	11	17	28
			390	8	5	13	11	17	28
PROPOSED PROJECT TRIPS			2,567	55	125	180	139	103	242

Notes:

du: dwelling unit, ksf: 1,000 square feet

[a] Source: *Trip Generation, 11th Edition*, Institute of Transportation Engineers, 2021.

[b] Rate based on empirical rate from *Transportation Study for the NBC Universal Evolution Plan Environmental Impact Report*, Gibson Transportation Consulting, Inc. and Raju Associates, Inc., March 2010.

[c] The Project Site is located less than 1/2 mile from the Santa Clarita Metrolink Station. Therefore, a 5% adjustment was applied to account for transit usage and pedestrian connections to/from the station.

Chapter 4

CEQA Analysis: Consistency with Policy

This chapter presents a review of the Project's consistency with plans and policies guiding the development and transportation networks in the City.

SIGNIFICANCE CRITERIA

Based on CEQA guidance, a project would result in a significant impact if it would conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle, and pedestrian facilities.

A project would be determined not to conflict with a particular program, plan, policy, or ordinance if it is generally in conformance and does not obstruct the implementation of that policy. If a conflict is identified, mitigation measures would focus on improving access, comfort, and safety for all road users, especially pedestrians, bicyclists, and transit riders.

Cumulative Impact Analysis

In addition to potential Project-specific impacts, CEQA requires that the Project be reviewed in combination with other development projects that may affect transportation networks within the Study Area (i.e., the Related Projects shown in Figure 7 and Table 4). The analysis would seek to identify any cumulatively significant impacts resulting from inconsistency with a particular program, plan, policy, or ordinance. The majority of the 22 Related Projects are fully or primarily residential; the remainder are self-storage facilities, retail, hotels, and master plans.

PLANS, PROGRAMS, ORDINANCES, AND POLICIES

GTC identified a series of City adopted programs, plans, ordinances, and policies that establish the transportation planning regulatory framework for development in the City.

Each of the documents discussed below was reviewed for applicability to the Project, and the relevant transportation-related policies, along with the Project's conformance, are described below.

Circulation Element of the General Plan

The Circulation Element plans for the continued development of transportation systems that are consistent with regional plans, local needs, and the community's character. The Circulation Element identifies and promotes a variety of techniques for improving mobility including the development of alternative travel modes and support facilities; increased efficiency and capacity of existing systems through management strategies; and coordination of land use planning with transportation planning by promoting concentrated, mixed-use development near transit facilities. The Circulation Element identifies the following seven areas with specific goals, objectives, and policies that define the City's transportation priorities:

1. Multi-Modal Circulation Network
2. Street and Highway System
3. Vehicle Trip Reduction
4. Rail Service
5. Bus Transit
6. Bikeways
7. Pedestrian Circulation

It further enumerates a variety of objectives, goals, and policies in support of each of those areas. The policies and programs that apply to the Project, along with a detailed discussion of the Project's consistency with each, are provided in Table 6. The Project is consistent with the applicable objectives of the Circulation Element and would help to improve the vehicular and

bicycle network, provide end-of-trip facilities, encourage alternative travel modes, and support electric vehicles.

Non-Motorized Transportation Plan

The Non-Motorized Transportation Plan guides future pedestrian and bicycle infrastructure, policy, and planning in the City.

A detailed analysis of the Project's consistency with the policies in the Non-Motorized Transportation Plan is provided in Table 7. In summary, the Project would promote walking and biking to and from home and work and support bicycling through the provision of bike parking facilities throughout the Project Site. In addition, employees who walk or bike to work may use the shower facilities provided for studio employees on the lot. It is also likely that a small fleet of on-site bicycles would be provided to assist employees in moving around the studio lot. This would reduce short vehicular trips internal to the site. Further, the Project will provide a pedestrian-friendly design and facilitate transit use by developing residential and employment opportunities immediately adjacent to the Santa Clarita Metrolink Station.

Specific Plans

The Project is not located within an area currently governed by a Specific Plan. However, the Project is located within the Saugus Speedway Jobs Creation Overlay Zone (JCOZ). Per the SCUDC, "The purpose of the JCOZ is to support the General Plan objective of promoting the creation of strong regional and local economies via the implementation of strategic land use planning policies." The development would support the local economy with employment and housing opportunities and would strategically locate them next to transit. Thus, the Project would support the goals of the JCOZ.

Santa Clarita Unified Development Code (SCUDC) Title 17 Division 5 (Use Classifications and Required Parking)

The Project will provide residential parking in accordance with the SCUDC. The City of Santa Clarita does not contain required parking ratios for studios; however the Project would provide parking consistent with other similar uses in Southern CA. The Project's provision of 1,269 spaces for Project uses would meet the requirements of the SCUDC.

Similar to the Project, each of the Related Projects would be individually responsible for providing on-site parking based on SCUDC requirements or any applicable specific plan. Therefore, the Project, together with the Related Projects, would not result in cumulative impacts concerning consistency with SCUDC Title 17 Division 5.

2016 California Green Building Standards Code (CALGreen) Sections 5.106.4.1.1 and 5.106.4.1.2 (Bicycle Parking)

CALGreen Sections 5.106.4.1.1 and 5.106.4.1.2 detail the bicycle parking requirements for new developments. Based on its parking supply of 1,269 vehicular parking spaces, per CALGreen's requirement for the provision of bicycle parking at a rate of at least 5% of vehicular spaces, the Project would be required to provide 64 bicycle parking spaces. The Project would meet or exceed the CALGreen requirements for on-site bicycle parking supply.

Similar to the Project, each of the Related Projects would be individually responsible for providing on-site bicycle parking based on CALGreen requirements. Therefore, the Project, together with the Related Projects, would not result in cumulative impacts concerning consistency with CALGreen Sections 5.106.4.1.1 and 5.106.4.1.2.

Streetscape Plans

There are no streetscape plans near the Project Site; as such, streetscape plans do not apply to the Project. However, the Project design is intended to promote a balanced approach to all modes of transportation and provide safe and adequate space for sidewalks, bicycle paths,

transit, parking, vehicular traffic, street trees, landscaping, lighting, and street furnishings, consistent with the goals of nearby streetscape plans.

Community Character and Design Guidelines

City of Santa Clarita Community Character and Design Guidelines (rrm Design Group, March 24, 2009) (Design Guidelines) identifies urban design principles to guide architects and developers in designing high-quality projects that meet the City's functional, aesthetic, and policy objectives and help foster a sense of community. The Design Guidelines are organized around four design goals: Sense of Timelessness, Sense of Ownership, Sense of Place and Identity, and Sense of Community.

The policies that apply to this transportation assessment are those under the multi-family residential and industrial and business park design guidelines chapters. The Project meets the objectives and goals set in the Design Guidelines and is therefore consistent with all applicable policies. Table 8 provides a further summary of the Project's compliance.

Similar to the Project, the Related Projects are also required to be consistent with the Design Guidelines, therefore, the Project, together with the Related Projects, would not result in cumulative impacts concerning consistency with the Design Guidelines.

SUMMARY

The Project is consistent with each of the City documents discussed above. Therefore, the Project would not result in a significant impact with Plan and Policy consistency, and no mitigation measures are required.

Each of the Related Projects considered in this cumulative analysis of consistency with plans and policies would be separately reviewed and approved by the City, including a check for their consistency with applicable policies. Therefore, the Project, together with the Related Projects identified in Table 4, would not create inconsistencies nor result in cumulative impacts concerning the identified plans and policies.

**TABLE 6
PROJECT CONSISTENCY WITH CIRCULATION ELEMENT OF THE GENERAL PLAN**

Objective	Analysis of Project Consistency
Area 1 – Multi-Modal Circulation Network	
<p><u>Objective C 1.1</u> Provide multi-modal circulation systems that move people and goods efficiently while protecting environmental resources and quality of life.</p>	<p>Consistent. The Project proposes the signalization of the main gate driveway that will help meet this objective by providing pedestrian and bicycle access across Soledad Canyon Road to the existing bicycle path. Further, the Project would be connected internally with a series of private drives connecting the residential area to the existing street network.</p>
<p><u>Objective C 1.2</u> Coordinate land use and circulation planning to achieve greater accessibility and mobility for users of all travel modes.</p>	<p>Consistent. The Project provides mixed-use studio and residential development immediately adjacent to transit options that will allow for reduced commuter trips and opportunities for alternative modes of transportation.</p>
<p><u>Objective C 1.3</u> Ensure conformance of the Circulation Plan with regional transportation plans.</p>	<p>Consistent. This objective is not applicable to the Project because it is not the Project's responsibility to ensure conformance of the Circulation Plan with regional transportation plans. However, the Project does not preclude the implementation of the current Circulation plan or any regional transportation plans.</p>
Area 2 – Street and Highway System	
<p><u>Objective C 2.1</u> Implement the Circulation Plan (as shown in Exhibit C-2) for streets and highways to meet existing and future travel demands for mobility, access, connectivity, and capacity.</p>	<p>Consistent. This objective is not applicable to the Project because it is not the Project's responsibility to ensure the implementation of the Circulation Plan. However, the Project does not preclude the implementation of the current Circulation plan and will contribute to the improvement of adjacent streets as envisioned in the Circulation Element.</p>
<p><u>Objective C 2.2</u> Adopt and apply consistent standards throughout the Santa Clarita Valley for street design and service levels, which promote safety, convenience, and efficiency of travel.</p>	<p>This objective is not applicable to the Project because it is not the Project's responsibility to plan the street system.</p>
<p><u>Objective C 2.3</u> Balance the needs of congestion relief with community values for aesthetics and quality of life.</p>	<p>Consistent. The Project supports congestion relief by providing dedications along the Project Site for street enhancements along the Project frontages. These dedications will help improve traffic flow and enhance active transportation options such as walking and biking. These improvements would have appropriate landscaping to reinforce the local community's aesthetics and quality of life.</p>

TABLE 6 (CONTINUED)
PROJECT CONSISTENCY WITH CIRCULATION ELEMENT OF THE GENERAL PLAN

Objective	Analysis of Project Consistency
<p><u>Objective C 2.4</u> Allow trucks to utilize only major and secondary highways as through routes, to minimize impacts of truck traffic on surface streets and residential neighborhoods.</p>	<p>Consistent. The Project Site is adjacent to several streets that are part of the regional transportation network and connect to other major roadways. Project trucks will be able to utilize these streets to access regional freeways and avoid residential neighborhoods where possible.</p>
<p><u>Objective C 2.5</u> Consider the needs for emergency access in transportation planning.</p>	<p>Consistent. The Project will comply will all emergency access needs and standards including the provision of fire lanes and adequate turning radii and Project driveways and internal intersections. An analysis of emergency evacuation conditions is performed in Chapter 9.</p>
<p><u>Objective C 2.6</u> Ensure that funding and phasing of new transportation improvements is coordinated with growth.</p>	<p>This objective is not applicable to the Project because it is not the Project's responsibility for funding of all transportation improvements to accommodate traffic growth.</p>
<p><u>Objective C 2.7</u> Pursue the safety, efficiency and tranquility of existing and future residential streets by properly planning for local, collector and arterial roadways and limiting residential driveway access onto collector or arterial roadways.</p>	<p>This objective is not applicable to the Project because it is not the Project's responsibility to plan the street system.</p>
<p align="center"><i>Area 3 – Vehicle Trip Reduction</i></p>	
<p><u>Objective C 3.1</u> Promote the use of travel demand management strategies to reduce vehicle trips.</p>	<p>Consistent. The Project will provide a TDM plan aimed at reducing single-occupant commuting as well as bike parking and end-of-trip facilities.</p>
<p><u>Objective C 3.2</u> Encourage reduction in airborne emissions from vehicles through use of clean vehicles and transportation system management.</p>	<p>Consistent. In addition to the TDM plan mentioned above, the Project would include electric vehicle charging stations to encourage the use of clean vehicles and carpool incentives to encourage reduced VMT.</p>

**TABLE 6 (CONTINUED)
PROJECT CONSISTENCY WITH CIRCULATION ELEMENT OF THE GENERAL PLAN**

Objective	Analysis of Project Consistency
<p><u>Objective C 3.3</u> Make more efficient use of parking and maximize economic use of land, while decreasing impervious surfaces in urban areas, through parking management strategies.</p>	<p>Consistent. The Project parking supply will be intentionally designed to reduce the amount of space parking takes up. Further, the Project's TDM plan will support parking management strategies.</p>
Area 4 – Rail Service	
<p><u>Objective C 4.1</u> Maximize the effectiveness of Metrolink's commuter rail service through provision of support facilities and land planning.</p>	<p>Consistent. The Project will provide numerous employment opportunities immediately adjacent to the Santa Clarita Metrolink Station.</p>
<p><u>Objective C 4.2</u> Access to a high speed rail system connecting the Santa Clarita Valley with other regions, and other regional rail service connections.</p>	<p>This objective is not applicable to the Project because it is not the Project's responsibility to plan the transportation system.</p>
Area 5 – Bus Transit	
<p><u>Objective C 5.1</u> Ensure that street patterns and design standards accommodate transit needs.</p>	<p>Consistent. The Project would accommodate public transit needs by improving the existing shared driveway between the Project and the adjacent transit station, as well as providing additional driveways to separate Project traffic from transit operations.</p>
<p><u>Objective C 5.2</u> Maximize the accessibility, safety, convenience, and appeal of transit stops.</p>	<p>This objective is not applicable to the Project because it is not the Project's responsibility to improve transit stops.</p>
<p><u>Objective C 5.3</u> Explore opportunities to improve and expand bus transit service.</p>	<p>This objective is not applicable to the Project because it is not the Project's responsibility to optimize the transportation system.</p>
<p><u>Objective C 5.4</u> Provide adequate funding to expand transit services to meet the needs of new development in the Valley.</p>	<p>This objective is not applicable to the Project because the Project is not responsible for transit funding.</p>

TABLE 6 (CONTINUED)
PROJECT CONSISTENCY WITH CIRCULATION ELEMENT OF THE GENERAL PLAN

Objective	Analysis of Project Consistency
Area 6 – Bikeways	
<p><u>Objective C 6.1</u> Adopt and implement a coordinated master plan for bikeways for the Valley, including both City and County areas, to make bicycling an attractive and feasible mode of transportation.</p>	<p>This objective is not applicable to the Project because the Project is not responsible for bikeway planning.</p>
<p><u>Objective C 6.2</u> Encourage provision of equipment and facilities to support the use of bicycles as an alternative means of travel.</p>	<p>Consistent. The Project will provide bicycle parking and amenities on-site. The new signal would also provide a signalized crossing location for bicycles and pedestrians to access the Chuck Pontius Commuter-Rail Trail. Further, the Project will not preclude future bicycle infrastructure improvements along the Project frontage.</p>
Area 7 – Pedestrian Circulation	
<p><u>Objective C 7.1</u> A continuous, integrated system of safe and attractive pedestrian walkways, paseos and trails linking residents to parks, open space, schools, services, and transit.</p>	<p>Consistent. The Project would provide for sidewalks along the Project frontage as well as upgraded crosswalks and ADA facilities at nearby intersections.</p>

**TABLE 7
PROJECT CONSISTENCY WITH NON-MOTORIZED TRANSPORTATION PLAN**

Objective [a]	Analysis of Project Consistency
<p>Goal 1. Safety & Health</p> <p>This NMTP will empower residents to live a more active lifestyle by providing a network of safe and comfortable walking routes and bikeways for everyone to enjoy.</p> <ul style="list-style-type: none"> A. Reduce bicycle and pedestrian collisions through safe and comfortable facilities B. Promote an active lifestyle that includes biking and walking C. Reduce air pollution, asthma rates, and greenhouse gas emissions 	<p>Consistent. The Project will provide bicycle parking and end-of-trip amenities (i.e., showers). These facilities would be designed to improve safety for all road users and help promote active transportation within the City. Providing bicycle facilities at the Project Site will help reduce vehicular trips, thus improving air quality and health outcomes.</p>
<p>Goal 2. Access & Comfort</p> <p>This NMTP will support increased access to neighborhood destinations such as parks, shopping and employment centers, libraries, schools, recreation centers, and transit stops. Pedestrian and bicycle facilities will be accessible and comfortable for people of all ages and abilities to use.</p> <ul style="list-style-type: none"> A. Increase access to jobs, education, retail, parks and libraries, schools, recreational centers, transit, and other neighborhood destinations B. Address barriers so that disadvantaged populations can take part in improvements C. Reduce air pollution, asthma rates, and greenhouse gas emissions D. Reduce travel times for disadvantaged households E. Prioritize the needs and trip patterns of disadvantaged populations F. Serve people with disabilities. 	<p>Consistent. The Project will provide bicycle parking and end-of-trip amenities. This will improve access to local and regional destinations such as jobs, transit, retail, and other activities. The Project will also improve mobility for disadvantaged households by providing safe alternatives to vehicular travel and reducing existing travel times adjacent to the Project Site with various pedestrian and bike improvements. All improvements would be compliant with the Americans with Disabilities Act (ADA).</p>
<p>Goal 3. Maintain & Expand the Network</p> <p>This NMTP will help out community identify, develop, and maintain a complete and convenient bicycle and pedestrian network.</p> <ul style="list-style-type: none"> A. Integrate bicycle and pedestrian network and facility needs into all city planning documents and capital improvement projects B. Leverage existing funding to maximize project delivery C. Maintain designated facilities to be comfortable and free of hazards to biking and walking D. Reduce long-term transportation costs by reducing the need for vehicle ownership or for parking in new developments. 	<p>This objective is not applicable to the Project because the Project is not responsible for planning and maintaining the transportation network.</p>

Notes:

[a] Objectives based on information provided in *2020 City of Santa Clarita Non-Motorized Transportation Plan* (Alta Planning + Design, September 2020).

**TABLE 8
PROJECT CONSISTENCY WITH COMMUNITY CHARACTER AND DESIGN GUIDELINES**

Objective [a]	Analysis of Project Consistency
<i>Multi-Family Residential Design Guidelines</i>	
<ol style="list-style-type: none"> 1. The design of multi-family developments should consider compatibility with the surrounding neighborhood. 2. Dwellings should incorporate porches, trellises, landscaping, and other features to extend the living area toward the street and soften the transition between the street and the dwelling. When placed correctly, these elements can also provide shading. 3. Incompatible uses, such as industrial operations, auto repair, etc., should be buffered from residential development. Intensified landscaping, increased setbacks, and building orientation should be utilized as a means of providing adequate separation between such land uses. 4. New structures should be clustered. Clustering creates plazas or pedestrian malls and prevents long “barrack-like” or continuous rows of structures. 5. Buildings should be placed close to, and oriented toward, the street. 6. Natural amenities such as views, mature trees, creeks, riparian corridors, and similar features unique to the site should be preserved. 7. Where possible, utilize courtyards or other methods to break up the building mass and provide natural ventilation. 8. Building placement should not limit solar access by shading adjacent rooftops. 9. Orient buildings on an east/west axis to maximize the use of natural daylighting. 10. Orient buildings on an east/west axis to maximize the use of natural daylighting. 	<p>Consistent. The Project will comply with all residential design standards and ensure compatibility with the surrounding uses. The residential component of the Project will be oriented toward the street, the Project will provide the required open space and landscaping elements, and the Project will utilize internal pathways to connect uses throughout the Project Site.</p>

Chapter 5

CEQA Analysis: VMT

This chapter presents an analysis of potential VMT impacts for the Project based on the TAU and *State of California Senate Bill No. 743* (Steinberg, 2013).

VMT GUIDELINES

The VMT guidelines are intended to promote the reduction of GHG emissions, the development of multimodal transportation networks, and a diversity of land uses. This encourages development that shortens the distance between housing, jobs, and services, increases the availability of affordable housing options proximal to public transit, offers attractive non-vehicular transportation options, provides strong TDM programs, and promotes walking and bicycling trips.

VMT Screening

As discussed above, the City has adopted four screening thresholds, only one of which must be satisfied in order to screen out of a full VMT analysis. The Project satisfies the Transit Proximity threshold.

The following five criteria must be met in order for a project to screen out of VMT analysis based on proximity to transit:

- The project is located in a TPA, defined as being within 0.5 miles of an existing or planned major transit stop or an existing stop along a high-quality transit corridor
- The project has a FAR of more than 0.75
- The project does not contain more parking for use by residents, customers, or employees than required by the City

-
- The project is consistent with *Connect SoCal - 2020-2045 Regional Transportation Plan / Sustainable Communities Strategy* (Southern California Association of Governments, September 2020) (RTP/SCS), the regional plan to reach State air quality and GHG reduction targets
 - The project does not replace affordable residential units with a smaller number of moderate- or high-income residential units

The Project, due to its location immediately adjacent to the Santa Clarita Metrolink Station, was evaluated under the accessibility to transit screening criteria. As outlined in the Peer Review, the Project meets all screening criteria related to transit proximity. As such, the Project can be presumed to have a less than significant VMT impact and no further VMT analysis is needed.

A copy of the Peer Review can be found in Appendix B.

CUMULATIVE VMT ANALYSIS

A development project would have a cumulative VMT impact if it were deemed inconsistent with the RTP/SCS. However, based on the TAU, a project that does not result in a significant VMT impact using the City's methodology described above would be in alignment with the RTP/SCS and, therefore, would also have no cumulative VMT impact.

When considered with the Related Projects, many of which propose additional residential development near the Project Site, the Project would help to provide local employment options to the many existing and future residents in the Study Area.

Therefore, the Project would not result in a cumulatively significant VMT impact.

Chapter 6

CEQA Analysis: Geometric Design and Land Use Hazards

This chapter presents an analysis of potential safety, operational, or capacity impacts that could be caused by the design or location of Project access points.

SIGNIFICANCE CRITERIA

This analysis determines if the project would substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment using a high-speed roadway). It seeks to identify potential safety conflicts between vehicles, pedestrians, and bicycles, as well as operational delays or capacity reductions resulting from the design or placement of a project's access points.

The determination of significance should be based on commonly accepted traffic engineering design standards while considering the amount of pedestrian and bicycle activity crossing vehicular access points, sight distance, physical conditions like curves or grade changes, and a project's proximity to streets identified in the Safe Routes to School (SRTS) program. Significance may be determined qualitatively or quantitatively as best suits the circumstances of a project.

If a significant impact is identified, mitigation measures may include the installation of new traffic control devices, redesign or relocation of access points, turn restrictions, pavement markings, or vehicular demand management.

DRIVEWAY DESIGN

The following are generally accepted design guidelines regarding driveway placement, width, and type. The general recommendations that would apply to the Project's access points are:

-
- The driveway location should be planned to minimize conflicts between the parking facility and users of the adjacent street, including pedestrians, bicyclists, and drivers.
 - Driveways should be located on streets with the least traffic volume when feasible and not along arterial streets.
 - All commercial loading facilities should be located on Local Streets when feasible.
 - The number of driveways should be minimized.
 - Driveways should be spaced at least 50 feet apart when feasible.
 - Driveway design should address all issues that could affect the safety of driveway operation, including pedestrian traffic, sight distance, lane widths and turn radii, traffic volumes and speeds on the street, and driveway traffic volume.
 - All vehicle maneuvering (such as commercial vehicles turning around) should occur on private property or in an alley.

Each Project vehicular access point was designed to comply with these guidelines to the extent feasible. The final design of the access points would be reviewed by the City during the site plan review to ensure a safe pedestrian, bicycle, and vehicular design.

PROJECT HAZARDS ANALYSIS

As shown in Figure 2 and discussed in Chapter 1, the Project Site would provide vehicular access via four new access points, one of which providing emergency access only, and one existing access point at Commuter Way & Soledad Canyon Road. The security control point for the studio component of the Project would be set well into the facility to prevent any queues from extending into the adjacent public streets. A sufficient number of inbound and outbound lanes would be provided to avoid back-ups.

Pedestrian access to the on-site studio buildings would be provided from Soledad Canyon Road, adjacent to the security access point, as shown in Figure 2. Bicycle access to the studio buildings would be provided from Soledad Canyon Road through the security access point. Pedestrian and bicycle access to the residential units would be provided from one driveway along Commuter Way and two driveways leading to private drives along Soledad Canyon Road.

Consistency with Driveway Design

Driveway Placement. Project access is provided at the four new proposed driveways and an existing driveway along Soledad Canyon Road. While this street is designated as a Major Highway, no viable local streets are available in the area to provide access. Internal circulation would be provided within the Project Site to ensure no queuing issues would occur. Residents and visitors to the residential uses would utilize internal local neighborhood streets to access the driveways of each home. The Project would also provide dedications to install new right-turn lanes into the Project Site. All passenger and commercial loading facilities are located on-site.

Driveway Spacing. As mentioned, the Project's studio main gate driveway is located at a signalized intersection and residential access would be provided from Commuter Way, an existing signalized intersection with Soledad Canyon Road. The two residential driveways on Soledad Canyon Road will meet the City's criteria for driveway spacing. All driveways will be designed to accommodate commercial vehicles and provide multiple lanes, based on a turning radius analysis and operational analysis.

Driveway Design. The driveway design will comply with all City requirements including width, curb return radii, and access control locations.

Driveway Obstacles. No unusual obstacles are presented in the design of the driveways that would be considered hazardous to motorized vehicles, non-motorized vehicles, or pedestrians. All roads are straight and flat, and driveways meet the roadways at right angles or include turn restrictions to prevent any visual obstructions.

Upon further refinement of plans during the building permit application process, the driveways would be designed according to the building code and other City standards. They would be reviewed by the City during the site plan review to ensure code compliance and safe pedestrian and vehicular design.

Project Site Pedestrian Access

The Project's design also minimizes potential hazards to pedestrians by concentrating access for those users at a signalized intersection with pedestrian protection. The Project would provide dedicated pedestrian access to the Project Site via sidewalks along the Project frontage and internal to the Project Site. Pedestrian access is provided at all four driveways and employee pedestrian access will be concentrated at the signalized intersection.

Pedestrian Paths of Travel. Pedestrian paths of travel would be routed away from vehicle traffic to the extent possible. Most pedestrian trips would either be internal trips within the Project Site or trips between Project uses and the adjacent Santa Clarita Metrolink Station. As such, many pedestrians traveling to or from the Project Site would not need to cross uncontrolled Project vehicular access points. Instead, pedestrian trips are concentrated at the signalized intersection and internal sidewalks.

Project Pedestrian Amenities. The Project proposes to install crosswalks across the new signalized intersection serving the Project's main gate driveway. These amenities would serve to reduce hazardous conflicts between vehicles and pedestrians.

Project Site Bicycle Access

The Project's design also minimizes potential hazards to bicyclists by providing facilities for bicyclists including bicycle parking, racks, lockers, and showers in the studio portion of the Project. No existing bicycle facility would be affected by the Project.

SRTS

The Project Site does not front any SRTS paths. Therefore, the Project would not result in a significant safety hazard to students.

Project Hazards Analysis Summary

Based on the Project site plan review and design assumptions, the Project does not present any geometric design hazards related to traffic movement, mobility, or pedestrian accessibility, and no significant impact would occur. Therefore, no mitigation measures would be required.

CUMULATIVE ANALYSIS

Per CEQA, a project could contribute to a significant cumulative impact concerning geometric design if the project, in combination with Related Projects with access points proposed along the same block(s), would result in significant impacts. However, as shown in Figure 7, there are no Related Projects on the same blocks as any Project access point. Further, as the Project would not result in a significant impact concerning the above analysis, it would not contribute to a cumulatively significant impact.

Chapter 7

CEQA Analysis: Freeway Safety

The analysis in this chapter is based on the guidance contained in *Interim Land Development and Intergovernmental Review (LDIGR) Safety Review Practitioners Guidance* (Caltrans, July 2020) (Caltrans Safety Guidance).

OPERATIONAL ANALYSIS METHODOLOGY

The Caltrans Safety Guidance relates to the identification of potential safety impacts at freeway off-ramps as a result of increased traffic from development projects. It provides a methodology and significance criteria for assessing whether additional vehicle queueing at off-ramps could result in a safety impact due to speed differentials between the mainline freeway lanes and the queued vehicles at the off-ramp.

Based on the Caltrans Safety Guidance, a transportation assessment for a development project must include an analysis of any freeway off-ramp where the project adds 25 or more peak hour trips. A project would result in a significant impact at such a ramp if each of the following three criteria were met:

1. Under a scenario analyzing future conditions upon project buildout, with project traffic included, the off-ramp queue would extend to the mainline freeway lanes based on the 95th percentile queue length using Synchro or a comparable Highway Capacity Manual analysis methodology.
2. The project would contribute at least two vehicle lengths (50 feet, assuming 25 feet per vehicle) to the queue.
3. The average speed of mainline freeway traffic adjacent to the off-ramp during the analyzed peak hour(s) is greater than 30 mph.

Should a significant impact be identified, mitigation measures to be considered include TDM measures to reduce a project's trip generation, investments in active transportation or transit

system infrastructure to reduce a project's trip generation, changes to the traffic signal timing/phasing or lane assignments at the ramp intersection, or physical changes to the off-ramp. Any physical change to the ramp would have to improve safety, not induce greater VMT, and not result in secondary environmental impacts.

OPERATIONAL FREEWAY SAFETY ANALYSIS

Based on the Project's trip generation estimates and the traffic distribution pattern detailed in Chapter 9, the Project would not add 25 or more peak hour trips at any freeway off-ramp within the Study Area. Table 9 provides an overview of the traffic volumes assigned to each off-ramp. Thus, none of the ramps meet the screening criteria for additional Caltrans freeway analysis.

CALTRANS SAFETY REVIEW

The Caltrans Safety Guidance recommends that the lead CEQA agency (i.e., the City) overseeing a project's entitlement conduct a review of local traffic safety plans and the Project's potential adverse effect on safety or the implementation of those plans. Under the federal Highway Safety Improvement Program (HSIP), Caltrans developed *Local Roadway Safety: A Manual for California's Local Road Owners* (Caltrans, April 2020), the Local Roadway Safety Plan (LRSP), and the Systemic Safety Analysis Report Program (SSARP).

Each of the three Caltrans documents and programs is similar in purpose, each providing a framework for local agencies (i.e., the City) to identify safety problems and develop projects designed to improve safety. The LRSP and SSARP identify funded improvement projects and plans. A review of a list of funded improvement plans under the LRSP showed that no infrastructure improvements are located in the City as of October 1, 2020⁵. Under the SSARP, no improvement projects were identified for funding in the City⁶. There are no identified and/or funded improvement projects in the City.

⁵ <https://dot.ca.gov/-/media/dot-media/programs/local-assistance/documents/hsip/2020/lrspprojects20201001-a11y.pdf>

⁶ <https://dot.ca.gov/-/media/dot-media/programs/local-assistance/documents/hsip/2018/selectedapplications20160715.pdf>

The HSIP itself allocates federal funding for safety programs. A review of the programs and projects selected for funding in HSIP cycles 7, 8, 9, and 10⁷ identified several programs in the City, but none that would affect the transportation network in the vicinity of the Study Area.

The City has several programs in place to proactively identify and manage traffic safety, such as the SRTS program. As discussed in Chapter 4, the Project would not interfere with the implementation of any City plans or policies in the Study Area. Additionally, as discussed in Chapter 6, the Project would not introduce new traffic hazards nor significantly increase existing hazards. All Project access points are designed in accordance with driveway design guidelines. Therefore, the Project would not have an adverse safety impact nor impede the implementation of any safety improvement projects.

⁷ <https://dot.ca.gov/programs/local-assistance/fed-and-state-programs/highway-safety-improvement-program/approved-project-lists>

**TABLE 9
FREEWAY OFF-RAMP SCREENING ANALYSIS - YEAR 2026**

Off Ramp	Peak Hour	Project Trips Added	Meets Screening?
SR 14 Southbound Off-Ramp to Newhall Avenue	AM	2	No
	PM	3	No
SR 14 Northbound Off-Ramp to Newhall Avenue	AM	11	No
	PM	18	No
SR 14 Southbound Off-Ramp to Sierra Highway	AM	2	No
	PM	3	No
SR 14 Northbound Off-Ramp to Placerita Canyon Road	AM	2	No
	PM	3	No
SR 14 Southbound Off-Ramp to Golden Valley Road	AM	4	No
	PM	8	No
SR 14 Northbound Off-Ramp to Golden Valley Road	AM	11	No
	PM	18	No
SR 14 Southbound Off-Ramp to Via Princessa	AM	2	No
	PM	3	No
SR 14 Northbound Off-Ramp to Via Princessa	AM	2	No
	PM	3	No

TABLE 9 (CONTINUED)
FREEWAY OFF-RAMP SCREENING ANALYSIS - YEAR 2026

Off Ramp	Peak Hour	Project Trips Added	Meets Screening?
SR 14 Southbound Off-Ramp to Soledad Canyon Road	AM	11	No
	PM	18	No
SR 14 Northbound Off-Ramp to Sand Canyon Road	AM	2	No
	PM	3	No
I-5 Northbound Off-Ramp to Newhall Ranch Road	AM	2	No
	PM	3	No
I-5 Southbound Off-Ramp to Newhall Ranch Road	AM	2	No
	PM	3	No
I-5 Northbound Off-Ramp to Magic Mountain Parkway	AM	5	No
	PM	9	No
I-5 Southbound Off-Ramp to Magic Mountain Parkway	AM	5	No
	PM	9	No
I-5 Northbound Off-Ramp to Valencia Boulevard	AM	17	No
	PM	23	No
I-5 Southbound Off-Ramp to Valencia Boulevard	AM	5	No
	PM	9	No

Chapter 8

Non-CEQA Analysis: Pedestrian, Bicycle, and Transit Access

This chapter presents an assessment of the Project's effects on pedestrian, bicycle, and transit circulation in the vicinity of the Project Site. The choice to make a trip by a mode other than automobile is directly influenced by the perceived convenience and safety of the alternative mode and, therefore, the Project's improvements or deterioration of facilities serving pedestrians, bicyclists, or transit users is of critical importance.

EXISTING INFRASTRUCTURE

The Study Area is served by existing dedicated pedestrian, bicycle, and transit infrastructure, as discussed in Chapter 2, however some of these elements are lacking in the immediate vicinity of the Project Site.

Pedestrian Infrastructure

Currently no sidewalks or marked pedestrian crossings exist along the Project frontage. North of the railroad tracks is the Chuck Pontus Commuter Rail Trail, which is primarily a bicycle path but could serve pedestrians. Only one crosswalk across Soledad Canyon Road is provided near the Project, which is at Commuter Way & Soledad Canyon Road. Farther away from the Project Site, crosswalks are provided at Bouquet Canyon Road & Valencia Boulevard / Soledad Canyon Road.

Figure 4 provides a map of potential pedestrian destinations in the vicinity of the Project Site.

Bicycle Infrastructure

As previously mentioned, the Chuck Pontus Commuter Rail Trail provides a Class I bicycle path on the north side of Soledad Canyon Road adjacent to the Project Site. This path connects to a variety of additional existing and proposed Class I, II, and III bicycle facilities in the area including along Bouquet Canyon Road, Newhall Ranch Road, Golden Valley Road, and along the Santa Clarita River. Multi-Use paths are located along the Santa Clarita River and through the residential neighborhood just north of the Project Site.

Transit Infrastructure

As shown in Table 3, Santa Clarita Metrolink Station is located adjacent to the eastern boundary of the Project Site. Additionally, bus stops for Santa Clarita Transit and Kern Transit are also located along Soledad Canyon Road Avenue. Transit routes serving the Project Site are summarized in Table 3 and mapped in Figure 6.

On-Street Parking

On-street parking is prohibited along Soledad Canyon Road and Commuter Way adjacent to the Project Site.

PROJECT EFFECTS ON INFRASTRUCTURE

The Project would generally improve the surrounding infrastructure for pedestrians, bicyclists, and transit users. The following series of evaluation criteria was used to assess the Project's effects on infrastructure and summarized below.

- **Pedestrian Infrastructure**: The Project would install sidewalks along the entire Project frontage and internal to the Project Site that would meet standard widths according to City standards, and would comply with City requirements regarding ADA accessibility at crossing points. The Project would provide crosswalks at key locations, including the proposed new signal, and would not remove or degrade any existing pedestrian

facilities. The additional pedestrian infrastructure would better facilitate local trips, including trips to the Santa Clarita Metrolink Station to the east of the Project.

- **Bicycle Infrastructure:** The Project would install a new traffic signal with crosswalks that would provide a new connection to the Chuck Pontus Commuter Rail Trail to the north side of Soledad Canyon Road. Further, the Project would provide a variety of new internal circulation options for bicyclists along the internal local streets within the Project Site.
- **Transit Infrastructure:** The Project would not alter any existing transit infrastructure and would support the transit infrastructure by locating jobs and residential development within close proximity to the Santa Clarita Metrolink Station, which is served by both Metrolink and numerous bus lines.

On-Street Parking

The Project would have a no direct effect on the total number of on-street parking spaces.

Proximity to Schools

The Project Site is not located within 0.25 miles of the Project Site. As such, the Project would not affect pedestrian access for students walking to school. Therefore, the Project would not negatively affect pedestrian access to any local school.

PROJECT EFFECTS ON VOLUME

The Project would result in additional pedestrian, bicycle, and transit activity at and around the Project Site. In summary, while the Project would increase pedestrian traffic to and from the Project Site, virtually all major pedestrian crossing points would be provided using crosswalks at signalized intersections.

Existing pedestrian activity in the vicinity of the Project Site is limited but may increase with the on-site employees and new residents. This activity would not substantially change as a result of the Project, though more pedestrian trips to and from public transit would travel to Santa Clarita

Metrolink Station. The Project accommodates new pedestrian traffic with various sidewalks and crosswalks proposed for installation, improving connectivity where none exists today.

Pedestrian activity generated by the Project is anticipated to be heaviest between the Santa Clarita Metrolink Station and the Project Site. Secondarily, pedestrian activity would be heaviest internal to the Project Site, with residents visiting other residents and commuting to work at the studio.

Bicycle activity would be very similar to the pedestrian activity described above.

Given the high capacity of the primary transit routes (i.e., Metrolink Antelope Valley Line), transit activity generated by the Project would not strain the capacity of the public transit system.

PROJECT FEATURES AND RECOMMENDED ACTIONS

In summary, the Project would provide the following features that would directly benefit pedestrian, bicycle, or transit access at and around the Project Site:

- Construction of sidewalks along the Project frontage and within the Project Site
- Dedicated pedestrian access to all Project development components
- Proposed implementation of new crosswalks and signalized intersections
- Connection to the existing Class I bicycle path along the Project frontage
- Provision of on-site bicycle parking
- Improved connectivity between the Project and Santa Clarita Metrolink Station

Based on the analysis above, the Project would not result in substantial negative effects on pedestrian, bicycle, or transit access and, therefore, no improvements are necessary beyond those already proposed as features of the Project.

Chapter 9

Non-CEQA Analysis: Project Access, Safety, and Circulation

This chapter presents an assessment of the Project's effects on access and circulation, both adjacent to the Project Site and in the surrounding area, once the Project is operational.⁸ Negative effects of a project may consist of operational delays on surrounding streets or conflicts between vehicles and other vehicles, bicycles, or pedestrians. Such effects are not considered significant under CEQA but could require Project modifications or off-site improvements to ensure safe and efficient circulation around the Project Site.

VEHICLE OPERATIONS OVERVIEW

The vehicle operations evaluation is a quantitative analysis of the effects of Project traffic at Project driveways and surrounding intersections where the Project would be expected to add at least 50 trips during the morning or afternoon peak hours. Per the City's request, additional intersections which fell below the 50-trip threshold were also included as part of the analysis. Potential negative effects to be identified include increases in average vehicular delay, worsening of intersection level of service (LOS), or vehicular queuing that would exceed turn pocket lengths and extend into through lanes, block cross streets, or contribute to congestion.

The operational evaluation includes the following steps, which are described in detail in the following sections.:

- Develop Project traffic estimates
- Obtain existing traffic volumes and future model-run baseline traffic volumes
- Conduct operational analysis of study intersections and Project driveways

⁸ Effects of Project construction are analyzed in Chapter 10.

Based on thresholds determined using criteria established by the City, an intersection would be considered affected by Project-generated traffic if the Project would do any of the following:

- Worsen an intersection maintained by the City from LOS D or better to LOS E or F
- Cause the following increase in delay at an intersection maintained by the City that operated (with the Project) at LOS D or worse:
 - LOS D with the Project: more than four-second increase in delay
 - LOS E or F with the Project: more than two-second increase in delay

PROJECT TRAFFIC

This section details the development of Project traffic estimates for the morning and afternoon commuter peak hours. The assumptions used in developing the Project traffic estimates were reviewed and approved by City staff as part of the analysis of the traffic signal warrants for the Project driveways.

Project Trip Generation

The number of vehicle trips expected to be generated by the Project's land uses was estimated using rates derived from empirical counts at existing studios in Los Angeles County and are provided as daily and peak hour rates. The trip generation rates relate the number of vehicle trips traveling to and from the Project Site to the size of development of each land use. The rates applied to the Project are summarized in Table 5.

To be conservative, only a 5% trip reduction was applied to account for public transit usage and pedestrian trips. No reductions were applied to account for internal trips, TDM strategies, or pass-by trips.

The Project trip generation estimates are shown in Table 5. As shown, the Project is estimated to generate a total of 2,567 daily trips, including 180 trips during the morning peak hour (55 inbound, 125 outbound) and 242 trips during the afternoon peak hour (139 inbound, 103 outbound).

Project Trip Distribution

The distribution of Project traffic throughout the surrounding streets and highways is dependent on the location of residential and industrial centers from which employees and services of the Project would be drawn, characteristics of the street and freeway system serving the Project Site, the location of the proposed driveways, and existing/proposed traffic conditions.

The general distribution patterns for Project traffic for the studio and residential Lots 1-4 are shown in Figures 10A through 10D and are based on distribution patterns developed in the City's travel demand forecasting model and nearby development projects.

Intersection Selection

Per the TAU, a detailed analysis shall be conducted for intersections that meet any of the following conditions:

- Major signalized and unsignalized intersections that are likely to be affected by the project
- Intersections where the proposed project would add 50 or more net new trips during the morning and afternoon peak hours
- Site access points

As listed in Table 10 and shown in Figure 11, based on Project trip generation estimates and the trip distribution patterns described above, a total of 19 intersections, including 16 existing signalized intersections, and three driveways (one of which is proposed to be signalized), were selected for analysis. The secondary studio driveway would likely operate as emergency access only and thus was not included in the selection of study intersections.

Project Traffic Assignment

The trip distribution pattern shown in Figures 10A through 10D were used to assign the Project-generated traffic through the Study Area based on the trip generation estimates summarized in

Table 5. Figure 12 illustrates the Project traffic volumes at the study intersections during typical weekday morning and afternoon peak hours.

EXISTING AND FUTURE TRAFFIC VOLUMES

Existing Traffic Volumes

Intersection turning movement counts for most intersections were collected in February 2023, on a day when schools were in session. Two additional counts were provided by the City and were collected in 2019, prior to the COVID-19 pandemic.

The traffic counts collected in 2019 were increased by 1% per year to account for general growth in regional traffic between the year they were conducted and 2023. With these adjustments incorporated, the Existing Conditions (2023) peak hour traffic volumes are shown in Figure 13.

Traffic counts collected are provided in Appendix C.

Future Traffic Volumes

Estimates of future traffic conditions were prepared in accordance with procedures outlined by the City and were obtained using a combination of ambient traffic growth and traffic estimates from known Related Projects, as shown in Table 4. Typically, these volumes would be developed based on the City's traffic model, however, the model was not available for use at the time of this study.

Ambient Traffic Growth

Existing traffic is expected to increase as a result of regional growth and development outside the Study Area. Based on discussions with the City, an ambient growth factor of 1% per year was applied to the existing traffic volumes to reflect the effects of the regional growth and

development by Year 2026. The total adjustment applied over the three-year period between Year 2023 and the anticipated buildout year of the Project was 3%. This rate exceeds the regional traffic growth forecasts of *2010 Congestion Management Program* (Los Angeles County Metropolitan Transportation Authority [Metro], 2010) and, therefore, is conservative.

Related Projects

As stated in Chapter 2, this study also considered the effects of the Project on Related Projects. The Related Projects are detailed in Table 4 and their approximate locations shown in Figure 7.

The development of estimated traffic volumes added to the Study Intersections as a result of Related Projects involves the use of a three-step process: trip generation, trip distribution, and trip assignment.

Trip Generation. Trip generation estimates for the Related Projects were either provided by the City, in previous transportation studies, or by using the Trip Generation Manual. The Related Projects trip generation estimates summarized in Table 4 are conservative in that they do not in every case account for either the trips generated by the existing uses to be removed or the likely use of other travel modes (e.g., transit, bus, bicycling, walking, carpool, etc.) Further, in many cases, they do not account for the internal capture trips within a multi-use development or for the interaction of trips between multiple Related Projects, in which one Related Project serves as the origin for a trip destined for another Related Project.

Trip Distribution. The geographic distribution of the traffic generated by the Related Projects is dependent on several factors. These include the type and density of the proposed land uses, the geographic distribution of the population from which the residents of the proposed developments are drawn, and the location of these projects in relation to the surrounding street system. These factors are considered along with logical travel routes through the street system to develop a reasonable pattern of trip distribution.

Traffic Assignment. The trip generation estimates for the Related Projects were assigned to the local street system using the trip distribution pattern described above. Figure 14 shows the peak hour traffic volumes associated with these Related Projects at the Study Intersections.

Future without Project Conditions. The Future without Project Conditions peak hour traffic volumes are shown in in Figure 15. These volumes represent the Future Base Conditions to which the addition of Project traffic will be compared.

OPERATING CONDITIONS

The analysis of traffic operating conditions was conducted using the HCM methodology, which calculates delay, in seconds, experienced by a vehicle passing through an intersection. For signalized intersections and stop-controlled intersections, the average delay of all traffic passing through the intersection is reported. For both signalized and unsignalized intersections, vehicular delay is converted to LOS, a metric ranging from A to F, as shown in Table 11. Intersections operating at LOS A allow all vehicles to pass through with minimal delay, never having to wait through multiple signal cycles. Intersections operating at LOS F experience heavy congestion and long vehicle queues and delay. The HCM analysis also provides estimates of vehicle queuing lengths at various movements through each intersection based on the 95th percentile queue length. The HCM analysis of signalized intersections accounted for the existing traffic signal cycle lengths and timing plans in place according to City records. Intersection lane configurations used in the analysis are shown in Appendix D and the HCM output is provided in Appendix E.

Intersection LOS

Existing Conditions. Table 12 summarizes the LOS analysis for Existing Conditions for each of the study intersections. As shown, under Existing Conditions, 14 of the 16 existing study intersections operate at LOS D or better during both the morning and afternoon peak hours. The following intersections operate at LOS E or F during one or both peak hours:

- Intersection #4, McBean Parkway & Magic Mountain Parkway
- Intersection #8, Bouquet Canyon Road & Newhall Ranch Road

Existing with Project Conditions. The Existing peak hour traffic volumes, shown in Figure 13, combined with the Project traffic volumes from Figure 12 result in Existing with Project Traffic volumes shown in Figure 16.

Table 12 summarizes the LOS analysis for Existing with Project Conditions for each of the study intersections. As shown, under Existing with Project Conditions, 13 of the 16 existing study intersections and all three proposed new driveways operate at LOS D or better during both the morning and afternoon peak hours. The following intersections operate at LOS E or F during one or both peak hours:

- Intersection #4, McBean Parkway & Magic Mountain Parkway
- Intersection #7, Bouquet Canyon Road & Valencia Boulevard / Soledad Canyon Road
- Intersection #8, Bouquet Canyon Road & Newhall Ranch Road

Project traffic would substantially affect operations at Intersection #7, Bouquet Canyon Road & Valencia Boulevard / Soledad Canyon Road which is projected to operate at LOS E during the afternoon peak hour. The improvements to affected intersections are discussed in further detail later in this chapter.

Future Conditions (2026). The Future without Project peak hour traffic volumes, shown in Figure 15, combined with the Project traffic volumes from Figure 12, result in Future with Project peak hour traffic volumes shown in Figure 17.

Table 13 summarizes the LOS analysis for Future without Project Conditions and Future with Project Conditions for each of the study intersections. As shown, under Future without Project Conditions, 11 of the 16 study intersections are forecast to operate at LOS D or better during both the morning and afternoon peak hours. The following intersections are forecast to operate at LOS E or F during one or both peak hours:

- Intersection #4, McBean Parkway & Magic Mountain Parkway
- Intersection #7, Bouquet Canyon Road & Valencia Boulevard / Soledad Canyon Road
- Intersection #8, Bouquet Canyon Road & Newhall Ranch Road
- Intersection #13, Golden Valley Road & Center Pointe Drive
- Intersection #14, Sierra Highway & Golden Valley Road

With construction of the Project, no additional intersections would operate at LOS E or F. However, Project traffic does affect the operations of the following two intersections during one or both peak hours per the TAU:

- Intersection #7, Bouquet Canyon Road & Valencia Boulevard / Soledad Canyon Road
- Intersection #13, Golden Valley Road & Center Pointe Drive

Table 13 also contains the LOS results that would occur if a series of operational improvements were included at affected study intersections. As shown, all Project affects can be reduced to non-affects with the implementation of the improvements. The improvements are discussed in further detail later in this chapter.

Intersection Queuing

In addition to providing delay and LOS, the HCM analysis provides estimates of vehicle queuing lengths at various movements through each intersection based on the 95th percentile queue length. As no threshold for queuing length is established in the TAU, a summary of the results is provided in Table 14 for the Future Conditions. Most intersections would not experience an increase in queue length of over 50 feet, or approximately two car lengths.

Access Points

As illustrated in Figure 2, all vehicle access would be provided via Soledad Canyon Road. The following intersections provide access to the Project.

- Intersection #9, Commuter Way & Soledad Canyon Road
- Intersection #17, Studio Driveway & Soledad Canyon Road
- Intersection #18, Residential Driveway 1 & Soledad Canyon Road
- Intersection #19, Residential Driveway 2 & Soledad Canyon Road

As mentioned previously, the Emergency Access Driveway was not included as it is not anticipated that Project traffic would utilize this driveway on a daily basis.

The effects of Project traffic on City intersections, including changes in delay, LOS, and queuing, were documented above. All driveway locations are anticipated to operate at LOS C or better and would not contribute to additional queuing or congestion on surrounding streets.

PROPOSED IMPROVEMENTS AND RECOMMENDED ACTIONS

The Project Applicant proposes a series of operational measures, design features, and public benefits that would improve accessibility and traffic circulation for all modes within and around the Project Site and reduce the effects of Project traffic.

New Pedestrian Infrastructure

The Project would install or upgrade pedestrian infrastructure along the Project frontage. New public sidewalks would be constructed adjacent to the Project Site to meet or exceed City standards. The Project would also provide pedestrian crosswalks at the new signalized intersection of the Studio Driveway & Soledad Canyon Road.

New Bicycle Infrastructure

The Project proposes to install a new access point to the existing Chuck Pontus Commuter Rail Trail on the north side of Soledad Canyon Road by installing a new traffic signal at the Studio Driveway & Soledad Canyon Road intersection. In addition, the Project would provide bicycle parking per the SCUDC.

TDM Program

The Project could incorporate various TDM measures into the commercial portion of the Project to encourage the use of alternative transportation modes and reduce VMT and vehicle trips. These measures include:

TDM Strategies Focused on the Site Design (Project Design Features)

- Flexible Work Schedules and Telecommuting Programs
- Bicycle Amenities (Bicycle Racks, Lockers, Showers, etc.)
- TIC
- Flex Car Support
- Preferential Parking Locations for HOV
- Membership in a TMA serving the area

Flexible TDM Strategies Provided by Studio Tenants

- Rideshare Services
- GRH program
- Tax Benefits for Transit Users

The TDM measures are not required to mitigate significant transportation impacts, and the potential reduction in Project trip generation resulting from these measures was conservatively excluded from the operational analysis described in this chapter.

Additional Transportation Infrastructure Improvements

As part of the Project Design, the Project would add an eastbound U-turn lane at the intersection of Soledad Canyon Road & Commuter Way to serve the traffic leaving the residential portion of the Project and traveling west toward I-5. The lane would be added into the existing center median along Soledad Canyon Road. This improvement would require modifications to the traffic signal equipment and phasing at the location.

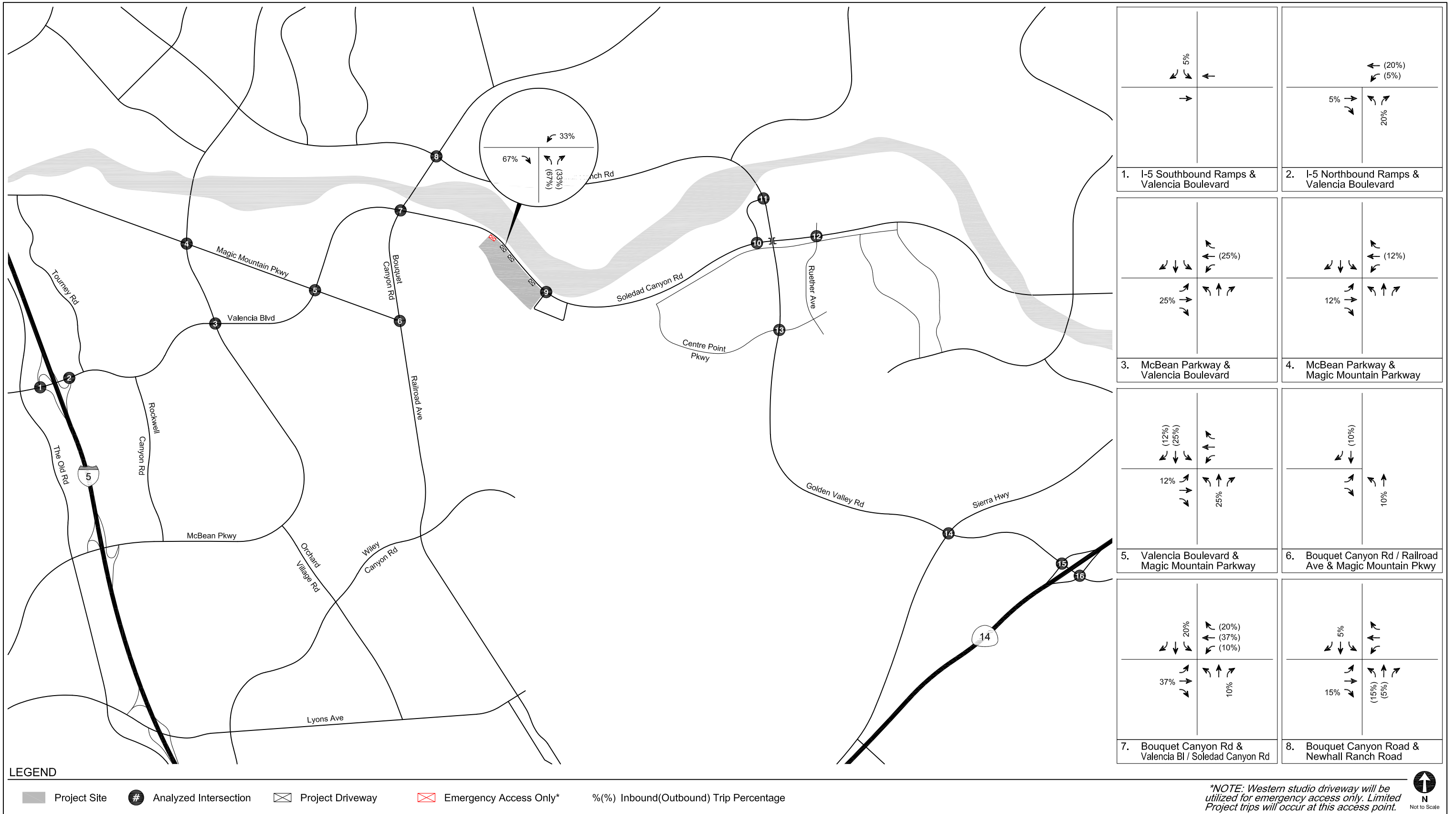
In order to improve study intersections where Project traffic affects intersection operations, the Applicant proposes to implement additional improvements at the two affected study intersections within the Study Area:

- At Intersection #7, Bouquet Canyon Road & Valencia Boulevard / Soledad Canyon Road, the Project would modify the eastbound approach to include a new right-turn lane. The modification can be accomplished within the existing ROW by shifting the existing center median to the north and restriping the existing travel lanes. A small widening

would be necessary along the north side of Valencia Boulevard. The new eastbound approach would consist of three left-turn lanes, three through lanes, and a right-turn lane. Further, the Project proposes an additional receiving lane on the east leg of the intersection. The lane would provide a trap right-turn lane into the nearby commercial area, which includes a gas station. The additional receiving lane would allow the northbound right-turn movement to flow into the eastbound traffic easier.

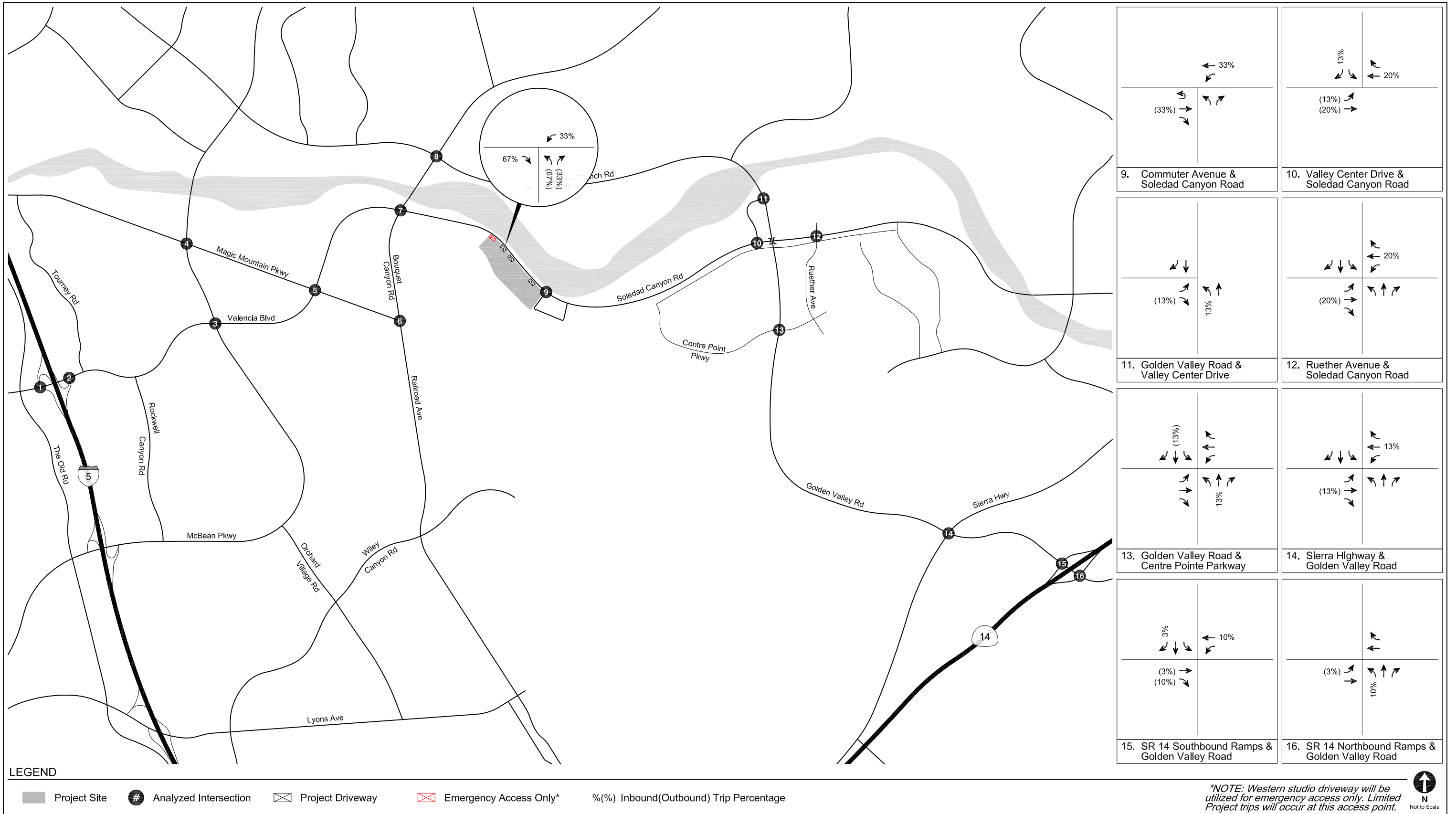
- At Intersection #13, Golden Valley Road & Center Pointe Drive, the Project would modify the northbound approach by widening the intersection to add a separate right-turn lane. The revised lane configuration for the northbound approach would be one left-turn lane, three through lanes, and a right-turn lane.

Conceptual drawings of the proposed improvements at Intersections 7 and 13 are provided in Appendix F.



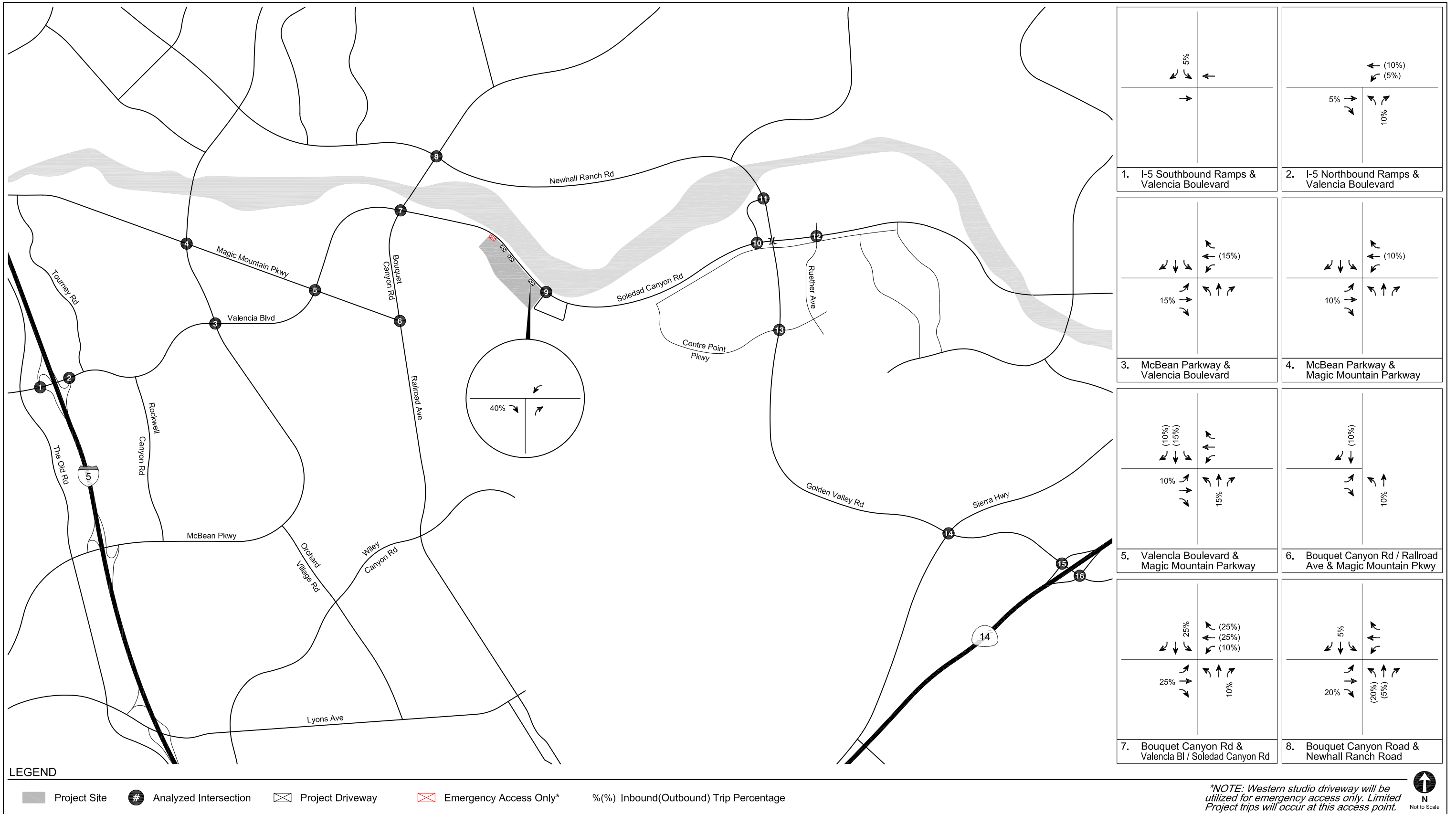
PROJECT TRIP DISTRIBUTION STUDIO

FIGURE 10A



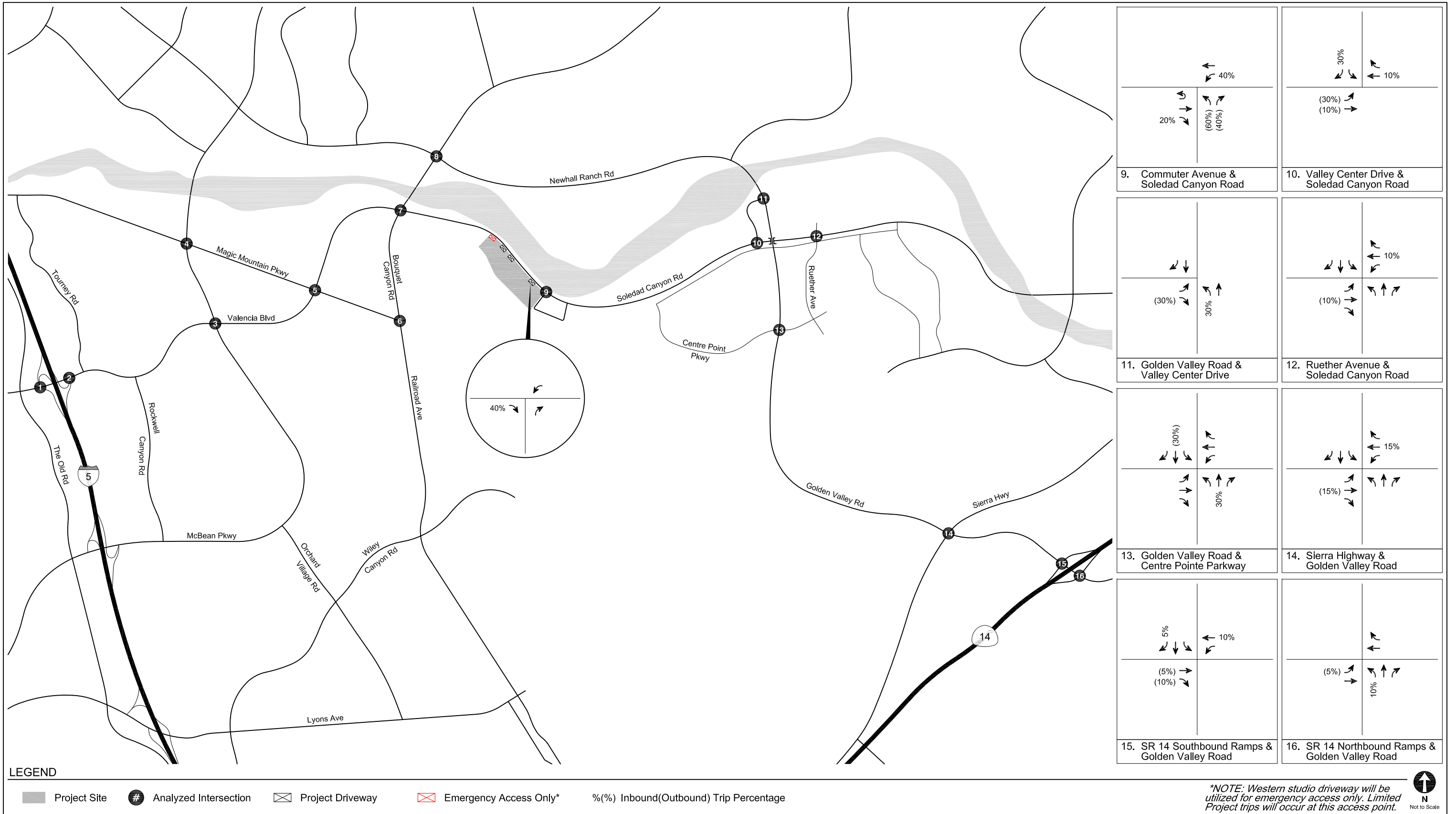
PROJECT TRIP DISTRIBUTION STUDIO

FIGURE 10A (CONT.)



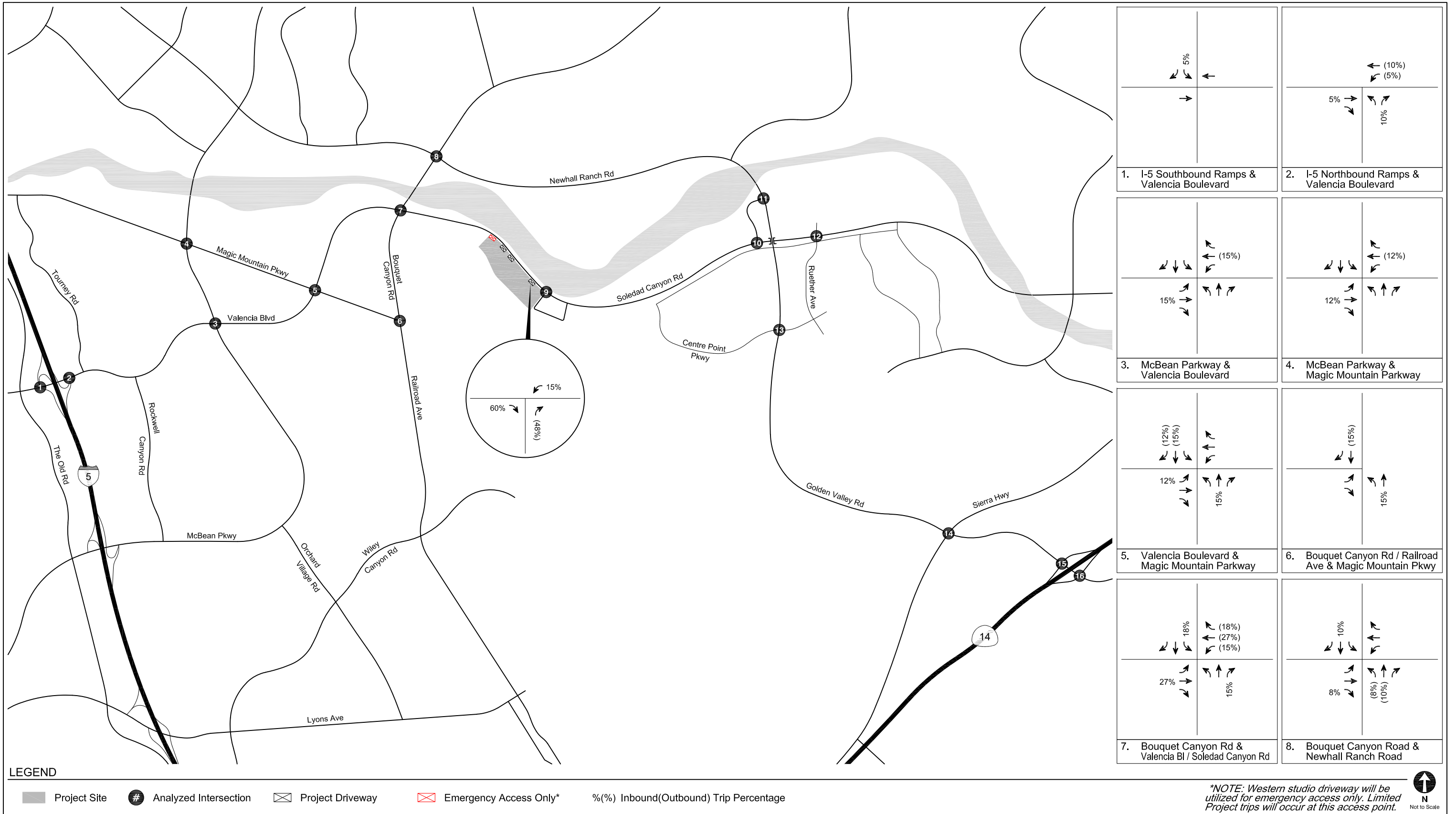
PROJECT TRIP DISTRIBUTION
RESIDENTIAL LOT 1

FIGURE
10B



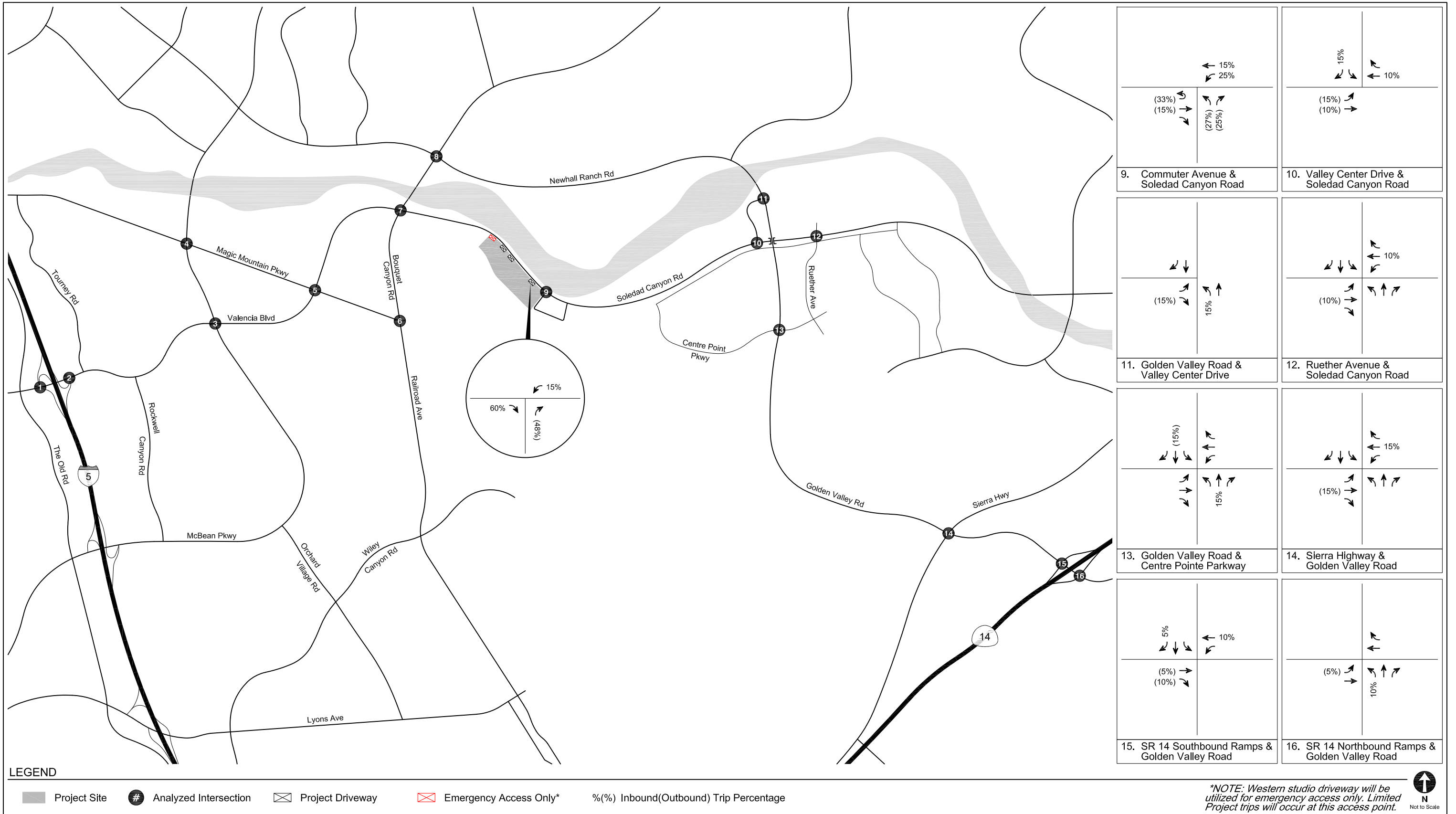
PROJECT TRIP DISTRIBUTION
RESIDENTIAL LOT 1

FIGURE
10B (CONT.)



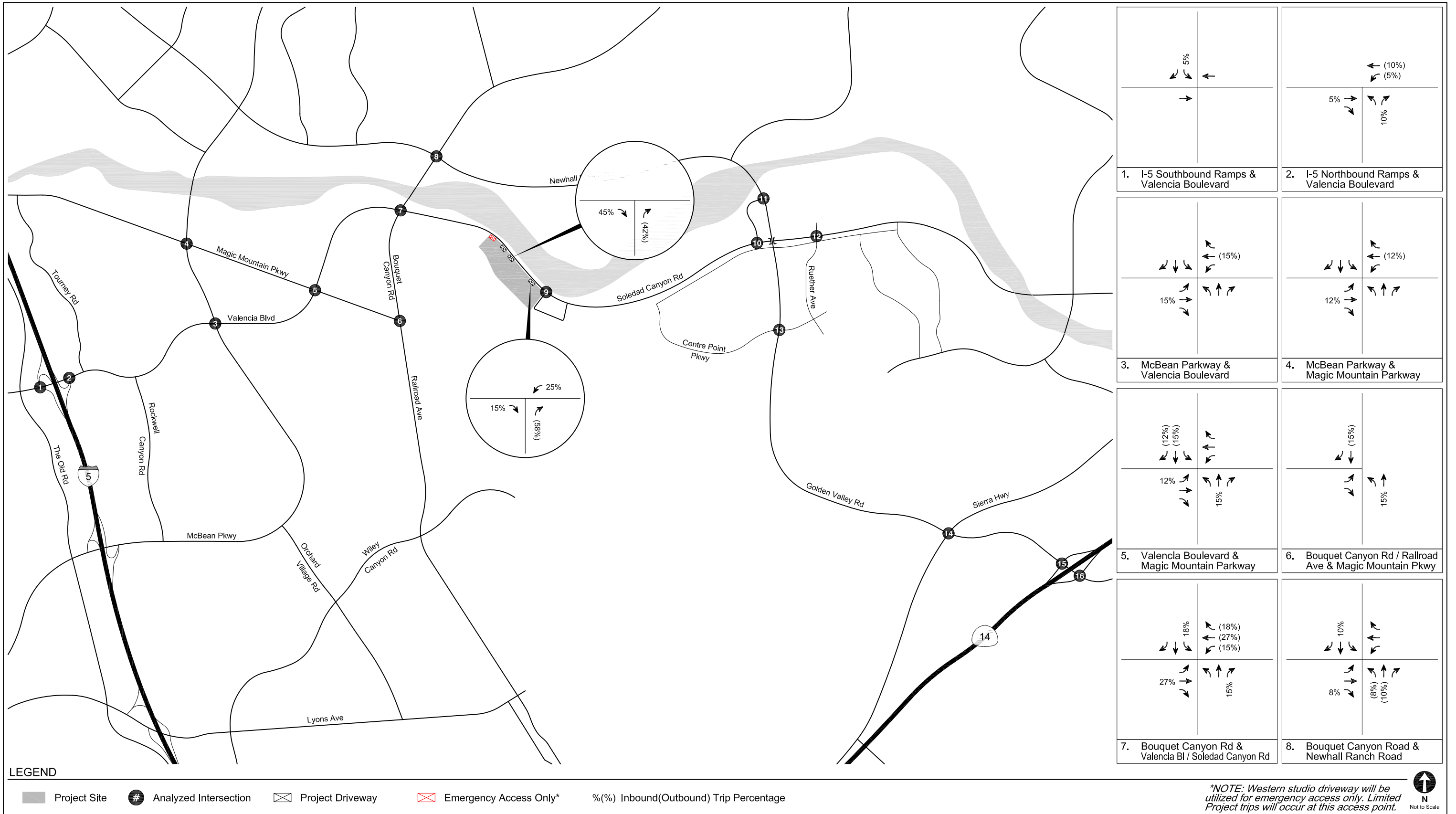
PROJECT TRIP DISTRIBUTION
RESIDENTIAL LOT 2

FIGURE
10C



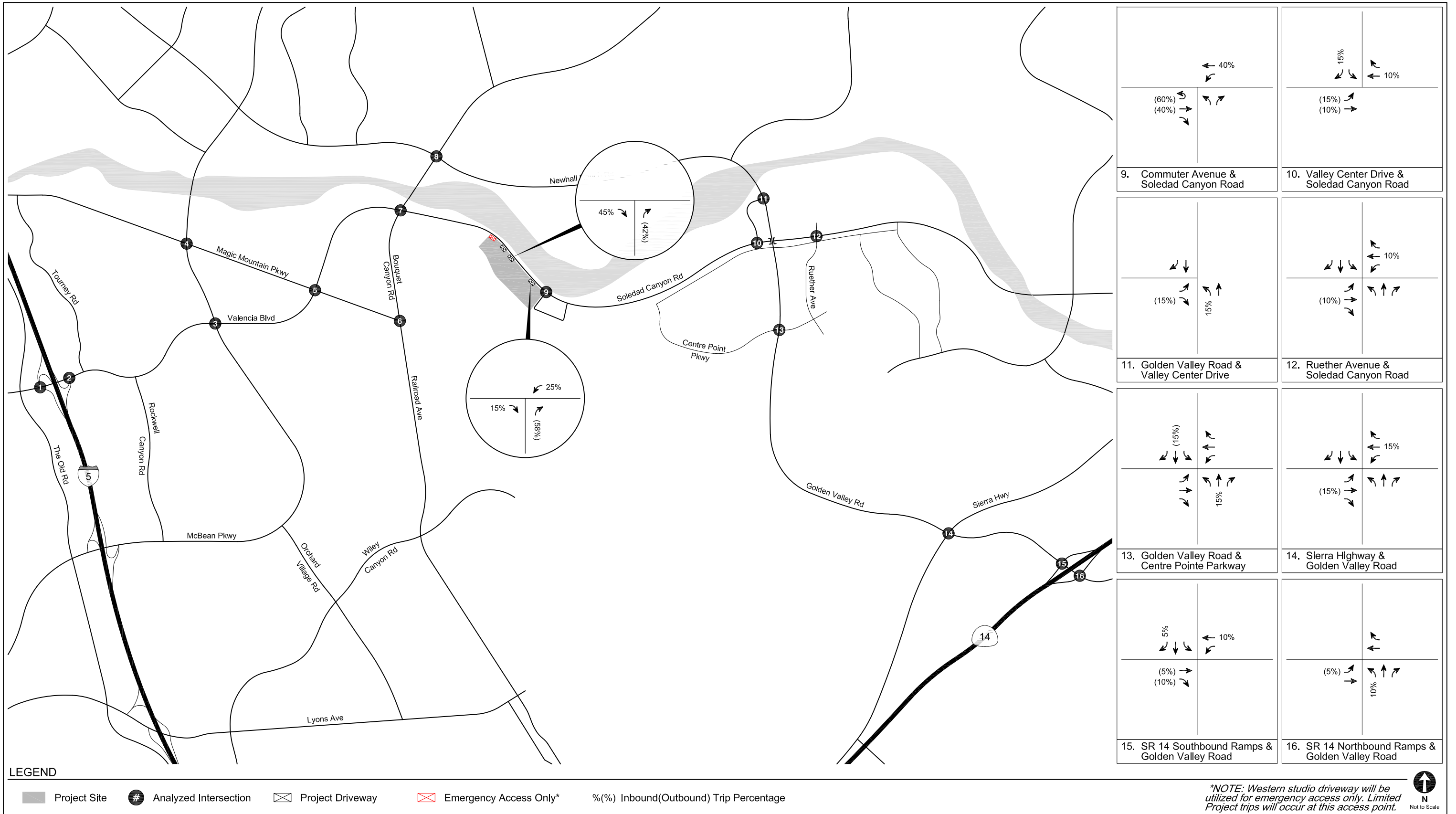
PROJECT TRIP DISTRIBUTION
RESIDENTIAL LOT 2

FIGURE
10C (CONT.)



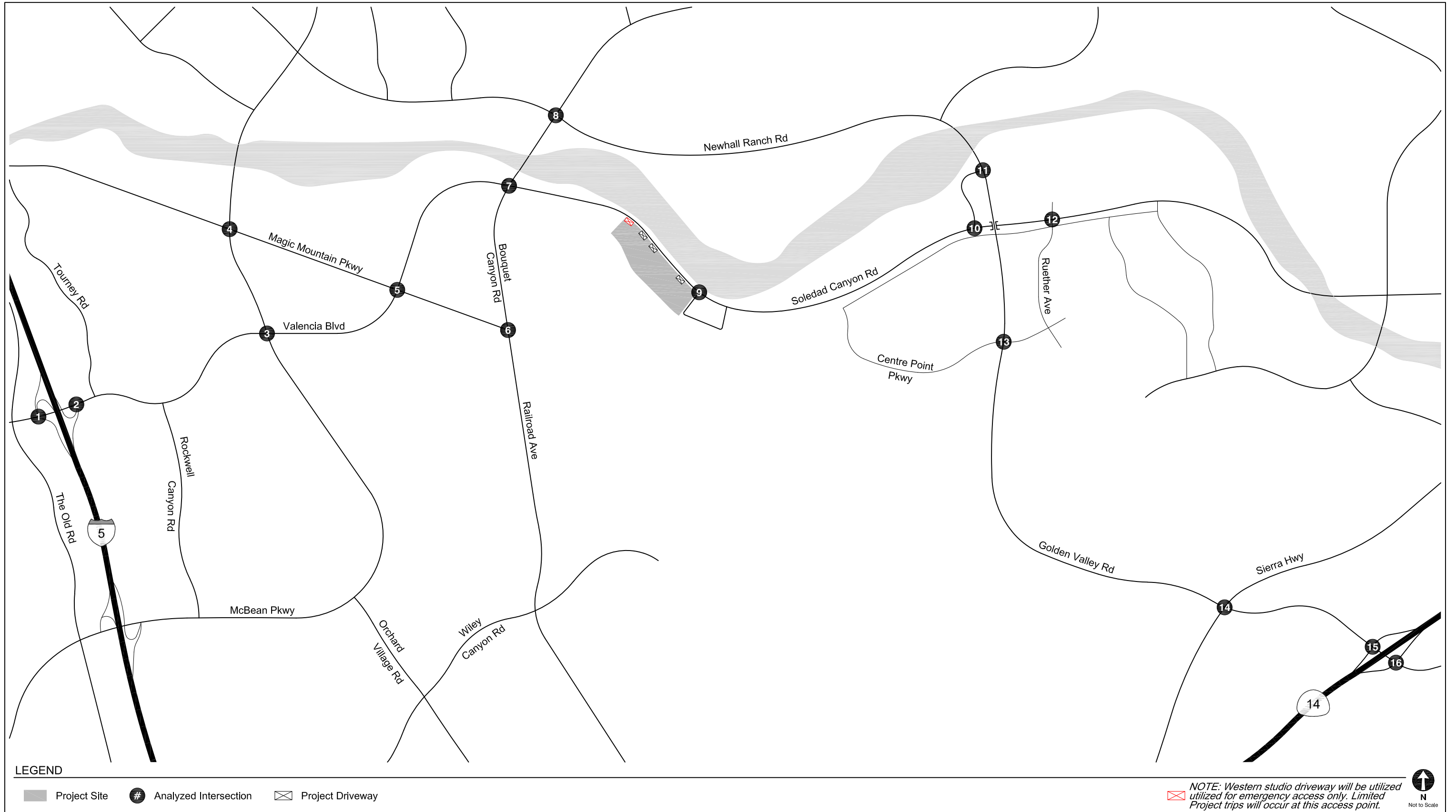
PROJECT TRIP DISTRIBUTION
RESIDENTIAL LOTS 3+4

FIGURE
10D



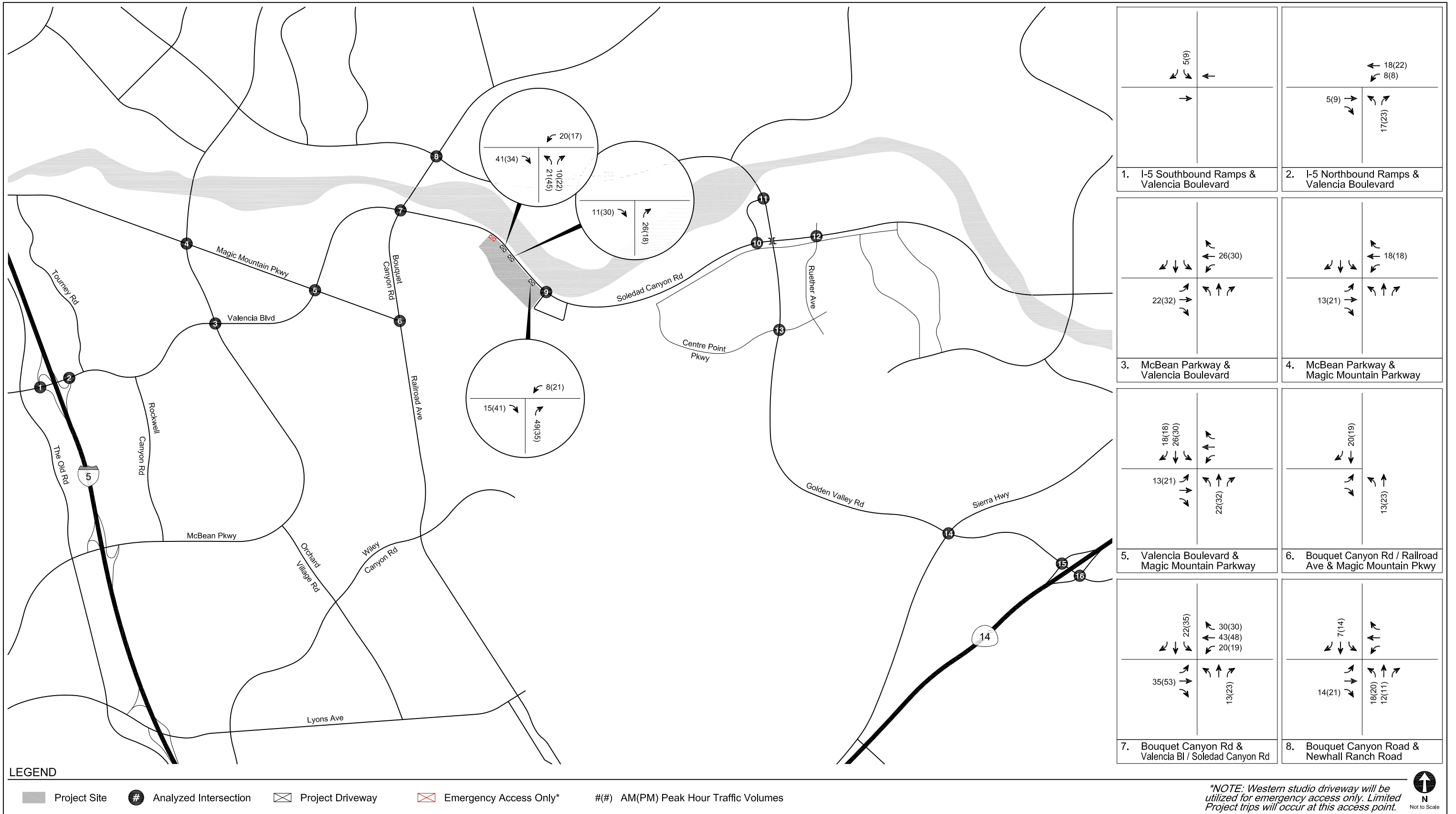
PROJECT TRIP DISTRIBUTION
RESIDENTIAL LOTS 3+4

FIGURE
10D (CONT.)



STUDY AREA AND ANALYZED INTERSECTIONS

FIGURE 11

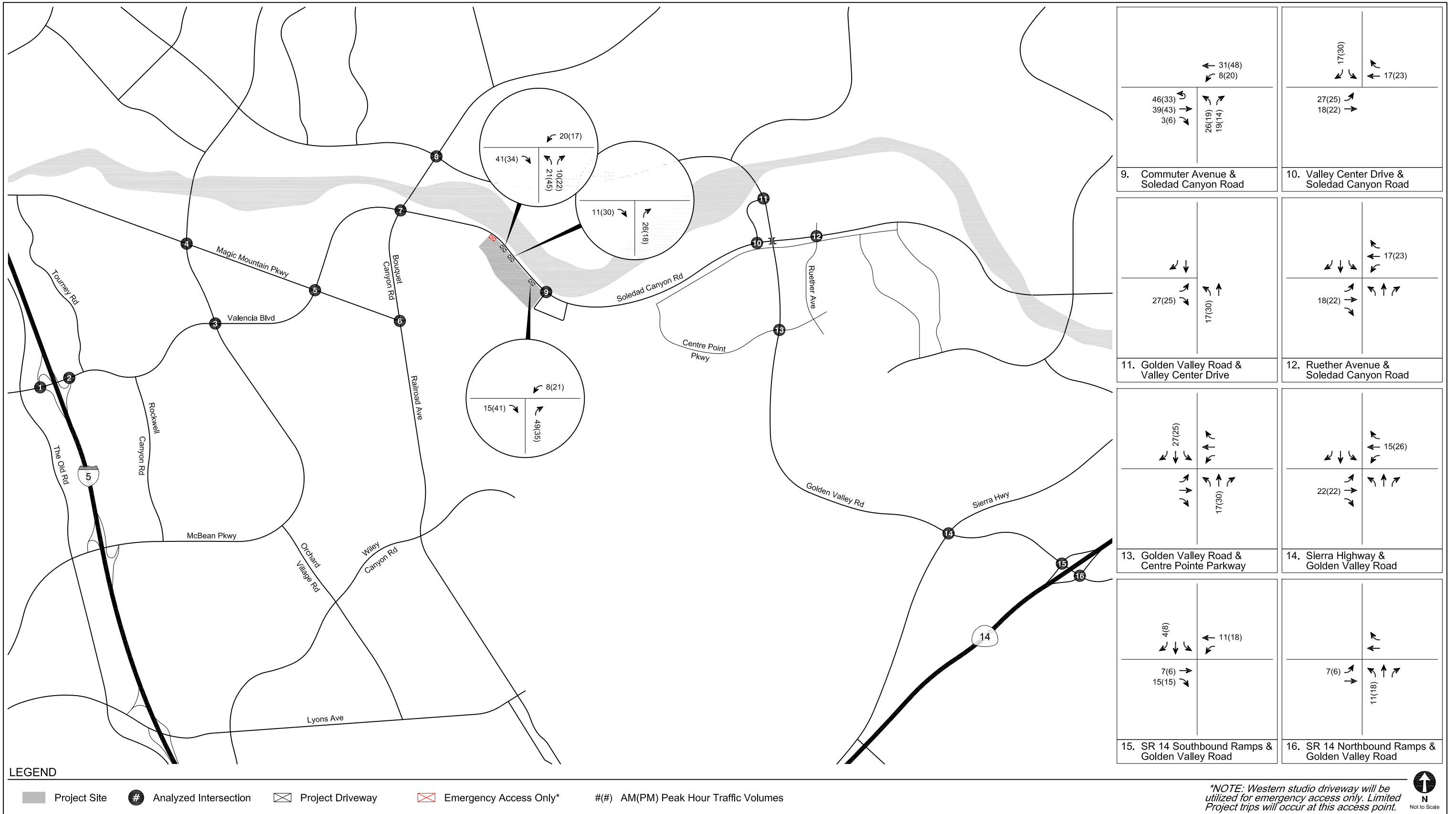


*NOTE: Western studio driveway will be utilized for emergency access only. Limited Project trips will occur at this access point.



PROJECT-ONLY PEAK HOUR TRAFFIC VOLUMES

FIGURE 12



LEGEND

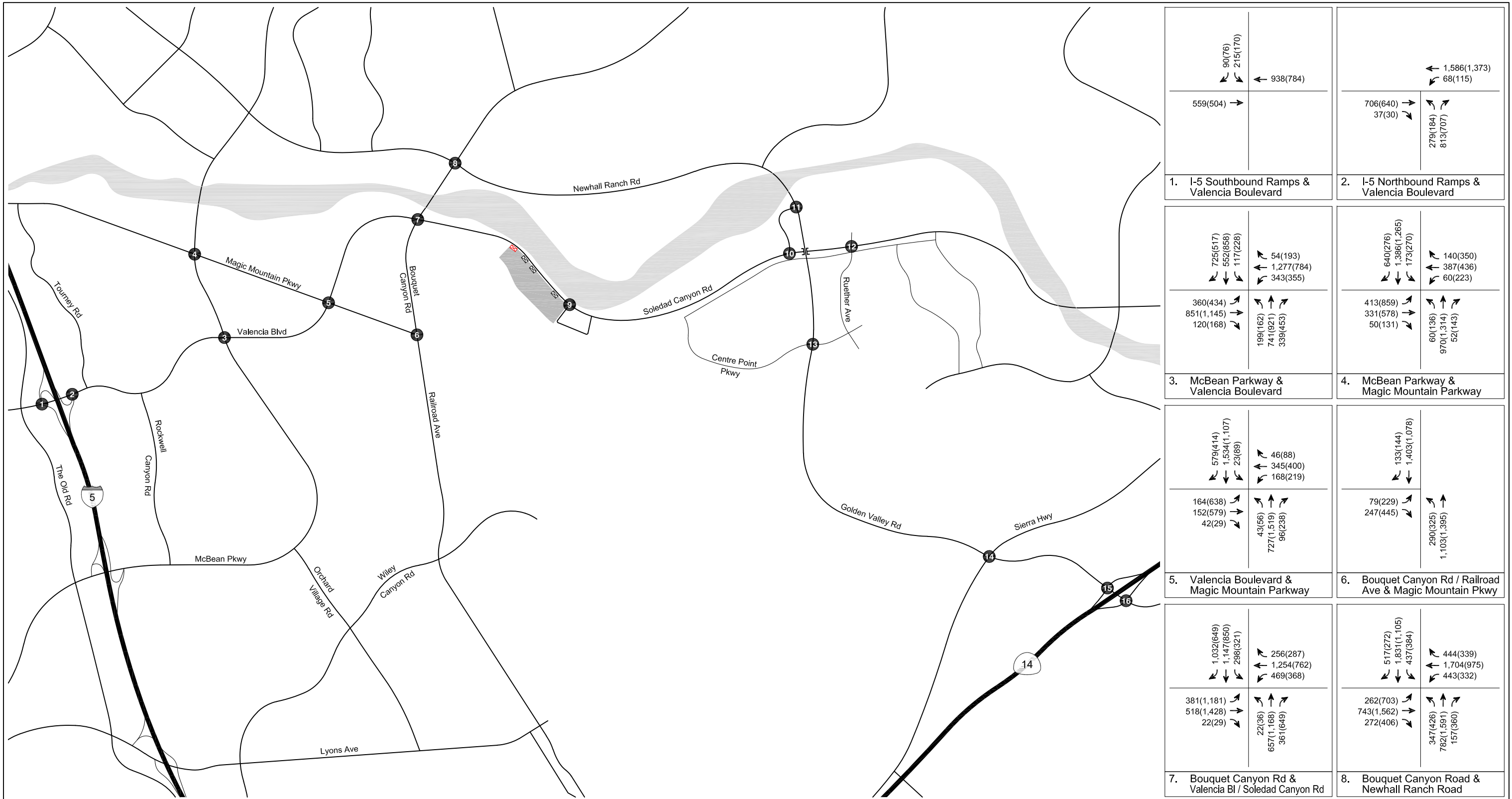
- Project Site
- Analyzed Intersection
- Project Driveway
- Emergency Access Only*
- #(##) AM(PM) Peak Hour Traffic Volumes

*NOTE: Western studio driveway will be utilized for emergency access only. Limited Project trips will occur at this access point.



PROJECT-ONLY PEAK HOUR TRAFFIC VOLUMES

FIGURE 12 (CONT.)



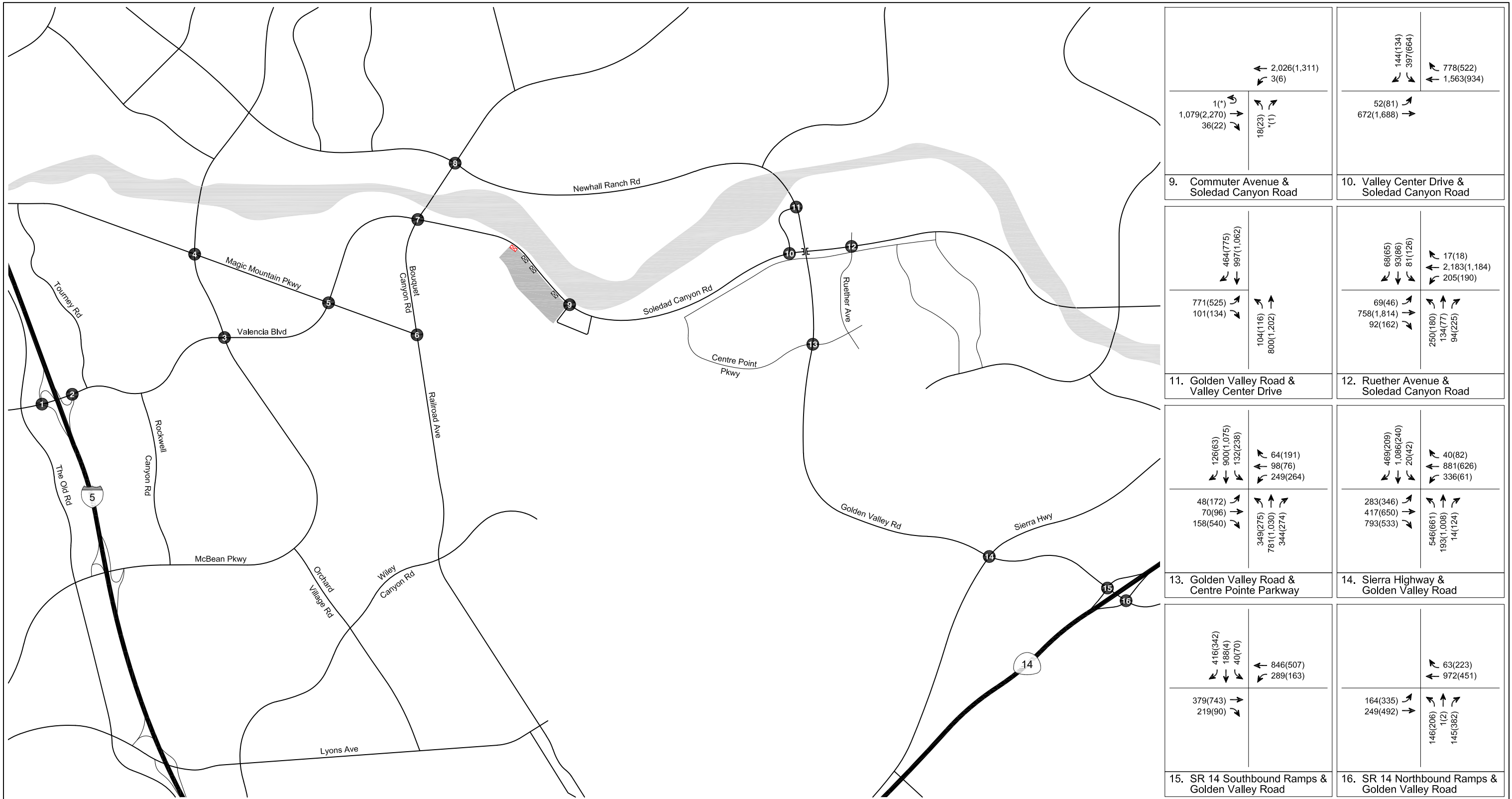
LEGEND

Project Site
 Analyzed Intersection
 Project Driveway
 Emergency Access Only*
 #(#) AM(PM) Peak Hour Traffic Volumes
 () Negligible Volume

**NOTE: Western studio driveway will be utilized for emergency access only. Limited Project trips will occur at this access point.*

EXISTING CONDITIONS (YEAR 2023)
PEAK HOUR TRAFFIC VOLUMES

FIGURE
13



<p>2,026(1,311) 3(6)</p> <p>1(*) 1,079(2,270) 36(22)</p> <p>18(23) *(1)</p>	<p>144(134) 397(664)</p> <p>52(81) 672(1,688)</p> <p>778(522) 1,563(934)</p>
<p>464(775) 997(1,062)</p> <p>771(525) 101(134)</p> <p>104(116) 800(1,202)</p>	<p>68(65) 93(86) 81(126)</p> <p>17(18) 2,183(1,184) 205(190)</p> <p>250(180) 134(77) 94(225)</p>
<p>126(63) 900(1,075) 132(238)</p> <p>48(172) 70(96) 158(540)</p> <p>349(275) 781(1,030) 344(274)</p>	<p>64(191) 98(76) 249(264)</p> <p>469(209) 1,086(240) 20(42)</p> <p>40(82) 881(626) 336(61)</p> <p>283(346) 417(650) 793(533)</p> <p>546(661) 193(1,008) 14(124)</p>
<p>416(342) 188(4) 40(70)</p> <p>379(743) 219(90)</p> <p>846(507) 289(163)</p>	<p>63(223) 972(451)</p> <p>164(335) 249(492)</p> <p>146(206) 1(2) 145(382)</p>

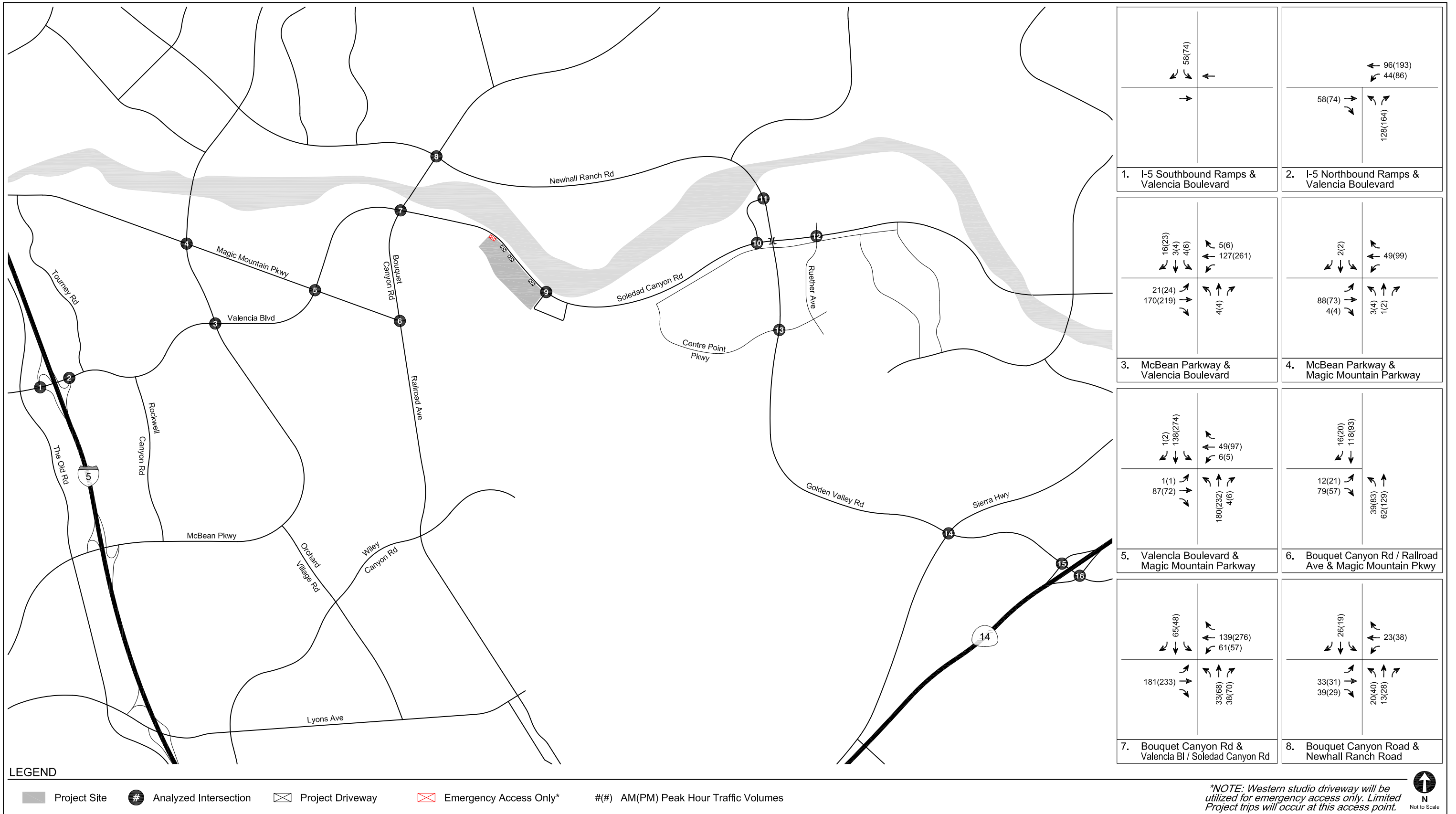
LEGEND

Project Site
 Analyzed Intersection
 Project Driveway
 Emergency Access Only*
 #(#) AM(PM) Peak Hour Traffic Volumes
 () Negligible Volume

**NOTE: Western studio driveway will be utilized for emergency access only. Limited Project trips will occur at this access point.*

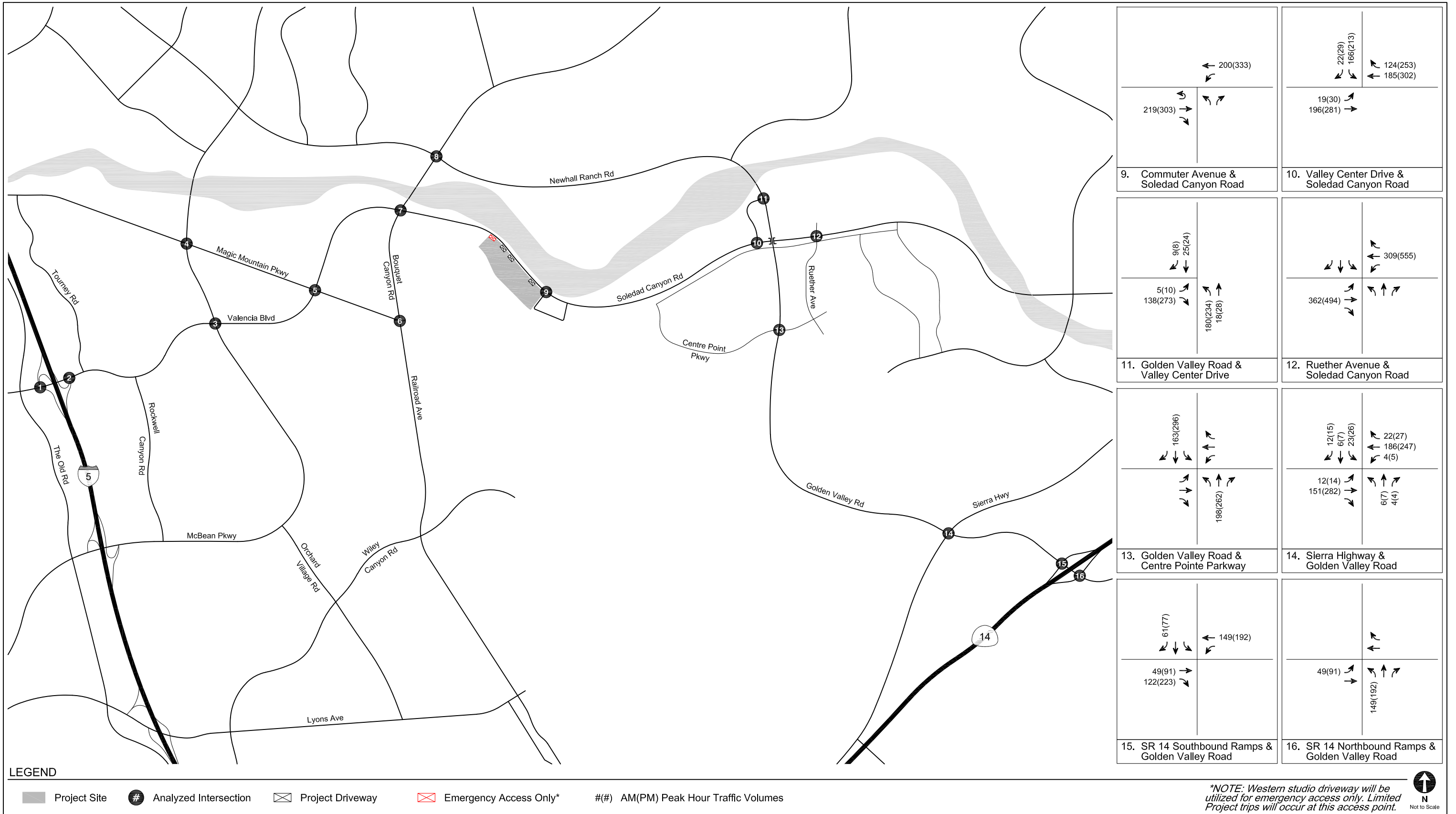
EXISTING CONDITIONS (YEAR 2023)
PEAK HOUR TRAFFIC VOLUMES

FIGURE
13 (CONT.)



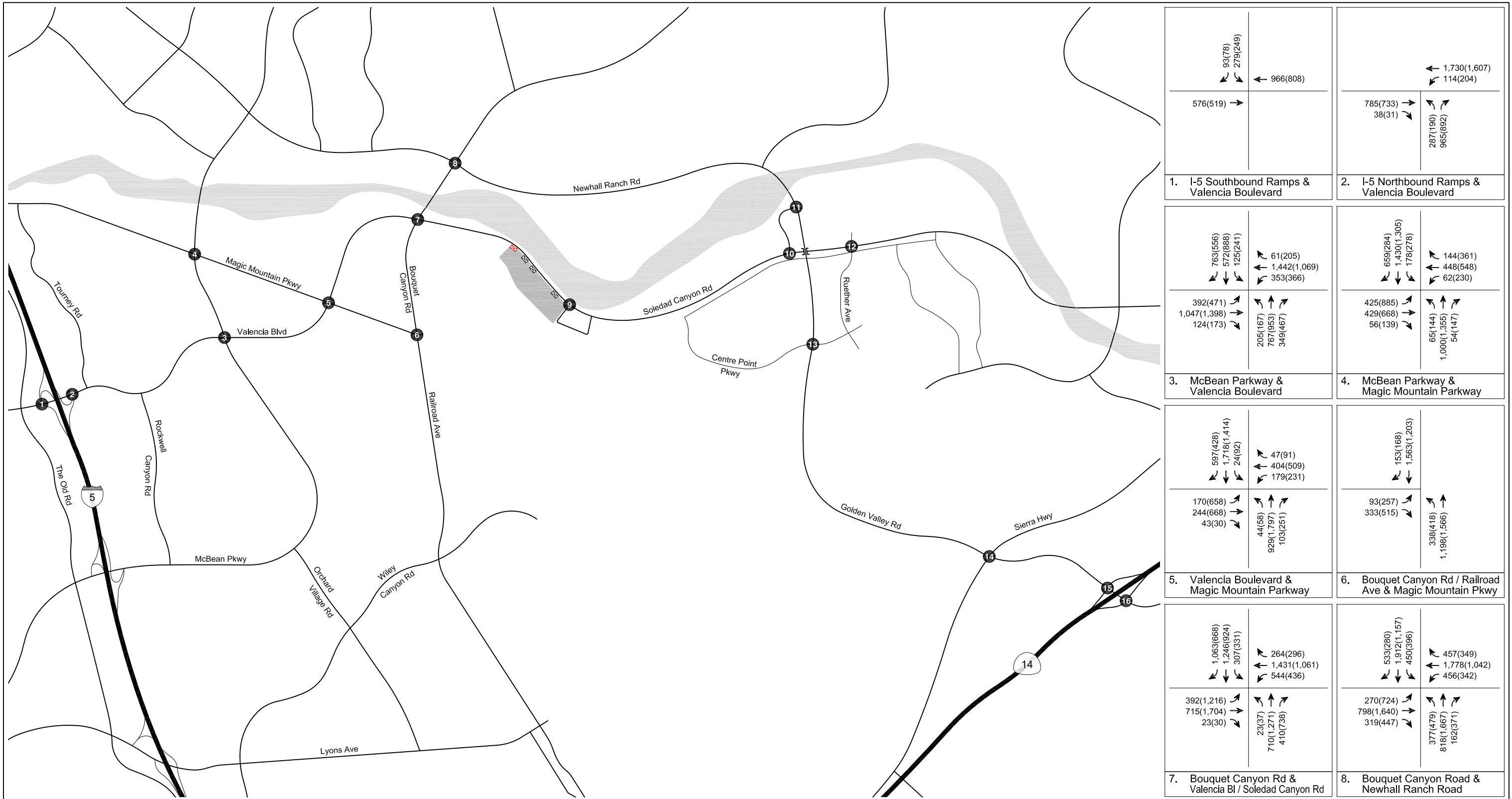
RELATED PROJECT-ONLY
PEAK HOUR TRAFFIC VOLUMES

FIGURE
14



RELATED PROJECT-ONLY
PEAK HOUR TRAFFIC VOLUMES

FIGURE
14 (CONT.)



<p>93(78) ↙ ↘ 279(249) ↙ ↘</p> <p>576(519) →</p>	<p>← 966(808)</p>	<p>← 1,730(1,607) 114(204)</p>	<p>785(733) → 38(31) ↙ ↘</p> <p>287(190) ↙ ↘ 965(892) ↙ ↘</p>
1. I-5 Southbound Ramps & Valencia Boulevard		2. I-5 Northbound Ramps & Valencia Boulevard	
<p>763(656) ↙ ↘ 572(888) ↙ ↘ 125(241) ↙ ↘</p> <p>392(471) ↙ ↘ 1,047(1,398) → 124(173) ↙ ↘</p>	<p>61(205) ↙ ↘ 1,442(1,069) ↙ ↘ 353(366) ↙ ↘</p> <p>205(167) ↙ ↘ 767(953) ↙ ↘ 349(467) ↙ ↘</p>	<p>659(284) ↙ ↘ 1,430(1,305) ↙ ↘ 178(278) ↙ ↘</p> <p>144(361) ↙ ↘ 448(548) ↙ ↘ 62(230) ↙ ↘</p> <p>425(885) ↙ ↘ 429(668) → 56(139) ↙ ↘</p> <p>65(144) ↙ ↘ 1,000(1,355) ↙ ↘ 54(147) ↙ ↘</p>	<p>425(885) ↙ ↘ 429(668) → 56(139) ↙ ↘</p> <p>65(144) ↙ ↘ 1,000(1,355) ↙ ↘ 54(147) ↙ ↘</p>
3. McBean Parkway & Valencia Boulevard		4. McBean Parkway & Magic Mountain Parkway	
<p>597(428) ↙ ↘ 1,718(1,414) ↙ ↘ 24(92) ↙ ↘</p> <p>170(658) ↙ ↘ 244(668) → 43(30) ↙ ↘</p>	<p>47(91) ↙ ↘ 404(509) ↙ ↘ 179(231) ↙ ↘</p> <p>44(68) ↙ ↘ 929(1,797) ↙ ↘ 103(251) ↙ ↘</p>	<p>153(168) ↙ ↘ 1,563(1,203) ↙ ↘</p> <p>93(257) ↙ ↘ 333(515) ↙ ↘</p> <p>338(418) ↙ ↘ 1,198(1,566) ↙ ↘</p>	<p>153(168) ↙ ↘ 1,563(1,203) ↙ ↘</p> <p>93(257) ↙ ↘ 333(515) ↙ ↘</p> <p>338(418) ↙ ↘ 1,198(1,566) ↙ ↘</p>
5. Valencia Boulevard & Magic Mountain Parkway		6. Bouquet Canyon Rd / Railroad Ave & Magic Mountain Pkwy	
<p>1,063(668) ↙ ↘ 1,246(924) ↙ ↘ 307(331) ↙ ↘</p> <p>392(1,216) ↙ ↘ 715(1,704) → 23(30) ↙ ↘</p>	<p>264(296) ↙ ↘ 1,431(1,061) ↙ ↘ 544(436) ↙ ↘</p> <p>23(37) ↙ ↘ 710(1,271) ↙ ↘ 410(738) ↙ ↘</p>	<p>533(280) ↙ ↘ 1,912(1,157) ↙ ↘ 450(396) ↙ ↘</p> <p>270(724) ↙ ↘ 798(1,640) → 319(447) ↙ ↘</p> <p>377(479) ↙ ↘ 818(1,667) ↙ ↘ 162(371) ↙ ↘</p>	<p>533(280) ↙ ↘ 1,912(1,157) ↙ ↘ 450(396) ↙ ↘</p> <p>270(724) ↙ ↘ 798(1,640) → 319(447) ↙ ↘</p> <p>377(479) ↙ ↘ 818(1,667) ↙ ↘ 162(371) ↙ ↘</p>
7. Bouquet Canyon Rd & Valencia Bl / Soledad Canyon Rd		8. Bouquet Canyon Road & Newhall Ranch Road	

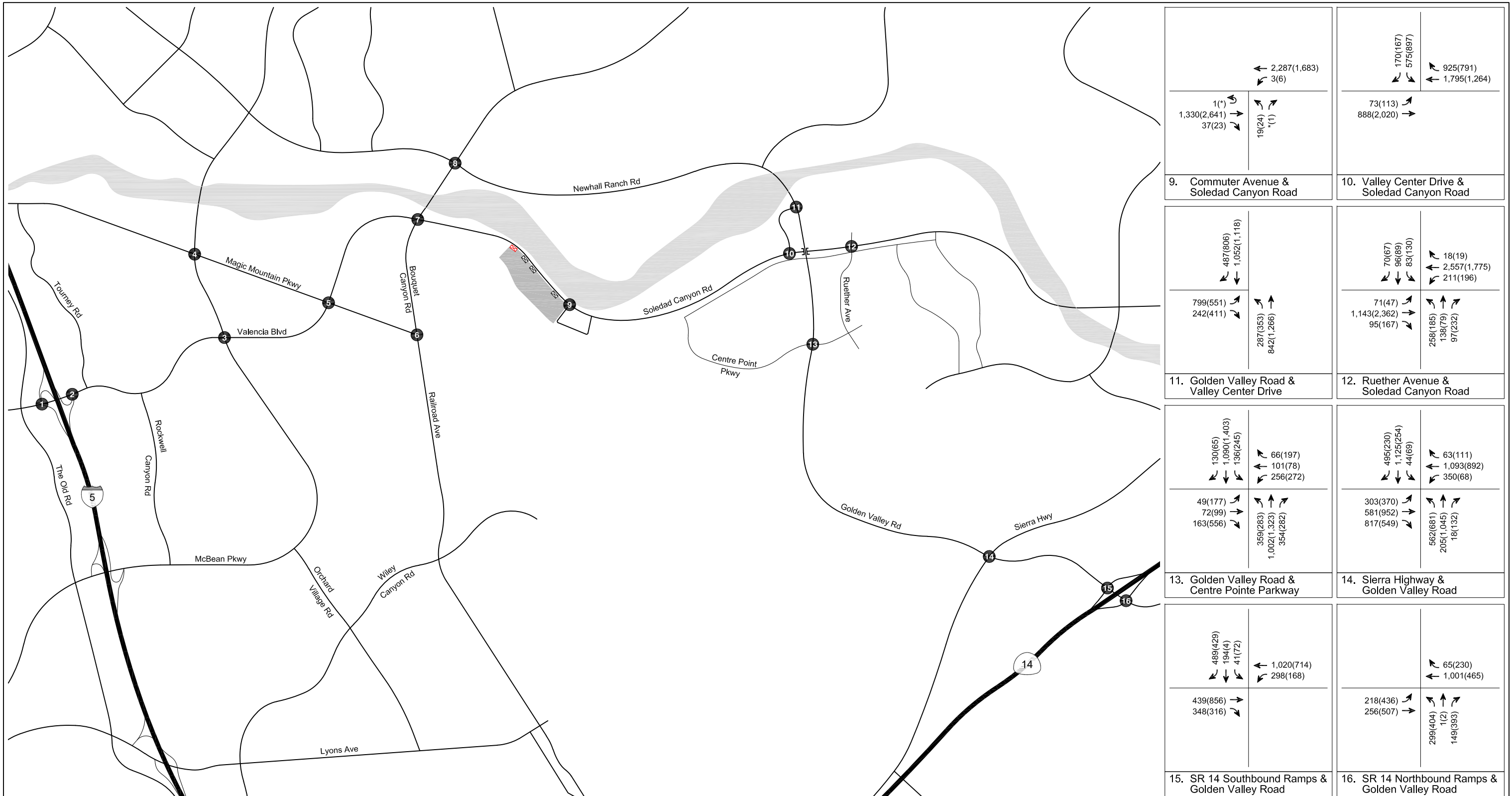
LEGEND

Project Site
 Analyzed Intersection
 Project Driveway
 Emergency Access Only*
 #(#) AM(PM) Peak Hour Traffic Volumes
 () Negligible Volume

**NOTE: Western studio driveway will be utilized for emergency access only. Limited Project trips will occur at this access point.*

**FUTURE WITHOUT PROJECT CONDITIONS (YEAR 2026)
PEAK HOUR TRAFFIC VOLUMES**

FIGURE 15



<p>2,287(1,683) 3(6)</p> <p>1330(2,641) 37(23)</p> <p>19(24) *(1)</p>	<p>170(167) 575(697)</p> <p>73(113) 888(2,020)</p> <p>925(791) 1,795(1,264)</p>
<p>9. Commuter Avenue & Soledad Canyon Road</p>	<p>10. Valley Center Drive & Soledad Canyon Road</p>
<p>487(806) 1,052(1,118)</p> <p>799(551) 242(411)</p> <p>287(353) 842(1,266)</p>	<p>70(67) 96(89) 83(130)</p> <p>71(47) 1,143(2,362) 95(167)</p> <p>258(185) 138(79) 97(232)</p> <p>18(19) 2,557(1,775) 211(196)</p>
<p>11. Golden Valley Road & Valley Center Drive</p>	<p>12. Ruether Avenue & Soledad Canyon Road</p>
<p>130(65) 1,090(1,403) 136(245)</p> <p>49(177) 72(99) 163(556)</p> <p>358(283) 1,002(1,323) 354(282)</p> <p>66(197) 101(78) 256(272)</p>	<p>495(230) 1,125(254) 44(69)</p> <p>303(370) 581(952) 817(549)</p> <p>562(681) 205(1,045) 18(132)</p> <p>63(111) 1,093(892) 350(68)</p>
<p>13. Golden Valley Road & Centre Point Parkway</p>	<p>14. Sierra Highway & Golden Valley Road</p>
<p>489(429) 194(4) 41(72)</p> <p>439(856) 348(316)</p> <p>1,020(714) 298(168)</p>	<p>65(230) 1,001(465)</p> <p>218(436) 256(507)</p> <p>299(404) 1(2) 149(393)</p>
<p>15. SR 14 Southbound Ramps & Golden Valley Road</p>	<p>16. SR 14 Northbound Ramps & Golden Valley Road</p>

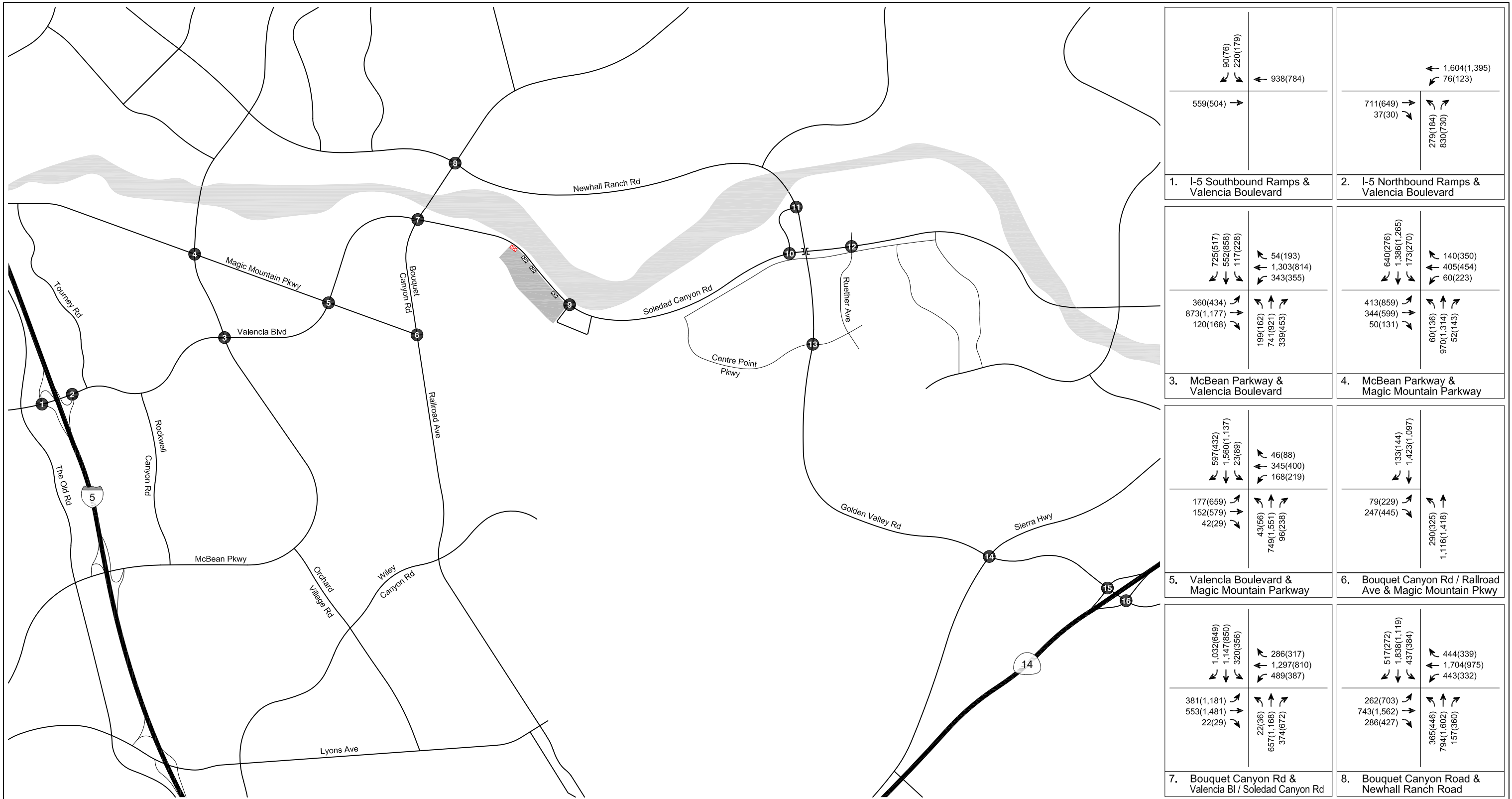
LEGEND

Project Site
 Analyzed Intersection
 Project Driveway
 Emergency Access Only*
 #(#) AM(PM) Peak Hour Traffic Volumes
 () Negligible Volume

**NOTE: Western studio driveway will be utilized for emergency access only. Limited Project trips will occur at this access point.*

**FUTURE WITHOUT PROJECT CONDITIONS (YEAR 2026)
PEAK HOUR TRAFFIC VOLUMES**

FIGURE 15 (CONT.)



<p>90(76) ↙ ↘ 220(179) ←</p> <p>559(504) →</p> <p>938(784) ←</p> <p>1,604(1,395) ← 76(123) ↘</p>	<p>711(649) → 37(30) ↘</p> <p>279(184) ↙ 830(730) ↘</p>
<p>1. I-5 Southbound Ramps & Valencia Boulevard</p>	<p>2. I-5 Northbound Ramps & Valencia Boulevard</p>
<p>725(617) ↙ ↘ 552(658) ↙ ↘ 117(228) ↙ ↘</p> <p>360(434) ↙ ↘ 873(1,177) ↙ ↘ 120(168) ↙ ↘</p> <p>54(193) ↗ 1,303(814) ↗ 343(355) ↗</p> <p>199(162) ↗ 741(921) ↗ 339(453) ↗</p>	<p>640(276) ↙ ↘ 1,386(1,265) ↙ ↘ 173(270) ↙ ↘</p> <p>413(859) ↙ ↘ 344(599) ↙ ↘ 50(131) ↙ ↘</p> <p>140(350) ↗ 405(454) ↗ 60(223) ↗</p> <p>60(136) ↗ 970(1,314) ↗ 52(143) ↗</p>
<p>3. McBean Parkway & Valencia Boulevard</p>	<p>4. McBean Parkway & Magic Mountain Parkway</p>
<p>597(432) ↙ ↘ 1,560(1,137) ↙ ↘ 23(89) ↙ ↘</p> <p>177(659) ↙ ↘ 152(579) ↙ ↘ 42(29) ↙ ↘</p> <p>46(88) ↗ 345(400) ↗ 168(219) ↗</p> <p>43(66) ↗ 749(1,551) ↗ 96(236) ↗</p>	<p>133(144) ↙ ↘ 1,423(1,097) ↙ ↘</p> <p>79(229) ↙ ↘ 247(445) ↙ ↘</p> <p>290(325) ↗ 1,116(1,418) ↗</p>
<p>5. Valencia Boulevard & Magic Mountain Parkway</p>	<p>6. Bouquet Canyon Rd / Railroad Ave & Magic Mountain Pkwy</p>
<p>1,032(649) ↙ ↘ 1,147(850) ↙ ↘ 320(356) ↙ ↘</p> <p>381(1,181) ↙ ↘ 553(1,481) ↙ ↘ 22(29) ↙ ↘</p> <p>286(317) ↗ 1,297(810) ↗ 489(387) ↗</p> <p>22(36) ↗ 657(1,168) ↗ 374(672) ↗</p>	<p>517(272) ↙ ↘ 1,838(1,119) ↙ ↘ 437(384) ↙ ↘</p> <p>262(703) ↙ ↘ 743(1,562) ↙ ↘ 286(427) ↙ ↘</p> <p>444(339) ↗ 1,704(975) ↗ 443(332) ↗</p> <p>365(446) ↗ 794(1,602) ↗ 157(360) ↗</p>
<p>7. Bouquet Canyon Rd & Valencia Bl / Soledad Canyon Rd</p>	<p>8. Bouquet Canyon Road & Newhall Ranch Road</p>

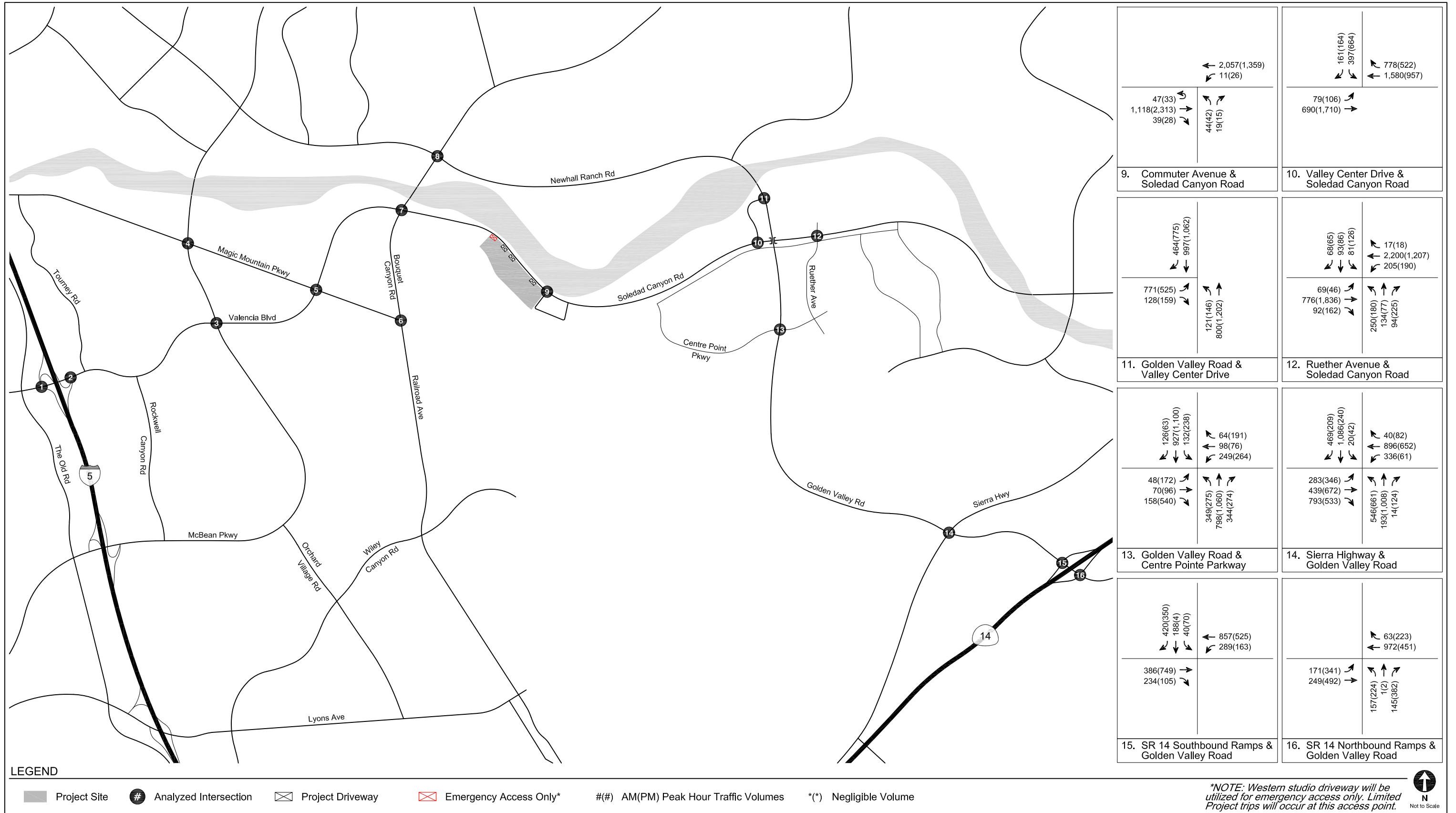
LEGEND

Project Site
 Analyzed Intersection
 Project Driveway
 Emergency Access Only*
 #(#) AM(PM) Peak Hour Traffic Volumes
 () Negligible Volume

**NOTE: Western studio driveway will be utilized for emergency access only. Limited Project trips will occur at this access point.*

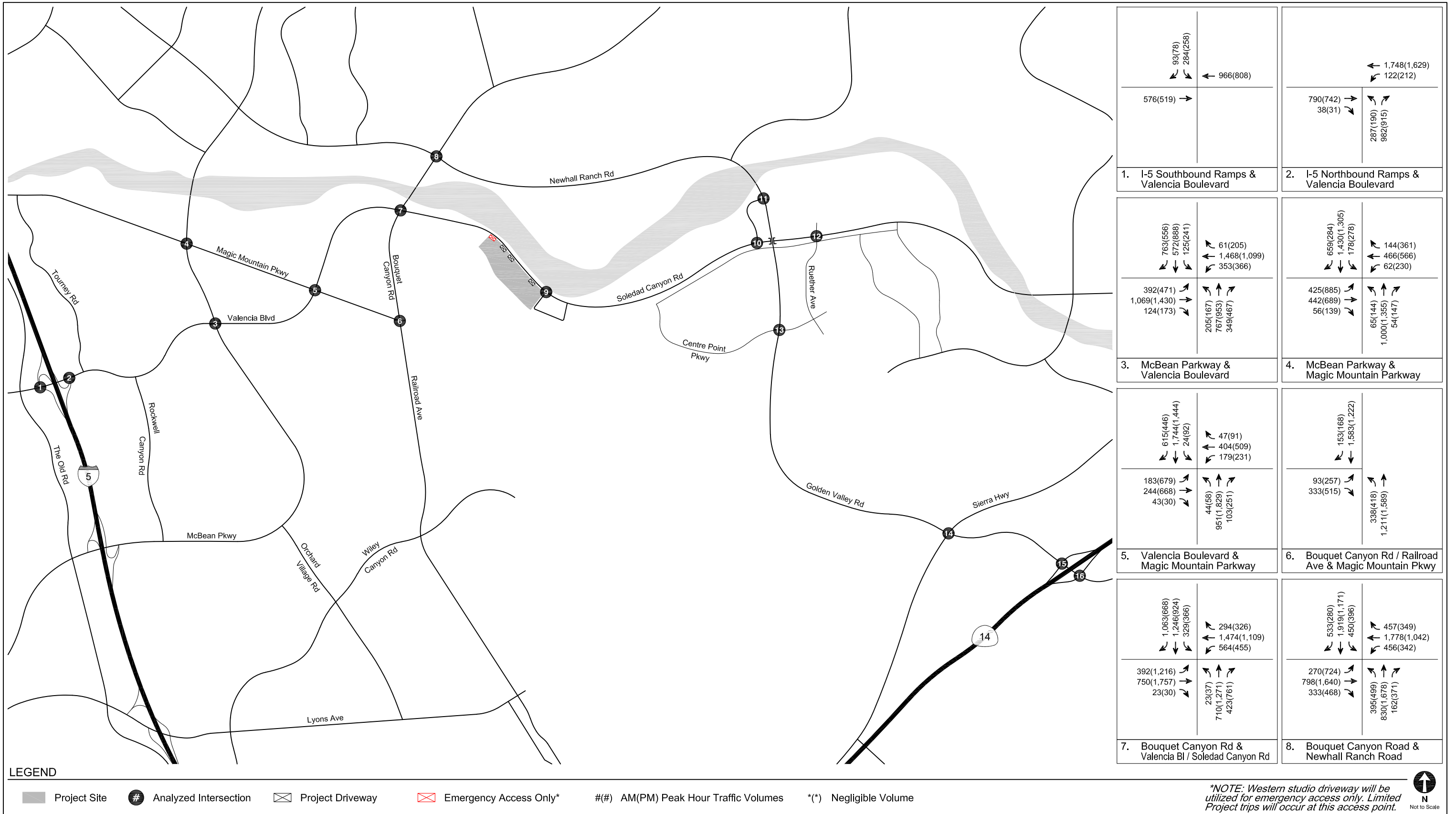
**EXISTING WITH PROJECT CONDITIONS (YEAR 2023)
PEAK HOUR TRAFFIC VOLUMES**

FIGURE 16



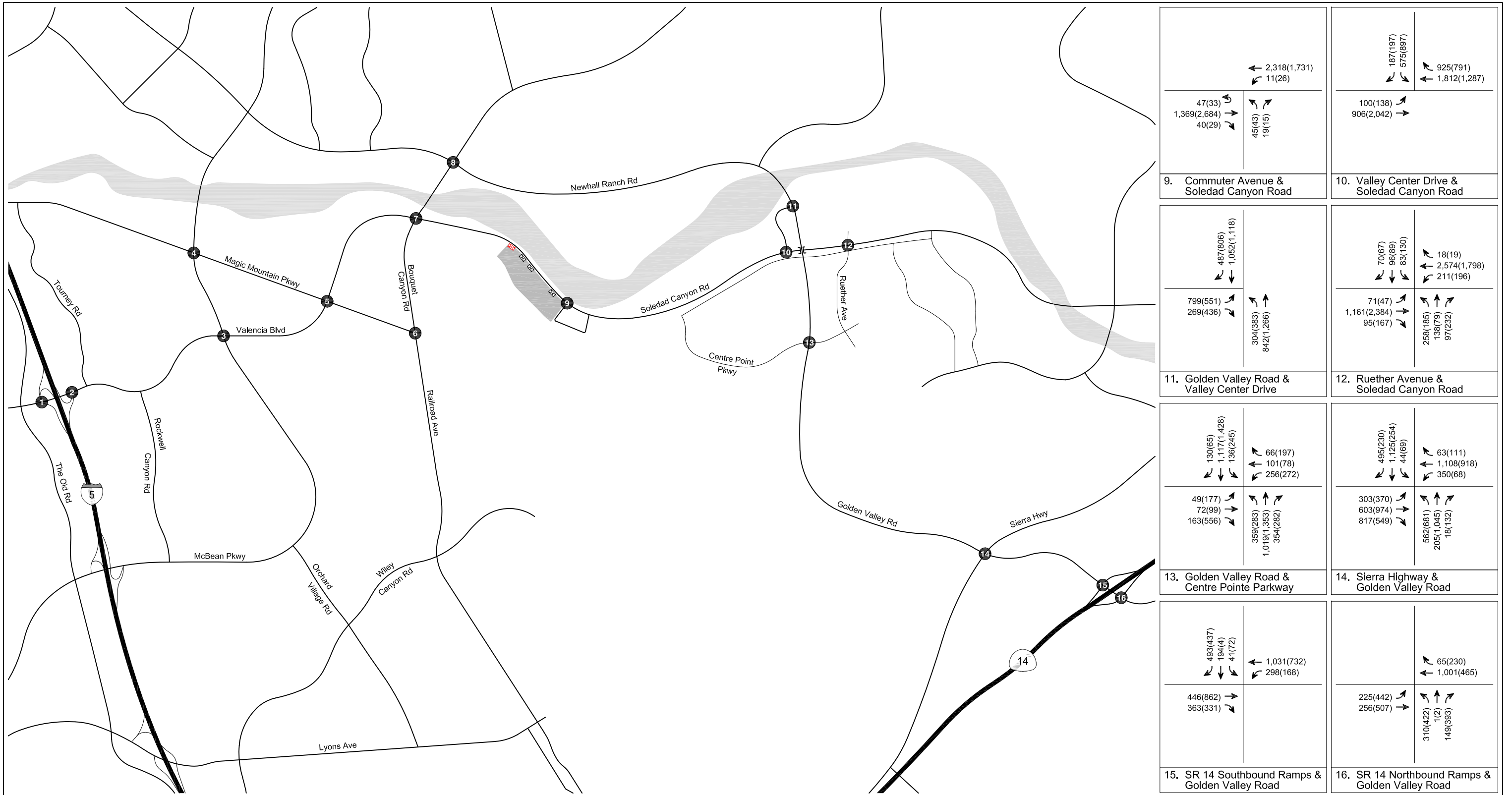
EXISTING WITH PROJECT CONDITIONS (YEAR 2023)
PEAK HOUR TRAFFIC VOLUMES

FIGURE
16 (CONT.)



FUTURE WITH PROJECT CONDITIONS (YEAR 2026)
PEAK HOUR TRAFFIC VOLUMES

FIGURE
17



LEGEND
 ■ Project Site ● Analyzed Intersection ⊠ Project Driveway ⊠ Emergency Access Only* #(#) AM(PM) Peak Hour Traffic Volumes *(*) Negligible Volume

**NOTE: Western studio driveway will be utilized for emergency access only. Limited Project trips will occur at this access point.*

**FUTURE WITH PROJECT CONDITIONS (YEAR 2026)
PEAK HOUR TRAFFIC VOLUMES** **FIGURE 17 (CONT.)**

**TABLE 10
INTERSECTIONS PROPOSED FOR ANALYSIS**

No.	N/S Street	E/W Street	Type
1	I-5 Southbound Ramps	Valencia Boulevard	Signalized
2	I-5 Northbound Ramps	Valencia Boulevard	Signalized
3	McBean Parkway	Valencia Boulevard	Signalized
4	McBean Parkway	Magic Mountain Parkway	Signalized
5	Valencia Boulevard	Magic Mountain Parkway	Signalized
6	Railroad Avenue / Bouquet Canyon Road	Magic Mountain Parkway	Signalized
7	Bouquet Canyon Road	Valencia Boulevard/Soledad Canyon Road	Signalized
8	Bouquet Canyon Road	Newhall Ranch Road	Signalized
9 [a]	Commuter Way	Soledad Canyon Road	Signalized
10	Valley Center Drive	Soledad Canyon Road	Signalized
11	Golden Valley Road	Valley Center Drive	Signalized
12	Ruether Avenue	Soledad Canyon Road	Signalized
13	Golden Valley Road	Centre Pointe Drive	Signalized
14	Sierra Highway	Golden Valley Road	Signalized
15	SR-14 Southbound Ramps	Golden Valley Road	Signalized
16	SR-14 Northbound Ramps	Golden Valley Road	Signalized
17 [a] [b]	Studio Driveway	Soledad Canyon Road	Signalized
18 [a]	Residential Driveway 1	Soledad Canyon Road	One-way Stop
19 [a]	Residential Driveway 2	Soledad Canyon Road	One-way Stop

Notes:

[a] A signalized intersection is proposed as part of the Project.

[b] Proposed Project access point.

**TABLE 11
INTERSECTION LEVEL OF SERVICE DEFINITIONS**

Level of Service	Description	Seconds of Delay	
		Signalized Intersections	Unsignalized Intersections
A	EXCELLENT. No vehicle waits longer than one red light and no approach phase is fully used.	≤ 10	≤ 10
B	VERY GOOD. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.	> 10 and ≤ 20	> 10 and ≤ 15
C	GOOD. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.	> 20 and ≤ 35	> 15 and ≤ 25
D	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.	> 35 and ≤ 55	> 25 and ≤ 35
E	POOR. Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.	> 55 and ≤ 80	> 35 and ≤ 50
F	FAILURE. Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Tremendous delays with continuously increasing queue lengths.	> 80	> 50

Notes:

Source: *Highway Capacity Manual, 6th Edition* (Transportation Research Board, 2016).

**TABLE 12
EXISTING CONDITIONS (YEAR 2023)
INTERSECTION LEVELS OF SERVICE**

No.	Intersection	Peak Hour	Existing Conditions		Existing with Project Conditions			
			Delay	LOS	Delay	LOS	Δ Delay	Impact
1.	I-5 Southbound Ramps & Valencia Boulevard	A.M.	5.6	A	5.7	A	0.1	No
		P.M.	6.7	A	6.9	A	0.2	No
2.	I-5 Northbound Ramps & Valencia Boulevard	A.M.	8.6	A	9.0	A	0.4	No
		P.M.	7.3	A	7.7	A	0.4	No
3.	McBean Parkway & Valencia Boulevard	A.M.	37.0	D	36.7	D	-0.3	No
		P.M.	43.6	D	43.6	D	0.0	No
4.	McBean Parkway & Magic Mountain Parkway	A.M.	33.2	C	33.2	C	0.0	No
		P.M.	107.0	F	106.5	F	-0.5	No
5.	Valencia boulevard & Magic Mountain Parkway	A.M.	33.9	C	34.9	C	1.0	No
		P.M.	34.3	C	35.2	D	0.9	No
6.	Railroad Avenue / Bouquet Canyon Road & Magic Mountain Parkway	A.M.	24.0	C	24.2	C	0.2	No
		P.M.	25.3	C	25.3	C	0.0	No
7.	Bouquet Canyon Road & Valencia Boulevard/Soledad Canyon Road	A.M.	29.5	C	30.5	C	1.0	No
		P.M.	53.1	D	56.6	E	3.5	Yes
8.	Bouquet Canyon Road & Newhall Ranch Road	A.M.	55.7	E	55.7	E	0.0	No
		P.M.	48.3	D	48.5	D	0.2	No
9. [a]	Commuter Way & Soledad Canyon Road	A.M.	0.9	A	1.9	A	1.0	No
		P.M.	3.4	A	7.1	A	3.7	No
10.	Valley Center Drive & Soledad Canyon Road	A.M.	9.1	A	9.4	A	0.3	No
		P.M.	18.5	B	19.3	B	0.8	No
11.	Golden Valley Drive & Valley Center Drive	A.M.	17.5	B	18.0	B	0.5	No
		P.M.	13.4	B	13.3	B	-0.1	No
12.	Ruether Avenue & Soledad Canyon Road	A.M.	36.5	D	36.7	D	0.2	No
		P.M.	31.6	C	29.9	C	-1.7	No

Notes:

Intersections are signalized except as otherwise noted.

[a] Project access with signalized intersection

[b] Project access with one-way stop controlled intersection.

**TABLE 12 (CONTINUED)
EXISTING CONDITIONS (YEAR 2023)
INTERSECTION LEVELS OF SERVICE**

No.	Intersection	Peak Hour	Existing Conditions		Existing with Project Conditions			
			Delay	LOS	Delay	LOS	Δ Delay	Impact
13.	Golden Valley Road & Center Pointe Drive	A.M.	42.0	D	42.2	D	0.2	No
		P.M.	50.2	D	51.5	D	1.3	No
14.	Sierra Highway & Golden Valley Road	A.M.	53.8	D	54.2	D	0.4	No
		P.M.	38.6	D	38.9	D	0.3	No
15.	SR-14 Southbound Ramps & Golden Valley Road	A.M.	19.0	B	19.1	B	0.1	No
		P.M.	16.6	B	16.6	B	0.0	No
16.	SR-14 Northbound Ramps & Golden Valley Road	A.M.	20.8	C	20.8	C	0.0	No
		P.M.	21.5	C	21.7	C	0.2	No
17. [a]	Studio Driveway Soledad Canyon Road	A.M.	New Intersection		3.6	A	N/A	No
		P.M.	New Intersection		6.6	A	N/A	No
18. [b]	Residential Driveway 1 & Soledad Canyon Road	A.M.	New Intersection		13.2	B	N/A	No
		P.M.	New Intersection		12.9	B	N/A	No
19. [b]	Residential Driveway 2 & Soledad Canyon Road	A.M.	New Intersection		13.5	B	N/A	No
		P.M.	New Intersection		13.0	B	N/A	No

Notes:

Intersections are signalized except as otherwise noted.

[a] Project access with signalized intersection

[b] Project access with one-way stop controlled intersection.

**TABLE 13
FUTURE CONDITIONS (YEAR 2026)
INTERSECTION LEVELS OF SERVICE**

No.	Intersection	Peak Hour	Future without Project Conditions		Future with Project Conditions				Future with Project with Mitigation Conditions			
			Delay	LOS	Delay	LOS	Δ Delay	Impact	Delay	LOS	Δ Delay	Impact
1.	I-5 Southbound Ramps & Valencia Boulevard	A.M.	6.5	A	6.5	A	0.0	No	6.5	A	0.0	No
		P.M.	7.4	A	7.5	A	0.1	No	7.5	A	0.1	No
2.	I-5 Northbound Ramps & Valencia Boulevard	A.M.	11.7	B	12.1	B	0.4	No	12.1	B	0.4	No
		P.M.	11.4	B	11.9	B	0.5	No	11.9	B	0.5	No
3.	McBean Parkway & Valencia Boulevard	A.M.	37.4	D	37.0	D	-0.4	No	37.0	D	-0.4	No
		P.M.	45.5	D	46.0	D	0.5	No	46.0	D	0.5	No
4.	McBean Parkway & Magic Mountain Parkway	A.M.	34.9	C	34.9	C	0.0	No	34.9	C	0.0	No
		P.M.	110.3	F	109.9	F	-0.4	No	109.9	F	-0.4	No
5.	Valencia boulevard & Magic Mountain Parkway	A.M.	46.1	D	48.5	D	2.4	No	48.5	D	2.4	No
		P.M.	44.6	D	47.3	D	2.7	No	47.3	D	2.7	No
6.	Railroad Avenue / Bouquet Canyon Road & Magic Mountain Parkway	A.M.	25.9	C	26.4	C	0.5	No	26.6	C	0.7	No
		P.M.	25.2	C	25.3	C	0.1	No	25.3	C	0.1	No
7.	Bouquet Canyon Road & Valencia Boulevard/Soledad Canyon Road	A.M.	35.0	C	37.8	D	2.8	No	37.0	D	2.0	No
		P.M.	81.7	F	89.4	F	7.7	Yes	78.5	E	-3.2	No
8.	Bouquet Canyon Road & Newhall Ranch Road	A.M.	60.9	E	61.0	E	0.1	No	60.8	E	-0.1	No
		P.M.	53.2	D	53.8	D	0.6	No	53.9	D	0.7	No
9. [a]	Commuter Way & Soledad Canyon Road	A.M.	1.3	A	2.2	A	0.9	No	2.2	A	0.9	No
		P.M.	3.0	A	6.2	A	3.2	No	6.3	A	3.3	No
10.	Valley Center Drive & Soledad Canyon Road	A.M.	12.0	B	12.5	B	0.5	No	12.6	B	0.6	No
		P.M.	24.3	C	25.3	C	1.0	No	25.1	C	0.8	No
11.	Golden Valley Drive & Valley Center Drive	A.M.	19.6	B	20.1	C	0.5	No	20.4	C	0.8	No
		P.M.	13.1	B	13.2	B	0.1	No	13.4	B	0.3	No
12.	Ruether Avenue & Soledad Canyon Road	A.M.	49.8	D	51.1	D	1.3	No	51.0	D	1.2	No
		P.M.	46.0	D	47.7	D	1.7	No	47.6	D	1.6	No

Notes:

Intersections are signalized except as otherwise noted.

[a] Project access with signalized intersection

[b] Project access with one-way stop controlled intersection.

**TABLE 13 (CONTINUED)
FUTURE CONDITIONS (YEAR 2026)
INTERSECTION LEVELS OF SERVICE**

No.	Intersection	Peak Hour	Future without Project Conditions		Future with Project Conditions				Future with Project with Mitigation Conditions			
			Delay	LOS	Delay	LOS	Δ Delay	Impact	Delay	LOS	Δ Delay	Impact
13.	Golden Valley Road & Center Pointe Drive	A.M.	44.4	D	44.8	D	0.4	No	47.6	D	3.2	No
		P.M.	96.0	F	101.7	F	5.7	Yes	87.4	F	-8.6	No
14.	Sierra Highway & Golden Valley Road	A.M.	63.1	E	63.4	E	0.3	No	63.4	E	0.3	No
		P.M.	43.0	D	43.5	D	0.5	No	43.5	D	0.5	No
15.	SR-14 Southbound Ramps & Golden Valley Road	A.M.	22.1	C	22.1	C	0.0	No	22.1	C	0.0	No
		P.M.	21.2	C	21.4	C	0.2	No	21.4	C	0.2	No
16.	SR-14 Northbound Ramps & Golden Valley Road	A.M.	21.1	C	21.1	C	0.0	No	21.1	C	0.0	No
		P.M.	22.6	C	22.8	C	0.2	No	22.8	C	0.2	No
17. [a]	Studio Driveway Soledad Canyon Road	A.M.	New Intersection		3.9	A	N/A	No	3.8	A	N/A	No
		P.M.	New Intersection		8.1	A	N/A	No	8.6	A	N/A	No
18. [b]	Residential Driveway 1 & Soledad Canyon Road	A.M.	New Intersection		16.0	C	N/A	No	16.0	C	N/A	No
		P.M.	New Intersection		16.8	C	N/A	No	16.8	C	N/A	No
19. [b]	Residential Driveway 2 & Soledad Canyon Road	A.M.	New Intersection		16.3	C	N/A	No	16.3	C	N/A	No
		P.M.	New Intersection		17.1	C	N/A	No	17.1	C	N/A	No

Notes:

Intersections are signalized except as otherwise noted.

[a] Project access with signalized intersection

[b] Project access with one-way stop controlled intersection.

**TABLE 14
FUTURE CONDITIONS (YEAR 2026)
INTERSECTION QUEUES**

Intersection	Turn Pocket Length	Peak Hour	Queue Length		
			Future without Project Conditions	Future with Project Conditions	Project Contribution to Queue Length
Intersection #1, I-5 Southbound Ramps & Valencia Boulevard					
Southbound Left-Turn [a] <i>from I-5 Southbound Off-Ramp to Valencia Boulevard</i>	800	A.M.	82	84	2
		P.M.	77	77	0
Intersection #2, I-5 Northbound Ramps & Valencia Boulevard					
Westbound Left-Turn <i>from Valencia Boulevard to I-5 Northbound On-Ramp</i>	200	A.M.	36	37	1
		P.M.	87	89	2
Northbound Left-Turn [a] <i>from I-5 Northbound Off-Ramp to Valencia Boulevard</i>	220	A.M.	86	86	0
		P.M.	60	60	0
Intersection #3, McBean Parkway & Valencia Boulevard					
Eastbound Left-Turn <i>from Valencia Boulevard to McBean Parkway</i>	350	A.M.	234	230	-4
		P.M.	335	328	-7
Westbound Left-Turn <i>from Valencia Boulevard to McBean Parkway</i>	290	A.M.	132	129	-3
		P.M.	192	190	-2
Northbound Left-Turn <i>from McBean Parkway to Valencia Boulevard</i>	130	A.M.	140	140	0
		P.M.	117	117	0
Southbound Left-Turn [a] <i>from McBean Parkway to Valencia Boulevard</i>	190	A.M.	95	95	0
		P.M.	153	153	0
Intersection #4, McBean Parkway & Magic Mountain Parkway					
Eastbound Left-Turn [a] <i>from Magic Mountain Parkway to McBean Parkway</i>	360	A.M.	342	342	0
		P.M.	810	810	0
Westbound Left-Turn <i>from Magic Mountain Parkway to McBean Parkway</i>	210	A.M.	52	52	0
		P.M.	155	154	-1
Northbound Left-Turn <i>from McBean Parkway to Magic Mountain Parkway</i>	175	A.M.	53	53	0
		P.M.	95	95	0
Southbound Left-Turn [a] <i>from McBean Parkway to Magic Mountain Parkway</i>	300	A.M.	119	119	0
		P.M.	178	178	0
Intersection #5, Valencia Boulevard & Magic Mountain Parkway					
Eastbound Left-Turn [a] <i>from Magic Mountain Parkway to Valencia Boulevard</i>	310	A.M.	115	118	3
		P.M.	573	594	21
Westbound Left-Turn <i>from Magic Mountain Parkway to Valencia Boulevard</i>	250	A.M.	130	130	0
		P.M.	156	156	0
Northbound Left-Turn <i>From Magic Mountain Parkway to Valencia Boulevard</i>	180	A.M.	68	68	0
		P.M.	69	69	0
Southbound Left-Turn [a] <i>From Magic Mountain Parkway to Valencia Boulevard</i>	190	A.M.	21	20	-1
		P.M.	99	96	-3
Intersection #6, Railroad Avenue / Bouquet Canyon Road & Magic Mountain Parkway					
Eastbound Left-Turn [a] <i>from Magic Mountain Parkway to Bouquet Canyon Road</i>	265	A.M.	63	63	0
		P.M.	163	163	0
Northbound Left-Turn <i>from Railroad Avenue to Magic Mountain Parkway</i>	260	A.M.	198	198	0
		P.M.	246	246	0

**TABLE 14 (CONTINUED)
FUTURE CONDITIONS (YEAR 2026)
INTERSECTION QUEUES**

Intersection	Turn Pocket Length	Peak Hour	Queue Length		
			Future without Project Conditions	Future with Project Conditions	Project Contribution to Queue Length
Intersection #7, Bouquet Canyon Road & Velencia Boulevard / Soledad Canyon Road					
Eastbound Left-Turn [a] <i>from Velencia Boulevard to Bouquet Canyon Road</i>	360	A.M.	70	75	5
		P.M.	415	408	-7
Westbound Left-Turn <i>from Soledad Canyon Road to Bouquet Canyon Road</i>	330	A.M.	232	240	8
		P.M.	163	173	10
Northbound Left-Turn <i>From Bouquet Canyon Road to Velencia Boulevard</i>	250	A.M.	51	51	0
		P.M.	70	70	0
Southbound Left-Turn [a] <i>From Bouquet Canyon Road to Soledad Canyon Road</i>	435	A.M.	185	208	23
		P.M.	252	292	40
Intersection #8, Bouquet Canyon Road & Newhall Ranch Road					
Eastbound Left-Turn [a] <i>from Newhall Ranch Road to Bouquet Canyon Road</i>	290	A.M.	115	115	0
		P.M.	339	339	0
Westbound Left-Turn <i>from Newhall Ranch Road to Bouquet Canyon Road</i>	410	A.M.	358	358	0
		P.M.	242	242	0
Northbound Left-Turn <i>From Bouquet Canyon Road to Newhall Ranch Road</i>	475	A.M.	260	278	18
		P.M.	226	240	14
Southbound Left-Turn <i>From Bouquet Canyon Road to Newhall Ranch Road</i>	260	A.M.	264	264	0
		P.M.	243	243	0
Intersection #9, Commuter Way & Soledad Canyon Road					
Westbound Left-Turn <i>from Soledad Canyon Road to Commuter Way</i>	285	A.M.	6	11	5
		P.M.	12	36	24
Northbound Left-Turn [a] <i>from Commuter Way to Soledad Canyon Road</i>	205	A.M.	23	45	22
		P.M.	27	43	16
Intersection #10, Valley Center Drive & Soledad Canyon Road					
Eastbound Left-Turn <i>from Soledad Canyon Road to Valley Center Drive</i>	250	A.M.	62	80	18
		P.M.	81	88	7
Southbound Left-Turn [a] <i>from Valley Center Drive to Soledad Canyon Road</i>	235	A.M.	244	246	2
		P.M.	501	502	1
Intersection #11, Golden Valley Road & Valley Center Drive					
Eastbound Left-Turn [a] <i>from Valley Center Drive to Golden Valley Road</i>	260	A.M.	269	274	5
		P.M.	198	198	0
Northbound Left-Turn <i>from Golden Valley Road to Valley Center Drive</i>	290	A.M.	170	178	8
		P.M.	93	101	8
Intersection #12, Ruther Avenue & Soledad Canyon Road					
Eastbound Left-Turn [a] <i>from Newhall Ranch Road to Bouquet Canyon Road</i>	285	A.M.	110	111	1
		P.M.	45	45	0
Westbound Left-Turn <i>from Newhall Ranch Road to Bouquet Canyon Road</i>	250	A.M.	139	139	0
		P.M.	130	130	0
Southbound Left-Turn <i>From Bouquet Canyon Road to Newhall Ranch Road</i>	125	A.M.	136	136	0
		P.M.	178	178	0

**TABLE 14 (CONTINUED)
FUTURE CONDITIONS (YEAR 2026)
INTERSECTION QUEUES**

Intersection	Turn Pocket Length	Peak Hour	Queue Length		
			Future without Project Conditions	Future with Project Conditions	Project Contribution to Queue Length
Intersection #13, Golden Valley Road & Center Pointe Parkway					
Eastbound Left-Turn <i>from Center Pointe Parkway to Golden Valley Road</i>	150	A.M.	86	86	0
		P.M.	285	285	0
Westbound Left-Turn [a] <i>from Center Pointe Parkway to Golden Valley Road</i>	150	A.M.	157	157	0
		P.M.	165	165	0
Northbound Left-Turn <i>from Golden Valley Road to Center Pointe Parkway</i>	300	A.M.	405	402	-3
		P.M.	364	362	-2
Southbound Left-Turn <i>from Golden Valley Road to Center Pointe Parkway</i>	700	A.M.	134	134	0
		P.M.	315	317	2
Intersection #14, Sierra Highway & Golden Valley Road					
Eastbound Left-Turn <i>from Sierra Highway to Golden Valley Road</i>	280	A.M.	120	115	-5
		P.M.	166	164	-2
Westbound Left-Turn <i>from Sierra Highway to Golden Valley Road</i>	285	A.M.	207	207	0
		P.M.	57	57	0
Northbound Left-Turn <i>from Golden Valley Road to Sierra Highway</i>	285	A.M.	428	428	0
		P.M.	410	410	0
Southbound Left-Turn <i>from Golden Valley Road to Sierra Highway</i>	410	A.M.	81	81	0
		P.M.	113	113	0
Intersection #15, SR-14 Southbound Ramps & Golden Valley Road					
Westbound Left-Turn <i>from Golden Valley Road to SR-14 Southbound On-Ramp</i>	220	A.M.	306	306	0
		P.M.	207	205	-2
Southbound Left-Turn <i>from SR-14 Southbound Off-Ramp to Golden Valley Road</i>	300	A.M.	33	33	0
		P.M.	40	40	0
Intersection #16, SR-14 Northbound Ramps & Golden Valley Road					
Eastbound Left-Turn <i>from Golden Valley Road to SR-14 Northbound On-Ramp</i>	220	A.M.	102	106	4
		P.M.	203	205	2
Northbound Left-Turn [a] <i>from SR-14 Northbound Off-Ramp to Golden Valley Road</i>	655	A.M.	146	152	6
		P.M.	168	175	7

Notes:

All lengths shown in feet based on 25 feet per vehicle. Queues based on 95th percentile queue calculated by the HCM methodology.

[a] The travel lane ends in a left-turn pocket, and therefore the queue does not block through traffic.

[b] Estimated distance as turn lane has not yet been constructed

Chapter 10

Non-CEQA Analysis: Project Construction

This chapter describes the temporary effects of Project construction on the surrounding sidewalks and streets and how construction activities would affect pedestrian, bicycle, transit, and vehicular circulation.

EVALUATION CRITERIA

The TAU requires that the Project construction period be reviewed to determine the extent and the duration to which Project construction would interfere with pedestrian, bicycle, transit, or vehicular circulation and accessibility in the surrounding vicinity. To address this requirement three types of review were conducted:

- Temporary Transportation Constraints: This relates to the closure of streets or travel lanes. The review considers the duration of closure, the classification of the street, existing congestion levels, whether the street directly leads to a freeway ramp, and the closure's potential effect on safety and emergency services.
- Temporary Loss of Access: This relates to the closure of any bicycle or pedestrian facilities or the loss of access to any nearby parcels. The review considers the duration of closure or loss of access, the availability of alternative facilities or access, and the extent to which this condition would result in safety, convenience, or economic issues.
- Temporary Loss of Bus Stops or Rerouting of Bus Lines: This relates to the effects of Project construction on public transit operations and considers the duration that an existing bus stop would be unavailable, the potential to temporarily relocate the stop, the duration that existing service routes would be interrupted, the availability of alternative routes, and whether interruptions would occur on weekdays, weekends, or holidays.

Additionally, this chapter reviews the effect of Project construction on parking and compares the level of construction-related traffic to that generated by the Project once operational.

PROJECT SETTING

As detailed in Chapter 2, the Project Site is currently mostly vacant and does not provide any transit stops along the Project frontage. The existing transit lines in the area are shown in Figure 6 and summarized in Table 3. Transit stops are listed in Table 2. On-street parking is prohibited along the Project frontage.

Surrounding the Project Site is mostly vacant land, with the exception of the Santa Clarita Metrolink Station. Commercial uses are east of the site and residential uses to the north of the Santa Clarita River.

PROJECT CONSTRUCTION DETAILS

The construction information used in this section was provided by the Applicant.

Construction Schedule

On-site construction activity would occur between 7:00 AM and 7:00 PM on weekdays and between 8:00 AM and 6:00 PM on Saturdays, consistent with the City's construction hour restrictions. There may be additional restrictions on construction activity or hauling during commuter peak periods, to be determined during the construction permitting process. Additionally, any construction within the public ROW would be subject to additional time restrictions. Construction would not occur on Sundays or federal holidays, though construction-related street or sidewalk closures may remain in place even on days construction does not occur.

The Applicant developed a detailed projection of the anticipated timeline for Project construction. It is important to note that the construction schedule is a long-range forecast that is inherently subject to change based on market conditions and the availability of financing. The schedule described below represents a reasonable projection for Project construction for use in this assessment. However, in practice, it could be compressed (resulting in more intensive construction activity over a shorter duration), extended (resulting in less intensive construction

activity over a longer duration), or staggered (resulting in similar intensity as in the forecast schedule but with periods of inactivity between construction phases).

The Project is anticipated to be constructed in one construction phase over a year long duration.

Accommodations for Public Transit

There are no transit-serving facilities on-site or along the Project frontage; therefore, no accommodations will be required for public transit access.

Construction Traffic

Project construction would result in truck traffic (haul trucks, delivery trucks, concrete trucks) and worker traffic to and from the Project Site on a daily basis. Detailed information about the maximum numbers of trucks and workers that would be required during each phase of Project construction is provided below.

Trucks. Haul trucks carry dirt or debris away from the Project Site. Haul truck activity is heaviest during grading and excavation periods. No hauling is anticipated for this Project as no material is anticipated to be removed.

Concrete truck trips to the Project Site are concentrated on concrete pour days, such as when pouring building foundations. These trucks often arrive and leave over the first half of the day so the remainder of the day can be devoted to leveling and smoothing the concrete and to allow ample time to set before it can be worked on the following day, though the hours could be extended when exceptionally large concrete pours are required. The number of concrete trucks per day would vary depending on the size of a particular pour. For large concrete pours, a Worksite Traffic Control Plan could be required by the City.

Delivery truck traffic is highest during building construction and finishing, which is toward the end of the construction process. All the deliveries are expected to occur on site, given the large size of the Project Site.

Workers. The number of workers at the Project Site will vary throughout the construction process. A maximum of 100 workers per day is anticipated, all of which would park on-site during the construction period.

Construction Closures

This transportation assessment analyzed the effects of Project construction on surrounding sidewalks and streets. Construction activities would be entirely contained within the Project Site boundaries, but temporary sidewalk and lane closures could be necessary to construct any street or sidewalk improvement along the Project frontage or any off-site improvements at the key study intersections. All lane closures would require temporary traffic control plans that would be individually reviewed and approved by the City during the construction permitting process. Project construction would not prevent pedestrian or vehicular access to any neighboring properties.

EFFECTS OF PROJECT CONSTRUCTION

The severity of the Project's effects on circulation, access, transit, and parking during construction was assessed. The measures proposed below to minimize the negative effects of Project construction would be incorporated into a Construction Management Plan, summarized at the end of this chapter. As discussed above, no lane closures or constraints are identified as part of the Project construction, however temporary sidewalk and lane closures may be necessary to construct off-site improvements. No temporary loss of access, transit, or parking is expected due to the Project construction.

Project construction would result in varying levels of truck and worker traffic to and from the Project Site on a daily basis. However, the total numbers of daily and peak hour trucks and workers on any given day would be substantially less than the Project traffic estimates upon operation, detailed in Table 5.

Construction workers often arrive to and depart from the Project Site outside of the morning and afternoon peak hours. Many workers would drive their own vehicles to and from the Project Site,

but some would carpool with coworkers and some would ride public transit. The Construction Management Plan would include a measure requiring contractors to provide information to construction workers regarding the availability of transit to and from the Project Site. For those workers who drive, parking would be provided on-site.

CONSTRUCTION MANAGEMENT PLAN

A detailed Construction Management Plan, including street closure information, a detour plan, haul routes, and a staging plan would be prepared and submitted to the City for review and approval during the construction permitting process. The Construction Management Plan would formalize how construction would be carried out and include a Worksite Traffic Control Plan, which would facilitate traffic and pedestrian movement and minimize the potential conflicts between construction activities, street traffic, bicyclists, and pedestrians.

The Construction Management Plan shall be based on the nature and timing of the specific construction activities and other projects in the vicinity of the Project Site, and shall include, but not be limited to, the following elements, as appropriate:

- Scheduling workdays to begin and end outside of the morning and afternoon peak hours to the extent feasible so as to minimize worker trips during those peak hours.
- Scheduling of construction-related deliveries so as not to coincide with major concrete pour days, to the extent feasible.
- Provision of worker parking on-site.
- Prohibition of construction-related vehicle parking on surrounding public streets.
- Requirement for contractors to provide public transit information to workers.
- Temporary traffic control (e.g., flag persons) during all construction activities adjacent to public ROW to improve traffic flow on public roadways and to maintain access for land uses in the vicinity of the Project Site.
- Safety precautions for pedestrians and bicyclists through such measures as alternate routing and protection barriers as appropriate.
- Planning and scheduling of construction activities so as to minimize the duration of sidewalk and lane closures and public transit detours.

-
- Coordination with emergency service providers to ensure that Project construction does not impede emergency response.
 - Provision of regular construction updates for adjacent businesses and residents through a website or social media.

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Appendix A
Access Study



MEMORANDUM

TO: Joel Bareng
Ian Pari
Cesar Romo

FROM: Patrick Gibson
Richard Gibson
David Roachford

DATE: March 29, 2022
July 29, 2022 (Revised)
November 9, 2022 (Revision 2)

RE: Access Study for the Riverview Mixed-Use Project
Soledad Canyon Road
Santa Clarita, California

Ref: J1977

Gibson Transportation Consulting, Inc. (GTC) met with City of Santa Clarita transportation staff to discuss the potential access plans for the proposed Riverview Mixed-Use Development (Riverview, Project) located on the south side of Soledad Canyon Road on the site of the former Saugus Raceway. At that meeting two different access plans were discussed and City staff requested some additional analysis be conducted to assist them in their evaluation of the alternate plans. This memo presents the results of the requested analysis.

PROJECT DESCRIPTION

The proposed Project consists of residential and studio land uses as shown in Figure 1A. The residential land uses would consist of a variety of residential types including several configurations of both attached and detached single family units. In addition, a commercial movie and television studio would be developed on the western portion of the Project site.

The residential portion of the Project would include 318 dwelling units while the studio component would include six sound stages totaling approximately 66,000 square feet of

stages and supporting production offices.

The residential portion of the Project would provide a total of 839 parking spaces while the studio component would provide 370 automobile spaces plus 60 spaces for production and delivery trucks (approximately 50 truck parking spaces will be provided in marked spaces within the parking lots and an additional 10 spaces will be in base camps immediately adjacent to the stages).

PROJECT ACCESS

Figures 1A and 1B shows the proposed access for the Project. All Project driveways would be served by Soledad Canyon Road.

Existing Conditions

Figure 1B shows that under Existing Conditions, the site has four driveways along Soledad Canyon Road. From west to east, the site is served by a driveway with right turns in and out and a left turn into the site. The next driveway easterly provides right turns in and out of the site and there is no break in the center median so there is no left turn access at this driveway.

The next driveway to the east provides access similar to the westerly driveway.

The easternmost driveway is at Commuter Way where a traffic signal on Soledad Canyon provides full left and right turn access in and out of the site. This driveway is shared with the Santa Clarita Metrolink Train Station.

Proposed Access Plan

The studio portion of the Project would have a main driveway at the northeast corner of the studio site with a minor right-turn in-and-out driveway at the northwest corner of the site. It is likely that this minor driveway would be used as an exit only driveway or an emergency access driveway because the studio will be a secure facility, requiring every vehicle to check in and out at the main gate. Because this driveway is likely to be closed to traffic most of the time, it was not included in the analysis of queue lengths or capacity impacts.

The developer has requested that the main gate driveway to the studio be controlled by a traffic signal.

The residential portion of the Project would be served by three driveways along Soledad Canyon Road. The westerly and the center driveway would allow right and left turns into the residential neighborhood, but only right turns out of the site. The easterly driveway would be a full access, signalized driveway (Commuter Way and Soledad Canyon Road) that would be shared with the traffic to/from the adjacent Santa Clarita Metrolink Train Station.

In addition, because of the outbound left turn restrictions at the westerly and central residential driveways, exiting residential traffic headed to the west would be required to make a U-turn at the intersection of Soledad Canyon Road and Commuter Way. The effects of the U-turn are evaluated in this memo.

Alternate Access Plan

As an alternate to the proposed access plan described above, City staff asked that an access plan be developed that combined the main gate studio driveway with the westerly residential driveway and that the combined driveway be evaluated for signalization. This plan is shown in the bottom portion of Figure 1B.

ANALYSIS

Trip Generation

Table 1 shows the daily, morning peak hour and afternoon peak hour trip generation from the residential portion of the Project. The 318 residential dwelling units would generate 2,435 vehicle trips per day with 167 of those trips occurring in the morning peak hour and 214 in afternoon peak hour. As expected, the residential traffic flow would be primarily outbound in the morning and inbound in the afternoon. The residential trip generation rates are taken from the *Trip Generation Manual, 11th Edition* published by the Institute of Transportation Engineers.

Tables 2-4 show the trip generation for the studio portion of the Project. These trip generation rates and hourly traffic distribution throughout the day are based on traffic counts conducted at numerous entertainment and studio campuses in Southern California. Specifically, the rates and the hourly breakdown of studio trip arrivals and departures are based on counts from NBCUniversal Studios (Universal City), Paramount Picture Studios (Los Angeles), Culver Studios (Culver City), Sony Studios (Culver City), Fox Studios (Century City), and CBS Television City (Los Angeles).

The studio would generate 1,028 trips per day. The hourly distribution of studio trips varies from other commercial uses in that the trips are spread out over a larger portion of the day than are, for example, office trips. Tables 3A – 3C break down the inbound and outbound studio trips by hour throughout the day. Table 3C summarizes the hourly trip patterns, showing 91 trips occurring in the morning peak hour and 117 trips in the afternoon peak hour. Table 4 presents the studio trip generation displayed according to the busiest eight hours of the day which is useful for testing the main gate intersection for traffic signal warrants.

Trip Distribution

Given the distribution of residential and commercial land uses in the Santa Clarita area, it was assumed that the residential trips would be split 60% to/from the west and 40% to/from the east. The studio trips are likely to be somewhat more oriented to the Interstate 5 freeway and therefore the distribution was assumed to be 66% to/from the west and 33% to/from the east. These assumptions are consistent with other recent traffic impact studies which were based on traffic model runs prepared by the Santa Clarita Valley Consolidated Traffic Model.

The basic distribution of Project trips was assigned to the Project driveways according to the patterns shown in Figures 2-6. Figures 4 and 5 show the differences in travel patterns for Residential Zones 3 and 4 depending on single or combined entrances for the studio and residential uses.

Project Traffic Assignment

The residential and studio trip generation described above were assigned to the Project driveways according to the distribution patterns shown in Figures 2-6. The resulting assignment of Project trips assigned to the Project driveways is shown in Figures 7A and 7B. Figure 7A details the project trips in the morning peak hour and Figure 7B shows the afternoon peak hour. In Figures 8A and 8B, the Project traffic is added to the background traffic along Soledad Canyon Road and to/from the Metrolink Train Station.

When the studio and westerly Project driveways are combined, the number of eastbound-to-westbound U-turns at the intersection of Soledad Canyon Road and Commuter Way is reduced because more of the residential traffic has direct access to westbound Soledad Canyon Road with the combined entrance served by a traffic signal. The U-turns at the Commuter Way intersection reduce from 48 and 35 (AM and PM peak hours, respectively) to 12 and 8 with the combined driveway.

Capacity Calculations

The performance of the two signalized entrances and Project driveways was evaluated using intersection capacity calculations as per methodology required by the City of Santa Clarita. Peak hour capacity calculations using the Highway Capacity Manual delay methodology with Synchro software were performed for morning and afternoon peak hour conditions. Two sets of capacity calculations were conducted – one for the westerly signalized entrance serving the studio only and one for the combined studio/residential entrance.

Table 5 shows that both signalized driveways and all limited access driveways would operate at good Levels of Service under both the separate and combined driveway configurations. The two intersections and the Project driveways all operated at Level of Service B or better under either combination of separate or combined driveways.

Attachment A to this memo presents the capacity calculation worksheets for City staff review.

Queue Lengths at Driveways

Per the City's UDC (Section 17.53.020), project access locations shall have a minimum stacking distance of 100' from the face of curb at signalized locations and a minimum stacking distance of 40' from the face of curb at non-signalized locations. This is to be measured from the final curb line (flow line) to the first parking stall or drive aisle.

The Proposed Access Plan meets these criteria in all cases. The Alternate Access Plan could have an internal cross driveway as close as 75 feet south of Soledad Canyon Road which would not meet the City's design criteria.

Queue length studies were conducted for the Proposed Access Plan. Table 6 shows the peak hour volumes, turn lane storage distance, and turn lane queues predicted by the Synchro analyses conducted as part of the Project Access Study.

As shown, all turn lanes and intersection storage lengths are adequately sized to accommodate the peak hour turning movement queues in both peak hours for the Proposed Access Plan.

That would not be the case for the Alternate Access Plan, however. The northbound left turn leaving the site at the combined studio/residential driveway would be higher than under the Proposed Access Plan, thereby resulting in longer queues along the exit driveway. The left turns during the morning peak hour would total 57 vehicles and would require 135 feet of turn queue. In the afternoon peak hour, the 71 vehicles turning left would require 125 feet of storage. Both peak hour storage requirements would exceed the 75 feet of available storage between Soledad Canyon Road and the first internal cross driveway. The Alternate Access Plan would have to shift the residential-to-studio cross street to the central or southern locations in order to meet the exit storage requirements and to meet the City's UDC cross-driveway location requirements. The central or southern cross-driveway locations would require a complete re-design of the studio campus.

INTERSECTION OPERATIONS

Studio Entrance

The studio entrance would operate at Level of Service A in the morning peak hour and Level of Service B in the afternoon peak hour, regardless of its operation as a single or a combined entrance. The delay increases under the combined configuration because the signal would handle more exiting traffic as a combined driveway. The delay increases however are minimal (1.1 seconds in the morning peak hour and 0.8 seconds in the afternoon peak hour) and would not be considered problematic at Levels of Service A and

B. In either case, the signalization of the studio or the combined studio/residential driveway would have minimal impact on the operation of Soledad Canyon Road.

Given the number of heavy trucks in and out of the studio complex per day, the signalization of the studio driveway is critically important from a safety standpoint. Operating speeds along Soledad Canyon Road are high and turning trucks in and out of the studio would present collision hazards for the arterial street traffic without the traffic signal.

Alternate Access Plan

Several alternate designs were studied for the combined entrance. The westerly residential roadway was extended to the south boundary of the residential property and a roadway from the studio site was connected to the residential road opposite the east-west residential roads in the north, central, and southern portions of the site plan. The results of the alternate designs were as follows:

- A. The joint connection opposite the northern residential roadway presented operational problems because the connection would occur too close to Soledad Canyon Road. The distance between Soledad Canyon Road and the new cross street would result in northbound exit queues at the traffic signal that blocked the exits from both the studio and the residential neighborhood. The chance for southbound entering traffic spillover back into Soledad Canyon Road was also great with this design option.
- B. A connection between the two properties at the central roadway to the residential neighborhood would solve the queuing problems described above, but it would require a major redesign of the retention basin located immediately adjacent to Soledad Canyon Road as well as result in a major collector street bisecting residential Neighborhoods 3 and 4.

- C. The connection at the south end of the property would require a complete redesign of the base camp area within the studio site and it would likely require the elimination of at least eight residential dwelling units.

The only feasible combined driveway designs would connect the two parcels in the center or at the south end of the property. Both alternates present two major operational and design problems for the Project. First, the central or southern internal intersection would result in residential and commercial studio traffic mixing within the Project roadway system. Given the number of trucks moving in and out of the studio campus, the mixing of these truck trips with residential trips presents both quality of life and safety concerns.

As shown in Tables 3A and 3B, the trucks into the studio begin at 4 AM and continue throughout the day until the last truck leaves at 10 PM. This means that trucks and residential traffic will mix along this combined entry road virtually all day long – increasing the exposure to conflicts and potential collisions.

Equally important, this combined entry roadway would traverse the western boundary of the residential neighborhood and the roadway extending to the central or southern portion of the site would bring noise and vibration impacts to the residential neighborhood for that same all-day time period.

For these safety, noise, vibration, and quality of life reasons, the Project developer is seeking approval to pursue separate studio and residential entrances onto Soledad Canyon Road.

Commuter Way

The evaluation of Commuter Way involved two elements of the roadway. First, the intersection of Soledad Canyon Road and Commuter Way was analyzed to determine if eastbound U-turns could be accommodated without disrupting the overall operation of the

intersection. Second, the operation of the corridor serving both the train station parking lot and the residential project was evaluated to determine if it would perform adequately without creating back-ups that would affect the operation of Soledad Canyon Road intersection.

Soledad Canyon Road Intersection

The capacity calculations show that the intersection of Soledad Canyon Road and Commuter Way would operate satisfactorily with the full buildout of the residential and studio Project. The two greatest areas of concern expressed by staff were:

1. Could the intersection accommodate the proposed level of eastbound-to-westbound U-turns at the signal if the studio and residential entrance was not combined?

Table 5 shows that the intersection would operate at Level of Service A and Level of Service B in the morning and afternoon peak hours, respectively. The intersection can accommodate the 48 AM and 35 PM peak hour U-turns resulting from the separate studio and residential driveways and still function well within the City's Level of Service target thresholds.

2. Would the northbound approach on Commuter Way need to be widened to accommodate the increased traffic from the residential project and from the expansion of train service at the Santa Clarita Metrolink Station?

The capacity calculations presented in this memo assume the existing cross section on Commuter Way. Even with the increased traffic levels from the Train Station and the Project, the intersection still operates at Level of Service A or B with the existing roadway cross section.

Commuter Way Corridor

Corridor Configuration: The Commuter Way roadway serving the train station and the proposed residential project is currently a 2-4 lane roadway. From Soledad Canyon Road southerly to the first driveway into the train station parking lot, a distance of 240 feet, the roadway provides four travel lanes – two northbound and two southbound. The first internal intersection provides access to the station parking lot via a driveway that forms the east leg of the internal intersection. The driveway is controlled by a stop sign while Commuter Way itself is uncontrolled through this intersection. The two southbound lanes are used as a through lane against the curb and an optional through and left turn lane serving traffic entering the parking lot.

At a distance of 130 feet further south, a second intersection is provided. The cross section of this intersection is as follows:

- Access to the residential development will form the west leg of the intersection.
- The east leg of the intersection serves the station parking lot as well as the pick-up and drop off area for kiss-and-ride patrons. Both the east and west legs will provide one approach and one departure lane and both will have the approach lanes controlled by stop signs.
- The south leg of the intersection serves one-way southbound travel for buses picking up or dropping off passengers adjacent to the train platform. The south leg also serves a limited amount of ADA parking near the train platform.
- The north leg of the intersection provides two travel lanes, one left turn lane into the parking lot and the kiss-and-ride area and one southbound through lane for buses and ADA parking.

In the future, the proposed residential development would add a third southbound lane to Commuter Way from Soledad Canyon Road southerly to the second intersection described above. This third lane would serve as a right turn lane into the residential

development at the south intersection. It is the intent to control this southerly intersection with all-way stop control.

Corridor Performance: The performance of the Commuter Way corridor was tested under two traffic scenarios. In the first test, the Existing Conditions were supplemented by the morning and afternoon peak hour traffic levels anticipated to be generated by the proposed residential development.

Because the frequency of the train service to the station is anticipated to increase in the future, a second set of conditions was tested that assumed the train station traffic would increase in the morning and afternoon peak hours. The increase in station traffic was estimated by doubling the station-related traffic at the southerly Commuter Way intersection. Since the existing parking lot is very well utilized today, doubling the traffic in/out of the station would mean a substantial increase in kiss-and-ride activity or an expansion of the parking lot, but this level of traffic increase represents a conservatively high estimate of future activity levels along the Commuter Way corridor.

Figure 9 shows the volume of traffic expected under Existing plus Residential Project and Expanded Train Service plus Residential Project conditions.

Table 7 shows the results of the two sets of capacity calculations. The two internal intersections along Commuter Way would operate at Level of Service A with minimal delay under both sets of traffic conditions during both the morning and afternoon peak hours. Just as importantly from an operational standpoint, the capacity calculations show that there will be no queuing problems at either intersection along Commuter Way. The 95th percentile queue will be one car or less during both peak hours of the day under either set of traffic volume conditions.

The capacity calculation worksheets may be found at the end of Attachment A.

The proposed configuration of Commuter Way has the capacity to accommodate the existing and future traffic levels generated by a combination of the train station and the residential project traffic. No internal congestion along Commuter Way is anticipated nor is any back-up that would negatively affect Soledad Canyon Road.

SIGNAL WARRANTS

The separate entrance serving the studio was evaluated to see if it met traffic signal warrants. Signal warrants were tested using the Caltrans warrants as per the State of California *Manual of Uniform Traffic Control Devices* (MUTCD) which is the document that the City of Santa Clarita follows.

Project trip generation was developed by assuming that the parking spaces on the studio campus would all be utilized every day and that each parking space would be used only once per day (both very conservative assumptions). Thus, each parking space on site would generate two trips per day – one in and one out of the campus.

When passenger car equivalent factors were applied to the truck trips in and out of the studio campus, Table 2 shows that the campus would generate a total of 1,028 automobile-equivalent trips per day.

Tables 3A – 3C show the inbound and outbound trip generation of the studio campus on an hour-by-hour basis throughout the day.

Table 3C identifies the peak, fourth- and eighth-highest hour of the day for Project driveway traffic.

Table 4 summarizes the eight highest hours of the day for traffic at the Project driveway and compares those hourly volumes to the Soledad Canyon Road volumes and then to

the warrants. Under this set of assumptions, the Project driveway meets the Peak-, Four- and Eight-Hour Warrants of 100, 80, and 56 minor street trips, respectively. These warrant levels have been adjusted to account for the operating speeds along Soledad Canyon Road.

Table 8 shows that several signal warrants are met for the single entrance to the studio campus.

CONCLUSION

GTC was asked by City staff to evaluate two alternate access plans for providing safe and efficient driveway access to the Riverview mixed-use residential and studio project:

- One alternate involved serving the studio campus with a traffic signal at its main entrance/exit off Soledad Canyon Road and permitting a separate Stop -controlled driveway to/from the residential project. This residential driveway would allow right turns in and out of the driveway as well as left turns into the driveway.
- The second alternate combined these two driveways to provide one driveway controlled by a traffic signal to serve both facilities. Full access to/from the driveways would be provided on Soledad Canyon Road, and connections to the studio campus and to the residential neighborhoods would be made internal to the Project site.

The analysis presented herein shows that both alternates would work from a public roadway operational standpoint. Either alternate could work without undue operational effects along Soledad Canyon Road. Both alternates would operate at Levels of Service A in the morning and Level of Service B in the afternoon peak hours.

However, the combined driveway does present some significant onsite operational and safety issues. If the access point from the driveway to the two parcels is located too close to Soledad Canyon Road, there is the chance that inbound traffic could back up onto Soledad Canyon Road and/or outbound traffic could form queues behind the traffic signal that blocked the exits from the studio or the residential neighborhood.

If the access point from the driveway to the two adjacent parcels was located in the center or at the southern end of the property, there would be a substantial mixing of truck and commercial commuter traffic with the residential traffic. Bringing studio campus trucks further into the residential neighborhood would negatively subject more residents to the noise and vibration of truck movements from very early morning until late night hours. In addition, the longer mixing of residential and commercial truck traffic increases the traffic safety concerns for the residents.

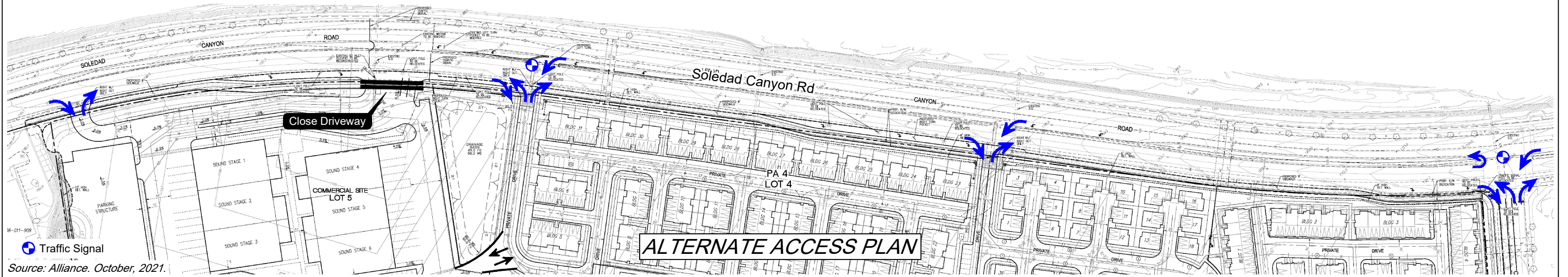
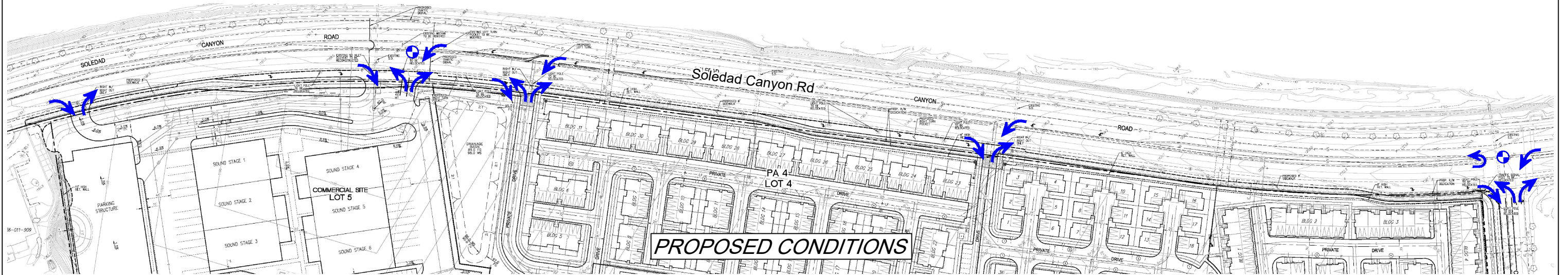
For these safety, noise, vibration, and quality of life reasons, the Project developer is seeking approval to pursue separate studio and residential entrances onto Soledad Canyon Road and to signalize the entrance to the studio campus.



Source: Alliance. October, 2021.

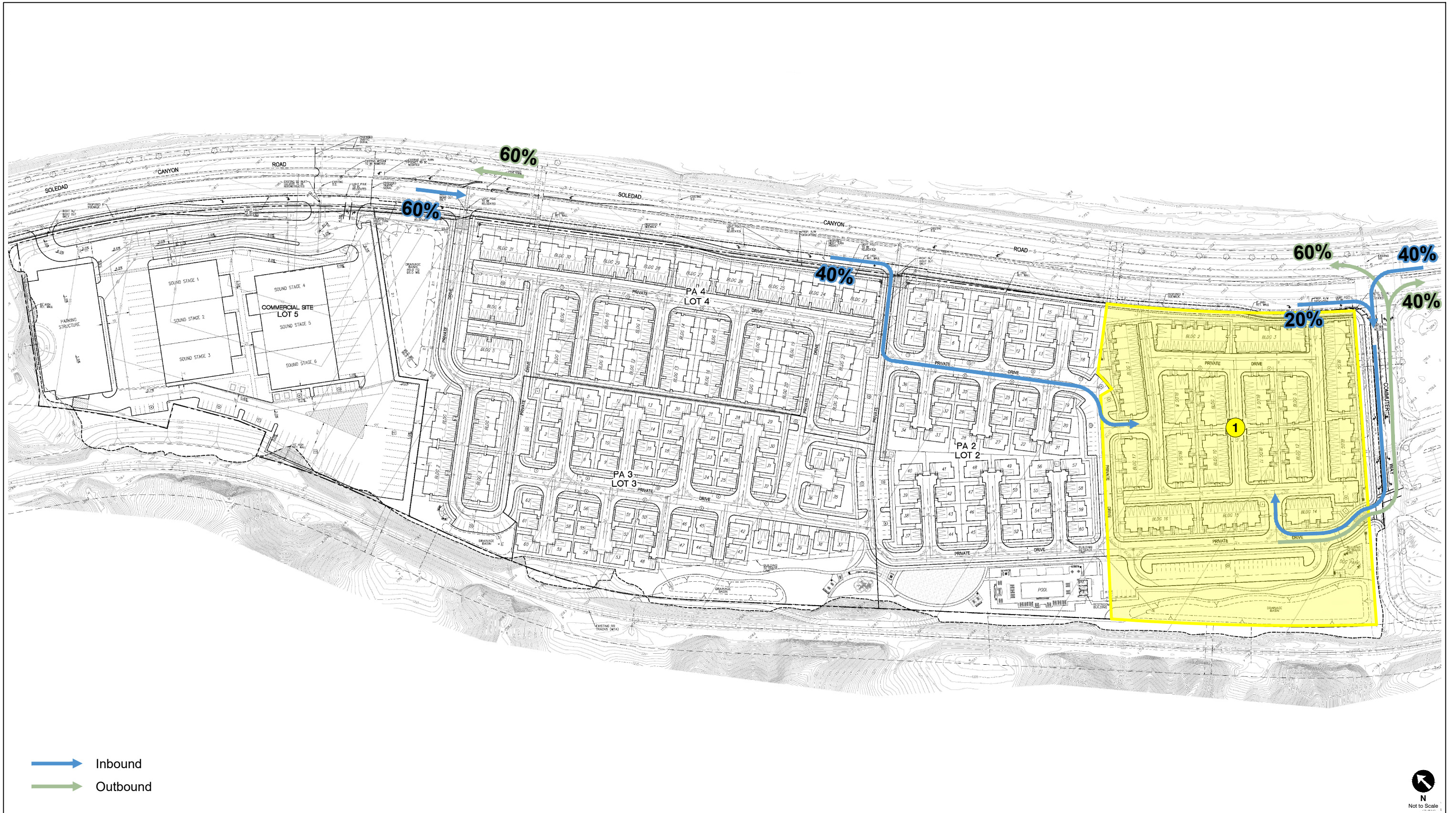
PROJECT SITE PLAN

FIGURE
1A



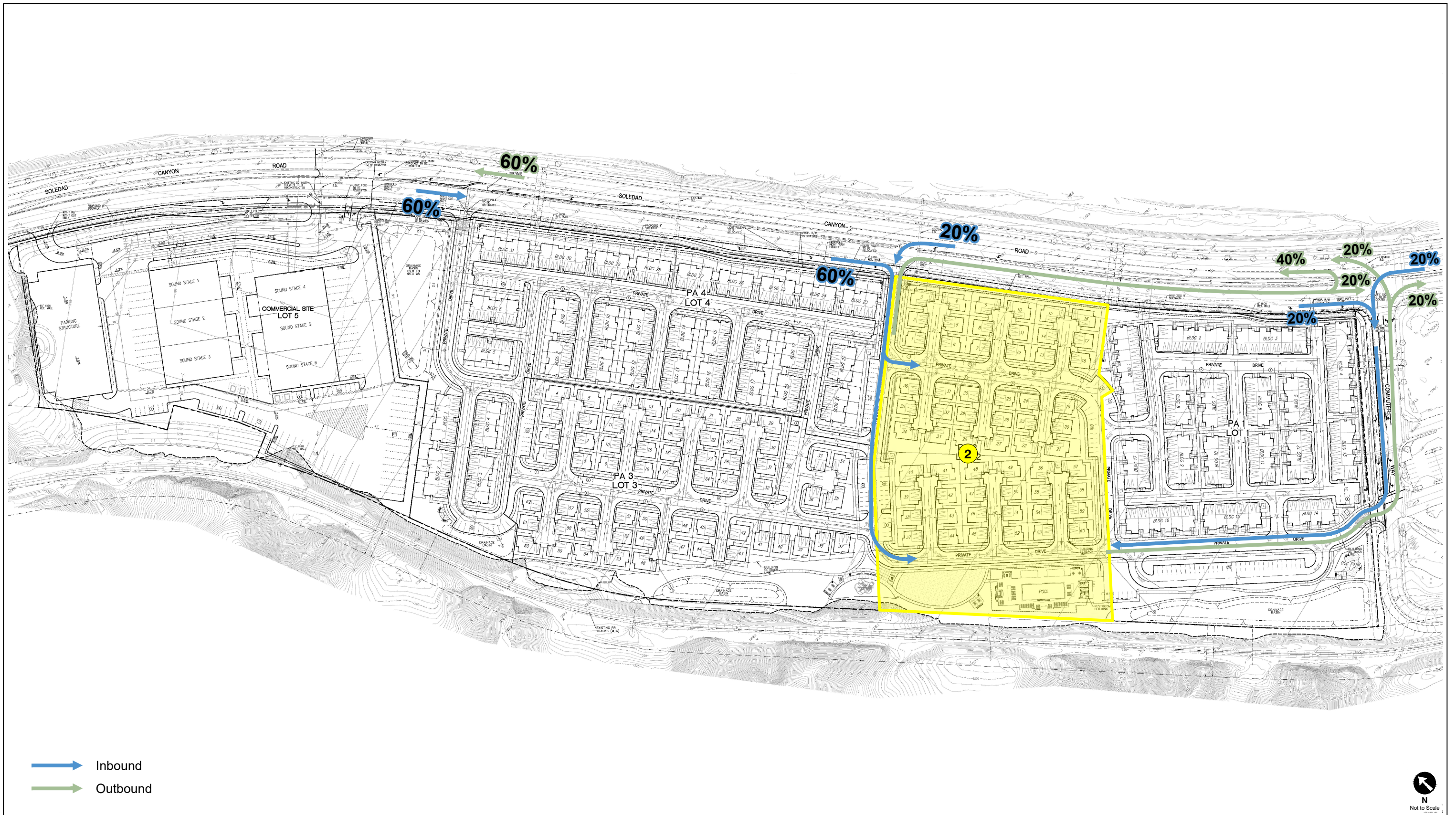
EXISTING AND PROPOSED SITE ACCESS

FIGURE 1B



RESIDENTIAL ZONE 1
TRIP DISTRIBUTION

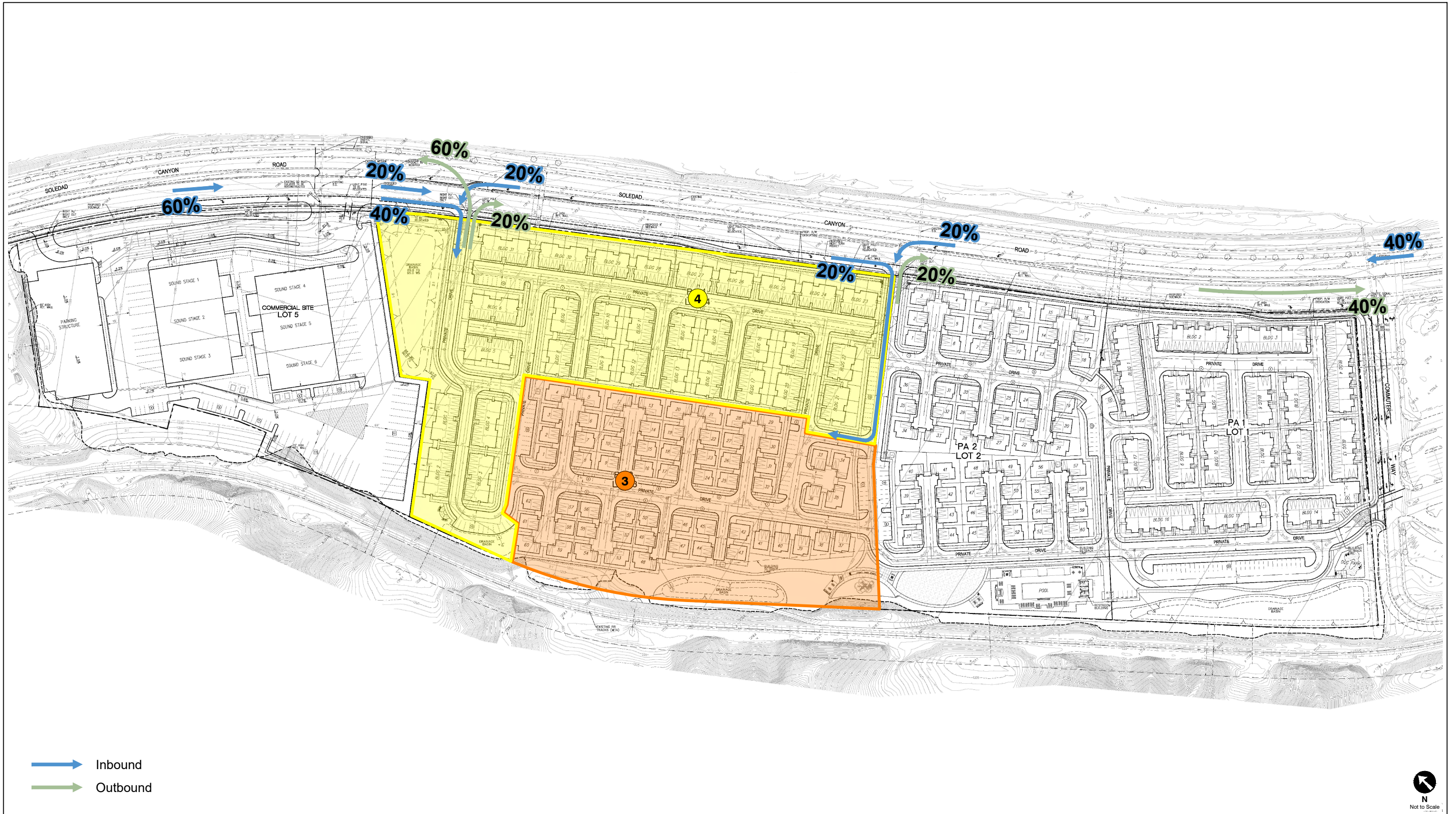
FIGURE
2



RESIDENTIAL ZONE 2
TRIP DISTRIBUTION

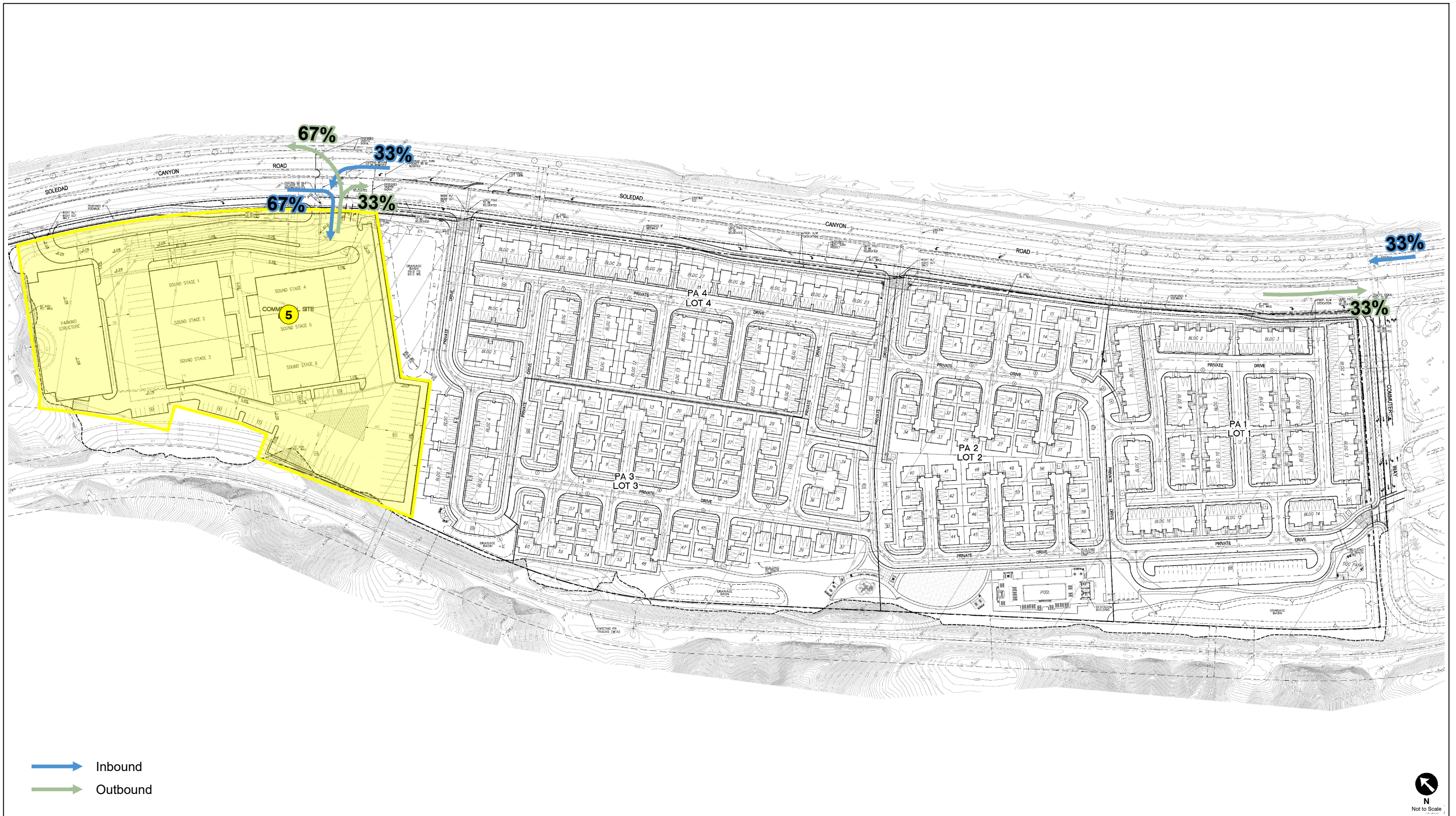
FIGURE
3





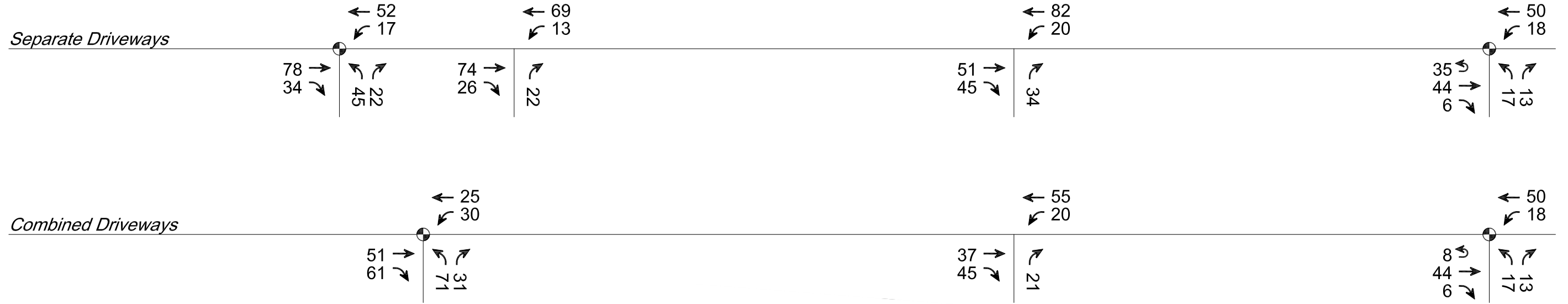
ZONES 3 AND 4 WITH COMBINED STUDIO AND RESIDENTIAL SIGNAL
TRIP DISTRIBUTION

FIGURE
5



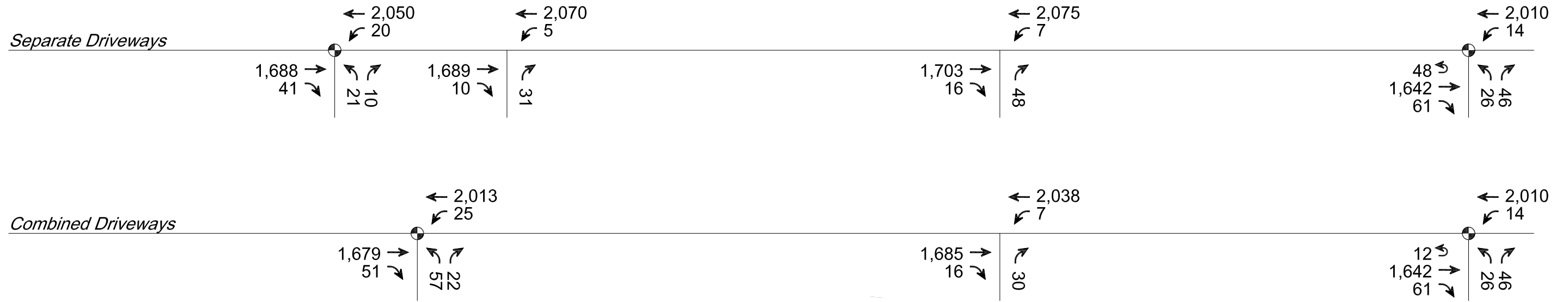
STUDIO ZONE 5 WITH SEPARATE STUDIO SIGNAL
TRIP DISTRIBUTION

FIGURE
6



PROJECT-ONLY TRIPS
PM PEAK HOUR

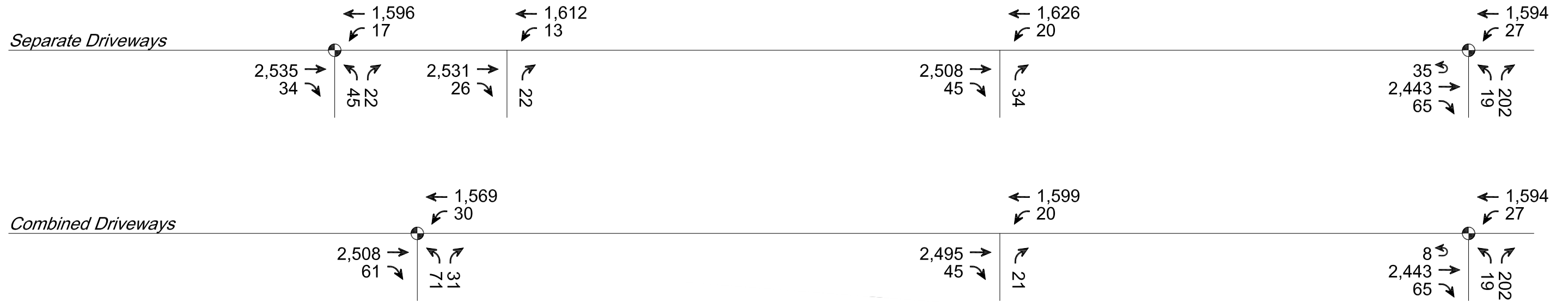
FIGURE
7B



● Traffic Signal

EXISTING BACKGROUND + PROJECT TRAFFIC
AM PEAK HOUR

FIGURE
8A

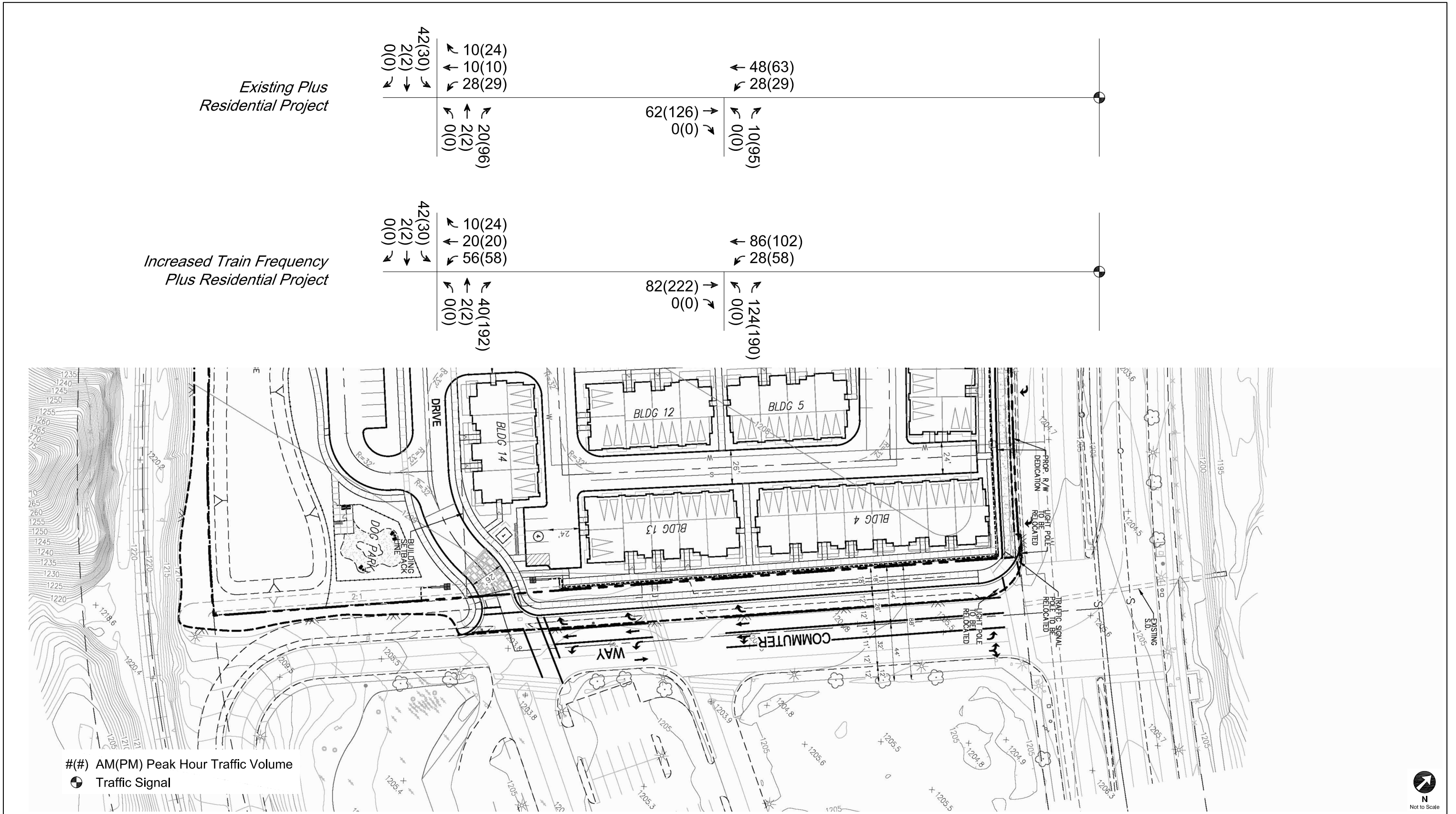


● Traffic Signal



EXISTING BACKGROUND + PROJECT TRAFFIC
PM PEAK HOUR

FIGURE
8B



COMMUTER WAY VOLUMES

FIGURE
9

**TABLE 1
PROJECT TRIP GENERATION ESTIMATES
RIVERVIEW RESIDENTIAL**

Land Use	ITE Land Use	Rate	Daily	Morning Peak Hour			Afternoon Peak Hour		
				In	Out	Total	In	Out	Total
<u>Trip Generation Rates</u> [a]									
Single Family Detached Housing	210	per dwelling unit	9.43	26%	74%	0.70	63%	37%	0.94
Single Family Attached Housing	215	per dwelling unit	7.20	31%	69%	0.48	57%	43%	0.57
<u>Proposed Project - Lot 1</u>									
Single Family Attached Housing	215	95 du	684	14	32	46	31	23	54
		<i>Transit/Walk-In Adjustment - 5% [b]</i>	<i>(34)</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(2)</i>	<i>(1)</i>	<i>(3)</i>
Total - Lot 1			650	13	30	43	29	22	51
<u>Proposed Project - Lot 2</u>									
Single Family Detached Housing	210	60 du	566	11	31	42	35	21	56
		<i>Transit/Walk-In Adjustment - 5% [b]</i>	<i>(28)</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(2)</i>	<i>(1)</i>	<i>(3)</i>
Total - Lot 2			538	10	29	39	33	20	53
<u>Proposed Project - Lot 3</u>									
Single Family Detached Housing	210	62 du	585	11	32	43	37	21	58
		<i>Transit/Walk-In Adjustment - 5% [b]</i>	<i>(29)</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(2)</i>	<i>(1)</i>	<i>(3)</i>
Total - Lot 3			556	10	30	40	35	20	55
<u>Proposed Project - Lot 4</u>									
Single Family Attached Housing	215	101 du	727	15	33	48	33	25	58
		<i>Transit/Walk-In Adjustment - 5% [b]</i>	<i>(36)</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(2)</i>	<i>(1)</i>	<i>(3)</i>
Total - Lot 4			691	14	31	45	31	24	55
PROPOSED PROJECT TRIPS			2,435	47	120	167	128	86	214

Notes:

du: dwelling unit

[a] Source: *Trip Generation, 11th Edition*, Institute of Transportation Engineers, 2021.

[b] The Project Site is located less than 1/2 mile from the Santa Clarita Metrolink Station. Therefore, a 5% adjustment was applied to account for transit usage and pedestrian connections to/from the station.

**TABLE 2
LA - 3 RIVERVIEW STUDIO TRIP GENERATION ESTIMATES
BASED ON PARKING SUPPLY BY LAND USE**

TRIP GENERATION RATES		
Land Use	Parking Spaces	Daily
Stage	289	2.00
Base Camp	70	2.00
Production Office	11	2.00
Trucks (PCE) (80% move x 3.0 PCE)	60	4.80
TRIPS		
Land Use	Size	Daily
<u>Proposed Project</u>		
Stage	289 sp	578
Base Camp	70 sp	140
Production Office	11 sp	22
Trucks (PCE)	60 sp	288
<i>Project Trips</i>		1,028
TOTAL - NEW PROJECT TRIPS		1,028

Notes

sp: number of parking spaces

Rate based on one turnover per day per parking space

Truck rate based on 80% of the truck spaces turning once per day
and a passenger car equivalent (PCE) of 3.0

TABLE 3A
TRAFFIC SIGNAL WARRANT ANALYSIS
HOURLY INBOUND AND OUTBOUND TRAVEL PATTERNS
RIVERVIEW STUDIOS - LA - 3

	STAGE	BASE CAMP	TRUCK	PRODUCTION OFFICE	TOTAL				
INBOUND									
		289	70	144	11	514			
TIME BEGIN									
0:00	0.0%	0	0.1%	0	0.0%	0			
1:00	0.0%	0	0.1%	0	0.0%	0			
EIGHT HOUR	0.0%	0	0.5%	0	0.0%	0			
3:00	0.0%	0	0.5%	0	0.0%	0			
4:00	0.0%	0	1.0%	1	5.0%	7			
5:00	6.0%	17	4.0%	3	11.1%	16			
6:00	12.0%	35	10.0%	7	13.0%	19			
7:00	12.0%	35	10.0%	7	15.0%	22			
8:00	13.0%	38	13.0%	9	8.9%	13			
9:00	10.0%	29	11.6%	8	9.0%	13			
10:00	3.0%	9	8.9%	6	11.0%	16			
11:00	2.0%	6	4.0%	3	4.0%	6			
12:00	8.0%	23	4.3%	3	4.0%	6			
13:00	2.0%	6	4.0%	3	3.0%	4			
14:00	2.0%	6	3.0%	2	2.0%	3			
15:00	2.0%	6	2.0%	1	3.0%	4			
16:00	2.0%	6	4.0%	3	1.0%	1			
17:00	14.0%	40	7.0%	5	3.0%	4			
18:00	10.0%	29	8.0%	6	6.0%	9			
19:00	2.0%	6	4.0%	3	1.0%	1			
20:00	0.0%	0	0.0%	0	0.0%	0			
21:00	0.0%	0	0.0%	0	0.0%	0			
22:00	0.0%	0	0.0%	0	0.0%	0			
23:00	0.0%	0	0.0%	0	0.0%	0			
	100.0%	289	100.0%	70	100.0%	144			
							11		
								102.5%	514

TABLE 3B
TRAFFIC SIGNAL WARRANT ANALYSIS
HOURLY INBOUND AND OUTBOUND TRAVEL PATTERNS
RIVERVIEW STUDIOS - LA - 3

	STAGE		BASE CAMP		TRUCK		PRODUCTION OFFICE		TOTAL	
OUTBOUND										
	289		70		144		11		514	
TIME BEGIN										
0:00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
1:00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
2:00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
3:00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
4:00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
5:00	1.0%	3	0.0%	0	1.0%	1	0.0%	0	0.8%	4
6:00	2.0%	6	1.0%	1	2.0%	3	0.0%	0	1.8%	9
7:00	2.0%	6	4.0%	3	3.0%	4	0.0%	0	2.5%	13
8:00	7.5%	22	4.0%	3	4.0%	6	3.4%	0	6.0%	31
9:00	4.0%	12	6.0%	4	6.0%	9	3.0%	0	4.8%	25
10:00	2.0%	6	4.0%	3	4.0%	6	3.0%	0	2.9%	15
11:00	5.0%	14	2.0%	1	3.0%	4	3.0%	0	4.0%	21
12:00	10.0%	29	2.0%	1	5.2%	7	5.0%	1	7.5%	38
13:00	6.0%	17	3.0%	2	8.0%	12	3.2%	0	6.1%	31
14:00	6.0%	17	4.0%	3	10.8%	16	3.0%	0	7.0%	36
15:00	7.0%	20	4.0%	3	14.0%	20	4.0%	0	8.5%	44
16:00	12.5%	36	10.0%	7	12.0%	17	10.0%	1	12.0%	62
17:00	14.0%	40	14.0%	10	10.0%	14	18.9%	2	13.0%	67
18:00	12.0%	35	16.0%	11	10.0%	14	22.5%	2	12.2%	63
19:00	4.0%	12	14.0%	10	3.0%	4	9.0%	1	5.2%	27
20:00	2.0%	6	5.5%	4	2.0%	3	6.0%	1	2.6%	13
21:00	1.0%	3	2.5%	2	1.0%	1	4.0%	0	1.3%	7
22:00	1.0%	3	2.0%	1	1.0%	1	1.0%	0	1.1%	6
23:00	1.0%	3	2.0%	1	0.0%	0	1.0%	0	0.9%	4
	100.0%	289	100.0%	70	100.0%	144	100.0%	11	100%	514

TABLE 3C
TRAFFIC SIGNAL WARRANT ANALYSIS
HOURLY INBOUND AND OUTBOUND TRAVEL PATTERNS
RIVERVIEW STUDIOS - LA - 3

	STAGE	BASE CAMP	TRUCK	PRODUCTION OFFICE	TOTAL
TOTAL					
TIME BEGIN					
0:00	0	0	0	0	0
1:00	0	0	0	0	0
2:00	0	0	0	0	0
3:00	0	0	0	0	0
4:00	0	1	7	0	8
5:00	20	3	17	0	41
6:00	40	8	22	1	71
7:00	40	10	26	1	78
8:00	59	12	19	2	91
9:00	40	12	22	2	77
10:00	14	9	22	2	47
11:00	20	4	10	1	35
12:00	52	4	13	1	71
13:00	23	5	16	1	45
14:00	23	5	18	1	47
15:00	26	4	24	1	55
16:00	42	10	19	1	72
17:00	81	15	19	3	117
18:00	64	17	23	4	107
19:00	17	13	6	1	37
20:00	6	4	3	1	13
21:00	3	2	1	0	7
22:00	3	1	1	0	6
23:00	<u>3</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>4</u>
	578	140	288	22	1028

- PEAK HOUR
- 4TH HIGHEST HOUR
- 8TH HIGHEST HOUR

TABLE 4
EIGHT HOUR TRAFFIC FLOW AT PROJECT DRIVEWAY -- STUDIO DRIVEWAY
LA - 3 RIVERVIEW STUDIOS

3771 PM Peak Hour Flow IN FRONT OF PROJECT SITE

Soledad Canyon Through Traffic				Project Driveway Traffic			
% of ADT	WARRANT TARGET	Hourly Flow	Time	% of ADT	WARRANT TARGET	Project Flow	Time
10	1150 (1)	3771	5-6 pm	11.4	100 (1)	117	5-6 pm
7		2640	6-7 pm	10.4		107	6-7 pm
6		2263	8-9 am	8.9		91	8-9 am
6.5	900 (2)	2451	7-8 am	7.5	80 (2)	78	7-8 am
5.4		2036	9-10 am	7.4		77	9-10 am
9.7		3658	4-5 pm	7.0		72	4-5 pm
5.1		1923	12n - 1pm	6.9		71	12n - 1pm
5	504 (3)	1886	6-7 am	6.9	56 (3)	71	6-7 am
54.7		20627		66.4		683	
100		37710		100		1028	

- PEAK HOUR
- 4TH HIGHEST HOUR
- 8TH HIGHEST HOUR

- NOTES
1. From Figure 4C-4 California Manual of Uniform Traffic Control Devices, 2014 Edition, Warrant 3 - Peak Hour Warrant (70% Factor)
 2. From Figure 4C-2 California MUTCD, 2014 Edition, Warrant 2 - Four Hour Vehicular Volume (70% Factor)
 3. From Table 4C-1 California MUTCD, 2014 Edition, Warrant 1 - Eight Hour Vehicular Volume, Combination of Conditions A and B

**TABLE 5
FUTURE CONDITIONS WITH RIVERVIEW PROJECT
INTERSECTION LEVELS OF SERVICE**

No.	Intersection	Peak Hour	Future without Shared Driveway Conditions		Future with Shared Driveway Conditions	
			Delay	LOS	Delay	LOS
1.	Studio Driveway & Soledad Canyon Road	A.M.	1.3	A	2.4	A
		P.M.	10.8	B	11.6	B
2. [a]	Residential Driveway 2 & Soledad Canyon Road	A.M.	0.2	A	<i>Consolidated with Studio Driveway</i>	
		P.M.	0.5	A		
3. [a]	Residential Driveway 1 & Soledad Canyon Road	A.M.	0.4	A	0.2	A
		P.M.	1.0	A	0.8	A
4.	Commuter Way & Soledad Canyon Road	A.M.	2.1	A	1.9	A
		P.M.	10.1	B	10.1	B

Notes:

Intersections are signalized except as otherwise noted.

[a] Intersection is 2-way stop-controlled, average intersection delay is reported

TABLE 6
TURNING MOVEMENT QUEUE LENGTHS
PROPOSED ACCESS PLAN - SIGNALIZED STUDIO ENTRANCE
RIVERVIEW RESIDENTIAL/STUDIO MIXED-USE DEVELOPMENT

LOCATION	MOVEMENT	PK HR VOLUME		QUEUE (ft)		
		Time	Volume	Provided	Required	Adequate
Soledad Canyon Road at: Studio Driveway	EB Right	AM	41	210	40*	YES
		PM	34	210	35*	YES
	WB Left	AM	20	160	25	YES
		PM	17	160	30	YES
	NB Left	AM	21	330	50	YES
		PM	45	330	80	YES
West Residential Drive	EB Right	AM	16	190	25*	YES
		PM	45	190	25*	YES
	WB Left	AM	7	200	25	YES
		PM	20	200	40	YES
	NB Right	AM	48	350	30	YES
		PM	34	350	35	YES
East Residential Drive	EB Right	AM	10	310	25*	YES
		PM	26	310	25*	YES
	WB Left	AM	5	210	25	YES
		PM	13	210	25	YES
	NB Right	AM	31	150	25	YES
		PM	22	150	25	YES
Commuter Way	EB U-Turn	AM	47	375	70	YES
		PM	34	375	26	YES
	EB Right	AM	61	150	0	YES
		PM	65	150	30	YES
	WB Left	AM	14	290	40	YES
		PM	27	290	50	YES
	NB Left + NB Right	AM	26 + 46	230	40	YES
		PM	19 + 202	230	53	YES

NOTE: * Signifies that the queue length is based on one foot of storage for every peak hour trip making that movement (min = 25')

**TABLE 7
FUTURE CONDITIONS WITH RIVERVIEW PROJECT
COMMUTER WAY CORRIDOR INTERSECTION LEVELS OF SERVICE**

No.	Intersection	Peak Hour	Future with Project with Existing Station Volumes			Future with Project with Increased Station Volumes		
			Delay (sec)	LOS	Max Queue (veh)	Delay (sec)	LOS	Max Queue (veh)
A	Commuter Way & Station Parking Lot Entrance	A.M.	3.8	A	0.2	4.2	A	0.5
[a]		P.M.	3.6	A	0.4	4.5	A	1.0
B	Commuter Way & Residential Driveway/Drop Off Roadway	A.M.	7.5	A	0.2	7.7	A	0.3
[b]		P.M.	7.3	A	0.3	7.9	A	0.8

Notes:

[a] Intersection is side street stop-controlled, average intersection delay is reported

[b] Intersection is assumed to be operated with an all-way stop control

TABLE 8
SIGNAL WARRANT SUMMARY
LA - 3 RIVERVIEW STUDIOS

SINGLE STUDIO DRIVEWAY ANALYSIS RESULTS		
WARRANT	TRIPS PLUS TRUCK FACTOR	TRIPS PLUS TRUCK FACTOR PLUS SCR SPEED
PEAK HOUR	YES	YES
FOUR HOUR	NO	NO
EIGHT HOUR		
VOLUME	NO	NO
CONTIN. FLOW	NO	YES
COMBINATION	NO	YES

SCR = Soledad Canyon Road



Attachment A

Capacity Calculation Worksheets

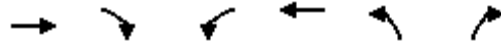


***Separate Driveways – AM Peak Hour
Capacity Calculation Worksheets***

Lanes, Volumes, Timings

2: Studio Driveway & Soledad Cyn

03/08/2022

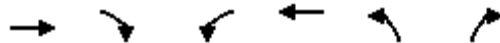


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↵	↑↑↑	↵	↵
Traffic Volume (vph)	1688	41	20	2050	21	10
Future Volume (vph)	1688	41	20	2050	21	10
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	150		0	0
Storage Lanes		0	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt	0.996					0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	5065	0	1770	5085	1770	1583
Flt Permitted			0.104		0.950	
Satd. Flow (perm)	5065	0	194	5085	1770	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	10					11
Link Speed (mph)	50			50	30	
Link Distance (ft)	1474			562	341	
Travel Time (s)	20.1			7.7	7.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1835	45	22	2228	23	11
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1880	0	22	2228	23	11
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2		1	2	1	1
Detector Template	Thru		Left	Thru	Left	Right
Leading Detector (ft)	100		20	100	20	20
Trailing Detector (ft)	0		0	0	0	0
Detector 1 Position(ft)	0		0	0	0	0
Detector 1 Size(ft)	6		20	6	20	20
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA		Perm	NA	Prot	Perm
Protected Phases	6			2	4	
Permitted Phases			2			4

Lanes, Volumes, Timings

2: Studio Driveway & Soledad Cyn

03/08/2022

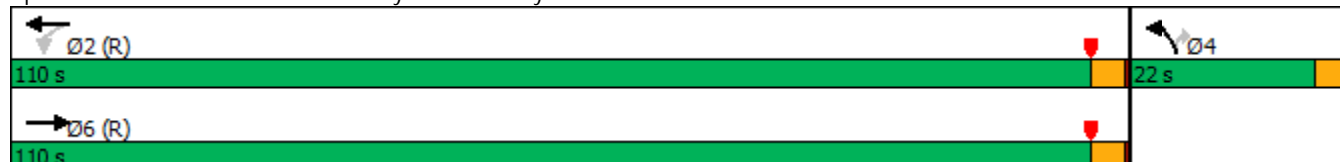


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Detector Phase	6		2	2	4	4
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	20.0		20.0	20.0	20.0	20.0
Total Split (s)	110.0		110.0	110.0	22.0	22.0
Total Split (%)	83.3%		83.3%	83.3%	16.7%	16.7%
Maximum Green (s)	106.0		106.0	106.0	18.0	18.0
Yellow Time (s)	3.5		3.5	3.5	3.5	3.5
All-Red Time (s)	0.5		0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max		C-Max	C-Max	None	None
Walk Time (s)	5.0		5.0	5.0	5.0	5.0
Flash Dont Walk (s)	11.0		11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0		0	0	0	0
Act Effct Green (s)	122.3		122.3	122.3	7.3	7.3
Actuated g/C Ratio	0.93		0.93	0.93	0.06	0.06
v/c Ratio	0.40		0.12	0.47	0.24	0.11
Control Delay	0.3		2.4	1.4	64.9	29.5
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	0.3		2.4	1.4	64.9	29.5
LOS	A		A	A	E	C
Approach Delay	0.3			1.4	53.4	
Approach LOS	A			A	D	

Intersection Summary

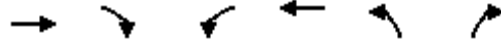
Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBT, Start of Yellow
 Natural Cycle: 50
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.47
 Intersection Signal Delay: 1.3
 Intersection Capacity Utilization 49.6%
 Analysis Period (min) 15
 Intersection LOS: A
 ICU Level of Service A

Splits and Phases: 2: Studio Driveway & Soledad Cyn



Lanes, Volumes, Timings
 3: Residential Driveway 2 & Soledad Cyn

03/08/2022



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↵	↑↑↑		↵
Traffic Volume (vph)	1689	10	5	2070	0	31
Future Volume (vph)	1689	10	5	2070	0	31
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	100		0	0
Storage Lanes		0	1		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt	0.999					0.865
Flt Protected			0.950			
Satd. Flow (prot)	5080	0	1770	5085	0	1611
Flt Permitted			0.950			
Satd. Flow (perm)	5080	0	1770	5085	0	1611
Link Speed (mph)	50			50	30	
Link Distance (ft)	562			519	267	
Travel Time (s)	7.7			7.1	6.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1836	11	5	2250	0	34
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1847	0	5	2250	0	34
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	43.3% ICU Level of Service A
Analysis Period (min)	15

HCM 6th TWSC
 3: Residential Driveway 2 & Soledad Cyn

03/08/2022

Intersection						
Int Delay, s/veh	0.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↑	↑↑↑		↑
Traffic Vol, veh/h	1689	10	5	2070	0	31
Future Vol, veh/h	1689	10	5	2070	0	31
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1836	11	5	2250	0	34

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	1847	0	924
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	5.34	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	3.12	-	3.92
Pot Cap-1 Maneuver	-	-	149	-	233
Stage 1	-	-	-	-	0
Stage 2	-	-	-	-	0
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	149	-	233
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	23
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	233	-	-	149	-
HCM Lane V/C Ratio	0.145	-	-	0.036	-
HCM Control Delay (s)	23	-	-	30.1	-
HCM Lane LOS	C	-	-	D	-
HCM 95th %tile Q(veh)	0.5	-	-	0.1	-

Lanes, Volumes, Timings
 4: Residential Driveway 1 & Soledad Cyn

03/08/2022



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↵	↑↑↑		↵
Traffic Volume (vph)	1703	16	7	2075	0	48
Future Volume (vph)	1703	16	7	2075	0	48
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	100		0	0
Storage Lanes		0	1		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt	0.999					0.865
Flt Protected			0.950			
Satd. Flow (prot)	5080	0	1770	5085	0	1611
Flt Permitted			0.950			
Satd. Flow (perm)	5080	0	1770	5085	0	1611
Link Speed (mph)	50			50	30	
Link Distance (ft)	519			513	330	
Travel Time (s)	7.1			7.0	7.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1851	17	8	2255	0	52
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1868	0	8	2255	0	52
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	43.4%
Analysis Period (min)	15
	ICU Level of Service A

HCM 6th TWSC
 4: Residential Driveway 1 & Soledad Cyn

03/08/2022

Intersection						
Int Delay, s/veh	0.4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↑	↑↑↑		↑
Traffic Vol, veh/h	1703	16	7	2075	0	48
Future Vol, veh/h	1703	16	7	2075	0	48
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1851	17	8	2255	0	52

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	1868	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	5.34	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	3.12	-	-
Pot Cap-1 Maneuver	-	-	146	-	0
Stage 1	-	-	-	-	0
Stage 2	-	-	-	-	0
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	146	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	25.2
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	230	-	-	146	-
HCM Lane V/C Ratio	0.227	-	-	0.052	-
HCM Control Delay (s)	25.2	-	-	31	-
HCM Lane LOS	D	-	-	D	-
HCM 95th %tile Q(veh)	0.8	-	-	0.2	-

Lanes, Volumes, Timings

5: Commuter Way & Soledad Cyn

03/08/2022



Lane Group	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔	↑↑↑	↗	↖	↑↑↑	↘	
Traffic Volume (vph)	47	1642	61	14	2010	26	46
Future Volume (vph)	47	1642	61	14	2010	26	46
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	500		0	0
Storage Lanes	1		1	1		2	0
Taper Length (ft)	25			25		25	
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.97	0.95
Frt			0.850			0.904	
Flt Protected	0.950			0.950		0.982	
Satd. Flow (prot)	1770	5085	1583	1770	5085	3208	0
Flt Permitted	0.076			0.950		0.982	
Satd. Flow (perm)	142	5085	1583	1770	5085	3208	0
Right Turn on Red			Yes				Yes
Satd. Flow (RTOR)			30			50	
Link Speed (mph)		50			50	30	
Link Distance (ft)		531			2825	382	
Travel Time (s)		7.2			38.5	8.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	51	1785	66	15	2185	28	50
Shared Lane Traffic (%)							
Lane Group Flow (vph)	51	1785	66	15	2185	78	0
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Right	Left	Left	Left	Right
Median Width(ft)		12			12	24	
Link Offset(ft)		0			0	0	
Crosswalk Width(ft)		16			16	16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9		9	15		15	9
Number of Detectors	1	1	1	1	1	1	
Detector Template							
Leading Detector (ft)	50	50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Turn Type	Perm	NA	Perm	Prot	NA	Prot	
Protected Phases		2		1	6	8	
Permitted Phases	2		2				
Detector Phase	2	2	2	1	6	8	
Switch Phase							
Minimum Initial (s)	10.0	10.0	10.0	4.0	10.0	4.0	
Minimum Split (s)	26.0	26.0	26.0	12.0	22.0	37.0	
Total Split (s)	75.0	75.0	75.0	20.0	95.0	37.0	

Lanes, Volumes, Timings

5: Commuter Way & Soledad Cyn

03/08/2022



Lane Group	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Total Split (%)	56.8%	56.8%	56.8%	15.2%	72.0%	28.0%	
Maximum Green (s)	69.0	69.0	69.0	16.5	89.0	31.0	
Yellow Time (s)	5.0	5.0	5.0	3.5	5.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	0.0	1.0	2.0	
Lost Time Adjust (s)	0.0	-2.0	-2.0	0.5	-2.0	-2.0	
Total Lost Time (s)	6.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			
Vehicle Extension (s)	5.0	5.0	5.0	1.5	5.0	2.0	
Minimum Gap (s)	4.0	4.0	4.0	1.5	4.0	2.0	
Time Before Reduce (s)	15.0	15.0	15.0	0.0	15.0	0.0	
Time To Reduce (s)	15.0	15.0	15.0	0.0	15.0	0.0	
Recall Mode	C-Max	C-Max	C-Max	None	C-Max	None	
Walk Time (s)	7.0	7.0	7.0			7.0	
Flash Dont Walk (s)	13.0	13.0	13.0			24.0	
Pedestrian Calls (#/hr)	0	0	0			0	
Act Effect Green (s)	113.4	115.0	115.0	4.7	119.0	7.9	
Actuated g/C Ratio	0.86	0.87	0.87	0.04	0.90	0.06	
v/c Ratio	0.42	0.40	0.05	0.24	0.48	0.33	
Control Delay	16.0	0.6	0.1	82.1	1.6	29.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	16.0	0.6	0.1	82.1	1.6	29.2	
LOS	B	A	A	F	A	C	
Approach Delay		1.0			2.1	29.2	
Approach LOS		A			A	C	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 16 (12%), Referenced to phase 2:EBTU and 6:WBT, Start of Yellow
 Natural Cycle: 80
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.48
 Intersection Signal Delay: 2.1
 Intersection LOS: A
 Intersection Capacity Utilization 49.1%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 5: Commuter Way & Soledad Cyn



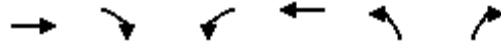


***Separate Driveways – PM Peak Hour
Capacity Calculation Worksheets***

Lanes, Volumes, Timings

2: Studio Driveway & Soledad Cyn

03/08/2022



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↵	↑↑↑	↵	↵
Traffic Volume (vph)	2535	34	17	1596	45	22
Future Volume (vph)	2535	34	17	1596	45	22
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	100		0	0
Storage Lanes		0	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt	0.998					0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	5075	0	1770	5085	1770	1583
Flt Permitted			0.038		0.950	
Satd. Flow (perm)	5075	0	71	5085	1770	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	5					10
Link Speed (mph)	50			50	30	
Link Distance (ft)	1272			563	444	
Travel Time (s)	17.3			7.7	10.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2755	37	18	1735	49	24
Shared Lane Traffic (%)						
Lane Group Flow (vph)	2792	0	18	1735	49	24
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2		1	2	1	1
Detector Template	Thru		Left	Thru	Left	Right
Leading Detector (ft)	100		20	100	20	20
Trailing Detector (ft)	0		0	0	0	0
Detector 1 Position(ft)	0		0	0	0	0
Detector 1 Size(ft)	6		20	6	20	20
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA		Perm	NA	Prot	Perm
Protected Phases	6			2	4	
Permitted Phases			2			4

Lanes, Volumes, Timings

2: Studio Driveway & Soledad Cyn

03/08/2022



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Detector Phase	6		2	2	4	4
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	20.0		20.0	20.0	20.0	20.0
Total Split (s)	110.0		110.0	110.0	22.0	22.0
Total Split (%)	83.3%		83.3%	83.3%	16.7%	16.7%
Maximum Green (s)	106.0		106.0	106.0	18.0	18.0
Yellow Time (s)	3.5		3.5	3.5	3.5	3.5
All-Red Time (s)	0.5		0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	Max		C-Max	C-Max	Max	Max
Walk Time (s)	5.0		5.0	5.0	5.0	5.0
Flash Dont Walk (s)	11.0		11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0		0	0	0	0
Act Effect Green (s)	106.0		106.0	106.0	18.0	18.0
Actuated g/C Ratio	0.80		0.80	0.80	0.14	0.14
v/c Ratio	0.68		0.32	0.42	0.20	0.11
Control Delay	14.0		26.6	4.0	53.1	35.7
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	14.0		26.6	4.0	53.1	35.7
LOS	B		C	A	D	D
Approach Delay	14.0			4.2	47.4	
Approach LOS	B			A	D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 0 (0%), Referenced to phase 2:WBTL, Start of Yellow
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.68
 Intersection Signal Delay: 10.8
 Intersection LOS: B
 Intersection Capacity Utilization 59.7%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 2: Studio Driveway & Soledad Cyn



Lanes, Volumes, Timings
 3: Residential Driveway 2 & Soledad Cyn

03/08/2022



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↙	↑↑↑		↗
Traffic Volume (vph)	2531	26	13	1612	0	22
Future Volume (vph)	2531	26	13	1612	0	22
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	100		0	0
Storage Lanes		0	1		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt	0.998					0.865
Flt Protected			0.950			
Satd. Flow (prot)	5075	0	1770	5085	0	1611
Flt Permitted			0.950			
Satd. Flow (perm)	5075	0	1770	5085	0	1611
Link Speed (mph)	50			50	30	
Link Distance (ft)	563			538	433	
Travel Time (s)	7.7			7.3	9.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2751	28	14	1752	0	24
Shared Lane Traffic (%)						
Lane Group Flow (vph)	2779	0	14	1752	0	24
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	59.5%
ICU Level of Service	B
Analysis Period (min)	15

HCM 6th TWSC
 3: Residential Driveway 2 & Soledad Cyn

03/08/2022

Intersection						
Int Delay, s/veh	0.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↖ ↑↑↑			↗
Traffic Vol, veh/h	2531	26	13	1612	0	22
Future Vol, veh/h	2531	26	13	1612	0	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2751	28	14	1752	0	24

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	2779	0	1390
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	5.34	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	3.12	-	3.92
Pot Cap-1 Maneuver	-	-	49	-	0
Stage 1	-	-	-	-	0
Stage 2	-	-	-	-	0
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	49	-	113
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.8	45.2
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	113	-	-	49	-
HCM Lane V/C Ratio	0.212	-	-	0.288	-
HCM Control Delay (s)	45.2	-	-	105.9	-
HCM Lane LOS	E	-	-	F	-
HCM 95th %tile Q(veh)	0.8	-	-	1	-

Lanes, Volumes, Timings
 4: Residential Driveway 2 & Soledad Cyn

03/08/2022



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↵	↑↑↑		↵
Traffic Volume (vph)	2508	45	20	1626	0	34
Future Volume (vph)	2508	45	20	1626	0	34
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	100		0	0
Storage Lanes		0	1		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt	0.997					0.865
Flt Protected			0.950			
Satd. Flow (prot)	5070	0	1770	5085	0	1611
Flt Permitted			0.950			
Satd. Flow (perm)	5070	0	1770	5085	0	1611
Link Speed (mph)	50			50	30	
Link Distance (ft)	538			931	438	
Travel Time (s)	7.3			12.7	10.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2726	49	22	1767	0	37
Shared Lane Traffic (%)						
Lane Group Flow (vph)	2775	0	22	1767	0	37
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	59.5%
ICU Level of Service	B
Analysis Period (min)	15

Intersection						
Int Delay, s/veh	1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↖ ↑↑↑			↗
Traffic Vol, veh/h	2508	45	20	1626	0	34
Future Vol, veh/h	2508	45	20	1626	0	34
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2726	49	22	1767	0	37

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	2775	0	1388
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	5.34	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	3.12	-	3.92
Pot Cap-1 Maneuver	-	-	50	-	0
Stage 1	-	-	-	-	0
Stage 2	-	-	-	-	0
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	50	-	114
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.5	51
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	114	-	-	50	-
HCM Lane V/C Ratio	0.324	-	-	0.435	-
HCM Control Delay (s)	51	-	-	123.8	-
HCM Lane LOS	F	-	-	F	-
HCM 95th %tile Q(veh)	1.3	-	-	1.6	-

Lanes, Volumes, Timings

5: Commuter Way & Soledad Cyn

03/08/2022



Lane Group	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔	↑↑↑	↗	↖	↑↑↑	↘	
Traffic Volume (vph)	34	2443	65	27	1594	19	202
Future Volume (vph)	34	2443	65	27	1594	19	202
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	500		0	0
Storage Lanes	1		1	1		2	0
Taper Length (ft)	25			25		25	
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.97	0.95
Frt			0.850			0.863	
Flt Protected	0.950			0.950		0.996	
Satd. Flow (prot)	1770	5085	1583	1770	5085	3106	0
Flt Permitted	0.126			0.950		0.996	
Satd. Flow (perm)	235	5085	1583	1770	5085	3106	0
Right Turn on Red			Yes				Yes
Satd. Flow (RTOR)			22			211	
Link Speed (mph)		50			50	30	
Link Distance (ft)		931			2825	382	
Travel Time (s)		12.7			38.5	8.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	37	2655	71	29	1733	21	220
Shared Lane Traffic (%)							
Lane Group Flow (vph)	37	2655	71	29	1733	241	0
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Right	Left	Left	Left	Right
Median Width(ft)		24			24	24	
Link Offset(ft)		0			0	0	
Crosswalk Width(ft)		16			16	16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9		9	15		15	9
Number of Detectors	1	1	1	1	1	1	
Detector Template							
Leading Detector (ft)	50	50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Turn Type	Perm	NA	Perm	Prot	NA	Prot	
Protected Phases		2		1	6	8	
Permitted Phases	2		2				
Detector Phase	2	2	2	1	6	8	
Switch Phase							
Minimum Initial (s)	10.0	10.0	10.0	4.0	10.0	4.0	
Minimum Split (s)	26.0	26.0	26.0	12.0	22.0	37.0	
Total Split (s)	75.0	75.0	75.0	20.0	95.0	37.0	

Lanes, Volumes, Timings
5: Commuter Way & Soledad Cyn

03/08/2022

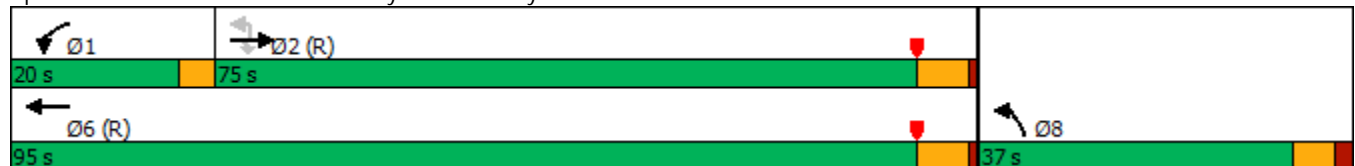


Lane Group	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Total Split (%)	56.8%	56.8%	56.8%	15.2%	72.0%	28.0%	
Maximum Green (s)	69.0	69.0	69.0	16.5	89.0	31.0	
Yellow Time (s)	5.0	5.0	5.0	3.5	5.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	0.0	1.0	2.0	
Lost Time Adjust (s)	0.0	-2.0	-2.0	0.5	-2.0	-2.0	
Total Lost Time (s)	6.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			
Vehicle Extension (s)	5.0	5.0	5.0	1.5	5.0	2.0	
Minimum Gap (s)	4.0	4.0	4.0	1.5	4.0	2.0	
Time Before Reduce (s)	15.0	15.0	15.0	0.0	15.0	0.0	
Time To Reduce (s)	15.0	15.0	15.0	0.0	15.0	0.0	
Recall Mode	C-Max	C-Max	C-Max	None	C-Max	None	
Walk Time (s)	7.0	7.0	7.0			7.0	
Flash Dont Walk (s)	13.0	13.0	13.0			24.0	
Pedestrian Calls (#/hr)	0	0	0			0	
Act Effect Green (s)	106.9	108.9	108.9	5.7	115.4	8.6	
Actuated g/C Ratio	0.81	0.82	0.82	0.04	0.87	0.07	
v/c Ratio	0.19	0.63	0.05	0.38	0.39	0.60	
Control Delay	11.5	12.3	4.7	70.1	4.9	17.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	11.5	12.3	4.7	70.1	4.9	17.9	
LOS	B	B	A	E	A	B	
Approach Delay		12.1			6.0	17.9	
Approach LOS		B			A	B	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 58 (44%), Referenced to phase 2:EBTU and 6:WBT, Start of Yellow
 Natural Cycle: 100
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.63
 Intersection Signal Delay: 10.1
 Intersection LOS: B
 Intersection Capacity Utilization 60.8%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 5: Commuter Way & Soledad Cyn





***Combined Driveways – AM Peak Hour
Capacity Calculation Worksheets***

Lanes, Volumes, Timings

2: Studio Driveway & Soledad Cyn

03/08/2022



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↵	↑↑↑	↵	↵
Traffic Volume (vph)	1679	50	25	2013	57	22
Future Volume (vph)	1679	50	25	2013	57	22
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	150		0	0
Storage Lanes		0	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt	0.996					0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	5065	0	1770	5085	1770	1583
Flt Permitted			0.102		0.950	
Satd. Flow (perm)	5065	0	190	5085	1770	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	12					24
Link Speed (mph)	50			50	30	
Link Distance (ft)	1474			562	341	
Travel Time (s)	20.1			7.7	7.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1825	54	27	2188	62	24
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1879	0	27	2188	62	24
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2		1	2	1	1
Detector Template	Thru		Left	Thru	Left	Right
Leading Detector (ft)	100		20	100	20	20
Trailing Detector (ft)	0		0	0	0	0
Detector 1 Position(ft)	0		0	0	0	0
Detector 1 Size(ft)	6		20	6	20	20
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA		Perm	NA	Prot	Perm
Protected Phases	6			2	4	
Permitted Phases			2			4

Lanes, Volumes, Timings

2: Studio Driveway & Soledad Cyn

03/08/2022



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Detector Phase	6		2	2	4	4
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	20.0		20.0	20.0	20.0	20.0
Total Split (s)	110.0		110.0	110.0	22.0	22.0
Total Split (%)	83.3%		83.3%	83.3%	16.7%	16.7%
Maximum Green (s)	106.0		106.0	106.0	18.0	18.0
Yellow Time (s)	3.5		3.5	3.5	3.5	3.5
All-Red Time (s)	0.5		0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max		C-Max	C-Max	None	None
Walk Time (s)	5.0		5.0	5.0	5.0	5.0
Flash Dont Walk (s)	11.0		11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0		0	0	0	0
Act Effect Green (s)	116.8		116.8	116.8	10.0	10.0
Actuated g/C Ratio	0.88		0.88	0.88	0.08	0.08
v/c Ratio	0.42		0.16	0.49	0.46	0.17
Control Delay	0.4		3.6	2.0	68.8	22.0
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	0.4		3.6	2.0	68.8	22.0
LOS	A		A	A	E	C
Approach Delay	0.4			2.0	55.7	
Approach LOS	A			A	E	

Intersection Summary

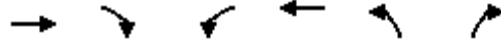
Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBT, Start of Yellow
 Natural Cycle: 50
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.49
 Intersection Signal Delay: 2.4
 Intersection LOS: A
 Intersection Capacity Utilization 48.9%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 2: Studio Driveway & Soledad Cyn



Lanes, Volumes, Timings
 3: Residential Driveway 2 & Soledad Cyn

03/08/2022



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↵	↑↑↑		↵
Traffic Volume (vph)	1701	0	0	2038	0	0
Future Volume (vph)	1701	0	0	2038	0	0
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	100		0	0
Storage Lanes		0	1		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	5085	0	1863	5085	0	1863
Flt Permitted						
Satd. Flow (perm)	5085	0	1863	5085	0	1863
Link Speed (mph)	50			50	30	
Link Distance (ft)	562			519	267	
Travel Time (s)	7.7			7.1	6.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1849	0	0	2215	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1849	0	0	2215	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	42.7%			ICU Level of Service A		
Analysis Period (min)	15					

HCM 6th TWSC
 3: Residential Driveway 2 & Soledad Cyn

03/08/2022

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↘	↑↑↑		↗
Traffic Vol, veh/h	1701	0	0	2038	0	0
Future Vol, veh/h	1701	0	0	2038	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1849	0	0	2215	0	0

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	1849	0	- 925
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	5.34	-	- 7.14
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	3.12	-	- 3.92
Pot Cap-1 Maneuver	-	-	149	-	0 233
Stage 1	-	-	-	-	0 -
Stage 2	-	-	-	-	0 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	149	-	- 233
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	149	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Lanes, Volumes, Timings
 4: Residential Driveway 1 & Soledad Cyn

03/08/2022



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↵	↑↑↑		↵
Traffic Volume (vph)	1685	16	7	2038	0	30
Future Volume (vph)	1685	16	7	2038	0	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	100		0	0
Storage Lanes		0	1		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt	0.999					0.865
Flt Protected			0.950			
Satd. Flow (prot)	5080	0	1770	5085	0	1611
Flt Permitted			0.950			
Satd. Flow (perm)	5080	0	1770	5085	0	1611
Link Speed (mph)	50			50	30	
Link Distance (ft)	519			513	330	
Travel Time (s)	7.1			7.0	7.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1832	17	8	2215	0	33
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1849	0	8	2215	0	33
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	42.9%
Analysis Period (min)	15
	ICU Level of Service A

HCM 6th TWSC
 4: Residential Driveway 1 & Soledad Cyn

03/08/2022

Intersection						
Int Delay, s/veh	0.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↖ ↑↑↑			↗
Traffic Vol, veh/h	1685	16	7	2038	0	30
Future Vol, veh/h	1685	16	7	2038	0	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1832	17	8	2215	0	33

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	1849	0	925
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	5.34	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	3.12	-	3.92
Pot Cap-1 Maneuver	-	-	149	-	233
Stage 1	-	-	-	-	0
Stage 2	-	-	-	-	0
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	149	-	233
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	22.9
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	233	-	-	149	-
HCM Lane V/C Ratio	0.14	-	-	0.051	-
HCM Control Delay (s)	22.9	-	-	30.5	-
HCM Lane LOS	C	-	-	D	-
HCM 95th %tile Q(veh)	0.5	-	-	0.2	-

Lanes, Volumes, Timings

5: Commuter Way & Soledad Cyn

03/08/2022



Lane Group	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔	↑↑↑	↗	↖	↑↑↑	↘↘	
Traffic Volume (vph)	10	1642	61	14	2010	26	46
Future Volume (vph)	10	1642	61	14	2010	26	46
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	500		0	0
Storage Lanes	1		1	1		2	0
Taper Length (ft)	25			25		25	
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.97	0.95
Frt			0.850			0.904	
Flt Protected	0.950			0.950		0.982	
Satd. Flow (prot)	1770	5085	1583	1770	5085	3208	0
Flt Permitted	0.076			0.950		0.982	
Satd. Flow (perm)	142	5085	1583	1770	5085	3208	0
Right Turn on Red			Yes				Yes
Satd. Flow (RTOR)			30			50	
Link Speed (mph)		50			50	30	
Link Distance (ft)		531			2825	382	
Travel Time (s)		7.2			38.5	8.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	1785	66	15	2185	28	50
Shared Lane Traffic (%)							
Lane Group Flow (vph)	11	1785	66	15	2185	78	0
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Right	Left	Left	Left	Right
Median Width(ft)		12			12	24	
Link Offset(ft)		0			0	0	
Crosswalk Width(ft)		16			16	16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9		9	15		15	9
Number of Detectors	1	1	1	1	1	1	
Detector Template							
Leading Detector (ft)	50	50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Turn Type	Perm	NA	Perm	Prot	NA	Prot	
Protected Phases		2		1	6	8	
Permitted Phases	2		2				
Detector Phase	2	2	2	1	6	8	
Switch Phase							
Minimum Initial (s)	10.0	10.0	10.0	4.0	10.0	4.0	
Minimum Split (s)	26.0	26.0	26.0	12.0	22.0	37.0	
Total Split (s)	75.0	75.0	75.0	20.0	95.0	37.0	

Lanes, Volumes, Timings
5: Commuter Way & Soledad Cyn

03/08/2022

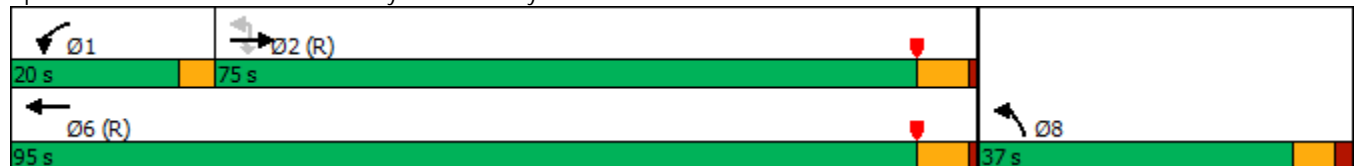


Lane Group	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Total Split (%)	56.8%	56.8%	56.8%	15.2%	72.0%	28.0%	
Maximum Green (s)	69.0	69.0	69.0	16.5	89.0	31.0	
Yellow Time (s)	5.0	5.0	5.0	3.5	5.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	0.0	1.0	2.0	
Lost Time Adjust (s)	0.0	-2.0	-2.0	0.5	-2.0	-2.0	
Total Lost Time (s)	6.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			
Vehicle Extension (s)	5.0	5.0	5.0	1.5	5.0	2.0	
Minimum Gap (s)	4.0	4.0	4.0	1.5	4.0	2.0	
Time Before Reduce (s)	15.0	15.0	15.0	0.0	15.0	0.0	
Time To Reduce (s)	15.0	15.0	15.0	0.0	15.0	0.0	
Recall Mode	C-Max	C-Max	C-Max	None	C-Max	None	
Walk Time (s)	7.0	7.0	7.0			7.0	
Flash Dont Walk (s)	13.0	13.0	13.0			24.0	
Pedestrian Calls (#/hr)	0	0	0			0	
Act Effect Green (s)	113.4	115.0	115.0	4.7	119.0	7.9	
Actuated g/C Ratio	0.86	0.87	0.87	0.04	0.90	0.06	
v/c Ratio	0.09	0.40	0.05	0.24	0.48	0.33	
Control Delay	2.0	0.5	0.1	82.1	1.6	29.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	2.0	0.5	0.1	82.1	1.6	29.2	
LOS	A	A	A	F	A	C	
Approach Delay		0.5			2.1	29.2	
Approach LOS		A			A	C	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 16 (12%), Referenced to phase 2:EBTU and 6:WBT, Start of Yellow
 Natural Cycle: 80
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.48
 Intersection Signal Delay: 1.9
 Intersection LOS: A
 Intersection Capacity Utilization 48.8%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 5: Commuter Way & Soledad Cyn





***Combined Driveways – PM Peak Hour
Capacity Calculation Worksheets***

Lanes, Volumes, Timings

2: Studio Driveway & Soledad Cyn

03/09/2022

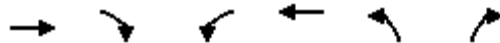


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↵	↑↑↑	↵	↵
Traffic Volume (vph)	2508	61	30	1569	71	31
Future Volume (vph)	2508	61	30	1569	71	31
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	100		0	0
Storage Lanes		0	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt	0.996					0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	5065	0	1770	5085	1770	1583
Flt Permitted			0.038		0.950	
Satd. Flow (perm)	5065	0	71	5085	1770	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	10					10
Link Speed (mph)	50			50	30	
Link Distance (ft)	1272			563	444	
Travel Time (s)	17.3			7.7	10.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2726	66	33	1705	77	34
Shared Lane Traffic (%)						
Lane Group Flow (vph)	2792	0	33	1705	77	34
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2		1	2	1	1
Detector Template	Thru		Left	Thru	Left	Right
Leading Detector (ft)	100		20	100	20	20
Trailing Detector (ft)	0		0	0	0	0
Detector 1 Position(ft)	0		0	0	0	0
Detector 1 Size(ft)	6		20	6	20	20
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA		Perm	NA	Prot	Perm
Protected Phases	6			2	4	
Permitted Phases			2			4

Lanes, Volumes, Timings

2: Studio Driveway & Soledad Cyn

03/09/2022



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Detector Phase	6		2	2	4	4
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	20.0		20.0	20.0	20.0	20.0
Total Split (s)	110.0		110.0	110.0	22.0	22.0
Total Split (%)	83.3%		83.3%	83.3%	16.7%	16.7%
Maximum Green (s)	106.0		106.0	106.0	18.0	18.0
Yellow Time (s)	3.5		3.5	3.5	3.5	3.5
All-Red Time (s)	0.5		0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	Max		C-Max	C-Max	Max	Max
Walk Time (s)	5.0		5.0	5.0	5.0	5.0
Flash Dont Walk (s)	11.0		11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0		0	0	0	0
Act Effect Green (s)	106.0		106.0	106.0	18.0	18.0
Actuated g/C Ratio	0.80		0.80	0.80	0.14	0.14
v/c Ratio	0.69		0.58	0.42	0.32	0.15
Control Delay	14.1		60.6	4.0	55.6	40.5
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	14.1		60.6	4.0	55.6	40.5
LOS	B		E	A	E	D
Approach Delay	14.1			5.0	51.0	
Approach LOS	B			A	D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 0 (0%), Referenced to phase 2:WBTL, Start of Yellow
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.69
 Intersection Signal Delay: 11.6
 Intersection LOS: B
 Intersection Capacity Utilization 60.4%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 2: Studio Driveway & Soledad Cyn



Lanes, Volumes, Timings
 3: Residential Driveway 2 & Soledad Cyn

03/09/2022



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↵	↑↑↑		↵
Traffic Volume (vph)	2539	0	0	1599	0	0
Future Volume (vph)	2539	0	0	1599	0	0
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	100		0	0
Storage Lanes		0	1		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	5085	0	1863	5085	0	1863
Flt Permitted						
Satd. Flow (perm)	5085	0	1863	5085	0	1863
Link Speed (mph)	50			50	30	
Link Distance (ft)	563			538	433	
Travel Time (s)	7.7			7.3	9.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2760	0	0	1738	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	2760	0	0	1738	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	52.4%
Analysis Period (min)	15
	ICU Level of Service A

HCM 6th TWSC
 3: Residential Driveway 2 & Soledad Cyn

03/09/2022

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↖	↑↑↑		↗
Traffic Vol, veh/h	2539	0	0	1599	0	0
Future Vol, veh/h	2539	0	0	1599	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2760	0	0	1738	0	0

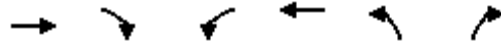
Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	2760	0	1380
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	5.34	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	3.12	-	3.92
Pot Cap-1 Maneuver	-	-	51	0	115
Stage 1	-	-	-	0	-
Stage 2	-	-	-	0	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	51	-	115
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	51	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Lanes, Volumes, Timings
 4: Residential Driveway 2 & Soledad Cyn

03/09/2022



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↵	↑↑↑		↵
Traffic Volume (vph)	2495	45	20	1599	0	21
Future Volume (vph)	2495	45	20	1599	0	21
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	100		0	0
Storage Lanes		0	1		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt	0.997					0.865
Flt Protected			0.950			
Satd. Flow (prot)	5070	0	1770	5085	0	1611
Flt Permitted			0.950			
Satd. Flow (perm)	5070	0	1770	5085	0	1611
Link Speed (mph)	50			50	30	
Link Distance (ft)	538			931	438	
Travel Time (s)	7.3			12.7	10.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2712	49	22	1738	0	23
Shared Lane Traffic (%)						
Lane Group Flow (vph)	2761	0	22	1738	0	23
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	59.2%
ICU Level of Service	B
Analysis Period (min)	15

HCM 6th TWSC
4: Residential Driveway 2 & Soledad Cyn

03/09/2022

Intersection						
Int Delay, s/veh	0.8					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↖	↑↑↑		↗
Traffic Vol, veh/h	2495	45	20	1599	0	21
Future Vol, veh/h	2495	45	20	1599	0	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2712	49	22	1738	0	23

Major/Minor	Major1	Major2	Minor1	Minor2
Conflicting Flow All	0	0	2761	0
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	-	-	5.34	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	-	-	3.12	-
Pot Cap-1 Maneuver	-	-	51	0
Stage 1	-	-	-	0
Stage 2	-	-	-	0
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	-	-	51	-
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.5	43.9
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	115	-	-	51	-
HCM Lane V/C Ratio	0.198	-	-	0.426	-
HCM Control Delay (s)	43.9	-	-	120.3	-
HCM Lane LOS	E	-	-	F	-
HCM 95th %tile Q(veh)	0.7	-	-	1.6	-

Lanes, Volumes, Timings

5: Commuter Way & Soledad Cyn

03/09/2022



Lane Group	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔	↑↑↑	↗	↖	↑↑↑	↘	
Traffic Volume (vph)	7	2443	65	27	1594	19	202
Future Volume (vph)	7	2443	65	27	1594	19	202
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	500		0	0
Storage Lanes	1		1	1		2	0
Taper Length (ft)	25			25		25	
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.97	0.95
Frt			0.850			0.863	
Flt Protected	0.950			0.950		0.996	
Satd. Flow (prot)	1770	5085	1583	1770	5085	3106	0
Flt Permitted	0.126			0.950		0.996	
Satd. Flow (perm)	235	5085	1583	1770	5085	3106	0
Right Turn on Red			Yes				Yes
Satd. Flow (RTOR)			22			211	
Link Speed (mph)		50			50	30	
Link Distance (ft)		931			2825	382	
Travel Time (s)		12.7			38.5	8.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	8	2655	71	29	1733	21	220
Shared Lane Traffic (%)							
Lane Group Flow (vph)	8	2655	71	29	1733	241	0
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Right	Left	Left	Left	Right
Median Width(ft)		24			24	24	
Link Offset(ft)		0			0	0	
Crosswalk Width(ft)		16			16	16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9		9	15		15	9
Number of Detectors	1	1	1	1	1	1	
Detector Template							
Leading Detector (ft)	50	50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Turn Type	Perm	NA	Perm	Prot	NA	Prot	
Protected Phases		2		1	6	8	
Permitted Phases	2		2				
Detector Phase	2	2	2	1	6	8	
Switch Phase							
Minimum Initial (s)	10.0	10.0	10.0	4.0	10.0	4.0	
Minimum Split (s)	26.0	26.0	26.0	12.0	22.0	37.0	
Total Split (s)	75.0	75.0	75.0	20.0	95.0	37.0	

Lanes, Volumes, Timings

5: Commuter Way & Soledad Cyn

03/09/2022



Lane Group	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Total Split (%)	56.8%	56.8%	56.8%	15.2%	72.0%	28.0%	
Maximum Green (s)	69.0	69.0	69.0	16.5	89.0	31.0	
Yellow Time (s)	5.0	5.0	5.0	3.5	5.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	0.0	1.0	2.0	
Lost Time Adjust (s)	0.0	-2.0	-2.0	0.5	-2.0	-2.0	
Total Lost Time (s)	6.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			
Vehicle Extension (s)	5.0	5.0	5.0	1.5	5.0	2.0	
Minimum Gap (s)	4.0	4.0	4.0	1.5	4.0	2.0	
Time Before Reduce (s)	15.0	15.0	15.0	0.0	15.0	0.0	
Time To Reduce (s)	15.0	15.0	15.0	0.0	15.0	0.0	
Recall Mode	C-Max	C-Max	C-Max	None	C-Max	None	
Walk Time (s)	7.0	7.0	7.0			7.0	
Flash Dont Walk (s)	13.0	13.0	13.0			24.0	
Pedestrian Calls (#/hr)	0	0	0			0	
Act Effect Green (s)	106.9	108.9	108.9	5.7	115.4	8.6	
Actuated g/C Ratio	0.81	0.82	0.82	0.04	0.87	0.07	
v/c Ratio	0.04	0.63	0.05	0.38	0.39	0.60	
Control Delay	8.4	12.2	4.7	70.1	4.9	17.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	8.4	12.2	4.7	70.1	4.9	17.9	
LOS	A	B	A	E	A	B	
Approach Delay		12.0			6.0	17.9	
Approach LOS		B			A	B	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 58 (44%), Referenced to phase 2:EBTU and 6:WBT, Start of Yellow
 Natural Cycle: 100
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.63
 Intersection Signal Delay: 10.1
 Intersection LOS: B
 Intersection Capacity Utilization 60.8%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 5: Commuter Way & Soledad Cyn



Intersection						
Int Delay, s/veh	3.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↔			↔↔
Traffic Vol, veh/h	0	62	62	0	28	48
Future Vol, veh/h	0	62	62	0	28	48
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	67	67	0	30	52

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	153	67	0	0	67	0
Stage 1	67	-	-	-	-	-
Stage 2	86	-	-	-	-	-
Critical Hdwy	6.63	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.83	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	-	-	2.219	-
Pot Cap-1 Maneuver	831	996	-	-	1534	-
Stage 1	955	-	-	-	-	-
Stage 2	928	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	814	996	-	-	1534	-
Mov Cap-2 Maneuver	814	-	-	-	-	-
Stage 1	955	-	-	-	-	-
Stage 2	909	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.9	0	2.7
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	996	1534
HCM Lane V/C Ratio	-	-	0.068	0.02
HCM Control Delay (s)	-	-	8.9	7.4
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0.1

Intersection	
Intersection Delay, s/veh	7.5
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕						↕	
Traffic Vol, veh/h	42	2	0	0	2	20	0	0	0	28	10	10
Future Vol, veh/h	42	2	0	0	2	20	0	0	0	28	10	10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	46	2	0	0	2	22	0	0	0	30	11	11
Number of Lanes	0	1	0	0	1	0	0	0	0	0	2	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	2	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	2	1
HCM Control Delay	7.5	6.7	7.8
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	95%	0%	85%	0%
Vol Thru, %	5%	9%	15%	33%
Vol Right, %	0%	91%	0%	67%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	44	22	33	15
LT Vol	42	0	28	0
Through Vol	2	2	5	5
RT Vol	0	20	0	10
Lane Flow Rate	48	24	36	16
Geometry Grp	2	2	7	7
Degree of Util (X)	0.056	0.023	0.051	0.019
Departure Headway (Hd)	4.232	3.513	5.084	4.192
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	842	1008	704	853
Service Time	2.279	1.571	2.813	1.921
HCM Lane V/C Ratio	0.057	0.024	0.051	0.019
HCM Control Delay	7.5	6.7	8.1	7
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.1	0.2	0.1

Intersection						
Int Delay, s/veh	3.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↔			↔↔
Traffic Vol, veh/h	0	95	126	0	29	63
Future Vol, veh/h	0	95	126	0	29	63
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	103	137	0	32	68

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	235	137	0	0	137	0
Stage 1	137	-	-	-	-	-
Stage 2	98	-	-	-	-	-
Critical Hdwy	6.63	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.83	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	-	-	2.219	-
Pot Cap-1 Maneuver	743	911	-	-	1446	-
Stage 1	889	-	-	-	-	-
Stage 2	915	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	726	911	-	-	1446	-
Mov Cap-2 Maneuver	726	-	-	-	-	-
Stage 1	889	-	-	-	-	-
Stage 2	894	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.5	0	2.4
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	911	1446
HCM Lane V/C Ratio	-	-	0.113	0.022
HCM Control Delay (s)	-	-	9.5	7.5
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0.1

Intersection	
Intersection Delay, s/veh	7.3
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕						↕	
Traffic Vol, veh/h	30	2	0	0	2	96	0	0	0	29	10	24
Future Vol, veh/h	30	2	0	0	2	96	0	0	0	29	10	24
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	33	2	0	0	2	104	0	0	0	32	11	26
Number of Lanes	0	1	0	0	1	0	0	0	0	0	2	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	2	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	2	1
HCM Control Delay	7.6	7	7.7
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	94%	0%	85%	0%
Vol Thru, %	6%	2%	15%	17%
Vol Right, %	0%	98%	0%	83%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	32	98	34	29
LT Vol	30	0	29	0
Through Vol	2	2	5	5
RT Vol	0	96	0	24
Lane Flow Rate	35	107	37	32
Geometry Grp	2	2	7	7
Degree of Util (X)	0.042	0.103	0.053	0.037
Departure Headway (Hd)	4.321	3.489	5.207	4.199
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	822	1015	687	850
Service Time	2.383	1.553	2.943	1.935
HCM Lane V/C Ratio	0.043	0.105	0.054	0.038
HCM Control Delay	7.6	7	8.2	7.1
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.3	0.2	0.1

Intersection						
Int Delay, s/veh	4.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	124	82	0	28	86
Future Vol, veh/h	0	124	82	0	28	86
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	135	89	0	30	93

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	196	89	0	0	89	0
Stage 1	89	-	-	-	-	-
Stage 2	107	-	-	-	-	-
Critical Hdwy	6.63	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.83	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	-	-	2.219	-
Pot Cap-1 Maneuver	784	969	-	-	1505	-
Stage 1	934	-	-	-	-	-
Stage 2	906	-	-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	768	969	-	-	1505	-
Mov Cap-2 Maneuver	768	-	-	-	-	-
Stage 1	934	-	-	-	-	-
Stage 2	887	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.3	0	1.8
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	969	1505
HCM Lane V/C Ratio	-	-	0.139	0.02
HCM Control Delay (s)	-	-	9.3	7.4
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0.1

HCM 6th AWSC

2: Commuter Way & Project/Parking/Drop-off Expanded Train Service plus Project AM 07/12/2022

Intersection	
Intersection Delay, s/veh	7.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕						↕	
Traffic Vol, veh/h	42	2	0	0	2	40	0	0	0	56	20	10
Future Vol, veh/h	42	2	0	0	2	40	0	0	0	56	20	10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	46	2	0	0	2	43	0	0	0	61	22	11
Number of Lanes	0	1	0	0	1	0	0	0	0	0	2	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	2	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	2	1
HCM Control Delay	7.7	6.8	8.1
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	95%	0%	85%	0%
Vol Thru, %	5%	5%	15%	50%
Vol Right, %	0%	95%	0%	50%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	44	42	66	20
LT Vol	42	0	56	0
Through Vol	2	2	10	10
RT Vol	0	40	0	10
Lane Flow Rate	48	46	72	22
Geometry Grp	2	2	7	7
Degree of Util (X)	0.057	0.045	0.102	0.026
Departure Headway (Hd)	4.32	3.558	5.122	4.347
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	817	985	699	822
Service Time	2.41	1.656	2.857	2.082
HCM Lane V/C Ratio	0.059	0.047	0.103	0.027
HCM Control Delay	7.7	6.8	8.4	7.2
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.1	0.3	0.1

Intersection						
Int Delay, s/veh	4.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	190	222	0	58	102
Future Vol, veh/h	0	190	222	0	58	102
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	207	241	0	63	111

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	423	241	0	0	241
Stage 1	241	-	-	-	-
Stage 2	182	-	-	-	-
Critical Hdwy	6.63	6.23	-	-	4.13
Critical Hdwy Stg 1	5.43	-	-	-	-
Critical Hdwy Stg 2	5.83	-	-	-	-
Follow-up Hdwy	3.519	3.319	-	-	2.219
Pot Cap-1 Maneuver	573	797	-	-	1324
Stage 1	798	-	-	-	-
Stage 2	832	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	544	797	-	-	1324
Mov Cap-2 Maneuver	544	-	-	-	-
Stage 1	798	-	-	-	-
Stage 2	790	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.1	0	2.9
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	797	1324
HCM Lane V/C Ratio	-	-	0.259	0.048
HCM Control Delay (s)	-	-	11.1	7.9
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	1	0.1

HCM 6th AWSC

2: Commuter Way & Project/Parking/Drop-off Expanded Train Service plus Project PM 07/12/2022

Intersection	
Intersection Delay, s/veh	7.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕						↕	
Traffic Vol, veh/h	30	2	0	0	2	192	0	0	0	58	20	24
Future Vol, veh/h	30	2	0	0	2	192	0	0	0	58	20	24
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	33	2	0	0	2	209	0	0	0	63	22	26
Number of Lanes	0	1	0	0	1	0	0	0	0	0	2	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	2	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	2	1
HCM Control Delay	7.8	7.7	8.4
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	94%	0%	85%	0%
Vol Thru, %	6%	1%	15%	29%
Vol Right, %	0%	99%	0%	71%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	32	194	68	34
LT Vol	30	0	58	0
Through Vol	2	2	10	10
RT Vol	0	192	0	24
Lane Flow Rate	35	211	74	37
Geometry Grp	2	2	7	7
Degree of Util (X)	0.045	0.215	0.111	0.046
Departure Headway (Hd)	4.606	3.673	5.386	4.462
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	781	983	660	793
Service Time	2.612	1.675	3.166	2.242
HCM Lane V/C Ratio	0.045	0.215	0.112	0.047
HCM Control Delay	7.8	7.7	8.8	7.5
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.8	0.4	0.1

Appendix B
Peer Review and Responses



MEMORANDUM

Date: January 13, 2023
To: Hannah Gbeh, SWCA
From: Sarah Brandenburg

Subject: Riverview Mixed-Use Project Transportation Study Peer Review

Ref: 3406

This memorandum presents the findings of the peer review for the Riverview Mixed-Use Project (Project) in the City of Santa Clarita. We have reviewed the VMT analysis documented in the *Transportation Analysis for Riverview Mixed-Use Development Vehicle Miles Traveled (VMT) Threshold Analysis*, Gibson Transportation Consultants, August 2, 2022 (VMT Study) and *Access Study for the Riverview Mixed-Use Project Soledad Canyon Road*, Gibson Transportation Consultants, November 9, 2022 (Access Study). The purpose of the peer review is to evaluate the methodology and significance thresholds applied to the VMT analysis and assess its consistency with the City's requirements as outlined in the *Transportation Analysis Updates in Santa Clarita*, Fehr & Peers, May 2020 and review the methodology and findings of the site access analysis. A brief description of the Project and the findings of the peer review are presented below.

PROPOSED PROJECT

The proposed Riverview Mixed-Use Project is located on the south side of Soledad Canyon Road just west of Commuter Way at the former Saugus Raceway site. The Project would provide 318 dwelling units consisting of attached and detached single family units and 66,000 square feet of space for a commercial movie and television studio with six sound stages. Access would be provided along Soledad Canyon Road and at the signalized intersection of Soledad Canyon Road & Commuter Way.

PEER REVIEW OF VMT STUDY

VMT Methodology

The purpose of the VMT analysis was to analyze the potential for significant transportation impacts that would occur with the development of the Project. The City of Santa Clarita adopted new transportation impact thresholds to adhere to CEQA requirements pertaining to Senate Bill 743 (SB 743) and provide guidance on conducting transportation studies in the City. The process began by collecting baseline VMT data for the City, and then using the VMT data to consider options for the preferred VMT methodology, thresholds, and potential mitigation strategies that were ultimately adopted by City Council in 2020 to adhere to CEQA requirements. The City's



guidelines for transportation analysis are provided in *Transportation Analysis Updates in Santa Clarita* (Guidelines).

The primary purpose of SB 743 was eliminating level of service (LOS) as a measure of vehicular capacity and traffic congestion as a basis for determining significant transportation impacts under CEQA. Rather, SB 743 required lead agencies to shift the focus from evaluating traffic impacts based on metrics that only consider vehicle travel time and delay (i.e., impacts to drivers) to metrics that capture the state's goals of improved air quality, reduced greenhouse gas emissions, and improved public health (i.e., impacts of driving). In response to SB 743, the Governor's Office of Planning and Research (OPR) selected VMT as the new transportation impact metric for which lead agencies are required to define methodologies, thresholds, and mitigation consistent with their respective General Plan goals. It should be noted that while LOS no longer constitutes a CEQA impact, it can still be used to inform decision makers on the overall effects of a project. The deadline for agencies to implement SB 743 was July 1, 2020.

The first step of a VMT impact evaluation is to determine what type of analysis, if any, is needed. Based on the OPR *Technical Advisory*¹, the City of Santa Clarita adopted four screening criteria that the City may use to identify if a proposed project is expected to cause a less-than-significant impact without conducting a detailed study: project size, locally serving retail, project location in a low VMT area, and project accessibility to transit.

VMT Screening Results

Given that the Project is immediately adjacent to the Santa Clarita Metrolink Station located just south of Commuter Way on the southern boundary of the Project site, the City's screening criteria related to transit accessibility was appropriately considered for the Project in the VMT Study. The following criteria must be met for a project to be screened from further VMT analysis based on transit accessibility:

- The project is located in a transit priority area (TPA) which is defined as being within ½ mile of an existing or planned major transit stop or an existing stop along a high-quality transit corridor.
- The project has a Floor Area Ratio (FAR) of more than 0.75.
- The project does not contain more parking for use by residents, customers, or employees than required by the City.
- The project is consistent with the regional Sustainable Communities Strategy published by the Southern California Association of Governments (SCAG).
- The project does not replace affordable residential units with a smaller number of moderate- or high-income residential units.

¹ Governor's Office of Planning and Research, *Technical Advisory on Evaluating Transportation Impacts in CEQA*, 2018.



The five criteria listed above were correctly applied to the proposed Project as part of the VMT Study. The results of the VMT screening assessment area summarized in below in **Table 1**.

Table 1: VMT Screening Results for Proposed Project

Screening Criteria	Project Findings	Screening Criteria Met?
Located within ½ mile of a TPA	Santa Clarita Metrolink Station qualifies as a Major Transit Stop and northern edge of Project site is less than 2,600 feet (½ mile) from the station.	YES
FAR > 0.75	Project FAR is 1.4.	YES
On-Site parking does not exceed City standards	Residential parking is being provided according to City of Santa Clarita Unified Development Code (UDC). The UDC does not contain required parking ratios for studio uses; however, the amount of parking being provided is stated to be consistent with other similar uses in Southern CA and is not intended to over supply parking on the site.	YES
SCAG's Connect SoCal Sustainable Communities Strategy (2020 RTP/SCS)	Consistency with SCS is ultimately at the discretion of the City. Given that the Project is providing a mixed-use development in a TPA, it is supporting the regional goals providing development close to high-quality transit and reducing VMT growth in the region and the finding of the Project's consistency with the SCS is supported.	YES
Replacing affordable housing	No residential uses are currently located on the Project site.	YES

VMT Impact Findings

As shown in Table 1, the Project meets the screening criteria related to transit proximity. Based on these findings, no further VMT analysis is needed, and the proposed Project can be presumed to have a **less than significant VMT impact** as concluded in the VMT Study.

The VMT Study did not address potential cumulative impacts. However, a project that is presumed to have a less than significant VMT impact under baseline conditions would also not have a cumulative impact as long as the project is consistent with the SCAG RTP/SCS. As documented in the VMT Study and summarized in Table 1 above, the Project has been found to be consistent with SCAG's Connect SoCal plan. Therefore, the proposed Project would also have a **less than significant VMT impact under cumulative conditions**.



PEER REVIEW OF SITE ACCESS STUDY

Proposed Access Plan

The Access Study states that the westerly and the center driveways serving the residential portion of the Project would allow right and left turns into the residential neighborhood, but only right turns out of the site. However, Figure 1B shows a left turn out of the site at the westerly driveway under the proposed conditions.

Given the access restrictions due to the median on Soledad Canyon Road, the Project is relying on vehicles to be able to make the U-Turn at the signalized intersection at Soledad Canyon Road & Commuter Way which is not currently allowed. The lack of an existing eastbound U-turn movement at this intersection is not discussed in the Access Study.

Project Trip Generation

The estimated trip generation for the residential uses is based on industry standard Institute of Transportation Engineers (ITE) rates and the trip generation estimates provided in Table 1 in the Access Study are accurate.

The estimated trip generation for the studio uses is based on counts from six other entertainment and studio sites in Los Angeles County. However, no information is provided on how this information was collected or how many trips are generated based on the size/activity levels of these other sites. The trip generation estimate is based on the number of parking spaces provided at the Project site which is also stated (in the VMT Study) to be based on parking levels at other similar sites. The trip generation estimate assumes that every parking space is used once per day resulting in one inbound and one outbound vehicle-trip per parking space as shown in Table 2 in the Access Study. Additional assumptions are used for the truck parking spaces.

Table 3A in the Access Study shows the inbound travel flows for vehicles and trucks entering the studio site. The table should be more clearly labeled as Inbound Travel Patterns and the mention of traffic signal warrant analysis and outbound travel patterns are irrelevant to this table.

Table 3B in the Access Study shows the outbound travel flows for vehicles and trucks exiting the studio site. The table should be more clearly labeled as Outbound Travel Patterns and the mention of traffic signal warrant analysis and inbound travel patterns are irrelevant to this table.

Given that vehicles arrive to the site throughout the day and depart the site throughout the day, the assumption that each parking space is only occupied once daily seems to be either an unreasonable use of parking or an unreasonable assumption. While the majority of vehicles arrive in the morning peak period and depart in the afternoon peak period, approximately 20% of Project vehicles (115 trips) arrive to the site after 4:00 PM and approximately 20% depart from the site (97 trips) before 11:00 AM. This seems to imply that at least some parking spaces could be utilized by multiple vehicles per day.



The signal warrant section of the Access Study states that “Project trip generation was developed by assuming that the parking spaces on the studio campus would all be utilized every day and that each parking space would be used only once per day (both very conservative assumptions).” While these may be conservative trip generation assumptions, no data is provided to support this conclusion. In addition, a parking space only being utilized once per day is typically not considered to be a conservative assumption. While the trip generation rates may be reasonable and additional data may have been provided directly to the City to support the rates applied to the analysis, the Access Study does not contain the documentation needed to verify that the rates being used for the studio uses are defensible.

The trip generation information is presented separately for the residential and studio uses on the Project site and the studio trip generation is presented in several tables. It would be helpful to include an additional table that shows the collective trip generation of the Project. The table below summarizes the total Project trip generation based on the data contained in the report. As shown, the overall Project generates 3,463 daily trips with 258 of those trips occurring in the AM peak hour and 331 occurring in the PM peak hour.

Table 2: Project Trip Generation Summary

Land Use	Daily	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Residential	2,435	47	120	167	128	86	214
Studios	1,028	61	31	91	51	67	117
Total	3,463	108	151	258	179	153	331

Project Trip Distribution & Assignment

The overall Project trip distribution assumptions are reasonable.

Figure 3 in the Access Study shows a total of 60% of inbound vehicle trips coming from the west with 60% of inbound vehicles utilizing the central driveway and 20% utilizing the signalized driveway. The central driveway should likely be 40% so that both driveways equate to 60%.

Figure 7A in the Access Study shows the AM peak hour Project only trips at the driveways. The central driveway shows 37 eastbound through vehicles and the signalized access point shows 52 through vehicles. The 37 vehicles should be 25 and the 52 vehicles should be 40 based on the Project traffic flows at the adjacent driveways.

The total inbound and outbound vehicle-trips at the Project driveways in Figure 7A and Figure 7B correctly match total AM and PM peak hour Project trip generation as summarized in the table above.



Traffic Operations Analysis

In reviewing the traffic operations analysis results, the following concerns are noted:

- The report does not acknowledge that there is currently no U-turn movement allowed from eastbound Soledad Canyon Road at the Commuter Way intersection. A sign is posted on the signal arm indicating “No U-Turns.”
- The report also does not acknowledge that there is currently no turn lane for vehicles to potentially make the U-turn movement from eastbound Soledad Canyon Road at the Commuter Way intersection.
- The operational analysis is assuming the following parameters for the eastbound approach on Soledad Canyon Road at the Commuter Way signalized intersection:
 - A separate U-turn lane is assumed to be provided. The synchro calculation sheets shows a separate U-turn lane (the storage length is not included). Table 6 shows 375 feet of storage for the U-turn movement with a queue length of 70 feet in the AM peak hour and 26 feet in the PM peak hour. There is no explanation as to how this new turn lane would be constructed with the Project.
 - The U-turn movement is assumed to operate under permitted signal phasing meaning that vehicles making the U-turn would need to yield to oncoming traffic on westbound Soledad Canyon Road and wait for a gap in vehicle flows to make the U-turn movement. The westbound left-turn movement operates under protected signal phasing, and it is likely that the City would expect the U-turn movement to also have a protected signal phase, especially if the combined studio/residential signalized access point is not provided and U-turn volumes are 48 vehicles in the AM peak hour and 35 vehicles in the PM peak hour.
- The delay calculations at the signalized intersection of Soledad Canyon Road & Commuter Way do not have any pedestrian calls in the AM or PM peak hours. Given the Santa Clarita Transit Station on the southside of the intersection and the bus stop and multi-use path on the northside of the intersection, some amount of pedestrian activity should be reflected in the intersection delay calculations.
- Table 6 shows the vehicle queues for the various turning movements providing access to the Project site. However, the synchro reports do not contain the queuing estimates.



CONCLUSIONS

The peer review conducted for the Riverview Mixed-Use Project in the City of Santa Clarita was based on the VMT Study and Access Study submitted by the Project applicant. Based on the City's Guidelines, the VMT screening results for the Project are appropriate, no additional VMT analysis is needed, and the Project can be presumed to have a ***less than significant VMT impact*** with no mitigation required. For the Access Study, several minor comments have been provided on the materials contained in the report. The more substantive comments are related to the lack of data supporting the trip generation estimates for the studio uses and the assumptions at the Soledad Canyon Road & Commuter Way signalized intersection pertaining to the ability to accommodate the anticipated demand in U-turning vehicles if signalized access is not provided for the residential uses at the Project site.



RESPONSE TO COMMENTS

PEER REVIEW BY FEHR & PEERS

January 13, 2023

VMT STUDY

Comment 1 – VMT Methodology

The Comment reviews the background of SB 743 which changed the transportation evaluation of proposed projects from congestion (level of service) to vehicle miles traveled. The comment introduces the City's four screening criteria that are used to determine if a project can be screened out of further analysis and a less-than-significant conclusion can be supported.

Response 1 – We concur with the explanation and the identification of the screening criteria.

Comment 2 – VMT Screening Results

The Comment compares the Project Description with the VMT screening Criteria and concludes that the analysis presented in the VMT Study memo was correctly applied.

Response 2 – We agree with the comment and the conclusion.

Comment 3 – VMT Impact Findings

The Comment concludes that the Project meets the screening criteria related to transit proximity, would not need any further VMT analysis, and can be presumed to have a less-than-significant VMT impact. The comment agrees with the findings of the VMT Study.

The Comment also points out that the Project would have a less than significant VMT impact under cumulative conditions.

Response 3 – We agree with the comment and the conclusion.

SITE ACCESS STUDY

Comment 4 – Access Plan

The Comment expresses concern that the proposed U-turn at Soledad Canyon Road and Commuter Way was not discussed in the Access Study.



Response 4 – Pages 9 and 10 of the Site Access Study discuss the need for a U-turn at the intersection and identify the peak hour traffic volumes anticipated to make that U-turn. Table 6 of the report shows that a U-turn lane of 375 feet could be provided in the existing center median although a maximum lane length of 100 feet is all that would be needed. The provision of the U-turn lane would be a Condition of Approval for the Project and the final design of the U-turn lane would be reviewed and approved by the City.

Comment 5 – Project Trip Generation

The Comment agrees with the trip generation for the residential portion of the Project but expresses concern that the trip generation for the studio component may need additional documentation of the assumptions. The comment also suggests that the residential and studio trip generation estimates should be presented in a single table.

Response 5 – The studio trip generation base has been changed in the Project’s Transportation Assessment to a studio rate that has been accepted by the City for other studio projects in Santa Clarita. The Transportation Assessment for the proposed Project combines the residential and studio trip generation into a single table for ease of review.

Comment 6 – Project Distribution and Assignment

The Comment stated that the distribution assumptions are reasonable and had minor adjustments suggested for the individual driveway assignments.

Response 6 – We concur with the conclusions regarding the distribution, and we will adjust the driveway assignments as suggested in the Project’s Transportation Assessment.

Comment 7 – Traffic Operations Analysis U-turn Design

The Comment says that the report did not state that a U-turn lane was not currently in place at the intersection of Commuter Way and Soledad Canyon Road.

Response 7 – See Response 4 above.

Comment 8 – Traffic Operations Analysis U-turn Operation

The Comment points out that Table 6 shows a 375-foot storage length for a U-turn lane that is not currently present at the intersection. It also indicates that the signal phasing for the intersection (after the addition of the U-turn lane) should include the U-turn movement in the phase concurrent with the westbound-to-southbound left turn and that the intersection should include a phase for pedestrians crossing Soledad Canyon Road. The comment also states that the report did not include the queue length summaries in the capacity calculation worksheets.



Response 8 – The U-turn lane would be added in the existing center median as a requirement of the Project. The final design and length of the lane would be reviewed and approved by the City. The signal phasing and the provision/timing of the pedestrian phase would be a decision of City staff at the time of the intersection design.

The queuing information is included in the capacity calculation worksheets presented in the Transportation Assessment for the Project.

Appendix C
Traffic Counts

Turning Movement Count Report AM

Location ID: 6
 North/South: I-5 SB Ramps
 East/West: Valencia Blvd

Date: 02/21/23
 City: Santa Clarita, CA

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	11	0	19	394	93	0	0	0	0	36	45	0	598
7:15	54	0	40	278	160	0	0	0	0	59	68	0	659
7:30	20	0	63	207	200	0	0	0	0	58	126	0	674
7:45	18	0	74	259	221	0	0	0	0	46	138	0	756
8:00	36	0	41	237	310	0	0	0	0	85	129	0	838
8:15	16	0	37	216	207	0	0	0	0	90	166	0	732
8:30	15	0	41	190	133	0	0	0	0	68	169	0	616
8:45	6	0	40	147	109	0	0	0	0	50	90	0	442

Total Volume:	176	0	355	1928	1433	0	0	0	0	492	931	0	5315
Approach %	33%	0%	67%	57%	43%	0%	0%	0%	0%	35%	65%	0%	

Peak Hr Begin:	7:30												
PHV	90	0	215	919	938	0	0	0	0	279	559	0	3000
PHF	0.829			0.849			0.000			0.818			0.895

Turning Movement Count Report PM

Location ID: 6
 North/South: I-5 SB Ramps
 East/West: Valencia Blvd

Date: 02/21/23
 City: Santa Clarita, CA

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	11	0	34	161	174	0	0	0	0	35	119	0	534
16:15	23	0	41	176	151	0	0	0	0	33	118	0	542
16:30	18	0	32	212	171	0	0	0	0	29	123	0	585
16:45	20	0	46	177	203	0	0	0	0	27	136	0	609
17:00	17	0	44	249	174	0	0	0	0	38	111	0	633
17:15	25	0	38	164	203	0	0	0	0	34	133	0	597
17:30	14	0	42	184	204	0	0	0	0	32	124	0	600
17:45	5	0	44	134	206	0	0	0	0	33	140	0	562

Total Volume:	133	0	321	1457	1486	0	0	0	0	261	1004	0	4662
Approach %	29%	0%	71%	50%	50%	0%	0%	0%	0%	21%	79%	0%	

Peak Hr Begin:	16:45												
PHV	76	0	170	774	784	0	0	0	0	131	504	0	2439
PHF	0.932			0.921			0.000			0.951			0.963

Pedestrian/Bicycle Count Report

Location ID: 6
 North/South: I-5 SB Ramps
 East/West: Valencia Blvd

Date: 02/21/23
 City: Santa Clarita, CA

Leg:	North		East		South		West	
Class:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
7:00	0	0	0	0	0	0	0	0
7:15	0	0	0	0	0	0	0	0
7:30	0	0	0	0	0	0	0	0
7:45	1	0	0	0	0	0	0	0
8:00	0	0	0	0	0	0	0	0
8:15	1	0	0	0	0	0	0	0
8:30	0	0	0	0	0	0	0	0
8:45	0	0	0	0	0	0	0	0

Leg:	North		East		South		West	
Class:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
16:00	1	1	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0
16:30	2	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0

Turning Movement Count Report AM

Location ID: 7
 North/South: I-5 NB Ramps
 East/West: Valencia Blvd

Date: 02/21/23
 City: Santa Clarita, CA

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	0	0	0	0	463	16	133	0	28	5	48	0	693
7:15	0	0	0	0	391	14	144	0	37	10	100	0	696
7:30	0	0	0	0	362	11	187	0	44	5	180	0	789
7:45	0	0	0	0	398	25	255	0	67	8	190	0	943
8:00	0	0	0	0	447	19	201	0	113	12	147	0	939
8:15	0	0	0	0	379	13	170	0	55	12	189	0	818
8:30	0	0	0	0	295	14	160	0	36	16	179	0	700
8:45	0	0	0	0	218	10	167	0	26	9	156	0	586

Total Volume:	0	0	0	0	2953	122	1417	0	406	77	1189	0	6164
Approach %	0%	0%	0%	0%	96%	4%	78%	0%	22%	6%	94%	0%	

Peak Hr Begin:	7:30												
PHV	0	0	0	0	1586	68	813	0	279	37	706	0	3489
PHF	0.000			0.887			0.848			0.924			0.925

Turning Movement Count Report PM

Location ID: 7
 North/South: I-5 NB Ramps
 East/West: Valencia Blvd

Date: 02/21/23
 City: Santa Clarita, CA

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	0	0	0	0	304	24	155	0	33	6	150	0	672
16:15	0	0	0	0	294	22	158	0	28	6	152	0	660
16:30	0	0	0	0	346	32	173	0	37	9	148	0	745
16:45	0	0	0	0	324	19	188	0	57	5	173	0	766
17:00	0	0	0	0	382	38	180	0	43	6	148	0	797
17:15	0	0	0	0	321	26	166	0	47	10	171	0	741
17:30	0	0	0	0	323	20	178	0	61	8	143	0	733
17:45	0	0	0	0	285	24	175	0	54	8	177	0	723

Total Volume:	0	0	0	0	2579	205	1373	0	360	58	1262	0	5837
Approach %	0%	0%	0%	0%	93%	7%	79%	0%	21%	4%	96%	0%	

Peak Hr Begin:	16:30												
PHV	0	0	0	0	1373	115	707	0	184	30	640	0	3049
PHF	0.000			0.886			0.909			0.925			0.956

Pedestrian/Bicycle Count Report

Location ID: 7
 North/South: I-5 NB Ramps
 East/West: Valencia Blvd

Date: 02/21/23
 City: Santa Clarita, CA

Leg:	North		East		South		West	
Class:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
7:00	0	0	0	0	0	0	0	0
7:15	0	0	0	0	0	0	0	0
7:30	0	0	0	0	0	0	0	0
7:45	0	0	0	0	0	0	0	0
8:00	0	0	0	0	0	0	0	0
8:15	0	0	0	0	0	0	0	0
8:30	0	0	0	0	0	0	0	0
8:45	0	0	0	0	0	0	0	0

Leg:	North		East		South		West	
Class:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
16:00	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0

Turning Movement Count Report AM

Location ID: 5
 North/South: McBean Pkwy
 East/West: Valencia Blvd

Date: 02/21/23
 City: Santa Clarita, CA

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	140	63	13	3	319	47	30	88	28	7	99	53	890
7:15	180	102	19	8	245	39	51	101	24	22	105	69	965
7:30	152	106	23	7	344	84	70	172	38	25	161	98	1280
7:45	205	158	31	13	356	105	96	222	47	44	269	99	1645
8:00	196	142	29	17	288	76	99	199	69	27	222	89	1453
8:15	172	146	34	17	289	78	74	148	45	24	199	74	1300
8:30	151	136	35	19	240	86	57	172	37	36	167	87	1223
8:45	132	139	42	15	226	78	79	172	51	31	180	83	1228

Total Volume:	1328	992	226	99	2307	593	556	1274	339	216	1402	652	9984
Approach %	52%	39%	9%	3%	77%	20%	26%	59%	16%	10%	62%	29%	

Peak Hr Begin:	7:30												
PHV	725	552	117	54	1277	343	339	741	199	120	851	360	5678
PHF	0.885			0.883			0.871			0.808			0.863

Turning Movement Count Report PM

Location ID: 5
 North/South: McBean Pkwy
 East/West: Valencia Blvd

Date: 02/21/23
 City: Santa Clarita, CA

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	124	189	38	30	171	90	88	180	34	24	281	106	1355
16:15	138	220	47	39	167	94	100	244	33	46	271	107	1506
16:30	125	212	65	58	198	92	113	221	47	32	243	99	1505
16:45	134	222	56	39	202	89	117	214	42	44	309	95	1563
17:00	120	204	60	57	217	80	123	242	40	46	322	133	1644
17:15	110	198	54	55	197	101	106	188	23	29	308	121	1490
17:30	124	192	34	46	184	84	107	232	40	47	255	104	1449
17:45	127	191	46	40	200	75	105	222	36	29	250	135	1456

Total Volume:	1002	1628	400	364	1536	705	859	1743	295	297	2239	900	11968
Approach %	33%	54%	13%	14%	59%	27%	30%	60%	10%	9%	65%	26%	

Peak Hr Begin:	16:15												
PHV	517	858	228	193	784	355	453	921	162	168	1145	434	6218
PHF	0.973			0.941			0.948			0.872			0.946

Pedestrian/Bicycle Count Report

Location ID: 5
 North/South: McBean Pkwy
 East/West: Valencia Blvd

Date: 02/21/23
 City: Santa Clarita, CA

Leg:	North		East		South		West	
Class:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
7:00	1	0	3	0	0	0	0	0
7:15	0	0	0	0	0	0	1	1
7:30	1	0	0	0	0	0	2	0
7:45	3	0	2	0	1	0	1	0
8:00	1	0	0	0	0	0	1	0
8:15	0	0	2	1	2	0	2	0
8:30	1	1	2	0	1	0	1	0
8:45	3	0	1	1	2	0	1	0

Leg:	North		East		South		West	
Class:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
16:00	1	0	2	1	1	0	2	0
16:15	1	0	3	0	0	0	0	0
16:30	3	0	3	1	1	0	1	0
16:45	2	0	1	1	1	0	6	0
17:00	1	0	1	1	0	0	0	0
17:15	0	0	0	0	0	0	2	0
17:30	0	0	4	0	2	0	0	0
17:45	1	0	2	0	1	0	0	0

Turning Movement Count Report AM

Location ID: 8
 North/South: McBean Pkwy
 East/West: Magic Mountain Pkwy

Date: 02/21/23
 City: Santa Clarita, CA

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	100	196	12	17	62	8	3	131	10	8	36	54	637
7:15	134	275	30	12	60	6	12	155	12	10	58	72	836
7:30	120	331	32	35	87	17	10	245	8	11	65	100	1061
7:45	162	368	33	42	106	9	19	298	20	14	90	123	1284
8:00	177	353	50	28	86	15	10	238	14	10	73	99	1153
8:15	181	334	58	35	108	19	13	189	18	15	103	91	1164
8:30	152	270	54	35	77	24	23	222	15	11	89	78	1050
8:45	104	305	40	34	66	26	22	214	21	22	102	81	1037

Total Volume:	1130	2432	309	238	652	124	112	1692	118	101	616	698	8222
Approach %	29%	63%	8%	23%	64%	12%	6%	88%	6%	7%	44%	49%	

Peak Hr Begin:	7:30												
PHV	640	1386	173	140	387	60	52	970	60	50	331	413	4662
PHF	0.948			0.906			0.803			0.874			0.908

Turning Movement Count Report PM

Location ID: 8
 North/South: McBean Pkwy
 East/West: Magic Mountain Pkwy

Date: 02/21/23
 City: Santa Clarita, CA

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	73	314	76	97	108	50	41	292	30	28	98	183	1390
16:15	70	335	79	78	120	50	31	271	30	28	121	176	1389
16:30	67	308	58	96	105	55	26	307	35	43	144	239	1483
16:45	73	330	72	79	102	50	28	314	29	30	173	191	1471
17:00	84	354	65	86	123	57	47	364	37	29	130	202	1578
17:15	52	273	75	89	106	61	42	329	35	29	131	227	1449
17:30	58	303	69	84	125	52	30	288	30	29	95	205	1368
17:45	68	292	62	67	95	40	41	331	32	26	92	217	1363

Total Volume:	545	2509	556	676	884	415	286	2496	258	242	984	1640	11491
Approach %	15%	70%	15%	34%	45%	21%	9%	82%	8%	8%	34%	57%	

Peak Hr Begin:	16:30												
PHV	276	1265	270	350	436	223	143	1314	136	131	578	859	5981
PHF	0.900			0.948			0.889			0.920			0.948

Pedestrian/Bicycle Count Report

Location ID: 8
 North/South: McBean Pkwy
 East/West: Magic Mountain Pkwy

Date: 02/21/23
 City: Santa Clarita, CA

Leg:	North		East		South		West	
Class:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
7:00	1	0	0	0	0	0	0	0
7:15	2	0	3	0	0	0	0	1
7:30	0	0	1	1	1	0	1	0
7:45	1	0	1	0	1	0	2	0
8:00	0	0	3	0	1	0	3	1
8:15	0	0	2	0	1	0	3	1
8:30	0	0	1	1	0	0	2	0
8:45	2	0	0	0	2	0	2	0

Leg:	North		East		South		West	
Class:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
16:00	3	0	5	1	3	0	6	0
16:15	2	0	7	1	1	0	1	0
16:30	7	0	7	0	2	0	5	0
16:45	2	0	2	1	3	0	1	0
17:00	2	0	4	1	0	0	3	2
17:15	2	0	5	0	0	0	4	0
17:30	1	0	4	0	0	0	2	0
17:45	2	0	3	0	1	0	4	1

26 SCTHU - TMC

Thu Jan 24, 2019

Full Length (6 AM-10 PM)

All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 615398, Location: 34.416, -118.549764



DATA SOLUTIONS

Provided by: IDAX Data Solutions
1305 N 30th St, Renton, WA, 98056, US

Leg Direction	Valencia Blvd Southbound							Magic Mountain Pkwy Westbound							Valencia Blvd Northbound							Magic Mountain Pkwy Eastbound							Int
	R	T	L	U	App	Ped*		R	T	L	U	App	Ped*		R	T	L	U	App	Ped*		R	T	L	U	App	Ped*		
2019-01-24 6:00AM	280	937	4	0	1221	0		5	175	66	0	246	0		28	268	4	1	301	1		8	74	69	0	151	1		1919
7:00AM	510	1406	15	0	1931	7		34	271	112	3	420	3		74	617	18	7	716	8		16	105	122	0	243	6		3310
8:00AM	462	1289	25	1	1777	3		36	313	176	0	525	2		91	599	20	12	722	10		48	171	177	0	396	2		3420
9:00AM	339	966	44	0	1349	2		40	280	113	0	433	7		94	635	45	21	795	9		41	172	169	0	382	1		2959
10:00AM	315	1012	38	5	1370	9		84	273	144	2	503	19		107	735	46	27	915	8		37	215	251	1	504	5		3292
11:00AM	396	975	38	1	1410	6		69	323	184	8	584	4		150	796	51	31	1028	7		41	254	352	0	647	14		3669
12:00PM	450	919	53	0	1422	15		59	365	194	8	626	14		161	1027	64	25	1277	12		61	311	377	0	749	7		4074
1:00PM	369	1052	53	2	1476	6		74	325	208	5	612	4		157	975	65	26	1223	18		62	326	392	0	780	5		4091
2:00PM	360	1120	64	2	1546	6		68	333	244	7	652	5		164	1127	82	26	1399	6		39	361	391	0	791	5		4388
3:00PM	424	1093	62	0	1579	3		75	317	222	3	617	4		191	1429	67	27	1714	5		32	342	456	0	830	5		4740
4:00PM	345	949	74	0	1368	7		86	315	185	10	596	8		131	1386	57	28	1602	6		34	458	545	0	1037	6		4603
5:00PM	398	1064	85	1	1548	8		85	385	195	16	681	6		229	1461	48	6	1744	4		28	557	613	0	1198	7		5171
6:00PM	356	908	63	3	1330	2		41	264	182	28	515	2		172	1306	26	15	1519	0		27	511	489	1	1028	4		4392
7:00PM	258	581	40	0	879	1		27	203	110	13	353	7		96	971	31	15	1113	4		13	248	369	0	630	0		2975
8:00PM	215	489	24	1	729	3		17	122	81	8	228	7		87	635	21	7	750	7		9	194	267	0	470	2		2177
9:00PM	152	339	17	1	509	1		7	100	65	6	178	1		60	424	9	2	495	4		6	202	256	0	464	0		1646
Total	5629	15099	699	17	21444	79		807	4364	2481	117	7769	93		1992	14391	654	276	17313	109		502	4501	5295	2	10300	70		56826
% Approach	26.2%	70.4%	3.3%	0.1%	-	-		10.4%	56.2%	31.9%	1.5%	-	-		11.5%	83.1%	3.8%	1.6%	-	-		4.9%	43.7%	51.4%	0%	-	-		-
% Total	9.9%	26.6%	1.2%	0%	37.7%	-		1.4%	7.7%	4.4%	0.2%	13.7%	-		3.5%	25.3%	1.2%	0.5%	30.5%	-		0.9%	7.9%	9.3%	0%	18.1%	-		-
Lights and Motorcycles	5513	14911	681	17	21122	-		796	4245	2421	117	7579	-		1928	14201	641	276	17046	-		490	4361	5197	2	10050	-		55797
% Lights and Motorcycles	97.9%	98.8%	97.4%	100%	98.5%	-		98.6%	97.3%	97.6%	100%	97.6%	-		96.8%	98.7%	98.0%	100%	98.5%	-		97.6%	96.9%	98.1%	100%	97.6%	-		98.2%
Heavy	115	185	18	0	318	-		11	119	59	0	189	-		63	189	13	0	265	-		12	140	98	0	250	-		1022
% Heavy	2.0%	1.2%	2.6%	0%	1.5%	-		1.4%	2.7%	2.4%	0%	2.4%	-		3.2%	1.3%	2.0%	0%	1.5%	-		2.4%	3.1%	1.9%	0%	2.4%	-		1.8%
Bicycles on Road	1	3	0	0	4	-		0	0	1	0	1	-		1	1	0	0	2	-		0	0	0	0	0	-		7
% Bicycles on Road	0%	0%	0%	0%	0%	-		0%	0%	0%	0%	0%	-		0.1%	0%	0%	0%	0%	-		0%	0%	0%	0%	0%	-		0%
Pedestrians	-	-	-	-	-	76		-	-	-	-	93		-	-	-	-	-	105		-	-	-	-	-	66		-	
% Pedestrians	-	-	-	-	-	96.2%		-	-	-	-	100%		-	-	-	-	-	96.3%		-	-	-	-	-	94.3%		-	
Bicycles on Crosswalk	-	-	-	-	-	3		-	-	-	-	0		-	-	-	-	-	4		-	-	-	-	-	4		-	
% Bicycles on Crosswalk	-	-	-	-	-	3.8%		-	-	-	-	0%		-	-	-	-	-	3.7%		-	-	-	-	-	5.7%		-	

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

26 SCTHU - TMC

Thu Jan 24, 2019

Full Length (6 AM-10 PM)

All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 615398, Location: 34.416, -118.549764

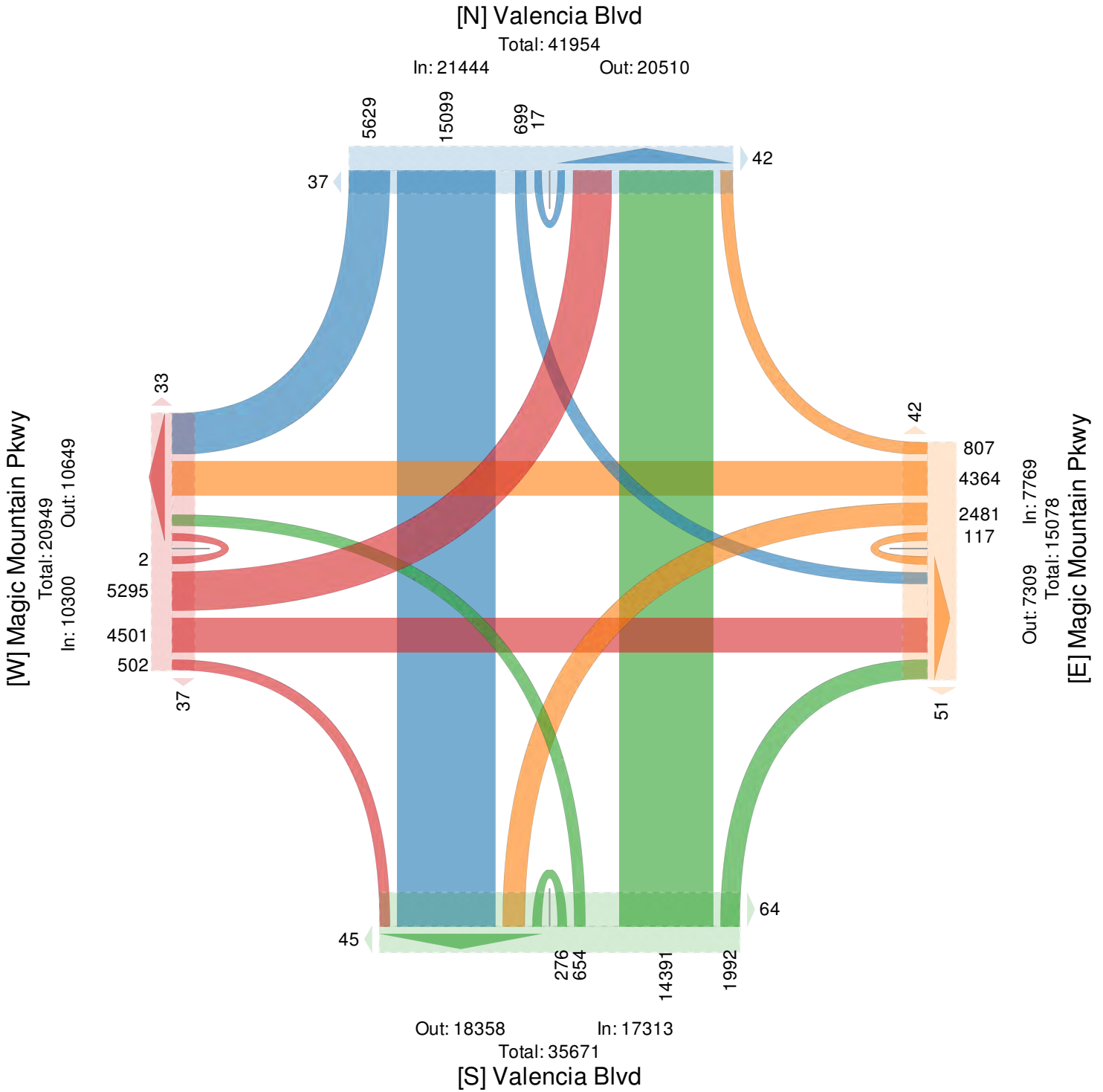


DATA SOLUTIONS

Provided by: IDAX Data Solutions

1305 N 30th St,

Renton, WA, 98056, US



26 SCTHU - TMC

Thu Jan 24, 2019

AM Peak (7:30 AM - 8:30 AM)

All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 615398, Location: 34.416, -118.549764



DATA SOLUTIONS

Provided by: IDAX Data Solutions

1305 N 30th St, Renton, WA, 98056, US

Leg Direction	Valencia Blvd Southbound						Magic Mountain Pkwy Westbound						Valencia Blvd Northbound						Magic Mountain Pkwy Eastbound						Int
	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	
2019-01-24 7:30AM	139	369	4	0	512	3	8	58	32	1	99	2	17	188	4	3	212	1	7	26	40	0	73	2	896
7:45AM	147	400	6	0	553	1	17	98	34	2	151	1	28	202	11	4	245	6	4	39	33	0	76	0	1025
8:00AM	146	368	4	0	518	1	10	90	49	0	149	0	28	170	5	5	208	2	14	51	42	0	107	0	982
8:15AM	125	338	8	0	471	0	9	86	44	0	139	1	19	139	7	2	167	1	15	30	43	0	88	1	865
Total	557	1475	22	0	2054	5	44	332	159	3	538	4	92	699	27	14	832	10	40	146	158	0	344	3	3768
% Approach	27.1%	71.8%	1.1%	0%	-	-	8.2%	61.7%	29.6%	0.6%	-	-	11.1%	84.0%	3.2%	1.7%	-	-	11.6%	42.4%	45.9%	0%	-	-	-
% Total	14.8%	39.1%	0.6%	0%	54.5%	-	1.2%	8.8%	4.2%	0.1%	14.3%	-	2.4%	18.6%	0.7%	0.4%	22.1%	-	1.1%	3.9%	4.2%	0%	9.1%	-	-
PHF	0.947	0.922	0.688	-	0.929	-	0.647	0.847	0.806	0.375	0.895	-	0.821	0.865	0.614	0.700	0.849	-	0.667	0.716	0.919	-	0.804	-	0.920
Lights and Motorcycles	548	1461	21	0	2030	-	43	326	152	3	524	-	88	684	22	14	808	-	37	137	147	0	321	-	3683
% Lights and Motorcycles	98.4%	99.1%	95.5%	0%	98.8%	-	97.7%	98.2%	95.6%	100%	97.4%	-	95.7%	97.9%	81.5%	100%	97.1%	-	92.5%	93.8%	93.0%	0%	93.3%	-	97.7%
Heavy	9	14	1	0	24	-	1	6	6	0	13	-	4	15	5	0	24	-	3	9	11	0	23	-	84
% Heavy	1.6%	0.9%	4.5%	0%	1.2%	-	2.3%	1.8%	3.8%	0%	2.4%	-	4.3%	2.1%	18.5%	0%	2.9%	-	7.5%	6.2%	7.0%	0%	6.7%	-	2.2%
Bicycles on Road	0	0	0	0	0	-	0	0	1	0	1	-	0	0	0	0	0	-	0	0	0	0	0	-	1
% Bicycles on Road	0%	0%	0%	0%	0%	-	0%	0%	0.6%	0%	0.2%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%
Pedestrians	-	-	-	-	-	5	-	-	-	-	4	-	-	-	-	-	10	-	-	-	-	-	-	1	-
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	-	33.3%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	-	2	-
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	-	66.7%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

26 SCTHU - TMC

Thu Jan 24, 2019

AM Peak (7:30 AM - 8:30 AM)

All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 615398, Location: 34.416, -118.549764

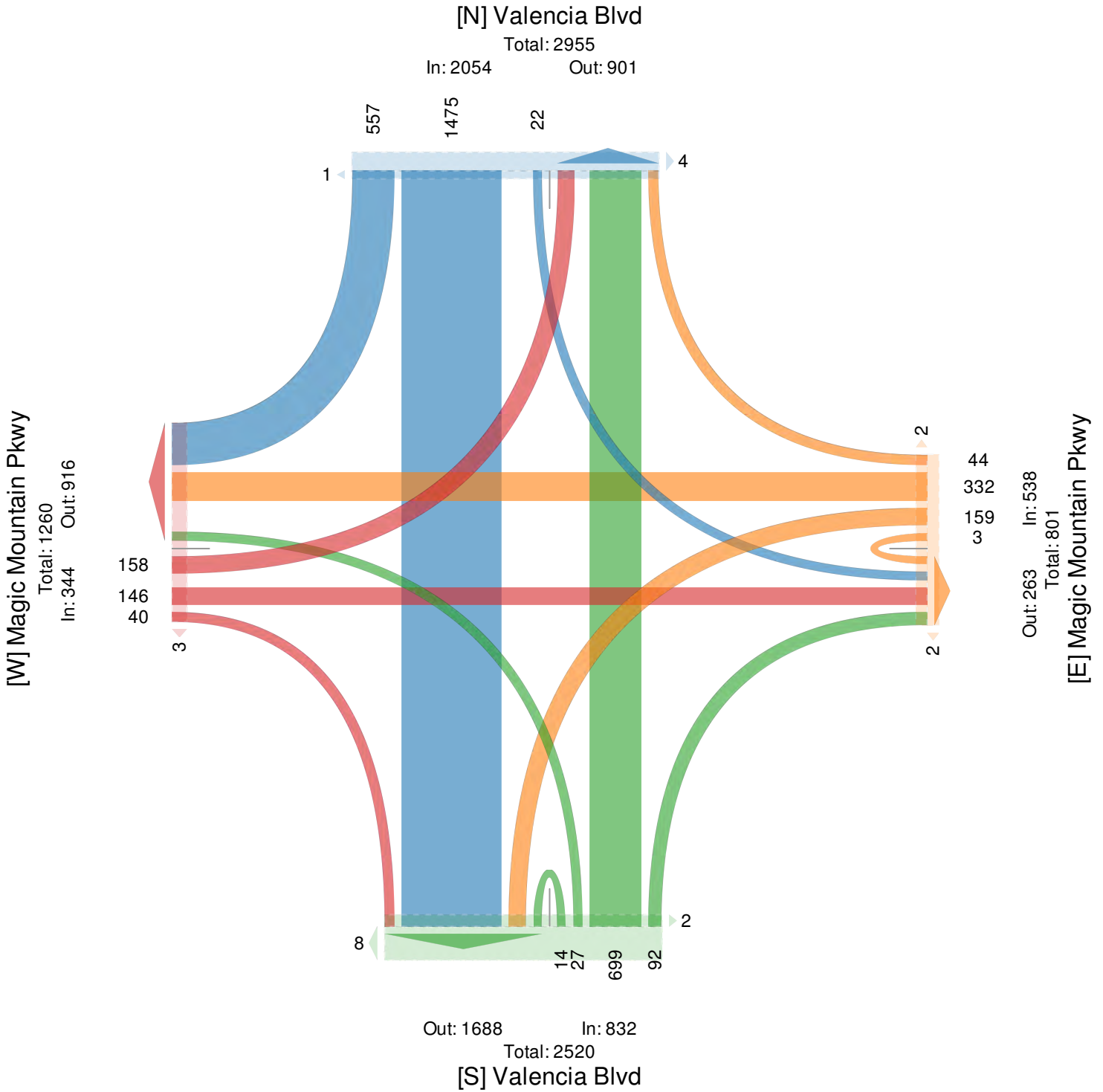


DATA SOLUTIONS

Provided by: IDAX Data Solutions

1305 N 30th St,

Renton, WA, 98056, US



26 SCTHU - TMC

Thu Jan 24, 2019

Midday Peak (12 PM - 1 PM)

All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 615398, Location: 34.416, -118.549764



DATA SOLUTIONS

Provided by: IDAX Data Solutions

1305 N 30th St, Renton, WA, 98056, US

Leg Direction	Valencia Blvd Southbound						Magic Mountain Pkwy Westbound						Valencia Blvd Northbound						Magic Mountain Pkwy Eastbound						Int
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	
2019-01-24 12:00PM	97	250	13	0	360	6	12	99	35	3	149	4	48	280	16	5	349	3	12	91	80	0	183	2	1041
12:15PM	98	213	8	0	319	2	11	104	55	1	171	2	36	246	18	7	307	4	18	80	106	0	204	0	1001
12:30PM	125	201	18	0	344	0	19	76	39	3	137	6	39	268	14	4	325	4	18	76	83	0	177	1	983
12:45PM	130	255	14	0	399	7	17	86	65	1	169	2	38	233	16	9	296	1	13	64	108	0	185	4	1049
Total	450	919	53	0	1422	15	59	365	194	8	626	14	161	1027	64	25	1277	12	61	311	377	0	749	7	4074
% Approach	31.6%	64.6%	3.7%	0%	-	-	9.4%	58.3%	31.0%	1.3%	-	-	12.6%	80.4%	5.0%	2.0%	-	-	8.1%	41.5%	50.3%	0%	-	-	-
% Total	11.0%	22.6%	1.3%	0%	34.9%	-	1.4%	9.0%	4.8%	0.2%	15.4%	-	4.0%	25.2%	1.6%	0.6%	31.3%	-	1.5%	7.6%	9.3%	0%	18.4%	-	-
PHF	0.865	0.901	0.736	-	0.891	-	0.776	0.877	0.746	0.667	0.915	-	0.839	0.917	0.889	0.694	0.915	-	0.847	0.854	0.873	-	0.918	-	0.971
Lights and Motorcycles	444	903	52	0	1399	-	58	354	191	8	611	-	156	1020	64	25	1265	-	59	299	371	0	729	-	4004
% Lights and Motorcycles	98.7%	98.3%	98.1%	0%	98.4%	-	98.3%	97.0%	98.5%	100%	97.6%	-	96.9%	99.3%	100%	100%	99.1%	-	96.7%	96.1%	98.4%	0%	97.3%	-	98.3%
Heavy	6	16	1	0	23	-	1	11	3	0	15	-	5	7	0	0	12	-	2	12	6	0	20	-	70
% Heavy	1.3%	1.7%	1.9%	0%	1.6%	-	1.7%	3.0%	1.5%	0%	2.4%	-	3.1%	0.7%	0%	0%	0.9%	-	3.3%	3.9%	1.6%	0%	2.7%	-	1.7%
Bicycles on Road	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0
% Bicycles on Road	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%
Pedestrians	-	-	-	-	-	14	-	-	-	-	-	14	-	-	-	-	-	12	-	-	-	-	-	7	
% Pedestrians	-	-	-	-	-	-93.3%	-	-	-	-	-	-100%	-	-	-	-	-	-100%	-	-	-	-	-	-100%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	6.7%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

26 SCTHU - TMC

Thu Jan 24, 2019

Midday Peak (12 PM - 1 PM)

All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 615398, Location: 34.416, -118.549764

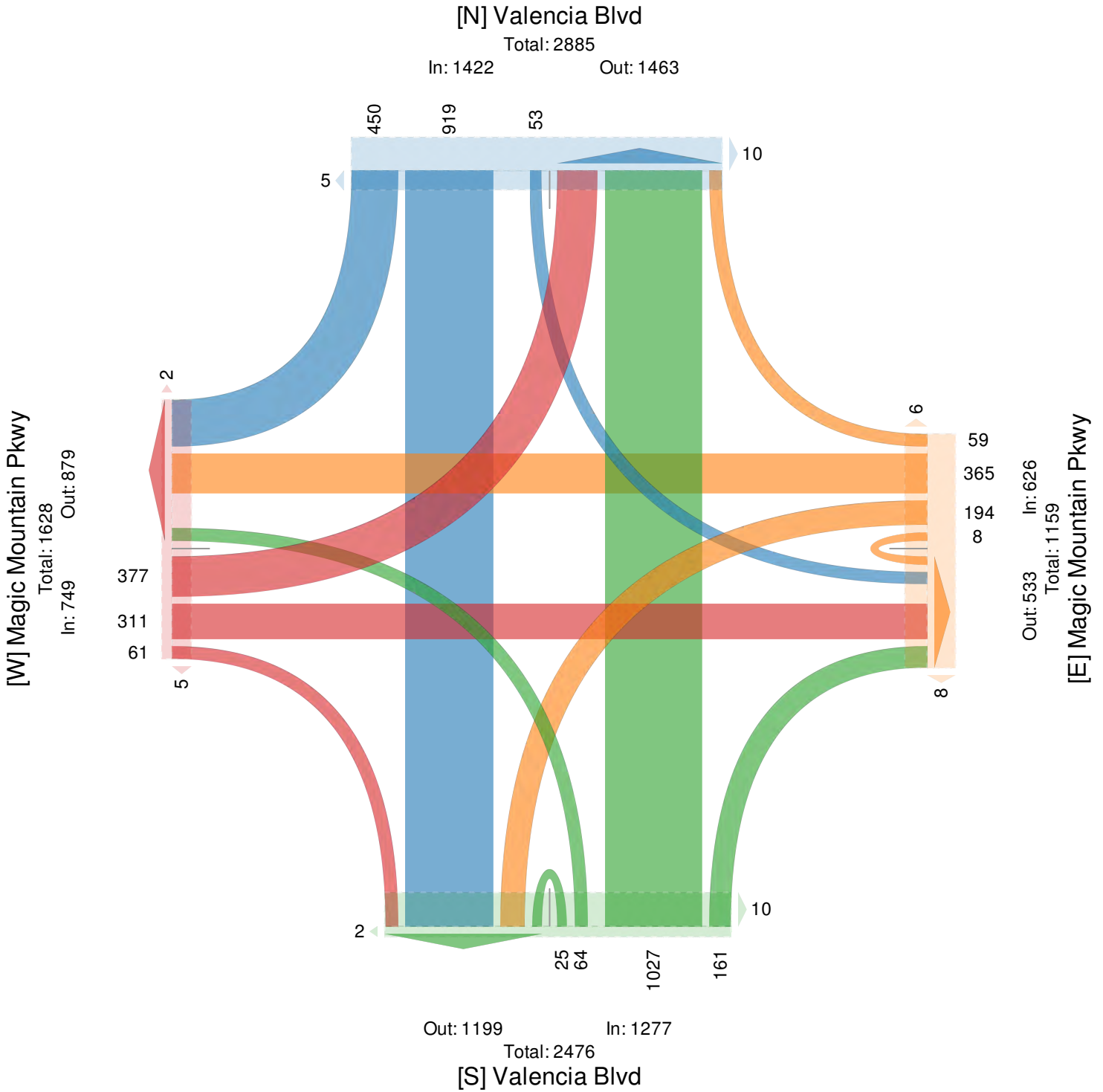


DATA SOLUTIONS

Provided by: IDAX Data Solutions

1305 N 30th St,

Renton, WA, 98056, US



26 SCTHU - TMC

Thu Jan 24, 2019

PM Peak (5 PM - 6 PM) - Overall Peak Hour

All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 615398, Location: 34.416, -118.549764



DATA SOLUTIONS

Provided by: IDAX Data Solutions

1305 N 30th St, Renton, WA, 98056, US

Leg Direction	Valencia Blvd Southbound						Magic Mountain Pkwy Westbound						Valencia Blvd Northbound						Magic Mountain Pkwy Eastbound						Int
	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	
Time																									
2019-01-24 5:00PM	83	281	22	0	386	2	19	90	56	6	171	1	50	343	8	1	402	1	8	132	132	0	272	4	1231
5:15PM	112	277	29	0	418	1	26	96	45	4	171	2	64	348	21	1	434	1	3	163	149	0	315	2	1338
5:30PM	92	265	23	1	381	0	22	97	53	2	174	3	53	407	11	2	473	2	7	129	169	0	305	0	1333
5:45PM	111	241	11	0	363	5	18	102	41	4	165	0	62	363	8	2	435	0	10	133	163	0	306	1	1269
Total	398	1064	85	1	1548	8	85	385	195	16	681	6	229	1461	48	6	1744	4	28	557	613	0	1198	7	5171
% Approach	25.7%	68.7%	5.5%	0.1%	-	-	12.5%	56.5%	28.6%	2.3%	-	-	13.1%	83.8%	2.8%	0.3%	-	-	2.3%	46.5%	51.2%	0%	-	-	-
% Total	7.7%	20.6%	1.6%	0%	29.9%	-	1.6%	7.4%	3.8%	0.3%	13.2%	-	4.4%	28.3%	0.9%	0.1%	33.7%	-	0.5%	10.8%	11.9%	0%	23.2%	-	-
PHF	0.888	0.947	0.733	0.250	0.926	-	0.817	0.944	0.871	0.667	0.978	-	0.895	0.897	0.571	0.750	0.921	-	0.700	0.854	0.907	-	0.951	-	0.966
Lights and Motorcycles	391	1060	84	1	1536	-	85	382	191	16	674	-	224	1447	48	6	1725	-	28	541	606	0	1175	-	5110
% Lights and Motorcycles	98.2%	99.6%	98.8%	100%	99.2%	-	100%	99.2%	97.9%	100%	99.0%	-	97.8%	99.0%	100%	100%	98.9%	-	100%	97.1%	98.9%	0%	98.1%	-	98.8%
Heavy	7	4	1	0	12	-	0	3	4	0	7	-	5	13	0	0	18	-	0	16	7	0	23	-	60
% Heavy	1.8%	0.4%	1.2%	0%	0.8%	-	0%	0.8%	2.1%	0%	1.0%	-	2.2%	0.9%	0%	0%	1.0%	-	0%	2.9%	1.1%	0%	1.9%	-	1.2%
Bicycles on Road	0	0	0	0	0	-	0	0	0	0	0	-	0	1	0	0	1	-	0	0	0	0	0	-	1
% Bicycles on Road	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0.1%	0%	0%	0.1%	-	0%	0%	0%	0%	0%	-	0%
Pedestrians	-	-	-	-	-	8	-	-	-	-	-	6	-	-	-	-	-	4	-	-	-	-	-	7	-
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

26 SCTHU - TMC

Thu Jan 24, 2019

PM Peak (5 PM - 6 PM) - Overall Peak Hour

All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 615398, Location: 34.416, -118.549764

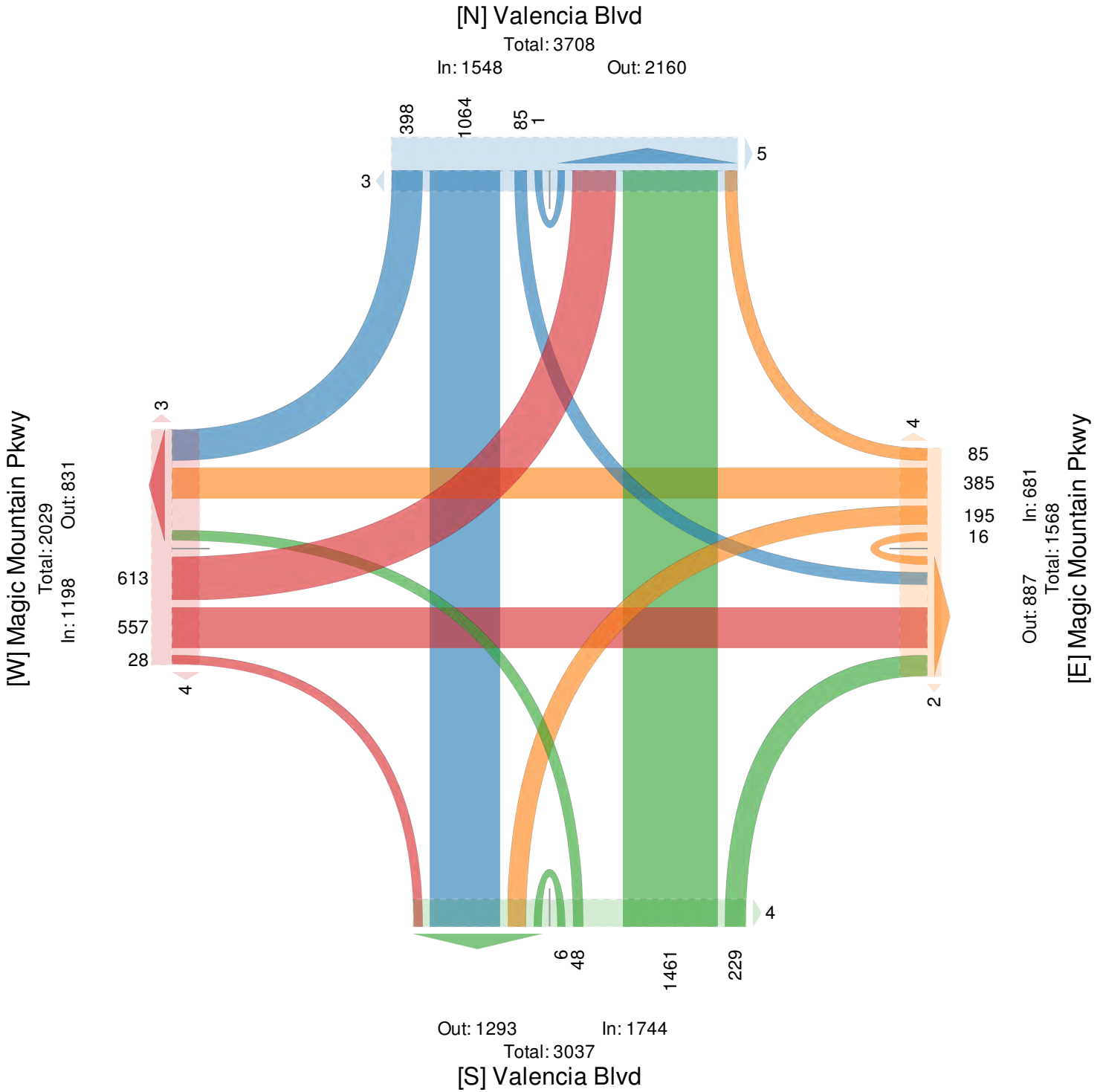


DATA SOLUTIONS

Provided by: IDAX Data Solutions

1305 N 30th St,

Renton, WA, 98056, US



Turning Movement Count Report AM

Location ID: 1
 North/South: Bouquet Canyon Rd
 East/West: Magic Mountain Pkwy

Date: 02/21/23
 City: Santa Clarita, CA

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	14	392	0	0	0	0	0	152	39	42	0	6	645
7:15	17	419	0	0	0	0	0	193	36	47	0	14	726
7:30	31	425	0	0	0	0	0	245	64	52	0	21	838
7:45	33	317	0	0	0	0	0	302	82	77	0	17	828
8:00	34	308	0	0	0	0	0	301	74	59	0	21	797
8:15	35	353	0	0	0	0	0	255	70	59	0	20	792
8:30	33	278	0	0	0	0	0	239	69	65	0	29	713
8:45	34	225	0	0	0	0	0	217	73	53	0	29	631

Total Volume:	231	2717	0	0	0	0	0	1904	507	454	0	157	5970
Approach %	8%	92%	0%	0%	0%	0%	0%	79%	21%	74%	0%	26%	

Peak Hr Begin:	7:30												
PHV	133	1403	0	0	0	0	0	1103	290	247	0	79	3255
PHF	0.842			0.000			0.907			0.867			0.971

Turning Movement Count Report PM

Location ID: 1
 North/South: Bouquet Canyon Rd
 East/West: Magic Mountain Pkwy

Date: 02/21/23
 City: Santa Clarita, CA

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	40	286	0	0	0	0	0	387	98	107	0	48	966
16:15	38	255	0	0	0	0	0	306	50	89	0	38	776
16:30	37	272	0	0	0	0	0	353	87	90	0	50	889
16:45	40	278	0	0	0	0	0	322	83	123	0	72	918
17:00	30	282	0	0	0	0	0	366	81	116	0	56	931
17:15	37	246	0	0	0	0	0	354	74	116	0	51	878
17:30	31	262	0	0	0	0	0	320	75	79	0	47	814
17:45	35	264	0	0	0	0	0	366	60	83	0	41	849

Total Volume:	288	2145	0	0	0	0	0	2774	608	803	0	403	7021
Approach %	12%	88%	0%	0%	0%	0%	0%	82%	18%	67%	0%	33%	

Peak Hr Begin:	16:30												
PHV	144	1078	0	0	0	0	0	1395	325	445	0	229	3616
PHF	0.961			0.000			0.962			0.864			0.971

Pedestrian/Bicycle Count Report

Location ID: 1
 North/South: Bouquet Canyon Rd
 East/West: Magic Mountain Pkwy

Date: 02/21/23
 City: Santa Clarita, CA

Leg:	North		East		South		West	
Class:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
7:00	0	0	0	0	0	0	0	0
7:15	0	0	0	0	0	0	0	0
7:30	0	0	0	0	0	0	1	1
7:45	0	0	0	0	0	0	0	0
8:00	0	0	0	0	0	0	2	1
8:15	0	0	0	0	0	0	0	0
8:30	0	0	0	0	0	0	1	1
8:45	0	0	0	0	0	0	1	1

Leg:	North		East		South		West	
Class:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
16:00	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	1
16:30	0	0	0	0	0	0	3	1
16:45	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	2	1
17:30	0	0	0	0	0	0	1	1
17:45	0	0	0	0	0	0	1	0

Turning Movement Count Report AM

Location ID: 2
 North/South: Bouquet Canyon Rd
 East/West: Valencia Blvd/Soledad Canyon Rd

Date: 2/16/2023
 City: Santa Clarita, CA

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	239	238	31	47	196	100	45	110	9	1	52	38	1106
7:15	251	343	42	73	221	170	51	128	4	2	77	53	1415
7:30	266	272	69	83	325	148	78	145	3	3	120	86	1598
7:45	285	274	79	62	361	106	92	210	7	4	129	98	1707
8:00	255	303	80	48	292	126	96	153	6	6	130	118	1613
8:15	226	298	70	63	276	89	95	149	6	9	139	79	1499
8:30	210	272	70	61	253	88	71	147	4	5	123	109	1413
8:45	228	196	50	58	230	93	67	123	11	7	138	115	1316

Total Volume:	1960	2196	491	495	2154	920	595	1165	50	37	908	696	11667
Approach %	42%	47%	11%	14%	60%	26%	33%	64%	3%	2%	55%	42%	

Peak Hr Begin:	7:30												
PHV	1032	1147	298	256	1254	469	361	657	22	22	518	381	6417
PHF	0.971			0.890			0.841			0.906			0.940

Turning Movement Count Report PM

Location ID: 2
 North/South: Bouquet Canyon Rd
 East/West: Valencia Blvd/Soledad Canyon Rd

Date: 2/16/2023
 City: Santa Clarita, CA

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	181	189	72	57	268	93	148	289	6	7	342	262	1914
16:15	179	235	69	57	269	92	133	234	11	6	318	291	1894
16:30	166	218	66	59	277	103	143	277	7	2	325	290	1933
16:45	204	181	91	66	188	93	151	303	7	8	314	285	1891
17:00	148	198	87	68	199	116	167	273	10	7	360	307	1940
17:15	154	211	83	56	195	88	175	351	9	6	353	264	1945
17:30	175	213	74	75	175	93	174	279	6	7	329	274	1874
17:45	172	228	77	88	193	71	133	265	11	9	386	336	1969

Total Volume:	1379	1673	619	526	1764	749	1224	2271	67	52	2727	2309	15360
Approach %	38%	46%	17%	17%	58%	25%	34%	64%	2%	1%	54%	45%	

Peak Hr Begin:	17:00												
PHV	649	850	321	287	762	368	649	1168	36	29	1428	1181	7728
PHF	0.954			0.925			0.866			0.902			0.981

Pedestrian/Bicycle Count Report

Location ID: 2
 North/South: Bouquet Canyon Rd
 East/West: Valencia Blvd/Soledad Canyon Rd

Date: 2/16/2023
 City: Santa Clarita, CA

Leg:	North		East		South		West	
Class:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
7:00	0	0	1	0	3	0	0	0
7:15	0	0	0	1	0	0	0	0
7:30	0	0	1	0	0	0	0	0
7:45	1	1	0	1	1	0	0	0
8:00	0	0	1	1	2	0	0	0
8:15	0	0	1	0	0	0	0	0
8:30	0	0	0	1	2	0	0	0
8:45	0	0	0	0	2	0	0	0

Leg:	North		East		South		West	
Class:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
16:00	2	0	1	1	1	0	0	0
16:15	7	1	1	0	1	0	0	1
16:30	0	1	0	0	1	0	0	0
16:45	0	0	0	1	1	1	0	0
17:00	2	0	3	0	1	0	0	0
17:15	0	0	3	0	1	0	0	0
17:30	1	0	1	0	3	0	0	0
17:45	0	0	0	1	0	1	0	0

Turning Movement Count Report AM

Location ID: 2
 North/South: Bouquet Canyon Rd
 East/West: Newhall Ranch Rd

Date: 02/21/23
 City: Santa Clarita, CA

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	93	488	40	46	229	120	18	98	63	27	103	39	1364
7:15	96	487	59	103	227	99	21	151	56	57	127	48	1531
7:30	126	468	81	160	359	107	31	200	90	55	136	51	1864
7:45	141	457	121	156	522	110	45	212	97	79	178	66	2184
8:00	134	444	125	81	464	124	50	211	86	65	188	73	2045
8:15	116	462	110	47	359	102	31	159	74	73	241	72	1846
8:30	79	346	79	57	333	98	38	165	98	74	209	92	1668
8:45	68	360	81	49	235	88	45	164	95	77	173	79	1514

Total Volume:	853	3512	696	699	2728	848	279	1360	659	507	1355	520	14016
Approach %	17%	69%	14%	16%	64%	20%	12%	59%	29%	21%	57%	22%	

Peak Hr Begin:	7:30												
PHV	517	1831	437	444	1704	443	157	782	347	272	743	262	7939
PHF	0.968			0.822			0.908			0.827			0.909

Turning Movement Count Report PM

Location ID: 2
 North/South: Bouquet Canyon Rd
 East/West: Newhall Ranch Rd

Date: 02/21/23
 City: Santa Clarita, CA

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	61	285	93	81	244	78	78	419	113	73	337	143	2005
16:15	59	302	84	103	243	86	77	419	115	77	339	162	2066
16:30	66	280	111	67	219	77	105	378	113	95	377	136	2024
16:45	67	286	100	89	259	87	73	370	90	111	408	229	2169
17:00	74	280	87	86	239	81	90	395	112	97	391	164	2096
17:15	65	259	86	97	258	87	92	448	111	103	386	174	2166
17:30	54	272	90	94	270	94	79	405	106	70	306	159	1999
17:45	76	332	109	78	197	79	79	457	111	104	322	178	2122

Total Volume:	522	2296	760	695	1929	669	673	3291	871	730	2866	1345	16647
Approach %	15%	64%	21%	21%	59%	20%	14%	68%	18%	15%	58%	27%	

Peak Hr Begin:	16:30												
PHV	272	1105	384	339	975	332	360	1591	426	406	1562	703	8455
PHF	0.963			0.931			0.913			0.893			0.975

Pedestrian/Bicycle Count Report

Location ID: 2
 North/South: Bouquet Canyon Rd
 East/West: Newhall Ranch Rd

Date: 02/21/23
 City: Santa Clarita, CA

Leg:	North		East		South		West	
Class:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
7:00	0	0	0	0	0	0	0	0
7:15	0	0	0	0	0	0	1	0
7:30	0	0	0	0	3	0	0	0
7:45	1	0	0	0	0	0	1	1
8:00	3	0	0	0	0	0	2	2
8:15	0	0	0	0	1	0	2	0
8:30	2	0	0	0	0	0	1	0
8:45	3	0	0	0	1	0	4	1

Leg:	North		East		South		West	
Class:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
16:00	0	0	1	0	2	0	3	0
16:15	4	0	0	0	0	0	3	0
16:30	4	0	0	0	0	0	2	2
16:45	0	0	0	0	0	0	0	0
17:00	2	1	0	0	3	0	1	0
17:15	3	0	0	0	0	0	3	2
17:30	1	0	0	0	0	0	2	0
17:45	1	0	1	0	0	0	1	1

Turning Movement Count Report AM

Location ID: 6
 North/South: Commuter Way
 East/West: Soledad Canyon Rd

Date: 2/16/2023
 City: Santa Clarita, CA

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	0	0	0	0	361	0	0	0	0	10	103	0	474
7:15	0	0	0	0	469	0	0	0	6	11	147	0	633
7:30	0	0	0	0	637	1	0	0	4	7	236	0	885
7:45	0	0	0	0	532	1	0	0	5	9	286	1	834
8:00	0	0	0	0	435	1	0	0	4	10	286	0	736
8:15	0	0	0	0	422	0	0	0	5	10	271	0	708
8:30	0	0	0	0	405	0	0	0	6	7	237	0	655
8:45	0	0	0	0	367	1	0	0	3	4	258	0	633

Total Volume:	0	0	0	0	3628	4	0	0	33	68	1824	1	5558
Approach %	0%	0%	0%	0%	100%	0%	0%	0%	100%	4%	96%	0%	

Peak Hr Begin:	7:30												
PHV	0	0	0	0	2026	3	0	0	18	36	1079	1	3163
PHF	0.000			0.795			0.900			0.943			0.894

Turning Movement Count Report PM

Location ID: 6
 North/South: Commuter Way
 East/West: Soledad Canyon Rd

Date: 2/16/2023
 City: Santa Clarita, CA

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	0	0	0	0	342	0	1	0	4	6	487	0	840
16:15	0	0	0	0	306	0	0	0	3	3	522	0	834
16:30	0	0	0	0	361	4	0	0	8	5	509	0	887
16:45	0	0	0	0	317	1	1	0	10	8	536	0	873
17:00	0	0	0	0	366	1	0	0	4	1	548	0	920
17:15	0	0	0	0	339	3	0	0	6	5	587	0	940
17:30	0	0	0	0	289	1	0	0	3	8	599	0	900
17:45	0	0	0	0	321	3	1	0	30	5	508	0	868

Total Volume:	0	0	0	0	2641	13	3	0	68	41	4296	0	7062
Approach %	0%	0%	0%	0%	100%	0%	4%	0%	96%	1%	99%	0%	

Peak Hr Begin:	16:45												
PHV	0	0	0	0	1311	6	1	0	23	22	2270	0	3633
PHF	0.000			0.897			0.545			0.944			0.966

Pedestrian/Bicycle Count Report

Location ID: 6
 North/South: Commuter Way
 East/West: Soledad Canyon Rd

Date: 2/16/2023
 City: Santa Clarita, CA

Leg:	North		East		South		West	
Class:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
7:00	0	0	0	0	0	0	0	0
7:15	0	0	1	0	0	0	0	0
7:30	0	0	0	0	0	0	0	0
7:45	0	0	0	0	0	0	0	0
8:00	0	0	1	1	0	0	0	0
8:15	0	0	0	3	0	0	0	0
8:30	0	0	0	0	0	0	0	0
8:45	0	0	0	0	0	0	0	0

Leg:	North		East		South		West	
Class:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
16:00	0	0	0	0	0	0	0	0
16:15	0	0	1	3	0	0	0	0
16:30	0	0	0	2	0	0	0	0
16:45	0	0	1	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	1	0	0	0	0	0

Turning Movement Count Report AM

Location ID: 7
 North/South: Valley Center Drive
 East/West: Soledad Canyon Rd

Date: 2/16/2023
 City: Santa Clarita, CA

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	24	0	57	162	310	0	0	0	0	0	69	3	625
7:15	24	0	60	207	377	0	0	0	0	0	88	6	762
7:30	43	0	96	211	508	0	0	0	0	0	162	4	1024
7:45	31	0	103	203	361	0	0	0	0	0	194	14	906
8:00	37	0	85	201	389	0	0	0	0	0	171	16	899
8:15	33	0	113	163	305	0	0	0	0	0	145	18	777
8:30	30	0	96	130	312	0	0	0	0	0	151	11	730
8:45	31	0	92	135	294	0	0	0	0	0	154	10	716

Total Volume:	253	0	702	1412	2856	0	0	0	0	0	1134	82	6439
Approach %	26%	0%	74%	33%	67%	0%	0%	0%	0%	0%	93%	7%	

Peak Hr Begin:	7:30												
PHV	144	0	397	778	1563	0	0	0	0	0	672	52	3606
PHF	0.926			0.814			0.000			0.870			0.880

Turning Movement Count Report PM

Location ID: 7
 North/South: Valley Center Drive
 East/West: Soledad Canyon Rd

Date: 2/16/2023
 City: Santa Clarita, CA

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	41	0	165	120	237	0	0	0	0	0	357	24	944
16:15	38	0	167	137	236	0	0	0	0	0	368	24	970
16:30	28	0	174	142	248	0	0	0	0	0	353	12	957
16:45	35	0	188	156	236	0	0	0	0	0	439	23	1077
17:00	35	0	159	131	253	0	0	0	0	0	340	11	929
17:15	33	0	170	107	211	0	0	0	0	0	480	23	1024
17:30	31	0	147	128	234	1	0	0	0	0	429	24	994
17:45	36	0	160	103	226	0	0	0	0	0	410	24	959

Total Volume:	277	0	1330	1024	1881	1	0	0	0	0	3176	165	7854
Approach %	17%	0%	83%	35%	65%	0%	0%	0%	0%	0%	95%	5%	

Peak Hr Begin:	16:45												
PHV	134	0	664	522	934	1	0	0	0	0	1688	81	4024
PHF	0.895			0.929			0.000			0.879			0.934

Pedestrian/Bicycle Count Report

Location ID: 7
 North/South: Valley Center Drive
 East/West: Soledad Canyon Rd

Date: 2/16/2023
 City: Santa Clarita, CA

Leg:	North		East		South		West	
Class:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
7:00	0	1	0	0	0	0	0	0
7:15	0	0	1	0	0	0	0	0
7:30	0	0	0	0	0	0	0	0
7:45	0	0	0	0	0	0	0	0
8:00	0	1	0	0	0	0	0	0
8:15	0	0	0	0	0	0	0	0
8:30	0	0	0	0	0	0	0	0
8:45	1	0	0	0	0	0	0	0

Leg:	North		East		South		West	
Class:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
16:00	0	1	0	0	0	1	0	0
16:15	1	0	0	0	1	0	0	0
16:30	1	0	0	0	1	0	0	0
16:45	1	0	0	0	1	0	0	0
17:00	1	0	0	0	1	0	0	0
17:15	1	0	0	0	1	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	1	1	0	0	1	1	0	0

Turning Movement Count Report AM

Location ID: 3
 North/South: Golden Valley Rd
 East/West: Valley Center Dr

Date: 02/21/23
 City: Santa Clarita, CA

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	65	195	0	0	0	0	0	115	20	19	0	118	532
7:15	76	214	0	0	0	0	0	130	21	20	0	125	586
7:30	98	212	0	0	0	0	0	199	35	12	0	216	772
7:45	114	240	0	0	0	0	0	216	30	35	0	185	820
8:00	110	264	0	0	0	0	0	186	23	31	0	205	819
8:15	142	281	0	0	0	0	0	199	16	23	0	165	826
8:30	108	233	0	0	0	0	0	222	31	26	0	135	755
8:45	97	230	0	0	0	0	0	182	23	27	0	138	697

Total Volume:	810	1869	0	0	0	0	0	1449	199	193	0	1287	5807
Approach %	30%	70%	0%	0%	0%	0%	0%	88%	12%	13%	0%	87%	

Peak Hr Begin:	7:30												
PHV	464	997	0	0	0	0	0	800	104	101	0	771	3237
PHF	0.863			0.000			0.919			0.924			0.980

Turning Movement Count Report PM

Location ID: 3
 North/South: Golden Valley Rd
 East/West: Valley Center Dr

Date: 02/21/23
 City: Santa Clarita, CA

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	177	247	0	0	0	0	0	315	25	33	0	120	917
16:15	194	282	0	0	0	0	0	299	38	43	0	127	983
16:30	186	256	0	0	0	0	0	310	28	34	0	146	960
16:45	218	277	0	0	0	0	0	278	25	24	0	132	954
17:00	139	255	0	0	0	0	0	262	20	31	0	123	830
17:15	203	291	0	0	0	0	0	320	30	20	0	154	1018
17:30	171	262	0	0	0	0	0	292	23	21	0	151	920
17:45	157	260	0	0	0	0	0	321	21	19	0	125	903

Total Volume:	1445	2130	0	0	0	0	0	2397	210	225	0	1078	7485
Approach %	40%	60%	0%	0%	0%	0%	0%	92%	8%	17%	0%	83%	

Peak Hr Begin:	16:00												
PHV	775	1062	0	0	0	0	0	1202	116	134	0	525	3814
PHF	0.928			0.000			0.969			0.915			0.970

Pedestrian/Bicycle Count Report

Location ID: 3
 North/South: Golden Valley Rd
 East/West: Valley Center Dr

Date: 02/21/23
 City: Santa Clarita, CA

Leg:	North		East		South		West	
Class:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
7:00	0	0	0	0	0	0	0	0
7:15	0	0	0	0	0	0	2	0
7:30	0	0	0	0	0	0	0	0
7:45	0	0	0	0	0	0	0	0
8:00	0	0	0	0	0	0	0	0
8:15	0	0	0	0	0	0	1	0
8:30	0	0	0	0	0	0	0	0
8:45	0	0	0	0	0	0	0	0

Leg:	North		East		South		West	
Class:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
16:00	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	1	0
16:30	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0

Turning Movement Count Report AM

Location ID: 4
 North/South: Ruether Avenue
 East/West: Soledad Canyon Rd

Date: 02/21/23
 City: Santa Clarita, CA

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	11	13	7	5	463	53	19	6	40	7	86	7	717
7:15	11	14	8	5	539	56	13	19	44	9	121	13	852
7:30	14	20	9	5	625	28	23	56	72	16	151	7	1026
7:45	17	31	33	3	508	47	26	36	79	21	208	23	1032
8:00	12	26	26	4	523	57	12	24	53	22	190	16	965
8:15	25	16	13	5	527	73	33	18	46	33	209	23	1021
8:30	25	18	15	7	411	44	33	12	35	24	192	20	836
8:45	13	10	8	5	402	50	29	9	54	23	164	6	773

Total Volume:	128	148	119	39	3998	408	188	180	423	155	1321	115	7222
Approach %	32%	37%	30%	1%	90%	9%	24%	23%	53%	10%	83%	7%	

Peak Hr Begin:	7:30												
PHV	68	93	81	17	2183	205	94	134	250	92	758	69	4044
PHF	0.747			0.914			0.791			0.867			0.980

Turning Movement Count Report PM

Location ID: 4
 North/South: Ruether Avenue
 East/West: Soledad Canyon Rd

Date: 02/21/23
 City: Santa Clarita, CA

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	21	27	34	7	294	33	60	19	35	36	406	17	989
16:15	18	23	29	9	308	30	57	20	32	46	405	13	990
16:30	12	21	24	7	344	44	53	10	39	44	444	19	1061
16:45	18	22	25	4	318	76	51	24	51	40	433	5	1067
17:00	15	27	44	7	261	34	67	24	48	48	460	10	1045
17:15	20	16	33	0	261	36	54	19	42	30	477	12	1000
17:30	9	8	25	3	291	42	61	10	29	30	455	19	982
17:45	15	13	17	3	256	38	50	11	27	44	421	14	909

Total Volume:	128	157	231	40	2333	333	453	137	303	318	3501	109	8043
Approach %	25%	30%	45%	1%	86%	12%	51%	15%	34%	8%	89%	3%	

Peak Hr Begin:	16:30												
PHV	65	86	126	18	1184	190	225	77	180	162	1814	46	4173
PHF	0.805			0.874			0.867			0.974			0.978

Pedestrian/Bicycle Count Report

Location ID: 4
 North/South: Ruether Avenue
 East/West: Soledad Canyon Rd

Date: 02/21/23
 City: Santa Clarita, CA

Leg:	North		East		South		West	
Class:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
7:00	0	1	1	0	2	0	0	0
7:15	0	0	2	0	0	0	0	0
7:30	0	1	1	0	0	0	0	0
7:45	1	0	8	0	2	0	0	0
8:00	7	0	7	0	0	2	0	0
8:15	0	0	4	0	1	1	0	0
8:30	0	0	0	1	0	3	0	0
8:45	0	0	0	0	0	1	0	0

Leg:	North		East		South		West	
Class:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
16:00	0	0	5	0	1	1	0	0
16:15	0	0	0	0	0	0	0	0
16:30	2	0	3	0	0	1	0	0
16:45	0	0	4	0	0	0	0	0
17:00	2	0	3	0	0	2	0	0
17:15	1	0	2	0	1	1	0	0
17:30	0	0	2	0	2	1	0	0
17:45	0	1	0	2	1	0	0	0

132 SCTHU - TMC

Thu Feb 7, 2019

Full Length (6 AM-10 PM)

All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 621007, Location: 34.412691, -118.502214



DATA SOLUTIONS

Provided by: IDAX Data Solutions

1305 N 30th St, Renton, WA, 98056, US

Leg Direction	Golden Valley Rd Southbound						Centre Pointe Pkwy Westbound						Golden Valley Rd Northbound						Centre Pointe Rd Eastbound						Int
	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	
2019-02-07 6:00AM	34	834	51	0	919	1	41	16	303	0	360	2	160	331	119	1	611	0	101	21	25	0	147	0	2037
7:00AM	90	831	92	1	1014	4	54	58	412	0	524	0	304	634	224	1	1163	0	133	35	27	0	195	0	2896
8:00AM	109	805	131	0	1045	4	55	95	170	0	320	0	262	761	320	0	1343	0	137	67	47	0	251	0	2959
9:00AM	55	660	93	1	809	3	55	54	128	0	237	0	149	560	234	0	943	0	187	49	48	0	284	0	2273
10:00AM	39	677	89	1	806	6	48	78	117	0	243	3	127	590	221	1	939	0	199	45	52	0	296	0	2284
11:00AM	75	630	85	1	791	3	63	65	128	0	256	2	131	561	268	1	961	0	272	79	83	0	434	1	2442
12:00PM	63	672	111	3	849	3	102	72	132	0	306	4	138	676	264	1	1079	0	267	66	83	0	416	1	2650
1:00PM	65	717	125	1	908	5	80	52	132	0	264	3	166	746	254	0	1166	0	273	60	67	0	400	0	2738
2:00PM	73	808	180	1	1062	5	99	60	160	0	319	2	250	822	233	1	1306	0	246	92	67	0	405	0	3092
3:00PM	96	942	218	1	1257	6	134	97	261	0	492	4	311	942	297	0	1550	0	385	112	110	0	607	0	3906
4:00PM	82	968	236	0	1286	9	189	92	251	0	532	8	267	932	251	0	1450	0	445	86	145	0	676	1	3944
5:00PM	59	1167	260	2	1488	14	197	65	210	0	472	8	233	952	232	0	1417	0	458	101	134	0	693	0	4070
6:00PM	51	851	151	5	1058	3	173	43	130	0	346	0	188	807	213	0	1208	0	292	67	75	0	434	0	3046
7:00PM	25	582	131	2	740	2	139	62	87	0	288	6	175	724	175	0	1074	0	186	50	44	0	280	0	2382
8:00PM	10	498	76	1	585	1	79	32	94	0	205	0	89	560	118	0	767	0	154	29	47	0	230	0	1787
9:00PM	6	404	36	0	446	2	56	20	54	0	130	0	47	435	73	0	555	0	126	29	36	0	191	1	1322
Total	932	12046	2065	20	15063	71	1564	961	2769	0	5294	42	2997	11033	3496	6	17532	0	3861	988	1090	0	5939	4	43828
% Approach	6.2%	80.0%	13.7%	0.1%	-	-	29.5%	18.2%	52.3%	0%	-	-	17.1%	62.9%	19.9%	0%	-	-	65.0%	16.6%	18.4%	0%	-	-	-
% Total	2.1%	27.5%	4.7%	0%	34.4%	-	3.6%	2.2%	6.3%	0%	12.1%	-	6.8%	25.2%	8.0%	0%	40.0%	-	8.8%	2.3%	2.5%	0%	13.6%	-	-
Lights and Motorcycles	880	11774	1959	20	14633	-	1470	919	2611	0	5000	-	2817	10785	3378	6	16986	-	3723	952	1028	0	5703	-	42322
% Lights and Motorcycles	94.4%	97.7%	94.9%	100%	97.1%	-	94.0%	95.6%	94.3%	0%	94.4%	-	94.0%	97.8%	96.6%	100%	96.9%	-	96.4%	96.4%	94.3%	0%	96.0%	-	96.6%
Heavy	52	271	106	0	429	-	90	37	157	0	284	-	180	247	118	0	545	-	136	36	62	0	234	-	1492
% Heavy	5.6%	2.2%	5.1%	0%	2.8%	-	5.8%	3.9%	5.7%	0%	5.4%	-	6.0%	2.2%	3.4%	0%	3.1%	-	3.5%	3.6%	5.7%	0%	3.9%	-	3.4%
Bicycles on Road	0	1	0	0	1	-	4	5	1	0	10	-	0	1	0	0	1	-	2	0	0	0	2	-	14
% Bicycles on Road	0%	0%	0%	0%	0%	-	0.3%	0.5%	0%	0%	0.2%	-	0%	0%	0%	0%	0%	-	0.1%	0%	0%	0%	0%	-	0%
Pedestrians	-	-	-	-	-	65	-	-	-	-	-	27	-	-	-	-	-	0	-	-	-	-	-	3	-
% Pedestrians	-	-	-	-	-	91.5%	-	-	-	-	-	64.3%	-	-	-	-	-	-	-	-	-	-	-	75.0%	-
Bicycles on Crosswalk	-	-	-	-	-	6	-	-	-	-	-	15	-	-	-	-	-	0	-	-	-	-	-	1	-
% Bicycles on Crosswalk	-	-	-	-	-	8.5%	-	-	-	-	-	35.7%	-	-	-	-	-	-	-	-	-	-	-	25.0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

132 S C THU - TMC

Thu Feb 7, 2019

Full Length (6 AM-10 PM)

All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 621007, Location: 34.412691, -118.502214

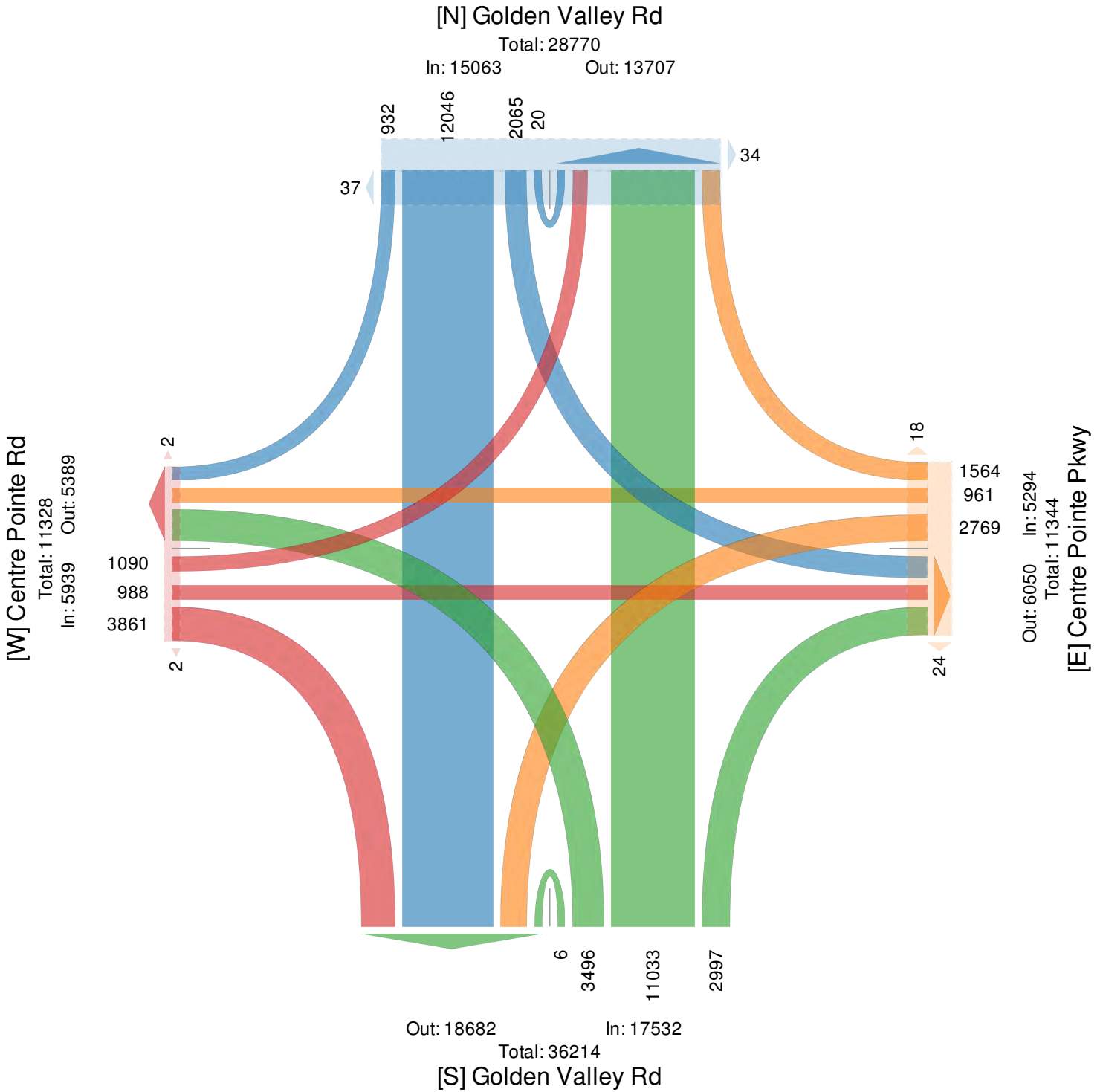


DATA SOLUTIONS

Provided by: IDAX Data Solutions

1305 N 30th St,

Renton, WA, 98056, US



132 SCTHU - TMC

Thu Feb 7, 2019

AM Peak (7:45 AM - 8:45 AM)

All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 621007, Location: 34.412691, -118.502214



DATA SOLUTIONS

Provided by: IDAX Data Solutions
1305 N 30th St, Renton, WA, 98056, US

Leg Direction	Golden Valley Rd Southbound						Centre Pointe Pkwy Westbound						Golden Valley Rd Northbound						Centre Pointe Rd Eastbound						Int
	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	
2019-02-07 7:45AM	33	229	30	0	292	3	17	25	100	0	142	0	115	194	89	1	399	0	41	15	12	0	68	0	901
8:00AM	31	197	39	0	267	0	16	20	60	0	96	0	108	197	82	0	387	0	34	16	11	0	61	0	811
8:15AM	35	215	28	0	278	2	13	27	45	0	85	0	58	175	92	0	325	0	37	20	11	0	68	0	756
8:30AM	22	224	30	0	276	0	16	22	34	0	72	0	50	185	72	0	307	0	40	16	12	0	68	0	723
Total	121	865	127	0	1113	5	62	94	239	0	395	0	331	751	335	1	1418	0	152	67	46	0	265	0	3191
% Approach	10.9%	77.7%	11.4%	0%	-	-	15.7%	23.8%	60.5%	0%	-	-	23.3%	53.0%	23.6%	0.1%	-	-	57.4%	25.3%	17.4%	0%	-	-	-
% Total	3.8%	27.1%	4.0%	0%	34.9%	-	1.9%	2.9%	7.5%	0%	12.4%	-	10.4%	23.5%	10.5%	0%	44.4%	-	4.8%	2.1%	1.4%	0%	8.3%	-	-
PHF	0.864	0.944	0.814	-	0.953	-	0.912	0.870	0.598	-	0.695	-	0.720	0.953	0.910	0.250	0.888	-	0.927	0.838	0.958	-	0.974	-	0.885
Lights and Motorcycles	112	846	119	0	1077	-	57	92	223	0	372	-	313	727	327	1	1368	-	147	62	39	0	248	-	3065
% Lights and Motorcycles	92.6%	97.8%	93.7%	0%	96.8%	-	91.9%	97.9%	93.3%	0%	94.2%	-	94.6%	96.8%	97.6%	100%	96.5%	-	96.7%	92.5%	84.8%	0%	93.6%	-	96.1%
Heavy	9	19	8	0	36	-	5	2	16	0	23	-	18	24	8	0	50	-	5	5	7	0	17	-	126
% Heavy	7.4%	2.2%	6.3%	0%	3.2%	-	8.1%	2.1%	6.7%	0%	5.8%	-	5.4%	3.2%	2.4%	0%	3.5%	-	3.3%	7.5%	15.2%	0%	6.4%	-	3.9%
Bicycles on Road	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0
% Bicycles on Road	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%
Pedestrians	-	-	-	-	-	5	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

132 SC THU - TMC

Thu Feb 7, 2019

AM Peak (7:45 AM - 8:45 AM)

All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 621007, Location: 34.412691, -118.502214



DATA SOLUTIONS

Provided by: IDAX Data Solutions

1305 N 30th St,

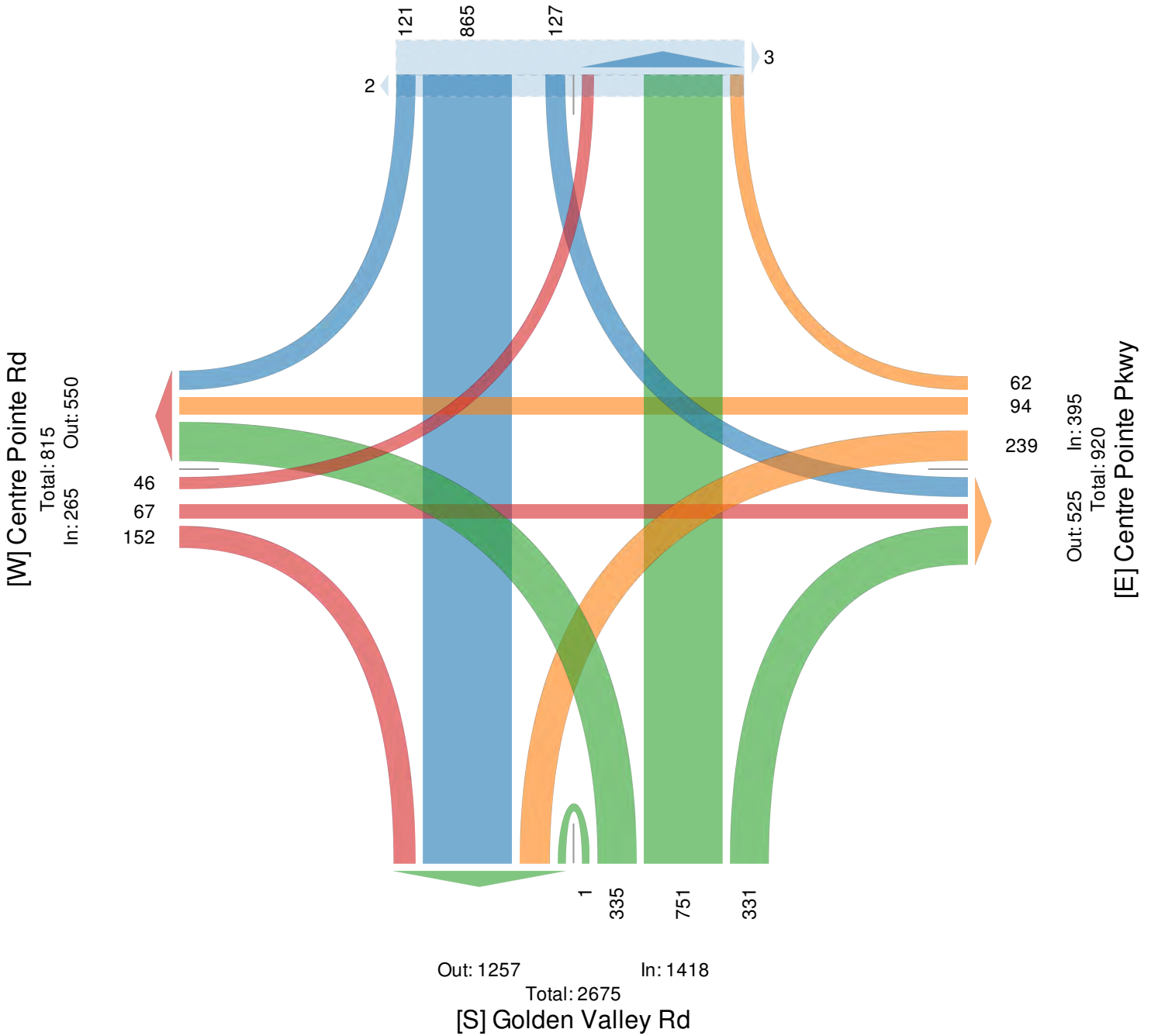
Renton, WA, 98056, US

[N] Golden Valley Rd

Total: 1972

In: 1113

Out: 859



132 SCTHU - TMC

Thu Feb 7, 2019

Midday Peak (12 PM - 1 PM)

All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 621007, Location: 34.412691, -118.502214



DATA SOLUTIONS

Provided by: IDAX Data Solutions

1305 N 30th St, Renton, WA, 98056, US

Leg Direction	Golden Valley Rd Southbound						Centre Pointe Pkwy Westbound						Golden Valley Rd Northbound						Centre Pointe Rd Eastbound						Int
	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	
2019-02-07 12:00PM	15	147	28	1	191	1	21	16	39	0	76	2	36	139	82	0	257	0	72	14	31	0	117	0	641
12:15PM	18	185	21	0	224	0	29	30	24	0	83	0	38	182	47	0	267	0	60	17	19	0	96	1	670
12:30PM	12	173	32	0	217	1	34	9	33	0	76	2	31	170	69	0	270	0	61	14	15	0	90	0	653
12:45PM	18	167	30	2	217	1	18	17	36	0	71	0	33	185	66	1	285	0	74	21	18	0	113	0	686
Total	63	672	111	3	849	3	102	72	132	0	306	4	138	676	264	1	1079	0	267	66	83	0	416	1	2650
% Approach	7.4%	79.2%	13.1%	0.4%	-	-	33.3%	23.5%	43.1%	0%	-	-	12.8%	62.7%	24.5%	0.1%	-	-	64.2%	15.9%	20.0%	0%	-	-	-
% Total	2.4%	25.4%	4.2%	0.1%	32.0%	-	3.8%	2.7%	5.0%	0%	11.5%	-	5.2%	25.5%	10.0%	0%	40.7%	-	10.1%	2.5%	3.1%	0%	15.7%	-	-
PHF	0.875	0.908	0.867	0.375	0.948	-	0.790	0.600	0.846	-	0.910	-	0.908	0.914	0.805	0.250	0.946	-	0.902	0.786	0.669	-	0.889	-	0.966
Lights and Motorcycles	61	653	104	3	821	-	92	69	125	0	286	-	128	656	257	1	1042	-	255	63	78	0	396	-	2545
% Lights and Motorcycles	96.8%	97.2%	93.7%	100%	96.7%	-	90.2%	95.8%	94.7%	0%	93.5%	-	92.8%	97.0%	97.3%	100%	96.6%	-	95.5%	95.5%	94.0%	0%	95.2%	-	96.0%
Heavy	2	19	7	0	28	-	6	3	7	0	16	-	10	20	7	0	37	-	12	3	5	0	20	-	101
% Heavy	3.2%	2.8%	6.3%	0%	3.3%	-	5.9%	4.2%	5.3%	0%	5.2%	-	7.2%	3.0%	2.7%	0%	3.4%	-	4.5%	4.5%	6.0%	0%	4.8%	-	3.8%
Bicycles on Road	0	0	0	0	0	-	4	0	0	0	4	-	0	0	0	0	0	-	0	0	0	0	0	-	4
% Bicycles on Road	0%	0%	0%	0%	0%	-	3.9%	0%	0%	0%	1.3%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0.2%
Pedestrians	-	-	-	-	-	3	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	1	-
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	50.0%	-	-	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	0	-
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	50.0%	-	-	-	-	-	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

132 SC THU - TMC

Thu Feb 7, 2019

Midday Peak (12 PM - 1 PM)

All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 621007, Location: 34.412691, -118.502214

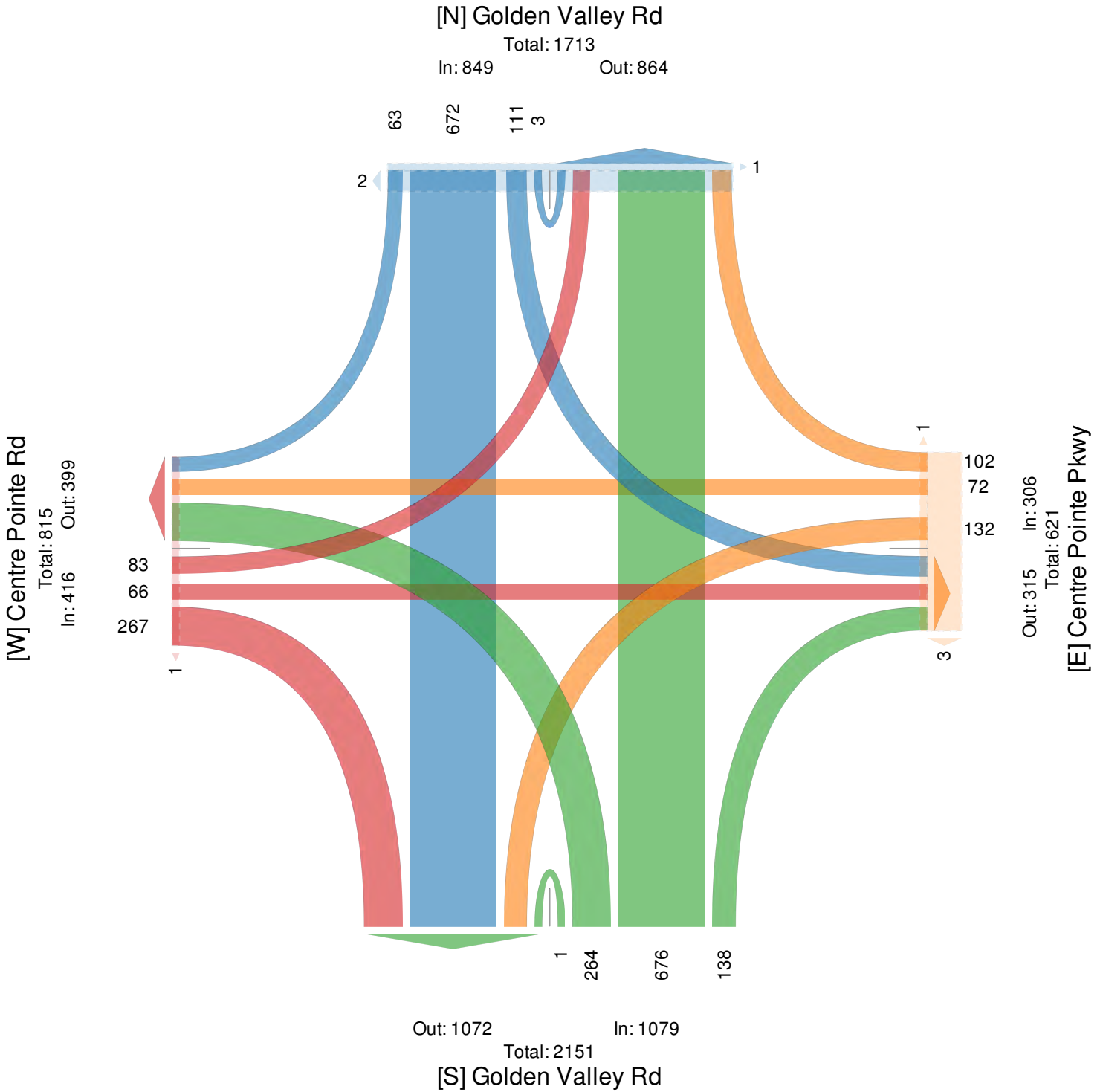


DATA SOLUTIONS

Provided by: IDAX Data Solutions

1305 N 30th St,

Renton, WA, 98056, US



132 SCTHU - TMC

Thu Feb 7, 2019

PM Peak (4:30 PM - 5:30 PM) - Overall Peak Hour

All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 621007, Location: 34.412691, -118.502214



DATA SOLUTIONS

Provided by: IDAX Data Solutions
1305 N 30th St, Renton, WA, 98056, US

Leg Direction	Golden Valley Rd Southbound						Centre Pointe Pkwy Westbound						Golden Valley Rd Northbound						Centre Pointe Rd Eastbound						Int
	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	
2019-02-07 4:30PM	11	249	48	0	308	8	58	24	90	0	172	5	63	239	58	0	360	0	159	19	48	0	226	0	1066
4:45PM	23	244	60	0	327	0	31	18	50	0	99	0	72	255	69	0	396	0	106	21	35	0	162	0	984
5:00PM	12	252	65	0	329	4	49	20	65	0	134	2	73	232	73	0	378	0	139	33	45	0	217	0	1058
5:15PM	15	289	55	1	360	4	46	11	49	0	106	3	55	264	64	0	383	0	115	19	37	0	171	0	1020
Total	61	1034	228	1	1324	16	184	73	254	0	511	10	263	990	264	0	1517	0	519	92	165	0	776	0	4128
% Approach	4.6%	78.1%	17.2%	0.1%	-	-	36.0%	14.3%	49.7%	0%	-	-	17.3%	65.3%	17.4%	0%	-	-	66.9%	11.9%	21.3%	0%	-	-	-
% Total	1.5%	25.0%	5.5%	0%	32.1%	-	4.5%	1.8%	6.2%	0%	12.4%	-	6.4%	24.0%	6.4%	0%	36.7%	-	12.6%	2.2%	4.0%	0%	18.8%	-	-
PHF	0.663	0.894	0.877	0.250	0.919	-	0.793	0.760	0.706	-	0.743	-	0.901	0.938	0.904	-	0.958	-	0.816	0.697	0.859	-	0.858	-	0.968
Lights and Motorcycles	51	1019	223	1	1294	-	178	68	246	0	492	-	253	981	256	0	1490	-	505	92	161	0	758	-	4034
% Lights and Motorcycles	83.6%	98.5%	97.8%	100%	97.7%	-	96.7%	93.2%	96.9%	0%	96.3%	-	96.2%	99.1%	97.0%	0%	98.2%	-	97.3%	100%	97.6%	0%	97.7%	-	97.7%
Heavy	10	15	5	0	30	-	6	5	8	0	19	-	10	9	8	0	27	-	14	0	4	0	18	-	94
% Heavy	16.4%	1.5%	2.2%	0%	2.3%	-	3.3%	6.8%	3.1%	0%	3.7%	-	3.8%	0.9%	3.0%	0%	1.8%	-	2.7%	0%	2.4%	0%	2.3%	-	2.3%
Bicycles on Road	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0
% Bicycles on Road	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%
Pedestrians	-	-	-	-	-	15	-	-	-	-	-	10	-	-	-	-	-	0	-	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	93.8%	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-
% Bicycles on Crosswalk	-	-	-	-	-	6.3%	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

132 SC THU - TMC

Thu Feb 7, 2019

PM Peak (4:30 PM - 5:30 PM) - Overall Peak Hour

All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 621007, Location: 34.412691, -118.502214

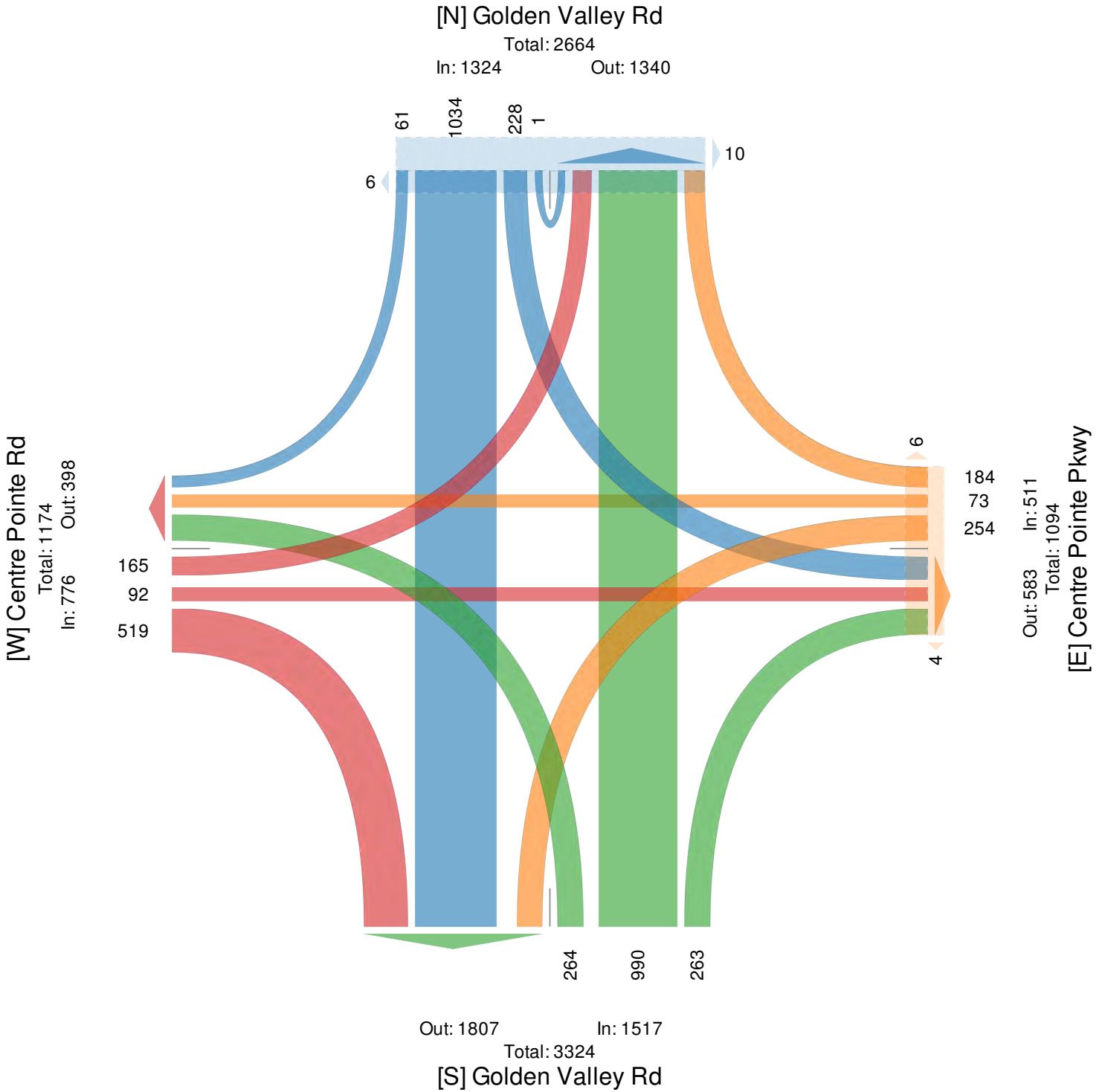


DATA SOLUTIONS

Provided by: IDAX Data Solutions

1305 N 30th St,

Renton, WA, 98056, US



Turning Movement Count Report AM

Location ID: 11
 North/South: Sierra Hwy
 East/West: Golden Valley Rd

Date: 02/21/23
 City: Santa Clarita, CA

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	24	321	0	1	94	135	2	16	86	209	69	23	980
7:15	78	348	2	2	133	142	4	27	82	210	50	40	1118
7:30	87	312	3	2	207	107	2	29	105	248	83	32	1217
7:45	127	265	7	9	235	69	2	57	163	167	82	52	1235
8:00	127	273	4	9	215	86	8	57	147	159	122	84	1291
8:15	128	236	6	20	224	74	2	50	131	219	130	115	1335
8:30	69	197	11	15	156	25	5	38	99	196	117	91	1019
8:45	69	150	6	8	148	20	2	46	79	123	66	40	757

Total Volume:	709	2102	39	66	1412	658	27	320	892	1531	719	477	8952
Approach %	25%	74%	1%	3%	66%	31%	2%	26%	72%	56%	26%	17%	

Peak Hr Begin:	7:30												
PHV	469	1086	20	40	881	336	14	193	546	793	417	283	5078
PHF	0.975			0.988			0.848			0.804			0.951

Turning Movement Count Report PM

Location ID: 11
 North/South: Sierra Hwy
 East/West: Golden Valley Rd

Date: 02/21/23
 City: Santa Clarita, CA

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	75	78	17	22	132	16	32	231	124	179	176	107	1189
16:15	57	71	7	23	135	7	23	200	139	151	157	91	1061
16:30	72	87	13	20	149	10	26	204	135	155	179	82	1132
16:45	49	66	17	10	170	10	39	212	145	132	164	84	1098
17:00	69	63	12	25	144	11	28	250	168	153	176	76	1175
17:15	46	63	7	17	169	13	33	212	174	147	175	118	1174
17:30	54	66	12	17	171	22	27	265	124	131	162	81	1132
17:45	40	48	11	23	142	15	36	281	195	102	137	71	1101

Total Volume:	462	542	96	157	1212	104	244	1855	1204	1150	1326	710	9062
Approach %	42%	49%	9%	11%	82%	7%	7%	56%	36%	36%	42%	22%	

Peak Hr Begin:	17:00												
PHV	209	240	42	82	626	61	124	1008	661	533	650	346	4582
PHF	0.852			0.915			0.875			0.869			0.975

Pedestrian/Bicycle Count Report

Location ID: 11
 North/South: Sierra Hwy
 East/West: Golden Valley Rd

Date: 02/21/23
 City: Santa Clarita, CA

Leg:	North		East		South		West	
Class:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
7:00	3	0	0	0	0	0	0	0
7:15	0	0	0	0	0	0	0	0
7:30	5	0	0	0	0	0	0	0
7:45	14	0	0	0	0	0	0	0
8:00	35	0	0	0	0	0	0	0
8:15	14	0	0	0	0	0	0	0
8:30	3	0	0	0	0	0	0	0
8:45	7	0	0	0	0	0	0	0

Leg:	North		East		South		West	
Class:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
16:00	5	0	0	0	0	0	0	0
16:15	2	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0
16:45	6	0	0	0	0	0	0	0
17:00	4	0	0	0	0	0	0	0
17:15	5	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0

Turning Movement Count Report AM

Location ID: 12
 North/South: SR-14 SB Ramps
 East/West: Golden Valley Rd

Date: 02/21/23
 City: Santa Clarita, CA

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	28	55	6	0	131	103	0	0	0	118	61	0	502
7:15	56	70	6	0	210	86	0	0	0	101	80	0	609
7:30	80	49	8	0	209	82	0	0	0	40	61	0	529
7:45	115	39	12	0	229	68	0	0	0	47	113	0	623
8:00	165	30	14	0	198	53	0	0	0	31	125	0	616
8:15	113	5	12	0	152	55	0	0	0	24	127	0	488
8:30	84	1	6	0	101	69	0	0	0	38	132	0	431
8:45	88	0	21	0	104	58	0	0	0	25	81	0	377

Total Volume:	729	249	85	0	1334	574	0	0	0	424	780	0	4175
Approach %	69%	23%	8%	0%	70%	30%	0%	0%	0%	35%	65%	0%	

Peak Hr Begin:	7:15												
PHV	416	188	40	0	846	289	0	0	0	219	379	0	2377
PHF	0.770			0.955			0.000			0.826			0.954

Turning Movement Count Report PM

Location ID: 12
 North/South: SR-14 SB Ramps
 East/West: Golden Valley Rd

Date: 02/21/23
 City: Santa Clarita, CA

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	67	1	18	0	124	38	0	0	0	34	213	0	495
16:15	67	1	12	0	132	47	0	0	0	30	167	0	456
16:30	83	0	14	0	118	45	0	0	0	29	159	0	448
16:45	83	2	19	0	126	37	0	0	0	26	193	0	486
17:00	73	0	15	0	133	49	0	0	0	25	171	0	466
17:15	96	1	17	0	116	38	0	0	0	20	210	0	498
17:30	90	1	19	0	132	39	0	0	0	19	169	0	469
17:45	69	0	11	0	137	37	0	0	0	19	168	0	441

Total Volume:	628	6	125	0	1018	330	0	0	0	202	1450	0	3759
Approach %	83%	1%	16%	0%	76%	24%	0%	0%	0%	12%	88%	0%	

Peak Hr Begin:	16:45												
PHV	342	4	70	0	507	163	0	0	0	90	743	0	1919
PHF	0.912			0.920			0.000			0.905			0.963

Pedestrian/Bicycle Count Report

Location ID: 12
 North/South: SR-14 SB Ramps
 East/West: Golden Valley Rd

Date: 02/21/23
 City: Santa Clarita, CA

Leg:	North		East		South		West	
Class:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
7:00	0	0	0	0	0	0	0	0
7:15	0	0	0	0	0	0	0	0
7:30	4	0	0	0	0	0	0	0
7:45	1	1	0	0	0	0	0	0
8:00	0	0	0	0	0	0	0	0
8:15	0	0	0	0	0	0	0	0
8:30	2	0	0	0	0	0	0	0
8:45	0	0	0	0	0	0	0	0

Leg:	North		East		South		West	
Class:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
16:00	1	0	0	0	0	0	0	0
16:15	2	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0
17:00	0	1	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0

Turning Movement Count Report AM

Location ID: 13
 North/South: SR-14 NB Ramps
 East/West: Golden Valley Rd

Date: 02/21/23
 City: Santa Clarita, CA

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	0	0	0	14	229	0	31	0	25	0	24	42	365
7:15	0	0	0	14	266	0	29	0	35	0	37	53	434
7:30	0	0	0	17	246	0	28	1	31	0	39	27	389
7:45	0	0	0	21	239	0	44	0	46	0	78	41	469
8:00	0	0	0	11	221	0	44	0	34	0	95	43	448
8:15	0	0	0	24	168	0	55	1	41	0	88	53	430
8:30	0	0	0	19	120	0	41	0	38	0	86	58	362
8:45	0	0	0	19	120	0	53	0	43	0	78	26	339

Total Volume:	0	0	0	139	1609	0	325	2	293	0	525	343	3236
Approach %	0%	0%	0%	8%	92%	0%	52%	0%	47%	0%	60%	40%	

Peak Hr Begin:	7:15													
PHV	0	0	0	63	972	0	145	1	146	0	249	164	1740	
PHF	0.000			0.924			0.811			0.748			0.928	

Turning Movement Count Report PM

Location ID: 13
 North/South: SR-14 NB Ramps
 East/West: Golden Valley Rd

Date: 02/21/23
 City: Santa Clarita, CA

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	0	0	0	50	106	0	81	0	56	0	124	107	524
16:15	0	0	0	54	129	0	96	0	54	0	102	72	507
16:30	0	0	0	50	122	0	81	3	43	0	103	79	481
16:45	0	0	0	64	108	0	101	0	57	0	127	78	535
17:00	0	0	0	58	123	0	109	1	60	0	113	88	552
17:15	0	0	0	49	100	0	88	0	39	0	135	97	508
17:30	0	0	0	52	120	0	84	1	50	0	117	72	496
17:45	0	0	0	45	134	0	102	1	52	0	109	70	513

Total Volume:	0	0	0	422	942	0	742	6	411	0	930	663	4116
Approach %	0%	0%	0%	31%	69%	0%	64%	1%	35%	0%	58%	42%	

Peak Hr Begin:	16:45												
PHV	0	0	0	223	451	0	382	2	206	0	492	335	2091
PHF	0.000			0.931			0.868			0.891			0.947

Pedestrian/Bicycle Count Report

Location ID: 13
 North/South: SR-14 NB Ramps
 East/West: Golden Valley Rd

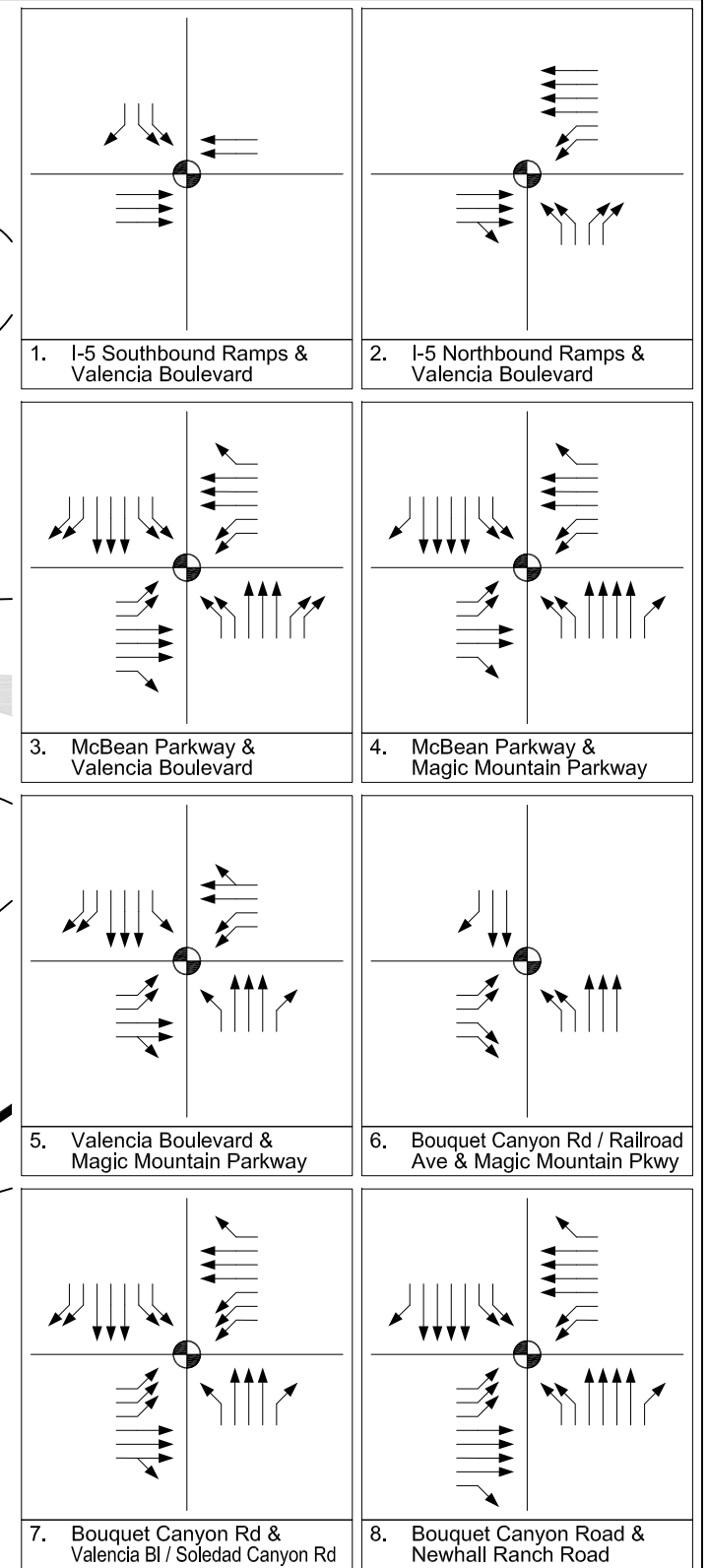
Date: 02/21/23
 City: Santa Clarita, CA

Leg:	North		East		South		West	
Class:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
7:00	0	0	0	0	0	0	0	0
7:15	0	0	0	0	0	0	0	0
7:30	0	0	0	0	0	0	0	0
7:45	3	2	0	0	0	0	0	0
8:00	0	0	0	0	0	0	0	0
8:15	1	0	0	0	0	0	0	0
8:30	3	0	0	0	0	0	0	0
8:45	0	0	0	0	0	0	0	0

Leg:	North		East		South		West	
Class:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
16:00	2	1	0	0	0	0	0	0
16:15	0	0	0	0	0	3	0	0
16:30	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0
17:00	0	1	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0

Appendix D

Intersection Lane Configurations



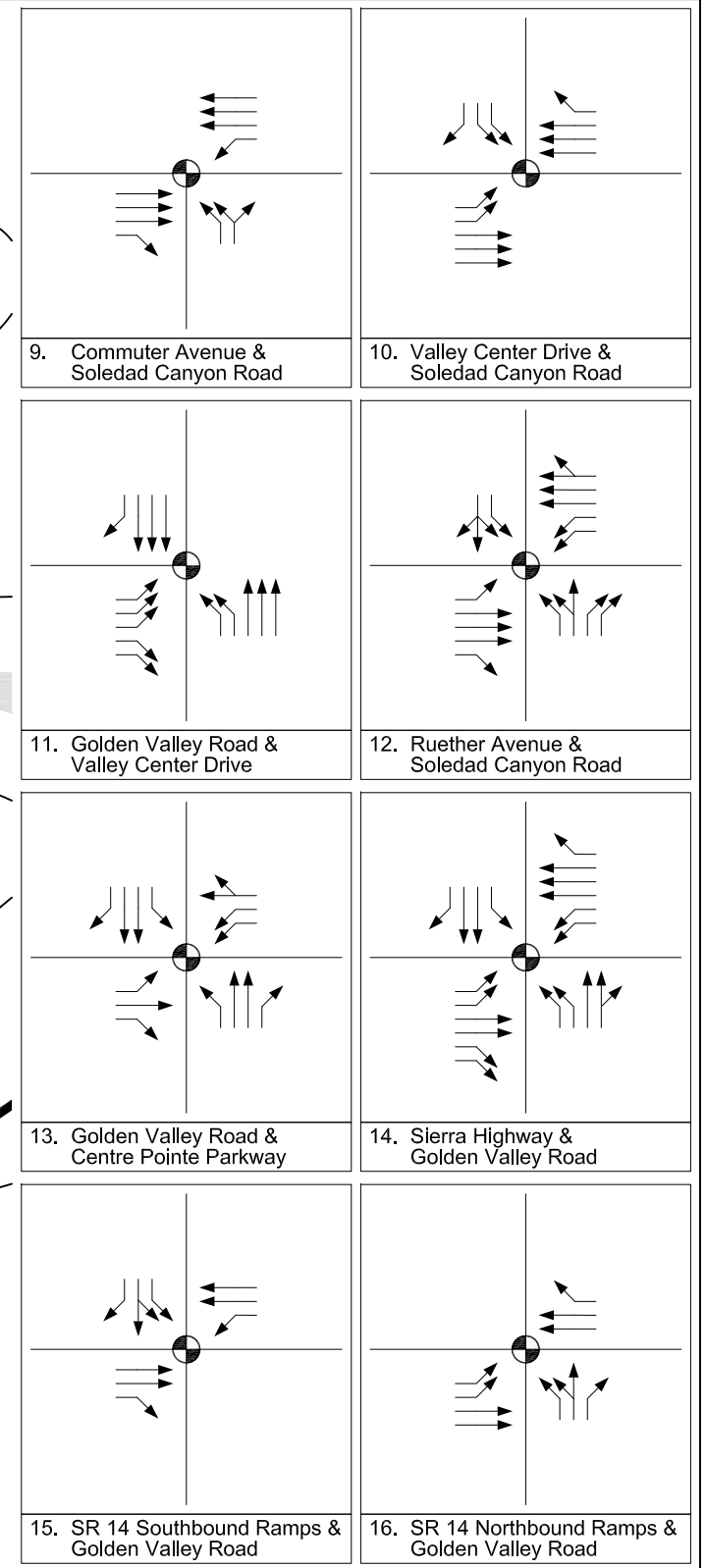
LEGEND

- Project Site
- Analyzed Intersection
- Project Driveway
- Emergency Access Only*
- Traffic Signal

*NOTE: Western studio driveway will be utilized for emergency access only. Limited Project trips will occur at this access point.

N
Not to Scale

INTERSECTION LANE CONFIGURATIONS



LEGEND

- Project Site
- Analyzed Intersection
- Project Driveway
- Emergency Access Only*
- Traffic Signal

**NOTE: Western studio driveway will be utilized for emergency access only. Limited Project trips will occur at this access point.*



INTERSECTION LANE CONFIGURATIONS

Appendix E

HCM Analysis Worksheets

Lanes, Volumes, Timings
 1: Valencia Blvd & 5 Fwy SB Ramp

04/25/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑		↑↑	↑
Traffic Volume (vph)	0	559	938	0	215	90
Future Volume (vph)	0	559	938	0	215	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	15	12	14
Storage Length (ft)	0			0	0	455
Storage Lanes	0			0	2	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.91	0.95	1.00	0.97	1.00
Fr _t						0.850
Fl _t Protected					0.950	
Satd. Flow (prot)	0	5085	3539	0	3433	1689
Fl _t Permitted					0.950	
Satd. Flow (perm)	0	5085	3539	0	3433	1689
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)						98
Link Speed (mph)		50	50		30	
Link Distance (ft)		616	917		417	
Travel Time (s)		8.4	12.5		9.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	608	1020	0	234	98
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	608	1020	0	234	98
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		24	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	0.88	1.00	0.92
Turning Speed (mph)	15			9	15	9
Number of Detectors		1	1		1	1
Detector Template						
Leading Detector (ft)		50	50		50	50
Trailing Detector (ft)		0	0		0	0
Detector 1 Position(ft)		0	0		0	0
Detector 1 Size(ft)		50	50		50	50
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)		0.0	0.0		0.0	0.0
Detector 1 Queue (s)		0.0	0.0		0.0	0.0
Detector 1 Delay (s)		0.0	0.0		0.0	0.0
Turn Type		NA	NA		Prot	Perm
Protected Phases		2	6		4	
Permitted Phases						4
Detector Phase		2	6		4	4
Switch Phase						
Minimum Initial (s)		4.0	4.0		4.0	4.0
Minimum Split (s)		20.0	35.2		20.0	20.0

Lanes, Volumes, Timings
 1: Valencia Blvd & 5 Fwy SB Ramp

04/25/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Total Split (s)		41.0	41.0		25.0	25.0
Total Split (%)		62.1%	62.1%		37.9%	37.9%
Maximum Green (s)		34.8	34.8		19.2	19.2
Yellow Time (s)		5.2	5.2		4.8	4.8
All-Red Time (s)		1.0	1.0		1.0	1.0
Lost Time Adjust (s)		-2.2	-2.2		-1.8	-1.8
Total Lost Time (s)		4.0	4.0		4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Recall Mode		C-Max	C-Max		Min	Min
Walk Time (s)			5.0			
Flash Dont Walk (s)			18.0			
Pedestrian Calls (#/hr)			0			
Act Effect Green (s)		46.4	46.4		11.6	11.6
Actuated g/C Ratio		0.70	0.70		0.18	0.18
v/c Ratio		0.17	0.41		0.39	0.26
Control Delay		3.7	2.1		25.5	7.5
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		3.7	2.1		25.5	7.5
LOS		A	A		C	A
Approach Delay		3.7	2.1		20.2	
Approach LOS		A	A		C	

Intersection Summary

Area Type:	Other
Cycle Length:	66
Actuated Cycle Length:	66
Offset:	14 (21%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle:	60
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.41
Intersection Signal Delay:	5.6
Intersection LOS:	A
Intersection Capacity Utilization:	38.7%
ICU Level of Service:	A
Analysis Period (min):	15

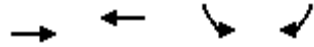
Splits and Phases: 1: Valencia Blvd & 5 Fwy SB Ramp



Queues

1: Valencia Blvd & 5 Fwy SB Ramp

04/25/2023



Lane Group	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	608	1020	234	98
v/c Ratio	0.17	0.41	0.39	0.26
Control Delay	3.7	2.1	25.5	7.5
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	3.7	2.1	25.5	7.5
Queue Length 50th (ft)	23	24	43	0
Queue Length 95th (ft)	40	70	69	33
Internal Link Dist (ft)	536	837	337	
Turn Bay Length (ft)				455
Base Capacity (vph)	3574	2488	1092	604
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.17	0.41	0.21	0.16

Intersection Summary

Lanes, Volumes, Timings

2: 5 Fwy NB Ramp & Valencia Blvd

04/25/2023

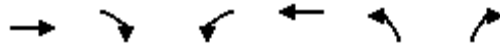


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↵↵	↑↑↑	↵↵	↵↵
Traffic Volume (vph)	706	37	68	1586	279	813
Future Volume (vph)	706	37	68	1586	279	813
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	12	12	12	12	14
Storage Length (ft)		0	200		220	220
Storage Lanes		0	2		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	0.97	0.86	0.97	0.88
Fr _t	0.993					0.850
Fl _t Protected			0.950		0.950	
Satd. Flow (prot)	5386	0	3433	6408	3433	2972
Fl _t Permitted			0.950		0.950	
Satd. Flow (perm)	5386	0	3433	6408	3433	2972
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	14					662
Link Speed (mph)	50			50	30	
Link Distance (ft)	917			476	493	
Travel Time (s)	12.5			6.5	11.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	767	40	74	1724	303	884
Shared Lane Traffic (%)						
Lane Group Flow (vph)	807	0	74	1724	303	884
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	24			24	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.92	1.00	1.00	1.00	1.00	0.92
Turning Speed (mph)		9	15		15	9
Number of Detectors	1		1	1	1	1
Detector Template						
Leading Detector (ft)	50		50	50	50	50
Trailing Detector (ft)	0		0	0	0	0
Detector 1 Position(ft)	0		0	0	0	0
Detector 1 Size(ft)	50		50	50	50	50
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0
Turn Type	NA		Prot	NA	Prot	Prot
Protected Phases	2		1	6	8	8
Permitted Phases						
Detector Phase	2		1	6	8	8
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	31.0		14.0	20.0	20.0	20.0

Lanes, Volumes, Timings

2: 5 Fwy NB Ramp & Valencia Blvd

04/25/2023

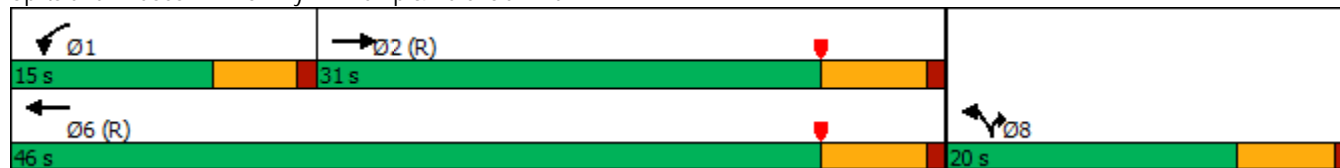


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Total Split (s)	31.0		15.0	46.0	20.0	20.0
Total Split (%)	47.0%		22.7%	69.7%	30.3%	30.3%
Maximum Green (s)	24.8		9.9	39.8	14.2	14.2
Yellow Time (s)	5.2		4.1	5.2	4.8	4.8
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-2.2		-1.1	-2.2	-1.8	-1.8
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max		None	C-Max	None	None
Walk Time (s)	5.0					
Flash Dont Walk (s)	24.0					
Pedestrian Calls (#/hr)	0					
Act Effect Green (s)	36.0		7.9	43.5	14.5	14.5
Actuated g/C Ratio	0.55		0.12	0.66	0.22	0.22
v/c Ratio	0.27		0.18	0.41	0.40	0.76
Control Delay	7.5		26.8	4.6	23.4	10.6
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	7.5		26.8	4.6	23.4	10.6
LOS	A		C	A	C	B
Approach Delay	7.5			5.6	13.9	
Approach LOS	A			A	B	

Intersection Summary

Area Type: Other
 Cycle Length: 66
 Actuated Cycle Length: 66
 Offset: 8 (12%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Natural Cycle: 65
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.76
 Intersection Signal Delay: 8.6
 Intersection LOS: A
 Intersection Capacity Utilization 49.6%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 2: 5 Fwy NB Ramp & Valencia Blvd



Queues

2: 5 Fwy NB Ramp & Valencia Blvd

04/25/2023



Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	807	74	1724	303	884
v/c Ratio	0.27	0.18	0.41	0.40	0.76
Control Delay	7.5	26.8	4.6	23.4	10.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	7.5	26.8	4.6	23.4	10.6
Queue Length 50th (ft)	69	14	138	52	42
Queue Length 95th (ft)	89	m24	65	84	103
Internal Link Dist (ft)	837		396	413	
Turn Bay Length (ft)		200		220	220
Base Capacity (vph)	2942	572	4227	832	1222
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.27	0.13	0.41	0.36	0.72

Intersection Summary

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

Lanes, Volumes, Timings
3: McBean Pkwy & Valencia Blvd

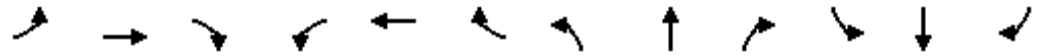
04/25/2023

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	360	851	120	343	1277	54	199	741	339	117	552	725
Future Volume (vph)	360	851	120	343	1277	54	199	741	339	117	552	725
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	11	11	13	11	11	12	11	11	12
Storage Length (ft)	350		280	290		225	130		200	190		300
Storage Lanes	2		1	2		1	2		2	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	0.88	0.97	0.91	0.88
Fr _t			0.850			0.850			0.850			0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3319	4916	1583	3319	4916	1636	3319	4916	2787	3319	4916	2787
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3319	4916	1583	3319	4916	1636	3319	4916	2787	3319	4916	2787
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			74			70			181			120
Link Speed (mph)		50			50			45			45	
Link Distance (ft)		1919			721			765			966	
Travel Time (s)		26.2			9.8			11.6			14.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	391	925	130	373	1388	59	216	805	368	127	600	788
Shared Lane Traffic (%)												
Lane Group Flow (vph)	391	925	130	373	1388	59	216	805	368	127	600	788
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		22			22			22			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.00	1.04	1.04	0.96	1.04	1.04	1.00	1.04	1.04	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	1	6	7	5	2	3	7	4	5	3	8	1
Permitted Phases			6			2			4			8
Detector Phase	1	6	7	5	2	3	7	4	5	3	8	1
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	44.0	12.0	12.0	47.0	12.0	12.0	41.0	12.0	12.0	44.0	12.0

Queues

3: McBean Pkwy & Valencia Blvd

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	391	925	130	373	1388	59	216	805	368	127	600	788
v/c Ratio	0.66	0.46	0.16	0.71	0.73	0.07	0.64	0.73	0.31	0.42	0.57	0.63
Control Delay	53.0	31.3	4.1	29.2	12.3	0.1	66.0	51.3	8.9	39.2	59.7	63.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.0	31.3	4.1	29.2	12.3	0.1	66.0	51.3	8.9	39.2	59.7	63.6
Queue Length 50th (ft)	154	233	3	137	52	0	92	235	43	55	200	379
Queue Length 95th (ft)	227	286	m15	m147	m130	m0	136	269	61	90	243	452
Internal Link Dist (ft)		1839			641			685			886	
Turn Bay Length (ft)	350		280	290		225	130		200	190		300
Base Capacity (vph)	593	1990	844	528	1893	934	352	1377	1181	452	1526	1245
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.66	0.46	0.15	0.71	0.73	0.06	0.61	0.58	0.31	0.28	0.39	0.63

Intersection Summary

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

Lanes, Volumes, Timings

4: McBean Parkway & Magic Mountain Pkwy

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	413	331	50	60	387	140	60	970	52	173	1386	640
Future Volume (vph)	413	331	50	60	387	140	60	970	52	173	1386	640
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	16	12	12	14	11	11	16	11	11	16
Storage Length (ft)	360		360	210		0	175		175	300		340
Storage Lanes	1		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.91	1.00	0.97	0.86	1.00	0.97	0.86	1.00
Fr _t			0.850			0.850			0.850			0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	1794	3433	5085	1689	3319	6194	1794	3319	6194	1794
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1794	3433	5085	1689	3319	6194	1794	3319	6194	1794
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			99			152			198			633
Link Speed (mph)		50			45			45			50	
Link Distance (ft)		809			1452			1622			1219	
Travel Time (s)		11.0			22.0			24.6			16.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	449	360	54	65	421	152	65	1054	57	188	1507	696
Shared Lane Traffic (%)												
Lane Group Flow (vph)	449	360	54	65	421	152	65	1054	57	188	1507	696
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			22			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	0.85	1.00	1.00	0.92	1.04	1.04	0.85	1.04	1.04	0.85
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			Free			Free
Detector Phase	5	2	2	1	6	6	3	8		7	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Minimum Split (s)	12.0	41.0	41.0	12.0	40.0	40.0	12.0	37.0		12.0	37.0	

Lanes, Volumes, Timings
 4: McBean Parkway & Magic Mountain Pkwy

04/25/2023

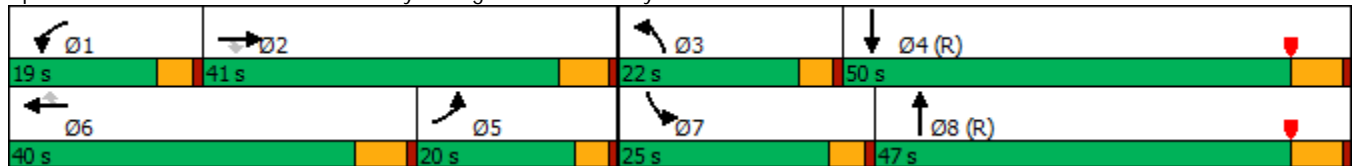


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	20.0	41.0	41.0	19.0	40.0	40.0	22.0	47.0		25.0	50.0	
Total Split (%)	15.2%	31.1%	31.1%	14.4%	30.3%	30.3%	16.7%	35.6%		18.9%	37.9%	
Maximum Green (s)	15.5	35.0	35.0	14.5	34.0	34.0	17.5	41.0		20.5	44.0	
Yellow Time (s)	3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.0		3.5	5.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	-0.5	-2.0	-2.0	-0.5	-2.0	-2.0	-0.5	-2.0		-0.5	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	Max	Max	None	Max	Max	None	C-Max		None	C-Max	
Walk Time (s)		5.0	5.0		5.0	5.0		5.0			5.0	
Flash Dont Walk (s)		30.0	30.0		29.0	29.0		26.0			26.0	
Pedestrian Calls (#/hr)		0	0		0	0		0			0	
Act Effect Green (s)	16.0	45.7	45.7	8.4	36.0	36.0	8.5	50.7	132.0	13.3	57.6	132.0
Actuated g/C Ratio	0.12	0.35	0.35	0.06	0.27	0.27	0.06	0.38	1.00	0.10	0.44	1.00
v/c Ratio	1.08	0.29	0.08	0.30	0.30	0.27	0.31	0.44	0.03	0.56	0.56	0.39
Control Delay	120.7	33.2	0.7	66.8	40.0	13.7	83.8	16.2	0.0	62.9	29.3	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	120.7	33.2	0.7	66.8	40.0	13.7	83.8	16.2	0.0	62.9	29.3	0.6
LOS	F	C	A	E	D	B	F	B	A	E	C	A
Approach Delay		76.7			36.5			19.1			23.6	
Approach LOS		E			D			B			C	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 28 (21%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow
 Natural Cycle: 105
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.08
 Intersection Signal Delay: 33.2
 Intersection LOS: C
 Intersection Capacity Utilization 56.0%
 ICU Level of Service B
 Analysis Period (min) 15

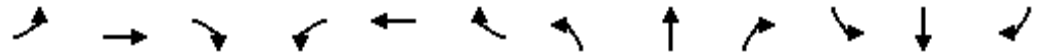
Splits and Phases: 4: McBean Parkway & Magic Mountain Pkwy



Queues

4: McBean Parkway & Magic Mountain Pkwy

04/25/2023

























Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	449	360	54	65	421	152	65	1054	57	188	1507	696
v/c Ratio	1.08	0.29	0.08	0.30	0.30	0.27	0.31	0.44	0.03	0.56	0.56	0.39
Control Delay	120.7	33.2	0.7	66.8	40.0	13.7	83.8	16.2	0.0	62.9	29.3	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	120.7	33.2	0.7	66.8	40.0	13.7	83.8	16.2	0.0	62.9	29.3	0.6
Queue Length 50th (ft)	~221	120	0	27	95	21	30	60	0	80	283	0
Queue Length 95th (ft)	#329	167	4	50	128	55	m50	114	m0	117	331	0
Internal Link Dist (ft)		729			1372			1542			1139	
Turn Bay Length (ft)	360		360	210			175		175	300		340
Base Capacity (vph)	416	1224	685	390	1386	571	452	2379	1794	528	2702	1794
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.08	0.29	0.08	0.17	0.30	0.27	0.14	0.44	0.03	0.36	0.56	0.39

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
5: Valencia Blvd & Magic Mountain Pkwy

04/25/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	164	152	42	168	345	46	43	727	96	23	1534	579
Future Volume (vph)	164	152	42	168	345	46	43	727	96	23	1534	579
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	13	12	11	12	11	11	14	12	11	11	12
Storage Length (ft)	310		0	250		200	180		200	190		190
Storage Lanes	1		0	2		0	1		1	1		2
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	0.95	0.97	0.95	0.95	1.00	0.91	1.00	1.00	0.91	0.88
Fr _t		0.967			0.982				0.850			0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3319	3537	0	3319	3476	0	1711	5424	1583	1711	4916	2787
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3319	3537	0	3319	3476	0	1711	5424	1583	1711	4916	2787
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		28			11				112			476
Link Speed (mph)		45			45			45				45
Link Distance (ft)		1046			2748			1989				572
Travel Time (s)		15.8			41.6			30.1				8.7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	178	165	46	183	375	50	47	790	104	25	1667	629
Shared Lane Traffic (%)												
Lane Group Flow (vph)	178	211	0	183	425	0	47	790	104	25	1667	629
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		22			22			11				11
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.04	0.96	1.00	1.04	1.00	1.04	1.04	0.92	1.00	1.04	1.04	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Size(ft)	50	50		50	50		50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	3	8		7	4		1	6		5	2	3
Permitted Phases									6			2
Detector Phase	3	8		7	4		1	6	6	5	2	3
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	45.0		12.0	45.0		12.0	38.0	38.0	12.0	39.0	12.0

Queues

5: Valencia Blvd & Magic Mountain Pkwy

04/25/2023



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	178	211	183	425	47	790	104	25	1667	629
v/c Ratio	0.51	0.16	0.56	0.33	0.38	0.48	0.19	0.14	0.96	0.39
Control Delay	60.1	25.6	94.1	14.6	52.4	39.0	11.1	42.9	40.3	3.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	60.1	25.6	94.1	14.6	52.4	39.0	11.1	42.9	40.3	3.8
Queue Length 50th (ft)	79	56	83	49	40	234	30	16	~402	32
Queue Length 95th (ft)	112	115	122	156	80	277	70	m22	m#665	m35
Internal Link Dist (ft)		966		2668		1909			492	
Turn Bay Length (ft)	310		250		180		200	190		190
Base Capacity (vph)	528	1328	528	1271	181	1643	535	181	1731	1727
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.34	0.16	0.35	0.33	0.26	0.48	0.19	0.14	0.96	0.36

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings

6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy

04/25/2023



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	79	247	290	1103	1403	133
Future Volume (vph)	79	247	290	1103	1403	133
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	265	265	260			270
Storage Lanes	1	1	2			1
Taper Length (ft)	25		25			
Lane Util. Factor	0.97	0.88	0.97	0.91	0.95	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3433	2787	3433	5085	3539	1583
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	3433	2787	3433	5085	3539	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		26				113
Link Speed (mph)	45			50	45	
Link Distance (ft)	2748			2280	1194	
Travel Time (s)	41.6			31.1	18.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	86	268	315	1199	1525	145
Shared Lane Traffic (%)						
Lane Group Flow (vph)	86	268	315	1199	1525	145
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	34			24	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	1	1	1
Detector Template						
Leading Detector (ft)	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	pt+ov	custom	NA	NA	Perm
Protected Phases	8	8 1	1	6	2	
Permitted Phases			1			2
Detector Phase	8	8 1	1	6	2	2
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	20.0		20.0	20.0	41.0	41.0
Total Split (s)	34.0		30.0	98.0	68.0	68.0

Lanes, Volumes, Timings

6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy

04/25/2023

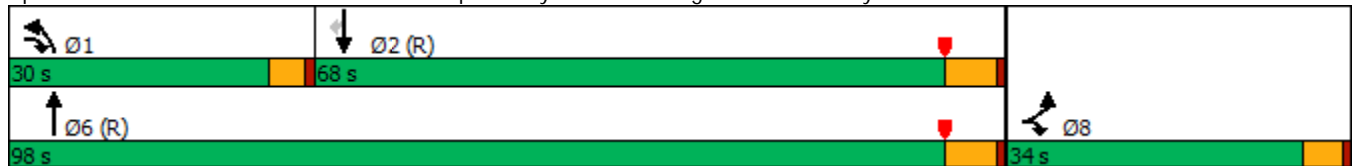


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Total Split (%)	25.8%		22.7%	74.2%	51.5%	51.5%
Maximum Green (s)	29.0		25.5	92.0	62.0	62.0
Yellow Time (s)	4.0		3.5	5.0	5.0	5.0
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0		-0.5	-2.0	-2.0	-2.0
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	Max		Min	C-Min	C-Min	C-Min
Walk Time (s)					7.0	7.0
Flash Dont Walk (s)					28.0	28.0
Pedestrian Calls (#/hr)					0	0
Act Effect Green (s)	34.3	56.6	18.2	89.7	67.4	67.4
Actuated g/C Ratio	0.26	0.43	0.14	0.68	0.51	0.51
v/c Ratio	0.10	0.22	0.67	0.35	0.84	0.17
Control Delay	33.7	16.7	60.7	9.0	30.8	5.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.7	16.7	60.7	9.0	30.8	5.7
LOS	C	B	E	A	C	A
Approach Delay	20.9			19.8	28.6	
Approach LOS	C			B	C	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 77 (58%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
 Natural Cycle: 85
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.84
 Intersection Signal Delay: 24.0
 Intersection LOS: C
 Intersection Capacity Utilization 60.4%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy



Queues

6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy

04/25/2023



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	86	268	315	1199	1525	145
v/c Ratio	0.10	0.22	0.67	0.35	0.84	0.17
Control Delay	33.7	16.7	60.7	9.0	30.8	5.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.7	16.7	60.7	9.0	30.8	5.7
Queue Length 50th (ft)	34	90	134	132	726	17
Queue Length 95th (ft)	63	125	176	149	802	m36
Internal Link Dist (ft)	2668			2200	1114	
Turn Bay Length (ft)	265	265	260			270
Base Capacity (vph)	893	1372	676	3621	1808	863
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.10	0.20	0.47	0.33	0.84	0.17
























Intersection Summary

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

Lanes, Volumes, Timings

7: Bouquet Canyon Rd & Valencia Blvd/Soledad Canyon Rd

04/25/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	381	518	22	469	1254	256	22	657	361	298	1147	1032
Future Volume (vph)	381	518	22	469	1254	256	22	657	361	298	1147	1032
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	10	10	11	11	11	11	10	10	11
Storage Length (ft)	360		0	330		330	250		0	435		400
Storage Lanes	2		0	3		1	1		1	2		2
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.94	0.91	0.91	0.94	0.91	1.00	1.00	0.91	1.00	0.97	0.91	0.88
Fr _t		0.994				0.850			0.850			0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	4824	4886	0	4658	4746	1531	1711	4916	1531	3204	4746	2694
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	4824	4886	0	4658	4746	1531	1711	4916	1531	3204	4746	2694
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5				99			112			460
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		2282			2858			2196			1054	
Travel Time (s)		34.6			43.3			33.3			12.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	414	563	24	510	1363	278	24	714	392	324	1247	1122
Shared Lane Traffic (%)												
Lane Group Flow (vph)	414	587	0	510	1363	278	24	714	392	324	1247	1122
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		33			33			20			20	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.00	1.09	1.09	1.04	1.04	1.04	1.04	1.09	1.09	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50		50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50		50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4		3	8	1	5	2	3	1	6	7
Permitted Phases						8			2			6
Detector Phase	7	4		3	8	1	5	2	3	1	6	7
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	44.0		12.0	48.0	12.0	12.0	46.0	12.0	12.0	44.0	12.0

Queues

7: Bouquet Canyon Rd & Valencia Blvd/Soledad Canyon Rd

04/25/2023



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	414	587	510	1363	278	24	714	392	324	1247	1122
v/c Ratio	0.56	0.68	0.38	0.93	0.39	0.24	0.49	0.40	0.84	0.68	0.65
Control Delay	21.4	21.3	39.6	57.3	13.0	59.0	35.4	5.8	52.2	19.4	11.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	21.4	21.3	39.6	57.3	13.0	59.0	35.4	5.8	52.2	19.4	11.2
Queue Length 50th (ft)	33	47	137	455	75	20	191	9	148	314	427
Queue Length 95th (ft)	45	56	196	#531	138	49	234	220	m#190	382	525
Internal Link Dist (ft)		2202		2778			2116			974	
Turn Bay Length (ft)	360		330		330	250			435		400
Base Capacity (vph)	804	1299	1339	1473	716	194	1445	980	388	1835	1764
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.45	0.38	0.93	0.39	0.12	0.49	0.40	0.84	0.68	0.64

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

Lanes, Volumes, Timings
 8: Bouquet Canyon Rd & Newhall Ranch Rd

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	262	743	272	443	1704	444	347	782	157	437	1831	517
Future Volume (vph)	262	743	272	443	1704	444	347	782	157	437	1831	517
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	290		265	410		410	475		230	260		150
Storage Lanes	3		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.94	0.86	1.00	0.97	0.86	1.00	0.97	0.86	1.00	0.97	0.86	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	4990	6408	1583	3433	6408	1583	3433	6408	1583	3433	6408	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	4990	6408	1583	3433	6408	1583	3433	6408	1583	3433	6408	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			107			330			182			112
Link Speed (mph)		45		45			45			45		45
Link Distance (ft)		870		2469			1012			1082		
Travel Time (s)		13.2		37.4			15.3			16.4		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	285	808	296	482	1852	483	377	850	171	475	1990	562
Shared Lane Traffic (%)												
Lane Group Flow (vph)	285	808	296	482	1852	483	377	850	171	475	1990	562
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		36		36			24			24		
Link Offset(ft)		0		0			0			0		
Crosswalk Width(ft)		16		16			16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	3	8	1	7	4		1	6		5	2	3
Permitted Phases			8			4			6			2
Detector Phase	3	8	1	7	4	4	1	6	6	5	2	3
Switch Phase												
Minimum Initial (s)	4.0	5.0	4.0	4.0	5.0	5.0	4.0	10.0	10.0	4.0	10.0	4.0
Minimum Split (s)	12.0	43.0	12.0	12.0	43.0	43.0	12.0	49.0	49.0	12.0	50.0	12.0
Total Split (s)	21.0	36.0	22.0	21.0	36.0	36.0	22.0	45.0	45.0	30.0	53.0	21.0

Lanes, Volumes, Timings
 8: Bouquet Canyon Rd & Newhall Ranch Rd

04/25/2023

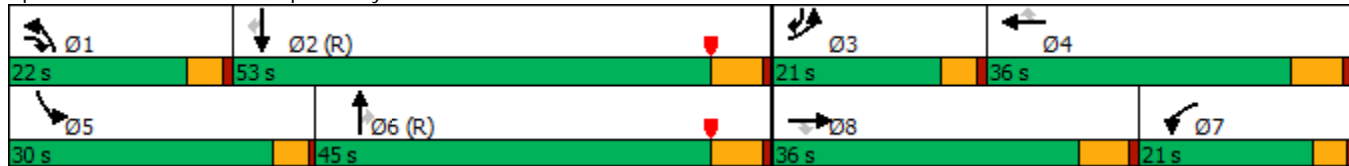


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	15.9%	27.3%	16.7%	15.9%	27.3%	27.3%	16.7%	34.1%	34.1%	22.7%	40.2%	15.9%
Maximum Green (s)	16.5	30.0	17.5	17.0	30.0	30.0	17.5	39.0	39.0	26.0	47.0	16.5
Yellow Time (s)	3.5	5.0	3.5	3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.0	3.5
All-Red Time (s)	1.0	1.0	1.0	0.5	1.0	1.0	1.0	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	-0.5	-2.0	-0.5	-0.5	-2.0	-2.0	-0.5	-2.0	-2.0	-0.5	-2.0	-0.5
Total Lost Time (s)	4.0	4.0	4.0	3.5	4.0	4.0	4.0	4.0	4.0	3.5	4.0	4.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes		Yes	Yes			Yes			Yes		Yes
Vehicle Extension (s)	3.0	5.5	3.0	3.0	5.5	5.5	3.0	5.5	5.5	3.0	5.5	3.0
Minimum Gap (s)	3.0	2.5	3.0	3.0	2.5	2.5	3.0	4.5	4.5	3.0	4.5	3.0
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	10.0	0.0	10.0	0.0
Time To Reduce (s)	0.0	24.0	0.0	0.0	24.0	24.0	0.0	10.0	10.0	0.0	10.0	0.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	None
Walk Time (s)		5.0			5.0	5.0		5.0	5.0		5.0	
Flash Dont Walk (s)		32.0			32.0	32.0		38.0	38.0		39.0	
Pedestrian Calls (#/hr)		2			2	2		1	1		1	
Act Effect Green (s)	14.2	26.8	44.3	22.7	34.8	34.8	17.5	44.2	44.2	23.3	49.5	67.7
Actuated g/C Ratio	0.11	0.20	0.34	0.17	0.26	0.26	0.13	0.33	0.33	0.18	0.38	0.51
v/c Ratio	0.53	0.62	0.49	0.82	1.10	0.73	0.83	0.40	0.26	0.79	0.83	0.65
Control Delay	59.0	49.9	14.5	63.6	98.0	23.7	60.5	53.7	20.6	61.5	41.2	22.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.0	49.9	14.5	63.6	98.0	23.7	60.5	53.7	20.6	61.5	41.2	22.2
LOS	E	D	B	E	F	C	E	D	C	E	D	C
Approach Delay		44.2			79.3			51.5			40.9	
Approach LOS		D			E			D			D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 105 (80%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
 Natural Cycle: 130
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.10
 Intersection Signal Delay: 55.7
 Intersection LOS: E
 Intersection Capacity Utilization 79.4%
 ICU Level of Service D
 Analysis Period (min) 15

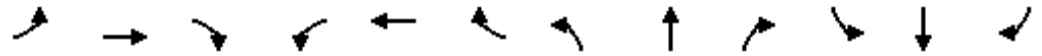
Splits and Phases: 8: Bouquet Canyon Rd & Newhall Ranch Rd



Queues

8: Bouquet Canyon Rd & Newhall Ranch Rd

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	285	808	296	482	1852	483	377	850	171	475	1990	562
v/c Ratio	0.53	0.62	0.49	0.82	1.10	0.73	0.83	0.40	0.26	0.79	0.83	0.65
Control Delay	59.0	49.9	14.5	63.6	98.0	23.7	60.5	53.7	20.6	61.5	41.2	22.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.0	49.9	14.5	63.6	98.0	23.7	60.5	53.7	20.6	61.5	41.2	22.2
Queue Length 50th (ft)	82	184	77	200	-524	123	137	221	42	201	448	277
Queue Length 95th (ft)	112	211	133	#345	#631	253	#231	254	103	257	498	389
Internal Link Dist (ft)		790			2389			932			1002	
Turn Bay Length (ft)	290		265	410		410	475		230	260		150
Base Capacity (vph)	642	1553	608	589	1687	659	468	2145	651	689	2401	897
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.44	0.52	0.49	0.82	1.10	0.73	0.81	0.40	0.26	0.69	0.83	0.63

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.

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

Lanes, Volumes, Timings
9: Commuter Way & Soledad Cyn

04/25/2023

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↑	↓	↑↑↑	↓	↓
Traffic Volume (vph)	1079	36	3	2026	18	0
Future Volume (vph)	1079	36	3	2026	18	0
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		150	285		0	0
Storage Lanes		1	1		2	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	1.00	1.00	0.91	0.97	0.95
Frt		0.850				
Flt Protected			0.950		0.950	
Satd. Flow (prot)	5085	1583	1770	5085	3433	0
Flt Permitted			0.950		0.950	
Satd. Flow (perm)	5085	1583	1770	5085	3433	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		37				
Link Speed (mph)	50			50	30	
Link Distance (ft)	928			2825	392	
Travel Time (s)	12.7			38.5	8.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1173	39	3	2202	20	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1173	39	3	2202	20	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	1	1	1	1	1	
Detector Template						
Leading Detector (ft)	50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	
Turn Type	NA	Perm	Prot	NA	Prot	
Protected Phases	2		1	6	8	
Permitted Phases		2				
Detector Phase	2	2	1	6	8	
Switch Phase						
Minimum Initial (s)	10.0	10.0	4.0	10.0	4.0	
Minimum Split (s)	26.0	26.0	12.0	22.0	37.0	
Total Split (s)	75.0	75.0	20.0	95.0	37.0	

Lanes, Volumes, Timings
 9: Commuter Way & Soledad Cyn

04/25/2023

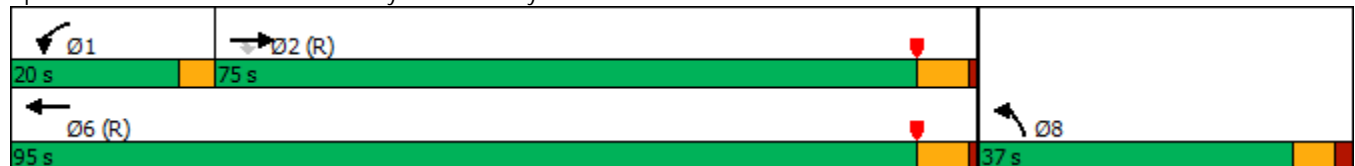


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Total Split (%)	56.8%	56.8%	15.2%	72.0%	28.0%	
Maximum Green (s)	69.0	69.0	16.5	89.0	31.0	
Yellow Time (s)	5.0	5.0	3.5	5.0	4.0	
All-Red Time (s)	1.0	1.0	0.0	1.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	0.5	-2.0	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Vehicle Extension (s)	5.0	5.0	1.5	5.0	2.0	
Minimum Gap (s)	4.0	4.0	1.5	4.0	2.0	
Time Before Reduce (s)	15.0	15.0	0.0	15.0	0.0	
Time To Reduce (s)	15.0	15.0	0.0	15.0	0.0	
Recall Mode	C-Max	C-Max	None	C-Max	None	
Walk Time (s)	7.0	7.0			7.0	
Flash Dont Walk (s)	13.0	13.0			24.0	
Pedestrian Calls (#/hr)	0	0			0	
Act Effect Green (s)	120.8	120.8	3.9	122.6	7.3	
Actuated g/C Ratio	0.92	0.92	0.03	0.93	0.06	
v/c Ratio	0.25	0.03	0.06	0.47	0.11	
Control Delay	0.5	0.0	78.3	0.5	60.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	0.5	0.0	78.3	0.5	60.1	
LOS	A	A	E	A	E	
Approach Delay	0.5			0.7	60.1	
Approach LOS	A			A	E	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 16 (12%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Natural Cycle: 75
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.47
 Intersection Signal Delay: 0.9
 Intersection LOS: A
 Intersection Capacity Utilization 49.1%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 9: Commuter Way & Soledad Cyn



Queues

9: Commuter Way & Soledad Cyn

04/25/2023



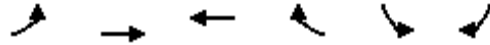
Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Group Flow (vph)	1173	39	3	2202	20
v/c Ratio	0.25	0.03	0.06	0.47	0.11
Control Delay	0.5	0.0	78.3	0.5	60.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	0.5	0.0	78.3	0.5	60.1
Queue Length 50th (ft)	11	0	2	20	8
Queue Length 95th (ft)	23	0	m7	18	22
Internal Link Dist (ft)	848			2745	312
Turn Bay Length (ft)		150	285		
Base Capacity (vph)	4655	1452	214	4721	858
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.25	0.03	0.01	0.47	0.02

Intersection Summary

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

Lanes, Volumes, Timings
 10: Soledad Cyn/Soledad Cyn Rd & Valley Center

04/25/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø4
Lane Configurations	↖↖	↑↑↑	↑↑↑	↗	↘↘	↘	
Traffic Volume (vph)	52	672	1563	778	397	144	
Future Volume (vph)	52	672	1563	778	397	144	
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	250			310	235	0	
Storage Lanes	2			1	1	1	
Taper Length (ft)	25				25		
Lane Util. Factor	0.97	0.91	0.91	1.00	0.97	1.00	
Fr _t				0.850		0.850	
Fl _t Protected	0.950				0.950		
Satd. Flow (prot)	3433	5085	5085	1583	3433	1583	
Fl _t Permitted	0.950				0.950		
Satd. Flow (perm)	3433	5085	5085	1583	3433	1583	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)				497		157	
Link Speed (mph)		50	50		30		
Link Distance (ft)		2935	1764		1172		
Travel Time (s)		40.0	24.1		26.6		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	57	730	1699	846	432	157	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	57	730	1699	846	432	157	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Left	Left	Right	Left	Right	
Median Width(ft)		24	24		24		
Link Offset(ft)		0	0		0		
Crosswalk Width(ft)		16	16		16		
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (mph)	15			9	15	9	
Number of Detectors	1	1	1	1	1	1	
Detector Template							
Leading Detector (ft)	50	50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Turn Type	Prot	NA	NA	Free	Prot	pt+ov	
Protected Phases	5	2	6		3	3 5	4
Permitted Phases				Free			
Detector Phase	5	2	6		3	3 5	
Switch Phase							
Minimum Initial (s)	4.0	4.0	4.0		4.0		4.0
Minimum Split (s)	20.0	22.0	29.0		20.0		35.0
Total Split (s)	20.0	72.0	52.0		25.0		35.0

Lanes, Volumes, Timings
 10: Soledad Cyn/Soledad Cyn Rd & Valley Center

04/25/2023

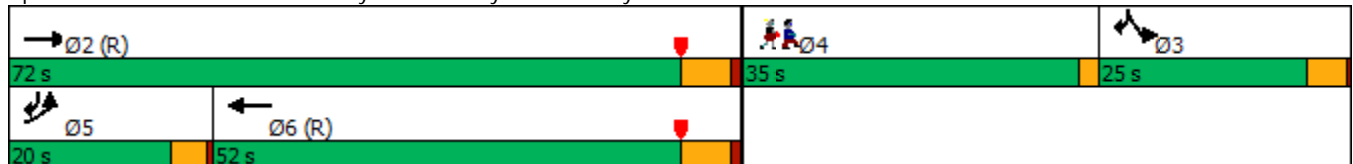


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø4	
Total Split (%)	15.2%	54.5%	39.4%		18.9%		27%	
Maximum Green (s)	16.0	66.0	46.0		20.5		33.0	
Yellow Time (s)	3.5	5.0	5.0		4.0		2.0	
All-Red Time (s)	0.5	1.0	1.0		0.5		0.0	
Lost Time Adjust (s)	0.0	-2.0	-2.0		-0.5			
Total Lost Time (s)	4.0	4.0	4.0		4.0			
Lead/Lag	Lead		Lag		Lag		Lead	
Lead-Lag Optimize?	Yes		Yes		Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		0.2	
Recall Mode	None	C-Max	C-Max		None		None	
Walk Time (s)				7.0				7.0
Flash Dont Walk (s)				16.0				26.0
Pedestrian Calls (#/hr)				0				0
Act Effct Green (s)	7.6	101.4	89.8	132.0	22.6	34.2		
Actuated g/C Ratio	0.06	0.77	0.68	1.00	0.17	0.26		
v/c Ratio	0.29	0.19	0.49	0.53	0.73	0.30		
Control Delay	49.8	9.1	2.6	2.9	43.4	3.8		
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		
Total Delay	49.8	9.1	2.6	2.9	43.4	3.8		
LOS	D	A	A	A	D	A		
Approach Delay	12.1		2.7	32.9				
Approach LOS	B		A	C				

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 37 (28%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Natural Cycle: 115
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.73
 Intersection Signal Delay: 9.1
 Intersection LOS: A
 Intersection Capacity Utilization 48.2%
 ICU Level of Service A
 Analysis Period (min) 15

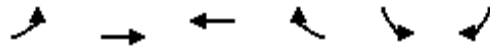
Splits and Phases: 10: Soledad Cyn/Soledad Cyn Rd & Valley Center



Queues

10: Soledad Cyn/Soledad Cyn Rd & Valley Center

04/25/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	57	730	1699	846	432	157
v/c Ratio	0.29	0.19	0.49	0.53	0.73	0.30
Control Delay	49.8	9.1	2.6	2.9	43.4	3.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.8	9.1	2.6	2.9	43.4	3.8
Queue Length 50th (ft)	24	117	36	0	145	8
Queue Length 95th (ft)	49	149	52	m420	217	19
Internal Link Dist (ft)		2855	1684		1092	
Turn Bay Length (ft)	250			310	235	
Base Capacity (vph)	416	3904	3458	1583	612	610
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.19	0.49	0.53	0.71	0.26

Intersection Summary

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

Lanes, Volumes, Timings
 11: Golden Valley Road & Valley Center Drive

04/25/2023



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4	Ø5	Ø12
Lane Configurations	↶↶↶	↷↷	↶↶	↑↑↑	↑↑↑	↷			
Traffic Volume (vph)	771	101	104	800	997	464			
Future Volume (vph)	771	101	104	800	997	464			
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900			
Storage Length (ft)	260	260	290			150			
Storage Lanes	2	1	2			1			
Taper Length (ft)	25		25						
Lane Util. Factor	0.94	0.88	0.97	0.91	0.91	1.00			
Frt		0.850				0.850			
Flt Protected	0.950		0.950						
Satd. Flow (prot)	4990	2787	3433	5085	5085	1583			
Flt Permitted	0.950		0.950						
Satd. Flow (perm)	4990	2787	3433	5085	5085	1583			
Right Turn on Red		Yes				Yes			
Satd. Flow (RTOR)		110				340			
Link Speed (mph)	30			50	50				
Link Distance (ft)	513			2601	1605				
Travel Time (s)	11.7			35.5	21.9				
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92			
Adj. Flow (vph)	838	110	113	870	1084	504			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	838	110	113	870	1084	504			
Enter Blocked Intersection	No	No	No	No	No	No			
Lane Alignment	Left	Right	Left	Left	Left	Right			
Median Width(ft)	36			24	24				
Link Offset(ft)	0			0	0				
Crosswalk Width(ft)	16			16	16				
Two way Left Turn Lane									
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00			
Turning Speed (mph)	15	9	15			9			
Number of Detectors	1	1	1	1	1	1			
Detector Template									
Leading Detector (ft)	50	50	50	50	50	50			
Trailing Detector (ft)	0	0	0	0	0	0			
Detector 1 Position(ft)	0	0	0	0	0	0			
Detector 1 Size(ft)	50	50	50	50	50	50			
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel									
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Turn Type	Prot	pt+ov	Prot	NA	NA	Perm			
Protected Phases	3	5 12	5 12	2	6		4	5	12
Permitted Phases						6			
Detector Phase	3	5 12	5 12	2	6	6			
Switch Phase									
Minimum Initial (s)	3.0			10.0	10.0	10.0	4.0	4.0	4.0
Minimum Split (s)	25.0			30.0	40.0	40.0	35.0	15.0	20.0
Total Split (s)	30.0			67.0	42.0	42.0	35.0	25.0	35.0

Lanes, Volumes, Timings
 11: Golden Valley Road & Valley Center Drive

04/25/2023

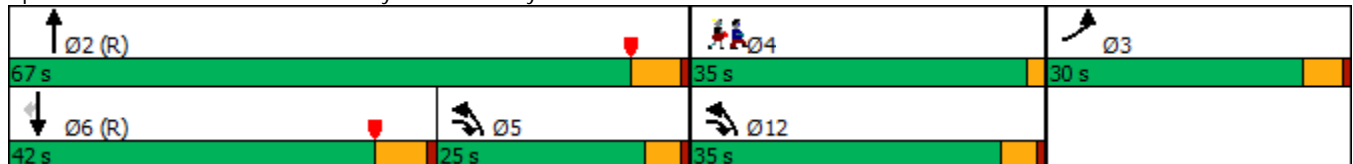


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4	Ø5	Ø12
Total Split (%)	22.7%			50.8%	31.8%	31.8%	27%	19%	27%
Maximum Green (s)	25.0			61.0	36.0	36.0	33.0	20.5	30.5
Yellow Time (s)	4.0			5.0	5.0	5.0	2.0	3.5	3.5
All-Red Time (s)	1.0			1.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)	-1.0			-2.0	-2.0	-2.0			
Total Lost Time (s)	4.0			4.0	4.0	4.0			
Lead/Lag					Lead	Lead		Lag	
Lead-Lag Optimize?					Yes	Yes		Yes	
Vehicle Extension (s)	3.0			3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None			C-Min	C-Min	C-Min	None	None	None
Walk Time (s)					7.0	7.0	7.0		5.0
Flash Dont Walk (s)					24.0	24.0	26.0		10.0
Pedestrian Calls (#/hr)					0	0	0		0
Act Effect Green (s)	29.6	19.8	19.8	84.3	70.6	70.6			
Actuated g/C Ratio	0.22	0.15	0.15	0.64	0.53	0.53			
v/c Ratio	0.75	0.22	0.22	0.27	0.40	0.50			
Control Delay	41.2	8.6	39.0	4.1	12.7	9.1			
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0			
Total Delay	41.2	8.6	39.0	4.1	12.7	9.1			
LOS	D	A	D	A	B	A			
Approach Delay	37.4			8.1	11.6				
Approach LOS	D			A	B				

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 26 (20%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 115
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.75
 Intersection Signal Delay: 17.5
 Intersection LOS: B
 Intersection Capacity Utilization 47.3%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 11: Golden Valley Road & Valley Center Drive



Queues

11: Golden Valley Road & Valley Center Drive

04/25/2023



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	838	110	113	870	1084	504
v/c Ratio	0.75	0.22	0.22	0.27	0.40	0.50
Control Delay	41.2	8.6	39.0	4.1	12.7	9.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.2	8.6	39.0	4.1	12.7	9.1
Queue Length 50th (ft)	252	5	51	42	159	110
Queue Length 95th (ft)	269	21	84	44	180	264
Internal Link Dist (ft)	433			2521	1525	
Turn Bay Length (ft)	260	260	290			150
Base Capacity (vph)	1133	1016	1162	3245	2718	1004
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.74	0.11	0.10	0.27	0.40	0.50

Intersection Summary

Lanes, Volumes, Timings
12: Ruther Ave & Soledad Cyn Rd

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↙	↑↑↑	↗	↙↗	↑↑↑		↙	↑	↗↘	↙	↕	
Traffic Volume (vph)	69	758	92	205	2183	17	250	134	94	81	93	68
Future Volume (vph)	69	758	92	205	2183	17	250	134	94	81	93	68
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	285		300	250		0	0		0	125		0
Storage Lanes	1		1	2		0	1		2	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	0.91	0.95	0.95	0.88	0.95	0.95	1.00
Frt			0.850		0.999				0.850		0.937	
Flt Protected	0.950			0.950			0.950	0.979		0.950		
Satd. Flow (prot)	1770	5085	1583	3433	5080	0	1681	1732	2787	1681	1658	0
Flt Permitted	0.950			0.950			0.950	0.979		0.950		
Satd. Flow (perm)	1770	5085	1583	3433	5080	0	1681	1732	2787	1681	1658	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			103		1				102		23	
Link Speed (mph)		50		50				40			30	
Link Distance (ft)		1764		2200				220			327	
Travel Time (s)		24.1		30.0				3.8			7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	75	824	100	223	2373	18	272	146	102	88	101	74
Shared Lane Traffic (%)							42%			0%		
Lane Group Flow (vph)	75	824	100	223	2391	0	158	260	102	88	175	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24		24				12			12	
Link Offset(ft)		0		0				0			0	
Crosswalk Width(ft)		16		16				16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1	1	1	1	
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50		50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	pt+ov	Split	NA	
Protected Phases	1	6		5	2		3	3	3 5	4	4	
Permitted Phases			6									
Detector Phase	1	6	6	5	2		3	3	3 5	4	4	
Switch Phase												
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	12.0	42.0	42.0	12.0	27.0		35.0	35.0		15.0	15.0	
Total Split (s)	18.0	52.0	52.0	30.0	64.0		30.0	30.0		20.0	20.0	

Lanes, Volumes, Timings
12: Ruther Ave & Soledad Cyn Rd

04/25/2023

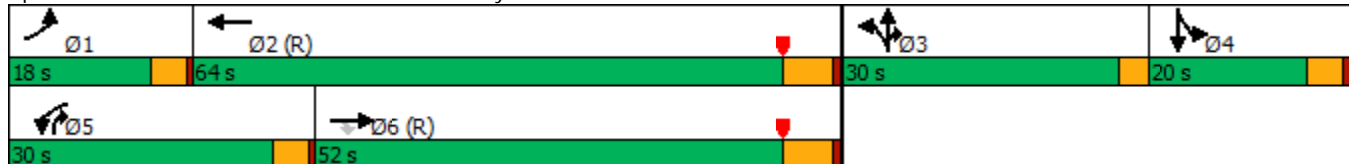


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	13.6%	39.4%	39.4%	22.7%	48.5%		22.7%	22.7%		15.2%	15.2%	
Maximum Green (s)	14.0	46.0	46.0	26.0	58.0		27.0	27.0		15.5	15.5	
Yellow Time (s)	3.5	5.0	5.0	3.5	5.0		3.0	3.0		3.5	3.5	
All-Red Time (s)	0.5	1.0	1.0	0.5	1.0		0.0	0.0		1.0	1.0	
Lost Time Adjust (s)	0.0	-2.0	-2.0	0.0	-2.0		1.0	1.0		-0.5	-0.5	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	4.5	4.5	1.5	4.5		3.0	3.0		3.0	3.0	
Minimum Gap (s)	1.5	3.0	3.0	1.5	3.0		3.0	3.0		3.0	3.0	
Time Before Reduce (s)	0.0	7.5	7.5	0.0	7.5		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	22.5	22.5	0.0	22.5		0.0	0.0		0.0	0.0	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None		None	None	
Walk Time (s)		7.0	7.0		7.0		5.0	5.0				
Flash Dont Walk (s)		25.0	25.0		11.0		27.0	27.0				
Pedestrian Calls (#/hr)		0	0		0		0	0				
Act Effect Green (s)	9.5	65.2	65.2	12.5	70.1		22.8	22.8	35.3	15.5	15.5	
Actuated g/C Ratio	0.07	0.49	0.49	0.09	0.53		0.17	0.17	0.27	0.12	0.12	
v/c Ratio	0.59	0.33	0.12	0.69	0.89		0.54	0.87	0.12	0.45	0.81	
Control Delay	99.0	8.0	1.1	68.7	34.3		56.6	80.2	3.9	61.7	77.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	99.0	8.0	1.1	68.7	34.3		56.6	80.2	3.9	61.7	77.1	
LOS	F	A	A	E	C		E	F	A	E	E	
Approach Delay		14.1			37.3			58.1			71.9	
Approach LOS		B			D			E			E	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
 Natural Cycle: 115
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.89
 Intersection Signal Delay: 36.5
 Intersection LOS: D
 Intersection Capacity Utilization 76.9%
 ICU Level of Service D
 Analysis Period (min) 15

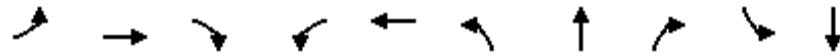
Splits and Phases: 12: Ruther Ave & Soledad Cyn Rd



Queues

12: Ruther Ave & Soledad Cyn Rd

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	75	824	100	223	2391	158	260	102	88	175
v/c Ratio	0.59	0.33	0.12	0.69	0.89	0.54	0.87	0.12	0.45	0.81
Control Delay	99.0	8.0	1.1	68.7	34.3	56.6	80.2	3.9	61.7	77.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	99.0	8.0	1.1	68.7	34.3	56.6	80.2	3.9	61.7	77.1
Queue Length 50th (ft)	64	98	0	96	706	129	227	0	73	133
Queue Length 95th (ft)	m103	137	m7	136	#895	203	#352	16	134	#261
Internal Link Dist (ft)		1684			2120		140			247
Turn Bay Length (ft)	285		300	250					125	
Base Capacity (vph)	187	2512	834	676	2696	331	341	1159	207	225
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.33	0.12	0.33	0.89	0.48	0.76	0.09	0.43	0.78

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

Lanes, Volumes, Timings
 13: Golden Valley Road & Centre Pointe Parkway

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	48	70	158	249	98	64	349	781	344	132	900	126
Future Volume (vph)	48	70	158	249	98	64	349	781	344	132	900	126
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		260	150		250	375		300	700		0
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850		0.941				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	3433	1753	0	1770	3539	1583	1770	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1863	1583	3433	1753	0	1770	3539	1583	1770	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			110		25				374			136
Link Speed (mph)		30			30			50			50	
Link Distance (ft)		1149			802			7898			1445	
Travel Time (s)		26.1			18.2			107.7			19.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	52	76	172	271	107	70	379	849	374	143	978	137
Shared Lane Traffic (%)												
Lane Group Flow (vph)	52	76	172	271	177	0	379	849	374	143	978	137
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50		50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	3	8	5	7	4		5	2	7	1	6	
Permitted Phases			8						2			6
Detector Phase	3	8	5	7	4		5	2	7	1	6	6
Switch Phase												
Minimum Initial (s)	4.0	6.0	4.0	4.0	6.0		4.0	10.0	4.0	4.0	10.0	10.0
Minimum Split (s)	12.0	25.0	20.0	20.0	39.0		20.0	33.0	20.0	15.0	34.0	34.0
Total Split (s)	19.0	25.0	33.0	34.0	40.0		33.0	40.0	34.0	33.0	40.0	40.0

Lanes, Volumes, Timings
 13: Golden Valley Road & Centre Pointe Parkway

04/25/2023

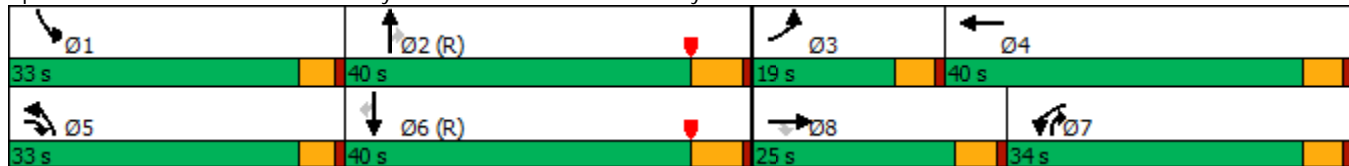


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	14.4%	18.9%	25.0%	25.8%	30.3%		25.0%	30.3%	25.8%	25.0%	30.3%	30.3%
Maximum Green (s)	14.0	20.0	28.5	29.0	35.0		28.5	34.0	29.0	28.5	34.0	34.0
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0		3.5	5.0	4.0	3.5	5.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0	-1.0	-0.5	-1.0	-1.0		-0.5	-2.0	-1.0	-0.5	-2.0	-2.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Min	None	None	C-Min	C-Min
Walk Time (s)					7.0			7.0			7.0	7.0
Flash Dont Walk (s)					27.0			20.0			21.0	21.0
Pedestrian Calls (#/hr)					0			0			0	0
Act Effct Green (s)	10.2	11.7	47.0	17.4	18.8		36.8	72.7	90.9	16.5	52.3	52.3
Actuated g/C Ratio	0.08	0.09	0.36	0.13	0.14		0.28	0.55	0.69	0.12	0.40	0.40
v/c Ratio	0.38	0.46	0.27	0.60	0.66		0.77	0.44	0.31	0.65	0.70	0.19
Control Delay	65.0	65.4	6.4	59.1	56.8		38.9	42.1	7.0	64.4	51.9	21.4
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.0	65.4	6.4	59.1	56.8		38.9	42.1	7.0	64.4	51.9	21.4
LOS	E	E	A	E	E		D	D	A	E	D	C
Approach Delay		31.5			58.2			33.2			50.0	
Approach LOS		C			E			C			D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 125 (95%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 105
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.77
 Intersection Signal Delay: 42.0
 Intersection LOS: D
 Intersection Capacity Utilization 69.9%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 13: Golden Valley Road & Centre Pointe Parkway



Queues

13: Golden Valley Road & Centre Pointe Parkway

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	52	76	172	271	177	379	849	374	143	978	137
v/c Ratio	0.38	0.46	0.27	0.60	0.66	0.77	0.44	0.31	0.65	0.70	0.19
Control Delay	65.0	65.4	6.4	59.1	56.8	38.9	42.1	7.0	64.4	51.9	21.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.0	65.4	6.4	59.1	56.8	38.9	42.1	7.0	64.4	51.9	21.4
Queue Length 50th (ft)	43	63	23	114	124	338	373	107	124	462	46
Queue Length 95th (ft)	85	112	43	154	195	m404	m431	m160	123	#616	123
Internal Link Dist (ft)		1069			722		7818			1365	
Turn Bay Length (ft)	150		260	150		375		300	700		
Base Capacity (vph)	201	296	634	780	496	493	1948	1321	388	1403	709
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.26	0.26	0.27	0.35	0.36	0.77	0.44	0.28	0.37	0.70	0.19

Intersection Summary

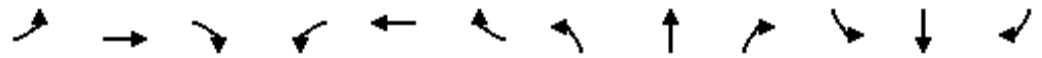
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

Lanes, Volumes, Timings
 14: Sierra Highway & Golden Valley Road

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑	↔↔	↔↔	↑↑↑	↔	↔↔	↑↔		↔	↑↑	↔
Traffic Volume (vph)	283	417	793	336	881	40	546	193	14	20	1086	469
Future Volume (vph)	283	417	793	336	881	40	546	193	14	20	1086	469
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	280		280	285		300	285		0	410		540
Storage Lanes	2		2	2		1	2		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	0.88	0.97	0.91	1.00	0.97	0.95	0.95	1.00	0.95	1.00
Fr _t			0.850			0.850		0.990				0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	2787	3433	5085	1583	3433	3504	0	1770	3539	1583
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	2787	3433	5085	1583	3433	3504	0	1770	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			481			136		6				510
Link Speed (mph)		50		50			30			30		
Link Distance (ft)		2032		1202			1801			1671		
Travel Time (s)		27.7		16.4			40.9			38.0		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	308	453	862	365	958	43	593	210	15	22	1180	510
Shared Lane Traffic (%)												
Lane Group Flow (vph)	308	453	862	365	958	43	593	225	0	22	1180	510
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24		24			24			24		24
Link Offset(ft)		0		0			0			0		0
Crosswalk Width(ft)		16		16			16			16		16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50		50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50		50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	custom
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						8
Detector Phase	7	4	4	3	8	8	5	2		1	6	8
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	8.5	29.6	29.6	8.5	40.0	40.0	15.0	49.0		8.5	46.0	40.0
Total Split (s)	29.0	41.0	41.0	29.0	41.0	41.0	25.0	44.0		18.0	37.0	41.0

Lanes, Volumes, Timings
 14: Sierra Highway & Golden Valley Road

04/25/2023

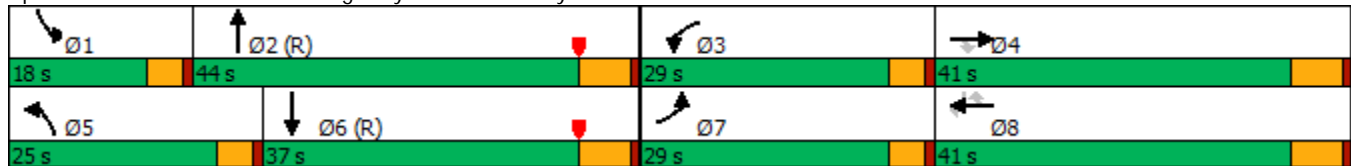


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	22.0%	31.1%	31.1%	22.0%	31.1%	31.1%	18.9%	33.3%		13.6%	28.0%	31.1%
Maximum Green (s)	24.5	35.0	35.0	24.5	35.0	35.0	20.5	38.0		13.5	31.0	35.0
Yellow Time (s)	3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.0		3.5	5.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	-0.5	-2.0	-2.0	-0.5	-2.0	-2.0	-0.5	-2.0		-0.5	-2.0	-2.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	None
Walk Time (s)					5.0	5.0		5.0			5.0	5.0
Flash Dont Walk (s)					29.0	29.0		33.0			30.0	29.0
Pedestrian Calls (#/hr)					0	0		0			0	0
Act Effct Green (s)	17.6	33.5	33.5	19.7	35.6	35.6	21.0	59.2		7.7	41.8	35.6
Actuated g/C Ratio	0.13	0.25	0.25	0.15	0.27	0.27	0.16	0.45		0.06	0.32	0.27
v/c Ratio	0.67	0.51	0.81	0.71	0.70	0.08	1.09	0.14		0.21	1.05	0.64
Control Delay	47.9	32.8	24.2	61.2	46.0	0.3	115.2	24.1		63.5	85.8	7.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	47.9	32.8	24.2	61.2	46.0	0.3	115.2	24.1		63.5	85.8	7.0
LOS	D	C	C	E	D	A	F	C		E	F	A
Approach Delay		31.1			48.6			90.1			62.0	
Approach LOS		C			D			F			E	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 96 (73%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 130
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.09
 Intersection Signal Delay: 53.8 Intersection LOS: D
 Intersection Capacity Utilization 84.0% ICU Level of Service E
 Analysis Period (min) 15

Splits and Phases: 14: Sierra Highway & Golden Valley Road



Queues

14: Sierra Highway & Golden Valley Road

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	308	453	862	365	958	43	593	225	22	1180	510
v/c Ratio	0.67	0.51	0.81	0.71	0.70	0.08	1.09	0.14	0.21	1.05	0.64
Control Delay	47.9	32.8	24.2	61.2	46.0	0.3	115.2	24.1	63.5	85.8	7.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.9	32.8	24.2	61.2	46.0	0.3	115.2	24.1	63.5	85.8	7.0
Queue Length 50th (ft)	115	171	236	155	268	0	-293	61	18	-593	0
Queue Length 95th (ft)	135	224	299	201	309	0	#411	102	47	#822	89
Internal Link Dist (ft)		1952			1122			1721		1591	
Turn Bay Length (ft)	280		280	285		300	285		410		540
Base Capacity (vph)	650	991	1127	650	1458	551	546	1574	187	1119	817
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.47	0.46	0.76	0.56	0.66	0.08	1.09	0.14	0.12	1.05	0.62

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

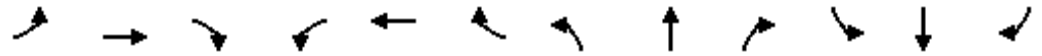
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Lanes, Volumes, Timings

15: SR-14 SB Ramp & Newhall Ranch Road/Golden Valley Road

04/25/2023

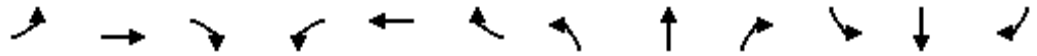


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗	↖	↑↑					↖	↗	↗
Traffic Volume (vph)	0	379	219	289	846	0	0	0	0	40	188	416
Future Volume (vph)	0	379	219	289	846	0	0	0	0	40	188	416
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	220		0	0		0	300		0
Storage Lanes	0		1	1		0	0		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850									0.850
Flt Protected				0.950						0.950	0.999	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	1681	1768	1583
Flt Permitted				0.950						0.950	0.999	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	1681	1768	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			238									111
Link Speed (mph)		50			50			30			30	
Link Distance (ft)		807			717			580			626	
Travel Time (s)		11.0			9.8			13.2			14.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	412	238	314	920	0	0	0	0	43	204	452
Shared Lane Traffic (%)										10%		
Lane Group Flow (vph)	0	412	238	314	920	0	0	0	0	39	208	452
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94							94
Detector 2 Size(ft)		6			6							6
Detector 2 Type		Cl+Ex			Cl+Ex							Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							0.0
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		6		5	2						4	
Permitted Phases		6								4		4

Lanes, Volumes, Timings

15: SR-14 SB Ramp & Newhall Ranch Road/Golden Valley Road

04/25/2023

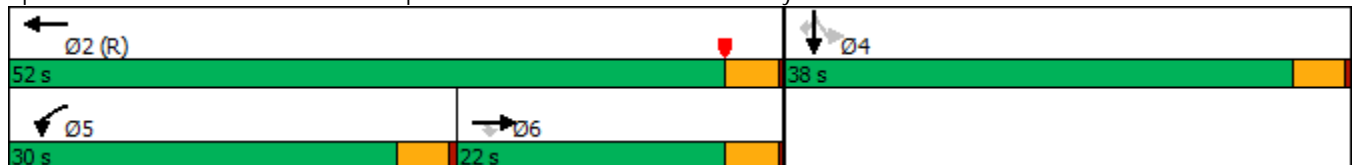


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase		6	6	5	2					4	4	4
Switch Phase												
Minimum Initial (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Minimum Split (s)		20.0	20.0	12.0	20.0					20.0	20.0	20.0
Total Split (s)		22.0	22.0	30.0	52.0					38.0	38.0	38.0
Total Split (%)		24.4%	24.4%	33.3%	57.8%					42.2%	42.2%	42.2%
Maximum Green (s)		18.0	18.0	26.0	48.0					34.0	34.0	34.0
Yellow Time (s)		3.5	3.5	3.5	3.5					3.5	3.5	3.5
All-Red Time (s)		0.5	0.5	0.5	0.5					0.5	0.5	0.5
Lost Time Adjust (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Total Lost Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lead/Lag		Lag	Lag	Lead								
Lead-Lag Optimize?		Yes	Yes	Yes								
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Recall Mode		Max	Max	None	C-Max					Max	Max	Max
Walk Time (s)		5.0	5.0		5.0					5.0	5.0	5.0
Flash Dont Walk (s)		10.0	10.0		10.0					10.0	10.0	10.0
Pedestrian Calls (#/hr)		0	0		0					0	0	0
Act Effect Green (s)		23.3	23.3	20.7	48.0					34.0	34.0	34.0
Actuated g/C Ratio		0.26	0.26	0.23	0.53					0.38	0.38	0.38
v/c Ratio		0.45	0.41	0.77	0.49					0.06	0.31	0.68
Control Delay		31.0	6.6	29.4	10.7					18.3	21.4	23.4
Queue Delay		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Total Delay		31.0	6.6	29.4	10.7					18.3	21.4	23.4
LOS		C	A	C	B					B	C	C
Approach Delay		22.1			15.5						22.5	
Approach LOS		C			B						C	

Intersection Summary

Area Type: Other
 Cycle Length: 90
 Actuated Cycle Length: 90
 Offset: 0 (0%), Referenced to phase 2:WBT, Start of Yellow
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.77
 Intersection Signal Delay: 19.0
 Intersection LOS: B
 Intersection Capacity Utilization 55.8%
 ICU Level of Service B
 Analysis Period (min) 15

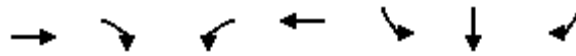
Splits and Phases: 15: SR-14 SB Ramp & Newhall Ranch Road/Golden Valley Road



Queues

15: SR-14 SB Ramp & Newhall Ranch Road/Golden Valley Road

04/25/2023



Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	412	238	314	920	39	208	452
v/c Ratio	0.45	0.41	0.77	0.49	0.06	0.31	0.68
Control Delay	31.0	6.6	29.4	10.7	18.3	21.4	23.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.0	6.6	29.4	10.7	18.3	21.4	23.4
Queue Length 50th (ft)	104	0	166	237	14	86	159
Queue Length 95th (ft)	161	60	249	266	36	144	271
Internal Link Dist (ft)	727			637		546	
Turn Bay Length (ft)			220		300		
Base Capacity (vph)	917	586	511	1887	635	667	667
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.45	0.41	0.61	0.49	0.06	0.31	0.68

Intersection Summary

Lanes, Volumes, Timings
 16: SR 14 NB Ramp & Golden Valley Road

04/25/2023

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	164	249	0	0	972	63	146	1	145	0	0	0
Future Volume (vph)	164	249	0	0	972	63	146	1	145	0	0	0
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	230		0	0		280	0		140	0		0
Storage Lanes	2		0	0		1	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt						0.850			0.850			
Flt Protected	0.950						0.950	0.953				
Satd. Flow (prot)	3433	3539	0	0	3539	1583	1681	1686	1583	0	0	0
Flt Permitted	0.950						0.950	0.953				
Satd. Flow (perm)	3433	3539	0	0	3539	1583	1681	1686	1583	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						68			158			
Link Speed (mph)		50			50			30				30
Link Distance (ft)		717			541			632				618
Travel Time (s)		9.8			7.4			14.4				14.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	178	271	0	0	1057	68	159	1	158	0	0	0
Shared Lane Traffic (%)							50%					
Lane Group Flow (vph)	178	271	0	0	1057	68	79	81	158	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1	1	2	1			
Detector Template	Left	Thru			Thru	Right	Left	Thru	Right			
Leading Detector (ft)	20	100			100	20	20	100	20			
Trailing Detector (ft)	0	0			0	0	0	0	0			
Detector 1 Position(ft)	0	0			0	0	0	0	0			
Detector 1 Size(ft)	20	6			6	20	20	6	20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Prot	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	7	4			8			2				
Permitted Phases						8	2		2			

Lanes, Volumes, Timings
 16: SR 14 NB Ramp & Golden Valley Road

04/25/2023

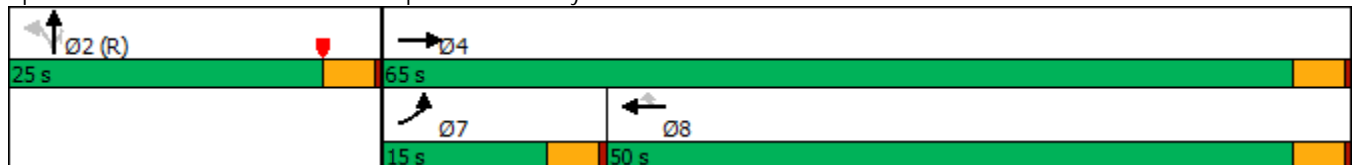


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4			8	8	2	2	2			
Switch Phase												
Minimum Initial (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Minimum Split (s)	12.0	20.0			20.0	20.0	20.0	20.0	20.0			
Total Split (s)	15.0	65.0			50.0	50.0	25.0	25.0	25.0			
Total Split (%)	16.7%	72.2%			55.6%	55.6%	27.8%	27.8%	27.8%			
Maximum Green (s)	11.0	61.0			46.0	46.0	21.0	21.0	21.0			
Yellow Time (s)	3.5	3.5			3.5	3.5	3.5	3.5	3.5			
All-Red Time (s)	0.5	0.5			0.5	0.5	0.5	0.5	0.5			
Lost Time Adjust (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Total Lost Time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Lead/Lag	Lead				Lag		Lag					
Lead-Lag Optimize?	Yes				Yes		Yes					
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Recall Mode	None	None			None	None	C-Max	C-Max	C-Max			
Walk Time (s)		5.0			5.0	5.0	5.0	5.0	5.0			
Flash Dont Walk (s)		10.0			10.0	10.0	10.0	10.0	10.0			
Pedestrian Calls (#/hr)		0			0	0	0	0	0			
Act Effct Green (s)	9.6	49.7			36.1	36.1	32.3	32.3	32.3			
Actuated g/C Ratio	0.11	0.55			0.40	0.40	0.36	0.36	0.36			
v/c Ratio	0.49	0.14			0.74	0.10	0.13	0.13	0.24			
Control Delay	20.3	12.1			26.1	3.9	23.5	23.5	5.5			
Queue Delay	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Total Delay	20.3	12.1			26.1	3.9	23.5	23.5	5.5			
LOS	C	B			C	A	C	C	A			
Approach Delay		15.4			24.7			14.5				
Approach LOS		B			C			B				

Intersection Summary

Area Type: Other
 Cycle Length: 90
 Actuated Cycle Length: 90
 Offset: 0 (0%), Referenced to phase 2:NBTL and 6:, Start of Yellow
 Natural Cycle: 55
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.74
 Intersection Signal Delay: 20.8
 Intersection LOS: C
 Intersection Capacity Utilization 55.8%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 16: SR 14 NB Ramp & Golden Valley Road



Queues

16: SR 14 NB Ramp & Golden Valley Road

04/25/2023



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	178	271	1057	68	79	81	158
v/c Ratio	0.49	0.14	0.74	0.10	0.13	0.13	0.24
Control Delay	20.3	12.1	26.1	3.9	23.5	23.5	5.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.3	12.1	26.1	3.9	23.5	23.5	5.5
Queue Length 50th (ft)	52	75	262	0	31	32	0
Queue Length 95th (ft)	78	115	286	21	75	76	46
Internal Link Dist (ft)		637	461			552	
Turn Bay Length (ft)	230			280			140
Base Capacity (vph)	419	2398	1808	842	602	604	668
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.42	0.11	0.58	0.08	0.13	0.13	0.24

Intersection Summary

Lanes, Volumes, Timings
 1: Valencia Blvd & 5 Fwy SB Ramp

04/25/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑		↑↑	↑
Traffic Volume (vph)	0	504	784	0	170	76
Future Volume (vph)	0	504	784	0	170	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	15	12	14
Storage Length (ft)	0			0	0	455
Storage Lanes	0			0	2	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.91	0.95	1.00	0.97	1.00
Fr _t						0.850
Fl _t Protected					0.950	
Satd. Flow (prot)	0	5085	3539	0	3433	1689
Fl _t Permitted					0.950	
Satd. Flow (perm)	0	5085	3539	0	3433	1689
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)						83
Link Speed (mph)		50	50		30	
Link Distance (ft)		616	917		417	
Travel Time (s)		8.4	12.5		9.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	548	852	0	185	83
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	548	852	0	185	83
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		24	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	0.88	1.00	0.92
Turning Speed (mph)	15			9	15	9
Number of Detectors		1	1		1	1
Detector Template						
Leading Detector (ft)		50	50		50	50
Trailing Detector (ft)		0	0		0	0
Detector 1 Position(ft)		0	0		0	0
Detector 1 Size(ft)		50	50		50	50
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)		0.0	0.0		0.0	0.0
Detector 1 Queue (s)		0.0	0.0		0.0	0.0
Detector 1 Delay (s)		0.0	0.0		0.0	0.0
Turn Type		NA	NA		Prot	Perm
Protected Phases		2	6		4	
Permitted Phases						4
Detector Phase		2	6		4	4
Switch Phase						
Minimum Initial (s)		4.0	4.0		4.0	4.0
Minimum Split (s)		20.0	35.2		20.0	20.0

Lanes, Volumes, Timings
 1: Valencia Blvd & 5 Fwy SB Ramp

04/25/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Total Split (s)		41.0	41.0		25.0	25.0
Total Split (%)		62.1%	62.1%		37.9%	37.9%
Maximum Green (s)		34.8	34.8		19.2	19.2
Yellow Time (s)		5.2	5.2		4.8	4.8
All-Red Time (s)		1.0	1.0		1.0	1.0
Lost Time Adjust (s)		-2.2	-2.2		-1.8	-1.8
Total Lost Time (s)		4.0	4.0		4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Recall Mode		C-Max	C-Max		Min	Min
Walk Time (s)			5.0			
Flash Dont Walk (s)			18.0			
Pedestrian Calls (#/hr)			0			
Act Effect Green (s)		47.3	47.3		10.7	10.7
Actuated g/C Ratio		0.72	0.72		0.16	0.16
v/c Ratio		0.15	0.34		0.33	0.24
Control Delay		3.3	4.7		25.7	8.2
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		3.3	4.7		25.7	8.2
LOS		A	A		C	A
Approach Delay		3.3	4.7		20.3	
Approach LOS		A	A		C	

Intersection Summary

Area Type: Other
 Cycle Length: 66
 Actuated Cycle Length: 66
 Offset: 56 (85%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.34
 Intersection Signal Delay: 6.7
 Intersection LOS: A
 Intersection Capacity Utilization 33.2%
 ICU Level of Service A
 Analysis Period (min) 15

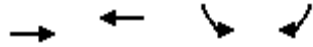
Splits and Phases: 1: Valencia Blvd & 5 Fwy SB Ramp



Queues

1: Valencia Blvd & 5 Fwy SB Ramp

04/25/2023














Lane Group	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	548	852	185	83
v/c Ratio	0.15	0.34	0.33	0.24
Control Delay	3.3	4.7	25.7	8.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	3.3	4.7	25.7	8.2
Queue Length 50th (ft)	19	88	34	0
Queue Length 95th (ft)	33	87	58	32
Internal Link Dist (ft)	536	837	337	
Turn Bay Length (ft)				455
Base Capacity (vph)	3644	2536	1092	594
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.15	0.34	0.17	0.14

Intersection Summary

Lanes, Volumes, Timings

2: 5 Fwy NB Ramp & Valencia Blvd

04/25/2023

						
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	640	30	115	1373	184	707
Future Volume (vph)	640	30	115	1373	184	707
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	12	12	12	12	14
Storage Length (ft)		0	200		220	220
Storage Lanes		0	2		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	0.97	0.86	0.97	0.88
Fr _t	0.993					0.850
Fl _t Protected			0.950		0.950	
Satd. Flow (prot)	5386	0	3433	6408	3433	2972
Fl _t Permitted			0.950		0.950	
Satd. Flow (perm)	5386	0	3433	6408	3433	2972
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	13					692
Link Speed (mph)	50			50	30	
Link Distance (ft)	917			476	493	
Travel Time (s)	12.5			6.5	11.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	696	33	125	1492	200	768
Shared Lane Traffic (%)						
Lane Group Flow (vph)	729	0	125	1492	200	768
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	24			24	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.92	1.00	1.00	1.00	1.00	0.92
Turning Speed (mph)		9	15		15	9
Number of Detectors	1		1	1	1	1
Detector Template						
Leading Detector (ft)	50		50	50	50	50
Trailing Detector (ft)	0		0	0	0	0
Detector 1 Position(ft)	0		0	0	0	0
Detector 1 Size(ft)	50		50	50	50	50
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0
Turn Type	NA		Prot	NA	Prot	Prot
Protected Phases	2		1	6	8	8
Permitted Phases						
Detector Phase	2		1	6	8	8
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	36.0		14.0	20.0	20.0	20.0

Queues

2: 5 Fwy NB Ramp & Valencia Blvd

04/25/2023










































Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	729	125	1492	200	768
v/c Ratio	0.26	0.27	0.34	0.30	0.68
Control Delay	7.8	30.4	3.4	23.3	6.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	7.8	30.4	3.4	23.3	6.7
Queue Length 50th (ft)	35	31	38	36	14
Queue Length 95th (ft)	88	51	86	58	58
Internal Link Dist (ft)	837		396	413	
Turn Bay Length (ft)		200		220	220
Base Capacity (vph)	2836	572	4402	832	1244
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.26	0.22	0.34	0.24	0.62

Intersection Summary

Lanes, Volumes, Timings
3: McBean Pkwy & Valencia Blvd

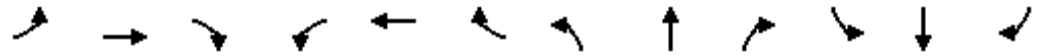
04/25/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	  		  	  		 	  	  	  	  	
Traffic Volume (vph)	434	1145	168	355	784	193	162	921	453	228	858	517
Future Volume (vph)	434	1145	168	355	784	193	162	921	453	228	858	517
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	11	11	13	11	11	12	11	11	12
Storage Length (ft)	350		280	290		225	130		200	190		300
Storage Lanes	2		1	2		1	2		2	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	0.88	0.97	0.91	0.88
Fr _t			0.850			0.850			0.850			0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3319	4916	1583	3319	4916	1636	3319	4916	2787	3319	4916	2787
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3319	4916	1583	3319	4916	1636	3319	4916	2787	3319	4916	2787
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			70			70			70			86
Link Speed (mph)		50			50			45			45	
Link Distance (ft)		1919			721			765			1359	
Travel Time (s)		26.2			9.8			11.6			20.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	472	1245	183	386	852	210	176	1001	492	248	933	562
Shared Lane Traffic (%)												
Lane Group Flow (vph)	472	1245	183	386	852	210	176	1001	492	248	933	562
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		22			22			22			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.00	1.04	1.04	0.96	1.04	1.04	1.00	1.04	1.04	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	1	6	7	5	2	3	7	4	5	3	8	1
Permitted Phases			6			2			4			8
Detector Phase	1	6	7	5	2	3	7	4	5	3	8	1
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	43.0	12.0	12.0	44.0	12.0	12.0	41.0	12.0	12.0	44.0	12.0

Queues

3: McBean Pkwy & Valencia Blvd

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	472	1245	183	386	852	210	176	1001	492	248	933	562
v/c Ratio	0.82	0.75	0.24	0.72	0.53	0.26	0.54	0.78	0.38	0.63	0.68	0.40
Control Delay	70.1	41.9	16.8	74.3	20.6	5.0	63.1	50.0	20.5	41.0	54.4	47.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	70.1	41.9	16.8	74.3	20.6	5.0	63.1	50.0	20.5	41.0	54.4	47.8
Queue Length 50th (ft)	210	371	53	123	225	75	74	289	127	100	309	264
Queue Length 95th (ft)	#294	430	105	178	258	91	113	338	168	146	357	325
Internal Link Dist (ft)		1839			641			685			1279	
Turn Bay Length (ft)	350		280	290		225	130		200	190		300
Base Capacity (vph)	580	1664	788	578	1604	830	352	1377	1333	427	1489	1398
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.81	0.75	0.23	0.67	0.53	0.25	0.50	0.73	0.37	0.58	0.63	0.40

Intersection Summary

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

Lanes, Volumes, Timings
4: McBean Parkway & Magic Mountain Pkwy

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑	↗	↔↔	↑↑↑	↗	↔↔	↑↑↑	↗	↔↔	↑↑↑	↗
Traffic Volume (vph)	859	578	131	223	436	350	136	1314	143	270	1265	276
Future Volume (vph)	859	578	131	223	436	350	136	1314	143	270	1265	276
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	16	12	12	14	11	11	16	11	11	16
Storage Length (ft)	360		360	210		0	175		175	300		340
Storage Lanes	1		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.91	1.00	0.97	0.86	1.00	0.97	0.86	1.00
Fr _t			0.850			0.850			0.850			0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	1794	3433	5085	1689	3319	6194	1794	3319	6194	1794
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1794	3433	5085	1689	3319	6194	1794	3319	6194	1794
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			142			255			198			299
Link Speed (mph)		50			45			45			50	
Link Distance (ft)		809			1452			1203			1219	
Travel Time (s)		11.0			22.0			18.2			16.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	934	628	142	242	474	380	148	1428	155	293	1375	300
Shared Lane Traffic (%)												
Lane Group Flow (vph)	934	628	142	242	474	380	148	1428	155	293	1375	300
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			22			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	0.85	1.00	1.00	0.92	1.04	1.04	0.85	1.04	1.04	0.85
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			Free			Free
Detector Phase	5	2	2	1	6	6	3	8		7	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Minimum Split (s)	12.0	41.0	41.0	12.0	40.0	40.0	12.0	37.0		12.0	37.0	

Lanes, Volumes, Timings
 4: McBean Parkway & Magic Mountain Pkwy

04/25/2023

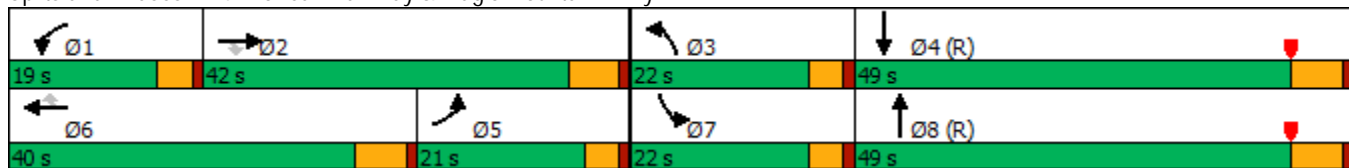


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	21.0	42.0	42.0	19.0	40.0	40.0	22.0	49.0		22.0	49.0	
Total Split (%)	15.9%	31.8%	31.8%	14.4%	30.3%	30.3%	16.7%	37.1%		16.7%	37.1%	
Maximum Green (s)	16.5	36.0	36.0	14.5	34.0	34.0	17.5	43.0		17.5	43.0	
Yellow Time (s)	3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.0		3.5	5.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	-0.5	-2.0	-2.0	-0.5	-2.0	-2.0	-0.5	-2.0		-0.5	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	Max	Max	None	Max	Max	None	C-Max		None	C-Max	
Walk Time (s)		5.0	5.0		5.0	5.0		5.0			5.0	
Flash Dont Walk (s)		30.0	30.0		29.0	29.0		26.0			26.0	
Pedestrian Calls (#/hr)		0	0		0	0		0			0	
Act Effect Green (s)	17.0	39.1	39.1	13.9	36.0	36.0	11.7	46.7	132.0	16.3	51.3	132.0
Actuated g/C Ratio	0.13	0.30	0.30	0.11	0.27	0.27	0.09	0.35	1.00	0.12	0.39	1.00
v/c Ratio	2.11	0.60	0.23	0.67	0.34	0.59	0.50	0.65	0.09	0.71	0.57	0.17
Control Delay	536.3	42.9	6.4	73.2	48.1	26.0	78.5	27.6	0.1	65.7	33.2	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	536.3	42.9	6.4	73.2	48.1	26.0	78.5	27.6	0.1	65.7	33.2	0.2
LOS	F	D	A	E	D	C	E	C	A	E	C	A
Approach Delay		310.3			46.0			29.5			33.0	
Approach LOS		F			D			C			C	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 30 (23%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow
 Natural Cycle: 125
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 2.11
 Intersection Signal Delay: 107.0
 Intersection LOS: F
 Intersection Capacity Utilization 75.2%
 ICU Level of Service D
 Analysis Period (min) 15

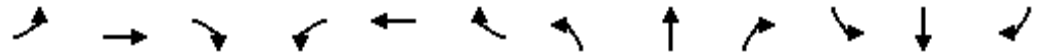
Splits and Phases: 4: McBean Parkway & Magic Mountain Pkwy



Queues

4: McBean Parkway & Magic Mountain Pkwy

04/25/2023


































Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	934	628	142	242	474	380	148	1428	155	293	1375	300
v/c Ratio	2.11	0.60	0.23	0.67	0.34	0.59	0.50	0.65	0.09	0.71	0.57	0.17
Control Delay	536.3	42.9	6.4	73.2	48.1	26.0	78.5	27.6	0.1	65.7	33.2	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	536.3	42.9	6.4	73.2	48.1	26.0	78.5	27.6	0.1	65.7	33.2	0.2
Queue Length 50th (ft)	~653	245	0	105	122	105	68	156	0	125	266	0
Queue Length 95th (ft)	#784	311	50	150	162	219	m93	175	m0	173	318	0
Internal Link Dist (ft)		729			1372			1123			1139	
Turn Bay Length (ft)	360		360	210			175		175	300		340
Base Capacity (vph)	442	1048	631	390	1386	646	452	2189	1794	452	2406	1794
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	2.11	0.60	0.23	0.62	0.34	0.59	0.33	0.65	0.09	0.65	0.57	0.17

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
5: Valencia Blvd & Magic Mountain Pkwy

04/25/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 		 	 			  			  	 
Traffic Volume (vph)	638	579	29	219	400	88	56	1519	238	89	1107	414
Future Volume (vph)	638	579	29	219	400	88	56	1519	238	89	1107	414
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	13	12	11	12	11	11	14	12	11	11	12
Storage Length (ft)	310		0	250		200	180		200	190		190
Storage Lanes	1		0	2		0	1		1	1		2
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	0.95	0.97	0.95	0.95	1.00	0.91	1.00	1.00	0.91	0.88
Fr't		0.993			0.973				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3319	3632	0	3319	3444	0	1711	5424	1583	1711	4916	2787
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3319	3632	0	3319	3444	0	1711	5424	1583	1711	4916	2787
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			19				161			443
Link Speed (mph)		50			45			45				45
Link Distance (ft)		1046			2778			1989				572
Travel Time (s)		14.3			42.1			30.1				8.7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	693	629	32	238	435	96	61	1651	259	97	1203	450
Shared Lane Traffic (%)												
Lane Group Flow (vph)	693	661	0	238	531	0	61	1651	259	97	1203	450
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		22			22			11				11
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.04	0.96	1.00	1.04	1.00	1.04	1.04	0.92	1.00	1.04	1.04	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Size(ft)	50	50		50	50		50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	3	8		7	4		1	6		5	2	3
Permitted Phases									6			2
Detector Phase	3	8		7	4		1	6	6	5	2	3
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	35.0		12.0	39.0		12.0	38.0	38.0	12.0	41.0	12.0

Lanes, Volumes, Timings
5: Valencia Blvd & Magic Mountain Pkwy

04/25/2023

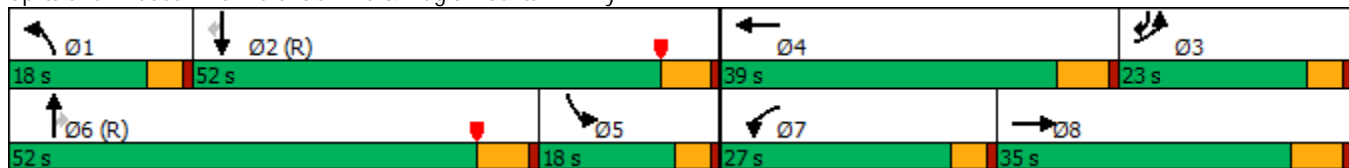


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	23.0	35.0		27.0	39.0		18.0	52.0	52.0	18.0	52.0	23.0
Total Split (%)	17.4%	26.5%		20.5%	29.5%		13.6%	39.4%	39.4%	13.6%	39.4%	17.4%
Maximum Green (s)	18.5	29.0		22.5	33.0		13.5	46.0	46.0	13.5	46.0	18.5
Yellow Time (s)	3.5	5.0		3.5	5.0		3.5	5.0	5.0	3.5	5.0	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-0.5	-2.0		-0.5	-2.0		-0.5	-2.0	0.0	-0.5	-2.0	-0.5
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	6.0	4.0	4.0	4.0
Lead/Lag	Lag	Lag		Lead	Lead		Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None		None	C-Max	C-Max	Max	C-Max	None
Walk Time (s)		5.0			5.0			5.0	5.0		5.0	
Flash Dont Walk (s)		24.0			28.0			21.0	21.0		22.0	
Pedestrian Calls (#/hr)		0			0			0	0		0	
Act Effect Green (s)	26.9	38.7		15.3	27.1		10.5	48.0	46.0	14.0	53.7	81.4
Actuated g/C Ratio	0.20	0.29		0.12	0.21		0.08	0.36	0.35	0.11	0.41	0.62
v/c Ratio	1.03	0.62		0.62	0.74		0.45	0.84	0.39	0.54	0.60	0.24
Control Delay	87.5	38.6		47.3	44.1		88.1	29.4	7.0	47.0	16.0	0.7
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	87.5	38.6		47.3	44.1		88.1	29.4	7.0	47.0	16.0	0.7
LOS	F	D		D	D		F	C	A	D	B	A
Approach Delay		63.6			45.1			28.2			13.7	
Approach LOS		E			D			C			B	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 115 (87%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
 Natural Cycle: 115
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.03
 Intersection Signal Delay: 34.3
 Intersection LOS: C
 Intersection Capacity Utilization 79.7%
 ICU Level of Service D
 Analysis Period (min) 15

Splits and Phases: 5: Valencia Blvd & Magic Mountain Pkwy



Queues

5: Valencia Blvd & Magic Mountain Pkwy

04/25/2023



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	693	661	238	531	61	1651	259	97	1203	450
v/c Ratio	1.03	0.62	0.62	0.74	0.45	0.84	0.39	0.54	0.60	0.24
Control Delay	87.5	38.6	47.3	44.1	88.1	29.4	7.0	47.0	16.0	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	87.5	38.6	47.3	44.1	88.1	29.4	7.0	47.0	16.0	0.7
Queue Length 50th (ft)	~329	298	107	233	52	262	17	74	104	1
Queue Length 95th (ft)	#532	366	147	292	m78	257	m47	m114	195	m10
Internal Link Dist (ft)		966		2698		1909			492	
Turn Bay Length (ft)	310		250		180		200	190		190
Base Capacity (vph)	676	1068	578	927	181	1972	656	181	1998	1887
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.03	0.62	0.41	0.57	0.34	0.84	0.39	0.54	0.60	0.24

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings

6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy

04/25/2023



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	229	445	325	1395	1078	144
Future Volume (vph)	229	445	325	1395	1078	144
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	265	265	260			270
Storage Lanes	1	1	2			1
Taper Length (ft)	25		25			
Lane Util. Factor	0.97	0.88	0.97	0.91	0.95	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3433	2787	3433	5085	3539	1583
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	3433	2787	3433	5085	3539	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		74				157
Link Speed (mph)	45			50	45	
Link Distance (ft)	2778			2280	1171	
Travel Time (s)	42.1			31.1	17.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	249	484	353	1516	1172	157
Shared Lane Traffic (%)						
Lane Group Flow (vph)	249	484	353	1516	1172	157
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	34			24	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	1	1	1
Detector Template						
Leading Detector (ft)	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	pt+ov	custom	NA	NA	Perm
Protected Phases	8	8 1	1	6	2	
Permitted Phases			1			2
Detector Phase	8	8 1	1	6	2	2
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	20.0		20.0	20.0	41.0	41.0
Total Split (s)	34.0		30.0	98.0	68.0	68.0

Lanes, Volumes, Timings

6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy

04/25/2023

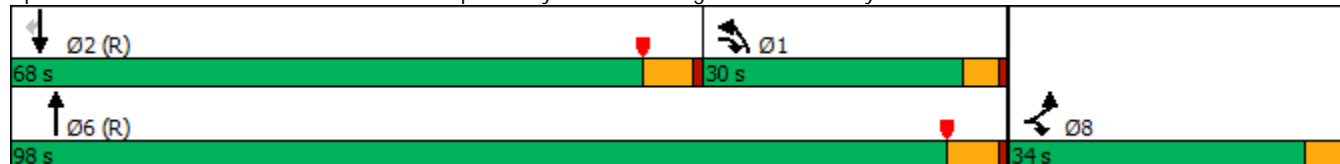


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Total Split (%)	25.8%		22.7%	74.2%	51.5%	51.5%
Maximum Green (s)	29.0		25.5	92.0	62.0	62.0
Yellow Time (s)	4.0		3.5	5.0	5.0	5.0
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0		-0.5	-2.0	-2.0	-2.0
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0
Lead/Lag			Lag		Lead	Lead
Lead-Lag Optimize?			Yes		Yes	Yes
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	Max		Min	C-Min	C-Min	C-Min
Walk Time (s)					7.0	7.0
Flash Dont Walk (s)					28.0	28.0
Pedestrian Calls (#/hr)					0	0
Act Effect Green (s)	44.3	68.9	20.6	79.7	55.1	55.1
Actuated g/C Ratio	0.34	0.52	0.16	0.60	0.42	0.42
v/c Ratio	0.22	0.32	0.66	0.49	0.79	0.21
Control Delay	29.5	8.9	58.0	15.0	37.6	3.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.5	8.9	58.0	15.0	37.6	3.6
LOS	C	A	E	B	D	A
Approach Delay	15.9			23.2	33.6	
Approach LOS	B			C	C	

Intersection Summary

Area Type:	Other
Cycle Length:	132
Actuated Cycle Length:	132
Offset:	75 (57%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle:	85
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.79
Intersection Signal Delay:	25.3
Intersection LOS:	C
Intersection Capacity Utilization	55.6%
ICU Level of Service	B
Analysis Period (min)	15

Splits and Phases: 6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy



Queues

6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy

04/25/2023



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	249	484	353	1516	1172	157
v/c Ratio	0.22	0.32	0.66	0.49	0.79	0.21
Control Delay	29.5	8.9	58.0	15.0	37.6	3.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.5	8.9	58.0	15.0	37.6	3.6
Queue Length 50th (ft)	100	55	148	253	451	0
Queue Length 95th (ft)	149	152	189	201	485	38
Internal Link Dist (ft)	2698		2200		1091	
Turn Bay Length (ft)	265	265	260			270
Base Capacity (vph)	1152	1486	682	3621	1715	848
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.33	0.52	0.42	0.68	0.19

Intersection Summary

Lanes, Volumes, Timings
7: Bouquet Canyon Rd & Valencia Blvd

04/25/2023

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1181	1428	29	368	762	287	36	1168	649	321	850	649
Future Volume (vph)	1181	1428	29	368	762	287	36	1168	649	321	850	649
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	10	10	11	11	11	11	10	10	11
Storage Length (ft)	360		0	330		330	250		0	435		400
Storage Lanes	2		0	3		1	1		1	2		2
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.94	0.91	0.91	0.94	0.91	1.00	1.00	0.91	1.00	0.97	0.91	0.88
Fr _t		0.997				0.850			0.850			0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	4824	4901	0	4658	4746	1531	1711	4916	1531	3204	4746	2694
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	4824	4901	0	4658	4746	1531	1711	4916	1531	3204	4746	2694
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2				124			112			460
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		2282			2684			2196			1017	
Travel Time (s)		34.6			40.7			33.3			12.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1284	1552	32	400	828	312	39	1270	705	349	924	705
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1284	1584	0	400	828	312	39	1270	705	349	924	705
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		33			33			20			20	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.00	1.09	1.09	1.04	1.04	1.04	1.04	1.09	1.09	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50		50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50		50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4		3	8	1	5	2	3	1	6	7
Permitted Phases						8			2			6
Detector Phase	7	4		3	8	1	5	2	3	1	6	7
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	44.0		12.0	48.0	12.0	12.0	46.0	12.0	12.0	44.0	12.0

Lanes, Volumes, Timings
7: Bouquet Canyon Rd & Valencia Blvd

04/25/2023

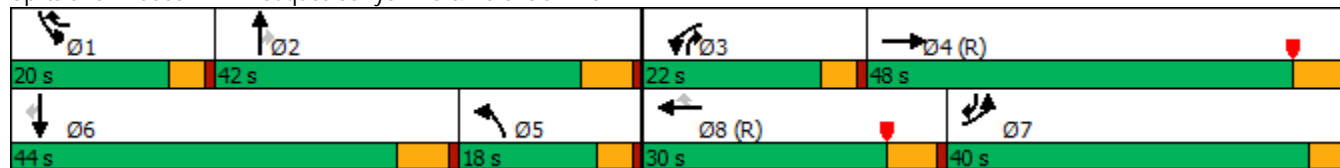


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	40.0	48.0		22.0	30.0	20.0	18.0	42.0	22.0	20.0	44.0	40.0
Total Split (%)	30.3%	36.4%		16.7%	22.7%	15.2%	13.6%	31.8%	16.7%	15.2%	33.3%	30.3%
Maximum Green (s)	35.5	42.0		17.5	24.0	15.5	13.5	36.0	17.5	15.5	38.0	35.5
Yellow Time (s)	3.5	5.0		3.5	5.0	3.5	3.5	5.0	3.5	3.5	5.0	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-0.5	-2.0		-0.5	-2.0	-0.5	-0.5	-2.0	-0.5	-0.5	-2.0	-0.5
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lag	Lag		Lead	Lead	Lead	Lag	Lag	Lead	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Max		None	C-Max	None	None	Max	None	None	None	None
Walk Time (s)		5.0			5.0			5.0				
Flash Dont Walk (s)		33.0			37.0			35.0				
Pedestrian Calls (#/hr)		0			0			0				
Act Effect Green (s)	36.0	44.6		17.4	26.0	42.0	12.8	38.0	59.4	16.0	45.4	85.4
Actuated g/C Ratio	0.27	0.34		0.13	0.20	0.32	0.10	0.29	0.45	0.12	0.34	0.65
v/c Ratio	0.98	0.96		0.65	0.89	0.55	0.23	0.90	0.94	0.90	0.57	0.37
Control Delay	74.4	64.8		44.9	41.3	7.4	56.8	54.6	50.5	77.7	53.5	13.5
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	74.4	64.8		44.9	41.3	7.4	56.8	54.6	50.5	77.7	53.5	13.5
LOS	E	E		D	D	A	E	D	D	E	D	B
Approach Delay		69.1			35.4			53.2			43.6	
Approach LOS		E			D			D			D	

Intersection Summary

Area Type:	Other
Cycle Length:	132
Actuated Cycle Length:	132
Offset:	51 (39%), Referenced to phase 4:EBT and 8:WBT, Start of Yellow
Natural Cycle:	150
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.98
Intersection Signal Delay:	53.1
Intersection LOS:	D
Intersection Capacity Utilization:	87.6%
ICU Level of Service:	E
Analysis Period (min):	15

Splits and Phases: 7: Bouquet Canyon Rd & Valencia Blvd



Queues

7: Bouquet Canyon Rd & Valencia Blvd

04/25/2023



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	1284	1584	400	828	312	39	1270	705	349	924	705
v/c Ratio	0.98	0.96	0.65	0.89	0.55	0.23	0.90	0.94	0.90	0.57	0.37
Control Delay	74.4	64.8	44.9	41.3	7.4	56.8	54.6	50.5	77.7	53.5	13.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	74.4	64.8	44.9	41.3	7.4	56.8	54.6	50.5	77.7	53.5	13.5
Queue Length 50th (ft)	410	521	79	191	0	30	383	495	157	302	171
Queue Length 95th (ft)	m#471	m#579	124	#286	69	69	#447	#767	m#242	341	228
Internal Link Dist (ft)		2202		2604			2116			937	
Turn Bay Length (ft)	360		330		330	250			435		400
Base Capacity (vph)	1315	1657	635	934	571	204	1415	757	388	1697	1905
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.98	0.96	0.63	0.89	0.55	0.19	0.90	0.93	0.90	0.54	0.37

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

Lanes, Volumes, Timings
 8: Bouquet Canyon Rd & Newhall Ranch Road

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	703	1562	406	332	975	339	426	1591	360	384	1105	272
Future Volume (vph)	703	1562	406	332	975	339	426	1591	360	384	1105	272
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	290		265	410		410	475		230	260		150
Storage Lanes	3		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.94	0.86	1.00	0.97	0.86	1.00	0.97	0.86	1.00	0.97	0.86	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	4990	6408	1583	3433	6408	1583	3433	6408	1583	3433	6408	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	4990	6408	1583	3433	6408	1583	3433	6408	1583	3433	6408	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			62			295			301			99
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		2675			2485			1030			669	
Travel Time (s)		40.5			37.7			15.6			10.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	764	1698	441	361	1060	368	463	1729	391	417	1201	296
Shared Lane Traffic (%)												
Lane Group Flow (vph)	764	1698	441	361	1060	368	463	1729	391	417	1201	296
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		36			36			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	2	1	1	2	1
Detector Template	Left		Right	Left		Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	50	20	20	50	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	50	20	20	50	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)								94			94	
Detector 2 Size(ft)								6			6	
Detector 2 Type								Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)								0.0			0.0	
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	3	8	1	7	4		1	6		5	2	3
Permitted Phases			8			4			6			2

Lanes, Volumes, Timings
8: Bouquet Canyon Rd & Newhall Ranch Road

04/25/2023

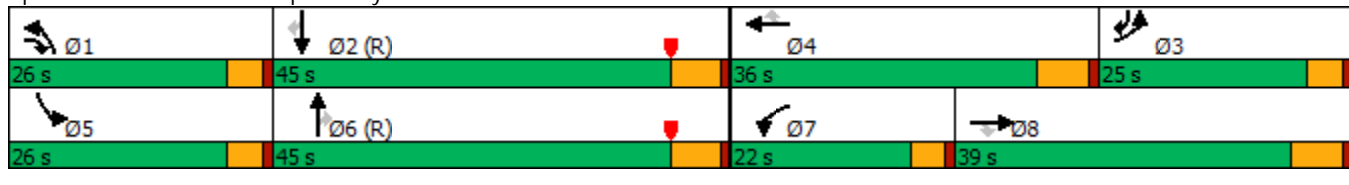


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	3	8	1	7	4	4	1	6	6	5	2	3
Switch Phase												
Minimum Initial (s)	4.0	5.0	4.0	4.0	5.0	5.0	4.0	10.0	10.0	4.0	10.0	4.0
Minimum Split (s)	12.0	43.0	12.0	12.0	43.0	43.0	12.0	49.0	49.0	12.0	50.0	12.0
Total Split (s)	25.0	39.0	26.0	22.0	36.0	36.0	26.0	45.0	45.0	26.0	45.0	25.0
Total Split (%)	18.9%	29.5%	19.7%	16.7%	27.3%	27.3%	19.7%	34.1%	34.1%	19.7%	34.1%	18.9%
Maximum Green (s)	20.5	33.0	21.5	17.5	30.0	30.0	21.5	39.0	39.0	21.5	39.0	20.5
Yellow Time (s)	3.5	5.0	3.5	3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.0	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	-2.0	0.0	0.0	-2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.0	4.5	4.5	4.0	6.0	4.5	6.0	6.0	4.5	6.0	4.5
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes		Yes	Yes			Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	5.5	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Minimum Gap (s)	3.0	2.5	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	24.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	Max	C-Max	None
Walk Time (s)		5.0			5.0	5.0		5.0	5.0		5.0	
Flash Dont Walk (s)		32.0			32.0	32.0		38.0	38.0		39.0	
Pedestrian Calls (#/hr)		2			5	5		1	1		1	
Act Effect Green (s)	21.9	35.6	60.4	16.9	30.6	28.6	20.8	39.0	39.0	21.5	39.7	63.2
Actuated g/C Ratio	0.17	0.27	0.46	0.13	0.23	0.22	0.16	0.30	0.30	0.16	0.30	0.48
v/c Ratio	0.92	0.98	0.58	0.82	0.71	0.64	0.86	0.91	0.58	0.75	0.62	0.37
Control Delay	71.5	65.8	26.1	76.6	41.2	14.7	52.4	47.2	12.9	61.8	41.5	8.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	71.5	65.8	26.1	76.6	41.2	14.7	52.4	47.2	12.9	61.8	41.5	8.8
LOS	E	E	C	E	D	B	D	D	B	E	D	A
Approach Delay		61.3			42.9			43.0			40.9	
Approach LOS		E			D			D			D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 33 (25%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
 Natural Cycle: 140
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.98
 Intersection Signal Delay: 48.3 Intersection LOS: D
 Intersection Capacity Utilization 81.9% ICU Level of Service D
 Analysis Period (min) 15

Splits and Phases: 8: Bouquet Canyon Rd & Newhall Ranch Road



Queues

8: Bouquet Canyon Rd & Newhall Ranch Road

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	764	1698	441	361	1060	368	463	1729	391	417	1201	296
v/c Ratio	0.92	0.98	0.58	0.82	0.71	0.64	0.86	0.91	0.58	0.75	0.62	0.37
Control Delay	71.5	65.8	26.1	76.6	41.2	14.7	52.4	47.2	12.9	61.8	41.5	8.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	71.5	65.8	26.1	76.6	41.2	14.7	52.4	47.2	12.9	61.8	41.5	8.8
Queue Length 50th (ft)	234	424	236	155	197	75	182	356	89	177	259	54
Queue Length 95th (ft)	#323	#515	346	#225	239	134	m206	m411	m112	236	300	91
Internal Link Dist (ft)		2595			2405			950			589	
Turn Bay Length (ft)	290		265	410		410	475		230	260		150
Base Capacity (vph)	829	1728	766	455	1553	587	559	1893	679	559	1928	808
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.92	0.98	0.58	0.79	0.68	0.63	0.83	0.91	0.58	0.75	0.62	0.37

Intersection Summary

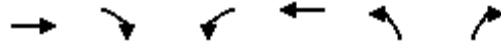
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

Lanes, Volumes, Timings
9: Commuter Way & Soledad Cyn

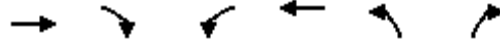
04/25/2023



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↑	↓	↑↑↑	↓	↓
Traffic Volume (vph)	2270	22	6	1311	23	1
Future Volume (vph)	2270	22	6	1311	23	1
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		150	285		0	0
Storage Lanes		1	1		2	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	1.00	1.00	0.91	0.97	0.95
Frt		0.850			0.994	
Flt Protected			0.950		0.954	
Satd. Flow (prot)	5085	1583	1770	5085	3427	0
Flt Permitted			0.950		0.954	
Satd. Flow (perm)	5085	1583	1770	5085	3427	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		11			1	
Link Speed (mph)	50			50	30	
Link Distance (ft)	911			2825	388	
Travel Time (s)	12.4			38.5	8.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2467	24	7	1425	25	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	2467	24	7	1425	26	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	1	1	1	1	1	
Detector Template						
Leading Detector (ft)	50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	
Turn Type	NA	Perm	Prot	NA	Prot	
Protected Phases	2		1	6	8	
Permitted Phases		2				
Detector Phase	2	2	1	6	8	
Switch Phase						
Minimum Initial (s)	10.0	10.0	4.0	10.0	4.0	
Minimum Split (s)	26.0	26.0	12.0	22.0	37.0	
Total Split (s)	75.0	75.0	20.0	95.0	37.0	

Lanes, Volumes, Timings
 9: Commuter Way & Soledad Cyn

04/25/2023

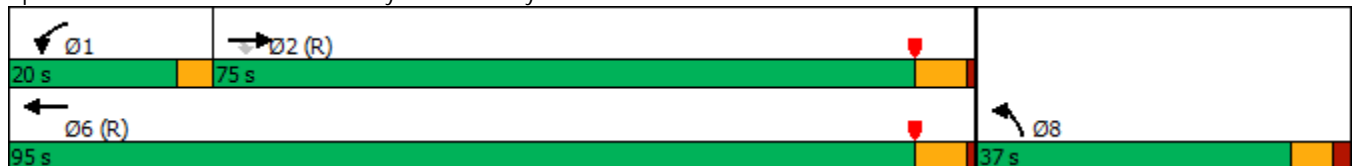


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Total Split (%)	56.8%	56.8%	15.2%	72.0%	28.0%	
Maximum Green (s)	69.0	69.0	16.5	89.0	31.0	
Yellow Time (s)	5.0	5.0	3.5	5.0	4.0	
All-Red Time (s)	1.0	1.0	0.0	1.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	0.5	-2.0	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Vehicle Extension (s)	5.0	5.0	1.5	5.0	2.0	
Minimum Gap (s)	4.0	4.0	1.5	4.0	2.0	
Time Before Reduce (s)	15.0	15.0	0.0	15.0	0.0	
Time To Reduce (s)	15.0	15.0	0.0	15.0	0.0	
Recall Mode	C-Max	C-Max	None	C-Max	None	
Walk Time (s)	7.0	7.0			7.0	
Flash Dont Walk (s)	13.0	13.0			24.0	
Pedestrian Calls (#/hr)	0	0			0	
Act Effect Green (s)	120.5	120.5	4.2	122.4	7.5	
Actuated g/C Ratio	0.91	0.91	0.03	0.93	0.06	
v/c Ratio	0.53	0.02	0.13	0.30	0.13	
Control Delay	2.1	1.0	77.0	4.3	58.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	2.1	1.0	77.0	4.3	58.6	
LOS	A	A	E	A	E	
Approach Delay	2.1			4.6	58.6	
Approach LOS	A			A	E	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 58 (44%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Natural Cycle: 100
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.53
 Intersection Signal Delay: 3.4
 Intersection LOS: A
 Intersection Capacity Utilization 53.9%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 9: Commuter Way & Soledad Cyn



Queues

9: Commuter Way & Soledad Cyn

04/25/2023



Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Group Flow (vph)	2467	24	7	1425	26
v/c Ratio	0.53	0.02	0.13	0.30	0.13
Control Delay	2.1	1.0	77.0	4.3	58.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	2.1	1.0	77.0	4.3	58.6
Queue Length 50th (ft)	85	1	5	309	10
Queue Length 95th (ft)	202	6	m17	102	26
Internal Link Dist (ft)	831			2745	308
Turn Bay Length (ft)		150	285		
Base Capacity (vph)	4643	1446	214	4715	857
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.53	0.02	0.03	0.30	0.03

Intersection Summary

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

Lanes, Volumes, Timings
 10: Soledad Cyn & Valley Center

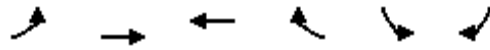
04/25/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø4
Lane Configurations	↖↖	↑↑↑	↑↑↑	↗	↘↘	↘	
Traffic Volume (vph)	81	1688	934	522	664	134	
Future Volume (vph)	81	1688	934	522	664	134	
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	250			310	235	0	
Storage Lanes	2			1	1	1	
Taper Length (ft)	25				25		
Lane Util. Factor	0.97	0.91	0.91	1.00	0.97	1.00	
Fr _t				0.850		0.850	
Fl _t Protected	0.950				0.950		
Satd. Flow (prot)	3433	5085	5085	1583	3433	1583	
Fl _t Permitted	0.950				0.950		
Satd. Flow (perm)	3433	5085	5085	1583	3433	1583	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)				557		146	
Link Speed (mph)		50	50		30		
Link Distance (ft)		2935	1764		1116		
Travel Time (s)		40.0	24.1		25.4		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	88	1835	1015	567	722	146	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	88	1835	1015	567	722	146	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Left	Left	Right	Left	Right	
Median Width(ft)		24	24		24		
Link Offset(ft)		0	0		0		
Crosswalk Width(ft)		16	16		16		
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (mph)	15			9	15	9	
Number of Detectors	1	1	1	1	1	1	
Detector Template							
Leading Detector (ft)	50	50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Turn Type	Prot	NA	NA	Free	Prot	pt+ov	
Protected Phases	5	2	6		3	3 5	4
Permitted Phases				Free			
Detector Phase	5	2	6		3	3 5	
Switch Phase							
Minimum Initial (s)	4.0	4.0	4.0		4.0		4.0
Minimum Split (s)	20.0	22.0	29.0		20.0		35.0
Total Split (s)	20.0	72.0	52.0		25.0		35.0

Lanes, Volumes, Timings
 10: Soledad Cyn & Valley Center

04/25/2023

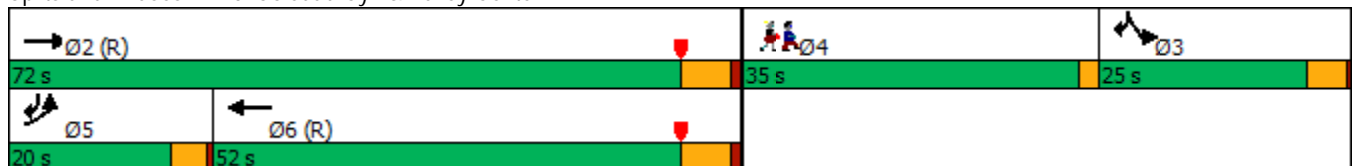


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø4	
Total Split (%)	15.2%	54.5%	39.4%		18.9%		27%	
Maximum Green (s)	16.0	66.0	46.0		20.5		33.0	
Yellow Time (s)	3.5	5.0	5.0		4.0		2.0	
All-Red Time (s)	0.5	1.0	1.0		0.5		0.0	
Lost Time Adjust (s)	0.0	-2.0	-2.0		-0.5			
Total Lost Time (s)	4.0	4.0	4.0		4.0			
Lead/Lag	Lead		Lag		Lag		Lead	
Lead-Lag Optimize?	Yes		Yes		Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		0.2	
Recall Mode	None	C-Max	C-Max		None		None	
Walk Time (s)				7.0				7.0
Flash Dont Walk (s)				16.0				26.0
Pedestrian Calls (#/hr)				0				0
Act Effct Green (s)	8.8	80.0	67.2	132.0	44.0	56.8		
Actuated g/C Ratio	0.07	0.61	0.51	1.00	0.33	0.43		
v/c Ratio	0.39	0.60	0.39	0.36	0.63	0.19		
Control Delay	64.0	18.3	9.9	2.3	40.2	9.4		
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		
Total Delay	64.0	18.3	9.9	2.3	40.2	9.4		
LOS	E	B	A	A	D	A		
Approach Delay	20.4		7.2		35.0			
Approach LOS	C		A		D			

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 35 (27%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Natural Cycle: 105
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.63
 Intersection Signal Delay: 18.5
 Intersection LOS: B
 Intersection Capacity Utilization 58.2%
 ICU Level of Service B
 Analysis Period (min) 15

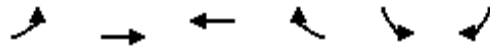
Splits and Phases: 10: Soledad Cyn & Valley Center



Queues

10: Soledad Cyn & Valley Center

04/25/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	88	1835	1015	567	722	146
v/c Ratio	0.39	0.60	0.39	0.36	0.63	0.19
Control Delay	64.0	18.3	9.9	2.3	40.2	9.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	64.0	18.3	9.9	2.3	40.2	9.4
Queue Length 50th (ft)	37	0	59	37	320	34
Queue Length 95th (ft)	65	428	63	337	386	m50
Internal Link Dist (ft)		2855	1684		1036	
Turn Bay Length (ft)	250			310	235	
Base Capacity (vph)	416	3081	2589	1583	1144	842
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.60	0.39	0.36	0.63	0.17

Intersection Summary

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

Lanes, Volumes, Timings
 11: Golden Valley Road & Valley Center Drive

04/25/2023



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4	Ø5	Ø12
Lane Configurations	↔↔↔	↔↔	↔↔	↑↑↑	↑↑↑	↔			
Traffic Volume (vph)	525	134	116	1202	1062	775			
Future Volume (vph)	525	134	116	1202	1062	775			
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900			
Storage Length (ft)	260	260	290			150			
Storage Lanes	2	1	2			1			
Taper Length (ft)	25		25						
Lane Util. Factor	0.94	0.88	0.97	0.91	0.91	1.00			
Frt		0.850				0.850			
Flt Protected	0.950		0.950						
Satd. Flow (prot)	4990	2787	3433	5085	5085	1583			
Flt Permitted	0.950		0.950						
Satd. Flow (perm)	4990	2787	3433	5085	5085	1583			
Right Turn on Red		Yes				Yes			
Satd. Flow (RTOR)		146				534			
Link Speed (mph)	30			50	50				
Link Distance (ft)	456			2527	1665				
Travel Time (s)	10.4			34.5	22.7				
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92			
Adj. Flow (vph)	571	146	126	1307	1154	842			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	571	146	126	1307	1154	842			
Enter Blocked Intersection	No	No	No	No	No	No			
Lane Alignment	Left	Right	Left	Left	Left	Right			
Median Width(ft)	36			24	24				
Link Offset(ft)	0			0	0				
Crosswalk Width(ft)	16			16	16				
Two way Left Turn Lane									
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00			
Turning Speed (mph)	15	9	15			9			
Number of Detectors	1	1	1	1	1	1			
Detector Template									
Leading Detector (ft)	50	50	50	50	50	50			
Trailing Detector (ft)	0	0	0	0	0	0			
Detector 1 Position(ft)	0	0	0	0	0	0			
Detector 1 Size(ft)	50	50	50	50	50	50			
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel									
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Turn Type	Prot	pt+ov	Prot	NA	NA	Perm			
Protected Phases	3	5 12	5 12	2	6		4	5	12
Permitted Phases						6			
Detector Phase	3	5 12	5 12	2	6	6			
Switch Phase									
Minimum Initial (s)	3.0			10.0	10.0	10.0	4.0	4.0	4.0
Minimum Split (s)	25.0			30.0	40.0	40.0	35.0	15.0	20.0
Total Split (s)	30.0			67.0	42.0	42.0	35.0	25.0	35.0

Lanes, Volumes, Timings
 11: Golden Valley Road & Valley Center Drive

04/25/2023

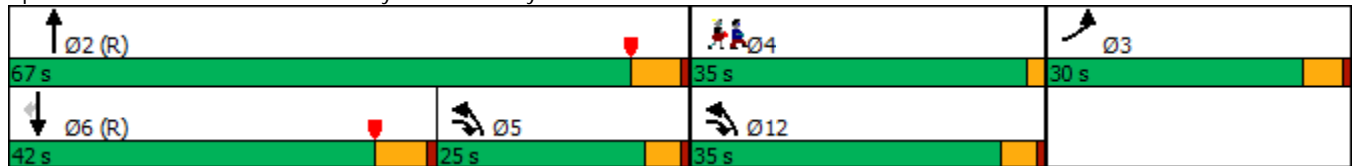


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4	Ø5	Ø12
Total Split (%)	22.7%			50.8%	31.8%	31.8%	27%	19%	27%
Maximum Green (s)	25.0			61.0	36.0	36.0	33.0	20.5	30.5
Yellow Time (s)	4.0			5.0	5.0	5.0	2.0	3.5	3.5
All-Red Time (s)	1.0			1.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)	-1.0			-2.0	-2.0	-2.0			
Total Lost Time (s)	4.0			4.0	4.0	4.0			
Lead/Lag					Lead	Lead		Lag	
Lead-Lag Optimize?					Yes	Yes		Yes	
Vehicle Extension (s)	3.0			3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None			C-Min	C-Min	C-Min	None	None	None
Walk Time (s)					7.0	7.0	7.0		5.0
Flash Dont Walk (s)					24.0	24.0	26.0		10.0
Pedestrian Calls (#/hr)					0	0	0		0
Act Effct Green (s)	21.6	20.4	20.4	92.3	78.0	78.0			
Actuated g/C Ratio	0.16	0.15	0.15	0.70	0.59	0.59			
v/c Ratio	0.70	0.26	0.24	0.37	0.38	0.73			
Control Delay	40.8	13.2	27.1	8.4	4.1	13.2			
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0			
Total Delay	40.8	13.2	27.1	8.4	4.1	13.2			
LOS	D	B	C	A	A	B			
Approach Delay	35.1			10.0	7.9				
Approach LOS	D			B	A				

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 115
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.73
 Intersection Signal Delay: 13.4
 Intersection LOS: B
 Intersection Capacity Utilization 58.0%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 11: Golden Valley Road & Valley Center Drive



Queues

11: Golden Valley Road & Valley Center Drive

04/25/2023




































Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	571	146	126	1307	1154	842
v/c Ratio	0.70	0.26	0.24	0.37	0.38	0.73
Control Delay	40.8	13.2	27.1	8.4	4.1	13.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.8	13.2	27.1	8.4	4.1	13.2
Queue Length 50th (ft)	171	3	37	104	36	479
Queue Length 95th (ft)	169	36	m36	147	m60	m344
Internal Link Dist (ft)	376			2447	1585	
Turn Bay Length (ft)	260	260	290			150
Base Capacity (vph)	984	1052	1177	3555	3005	1154
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.58	0.14	0.11	0.37	0.38	0.73

Intersection Summary

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

Lanes, Volumes, Timings
12: Ruther & Soledad Cyn

04/25/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  		  	  				  	  	  	
Traffic Volume (vph)	46	1814	162	190	1184	18	180	77	225	126	86	65
Future Volume (vph)	46	1814	162	190	1184	18	180	77	225	126	86	65
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	285		300	250		0	0		0	125		0
Storage Lanes	1		1	2		0	1		2	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	0.91	0.95	0.95	0.88	0.95	0.95	1.00
Frt			0.850		0.998				0.850		0.938	
Flt Protected	0.950			0.950			0.950	0.977		0.950	0.998	
Satd. Flow (prot)	1770	5085	1583	3433	5075	0	1681	1729	2787	1681	1657	0
Flt Permitted	0.950			0.950			0.950	0.977		0.950	0.998	
Satd. Flow (perm)	1770	5085	1583	3433	5075	0	1681	1729	2787	1681	1657	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			131		2				127		22	
Link Speed (mph)		50		50				40			30	
Link Distance (ft)		1764		2480				220			327	
Travel Time (s)		24.1		33.8				3.8			7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	50	1972	176	207	1287	20	196	84	245	137	93	71
Shared Lane Traffic (%)							37%			5%		
Lane Group Flow (vph)	50	1972	176	207	1307	0	123	157	245	130	171	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24		24				12			12	
Link Offset(ft)		0		0				0			0	
Crosswalk Width(ft)		16		16				16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1	1	1	1	
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50		50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	pt+ov	Split	NA	
Protected Phases	1	6		5	2		3	3	3 5	4	4	
Permitted Phases			6									
Detector Phase	1	6	6	5	2		3	3	3 5	4	4	
Switch Phase												
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	12.0	42.0	42.0	12.0	27.0		37.0	37.0		15.0	15.0	
Total Split (s)	26.0	49.0	49.0	25.0	48.0		38.0	38.0		20.0	20.0	

Lanes, Volumes, Timings
12: Ruther & Soledad Cyn

04/25/2023

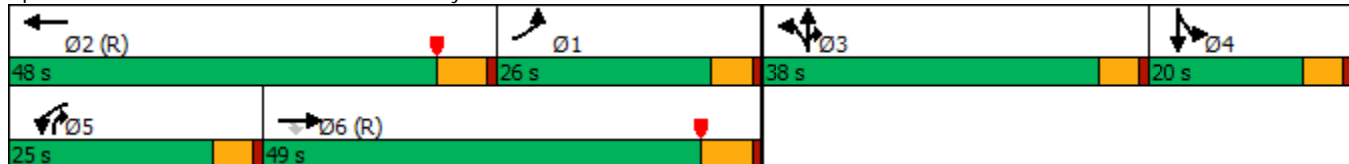


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	19.7%	37.1%	37.1%	18.9%	36.4%		28.8%	28.8%		15.2%	15.2%	
Maximum Green (s)	21.0	43.0	43.0	20.0	42.0		33.0	33.0		15.0	15.0	
Yellow Time (s)	4.0	5.0	5.0	4.0	5.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	-1.0	-2.0	-2.0	-1.0	-2.0		-1.0	-1.0		-1.0	-1.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead		Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	4.5	4.5	1.5	4.5		3.0	3.0		3.0	3.0	
Minimum Gap (s)	1.5	3.0	3.0	1.5	3.0		3.0	3.0		3.0	3.0	
Time Before Reduce (s)	0.0	7.5	7.5	0.0	7.5		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	22.5	22.5	0.0	22.5		0.0	0.0		0.0	0.0	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None		None	None	
Walk Time (s)		7.0	7.0		7.0		5.0	5.0				
Flash Dont Walk (s)		25.0	25.0		11.0		27.0	27.0				
Pedestrian Calls (#/hr)		0	0		0		0	0				
Act Effect Green (s)	18.6	66.0	66.0	12.9	62.0		18.5	18.5	31.3	18.7	18.7	
Actuated g/C Ratio	0.14	0.50	0.50	0.10	0.47		0.14	0.14	0.24	0.14	0.14	
v/c Ratio	0.20	0.78	0.21	0.62	0.55		0.52	0.65	0.32	0.55	0.68	
Control Delay	42.2	25.4	4.2	65.2	29.5		59.8	65.7	11.7	60.5	59.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	42.2	25.4	4.2	65.2	29.5		59.8	65.7	11.7	60.5	59.5	
LOS	D	C	A	E	C		E	E	B	E	E	
Approach Delay		24.0			34.3			39.1			60.0	
Approach LOS		C			C			D			E	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
 Natural Cycle: 110
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.78
 Intersection Signal Delay: 31.6
 Intersection LOS: C
 Intersection Capacity Utilization 68.5%
 ICU Level of Service C
 Analysis Period (min) 15

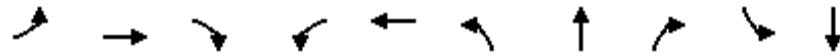
Splits and Phases: 12: Ruther & Soledad Cyn



Queues

12: Ruther & Soledad Cyn

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	50	1972	176	207	1307	123	157	245	130	171
v/c Ratio	0.20	0.78	0.21	0.62	0.55	0.52	0.65	0.32	0.55	0.68
Control Delay	42.2	25.4	4.2	65.2	29.5	59.8	65.7	11.7	60.5	59.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.2	25.4	4.2	65.2	29.5	59.8	65.7	11.7	60.5	59.5
Queue Length 50th (ft)	37	304	17	89	309	104	135	32	110	128
Queue Length 95th (ft)	m60	#772	35	127	425	163	203	47	173	203
Internal Link Dist (ft)		1684			2400		140			247
Turn Bay Length (ft)	285		300	250					125	
Base Capacity (vph)	295	2541	856	546	2386	432	445	1227	248	263
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.78	0.21	0.38	0.55	0.28	0.35	0.20	0.52	0.65

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

Lanes, Volumes, Timings
 13: Golden Valley Road & Centre Pointe Parkway

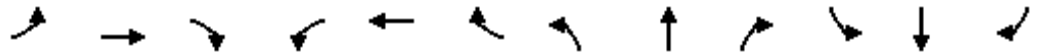
04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	172	96	540	264	76	191	275	1030	274	238	1075	63
Future Volume (vph)	172	96	540	264	76	191	275	1030	274	238	1075	63
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		260	150		250	300		300	700		0
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850		0.893				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	3433	1663	0	1770	3539	1583	1770	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1863	1583	3433	1663	0	1770	3539	1583	1770	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			98		94				298			136
Link Speed (mph)		30		30				50			50	
Link Distance (ft)		1149		802				7902			1475	
Travel Time (s)		26.1		18.2				107.8			20.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	187	104	587	287	83	208	299	1120	298	259	1168	68
Shared Lane Traffic (%)												
Lane Group Flow (vph)	187	104	587	287	291	0	299	1120	298	259	1168	68
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24		24				12			12	
Link Offset(ft)		0		0				0			0	
Crosswalk Width(ft)		16		16				16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50		50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	3	8	5	7	4		5	2	7	1	6	
Permitted Phases			8						2			6
Detector Phase	3	8	5	7	4		5	2	7	1	6	6
Switch Phase												
Minimum Initial (s)	4.0	6.0	4.0	4.0	6.0		4.0	10.0	4.0	4.0	10.0	10.0
Minimum Split (s)	12.0	25.0	20.0	20.0	39.0		20.0	33.0	20.0	15.0	34.0	34.0
Total Split (s)	19.0	25.0	33.0	34.0	40.0		33.0	40.0	34.0	33.0	40.0	40.0

Lanes, Volumes, Timings
 13: Golden Valley Road & Centre Pointe Parkway

04/25/2023

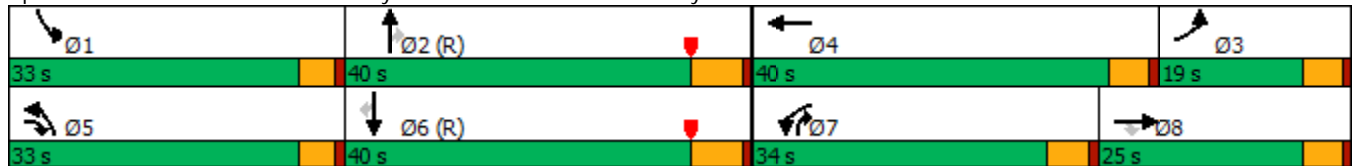


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	14.4%	18.9%	25.0%	25.8%	30.3%		25.0%	30.3%	25.8%	25.0%	30.3%	30.3%
Maximum Green (s)	14.0	20.0	28.5	29.0	35.0		28.5	34.0	29.0	28.5	34.0	34.0
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0		3.5	5.0	4.0	3.5	5.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0	-1.0	-0.5	-1.0	-1.0		-0.5	-2.0	-1.0	-0.5	-2.0	-2.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lag	Lag	Lead	Lead	Lead		Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Min	None	None	C-Min	C-Min
Walk Time (s)					7.0			7.0			7.0	7.0
Flash Dont Walk (s)					27.0			20.0			21.0	21.0
Pedestrian Calls (#/hr)					0			0			0	0
Act Effct Green (s)	20.5	25.7	55.8	17.7	22.9		26.1	48.5	70.1	24.2	46.5	46.5
Actuated g/C Ratio	0.16	0.19	0.42	0.13	0.17		0.20	0.37	0.53	0.18	0.35	0.35
v/c Ratio	0.68	0.29	0.81	0.63	0.80		0.85	0.86	0.30	0.80	0.94	0.11
Control Delay	65.9	46.3	36.3	59.8	50.4		75.4	40.5	10.8	51.9	67.7	8.5
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.9	46.3	36.3	59.8	50.4		75.4	40.5	10.8	51.9	67.7	8.5
LOS	E	D	D	E	D		E	D	B	D	E	A
Approach Delay		43.8			55.1			41.4			62.3	
Approach LOS		D			E			D			E	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 103 (78%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 125
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.94
 Intersection Signal Delay: 50.2
 Intersection Capacity Utilization 83.6%
 Analysis Period (min) 15
 Intersection LOS: D
 ICU Level of Service E

Splits and Phases: 13: Golden Valley Road & Centre Pointe Parkway



Queues

13: Golden Valley Road & Centre Pointe Parkway

04/25/2023


































Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	187	104	587	287	291	299	1120	298	259	1168	68
v/c Ratio	0.68	0.29	0.81	0.63	0.80	0.85	0.86	0.30	0.80	0.94	0.11
Control Delay	65.9	46.3	36.3	59.8	50.4	75.4	40.5	10.8	51.9	67.7	8.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.9	46.3	36.3	59.8	50.4	75.4	40.5	10.8	51.9	67.7	8.5
Queue Length 50th (ft)	150	75	344	121	166	270	361	73	201	-585	4
Queue Length 95th (ft)	#264	129	498	162	251	m350	#724	m110	313	#802	33
Internal Link Dist (ft)		1069			722		7822			1395	
Turn Bay Length (ft)	150		260	150		300		300	700		
Base Capacity (vph)	274	373	758	780	521	389	1299	1100	388	1247	646
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.68	0.28	0.77	0.37	0.56	0.77	0.86	0.27	0.67	0.94	0.11

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

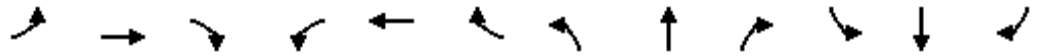
Lanes, Volumes, Timings
 14: Sierra Highway & Golden Valley Road

04/25/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 	 	 	  		 	 			 	
Traffic Volume (vph)	346	650	533	61	626	82	661	1008	124	42	240	209
Future Volume (vph)	346	650	533	61	626	82	661	1008	124	42	240	209
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	280		280	285		300	285		0	410		540
Storage Lanes	2		2	2		1	2		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	0.88	0.97	0.91	1.00	0.97	0.95	0.95	1.00	0.95	1.00
Frt			0.850			0.850		0.984				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	2787	3433	5085	1583	3433	3483	0	1770	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	2787	3433	5085	1583	3433	3483	0	1770	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			579			186		10				227
Link Speed (mph)		50			50			30				30
Link Distance (ft)		1983			1208			1801				1671
Travel Time (s)		27.0			16.5			40.9				38.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	376	707	579	66	680	89	718	1096	135	46	261	227
Shared Lane Traffic (%)												
Lane Group Flow (vph)	376	707	579	66	680	89	718	1231	0	46	261	227
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24				24
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50		50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50		50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	custom
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						8
Detector Phase	7	4	4	3	8	8	5	2		1	6	8
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	8.5	29.6	29.6	8.5	40.0	40.0	15.0	49.0		8.5	46.0	40.0
Total Split (s)	29.0	50.0	50.0	20.0	41.0	41.0	37.0	44.0		18.0	25.0	41.0

Lanes, Volumes, Timings
 14: Sierra Highway & Golden Valley Road

04/25/2023

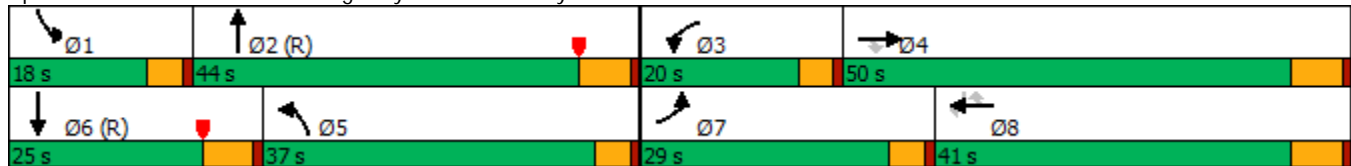


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	22.0%	37.9%	37.9%	15.2%	31.1%	31.1%	28.0%	33.3%		13.6%	18.9%	31.1%
Maximum Green (s)	24.5	44.0	44.0	15.5	35.0	35.0	32.5	38.0		13.5	19.0	35.0
Yellow Time (s)	3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.0		3.5	5.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	-0.5	-2.0	-2.0	-0.5	-2.0	-2.0	-0.5	-2.0		-0.5	-2.0	-2.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lag		Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	None
Walk Time (s)					5.0	5.0		5.0			5.0	5.0
Flash Dont Walk (s)					29.0	29.0		33.0			30.0	29.0
Pedestrian Calls (#/hr)					0	0		0			0	0
Act Effct Green (s)	20.2	41.0	41.0	8.4	27.2	27.2	33.0	61.4		9.3	35.7	27.2
Actuated g/C Ratio	0.15	0.31	0.31	0.06	0.21	0.21	0.25	0.47		0.07	0.27	0.21
v/c Ratio	0.72	0.64	0.46	0.30	0.65	0.19	0.84	0.76		0.37	0.27	0.45
Control Delay	47.3	42.0	11.9	62.1	50.8	0.9	56.8	35.0		66.1	40.9	7.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	47.3	42.0	11.9	62.1	50.8	0.9	56.8	35.0		66.1	40.9	7.9
LOS	D	D	B	E	D	A	E	C		E	D	A
Approach Delay		32.7			46.3			43.0			29.0	
Approach LOS		C			D			D			C	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 65 (49%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 130
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.84
 Intersection Signal Delay: 38.6
 Intersection LOS: D
 Intersection Capacity Utilization 70.4%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 14: Sierra Highway & Golden Valley Road



Queues

14: Sierra Highway & Golden Valley Road

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	376	707	579	66	680	89	718	1231	46	261	227
v/c Ratio	0.72	0.64	0.46	0.30	0.65	0.19	0.84	0.76	0.37	0.27	0.45
Control Delay	47.3	42.0	11.9	62.1	50.8	0.9	56.8	35.0	66.1	40.9	7.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.3	42.0	11.9	62.1	50.8	0.9	56.8	35.0	66.1	40.9	7.9
Queue Length 50th (ft)	159	298	95	28	198	0	302	456	38	92	0
Queue Length 95th (ft)	m188	m332	m131	52	228	0	377	#732	78	148	64
Internal Link Dist (ft)		1903			1128			1721		1591	
Turn Bay Length (ft)	280		280	285		300	285		410		540
Base Capacity (vph)	650	1244	1355	416	1425	577	858	1625	187	956	607
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.58	0.57	0.43	0.16	0.48	0.15	0.84	0.76	0.25	0.27	0.37

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

Lanes, Volumes, Timings
 15: SR 14 SB Ramp & Golden Valley Road

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗	↖	↑↑					↘	↙	↗
Traffic Volume (vph)	0	743	90	163	507	0	0	0	0	70	4	342
Future Volume (vph)	0	743	90	163	507	0	0	0	0	70	4	342
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	220		0	0		0	300		0
Storage Lanes	0		1	1		0	0		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850									0.850
Flt Protected				0.950						0.950	0.957	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	1681	1694	1583
Flt Permitted				0.950						0.950	0.957	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	1681	1694	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			98									354
Link Speed (mph)		50			50			30			30	
Link Distance (ft)		861			697			508			640	
Travel Time (s)		11.7			9.5			11.5			14.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	808	98	177	551	0	0	0	0	76	4	372
Shared Lane Traffic (%)										47%		
Lane Group Flow (vph)	0	808	98	177	551	0	0	0	0	40	40	372
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94		94							94	
Detector 2 Size(ft)		6		6							6	
Detector 2 Type		Cl+Ex		Cl+Ex							Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0		0.0							0.0	
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		6		5	2					4		
Permitted Phases		6								4		4

Lanes, Volumes, Timings
 15: SR 14 SB Ramp & Golden Valley Road

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase		6	6	5	2					4	4	4
Switch Phase												
Minimum Initial (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Minimum Split (s)		20.0	20.0	12.0	20.0					20.0	20.0	20.0
Total Split (s)		39.0	39.0	22.0	61.0					29.0	29.0	29.0
Total Split (%)		43.3%	43.3%	24.4%	67.8%					32.2%	32.2%	32.2%
Maximum Green (s)		35.0	35.0	18.0	57.0					25.0	25.0	25.0
Yellow Time (s)		3.5	3.5	3.5	3.5					3.5	3.5	3.5
All-Red Time (s)		0.5	0.5	0.5	0.5					0.5	0.5	0.5
Lost Time Adjust (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Total Lost Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lead/Lag		Lag	Lag	Lead								
Lead-Lag Optimize?		Yes	Yes	Yes								
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Recall Mode		Max	Max	None	C-Max					Max	Max	Max
Walk Time (s)		5.0	5.0		5.0					5.0	5.0	5.0
Flash Dont Walk (s)		10.0	10.0		10.0					10.0	10.0	10.0
Pedestrian Calls (#/hr)		0	0		0					0	0	0
Act Effect Green (s)		39.1	39.1	13.9	57.0					25.0	25.0	25.0
Actuated g/C Ratio		0.43	0.43	0.15	0.63					0.28	0.28	0.28
v/c Ratio		0.53	0.13	0.65	0.25					0.09	0.09	0.54
Control Delay		20.9	4.4	49.8	7.2					24.8	24.8	6.8
Queue Delay		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Total Delay		20.9	4.4	49.8	7.2					24.8	24.8	6.8
LOS		C	A	D	A					C	C	A
Approach Delay		19.1			17.6						10.0	
Approach LOS		B			B						B	

Intersection Summary

Area Type: Other
 Cycle Length: 90
 Actuated Cycle Length: 90
 Offset: 0 (0%), Referenced to phase 2:WBT, Start of Yellow
 Natural Cycle: 55
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.65
 Intersection Signal Delay: 16.6
 Intersection LOS: B
 Intersection Capacity Utilization 43.9%
 ICU Level of Service A
 Analysis Period (min) 15

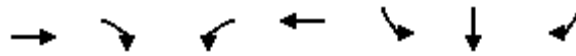
Splits and Phases: 15: SR 14 SB Ramp & Golden Valley Road



Queues

15: SR 14 SB Ramp & Golden Valley Road

04/25/2023



Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	808	98	177	551	40	40	372
v/c Ratio	0.53	0.13	0.65	0.25	0.09	0.09	0.54
Control Delay	20.9	4.4	49.8	7.2	24.8	24.8	6.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.9	4.4	49.8	7.2	24.8	24.8	6.8
Queue Length 50th (ft)	173	0	106	60	17	17	7
Queue Length 95th (ft)	247	30	173	79	43	43	77
Internal Link Dist (ft)	781			617		560	
Turn Bay Length (ft)			220		300		
Base Capacity (vph)	1537	743	354	2241	466	470	695
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.13	0.50	0.25	0.09	0.09	0.54

Intersection Summary

Lanes, Volumes, Timings
 16: SR 14 NB Ramp & Golden Valley Road

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑			↑↑	↗	↖	↗	↖			
Traffic Volume (vph)	335	492	0	0	451	223	206	2	382	0	0	0
Future Volume (vph)	335	492	0	0	451	223	206	2	382	0	0	0
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	230		0	0		280	0		140	0		0
Storage Lanes	2		0	0		1	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt						0.850			0.850			
Flt Protected	0.950						0.950	0.953				
Satd. Flow (prot)	3433	3539	0	0	3539	1583	1681	1686	1583	0	0	0
Flt Permitted	0.950						0.950	0.953				
Satd. Flow (perm)	3433	3539	0	0	3539	1583	1681	1686	1583	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						242			297			
Link Speed (mph)		50			50			30				30
Link Distance (ft)		697			616			615				491
Travel Time (s)		9.5			8.4			14.0				11.2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	364	535	0	0	490	242	224	2	415	0	0	0
Shared Lane Traffic (%)							50%					
Lane Group Flow (vph)	364	535	0	0	490	242	112	114	415	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1	1	2	1			
Detector Template	Left	Thru			Thru	Right	Left	Thru	Right			
Leading Detector (ft)	20	100			100	20	20	100	20			
Trailing Detector (ft)	0	0			0	0	0	0	0			
Detector 1 Position(ft)	0	0			0	0	0	0	0			
Detector 1 Size(ft)	20	6			6	20	20	6	20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Prot	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	1	6			2			8				
Permitted Phases						2	8		8			

Lanes, Volumes, Timings
 16: SR 14 NB Ramp & Golden Valley Road

04/25/2023

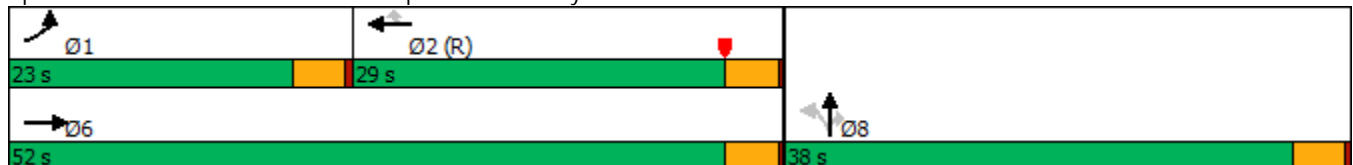


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	1	6			2	2	8	8	8			
Switch Phase												
Minimum Initial (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Minimum Split (s)	12.0	20.0			20.0	20.0	20.0	20.0	20.0			
Total Split (s)	23.0	52.0			29.0	29.0	38.0	38.0	38.0			
Total Split (%)	25.6%	57.8%			32.2%	32.2%	42.2%	42.2%	42.2%			
Maximum Green (s)	19.0	48.0			25.0	25.0	34.0	34.0	34.0			
Yellow Time (s)	3.5	3.5			3.5	3.5	3.5	3.5	3.5			
All-Red Time (s)	0.5	0.5			0.5	0.5	0.5	0.5	0.5			
Lost Time Adjust (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Total Lost Time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Lead/Lag	Lead				Lag		Lag					
Lead-Lag Optimize?	Yes				Yes		Yes					
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Recall Mode	None	Max			C-Max	C-Max	Max	Max	Max			
Walk Time (s)		5.0			5.0	5.0	5.0	5.0	5.0			
Flash Dont Walk (s)		10.0			10.0	10.0	10.0	10.0	10.0			
Pedestrian Calls (#/hr)		0			0	0	0	0	0			
Act Effct Green (s)	14.7	48.0			29.3	29.3	34.0	34.0	34.0			
Actuated g/C Ratio	0.16	0.53			0.33	0.33	0.38	0.38	0.38			
v/c Ratio	0.65	0.28			0.43	0.36	0.18	0.18	0.53			
Control Delay	64.8	6.2			25.8	5.1	19.6	19.7	9.0			
Queue Delay	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Total Delay	64.8	6.2			25.8	5.1	19.6	19.7	9.0			
LOS	E	A			C	A	B	B	A			
Approach Delay		29.9			19.0			12.7				
Approach LOS		C			B			B				

Intersection Summary

Area Type: Other
 Cycle Length: 90
 Actuated Cycle Length: 90
 Offset: 0 (0%), Referenced to phase 2:WBT, Start of Yellow
 Natural Cycle: 55
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.65
 Intersection Signal Delay: 21.5
 Intersection LOS: C
 Intersection Capacity Utilization 43.9%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 16: SR 14 NB Ramp & Golden Valley Road



Queues

16: SR 14 NB Ramp & Golden Valley Road

04/25/2023



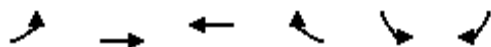
Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	364	535	490	242	112	114	415
v/c Ratio	0.65	0.28	0.43	0.36	0.18	0.18	0.53
Control Delay	64.8	6.2	25.8	5.1	19.6	19.7	9.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	64.8	6.2	25.8	5.1	19.6	19.7	9.0
Queue Length 50th (ft)	117	33	113	0	44	44	44
Queue Length 95th (ft)	162	43	170	54	83	84	125
Internal Link Dist (ft)		617	536			535	
Turn Bay Length (ft)	230			280			140
Base Capacity (vph)	724	1887	1152	678	635	636	782
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.50	0.28	0.43	0.36	0.18	0.18	0.53

Intersection Summary

Lanes, Volumes, Timings

1: Valencia Blvd & 5 Fwy SB Ramp

04/25/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑		↑↑	↑
Traffic Volume (vph)	0	559	938	0	220	90
Future Volume (vph)	0	559	938	0	220	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	15	12	14
Storage Length (ft)	0			0	0	455
Storage Lanes	0			0	2	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.91	0.95	1.00	0.97	1.00
Fr _t						0.850
Fl _t Protected					0.950	
Satd. Flow (prot)	0	5085	3539	0	3433	1689
Fl _t Permitted					0.950	
Satd. Flow (perm)	0	5085	3539	0	3433	1689
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)						98
Link Speed (mph)		50	50		30	
Link Distance (ft)		616	917		417	
Travel Time (s)		8.4	12.5		9.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	608	1020	0	239	98
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	608	1020	0	239	98
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		24	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	0.88	1.00	0.92
Turning Speed (mph)	15			9	15	9
Number of Detectors		1	1		1	1
Detector Template						
Leading Detector (ft)		50	50		50	50
Trailing Detector (ft)		0	0		0	0
Detector 1 Position(ft)		0	0		0	0
Detector 1 Size(ft)		50	50		50	50
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)		0.0	0.0		0.0	0.0
Detector 1 Queue (s)		0.0	0.0		0.0	0.0
Detector 1 Delay (s)		0.0	0.0		0.0	0.0
Turn Type		NA	NA		Prot	Perm
Protected Phases		2	6		4	
Permitted Phases						4
Detector Phase		2	6		4	4
Switch Phase						
Minimum Initial (s)		4.0	4.0		4.0	4.0
Minimum Split (s)		20.0	35.2		20.0	20.0

Lanes, Volumes, Timings
 1: Valencia Blvd & 5 Fwy SB Ramp

04/25/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Total Split (s)		41.0	41.0		25.0	25.0
Total Split (%)		62.1%	62.1%		37.9%	37.9%
Maximum Green (s)		34.8	34.8		19.2	19.2
Yellow Time (s)		5.2	5.2		4.8	4.8
All-Red Time (s)		1.0	1.0		1.0	1.0
Lost Time Adjust (s)		-2.2	-2.2		-1.8	-1.8
Total Lost Time (s)		4.0	4.0		4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Recall Mode		C-Max	C-Max		Min	Min
Walk Time (s)			5.0			
Flash Dont Walk (s)			18.0			
Pedestrian Calls (#/hr)			0			
Act Effect Green (s)		46.3	46.3		11.7	11.7
Actuated g/C Ratio		0.70	0.70		0.18	0.18
v/c Ratio		0.17	0.41		0.39	0.26
Control Delay		3.7	2.1		25.5	7.5
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		3.7	2.1		25.5	7.5
LOS		A	A		C	A
Approach Delay		3.7	2.1		20.3	
Approach LOS		A	A		C	

Intersection Summary
 Area Type: Other
 Cycle Length: 66
 Actuated Cycle Length: 66
 Offset: 14 (21%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.41
 Intersection Signal Delay: 5.7
 Intersection LOS: A
 Intersection Capacity Utilization 38.9%
 ICU Level of Service A
 Analysis Period (min) 15

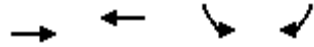
Splits and Phases: 1: Valencia Blvd & 5 Fwy SB Ramp



Queues

1: Valencia Blvd & 5 Fwy SB Ramp

04/25/2023



Lane Group	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	608	1020	239	98
v/c Ratio	0.17	0.41	0.39	0.26
Control Delay	3.7	2.1	25.5	7.5
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	3.7	2.1	25.5	7.5
Queue Length 50th (ft)	24	24	44	0
Queue Length 95th (ft)	40	70	70	33
Internal Link Dist (ft)	536	837	337	
Turn Bay Length (ft)				455
Base Capacity (vph)	3567	2482	1092	604
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.17	0.41	0.22	0.16

Intersection Summary

Lanes, Volumes, Timings
 2: 5 Fwy NB Ramp & Valencia Blvd

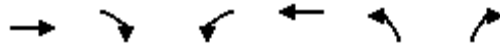
04/25/2023

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↙↘	↑↑↑	↙↘	↗↘
Traffic Volume (vph)	711	37	76	1604	279	830
Future Volume (vph)	711	37	76	1604	279	830
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	12	12	12	12	14
Storage Length (ft)		0	200		220	220
Storage Lanes		0	2		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	0.97	0.86	0.97	0.88
Fr _t	0.993					0.850
Fl _t Protected			0.950		0.950	
Satd. Flow (prot)	5386	0	3433	6408	3433	2972
Fl _t Permitted			0.950		0.950	
Satd. Flow (perm)	5386	0	3433	6408	3433	2972
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	14					659
Link Speed (mph)	50			50	30	
Link Distance (ft)	917			476	493	
Travel Time (s)	12.5			6.5	11.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	773	40	83	1743	303	902
Shared Lane Traffic (%)						
Lane Group Flow (vph)	813	0	83	1743	303	902
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	24			24	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.92	1.00	1.00	1.00	1.00	0.92
Turning Speed (mph)		9	15		15	9
Number of Detectors	1		1	1	1	1
Detector Template						
Leading Detector (ft)	50		50	50	50	50
Trailing Detector (ft)	0		0	0	0	0
Detector 1 Position(ft)	0		0	0	0	0
Detector 1 Size(ft)	50		50	50	50	50
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0
Turn Type	NA		Prot	NA	Prot	Prot
Protected Phases	2		1	6	8	8
Permitted Phases						
Detector Phase	2		1	6	8	8
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	31.0		14.0	20.0	20.0	20.0

Lanes, Volumes, Timings

2: 5 Fwy NB Ramp & Valencia Blvd

04/25/2023

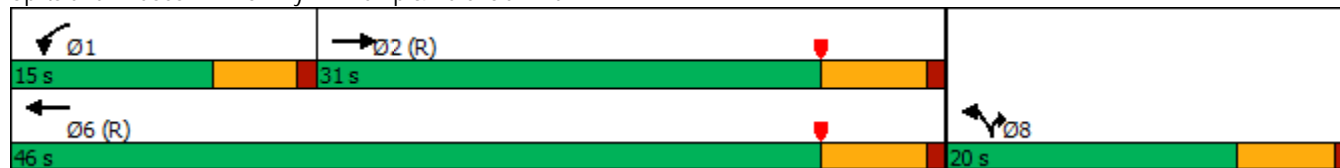


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Total Split (s)	31.0		15.0	46.0	20.0	20.0
Total Split (%)	47.0%		22.7%	69.7%	30.3%	30.3%
Maximum Green (s)	24.8		9.9	39.8	14.2	14.2
Yellow Time (s)	5.2		4.1	5.2	4.8	4.8
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-2.2		-1.1	-2.2	-1.8	-1.8
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max		None	C-Max	None	None
Walk Time (s)	5.0					
Flash Dont Walk (s)	24.0					
Pedestrian Calls (#/hr)	0					
Act Effect Green (s)	33.4		8.1	43.4	14.6	14.6
Actuated g/C Ratio	0.51		0.12	0.66	0.22	0.22
v/c Ratio	0.30		0.20	0.41	0.40	0.77
Control Delay	8.6		26.5	4.7	23.2	11.3
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	8.6		26.5	4.7	23.2	11.3
LOS	A		C	A	C	B
Approach Delay	8.6			5.7	14.3	
Approach LOS	A			A	B	

Intersection Summary

Area Type: Other
 Cycle Length: 66
 Actuated Cycle Length: 66
 Offset: 8 (12%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Natural Cycle: 65
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.77
 Intersection Signal Delay: 9.0
 Intersection LOS: A
 Intersection Capacity Utilization 50.3%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 2: 5 Fwy NB Ramp & Valencia Blvd



Queues

2: 5 Fwy NB Ramp & Valencia Blvd

04/25/2023










































Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	813	83	1743	303	902
v/c Ratio	0.30	0.20	0.41	0.40	0.77
Control Delay	8.6	26.5	4.7	23.2	11.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	8.6	26.5	4.7	23.2	11.3
Queue Length 50th (ft)	70	15	142	52	46
Queue Length 95th (ft)	90	m27	64	84	110
Internal Link Dist (ft)	837		396	413	
Turn Bay Length (ft)		200		220	220
Base Capacity (vph)	2730	572	4209	832	1219
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.30	0.15	0.41	0.36	0.74

Intersection Summary

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

Lanes, Volumes, Timings
3: McBean Pkwy & Valencia Blvd

04/25/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	  		  	  		 	  	 	 	  	 
Traffic Volume (vph)	360	873	120	343	1303	54	199	741	339	117	552	725
Future Volume (vph)	360	873	120	343	1303	54	199	741	339	117	552	725
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	11	11	13	11	11	12	11	11	12
Storage Length (ft)	350		280	290		225	130		200	190		300
Storage Lanes	2		1	2		1	2		2	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	0.88	0.97	0.91	0.88
Fr _t			0.850			0.850			0.850			0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3319	4916	1583	3319	4916	1636	3319	4916	2787	3319	4916	2787
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3319	4916	1583	3319	4916	1636	3319	4916	2787	3319	4916	2787
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			74			70			178			120
Link Speed (mph)		50			50			45			45	
Link Distance (ft)		1919			721			765			966	
Travel Time (s)		26.2			9.8			11.6			14.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	391	949	130	373	1416	59	216	805	368	127	600	788
Shared Lane Traffic (%)												
Lane Group Flow (vph)	391	949	130	373	1416	59	216	805	368	127	600	788
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		22			22			22			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.00	1.04	1.04	0.96	1.04	1.04	1.00	1.04	1.04	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	1	6	7	5	2	3	7	4	5	3	8	1
Permitted Phases			6			2			4			8
Detector Phase	1	6	7	5	2	3	7	4	5	3	8	1
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	44.0	12.0	12.0	47.0	12.0	12.0	41.0	12.0	12.0	44.0	12.0

Lanes, Volumes, Timings
 3: McBean Pkwy & Valencia Blvd

04/25/2023

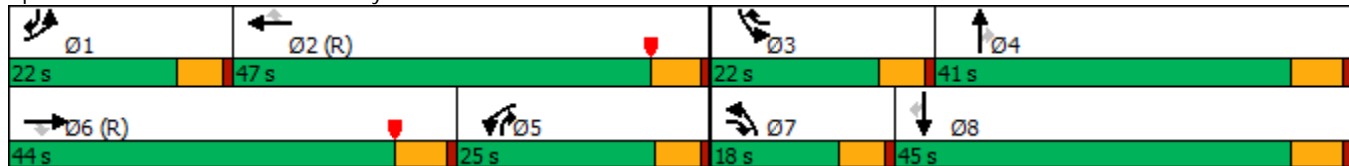


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	22.0	44.0	18.0	25.0	47.0	22.0	18.0	41.0	25.0	22.0	45.0	22.0
Total Split (%)	16.7%	33.3%	13.6%	18.9%	35.6%	16.7%	13.6%	31.1%	18.9%	16.7%	34.1%	16.7%
Maximum Green (s)	16.5	38.0	12.5	19.5	41.0	16.5	12.5	35.0	19.5	16.5	39.0	16.5
Yellow Time (s)	4.5	5.0	4.5	4.5	5.0	4.5	4.5	5.0	4.5	4.5	5.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.5	-2.0	-1.5	-1.5	-2.0	-1.5	-1.5	-2.0	-1.5	-1.5	-2.0	-1.5
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Max	None	None	C-Max	None	None	None	None	None	None	None
Walk Time (s)		5.0			5.0			5.0			5.0	
Flash Dont Walk (s)		32.0			33.0			30.0			33.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effect Green (s)	23.6	53.4	66.9	21.0	50.8	66.7	13.5	29.7	50.7	11.9	28.1	55.7
Actuated g/C Ratio	0.18	0.40	0.51	0.16	0.38	0.51	0.10	0.22	0.38	0.09	0.21	0.42
v/c Ratio	0.66	0.48	0.16	0.71	0.75	0.07	0.64	0.73	0.31	0.42	0.57	0.63
Control Delay	52.6	30.8	4.0	28.7	12.5	0.1	66.0	51.3	9.1	39.2	59.7	63.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.6	30.8	4.0	28.7	12.5	0.1	66.0	51.3	9.1	39.2	59.7	63.6
LOS	D	C	A	C	B	A	E	D	A	D	E	E
Approach Delay		34.3			15.4			42.4			60.0	
Approach LOS		C			B			D			E	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 35 (27%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
 Natural Cycle: 115
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.75
 Intersection Signal Delay: 36.7
 Intersection LOS: D
 Intersection Capacity Utilization 66.4%
 ICU Level of Service C
 Analysis Period (min) 15

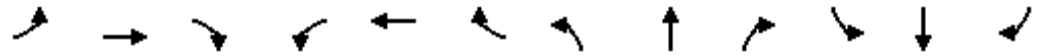
Splits and Phases: 3: McBean Pkwy & Valencia Blvd



Queues

3: McBean Pkwy & Valencia Blvd

04/25/2023



























Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	391	949	130	373	1416	59	216	805	368	127	600	788
v/c Ratio	0.66	0.48	0.16	0.71	0.75	0.07	0.64	0.73	0.31	0.42	0.57	0.63
Control Delay	52.6	30.8	4.0	28.7	12.5	0.1	66.0	51.3	9.1	39.2	59.7	63.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.6	30.8	4.0	28.7	12.5	0.1	66.0	51.3	9.1	39.2	59.7	63.6
Queue Length 50th (ft)	153	241	0	137	52	0	92	235	44	55	200	379
Queue Length 95th (ft)	227	294	m15	m144	m130	m0	136	269	62	90	243	452
Internal Link Dist (ft)		1839			641			685			886	
Turn Bay Length (ft)	350		280	290		225	130		200	190		300
Base Capacity (vph)	593	1990	844	528	1893	934	352	1377	1179	452	1526	1245
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.66	0.48	0.15	0.71	0.75	0.06	0.61	0.58	0.31	0.28	0.39	0.63

Intersection Summary

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

Lanes, Volumes, Timings
4: McBean Parkway & Magic Mountain Pkwy

04/25/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	413	344	50	60	405	140	60	970	52	173	1386	640
Future Volume (vph)	413	344	50	60	405	140	60	970	52	173	1386	640
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	16	12	12	14	11	11	16	11	11	16
Storage Length (ft)	360		360	210		0	175		175	300		340
Storage Lanes	1		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.91	1.00	0.97	0.86	1.00	0.97	0.86	1.00
Fr _t			0.850			0.850			0.850			0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	1794	3433	5085	1689	3319	6194	1794	3319	6194	1794
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1794	3433	5085	1689	3319	6194	1794	3319	6194	1794
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			99			152			198			633
Link Speed (mph)		50			45			45			50	
Link Distance (ft)		809			1452			1622			1219	
Travel Time (s)		11.0			22.0			24.6			16.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	449	374	54	65	440	152	65	1054	57	188	1507	696
Shared Lane Traffic (%)												
Lane Group Flow (vph)	449	374	54	65	440	152	65	1054	57	188	1507	696
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			22			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	0.85	1.00	1.00	0.92	1.04	1.04	0.85	1.04	1.04	0.85
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			Free			Free
Detector Phase	5	2	2	1	6	6	3	8		7	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Minimum Split (s)	12.0	41.0	41.0	12.0	40.0	40.0	12.0	37.0		12.0	37.0	

Lanes, Volumes, Timings
 4: McBean Parkway & Magic Mountain Pkwy

04/25/2023

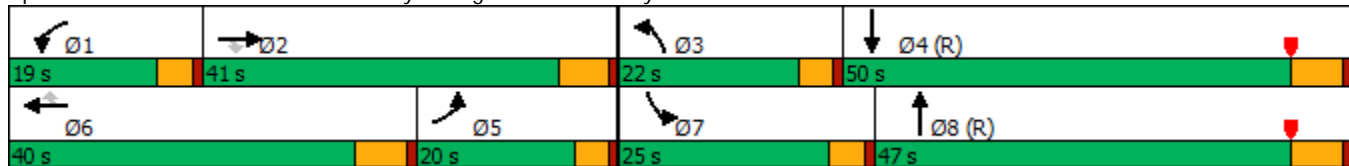


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	20.0	41.0	41.0	19.0	40.0	40.0	22.0	47.0		25.0	50.0	
Total Split (%)	15.2%	31.1%	31.1%	14.4%	30.3%	30.3%	16.7%	35.6%		18.9%	37.9%	
Maximum Green (s)	15.5	35.0	35.0	14.5	34.0	34.0	17.5	41.0		20.5	44.0	
Yellow Time (s)	3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.0		3.5	5.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	-0.5	-2.0	-2.0	-0.5	-2.0	-2.0	-0.5	-2.0		-0.5	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	Max	Max	None	Max	Max	None	C-Max		None	C-Max	
Walk Time (s)		5.0	5.0		5.0	5.0		5.0			5.0	
Flash Dont Walk (s)		30.0	30.0		29.0	29.0		26.0			26.0	
Pedestrian Calls (#/hr)		0	0		0	0		0			0	
Act Effect Green (s)	16.0	45.7	45.7	8.4	36.0	36.0	8.5	50.7	132.0	13.3	57.6	132.0
Actuated g/C Ratio	0.12	0.35	0.35	0.06	0.27	0.27	0.06	0.38	1.00	0.10	0.44	1.00
v/c Ratio	1.08	0.31	0.08	0.30	0.32	0.27	0.31	0.44	0.03	0.56	0.56	0.39
Control Delay	120.7	33.3	0.7	67.1	39.5	13.3	83.8	16.2	0.0	62.9	29.3	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	120.7	33.3	0.7	67.1	39.5	13.3	83.8	16.2	0.0	62.9	29.3	0.6
LOS	F	C	A	E	D	B	F	B	A	E	C	A
Approach Delay		76.0			36.2			19.1			23.6	
Approach LOS		E			D			B			C	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 28 (21%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow
 Natural Cycle: 105
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.08
 Intersection Signal Delay: 33.2
 Intersection LOS: C
 Intersection Capacity Utilization 56.4%
 ICU Level of Service B
 Analysis Period (min) 15

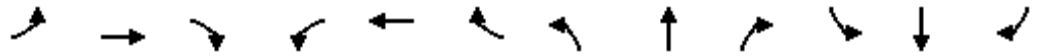
Splits and Phases: 4: McBean Parkway & Magic Mountain Pkwy



Queues

4: McBean Parkway & Magic Mountain Pkwy

04/25/2023

























Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	449	374	54	65	440	152	65	1054	57	188	1507	696
v/c Ratio	1.08	0.31	0.08	0.30	0.32	0.27	0.31	0.44	0.03	0.56	0.56	0.39
Control Delay	120.7	33.3	0.7	67.1	39.5	13.3	83.8	16.2	0.0	62.9	29.3	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	120.7	33.3	0.7	67.1	39.5	13.3	83.8	16.2	0.0	62.9	29.3	0.6
Queue Length 50th (ft)	~221	125	0	27	100	21	30	60	0	80	283	0
Queue Length 95th (ft)	#329	173	4	50	132	52	m50	114	m0	117	331	0
Internal Link Dist (ft)		729			1372			1542			1139	
Turn Bay Length (ft)	360		360	210			175		175	300		340
Base Capacity (vph)	416	1224	685	390	1386	571	452	2379	1794	528	2702	1794
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.08	0.31	0.08	0.17	0.32	0.27	0.14	0.44	0.03	0.36	0.56	0.39

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
5: Valencia Blvd & Magic Mountain Pkwy

04/25/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	177	152	42	168	345	46	43	749	96	23	1560	597
Future Volume (vph)	177	152	42	168	345	46	43	749	96	23	1560	597
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	13	12	11	12	11	11	14	12	11	11	12
Storage Length (ft)	310		0	250		200	180		200	190		190
Storage Lanes	1		0	2		0	1		1	1		2
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	0.95	0.97	0.95	0.95	1.00	0.91	1.00	1.00	0.91	0.88
Fr't		0.967			0.982				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3319	3537	0	3319	3476	0	1711	5424	1583	1711	4916	2787
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3319	3537	0	3319	3476	0	1711	5424	1583	1711	4916	2787
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		28			11				112			483
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1046			2748			1989			572	
Travel Time (s)		15.8			41.6			30.1			8.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	192	165	46	183	375	50	47	814	104	25	1696	649
Shared Lane Traffic (%)												
Lane Group Flow (vph)	192	211	0	183	425	0	47	814	104	25	1696	649
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		22			22			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	0.96	1.00	1.04	1.00	1.04	1.04	0.92	1.00	1.04	1.04	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Size(ft)	50	50		50	50		50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	3	8		7	4		1	6		5	2	3
Permitted Phases									6			2
Detector Phase	3	8		7	4		1	6	6	5	2	3
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	45.0		12.0	45.0		12.0	38.0	38.0	12.0	39.0	12.0

Queues

5: Valencia Blvd & Magic Mountain Pkwy

04/25/2023



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	192	211	183	425	47	814	104	25	1696	649
v/c Ratio	0.52	0.16	0.56	0.34	0.38	0.50	0.19	0.14	0.98	0.40
Control Delay	58.4	25.8	94.2	14.9	51.8	39.0	10.9	42.6	42.8	3.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	58.4	25.8	94.2	14.9	51.8	39.0	10.9	42.6	42.8	3.6
Queue Length 50th (ft)	86	57	83	49	40	242	30	16	~469	32
Queue Length 95th (ft)	117	115	122	174	79	284	70	m22	m#672	m34
Internal Link Dist (ft)		966		2668		1909			492	
Turn Bay Length (ft)	310		250		180		200	190		190
Base Capacity (vph)	528	1328	528	1256	181	1643	535	181	1731	1731
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.16	0.35	0.34	0.26	0.50	0.19	0.14	0.98	0.37

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings

6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy

04/25/2023



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	79	247	290	1116	1423	133
Future Volume (vph)	79	247	290	1116	1423	133
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	265	265	260			270
Storage Lanes	1	1	2			1
Taper Length (ft)	25		25			
Lane Util. Factor	0.97	0.88	0.97	0.91	0.95	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3433	2787	3433	5085	3539	1583
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	3433	2787	3433	5085	3539	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		24				111
Link Speed (mph)	45			50	45	
Link Distance (ft)	2748			2280	1194	
Travel Time (s)	41.6			31.1	18.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	86	268	315	1213	1547	145
Shared Lane Traffic (%)						
Lane Group Flow (vph)	86	268	315	1213	1547	145
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	34			24	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	1	1	1
Detector Template						
Leading Detector (ft)	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	pt+ov	custom	NA	NA	Perm
Protected Phases	8	8 1	1	6	2	
Permitted Phases			1			2
Detector Phase	8	8 1	1	6	2	2
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	20.0		20.0	20.0	41.0	41.0
Total Split (s)	34.0		30.0	98.0	68.0	68.0

Lanes, Volumes, Timings

6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy

04/25/2023



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Total Split (%)	25.8%		22.7%	74.2%	51.5%	51.5%
Maximum Green (s)	29.0		25.5	92.0	62.0	62.0
Yellow Time (s)	4.0		3.5	5.0	5.0	5.0
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0		-0.5	-2.0	-2.0	-2.0
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	Max		Min	C-Min	C-Min	C-Min
Walk Time (s)					7.0	7.0
Flash Dont Walk (s)					28.0	28.0
Pedestrian Calls (#/hr)					0	0
Act Effect Green (s)	33.9	56.1	18.2	90.1	67.9	67.9
Actuated g/C Ratio	0.26	0.42	0.14	0.68	0.51	0.51
v/c Ratio	0.10	0.22	0.67	0.35	0.85	0.17
Control Delay	34.0	17.2	60.7	8.9	31.2	5.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.0	17.2	60.7	8.9	31.2	5.9
LOS	C	B	E	A	C	A
Approach Delay	21.3			19.6	29.0	
Approach LOS	C			B	C	

Intersection Summary

Area Type: Other

Cycle Length: 132

Actuated Cycle Length: 132

Offset: 77 (58%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 24.2

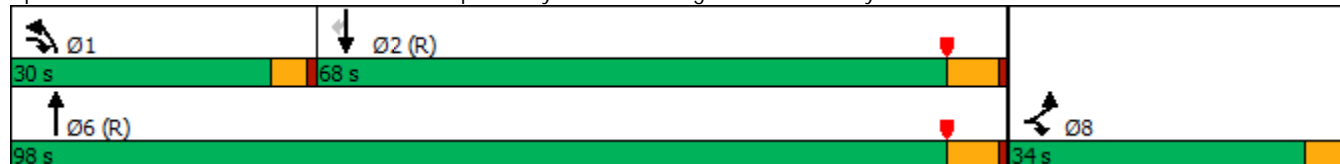
Intersection LOS: C

Intersection Capacity Utilization 60.9%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy



Queues

6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy

04/25/2023



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	86	268	315	1213	1547	145
v/c Ratio	0.10	0.22	0.67	0.35	0.85	0.17
Control Delay	34.0	17.2	60.7	8.9	31.2	5.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.0	17.2	60.7	8.9	31.2	5.9
Queue Length 50th (ft)	34	92	134	129	736	18
Queue Length 95th (ft)	63	125	176	151	814	m37
Internal Link Dist (ft)	2668			2200	1114	
Turn Bay Length (ft)	265	265	260			270
Base Capacity (vph)	881	1361	676	3621	1819	867
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.10	0.20	0.47	0.33	0.85	0.17
























Intersection Summary

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

Lanes, Volumes, Timings

7: Bouquet Canyon Rd & Valencia Blvd/Soledad Canyon Rd

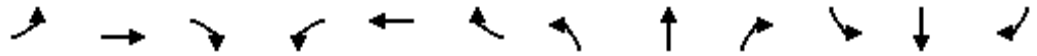
04/25/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	381	553	22	489	1297	286	22	657	374	320	1147	1032
Future Volume (vph)	381	553	22	489	1297	286	22	657	374	320	1147	1032
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	10	10	11	11	11	11	10	10	11
Storage Length (ft)	360		0	330		330	250		0	435		400
Storage Lanes	2		0	3		1	1		1	2		2
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.94	0.91	0.91	0.94	0.91	1.00	1.00	0.91	1.00	0.97	0.91	0.88
Frt		0.994				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	4824	4886	0	4658	4746	1531	1711	4916	1531	3204	4746	2694
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	4824	4886	0	4658	4746	1531	1711	4916	1531	3204	4746	2694
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4				99			112			459
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		2282			2858			2196			1054	
Travel Time (s)		34.6			43.3			33.3			12.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	414	601	24	532	1410	311	24	714	407	348	1247	1122
Shared Lane Traffic (%)												
Lane Group Flow (vph)	414	625	0	532	1410	311	24	714	407	348	1247	1122
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		33			33			20			20	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.00	1.09	1.09	1.04	1.04	1.04	1.04	1.09	1.09	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50		50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50		50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4		3	8	1	5	2	3	1	6	7
Permitted Phases						8			2			6
Detector Phase	7	4		3	8	1	5	2	3	1	6	7
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	44.0		12.0	48.0	12.0	12.0	46.0	12.0	12.0	44.0	12.0

Lanes, Volumes, Timings

7: Bouquet Canyon Rd & Valencia Blvd/Soledad Canyon Rd

04/25/2023

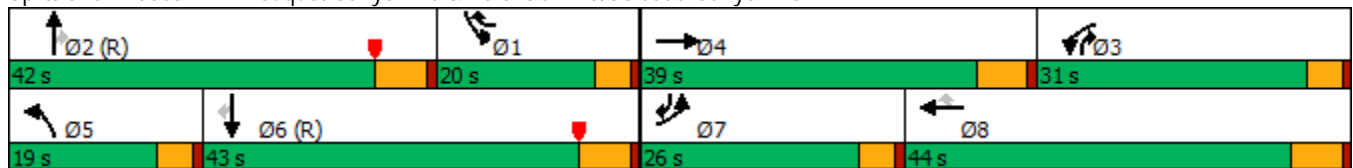


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	26.0	39.0		31.0	44.0	20.0	19.0	42.0	31.0	20.0	43.0	26.0
Total Split (%)	19.7%	29.5%		23.5%	33.3%	15.2%	14.4%	31.8%	23.5%	15.2%	32.6%	19.7%
Maximum Green (s)	21.5	33.0		26.5	38.0	15.5	14.5	36.0	26.5	15.5	37.0	21.5
Yellow Time (s)	3.5	5.0		3.5	5.0	3.5	3.5	5.0	3.5	3.5	5.0	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-0.5	-2.0		-0.5	-2.0	-0.5	-0.5	-2.0	-0.5	-0.5	-2.0	-0.5
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lead		Lag	Lag	Lag	Lead	Lead	Lag	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None	None	None	C-Max	None	None	C-Max	None
Walk Time (s)		5.0			5.0			5.0				
Flash Dont Walk (s)		33.0			37.0			35.0				
Pedestrian Calls (#/hr)		0			0			0				
Act Effect Green (s)	20.2	24.4		37.4	41.6	57.6	7.9	38.2	79.6	16.0	50.4	74.6
Actuated g/C Ratio	0.15	0.18		0.28	0.32	0.44	0.06	0.29	0.60	0.12	0.38	0.57
v/c Ratio	0.56	0.69		0.40	0.94	0.43	0.24	0.50	0.42	0.90	0.69	0.65
Control Delay	22.0	21.6		40.7	58.9	13.5	59.0	35.8	6.6	58.2	19.8	11.1
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.0	21.6		40.7	58.9	13.5	59.0	35.8	6.6	58.2	19.8	11.1
LOS	C	C		D	E	B	E	D	A	E	B	B
Approach Delay		21.8			48.3			25.9			21.1	
Approach LOS		C			D			C			C	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 117 (89%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 120
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.94
 Intersection Signal Delay: 30.5
 Intersection LOS: C
 Intersection Capacity Utilization 74.5%
 ICU Level of Service D
 Analysis Period (min) 15

Splits and Phases: 7: Bouquet Canyon Rd & Valencia Blvd/Soledad Canyon Rd



Queues

7: Bouquet Canyon Rd & Valencia Blvd/Soledad Canyon Rd

04/25/2023



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	414	625	532	1410	311	24	714	407	348	1247	1122
v/c Ratio	0.56	0.69	0.40	0.94	0.43	0.24	0.50	0.42	0.90	0.69	0.65
Control Delay	22.0	21.6	40.7	58.9	13.5	59.0	35.8	6.6	58.2	19.8	11.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.0	21.6	40.7	58.9	13.5	59.0	35.8	6.6	58.2	19.8	11.1
Queue Length 50th (ft)	34	51	147	471	87	20	191	12	160	313	425
Queue Length 95th (ft)	47	60	208	#563	157	49	234	236	m#215	381	522
Internal Link Dist (ft)		2202		2778			2116			974	
Turn Bay Length (ft)	360		330		330	250			435		400
Base Capacity (vph)	804	1298	1318	1495	723	194	1422	967	388	1813	1753
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.48	0.40	0.94	0.43	0.12	0.50	0.42	0.90	0.69	0.64

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

Lanes, Volumes, Timings
8: Bouquet Canyon Rd & Newhall Ranch Rd

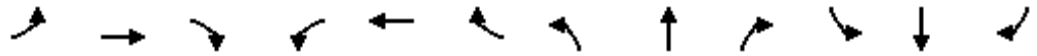
04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	262	743	286	443	1704	444	365	794	157	437	1838	517
Future Volume (vph)	262	743	286	443	1704	444	365	794	157	437	1838	517
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	290		265	410		410	475		230	260		150
Storage Lanes	3		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.94	0.86	1.00	0.97	0.86	1.00	0.97	0.86	1.00	0.97	0.86	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	4990	6408	1583	3433	6408	1583	3433	6408	1583	3433	6408	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	4990	6408	1583	3433	6408	1583	3433	6408	1583	3433	6408	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			107			329			182			112
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		870			2469			1012			1082	
Travel Time (s)		13.2			37.4			15.3			16.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	285	808	311	482	1852	483	397	863	171	475	1998	562
Shared Lane Traffic (%)												
Lane Group Flow (vph)	285	808	311	482	1852	483	397	863	171	475	1998	562
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		36			36			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	3	8	1	7	4		1	6		5	2	3
Permitted Phases			8			4			6			2
Detector Phase	3	8	1	7	4	4	1	6	6	5	2	3
Switch Phase												
Minimum Initial (s)	4.0	5.0	4.0	4.0	5.0	5.0	4.0	10.0	10.0	4.0	10.0	4.0
Minimum Split (s)	12.0	43.0	12.0	12.0	43.0	43.0	12.0	49.0	49.0	12.0	50.0	12.0
Total Split (s)	21.0	36.0	22.0	21.0	36.0	36.0	22.0	45.0	45.0	30.0	53.0	21.0

Lanes, Volumes, Timings
 8: Bouquet Canyon Rd & Newhall Ranch Rd

04/25/2023

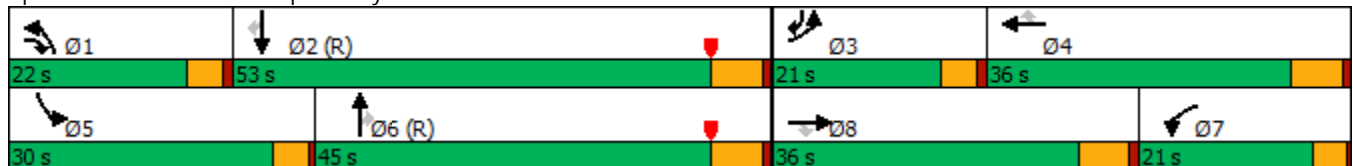


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	15.9%	27.3%	16.7%	15.9%	27.3%	27.3%	16.7%	34.1%	34.1%	22.7%	40.2%	15.9%
Maximum Green (s)	16.5	30.0	17.5	17.0	30.0	30.0	17.5	39.0	39.0	26.0	47.0	16.5
Yellow Time (s)	3.5	5.0	3.5	3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.0	3.5
All-Red Time (s)	1.0	1.0	1.0	0.5	1.0	1.0	1.0	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	-0.5	-2.0	-0.5	-0.5	-2.0	-2.0	-0.5	-2.0	-2.0	-0.5	-2.0	-0.5
Total Lost Time (s)	4.0	4.0	4.0	3.5	4.0	4.0	4.0	4.0	4.0	3.5	4.0	4.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes		Yes	Yes			Yes			Yes		Yes
Vehicle Extension (s)	3.0	5.5	3.0	3.0	5.5	5.5	3.0	5.5	5.5	3.0	5.5	3.0
Minimum Gap (s)	3.0	2.5	3.0	3.0	2.5	2.5	3.0	4.5	4.5	3.0	4.5	3.0
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	10.0	0.0	10.0	0.0
Time To Reduce (s)	0.0	24.0	0.0	0.0	24.0	24.0	0.0	10.0	10.0	0.0	10.0	0.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	None
Walk Time (s)		5.0			5.0	5.0		5.0	5.0		5.0	
Flash Dont Walk (s)		32.0			32.0	32.0		38.0	38.0		39.0	
Pedestrian Calls (#/hr)		2			2	2		1	1		1	
Act Effect Green (s)	14.2	26.8	44.5	22.7	34.8	34.8	17.7	44.2	44.2	23.3	49.3	67.5
Actuated g/C Ratio	0.11	0.20	0.34	0.17	0.26	0.26	0.13	0.33	0.33	0.18	0.37	0.51
v/c Ratio	0.53	0.62	0.51	0.82	1.10	0.73	0.86	0.40	0.26	0.79	0.83	0.65
Control Delay	59.0	49.9	15.3	63.5	97.8	23.8	63.9	52.6	19.7	61.5	41.6	22.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.0	49.9	15.3	63.5	97.8	23.8	63.9	52.6	19.7	61.5	41.6	22.3
LOS	E	D	B	E	F	C	E	D	B	E	D	C
Approach Delay		44.1			79.2			51.8			41.1	
Approach LOS		D			E			D			D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 105 (80%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
 Natural Cycle: 130
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.10
 Intersection Signal Delay: 55.7
 Intersection LOS: E
 Intersection Capacity Utilization 80.1%
 ICU Level of Service D
 Analysis Period (min) 15

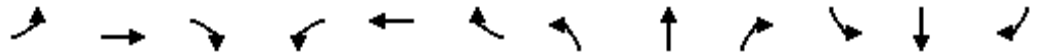
Splits and Phases: 8: Bouquet Canyon Rd & Newhall Ranch Rd



Queues

8: Bouquet Canyon Rd & Newhall Ranch Rd

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	285	808	311	482	1852	483	397	863	171	475	1998	562
v/c Ratio	0.53	0.62	0.51	0.82	1.10	0.73	0.86	0.40	0.26	0.79	0.83	0.65
Control Delay	59.0	49.9	15.3	63.5	97.8	23.8	63.9	52.6	19.7	61.5	41.6	22.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.0	49.9	15.3	63.5	97.8	23.8	63.9	52.6	19.7	61.5	41.6	22.3
Queue Length 50th (ft)	82	184	85	199	-521	123	146	221	39	201	451	277
Queue Length 95th (ft)	112	211	142	#345	#631	255	#251	253	100	257	500	389
Internal Link Dist (ft)		790			2389			932			1002	
Turn Bay Length (ft)	290		265	410		410	475		230	260		150
Base Capacity (vph)	642	1553	608	589	1687	659	468	2145	651	689	2393	895
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.44	0.52	0.51	0.82	1.10	0.73	0.85	0.40	0.26	0.69	0.83	0.63

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

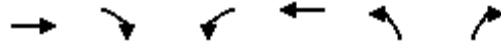
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Lanes, Volumes, Timings
9: Commuter Way & Soledad Cyn

04/25/2023



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↑	↓	↑↑↑	↓	↓
Traffic Volume (vph)	1118	39	11	2057	44	19
Future Volume (vph)	1118	39	11	2057	44	19
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		150	285		0	0
Storage Lanes		1	1		2	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	1.00	1.00	0.91	0.97	0.95
Frt		0.850			0.954	
Flt Protected			0.950		0.966	
Satd. Flow (prot)	5085	1583	1770	5085	3330	0
Flt Permitted			0.950		0.966	
Satd. Flow (perm)	5085	1583	1770	5085	3330	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		39			21	
Link Speed (mph)	50			50	30	
Link Distance (ft)	928			2825	392	
Travel Time (s)	12.7			38.5	8.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1215	42	12	2236	48	21
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1215	42	12	2236	69	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	1	1	1	1	1	
Detector Template						
Leading Detector (ft)	50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	
Turn Type	NA	Perm	Prot	NA	Prot	
Protected Phases	2		1	6	8	
Permitted Phases		2				
Detector Phase	2	2	1	6	8	
Switch Phase						
Minimum Initial (s)	10.0	10.0	4.0	10.0	4.0	
Minimum Split (s)	26.0	26.0	12.0	22.0	37.0	
Total Split (s)	75.0	75.0	20.0	95.0	37.0	

Lanes, Volumes, Timings

9: Commuter Way & Soledad Cyn

04/25/2023

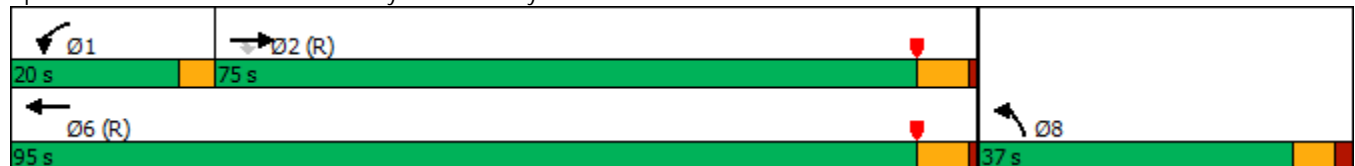


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Total Split (%)	56.8%	56.8%	15.2%	72.0%	28.0%	
Maximum Green (s)	69.0	69.0	16.5	89.0	31.0	
Yellow Time (s)	5.0	5.0	3.5	5.0	4.0	
All-Red Time (s)	1.0	1.0	0.0	1.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	0.5	-2.0	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Vehicle Extension (s)	5.0	5.0	1.5	5.0	2.0	
Minimum Gap (s)	4.0	4.0	1.5	4.0	2.0	
Time Before Reduce (s)	15.0	15.0	0.0	15.0	0.0	
Time To Reduce (s)	15.0	15.0	0.0	15.0	0.0	
Recall Mode	C-Max	C-Max	None	C-Max	None	
Walk Time (s)	7.0	7.0			7.0	
Flash Dont Walk (s)	13.0	13.0			24.0	
Pedestrian Calls (#/hr)	0	0			0	
Act Effect Green (s)	114.7	114.7	4.5	118.5	8.4	
Actuated g/C Ratio	0.87	0.87	0.03	0.90	0.06	
v/c Ratio	0.28	0.03	0.20	0.49	0.30	
Control Delay	0.9	0.1	82.8	0.7	45.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	0.9	0.1	82.8	0.7	45.1	
LOS	A	A	F	A	D	
Approach Delay	0.9			1.2	45.1	
Approach LOS	A			A	D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 16 (12%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Natural Cycle: 75
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.49
 Intersection Signal Delay: 1.9
 Intersection LOS: A
 Intersection Capacity Utilization 49.7%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 9: Commuter Way & Soledad Cyn



Queues

9: Commuter Way & Soledad Cyn

04/25/2023



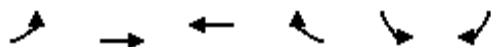
Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Group Flow (vph)	1215	42	12	2236	69
v/c Ratio	0.28	0.03	0.20	0.49	0.30
Control Delay	0.9	0.1	82.8	0.7	45.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	0.9	0.1	82.8	0.7	45.1
Queue Length 50th (ft)	13	0	11	25	20
Queue Length 95th (ft)	31	0	m24	21	44
Internal Link Dist (ft)	848			2745	312
Turn Bay Length (ft)		150	285		
Base Capacity (vph)	4417	1380	214	4564	848
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.28	0.03	0.06	0.49	0.08

Intersection Summary

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

Lanes, Volumes, Timings
 10: Soledad Cyn/Soledad Cyn Rd & Valley Center

04/25/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø4
Lane Configurations	↖↖	↑↑↑	↑↑↑	↗	↖↖	↗	
Traffic Volume (vph)	79	690	1580	778	397	161	
Future Volume (vph)	79	690	1580	778	397	161	
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	250			310	235	0	
Storage Lanes	2			1	1	1	
Taper Length (ft)	25				25		
Lane Util. Factor	0.97	0.91	0.91	1.00	0.97	1.00	
Frt				0.850		0.850	
Flt Protected	0.950				0.950		
Satd. Flow (prot)	3433	5085	5085	1583	3433	1583	
Flt Permitted	0.950				0.950		
Satd. Flow (perm)	3433	5085	5085	1583	3433	1583	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)				492		175	
Link Speed (mph)		50	50		30		
Link Distance (ft)		2935	1764		1172		
Travel Time (s)		40.0	24.1		26.6		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	86	750	1717	846	432	175	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	86	750	1717	846	432	175	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Left	Left	Right	Left	Right	
Median Width(ft)		24	24		24		
Link Offset(ft)		0	0		0		
Crosswalk Width(ft)		16	16		16		
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (mph)	15			9	15	9	
Number of Detectors	1	1	1	1	1	1	
Detector Template							
Leading Detector (ft)	50	50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Turn Type	Prot	NA	NA	Free	Prot	pt+ov	
Protected Phases	5	2	6		3	3 5	4
Permitted Phases				Free			
Detector Phase	5	2	6		3	3 5	
Switch Phase							
Minimum Initial (s)	4.0	4.0	4.0		4.0		4.0
Minimum Split (s)	20.0	22.0	29.0		20.0		35.0
Total Split (s)	20.0	72.0	52.0		25.0		35.0

Lanes, Volumes, Timings
 10: Soledad Cyn/Soledad Cyn Rd & Valley Center

04/25/2023

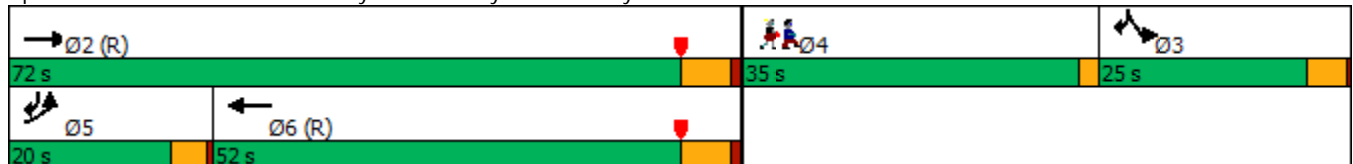


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø4	
Total Split (%)	15.2%	54.5%	39.4%		18.9%		27%	
Maximum Green (s)	16.0	66.0	46.0		20.5		33.0	
Yellow Time (s)	3.5	5.0	5.0		4.0		2.0	
All-Red Time (s)	0.5	1.0	1.0		0.5		0.0	
Lost Time Adjust (s)	0.0	-2.0	-2.0		-0.5			
Total Lost Time (s)	4.0	4.0	4.0		4.0			
Lead/Lag	Lead		Lag		Lag		Lead	
Lead-Lag Optimize?	Yes		Yes		Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		0.2	
Recall Mode	None	C-Max	C-Max		None		None	
Walk Time (s)				7.0				7.0
Flash Dont Walk (s)				16.0				26.0
Pedestrian Calls (#/hr)				0				0
Act Effct Green (s)	8.7	101.0	88.4	132.0	23.0	35.6		
Actuated g/C Ratio	0.07	0.77	0.67	1.00	0.17	0.27		
v/c Ratio	0.38	0.19	0.50	0.53	0.72	0.32		
Control Delay	50.9	9.1	2.7	2.9	42.7	3.6		
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		
Total Delay	50.9	9.1	2.7	2.9	42.7	3.6		
LOS	D	A	A	A	D	A		
Approach Delay	13.4		2.8		31.4			
Approach LOS	B		A		C			

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 37 (28%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Natural Cycle: 115
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.72
 Intersection Signal Delay: 9.4
 Intersection Capacity Utilization 51.8%
 Analysis Period (min) 15
 Intersection LOS: A
 ICU Level of Service A

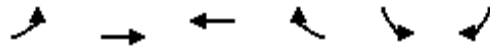
Splits and Phases: 10: Soledad Cyn/Soledad Cyn Rd & Valley Center



Queues

10: Soledad Cyn/Soledad Cyn Rd & Valley Center

04/25/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	86	750	1717	846	432	175
v/c Ratio	0.38	0.19	0.50	0.53	0.72	0.32
Control Delay	50.9	9.1	2.7	2.9	42.7	3.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.9	9.1	2.7	2.9	42.7	3.6
Queue Length 50th (ft)	38	121	36	0	137	8
Queue Length 95th (ft)	67	150	52	m416	211	19
Internal Link Dist (ft)		2855	1684		1092	
Turn Bay Length (ft)	250			310	235	
Base Capacity (vph)	416	3891	3404	1583	621	625
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.19	0.50	0.53	0.70	0.28

Intersection Summary

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

Lanes, Volumes, Timings
 11: Golden Valley Road & Valley Center Drive

04/25/2023



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4	Ø5	Ø12
Lane Configurations	↶↶↶	↷↷	↶↶	↑↑↑	↑↑↑	↷			
Traffic Volume (vph)	771	128	121	800	997	464			
Future Volume (vph)	771	128	121	800	997	464			
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900			
Storage Length (ft)	260	260	290			150			
Storage Lanes	2	1	2			1			
Taper Length (ft)	25		25						
Lane Util. Factor	0.94	0.88	0.97	0.91	0.91	1.00			
Frt		0.850				0.850			
Flt Protected	0.950		0.950						
Satd. Flow (prot)	4990	2787	3433	5085	5085	1583			
Flt Permitted	0.950		0.950						
Satd. Flow (perm)	4990	2787	3433	5085	5085	1583			
Right Turn on Red		Yes				Yes			
Satd. Flow (RTOR)		139				340			
Link Speed (mph)	30			50	50				
Link Distance (ft)	513			2601	1605				
Travel Time (s)	11.7			35.5	21.9				
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92			
Adj. Flow (vph)	838	139	132	870	1084	504			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	838	139	132	870	1084	504			
Enter Blocked Intersection	No	No	No	No	No	No			
Lane Alignment	Left	Right	Left	Left	Left	Right			
Median Width(ft)	36			24	24				
Link Offset(ft)	0			0	0				
Crosswalk Width(ft)	16			16	16				
Two way Left Turn Lane									
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00			
Turning Speed (mph)	15	9	15			9			
Number of Detectors	1	1	1	1	1	1			
Detector Template									
Leading Detector (ft)	50	50	50	50	50	50			
Trailing Detector (ft)	0	0	0	0	0	0			
Detector 1 Position(ft)	0	0	0	0	0	0			
Detector 1 Size(ft)	50	50	50	50	50	50			
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel									
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Turn Type	Prot	pt+ov	Prot	NA	NA	Perm			
Protected Phases	3	5 12	5 12	2	6		4	5	12
Permitted Phases						6			
Detector Phase	3	5 12	5 12	2	6	6			
Switch Phase									
Minimum Initial (s)	3.0			10.0	10.0	10.0	4.0	4.0	4.0
Minimum Split (s)	25.0			30.0	40.0	40.0	35.0	15.0	20.0
Total Split (s)	30.0			67.0	42.0	42.0	35.0	25.0	35.0

Lanes, Volumes, Timings
 11: Golden Valley Road & Valley Center Drive

04/25/2023

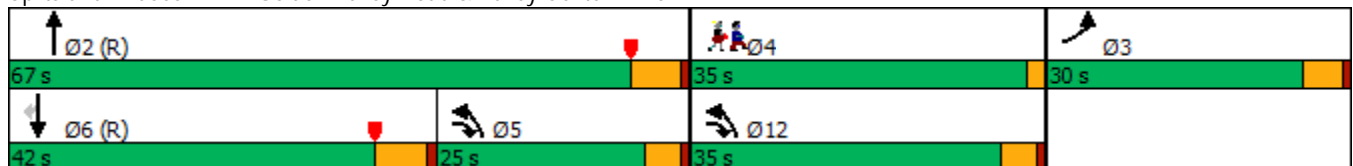


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4	Ø5	Ø12
Total Split (%)	22.7%			50.8%	31.8%	31.8%	27%	19%	27%
Maximum Green (s)	25.0			61.0	36.0	36.0	33.0	20.5	30.5
Yellow Time (s)	4.0			5.0	5.0	5.0	2.0	3.5	3.5
All-Red Time (s)	1.0			1.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)	-1.0			-2.0	-2.0	-2.0			
Total Lost Time (s)	4.0			4.0	4.0	4.0			
Lead/Lag					Lead	Lead		Lag	
Lead-Lag Optimize?					Yes	Yes		Yes	
Vehicle Extension (s)	3.0			3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None			C-Min	C-Min	C-Min	None	None	None
Walk Time (s)					7.0	7.0	7.0		5.0
Flash Dont Walk (s)					24.0	24.0	26.0		10.0
Pedestrian Calls (#/hr)					0	0	0		0
Act Effect Green (s)	29.6	20.4	20.4	84.3	69.9	69.9			
Actuated g/C Ratio	0.22	0.15	0.15	0.64	0.53	0.53			
v/c Ratio	0.75	0.25	0.25	0.27	0.40	0.51			
Control Delay	42.7	7.8	39.0	4.1	13.1	9.2			
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0			
Total Delay	42.7	7.8	39.0	4.1	13.1	9.2			
LOS	D	A	D	A	B	A			
Approach Delay	37.7			8.7	11.8				
Approach LOS	D			A	B				

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 26 (20%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 115
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.75
 Intersection Signal Delay: 18.0
 Intersection LOS: B
 Intersection Capacity Utilization 47.4%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 11: Golden Valley Road & Valley Center Drive



Queues

11: Golden Valley Road & Valley Center Drive

04/25/2023



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	838	139	132	870	1084	504
v/c Ratio	0.75	0.25	0.25	0.27	0.40	0.51
Control Delay	42.7	7.8	39.0	4.1	13.1	9.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.7	7.8	39.0	4.1	13.1	9.2
Queue Length 50th (ft)	252	6	60	41	158	110
Queue Length 95th (ft)	274	22	95	43	180	268
Internal Link Dist (ft)	433			2521	1525	
Turn Bay Length (ft)	260	260	290			150
Base Capacity (vph)	1133	1047	1178	3245	2694	998
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.74	0.13	0.11	0.27	0.40	0.51

Intersection Summary

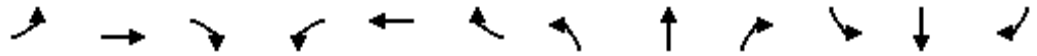
Lanes, Volumes, Timings
 12: Ruther Ave & Soledad Cyn Rd

04/25/2023

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	69	776	92	205	2200	17	250	134	94	81	93	68
Future Volume (vph)	69	776	92	205	2200	17	250	134	94	81	93	68
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	285		300	250		0	0		0	125		0
Storage Lanes	1		1	2		0	1		2	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	0.91	0.95	0.95	0.88	0.95	0.95	1.00
Frt			0.850		0.999				0.850		0.937	
Flt Protected	0.950			0.950			0.950	0.979		0.950		
Satd. Flow (prot)	1770	5085	1583	3433	5080	0	1681	1732	2787	1681	1658	0
Flt Permitted	0.950			0.950			0.950	0.979		0.950		
Satd. Flow (perm)	1770	5085	1583	3433	5080	0	1681	1732	2787	1681	1658	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			103		1				102		23	
Link Speed (mph)		50		50				40			30	
Link Distance (ft)		1764		2200				220			327	
Travel Time (s)		24.1		30.0				3.8			7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	75	843	100	223	2391	18	272	146	102	88	101	74
Shared Lane Traffic (%)							42%			0%		
Lane Group Flow (vph)	75	843	100	223	2409	0	158	260	102	88	175	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24		24				12			12	
Link Offset(ft)		0		0				0			0	
Crosswalk Width(ft)		16		16				16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1	1	1	1	
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50		50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	pt+ov	Split	NA	
Protected Phases	1	6		5	2		3	3	3 5	4	4	
Permitted Phases			6									
Detector Phase	1	6	6	5	2		3	3	3 5	4	4	
Switch Phase												
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	12.0	42.0	42.0	12.0	27.0		35.0	35.0		15.0	15.0	
Total Split (s)	18.0	52.0	52.0	30.0	64.0		30.0	30.0		20.0	20.0	

Lanes, Volumes, Timings
12: Ruther Ave & Soledad Cyn Rd

04/25/2023

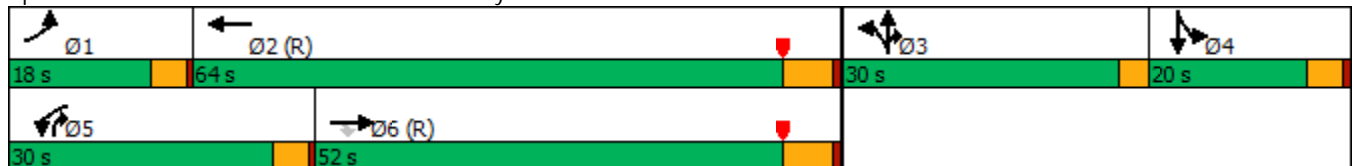


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	13.6%	39.4%	39.4%	22.7%	48.5%		22.7%	22.7%		15.2%	15.2%	
Maximum Green (s)	14.0	46.0	46.0	26.0	58.0		27.0	27.0		15.5	15.5	
Yellow Time (s)	3.5	5.0	5.0	3.5	5.0		3.0	3.0		3.5	3.5	
All-Red Time (s)	0.5	1.0	1.0	0.5	1.0		0.0	0.0		1.0	1.0	
Lost Time Adjust (s)	0.0	-2.0	-2.0	0.0	-2.0		1.0	1.0		-0.5	-0.5	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	4.5	4.5	1.5	4.5		3.0	3.0		3.0	3.0	
Minimum Gap (s)	1.5	3.0	3.0	1.5	3.0		3.0	3.0		3.0	3.0	
Time Before Reduce (s)	0.0	7.5	7.5	0.0	7.5		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	22.5	22.5	0.0	22.5		0.0	0.0		0.0	0.0	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None		None	None	
Walk Time (s)		7.0	7.0		7.0		5.0	5.0				
Flash Dont Walk (s)		25.0	25.0		11.0		27.0	27.0				
Pedestrian Calls (#/hr)		0	0		0		0	0				
Act Effect Green (s)	9.5	65.2	65.2	12.5	70.1		22.8	22.8	35.3	15.5	15.5	
Actuated g/C Ratio	0.07	0.49	0.49	0.09	0.53		0.17	0.17	0.27	0.12	0.12	
v/c Ratio	0.59	0.34	0.12	0.69	0.89		0.54	0.87	0.12	0.45	0.81	
Control Delay	98.3	8.4	1.3	68.7	34.8		56.6	80.2	3.9	61.7	77.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	98.3	8.4	1.3	68.7	34.8		56.6	80.2	3.9	61.7	77.1	
LOS	F	A	A	E	C		E	F	A	E	E	
Approach Delay		14.3			37.7			58.1			71.9	
Approach LOS		B			D			E			E	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
 Natural Cycle: 125
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.89
 Intersection Signal Delay: 36.7
 Intersection LOS: D
 Intersection Capacity Utilization 77.2%
 ICU Level of Service D
 Analysis Period (min) 15

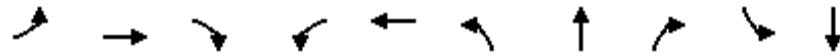
Splits and Phases: 12: Ruther Ave & Soledad Cyn Rd



Queues

12: Ruther Ave & Soledad Cyn Rd

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	75	843	100	223	2409	158	260	102	88	175
v/c Ratio	0.59	0.34	0.12	0.69	0.89	0.54	0.87	0.12	0.45	0.81
Control Delay	98.3	8.4	1.3	68.7	34.8	56.6	80.2	3.9	61.7	77.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	98.3	8.4	1.3	68.7	34.8	56.6	80.2	3.9	61.7	77.1
Queue Length 50th (ft)	64	106	1	96	716	129	227	0	73	133
Queue Length 95th (ft)	m104	146	m8	136	#907	203	#352	16	134	#261
Internal Link Dist (ft)		1684			2120		140			247
Turn Bay Length (ft)	285		300	250					125	
Base Capacity (vph)	187	2512	834	676	2696	331	341	1159	207	225
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.34	0.12	0.33	0.89	0.48	0.76	0.09	0.43	0.78

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

Lanes, Volumes, Timings
 13: Golden Valley Road & Centre Pointe Parkway

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	48	70	158	249	98	64	349	798	344	132	927	126
Future Volume (vph)	48	70	158	249	98	64	349	798	344	132	927	126
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		260	150		250	375		300	700		0
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850		0.941				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	3433	1753	0	1770	3539	1583	1770	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1863	1583	3433	1753	0	1770	3539	1583	1770	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			109		25				374			136
Link Speed (mph)		30			30			50			50	
Link Distance (ft)		1149			802			7898			1445	
Travel Time (s)		26.1			18.2			107.7			19.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	52	76	172	271	107	70	379	867	374	143	1008	137
Shared Lane Traffic (%)												
Lane Group Flow (vph)	52	76	172	271	177	0	379	867	374	143	1008	137
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50		50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	3	8	5	7	4		5	2	7	1	6	
Permitted Phases			8						2			6
Detector Phase	3	8	5	7	4		5	2	7	1	6	6
Switch Phase												
Minimum Initial (s)	4.0	6.0	4.0	4.0	6.0		4.0	10.0	4.0	4.0	10.0	10.0
Minimum Split (s)	12.0	25.0	20.0	20.0	39.0		20.0	33.0	20.0	15.0	34.0	34.0
Total Split (s)	19.0	25.0	33.0	34.0	40.0		33.0	40.0	34.0	33.0	40.0	40.0

Lanes, Volumes, Timings
 13: Golden Valley Road & Centre Pointe Parkway

04/25/2023

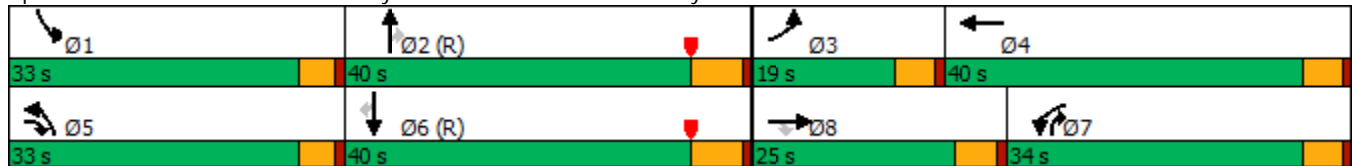


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	14.4%	18.9%	25.0%	25.8%	30.3%		25.0%	30.3%	25.8%	25.0%	30.3%	30.3%
Maximum Green (s)	14.0	20.0	28.5	29.0	35.0		28.5	34.0	29.0	28.5	34.0	34.0
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0		3.5	5.0	4.0	3.5	5.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0	-1.0	-0.5	-1.0	-1.0		-0.5	-2.0	-1.0	-0.5	-2.0	-2.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Min	None	None	C-Min	C-Min
Walk Time (s)					7.0			7.0			7.0	7.0
Flash Dont Walk (s)					27.0			20.0			21.0	21.0
Pedestrian Calls (#/hr)					0			0			0	0
Act Effct Green (s)	10.2	11.7	47.0	17.4	18.8		36.8	72.7	90.9	16.5	52.3	52.3
Actuated g/C Ratio	0.08	0.09	0.36	0.13	0.14		0.28	0.55	0.69	0.12	0.40	0.40
v/c Ratio	0.38	0.46	0.27	0.60	0.66		0.77	0.45	0.31	0.65	0.72	0.19
Control Delay	65.0	65.4	6.5	59.1	56.8		38.8	42.4	6.9	64.4	52.1	20.8
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.0	65.4	6.5	59.1	56.8		38.8	42.4	6.9	64.4	52.1	20.8
LOS	E	E	A	E	E		D	D	A	E	D	C
Approach Delay		31.6			58.2			33.4			50.2	
Approach LOS		C			E			C			D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 125 (95%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 105
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.77
 Intersection Signal Delay: 42.2
 Intersection LOS: D
 Intersection Capacity Utilization 70.7%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 13: Golden Valley Road & Centre Pointe Parkway



Queues

13: Golden Valley Road & Centre Pointe Parkway

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	52	76	172	271	177	379	867	374	143	1008	137
v/c Ratio	0.38	0.46	0.27	0.60	0.66	0.77	0.45	0.31	0.65	0.72	0.19
Control Delay	65.0	65.4	6.5	59.1	56.8	38.8	42.4	6.9	64.4	52.1	20.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.0	65.4	6.5	59.1	56.8	38.8	42.4	6.9	64.4	52.1	20.8
Queue Length 50th (ft)	43	63	24	114	124	338	382	108	124	475	45
Queue Length 95th (ft)	85	112	43	154	195	m406	m440	m162	125	#645	121
Internal Link Dist (ft)		1069			722		7818			1365	
Turn Bay Length (ft)	150		260	150		375		300	700		
Base Capacity (vph)	201	296	633	780	496	493	1948	1321	388	1403	709
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.26	0.26	0.27	0.35	0.36	0.77	0.45	0.28	0.37	0.72	0.19

Intersection Summary







































95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

Lanes, Volumes, Timings
 14: Sierra Highway & Golden Valley Road

04/25/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 	  	  	  	 	  	  		 	  	
Traffic Volume (vph)	283	439	793	336	896	40	546	193	14	20	1086	469
Future Volume (vph)	283	439	793	336	896	40	546	193	14	20	1086	469
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	280		280	285		300	285		0	410		540
Storage Lanes	2		2	2		1	2		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	0.88	0.97	0.91	1.00	0.97	0.95	0.95	1.00	0.95	1.00
Frt			0.850			0.850		0.990				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	2787	3433	5085	1583	3433	3504	0	1770	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	2787	3433	5085	1583	3433	3504	0	1770	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			481			136		6				510
Link Speed (mph)		50			50			30				30
Link Distance (ft)		2032			1202			1801				1671
Travel Time (s)		27.7			16.4			40.9				38.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	308	477	862	365	974	43	593	210	15	22	1180	510
Shared Lane Traffic (%)												
Lane Group Flow (vph)	308	477	862	365	974	43	593	225	0	22	1180	510
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24				24
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1		1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50		50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50		50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	custom
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						8
Detector Phase	7	4	4	3	8	8	5	2		1	6	8
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	8.5	29.6	29.6	8.5	40.0	40.0	15.0	49.0		8.5	46.0	40.0
Total Split (s)	29.0	41.0	41.0	29.0	41.0	41.0	25.0	44.0		18.0	37.0	41.0

Lanes, Volumes, Timings
 14: Sierra Highway & Golden Valley Road

04/25/2023

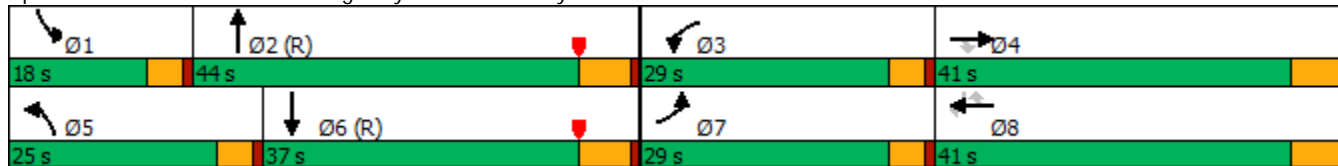


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	22.0%	31.1%	31.1%	22.0%	31.1%	31.1%	18.9%	33.3%		13.6%	28.0%	31.1%
Maximum Green (s)	24.5	35.0	35.0	24.5	35.0	35.0	20.5	38.0		13.5	31.0	35.0
Yellow Time (s)	3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.0		3.5	5.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	-0.5	-2.0	-2.0	-0.5	-2.0	-2.0	-0.5	-2.0		-0.5	-2.0	-2.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	None
Walk Time (s)					5.0	5.0		5.0			5.0	5.0
Flash Dont Walk (s)					29.0	29.0		33.0			30.0	29.0
Pedestrian Calls (#/hr)					0	0		0			0	0
Act Effct Green (s)	17.6	33.8	33.8	19.7	35.9	35.9	21.0	58.9		7.7	41.5	35.9
Actuated g/C Ratio	0.13	0.26	0.26	0.15	0.27	0.27	0.16	0.45		0.06	0.31	0.27
v/c Ratio	0.67	0.53	0.80	0.71	0.70	0.08	1.09	0.14		0.21	1.06	0.64
Control Delay	47.5	33.0	24.3	61.2	46.0	0.3	115.2	24.2		63.5	88.1	6.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	47.5	33.0	24.3	61.2	46.0	0.3	115.2	24.2		63.5	88.1	6.9
LOS	D	C	C	E	D	A	F	C		E	F	A
Approach Delay		31.1			48.6			90.2			63.6	
Approach LOS		C			D			F			E	

Intersection Summary

Area Type:	Other
Cycle Length:	132
Actuated Cycle Length:	132
Offset:	96 (73%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle:	130
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	1.09
Intersection Signal Delay:	54.2
Intersection LOS:	D
Intersection Capacity Utilization:	84.3%
ICU Level of Service:	E
Analysis Period (min):	15

Splits and Phases: 14: Sierra Highway & Golden Valley Road



Queues

14: Sierra Highway & Golden Valley Road

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	308	477	862	365	974	43	593	225	22	1180	510
v/c Ratio	0.67	0.53	0.80	0.71	0.70	0.08	1.09	0.14	0.21	1.06	0.64
Control Delay	47.5	33.0	24.3	61.2	46.0	0.3	115.2	24.2	63.5	88.1	6.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.5	33.0	24.3	61.2	46.0	0.3	115.2	24.2	63.5	88.1	6.9
Queue Length 50th (ft)	113	181	238	155	272	0	-293	61	18	-597	0
Queue Length 95th (ft)	134	236	302	201	315	0	#411	102	47	#822	89
Internal Link Dist (ft)		1952			1122			1721		1591	
Turn Bay Length (ft)	280		280	285		300	285		410		540
Base Capacity (vph)	650	991	1127	650	1462	552	546	1566	187	1112	818
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.47	0.48	0.76	0.56	0.67	0.08	1.09	0.14	0.12	1.06	0.62

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

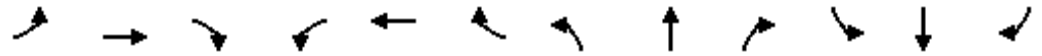
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Lanes, Volumes, Timings

15: SR-14 SB Ramp & Newhall Ranch Road/Golden Valley Road

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗	↖	↑↑					↖	↗	↗
Traffic Volume (vph)	0	386	234	289	857	0	0	0	0	40	188	420
Future Volume (vph)	0	386	234	289	857	0	0	0	0	40	188	420
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	220		0	0		0	300		0
Storage Lanes	0		1	1		0	0		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850									0.850
Flt Protected				0.950						0.950	0.999	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	1681	1768	1583
Flt Permitted				0.950						0.950	0.999	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	1681	1768	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			254									108
Link Speed (mph)		50			50			30			30	
Link Distance (ft)		807			717			580			626	
Travel Time (s)		11.0			9.8			13.2			14.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	420	254	314	932	0	0	0	0	43	204	457
Shared Lane Traffic (%)										10%		
Lane Group Flow (vph)	0	420	254	314	932	0	0	0	0	39	208	457
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94		94							94	
Detector 2 Size(ft)		6		6							6	
Detector 2 Type		Cl+Ex		Cl+Ex							Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0		0.0							0.0	
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		6		5	2						4	
Permitted Phases			6							4		4

Lanes, Volumes, Timings

15: SR-14 SB Ramp & Newhall Ranch Road/Golden Valley Road

04/25/2023

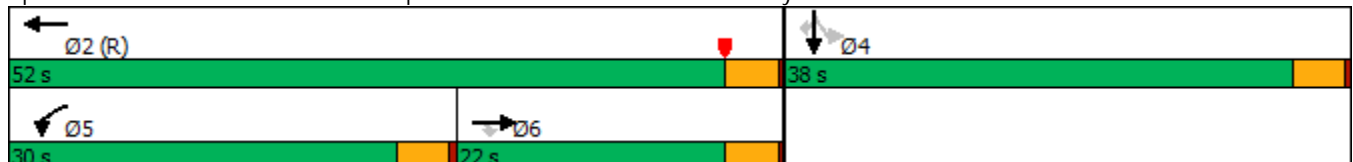


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase		6	6	5	2					4	4	4
Switch Phase												
Minimum Initial (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Minimum Split (s)		20.0	20.0	12.0	20.0					20.0	20.0	20.0
Total Split (s)		22.0	22.0	30.0	52.0					38.0	38.0	38.0
Total Split (%)		24.4%	24.4%	33.3%	57.8%					42.2%	42.2%	42.2%
Maximum Green (s)		18.0	18.0	26.0	48.0					34.0	34.0	34.0
Yellow Time (s)		3.5	3.5	3.5	3.5					3.5	3.5	3.5
All-Red Time (s)		0.5	0.5	0.5	0.5					0.5	0.5	0.5
Lost Time Adjust (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Total Lost Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lead/Lag		Lag	Lag	Lead								
Lead-Lag Optimize?		Yes	Yes	Yes								
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Recall Mode		Max	Max	None	C-Max					Max	Max	Max
Walk Time (s)		5.0	5.0		5.0					5.0	5.0	5.0
Flash Dont Walk (s)		10.0	10.0		10.0					10.0	10.0	10.0
Pedestrian Calls (#/hr)		0	0		0					0	0	0
Act Effect Green (s)		23.3	23.3	20.7	48.0					34.0	34.0	34.0
Actuated g/C Ratio		0.26	0.26	0.23	0.53					0.38	0.38	0.38
v/c Ratio		0.46	0.42	0.77	0.49					0.06	0.31	0.69
Control Delay		31.1	6.6	29.8	10.6					18.3	21.4	24.0
Queue Delay		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Total Delay		31.1	6.6	29.8	10.6					18.3	21.4	24.0
LOS		C	A	C	B					B	C	C
Approach Delay		21.9			15.5						22.9	
Approach LOS		C			B						C	

Intersection Summary

Area Type: Other
 Cycle Length: 90
 Actuated Cycle Length: 90
 Offset: 0 (0%), Referenced to phase 2:WBT, Start of Yellow
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.77
 Intersection Signal Delay: 19.1
 Intersection LOS: B
 Intersection Capacity Utilization 56.4%
 ICU Level of Service B
 Analysis Period (min) 15

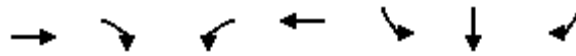
Splits and Phases: 15: SR-14 SB Ramp & Newhall Ranch Road/Golden Valley Road



Queues

15: SR-14 SB Ramp & Newhall Ranch Road/Golden Valley Road

04/25/2023

























Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	420	254	314	932	39	208	457
v/c Ratio	0.46	0.42	0.77	0.49	0.06	0.31	0.69
Control Delay	31.1	6.6	29.8	10.6	18.3	21.4	24.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.1	6.6	29.8	10.6	18.3	21.4	24.0
Queue Length 50th (ft)	106	0	165	238	14	86	164
Queue Length 95th (ft)	164	62	247	267	36	144	277
Internal Link Dist (ft)	727			637		546	
Turn Bay Length (ft)			220		300		
Base Capacity (vph)	917	598	511	1887	635	667	665
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.46	0.42	0.61	0.49	0.06	0.31	0.69

Intersection Summary

Lanes, Volumes, Timings
 16: SR 14 NB Ramp & Golden Valley Road

04/25/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 			 							
Traffic Volume (vph)	171	249	0	0	972	63	157	1	145	0	0	0
Future Volume (vph)	171	249	0	0	972	63	157	1	145	0	0	0
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	230		0	0		280	0		140	0		0
Storage Lanes	2		0	0		1	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt						0.850			0.850			
Flt Protected	0.950						0.950	0.953				
Satd. Flow (prot)	3433	3539	0	0	3539	1583	1681	1686	1583	0	0	0
Flt Permitted	0.950						0.950	0.953				
Satd. Flow (perm)	3433	3539	0	0	3539	1583	1681	1686	1583	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						68			158			
Link Speed (mph)		50			50			30				30
Link Distance (ft)		717			541			632				618
Travel Time (s)		9.8			7.4			14.4				14.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	186	271	0	0	1057	68	171	1	158	0	0	0
Shared Lane Traffic (%)							50%					
Lane Group Flow (vph)	186	271	0	0	1057	68	85	87	158	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1	1	2	1			
Detector Template	Left	Thru			Thru	Right	Left	Thru	Right			
Leading Detector (ft)	20	100			100	20	20	100	20			
Trailing Detector (ft)	0	0			0	0	0	0	0			
Detector 1 Position(ft)	0	0			0	0	0	0	0			
Detector 1 Size(ft)	20	6			6	20	20	6	20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Prot	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	7	4			8			2				
Permitted Phases						8	2		2			

Lanes, Volumes, Timings
 16: SR 14 NB Ramp & Golden Valley Road

04/25/2023

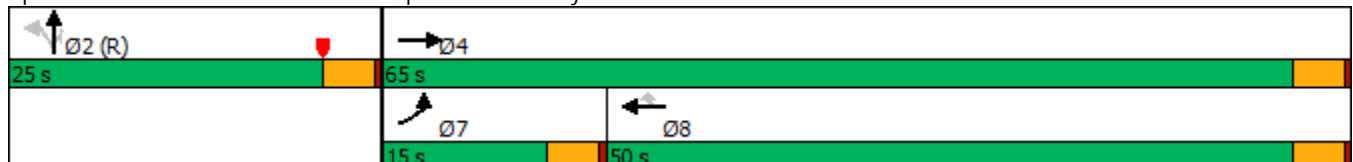


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4			8	8	2	2	2			
Switch Phase												
Minimum Initial (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Minimum Split (s)	12.0	20.0			20.0	20.0	20.0	20.0	20.0			
Total Split (s)	15.0	65.0			50.0	50.0	25.0	25.0	25.0			
Total Split (%)	16.7%	72.2%			55.6%	55.6%	27.8%	27.8%	27.8%			
Maximum Green (s)	11.0	61.0			46.0	46.0	21.0	21.0	21.0			
Yellow Time (s)	3.5	3.5			3.5	3.5	3.5	3.5	3.5			
All-Red Time (s)	0.5	0.5			0.5	0.5	0.5	0.5	0.5			
Lost Time Adjust (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Total Lost Time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Lead/Lag	Lead				Lag				Lag			
Lead-Lag Optimize?	Yes				Yes				Yes			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Recall Mode	None	None			None	None	C-Max	C-Max	C-Max			
Walk Time (s)		5.0			5.0	5.0	5.0	5.0	5.0			
Flash Dont Walk (s)		10.0			10.0	10.0	10.0	10.0	10.0			
Pedestrian Calls (#/hr)		0			0	0	0	0	0			
Act Effct Green (s)	9.7	49.9			36.1	36.1	32.1	32.1	32.1			
Actuated g/C Ratio	0.11	0.55			0.40	0.40	0.36	0.36	0.36			
v/c Ratio	0.50	0.14			0.74	0.10	0.14	0.14	0.24			
Control Delay	20.3	12.1			26.1	3.9	23.6	23.6	5.5			
Queue Delay	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Total Delay	20.3	12.1			26.1	3.9	23.6	23.6	5.5			
LOS	C	B			C	A	C	C	A			
Approach Delay		15.4			24.7			14.9				
Approach LOS		B			C			B				

Intersection Summary

Area Type: Other
 Cycle Length: 90
 Actuated Cycle Length: 90
 Offset: 0 (0%), Referenced to phase 2:NBTL and 6:, Start of Yellow
 Natural Cycle: 55
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.74
 Intersection Signal Delay: 20.8
 Intersection LOS: C
 Intersection Capacity Utilization 56.4%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 16: SR 14 NB Ramp & Golden Valley Road



Queues

16: SR 14 NB Ramp & Golden Valley Road

04/25/2023



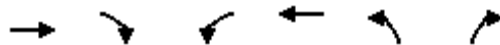
Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	186	271	1057	68	85	87	158
v/c Ratio	0.50	0.14	0.74	0.10	0.14	0.14	0.24
Control Delay	20.3	12.1	26.1	3.9	23.6	23.6	5.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.3	12.1	26.1	3.9	23.6	23.6	5.5
Queue Length 50th (ft)	54	75	262	0	34	35	0
Queue Length 95th (ft)	82	115	286	21	80	82	46
Internal Link Dist (ft)		637	461			552	
Turn Bay Length (ft)	230			280			140
Base Capacity (vph)	419	2398	1808	842	600	602	666
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.44	0.11	0.58	0.08	0.14	0.14	0.24

Intersection Summary

Lanes, Volumes, Timings

17: Studio Driveway & Soledad Cyn

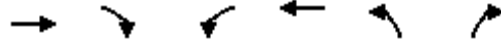
04/25/2023



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↵	↑↑↑	↵	
Traffic Volume (vph)	802	41	20	1929	21	10
Future Volume (vph)	802	41	20	1929	21	10
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Fr t	0.993				0.956	
Fl t Protected			0.950		0.967	
Satd. Flow (prot)	5050	0	1770	5085	1722	0
Fl t Permitted			0.293		0.967	
Satd. Flow (perm)	5050	0	546	5085	1722	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	21				11	
Link Speed (mph)	50			50	30	
Link Distance (ft)	469			185	392	
Travel Time (s)	6.4			2.5	8.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	872	45	22	2097	23	11
Shared Lane Traffic (%)						
Lane Group Flow (vph)	917	0	22	2097	34	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2		1	2	1	
Detector Template	Thru		Left	Thru	Left	
Leading Detector (ft)	100		20	100	20	
Trailing Detector (ft)	0		0	0	0	
Detector 1 Position(ft)	0		0	0	0	
Detector 1 Size(ft)	6		20	6	20	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA		Perm	NA	Prot	
Protected Phases	6			2	4	
Permitted Phases			2			
Detector Phase	6		2	2	4	
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	

Lanes, Volumes, Timings
 17: Studio Driveway & Soledad Cyn

04/25/2023

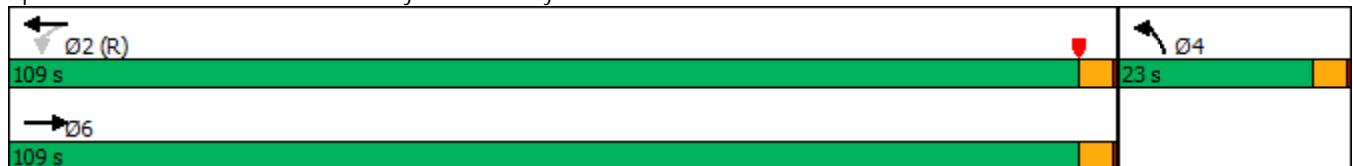


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Minimum Split (s)	20.0		20.0	20.0	20.0	
Total Split (s)	109.0		109.0	109.0	23.0	
Total Split (%)	82.6%		82.6%	82.6%	17.4%	
Maximum Green (s)	105.0		105.0	105.0	19.0	
Yellow Time (s)	3.5		3.5	3.5	3.5	
All-Red Time (s)	0.5		0.5	0.5	0.5	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	4.0		4.0	4.0	4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Recall Mode	Max		C-Max	C-Max	Max	
Walk Time (s)	5.0		5.0	5.0	5.0	
Flash Dont Walk (s)	10.0		10.0	10.0	10.0	
Pedestrian Calls (#/hr)	0		0	0	0	
Act Effect Green (s)	105.0		105.0	105.0	19.0	
Actuated g/C Ratio	0.80		0.80	0.80	0.14	
v/c Ratio	0.23		0.05	0.52	0.13	
Control Delay	0.9		3.5	4.2	38.3	
Queue Delay	0.0		0.0	0.0	0.0	
Total Delay	0.9		3.5	4.2	38.3	
LOS	A		A	A	D	
Approach Delay	0.9			4.2	38.3	
Approach LOS	A			A	D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 0 (0%), Referenced to phase 2:WBTL, Start of Yellow
 Natural Cycle: 45
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.52
 Intersection Signal Delay: 3.6
 Intersection LOS: A
 Intersection Capacity Utilization 47.3%
 ICU Level of Service A
 Analysis Period (min) 15

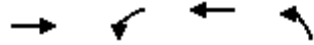
Splits and Phases: 17: Studio Driveway & Soledad Cyn



Queues

17: Studio Driveway & Soledad Cyn

04/25/2023



Lane Group	EBT	WBL	WBT	NBL
Lane Group Flow (vph)	917	22	2097	34
v/c Ratio	0.23	0.05	0.52	0.13
Control Delay	0.9	3.5	4.2	38.3
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	0.9	3.5	4.2	38.3
Queue Length 50th (ft)	13	3	133	17
Queue Length 95th (ft)	m15	m7	153	50
Internal Link Dist (ft)	389		105	312
Turn Bay Length (ft)				
Base Capacity (vph)	4021	434	4044	257
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.23	0.05	0.52	0.13

Intersection Summary

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

Lanes, Volumes, Timings
 18: Residential Driveway 1 & Soledad Cyn

04/25/2023



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↵	↑↑↑		↵
Traffic Volume (vph)	802	11	4	1949	0	26
Future Volume (vph)	802	11	4	1949	0	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	100		0	0
Storage Lanes		0	1		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt	0.998					0.865
Flt Protected			0.950			
Satd. Flow (prot)	5075	0	1770	5085	0	1611
Flt Permitted			0.950			
Satd. Flow (perm)	5075	0	1770	5085	0	1611
Link Speed (mph)	50			50	30	
Link Distance (ft)	185			460	286	
Travel Time (s)	2.5			6.3	6.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	872	12	4	2118	0	28
Shared Lane Traffic (%)						
Lane Group Flow (vph)	884	0	4	2118	0	28
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	41.0% ICU Level of Service A
Analysis Period (min)	15

HCM 6th TWSC
 18: Residential Driveway 1 & Soledad Cyn

04/25/2023

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↑	↑↑↑		↑
Traffic Vol, veh/h	802	11	4	1949	0	26
Future Vol, veh/h	802	11	4	1949	0	26
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	872	12	4	2118	0	28

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	884	0	442
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	5.34	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	3.12	-	3.92
Pot Cap-1 Maneuver	-	-	445	-	482
Stage 1	-	-	-	-	0
Stage 2	-	-	-	-	0
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	445	-	482
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	12.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	482	-	-	445	-
HCM Lane V/C Ratio	0.059	-	-	0.01	-
HCM Control Delay (s)	12.9	-	-	13.2	-
HCM Lane LOS	B	-	-	B	-
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Lanes, Volumes, Timings
 19: Residential Driveway 2 & Soledad Cyn

04/25/2023



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↵	↑↑↑		↵
Traffic Volume (vph)	812	15	8	1953	0	49
Future Volume (vph)	812	15	8	1953	0	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	100		0	0
Storage Lanes		0	1		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt	0.997					0.865
Flt Protected			0.950			
Satd. Flow (prot)	5070	0	1770	5085	0	1611
Flt Permitted			0.950			
Satd. Flow (perm)	5070	0	1770	5085	0	1611
Link Speed (mph)	50			50	30	
Link Distance (ft)	460			928	378	
Travel Time (s)	6.3			12.7	8.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	883	16	9	2123	0	53
Shared Lane Traffic (%)						
Lane Group Flow (vph)	899	0	9	2123	0	53
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	41.1% ICU Level of Service A
Analysis Period (min)	15

HCM 6th TWSC
 19: Residential Driveway 2 & Soledad Cyn

04/25/2023

Intersection						
Int Delay, s/veh	0.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↘	↑↑↑		↗
Traffic Vol, veh/h	812	15	8	1953	0	49
Future Vol, veh/h	812	15	8	1953	0	49
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	883	16	9	2123	0	53

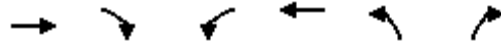
Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	899	0	450
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	5.34	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	3.12	-	3.92
Pot Cap-1 Maneuver	-	-	438	-	476
Stage 1	-	-	-	0	-
Stage 2	-	-	-	0	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	438	-	476
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	13.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	476	-	-	438	-
HCM Lane V/C Ratio	0.112	-	-	0.02	-
HCM Control Delay (s)	13.5	-	-	13.4	-
HCM Lane LOS	B	-	-	B	-
HCM 95th %tile Q(veh)	0.4	-	-	0.1	-

Lanes, Volumes, Timings
 20: Studio Driveway 2 & Soledad Cyn

04/25/2023



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑		↗
Traffic Volume (vph)	843	0	0	1950	0	0
Future Volume (vph)	843	0	0	1950	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Fr						
Flt Protected						
Satd. Flow (prot)	5085	0	0	5085	0	1863
Flt Permitted						
Satd. Flow (perm)	5085	0	0	5085	0	1863
Link Speed (mph)	50			50	30	
Link Distance (ft)	557			469	476	
Travel Time (s)	7.6			6.4	10.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	916	0	0	2120	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	916	0	0	2120	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	41.0% ICU Level of Service A
Analysis Period (min)	15

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑		↑
Traffic Vol, veh/h	843	0	0	1950	0	0
Future Vol, veh/h	843	0	0	1950	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	916	0	0	2120	0	0

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	-	-	458
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	3.92
Pot Cap-1 Maneuver	-	0	-	0	470
Stage 1	-	0	-	0	-
Stage 2	-	0	-	0	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	470
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

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

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

Lanes, Volumes, Timings
 1: Valencia Blvd & 5 Fwy SB Ramp

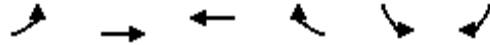
04/25/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑		↑↑	↑
Traffic Volume (vph)	0	504	784	0	179	76
Future Volume (vph)	0	504	784	0	179	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	15	12	14
Storage Length (ft)	0			0	0	455
Storage Lanes	0			0	2	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.91	0.95	1.00	0.97	1.00
Fr _t						0.850
Fl _t Protected					0.950	
Satd. Flow (prot)	0	5085	3539	0	3433	1689
Fl _t Permitted					0.950	
Satd. Flow (perm)	0	5085	3539	0	3433	1689
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)						83
Link Speed (mph)		50	50		30	
Link Distance (ft)		616	917		417	
Travel Time (s)		8.4	12.5		9.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	548	852	0	195	83
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	548	852	0	195	83
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		24	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	0.88	1.00	0.92
Turning Speed (mph)	15			9	15	9
Number of Detectors		1	1		1	1
Detector Template						
Leading Detector (ft)		50	50		50	50
Trailing Detector (ft)		0	0		0	0
Detector 1 Position(ft)		0	0		0	0
Detector 1 Size(ft)		50	50		50	50
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)		0.0	0.0		0.0	0.0
Detector 1 Queue (s)		0.0	0.0		0.0	0.0
Detector 1 Delay (s)		0.0	0.0		0.0	0.0
Turn Type		NA	NA		Prot	Perm
Protected Phases		2	6		4	
Permitted Phases						4
Detector Phase		2	6		4	4
Switch Phase						
Minimum Initial (s)		4.0	4.0		4.0	4.0
Minimum Split (s)		20.0	35.2		20.0	20.0

Lanes, Volumes, Timings
 1: Valencia Blvd & 5 Fwy SB Ramp

04/25/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Total Split (s)		41.0	41.0		25.0	25.0
Total Split (%)		62.1%	62.1%		37.9%	37.9%
Maximum Green (s)		34.8	34.8		19.2	19.2
Yellow Time (s)		5.2	5.2		4.8	4.8
All-Red Time (s)		1.0	1.0		1.0	1.0
Lost Time Adjust (s)		-2.2	-2.2		-1.8	-1.8
Total Lost Time (s)		4.0	4.0		4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Recall Mode		C-Max	C-Max		Min	Min
Walk Time (s)			5.0			
Flash Dont Walk (s)			18.0			
Pedestrian Calls (#/hr)			0			
Act Effect Green (s)		47.1	47.1		10.9	10.9
Actuated g/C Ratio		0.71	0.71		0.17	0.17
v/c Ratio		0.15	0.34		0.35	0.24
Control Delay		3.3	4.7		25.7	8.1
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		3.3	4.7		25.7	8.1
LOS		A	A		C	A
Approach Delay		3.3	4.7		20.4	
Approach LOS		A	A		C	

Intersection Summary

Area Type:	Other
Cycle Length:	66
Actuated Cycle Length:	66
Offset:	56 (85%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle:	60
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.35
Intersection Signal Delay:	6.9
Intersection LOS:	A
Intersection Capacity Utilization:	33.4%
ICU Level of Service:	A
Analysis Period (min):	15

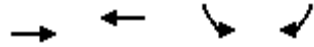
Splits and Phases: 1: Valencia Blvd & 5 Fwy SB Ramp



Queues

1: Valencia Blvd & 5 Fwy SB Ramp

04/25/2023









Lane Group	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	548	852	195	83
v/c Ratio	0.15	0.34	0.35	0.24
Control Delay	3.3	4.7	25.7	8.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	3.3	4.7	25.7	8.1
Queue Length 50th (ft)	20	87	36	0
Queue Length 95th (ft)	34	86	60	32
Internal Link Dist (ft)	536	837	337	
Turn Bay Length (ft)				455
Base Capacity (vph)	3630	2526	1092	594
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.15	0.34	0.18	0.14
Intersection Summary				

Lanes, Volumes, Timings

2: 5 Fwy NB Ramp & Valencia Blvd

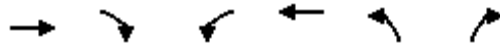
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Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↵↵	↑↑↑	↵↵	↵↵
Traffic Volume (vph)	649	30	123	1395	184	730
Future Volume (vph)	649	30	123	1395	184	730
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	12	12	12	12	14
Storage Length (ft)		0	200		220	220
Storage Lanes		0	2		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	0.97	0.86	0.97	0.88
Fr _t	0.993					0.850
Fl _t Protected			0.950		0.950	
Satd. Flow (prot)	5386	0	3433	6408	3433	2972
Fl _t Permitted			0.950		0.950	
Satd. Flow (perm)	5386	0	3433	6408	3433	2972
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	13					688
Link Speed (mph)	50			50	30	
Link Distance (ft)	917			476	493	
Travel Time (s)	12.5			6.5	11.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	705	33	134	1516	200	793
Shared Lane Traffic (%)						
Lane Group Flow (vph)	738	0	134	1516	200	793
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	24			24	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.92	1.00	1.00	1.00	1.00	0.92
Turning Speed (mph)		9	15		15	9
Number of Detectors	1		1	1	1	1
Detector Template						
Leading Detector (ft)	50		50	50	50	50
Trailing Detector (ft)	0		0	0	0	0
Detector 1 Position(ft)	0		0	0	0	0
Detector 1 Size(ft)	50		50	50	50	50
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0
Turn Type	NA		Prot	NA	Prot	Prot
Protected Phases	2		1	6	8	8
Permitted Phases						
Detector Phase	2		1	6	8	8
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	36.0		14.0	20.0	20.0	20.0

Lanes, Volumes, Timings

2: 5 Fwy NB Ramp & Valencia Blvd

04/25/2023

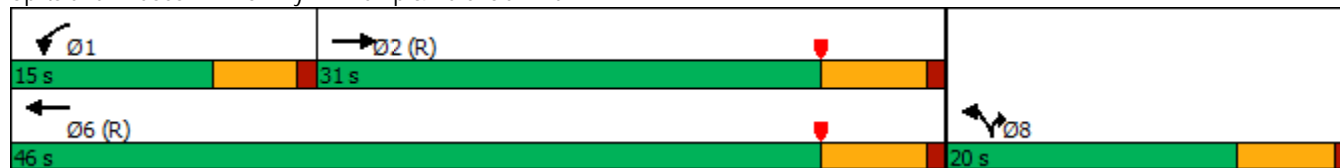


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Total Split (s)	31.0		15.0	46.0	20.0	20.0
Total Split (%)	47.0%		22.7%	69.7%	30.3%	30.3%
Maximum Green (s)	24.8		9.9	39.8	14.2	14.2
Yellow Time (s)	5.2		4.1	5.2	4.8	4.8
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-2.2		-1.1	-2.2	-1.8	-1.8
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max		None	C-Max	None	None
Walk Time (s)	5.0					
Flash Dont Walk (s)	24.0					
Pedestrian Calls (#/hr)	0					
Act Effect Green (s)	34.4		9.0	45.2	12.8	12.8
Actuated g/C Ratio	0.52		0.14	0.68	0.19	0.19
v/c Ratio	0.26		0.29	0.35	0.30	0.70
Control Delay	7.9		30.3	3.7	23.1	7.5
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	7.9		30.3	3.7	23.1	7.5
LOS	A		C	A	C	A
Approach Delay	7.9			5.9	10.6	
Approach LOS	A			A	B	

Intersection Summary

Area Type: Other
 Cycle Length: 66
 Actuated Cycle Length: 66
 Offset: 45 (68%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Natural Cycle: 70
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.70
 Intersection Signal Delay: 7.7
 Intersection LOS: A
 Intersection Capacity Utilization 45.4%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 2: 5 Fwy NB Ramp & Valencia Blvd



Queues

2: 5 Fwy NB Ramp & Valencia Blvd

04/25/2023



























Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	738	134	1516	200	793
v/c Ratio	0.26	0.29	0.35	0.30	0.70
Control Delay	7.9	30.3	3.7	23.1	7.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	7.9	30.3	3.7	23.1	7.5
Queue Length 50th (ft)	35	34	45	36	20
Queue Length 95th (ft)	89	55	94	58	65
Internal Link Dist (ft)	837		396	413	
Turn Bay Length (ft)		200		220	220
Base Capacity (vph)	2811	572	4386	832	1241
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.26	0.23	0.35	0.24	0.64

Intersection Summary

Lanes, Volumes, Timings
3: McBean Pkwy & Valencia Blvd

04/25/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	434	1177	168	355	814	193	162	921	453	228	858	517
Future Volume (vph)	434	1177	168	355	814	193	162	921	453	228	858	517
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	11	11	13	11	11	12	11	11	12
Storage Length (ft)	350		280	290		225	130		200	190		300
Storage Lanes	2		1	2		1	2		2	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	0.88	0.97	0.91	0.88
Fr't			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3319	4916	1583	3319	4916	1636	3319	4916	2787	3319	4916	2787
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3319	4916	1583	3319	4916	1636	3319	4916	2787	3319	4916	2787
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			70			70			70			81
Link Speed (mph)		50			50			45			45	
Link Distance (ft)		1919			721			765			1359	
Travel Time (s)		26.2			9.8			11.6			20.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	472	1279	183	386	885	210	176	1001	492	248	933	562
Shared Lane Traffic (%)												
Lane Group Flow (vph)	472	1279	183	386	885	210	176	1001	492	248	933	562
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		22			22			22			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.00	1.04	1.04	0.96	1.04	1.04	1.00	1.04	1.04	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	1	6	7	5	2	3	7	4	5	3	8	1
Permitted Phases			6			2			4			8
Detector Phase	1	6	7	5	2	3	7	4	5	3	8	1
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	43.0	12.0	12.0	44.0	12.0	12.0	41.0	12.0	12.0	44.0	12.0

Lanes, Volumes, Timings
 3: McBean Pkwy & Valencia Blvd

04/25/2023

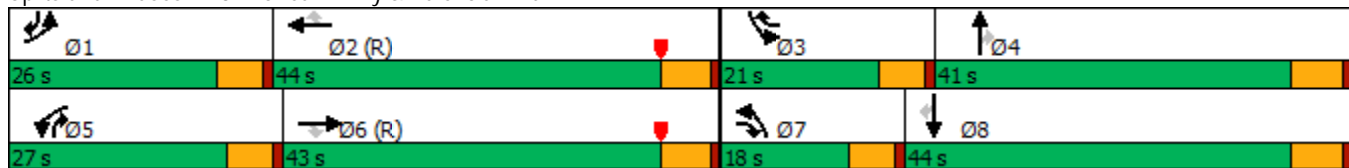


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	26.0	43.0	18.0	27.0	44.0	21.0	18.0	41.0	27.0	21.0	44.0	26.0
Total Split (%)	19.7%	32.6%	13.6%	20.5%	33.3%	15.9%	13.6%	31.1%	20.5%	15.9%	33.3%	19.7%
Maximum Green (s)	20.5	37.0	12.5	21.5	38.0	15.5	12.5	35.0	21.5	15.5	38.0	20.5
Yellow Time (s)	4.5	5.0	4.5	4.5	5.0	4.5	4.5	5.0	4.5	4.5	5.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.5	-2.0	-1.5	-1.5	-2.0	-1.5	-1.5	-2.0	-1.5	-1.5	-2.0	-1.5
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Max	None	None	C-Max	None	None	None	None	None	None	None
Walk Time (s)		5.0			5.0			5.0			5.0	
Flash Dont Walk (s)		32.0			33.0			30.0			33.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effect Green (s)	22.9	44.7	61.6	21.3	43.1	62.7	12.9	34.4	59.7	15.6	37.1	64.0
Actuated g/C Ratio	0.17	0.34	0.47	0.16	0.33	0.48	0.10	0.26	0.45	0.12	0.28	0.48
v/c Ratio	0.82	0.77	0.24	0.72	0.55	0.26	0.54	0.78	0.38	0.63	0.68	0.40
Control Delay	69.9	42.5	16.6	74.8	20.4	4.8	63.1	50.0	20.5	41.0	54.4	48.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	69.9	42.5	16.6	74.8	20.4	4.8	63.1	50.0	20.5	41.0	54.4	48.0
LOS	E	D	B	E	C	A	E	D	C	D	D	D
Approach Delay		46.7			32.4			42.7			50.5	
Approach LOS		D			C			D			D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 61 (46%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
 Natural Cycle: 115
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.82
 Intersection Signal Delay: 43.6
 Intersection LOS: D
 Intersection Capacity Utilization 70.5%
 ICU Level of Service C
 Analysis Period (min) 15

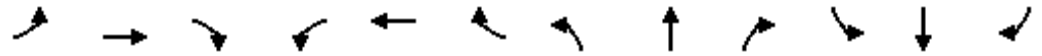
Splits and Phases: 3: McBean Pkwy & Valencia Blvd



Queues

3: McBean Pkwy & Valencia Blvd

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	472	1279	183	386	885	210	176	1001	492	248	933	562
v/c Ratio	0.82	0.77	0.24	0.72	0.55	0.26	0.54	0.78	0.38	0.63	0.68	0.40
Control Delay	69.9	42.5	16.6	74.8	20.4	4.8	63.1	50.0	20.5	41.0	54.4	48.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	69.9	42.5	16.6	74.8	20.4	4.8	63.1	50.0	20.5	41.0	54.4	48.0
Queue Length 50th (ft)	210	381	53	124	231	72	74	289	127	100	309	264
Queue Length 95th (ft)	#295	443	102	179	265	86	113	338	168	146	357	326
Internal Link Dist (ft)		1839			641			685			1279	
Turn Bay Length (ft)	350		280	290		225	130		200	190		300
Base Capacity (vph)	580	1664	788	578	1604	830	352	1377	1333	427	1489	1396
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.81	0.77	0.23	0.67	0.55	0.25	0.50	0.73	0.37	0.58	0.63	0.40

Intersection Summary

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

Lanes, Volumes, Timings
4: McBean Parkway & Magic Mountain Pkwy

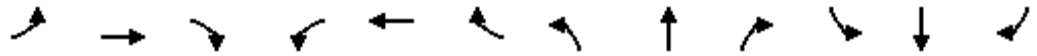
04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	859	599	131	223	454	350	136	1314	143	270	1265	276
Future Volume (vph)	859	599	131	223	454	350	136	1314	143	270	1265	276
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	16	12	12	14	11	11	16	11	11	16
Storage Length (ft)	360		360	210		0	175		175	300		340
Storage Lanes	1		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.91	1.00	0.97	0.86	1.00	0.97	0.86	1.00
Fr _t			0.850			0.850			0.850			0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	1794	3433	5085	1689	3319	6194	1794	3319	6194	1794
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1794	3433	5085	1689	3319	6194	1794	3319	6194	1794
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			142			255			198			299
Link Speed (mph)		50			45			45			50	
Link Distance (ft)		809			1452			1203			1219	
Travel Time (s)		11.0			22.0			18.2			16.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	934	651	142	242	493	380	148	1428	155	293	1375	300
Shared Lane Traffic (%)												
Lane Group Flow (vph)	934	651	142	242	493	380	148	1428	155	293	1375	300
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			22			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	0.85	1.00	1.00	0.92	1.04	1.04	0.85	1.04	1.04	0.85
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			Free			Free
Detector Phase	5	2	2	1	6	6	3	8		7	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Minimum Split (s)	12.0	41.0	41.0	12.0	40.0	40.0	12.0	37.0		12.0	37.0	

Lanes, Volumes, Timings
 4: McBean Parkway & Magic Mountain Pkwy

04/25/2023

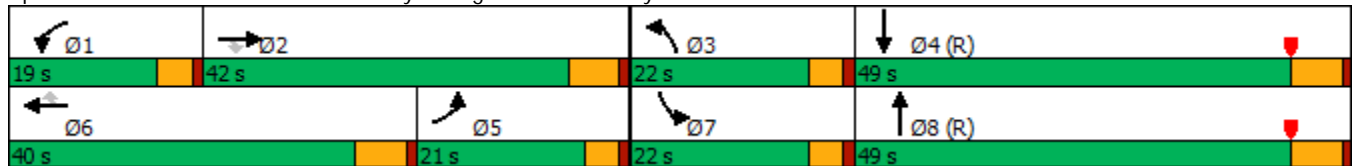


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	21.0	42.0	42.0	19.0	40.0	40.0	22.0	49.0		22.0	49.0	
Total Split (%)	15.9%	31.8%	31.8%	14.4%	30.3%	30.3%	16.7%	37.1%		16.7%	37.1%	
Maximum Green (s)	16.5	36.0	36.0	14.5	34.0	34.0	17.5	43.0		17.5	43.0	
Yellow Time (s)	3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.0		3.5	5.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	-0.5	-2.0	-2.0	-0.5	-2.0	-2.0	-0.5	-2.0		-0.5	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	Max	Max	None	Max	Max	None	C-Max		None	C-Max	
Walk Time (s)		5.0	5.0		5.0	5.0		5.0			5.0	
Flash Dont Walk (s)		30.0	30.0		29.0	29.0		26.0			26.0	
Pedestrian Calls (#/hr)		0	0		0	0		0			0	
Act Effect Green (s)	17.0	39.1	39.1	13.9	36.0	36.0	11.7	46.7	132.0	16.3	51.3	132.0
Actuated g/C Ratio	0.13	0.30	0.30	0.11	0.27	0.27	0.09	0.35	1.00	0.12	0.39	1.00
v/c Ratio	2.11	0.62	0.23	0.67	0.36	0.59	0.50	0.65	0.09	0.71	0.57	0.17
Control Delay	536.3	43.4	6.4	72.3	47.6	25.4	78.4	27.6	0.1	65.7	33.2	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	536.3	43.4	6.4	72.3	47.6	25.4	78.4	27.6	0.1	65.7	33.2	0.2
LOS	F	D	A	E	D	C	E	C	A	E	C	A
Approach Delay		307.0			45.4			29.5			33.0	
Approach LOS		F			D			C			C	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 30 (23%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow
 Natural Cycle: 125
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 2.11
 Intersection Signal Delay: 106.5
 Intersection LOS: F
 Intersection Capacity Utilization 75.2%
 ICU Level of Service D
 Analysis Period (min) 15

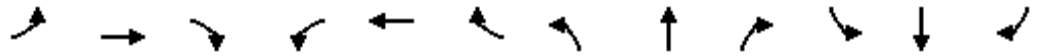
Splits and Phases: 4: McBean Parkway & Magic Mountain Pkwy



Queues

4: McBean Parkway & Magic Mountain Pkwy

04/25/2023


































Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	934	651	142	242	493	380	148	1428	155	293	1375	300
v/c Ratio	2.11	0.62	0.23	0.67	0.36	0.59	0.50	0.65	0.09	0.71	0.57	0.17
Control Delay	536.3	43.4	6.4	72.3	47.6	25.4	78.4	27.6	0.1	65.7	33.2	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	536.3	43.4	6.4	72.3	47.6	25.4	78.4	27.6	0.1	65.7	33.2	0.2
Queue Length 50th (ft)	~653	256	0	103	126	102	68	156	0	125	266	0
Queue Length 95th (ft)	#784	323	50	149	168	221	m93	175	m0	173	318	0
Internal Link Dist (ft)		729			1372			1123			1139	
Turn Bay Length (ft)	360		360	210			175		175	300		340
Base Capacity (vph)	442	1048	631	390	1386	646	452	2189	1794	452	2406	1794
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	2.11	0.62	0.23	0.62	0.36	0.59	0.33	0.65	0.09	0.65	0.57	0.17

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

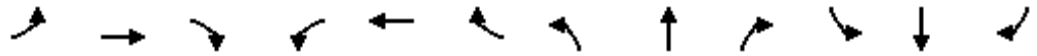
Lanes, Volumes, Timings
5: Valencia Blvd & Magic Mountain Pkwy

04/25/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 		 	 			  			  	 
Traffic Volume (vph)	659	579	29	219	400	88	56	1551	238	89	1137	432
Future Volume (vph)	659	579	29	219	400	88	56	1551	238	89	1137	432
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	13	12	11	12	11	11	14	12	11	11	12
Storage Length (ft)	310		0	250		200	180		200	190		190
Storage Lanes	1		0	2		0	1		1	1		2
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	0.95	0.97	0.95	0.95	1.00	0.91	1.00	1.00	0.91	0.88
Fr't		0.993			0.973				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3319	3632	0	3319	3444	0	1711	5424	1583	1711	4916	2787
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3319	3632	0	3319	3444	0	1711	5424	1583	1711	4916	2787
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			19				161			443
Link Speed (mph)		50			45			45				45
Link Distance (ft)		1046			2778			1989				572
Travel Time (s)		14.3			42.1			30.1				8.7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	716	629	32	238	435	96	61	1686	259	97	1236	470
Shared Lane Traffic (%)												
Lane Group Flow (vph)	716	661	0	238	531	0	61	1686	259	97	1236	470
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		22			22			11				11
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.04	0.96	1.00	1.04	1.00	1.04	1.04	0.92	1.00	1.04	1.04	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Size(ft)	50	50		50	50		50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	3	8		7	4		1	6		5	2	3
Permitted Phases									6			2
Detector Phase	3	8		7	4		1	6	6	5	2	3
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	35.0		12.0	39.0		12.0	38.0	38.0	12.0	41.0	12.0

Lanes, Volumes, Timings
5: Valencia Blvd & Magic Mountain Pkwy

04/25/2023

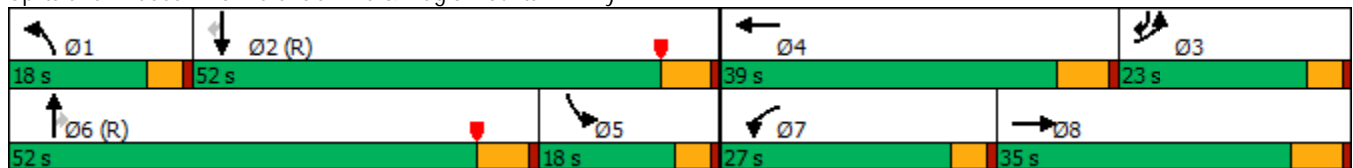


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	23.0	35.0		27.0	39.0		18.0	52.0	52.0	18.0	52.0	23.0
Total Split (%)	17.4%	26.5%		20.5%	29.5%		13.6%	39.4%	39.4%	13.6%	39.4%	17.4%
Maximum Green (s)	18.5	29.0		22.5	33.0		13.5	46.0	46.0	13.5	46.0	18.5
Yellow Time (s)	3.5	5.0		3.5	5.0		3.5	5.0	5.0	3.5	5.0	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-0.5	-2.0		-0.5	-2.0		-0.5	-2.0	0.0	-0.5	-2.0	-0.5
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	6.0	4.0	4.0	4.0
Lead/Lag	Lag	Lag		Lead	Lead		Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None		None	C-Max	C-Max	Max	C-Max	None
Walk Time (s)		5.0			5.0			5.0	5.0		5.0	
Flash Dont Walk (s)		24.0			28.0			21.0	21.0		22.0	
Pedestrian Calls (#/hr)		0			0			0	0		0	
Act Effect Green (s)	26.9	38.7		15.3	27.1		10.5	48.0	46.0	14.0	53.7	81.4
Actuated g/C Ratio	0.20	0.29		0.12	0.21		0.08	0.36	0.35	0.11	0.41	0.62
v/c Ratio	1.06	0.62		0.62	0.74		0.45	0.85	0.39	0.54	0.62	0.25
Control Delay	96.3	38.4		47.0	43.8		87.7	29.5	6.7	45.8	15.6	0.6
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	96.3	38.4		47.0	43.8		87.7	29.5	6.7	45.8	15.6	0.6
LOS	F	D		D	D		F	C	A	D	B	A
Approach Delay		68.5			44.8			28.3			13.3	
Approach LOS		E			D			C			B	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 115 (87%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
 Natural Cycle: 115
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.06
 Intersection Signal Delay: 35.2
 Intersection LOS: D
 Intersection Capacity Utilization 80.9%
 ICU Level of Service D
 Analysis Period (min) 15

Splits and Phases: 5: Valencia Blvd & Magic Mountain Pkwy



Queues

5: Valencia Blvd & Magic Mountain Pkwy

04/25/2023



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	716	661	238	531	61	1686	259	97	1236	470
v/c Ratio	1.06	0.62	0.62	0.74	0.45	0.85	0.39	0.54	0.62	0.25
Control Delay	96.3	38.4	47.0	43.8	87.7	29.5	6.7	45.8	15.6	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	96.3	38.4	47.0	43.8	87.7	29.5	6.7	45.8	15.6	0.6
Queue Length 50th (ft)	~351	298	107	234	52	268	16	75	104	1
Queue Length 95th (ft)	#554	366	148	292	m76	260	m42	m109	m182	m9
Internal Link Dist (ft)		966		2698		1909			492	
Turn Bay Length (ft)	310		250		180		200	190		190
Base Capacity (vph)	676	1068	578	927	181	1972	656	181	1998	1887
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.06	0.62	0.41	0.57	0.34	0.85	0.39	0.54	0.62	0.25

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings

6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy

04/25/2023



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	229	445	325	1418	1097	144
Future Volume (vph)	229	445	325	1418	1097	144
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	265	265	260			270
Storage Lanes	1	1	2			1
Taper Length (ft)	25		25			
Lane Util. Factor	0.97	0.88	0.97	0.91	0.95	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3433	2787	3433	5085	3539	1583
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	3433	2787	3433	5085	3539	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		70				156
Link Speed (mph)	45			50	45	
Link Distance (ft)	2778			2280	1171	
Travel Time (s)	42.1			31.1	17.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	249	484	353	1541	1192	157
Shared Lane Traffic (%)						
Lane Group Flow (vph)	249	484	353	1541	1192	157
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	34			24	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	1	1	1
Detector Template						
Leading Detector (ft)	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	pt+ov	custom	NA	NA	Perm
Protected Phases	8	8 1	1	6	2	
Permitted Phases			1			2
Detector Phase	8	8 1	1	6	2	2
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	20.0		20.0	20.0	41.0	41.0
Total Split (s)	34.0		30.0	98.0	68.0	68.0

Lanes, Volumes, Timings

6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy

04/25/2023

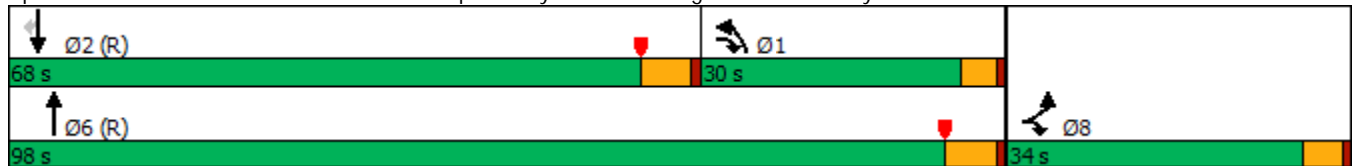


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Total Split (%)	25.8%		22.7%	74.2%	51.5%	51.5%
Maximum Green (s)	29.0		25.5	92.0	62.0	62.0
Yellow Time (s)	4.0		3.5	5.0	5.0	5.0
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0		-0.5	-2.0	-2.0	-2.0
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0
Lead/Lag			Lag		Lead	Lead
Lead-Lag Optimize?			Yes		Yes	Yes
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	Max		Min	C-Min	C-Min	C-Min
Walk Time (s)					7.0	7.0
Flash Dont Walk (s)					28.0	28.0
Pedestrian Calls (#/hr)					0	0
Act Effect Green (s)	43.8	68.3	20.5	80.2	55.7	55.7
Actuated g/C Ratio	0.33	0.52	0.16	0.61	0.42	0.42
v/c Ratio	0.22	0.33	0.66	0.50	0.80	0.21
Control Delay	30.1	9.6	58.2	14.9	37.4	3.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.1	9.6	58.2	14.9	37.4	3.6
LOS	C	A	E	B	D	A
Approach Delay	16.5			22.9	33.5	
Approach LOS	B			C	C	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 75 (57%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
 Natural Cycle: 85
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.80
 Intersection Signal Delay: 25.3
 Intersection LOS: C
 Intersection Capacity Utilization 56.1%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy



Queues

6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy

04/25/2023



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	249	484	353	1541	1192	157
v/c Ratio	0.22	0.33	0.66	0.50	0.80	0.21
Control Delay	30.1	9.6	58.2	14.9	37.4	3.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.1	9.6	58.2	14.9	37.4	3.6
Queue Length 50th (ft)	101	71	148	256	458	1
Queue Length 95th (ft)	149	164	190	206	494	38
Internal Link Dist (ft)	2698			2200	1091	
Turn Bay Length (ft)	265	265	260			270
Base Capacity (vph)	1138	1471	679	3621	1715	847
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.33	0.52	0.43	0.70	0.19

Intersection Summary

Lanes, Volumes, Timings
7: Bouquet Canyon Rd & Valencia Blvd

04/25/2023

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1181	1481	29	387	810	317	36	1168	672	356	850	649
Future Volume (vph)	1181	1481	29	387	810	317	36	1168	672	356	850	649
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	10	10	11	11	11	11	10	10	11
Storage Length (ft)	360		0	330		330	250		0	435		400
Storage Lanes	2		0	3		1	1		1	2		2
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.94	0.91	0.91	0.94	0.91	1.00	1.00	0.91	1.00	0.97	0.91	0.88
Fr _t		0.997				0.850			0.850			0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	4824	4901	0	4658	4746	1531	1711	4916	1531	3204	4746	2694
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	4824	4901	0	4658	4746	1531	1711	4916	1531	3204	4746	2694
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2				124			112			459
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		2282			2684			2196			1017	
Travel Time (s)		34.6			40.7			33.3			12.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1284	1610	32	421	880	345	39	1270	730	387	924	705
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1284	1642	0	421	880	345	39	1270	730	387	924	705
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		33			33			20			20	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.00	1.09	1.09	1.04	1.04	1.04	1.04	1.09	1.09	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50		50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50		50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4		3	8	1	5	2	3	1	6	7
Permitted Phases						8			2			6
Detector Phase	7	4		3	8	1	5	2	3	1	6	7
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	44.0		12.0	48.0	12.0	12.0	46.0	12.0	12.0	44.0	12.0

Queues

7: Bouquet Canyon Rd & Valencia Blvd

04/25/2023



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	1284	1642	421	880	345	39	1270	730	387	924	705
v/c Ratio	0.98	1.00	0.66	0.94	0.60	0.23	0.90	0.96	1.00	0.57	0.37
Control Delay	73.9	73.8	46.2	48.2	6.8	56.8	54.6	55.1	95.8	53.4	13.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	73.9	73.8	46.2	48.2	6.8	56.8	54.6	55.1	95.8	53.4	13.5
Queue Length 50th (ft)	410	-550	89	215	17	30	383	533	175	302	170
Queue Length 95th (ft)	m#465	m#608	135	#347	35	69	#447	#814	m#283	338	224
Internal Link Dist (ft)		2202		2604			2116			937	
Turn Bay Length (ft)	360		330		330	250			435		400
Base Capacity (vph)	1315	1635	635	934	571	204	1415	757	388	1697	1905
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.98	1.00	0.66	0.94	0.60	0.19	0.90	0.96	1.00	0.54	0.37

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
 8: Bouquet Canyon Rd & Newhall Ranch Road

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	703	1562	427	332	975	339	446	1602	360	384	1119	272
Future Volume (vph)	703	1562	427	332	975	339	446	1602	360	384	1119	272
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	290		265	410		410	475		230	260		150
Storage Lanes	3		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.94	0.86	1.00	0.97	0.86	1.00	0.97	0.86	1.00	0.97	0.86	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	4990	6408	1583	3433	6408	1583	3433	6408	1583	3433	6408	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	4990	6408	1583	3433	6408	1583	3433	6408	1583	3433	6408	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			62			295			301			99
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		2675			2485			1030			669	
Travel Time (s)		40.5			37.7			15.6			10.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	764	1698	464	361	1060	368	485	1741	391	417	1216	296
Shared Lane Traffic (%)												
Lane Group Flow (vph)	764	1698	464	361	1060	368	485	1741	391	417	1216	296
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		36			36			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	2	1	1	2	1
Detector Template	Left		Right	Left		Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	50	20	20	50	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	50	20	20	50	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)								94			94	
Detector 2 Size(ft)								6			6	
Detector 2 Type								Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)								0.0			0.0	
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	3	8	1	7	4		1	6		5	2	3
Permitted Phases			8			4			6			2

Lanes, Volumes, Timings

8: Bouquet Canyon Rd & Newhall Ranch Road

04/25/2023

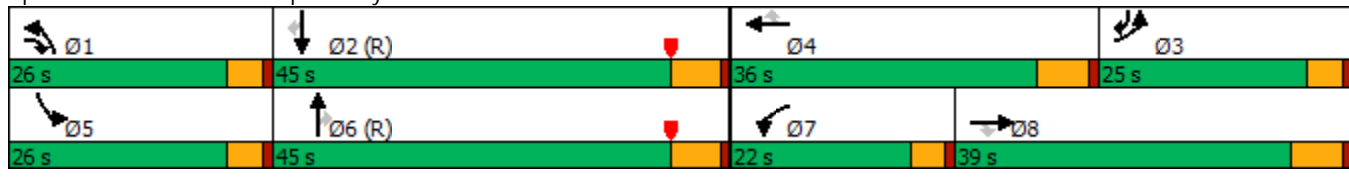


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	3	8	1	7	4	4	1	6	6	5	2	3
Switch Phase												
Minimum Initial (s)	4.0	5.0	4.0	4.0	5.0	5.0	4.0	10.0	10.0	4.0	10.0	4.0
Minimum Split (s)	12.0	43.0	12.0	12.0	43.0	43.0	12.0	49.0	49.0	12.0	50.0	12.0
Total Split (s)	25.0	39.0	26.0	22.0	36.0	36.0	26.0	45.0	45.0	26.0	45.0	25.0
Total Split (%)	18.9%	29.5%	19.7%	16.7%	27.3%	27.3%	19.7%	34.1%	34.1%	19.7%	34.1%	18.9%
Maximum Green (s)	20.5	33.0	21.5	17.5	30.0	30.0	21.5	39.0	39.0	21.5	39.0	20.5
Yellow Time (s)	3.5	5.0	3.5	3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.0	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	-2.0	0.0	0.0	-2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.0	4.5	4.5	4.0	6.0	4.5	6.0	6.0	4.5	6.0	4.5
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes		Yes	Yes			Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	5.5	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Minimum Gap (s)	3.0	2.5	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	24.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	Max	C-Max	None
Walk Time (s)		5.0			5.0	5.0		5.0	5.0		5.0	
Flash Dont Walk (s)		32.0			32.0	32.0		38.0	38.0		39.0	
Pedestrian Calls (#/hr)		2			5	5		1	1		1	
Act Effect Green (s)	21.9	35.6	60.6	16.9	30.6	28.6	21.0	39.0	39.0	21.5	39.5	63.0
Actuated g/C Ratio	0.17	0.27	0.46	0.13	0.23	0.22	0.16	0.30	0.30	0.16	0.30	0.48
v/c Ratio	0.92	0.98	0.61	0.82	0.71	0.64	0.89	0.92	0.58	0.75	0.63	0.37
Control Delay	71.5	65.8	27.1	77.8	40.5	14.7	54.9	47.5	12.8	61.8	41.9	8.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	71.5	65.8	27.1	77.8	40.5	14.7	54.9	47.5	12.8	61.8	41.9	8.8
LOS	E	E	C	E	D	B	D	D	B	E	D	A
Approach Delay		61.2			42.7			43.7			41.1	
Approach LOS		E			D			D			D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 33 (25%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
 Natural Cycle: 140
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.98
 Intersection Signal Delay: 48.5
 Intersection LOS: D
 Intersection Capacity Utilization 82.1%
 ICU Level of Service E
 Analysis Period (min) 15

Splits and Phases: 8: Bouquet Canyon Rd & Newhall Ranch Road



Queues

8: Bouquet Canyon Rd & Newhall Ranch Road

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	764	1698	464	361	1060	368	485	1741	391	417	1216	296
v/c Ratio	0.92	0.98	0.61	0.82	0.71	0.64	0.89	0.92	0.58	0.75	0.63	0.37
Control Delay	71.5	65.8	27.1	77.8	40.5	14.7	54.9	47.5	12.8	61.8	41.9	8.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	71.5	65.8	27.1	77.8	40.5	14.7	54.9	47.5	12.8	61.8	41.9	8.8
Queue Length 50th (ft)	234	424	255	159	198	75	195	360	88	177	263	54
Queue Length 95th (ft)	#323	#515	372	#230	248	145	m220	m418	m112	236	304	91
Internal Link Dist (ft)		2595			2405			950			589	
Turn Bay Length (ft)	290		265	410		410	475		230	260		150
Base Capacity (vph)	829	1728	766	455	1553	587	559	1893	679	559	1918	806
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.92	0.98	0.61	0.79	0.68	0.63	0.87	0.92	0.58	0.75	0.63	0.37

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

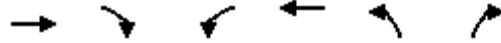
Lanes, Volumes, Timings
9: Commuter Way & Soledad Cyn

04/25/2023

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↗	↙	↑↑↑	↖↗	
Traffic Volume (vph)	2313	28	26	1359	42	15
Future Volume (vph)	2313	28	26	1359	42	15
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		150	285		0	0
Storage Lanes		1	1		2	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	1.00	1.00	0.91	0.97	0.95
Frt		0.850			0.961	
Flt Protected			0.950		0.964	
Satd. Flow (prot)	5085	1583	1770	5085	3348	0
Flt Permitted			0.950		0.964	
Satd. Flow (perm)	5085	1583	1770	5085	3348	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		13			16	
Link Speed (mph)	50			50	30	
Link Distance (ft)	911			2825	388	
Travel Time (s)	12.4			38.5	8.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2514	30	28	1477	46	16
Shared Lane Traffic (%)						
Lane Group Flow (vph)	2514	30	28	1477	62	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	1	1	1	1	1	
Detector Template						
Leading Detector (ft)	50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	
Turn Type	NA	Perm	Prot	NA	Prot	
Protected Phases	2		1	6	8	
Permitted Phases		2				
Detector Phase	2	2	1	6	8	
Switch Phase						
Minimum Initial (s)	10.0	10.0	4.0	10.0	4.0	
Minimum Split (s)	26.0	26.0	12.0	22.0	37.0	
Total Split (s)	75.0	75.0	20.0	95.0	37.0	

Lanes, Volumes, Timings
 9: Commuter Way & Soledad Cyn

04/25/2023

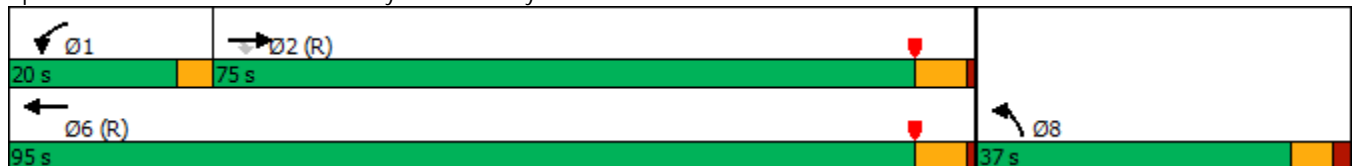


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Total Split (%)	56.8%	56.8%	15.2%	72.0%	28.0%	
Maximum Green (s)	69.0	69.0	16.5	89.0	31.0	
Yellow Time (s)	5.0	5.0	3.5	5.0	4.0	
All-Red Time (s)	1.0	1.0	0.0	1.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	0.5	-2.0	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Vehicle Extension (s)	5.0	5.0	1.5	5.0	2.0	
Minimum Gap (s)	4.0	4.0	1.5	4.0	2.0	
Time Before Reduce (s)	15.0	15.0	0.0	15.0	0.0	
Time To Reduce (s)	15.0	15.0	0.0	15.0	0.0	
Recall Mode	C-Max	C-Max	None	C-Max	None	
Walk Time (s)	7.0	7.0			7.0	
Flash Dont Walk (s)	13.0	13.0			24.0	
Pedestrian Calls (#/hr)	0	0			0	
Act Effect Green (s)	112.1	112.1	5.6	118.6	8.3	
Actuated g/C Ratio	0.85	0.85	0.04	0.90	0.06	
v/c Ratio	0.58	0.02	0.37	0.32	0.28	
Control Delay	6.1	2.8	77.0	5.9	47.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	6.1	2.8	77.0	5.9	47.6	
LOS	A	A	E	A	D	
Approach Delay	6.1			7.2	47.6	
Approach LOS	A			A	D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 58 (44%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Natural Cycle: 100
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.58
 Intersection Signal Delay: 7.1
 Intersection LOS: A
 Intersection Capacity Utilization 54.7%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 9: Commuter Way & Soledad Cyn



Queues

9: Commuter Way & Soledad Cyn

04/25/2023

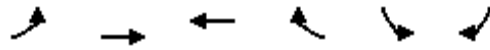


Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Group Flow (vph)	2514	30	28	1477	62
v/c Ratio	0.58	0.02	0.37	0.32	0.28
Control Delay	6.1	2.8	77.0	5.9	47.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	6.1	2.8	77.0	5.9	47.6
Queue Length 50th (ft)	268	3	21	321	19
Queue Length 95th (ft)	349	11	52	148	43
Internal Link Dist (ft)	831			2745	308
Turn Bay Length (ft)		150	285		
Base Capacity (vph)	4319	1346	214	4568	849
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.58	0.02	0.13	0.32	0.07

Intersection Summary

Lanes, Volumes, Timings
10: Soledad Cyn & Valley Center

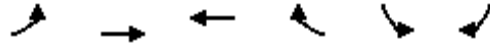
04/25/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø4
Lane Configurations	↖↖	↑↑↑	↑↑↑	↗	↘↘	↘	
Traffic Volume (vph)	106	1710	957	522	664	164	
Future Volume (vph)	106	1710	957	522	664	164	
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	250			310	235	0	
Storage Lanes	2			1	1	1	
Taper Length (ft)	25				25		
Lane Util. Factor	0.97	0.91	0.91	1.00	0.97	1.00	
Frt				0.850		0.850	
Flt Protected	0.950				0.950		
Satd. Flow (prot)	3433	5085	5085	1583	3433	1583	
Flt Permitted	0.950				0.950		
Satd. Flow (perm)	3433	5085	5085	1583	3433	1583	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)				544		178	
Link Speed (mph)		50	50		30		
Link Distance (ft)		2935	1764		1116		
Travel Time (s)		40.0	24.1		25.4		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	115	1859	1040	567	722	178	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	115	1859	1040	567	722	178	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Left	Left	Right	Left	Right	
Median Width(ft)		24	24		24		
Link Offset(ft)		0	0		0		
Crosswalk Width(ft)		16	16		16		
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (mph)	15			9	15	9	
Number of Detectors	1	1	1	1	1	1	
Detector Template							
Leading Detector (ft)	50	50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Turn Type	Prot	NA	NA	Free	Prot	pt+ov	
Protected Phases	5	2	6		3	3 5	4
Permitted Phases				Free			
Detector Phase	5	2	6		3	3 5	
Switch Phase							
Minimum Initial (s)	4.0	4.0	4.0		4.0		4.0
Minimum Split (s)	20.0	22.0	29.0		20.0		35.0
Total Split (s)	20.0	72.0	52.0		25.0		35.0

Lanes, Volumes, Timings
 10: Soledad Cyn & Valley Center

04/25/2023

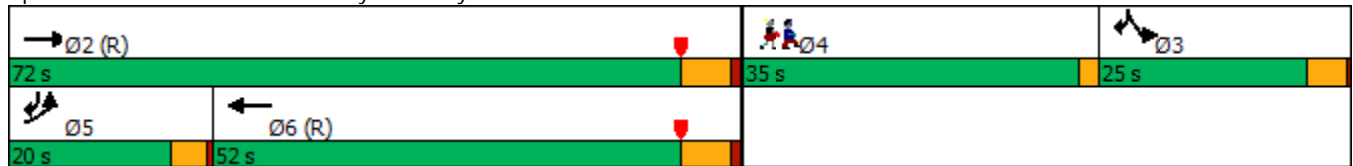


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø4	
Total Split (%)	15.2%	54.5%	39.4%		18.9%		27%	
Maximum Green (s)	16.0	66.0	46.0		20.5		33.0	
Yellow Time (s)	3.5	5.0	5.0		4.0		2.0	
All-Red Time (s)	0.5	1.0	1.0		0.5		0.0	
Lost Time Adjust (s)	0.0	-2.0	-2.0		-0.5			
Total Lost Time (s)	4.0	4.0	4.0		4.0			
Lead/Lag	Lead		Lag		Lag		Lead	
Lead-Lag Optimize?	Yes		Yes		Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		0.2	
Recall Mode	None	C-Max	C-Max		None		None	
Walk Time (s)				7.0				7.0
Flash Dont Walk (s)				16.0				26.0
Pedestrian Calls (#/hr)				0				0
Act Effct Green (s)	9.8	80.0	66.2	132.0	44.0	57.8		
Actuated g/C Ratio	0.07	0.61	0.50	1.00	0.33	0.44		
v/c Ratio	0.45	0.60	0.41	0.36	0.63	0.22		
Control Delay	58.1	20.4	10.3	2.2	39.2	8.7		
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		
Total Delay	58.1	20.4	10.3	2.2	39.2	8.7		
LOS	E	C	B	A	D	A		
Approach Delay	22.6		7.4	33.1				
Approach LOS	C		A	C				

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 35 (27%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Natural Cycle: 105
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.63
 Intersection Signal Delay: 19.3
 Intersection LOS: B
 Intersection Capacity Utilization 58.6%
 ICU Level of Service B
 Analysis Period (min) 15

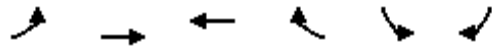
Splits and Phases: 10: Soledad Cyn & Valley Center



Queues

10: Soledad Cyn & Valley Center

04/25/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	115	1859	1040	567	722	178
v/c Ratio	0.45	0.60	0.41	0.36	0.63	0.22
Control Delay	58.1	20.4	10.3	2.2	39.2	8.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	58.1	20.4	10.3	2.2	39.2	8.7
Queue Length 50th (ft)	49	452	60	32	321	38
Queue Length 95th (ft)	75	506	64	341	387	m57
Internal Link Dist (ft)		2855	1684		1036	
Turn Bay Length (ft)	250			310	235	
Base Capacity (vph)	416	3081	2549	1583	1144	859
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.60	0.41	0.36	0.63	0.21

Intersection Summary

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

Lanes, Volumes, Timings
 11: Golden Valley Road & Valley Center Drive

04/25/2023



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4	Ø5	Ø12
Lane Configurations	↔↔↔	↔↔	↔↔	↑↑↑	↑↑↑	↔			
Traffic Volume (vph)	525	159	146	1202	1062	775			
Future Volume (vph)	525	159	146	1202	1062	775			
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900			
Storage Length (ft)	260	260	290			150			
Storage Lanes	2	1	2			1			
Taper Length (ft)	25		25						
Lane Util. Factor	0.94	0.88	0.97	0.91	0.91	1.00			
Frt		0.850				0.850			
Flt Protected	0.950		0.950						
Satd. Flow (prot)	4990	2787	3433	5085	5085	1583			
Flt Permitted	0.950		0.950						
Satd. Flow (perm)	4990	2787	3433	5085	5085	1583			
Right Turn on Red		Yes				Yes			
Satd. Flow (RTOR)		173				534			
Link Speed (mph)	30			50	50				
Link Distance (ft)	456			2527	1665				
Travel Time (s)	10.4			34.5	22.7				
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92			
Adj. Flow (vph)	571	173	159	1307	1154	842			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	571	173	159	1307	1154	842			
Enter Blocked Intersection	No	No	No	No	No	No			
Lane Alignment	Left	Right	Left	Left	Left	Right			
Median Width(ft)	36			24	24				
Link Offset(ft)	0			0	0				
Crosswalk Width(ft)	16			16	16				
Two way Left Turn Lane									
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00			
Turning Speed (mph)	15	9	15			9			
Number of Detectors	1	1	1	1	1	1			
Detector Template									
Leading Detector (ft)	50	50	50	50	50	50			
Trailing Detector (ft)	0	0	0	0	0	0			
Detector 1 Position(ft)	0	0	0	0	0	0			
Detector 1 Size(ft)	50	50	50	50	50	50			
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel									
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Turn Type	Prot	pt+ov	Prot	NA	NA	Perm			
Protected Phases	3	5 12	5 12	2	6		4	5	12
Permitted Phases						6			
Detector Phase	3	5 12	5 12	2	6	6			
Switch Phase									
Minimum Initial (s)	3.0			10.0	10.0	10.0	4.0	4.0	4.0
Minimum Split (s)	25.0			30.0	40.0	40.0	35.0	15.0	20.0
Total Split (s)	30.0			67.0	42.0	42.0	35.0	25.0	35.0

Lanes, Volumes, Timings
 11: Golden Valley Road & Valley Center Drive

04/25/2023

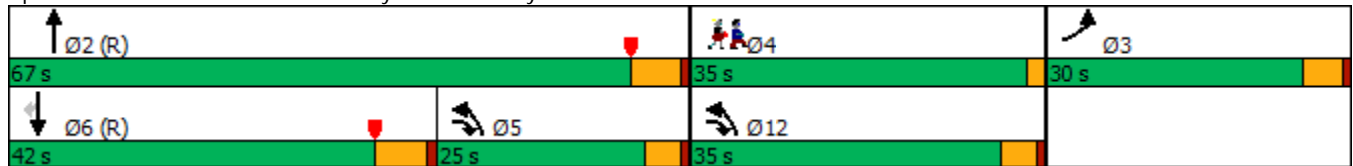


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4	Ø5	Ø12
Total Split (%)	22.7%			50.8%	31.8%	31.8%	27%	19%	27%
Maximum Green (s)	25.0			61.0	36.0	36.0	33.0	20.5	30.5
Yellow Time (s)	4.0			5.0	5.0	5.0	2.0	3.5	3.5
All-Red Time (s)	1.0			1.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)	-1.0			-2.0	-2.0	-2.0			
Total Lost Time (s)	4.0			4.0	4.0	4.0			
Lead/Lag					Lead	Lead		Lag	
Lead-Lag Optimize?					Yes	Yes		Yes	
Vehicle Extension (s)	3.0			3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None			C-Min	C-Min	C-Min	None	None	None
Walk Time (s)					7.0	7.0	7.0		5.0
Flash Dont Walk (s)					24.0	24.0	26.0		10.0
Pedestrian Calls (#/hr)					0	0	0		0
Act Effect Green (s)	21.6	21.6	21.6	92.3	76.8	76.8			
Actuated g/C Ratio	0.16	0.16	0.16	0.70	0.58	0.58			
v/c Ratio	0.70	0.29	0.28	0.37	0.39	0.74			
Control Delay	40.9	11.3	27.0	7.8	4.3	13.3			
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0			
Total Delay	40.9	11.3	27.0	7.8	4.3	13.3			
LOS	D	B	C	A	A	B			
Approach Delay	34.0			9.8	8.1				
Approach LOS	C			A	A				

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 115
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.74
 Intersection Signal Delay: 13.3
 Intersection LOS: B
 Intersection Capacity Utilization 58.8%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 11: Golden Valley Road & Valley Center Drive



Queues

11: Golden Valley Road & Valley Center Drive

04/25/2023



































Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	571	173	159	1307	1154	842
v/c Ratio	0.70	0.29	0.28	0.37	0.39	0.74
Control Delay	40.9	11.3	27.0	7.8	4.3	13.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.9	11.3	27.0	7.8	4.3	13.3
Queue Length 50th (ft)	172	2	46	105	37	476
Queue Length 95th (ft)	172	37	m45	133	m60	m344
Internal Link Dist (ft)	376			2447	1585	
Turn Bay Length (ft)	260	260	290			150
Base Capacity (vph)	984	1092	1207	3554	2959	1144
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.58	0.16	0.13	0.37	0.39	0.74

Intersection Summary

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

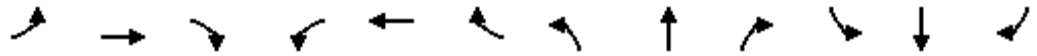
Lanes, Volumes, Timings
12: Ruther & Soledad Cyn

04/25/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  		  	  				  		 	
Traffic Volume (vph)	46	1836	162	190	1207	18	180	77	225	126	86	65
Future Volume (vph)	46	1836	162	190	1207	18	180	77	225	126	86	65
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	285		300	250		0	0		0	125		0
Storage Lanes	1		1	2		0	1		2	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	0.91	0.95	0.95	0.88	0.95	0.95	1.00
Frt			0.850		0.998				0.850		0.938	
Flt Protected	0.950			0.950			0.950	0.977		0.950	0.998	
Satd. Flow (prot)	1770	5085	1583	3433	5075	0	1681	1729	2787	1681	1657	0
Flt Permitted	0.950			0.950			0.950	0.977		0.950	0.998	
Satd. Flow (perm)	1770	5085	1583	3433	5075	0	1681	1729	2787	1681	1657	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			130		2				126		22	
Link Speed (mph)		50		50				40			30	
Link Distance (ft)		1764		2480				220			327	
Travel Time (s)		24.1		33.8				3.8			7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	50	1996	176	207	1312	20	196	84	245	137	93	71
Shared Lane Traffic (%)							37%			5%		
Lane Group Flow (vph)	50	1996	176	207	1332	0	123	157	245	130	171	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24		24				12			12	
Link Offset(ft)		0		0				0			0	
Crosswalk Width(ft)		16		16				16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1	1	1	1	
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50		50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	pt+ov	Split	NA	
Protected Phases	1	6		5	2		3	3	3 5	4	4	
Permitted Phases			6									
Detector Phase	1	6	6	5	2		3	3	3 5	4	4	
Switch Phase												
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	12.0	42.0	42.0	12.0	27.0		37.0	37.0		15.0	15.0	
Total Split (s)	26.0	49.0	49.0	25.0	48.0		38.0	38.0		20.0	20.0	

Lanes, Volumes, Timings
12: Ruther & Soledad Cyn

04/25/2023

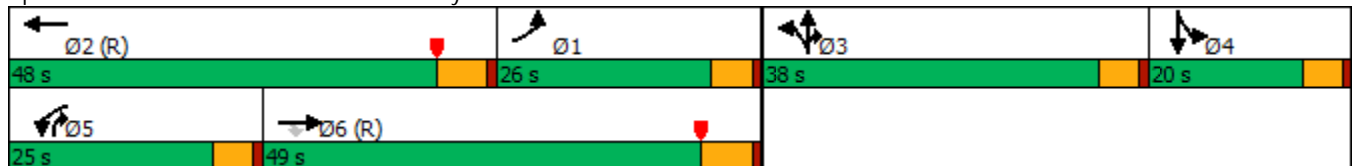


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	19.7%	37.1%	37.1%	18.9%	36.4%		28.8%	28.8%		15.2%	15.2%	
Maximum Green (s)	21.0	43.0	43.0	20.0	42.0		33.0	33.0		15.0	15.0	
Yellow Time (s)	4.0	5.0	5.0	4.0	5.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	-1.0	-2.0	-2.0	-1.0	-2.0		-1.0	-1.0		-1.0	-1.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead		Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	4.5	4.5	1.5	4.5		3.0	3.0		3.0	3.0	
Minimum Gap (s)	1.5	3.0	3.0	1.5	3.0		3.0	3.0		3.0	3.0	
Time Before Reduce (s)	0.0	7.5	7.5	0.0	7.5		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	22.5	22.5	0.0	22.5		0.0	0.0		0.0	0.0	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None		None	None	
Walk Time (s)		7.0	7.0		7.0		5.0	5.0				
Flash Dont Walk (s)		25.0	25.0		11.0		27.0	27.0				
Pedestrian Calls (#/hr)		0	0		0		0	0				
Act Effect Green (s)	18.6	66.0	66.0	12.9	62.0		18.5	18.5	31.3	18.7	18.7	
Actuated g/C Ratio	0.14	0.50	0.50	0.10	0.47		0.14	0.14	0.24	0.14	0.14	
v/c Ratio	0.20	0.79	0.21	0.62	0.56		0.52	0.65	0.32	0.55	0.68	
Control Delay	36.7	21.6	3.2	65.2	29.7		59.8	65.7	11.8	60.5	59.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	36.7	21.6	3.2	65.2	29.7		59.8	65.7	11.8	60.5	59.5	
LOS	D	C	A	E	C		E	E	B	E	E	
Approach Delay		20.5			34.5			39.1			60.0	
Approach LOS		C			C			D			E	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
 Natural Cycle: 110
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.79
 Intersection Signal Delay: 29.9
 Intersection LOS: C
 Intersection Capacity Utilization 69.0%
 ICU Level of Service C
 Analysis Period (min) 15

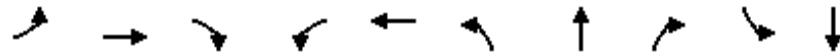
Splits and Phases: 12: Ruther & Soledad Cyn



Queues

12: Ruther & Soledad Cyn

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	50	1996	176	207	1332	123	157	245	130	171
v/c Ratio	0.20	0.79	0.21	0.62	0.56	0.52	0.65	0.32	0.55	0.68
Control Delay	36.7	21.6	3.2	65.2	29.7	59.8	65.7	11.8	60.5	59.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.7	21.6	3.2	65.2	29.7	59.8	65.7	11.8	60.5	59.5
Queue Length 50th (ft)	35	264	16	89	317	104	135	33	110	128
Queue Length 95th (ft)	m56	#787	32	127	435	163	203	47	173	203
Internal Link Dist (ft)		1684			2400		140			247
Turn Bay Length (ft)	285		300	250					125	
Base Capacity (vph)	295	2541	856	546	2386	432	445	1226	248	263
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.79	0.21	0.38	0.56	0.28	0.35	0.20	0.52	0.65

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

Lanes, Volumes, Timings
 13: Golden Valley Road & Centre Pointe Parkway

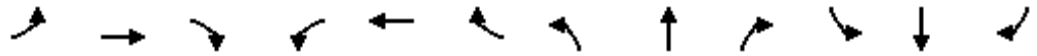
04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	172	96	540	264	76	191	275	1060	274	238	1100	63
Future Volume (vph)	172	96	540	264	76	191	275	1060	274	238	1100	63
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		260	150		250	300		300	700		0
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850		0.893				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	3433	1663	0	1770	3539	1583	1770	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1863	1583	3433	1663	0	1770	3539	1583	1770	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			98		94				298			136
Link Speed (mph)		30		30				50			50	
Link Distance (ft)		1149		802				7902			1475	
Travel Time (s)		26.1		18.2				107.8			20.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	187	104	587	287	83	208	299	1152	298	259	1196	68
Shared Lane Traffic (%)												
Lane Group Flow (vph)	187	104	587	287	291	0	299	1152	298	259	1196	68
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24		24				12			12	
Link Offset(ft)		0		0				0			0	
Crosswalk Width(ft)		16		16				16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50		50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	3	8	5	7	4		5	2	7	1	6	
Permitted Phases			8						2			6
Detector Phase	3	8	5	7	4		5	2	7	1	6	6
Switch Phase												
Minimum Initial (s)	4.0	6.0	4.0	4.0	6.0		4.0	10.0	4.0	4.0	10.0	10.0
Minimum Split (s)	12.0	25.0	20.0	20.0	39.0		20.0	33.0	20.0	15.0	34.0	34.0
Total Split (s)	19.0	25.0	33.0	34.0	40.0		33.0	40.0	34.0	33.0	40.0	40.0

Lanes, Volumes, Timings
 13: Golden Valley Road & Centre Pointe Parkway

04/25/2023

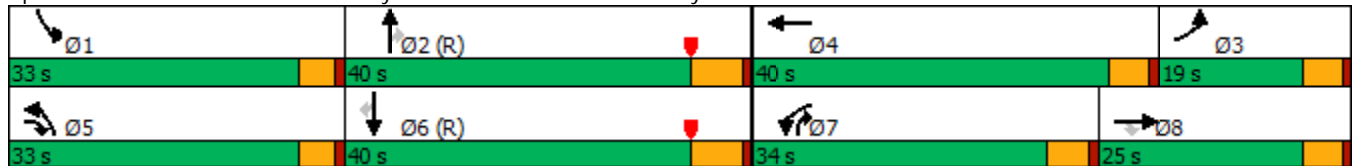


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	14.4%	18.9%	25.0%	25.8%	30.3%		25.0%	30.3%	25.8%	25.0%	30.3%	30.3%
Maximum Green (s)	14.0	20.0	28.5	29.0	35.0		28.5	34.0	29.0	28.5	34.0	34.0
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0		3.5	5.0	4.0	3.5	5.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0	-1.0	-0.5	-1.0	-1.0		-0.5	-2.0	-1.0	-0.5	-2.0	-2.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lag	Lag	Lead	Lead	Lead		Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Min	None	None	C-Min	C-Min
Walk Time (s)					7.0			7.0			7.0	7.0
Flash Dont Walk (s)					27.0			20.0			21.0	21.0
Pedestrian Calls (#/hr)					0			0			0	0
Act Effct Green (s)	20.5	25.7	55.8	17.7	22.9		26.1	48.5	70.1	24.2	46.5	46.5
Actuated g/C Ratio	0.16	0.19	0.42	0.13	0.17		0.20	0.37	0.53	0.18	0.35	0.35
v/c Ratio	0.68	0.29	0.81	0.63	0.80		0.85	0.89	0.30	0.80	0.96	0.11
Control Delay	65.9	46.3	36.3	59.8	50.4		74.7	42.4	11.1	52.3	70.9	8.4
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.9	46.3	36.3	59.8	50.4		74.7	42.4	11.1	52.3	70.9	8.4
LOS	E	D	D	E	D		E	D	B	D	E	A
Approach Delay		43.8			55.1			42.6			64.9	
Approach LOS		D			E			D			E	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 103 (78%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 125
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.96
 Intersection Signal Delay: 51.5
 Intersection Capacity Utilization 84.2%
 Analysis Period (min) 15
 Intersection LOS: D
 ICU Level of Service E

Splits and Phases: 13: Golden Valley Road & Centre Pointe Parkway



Queues

13: Golden Valley Road & Centre Pointe Parkway

04/25/2023








































Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	187	104	587	287	291	299	1152	298	259	1196	68
v/c Ratio	0.68	0.29	0.81	0.63	0.80	0.85	0.89	0.30	0.80	0.96	0.11
Control Delay	65.9	46.3	36.3	59.8	50.4	74.7	42.4	11.1	52.3	70.9	8.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.9	46.3	36.3	59.8	50.4	74.7	42.4	11.1	52.3	70.9	8.4
Queue Length 50th (ft)	150	75	344	121	166	269	410	74	202	-612	3
Queue Length 95th (ft)	#264	129	498	162	251	m350	#756	m112	310	#828	34
Internal Link Dist (ft)		1069			722		7822			1395	
Turn Bay Length (ft)	150		260	150		300		300	700		
Base Capacity (vph)	274	373	758	780	521	389	1299	1100	388	1247	646
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.68	0.28	0.77	0.37	0.56	0.77	0.89	0.27	0.67	0.96	0.11

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

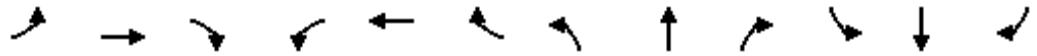
Lanes, Volumes, Timings
 14: Sierra Highway & Golden Valley Road

04/25/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 	  	  	  	 	 	 	 	  		
Traffic Volume (vph)	346	672	533	61	652	82	661	1008	124	42	240	209
Future Volume (vph)	346	672	533	61	652	82	661	1008	124	42	240	209
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	280		280	285		300	285		0	410		540
Storage Lanes	2		2	2		1	2		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	0.88	0.97	0.91	1.00	0.97	0.95	0.95	1.00	0.95	1.00
Fr _t			0.850			0.850		0.984				0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	2787	3433	5085	1583	3433	3483	0	1770	3539	1583
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	2787	3433	5085	1583	3433	3483	0	1770	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			579			186		10				227
Link Speed (mph)		50		50			30			30		
Link Distance (ft)		1983		1208			1801			1671		
Travel Time (s)		27.0		16.5			40.9			38.0		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	376	730	579	66	709	89	718	1096	135	46	261	227
Shared Lane Traffic (%)												
Lane Group Flow (vph)	376	730	579	66	709	89	718	1231	0	46	261	227
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24		24			24			24		24
Link Offset(ft)		0		0			0			0		0
Crosswalk Width(ft)		16		16			16			16		16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50		50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50		50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	custom
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						8
Detector Phase	7	4	4	3	8	8	5	2		1	6	8
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	8.5	29.6	29.6	8.5	40.0	40.0	15.0	49.0		8.5	46.0	40.0
Total Split (s)	29.0	50.0	50.0	20.0	41.0	41.0	37.0	44.0		18.0	25.0	41.0

Lanes, Volumes, Timings
 14: Sierra Highway & Golden Valley Road

04/25/2023

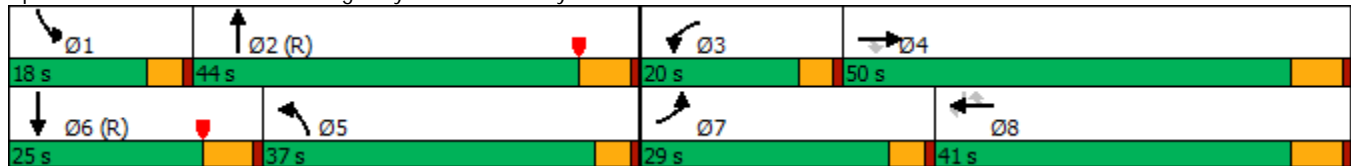


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	22.0%	37.9%	37.9%	15.2%	31.1%	31.1%	28.0%	33.3%		13.6%	18.9%	31.1%
Maximum Green (s)	24.5	44.0	44.0	15.5	35.0	35.0	32.5	38.0		13.5	19.0	35.0
Yellow Time (s)	3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.0		3.5	5.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	-0.5	-2.0	-2.0	-0.5	-2.0	-2.0	-0.5	-2.0		-0.5	-2.0	-2.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lag		Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	None
Walk Time (s)					5.0	5.0		5.0			5.0	5.0
Flash Dont Walk (s)					29.0	29.0		33.0			30.0	29.0
Pedestrian Calls (#/hr)					0	0		0			0	0
Act Effect Green (s)	20.2	41.8	41.8	8.4	28.0	28.0	33.0	60.5		9.3	34.8	28.0
Actuated g/C Ratio	0.15	0.32	0.32	0.06	0.21	0.21	0.25	0.46		0.07	0.26	0.21
v/c Ratio	0.72	0.65	0.45	0.30	0.66	0.18	0.84	0.77		0.37	0.28	0.44
Control Delay	46.9	41.8	12.0	62.1	50.3	0.8	56.8	35.9		66.1	41.7	7.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	46.9	41.8	12.0	62.1	50.3	0.8	56.8	35.9		66.1	41.7	7.7
LOS	D	D	B	E	D	A	E	D		E	D	A
Approach Delay		32.7			46.1			43.6			29.3	
Approach LOS		C			D			D			C	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 65 (49%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 130
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.84
 Intersection Signal Delay: 38.9 Intersection LOS: D
 Intersection Capacity Utilization 70.9% ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 14: Sierra Highway & Golden Valley Road



Queues

14: Sierra Highway & Golden Valley Road

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	376	730	579	66	709	89	718	1231	46	261	227
v/c Ratio	0.72	0.65	0.45	0.30	0.66	0.18	0.84	0.77	0.37	0.28	0.44
Control Delay	46.9	41.8	12.0	62.1	50.3	0.8	56.8	35.9	66.1	41.7	7.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.9	41.8	12.0	62.1	50.3	0.8	56.8	35.9	66.1	41.7	7.7
Queue Length 50th (ft)	159	306	96	28	204	0	302	468	38	94	0
Queue Length 95th (ft)	m185	m338	m129	52	236	0	377	#741	78	149	63
Internal Link Dist (ft)		1903			1128			1721		1591	
Turn Bay Length (ft)	280		280	285		300	285		410		540
Base Capacity (vph)	650	1247	1357	416	1425	577	858	1601	187	932	607
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.58	0.59	0.43	0.16	0.50	0.15	0.84	0.77	0.25	0.28	0.37

Intersection Summary













95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

Lanes, Volumes, Timings
15: SR 14 SB Ramp & Golden Valley Road

04/25/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗	↖	↑↑					↘	↙	↗
Traffic Volume (vph)	0	749	105	163	525	0	0	0	0	70	4	350
Future Volume (vph)	0	749	105	163	525	0	0	0	0	70	4	350
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	220		0	0		0	300		0
Storage Lanes	0		1	1		0	0		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850									0.850
Flt Protected				0.950						0.950	0.957	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	1681	1694	1583
Flt Permitted				0.950						0.950	0.957	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	1681	1694	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			114									339
Link Speed (mph)		50			50			30			30	
Link Distance (ft)		861			697			508			640	
Travel Time (s)		11.7			9.5			11.5			14.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	814	114	177	571	0	0	0	0	76	4	380
Shared Lane Traffic (%)										47%		
Lane Group Flow (vph)	0	814	114	177	571	0	0	0	0	40	40	380
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94		94							94	
Detector 2 Size(ft)		6		6							6	
Detector 2 Type		Cl+Ex		Cl+Ex							Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0		0.0							0.0	
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		6		5	2						4	
Permitted Phases		6								4		4

Lanes, Volumes, Timings
 15: SR 14 SB Ramp & Golden Valley Road

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase		6	6	5	2					4	4	4
Switch Phase												
Minimum Initial (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Minimum Split (s)		20.0	20.0	12.0	20.0					20.0	20.0	20.0
Total Split (s)		39.0	39.0	22.0	61.0					29.0	29.0	29.0
Total Split (%)		43.3%	43.3%	24.4%	67.8%					32.2%	32.2%	32.2%
Maximum Green (s)		35.0	35.0	18.0	57.0					25.0	25.0	25.0
Yellow Time (s)		3.5	3.5	3.5	3.5					3.5	3.5	3.5
All-Red Time (s)		0.5	0.5	0.5	0.5					0.5	0.5	0.5
Lost Time Adjust (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Total Lost Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lead/Lag		Lag	Lag	Lead								
Lead-Lag Optimize?		Yes	Yes	Yes								
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Recall Mode		Max	Max	None	C-Max					Max	Max	Max
Walk Time (s)		5.0	5.0		5.0					5.0	5.0	5.0
Flash Dont Walk (s)		10.0	10.0		10.0					10.0	10.0	10.0
Pedestrian Calls (#/hr)		0	0		0					0	0	0
Act Effect Green (s)		39.1	39.1	13.9	57.0					25.0	25.0	25.0
Actuated g/C Ratio		0.43	0.43	0.15	0.63					0.28	0.28	0.28
v/c Ratio		0.53	0.15	0.65	0.25					0.09	0.09	0.56
Control Delay		20.9	4.1	49.1	7.4					24.8	24.8	8.1
Queue Delay		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Total Delay		20.9	4.1	49.1	7.4					24.8	24.8	8.1
LOS		C	A	D	A					C	C	A
Approach Delay		18.9			17.3						11.0	
Approach LOS		B			B						B	

Intersection Summary

Area Type: Other
 Cycle Length: 90
 Actuated Cycle Length: 90
 Offset: 0 (0%), Referenced to phase 2:WBT, Start of Yellow
 Natural Cycle: 55
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.65
 Intersection Signal Delay: 16.6
 Intersection LOS: B
 Intersection Capacity Utilization 43.9%
 ICU Level of Service A
 Analysis Period (min) 15

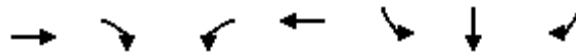
Splits and Phases: 15: SR 14 SB Ramp & Golden Valley Road



Queues

15: SR 14 SB Ramp & Golden Valley Road
























04/25/2023



Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	814	114	177	571	40	40	380
v/c Ratio	0.53	0.15	0.65	0.25	0.09	0.09	0.56
Control Delay	20.9	4.1	49.1	7.4	24.8	24.8	8.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.9	4.1	49.1	7.4	24.8	24.8	8.1
Queue Length 50th (ft)	174	0	106	64	17	17	17
Queue Length 95th (ft)	250	32	174	85	43	43	93
Internal Link Dist (ft)	781			617		560	
Turn Bay Length (ft)			220		300		
Base Capacity (vph)	1537	752	354	2241	466	470	684
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.15	0.50	0.25	0.09	0.09	0.56
Intersection Summary							

Lanes, Volumes, Timings
16: SR 14 NB Ramp & Golden Valley Road

04/25/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 			 			 				
Traffic Volume (vph)	341	492	0	0	451	223	224	2	382	0	0	0
Future Volume (vph)	341	492	0	0	451	223	224	2	382	0	0	0
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	230		0	0		280	0		140	0		0
Storage Lanes	2		0	0		1	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt						0.850			0.850			
Flt Protected	0.950						0.950	0.953				
Satd. Flow (prot)	3433	3539	0	0	3539	1583	1681	1686	1583	0	0	0
Flt Permitted	0.950						0.950	0.953				
Satd. Flow (perm)	3433	3539	0	0	3539	1583	1681	1686	1583	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						242			297			
Link Speed (mph)		50			50			30				30
Link Distance (ft)		697			616			615				491
Travel Time (s)		9.5			8.4			14.0				11.2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	371	535	0	0	490	242	243	2	415	0	0	0
Shared Lane Traffic (%)							50%					
Lane Group Flow (vph)	371	535	0	0	490	242	121	124	415	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1	1	2	1			
Detector Template	Left	Thru			Thru	Right	Left	Thru	Right			
Leading Detector (ft)	20	100			100	20	20	100	20			
Trailing Detector (ft)	0	0			0	0	0	0	0			
Detector 1 Position(ft)	0	0			0	0	0	0	0			
Detector 1 Size(ft)	20	6			6	20	20	6	20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Prot	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	1	6			2			8				
Permitted Phases						2	8		8			

Queues

16: SR 14 NB Ramp & Golden Valley Road

04/25/2023



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	371	535	490	242	121	124	415
v/c Ratio	0.65	0.28	0.43	0.36	0.19	0.19	0.53
Control Delay	64.8	6.2	26.0	5.1	19.8	19.9	9.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	64.8	6.2	26.0	5.1	19.8	19.9	9.0
Queue Length 50th (ft)	119	33	114	0	47	49	44
Queue Length 95th (ft)	165	42	170	54	88	90	125
Internal Link Dist (ft)		617	536			535	
Turn Bay Length (ft)	230			280			140
Base Capacity (vph)	724	1887	1145	675	635	636	782
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.28	0.43	0.36	0.19	0.19	0.53

Intersection Summary

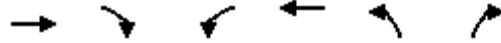
Lanes, Volumes, Timings
17: Studio Driveway & Soledad Cyn

04/25/2023

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↙	↑↑↑	↖	
Traffic Volume (vph)	751	34	17	1610	45	22
Future Volume (vph)	751	34	17	1610	45	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Fr _t	0.993				0.956	
Fl _t Protected			0.950		0.968	
Satd. Flow (prot)	5050	0	1770	5085	1724	0
Fl _t Permitted			0.310		0.968	
Satd. Flow (perm)	5050	0	577	5085	1724	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	15				16	
Link Speed (mph)	50			50	30	
Link Distance (ft)	419			233	380	
Travel Time (s)	5.7			3.2	8.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	816	37	18	1750	49	24
Shared Lane Traffic (%)						
Lane Group Flow (vph)	853	0	18	1750	73	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2		1	2	1	
Detector Template	Thru		Left	Thru	Left	
Leading Detector (ft)	100		20	100	20	
Trailing Detector (ft)	0		0	0	0	
Detector 1 Position(ft)	0		0	0	0	
Detector 1 Size(ft)	6		20	6	20	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA		Perm	NA	Prot	
Protected Phases	6			2	4	
Permitted Phases			2			
Detector Phase	6		2	2	4	
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	

Lanes, Volumes, Timings
17: Studio Driveway & Soledad Cyn

04/25/2023

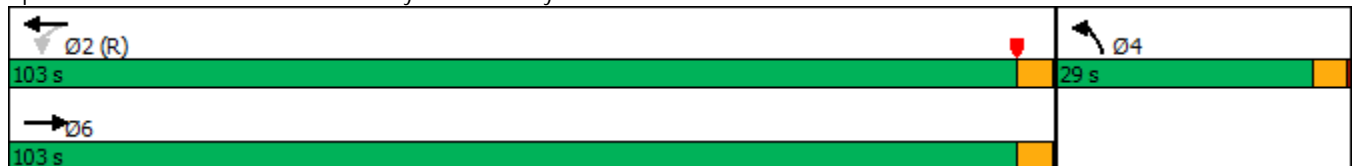


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Minimum Split (s)	20.0		20.0	20.0	20.0	
Total Split (s)	103.0		103.0	103.0	29.0	
Total Split (%)	78.0%		78.0%	78.0%	22.0%	
Maximum Green (s)	99.0		99.0	99.0	25.0	
Yellow Time (s)	3.5		3.5	3.5	3.5	
All-Red Time (s)	0.5		0.5	0.5	0.5	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	4.0		4.0	4.0	4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Recall Mode	Max		C-Max	C-Max	Max	
Walk Time (s)	5.0		5.0	5.0	5.0	
Flash Dont Walk (s)	10.0		10.0	10.0	10.0	
Pedestrian Calls (#/hr)	0		0	0	0	
Act Effect Green (s)	99.0		99.0	99.0	25.0	
Actuated g/C Ratio	0.75		0.75	0.75	0.19	
v/c Ratio	0.23		0.04	0.46	0.22	
Control Delay	7.8		3.6	4.7	37.0	
Queue Delay	0.0		0.0	0.0	0.0	
Total Delay	7.8		3.6	4.7	37.0	
LOS	A		A	A	D	
Approach Delay	7.8			4.7	37.0	
Approach LOS	A			A	D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 0 (0%), Referenced to phase 2:WBTL, Start of Yellow
 Natural Cycle: 40
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.46
 Intersection Signal Delay: 6.6
 Intersection Capacity Utilization 41.6%
 Analysis Period (min) 15
 Intersection LOS: A
 ICU Level of Service A

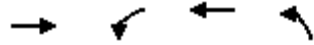
Splits and Phases: 17: Studio Driveway & Soledad Cyn



Queues

17: Studio Driveway & Soledad Cyn

04/25/2023



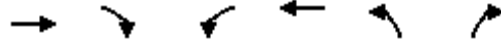
Lane Group	EBT	WBL	WBT	NBL
Lane Group Flow (vph)	853	18	1750	73
v/c Ratio	0.23	0.04	0.46	0.22
Control Delay	7.8	3.6	4.7	37.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	7.8	3.6	4.7	37.0
Queue Length 50th (ft)	104	2	104	41
Queue Length 95th (ft)	m105	8	139	87
Internal Link Dist (ft)	339		153	300
Turn Bay Length (ft)				
Base Capacity (vph)	3791	432	3813	339
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.23	0.04	0.46	0.22

Intersection Summary

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

Lanes, Volumes, Timings
 18: Residential Driveway 1 & Soledad Cyn

04/25/2023



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↵	↑↑↑	↵	
Traffic Volume (vph)	743	30	10	1626	0	18
Future Volume (vph)	743	30	10	1626	0	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	100		0	0
Storage Lanes		0	1		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt	0.994				0.865	
Flt Protected			0.950			
Satd. Flow (prot)	5055	0	1770	5085	1611	0
Flt Permitted			0.950			
Satd. Flow (perm)	5055	0	1770	5085	1611	0
Link Speed (mph)	50			50	30	
Link Distance (ft)	233			397	318	
Travel Time (s)	3.2			5.4	7.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	808	33	11	1767	0	20
Shared Lane Traffic (%)						
Lane Group Flow (vph)	841	0	11	1767	20	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	41.4%
Analysis Period (min)	15
	ICU Level of Service A

HCM 6th TWSC
 18: Residential Driveway 1 & Soledad Cyn

04/25/2023

Intersection						
Int Delay, s/veh	0.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↑	↑↑↑	↑	
Traffic Vol, veh/h	743	30	10	1626	0	18
Future Vol, veh/h	743	30	10	1626	0	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	808	33	11	1767	0	20

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	841	0	1554
Stage 1	-	-	-	-	825
Stage 2	-	-	-	-	729
Critical Hdwy	-	-	5.34	-	5.74
Critical Hdwy Stg 1	-	-	-	-	6.64
Critical Hdwy Stg 2	-	-	-	-	6.04
Follow-up Hdwy	-	-	3.12	-	3.82
Pot Cap-1 Maneuver	-	-	467	-	161
Stage 1	-	-	-	-	309
Stage 2	-	-	-	-	398
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	467	-	157
Mov Cap-2 Maneuver	-	-	-	-	157
Stage 1	-	-	-	-	309
Stage 2	-	-	-	-	388

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	12.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	497	-	-	467	-
HCM Lane V/C Ratio	0.039	-	-	0.023	-
HCM Control Delay (s)	12.5	-	-	12.9	-
HCM Lane LOS	B	-	-	B	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-

Lanes, Volumes, Timings
 19: Residential Driveway 2 & Soledad Cyn

04/25/2023



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↵	↑↑↑		↵
Traffic Volume (vph)	720	41	21	1636	0	35
Future Volume (vph)	720	41	21	1636	0	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	100		0	0
Storage Lanes		0	1		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt	0.992					0.865
Flt Protected			0.950			
Satd. Flow (prot)	5045	0	1770	5085	0	1611
Flt Permitted			0.950			
Satd. Flow (perm)	5045	0	1770	5085	0	1611
Link Speed (mph)	50			50	30	
Link Distance (ft)	397			911	422	
Travel Time (s)	5.4			12.4	9.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	783	45	23	1778	0	38
Shared Lane Traffic (%)						
Lane Group Flow (vph)	828	0	23	1778	0	38
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	34.9%
ICU Level of Service	A
Analysis Period (min)	15

HCM 6th TWSC
 19: Residential Driveway 2 & Soledad Cyn

04/25/2023

Intersection						
Int Delay, s/veh	0.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↘	↑↑↑		↗
Traffic Vol, veh/h	720	41	21	1636	0	35
Future Vol, veh/h	720	41	21	1636	0	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	783	45	23	1778	0	38

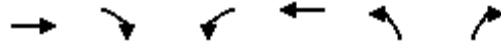
Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	828	0	414
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	5.34	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	3.12	-	3.92
Pot Cap-1 Maneuver	-	-	473	-	502
Stage 1	-	-	-	-	0
Stage 2	-	-	-	-	0
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	473	-	502
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	12.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	502	-	-	473	-
HCM Lane V/C Ratio	0.076	-	-	0.048	-
HCM Control Delay (s)	12.8	-	-	13	-
HCM Lane LOS	B	-	-	B	-
HCM 95th %tile Q(veh)	0.2	-	-	0.2	-

Lanes, Volumes, Timings
 20: Studio Driveway 2 & Soledad Cyn

04/25/2023



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑		↗
Traffic Volume (vph)	785	0	0	1654	0	0
Future Volume (vph)	785	0	0	1654	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Fr						
Flt Protected						
Satd. Flow (prot)	5085	0	0	5085	0	1863
Flt Permitted						
Satd. Flow (perm)	5085	0	0	5085	0	1863
Link Speed (mph)	50			50	30	
Link Distance (ft)	765			419	381	
Travel Time (s)	10.4			5.7	8.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	853	0	0	1798	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	853	0	0	1798	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	35.3%
Analysis Period (min)	15
	ICU Level of Service A

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑		↑
Traffic Vol, veh/h	785	0	0	1654	0	0
Future Vol, veh/h	785	0	0	1654	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	853	0	0	1798	0	0

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	-	-	427
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	3.92
Pot Cap-1 Maneuver	-	0	-	0	492
Stage 1	-	0	-	0	-
Stage 2	-	0	-	0	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	492
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

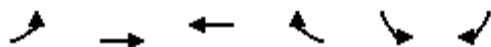
Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

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

Lanes, Volumes, Timings

1: Valencia Blvd & 5 Fwy SB Ramp

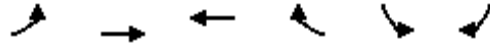
04/25/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑		↑↑	↑
Traffic Volume (vph)	0	576	966	96	279	93
Future Volume (vph)	0	576	966	96	279	93
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	15	12	14
Storage Length (ft)	0			0	0	455
Storage Lanes	0			0	2	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.91	0.95	0.95	0.97	1.00
Fr _t			0.986			0.850
Fl _t Protected					0.950	
Satd. Flow (prot)	0	5085	3490	0	3433	1689
Fl _t Permitted					0.950	
Satd. Flow (perm)	0	5085	3490	0	3433	1689
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			26			91
Link Speed (mph)		50	50		30	
Link Distance (ft)		616	917		417	
Travel Time (s)		8.4	12.5		9.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	626	1050	104	303	101
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	626	1154	0	303	101
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		24	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	0.88	1.00	0.92
Turning Speed (mph)	15			9	15	9
Number of Detectors		1	1		1	1
Detector Template						
Leading Detector (ft)		50	50		50	50
Trailing Detector (ft)		0	0		0	0
Detector 1 Position(ft)		0	0		0	0
Detector 1 Size(ft)		50	50		50	50
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)		0.0	0.0		0.0	0.0
Detector 1 Queue (s)		0.0	0.0		0.0	0.0
Detector 1 Delay (s)		0.0	0.0		0.0	0.0
Turn Type		NA	NA		Prot	Perm
Protected Phases		2	6		4	
Permitted Phases						4
Detector Phase		2	6		4	4
Switch Phase						
Minimum Initial (s)		4.0	4.0		4.0	4.0
Minimum Split (s)		20.0	35.2		20.0	20.0

Lanes, Volumes, Timings
 1: Valencia Blvd & 5 Fwy SB Ramp

04/25/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Total Split (s)		41.0	41.0		25.0	25.0
Total Split (%)		62.1%	62.1%		37.9%	37.9%
Maximum Green (s)		34.8	34.8		19.2	19.2
Yellow Time (s)		5.2	5.2		4.8	4.8
All-Red Time (s)		1.0	1.0		1.0	1.0
Lost Time Adjust (s)		-2.2	-2.2		-1.8	-1.8
Total Lost Time (s)		4.0	4.0		4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Recall Mode		C-Max	C-Max		Min	Min
Walk Time (s)			5.0			
Flash Dont Walk (s)			18.0			
Pedestrian Calls (#/hr)			0			
Act Effect Green (s)		45.0	45.0		13.0	13.0
Actuated g/C Ratio		0.68	0.68		0.20	0.20
v/c Ratio		0.18	0.48		0.45	0.25
Control Delay		4.3	2.6		25.0	8.0
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		4.3	2.6		25.0	8.0
LOS		A	A		C	A
Approach Delay		4.3	2.6		20.7	
Approach LOS		A	A		C	

Intersection Summary

Area Type: Other
 Cycle Length: 66
 Actuated Cycle Length: 66
 Offset: 14 (21%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.48
 Intersection Signal Delay: 6.5
 Intersection LOS: A
 Intersection Capacity Utilization 44.4%
 ICU Level of Service A
 Analysis Period (min) 15

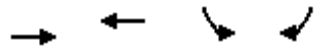
Splits and Phases: 1: Valencia Blvd & 5 Fwy SB Ramp



Queues

1: Valencia Blvd & 5 Fwy SB Ramp

04/25/2023














Lane Group	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	626	1154	303	101
v/c Ratio	0.18	0.48	0.45	0.25
Control Delay	4.3	2.6	25.0	8.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	4.3	2.6	25.0	8.0
Queue Length 50th (ft)	27	11	56	3
Queue Length 95th (ft)	47	91	82	35
Internal Link Dist (ft)	536	837	337	
Turn Bay Length (ft)				455
Base Capacity (vph)	3463	2385	1092	599
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.18	0.48	0.28	0.17

Intersection Summary

Lanes, Volumes, Timings

2: 5 Fwy NB Ramp & Valencia Blvd

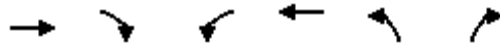
04/25/2023

						
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	785	38	114	1730	287	965
Future Volume (vph)	785	38	114	1730	287	965
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	12	12	12	12	14
Storage Length (ft)		0	200		220	220
Storage Lanes		0	2		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	0.97	0.86	0.97	0.88
Fr _t	0.993					0.850
Fl _t Protected			0.950		0.950	
Satd. Flow (prot)	5386	0	3433	6408	3433	2972
Fl _t Permitted			0.950		0.950	
Satd. Flow (perm)	5386	0	3433	6408	3433	2972
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	13					633
Link Speed (mph)	50			50	30	
Link Distance (ft)	917			476	493	
Travel Time (s)	12.5			6.5	11.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	853	41	124	1880	312	1049
Shared Lane Traffic (%)						
Lane Group Flow (vph)	894	0	124	1880	312	1049
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	24			24	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.92	1.00	1.00	1.00	1.00	0.92
Turning Speed (mph)		9	15		15	9
Number of Detectors	1		1	1	1	1
Detector Template						
Leading Detector (ft)	50		50	50	50	50
Trailing Detector (ft)	0		0	0	0	0
Detector 1 Position(ft)	0		0	0	0	0
Detector 1 Size(ft)	50		50	50	50	50
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0
Turn Type	NA		Prot	NA	Prot	Prot
Protected Phases	2		1	6	8	8
Permitted Phases						
Detector Phase	2		1	6	8	8
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	31.0		14.0	20.0	20.0	20.0

Lanes, Volumes, Timings

2: 5 Fwy NB Ramp & Valencia Blvd

04/25/2023

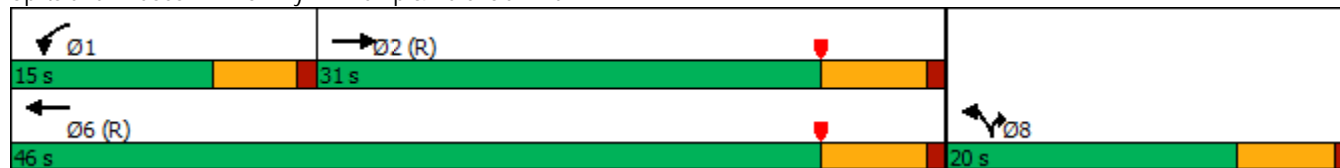


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Total Split (s)	31.0		15.0	46.0	20.0	20.0
Total Split (%)	47.0%		22.7%	69.7%	30.3%	30.3%
Maximum Green (s)	24.8		9.9	39.8	14.2	14.2
Yellow Time (s)	5.2		4.1	5.2	4.8	4.8
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-2.2		-1.1	-2.2	-1.8	-1.8
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max		None	C-Max	None	None
Walk Time (s)	5.0					
Flash Dont Walk (s)	24.0					
Pedestrian Calls (#/hr)	0					
Act Effect Green (s)	31.9		8.8	42.5	15.5	15.5
Actuated g/C Ratio	0.48		0.13	0.64	0.23	0.23
v/c Ratio	0.34		0.27	0.46	0.39	0.89
Control Delay	9.2		26.3	5.0	22.7	20.6
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	9.2		26.3	5.0	22.7	20.6
LOS	A		C	A	C	C
Approach Delay	9.2			6.4	21.1	
Approach LOS	A			A	C	

Intersection Summary

Area Type: Other
 Cycle Length: 66
 Actuated Cycle Length: 66
 Offset: 8 (12%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Natural Cycle: 65
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.89
 Intersection Signal Delay: 11.7
 Intersection LOS: B
 Intersection Capacity Utilization 56.4%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 2: 5 Fwy NB Ramp & Valencia Blvd



Queues

2: 5 Fwy NB Ramp & Valencia Blvd

04/25/2023



Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	894	124	1880	312	1049
v/c Ratio	0.34	0.27	0.46	0.39	0.89
Control Delay	9.2	26.3	5.0	22.7	20.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	9.2	26.3	5.0	22.7	20.6
Queue Length 50th (ft)	81	27	96	54	89
Queue Length 95th (ft)	103	m36	66	86	#218
Internal Link Dist (ft)	837		396	413	
Turn Bay Length (ft)		200		220	220
Base Capacity (vph)	2610	572	4129	832	1200
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.34	0.22	0.46	0.38	0.87

Intersection Summary





































95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

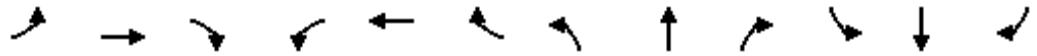
Lanes, Volumes, Timings
3: McBean Pkwy & Valencia Blvd

04/25/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	  		  	  		 	  	 	 	 	
Traffic Volume (vph)	392	1047	124	353	1442	61	205	767	349	125	572	763
Future Volume (vph)	392	1047	124	353	1442	61	205	767	349	125	572	763
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	11	11	13	11	11	12	11	11	12
Storage Length (ft)	350		280	290		225	130		200	190		300
Storage Lanes	2		1	2		1	2		2	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	0.88	0.97	0.91	0.88
Fr _t			0.850			0.850			0.850			0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3319	4916	1583	3319	4916	1636	3319	4916	2787	3319	4916	2787
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3319	4916	1583	3319	4916	1636	3319	4916	2787	3319	4916	2787
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			74			70			153			120
Link Speed (mph)		50			50			45			45	
Link Distance (ft)		1919			721			765			966	
Travel Time (s)		26.2			9.8			11.6			14.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	426	1138	135	384	1567	66	223	834	379	136	622	829
Shared Lane Traffic (%)												
Lane Group Flow (vph)	426	1138	135	384	1567	66	223	834	379	136	622	829
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		22			22			22			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.00	1.04	1.04	0.96	1.04	1.04	1.00	1.04	1.04	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	1	6	7	5	2	3	7	4	5	3	8	1
Permitted Phases			6			2			4			8
Detector Phase	1	6	7	5	2	3	7	4	5	3	8	1
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	44.0	12.0	12.0	47.0	12.0	12.0	41.0	12.0	12.0	44.0	12.0

Lanes, Volumes, Timings
 3: McBean Pkwy & Valencia Blvd

04/25/2023

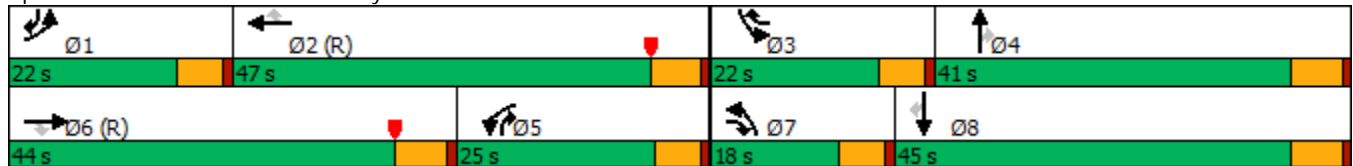


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	22.0	44.0	18.0	25.0	47.0	22.0	18.0	41.0	25.0	22.0	45.0	22.0
Total Split (%)	16.7%	33.3%	13.6%	18.9%	35.6%	16.7%	13.6%	31.1%	18.9%	16.7%	34.1%	16.7%
Maximum Green (s)	16.5	38.0	12.5	19.5	41.0	16.5	12.5	35.0	19.5	16.5	39.0	16.5
Yellow Time (s)	4.5	5.0	4.5	4.5	5.0	4.5	4.5	5.0	4.5	4.5	5.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.5	-2.0	-1.5	-1.5	-2.0	-1.5	-1.5	-2.0	-1.5	-1.5	-2.0	-1.5
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Max	None	None	C-Max	None	None	None	None	None	None	None
Walk Time (s)		5.0			5.0			5.0			5.0	
Flash Dont Walk (s)		32.0			33.0			30.0			33.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effect Green (s)	24.8	52.2	65.7	21.0	48.4	64.6	13.5	30.6	51.6	12.2	29.3	58.1
Actuated g/C Ratio	0.19	0.40	0.50	0.16	0.37	0.49	0.10	0.23	0.39	0.09	0.22	0.44
v/c Ratio	0.68	0.59	0.16	0.73	0.87	0.08	0.66	0.73	0.32	0.44	0.57	0.64
Control Delay	53.1	32.9	4.3	27.0	15.4	0.1	66.6	50.8	10.2	39.1	59.4	64.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.1	32.9	4.3	27.0	15.4	0.1	66.6	50.8	10.2	39.1	59.4	64.3
LOS	D	C	A	C	B	A	E	D	B	D	E	E
Approach Delay		35.7			17.1			42.5			60.3	
Approach LOS		D			B			D			E	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 35 (27%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
 Natural Cycle: 115
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.87
 Intersection Signal Delay: 37.4
 Intersection LOS: D
 Intersection Capacity Utilization 70.8%
 ICU Level of Service C
 Analysis Period (min) 15

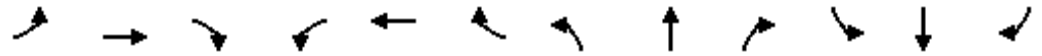
Splits and Phases: 3: McBean Pkwy & Valencia Blvd



Queues

3: McBean Pkwy & Valencia Blvd

04/25/2023



























Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	426	1138	135	384	1567	66	223	834	379	136	622	829
v/c Ratio	0.68	0.59	0.16	0.73	0.87	0.08	0.66	0.73	0.32	0.44	0.57	0.64
Control Delay	53.1	32.9	4.3	27.0	15.4	0.1	66.6	50.8	10.2	39.1	59.4	64.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.1	32.9	4.3	27.0	15.4	0.1	66.6	50.8	10.2	39.1	59.4	64.3
Queue Length 50th (ft)	174	294	10	142	192	0	95	243	52	59	208	400
Queue Length 95th (ft)	m234	354	m14	m132	m134	m0	140	277	69	95	250	473
Internal Link Dist (ft)		1839			641			685			886	
Turn Bay Length (ft)	350		280	290		225	130		200	190		300
Base Capacity (vph)	624	1943	830	528	1801	904	352	1377	1182	452	1526	1293
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.68	0.59	0.16	0.73	0.87	0.07	0.63	0.61	0.32	0.30	0.41	0.64

Intersection Summary

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

Lanes, Volumes, Timings
4: McBean Parkway & Magic Mountain Pkwy

04/25/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	425	429	56	62	448	144	65	1000	54	178	1430	659
Future Volume (vph)	425	429	56	62	448	144	65	1000	54	178	1430	659
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	16	12	12	14	11	11	16	11	11	16
Storage Length (ft)	360		360	210		0	175		175	300		340
Storage Lanes	1		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.91	1.00	0.97	0.86	1.00	0.97	0.86	1.00
Fr _t			0.850			0.850			0.850			0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	1794	3433	5085	1689	3319	6194	1794	3319	6194	1794
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1794	3433	5085	1689	3319	6194	1794	3319	6194	1794
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			99			157			198			631
Link Speed (mph)		50			45			45			50	
Link Distance (ft)		809			1452			1622			1219	
Travel Time (s)		11.0			22.0			24.6			16.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	462	466	61	67	487	157	71	1087	59	193	1554	716
Shared Lane Traffic (%)												
Lane Group Flow (vph)	462	466	61	67	487	157	71	1087	59	193	1554	716
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			22			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	0.85	1.00	1.00	0.92	1.04	1.04	0.85	1.04	1.04	0.85
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			Free			Free
Detector Phase	5	2	2	1	6	6	3	8		7	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Minimum Split (s)	12.0	41.0	41.0	12.0	40.0	40.0	12.0	37.0		12.0	37.0	

Lanes, Volumes, Timings
 4: McBean Parkway & Magic Mountain Pkwy

04/25/2023

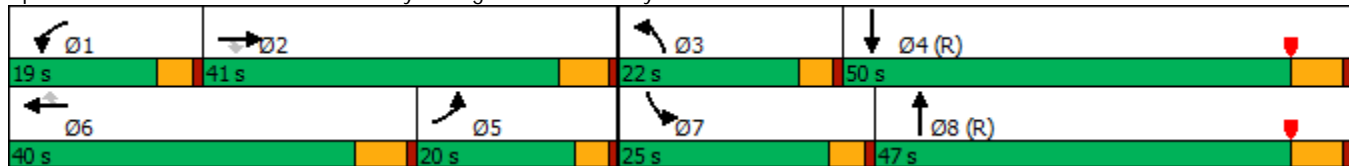


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	20.0	41.0	41.0	19.0	40.0	40.0	22.0	47.0		25.0	50.0	
Total Split (%)	15.2%	31.1%	31.1%	14.4%	30.3%	30.3%	16.7%	35.6%		18.9%	37.9%	
Maximum Green (s)	15.5	35.0	35.0	14.5	34.0	34.0	17.5	41.0		20.5	44.0	
Yellow Time (s)	3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.0		3.5	5.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	-0.5	-2.0	-2.0	-0.5	-2.0	-2.0	-0.5	-2.0		-0.5	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	Max	Max	None	Max	Max	None	C-Max		None	C-Max	
Walk Time (s)		5.0	5.0		5.0	5.0		5.0			5.0	
Flash Dont Walk (s)		30.0	30.0		29.0	29.0		26.0			26.0	
Pedestrian Calls (#/hr)		0	0		0	0		0			0	
Act Effect Green (s)	16.0	45.6	45.6	8.5	36.0	36.0	8.7	50.5	132.0	13.5	57.4	132.0
Actuated g/C Ratio	0.12	0.35	0.35	0.06	0.27	0.27	0.07	0.38	1.00	0.10	0.43	1.00
v/c Ratio	1.11	0.38	0.09	0.30	0.35	0.27	0.33	0.46	0.03	0.57	0.58	0.40
Control Delay	129.8	34.6	1.7	66.9	40.9	14.0	82.2	18.4	0.0	62.9	29.9	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	129.8	34.6	1.7	66.9	40.9	14.0	82.2	18.4	0.0	62.9	29.9	0.7
LOS	F	C	A	E	D	B	F	B	A	E	C	A
Approach Delay		77.0			37.4			21.2			24.0	
Approach LOS		E			D			C			C	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 28 (21%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow
 Natural Cycle: 105
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.11
 Intersection Signal Delay: 34.9
 Intersection LOS: C
 Intersection Capacity Utilization 58.2%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 4: McBean Parkway & Magic Mountain Pkwy



Queues

4: McBean Parkway & Magic Mountain Pkwy

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	462	466	61	67	487	157	71	1087	59	193	1554	716
v/c Ratio	1.11	0.38	0.09	0.30	0.35	0.27	0.33	0.46	0.03	0.57	0.58	0.40
Control Delay	129.8	34.6	1.7	66.9	40.9	14.0	82.2	18.4	0.0	62.9	29.9	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	129.8	34.6	1.7	66.9	40.9	14.0	82.2	18.4	0.0	62.9	29.9	0.7
Queue Length 50th (ft)	~232	162	0	28	115	25	33	73	0	82	295	0
Queue Length 95th (ft)	#342	216	10	52	149	55	m53	121	m0	119	345	0
Internal Link Dist (ft)		729			1372			1542			1139	
Turn Bay Length (ft)	360		360	210			175		175	300		340
Base Capacity (vph)	416	1223	684	390	1386	574	452	2370	1794	528	2693	1794
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.11	0.38	0.09	0.17	0.35	0.27	0.16	0.46	0.03	0.37	0.58	0.40

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
5: Valencia Blvd & Magic Mountain Pkwy

04/25/2023

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	170	244	43	179	404	47	44	929	103	24	1718	597
Future Volume (vph)	170	244	43	179	404	47	44	929	103	24	1718	597
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	13	12	11	12	11	11	14	12	11	11	12
Storage Length (ft)	310		0	250		200	180		200	190		190
Storage Lanes	1		0	2		0	1		1	1		2
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	0.95	0.97	0.95	0.95	1.00	0.91	1.00	1.00	0.91	0.88
Frt		0.977			0.984				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3319	3573	0	3319	3483	0	1711	5424	1583	1711	4916	2787
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3319	3573	0	3319	3483	0	1711	5424	1583	1711	4916	2787
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		16			10				112			438
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1046			2748			1989			572	
Travel Time (s)		15.8			41.6			30.1			8.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	185	265	47	195	439	51	48	1010	112	26	1867	649
Shared Lane Traffic (%)												
Lane Group Flow (vph)	185	312	0	195	490	0	48	1010	112	26	1867	649
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		22			22			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	0.96	1.00	1.04	1.00	1.04	1.04	0.92	1.00	1.04	1.04	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Size(ft)	50	50		50	50		50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	3	8		7	4		1	6		5	2	3
Permitted Phases									6			2
Detector Phase	3	8		7	4		1	6	6	5	2	3
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	45.0		12.0	45.0		12.0	38.0	38.0	12.0	39.0	12.0

Queues

5: Valencia Blvd & Magic Mountain Pkwy

04/25/2023



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	185	312	195	490	48	1010	112	26	1867	649
v/c Ratio	0.52	0.24	0.57	0.39	0.39	0.61	0.21	0.14	1.08	0.41
Control Delay	54.7	30.7	95.3	14.8	48.2	39.3	10.1	41.9	71.5	3.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	54.7	30.7	95.3	14.8	48.2	39.3	10.1	41.9	71.5	3.8
Queue Length 50th (ft)	82	98	89	54	39	305	35	17	~660	33
Queue Length 95th (ft)	115	137	130	190	m68	358	78	m21	m#719	m28
Internal Link Dist (ft)		966		2668		1909			492	
Turn Bay Length (ft)	310		250		180		200	190		190
Base Capacity (vph)	528	1321	528	1265	181	1643	535	181	1730	1709
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.35	0.24	0.37	0.39	0.27	0.61	0.21	0.14	1.08	0.38

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings

6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy

04/25/2023



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	93	333	338	1198	1563	153
Future Volume (vph)	93	333	338	1198	1563	153
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	265	265	260			270
Storage Lanes	1	1	2			1
Taper Length (ft)	25		25			
Lane Util. Factor	0.97	0.88	0.97	0.91	0.95	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3433	2787	3433	5085	3539	1583
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	3433	2787	3433	5085	3539	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		15				116
Link Speed (mph)	45			50	45	
Link Distance (ft)	2748			2280	1194	
Travel Time (s)	41.6			31.1	18.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	101	362	367	1302	1699	166
Shared Lane Traffic (%)						
Lane Group Flow (vph)	101	362	367	1302	1699	166
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	34			24	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	1	1	1
Detector Template						
Leading Detector (ft)	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	pt+ov	custom	NA	NA	Perm
Protected Phases	8	8 1	1	6	2	
Permitted Phases			1			2
Detector Phase	8	8 1	1	6	2	2
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	20.0		20.0	20.0	41.0	41.0
Total Split (s)	34.0		30.0	98.0	68.0	68.0

Lanes, Volumes, Timings

6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy

04/25/2023

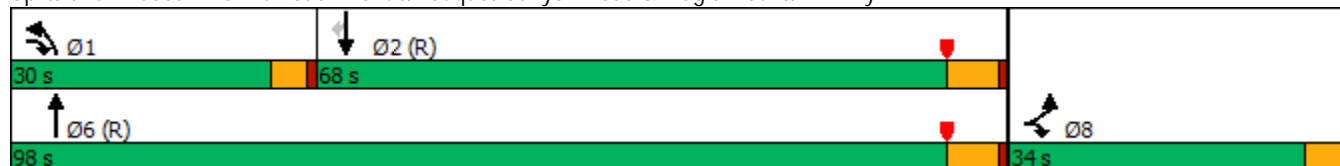


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Total Split (%)	25.8%		22.7%	74.2%	51.5%	51.5%
Maximum Green (s)	29.0		25.5	92.0	62.0	62.0
Yellow Time (s)	4.0		3.5	5.0	5.0	5.0
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0		-0.5	-2.0	-2.0	-2.0
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	Max		Min	C-Min	C-Min	C-Min
Walk Time (s)					7.0	7.0
Flash Dont Walk (s)					28.0	28.0
Pedestrian Calls (#/hr)					0	0
Act Effect Green (s)	30.0	54.4	20.4	94.0	69.6	69.6
Actuated g/C Ratio	0.23	0.41	0.15	0.71	0.53	0.53
v/c Ratio	0.13	0.31	0.69	0.36	0.91	0.19
Control Delay	30.3	18.8	59.5	7.7	35.8	6.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.3	18.8	59.5	7.7	35.8	6.2
LOS	C	B	E	A	D	A
Approach Delay	21.3			19.1	33.2	
Approach LOS	C			B	C	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 77 (58%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
 Natural Cycle: 85
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.91
 Intersection Signal Delay: 25.9
 Intersection LOS: C
 Intersection Capacity Utilization 66.2%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy



Queues

6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy

04/25/2023



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	101	362	367	1302	1699	166
v/c Ratio	0.13	0.31	0.69	0.36	0.91	0.19
Control Delay	30.3	18.8	59.5	7.7	35.8	6.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.3	18.8	59.5	7.7	35.8	6.2
Queue Length 50th (ft)	42	139	155	142	814	25
Queue Length 95th (ft)	63	179	198	165	#953	m41
Internal Link Dist (ft)	2668		2200		1114	
Turn Bay Length (ft)	265	265	260			270
Base Capacity (vph)	780	1275	676	3621	1864	889
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.28	0.54	0.36	0.91	0.19

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

Lanes, Volumes, Timings

7: Bouquet Canyon Rd & Valencia Blvd/Soledad Canyon Rd

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔↔	↕↕↕		↔↔↔	↕↕↕	↔	↔	↕↕↕	↔	↔↔↔	↕↕↕	↔↔
Traffic Volume (vph)	392	715	23	544	1431	264	23	710	410	307	1246	1063
Future Volume (vph)	392	715	23	544	1431	264	23	710	410	307	1246	1063
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	10	10	11	11	11	11	10	10	11
Storage Length (ft)	360		0	330		330	250		0	435		400
Storage Lanes	2		0	3		1	1		1	2		2
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.94	0.91	0.91	0.94	0.91	1.00	1.00	0.91	1.00	0.97	0.91	0.88
Frt		0.995				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	4824	4891	0	4658	4746	1531	1711	4916	1531	3204	4746	2694
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	4824	4891	0	4658	4746	1531	1711	4916	1531	3204	4746	2694
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3				99			112			454
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		2282			2858			2196			1054	
Travel Time (s)		34.6			43.3			33.3			12.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	426	777	25	591	1555	287	25	772	446	334	1354	1155
Shared Lane Traffic (%)												
Lane Group Flow (vph)	426	802	0	591	1555	287	25	772	446	334	1354	1155
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		33			33			20			20	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.00	1.09	1.09	1.04	1.04	1.04	1.04	1.09	1.09	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50		50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50		50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4		3	8	1	5	2	3	1	6	7
Permitted Phases						8			2			6
Detector Phase	7	4		3	8	1	5	2	3	1	6	7
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	44.0		12.0	48.0	12.0	12.0	46.0	12.0	12.0	44.0	12.0

Queues

7: Bouquet Canyon Rd & Valencia Blvd/Soledad Canyon Rd

04/25/2023



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	426	802	591	1555	287	25	772	446	334	1354	1155
v/c Ratio	0.57	0.73	0.52	1.04	0.40	0.24	0.55	0.49	0.86	0.75	0.67
Control Delay	27.2	18.2	44.8	76.9	14.6	59.6	37.8	10.9	52.9	21.1	11.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.2	18.2	44.8	76.9	14.6	59.6	37.8	10.9	52.9	21.1	11.2
Queue Length 50th (ft)	33	53	184	~560	89	21	209	182	153	368	447
Queue Length 95th (ft)	70	60	232	#661	167	51	254	297	m#185	435	540
Internal Link Dist (ft)		2202		2778			2116			974	
Turn Bay Length (ft)	360		330		330	250			435		400
Base Capacity (vph)	804	1299	1145	1495	723	194	1415	912	388	1805	1747
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.62	0.52	1.04	0.40	0.13	0.55	0.49	0.86	0.75	0.66

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
 8: Bouquet Canyon Rd & Newhall Ranch Rd

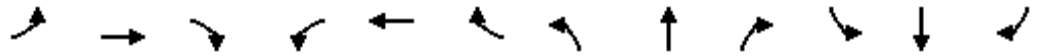
04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	270	798	319	456	1778	457	377	818	162	450	1912	533
Future Volume (vph)	270	798	319	456	1778	457	377	818	162	450	1912	533
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	290		265	410		410	475		230	260		150
Storage Lanes	3		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.94	0.86	1.00	0.97	0.86	1.00	0.97	0.86	1.00	0.97	0.86	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	4990	6408	1583	3433	6408	1583	3433	6408	1583	3433	6408	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	4990	6408	1583	3433	6408	1583	3433	6408	1583	3433	6408	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			107			327			182			112
Link Speed (mph)		45		45			45			45		45
Link Distance (ft)		870		2469			1012			1082		
Travel Time (s)		13.2		37.4			15.3			16.4		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	293	867	347	496	1933	497	410	889	176	489	2078	579
Shared Lane Traffic (%)												
Lane Group Flow (vph)	293	867	347	496	1933	497	410	889	176	489	2078	579
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		36		36			24			24		
Link Offset(ft)		0		0			0			0		
Crosswalk Width(ft)		16		16			16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	3	8	1	7	4		1	6		5	2	3
Permitted Phases			8			4			6			2
Detector Phase	3	8	1	7	4	4	1	6	6	5	2	3
Switch Phase												
Minimum Initial (s)	4.0	5.0	4.0	4.0	5.0	5.0	4.0	10.0	10.0	4.0	10.0	4.0
Minimum Split (s)	12.0	43.0	12.0	12.0	43.0	43.0	12.0	49.0	49.0	12.0	50.0	12.0
Total Split (s)	21.0	36.0	22.0	21.0	36.0	36.0	22.0	45.0	45.0	30.0	53.0	21.0

Lanes, Volumes, Timings
 8: Bouquet Canyon Rd & Newhall Ranch Rd

04/25/2023

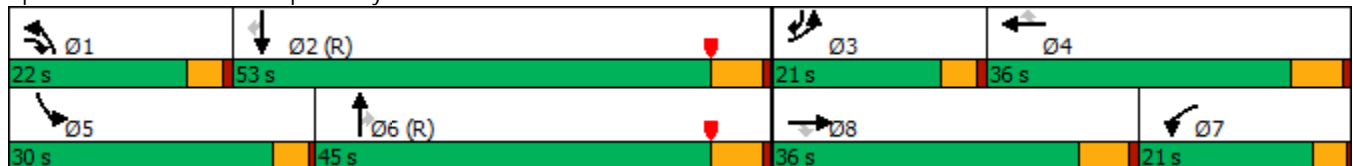


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	15.9%	27.3%	16.7%	15.9%	27.3%	27.3%	16.7%	34.1%	34.1%	22.7%	40.2%	15.9%
Maximum Green (s)	16.5	30.0	17.5	17.0	30.0	30.0	17.5	39.0	39.0	26.0	47.0	16.5
Yellow Time (s)	3.5	5.0	3.5	3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.0	3.5
All-Red Time (s)	1.0	1.0	1.0	0.5	1.0	1.0	1.0	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	-0.5	-2.0	-0.5	-0.5	-2.0	-2.0	-0.5	-2.0	-2.0	-0.5	-2.0	-0.5
Total Lost Time (s)	4.0	4.0	4.0	3.5	4.0	4.0	4.0	4.0	4.0	3.5	4.0	4.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes		Yes	Yes			Yes			Yes		Yes
Vehicle Extension (s)	3.0	5.5	3.0	3.0	5.5	5.5	3.0	5.5	5.5	3.0	5.5	3.0
Minimum Gap (s)	3.0	2.5	3.0	3.0	2.5	2.5	3.0	4.5	4.5	3.0	4.5	3.0
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	10.0	0.0	10.0	0.0
Time To Reduce (s)	0.0	24.0	0.0	0.0	24.0	24.0	0.0	10.0	10.0	0.0	10.0	0.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	None
Walk Time (s)		5.0			5.0	5.0		5.0	5.0		5.0	
Flash Dont Walk (s)		32.0			32.0	32.0		38.0	38.0		39.0	
Pedestrian Calls (#/hr)		2			2	2		1	1		1	
Act Effect Green (s)	14.4	27.9	45.7	21.6	34.6	34.6	17.8	43.8	43.8	23.7	49.2	67.6
Actuated g/C Ratio	0.11	0.21	0.35	0.16	0.26	0.26	0.13	0.33	0.33	0.18	0.37	0.51
v/c Ratio	0.54	0.64	0.56	0.88	1.15	0.76	0.88	0.42	0.27	0.80	0.87	0.67
Control Delay	59.1	49.6	16.7	69.3	116.8	24.3	69.6	52.5	20.5	61.8	43.5	23.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.1	49.6	16.7	69.3	116.8	24.3	69.6	52.5	20.5	61.8	43.5	23.0
LOS	E	D	B	E	F	C	E	D	C	E	D	C
Approach Delay		43.9			93.1			53.5			42.6	
Approach LOS		D			F			D			D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 105 (80%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
 Natural Cycle: 130
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.15
 Intersection Signal Delay: 60.9
 Intersection LOS: E
 Intersection Capacity Utilization 82.7%
 ICU Level of Service E
 Analysis Period (min) 15

Splits and Phases: 8: Bouquet Canyon Rd & Newhall Ranch Rd



Queues

8: Bouquet Canyon Rd & Newhall Ranch Rd

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	293	867	347	496	1933	497	410	889	176	489	2078	579
v/c Ratio	0.54	0.64	0.56	0.88	1.15	0.76	0.88	0.42	0.27	0.80	0.87	0.67
Control Delay	59.1	49.6	16.7	69.3	116.8	24.3	69.6	52.5	20.5	61.8	43.5	23.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.1	49.6	16.7	69.3	116.8	24.3	69.6	52.5	20.5	61.8	43.5	23.0
Queue Length 50th (ft)	85	198	103	210	-564	124	159	222	46	207	478	292
Queue Length 95th (ft)	115	227	167	#358	#675	274	#260	260	105	264	529	410
Internal Link Dist (ft)		790			2389			932			1002	
Turn Bay Length (ft)	290		265	410		410	475		230	260		150
Base Capacity (vph)	642	1553	620	562	1679	656	468	2127	647	689	2386	894
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.46	0.56	0.56	0.88	1.15	0.76	0.88	0.42	0.27	0.71	0.87	0.65

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

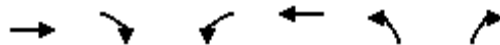
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Lanes, Volumes, Timings
9: Commuter Way & Soledad Cyn

04/25/2023



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↑	↓	↑↑↑	↓	↓
Traffic Volume (vph)	1330	37	3	2287	19	0
Future Volume (vph)	1330	37	3	2287	19	0
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		150	285		0	0
Storage Lanes		1	1		2	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	1.00	1.00	0.91	0.97	0.95
Flt		0.850				
Flt Protected			0.950		0.950	
Satd. Flow (prot)	5085	1583	1770	5085	3433	0
Flt Permitted			0.950		0.950	
Satd. Flow (perm)	5085	1583	1770	5085	3433	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		31				
Link Speed (mph)	50			50	30	
Link Distance (ft)	928			2825	392	
Travel Time (s)	12.7			38.5	8.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1446	40	3	2486	21	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1446	40	3	2486	21	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	1	1	1	1	1	
Detector Template						
Leading Detector (ft)	50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	
Turn Type	NA	Perm	Prot	NA	Prot	
Protected Phases	2		1	6	8	
Permitted Phases		2				
Detector Phase	2	2	1	6	8	
Switch Phase						
Minimum Initial (s)	10.0	10.0	4.0	10.0	4.0	
Minimum Split (s)	26.0	26.0	12.0	22.0	37.0	
Total Split (s)	75.0	75.0	20.0	95.0	37.0	

Lanes, Volumes, Timings

9: Commuter Way & Soledad Cyn

04/25/2023

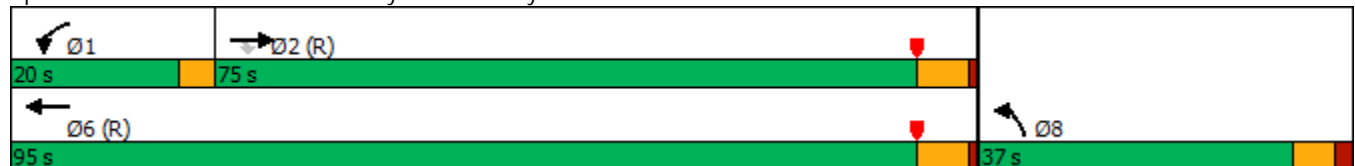


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Total Split (%)	56.8%	56.8%	15.2%	72.0%	28.0%	
Maximum Green (s)	69.0	69.0	16.5	89.0	31.0	
Yellow Time (s)	5.0	5.0	3.5	5.0	4.0	
All-Red Time (s)	1.0	1.0	0.0	1.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	0.5	-2.0	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Vehicle Extension (s)	5.0	5.0	1.5	5.0	2.0	
Minimum Gap (s)	4.0	4.0	1.5	4.0	2.0	
Time Before Reduce (s)	15.0	15.0	0.0	15.0	0.0	
Time To Reduce (s)	15.0	15.0	0.0	15.0	0.0	
Recall Mode	C-Max	C-Max	None	C-Max	None	
Walk Time (s)	7.0	7.0			7.0	
Flash Dont Walk (s)	13.0	13.0			24.0	
Pedestrian Calls (#/hr)	0	0			0	
Act Effect Green (s)	120.8	120.8	3.9	122.5	7.3	
Actuated g/C Ratio	0.92	0.92	0.03	0.93	0.06	
v/c Ratio	0.31	0.03	0.06	0.53	0.11	
Control Delay	0.6	0.1	80.7	1.1	60.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	0.6	0.1	80.7	1.1	60.2	
LOS	A	A	F	A	E	
Approach Delay	0.6			1.2	60.2	
Approach LOS	A			A	E	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 16 (12%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Natural Cycle: 80
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.53
 Intersection Signal Delay: 1.3
 Intersection LOS: A
 Intersection Capacity Utilization 54.2%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 9: Commuter Way & Soledad Cyn



Queues

9: Commuter Way & Soledad Cyn

04/25/2023



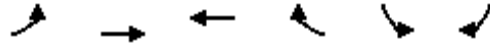
Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Group Flow (vph)	1446	40	3	2486	21
v/c Ratio	0.31	0.03	0.06	0.53	0.11
Control Delay	0.6	0.1	80.7	1.1	60.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	0.6	0.1	80.7	1.1	60.2
Queue Length 50th (ft)	12	0	2	12	8
Queue Length 95th (ft)	30	1	m6	18	23
Internal Link Dist (ft)	848			2745	312
Turn Bay Length (ft)		150	285		
Base Capacity (vph)	4654	1451	214	4720	858
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.31	0.03	0.01	0.53	0.02

Intersection Summary

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

Lanes, Volumes, Timings
 10: Soledad Cyn/Soledad Cyn Rd & Valley Center

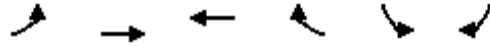
04/25/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø4
Lane Configurations	↖↖	↑↑↑	↑↑↑	↗	↖↖	↗	
Traffic Volume (vph)	73	888	1795	925	575	170	
Future Volume (vph)	73	888	1795	925	575	170	
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	250			310	235	0	
Storage Lanes	2			1	1	1	
Taper Length (ft)	25				25		
Lane Util. Factor	0.97	0.91	0.91	1.00	0.97	1.00	
Fr _t				0.850		0.850	
Fl _t Protected	0.950				0.950		
Satd. Flow (prot)	3433	5085	5085	1583	3433	1583	
Fl _t Permitted	0.950				0.950		
Satd. Flow (perm)	3433	5085	5085	1583	3433	1583	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)				514		185	
Link Speed (mph)		50	50		30		
Link Distance (ft)		2935	1764		1172		
Travel Time (s)		40.0	24.1		26.6		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	79	965	1951	1005	625	185	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	79	965	1951	1005	625	185	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Left	Left	Right	Left	Right	
Median Width(ft)		24	24		24		
Link Offset(ft)		0	0		0		
Crosswalk Width(ft)		16	16		16		
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (mph)	15			9	15	9	
Number of Detectors	1	1	1	1	1	1	
Detector Template							
Leading Detector (ft)	50	50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Turn Type	Prot	NA	NA	Free	Prot	pt+ov	
Protected Phases	5	2	6		3	3 5	4
Permitted Phases				Free			
Detector Phase	5	2	6		3	3 5	
Switch Phase							
Minimum Initial (s)	4.0	4.0	4.0		4.0		4.0
Minimum Split (s)	20.0	22.0	29.0		20.0		35.0
Total Split (s)	20.0	72.0	52.0		25.0		35.0

Lanes, Volumes, Timings
 10: Soledad Cyn/Soledad Cyn Rd & Valley Center

04/25/2023

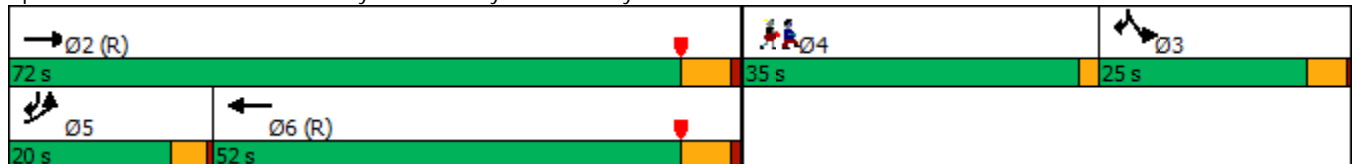


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø4
Total Split (%)	15.2%	54.5%	39.4%		18.9%		27%
Maximum Green (s)	16.0	66.0	46.0		20.5		33.0
Yellow Time (s)	3.5	5.0	5.0		4.0		2.0
All-Red Time (s)	0.5	1.0	1.0		0.5		0.0
Lost Time Adjust (s)	0.0	-2.0	-2.0		-0.5		
Total Lost Time (s)	4.0	4.0	4.0		4.0		
Lead/Lag	Lead		Lag		Lag		Lead
Lead-Lag Optimize?	Yes		Yes		Yes		Yes
Vehicle Extension (s)	3.0	3.0	3.0		3.0		0.2
Recall Mode	None	C-Max	C-Max		None		None
Walk Time (s)				7.0			
Flash Dont Walk (s)				16.0			
Pedestrian Calls (#/hr)				0			
Act Effct Green (s)	8.4	87.3	74.9	132.0	36.7	49.1	
Actuated g/C Ratio	0.06	0.66	0.57	1.00	0.28	0.37	
v/c Ratio	0.36	0.29	0.68	0.63	0.65	0.26	
Control Delay	50.6	17.8	5.8	6.7	29.2	1.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	50.6	17.8	5.8	6.7	29.2	1.7	
LOS	D	B	A	A	C	A	
Approach Delay	20.2		6.1		22.9		
Approach LOS	C		A		C		

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 37 (28%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Natural Cycle: 135
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.68
 Intersection Signal Delay: 12.0
 Intersection LOS: B
 Intersection Capacity Utilization 57.8%
 ICU Level of Service B
 Analysis Period (min) 15

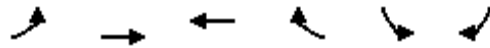
Splits and Phases: 10: Soledad Cyn/Soledad Cyn Rd & Valley Center



Queues

10: Soledad Cyn/Soledad Cyn Rd & Valley Center

04/25/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	79	965	1951	1005	625	185
v/c Ratio	0.36	0.29	0.68	0.63	0.65	0.26
Control Delay	50.6	17.8	5.8	6.7	29.2	1.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.6	17.8	5.8	6.7	29.2	1.7
Queue Length 50th (ft)	35	197	38	425	150	4
Queue Length 95th (ft)	62	224	m47	m466	244	9
Internal Link Dist (ft)		2855	1684		1092	
Turn Bay Length (ft)	250			310	235	
Base Capacity (vph)	416	3362	2883	1583	955	785
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.29	0.68	0.63	0.65	0.24

Intersection Summary

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

Lanes, Volumes, Timings
 11: Golden Valley Road & Valley Center Drive

04/25/2023



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4	Ø5	Ø12
Lane Configurations	↶↶↶	↷↷	↶↶	↑↑↑	↑↑↑	↷			
Traffic Volume (vph)	799	242	287	842	1052	487			
Future Volume (vph)	799	242	287	842	1052	487			
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900			
Storage Length (ft)	260	260	290			150			
Storage Lanes	2	1	2			1			
Taper Length (ft)	25		25						
Lane Util. Factor	0.94	0.88	0.97	0.91	0.91	1.00			
Frt		0.850				0.850			
Flt Protected	0.950		0.950						
Satd. Flow (prot)	4990	2787	3433	5085	5085	1583			
Flt Permitted	0.950		0.950						
Satd. Flow (perm)	4990	2787	3433	5085	5085	1583			
Right Turn on Red		Yes				Yes			
Satd. Flow (RTOR)		263				338			
Link Speed (mph)	30			50	50				
Link Distance (ft)	513			2601	1605				
Travel Time (s)	11.7			35.5	21.9				
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92			
Adj. Flow (vph)	868	263	312	915	1143	529			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	868	263	312	915	1143	529			
Enter Blocked Intersection	No	No	No	No	No	No			
Lane Alignment	Left	Right	Left	Left	Left	Right			
Median Width(ft)	36			24	24				
Link Offset(ft)	0			0	0				
Crosswalk Width(ft)	16			16	16				
Two way Left Turn Lane									
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00			
Turning Speed (mph)	15	9	15			9			
Number of Detectors	1	1	1	1	1	1			
Detector Template									
Leading Detector (ft)	50	50	50	50	50	50			
Trailing Detector (ft)	0	0	0	0	0	0			
Detector 1 Position(ft)	0	0	0	0	0	0			
Detector 1 Size(ft)	50	50	50	50	50	50			
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel									
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Turn Type	Prot	pt+ov	Prot	NA	NA	Perm			
Protected Phases	3	5 12	5 12	2	6		4	5	12
Permitted Phases						6			
Detector Phase	3	5 12	5 12	2	6	6			
Switch Phase									
Minimum Initial (s)	3.0			10.0	10.0	10.0	4.0	4.0	4.0
Minimum Split (s)	25.0			30.0	40.0	40.0	35.0	15.0	20.0
Total Split (s)	30.0			67.0	42.0	42.0	35.0	25.0	35.0

Lanes, Volumes, Timings
 11: Golden Valley Road & Valley Center Drive

04/25/2023

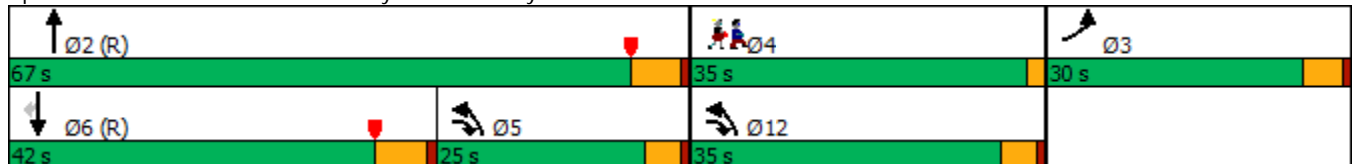


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4	Ø5	Ø12
Total Split (%)	22.7%			50.8%	31.8%	31.8%	27%	19%	27%
Maximum Green (s)	25.0			61.0	36.0	36.0	33.0	20.5	30.5
Yellow Time (s)	4.0			5.0	5.0	5.0	2.0	3.5	3.5
All-Red Time (s)	1.0			1.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)	-1.0			-2.0	-2.0	-2.0			
Total Lost Time (s)	4.0			4.0	4.0	4.0			
Lead/Lag					Lead	Lead		Lag	
Lead-Lag Optimize?					Yes	Yes		Yes	
Vehicle Extension (s)	3.0			3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None			C-Min	C-Min	C-Min	None	None	None
Walk Time (s)					7.0	7.0	7.0		5.0
Flash Dont Walk (s)					24.0	24.0	26.0		10.0
Pedestrian Calls (#/hr)					0	0	0		0
Act Effect Green (s)	30.5	27.4	27.4	82.7	62.1	62.1			
Actuated g/C Ratio	0.23	0.21	0.21	0.63	0.47	0.47			
v/c Ratio	0.75	0.33	0.44	0.29	0.48	0.57			
Control Delay	42.0	6.0	37.8	4.1	16.9	11.6			
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0			
Total Delay	42.0	6.0	37.8	4.1	16.9	11.6			
LOS	D	A	D	A	B	B			
Approach Delay	33.7			12.7	15.3				
Approach LOS	C			B	B				

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 26 (20%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 115
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.75
 Intersection Signal Delay: 19.6
 Intersection LOS: B
 Intersection Capacity Utilization 53.7%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 11: Golden Valley Road & Valley Center Drive



Queues

11: Golden Valley Road & Valley Center Drive

04/25/2023



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	868	263	312	915	1143	529
v/c Ratio	0.75	0.33	0.44	0.29	0.48	0.57
Control Delay	42.0	6.0	37.8	4.1	16.9	11.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.0	6.0	37.8	4.1	16.9	11.6
Queue Length 50th (ft)	257	10	141	33	161	113
Queue Length 95th (ft)	269	26	170	36	189	286
Internal Link Dist (ft)	433			2521	1525	
Turn Bay Length (ft)	260	260	290			150
Base Capacity (vph)	1159	1241	1331	3187	2391	923
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.75	0.21	0.23	0.29	0.48	0.57

Intersection Summary

Lanes, Volumes, Timings
12: Ruther Ave & Soledad Cyn Rd

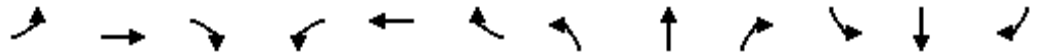
04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	71	1143	95	211	2557	18	258	138	97	83	96	70
Future Volume (vph)	71	1143	95	211	2557	18	258	138	97	83	96	70
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	285		300	250		0	0		0	125		0
Storage Lanes	1		1	2		0	1		2	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	0.91	0.95	0.95	0.88	0.95	0.95	1.00
Frt			0.850		0.999				0.850		0.937	
Flt Protected	0.950			0.950			0.950	0.978		0.950		
Satd. Flow (prot)	1770	5085	1583	3433	5080	0	1681	1731	2787	1681	1658	0
Flt Permitted	0.950			0.950			0.950	0.978		0.950		
Satd. Flow (perm)	1770	5085	1583	3433	5080	0	1681	1731	2787	1681	1658	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			103		1				105		23	
Link Speed (mph)		50		50				40			30	
Link Distance (ft)		1764		2200				220			327	
Travel Time (s)		24.1		30.0				3.8			7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	77	1242	103	229	2779	20	280	150	105	90	104	76
Shared Lane Traffic (%)							42%			0%		
Lane Group Flow (vph)	77	1242	103	229	2799	0	162	268	105	90	180	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24		24				12			12	
Link Offset(ft)		0		0				0			0	
Crosswalk Width(ft)		16		16				16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1	1	1	1	
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50		50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	pt+ov	Split	NA	
Protected Phases	1	6		5	2		3	3	3 5	4	4	
Permitted Phases			6									
Detector Phase	1	6	6	5	2		3	3	3 5	4	4	
Switch Phase												
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	12.0	42.0	42.0	12.0	27.0		35.0	35.0		15.0	15.0	
Total Split (s)	18.0	52.0	52.0	30.0	64.0		30.0	30.0		20.0	20.0	

Lanes, Volumes, Timings
12: Ruther Ave & Soledad Cyn Rd

04/25/2023

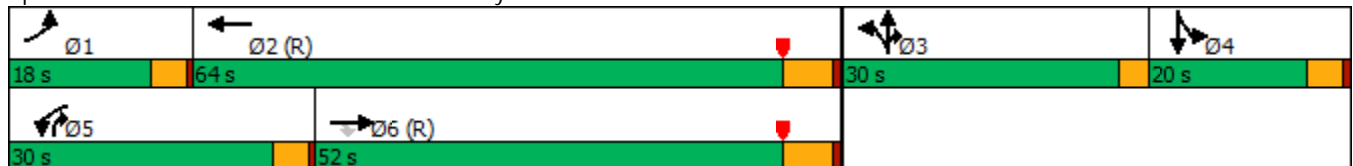


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	13.6%	39.4%	39.4%	22.7%	48.5%		22.7%	22.7%		15.2%	15.2%	
Maximum Green (s)	14.0	46.0	46.0	26.0	58.0		27.0	27.0		15.5	15.5	
Yellow Time (s)	3.5	5.0	5.0	3.5	5.0		3.0	3.0		3.5	3.5	
All-Red Time (s)	0.5	1.0	1.0	0.5	1.0		0.0	0.0		1.0	1.0	
Lost Time Adjust (s)	0.0	-2.0	-2.0	0.0	-2.0		1.0	1.0		-0.5	-0.5	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	4.5	4.5	1.5	4.5		3.0	3.0		3.0	3.0	
Minimum Gap (s)	1.5	3.0	3.0	1.5	3.0		3.0	3.0		3.0	3.0	
Time Before Reduce (s)	0.0	7.5	7.5	0.0	7.5		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	22.5	22.5	0.0	22.5		0.0	0.0		0.0	0.0	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None		None	None	
Walk Time (s)		7.0	7.0		7.0		5.0	5.0				
Flash Dont Walk (s)		25.0	25.0		11.0		27.0	27.0				
Pedestrian Calls (#/hr)		0	0		0		0	0				
Act Effect Green (s)	9.6	64.5	64.5	12.7	69.4		23.2	23.2	35.9	15.6	15.6	
Actuated g/C Ratio	0.07	0.49	0.49	0.10	0.53		0.18	0.18	0.27	0.12	0.12	
v/c Ratio	0.60	0.50	0.12	0.69	1.05		0.55	0.88	0.13	0.45	0.83	
Control Delay	94.9	8.1	0.9	68.7	63.2		56.4	81.5	3.8	61.9	79.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	94.9	8.1	0.9	68.7	63.2		56.4	81.5	3.8	61.9	79.7	
LOS	F	A	A	E	E		E	F	A	E	E	
Approach Delay		12.3			63.6			58.7			73.8	
Approach LOS		B			E			E			E	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
 Natural Cycle: 145
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.05
 Intersection Signal Delay: 49.8
 Intersection LOS: D
 Intersection Capacity Utilization 84.8%
 ICU Level of Service E
 Analysis Period (min) 15

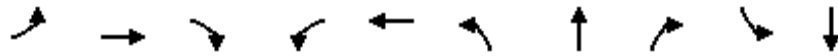
Splits and Phases: 12: Ruther Ave & Soledad Cyn Rd



Queues

12: Ruther Ave & Soledad Cyn Rd

04/25/2023



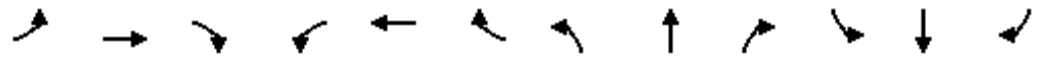
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	77	1242	103	229	2799	162	268	105	90	180
v/c Ratio	0.60	0.50	0.12	0.69	1.05	0.55	0.88	0.13	0.45	0.83
Control Delay	94.9	8.1	0.9	68.7	63.2	56.4	81.5	3.8	61.9	79.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	94.9	8.1	0.9	68.7	63.2	56.4	81.5	3.8	61.9	79.7
Queue Length 50th (ft)	66	146	1	99	~1019	131	233	0	75	140
Queue Length 95th (ft)	m110	202	m5	139	#1161	208	#369	16	136	#272
Internal Link Dist (ft)		1684			2120		140			247
Turn Bay Length (ft)	285		300	250					125	
Base Capacity (vph)	187	2484	826	676	2672	331	340	1161	207	224
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.41	0.50	0.12	0.34	1.05	0.49	0.79	0.09	0.43	0.80

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
 13: Golden Valley Road & Centre Pointe Parkway

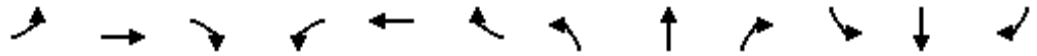
04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	72	163	256	101	66	359	1002	354	136	1090	130
Future Volume (vph)	49	72	163	256	101	66	359	1002	354	136	1090	130
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		260	150		250	375		300	700		0
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850		0.941				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	3433	1753	0	1770	3539	1583	1770	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1863	1583	3433	1753	0	1770	3539	1583	1770	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			103		25				385			136
Link Speed (mph)		30		30				50			50	
Link Distance (ft)		1149		802				7898			1445	
Travel Time (s)		26.1		18.2				107.7			19.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	53	78	177	278	110	72	390	1089	385	148	1185	141
Shared Lane Traffic (%)												
Lane Group Flow (vph)	53	78	177	278	182	0	390	1089	385	148	1185	141
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24		24				12			12	
Link Offset(ft)		0		0				0			0	
Crosswalk Width(ft)		16		16				16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50		50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	3	8	5	7	4		5	2	7	1	6	
Permitted Phases			8						2			6
Detector Phase	3	8	5	7	4		5	2	7	1	6	6
Switch Phase												
Minimum Initial (s)	4.0	6.0	4.0	4.0	6.0		4.0	10.0	4.0	4.0	10.0	10.0
Minimum Split (s)	12.0	25.0	20.0	20.0	39.0		20.0	33.0	20.0	15.0	34.0	34.0
Total Split (s)	19.0	25.0	33.0	34.0	40.0		33.0	40.0	34.0	33.0	40.0	40.0

Lanes, Volumes, Timings
 13: Golden Valley Road & Centre Pointe Parkway

04/25/2023

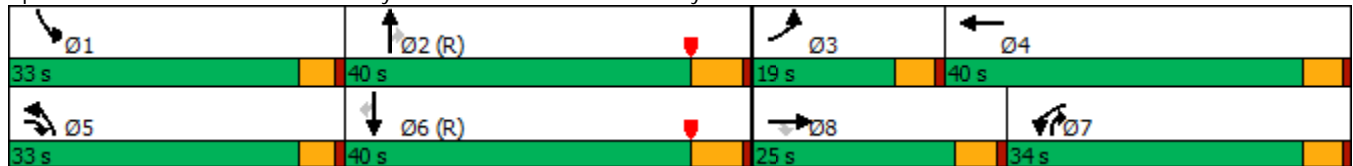


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	14.4%	18.9%	25.0%	25.8%	30.3%		25.0%	30.3%	25.8%	25.0%	30.3%	30.3%
Maximum Green (s)	14.0	20.0	28.5	29.0	35.0		28.5	34.0	29.0	28.5	34.0	34.0
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0		3.5	5.0	4.0	3.5	5.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0	-1.0	-0.5	-1.0	-1.0		-0.5	-2.0	-1.0	-0.5	-2.0	-2.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Min	None	None	C-Min	C-Min
Walk Time (s)					7.0			7.0			7.0	7.0
Flash Dont Walk (s)					27.0			20.0			21.0	21.0
Pedestrian Calls (#/hr)					0			0			0	0
Act Effct Green (s)	10.3	11.9	48.6	17.7	19.0		38.3	71.9	90.4	16.8	50.5	50.5
Actuated g/C Ratio	0.08	0.09	0.37	0.13	0.14		0.29	0.54	0.68	0.13	0.38	0.38
v/c Ratio	0.38	0.47	0.27	0.60	0.66		0.76	0.56	0.32	0.66	0.88	0.20
Control Delay	64.9	65.4	7.0	59.1	57.2		36.3	46.4	5.8	62.3	56.5	19.0
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	64.9	65.4	7.0	59.1	57.2		36.3	46.4	5.8	62.3	56.5	19.0
LOS	E	E	A	E	E		D	D	A	E	E	B
Approach Delay		31.8			58.3			35.9			53.5	
Approach LOS		C			E			D			D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 125 (95%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 125
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.88
 Intersection Signal Delay: 44.4
 Intersection LOS: D
 Intersection Capacity Utilization 76.0%
 ICU Level of Service D
 Analysis Period (min) 15

Splits and Phases: 13: Golden Valley Road & Centre Pointe Parkway



Queues

13: Golden Valley Road & Centre Pointe Parkway

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	53	78	177	278	182	390	1089	385	148	1185	141
v/c Ratio	0.38	0.47	0.27	0.60	0.66	0.76	0.56	0.32	0.66	0.88	0.20
Control Delay	64.9	65.4	7.0	59.1	57.2	36.3	46.4	5.8	62.3	56.5	19.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	64.9	65.4	7.0	59.1	57.2	36.3	46.4	5.8	62.3	56.5	19.0
Queue Length 50th (ft)	44	65	27	117	128	348	491	81	125	562	50
Queue Length 95th (ft)	86	115	47	157	200	m405	m549	m108	134	#817	124
Internal Link Dist (ft)		1069			722		7818			1365	
Turn Bay Length (ft)	150		260	150		375		300	700		
Base Capacity (vph)	201	296	648	780	496	513	1928	1317	388	1353	689
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.26	0.26	0.27	0.36	0.37	0.76	0.56	0.29	0.38	0.88	0.20

Intersection Summary


































95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

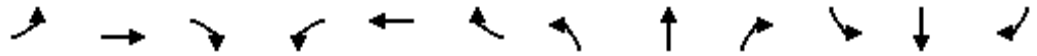
Lanes, Volumes, Timings
 14: Sierra Highway & Golden Valley Road

04/25/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 	  	  	  	 	  	 				
Traffic Volume (vph)	303	581	817	350	1093	63	562	205	18	44	1125	495
Future Volume (vph)	303	581	817	350	1093	63	562	205	18	44	1125	495
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	280		280	285		300	285		0	410		540
Storage Lanes	2		2	2		1	2		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	0.88	0.97	0.91	1.00	0.97	0.95	0.95	1.00	0.95	1.00
Fr _t			0.850			0.850		0.988				0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	2787	3433	5085	1583	3433	3497	0	1770	3539	1583
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	2787	3433	5085	1583	3433	3497	0	1770	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			476			136		7				538
Link Speed (mph)		50		50			30			30		
Link Distance (ft)		2032		1202			1801			1671		
Travel Time (s)		27.7		16.4			40.9			38.0		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	329	632	888	380	1188	68	611	223	20	48	1223	538
Shared Lane Traffic (%)												
Lane Group Flow (vph)	329	632	888	380	1188	68	611	243	0	48	1223	538
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24		24			24			24		24
Link Offset(ft)		0		0			0			0		0
Crosswalk Width(ft)		16		16			16			16		16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1		1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50		50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50		50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	custom
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						8
Detector Phase	7	4	4	3	8	8	5	2		1	6	8
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	8.5	29.6	29.6	8.5	40.0	40.0	15.0	49.0		8.5	46.0	40.0
Total Split (s)	29.0	41.0	41.0	29.0	41.0	41.0	25.0	44.0		18.0	37.0	41.0

Lanes, Volumes, Timings
 14: Sierra Highway & Golden Valley Road

04/25/2023

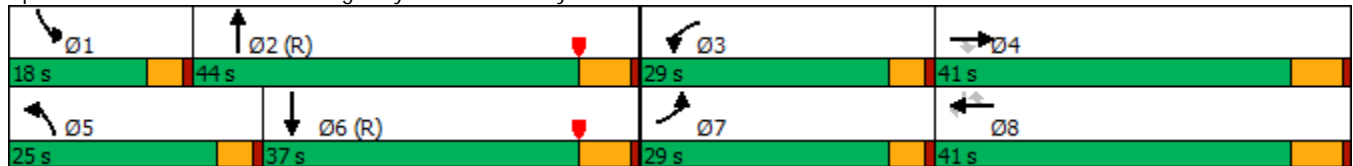


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	22.0%	31.1%	31.1%	22.0%	31.1%	31.1%	18.9%	33.3%		13.6%	28.0%	31.1%
Maximum Green (s)	24.5	35.0	35.0	24.5	35.0	35.0	20.5	38.0		13.5	31.0	35.0
Yellow Time (s)	3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.0		3.5	5.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	-0.5	-2.0	-2.0	-0.5	-2.0	-2.0	-0.5	-2.0		-0.5	-2.0	-2.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	None
Walk Time (s)					5.0	5.0		5.0			5.0	5.0
Flash Dont Walk (s)					29.0	29.0		33.0			30.0	29.0
Pedestrian Calls (#/hr)					0	0		0			0	0
Act Effct Green (s)	18.4	35.7	35.7	20.3	37.6	37.6	21.0	52.6		9.5	39.0	37.6
Actuated g/C Ratio	0.14	0.27	0.27	0.15	0.28	0.28	0.16	0.40		0.07	0.30	0.28
v/c Ratio	0.69	0.66	0.81	0.72	0.82	0.12	1.12	0.17		0.38	1.17	0.64
Control Delay	45.4	34.7	24.8	61.1	49.5	0.5	125.4	27.6		66.2	128.0	6.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	45.4	34.7	24.8	61.1	49.5	0.5	125.4	27.6		66.2	128.0	6.9
LOS	D	C	C	E	D	A	F	C		E	F	A
Approach Delay		31.9			50.2			97.6			90.3	
Approach LOS		C			D			F			F	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 96 (73%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 130
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.17
 Intersection Signal Delay: 63.1
 Intersection LOS: E
 Intersection Capacity Utilization 90.2%
 ICU Level of Service E
 Analysis Period (min) 15

Splits and Phases: 14: Sierra Highway & Golden Valley Road



Queues

14: Sierra Highway & Golden Valley Road

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	329	632	888	380	1188	68	611	243	48	1223	538
v/c Ratio	0.69	0.66	0.81	0.72	0.82	0.12	1.12	0.17	0.38	1.17	0.64
Control Delay	45.4	34.7	24.8	61.1	49.5	0.5	125.4	27.6	66.2	128.0	6.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.4	34.7	24.8	61.1	49.5	0.5	125.4	27.6	66.2	128.0	6.9
Queue Length 50th (ft)	119	252	260	161	350	0	-309	69	40	-647	0
Queue Length 95th (ft)	m120	m297	m322	207	400	0	#428	113	81	#869	91
Internal Link Dist (ft)		1952			1122			1721		1591	
Turn Bay Length (ft)	280		280	285		300	285		410		540
Base Capacity (vph)	650	991	1123	650	1457	550	546	1397	187	1046	837
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.64	0.79	0.58	0.82	0.12	1.12	0.17	0.26	1.17	0.64

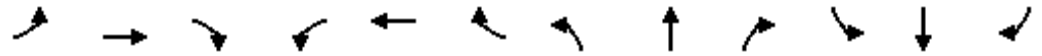
Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings

15: SR-14 SB Ramp & Newhall Ranch Road/Golden Valley Road

04/25/2023

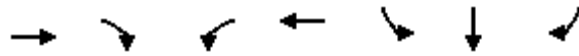


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗	↖	↑↑					↖	↗	↗
Traffic Volume (vph)	0	439	348	298	1020	0	0	0	0	41	194	489
Future Volume (vph)	0	439	348	298	1020	0	0	0	0	41	194	489
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	220		0	0		0	300		0
Storage Lanes	0		1	1		0	0		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850									0.850
Flt Protected				0.950						0.950	0.999	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	1681	1768	1583
Flt Permitted				0.950						0.950	0.999	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	1681	1768	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			378									61
Link Speed (mph)		50			50			30			30	
Link Distance (ft)		807			717			580			626	
Travel Time (s)		11.0			9.8			13.2			14.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	477	378	324	1109	0	0	0	0	45	211	532
Shared Lane Traffic (%)										10%		
Lane Group Flow (vph)	0	477	378	324	1109	0	0	0	0	40	216	532
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94		94							94	
Detector 2 Size(ft)		6		6							6	
Detector 2 Type		Cl+Ex		Cl+Ex							Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0		0.0							0.0	
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		6		5	2						4	
Permitted Phases		6								4		4

Queues

15: SR-14 SB Ramp & Newhall Ranch Road/Golden Valley Road

04/25/2023

























Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	477	378	324	1109	40	216	532
v/c Ratio	0.59	0.58	0.85	0.64	0.06	0.29	0.76
Control Delay	35.0	7.4	42.6	13.7	15.8	18.5	27.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.0	7.4	42.6	13.7	15.8	18.5	27.7
Queue Length 50th (ft)	131	0	184	275	13	83	223
Queue Length 95th (ft)	183	74	#306	316	33	137	357
Internal Link Dist (ft)	727			637		546	
Turn Bay Length (ft)			220		300		
Base Capacity (vph)	808	653	413	1730	709	746	703
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.59	0.58	0.78	0.64	0.06	0.29	0.76

Intersection Summary

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

Lanes, Volumes, Timings
16: SR 14 NB Ramp & Golden Valley Road

04/25/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 			 							
Traffic Volume (vph)	218	256	0	0	1001	65	299	1	149	0	0	0
Future Volume (vph)	218	256	0	0	1001	65	299	1	149	0	0	0
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	230		0	0		280	0		140	0		0
Storage Lanes	2		0	0		1	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt						0.850			0.850			
Flt Protected	0.950						0.950	0.953				
Satd. Flow (prot)	3433	3539	0	0	3539	1583	1681	1686	1583	0	0	0
Flt Permitted	0.950						0.950	0.953				
Satd. Flow (perm)	3433	3539	0	0	3539	1583	1681	1686	1583	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						71			162			
Link Speed (mph)		50			50			30				30
Link Distance (ft)		717			541			632				618
Travel Time (s)		9.8			7.4			14.4				14.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	237	278	0	0	1088	71	325	1	162	0	0	0
Shared Lane Traffic (%)							50%					
Lane Group Flow (vph)	237	278	0	0	1088	71	162	164	162	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1	1	2	1			
Detector Template	Left	Thru			Thru	Right	Left	Thru	Right			
Leading Detector (ft)	20	100			100	20	20	100	20			
Trailing Detector (ft)	0	0			0	0	0	0	0			
Detector 1 Position(ft)	0	0			0	0	0	0	0			
Detector 1 Size(ft)	20	6			6	20	20	6	20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Prot	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	7	4			8			2				
Permitted Phases						8	2		2			

Lanes, Volumes, Timings
 16: SR 14 NB Ramp & Golden Valley Road

04/25/2023

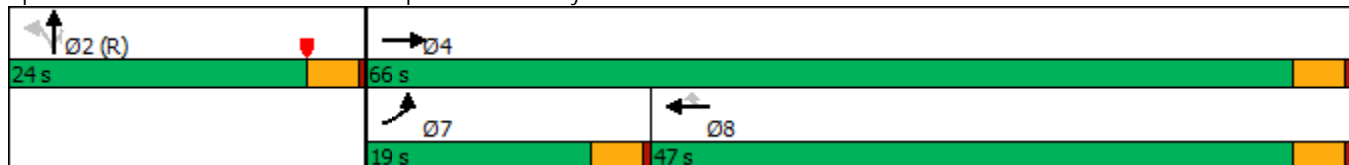


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4			8	8	2	2	2			
Switch Phase												
Minimum Initial (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Minimum Split (s)	12.0	20.0			20.0	20.0	20.0	20.0	20.0			
Total Split (s)	19.0	66.0			47.0	47.0	24.0	24.0	24.0			
Total Split (%)	21.1%	73.3%			52.2%	52.2%	26.7%	26.7%	26.7%			
Maximum Green (s)	15.0	62.0			43.0	43.0	20.0	20.0	20.0			
Yellow Time (s)	3.5	3.5			3.5	3.5	3.5	3.5	3.5			
All-Red Time (s)	0.5	0.5			0.5	0.5	0.5	0.5	0.5			
Lost Time Adjust (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Total Lost Time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Lead/Lag	Lead				Lag		Lag					
Lead-Lag Optimize?	Yes				Yes		Yes					
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Recall Mode	None	None			None	None	C-Max	C-Max	C-Max			
Walk Time (s)		5.0			5.0	5.0	5.0	5.0	5.0			
Flash Dont Walk (s)		10.0			10.0	10.0	10.0	10.0	10.0			
Pedestrian Calls (#/hr)		0			0	0	0	0	0			
Act Effct Green (s)	11.5	51.7			36.2	36.2	30.3	30.3	30.3			
Actuated g/C Ratio	0.13	0.57			0.40	0.40	0.34	0.34	0.34			
v/c Ratio	0.54	0.14			0.76	0.10	0.29	0.29	0.25			
Control Delay	16.1	10.1			26.7	3.9	26.5	26.5	5.9			
Queue Delay	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Total Delay	16.1	10.1			26.7	3.9	26.5	26.5	5.9			
LOS	B	B			C	A	C	C	A			
Approach Delay		12.9			25.3			19.6				
Approach LOS		B			C			B				

Intersection Summary

Area Type: Other
 Cycle Length: 90
 Actuated Cycle Length: 90
 Offset: 0 (0%), Referenced to phase 2:NBTL and 6:, Start of Yellow
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.76
 Intersection Signal Delay: 21.1
 Intersection LOS: C
 Intersection Capacity Utilization 65.1%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 16: SR 14 NB Ramp & Golden Valley Road



Queues

16: SR 14 NB Ramp & Golden Valley Road

04/25/2023

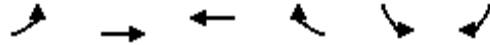


Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	237	278	1088	71	162	164	162
v/c Ratio	0.54	0.14	0.76	0.10	0.29	0.29	0.25
Control Delay	16.1	10.1	26.7	3.9	26.5	26.5	5.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	16.1	10.1	26.7	3.9	26.5	26.5	5.9
Queue Length 50th (ft)	68	78	272	0	70	71	0
Queue Length 95th (ft)	102	118	303	22	146	147	49
Internal Link Dist (ft)		637	461			552	
Turn Bay Length (ft)	230			280			140
Base Capacity (vph)	572	2437	1690	793	566	568	640
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.41	0.11	0.64	0.09	0.29	0.29	0.25

Intersection Summary

Lanes, Volumes, Timings
1: Valencia Blvd & 5 Fwy SB Ramp

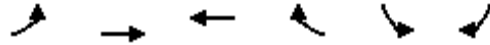
04/25/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑		↑↑	↑
Traffic Volume (vph)	0	519	808	193	249	78
Future Volume (vph)	0	519	808	193	249	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	15	12	14
Storage Length (ft)	0			0	0	455
Storage Lanes	0			0	2	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.91	0.95	0.95	0.97	1.00
Fr _t			0.971			0.850
Fl _t Protected					0.950	
Satd. Flow (prot)	0	5085	3437	0	3433	1689
Fl _t Permitted					0.950	
Satd. Flow (perm)	0	5085	3437	0	3433	1689
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			72			85
Link Speed (mph)		50	50		30	
Link Distance (ft)		616	917		417	
Travel Time (s)		8.4	12.5		9.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	564	878	210	271	85
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	564	1088	0	271	85
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		24	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	0.88	1.00	0.92
Turning Speed (mph)	15			9	15	9
Number of Detectors		1	1		1	1
Detector Template						
Leading Detector (ft)		50	50		50	50
Trailing Detector (ft)		0	0		0	0
Detector 1 Position(ft)		0	0		0	0
Detector 1 Size(ft)		50	50		50	50
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)		0.0	0.0		0.0	0.0
Detector 1 Queue (s)		0.0	0.0		0.0	0.0
Detector 1 Delay (s)		0.0	0.0		0.0	0.0
Turn Type		NA	NA		Prot	Perm
Protected Phases		2	6		4	
Permitted Phases						4
Detector Phase		2	6		4	4
Switch Phase						
Minimum Initial (s)		4.0	4.0		4.0	4.0
Minimum Split (s)		20.0	35.2		20.0	20.0

Lanes, Volumes, Timings
 1: Valencia Blvd & 5 Fwy SB Ramp

04/25/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Total Split (s)		41.0	41.0		25.0	25.0
Total Split (%)		62.1%	62.1%		37.9%	37.9%
Maximum Green (s)		34.8	34.8		19.2	19.2
Yellow Time (s)		5.2	5.2		4.8	4.8
All-Red Time (s)		1.0	1.0		1.0	1.0
Lost Time Adjust (s)		-2.2	-2.2		-1.8	-1.8
Total Lost Time (s)		4.0	4.0		4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Recall Mode		C-Max	C-Max		Min	Min
Walk Time (s)			5.0			
Flash Dont Walk (s)			18.0			
Pedestrian Calls (#/hr)			0			
Act Effect Green (s)		45.7	45.7		12.3	12.3
Actuated g/C Ratio		0.69	0.69		0.19	0.19
v/c Ratio		0.16	0.45		0.42	0.22
Control Delay		3.9	4.8		25.4	7.3
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		3.9	4.8		25.4	7.3
LOS		A	A		C	A
Approach Delay		3.9	4.8		21.1	
Approach LOS		A	A		C	

Intersection Summary

Area Type:	Other
Cycle Length:	66
Actuated Cycle Length:	66
Offset:	56 (85%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle:	60
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.45
Intersection Signal Delay:	7.4
Intersection LOS:	A
Intersection Capacity Utilization:	42.3%
ICU Level of Service:	A
Analysis Period (min):	15

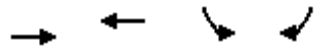
Splits and Phases: 1: Valencia Blvd & 5 Fwy SB Ramp



Queues

1: Valencia Blvd & 5 Fwy SB Ramp

04/25/2023














Lane Group	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	564	1088	271	85
v/c Ratio	0.16	0.45	0.42	0.22
Control Delay	3.9	4.8	25.4	7.3
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	3.9	4.8	25.4	7.3
Queue Length 50th (ft)	23	89	50	0
Queue Length 95th (ft)	39	90	77	30
Internal Link Dist (ft)	536	837	337	
Turn Bay Length (ft)				455
Base Capacity (vph)	3520	2402	1092	595
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.16	0.45	0.25	0.14
Intersection Summary				

Lanes, Volumes, Timings

2: 5 Fwy NB Ramp & Valencia Blvd

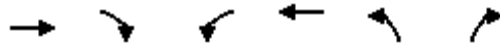
04/25/2023

						
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	733	31	204	1607	190	892
Future Volume (vph)	733	31	204	1607	190	892
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	12	12	12	12	14
Storage Length (ft)		0	200		220	220
Storage Lanes		0	2		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	0.97	0.86	0.97	0.88
Fr _t	0.994					0.850
Fl _t Protected			0.950		0.950	
Satd. Flow (prot)	5392	0	3433	6408	3433	2972
Fl _t Permitted			0.950		0.950	
Satd. Flow (perm)	5392	0	3433	6408	3433	2972
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	12					650
Link Speed (mph)	50			50	30	
Link Distance (ft)	917			476	493	
Travel Time (s)	12.5			6.5	11.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	797	34	222	1747	207	970
Shared Lane Traffic (%)						
Lane Group Flow (vph)	831	0	222	1747	207	970
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	24			24	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.92	1.00	1.00	1.00	1.00	0.92
Turning Speed (mph)		9	15		15	9
Number of Detectors	1		1	1	1	1
Detector Template						
Leading Detector (ft)	50		50	50	50	50
Trailing Detector (ft)	0		0	0	0	0
Detector 1 Position(ft)	0		0	0	0	0
Detector 1 Size(ft)	50		50	50	50	50
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0
Turn Type	NA		Prot	NA	Prot	Prot
Protected Phases	2		1	6	8	8
Permitted Phases						
Detector Phase	2		1	6	8	8
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	36.0		14.0	20.0	20.0	20.0

Lanes, Volumes, Timings

2: 5 Fwy NB Ramp & Valencia Blvd

04/25/2023

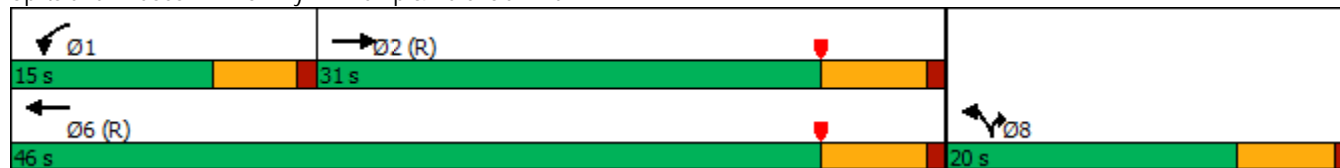


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Total Split (s)	31.0		15.0	46.0	20.0	20.0
Total Split (%)	47.0%		22.7%	69.7%	30.3%	30.3%
Maximum Green (s)	24.8		9.9	39.8	14.2	14.2
Yellow Time (s)	5.2		4.1	5.2	4.8	4.8
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-2.2		-1.1	-2.2	-1.8	-1.8
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max		None	C-Max	None	None
Walk Time (s)	5.0					
Flash Dont Walk (s)	24.0					
Pedestrian Calls (#/hr)	0					
Act Effect Green (s)	29.5		10.0	43.5	14.5	14.5
Actuated g/C Ratio	0.45		0.15	0.66	0.22	0.22
v/c Ratio	0.34		0.43	0.41	0.27	0.84
Control Delay	9.4		29.9	6.6	21.8	15.4
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	9.4		29.9	6.6	21.8	15.4
LOS	A		C	A	C	B
Approach Delay	9.4			9.2	16.5	
Approach LOS	A			A	B	

Intersection Summary

Area Type: Other
 Cycle Length: 66
 Actuated Cycle Length: 66
 Offset: 45 (68%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Natural Cycle: 70
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.84
 Intersection Signal Delay: 11.4
 Intersection LOS: B
 Intersection Capacity Utilization 52.7%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 2: 5 Fwy NB Ramp & Valencia Blvd



Queues

2: 5 Fwy NB Ramp & Valencia Blvd

04/25/2023



Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	831	222	1747	207	970
v/c Ratio	0.34	0.43	0.41	0.27	0.84
Control Delay	9.4	29.9	6.6	21.8	15.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	9.4	29.9	6.6	21.8	15.4
Queue Length 50th (ft)	81	63	136	34	62
Queue Length 95th (ft)	103	m87	185	60	#139
Internal Link Dist (ft)	837		396	413	
Turn Bay Length (ft)		200		220	220
Base Capacity (vph)	2414	572	4225	832	1212
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.34	0.39	0.41	0.25	0.80

Intersection Summary







































95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

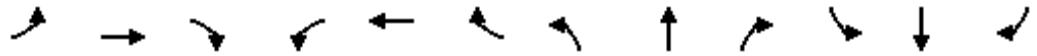
Lanes, Volumes, Timings
3: McBean Pkwy & Valencia Blvd

04/25/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	  		  	  		 	  	  	  	 	
Traffic Volume (vph)	471	1398	173	366	1069	205	167	953	467	241	888	556
Future Volume (vph)	471	1398	173	366	1069	205	167	953	467	241	888	556
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	11	11	13	11	11	12	11	11	12
Storage Length (ft)	350		280	290		225	130		200	190		300
Storage Lanes	2		1	2		1	2		2	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	0.88	0.97	0.91	0.88
Fr _t			0.850			0.850			0.850			0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3319	4916	1583	3319	4916	1636	3319	4916	2787	3319	4916	2787
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3319	4916	1583	3319	4916	1636	3319	4916	2787	3319	4916	2787
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			70			70			70			70
Link Speed (mph)		50			50			45			45	
Link Distance (ft)		1919			721			765			1359	
Travel Time (s)		26.2			9.8			11.6			20.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	512	1520	188	398	1162	223	182	1036	508	262	965	604
Shared Lane Traffic (%)												
Lane Group Flow (vph)	512	1520	188	398	1162	223	182	1036	508	262	965	604
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		22			22			22			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.00	1.04	1.04	0.96	1.04	1.04	1.00	1.04	1.04	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	1	6	7	5	2	3	7	4	5	3	8	1
Permitted Phases			6			2			4			8
Detector Phase	1	6	7	5	2	3	7	4	5	3	8	1
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	43.0	12.0	12.0	44.0	12.0	12.0	41.0	12.0	12.0	44.0	12.0

Lanes, Volumes, Timings
 3: McBean Pkwy & Valencia Blvd

04/25/2023

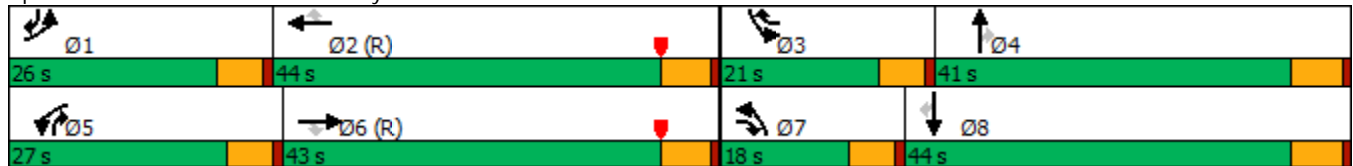


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	26.0	43.0	18.0	27.0	44.0	21.0	18.0	41.0	27.0	21.0	44.0	26.0
Total Split (%)	19.7%	32.6%	13.6%	20.5%	33.3%	15.9%	13.6%	31.1%	20.5%	15.9%	33.3%	19.7%
Maximum Green (s)	20.5	37.0	12.5	21.5	38.0	15.5	12.5	35.0	21.5	15.5	38.0	20.5
Yellow Time (s)	4.5	5.0	4.5	4.5	5.0	4.5	4.5	5.0	4.5	4.5	5.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.5	-2.0	-1.5	-1.5	-2.0	-1.5	-1.5	-2.0	-1.5	-1.5	-2.0	-1.5
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Max	None	None	C-Max	None	None	None	None	None	None	None
Walk Time (s)		5.0			5.0			5.0			5.0	
Flash Dont Walk (s)		32.0			33.0			30.0			33.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effect Green (s)	23.4	43.6	60.6	21.6	41.9	61.7	13.0	34.9	60.5	15.9	37.7	65.1
Actuated g/C Ratio	0.18	0.33	0.46	0.16	0.32	0.47	0.10	0.26	0.46	0.12	0.29	0.49
v/c Ratio	0.87	0.94	0.25	0.73	0.75	0.28	0.56	0.80	0.39	0.66	0.69	0.43
Control Delay	72.5	52.9	16.2	76.7	21.8	4.1	63.4	50.3	20.4	41.4	54.4	48.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	72.5	52.9	16.2	76.7	21.8	4.1	63.4	50.3	20.4	41.4	54.4	48.8
LOS	E	D	B	E	C	A	E	D	C	D	D	D
Approach Delay		54.3			31.8			42.9			50.7	
Approach LOS		D			C			D			D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 61 (46%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
 Natural Cycle: 115
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.94
 Intersection Signal Delay: 45.5
 Intersection LOS: D
 Intersection Capacity Utilization 76.1%
 ICU Level of Service D
 Analysis Period (min) 15

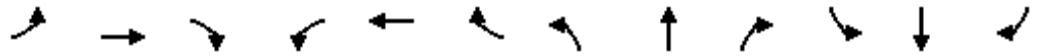
Splits and Phases: 3: McBean Pkwy & Valencia Blvd



Queues

3: McBean Pkwy & Valencia Blvd

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	512	1520	188	398	1162	223	182	1036	508	262	965	604
v/c Ratio	0.87	0.94	0.25	0.73	0.75	0.28	0.56	0.80	0.39	0.66	0.69	0.43
Control Delay	72.5	52.9	16.2	76.7	21.8	4.1	63.4	50.3	20.4	41.4	54.4	48.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	72.5	52.9	16.2	76.7	21.8	4.1	63.4	50.3	20.4	41.4	54.4	48.8
Queue Length 50th (ft)	233	~509	55	130	332	65	77	299	128	106	319	287
Queue Length 95th (ft)	#335	#613	m91	192	326	m59	117	352	176	153	367	353
Internal Link Dist (ft)		1839			641			685			1279	
Turn Bay Length (ft)	350		280	290		225	130		200	190		300
Base Capacity (vph)	587	1623	776	581	1559	815	352	1377	1347	427	1489	1410
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.87	0.94	0.24	0.69	0.75	0.27	0.52	0.75	0.38	0.61	0.65	0.43

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
4: McBean Parkway & Magic Mountain Pkwy

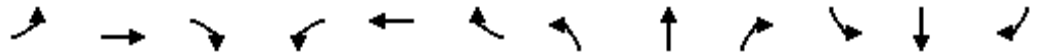
04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	885	668	139	230	548	361	144	1355	147	278	1305	284
Future Volume (vph)	885	668	139	230	548	361	144	1355	147	278	1305	284
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	16	12	12	14	11	11	16	11	11	16
Storage Length (ft)	360		360	210		0	175		175	300		340
Storage Lanes	1		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.91	1.00	0.97	0.86	1.00	0.97	0.86	1.00
Fr _t			0.850			0.850			0.850			0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	1794	3433	5085	1689	3319	6194	1794	3319	6194	1794
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1794	3433	5085	1689	3319	6194	1794	3319	6194	1794
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			151			254			198			299
Link Speed (mph)		50			45			45			50	
Link Distance (ft)		809			1452			1203			1219	
Travel Time (s)		11.0			22.0			18.2			16.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	962	726	151	250	596	392	157	1473	160	302	1418	309
Shared Lane Traffic (%)												
Lane Group Flow (vph)	962	726	151	250	596	392	157	1473	160	302	1418	309
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			22			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	0.85	1.00	1.00	0.92	1.04	1.04	0.85	1.04	1.04	0.85
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			Free			Free
Detector Phase	5	2	2	1	6	6	3	8		7	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Minimum Split (s)	12.0	41.0	41.0	12.0	40.0	40.0	12.0	37.0		12.0	37.0	

Lanes, Volumes, Timings
4: McBean Parkway & Magic Mountain Pkwy

04/25/2023

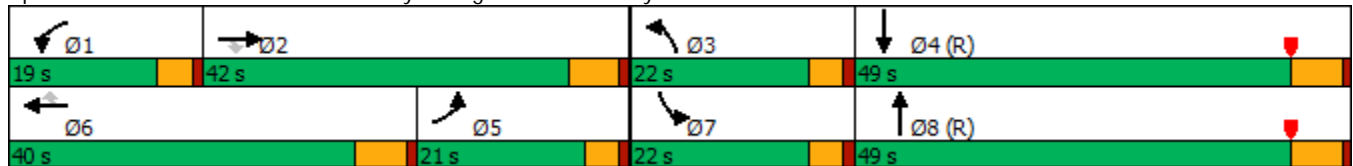


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	21.0	42.0	42.0	19.0	40.0	40.0	22.0	49.0		22.0	49.0	
Total Split (%)	15.9%	31.8%	31.8%	14.4%	30.3%	30.3%	16.7%	37.1%		16.7%	37.1%	
Maximum Green (s)	16.5	36.0	36.0	14.5	34.0	34.0	17.5	43.0		17.5	43.0	
Yellow Time (s)	3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.0		3.5	5.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	-0.5	-2.0	-2.0	-0.5	-2.0	-2.0	-0.5	-2.0		-0.5	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	Max	Max	None	Max	Max	None	C-Max		None	C-Max	
Walk Time (s)		5.0	5.0		5.0	5.0		5.0			5.0	
Flash Dont Walk (s)		30.0	30.0		29.0	29.0		26.0			26.0	
Pedestrian Calls (#/hr)		0	0		0	0		0			0	
Act Effect Green (s)	17.0	39.0	39.0	14.0	36.0	36.0	12.1	46.5	132.0	16.5	50.9	132.0
Actuated g/C Ratio	0.13	0.30	0.30	0.11	0.27	0.27	0.09	0.35	1.00	0.12	0.39	1.00
v/c Ratio	2.18	0.70	0.24	0.69	0.43	0.61	0.52	0.68	0.09	0.73	0.59	0.17
Control Delay	563.9	45.7	6.2	72.9	51.8	29.5	77.5	29.1	0.1	66.1	33.8	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	563.9	45.7	6.2	72.9	51.8	29.5	77.5	29.1	0.1	66.1	33.8	0.2
LOS	F	D	A	E	D	C	E	C	A	E	C	A
Approach Delay		313.5			49.0			30.8			33.5	
Approach LOS		F			D			C			C	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 30 (23%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow
 Natural Cycle: 125
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 2.18
 Intersection Signal Delay: 110.3
 Intersection LOS: F
 Intersection Capacity Utilization 77.2%
 ICU Level of Service D
 Analysis Period (min) 15

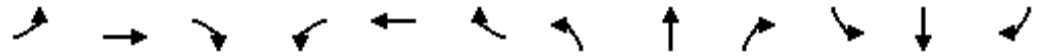
Splits and Phases: 4: McBean Parkway & Magic Mountain Pkwy



Queues

4: McBean Parkway & Magic Mountain Pkwy

04/25/2023


































Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	962	726	151	250	596	392	157	1473	160	302	1418	309
v/c Ratio	2.18	0.70	0.24	0.69	0.43	0.61	0.52	0.68	0.09	0.73	0.59	0.17
Control Delay	563.9	45.7	6.2	72.9	51.8	29.5	77.5	29.1	0.1	66.1	33.8	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	563.9	45.7	6.2	72.9	51.8	29.5	77.5	29.1	0.1	66.1	33.8	0.2
Queue Length 50th (ft)	~679	293	0	107	162	125	73	163	0	128	279	0
Queue Length 95th (ft)	#810	366	51	155	212	244	m95	192	m0	178	331	0
Internal Link Dist (ft)		729			1372			1123			1139	
Turn Bay Length (ft)	360		360	210			175		175	300		340
Base Capacity (vph)	442	1044	635	390	1386	645	452	2179	1794	452	2390	1794
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	2.18	0.70	0.24	0.64	0.43	0.61	0.35	0.68	0.09	0.67	0.59	0.17

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
5: Valencia Blvd & Magic Mountain Pkwy

04/25/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 		 	 			  			  	 
Traffic Volume (vph)	658	668	30	231	509	91	58	1797	251	92	1414	428
Future Volume (vph)	658	668	30	231	509	91	58	1797	251	92	1414	428
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	13	12	11	12	11	11	14	12	11	11	12
Storage Length (ft)	310		0	250		200	180		200	190		190
Storage Lanes	1		0	2		0	1		1	1		2
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	0.95	0.97	0.95	0.95	1.00	0.91	1.00	1.00	0.91	0.88
Fr't		0.993			0.977				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3319	3632	0	3319	3458	0	1711	5424	1583	1711	4916	2787
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3319	3632	0	3319	3458	0	1711	5424	1583	1711	4916	2787
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3			15				161			367
Link Speed (mph)		50			45			45			45	
Link Distance (ft)		1046			2778			1989			572	
Travel Time (s)		14.3			42.1			30.1			8.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	715	726	33	251	553	99	63	1953	273	100	1537	465
Shared Lane Traffic (%)												
Lane Group Flow (vph)	715	759	0	251	652	0	63	1953	273	100	1537	465
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		22			22			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	0.96	1.00	1.04	1.00	1.04	1.04	0.92	1.00	1.04	1.04	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Size(ft)	50	50		50	50		50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	3	8		7	4		1	6		5	2	3
Permitted Phases									6			2
Detector Phase	3	8		7	4		1	6	6	5	2	3
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	35.0		12.0	39.0		12.0	38.0	38.0	12.0	41.0	12.0

Lanes, Volumes, Timings
 5: Valencia Blvd & Magic Mountain Pkwy

04/25/2023

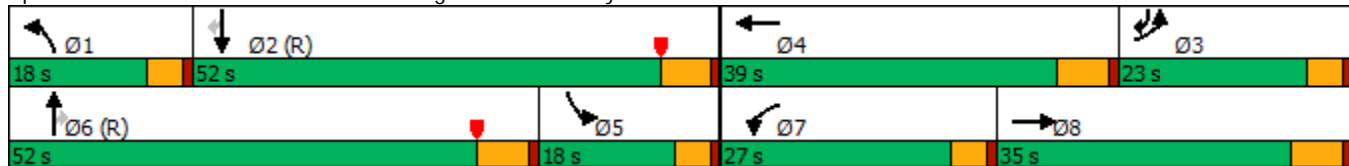


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	23.0	35.0		27.0	39.0		18.0	52.0	52.0	18.0	52.0	23.0
Total Split (%)	17.4%	26.5%		20.5%	29.5%		13.6%	39.4%	39.4%	13.6%	39.4%	17.4%
Maximum Green (s)	18.5	29.0		22.5	33.0		13.5	46.0	46.0	13.5	46.0	18.5
Yellow Time (s)	3.5	5.0		3.5	5.0		3.5	5.0	5.0	3.5	5.0	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-0.5	-2.0		-0.5	-2.0		-0.5	-2.0	0.0	-0.5	-2.0	-0.5
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	6.0	4.0	4.0	4.0
Lead/Lag	Lag	Lag		Lead	Lead		Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None		None	C-Max	C-Max	Max	C-Max	None
Walk Time (s)		5.0			5.0			5.0	5.0		5.0	
Flash Dont Walk (s)		24.0			28.0			21.0	21.0		22.0	
Pedestrian Calls (#/hr)		0			0			0	0		0	
Act Effect Green (s)	22.9	38.2		15.8	31.1		10.6	48.0	46.0	14.0	53.6	77.3
Actuated g/C Ratio	0.17	0.29		0.12	0.24		0.08	0.36	0.35	0.11	0.41	0.59
v/c Ratio	1.24	0.72		0.63	0.79		0.46	0.99	0.42	0.55	0.77	0.26
Control Delay	163.4	41.6		43.1	42.5		88.9	39.4	6.3	42.1	16.8	0.6
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	163.4	41.6		43.1	42.5		88.9	39.4	6.3	42.1	16.8	0.6
LOS	F	D		D	D		F	D	A	D	B	A
Approach Delay		100.7			42.7			36.8			14.4	
Approach LOS		F			D			D			B	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 115 (87%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
 Natural Cycle: 135
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.24
 Intersection Signal Delay: 44.6
 Intersection LOS: D
 Intersection Capacity Utilization 88.9%
 ICU Level of Service E
 Analysis Period (min) 15

Splits and Phases: 5: Valencia Blvd & Magic Mountain Pkwy



Queues

5: Valencia Blvd & Magic Mountain Pkwy

04/25/2023



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	715	759	251	652	63	1953	273	100	1537	465
v/c Ratio	1.24	0.72	0.63	0.79	0.46	0.99	0.42	0.55	0.77	0.26
Control Delay	163.4	41.6	43.1	42.5	88.9	39.4	6.3	42.1	16.8	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	163.4	41.6	43.1	42.5	88.9	39.4	6.3	42.1	16.8	0.6
Queue Length 50th (ft)	~404	346	112	293	56	256	17	80	118	1
Queue Length 95th (ft)	#573	419	156	358	m69	m#694	m29	m99	m203	m5
Internal Link Dist (ft)		966		2698		1909			492	
Turn Bay Length (ft)	310		250		180		200	190		190
Base Capacity (vph)	576	1054	578	927	181	1972	656	181	1995	1784
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.24	0.72	0.43	0.70	0.35	0.99	0.42	0.55	0.77	0.26

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings

6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy

04/25/2023



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	257	515	418	1566	1203	168
Future Volume (vph)	257	515	418	1566	1203	168
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	265	265	260			270
Storage Lanes	1	1	2			1
Taper Length (ft)	25		25			
Lane Util. Factor	0.97	0.88	0.97	0.91	0.95	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3433	2787	3433	5085	3539	1583
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	3433	2787	3433	5085	3539	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		50				166
Link Speed (mph)	45			50	45	
Link Distance (ft)	2778			2280	1171	
Travel Time (s)	42.1			31.1	17.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	279	560	454	1702	1308	183
Shared Lane Traffic (%)						
Lane Group Flow (vph)	279	560	454	1702	1308	183
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	34			24	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	1	1	1
Detector Template						
Leading Detector (ft)	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	pt+ov	custom	NA	NA	Perm
Protected Phases	8	8 1	1	6	2	
Permitted Phases			1			2
Detector Phase	8	8 1	1	6	2	2
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	20.0		20.0	20.0	41.0	41.0
Total Split (s)	34.0		30.0	98.0	68.0	68.0

Lanes, Volumes, Timings

6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy

04/25/2023

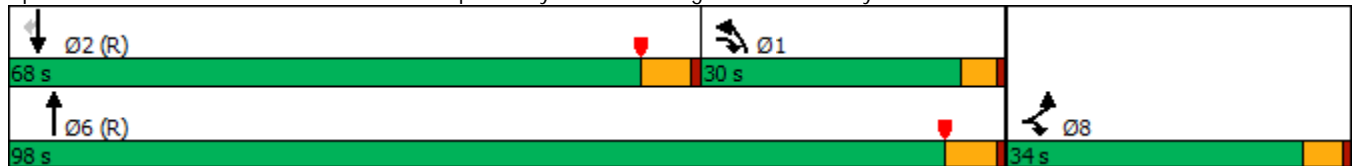


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Total Split (%)	25.8%		22.7%	74.2%	51.5%	51.5%
Maximum Green (s)	29.0		25.5	92.0	62.0	62.0
Yellow Time (s)	4.0		3.5	5.0	5.0	5.0
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0		-0.5	-2.0	-2.0	-2.0
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0
Lead/Lag			Lag		Lead	Lead
Lead-Lag Optimize?			Yes		Yes	Yes
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	Max		Min	C-Min	C-Min	C-Min
Walk Time (s)					7.0	7.0
Flash Dont Walk (s)					28.0	28.0
Pedestrian Calls (#/hr)					0	0
Act Effect Green (s)	37.3	64.9	23.6	86.7	59.1	59.1
Actuated g/C Ratio	0.28	0.49	0.18	0.66	0.45	0.45
v/c Ratio	0.29	0.40	0.74	0.51	0.83	0.23
Control Delay	34.6	13.1	58.9	12.0	36.8	4.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.6	13.1	58.9	12.0	36.8	4.4
LOS	C	B	E	B	D	A
Approach Delay	20.2			21.9	32.8	
Approach LOS	C			C	C	

Intersection Summary

Area Type:	Other
Cycle Length:	132
Actuated Cycle Length:	132
Offset:	75 (57%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle:	85
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.83
Intersection Signal Delay:	25.2
Intersection LOS:	C
Intersection Capacity Utilization	62.5%
ICU Level of Service	B
Analysis Period (min)	15

Splits and Phases: 6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy



Queues

6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy

04/25/2023










































Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	279	560	454	1702	1308	183
v/c Ratio	0.29	0.40	0.74	0.51	0.83	0.23
Control Delay	34.6	13.1	58.9	12.0	36.8	4.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.6	13.1	58.9	12.0	36.8	4.4
Queue Length 50th (ft)	120	193	189	241	498	8
Queue Length 95th (ft)	163	207	246	236	561	47
Internal Link Dist (ft)	2698			2200	1091	
Turn Bay Length (ft)	265	265	260			270
Base Capacity (vph)	970	1384	681	3621	1715	853
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.40	0.67	0.47	0.76	0.21

Intersection Summary

Lanes, Volumes, Timings
7: Bouquet Canyon Rd & Valencia Blvd

04/25/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	  	  		  	  	  	  	  	  	 		
Traffic Volume (vph)	1216	1704	30	436	1061	296	37	1271	738	331	924	668
Future Volume (vph)	1216	1704	30	436	1061	296	37	1271	738	331	924	668
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	10	10	11	11	11	11	10	10	11
Storage Length (ft)	360		0	330		330	250		0	435		400
Storage Lanes	2		0	3		1	1		1	2		2
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.94	0.91	0.91	0.94	0.91	1.00	1.00	0.91	1.00	0.97	0.91	0.88
Fr _t		0.997				0.850			0.850			0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	4824	4901	0	4658	4746	1531	1711	4916	1531	3204	4746	2694
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	4824	4901	0	4658	4746	1531	1711	4916	1531	3204	4746	2694
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2				124			112			452
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		2282			2684			2196			1017	
Travel Time (s)		34.6			40.7			33.3			12.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1322	1852	33	474	1153	322	40	1382	802	360	1004	726
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1322	1885	0	474	1153	322	40	1382	802	360	1004	726
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		33			33			20			20	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.00	1.09	1.09	1.04	1.04	1.04	1.04	1.09	1.09	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50		50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50		50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4		3	8	1	5	2	3	1	6	7
Permitted Phases						8			2			6
Detector Phase	7	4		3	8	1	5	2	3	1	6	7
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	44.0		12.0	48.0	12.0	12.0	46.0	12.0	12.0	44.0	12.0

Lanes, Volumes, Timings
7: Bouquet Canyon Rd & Valencia Blvd

04/25/2023

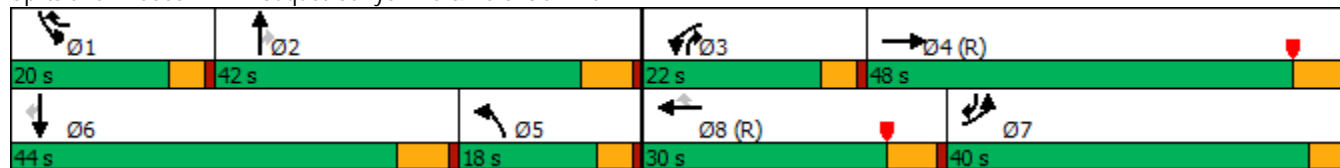


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	40.0	48.0		22.0	30.0	20.0	18.0	42.0	22.0	20.0	44.0	40.0
Total Split (%)	30.3%	36.4%		16.7%	22.7%	15.2%	13.6%	31.8%	16.7%	15.2%	33.3%	30.3%
Maximum Green (s)	35.5	42.0		17.5	24.0	15.5	13.5	36.0	17.5	15.5	38.0	35.5
Yellow Time (s)	3.5	5.0		3.5	5.0	3.5	3.5	5.0	3.5	3.5	5.0	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-0.5	-2.0		-0.5	-2.0	-0.5	-0.5	-2.0	-0.5	-0.5	-2.0	-0.5
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lag	Lag		Lead	Lead	Lead	Lag	Lag	Lead	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Max		None	C-Max	None	None	Max	None	None	None	None
Walk Time (s)		5.0			5.0			5.0				
Flash Dont Walk (s)		33.0			37.0			35.0				
Pedestrian Calls (#/hr)		0			0			0				
Act Effect Green (s)	36.0	44.0		18.0	26.0	42.0	14.5	38.0	60.0	16.0	41.5	81.5
Actuated g/C Ratio	0.27	0.33		0.14	0.20	0.32	0.11	0.29	0.45	0.12	0.31	0.62
v/c Ratio	1.01	1.15		0.75	1.23	0.56	0.21	0.98	1.06	0.93	0.67	0.40
Control Delay	74.2	119.5		55.1	146.2	7.2	55.8	65.5	80.2	81.1	56.5	14.2
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	74.2	119.5		55.1	146.2	7.2	55.8	65.5	80.2	81.1	56.5	14.2
LOS	E	F		E	F	A	E	E	F	F	E	B
Approach Delay		100.8			101.1			70.6			46.0	
Approach LOS		F			F			E			D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 51 (39%), Referenced to phase 4:EBT and 8:WBT, Start of Yellow
 Natural Cycle: 150
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.23
 Intersection Signal Delay: 81.7
 Intersection LOS: F
 Intersection Capacity Utilization 98.7%
 ICU Level of Service F
 Analysis Period (min) 15

Splits and Phases: 7: Bouquet Canyon Rd & Valencia Blvd



Queues

7: Bouquet Canyon Rd & Valencia Blvd

04/25/2023



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	1322	1885	474	1153	322	40	1382	802	360	1004	726
v/c Ratio	1.01	1.15	0.75	1.23	0.56	0.21	0.98	1.06	0.93	0.67	0.40
Control Delay	74.2	119.5	55.1	146.2	7.2	55.8	65.5	80.2	81.1	56.5	14.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	74.2	119.5	55.1	146.2	7.2	55.8	65.5	80.2	81.1	56.5	14.2
Queue Length 50th (ft)	~428	~711	114	~432	55	31	430	~698	162	328	165
Queue Length 95th (ft)	m415	m#680	163	#532	122	70	#536	#949	m#252	364	236
Internal Link Dist (ft)		2202		2604			2116			937	
Turn Bay Length (ft)	360		330		330	250			435		400
Base Capacity (vph)	1315	1635	635	934	571	208	1415	757	388	1567	1836
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.01	1.15	0.75	1.23	0.56	0.19	0.98	1.06	0.93	0.64	0.40

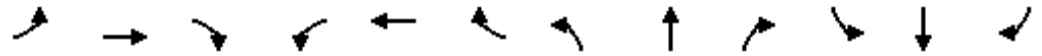
Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings

8: Bouquet Canyon Rd & Newhall Ranch Road

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	724	1640	447	342	1042	349	479	1667	371	396	1157	280
Future Volume (vph)	724	1640	447	342	1042	349	479	1667	371	396	1157	280
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	290		265	410		410	475		230	260		150
Storage Lanes	3		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.94	0.86	1.00	0.97	0.86	1.00	0.97	0.86	1.00	0.97	0.86	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	4990	6408	1583	3433	6408	1583	3433	6408	1583	3433	6408	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	4990	6408	1583	3433	6408	1583	3433	6408	1583	3433	6408	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			62			295			299			99
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		2675			2485			1030			669	
Travel Time (s)		40.5			37.7			15.6			10.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	787	1783	486	372	1133	379	521	1812	403	430	1258	304
Shared Lane Traffic (%)												
Lane Group Flow (vph)	787	1783	486	372	1133	379	521	1812	403	430	1258	304
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		36			36			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	2	1	1	2	1
Detector Template	Left		Right	Left		Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	50	20	20	50	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	50	20	20	50	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)								94			94	
Detector 2 Size(ft)								6			6	
Detector 2 Type								Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)								0.0			0.0	
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	3	8	1	7	4		1	6		5	2	3
Permitted Phases			8			4			6			2

Lanes, Volumes, Timings

8: Bouquet Canyon Rd & Newhall Ranch Road

04/25/2023

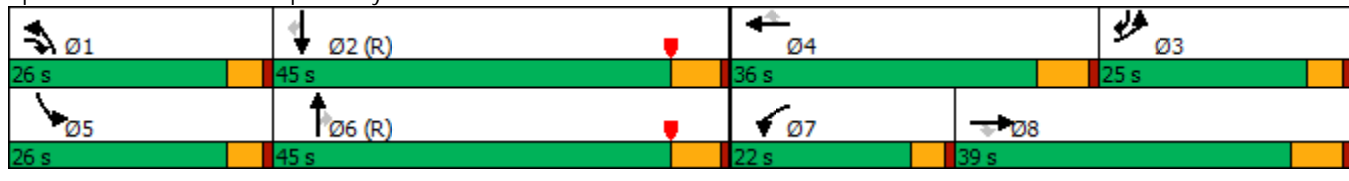


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	3	8	1	7	4	4	1	6	6	5	2	3
Switch Phase												
Minimum Initial (s)	4.0	5.0	4.0	4.0	5.0	5.0	4.0	10.0	10.0	4.0	10.0	4.0
Minimum Split (s)	12.0	43.0	12.0	12.0	43.0	43.0	12.0	49.0	49.0	12.0	50.0	12.0
Total Split (s)	25.0	39.0	26.0	22.0	36.0	36.0	26.0	45.0	45.0	26.0	45.0	25.0
Total Split (%)	18.9%	29.5%	19.7%	16.7%	27.3%	27.3%	19.7%	34.1%	34.1%	19.7%	34.1%	18.9%
Maximum Green (s)	20.5	33.0	21.5	17.5	30.0	30.0	21.5	39.0	39.0	21.5	39.0	20.5
Yellow Time (s)	3.5	5.0	3.5	3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.0	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	-2.0	0.0	0.0	-2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.0	4.5	4.5	4.0	6.0	4.5	6.0	6.0	4.5	6.0	4.5
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes		Yes	Yes			Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	5.5	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Minimum Gap (s)	3.0	2.5	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	24.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	Max	C-Max	None
Walk Time (s)		5.0			5.0	5.0		5.0	5.0		5.0	
Flash Dont Walk (s)		32.0			32.0	32.0		38.0	38.0		39.0	
Pedestrian Calls (#/hr)		2			5	5		1	1		1	
Act Effect Green (s)	21.3	35.5	60.9	17.0	31.2	29.2	21.4	39.0	39.0	21.5	39.1	61.8
Actuated g/C Ratio	0.16	0.27	0.46	0.13	0.24	0.22	0.16	0.30	0.30	0.16	0.30	0.47
v/c Ratio	0.98	1.03	0.64	0.84	0.75	0.65	0.94	0.96	0.59	0.77	0.66	0.38
Control Delay	82.3	78.1	28.0	72.2	46.5	18.5	57.5	50.4	13.4	63.1	42.8	9.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	82.3	78.1	28.0	72.2	46.5	18.5	57.5	50.4	13.4	63.1	42.8	9.2
LOS	F	E	C	E	D	B	E	D	B	E	D	A
Approach Delay		71.2			46.0			46.3			42.0	
Approach LOS		E			D			D			D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 33 (25%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
 Natural Cycle: 140
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.03
 Intersection Signal Delay: 53.2
 Intersection LOS: D
 Intersection Capacity Utilization 84.8%
 ICU Level of Service E
 Analysis Period (min) 15

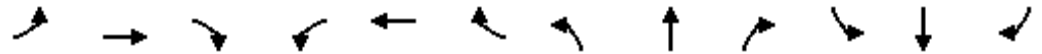
Splits and Phases: 8: Bouquet Canyon Rd & Newhall Ranch Road



Queues

8: Bouquet Canyon Rd & Newhall Ranch Road

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	787	1783	486	372	1133	379	521	1812	403	430	1258	304
v/c Ratio	0.98	1.03	0.64	0.84	0.75	0.65	0.94	0.96	0.59	0.77	0.66	0.38
Control Delay	82.3	78.1	28.0	72.2	46.5	18.5	57.5	50.4	13.4	63.1	42.8	9.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	82.3	78.1	28.0	72.2	46.5	18.5	57.5	50.4	13.4	63.1	42.8	9.2
Queue Length 50th (ft)	~247	~482	275	172	268	87	215	395	93	184	275	57
Queue Length 95th (ft)	#339	#559	399	#242	318	224	m226	m412	m101	243	316	95
Internal Link Dist (ft)		2595			2405			950			589	
Turn Bay Length (ft)	290		265	410		410	475		230	260		150
Base Capacity (vph)	803	1723	765	455	1553	587	559	1893	678	559	1896	793
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.98	1.03	0.64	0.82	0.73	0.65	0.93	0.96	0.59	0.77	0.66	0.38

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
9: Commuter Way & Soledad Cyn

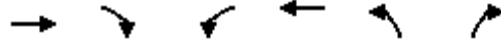
04/25/2023



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↑	↓	↑↑↑	↓	↓
Traffic Volume (vph)	2641	23	6	1683	24	1
Future Volume (vph)	2641	23	6	1683	24	1
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		150	285		0	0
Storage Lanes		1	1		2	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	1.00	1.00	0.91	0.97	0.95
Frt		0.850			0.994	
Flt Protected			0.950		0.954	
Satd. Flow (prot)	5085	1583	1770	5085	3427	0
Flt Permitted			0.950		0.954	
Satd. Flow (perm)	5085	1583	1770	5085	3427	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		10			1	
Link Speed (mph)	50			50	30	
Link Distance (ft)	911			2825	388	
Travel Time (s)	12.4			38.5	8.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2871	25	7	1829	26	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	2871	25	7	1829	27	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	1	1	1	1	1	
Detector Template						
Leading Detector (ft)	50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	
Turn Type	NA	Perm	Prot	NA	Prot	
Protected Phases	2		1	6	8	
Permitted Phases		2				
Detector Phase	2	2	1	6	8	
Switch Phase						
Minimum Initial (s)	10.0	10.0	4.0	10.0	4.0	
Minimum Split (s)	26.0	26.0	12.0	22.0	37.0	
Total Split (s)	75.0	75.0	20.0	95.0	37.0	

Lanes, Volumes, Timings
 9: Commuter Way & Soledad Cyn

04/25/2023

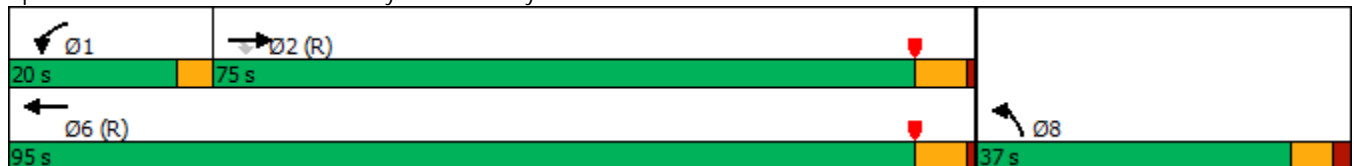


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Total Split (%)	56.8%	56.8%	15.2%	72.0%	28.0%	
Maximum Green (s)	69.0	69.0	16.5	89.0	31.0	
Yellow Time (s)	5.0	5.0	3.5	5.0	4.0	
All-Red Time (s)	1.0	1.0	0.0	1.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	0.5	-2.0	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Vehicle Extension (s)	5.0	5.0	1.5	5.0	2.0	
Minimum Gap (s)	4.0	4.0	1.5	4.0	2.0	
Time Before Reduce (s)	15.0	15.0	0.0	15.0	0.0	
Time To Reduce (s)	15.0	15.0	0.0	15.0	0.0	
Recall Mode	C-Max	C-Max	None	C-Max	None	
Walk Time (s)	7.0	7.0			7.0	
Flash Dont Walk (s)	13.0	13.0			24.0	
Pedestrian Calls (#/hr)	0	0			0	
Act Effect Green (s)	120.5	120.5	4.2	122.4	7.5	
Actuated g/C Ratio	0.91	0.91	0.03	0.93	0.06	
v/c Ratio	0.62	0.02	0.13	0.39	0.14	
Control Delay	3.2	1.0	98.3	1.5	58.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	3.2	1.0	98.3	1.5	58.7	
LOS	A	A	F	A	E	
Approach Delay	3.2			1.8	58.7	
Approach LOS	A			A	E	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 58 (44%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Natural Cycle: 110
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.62
 Intersection Signal Delay: 3.0
 Intersection LOS: A
 Intersection Capacity Utilization 61.0%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 9: Commuter Way & Soledad Cyn



Queues

9: Commuter Way & Soledad Cyn

04/25/2023



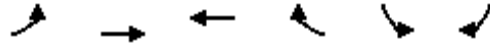
Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Group Flow (vph)	2871	25	7	1829	27
v/c Ratio	0.62	0.02	0.13	0.39	0.14
Control Delay	3.2	1.0	98.3	1.5	58.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	3.2	1.0	98.3	1.5	58.7
Queue Length 50th (ft)	120	1	6	30	11
Queue Length 95th (ft)	278	6	m12	11	27
Internal Link Dist (ft)	831			2745	308
Turn Bay Length (ft)		150	285		
Base Capacity (vph)	4642	1446	214	4713	857
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.62	0.02	0.03	0.39	0.03

Intersection Summary

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

Lanes, Volumes, Timings
10: Soledad Cyn & Valley Center

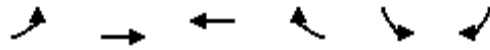
04/25/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø4
Lane Configurations	↖↖	↑↑↑	↑↑↑	↗	↘↘	↘	
Traffic Volume (vph)	113	2020	1264	791	897	167	
Future Volume (vph)	113	2020	1264	791	897	167	
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	250			310	235	0	
Storage Lanes	2			1	1	1	
Taper Length (ft)	25				25		
Lane Util. Factor	0.97	0.91	0.91	1.00	0.97	1.00	
Frt				0.850		0.850	
Flt Protected	0.950				0.950		
Satd. Flow (prot)	3433	5085	5085	1583	3433	1583	
Flt Permitted	0.950				0.950		
Satd. Flow (perm)	3433	5085	5085	1583	3433	1583	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)				625		157	
Link Speed (mph)		50	50		30		
Link Distance (ft)		2935	1764		1116		
Travel Time (s)		40.0	24.1		25.4		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	123	2196	1374	860	975	182	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	123	2196	1374	860	975	182	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Left	Left	Right	Left	Right	
Median Width(ft)		24	24		24		
Link Offset(ft)		0	0		0		
Crosswalk Width(ft)		16	16		16		
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (mph)	15			9	15	9	
Number of Detectors	1	1	1	1	1	1	
Detector Template							
Leading Detector (ft)	50	50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Turn Type	Prot	NA	NA	Free	Prot	pt+ov	
Protected Phases	5	2	6		3	3 5	4
Permitted Phases				Free			
Detector Phase	5	2	6		3	3 5	
Switch Phase							
Minimum Initial (s)	4.0	4.0	4.0		4.0		4.0
Minimum Split (s)	20.0	22.0	29.0		20.0		35.0
Total Split (s)	20.0	72.0	52.0		25.0		35.0

Lanes, Volumes, Timings
 10: Soledad Cyn & Valley Center

04/25/2023

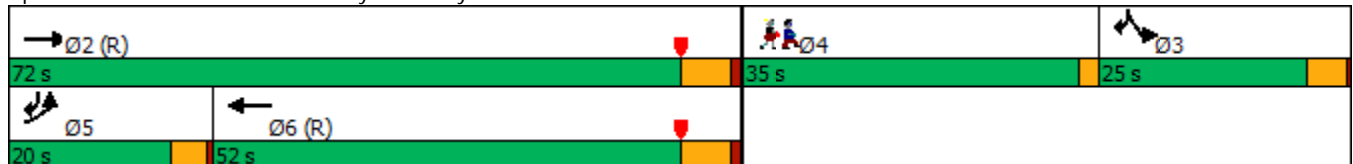


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø4	
Total Split (%)	15.2%	54.5%	39.4%		18.9%		27%	
Maximum Green (s)	16.0	66.0	46.0		20.5		33.0	
Yellow Time (s)	3.5	5.0	5.0		4.0		2.0	
All-Red Time (s)	0.5	1.0	1.0		0.5		0.0	
Lost Time Adjust (s)	0.0	-2.0	-2.0		-0.5			
Total Lost Time (s)	4.0	4.0	4.0		4.0			
Lead/Lag	Lead		Lag		Lag		Lead	
Lead-Lag Optimize?	Yes		Yes		Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		0.2	
Recall Mode	None	C-Max	C-Max		None		None	
Walk Time (s)				7.0				7.0
Flash Dont Walk (s)				16.0				26.0
Pedestrian Calls (#/hr)				0				0
Act Effct Green (s)	10.1	68.9	54.8	132.0	55.1	69.2		
Actuated g/C Ratio	0.08	0.52	0.42	1.00	0.42	0.52		
v/c Ratio	0.47	0.83	0.65	0.54	0.68	0.20		
Control Delay	58.3	32.0	14.8	7.7	34.3	6.0		
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		
Total Delay	58.3	32.0	14.8	7.7	34.3	6.0		
LOS	E	C	B	A	C	A		
Approach Delay	33.4		12.1	29.8				
Approach LOS	C		B	C				

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 35 (27%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Natural Cycle: 145
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.83
 Intersection Signal Delay: 24.3
 Intersection LOS: C
 Intersection Capacity Utilization 71.3%
 ICU Level of Service C
 Analysis Period (min) 15

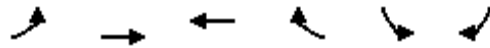
Splits and Phases: 10: Soledad Cyn & Valley Center



Queues

10: Soledad Cyn & Valley Center

04/25/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	123	2196	1374	860	975	182
v/c Ratio	0.47	0.83	0.65	0.54	0.68	0.20
Control Delay	58.3	32.0	14.8	7.7	34.3	6.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	58.3	32.0	14.8	7.7	34.3	6.0
Queue Length 50th (ft)	51	0	291	389	430	26
Queue Length 95th (ft)	81	749	91	631	501	m40
Internal Link Dist (ft)		2855	1684		1036	
Turn Bay Length (ft)	250			310	235	
Base Capacity (vph)	416	2652	2109	1583	1434	969
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.83	0.65	0.54	0.68	0.19

Intersection Summary

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

Lanes, Volumes, Timings
 11: Golden Valley Road & Valley Center Drive

04/25/2023



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4	Ø5	Ø12
Lane Configurations	↶↶↶	↷↷	↶↶	↑↑↑	↑↑↑	↷			
Traffic Volume (vph)	551	411	353	1266	1118	806			
Future Volume (vph)	551	411	353	1266	1118	806			
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900			
Storage Length (ft)	260	260	290			150			
Storage Lanes	2	1	2			1			
Taper Length (ft)	25		25						
Lane Util. Factor	0.94	0.88	0.97	0.91	0.91	1.00			
Frt		0.850				0.850			
Flt Protected	0.950		0.950						
Satd. Flow (prot)	4990	2787	3433	5085	5085	1583			
Flt Permitted	0.950		0.950						
Satd. Flow (perm)	4990	2787	3433	5085	5085	1583			
Right Turn on Red		Yes				Yes			
Satd. Flow (RTOR)		447				528			
Link Speed (mph)	30			50	50				
Link Distance (ft)	456			2527	1665				
Travel Time (s)	10.4			34.5	22.7				
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92			
Adj. Flow (vph)	599	447	384	1376	1215	876			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	599	447	384	1376	1215	876			
Enter Blocked Intersection	No	No	No	No	No	No			
Lane Alignment	Left	Right	Left	Left	Left	Right			
Median Width(ft)	36			24	24				
Link Offset(ft)	0			0	0				
Crosswalk Width(ft)	16			16	16				
Two way Left Turn Lane									
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00			
Turning Speed (mph)	15	9	15			9			
Number of Detectors	1	1	1	1	1	1			
Detector Template									
Leading Detector (ft)	50	50	50	50	50	50			
Trailing Detector (ft)	0	0	0	0	0	0			
Detector 1 Position(ft)	0	0	0	0	0	0			
Detector 1 Size(ft)	50	50	50	50	50	50			
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel									
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Turn Type	Prot	pt+ov	Prot	NA	NA	Perm			
Protected Phases	3	5 12	5 12	2	6		4	5	12
Permitted Phases						6			
Detector Phase	3	5 12	5 12	2	6	6			
Switch Phase									
Minimum Initial (s)	3.0			10.0	10.0	10.0	4.0	4.0	4.0
Minimum Split (s)	25.0			30.0	40.0	40.0	35.0	15.0	20.0
Total Split (s)	30.0			67.0	42.0	42.0	35.0	25.0	35.0

Lanes, Volumes, Timings
 11: Golden Valley Road & Valley Center Drive

04/25/2023

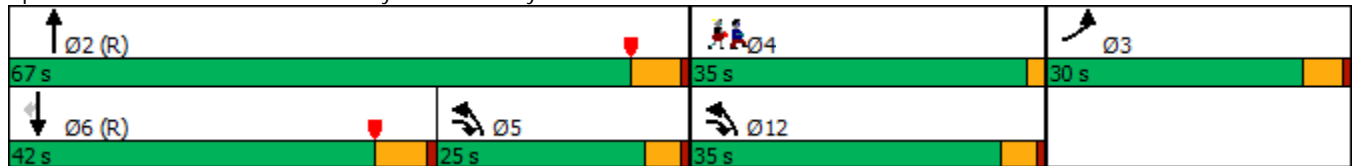


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4	Ø5	Ø12
Total Split (%)	22.7%			50.8%	31.8%	31.8%	27%	19%	27%
Maximum Green (s)	25.0			61.0	36.0	36.0	33.0	20.5	30.5
Yellow Time (s)	4.0			5.0	5.0	5.0	2.0	3.5	3.5
All-Red Time (s)	1.0			1.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)	-1.0			-2.0	-2.0	-2.0			
Total Lost Time (s)	4.0			4.0	4.0	4.0			
Lead/Lag					Lead	Lead		Lag	
Lead-Lag Optimize?					Yes	Yes		Yes	
Vehicle Extension (s)	3.0			3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None			C-Min	C-Min	C-Min	None	None	None
Walk Time (s)					7.0	7.0	7.0		5.0
Flash Dont Walk (s)					24.0	24.0	26.0		10.0
Pedestrian Calls (#/hr)					0	0	0		0
Act Effect Green (s)	22.3	31.2	31.2	89.6	66.4	66.4			
Actuated g/C Ratio	0.17	0.24	0.24	0.68	0.50	0.50			
v/c Ratio	0.71	0.45	0.47	0.40	0.47	0.83			
Control Delay	43.1	7.7	22.9	4.0	5.7	15.8			
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0			
Total Delay	43.1	7.7	22.9	4.0	5.7	15.8			
LOS	D	A	C	A	A	B			
Approach Delay	28.0			8.1	10.0				
Approach LOS	C			A	A				

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 115
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.83
 Intersection Signal Delay: 13.1
 Intersection LOS: B
 Intersection Capacity Utilization 66.6%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 11: Golden Valley Road & Valley Center Drive



Queues

11: Golden Valley Road & Valley Center Drive

04/25/2023


































Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	599	447	384	1376	1215	876
v/c Ratio	0.71	0.45	0.47	0.40	0.47	0.83
Control Delay	43.1	7.7	22.9	4.0	5.7	15.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.1	7.7	22.9	4.0	5.7	15.8
Queue Length 50th (ft)	160	26	114	82	42	440
Queue Length 95th (ft)	198	63	m93	m63	m65	m348
Internal Link Dist (ft)	376			2447	1585	
Turn Bay Length (ft)	260	260	290			150
Base Capacity (vph)	990	1388	1382	3450	2558	1058
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.61	0.32	0.28	0.40	0.47	0.83

Intersection Summary

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

Lanes, Volumes, Timings
12: Ruther & Soledad Cyn

04/25/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  		  	  					  		 
Traffic Volume (vph)	47	2362	167	196	1775	19	185	79	232	130	89	67
Future Volume (vph)	47	2362	167	196	1775	19	185	79	232	130	89	67
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	285		300	250		0	0		0	125		0
Storage Lanes	1		1	2		0	1		2	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	0.91	0.95	0.95	0.88	0.95	0.95	1.00
Frt			0.850		0.998				0.850		0.938	
Flt Protected	0.950			0.950			0.950	0.977		0.950	0.998	
Satd. Flow (prot)	1770	5085	1583	3433	5075	0	1681	1729	2787	1681	1657	0
Flt Permitted	0.950			0.950			0.950	0.977		0.950	0.998	
Satd. Flow (perm)	1770	5085	1583	3433	5075	0	1681	1729	2787	1681	1657	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			104		1				121		22	
Link Speed (mph)		50		50				40		30		
Link Distance (ft)		1764		2480				220		327		
Travel Time (s)		24.1		33.8				3.8		7.4		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	51	2567	182	213	1929	21	201	86	252	141	97	73
Shared Lane Traffic (%)							37%			5%		
Lane Group Flow (vph)	51	2567	182	213	1950	0	127	160	252	134	177	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24		24				12		12		
Link Offset(ft)		0		0				0		0		
Crosswalk Width(ft)		16		16				16		16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1	1	1	1	
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50		50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	pt+ov	Split	NA	
Protected Phases	1	6		5	2		3	3	3 5	4	4	
Permitted Phases			6									
Detector Phase	1	6	6	5	2		3	3	3 5	4	4	
Switch Phase												
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	12.0	42.0	42.0	12.0	27.0		37.0	37.0		15.0	15.0	
Total Split (s)	26.0	49.0	49.0	25.0	48.0		38.0	38.0		20.0	20.0	

Lanes, Volumes, Timings
12: Ruther & Soledad Cyn

04/25/2023

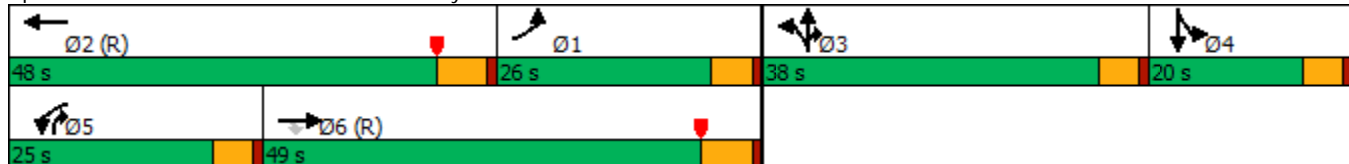


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	19.7%	37.1%	37.1%	18.9%	36.4%		28.8%	28.8%		15.2%	15.2%	
Maximum Green (s)	21.0	43.0	43.0	20.0	42.0		33.0	33.0		15.0	15.0	
Yellow Time (s)	4.0	5.0	5.0	4.0	5.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	-1.0	-2.0	-2.0	-1.0	-2.0		-1.0	-1.0		-1.0	-1.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead		Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	4.5	4.5	1.5	4.5		3.0	3.0		3.0	3.0	
Minimum Gap (s)	1.5	3.0	3.0	1.5	3.0		3.0	3.0		3.0	3.0	
Time Before Reduce (s)	0.0	7.5	7.5	0.0	7.5		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	22.5	22.5	0.0	22.5		0.0	0.0		0.0	0.0	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None		None	None	
Walk Time (s)		7.0	7.0		7.0		5.0	5.0				
Flash Dont Walk (s)		25.0	25.0		11.0		27.0	27.0				
Pedestrian Calls (#/hr)		0	0		0		0	0				
Act Effect Green (s)	18.6	64.9	64.9	13.1	61.1		18.9	18.9	32.0	19.2	19.2	
Actuated g/C Ratio	0.14	0.49	0.49	0.10	0.46		0.14	0.14	0.24	0.15	0.15	
v/c Ratio	0.20	1.03	0.22	0.63	0.83		0.53	0.65	0.33	0.55	0.68	
Control Delay	47.3	53.0	11.8	65.2	37.7		59.4	64.9	12.4	60.3	59.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	47.3	53.0	11.8	65.2	37.7		59.4	64.9	12.4	60.3	59.8	
LOS	D	D	B	E	D		E	E	B	E	E	
Approach Delay		50.2			40.4			39.1			60.0	
Approach LOS		D			D			D			E	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
 Natural Cycle: 140
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.03
 Intersection Signal Delay: 46.0
 Intersection LOS: D
 Intersection Capacity Utilization 79.7%
 ICU Level of Service D
 Analysis Period (min) 15

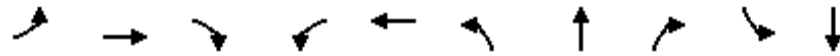
Splits and Phases: 12: Ruther & Soledad Cyn



Queues

12: Ruther & Soledad Cyn

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	51	2567	182	213	1950	127	160	252	134	177
v/c Ratio	0.20	1.03	0.22	0.63	0.83	0.53	0.65	0.33	0.55	0.68
Control Delay	47.3	53.0	11.8	65.2	37.7	59.4	64.9	12.4	60.3	59.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.3	53.0	11.8	65.2	37.7	59.4	64.9	12.4	60.3	59.8
Queue Length 50th (ft)	32	-847	34	91	565	107	138	36	113	133
Queue Length 95th (ft)	m45	#1140	m69	130	#817	168	206	50	178	211
Internal Link Dist (ft)		1684			2400		140			247
Turn Bay Length (ft)	285		300	250					125	
Base Capacity (vph)	295	2498	830	546	2351	432	445	1226	252	267
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	1.03	0.22	0.39	0.83	0.29	0.36	0.21	0.53	0.66

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

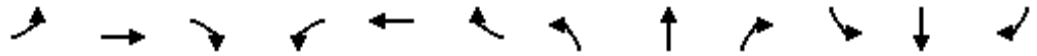
Lanes, Volumes, Timings
13: Golden Valley Road & Centre Pointe Parkway

04/25/2023

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	177	99	556	272	78	197	283	1323	282	245	1403	65
Future Volume (vph)	177	99	556	272	78	197	283	1323	282	245	1403	65
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		260	150		250	300		300	700		0
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850		0.893				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	3433	1663	0	1770	3539	1583	1770	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1863	1583	3433	1663	0	1770	3539	1583	1770	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			91		94				303			136
Link Speed (mph)		30		30				50			50	
Link Distance (ft)		1149		802				7902			1475	
Travel Time (s)		26.1		18.2				107.8			20.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	192	108	604	296	85	214	308	1438	307	266	1525	71
Shared Lane Traffic (%)												
Lane Group Flow (vph)	192	108	604	296	299	0	308	1438	307	266	1525	71
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24		24				12			12	
Link Offset(ft)		0		0				0			0	
Crosswalk Width(ft)		16		16				16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50		50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	3	8	5	7	4		5	2	7	1	6	
Permitted Phases			8						2			6
Detector Phase	3	8	5	7	4		5	2	7	1	6	6
Switch Phase												
Minimum Initial (s)	4.0	6.0	4.0	4.0	6.0		4.0	10.0	4.0	4.0	10.0	10.0
Minimum Split (s)	12.0	25.0	20.0	20.0	39.0		20.0	33.0	20.0	15.0	34.0	34.0
Total Split (s)	19.0	25.0	33.0	34.0	40.0		33.0	40.0	34.0	33.0	40.0	40.0

Lanes, Volumes, Timings
 13: Golden Valley Road & Centre Pointe Parkway

04/25/2023

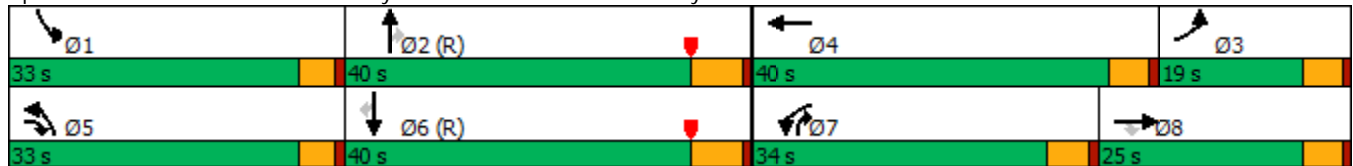


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	14.4%	18.9%	25.0%	25.8%	30.3%		25.0%	30.3%	25.8%	25.0%	30.3%	30.3%
Maximum Green (s)	14.0	20.0	28.5	29.0	35.0		28.5	34.0	29.0	28.5	34.0	34.0
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0		3.5	5.0	4.0	3.5	5.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0	-1.0	-0.5	-1.0	-1.0		-0.5	-2.0	-1.0	-0.5	-2.0	-2.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lag	Lag	Lead	Lead	Lead		Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Min	None	None	C-Min	C-Min
Walk Time (s)					7.0			7.0			7.0	7.0
Flash Dont Walk (s)					27.0			20.0			21.0	21.0
Pedestrian Calls (#/hr)					0			0			0	0
Act Effct Green (s)	20.8	26.1	56.7	18.2	23.6		26.6	47.1	69.3	24.6	45.1	45.1
Actuated g/C Ratio	0.16	0.20	0.43	0.14	0.18		0.20	0.36	0.52	0.19	0.34	0.34
v/c Ratio	0.69	0.29	0.83	0.63	0.80		0.87	1.14	0.31	0.81	1.26	0.11
Control Delay	66.1	46.4	38.0	59.2	50.6		69.6	105.5	12.7	55.4	166.6	8.8
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	66.1	46.4	38.0	59.2	50.6		69.6	105.5	12.7	55.4	166.6	8.8
LOS	E	D	D	E	D		E	F	B	E	F	A
Approach Delay		45.0			54.9			86.2			144.7	
Approach LOS		D			D			F			F	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 103 (78%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 145
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.26
 Intersection Signal Delay: 96.0 Intersection LOS: F
 Intersection Capacity Utilization 93.8% ICU Level of Service F
 Analysis Period (min) 15

Splits and Phases: 13: Golden Valley Road & Centre Pointe Parkway



Queues

13: Golden Valley Road & Centre Pointe Parkway

04/25/2023




































Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	192	108	604	296	299	308	1438	307	266	1525	71
v/c Ratio	0.69	0.29	0.83	0.63	0.80	0.87	1.14	0.31	0.81	1.26	0.11
Control Delay	66.1	46.4	38.0	59.2	50.6	69.6	105.5	12.7	55.4	166.6	8.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	66.1	46.4	38.0	59.2	50.6	69.6	105.5	12.7	55.4	166.6	8.8
Queue Length 50th (ft)	154	77	357	125	173	278	-811	82	218	-956	2
Queue Length 95th (ft)	#285	134	541	165	258	m#364	#1030	m132	315	#1143	39
Internal Link Dist (ft)		1069			722		7822			1395	
Turn Bay Length (ft)	150		260	150		300		300	700		
Base Capacity (vph)	278	375	761	780	521	391	1262	1089	388	1209	630
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.69	0.29	0.79	0.38	0.57	0.79	1.14	0.28	0.69	1.26	0.11

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

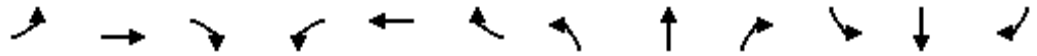
Lanes, Volumes, Timings
 14: Sierra Highway & Golden Valley Road

04/25/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 	  	  	  	 	  	 				
Traffic Volume (vph)	370	952	549	68	892	111	681	1045	132	69	254	230
Future Volume (vph)	370	952	549	68	892	111	681	1045	132	69	254	230
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	280		280	285		300	285		0	410		540
Storage Lanes	2		2	2		1	2		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	0.88	0.97	0.91	1.00	0.97	0.95	0.95	1.00	0.95	1.00
Fr _t			0.850			0.850		0.983				0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	2787	3433	5085	1583	3433	3479	0	1770	3539	1583
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	2787	3433	5085	1583	3433	3479	0	1770	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			559			186		11				250
Link Speed (mph)		50			50			30			30	
Link Distance (ft)		1983			1208			1801			1671	
Travel Time (s)		27.0			16.5			40.9			38.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	402	1035	597	74	970	121	740	1136	143	75	276	250
Shared Lane Traffic (%)												
Lane Group Flow (vph)	402	1035	597	74	970	121	740	1279	0	75	276	250
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50		50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50		50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	custom
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						8
Detector Phase	7	4	4	3	8	8	5	2		1	6	8
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	8.5	29.6	29.6	8.5	40.0	40.0	15.0	49.0		8.5	46.0	40.0
Total Split (s)	29.0	50.0	50.0	20.0	41.0	41.0	37.0	44.0		18.0	25.0	41.0

Lanes, Volumes, Timings
 14: Sierra Highway & Golden Valley Road

04/25/2023

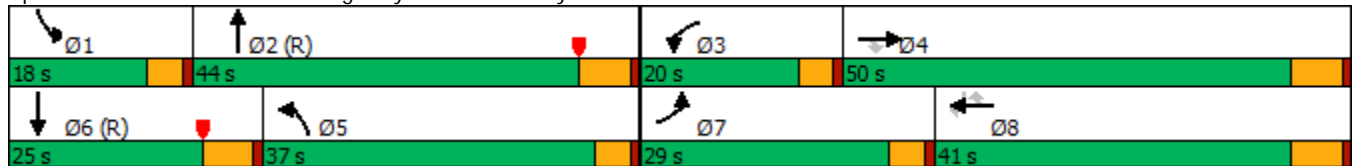


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	22.0%	37.9%	37.9%	15.2%	31.1%	31.1%	28.0%	33.3%		13.6%	18.9%	31.1%
Maximum Green (s)	24.5	44.0	44.0	15.5	35.0	35.0	32.5	38.0		13.5	19.0	35.0
Yellow Time (s)	3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.0		3.5	5.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	-0.5	-2.0	-2.0	-0.5	-2.0	-2.0	-0.5	-2.0		-0.5	-2.0	-2.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lag		Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	None
Walk Time (s)					5.0	5.0		5.0			5.0	5.0
Flash Dont Walk (s)					29.0	29.0		33.0			30.0	29.0
Pedestrian Calls (#/hr)					0	0		0			0	0
Act Effect Green (s)	20.9	48.9	48.9	8.7	34.6	34.6	33.0	51.7		11.1	27.5	34.6
Actuated g/C Ratio	0.16	0.37	0.37	0.07	0.26	0.26	0.25	0.39		0.08	0.21	0.26
v/c Ratio	0.74	0.79	0.43	0.33	0.73	0.22	0.86	0.93		0.51	0.37	0.42
Control Delay	40.9	42.0	13.7	62.2	47.8	1.4	58.8	52.8		69.1	48.2	6.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	40.9	42.0	13.7	62.2	47.8	1.4	58.8	52.8		69.1	48.2	6.5
LOS	D	D	B	E	D	A	E	D		E	D	A
Approach Delay		33.5			43.9			55.0			33.5	
Approach LOS		C			D			D			C	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 65 (49%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 140
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.93
 Intersection Signal Delay: 43.0 Intersection LOS: D
 Intersection Capacity Utilization 79.9% ICU Level of Service D
 Analysis Period (min) 15

Splits and Phases: 14: Sierra Highway & Golden Valley Road



Queues

14: Sierra Highway & Golden Valley Road

04/25/2023















Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	402	1035	597	74	970	121	740	1279	75	276	250
v/c Ratio	0.74	0.79	0.43	0.33	0.73	0.22	0.86	0.93	0.51	0.37	0.42
Control Delay	40.9	42.0	13.7	62.2	47.8	1.4	58.8	52.8	69.1	48.2	6.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.9	42.0	13.7	62.2	47.8	1.4	58.8	52.8	69.1	48.2	6.5
Queue Length 50th (ft)	175	451	114	31	273	0	314	~607	62	109	0
Queue Length 95th (ft)	m166	m415	m110	57	323	5	#410	#840	113	162	64
Internal Link Dist (ft)		1903			1128			1721		1591	
Turn Bay Length (ft)	280		280	285		300	285		410		540
Base Capacity (vph)	650	1314	1386	416	1425	577	858	1368	187	738	623
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.62	0.79	0.43	0.18	0.68	0.21	0.86	0.93	0.40	0.37	0.40

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
15: SR 14 SB Ramp & Golden Valley Road

04/25/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗	↖	↑↑					↘	↙	↗
Traffic Volume (vph)	0	856	316	168	714	0	0	0	0	72	4	429
Future Volume (vph)	0	856	316	168	714	0	0	0	0	72	4	429
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	220		0	0		0	300		0
Storage Lanes	0		1	1		0	0		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850									0.850
Flt Protected				0.950						0.950	0.957	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	1681	1694	1583
Flt Permitted				0.950						0.950	0.957	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	1681	1694	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			343									181
Link Speed (mph)		50			50			30			30	
Link Distance (ft)		861			697			508			640	
Travel Time (s)		11.7			9.5			11.5			14.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	930	343	183	776	0	0	0	0	78	4	466
Shared Lane Traffic (%)										48%		
Lane Group Flow (vph)	0	930	343	183	776	0	0	0	0	41	41	466
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94							94
Detector 2 Size(ft)		6			6							6
Detector 2 Type		Cl+Ex			Cl+Ex							Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							0.0
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		6		5		2					4	
Permitted Phases		6								4		4

Lanes, Volumes, Timings
 15: SR 14 SB Ramp & Golden Valley Road

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase		6	6	5	2					4	4	4
Switch Phase												
Minimum Initial (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Minimum Split (s)		20.0	20.0	12.0	20.0					20.0	20.0	20.0
Total Split (s)		38.0	38.0	17.0	55.0					35.0	35.0	35.0
Total Split (%)		42.2%	42.2%	18.9%	61.1%					38.9%	38.9%	38.9%
Maximum Green (s)		34.0	34.0	13.0	51.0					31.0	31.0	31.0
Yellow Time (s)		3.5	3.5	3.5	3.5					3.5	3.5	3.5
All-Red Time (s)		0.5	0.5	0.5	0.5					0.5	0.5	0.5
Lost Time Adjust (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Total Lost Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lead/Lag		Lag	Lag	Lead								
Lead-Lag Optimize?		Yes	Yes	Yes								
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Recall Mode		Max	Max	None	C-Max					Max	Max	Max
Walk Time (s)		5.0	5.0		5.0					5.0	5.0	5.0
Flash Dont Walk (s)		10.0	10.0		10.0					10.0	10.0	10.0
Pedestrian Calls (#/hr)		0	0		0					0	0	0
Act Effect Green (s)		34.8	34.8	12.2	51.0					31.0	31.0	31.0
Actuated g/C Ratio		0.39	0.39	0.14	0.57					0.34	0.34	0.34
v/c Ratio		0.68	0.42	0.76	0.39					0.07	0.07	0.70
Control Delay		26.3	3.9	60.1	13.3					20.4	20.4	21.8
Queue Delay		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Total Delay		26.3	3.9	60.1	13.3					20.4	20.4	21.8
LOS		C	A	E	B					C	C	C
Approach Delay		20.3			22.3						21.6	
Approach LOS		C			C						C	

Intersection Summary

Area Type:	Other
Cycle Length:	90
Actuated Cycle Length:	90
Offset:	0 (0%), Referenced to phase 2:WBT, Start of Yellow
Natural Cycle:	55
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.76
Intersection Signal Delay:	21.2
Intersection LOS:	C
Intersection Capacity Utilization:	53.0%
ICU Level of Service:	A
Analysis Period (min):	15

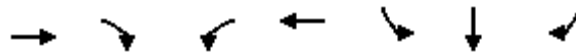
Splits and Phases: 15: SR 14 SB Ramp & Golden Valley Road



Queues

15: SR 14 SB Ramp & Golden Valley Road

04/25/2023


























Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	930	343	183	776	41	41	466
v/c Ratio	0.68	0.42	0.76	0.39	0.07	0.07	0.70
Control Delay	26.3	3.9	60.1	13.3	20.4	20.4	21.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.3	3.9	60.1	13.3	20.4	20.4	21.8
Queue Length 50th (ft)	230	0	114	133	16	16	138
Queue Length 95th (ft)	300	53	#207	164	40	40	255
Internal Link Dist (ft)	781			617		560	
Turn Bay Length (ft)			220		300		
Base Capacity (vph)	1366	821	255	2005	579	583	663
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.68	0.42	0.72	0.39	0.07	0.07	0.70

Intersection Summary

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

Lanes, Volumes, Timings
16: SR 14 NB Ramp & Golden Valley Road

04/25/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 			 			 				
Traffic Volume (vph)	436	507	0	0	465	230	404	2	393	0	0	0
Future Volume (vph)	436	507	0	0	465	230	404	2	393	0	0	0
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	230		0	0		280	0		140	0		0
Storage Lanes	2		0	0		1	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt						0.850			0.850			
Flt Protected	0.950						0.950	0.953				
Satd. Flow (prot)	3433	3539	0	0	3539	1583	1681	1686	1583	0	0	0
Flt Permitted	0.950						0.950	0.953				
Satd. Flow (perm)	3433	3539	0	0	3539	1583	1681	1686	1583	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						250			324			
Link Speed (mph)		50			50			30				30
Link Distance (ft)		697			616			615				491
Travel Time (s)		9.5			8.4			14.0				11.2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	474	551	0	0	505	250	439	2	427	0	0	0
Shared Lane Traffic (%)							50%					
Lane Group Flow (vph)	474	551	0	0	505	250	219	222	427	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1	1	2	1			
Detector Template	Left	Thru			Thru	Right	Left	Thru	Right			
Leading Detector (ft)	20	100			100	20	20	100	20			
Trailing Detector (ft)	0	0			0	0	0	0	0			
Detector 1 Position(ft)	0	0			0	0	0	0	0			
Detector 1 Size(ft)	20	6			6	20	20	6	20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Prot	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	1	6			2			8				
Permitted Phases						2	8		8			

Lanes, Volumes, Timings
 16: SR 14 NB Ramp & Golden Valley Road

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	1	6			2	2	8	8	8			
Switch Phase												
Minimum Initial (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Minimum Split (s)	12.0	20.0			20.0	20.0	20.0	20.0	20.0			
Total Split (s)	29.0	57.0			28.0	28.0	33.0	33.0	33.0			
Total Split (%)	32.2%	63.3%			31.1%	31.1%	36.7%	36.7%	36.7%			
Maximum Green (s)	25.0	53.0			24.0	24.0	29.0	29.0	29.0			
Yellow Time (s)	3.5	3.5			3.5	3.5	3.5	3.5	3.5			
All-Red Time (s)	0.5	0.5			0.5	0.5	0.5	0.5	0.5			
Lost Time Adjust (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Total Lost Time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Lead/Lag	Lead				Lag				Lag			
Lead-Lag Optimize?	Yes				Yes				Yes			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Recall Mode	None	Max			C-Max	C-Max	Max	Max	Max			
Walk Time (s)		5.0			5.0	5.0	5.0	5.0	5.0			
Flash Dont Walk (s)		10.0			10.0	10.0	10.0	10.0	10.0			
Pedestrian Calls (#/hr)		0			0	0	0	0	0			
Act Effct Green (s)	17.6	53.0			31.4	31.4	29.0	29.0	29.0			
Actuated g/C Ratio	0.20	0.59			0.35	0.35	0.32	0.32	0.32			
v/c Ratio	0.71	0.26			0.41	0.35	0.40	0.41	0.59			
Control Delay	57.6	5.7			24.3	4.7	26.6	26.6	10.1			
Queue Delay	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Total Delay	57.6	5.7			24.3	4.7	26.6	26.6	10.1			
LOS	E	A			C	A	C	C	B			
Approach Delay		29.7			17.8			18.5				
Approach LOS		C			B			B				

Intersection Summary

Area Type: Other
 Cycle Length: 90
 Actuated Cycle Length: 90
 Offset: 0 (0%), Referenced to phase 2:WBT, Start of Yellow
 Natural Cycle: 55
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.71
 Intersection Signal Delay: 22.6
 Intersection LOS: C
 Intersection Capacity Utilization 53.0%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 16: SR 14 NB Ramp & Golden Valley Road



Queues

16: SR 14 NB Ramp & Golden Valley Road

04/25/2023

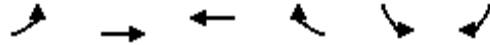


Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	474	551	505	250	219	222	427
v/c Ratio	0.71	0.26	0.41	0.35	0.40	0.41	0.59
Control Delay	57.6	5.7	24.3	4.7	26.6	26.6	10.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.6	5.7	24.3	4.7	26.6	26.6	10.1
Queue Length 50th (ft)	152	30	113	0	101	103	42
Queue Length 95th (ft)	203	56	171	53	168	170	132
Internal Link Dist (ft)		617	536			535	
Turn Bay Length (ft)	230			280			140
Base Capacity (vph)	953	2084	1233	714	541	543	729
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.50	0.26	0.41	0.35	0.40	0.41	0.59

Intersection Summary

Lanes, Volumes, Timings
 1: Valencia Blvd & 5 Fwy SB Ramp

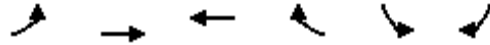
04/25/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑		↑↑	↑
Traffic Volume (vph)	0	576	966	96	284	93
Future Volume (vph)	0	576	966	96	284	93
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	15	12	14
Storage Length (ft)	0			0	0	455
Storage Lanes	0			0	2	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.91	0.95	0.95	0.97	1.00
Fr _t			0.986			0.850
Fl _t Protected					0.950	
Satd. Flow (prot)	0	5085	3490	0	3433	1689
Fl _t Permitted					0.950	
Satd. Flow (perm)	0	5085	3490	0	3433	1689
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			26			91
Link Speed (mph)		50	50		30	
Link Distance (ft)		616	917		417	
Travel Time (s)		8.4	12.5		9.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	626	1050	104	309	101
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	626	1154	0	309	101
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		24	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	0.88	1.00	0.92
Turning Speed (mph)	15			9	15	9
Number of Detectors		1	1		1	1
Detector Template						
Leading Detector (ft)		50	50		50	50
Trailing Detector (ft)		0	0		0	0
Detector 1 Position(ft)		0	0		0	0
Detector 1 Size(ft)		50	50		50	50
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)		0.0	0.0		0.0	0.0
Detector 1 Queue (s)		0.0	0.0		0.0	0.0
Detector 1 Delay (s)		0.0	0.0		0.0	0.0
Turn Type		NA	NA		Prot	Perm
Protected Phases		2	6		4	
Permitted Phases						4
Detector Phase		2	6		4	4
Switch Phase						
Minimum Initial (s)		4.0	4.0		4.0	4.0
Minimum Split (s)		20.0	35.2		20.0	20.0

Lanes, Volumes, Timings
 1: Valencia Blvd & 5 Fwy SB Ramp

04/25/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Total Split (s)		41.0	41.0		25.0	25.0
Total Split (%)		62.1%	62.1%		37.9%	37.9%
Maximum Green (s)		34.8	34.8		19.2	19.2
Yellow Time (s)		5.2	5.2		4.8	4.8
All-Red Time (s)		1.0	1.0		1.0	1.0
Lost Time Adjust (s)		-2.2	-2.2		-1.8	-1.8
Total Lost Time (s)		4.0	4.0		4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Recall Mode		C-Max	C-Max		Min	Min
Walk Time (s)			5.0			
Flash Dont Walk (s)			18.0			
Pedestrian Calls (#/hr)			0			
Act Effect Green (s)		44.8	44.8		13.2	13.2
Actuated g/C Ratio		0.68	0.68		0.20	0.20
v/c Ratio		0.18	0.49		0.45	0.25
Control Delay		4.3	2.7		24.9	7.9
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		4.3	2.7		24.9	7.9
LOS		A	A		C	A
Approach Delay		4.3	2.7		20.7	
Approach LOS		A	A		C	

Intersection Summary

Area Type:	Other
Cycle Length:	66
Actuated Cycle Length:	66
Offset:	14 (21%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle:	60
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.49
Intersection Signal Delay:	6.5
Intersection LOS:	A
Intersection Capacity Utilization:	44.5%
ICU Level of Service:	A
Analysis Period (min):	15

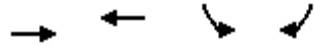
Splits and Phases: 1: Valencia Blvd & 5 Fwy SB Ramp



Queues

1: Valencia Blvd & 5 Fwy SB Ramp

04/25/2023





















Lane Group	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	626	1154	309	101
v/c Ratio	0.18	0.49	0.45	0.25
Control Delay	4.3	2.7	24.9	7.9
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	4.3	2.7	24.9	7.9
Queue Length 50th (ft)	27	16	57	3
Queue Length 95th (ft)	48	91	84	35
Internal Link Dist (ft)	536	837	337	
Turn Bay Length (ft)				455
Base Capacity (vph)	3454	2379	1092	599
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.18	0.49	0.28	0.17

Intersection Summary

Lanes, Volumes, Timings

2: 5 Fwy NB Ramp & Valencia Blvd

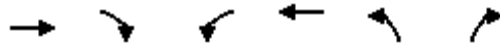
04/25/2023

						
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	  		 	  	 	 
Traffic Volume (vph)	790	38	122	1748	287	982
Future Volume (vph)	790	38	122	1748	287	982
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	12	12	12	12	14
Storage Length (ft)		0	200		220	220
Storage Lanes		0	2		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	0.97	0.86	0.97	0.88
Fr _t	0.993					0.850
Fl _t Protected			0.950		0.950	
Satd. Flow (prot)	5386	0	3433	6408	3433	2972
Fl _t Permitted			0.950		0.950	
Satd. Flow (perm)	5386	0	3433	6408	3433	2972
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	13					631
Link Speed (mph)	50			50	30	
Link Distance (ft)	917			476	493	
Travel Time (s)	12.5			6.5	11.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	859	41	133	1900	312	1067
Shared Lane Traffic (%)						
Lane Group Flow (vph)	900	0	133	1900	312	1067
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	24			24	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.92	1.00	1.00	1.00	1.00	0.92
Turning Speed (mph)		9	15		15	9
Number of Detectors	1		1	1	1	1
Detector Template						
Leading Detector (ft)	50		50	50	50	50
Trailing Detector (ft)	0		0	0	0	0
Detector 1 Position(ft)	0		0	0	0	0
Detector 1 Size(ft)	50		50	50	50	50
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0
Turn Type	NA		Prot	NA	Prot	Prot
Protected Phases	2		1	6	8	8
Permitted Phases						
Detector Phase	2		1	6	8	8
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	31.0		14.0	20.0	20.0	20.0

Lanes, Volumes, Timings

2: 5 Fwy NB Ramp & Valencia Blvd

04/25/2023



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Total Split (s)	31.0		15.0	46.0	20.0	20.0
Total Split (%)	47.0%		22.7%	69.7%	30.3%	30.3%
Maximum Green (s)	24.8		9.9	39.8	14.2	14.2
Yellow Time (s)	5.2		4.1	5.2	4.8	4.8
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-2.2		-1.1	-2.2	-1.8	-1.8
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max		None	C-Max	None	None
Walk Time (s)	5.0					
Flash Dont Walk (s)	24.0					
Pedestrian Calls (#/hr)	0					
Act Effect Green (s)	31.6		9.0	42.4	15.6	15.6
Actuated g/C Ratio	0.48		0.14	0.64	0.24	0.24
v/c Ratio	0.35		0.28	0.46	0.38	0.90
Control Delay	9.4		26.1	5.1	22.6	22.0
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	9.4		26.1	5.1	22.6	22.0
LOS	A		C	A	C	C
Approach Delay	9.4			6.5	22.1	
Approach LOS	A			A	C	

Intersection Summary

Area Type:	Other
Cycle Length:	66
Actuated Cycle Length:	66
Offset:	8 (12%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle:	65
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.90
Intersection Signal Delay:	12.1
Intersection LOS:	B
Intersection Capacity Utilization	57.1%
ICU Level of Service	B
Analysis Period (min)	15

Splits and Phases: 2: 5 Fwy NB Ramp & Valencia Blvd



Queues

2: 5 Fwy NB Ramp & Valencia Blvd

04/25/2023



Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	900	133	1900	312	1067
v/c Ratio	0.35	0.28	0.46	0.38	0.90
Control Delay	9.4	26.1	5.1	22.6	22.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	9.4	26.1	5.1	22.6	22.0
Queue Length 50th (ft)	82	29	96	54	94
Queue Length 95th (ft)	104	m37	65	86	#229
Internal Link Dist (ft)	837		396	413	
Turn Bay Length (ft)		200		220	220
Base Capacity (vph)	2582	572	4112	832	1198
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.35	0.23	0.46	0.38	0.89

Intersection Summary

























95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

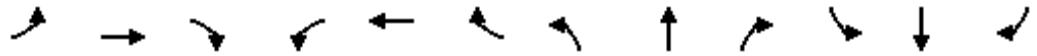
Lanes, Volumes, Timings
3: McBean Pkwy & Valencia Blvd

04/25/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	392	1069	124	353	1468	61	205	767	349	125	572	763
Future Volume (vph)	392	1069	124	353	1468	61	205	767	349	125	572	763
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	11	11	13	11	11	12	11	11	12
Storage Length (ft)	350		280	290		225	130		200	190		300
Storage Lanes	2		1	2		1	2		2	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	0.88	0.97	0.91	0.88
Fr _t			0.850			0.850			0.850			0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3319	4916	1583	3319	4916	1636	3319	4916	2787	3319	4916	2787
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3319	4916	1583	3319	4916	1636	3319	4916	2787	3319	4916	2787
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			74			70			153			120
Link Speed (mph)		50			50			45			45	
Link Distance (ft)		1919			721			765			966	
Travel Time (s)		26.2			9.8			11.6			14.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	426	1162	135	384	1596	66	223	834	379	136	622	829
Shared Lane Traffic (%)												
Lane Group Flow (vph)	426	1162	135	384	1596	66	223	834	379	136	622	829
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		22			22			22			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.00	1.04	1.04	0.96	1.04	1.04	1.00	1.04	1.04	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	1	6	7	5	2	3	7	4	5	3	8	1
Permitted Phases			6			2			4			8
Detector Phase	1	6	7	5	2	3	7	4	5	3	8	1
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	44.0	12.0	12.0	47.0	12.0	12.0	41.0	12.0	12.0	44.0	12.0

Lanes, Volumes, Timings
 3: McBean Pkwy & Valencia Blvd

04/25/2023

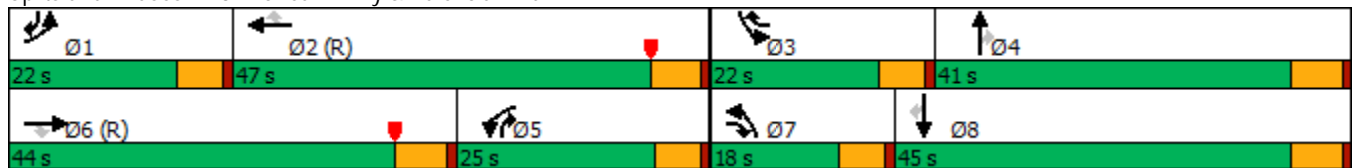


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	22.0	44.0	18.0	25.0	47.0	22.0	18.0	41.0	25.0	22.0	45.0	22.0
Total Split (%)	16.7%	33.3%	13.6%	18.9%	35.6%	16.7%	13.6%	31.1%	18.9%	16.7%	34.1%	16.7%
Maximum Green (s)	16.5	38.0	12.5	19.5	41.0	16.5	12.5	35.0	19.5	16.5	39.0	16.5
Yellow Time (s)	4.5	5.0	4.5	4.5	5.0	4.5	4.5	5.0	4.5	4.5	5.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.5	-2.0	-1.5	-1.5	-2.0	-1.5	-1.5	-2.0	-1.5	-1.5	-2.0	-1.5
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Max	None	None	C-Max	None	None	None	None	None	None	None
Walk Time (s)		5.0			5.0			5.0			5.0	
Flash Dont Walk (s)		32.0			33.0			30.0			33.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effect Green (s)	24.8	52.2	65.7	21.0	48.4	64.6	13.5	30.6	51.6	12.2	29.3	58.1
Actuated g/C Ratio	0.19	0.40	0.50	0.16	0.37	0.49	0.10	0.23	0.39	0.09	0.22	0.44
v/c Ratio	0.68	0.60	0.16	0.73	0.89	0.08	0.66	0.73	0.32	0.44	0.57	0.64
Control Delay	53.1	32.9	4.3	25.5	14.8	0.1	66.6	50.8	10.2	39.1	59.4	64.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.1	32.9	4.3	25.5	14.8	0.1	66.6	50.8	10.2	39.1	59.4	64.3
LOS	D	C	A	C	B	A	E	D	B	D	E	E
Approach Delay		35.7			16.3			42.5			60.3	
Approach LOS		D			B			D			E	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 35 (27%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
 Natural Cycle: 115
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.89
 Intersection Signal Delay: 37.0
 Intersection LOS: D
 Intersection Capacity Utilization 71.3%
 ICU Level of Service C
 Analysis Period (min) 15

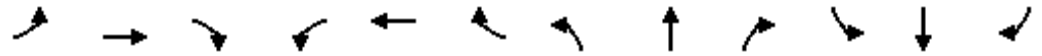
Splits and Phases: 3: McBean Pkwy & Valencia Blvd



Queues

3: McBean Pkwy & Valencia Blvd

04/25/2023



























Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	426	1162	135	384	1596	66	223	834	379	136	622	829
v/c Ratio	0.68	0.60	0.16	0.73	0.89	0.08	0.66	0.73	0.32	0.44	0.57	0.64
Control Delay	53.1	32.9	4.3	25.5	14.8	0.1	66.6	50.8	10.2	39.1	59.4	64.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.1	32.9	4.3	25.5	14.8	0.1	66.6	50.8	10.2	39.1	59.4	64.3
Queue Length 50th (ft)	174	300	10	142	212	0	95	243	52	59	208	400
Queue Length 95th (ft)	m230	m360	m14	m129	m132	m0	140	277	69	95	250	473
Internal Link Dist (ft)	1839						641		685		886	
Turn Bay Length (ft)	350		280	290		225		130	200		190	300
Base Capacity (vph)	624	1943	830	528	1801	904	352	1377	1182	452	1526	1293
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.68	0.60	0.16	0.73	0.89	0.07	0.63	0.61	0.32	0.30	0.41	0.64

Intersection Summary

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

Lanes, Volumes, Timings
4: McBean Parkway & Magic Mountain Pkwy

04/25/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	425	442	56	62	466	144	65	1000	54	178	1430	659
Future Volume (vph)	425	442	56	62	466	144	65	1000	54	178	1430	659
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	16	12	12	14	11	11	16	11	11	16
Storage Length (ft)	360		360	210		0	175		175	300		340
Storage Lanes	1		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.91	1.00	0.97	0.86	1.00	0.97	0.86	1.00
Fr _t			0.850			0.850			0.850			0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	1794	3433	5085	1689	3319	6194	1794	3319	6194	1794
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1794	3433	5085	1689	3319	6194	1794	3319	6194	1794
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			99			157			198			631
Link Speed (mph)		50			45			45			50	
Link Distance (ft)		809			1452			1622			1219	
Travel Time (s)		11.0			22.0			24.6			16.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	462	480	61	67	507	157	71	1087	59	193	1554	716
Shared Lane Traffic (%)												
Lane Group Flow (vph)	462	480	61	67	507	157	71	1087	59	193	1554	716
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			22			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	0.85	1.00	1.00	0.92	1.04	1.04	0.85	1.04	1.04	0.85
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			Free			Free
Detector Phase	5	2	2	1	6	6	3	8		7	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Minimum Split (s)	12.0	41.0	41.0	12.0	40.0	40.0	12.0	37.0		12.0	37.0	

Lanes, Volumes, Timings
 4: McBean Parkway & Magic Mountain Pkwy

04/25/2023

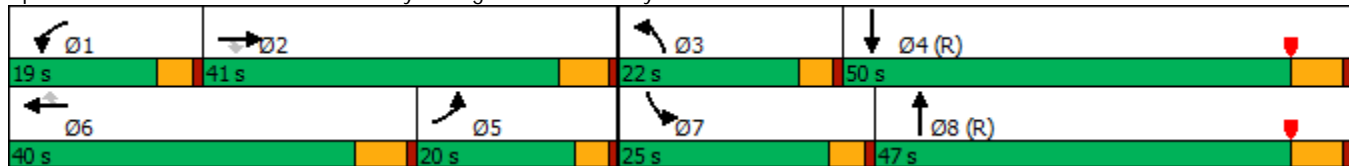


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	20.0	41.0	41.0	19.0	40.0	40.0	22.0	47.0		25.0	50.0	
Total Split (%)	15.2%	31.1%	31.1%	14.4%	30.3%	30.3%	16.7%	35.6%		18.9%	37.9%	
Maximum Green (s)	15.5	35.0	35.0	14.5	34.0	34.0	17.5	41.0		20.5	44.0	
Yellow Time (s)	3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.0		3.5	5.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	-0.5	-2.0	-2.0	-0.5	-2.0	-2.0	-0.5	-2.0		-0.5	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	Max	Max	None	Max	Max	None	C-Max		None	C-Max	
Walk Time (s)		5.0	5.0		5.0	5.0		5.0			5.0	
Flash Dont Walk (s)		30.0	30.0		29.0	29.0		26.0			26.0	
Pedestrian Calls (#/hr)		0	0		0	0		0			0	
Act Effect Green (s)	16.0	45.6	45.6	8.5	36.0	36.0	8.7	50.5	132.0	13.5	57.4	132.0
Actuated g/C Ratio	0.12	0.35	0.35	0.06	0.27	0.27	0.07	0.38	1.00	0.10	0.43	1.00
v/c Ratio	1.11	0.39	0.09	0.30	0.37	0.27	0.33	0.46	0.03	0.57	0.58	0.40
Control Delay	129.8	34.8	1.7	66.8	40.5	13.5	82.4	18.4	0.0	62.9	29.9	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	129.8	34.8	1.7	66.8	40.5	13.5	82.4	18.4	0.0	62.9	29.9	0.7
LOS	F	C	A	E	D	B	F	B	A	E	C	A
Approach Delay		76.5			37.1			21.3			24.0	
Approach LOS		E			D			C			C	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 28 (21%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow
 Natural Cycle: 105
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.11
 Intersection Signal Delay: 34.9
 Intersection LOS: C
 Intersection Capacity Utilization 58.5%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 4: McBean Parkway & Magic Mountain Pkwy



Queues

4: McBean Parkway & Magic Mountain Pkwy

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	462	480	61	67	507	157	71	1087	59	193	1554	716
v/c Ratio	1.11	0.39	0.09	0.30	0.37	0.27	0.33	0.46	0.03	0.57	0.58	0.40
Control Delay	129.8	34.8	1.7	66.8	40.5	13.5	82.4	18.4	0.0	62.9	29.9	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	129.8	34.8	1.7	66.8	40.5	13.5	82.4	18.4	0.0	62.9	29.9	0.7
Queue Length 50th (ft)	~232	167	0	28	119	25	33	73	0	82	295	0
Queue Length 95th (ft)	#342	223	10	52	153	55	m53	121	m0	119	345	0
Internal Link Dist (ft)		729			1372			1542			1139	
Turn Bay Length (ft)	360		360	210			175		175	300		340
Base Capacity (vph)	416	1223	684	390	1386	574	452	2370	1794	528	2693	1794
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.11	0.39	0.09	0.17	0.37	0.27	0.16	0.46	0.03	0.37	0.58	0.40

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
5: Valencia Blvd & Magic Mountain Pkwy

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	183	244	43	179	404	47	44	951	103	24	1744	615
Future Volume (vph)	183	244	43	179	404	47	44	951	103	24	1744	615
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	13	12	11	12	11	11	14	12	11	11	12
Storage Length (ft)	310		0	250		200	180		200	190		190
Storage Lanes	1		0	2		0	1		1	1		2
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	0.95	0.97	0.95	0.95	1.00	0.91	1.00	1.00	0.91	0.88
Fr _t		0.977			0.984				0.850			0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3319	3573	0	3319	3483	0	1711	5424	1583	1711	4916	2787
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3319	3573	0	3319	3483	0	1711	5424	1583	1711	4916	2787
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		16			10				112			444
Link Speed (mph)		45			45			45				45
Link Distance (ft)		1046			2748			1989				572
Travel Time (s)		15.8			41.6			30.1				8.7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	199	265	47	195	439	51	48	1034	112	26	1896	668
Shared Lane Traffic (%)												
Lane Group Flow (vph)	199	312	0	195	490	0	48	1034	112	26	1896	668
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		22			22			11				11
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.04	0.96	1.00	1.04	1.00	1.04	1.04	0.92	1.00	1.04	1.04	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Size(ft)	50	50		50	50		50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	3	8		7	4		1	6		5	2	3
Permitted Phases									6			2
Detector Phase	3	8		7	4		1	6	6	5	2	3
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	45.0		12.0	45.0		12.0	38.0	38.0	12.0	39.0	12.0

Queues

5: Valencia Blvd & Magic Mountain Pkwy

04/25/2023



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	199	312	195	490	48	1034	112	26	1896	668
v/c Ratio	0.53	0.24	0.57	0.39	0.39	0.63	0.21	0.14	1.10	0.42
Control Delay	52.5	30.9	95.6	15.4	47.8	39.4	10.0	41.9	77.8	3.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.5	30.9	95.6	15.4	47.8	39.4	10.0	41.9	77.8	3.7
Queue Length 50th (ft)	89	99	88	54	39	312	35	16	~678	33
Queue Length 95th (ft)	118	140	130	234	m68	369	76	m20	m#715	m26
Internal Link Dist (ft)		966		2668		1909			492	
Turn Bay Length (ft)	310		250		180		200	190		190
Base Capacity (vph)	528	1321	528	1246	181	1643	535	181	1730	1712
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.38	0.24	0.37	0.39	0.27	0.63	0.21	0.14	1.10	0.39

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings

6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy

04/25/2023



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	93	333	338	1211	1583	153
Future Volume (vph)	93	333	338	1211	1583	153
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	265	265	260			270
Storage Lanes	1	1	2			1
Taper Length (ft)	25		25			
Lane Util. Factor	0.97	0.88	0.97	0.91	0.95	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3433	2787	3433	5085	3539	1583
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	3433	2787	3433	5085	3539	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		14				114
Link Speed (mph)	45			50	45	
Link Distance (ft)	2748			2280	1194	
Travel Time (s)	41.6			31.1	18.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	101	362	367	1316	1721	166
Shared Lane Traffic (%)						
Lane Group Flow (vph)	101	362	367	1316	1721	166
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	34			24	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	1	1	1
Detector Template						
Leading Detector (ft)	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	pt+ov	custom	NA	NA	Perm
Protected Phases	8	8 1	1	6	2	
Permitted Phases			1			2
Detector Phase	8	8 1	1	6	2	2
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	20.0		20.0	20.0	41.0	41.0
Total Split (s)	34.0		30.0	98.0	68.0	68.0

Lanes, Volumes, Timings

6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy

04/25/2023

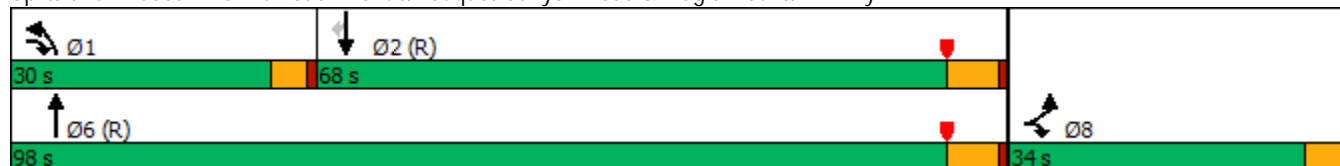


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Total Split (%)	25.8%		22.7%	74.2%	51.5%	51.5%
Maximum Green (s)	29.0		25.5	92.0	62.0	62.0
Yellow Time (s)	4.0		3.5	5.0	5.0	5.0
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0		-0.5	-2.0	-2.0	-2.0
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	Max		Min	C-Min	C-Min	C-Min
Walk Time (s)					7.0	7.0
Flash Dont Walk (s)					28.0	28.0
Pedestrian Calls (#/hr)					0	0
Act Effect Green (s)	30.0	54.4	20.4	94.0	69.6	69.6
Actuated g/C Ratio	0.23	0.41	0.15	0.71	0.53	0.53
v/c Ratio	0.13	0.31	0.69	0.36	0.92	0.19
Control Delay	30.4	18.8	59.5	7.7	36.9	6.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.4	18.8	59.5	7.7	36.9	6.5
LOS	C	B	E	A	D	A
Approach Delay	21.3			19.0	34.2	
Approach LOS	C			B	C	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 77 (58%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
 Natural Cycle: 85
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.92
 Intersection Signal Delay: 26.4
 Intersection LOS: C
 Intersection Capacity Utilization 66.7%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy



Queues

6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy

04/25/2023



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	101	362	367	1316	1721	166
v/c Ratio	0.13	0.31	0.69	0.36	0.92	0.19
Control Delay	30.4	18.8	59.5	7.7	36.9	6.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.4	18.8	59.5	7.7	36.9	6.5
Queue Length 50th (ft)	42	139	155	144	825	26
Queue Length 95th (ft)	63	179	198	167	#974	m43
Internal Link Dist (ft)	2668		2200		1114	
Turn Bay Length (ft)	265	265	260			270
Base Capacity (vph)	780	1274	676	3621	1864	888
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.28	0.54	0.36	0.92	0.19

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

Lanes, Volumes, Timings

7: Bouquet Canyon Rd & Valencia Blvd/Soledad Canyon Rd

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔↔	↕↕↕		↔↔↔	↕↕↕	↔	↔	↕↕↕	↔	↔↔↔	↕↕↕	↔↔↔
Traffic Volume (vph)	392	750	23	564	1474	294	23	710	423	329	1246	1063
Future Volume (vph)	392	750	23	564	1474	294	23	710	423	329	1246	1063
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	10	10	11	11	11	11	10	10	11
Storage Length (ft)	360		0	330		330	250		0	435		400
Storage Lanes	2		0	3		1	1		1	2		2
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.94	0.91	0.91	0.94	0.91	1.00	1.00	0.91	1.00	0.97	0.91	0.88
Fr _t		0.996				0.850			0.850			0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	4824	4896	0	4658	4746	1531	1711	4916	1531	3204	4746	2694
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	4824	4896	0	4658	4746	1531	1711	4916	1531	3204	4746	2694
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3				99			112			453
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		2282			2858			2196			1054	
Travel Time (s)		34.6			43.3			33.3			12.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	426	815	25	613	1602	320	25	772	460	358	1354	1155
Shared Lane Traffic (%)												
Lane Group Flow (vph)	426	840	0	613	1602	320	25	772	460	358	1354	1155
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		33			33			20			20	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.00	1.09	1.09	1.04	1.04	1.04	1.04	1.09	1.09	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50		50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50		50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4		3	8	1	5	2	3	1	6	7
Permitted Phases						8			2			6
Detector Phase	7	4		3	8	1	5	2	3	1	6	7
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	44.0		12.0	48.0	12.0	12.0	46.0	12.0	12.0	44.0	12.0

Lanes, Volumes, Timings

7: Bouquet Canyon Rd & Valencia Blvd/Soledad Canyon Rd

04/25/2023

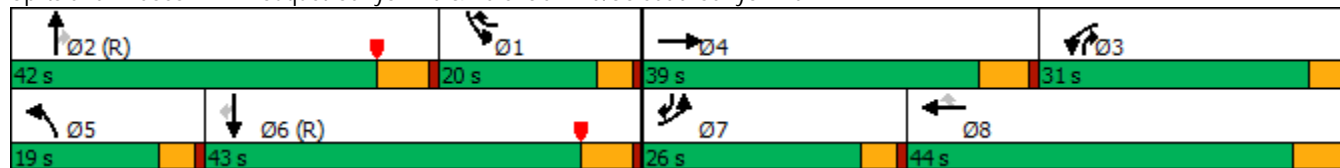


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	26.0	39.0		31.0	44.0	20.0	19.0	42.0	31.0	20.0	43.0	26.0
Total Split (%)	19.7%	29.5%		23.5%	33.3%	15.2%	14.4%	31.8%	23.5%	15.2%	32.6%	19.7%
Maximum Green (s)	21.5	33.0		26.5	38.0	15.5	14.5	36.0	26.5	15.5	37.0	21.5
Yellow Time (s)	3.5	5.0		3.5	5.0	3.5	3.5	5.0	3.5	3.5	5.0	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-0.5	-2.0		-0.5	-2.0	-0.5	-0.5	-2.0	-0.5	-0.5	-2.0	-0.5
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lead		Lag	Lag	Lag	Lead	Lead	Lag	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None		None	None	None	None	C-Max	None	None	C-Max	None
Walk Time (s)		5.0			5.0			5.0				
Flash Dont Walk (s)		33.0			37.0			35.0				
Pedestrian Calls (#/hr)		0			0			0				
Act Effect Green (s)	20.4	30.4		31.6	41.6	57.6	8.0	38.0	73.6	16.0	50.2	74.6
Actuated g/C Ratio	0.15	0.23		0.24	0.32	0.44	0.06	0.29	0.56	0.12	0.38	0.57
v/c Ratio	0.57	0.74		0.55	1.07	0.44	0.24	0.55	0.51	0.92	0.75	0.67
Control Delay	29.2	18.7		46.2	86.7	15.5	59.1	37.8	11.8	59.7	21.2	11.1
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.2	18.7		46.2	86.7	15.5	59.1	37.8	11.8	59.7	21.2	11.1
LOS	C	B		D	F	B	E	D	B	E	C	B
Approach Delay		22.2			67.9			28.7			22.0	
Approach LOS		C			E			C			C	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 117 (89%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 120
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.07
 Intersection Signal Delay: 37.8
 Intersection LOS: D
 Intersection Capacity Utilization 79.0%
 ICU Level of Service D
 Analysis Period (min) 15

Splits and Phases: 7: Bouquet Canyon Rd & Valencia Blvd/Soledad Canyon Rd



Queues

7: Bouquet Canyon Rd & Valencia Blvd/Soledad Canyon Rd

04/25/2023



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	426	840	613	1602	320	25	772	460	358	1354	1155
v/c Ratio	0.57	0.74	0.55	1.07	0.44	0.24	0.55	0.51	0.92	0.75	0.67
Control Delay	29.2	18.7	46.2	86.7	15.5	59.1	37.8	11.8	59.7	21.2	11.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.2	18.7	46.2	86.7	15.5	59.1	37.8	11.8	59.7	21.2	11.1
Queue Length 50th (ft)	36	57	196	~592	113	21	209	195	165	365	445
Queue Length 95th (ft)	75	64	240	#691	176	51	255	313	m#208	436	538
Internal Link Dist (ft)		2202		2778			2116			974	
Turn Bay Length (ft)	360		330		330	250			435		400
Base Capacity (vph)	804	1300	1114	1495	723	194	1415	903	388	1805	1746
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.65	0.55	1.07	0.44	0.13	0.55	0.51	0.92	0.75	0.66

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
8: Bouquet Canyon Rd & Newhall Ranch Rd

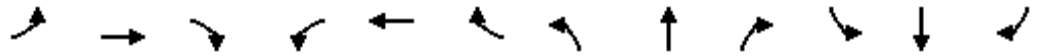
04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	270	798	333	456	1778	457	395	830	162	450	1919	533
Future Volume (vph)	270	798	333	456	1778	457	395	830	162	450	1919	533
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	290		265	410		410	475		230	260		150
Storage Lanes	3		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.94	0.86	1.00	0.97	0.86	1.00	0.97	0.86	1.00	0.97	0.86	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	4990	6408	1583	3433	6408	1583	3433	6408	1583	3433	6408	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	4990	6408	1583	3433	6408	1583	3433	6408	1583	3433	6408	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			107			326			182			112
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		870			2469			1012			1082	
Travel Time (s)		13.2			37.4			15.3			16.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	293	867	362	496	1933	497	429	902	176	489	2086	579
Shared Lane Traffic (%)												
Lane Group Flow (vph)	293	867	362	496	1933	497	429	902	176	489	2086	579
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		36			36			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	3	8	1	7	4		1	6		5	2	3
Permitted Phases			8			4			6			2
Detector Phase	3	8	1	7	4	4	1	6	6	5	2	3
Switch Phase												
Minimum Initial (s)	4.0	5.0	4.0	4.0	5.0	5.0	4.0	10.0	10.0	4.0	10.0	4.0
Minimum Split (s)	12.0	43.0	12.0	12.0	43.0	43.0	12.0	49.0	49.0	12.0	50.0	12.0
Total Split (s)	21.0	36.0	22.0	21.0	36.0	36.0	22.0	45.0	45.0	30.0	53.0	21.0

Lanes, Volumes, Timings
 8: Bouquet Canyon Rd & Newhall Ranch Rd

04/25/2023

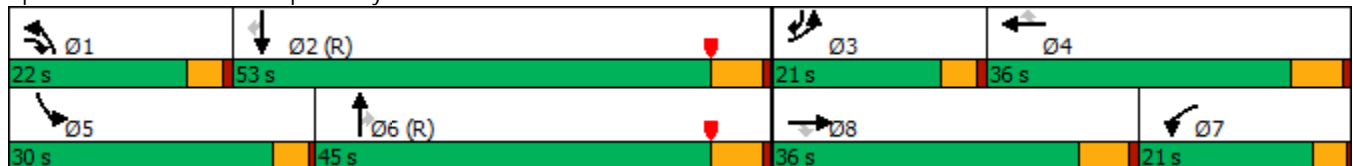


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	15.9%	27.3%	16.7%	15.9%	27.3%	27.3%	16.7%	34.1%	34.1%	22.7%	40.2%	15.9%
Maximum Green (s)	16.5	30.0	17.5	17.0	30.0	30.0	17.5	39.0	39.0	26.0	47.0	16.5
Yellow Time (s)	3.5	5.0	3.5	3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.0	3.5
All-Red Time (s)	1.0	1.0	1.0	0.5	1.0	1.0	1.0	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	-0.5	-2.0	-0.5	-0.5	-2.0	-2.0	-0.5	-2.0	-2.0	-0.5	-2.0	-0.5
Total Lost Time (s)	4.0	4.0	4.0	3.5	4.0	4.0	4.0	4.0	4.0	3.5	4.0	4.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes		Yes	Yes			Yes			Yes		Yes
Vehicle Extension (s)	3.0	5.5	3.0	3.0	5.5	5.5	3.0	5.5	5.5	3.0	5.5	3.0
Minimum Gap (s)	3.0	2.5	3.0	3.0	2.5	2.5	3.0	4.5	4.5	3.0	4.5	3.0
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	10.0	0.0	10.0	0.0
Time To Reduce (s)	0.0	24.0	0.0	0.0	24.0	24.0	0.0	10.0	10.0	0.0	10.0	0.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	None
Walk Time (s)		5.0			5.0	5.0		5.0	5.0		5.0	
Flash Dont Walk (s)		32.0			32.0	32.0		38.0	38.0		39.0	
Pedestrian Calls (#/hr)		2			2	2		1	1		1	
Act Effect Green (s)	14.4	27.9	45.9	21.6	34.6	34.6	18.0	43.8	43.8	23.7	49.0	67.4
Actuated g/C Ratio	0.11	0.21	0.35	0.16	0.26	0.26	0.14	0.33	0.33	0.18	0.37	0.51
v/c Ratio	0.54	0.64	0.58	0.88	1.15	0.76	0.92	0.42	0.27	0.80	0.88	0.67
Control Delay	59.1	49.6	17.4	69.1	116.6	24.2	73.7	51.8	19.9	61.8	43.9	23.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.1	49.6	17.4	69.1	116.6	24.2	73.7	51.8	19.9	61.8	43.9	23.1
LOS	E	D	B	E	F	C	E	D	B	E	D	C
Approach Delay		43.8			92.9			54.3			42.9	
Approach LOS		D			F			D			D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 105 (80%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
 Natural Cycle: 130
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.15
 Intersection Signal Delay: 61.0
 Intersection LOS: E
 Intersection Capacity Utilization 83.3%
 ICU Level of Service E
 Analysis Period (min) 15

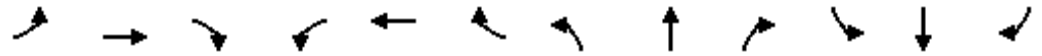
Splits and Phases: 8: Bouquet Canyon Rd & Newhall Ranch Rd



Queues

8: Bouquet Canyon Rd & Newhall Ranch Rd

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	293	867	362	496	1933	497	429	902	176	489	2086	579
v/c Ratio	0.54	0.64	0.58	0.88	1.15	0.76	0.92	0.42	0.27	0.80	0.88	0.67
Control Delay	59.1	49.6	17.4	69.1	116.6	24.2	73.7	51.8	19.9	61.8	43.9	23.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.1	49.6	17.4	69.1	116.6	24.2	73.7	51.8	19.9	61.8	43.9	23.1
Queue Length 50th (ft)	85	198	111	210	-564	123	172	222	44	207	480	292
Queue Length 95th (ft)	115	227	179	#358	#675	275	#278	262	103	264	531	410
Internal Link Dist (ft)		790			2389			932			1002	
Turn Bay Length (ft)	290		265	410		410	475		230	260		150
Base Capacity (vph)	642	1553	620	562	1679	655	468	2127	647	689	2378	892
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.46	0.56	0.58	0.88	1.15	0.76	0.92	0.42	0.27	0.71	0.88	0.65

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lanes, Volumes, Timings
9: Commuter Way & Soledad Cyn

04/25/2023



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↑	↓	↑↑↑	↓	↓
Traffic Volume (vph)	1369	40	11	2318	45	19
Future Volume (vph)	1369	40	11	2318	45	19
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		150	285		0	0
Storage Lanes		1	1		2	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	1.00	1.00	0.91	0.97	0.95
Frt		0.850			0.955	
Flt Protected			0.950		0.966	
Satd. Flow (prot)	5085	1583	1770	5085	3334	0
Flt Permitted			0.950		0.966	
Satd. Flow (perm)	5085	1583	1770	5085	3334	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		33			21	
Link Speed (mph)	50			50	30	
Link Distance (ft)	928			2825	392	
Travel Time (s)	12.7			38.5	8.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1488	43	12	2520	49	21
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1488	43	12	2520	70	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	1	1	1	1	1	
Detector Template						
Leading Detector (ft)	50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	
Turn Type	NA	Perm	Prot	NA	Prot	
Protected Phases	2		1	6	8	
Permitted Phases		2				
Detector Phase	2	2	1	6	8	
Switch Phase						
Minimum Initial (s)	10.0	10.0	4.0	10.0	4.0	
Minimum Split (s)	26.0	26.0	12.0	22.0	37.0	
Total Split (s)	75.0	75.0	20.0	95.0	37.0	

Lanes, Volumes, Timings
 9: Commuter Way & Soledad Cyn

04/25/2023

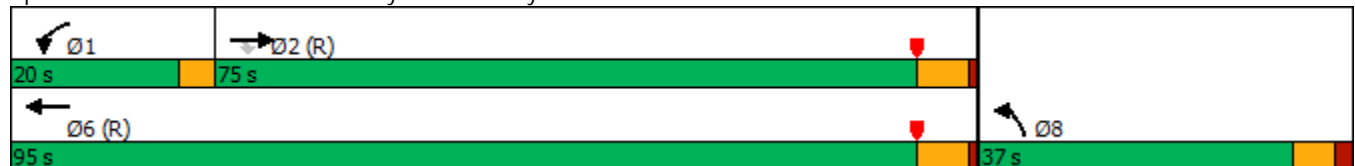


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Total Split (%)	56.8%	56.8%	15.2%	72.0%	28.0%	
Maximum Green (s)	69.0	69.0	16.5	89.0	31.0	
Yellow Time (s)	5.0	5.0	3.5	5.0	4.0	
All-Red Time (s)	1.0	1.0	0.0	1.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	0.5	-2.0	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Vehicle Extension (s)	5.0	5.0	1.5	5.0	2.0	
Minimum Gap (s)	4.0	4.0	1.5	4.0	2.0	
Time Before Reduce (s)	15.0	15.0	0.0	15.0	0.0	
Time To Reduce (s)	15.0	15.0	0.0	15.0	0.0	
Recall Mode	C-Max	C-Max	None	C-Max	None	
Walk Time (s)	7.0	7.0			7.0	
Flash Dont Walk (s)	13.0	13.0			24.0	
Pedestrian Calls (#/hr)	0	0			0	
Act Effect Green (s)	114.6	114.6	4.5	118.4	8.5	
Actuated g/C Ratio	0.87	0.87	0.03	0.90	0.06	
v/c Ratio	0.34	0.03	0.20	0.55	0.30	
Control Delay	1.0	0.1	81.3	1.4	45.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	1.0	0.1	81.3	1.4	45.2	
LOS	A	A	F	A	D	
Approach Delay	1.0			1.8	45.2	
Approach LOS	A			A	D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 16 (12%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Natural Cycle: 80
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.55
 Intersection Signal Delay: 2.2
 Intersection LOS: A
 Intersection Capacity Utilization 54.8%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 9: Commuter Way & Soledad Cyn



Queues

9: Commuter Way & Soledad Cyn

04/25/2023



Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Group Flow (vph)	1488	43	12	2520	70
v/c Ratio	0.34	0.03	0.20	0.55	0.30
Control Delay	1.0	0.1	81.3	1.4	45.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	1.0	0.1	81.3	1.4	45.2
Queue Length 50th (ft)	15	0	11	13	21
Queue Length 95th (ft)	37	1	m19	21	45
Internal Link Dist (ft)	848			2745	312
Turn Bay Length (ft)		150	285		
Base Capacity (vph)	4416	1379	214	4562	849
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.34	0.03	0.06	0.55	0.08

Intersection Summary

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

Lanes, Volumes, Timings
 10: Soledad Cyn/Soledad Cyn Rd & Valley Center

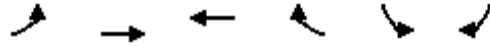
04/25/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø4
Lane Configurations	↖↖	↑↑↑	↑↑↑	↗	↖↖	↗	
Traffic Volume (vph)	100	906	1812	925	575	187	
Future Volume (vph)	100	906	1812	925	575	187	
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	250			310	235	0	
Storage Lanes	2			1	1	1	
Taper Length (ft)	25				25		
Lane Util. Factor	0.97	0.91	0.91	1.00	0.97	1.00	
Frt				0.850		0.850	
Flt Protected	0.950				0.950		
Satd. Flow (prot)	3433	5085	5085	1583	3433	1583	
Flt Permitted	0.950				0.950		
Satd. Flow (perm)	3433	5085	5085	1583	3433	1583	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)				509		203	
Link Speed (mph)		50	50		30		
Link Distance (ft)		2935	1764		1172		
Travel Time (s)		40.0	24.1		26.6		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	109	985	1970	1005	625	203	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	109	985	1970	1005	625	203	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Left	Left	Right	Left	Right	
Median Width(ft)		24	24		24		
Link Offset(ft)		0	0		0		
Crosswalk Width(ft)		16	16		16		
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (mph)	15			9	15	9	
Number of Detectors	1	1	1	1	1	1	
Detector Template							
Leading Detector (ft)	50	50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Turn Type	Prot	NA	NA	Free	Prot	pt+ov	
Protected Phases	5	2	6		3	3 5	4
Permitted Phases				Free			
Detector Phase	5	2	6		3	3 5	
Switch Phase							
Minimum Initial (s)	4.0	4.0	4.0		4.0		4.0
Minimum Split (s)	20.0	22.0	29.0		20.0		35.0
Total Split (s)	20.0	72.0	52.0		25.0		35.0

Lanes, Volumes, Timings
 10: Soledad Cyn/Soledad Cyn Rd & Valley Center

04/25/2023

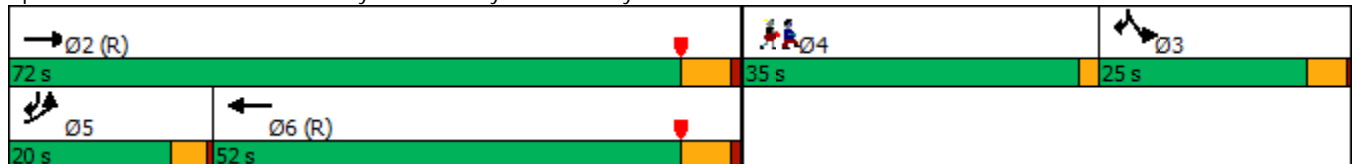


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø4	
Total Split (%)	15.2%	54.5%	39.4%		18.9%		27%	
Maximum Green (s)	16.0	66.0	46.0		20.5		33.0	
Yellow Time (s)	3.5	5.0	5.0		4.0		2.0	
All-Red Time (s)	0.5	1.0	1.0		0.5		0.0	
Lost Time Adjust (s)	0.0	-2.0	-2.0		-0.5			
Total Lost Time (s)	4.0	4.0	4.0		4.0			
Lead/Lag	Lead		Lag		Lag		Lead	
Lead-Lag Optimize?	Yes		Yes		Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		0.2	
Recall Mode	None	C-Max	C-Max		None		None	
Walk Time (s)				7.0				7.0
Flash Dont Walk (s)				16.0				26.0
Pedestrian Calls (#/hr)				0				0
Act Effct Green (s)	9.6	87.3	73.7	132.0	36.7	50.3		
Actuated g/C Ratio	0.07	0.66	0.56	1.00	0.28	0.38		
v/c Ratio	0.44	0.29	0.69	0.63	0.65	0.28		
Control Delay	51.6	17.4	6.4	6.7	30.4	1.7		
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		
Total Delay	51.6	17.4	6.4	6.7	30.4	1.7		
LOS	D	B	A	A	C	A		
Approach Delay	20.8		6.5		23.3			
Approach LOS	C		A		C			

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 37 (28%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Natural Cycle: 135
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.69
 Intersection Signal Delay: 12.5
 Intersection LOS: B
 Intersection Capacity Utilization 64.7%
 ICU Level of Service C
 Analysis Period (min) 15

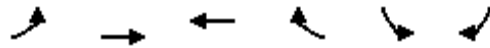
Splits and Phases: 10: Soledad Cyn/Soledad Cyn Rd & Valley Center



Queues

10: Soledad Cyn/Soledad Cyn Rd & Valley Center

04/25/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	109	985	1970	1005	625	203
v/c Ratio	0.44	0.29	0.69	0.63	0.65	0.28
Control Delay	51.6	17.4	6.4	6.7	30.4	1.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.6	17.4	6.4	6.7	30.4	1.7
Queue Length 50th (ft)	48	194	38	427	164	4
Queue Length 95th (ft)	80	224	m47	m461	246	9
Internal Link Dist (ft)		2855	1684		1092	
Turn Bay Length (ft)	250			310	235	
Base Capacity (vph)	416	3362	2839	1583	955	795
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.26	0.29	0.69	0.63	0.65	0.26

Intersection Summary

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

Lanes, Volumes, Timings
 11: Golden Valley Road & Valley Center Drive

04/25/2023



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4	Ø5	Ø12
Lane Configurations	↔↔↔	↔↔	↔↔	↑↑↑	↑↑↑	↔			
Traffic Volume (vph)	799	269	304	842	1052	487			
Future Volume (vph)	799	269	304	842	1052	487			
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900			
Storage Length (ft)	260	260	290			150			
Storage Lanes	2	1	2			1			
Taper Length (ft)	25		25						
Lane Util. Factor	0.94	0.88	0.97	0.91	0.91	1.00			
Frt		0.850				0.850			
Flt Protected	0.950		0.950						
Satd. Flow (prot)	4990	2787	3433	5085	5085	1583			
Flt Permitted	0.950		0.950						
Satd. Flow (perm)	4990	2787	3433	5085	5085	1583			
Right Turn on Red		Yes				Yes			
Satd. Flow (RTOR)		292				338			
Link Speed (mph)	30			50	50				
Link Distance (ft)	513			2601	1605				
Travel Time (s)	11.7			35.5	21.9				
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92			
Adj. Flow (vph)	868	292	330	915	1143	529			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	868	292	330	915	1143	529			
Enter Blocked Intersection	No	No	No	No	No	No			
Lane Alignment	Left	Right	Left	Left	Left	Right			
Median Width(ft)	36			24	24				
Link Offset(ft)	0			0	0				
Crosswalk Width(ft)	16			16	16				
Two way Left Turn Lane									
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00			
Turning Speed (mph)	15	9	15			9			
Number of Detectors	1	1	1	1	1	1			
Detector Template									
Leading Detector (ft)	50	50	50	50	50	50			
Trailing Detector (ft)	0	0	0	0	0	0			
Detector 1 Position(ft)	0	0	0	0	0	0			
Detector 1 Size(ft)	50	50	50	50	50	50			
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel									
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Turn Type	Prot	pt+ov	Prot	NA	NA	Perm			
Protected Phases	3	5 12	5 12	2	6		4	5	12
Permitted Phases						6			
Detector Phase	3	5 12	5 12	2	6	6			
Switch Phase									
Minimum Initial (s)	3.0			10.0	10.0	10.0	4.0	4.0	4.0
Minimum Split (s)	25.0			30.0	40.0	40.0	35.0	15.0	20.0
Total Split (s)	30.0			67.0	42.0	42.0	35.0	25.0	35.0

Lanes, Volumes, Timings
 11: Golden Valley Road & Valley Center Drive

04/25/2023

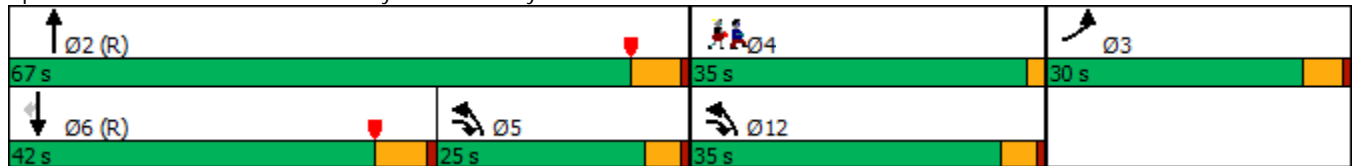


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4	Ø5	Ø12
Total Split (%)	22.7%			50.8%	31.8%	31.8%	27%	19%	27%
Maximum Green (s)	25.0			61.0	36.0	36.0	33.0	20.5	30.5
Yellow Time (s)	4.0			5.0	5.0	5.0	2.0	3.5	3.5
All-Red Time (s)	1.0			1.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)	-1.0			-2.0	-2.0	-2.0			
Total Lost Time (s)	4.0			4.0	4.0	4.0			
Lead/Lag					Lead	Lead		Lag	
Lead-Lag Optimize?					Yes	Yes		Yes	
Vehicle Extension (s)	3.0			3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None			C-Min	C-Min	C-Min	None	None	None
Walk Time (s)					7.0	7.0	7.0		5.0
Flash Dont Walk (s)					24.0	24.0	26.0		10.0
Pedestrian Calls (#/hr)					0	0	0		0
Act Effect Green (s)	30.5	28.5	28.5	82.3	61.0	61.0			
Actuated g/C Ratio	0.23	0.22	0.22	0.62	0.46	0.46			
v/c Ratio	0.75	0.35	0.45	0.29	0.49	0.58			
Control Delay	43.9	5.9	37.1	4.1	17.5	11.9			
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0			
Total Delay	43.9	5.9	37.1	4.1	17.5	11.9			
LOS	D	A	D	A	B	B			
Approach Delay	34.3			12.9	15.7				
Approach LOS	C			B	B				

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 26 (20%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 115
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.75
 Intersection Signal Delay: 20.1
 Intersection LOS: C
 Intersection Capacity Utilization 54.2%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 11: Golden Valley Road & Valley Center Drive



Queues

11: Golden Valley Road & Valley Center Drive

04/25/2023



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	868	292	330	915	1143	529
v/c Ratio	0.75	0.35	0.45	0.29	0.49	0.58
Control Delay	43.9	5.9	37.1	4.1	17.5	11.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.9	5.9	37.1	4.1	17.5	11.9
Queue Length 50th (ft)	270	11	145	31	162	114
Queue Length 95th (ft)	274	27	178	36	189	286
Internal Link Dist (ft)	433			2521	1525	
Turn Bay Length (ft)	260	260	290			150
Base Capacity (vph)	1159	1265	1339	3170	2349	913
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.75	0.23	0.25	0.29	0.49	0.58

Intersection Summary

Lanes, Volumes, Timings
12: Ruther Ave & Soledad Cyn Rd

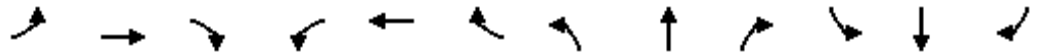
04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	71	1161	95	211	2574	18	258	138	97	83	96	70
Future Volume (vph)	71	1161	95	211	2574	18	258	138	97	83	96	70
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	285		300	250		0	0		0	125		0
Storage Lanes	1		1	2		0	1		2	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	0.91	0.95	0.95	0.88	0.95	0.95	1.00
Frt			0.850		0.999				0.850		0.937	
Flt Protected	0.950			0.950			0.950	0.978		0.950		
Satd. Flow (prot)	1770	5085	1583	3433	5080	0	1681	1731	2787	1681	1658	0
Flt Permitted	0.950			0.950			0.950	0.978		0.950		
Satd. Flow (perm)	1770	5085	1583	3433	5080	0	1681	1731	2787	1681	1658	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			103		1				105		23	
Link Speed (mph)		50		50				40			30	
Link Distance (ft)		1764		2200				220			327	
Travel Time (s)		24.1		30.0				3.8			7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	77	1262	103	229	2798	20	280	150	105	90	104	76
Shared Lane Traffic (%)							42%			0%		
Lane Group Flow (vph)	77	1262	103	229	2818	0	162	268	105	90	180	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24		24				12			12	
Link Offset(ft)		0		0				0			0	
Crosswalk Width(ft)		16		16				16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1	1	1	1	
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50		50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	pt+ov	Split	NA	
Protected Phases	1	6		5	2		3	3	3 5	4	4	
Permitted Phases			6									
Detector Phase	1	6	6	5	2		3	3	3 5	4	4	
Switch Phase												
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	12.0	42.0	42.0	12.0	27.0		35.0	35.0		15.0	15.0	
Total Split (s)	18.0	52.0	52.0	30.0	64.0		30.0	30.0		20.0	20.0	

Lanes, Volumes, Timings
 12: Ruther Ave & Soledad Cyn Rd

04/25/2023

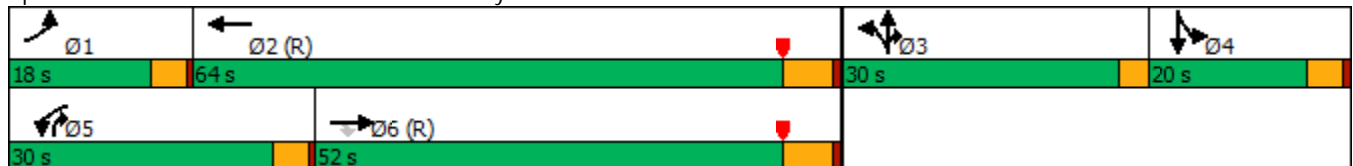


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	13.6%	39.4%	39.4%	22.7%	48.5%		22.7%	22.7%		15.2%	15.2%	
Maximum Green (s)	14.0	46.0	46.0	26.0	58.0		27.0	27.0		15.5	15.5	
Yellow Time (s)	3.5	5.0	5.0	3.5	5.0		3.0	3.0		3.5	3.5	
All-Red Time (s)	0.5	1.0	1.0	0.5	1.0		0.0	0.0		1.0	1.0	
Lost Time Adjust (s)	0.0	-2.0	-2.0	0.0	-2.0		1.0	1.0		-0.5	-0.5	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	4.5	4.5	1.5	4.5		3.0	3.0		3.0	3.0	
Minimum Gap (s)	1.5	3.0	3.0	1.5	3.0		3.0	3.0		3.0	3.0	
Time Before Reduce (s)	0.0	7.5	7.5	0.0	7.5		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	22.5	22.5	0.0	22.5		0.0	0.0		0.0	0.0	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None		None	None	
Walk Time (s)		7.0	7.0		7.0		5.0	5.0				
Flash Dont Walk (s)		25.0	25.0		11.0		27.0	27.0				
Pedestrian Calls (#/hr)		0	0		0		0	0				
Act Effect Green (s)	9.6	64.5	64.5	12.7	69.4		23.2	23.2	35.9	15.6	15.6	
Actuated g/C Ratio	0.07	0.49	0.49	0.10	0.53		0.18	0.18	0.27	0.12	0.12	
v/c Ratio	0.60	0.51	0.12	0.69	1.05		0.55	0.88	0.13	0.45	0.83	
Control Delay	93.5	8.6	1.1	68.7	65.7		56.4	81.5	3.8	61.9	79.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	93.5	8.6	1.1	68.7	65.7		56.4	81.5	3.8	61.9	79.7	
LOS	F	A	A	E	E		E	F	A	E	E	
Approach Delay		12.6			65.9			58.7			73.8	
Approach LOS		B			E			E			E	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
 Natural Cycle: 145
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.05
 Intersection Signal Delay: 51.1
 Intersection LOS: D
 Intersection Capacity Utilization 85.1%
 ICU Level of Service E
 Analysis Period (min) 15

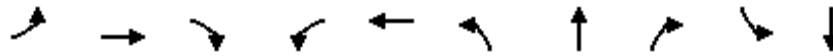
Splits and Phases: 12: Ruther Ave & Soledad Cyn Rd



Queues

12: Ruther Ave & Soledad Cyn Rd

04/25/2023



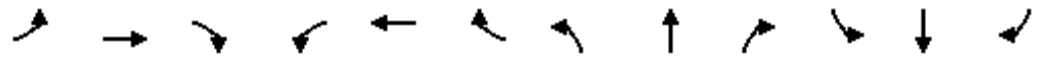
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	77	1262	103	229	2818	162	268	105	90	180
v/c Ratio	0.60	0.51	0.12	0.69	1.05	0.55	0.88	0.13	0.45	0.83
Control Delay	93.5	8.6	1.1	68.7	65.7	56.4	81.5	3.8	61.9	79.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	93.5	8.6	1.1	68.7	65.7	56.4	81.5	3.8	61.9	79.7
Queue Length 50th (ft)	67	155	0	99	~1031	131	233	0	75	140
Queue Length 95th (ft)	m111	214	m6	139	#1173	208	#369	16	136	#272
Internal Link Dist (ft)		1684			2120		140			247
Turn Bay Length (ft)	285		300	250					125	
Base Capacity (vph)	187	2484	826	676	2672	331	340	1161	207	224
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.41	0.51	0.12	0.34	1.05	0.49	0.79	0.09	0.43	0.80

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
 13: Golden Valley Road & Centre Pointe Parkway

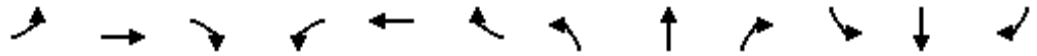
04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	72	163	256	101	66	359	1019	354	136	1117	130
Future Volume (vph)	49	72	163	256	101	66	359	1019	354	136	1117	130
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		260	150		250	375		300	700		0
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850		0.941				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	3433	1753	0	1770	3539	1583	1770	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1863	1583	3433	1753	0	1770	3539	1583	1770	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			103		25				385			136
Link Speed (mph)		30		30				50			50	
Link Distance (ft)		1149		802				7898			1445	
Travel Time (s)		26.1		18.2				107.7			19.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	53	78	177	278	110	72	390	1108	385	148	1214	141
Shared Lane Traffic (%)												
Lane Group Flow (vph)	53	78	177	278	182	0	390	1108	385	148	1214	141
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24		24				12			12	
Link Offset(ft)		0		0				0			0	
Crosswalk Width(ft)		16		16				16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50		50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	3	8	5	7	4		5	2	7	1	6	
Permitted Phases			8						2			6
Detector Phase	3	8	5	7	4		5	2	7	1	6	6
Switch Phase												
Minimum Initial (s)	4.0	6.0	4.0	4.0	6.0		4.0	10.0	4.0	4.0	10.0	10.0
Minimum Split (s)	12.0	25.0	20.0	20.0	39.0		20.0	33.0	20.0	15.0	34.0	34.0
Total Split (s)	19.0	25.0	33.0	34.0	40.0		33.0	40.0	34.0	33.0	40.0	40.0

Lanes, Volumes, Timings
 13: Golden Valley Road & Centre Pointe Parkway

04/25/2023

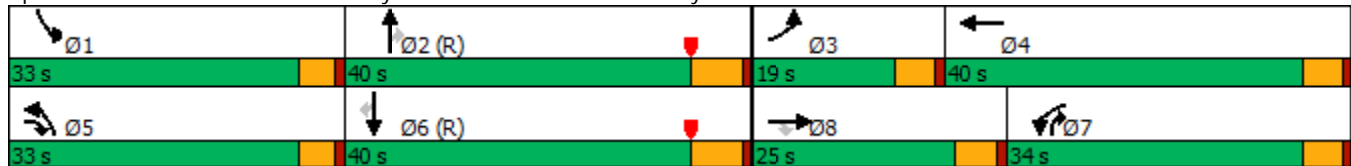


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	14.4%	18.9%	25.0%	25.8%	30.3%		25.0%	30.3%	25.8%	25.0%	30.3%	30.3%
Maximum Green (s)	14.0	20.0	28.5	29.0	35.0		28.5	34.0	29.0	28.5	34.0	34.0
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0		3.5	5.0	4.0	3.5	5.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0	-1.0	-0.5	-1.0	-1.0		-0.5	-2.0	-1.0	-0.5	-2.0	-2.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Min	None	None	C-Min	C-Min
Walk Time (s)					7.0			7.0			7.0	7.0
Flash Dont Walk (s)					27.0			20.0			21.0	21.0
Pedestrian Calls (#/hr)					0			0			0	0
Act Effct Green (s)	10.3	11.9	48.6	17.7	19.0		38.3	71.9	90.4	16.8	50.5	50.5
Actuated g/C Ratio	0.08	0.09	0.37	0.13	0.14		0.29	0.54	0.68	0.13	0.38	0.38
v/c Ratio	0.38	0.47	0.27	0.60	0.66		0.76	0.57	0.32	0.66	0.90	0.20
Control Delay	64.9	65.4	7.0	59.1	57.2		36.2	46.7	5.7	62.2	57.3	18.6
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	64.9	65.4	7.0	59.1	57.2		36.2	46.7	5.7	62.2	57.3	18.6
LOS	E	E	A	E	E		D	D	A	E	E	B
Approach Delay		31.8			58.3			36.1			54.2	
Approach LOS		C			E			D			D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 125 (95%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 125
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.90
 Intersection Signal Delay: 44.8
 Intersection LOS: D
 Intersection Capacity Utilization 76.8%
 ICU Level of Service D
 Analysis Period (min) 15

Splits and Phases: 13: Golden Valley Road & Centre Pointe Parkway



Queues

13: Golden Valley Road & Centre Pointe Parkway

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	53	78	177	278	182	390	1108	385	148	1214	141
v/c Ratio	0.38	0.47	0.27	0.60	0.66	0.76	0.57	0.32	0.66	0.90	0.20
Control Delay	64.9	65.4	7.0	59.1	57.2	36.2	46.7	5.7	62.2	57.3	18.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	64.9	65.4	7.0	59.1	57.2	36.2	46.7	5.7	62.2	57.3	18.6
Queue Length 50th (ft)	44	65	27	117	128	348	501	78	125	576	52
Queue Length 95th (ft)	86	115	47	157	200	m402	m559	m103	134	#847	124
Internal Link Dist (ft)		1069			722		7818			1365	
Turn Bay Length (ft)	150		260	150		375		300	700		
Base Capacity (vph)	201	296	648	780	496	513	1928	1317	388	1353	689
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.26	0.26	0.27	0.36	0.37	0.76	0.57	0.29	0.38	0.90	0.20

Intersection Summary

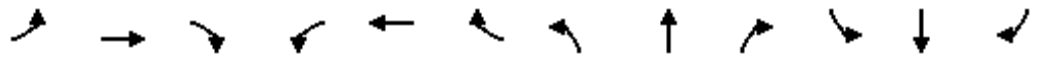
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

Lanes, Volumes, Timings
 14: Sierra Highway & Golden Valley Road

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑	↔↔	↔↔	↑↑↑	↔	↔↔	↑↔		↔	↑↑	↔
Traffic Volume (vph)	303	603	817	350	1108	63	562	205	18	44	1125	495
Future Volume (vph)	303	603	817	350	1108	63	562	205	18	44	1125	495
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	280		280	285		300	285		0	410		540
Storage Lanes	2		2	2		1	2		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	0.88	0.97	0.91	1.00	0.97	0.95	0.95	1.00	0.95	1.00
Fr _t			0.850			0.850		0.988				0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	2787	3433	5085	1583	3433	3497	0	1770	3539	1583
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	2787	3433	5085	1583	3433	3497	0	1770	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			476			136		7				538
Link Speed (mph)		50			50			30				30
Link Distance (ft)		2032			1202			1801				1671
Travel Time (s)		27.7			16.4			40.9				38.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	329	655	888	380	1204	68	611	223	20	48	1223	538
Shared Lane Traffic (%)												
Lane Group Flow (vph)	329	655	888	380	1204	68	611	243	0	48	1223	538
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24				24
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1		1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50		50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50		50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	custom
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						8
Detector Phase	7	4	4	3	8	8	5	2		1	6	8
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	8.5	29.6	29.6	8.5	40.0	40.0	15.0	49.0		8.5	46.0	40.0
Total Split (s)	29.0	41.0	41.0	29.0	41.0	41.0	25.0	44.0		18.0	37.0	41.0

Lanes, Volumes, Timings
 14: Sierra Highway & Golden Valley Road

04/25/2023

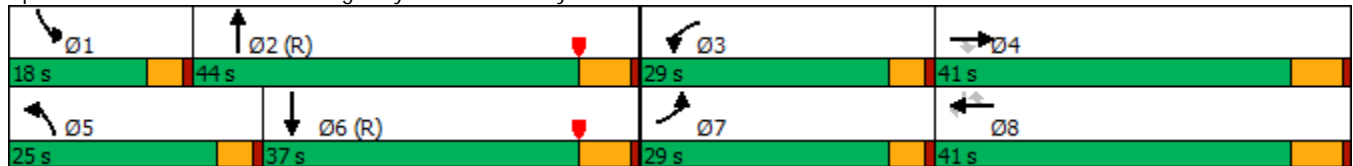


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	22.0%	31.1%	31.1%	22.0%	31.1%	31.1%	18.9%	33.3%		13.6%	28.0%	31.1%
Maximum Green (s)	24.5	35.0	35.0	24.5	35.0	35.0	20.5	38.0		13.5	31.0	35.0
Yellow Time (s)	3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.0		3.5	5.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	-0.5	-2.0	-2.0	-0.5	-2.0	-2.0	-0.5	-2.0		-0.5	-2.0	-2.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	None
Walk Time (s)					5.0	5.0		5.0			5.0	5.0
Flash Dont Walk (s)					29.0	29.0		33.0			30.0	29.0
Pedestrian Calls (#/hr)					0	0		0			0	0
Act Effect Green (s)	18.4	35.9	35.9	20.3	37.8	37.8	21.0	52.4		9.5	38.9	37.8
Actuated g/C Ratio	0.14	0.27	0.27	0.15	0.29	0.29	0.16	0.40		0.07	0.29	0.29
v/c Ratio	0.69	0.68	0.80	0.72	0.83	0.12	1.12	0.17		0.38	1.17	0.64
Control Delay	45.1	35.1	24.8	61.1	49.8	0.5	125.4	27.7		66.2	130.0	6.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	45.1	35.1	24.8	61.1	49.8	0.5	125.4	27.7		66.2	130.0	6.8
LOS	D	D	C	E	D	A	F	C		E	F	A
Approach Delay		32.0			50.4			97.6			91.7	
Approach LOS		C			D			F			F	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 96 (73%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 130
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.17
 Intersection Signal Delay: 63.4 Intersection LOS: E
 Intersection Capacity Utilization 90.5% ICU Level of Service E
 Analysis Period (min) 15

Splits and Phases: 14: Sierra Highway & Golden Valley Road



Queues

14: Sierra Highway & Golden Valley Road

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	329	655	888	380	1204	68	611	243	48	1223	538
v/c Ratio	0.69	0.68	0.80	0.72	0.83	0.12	1.12	0.17	0.38	1.17	0.64
Control Delay	45.1	35.1	24.8	61.1	49.8	0.5	125.4	27.7	66.2	130.0	6.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.1	35.1	24.8	61.1	49.8	0.5	125.4	27.7	66.2	130.0	6.8
Queue Length 50th (ft)	120	262	262	161	355	0	-309	69	40	-652	0
Queue Length 95th (ft)	m115	m304	m319	207	406	0	#428	113	81	#869	91
Internal Link Dist (ft)		1952			1122			1721		1591	
Turn Bay Length (ft)	280		280	285		300	285		410		540
Base Capacity (vph)	650	991	1123	650	1460	551	546	1393	187	1041	837
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.66	0.79	0.58	0.82	0.12	1.12	0.17	0.26	1.17	0.64

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings

15: SR-14 SB Ramp & Newhall Ranch Road/Golden Valley Road

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗	↖	↑↑					↖	↗	↗
Traffic Volume (vph)	0	446	363	298	1031	0	0	0	0	41	194	493
Future Volume (vph)	0	446	363	298	1031	0	0	0	0	41	194	493
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	220		0	0		0	300		0
Storage Lanes	0		1	1		0	0		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850									0.850
Flt Protected				0.950						0.950	0.999	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	1681	1768	1583
Flt Permitted				0.950						0.950	0.999	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	1681	1768	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			395									61
Link Speed (mph)		50			50			30			30	
Link Distance (ft)		807			717			580			626	
Travel Time (s)		11.0			9.8			13.2			14.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	485	395	324	1121	0	0	0	0	45	211	536
Shared Lane Traffic (%)										10%		
Lane Group Flow (vph)	0	485	395	324	1121	0	0	0	0	40	216	536
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		6		5		2				4		
Permitted Phases		6								4		4

Lanes, Volumes, Timings

15: SR-14 SB Ramp & Newhall Ranch Road/Golden Valley Road

04/25/2023

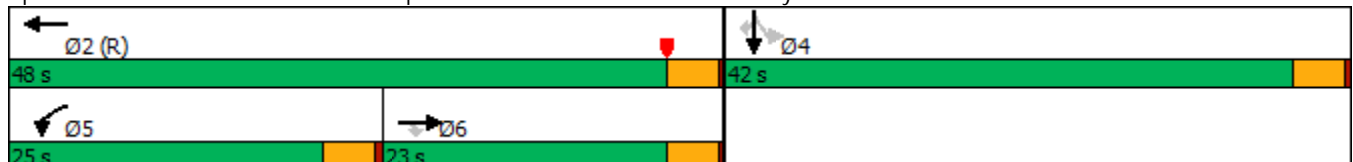


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase		6	6	5	2					4	4	4
Switch Phase												
Minimum Initial (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Minimum Split (s)		20.0	20.0	12.0	20.0					20.0	20.0	20.0
Total Split (s)		23.0	23.0	25.0	48.0					42.0	42.0	42.0
Total Split (%)		25.6%	25.6%	27.8%	53.3%					46.7%	46.7%	46.7%
Maximum Green (s)		19.0	19.0	21.0	44.0					38.0	38.0	38.0
Yellow Time (s)		3.5	3.5	3.5	3.5					3.5	3.5	3.5
All-Red Time (s)		0.5	0.5	0.5	0.5					0.5	0.5	0.5
Lost Time Adjust (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Total Lost Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lead/Lag		Lag	Lag	Lead								
Lead-Lag Optimize?		Yes	Yes	Yes								
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Recall Mode		Max	Max	None	C-Max					Max	Max	Max
Walk Time (s)		5.0	5.0		5.0					5.0	5.0	5.0
Flash Dont Walk (s)		10.0	10.0		10.0					10.0	10.0	10.0
Pedestrian Calls (#/hr)		0	0		0					0	0	0
Act Effect Green (s)		20.6	20.6	19.4	44.0					38.0	38.0	38.0
Actuated g/C Ratio		0.23	0.23	0.22	0.49					0.42	0.42	0.42
v/c Ratio		0.60	0.59	0.85	0.65					0.06	0.29	0.76
Control Delay		35.2	7.5	42.7	13.8					15.8	18.5	28.1
Queue Delay		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Total Delay		35.2	7.5	42.7	13.8					15.8	18.5	28.1
LOS		D	A	D	B					B	B	C
Approach Delay		22.8			20.3						24.8	
Approach LOS		C			C						C	

Intersection Summary

Area Type:	Other
Cycle Length:	90
Actuated Cycle Length:	90
Offset:	0 (0%), Referenced to phase 2:WBT, Start of Yellow
Natural Cycle:	65
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.85
Intersection Signal Delay:	22.1
Intersection LOS:	C
Intersection Capacity Utilization:	65.7%
ICU Level of Service:	C
Analysis Period (min):	15

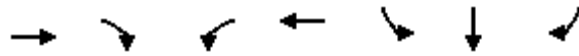
Splits and Phases: 15: SR-14 SB Ramp & Newhall Ranch Road/Golden Valley Road



Queues

15: SR-14 SB Ramp & Newhall Ranch Road/Golden Valley Road

04/25/2023



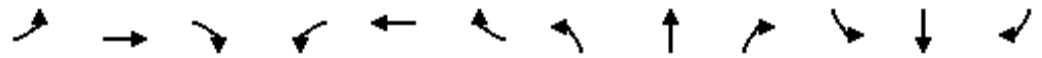
Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	485	395	324	1121	40	216	536
v/c Ratio	0.60	0.59	0.85	0.65	0.06	0.29	0.76
Control Delay	35.2	7.5	42.7	13.8	15.8	18.5	28.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.2	7.5	42.7	13.8	15.8	18.5	28.1
Queue Length 50th (ft)	133	0	183	276	13	83	226
Queue Length 95th (ft)	186	76	#306	323	33	137	361
Internal Link Dist (ft)	727			637		546	
Turn Bay Length (ft)			220		300		
Base Capacity (vph)	808	666	413	1730	709	746	703
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.60	0.59	0.78	0.65	0.06	0.29	0.76

Intersection Summary

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

Lanes, Volumes, Timings
 16: SR 14 NB Ramp & Golden Valley Road

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑			↑↑	↔	↔	↔	↔			
Traffic Volume (vph)	225	256	0	0	1001	65	310	1	149	0	0	0
Future Volume (vph)	225	256	0	0	1001	65	310	1	149	0	0	0
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	230		0	0		280	0		140	0		0
Storage Lanes	2		0	0		1	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt						0.850			0.850			
Flt Protected	0.950						0.950	0.953				
Satd. Flow (prot)	3433	3539	0	0	3539	1583	1681	1686	1583	0	0	0
Flt Permitted	0.950						0.950	0.953				
Satd. Flow (perm)	3433	3539	0	0	3539	1583	1681	1686	1583	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						71			162			
Link Speed (mph)		50			50			30				30
Link Distance (ft)		717			541			632				618
Travel Time (s)		9.8			7.4			14.4				14.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	245	278	0	0	1088	71	337	1	162	0	0	0
Shared Lane Traffic (%)							50%					
Lane Group Flow (vph)	245	278	0	0	1088	71	168	170	162	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1	1	2	1			
Detector Template	Left	Thru			Thru	Right	Left	Thru	Right			
Leading Detector (ft)	20	100			100	20	20	100	20			
Trailing Detector (ft)	0	0			0	0	0	0	0			
Detector 1 Position(ft)	0	0			0	0	0	0	0			
Detector 1 Size(ft)	20	6			6	20	20	6	20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Prot	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	7	4			8			2				
Permitted Phases						8	2		2			

Lanes, Volumes, Timings
 16: SR 14 NB Ramp & Golden Valley Road

04/25/2023

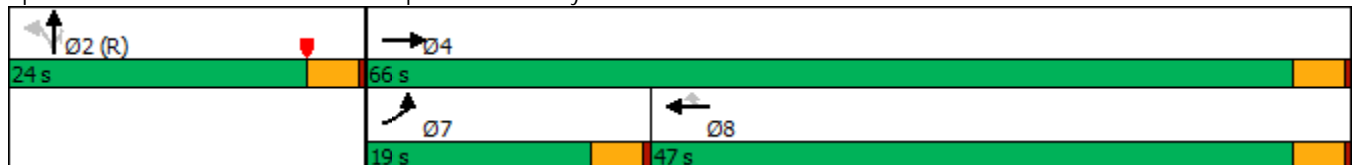


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4			8	8	2	2	2			
Switch Phase												
Minimum Initial (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Minimum Split (s)	12.0	20.0			20.0	20.0	20.0	20.0	20.0			
Total Split (s)	19.0	66.0			47.0	47.0	24.0	24.0	24.0			
Total Split (%)	21.1%	73.3%			52.2%	52.2%	26.7%	26.7%	26.7%			
Maximum Green (s)	15.0	62.0			43.0	43.0	20.0	20.0	20.0			
Yellow Time (s)	3.5	3.5			3.5	3.5	3.5	3.5	3.5			
All-Red Time (s)	0.5	0.5			0.5	0.5	0.5	0.5	0.5			
Lost Time Adjust (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Total Lost Time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Lead/Lag	Lead				Lag		Lag					
Lead-Lag Optimize?	Yes				Yes		Yes					
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Recall Mode	None	None			None	None	C-Max	C-Max	C-Max			
Walk Time (s)		5.0			5.0	5.0	5.0	5.0	5.0			
Flash Dont Walk (s)		10.0			10.0	10.0	10.0	10.0	10.0			
Pedestrian Calls (#/hr)		0			0	0	0	0	0			
Act Effct Green (s)	11.7	51.9			36.2	36.2	30.1	30.1	30.1			
Actuated g/C Ratio	0.13	0.58			0.40	0.40	0.33	0.33	0.33			
v/c Ratio	0.55	0.14			0.76	0.10	0.30	0.30	0.25			
Control Delay	16.0	10.1			26.7	3.9	26.8	26.9	5.9			
Queue Delay	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Total Delay	16.0	10.1			26.7	3.9	26.8	26.9	5.9			
LOS	B	B			C	A	C	C	A			
Approach Delay		12.8			25.3			20.1				
Approach LOS		B			C			C				

Intersection Summary

Area Type: Other
 Cycle Length: 90
 Actuated Cycle Length: 90
 Offset: 0 (0%), Referenced to phase 2:NBTL and 6:, Start of Yellow
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.76
 Intersection Signal Delay: 21.1
 Intersection LOS: C
 Intersection Capacity Utilization 65.7%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 16: SR 14 NB Ramp & Golden Valley Road



Queues

16: SR 14 NB Ramp & Golden Valley Road







04/25/2023



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	245	278	1088	71	168	170	162
v/c Ratio	0.55	0.14	0.76	0.10	0.30	0.30	0.25
Control Delay	16.0	10.1	26.7	3.9	26.8	26.9	5.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	16.0	10.1	26.7	3.9	26.8	26.9	5.9
Queue Length 50th (ft)	70	78	272	0	73	74	0
Queue Length 95th (ft)	106	119	303	21	152	153	49
Internal Link Dist (ft)		637	461			552	
Turn Bay Length (ft)	230			280			140
Base Capacity (vph)	572	2437	1691	793	561	563	636
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.43	0.11	0.64	0.09	0.30	0.30	0.25
Intersection Summary							

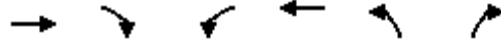
Lanes, Volumes, Timings
17: Studio Driveway & Soledad Cyn

04/25/2023

						
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↙	↑↑↑	↘	
Traffic Volume (vph)	1044	41	20	2185	21	10
Future Volume (vph)	1044	41	20	2185	21	10
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Fr _t	0.994				0.956	
Fl _t Protected			0.950		0.967	
Satd. Flow (prot)	5055	0	1770	5085	1722	0
Fl _t Permitted			0.218		0.967	
Satd. Flow (perm)	5055	0	406	5085	1722	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	16				11	
Link Speed (mph)	50			50	30	
Link Distance (ft)	469			185	392	
Travel Time (s)	6.4			2.5	8.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1135	45	22	2375	23	11
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1180	0	22	2375	34	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2		1	2	1	
Detector Template	Thru		Left	Thru	Left	
Leading Detector (ft)	100		20	100	20	
Trailing Detector (ft)	0		0	0	0	
Detector 1 Position(ft)	0		0	0	0	
Detector 1 Size(ft)	6		20	6	20	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA		Perm	NA	Prot	
Protected Phases	6			2	4	
Permitted Phases			2			
Detector Phase	6		2	2	4	
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	

Lanes, Volumes, Timings
 17: Studio Driveway & Soledad Cyn

04/25/2023

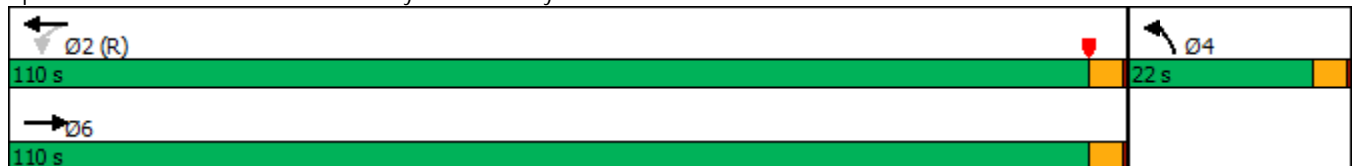


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Minimum Split (s)	20.0		20.0	20.0	20.0	
Total Split (s)	110.0		110.0	110.0	22.0	
Total Split (%)	83.3%		83.3%	83.3%	16.7%	
Maximum Green (s)	106.0		106.0	106.0	18.0	
Yellow Time (s)	3.5		3.5	3.5	3.5	
All-Red Time (s)	0.5		0.5	0.5	0.5	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	4.0		4.0	4.0	4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Recall Mode	Max		C-Max	C-Max	Max	
Walk Time (s)	5.0		5.0	5.0	5.0	
Flash Dont Walk (s)	10.0		10.0	10.0	10.0	
Pedestrian Calls (#/hr)	0		0	0	0	
Act Effect Green (s)	106.0		106.0	106.0	18.0	
Actuated g/C Ratio	0.80		0.80	0.80	0.14	
v/c Ratio	0.29		0.07	0.58	0.14	
Control Delay	1.0		4.0	4.8	39.0	
Queue Delay	0.0		0.0	0.0	0.0	
Total Delay	1.0		4.0	4.8	39.0	
LOS	A		A	A	D	
Approach Delay	1.0			4.8	39.0	
Approach LOS	A			A	D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 0 (0%), Referenced to phase 2:WBTL, Start of Yellow
 Natural Cycle: 55
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.58
 Intersection Signal Delay: 3.9
 Intersection Capacity Utilization 52.2%
 Analysis Period (min) 15
 Intersection LOS: A
 ICU Level of Service A

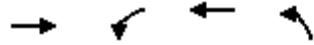
Splits and Phases: 17: Studio Driveway & Soledad Cyn



Queues

17: Studio Driveway & Soledad Cyn

04/25/2023



Lane Group	EBT	WBL	WBT	NBL
Lane Group Flow (vph)	1180	22	2375	34
v/c Ratio	0.29	0.07	0.58	0.14
Control Delay	1.0	4.0	4.8	39.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	1.0	4.0	4.8	39.0
Queue Length 50th (ft)	16	3	158	18
Queue Length 95th (ft)	m34	m8	207	51
Internal Link Dist (ft)	389		105	312
Turn Bay Length (ft)				
Base Capacity (vph)	4062	326	4083	244
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.29	0.07	0.58	0.14

Intersection Summary

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

Lanes, Volumes, Timings
 18: Residential Driveway 1 & Soledad Cyn

04/25/2023



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↵	↑↑↑		↵
Traffic Volume (vph)	1044	11	4	2205	0	26
Future Volume (vph)	1044	11	4	2205	0	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	100		0	0
Storage Lanes		0	1		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt	0.998					0.865
Flt Protected			0.950			
Satd. Flow (prot)	5075	0	1770	5085	0	1611
Flt Permitted			0.950			
Satd. Flow (perm)	5075	0	1770	5085	0	1611
Link Speed (mph)	50			50	30	
Link Distance (ft)	185			460	286	
Travel Time (s)	2.5			6.3	6.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1135	12	4	2397	0	28
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1147	0	4	2397	0	28
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	45.9%
ICU Level of Service	A
Analysis Period (min)	15

HCM 6th TWSC
 18: Residential Driveway 1 & Soledad Cyn

04/25/2023

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↑	↑↑↑		↑
Traffic Vol, veh/h	1044	11	4	2205	0	26
Future Vol, veh/h	1044	11	4	2205	0	26
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1135	12	4	2397	0	28

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	1147	0	- 574
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	5.34	-	- 7.14
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	3.12	-	- 3.92
Pot Cap-1 Maneuver	-	-	332	-	0 396
Stage 1	-	-	-	-	0 -
Stage 2	-	-	-	-	0 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	332	-	- 396
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	14.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	396	-	-	332	-
HCM Lane V/C Ratio	0.071	-	-	0.013	-
HCM Control Delay (s)	14.8	-	-	16	-
HCM Lane LOS	B	-	-	C	-
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Lanes, Volumes, Timings
 19: Residential Driveway 2 & Soledad Cyn

04/25/2023



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↵	↑↑↑		↵
Traffic Volume (vph)	1054	15	8	2209	0	49
Future Volume (vph)	1054	15	8	2209	0	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	100		0	0
Storage Lanes		0	1		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt	0.998					0.865
Flt Protected			0.950			
Satd. Flow (prot)	5075	0	1770	5085	0	1611
Flt Permitted			0.950			
Satd. Flow (perm)	5075	0	1770	5085	0	1611
Link Speed (mph)	50			50	30	
Link Distance (ft)	460			928	378	
Travel Time (s)	6.3			12.7	8.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1146	16	9	2401	0	53
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1162	0	9	2401	0	53
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	46.0%
ICU Level of Service	A
Analysis Period (min)	15

HCM 6th TWSC
 19: Residential Driveway 2 & Soledad Cyn

04/25/2023

Intersection						
Int Delay, s/veh	0.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↖ ↑↑↑			↗
Traffic Vol, veh/h	1054	15	8	2209	0	49
Future Vol, veh/h	1054	15	8	2209	0	49
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1146	16	9	2401	0	53

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	1162	0	- 581
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	5.34	-	- 7.14
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	3.12	-	- 3.92
Pot Cap-1 Maneuver	-	-	327	-	0 391
Stage 1	-	-	-	-	0 -
Stage 2	-	-	-	-	0 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	327	-	- 391
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	15.7
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	391	-	-	327	-
HCM Lane V/C Ratio	0.136	-	-	0.027	-
HCM Control Delay (s)	15.7	-	-	16.3	-
HCM Lane LOS	C	-	-	C	-
HCM 95th %tile Q(veh)	0.5	-	-	0.1	-

Lanes, Volumes, Timings
 20: Studio Driveway 2 & Soledad Cyn

04/25/2023



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑		↗
Traffic Volume (vph)	1085	0	0	2206	0	0
Future Volume (vph)	1085	0	0	2206	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frnt						
Flt Protected						
Satd. Flow (prot)	5085	0	0	5085	0	1863
Flt Permitted						
Satd. Flow (perm)	5085	0	0	5085	0	1863
Link Speed (mph)	50			50	30	
Link Distance (ft)	557			469	476	
Travel Time (s)	7.6			6.4	10.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1179	0	0	2398	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1179	0	0	2398	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	46.0%
Analysis Period (min)	15
	ICU Level of Service A

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑		↑
Traffic Vol, veh/h	1085	0	0	2206	0	0
Future Vol, veh/h	1085	0	0	2206	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1179	0	0	2398	0	0

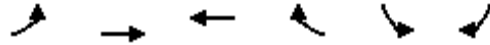
Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	-	-	590
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	3.92
Pot Cap-1 Maneuver	-	-	0	-	386
Stage 1	-	-	0	-	-
Stage 2	-	-	0	-	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	386
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

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

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

Lanes, Volumes, Timings
1: Valencia Blvd & 5 Fwy SB Ramp

04/25/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑		↑↑	↑
Traffic Volume (vph)	0	519	808	193	258	78
Future Volume (vph)	0	519	808	193	258	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	15	12	14
Storage Length (ft)	0			0	0	455
Storage Lanes	0			0	2	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.91	0.95	0.95	0.97	1.00
Fr _t			0.971			0.850
Fl _t Protected					0.950	
Satd. Flow (prot)	0	5085	3437	0	3433	1689
Fl _t Permitted					0.950	
Satd. Flow (perm)	0	5085	3437	0	3433	1689
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			72			85
Link Speed (mph)		50	50		30	
Link Distance (ft)		616	917		417	
Travel Time (s)		8.4	12.5		9.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	564	878	210	280	85
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	564	1088	0	280	85
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		24	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	0.88	1.00	0.92
Turning Speed (mph)	15			9	15	9
Number of Detectors		1	1		1	1
Detector Template						
Leading Detector (ft)		50	50		50	50
Trailing Detector (ft)		0	0		0	0
Detector 1 Position(ft)		0	0		0	0
Detector 1 Size(ft)		50	50		50	50
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)		0.0	0.0		0.0	0.0
Detector 1 Queue (s)		0.0	0.0		0.0	0.0
Detector 1 Delay (s)		0.0	0.0		0.0	0.0
Turn Type		NA	NA		Prot	Perm
Protected Phases		2	6		4	
Permitted Phases						4
Detector Phase		2	6		4	4
Switch Phase						
Minimum Initial (s)		4.0	4.0		4.0	4.0
Minimum Split (s)		20.0	35.2		20.0	20.0

Lanes, Volumes, Timings
 1: Valencia Blvd & 5 Fwy SB Ramp

04/25/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Total Split (s)		41.0	41.0		25.0	25.0
Total Split (%)		62.1%	62.1%		37.9%	37.9%
Maximum Green (s)		34.8	34.8		19.2	19.2
Yellow Time (s)		5.2	5.2		4.8	4.8
All-Red Time (s)		1.0	1.0		1.0	1.0
Lost Time Adjust (s)		-2.2	-2.2		-1.8	-1.8
Total Lost Time (s)		4.0	4.0		4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Recall Mode		C-Max	C-Max		Min	Min
Walk Time (s)			5.0			
Flash Dont Walk (s)			18.0			
Pedestrian Calls (#/hr)			0			
Act Effect Green (s)		45.4	45.4		12.6	12.6
Actuated g/C Ratio		0.69	0.69		0.19	0.19
v/c Ratio		0.16	0.46		0.43	0.22
Control Delay		4.1	4.9		25.0	7.1
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		4.1	4.9		25.0	7.1
LOS		A	A		C	A
Approach Delay		4.1	4.9		20.8	
Approach LOS		A	A		C	

Intersection Summary

Area Type: Other
 Cycle Length: 66
 Actuated Cycle Length: 66
 Offset: 56 (85%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.46
 Intersection Signal Delay: 7.5
 Intersection LOS: A
 Intersection Capacity Utilization 42.5%
 ICU Level of Service A
 Analysis Period (min) 15

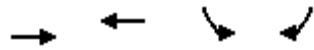
Splits and Phases: 1: Valencia Blvd & 5 Fwy SB Ramp



Queues

1: Valencia Blvd & 5 Fwy SB Ramp

04/25/2023



Lane Group	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	564	1088	280	85
v/c Ratio	0.16	0.46	0.43	0.22
Control Delay	4.1	4.9	25.0	7.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	4.1	4.9	25.0	7.1
Queue Length 50th (ft)	23	88	52	0
Queue Length 95th (ft)	42	89	77	30
Internal Link Dist (ft)	536	837	337	
Turn Bay Length (ft)				455
Base Capacity (vph)	3494	2384	1092	595
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.16	0.46	0.26	0.14
Intersection Summary				

Lanes, Volumes, Timings
2: 5 Fwy NB Ramp & Valencia Blvd

04/25/2023

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↙↘	↑↑↑	↙↘	↗↘
Traffic Volume (vph)	742	31	212	1629	190	915
Future Volume (vph)	742	31	212	1629	190	915
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	12	12	12	12	14
Storage Length (ft)		0	200		220	220
Storage Lanes		0	2		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	0.97	0.86	0.97	0.88
Fr _t	0.994					0.850
Fl _t Protected			0.950		0.950	
Satd. Flow (prot)	5392	0	3433	6408	3433	2972
Fl _t Permitted			0.950		0.950	
Satd. Flow (perm)	5392	0	3433	6408	3433	2972
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	11					647
Link Speed (mph)	50			50	30	
Link Distance (ft)	917			476	493	
Travel Time (s)	12.5			6.5	11.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	807	34	230	1771	207	995
Shared Lane Traffic (%)						
Lane Group Flow (vph)	841	0	230	1771	207	995
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	24			24	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.92	1.00	1.00	1.00	1.00	0.92
Turning Speed (mph)		9	15		15	9
Number of Detectors	1		1	1	1	1
Detector Template						
Leading Detector (ft)	50		50	50	50	50
Trailing Detector (ft)	0		0	0	0	0
Detector 1 Position(ft)	0		0	0	0	0
Detector 1 Size(ft)	50		50	50	50	50
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0
Turn Type	NA		Prot	NA	Prot	Prot
Protected Phases	2		1	6	8	8
Permitted Phases						
Detector Phase	2		1	6	8	8
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	36.0		14.0	20.0	20.0	20.0

Lanes, Volumes, Timings
 2: 5 Fwy NB Ramp & Valencia Blvd

04/25/2023



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Total Split (s)	31.0		15.0	46.0	20.0	20.0
Total Split (%)	47.0%		22.7%	69.7%	30.3%	30.3%
Maximum Green (s)	24.8		9.9	39.8	14.2	14.2
Yellow Time (s)	5.2		4.1	5.2	4.8	4.8
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-2.2		-1.1	-2.2	-1.8	-1.8
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max		None	C-Max	None	None
Walk Time (s)	5.0					
Flash Dont Walk (s)	24.0					
Pedestrian Calls (#/hr)	0					
Act Effect Green (s)	29.0		10.1	43.2	14.8	14.8
Actuated g/C Ratio	0.44		0.15	0.65	0.22	0.22
v/c Ratio	0.35		0.44	0.42	0.27	0.85
Control Delay	9.6		30.0	6.9	21.6	16.7
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	9.6		30.0	6.9	21.6	16.7
LOS	A		C	A	C	B
Approach Delay	9.6			9.6	17.5	
Approach LOS	A			A	B	

Intersection Summary

Area Type: Other
 Cycle Length: 66
 Actuated Cycle Length: 66
 Offset: 45 (68%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Natural Cycle: 70
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.85
 Intersection Signal Delay: 11.9
 Intersection LOS: B
 Intersection Capacity Utilization 53.7%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 2: 5 Fwy NB Ramp & Valencia Blvd



Queues

2: 5 Fwy NB Ramp & Valencia Blvd

04/25/2023



Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	841	230	1771	207	995
v/c Ratio	0.35	0.44	0.42	0.27	0.85
Control Delay	9.6	30.0	6.9	21.6	16.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	9.6	30.0	6.9	21.6	16.7
Queue Length 50th (ft)	83	67	149	34	68
Queue Length 95th (ft)	104	m89	197	60	#164
Internal Link Dist (ft)	837		396	413	
Turn Bay Length (ft)		200		220	220
Base Capacity (vph)	2378	572	4190	832	1210
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.35	0.40	0.42	0.25	0.82

Intersection Summary









































95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

Lanes, Volumes, Timings
3: McBean Pkwy & Valencia Blvd

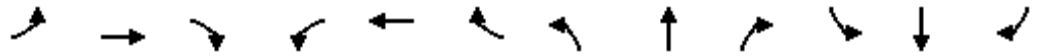
04/25/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	  		  	  		 	 	  	 	  	  
Traffic Volume (vph)	471	1430	173	366	1099	205	167	953	467	241	888	556
Future Volume (vph)	471	1430	173	366	1099	205	167	953	467	241	888	556
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	11	11	13	11	11	12	11	11	12
Storage Length (ft)	350		280	290		225	130		200	190		300
Storage Lanes	2		1	2		1	2		2	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	0.88	0.97	0.91	0.88
Fr _t			0.850			0.850			0.850			0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3319	4916	1583	3319	4916	1636	3319	4916	2787	3319	4916	2787
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3319	4916	1583	3319	4916	1636	3319	4916	2787	3319	4916	2787
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			70			70			70			70
Link Speed (mph)		50			50			45			45	
Link Distance (ft)		1919			721			765			1359	
Travel Time (s)		26.2			9.8			11.6			20.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	512	1554	188	398	1195	223	182	1036	508	262	965	604
Shared Lane Traffic (%)												
Lane Group Flow (vph)	512	1554	188	398	1195	223	182	1036	508	262	965	604
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		22			22			22			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.00	1.04	1.04	0.96	1.04	1.04	1.00	1.04	1.04	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	1	6	7	5	2	3	7	4	5	3	8	1
Permitted Phases			6			2			4			8
Detector Phase	1	6	7	5	2	3	7	4	5	3	8	1
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	43.0	12.0	12.0	44.0	12.0	12.0	41.0	12.0	12.0	44.0	12.0

Queues

3: McBean Pkwy & Valencia Blvd

04/25/2023








































Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	512	1554	188	398	1195	223	182	1036	508	262	965	604
v/c Ratio	0.87	0.96	0.25	0.73	0.77	0.28	0.56	0.80	0.39	0.66	0.69	0.43
Control Delay	72.1	55.6	16.1	76.8	22.1	4.1	63.4	50.3	20.4	41.4	54.4	48.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	72.1	55.6	16.1	76.8	22.1	4.1	63.4	50.3	20.4	41.4	54.4	48.8
Queue Length 50th (ft)	234	~533	56	131	347	63	77	299	128	106	319	288
Queue Length 95th (ft)	m#328	#635	m89	m190	348	m58	117	352	176	153	367	353
Internal Link Dist (ft)		1839			641			685			1279	
Turn Bay Length (ft)	350		280	290		225	130		200	190		300
Base Capacity (vph)	587	1623	776	581	1559	815	352	1377	1347	427	1489	1410
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.87	0.96	0.24	0.69	0.77	0.27	0.52	0.75	0.38	0.61	0.65	0.43

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

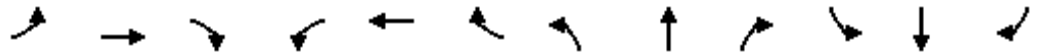
Lanes, Volumes, Timings
4: McBean Parkway & Magic Mountain Pkwy

04/25/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 		  	  		 	  		  	  	
Traffic Volume (vph)	885	689	139	230	566	361	144	1355	147	278	1305	284
Future Volume (vph)	885	689	139	230	566	361	144	1355	147	278	1305	284
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	16	12	12	14	11	11	16	11	11	16
Storage Length (ft)	360		360	210		0	175		175	300		340
Storage Lanes	1		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.91	1.00	0.97	0.86	1.00	0.97	0.86	1.00
Fr _t			0.850			0.850			0.850			0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	1794	3433	5085	1689	3319	6194	1794	3319	6194	1794
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1794	3433	5085	1689	3319	6194	1794	3319	6194	1794
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			151			254			198			299
Link Speed (mph)		50			45			45			50	
Link Distance (ft)		809			1452			1203			1219	
Travel Time (s)		11.0			22.0			18.2			16.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	962	749	151	250	615	392	157	1473	160	302	1418	309
Shared Lane Traffic (%)												
Lane Group Flow (vph)	962	749	151	250	615	392	157	1473	160	302	1418	309
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			22			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	0.85	1.00	1.00	0.92	1.04	1.04	0.85	1.04	1.04	0.85
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			Free			Free
Detector Phase	5	2	2	1	6	6	3	8		7	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Minimum Split (s)	12.0	41.0	41.0	12.0	40.0	40.0	12.0	37.0		12.0	37.0	

Lanes, Volumes, Timings
4: McBean Parkway & Magic Mountain Pkwy

04/25/2023

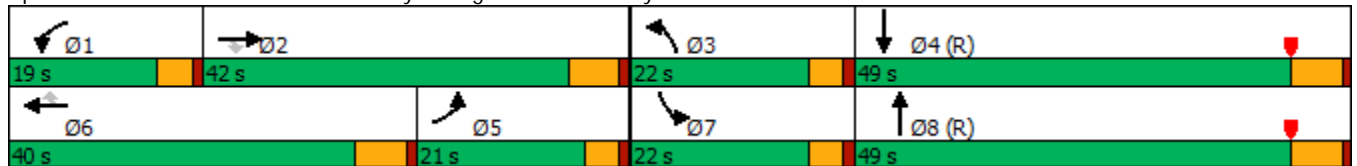


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	21.0	42.0	42.0	19.0	40.0	40.0	22.0	49.0		22.0	49.0	
Total Split (%)	15.9%	31.8%	31.8%	14.4%	30.3%	30.3%	16.7%	37.1%		16.7%	37.1%	
Maximum Green (s)	16.5	36.0	36.0	14.5	34.0	34.0	17.5	43.0		17.5	43.0	
Yellow Time (s)	3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.0		3.5	5.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	-0.5	-2.0	-2.0	-0.5	-2.0	-2.0	-0.5	-2.0		-0.5	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	Max	Max	None	Max	Max	None	C-Max		None	C-Max	
Walk Time (s)		5.0	5.0		5.0	5.0		5.0			5.0	
Flash Dont Walk (s)		30.0	30.0		29.0	29.0		26.0			26.0	
Pedestrian Calls (#/hr)		0	0		0	0		0			0	
Act Effect Green (s)	17.0	39.0	39.0	14.0	36.0	36.0	12.1	46.5	132.0	16.5	50.9	132.0
Actuated g/C Ratio	0.13	0.30	0.30	0.11	0.27	0.27	0.09	0.35	1.00	0.12	0.39	1.00
v/c Ratio	2.18	0.72	0.24	0.69	0.44	0.61	0.52	0.68	0.09	0.73	0.59	0.17
Control Delay	563.9	46.4	6.2	72.2	51.4	28.9	77.6	29.1	0.1	66.1	33.8	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	563.9	46.4	6.2	72.2	51.4	28.9	77.6	29.1	0.1	66.1	33.8	0.2
LOS	F	D	A	E	D	C	E	C	A	E	C	A
Approach Delay		310.5			48.6			30.8			33.5	
Approach LOS		F			D			C			C	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 30 (23%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow
 Natural Cycle: 125
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 2.18
 Intersection Signal Delay: 109.9 Intersection LOS: F
 Intersection Capacity Utilization 77.2% ICU Level of Service D
 Analysis Period (min) 15

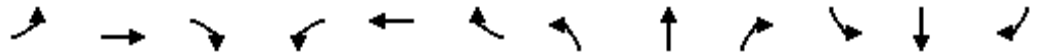
Splits and Phases: 4: McBean Parkway & Magic Mountain Pkwy



Queues

4: McBean Parkway & Magic Mountain Pkwy

04/25/2023

























Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	962	749	151	250	615	392	157	1473	160	302	1418	309
v/c Ratio	2.18	0.72	0.24	0.69	0.44	0.61	0.52	0.68	0.09	0.73	0.59	0.17
Control Delay	563.9	46.4	6.2	72.2	51.4	28.9	77.6	29.1	0.1	66.1	33.8	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	563.9	46.4	6.2	72.2	51.4	28.9	77.6	29.1	0.1	66.1	33.8	0.2
Queue Length 50th (ft)	~679	305	0	106	168	122	73	163	0	128	279	0
Queue Length 95th (ft)	#810	380	51	154	219	244	m95	192	m0	178	331	0
Internal Link Dist (ft)		729			1372			1123			1139	
Turn Bay Length (ft)	360		360	210			175		175	300		340
Base Capacity (vph)	442	1044	635	390	1386	645	452	2179	1794	452	2390	1794
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	2.18	0.72	0.24	0.64	0.44	0.61	0.35	0.68	0.09	0.67	0.59	0.17

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
5: Valencia Blvd & Magic Mountain Pkwy

04/25/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	679	668	30	231	509	91	58	1829	251	92	1444	446
Future Volume (vph)	679	668	30	231	509	91	58	1829	251	92	1444	446
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	13	12	11	12	11	11	14	12	11	11	12
Storage Length (ft)	310		0	250		200	180		200	190		190
Storage Lanes	1		0	2		0	1		1	1		2
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	0.95	0.97	0.95	0.95	1.00	0.91	1.00	1.00	0.91	0.88
Fr't		0.993			0.977				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3319	3632	0	3319	3458	0	1711	5424	1583	1711	4916	2787
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3319	3632	0	3319	3458	0	1711	5424	1583	1711	4916	2787
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3			15				161			367
Link Speed (mph)		50			45			45			45	
Link Distance (ft)		1046			2778			1989			572	
Travel Time (s)		14.3			42.1			30.1			8.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	738	726	33	251	553	99	63	1988	273	100	1570	485
Shared Lane Traffic (%)												
Lane Group Flow (vph)	738	759	0	251	652	0	63	1988	273	100	1570	485
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		22			22			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	0.96	1.00	1.04	1.00	1.04	1.04	0.92	1.00	1.04	1.04	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Size(ft)	50	50		50	50		50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	3	8		7	4		1	6		5	2	3
Permitted Phases									6			2
Detector Phase	3	8		7	4		1	6	6	5	2	3
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	35.0		12.0	39.0		12.0	38.0	38.0	12.0	41.0	12.0

Queues

5: Valencia Blvd & Magic Mountain Pkwy

04/25/2023



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	738	759	251	652	63	1988	273	100	1570	485
v/c Ratio	1.28	0.72	0.63	0.79	0.46	1.01	0.42	0.55	0.79	0.27
Control Delay	178.9	41.5	42.9	42.4	88.8	43.1	6.1	41.0	16.6	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	178.9	41.5	42.9	42.4	88.8	43.1	6.1	41.0	16.6	0.6
Queue Length 50th (ft)	~425	347	112	292	56	~303	16	80	118	0
Queue Length 95th (ft)	#594	419	156	357	m69	m#698	m26	m96	m174	m5
Internal Link Dist (ft)		966		2698		1909			492	
Turn Bay Length (ft)	310		250		180		200	190		190
Base Capacity (vph)	576	1054	578	927	181	1972	656	181	1995	1784
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.28	0.72	0.43	0.70	0.35	1.01	0.42	0.55	0.79	0.27

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings

6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy

04/25/2023



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	257	515	418	1589	1222	168
Future Volume (vph)	257	515	418	1589	1222	168
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	265	265	260			270
Storage Lanes	1	1	2			1
Taper Length (ft)	25		25			
Lane Util. Factor	0.97	0.88	0.97	0.91	0.95	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3433	2787	3433	5085	3539	1583
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	3433	2787	3433	5085	3539	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		47				164
Link Speed (mph)	45			50	45	
Link Distance (ft)	2778			2280	1171	
Travel Time (s)	42.1			31.1	17.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	279	560	454	1727	1328	183
Shared Lane Traffic (%)						
Lane Group Flow (vph)	279	560	454	1727	1328	183
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	34			24	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	1	1	1
Detector Template						
Leading Detector (ft)	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	pt+ov	custom	NA	NA	Perm
Protected Phases	8	8 1	1	6	2	
Permitted Phases			1			2
Detector Phase	8	8 1	1	6	2	2
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	20.0		20.0	20.0	41.0	41.0
Total Split (s)	34.0		30.0	98.0	68.0	68.0

Lanes, Volumes, Timings

6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy

04/25/2023

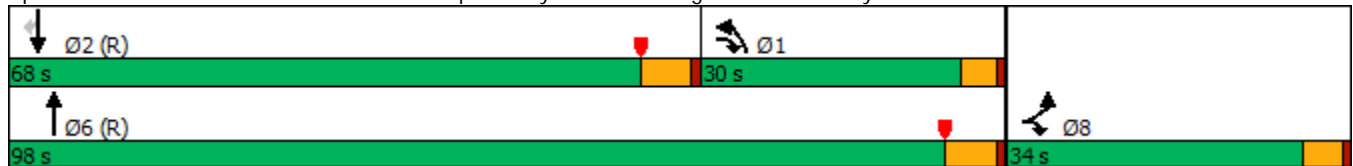


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Total Split (%)	25.8%		22.7%	74.2%	51.5%	51.5%
Maximum Green (s)	29.0		25.5	92.0	62.0	62.0
Yellow Time (s)	4.0		3.5	5.0	5.0	5.0
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0		-0.5	-2.0	-2.0	-2.0
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0
Lead/Lag			Lag		Lead	Lead
Lead-Lag Optimize?			Yes		Yes	Yes
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	Max		Min	C-Min	C-Min	C-Min
Walk Time (s)					7.0	7.0
Flash Dont Walk (s)					28.0	28.0
Pedestrian Calls (#/hr)					0	0
Act Effect Green (s)	36.9	64.5	23.5	87.1	59.5	59.5
Actuated g/C Ratio	0.28	0.49	0.18	0.66	0.45	0.45
v/c Ratio	0.29	0.40	0.74	0.51	0.83	0.23
Control Delay	34.9	13.6	59.1	11.9	36.9	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.9	13.6	59.1	11.9	36.9	4.5
LOS	C	B	E	B	D	A
Approach Delay	20.7			21.8	33.0	
Approach LOS	C			C	C	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 75 (57%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
 Natural Cycle: 85
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.83
 Intersection Signal Delay: 25.3
 Intersection LOS: C
 Intersection Capacity Utilization 63.0%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy



Queues

6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy

04/25/2023



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	279	560	454	1727	1328	183
v/c Ratio	0.29	0.40	0.74	0.51	0.83	0.23
Control Delay	34.9	13.6	59.1	11.9	36.9	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.9	13.6	59.1	11.9	36.9	4.5
Queue Length 50th (ft)	120	208	189	242	506	9
Queue Length 95th (ft)	163	211	246	242	575	48
Internal Link Dist (ft)	2698			2200	1091	
Turn Bay Length (ft)	265	265	260			270
Base Capacity (vph)	960	1373	679	3621	1715	852
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.41	0.67	0.48	0.77	0.21

Intersection Summary

Lanes, Volumes, Timings
7: Bouquet Canyon Rd & Valencia Blvd

04/25/2023

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1216	1757	30	455	1109	326	37	1271	761	366	924	668
Future Volume (vph)	1216	1757	30	455	1109	326	37	1271	761	366	924	668
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	10	10	11	11	11	11	10	10	11
Storage Length (ft)	360		0	330		330	250		0	435		400
Storage Lanes	2		0	3		1	1		1	2		2
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.94	0.91	0.91	0.94	0.91	1.00	1.00	0.91	1.00	0.97	0.91	0.88
Fr _t		0.997				0.850			0.850			0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	4824	4901	0	4658	4746	1531	1711	4916	1531	3204	4746	2694
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	4824	4901	0	4658	4746	1531	1711	4916	1531	3204	4746	2694
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2				124			112			452
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		2282			2684			2196			1017	
Travel Time (s)		34.6			40.7			33.3			12.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1322	1910	33	495	1205	354	40	1382	827	398	1004	726
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1322	1943	0	495	1205	354	40	1382	827	398	1004	726
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		33			33			20			20	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.00	1.09	1.09	1.04	1.04	1.04	1.04	1.09	1.09	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50		50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50		50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4		3	8	1	5	2	3	1	6	7
Permitted Phases						8			2			6
Detector Phase	7	4		3	8	1	5	2	3	1	6	7
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	44.0		12.0	48.0	12.0	12.0	46.0	12.0	12.0	44.0	12.0

Lanes, Volumes, Timings
7: Bouquet Canyon Rd & Valencia Blvd

04/25/2023

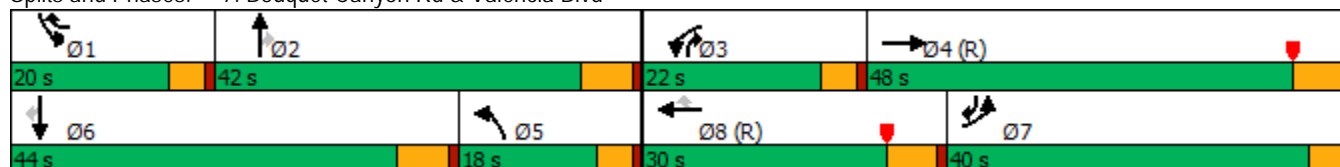


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	40.0	48.0		22.0	30.0	20.0	18.0	42.0	22.0	20.0	44.0	40.0
Total Split (%)	30.3%	36.4%		16.7%	22.7%	15.2%	13.6%	31.8%	16.7%	15.2%	33.3%	30.3%
Maximum Green (s)	35.5	42.0		17.5	24.0	15.5	13.5	36.0	17.5	15.5	38.0	35.5
Yellow Time (s)	3.5	5.0		3.5	5.0	3.5	3.5	5.0	3.5	3.5	5.0	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-0.5	-2.0		-0.5	-2.0	-0.5	-0.5	-2.0	-0.5	-0.5	-2.0	-0.5
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lag	Lag		Lead	Lead	Lead	Lag	Lag	Lead	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Max		None	C-Max	None	None	Max	None	None	None	None
Walk Time (s)		5.0			5.0			5.0				
Flash Dont Walk (s)		33.0			37.0			35.0				
Pedestrian Calls (#/hr)		0			0			0				
Act Effect Green (s)	36.0	44.0		18.0	26.0	42.0	14.5	38.0	60.0	16.0	41.5	81.5
Actuated g/C Ratio	0.27	0.33		0.14	0.20	0.32	0.11	0.29	0.45	0.12	0.31	0.62
v/c Ratio	1.01	1.19		0.78	1.29	0.62	0.21	0.98	1.09	1.03	0.67	0.40
Control Delay	73.4	133.5		56.9	169.8	7.4	55.8	65.5	91.2	100.9	56.1	13.9
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	73.4	133.5		56.9	169.8	7.4	55.8	65.5	91.2	100.9	56.1	13.9
LOS	E	F		E	F	A	E	E	F	F	E	B
Approach Delay		109.2			114.6			74.8			50.1	
Approach LOS		F			F			E			D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 51 (39%), Referenced to phase 4:EBT and 8:WBT, Start of Yellow
 Natural Cycle: 150
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.29
 Intersection Signal Delay: 89.4
 Intersection LOS: F
 Intersection Capacity Utilization 102.2%
 ICU Level of Service G
 Analysis Period (min) 15

Splits and Phases: 7: Bouquet Canyon Rd & Valencia Blvd



Queues

7: Bouquet Canyon Rd & Valencia Blvd

04/25/2023



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	1322	1943	495	1205	354	40	1382	827	398	1004	726
v/c Ratio	1.01	1.19	0.78	1.29	0.62	0.21	0.98	1.09	1.03	0.67	0.40
Control Delay	73.4	133.5	56.9	169.8	7.4	55.8	65.5	91.2	100.9	56.1	13.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	73.4	133.5	56.9	169.8	7.4	55.8	65.5	91.2	100.9	56.1	13.9
Queue Length 50th (ft)	~428	~750	123	~467	45	31	430	~744	~188	327	176
Queue Length 95th (ft)	m408	m#696	173	#567	74	70	#536	#996	m#292	360	233
Internal Link Dist (ft)		2202		2604			2116			937	
Turn Bay Length (ft)	360		330		330	250			435		400
Base Capacity (vph)	1315	1635	635	934	571	208	1415	757	388	1567	1836
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.01	1.19	0.78	1.29	0.62	0.19	0.98	1.09	1.03	0.64	0.40

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

Lanes, Volumes, Timings
 8: Bouquet Canyon Rd & Newhall Ranch Road

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	724	1640	468	342	1042	349	499	1678	371	396	1171	280
Future Volume (vph)	724	1640	468	342	1042	349	499	1678	371	396	1171	280
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	290		265	410		410	475		230	260		150
Storage Lanes	3		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.94	0.86	1.00	0.97	0.86	1.00	0.97	0.86	1.00	0.97	0.86	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	4990	6408	1583	3433	6408	1583	3433	6408	1583	3433	6408	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	4990	6408	1583	3433	6408	1583	3433	6408	1583	3433	6408	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			62			295			299			99
Link Speed (mph)		45		45			45			45		45
Link Distance (ft)		2675		2485			1030			669		
Travel Time (s)		40.5		37.7			15.6			10.1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	787	1783	509	372	1133	379	542	1824	403	430	1273	304
Shared Lane Traffic (%)												
Lane Group Flow (vph)	787	1783	509	372	1133	379	542	1824	403	430	1273	304
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		36		36			24			24		
Link Offset(ft)		0		0			0			0		
Crosswalk Width(ft)		16		16			16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	2	1	1	2	1
Detector Template	Left		Right	Left		Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	50	20	20	50	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	50	20	20	50	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)								94			94	
Detector 2 Size(ft)								6			6	
Detector 2 Type								Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)								0.0			0.0	
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	3	8	1	7	4		1	6		5	2	3
Permitted Phases			8			4			6			2

Lanes, Volumes, Timings
 8: Bouquet Canyon Rd & Newhall Ranch Road

04/25/2023

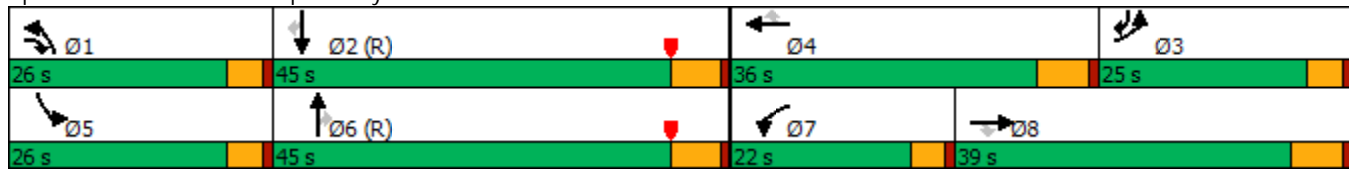


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	3	8	1	7	4	4	1	6	6	5	2	3
Switch Phase												
Minimum Initial (s)	4.0	5.0	4.0	4.0	5.0	5.0	4.0	10.0	10.0	4.0	10.0	4.0
Minimum Split (s)	12.0	43.0	12.0	12.0	43.0	43.0	12.0	49.0	49.0	12.0	50.0	12.0
Total Split (s)	25.0	39.0	26.0	22.0	36.0	36.0	26.0	45.0	45.0	26.0	45.0	25.0
Total Split (%)	18.9%	29.5%	19.7%	16.7%	27.3%	27.3%	19.7%	34.1%	34.1%	19.7%	34.1%	18.9%
Maximum Green (s)	20.5	33.0	21.5	17.5	30.0	30.0	21.5	39.0	39.0	21.5	39.0	20.5
Yellow Time (s)	3.5	5.0	3.5	3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.0	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	-2.0	0.0	0.0	-2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.0	4.5	4.5	4.0	6.0	4.5	6.0	6.0	4.5	6.0	4.5
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes		Yes	Yes			Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	5.5	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Minimum Gap (s)	3.0	2.5	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	24.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	Max	C-Max	None
Walk Time (s)		5.0			5.0	5.0		5.0	5.0		5.0	
Flash Dont Walk (s)		32.0			32.0	32.0		38.0	38.0		39.0	
Pedestrian Calls (#/hr)		2			5	5		1	1		1	
Act Effect Green (s)	21.3	35.5	61.0	17.0	31.2	29.2	21.5	39.0	39.0	21.5	39.0	61.8
Actuated g/C Ratio	0.16	0.27	0.46	0.13	0.24	0.22	0.16	0.30	0.30	0.16	0.30	0.47
v/c Ratio	0.98	1.03	0.67	0.84	0.75	0.65	0.97	0.96	0.59	0.77	0.67	0.38
Control Delay	82.3	78.1	29.2	71.7	48.0	18.6	62.7	50.9	13.2	63.1	43.0	9.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	82.3	78.1	29.2	71.7	48.0	18.6	62.7	50.9	13.2	63.1	43.0	9.2
LOS	F	E	C	E	D	B	E	D	B	E	D	A
Approach Delay		71.1			46.8			47.7			42.2	
Approach LOS		E			D			D			D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 33 (25%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
 Natural Cycle: 140
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.03
 Intersection Signal Delay: 53.8
 Intersection LOS: D
 Intersection Capacity Utilization 85.0%
 ICU Level of Service E
 Analysis Period (min) 15

Splits and Phases: 8: Bouquet Canyon Rd & Newhall Ranch Road



Queues

8: Bouquet Canyon Rd & Newhall Ranch Road

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	787	1783	509	372	1133	379	542	1824	403	430	1273	304
v/c Ratio	0.98	1.03	0.67	0.84	0.75	0.65	0.97	0.96	0.59	0.77	0.67	0.38
Control Delay	82.3	78.1	29.2	71.7	48.0	18.6	62.7	50.9	13.2	63.1	43.0	9.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	82.3	78.1	29.2	71.7	48.0	18.6	62.7	50.9	13.2	63.1	43.0	9.2
Queue Length 50th (ft)	~247	~482	296	171	268	87	227	402	91	184	279	57
Queue Length 95th (ft)	#339	#559	429	#242	318	224	m#240	m420	m100	243	321	95
Internal Link Dist (ft)		2595			2405			950			589	
Turn Bay Length (ft)	290		265	410		410	475		230	260		150
Base Capacity (vph)	803	1723	765	455	1553	587	559	1893	678	559	1893	793
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.98	1.03	0.67	0.82	0.73	0.65	0.97	0.96	0.59	0.77	0.67	0.38

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
9: Commuter Way & Soledad Cyn

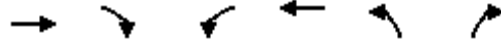
04/25/2023



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↑	↓	↑↑↑	↓	↓
Traffic Volume (vph)	2684	29	26	1731	43	15
Future Volume (vph)	2684	29	26	1731	43	15
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		150	285		0	0
Storage Lanes		1	1		2	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	1.00	1.00	0.91	0.97	0.95
Frt		0.850			0.962	
Flt Protected			0.950		0.964	
Satd. Flow (prot)	5085	1583	1770	5085	3351	0
Flt Permitted			0.950		0.964	
Satd. Flow (perm)	5085	1583	1770	5085	3351	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		12			16	
Link Speed (mph)	50			50	30	
Link Distance (ft)	911			2825	388	
Travel Time (s)	12.4			38.5	8.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2917	32	28	1882	47	16
Shared Lane Traffic (%)						
Lane Group Flow (vph)	2917	32	28	1882	63	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	1	1	1	1	1	
Detector Template						
Leading Detector (ft)	50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	
Turn Type	NA	Perm	Prot	NA	Prot	
Protected Phases	2		1	6	8	
Permitted Phases		2				
Detector Phase	2	2	1	6	8	
Switch Phase						
Minimum Initial (s)	10.0	10.0	4.0	10.0	4.0	
Minimum Split (s)	26.0	26.0	12.0	22.0	37.0	
Total Split (s)	75.0	75.0	20.0	95.0	37.0	

Lanes, Volumes, Timings
 9: Commuter Way & Soledad Cyn

04/25/2023



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Total Split (%)	56.8%	56.8%	15.2%	72.0%	28.0%	
Maximum Green (s)	69.0	69.0	16.5	89.0	31.0	
Yellow Time (s)	5.0	5.0	3.5	5.0	4.0	
All-Red Time (s)	1.0	1.0	0.0	1.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	0.5	-2.0	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Vehicle Extension (s)	5.0	5.0	1.5	5.0	2.0	
Minimum Gap (s)	4.0	4.0	1.5	4.0	2.0	
Time Before Reduce (s)	15.0	15.0	0.0	15.0	0.0	
Time To Reduce (s)	15.0	15.0	0.0	15.0	0.0	
Recall Mode	C-Max	C-Max	None	C-Max	None	
Walk Time (s)	7.0	7.0			7.0	
Flash Dont Walk (s)	13.0	13.0			24.0	
Pedestrian Calls (#/hr)	0	0			0	
Act Effect Green (s)	112.1	112.1	5.6	118.5	8.4	
Actuated g/C Ratio	0.85	0.85	0.04	0.90	0.06	
v/c Ratio	0.68	0.02	0.37	0.41	0.28	
Control Delay	7.3	2.6	99.7	1.7	47.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	7.3	2.6	99.7	1.7	47.6	
LOS	A	A	F	A	D	
Approach Delay	7.2			3.2	47.6	
Approach LOS	A			A	D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 58 (44%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Natural Cycle: 120
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.68
 Intersection Signal Delay: 6.2
 Intersection LOS: A
 Intersection Capacity Utilization 61.9%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 9: Commuter Way & Soledad Cyn



Queues

9: Commuter Way & Soledad Cyn

04/25/2023



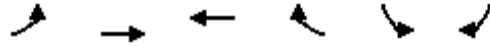
Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Group Flow (vph)	2917	32	28	1882	63
v/c Ratio	0.68	0.02	0.37	0.41	0.28
Control Delay	7.3	2.6	99.7	1.7	47.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	7.3	2.6	99.7	1.7	47.6
Queue Length 50th (ft)	331	3	23	31	20
Queue Length 95th (ft)	430	11	m36	13	43
Internal Link Dist (ft)	831			2745	308
Turn Bay Length (ft)		150	285		
Base Capacity (vph)	4318	1346	214	4566	849
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.68	0.02	0.13	0.41	0.07

Intersection Summary

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

Lanes, Volumes, Timings
10: Soledad Cyn & Valley Center

04/25/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø4
Lane Configurations	↖↖	↑↑↑	↑↑↑	↗	↘↘	↘	
Traffic Volume (vph)	138	2042	1287	791	897	197	
Future Volume (vph)	138	2042	1287	791	897	197	
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	250			310	235	0	
Storage Lanes	2			1	1	1	
Taper Length (ft)	25				25		
Lane Util. Factor	0.97	0.91	0.91	1.00	0.97	1.00	
Fr _t				0.850		0.850	
Fl _t Protected	0.950				0.950		
Satd. Flow (prot)	3433	5085	5085	1583	3433	1583	
Fl _t Permitted	0.950				0.950		
Satd. Flow (perm)	3433	5085	5085	1583	3433	1583	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)				614		185	
Link Speed (mph)		50	50		30		
Link Distance (ft)		2935	1764		1116		
Travel Time (s)		40.0	24.1		25.4		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	150	2220	1399	860	975	214	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	150	2220	1399	860	975	214	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Left	Left	Right	Left	Right	
Median Width(ft)		24	24		24		
Link Offset(ft)		0	0		0		
Crosswalk Width(ft)		16	16		16		
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (mph)	15			9	15	9	
Number of Detectors	1	1	1	1	1	1	
Detector Template							
Leading Detector (ft)	50	50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Turn Type	Prot	NA	NA	Free	Prot	pt+ov	
Protected Phases	5	2	6		3	3 5	4
Permitted Phases				Free			
Detector Phase	5	2	6		3	3 5	
Switch Phase							
Minimum Initial (s)	4.0	4.0	4.0		4.0		4.0
Minimum Split (s)	20.0	22.0	29.0		20.0		35.0
Total Split (s)	20.0	72.0	52.0		25.0		35.0

Lanes, Volumes, Timings
 10: Soledad Cyn & Valley Center

04/25/2023

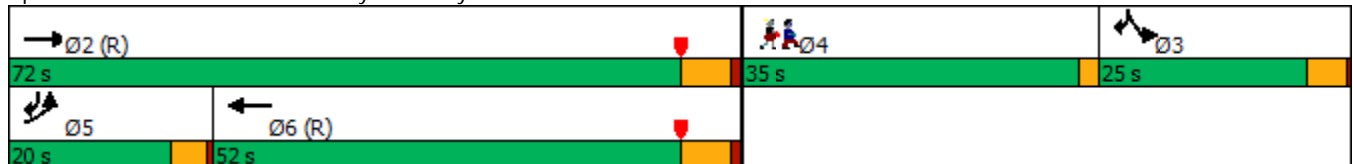


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø4
Total Split (%)	15.2%	54.5%	39.4%		18.9%		27%
Maximum Green (s)	16.0	66.0	46.0		20.5		33.0
Yellow Time (s)	3.5	5.0	5.0		4.0		2.0
All-Red Time (s)	0.5	1.0	1.0		0.5		0.0
Lost Time Adjust (s)	0.0	-2.0	-2.0		-0.5		
Total Lost Time (s)	4.0	4.0	4.0		4.0		
Lead/Lag	Lead		Lag		Lag		Lead
Lead-Lag Optimize?	Yes		Yes		Yes		Yes
Vehicle Extension (s)	3.0	3.0	3.0		3.0		0.2
Recall Mode	None	C-Max	C-Max		None		None
Walk Time (s)			7.0				7.0
Flash Dont Walk (s)			16.0				26.0
Pedestrian Calls (#/hr)			0				0
Act Effct Green (s)	11.1	68.9	53.8	132.0	55.1	70.2	
Actuated g/C Ratio	0.08	0.52	0.41	1.00	0.42	0.53	
v/c Ratio	0.52	0.84	0.68	0.54	0.68	0.23	
Control Delay	53.4	34.3	15.9	7.7	33.6	5.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	53.4	34.3	15.9	7.7	33.6	5.5	
LOS	D	C	B	A	C	A	
Approach Delay		35.5	12.8		28.5		
Approach LOS		D	B		C		

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 35 (27%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Natural Cycle: 145
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.84
 Intersection Signal Delay: 25.3
 Intersection LOS: C
 Intersection Capacity Utilization 71.7%
 ICU Level of Service C
 Analysis Period (min) 15

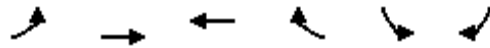
Splits and Phases: 10: Soledad Cyn & Valley Center



Queues

10: Soledad Cyn & Valley Center

04/25/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	150	2220	1399	860	975	214
v/c Ratio	0.52	0.84	0.68	0.54	0.68	0.23
Control Delay	53.4	34.3	15.9	7.7	33.6	5.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.4	34.3	15.9	7.7	33.6	5.5
Queue Length 50th (ft)	62	677	316	390	430	28
Queue Length 95th (ft)	m88	778	161	633	502	m42
Internal Link Dist (ft)		2855	1684		1036	
Turn Bay Length (ft)	250			310	235	
Base Capacity (vph)	416	2652	2070	1583	1434	980
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.84	0.68	0.54	0.68	0.22

Intersection Summary

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

Lanes, Volumes, Timings
 11: Golden Valley Road & Valley Center Drive

04/25/2023



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4	Ø5	Ø12
Lane Configurations	↔↔↔	↔↔	↔↔	↑↑↑	↑↑↑	↔			
Traffic Volume (vph)	551	436	383	1266	1118	806			
Future Volume (vph)	551	436	383	1266	1118	806			
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900			
Storage Length (ft)	260	260	290			150			
Storage Lanes	2	1	2			1			
Taper Length (ft)	25		25						
Lane Util. Factor	0.94	0.88	0.97	0.91	0.91	1.00			
Frt		0.850				0.850			
Flt Protected	0.950		0.950						
Satd. Flow (prot)	4990	2787	3433	5085	5085	1583			
Flt Permitted	0.950		0.950						
Satd. Flow (perm)	4990	2787	3433	5085	5085	1583			
Right Turn on Red		Yes				Yes			
Satd. Flow (RTOR)		474				528			
Link Speed (mph)	30			50	50				
Link Distance (ft)	456			2527	1665				
Travel Time (s)	10.4			34.5	22.7				
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92			
Adj. Flow (vph)	599	474	416	1376	1215	876			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	599	474	416	1376	1215	876			
Enter Blocked Intersection	No	No	No	No	No	No			
Lane Alignment	Left	Right	Left	Left	Left	Right			
Median Width(ft)	36			24	24				
Link Offset(ft)	0			0	0				
Crosswalk Width(ft)	16			16	16				
Two way Left Turn Lane									
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00			
Turning Speed (mph)	15	9	15			9			
Number of Detectors	1	1	1	1	1	1			
Detector Template									
Leading Detector (ft)	50	50	50	50	50	50			
Trailing Detector (ft)	0	0	0	0	0	0			
Detector 1 Position(ft)	0	0	0	0	0	0			
Detector 1 Size(ft)	50	50	50	50	50	50			
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel									
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Turn Type	Prot	pt+ov	Prot	NA	NA	Perm			
Protected Phases	3	5 12	5 12	2	6		4	5	12
Permitted Phases						6			
Detector Phase	3	5 12	5 12	2	6	6			
Switch Phase									
Minimum Initial (s)	3.0			10.0	10.0	10.0	4.0	4.0	4.0
Minimum Split (s)	25.0			30.0	40.0	40.0	35.0	15.0	20.0
Total Split (s)	30.0			67.0	42.0	42.0	35.0	25.0	35.0

Lanes, Volumes, Timings
 11: Golden Valley Road & Valley Center Drive

04/25/2023

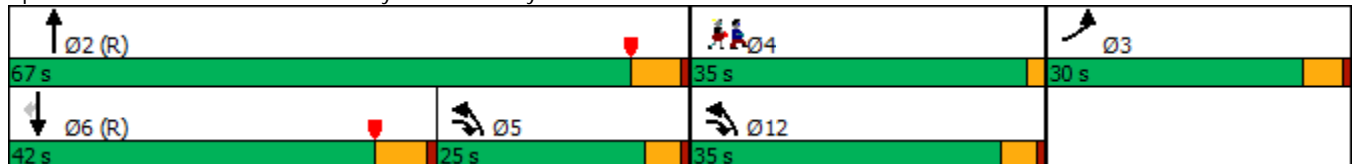


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4	Ø5	Ø12
Total Split (%)	22.7%			50.8%	31.8%	31.8%	27%	19%	27%
Maximum Green (s)	25.0			61.0	36.0	36.0	33.0	20.5	30.5
Yellow Time (s)	4.0			5.0	5.0	5.0	2.0	3.5	3.5
All-Red Time (s)	1.0			1.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)	-1.0			-2.0	-2.0	-2.0			
Total Lost Time (s)	4.0			4.0	4.0	4.0			
Lead/Lag					Lead	Lead		Lag	
Lead-Lag Optimize?					Yes	Yes		Yes	
Vehicle Extension (s)	3.0			3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None			C-Min	C-Min	C-Min	None	None	None
Walk Time (s)					7.0	7.0	7.0		5.0
Flash Dont Walk (s)					24.0	24.0	26.0		10.0
Pedestrian Calls (#/hr)					0	0	0		0
Act Effect Green (s)	22.3	32.0	32.0	89.4	65.6	65.6			
Actuated g/C Ratio	0.17	0.24	0.24	0.68	0.50	0.50			
v/c Ratio	0.71	0.46	0.50	0.40	0.48	0.83			
Control Delay	43.3	7.0	22.7	4.0	5.8	16.0			
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0			
Total Delay	43.3	7.0	22.7	4.0	5.8	16.0			
LOS	D	A	C	A	A	B			
Approach Delay	27.3			8.3	10.1				
Approach LOS	C			A	B				

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 115
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.83
 Intersection Signal Delay: 13.2
 Intersection LOS: B
 Intersection Capacity Utilization 67.5%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 11: Golden Valley Road & Valley Center Drive



Queues

11: Golden Valley Road & Valley Center Drive

04/25/2023



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	599	474	416	1376	1215	876
v/c Ratio	0.71	0.46	0.50	0.40	0.48	0.83
Control Delay	43.3	7.0	22.7	4.0	5.8	16.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.3	7.0	22.7	4.0	5.8	16.0
Queue Length 50th (ft)	161	25	127	81	42	439
Queue Length 95th (ft)	198	61	m101	m60	m65	m348
Internal Link Dist (ft)	376			2447	1585	
Turn Bay Length (ft)	260	260	290			150
Base Capacity (vph)	990	1425	1411	3442	2527	1052
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.61	0.33	0.29	0.40	0.48	0.83

Intersection Summary

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

Lanes, Volumes, Timings
12: Ruther & Soledad Cyn

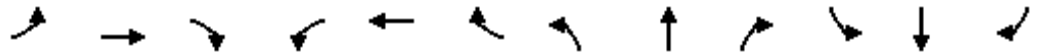
04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	47	2384	167	196	1798	19	185	79	232	130	89	67
Future Volume (vph)	47	2384	167	196	1798	19	185	79	232	130	89	67
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	285		300	250		0	0		0	125		0
Storage Lanes	1		1	2		0	1		2	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	0.91	0.95	0.95	0.88	0.95	0.95	1.00
Frt			0.850		0.998				0.850		0.938	
Flt Protected	0.950			0.950			0.950	0.977		0.950	0.998	
Satd. Flow (prot)	1770	5085	1583	3433	5075	0	1681	1729	2787	1681	1657	0
Flt Permitted	0.950			0.950			0.950	0.977		0.950	0.998	
Satd. Flow (perm)	1770	5085	1583	3433	5075	0	1681	1729	2787	1681	1657	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			103		1				121		22	
Link Speed (mph)		50		50				40			30	
Link Distance (ft)		1764		2480				220			327	
Travel Time (s)		24.1		33.8				3.8			7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	51	2591	182	213	1954	21	201	86	252	141	97	73
Shared Lane Traffic (%)							37%			5%		
Lane Group Flow (vph)	51	2591	182	213	1975	0	127	160	252	134	177	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24		24				12			12	
Link Offset(ft)		0		0				0			0	
Crosswalk Width(ft)		16		16				16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1	1	1	1	
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50		50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	pt+ov	Split	NA	
Protected Phases	1	6		5	2		3	3	3 5	4	4	
Permitted Phases			6									
Detector Phase	1	6	6	5	2		3	3	3 5	4	4	
Switch Phase												
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	12.0	42.0	42.0	12.0	27.0		37.0	37.0		15.0	15.0	
Total Split (s)	26.0	49.0	49.0	25.0	48.0		38.0	38.0		20.0	20.0	

Lanes, Volumes, Timings
12: Ruther & Soledad Cyn

04/25/2023

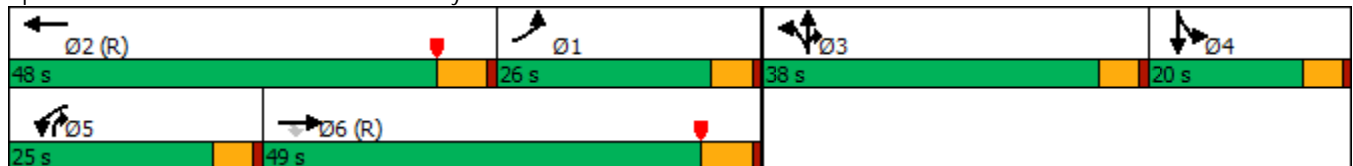


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	19.7%	37.1%	37.1%	18.9%	36.4%		28.8%	28.8%		15.2%	15.2%	
Maximum Green (s)	21.0	43.0	43.0	20.0	42.0		33.0	33.0		15.0	15.0	
Yellow Time (s)	4.0	5.0	5.0	4.0	5.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	-1.0	-2.0	-2.0	-1.0	-2.0		-1.0	-1.0		-1.0	-1.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead		Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	4.5	4.5	1.5	4.5		3.0	3.0		3.0	3.0	
Minimum Gap (s)	1.5	3.0	3.0	1.5	3.0		3.0	3.0		3.0	3.0	
Time Before Reduce (s)	0.0	7.5	7.5	0.0	7.5		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	22.5	22.5	0.0	22.5		0.0	0.0		0.0	0.0	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None		None	None	
Walk Time (s)		7.0	7.0		7.0		5.0	5.0				
Flash Dont Walk (s)		25.0	25.0		11.0		27.0	27.0				
Pedestrian Calls (#/hr)		0	0		0		0	0				
Act Effect Green (s)	18.6	64.9	64.9	13.1	61.1		18.9	18.9	32.0	19.2	19.2	
Actuated g/C Ratio	0.14	0.49	0.49	0.10	0.46		0.14	0.14	0.24	0.15	0.15	
v/c Ratio	0.20	1.04	0.22	0.63	0.84		0.53	0.65	0.33	0.55	0.68	
Control Delay	48.0	56.3	12.2	65.2	38.1		59.4	64.9	12.4	60.3	59.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	48.0	56.3	12.2	65.2	38.1		59.4	64.9	12.4	60.3	59.8	
LOS	D	E	B	E	D		E	E	B	E	E	
Approach Delay		53.3			40.7			39.1			60.0	
Approach LOS		D			D			D			E	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
 Natural Cycle: 140
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.04
 Intersection Signal Delay: 47.7
 Intersection LOS: D
 Intersection Capacity Utilization 80.2%
 ICU Level of Service D
 Analysis Period (min) 15

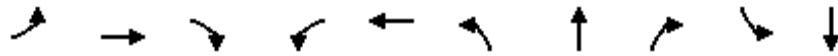
Splits and Phases: 12: Ruther & Soledad Cyn



Queues

12: Ruther & Soledad Cyn

04/25/2023



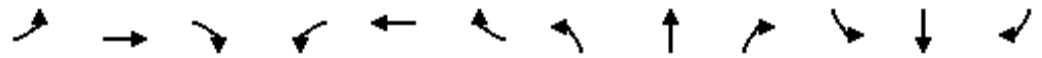
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	51	2591	182	213	1975	127	160	252	134	177
v/c Ratio	0.20	1.04	0.22	0.63	0.84	0.53	0.65	0.33	0.55	0.68
Control Delay	48.0	56.3	12.2	65.2	38.1	59.4	64.9	12.4	60.3	59.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.0	56.3	12.2	65.2	38.1	59.4	64.9	12.4	60.3	59.8
Queue Length 50th (ft)	32	-863	35	91	577	107	138	36	113	133
Queue Length 95th (ft)	m45	#1155	m69	130	#834	168	206	50	178	211
Internal Link Dist (ft)		1684			2400		140			247
Turn Bay Length (ft)	285		300	250					125	
Base Capacity (vph)	295	2498	830	546	2351	432	445	1226	252	267
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	1.04	0.22	0.39	0.84	0.29	0.36	0.21	0.53	0.66

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
 13: Golden Valley Road & Centre Pointe Parkway

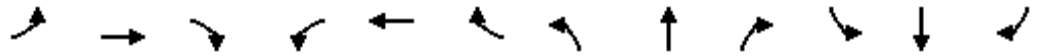
04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	177	99	556	272	78	197	283	1353	282	245	1428	65
Future Volume (vph)	177	99	556	272	78	197	283	1353	282	245	1428	65
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		260	150		250	300		300	700		0
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850		0.893				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	3433	1663	0	1770	3539	1583	1770	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1863	1583	3433	1663	0	1770	3539	1583	1770	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			91		94				299			136
Link Speed (mph)		30		30				50			50	
Link Distance (ft)		1149		802				7902			1475	
Travel Time (s)		26.1		18.2				107.8			20.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	192	108	604	296	85	214	308	1471	307	266	1552	71
Shared Lane Traffic (%)												
Lane Group Flow (vph)	192	108	604	296	299	0	308	1471	307	266	1552	71
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24		24				12			12	
Link Offset(ft)		0		0				0			0	
Crosswalk Width(ft)		16		16				16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50		50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	3	8	5	7	4		5	2	7	1	6	
Permitted Phases			8						2			6
Detector Phase	3	8	5	7	4		5	2	7	1	6	6
Switch Phase												
Minimum Initial (s)	4.0	6.0	4.0	4.0	6.0		4.0	10.0	4.0	4.0	10.0	10.0
Minimum Split (s)	12.0	25.0	20.0	20.0	39.0		20.0	33.0	20.0	15.0	34.0	34.0
Total Split (s)	19.0	25.0	33.0	34.0	40.0		33.0	40.0	34.0	33.0	40.0	40.0

Lanes, Volumes, Timings
 13: Golden Valley Road & Centre Pointe Parkway

04/25/2023

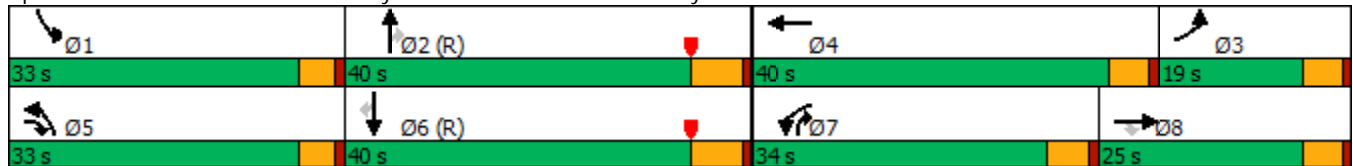


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	14.4%	18.9%	25.0%	25.8%	30.3%		25.0%	30.3%	25.8%	25.0%	30.3%	30.3%
Maximum Green (s)	14.0	20.0	28.5	29.0	35.0		28.5	34.0	29.0	28.5	34.0	34.0
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0		3.5	5.0	4.0	3.5	5.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0	-1.0	-0.5	-1.0	-1.0		-0.5	-2.0	-1.0	-0.5	-2.0	-2.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lag	Lag	Lead	Lead	Lead		Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Min	None	None	C-Min	C-Min
Walk Time (s)					7.0			7.0			7.0	7.0
Flash Dont Walk (s)					27.0			20.0			21.0	21.0
Pedestrian Calls (#/hr)					0			0			0	0
Act Effct Green (s)	20.8	26.1	56.7	18.2	23.6		26.6	47.1	69.3	24.6	45.1	45.1
Actuated g/C Ratio	0.16	0.20	0.43	0.14	0.18		0.20	0.36	0.52	0.19	0.34	0.34
v/c Ratio	0.69	0.29	0.83	0.63	0.80		0.87	1.17	0.32	0.81	1.28	0.11
Control Delay	66.1	46.4	38.0	59.2	50.6		69.0	116.0	12.9	55.8	175.4	8.6
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	66.1	46.4	38.0	59.2	50.6		69.0	116.0	12.9	55.8	175.4	8.6
LOS	E	D	D	E	D		E	F	B	E	F	A
Approach Delay		45.0			54.9			93.9			152.3	
Approach LOS		D			D			F			F	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 103 (78%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 145
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.28
 Intersection Signal Delay: 101.7 Intersection LOS: F
 Intersection Capacity Utilization 94.5% ICU Level of Service F
 Analysis Period (min) 15

Splits and Phases: 13: Golden Valley Road & Centre Pointe Parkway



Queues

13: Golden Valley Road & Centre Pointe Parkway

04/25/2023



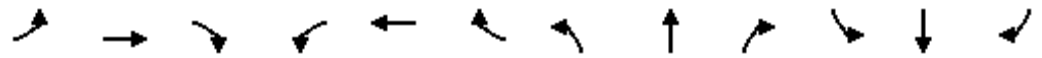
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	192	108	604	296	299	308	1471	307	266	1552	71
v/c Ratio	0.69	0.29	0.83	0.63	0.80	0.87	1.17	0.32	0.81	1.28	0.11
Control Delay	66.1	46.4	38.0	59.2	50.6	69.0	116.0	12.9	55.8	175.4	8.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	66.1	46.4	38.0	59.2	50.6	69.0	116.0	12.9	55.8	175.4	8.6
Queue Length 50th (ft)	154	77	357	125	173	277	-842	83	218	-981	1
Queue Length 95th (ft)	#285	134	541	165	258	m#362	#1061	m134	317	#1168	38
Internal Link Dist (ft)		1069			722		7822			1395	
Turn Bay Length (ft)	150		260	150		300		300	700		
Base Capacity (vph)	278	375	761	780	521	391	1262	1087	388	1209	630
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.69	0.29	0.79	0.38	0.57	0.79	1.17	0.28	0.69	1.28	0.11

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
 14: Sierra Highway & Golden Valley Road

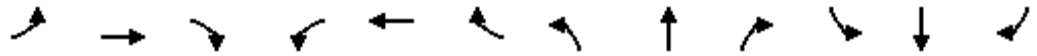
04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑	↔↔	↔↔	↑↑↑	↔	↔↔	↑↔		↔	↑↑	↔
Traffic Volume (vph)	370	974	549	68	918	111	681	1045	132	69	254	230
Future Volume (vph)	370	974	549	68	918	111	681	1045	132	69	254	230
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	280		280	285		300	285		0	410		540
Storage Lanes	2		2	2		1	2		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	0.88	0.97	0.91	1.00	0.97	0.95	0.95	1.00	0.95	1.00
Fr _t			0.850			0.850		0.983				0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	2787	3433	5085	1583	3433	3479	0	1770	3539	1583
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	2787	3433	5085	1583	3433	3479	0	1770	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			547			186		11				250
Link Speed (mph)		50			50			30			30	
Link Distance (ft)		1983			1208			1801			1671	
Travel Time (s)		27.0			16.5			40.9			38.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	402	1059	597	74	998	121	740	1136	143	75	276	250
Shared Lane Traffic (%)												
Lane Group Flow (vph)	402	1059	597	74	998	121	740	1279	0	75	276	250
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1		1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50		50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50		50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	custom
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						8
Detector Phase	7	4	4	3	8	8	5	2		1	6	8
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	8.5	29.6	29.6	8.5	40.0	40.0	15.0	49.0		8.5	46.0	40.0
Total Split (s)	29.0	50.0	50.0	20.0	41.0	41.0	37.0	44.0		18.0	25.0	41.0

Lanes, Volumes, Timings
 14: Sierra Highway & Golden Valley Road

04/25/2023

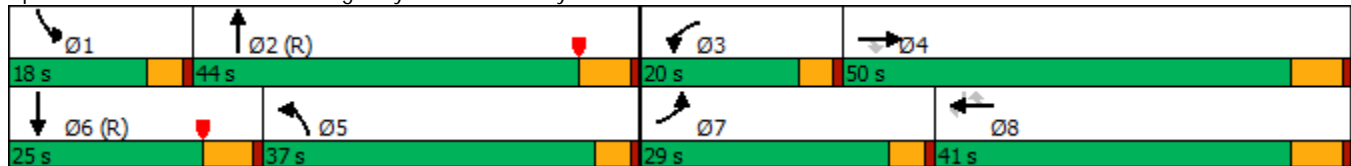


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	22.0%	37.9%	37.9%	15.2%	31.1%	31.1%	28.0%	33.3%		13.6%	18.9%	31.1%
Maximum Green (s)	24.5	44.0	44.0	15.5	35.0	35.0	32.5	38.0		13.5	19.0	35.0
Yellow Time (s)	3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.0		3.5	5.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	-0.5	-2.0	-2.0	-0.5	-2.0	-2.0	-0.5	-2.0		-0.5	-2.0	-2.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lag		Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	None
Walk Time (s)					5.0	5.0		5.0			5.0	5.0
Flash Dont Walk (s)					29.0	29.0		33.0			30.0	29.0
Pedestrian Calls (#/hr)					0	0		0			0	0
Act Effct Green (s)	20.9	49.3	49.3	8.7	35.0	35.0	33.0	51.3		11.1	27.1	35.0
Actuated g/C Ratio	0.16	0.37	0.37	0.07	0.27	0.27	0.25	0.39		0.08	0.21	0.27
v/c Ratio	0.74	0.80	0.43	0.33	0.74	0.22	0.86	0.94		0.51	0.38	0.41
Control Delay	40.8	42.5	14.2	62.2	48.0	1.4	58.8	54.1		69.1	48.6	6.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	40.8	42.5	14.2	62.2	48.0	1.4	58.8	54.1		69.1	48.6	6.5
LOS	D	D	B	E	D	A	E	D		E	D	A
Approach Delay		33.9			44.1			55.8			33.6	
Approach LOS		C			D			E			C	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 65 (49%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 140
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.94
 Intersection Signal Delay: 43.5
 Intersection LOS: D
 Intersection Capacity Utilization 80.5%
 ICU Level of Service D
 Analysis Period (min) 15

Splits and Phases: 14: Sierra Highway & Golden Valley Road



Queues

14: Sierra Highway & Golden Valley Road

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	402	1059	597	74	998	121	740	1279	75	276	250
v/c Ratio	0.74	0.80	0.43	0.33	0.74	0.22	0.86	0.94	0.51	0.38	0.41
Control Delay	40.8	42.5	14.2	62.2	48.0	1.4	58.8	54.1	69.1	48.6	6.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.8	42.5	14.2	62.2	48.0	1.4	58.8	54.1	69.1	48.6	6.5
Queue Length 50th (ft)	175	463	118	31	281	0	314	~614	62	110	0
Queue Length 95th (ft)	m164	m421	m111	57	333	5	#410	#840	113	162	64
Internal Link Dist (ft)		1903			1128			1721		1591	
Turn Bay Length (ft)	280		280	285		300	285		410		540
Base Capacity (vph)	650	1321	1383	416	1425	577	858	1357	187	727	623
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.62	0.80	0.43	0.18	0.70	0.21	0.86	0.94	0.40	0.38	0.40

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
 15: SR 14 SB Ramp & Golden Valley Road

04/25/2023

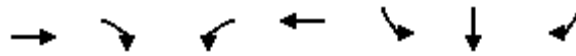


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗	↖	↑↑					↘	↙	↗
Traffic Volume (vph)	0	862	331	168	732	0	0	0	0	72	4	437
Future Volume (vph)	0	862	331	168	732	0	0	0	0	72	4	437
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	220		0	0		0	300		0
Storage Lanes	0		1	1		0	0		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850									0.850
Flt Protected				0.950						0.950	0.957	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	1681	1694	1583
Flt Permitted				0.950						0.950	0.957	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	1681	1694	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			360									173
Link Speed (mph)		50			50			30			30	
Link Distance (ft)		861			697			508			640	
Travel Time (s)		11.7			9.5			11.5			14.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	937	360	183	796	0	0	0	0	78	4	475
Shared Lane Traffic (%)										48%		
Lane Group Flow (vph)	0	937	360	183	796	0	0	0	0	41	41	475
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94							94
Detector 2 Size(ft)		6			6							6
Detector 2 Type		Cl+Ex			Cl+Ex							Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							0.0
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		6		5	2						4	
Permitted Phases			6							4		4

Queues

15: SR 14 SB Ramp & Golden Valley Road

04/25/2023


























Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	937	360	183	796	41	41	475
v/c Ratio	0.69	0.43	0.76	0.40	0.07	0.07	0.72
Control Delay	26.5	4.0	59.6	13.6	20.4	20.4	23.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.5	4.0	59.6	13.6	20.4	20.4	23.3
Queue Length 50th (ft)	233	0	114	139	16	16	149
Queue Length 95th (ft)	303	54	#205	171	40	40	270
Internal Link Dist (ft)	781			617		560	
Turn Bay Length (ft)			220		300		
Base Capacity (vph)	1366	832	255	2005	579	583	658
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.69	0.43	0.72	0.40	0.07	0.07	0.72

Intersection Summary

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

Lanes, Volumes, Timings
 16: SR 14 NB Ramp & Golden Valley Road

04/25/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 			 			 				
Traffic Volume (vph)	442	507	0	0	465	230	422	2	393	0	0	0
Future Volume (vph)	442	507	0	0	465	230	422	2	393	0	0	0
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	230		0	0		280	0		140	0		0
Storage Lanes	2		0	0		1	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt						0.850			0.850			
Flt Protected	0.950						0.950	0.953				
Satd. Flow (prot)	3433	3539	0	0	3539	1583	1681	1686	1583	0	0	0
Flt Permitted	0.950						0.950	0.953				
Satd. Flow (perm)	3433	3539	0	0	3539	1583	1681	1686	1583	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						250			324			
Link Speed (mph)		50			50			30				30
Link Distance (ft)		697			616			615				491
Travel Time (s)		9.5			8.4			14.0				11.2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	480	551	0	0	505	250	459	2	427	0	0	0
Shared Lane Traffic (%)							50%					
Lane Group Flow (vph)	480	551	0	0	505	250	229	232	427	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1	1	2	1			
Detector Template	Left	Thru			Thru	Right	Left	Thru	Right			
Leading Detector (ft)	20	100			100	20	20	100	20			
Trailing Detector (ft)	0	0			0	0	0	0	0			
Detector 1 Position(ft)	0	0			0	0	0	0	0			
Detector 1 Size(ft)	20	6			6	20	20	6	20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Prot	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	1	6			2			8				
Permitted Phases						2	8		8			

Lanes, Volumes, Timings
 16: SR 14 NB Ramp & Golden Valley Road

04/25/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	1	6			2	2	8	8	8			
Switch Phase												
Minimum Initial (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Minimum Split (s)	12.0	20.0			20.0	20.0	20.0	20.0	20.0			
Total Split (s)	29.0	57.0			28.0	28.0	33.0	33.0	33.0			
Total Split (%)	32.2%	63.3%			31.1%	31.1%	36.7%	36.7%	36.7%			
Maximum Green (s)	25.0	53.0			24.0	24.0	29.0	29.0	29.0			
Yellow Time (s)	3.5	3.5			3.5	3.5	3.5	3.5	3.5			
All-Red Time (s)	0.5	0.5			0.5	0.5	0.5	0.5	0.5			
Lost Time Adjust (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Total Lost Time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?	Yes				Yes							
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Recall Mode	None	Max			C-Max	C-Max	Max	Max	Max			
Walk Time (s)		5.0			5.0	5.0	5.0	5.0	5.0			
Flash Dont Walk (s)		10.0			10.0	10.0	10.0	10.0	10.0			
Pedestrian Calls (#/hr)		0			0	0	0	0	0			
Act Effct Green (s)	17.8	53.0			31.2	31.2	29.0	29.0	29.0			
Actuated g/C Ratio	0.20	0.59			0.35	0.35	0.32	0.32	0.32			
v/c Ratio	0.71	0.26			0.41	0.35	0.42	0.43	0.59			
Control Delay	57.7	5.7			24.4	4.8	26.9	27.0	10.1			
Queue Delay	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Total Delay	57.7	5.7			24.4	4.8	26.9	27.0	10.1			
LOS	E	A			C	A	C	C	B			
Approach Delay		29.9			17.9			18.9				
Approach LOS		C			B			B				

Intersection Summary

Area Type: Other
 Cycle Length: 90
 Actuated Cycle Length: 90
 Offset: 0 (0%), Referenced to phase 2:WBT, Start of Yellow
 Natural Cycle: 55
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.71
 Intersection Signal Delay: 22.8
 Intersection LOS: C
 Intersection Capacity Utilization 54.0%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 16: SR 14 NB Ramp & Golden Valley Road



Queues

16: SR 14 NB Ramp & Golden Valley Road

04/25/2023



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	480	551	505	250	229	232	427
v/c Ratio	0.71	0.26	0.41	0.35	0.42	0.43	0.59
Control Delay	57.7	5.7	24.4	4.8	26.9	27.0	10.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.7	5.7	24.4	4.8	26.9	27.0	10.1
Queue Length 50th (ft)	154	30	113	0	106	108	42
Queue Length 95th (ft)	205	57	171	53	175	177	132
Internal Link Dist (ft)		617	536			535	
Turn Bay Length (ft)	230			280			140
Base Capacity (vph)	953	2084	1227	712	541	543	729
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.50	0.26	0.41	0.35	0.42	0.43	0.59

Intersection Summary

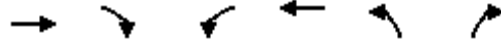
Lanes, Volumes, Timings
17: Studio Driveway & Soledad Cyn

04/25/2023

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↙	↑↑↑	↖	
Traffic Volume (vph)	1074	34	17	1990	45	22
Future Volume (vph)	1074	34	17	1990	45	22
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Fr _t	0.995				0.956	
Fl _t Protected			0.950		0.968	
Satd. Flow (prot)	5060	0	1770	5085	1724	0
Fl _t Permitted			0.210		0.968	
Satd. Flow (perm)	5060	0	391	5085	1724	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	11				16	
Link Speed (mph)	50			50	30	
Link Distance (ft)	419			233	380	
Travel Time (s)	5.7			3.2	8.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1167	37	18	2163	49	24
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1204	0	18	2163	73	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2		1	2	1	
Detector Template	Thru		Left	Thru	Left	
Leading Detector (ft)	100		20	100	20	
Trailing Detector (ft)	0		0	0	0	
Detector 1 Position(ft)	0		0	0	0	
Detector 1 Size(ft)	6		20	6	20	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA		Perm	NA	Prot	
Protected Phases	6			2	4	
Permitted Phases			2			
Detector Phase	6		2	2	4	
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	

Lanes, Volumes, Timings
 17: Studio Driveway & Soledad Cyn

04/25/2023

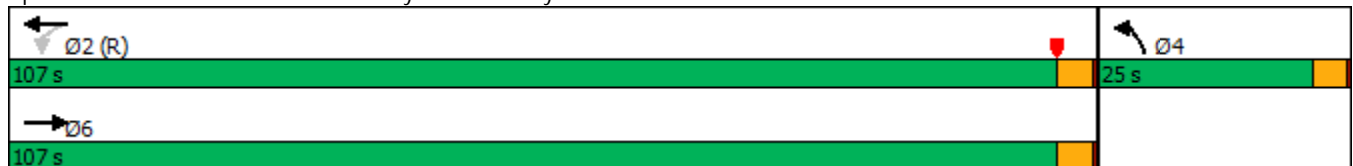


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Minimum Split (s)	20.0		20.0	20.0	20.0	
Total Split (s)	107.0		107.0	107.0	25.0	
Total Split (%)	81.1%		81.1%	81.1%	18.9%	
Maximum Green (s)	103.0		103.0	103.0	21.0	
Yellow Time (s)	3.5		3.5	3.5	3.5	
All-Red Time (s)	0.5		0.5	0.5	0.5	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	4.0		4.0	4.0	4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Recall Mode	Max		C-Max	C-Max	Max	
Walk Time (s)	5.0		5.0	5.0	5.0	
Flash Dont Walk (s)	10.0		10.0	10.0	10.0	
Pedestrian Calls (#/hr)	0		0	0	0	
Act Effect Green (s)	103.0		103.0	103.0	21.0	
Actuated g/C Ratio	0.78		0.78	0.78	0.16	
v/c Ratio	0.30		0.06	0.55	0.25	
Control Delay	7.4		5.6	7.5	40.4	
Queue Delay	0.0		0.0	0.0	0.0	
Total Delay	7.4		5.6	7.5	40.4	
LOS	A		A	A	D	
Approach Delay	7.4			7.4	40.4	
Approach LOS	A			A	D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 0 (0%), Referenced to phase 2:WBTL, Start of Yellow
 Natural Cycle: 50
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.55
 Intersection Signal Delay: 8.1
 Intersection Capacity Utilization 49.0%
 Analysis Period (min) 15
 Intersection LOS: A
 ICU Level of Service A

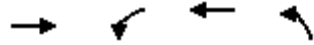
Splits and Phases: 17: Studio Driveway & Soledad Cyn



Queues

17: Studio Driveway & Soledad Cyn

04/25/2023



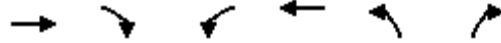
Lane Group	EBT	WBL	WBT	NBL
Lane Group Flow (vph)	1204	18	2163	73
v/c Ratio	0.30	0.06	0.55	0.25
Control Delay	7.4	5.6	7.5	40.4
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	7.4	5.6	7.5	40.4
Queue Length 50th (ft)	142	3	189	43
Queue Length 95th (ft)	m119	m11	273	90
Internal Link Dist (ft)	339		153	300
Turn Bay Length (ft)				
Base Capacity (vph)	3950	305	3967	287
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.30	0.06	0.55	0.25

Intersection Summary

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

Lanes, Volumes, Timings
 18: Residential Driveway 1 & Soledad Cyn

04/25/2023



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↵	↑↑↑	↵	
Traffic Volume (vph)	1066	30	10	2006	0	18
Future Volume (vph)	1066	30	10	2006	0	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	100		0	0
Storage Lanes		0	1		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt	0.996				0.865	
Flt Protected			0.950			
Satd. Flow (prot)	5065	0	1770	5085	1611	0
Flt Permitted			0.950			
Satd. Flow (perm)	5065	0	1770	5085	1611	0
Link Speed (mph)	50			50	30	
Link Distance (ft)	233			397	318	
Travel Time (s)	3.2			5.4	7.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1159	33	11	2180	0	20
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1192	0	11	2180	20	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	48.8%
Analysis Period (min)	15
	ICU Level of Service A

HCM 6th TWSC
 18: Residential Driveway 1 & Soledad Cyn

04/25/2023

Intersection						
Int Delay, s/veh	0.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↑	↑↑↑	↑	
Traffic Vol, veh/h	1066	30	10	2006	0	18
Future Vol, veh/h	1066	30	10	2006	0	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1159	33	11	2180	0	20

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	1192	0	2070
Stage 1	-	-	-	-	1176
Stage 2	-	-	-	-	894
Critical Hdwy	-	-	5.34	-	5.74
Critical Hdwy Stg 1	-	-	-	-	6.64
Critical Hdwy Stg 2	-	-	-	-	6.04
Follow-up Hdwy	-	-	3.12	-	3.82
Pot Cap-1 Maneuver	-	-	316	-	86
Stage 1	-	-	-	-	189
Stage 2	-	-	-	-	326
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	316	-	83
Mov Cap-2 Maneuver	-	-	-	-	83
Stage 1	-	-	-	-	189
Stage 2	-	-	-	-	315

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	14.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	383	-	-	316	-
HCM Lane V/C Ratio	0.051	-	-	0.034	-
HCM Control Delay (s)	14.9	-	-	16.8	-
HCM Lane LOS	B	-	-	C	-
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-

Lanes, Volumes, Timings
 19: Residential Driveway 2 & Soledad Cyn

04/25/2023



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↵	↑↑↑		↵
Traffic Volume (vph)	1043	41	21	2016	0	35
Future Volume (vph)	1043	41	21	2016	0	35
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	100		0	0
Storage Lanes		0	1		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt	0.994					0.865
Flt Protected			0.950			
Satd. Flow (prot)	5055	0	1770	5085	0	1611
Flt Permitted			0.950			
Satd. Flow (perm)	5055	0	1770	5085	0	1611
Link Speed (mph)	50			50	30	
Link Distance (ft)	397			911	422	
Travel Time (s)	5.4			12.4	9.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1134	45	23	2191	0	38
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1179	0	23	2191	0	38
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	42.3%
ICU Level of Service	A
Analysis Period (min)	15

HCM 6th TWSC
 19: Residential Driveway 2 & Soledad Cyn

04/25/2023

Intersection						
Int Delay, s/veh	0.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↑	↑↑↑		↑
Traffic Vol, veh/h	1043	41	21	2016	0	35
Future Vol, veh/h	1043	41	21	2016	0	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1134	45	23	2191	0	38

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	1179	0	- 590
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	5.34	-	- 7.14
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	3.12	-	- 3.92
Pot Cap-1 Maneuver	-	-	320	-	0 386
Stage 1	-	-	-	-	0 -
Stage 2	-	-	-	-	0 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	320	-	- 386
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	15.3
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	386	-	-	320	-
HCM Lane V/C Ratio	0.099	-	-	0.071	-
HCM Control Delay (s)	15.3	-	-	17.1	-
HCM Lane LOS	C	-	-	C	-
HCM 95th %tile Q(veh)	0.3	-	-	0.2	-

Lanes, Volumes, Timings
 20: Studio Driveway 2 & Soledad Cyn

04/25/2023



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑		↗
Traffic Volume (vph)	1108	0	0	2034	0	0
Future Volume (vph)	1108	0	0	2034	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Fr						
Flt Protected						
Satd. Flow (prot)	5085	0	0	5085	0	1863
Flt Permitted						
Satd. Flow (perm)	5085	0	0	5085	0	1863
Link Speed (mph)	50			50	30	
Link Distance (ft)	765			419	381	
Travel Time (s)	10.4			5.7	8.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1204	0	0	2211	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1204	0	0	2211	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	42.6%
Analysis Period (min)	15
	ICU Level of Service A

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑		↑
Traffic Vol, veh/h	1108	0	0	2034	0	0
Future Vol, veh/h	1108	0	0	2034	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1204	0	0	2211	0	0

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	-	-	602
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	3.92
Pot Cap-1 Maneuver	-	0	-	0	379
Stage 1	-	0	-	0	-
Stage 2	-	0	-	0	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	379
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

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

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

Lanes, Volumes, Timings
 1: Valencia Blvd & 5 Fwy SB Ramp

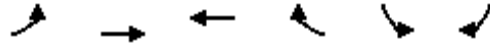
08/18/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑		↑↑	↑
Traffic Volume (vph)	0	576	966	96	284	93
Future Volume (vph)	0	576	966	96	284	93
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	15	12	14
Storage Length (ft)	0			0	0	455
Storage Lanes	0			0	2	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.91	0.95	0.95	0.97	1.00
Fr _t			0.986			0.850
Fl _t Protected					0.950	
Satd. Flow (prot)	0	5085	3490	0	3433	1689
Fl _t Permitted					0.950	
Satd. Flow (perm)	0	5085	3490	0	3433	1689
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			26			91
Link Speed (mph)		50	50		30	
Link Distance (ft)		616	917		417	
Travel Time (s)		8.4	12.5		9.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	626	1050	104	309	101
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	626	1154	0	309	101
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		24	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	0.88	1.00	0.92
Turning Speed (mph)	15			9	15	9
Number of Detectors		1	1		1	1
Detector Template						
Leading Detector (ft)		50	50		50	50
Trailing Detector (ft)		0	0		0	0
Detector 1 Position(ft)		0	0		0	0
Detector 1 Size(ft)		50	50		50	50
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)		0.0	0.0		0.0	0.0
Detector 1 Queue (s)		0.0	0.0		0.0	0.0
Detector 1 Delay (s)		0.0	0.0		0.0	0.0
Turn Type		NA	NA		Prot	Perm
Protected Phases		2	6		4	
Permitted Phases						4
Detector Phase		2	6		4	4
Switch Phase						
Minimum Initial (s)		4.0	4.0		4.0	4.0
Minimum Split (s)		20.0	35.2		20.0	20.0

Lanes, Volumes, Timings
 1: Valencia Blvd & 5 Fwy SB Ramp

08/18/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Total Split (s)		41.0	41.0		25.0	25.0
Total Split (%)		62.1%	62.1%		37.9%	37.9%
Maximum Green (s)		34.8	34.8		19.2	19.2
Yellow Time (s)		5.2	5.2		4.8	4.8
All-Red Time (s)		1.0	1.0		1.0	1.0
Lost Time Adjust (s)		-2.2	-2.2		-1.8	-1.8
Total Lost Time (s)		4.0	4.0		4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Recall Mode		C-Max	C-Max		Min	Min
Walk Time (s)			5.0			
Flash Dont Walk (s)			18.0			
Pedestrian Calls (#/hr)			0			
Act Effect Green (s)		44.8	44.8		13.2	13.2
Actuated g/C Ratio		0.68	0.68		0.20	0.20
v/c Ratio		0.18	0.49		0.45	0.25
Control Delay		4.3	2.7		24.9	7.9
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		4.3	2.7		24.9	7.9
LOS		A	A		C	A
Approach Delay		4.3	2.7		20.7	
Approach LOS		A	A		C	

Intersection Summary

Area Type:	Other
Cycle Length:	66
Actuated Cycle Length:	66
Offset:	14 (21%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle:	60
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.49
Intersection Signal Delay:	6.5
Intersection LOS:	A
Intersection Capacity Utilization:	44.5%
ICU Level of Service:	A
Analysis Period (min):	15

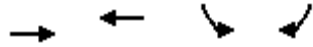
Splits and Phases: 1: Valencia Blvd & 5 Fwy SB Ramp



Queues

1: Valencia Blvd & 5 Fwy SB Ramp












08/18/2023



Lane Group	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	626	1154	309	101
v/c Ratio	0.18	0.49	0.45	0.25
Control Delay	4.3	2.7	24.9	7.9
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	4.3	2.7	24.9	7.9
Queue Length 50th (ft)	27	16	57	3
Queue Length 95th (ft)	48	91	84	35
Internal Link Dist (ft)	536	837	337	
Turn Bay Length (ft)				455
Base Capacity (vph)	3454	2379	1092	599
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.18	0.49	0.28	0.17
Intersection Summary				

Lanes, Volumes, Timings
2: 5 Fwy NB Ramp & Valencia Blvd

08/18/2023

						
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	790	38	122	1748	287	982
Future Volume (vph)	790	38	122	1748	287	982
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	12	12	12	12	14
Storage Length (ft)		0	200		220	220
Storage Lanes		0	2		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	0.97	0.86	0.97	0.88
Fr _t	0.993					0.850
Fl _t Protected			0.950		0.950	
Satd. Flow (prot)	5386	0	3433	6408	3433	2972
Fl _t Permitted			0.950		0.950	
Satd. Flow (perm)	5386	0	3433	6408	3433	2972
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	13					631
Link Speed (mph)	50			50	30	
Link Distance (ft)	917			476	493	
Travel Time (s)	12.5			6.5	11.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	859	41	133	1900	312	1067
Shared Lane Traffic (%)						
Lane Group Flow (vph)	900	0	133	1900	312	1067
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	24			24	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.92	1.00	1.00	1.00	1.00	0.92
Turning Speed (mph)		9	15		15	9
Number of Detectors	1		1	1	1	1
Detector Template						
Leading Detector (ft)	50		50	50	50	50
Trailing Detector (ft)	0		0	0	0	0
Detector 1 Position(ft)	0		0	0	0	0
Detector 1 Size(ft)	50		50	50	50	50
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0
Turn Type	NA		Prot	NA	Prot	Prot
Protected Phases	2		1	6	8	8
Permitted Phases						
Detector Phase	2		1	6	8	8
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	31.0		14.0	20.0	20.0	20.0

Lanes, Volumes, Timings
 2: 5 Fwy NB Ramp & Valencia Blvd

08/18/2023

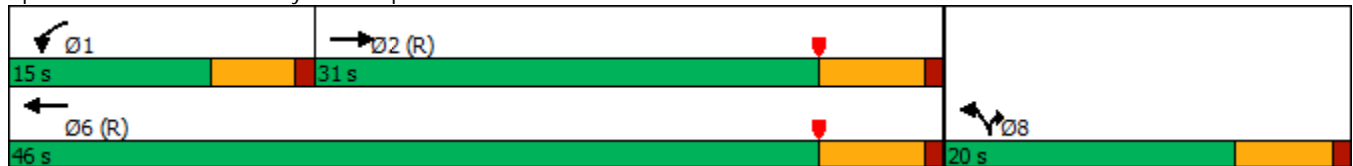


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Total Split (s)	31.0		15.0	46.0	20.0	20.0
Total Split (%)	47.0%		22.7%	69.7%	30.3%	30.3%
Maximum Green (s)	24.8		9.9	39.8	14.2	14.2
Yellow Time (s)	5.2		4.1	5.2	4.8	4.8
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-2.2		-1.1	-2.2	-1.8	-1.8
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max		None	C-Max	None	None
Walk Time (s)	5.0					
Flash Dont Walk (s)	24.0					
Pedestrian Calls (#/hr)	0					
Act Effect Green (s)	31.6		9.0	42.4	15.6	15.6
Actuated g/C Ratio	0.48		0.14	0.64	0.24	0.24
v/c Ratio	0.35		0.28	0.46	0.38	0.90
Control Delay	9.4		26.1	5.1	22.6	22.0
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	9.4		26.1	5.1	22.6	22.0
LOS	A		C	A	C	C
Approach Delay	9.4			6.5	22.1	
Approach LOS	A			A	C	

Intersection Summary

Area Type: Other
 Cycle Length: 66
 Actuated Cycle Length: 66
 Offset: 8 (12%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Natural Cycle: 65
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.90
 Intersection Signal Delay: 12.1
 Intersection LOS: B
 Intersection Capacity Utilization 57.1%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 2: 5 Fwy NB Ramp & Valencia Blvd



Queues

2: 5 Fwy NB Ramp & Valencia Blvd

08/18/2023



Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	900	133	1900	312	1067
v/c Ratio	0.35	0.28	0.46	0.38	0.90
Control Delay	9.4	26.1	5.1	22.6	22.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	9.4	26.1	5.1	22.6	22.0
Queue Length 50th (ft)	82	29	96	54	94
Queue Length 95th (ft)	104	m37	65	86	#229
Internal Link Dist (ft)	837		396	413	
Turn Bay Length (ft)		200		220	220
Base Capacity (vph)	2582	572	4112	832	1198
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.35	0.23	0.46	0.38	0.89

Intersection Summary

























95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

Lanes, Volumes, Timings
3: McBean Pkwy & Valencia Blvd

08/18/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	392	1069	124	353	1468	61	205	767	349	125	572	763
Future Volume (vph)	392	1069	124	353	1468	61	205	767	349	125	572	763
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	11	11	13	11	11	12	11	11	12
Storage Length (ft)	350		280	290		225	130		200	190		300
Storage Lanes	2		1	2		1	2		2	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	0.88	0.97	0.91	0.88
Fr _t			0.850			0.850			0.850			0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3319	4916	1583	3319	4916	1636	3319	4916	2787	3319	4916	2787
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3319	4916	1583	3319	4916	1636	3319	4916	2787	3319	4916	2787
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			74			70			153			120
Link Speed (mph)		50			50			45			45	
Link Distance (ft)		1919			721			765			966	
Travel Time (s)		26.2			9.8			11.6			14.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	426	1162	135	384	1596	66	223	834	379	136	622	829
Shared Lane Traffic (%)												
Lane Group Flow (vph)	426	1162	135	384	1596	66	223	834	379	136	622	829
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		22			22			22			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.00	1.04	1.04	0.96	1.04	1.04	1.00	1.04	1.04	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	1	6	7	5	2	3	7	4	5	3	8	1
Permitted Phases			6			2			4			8
Detector Phase	1	6	7	5	2	3	7	4	5	3	8	1
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	44.0	12.0	12.0	47.0	12.0	12.0	41.0	12.0	12.0	44.0	12.0

Lanes, Volumes, Timings
 3: McBean Pkwy & Valencia Blvd

08/18/2023

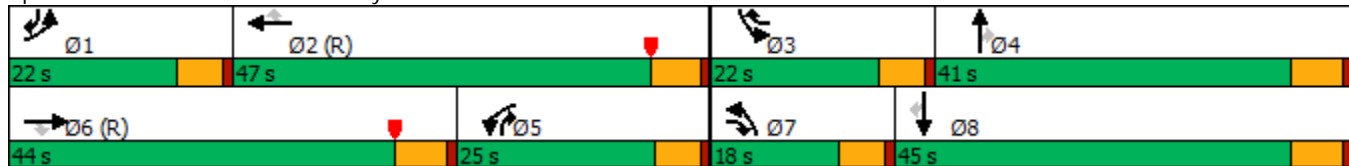


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	22.0	44.0	18.0	25.0	47.0	22.0	18.0	41.0	25.0	22.0	45.0	22.0
Total Split (%)	16.7%	33.3%	13.6%	18.9%	35.6%	16.7%	13.6%	31.1%	18.9%	16.7%	34.1%	16.7%
Maximum Green (s)	16.5	38.0	12.5	19.5	41.0	16.5	12.5	35.0	19.5	16.5	39.0	16.5
Yellow Time (s)	4.5	5.0	4.5	4.5	5.0	4.5	4.5	5.0	4.5	4.5	5.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.5	-2.0	-1.5	-1.5	-2.0	-1.5	-1.5	-2.0	-1.5	-1.5	-2.0	-1.5
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Max	None	None	C-Max	None	None	None	None	None	None	None
Walk Time (s)		5.0			5.0			5.0			5.0	
Flash Dont Walk (s)		32.0			33.0			30.0			33.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effect Green (s)	24.8	52.2	65.7	21.0	48.4	64.6	13.5	30.6	51.6	12.2	29.3	58.1
Actuated g/C Ratio	0.19	0.40	0.50	0.16	0.37	0.49	0.10	0.23	0.39	0.09	0.22	0.44
v/c Ratio	0.68	0.60	0.16	0.73	0.89	0.08	0.66	0.73	0.32	0.44	0.57	0.64
Control Delay	53.1	32.9	4.3	25.5	14.8	0.1	66.6	50.8	10.2	39.1	59.4	64.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.1	32.9	4.3	25.5	14.8	0.1	66.6	50.8	10.2	39.1	59.4	64.3
LOS	D	C	A	C	B	A	E	D	B	D	E	E
Approach Delay		35.7			16.4			42.5			60.3	
Approach LOS		D			B			D			E	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 35 (27%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
 Natural Cycle: 115
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.89
 Intersection Signal Delay: 37.0
 Intersection LOS: D
 Intersection Capacity Utilization 71.3%
 ICU Level of Service C
 Analysis Period (min) 15

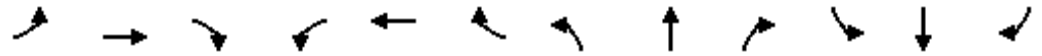
Splits and Phases: 3: McBean Pkwy & Valencia Blvd



Queues

3: McBean Pkwy & Valencia Blvd

08/18/2023



























Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	426	1162	135	384	1596	66	223	834	379	136	622	829
v/c Ratio	0.68	0.60	0.16	0.73	0.89	0.08	0.66	0.73	0.32	0.44	0.57	0.64
Control Delay	53.1	32.9	4.3	25.5	14.8	0.1	66.6	50.8	10.2	39.1	59.4	64.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.1	32.9	4.3	25.5	14.8	0.1	66.6	50.8	10.2	39.1	59.4	64.3
Queue Length 50th (ft)	174	300	10	142	212	0	95	243	52	59	208	400
Queue Length 95th (ft)	m230	m360	m14	m129	m132	m0	140	277	69	95	250	473
Internal Link Dist (ft)		1839			641			685			886	
Turn Bay Length (ft)	350		280	290		225	130		200	190		300
Base Capacity (vph)	624	1943	830	528	1801	904	352	1377	1182	452	1526	1293
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.68	0.60	0.16	0.73	0.89	0.07	0.63	0.61	0.32	0.30	0.41	0.64

Intersection Summary

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

Lanes, Volumes, Timings
 4: McBean Parkway & Magic Mountain Pkwy

08/18/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	425	442	56	62	466	144	65	1000	54	178	1430	659
Future Volume (vph)	425	442	56	62	466	144	65	1000	54	178	1430	659
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	16	12	12	14	11	11	16	11	11	16
Storage Length (ft)	360		360	210		0	175		175	300		340
Storage Lanes	1		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.91	1.00	0.97	0.86	1.00	0.97	0.86	1.00
Fr _t			0.850			0.850			0.850			0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	1794	3433	5085	1689	3319	6194	1794	3319	6194	1794
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1794	3433	5085	1689	3319	6194	1794	3319	6194	1794
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			99			157			198			631
Link Speed (mph)		50			45			45			50	
Link Distance (ft)		809			1452			1622			1219	
Travel Time (s)		11.0			22.0			24.6			16.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	462	480	61	67	507	157	71	1087	59	193	1554	716
Shared Lane Traffic (%)												
Lane Group Flow (vph)	462	480	61	67	507	157	71	1087	59	193	1554	716
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			22			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	0.85	1.00	1.00	0.92	1.04	1.04	0.85	1.04	1.04	0.85
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			Free			Free
Detector Phase	5	2	2	1	6	6	3	8		7	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Minimum Split (s)	12.0	41.0	41.0	12.0	40.0	40.0	12.0	37.0		12.0	37.0	

Lanes, Volumes, Timings
 4: McBean Parkway & Magic Mountain Pkwy

08/18/2023

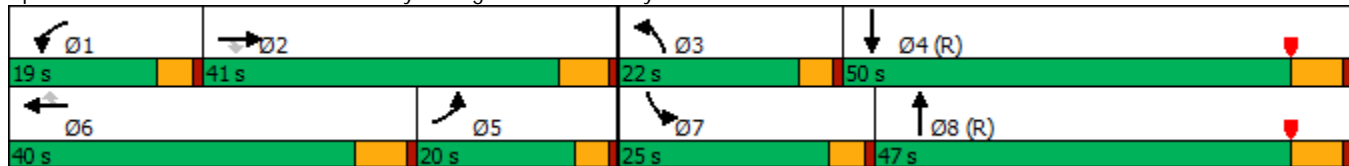


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	20.0	41.0	41.0	19.0	40.0	40.0	22.0	47.0		25.0	50.0	
Total Split (%)	15.2%	31.1%	31.1%	14.4%	30.3%	30.3%	16.7%	35.6%		18.9%	37.9%	
Maximum Green (s)	15.5	35.0	35.0	14.5	34.0	34.0	17.5	41.0		20.5	44.0	
Yellow Time (s)	3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.0		3.5	5.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	-0.5	-2.0	-2.0	-0.5	-2.0	-2.0	-0.5	-2.0		-0.5	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	Max	Max	None	Max	Max	None	C-Max		None	C-Max	
Walk Time (s)		5.0	5.0		5.0	5.0		5.0			5.0	
Flash Dont Walk (s)		30.0	30.0		29.0	29.0		26.0			26.0	
Pedestrian Calls (#/hr)		0	0		0	0		0			0	
Act Effect Green (s)	16.0	45.6	45.6	8.5	36.0	36.0	8.7	50.5	132.0	13.5	57.4	132.0
Actuated g/C Ratio	0.12	0.35	0.35	0.06	0.27	0.27	0.07	0.38	1.00	0.10	0.43	1.00
v/c Ratio	1.11	0.39	0.09	0.30	0.37	0.27	0.33	0.46	0.03	0.57	0.58	0.40
Control Delay	129.8	34.8	1.7	66.8	40.4	13.5	82.4	18.4	0.0	62.9	29.9	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	129.8	34.8	1.7	66.8	40.4	13.5	82.4	18.4	0.0	62.9	29.9	0.7
LOS	F	C	A	E	D	B	F	B	A	E	C	A
Approach Delay		76.5			37.1			21.3			24.0	
Approach LOS		E			D			C			C	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 28 (21%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow
 Natural Cycle: 105
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.11
 Intersection Signal Delay: 34.9
 Intersection LOS: C
 Intersection Capacity Utilization 58.5%
 ICU Level of Service B
 Analysis Period (min) 15

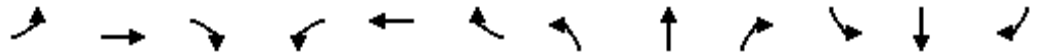
Splits and Phases: 4: McBean Parkway & Magic Mountain Pkwy



Queues

4: McBean Parkway & Magic Mountain Pkwy

08/18/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	462	480	61	67	507	157	71	1087	59	193	1554	716
v/c Ratio	1.11	0.39	0.09	0.30	0.37	0.27	0.33	0.46	0.03	0.57	0.58	0.40
Control Delay	129.8	34.8	1.7	66.8	40.4	13.5	82.4	18.4	0.0	62.9	29.9	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	129.8	34.8	1.7	66.8	40.4	13.5	82.4	18.4	0.0	62.9	29.9	0.7
Queue Length 50th (ft)	~232	167	0	28	119	25	33	73	0	82	295	0
Queue Length 95th (ft)	#342	223	10	52	153	55	m53	121	m0	119	345	0
Internal Link Dist (ft)		729			1372			1542			1139	
Turn Bay Length (ft)	360		360	210			175		175	300		340
Base Capacity (vph)	416	1223	684	390	1386	574	452	2370	1794	528	2693	1794
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.11	0.39	0.09	0.17	0.37	0.27	0.16	0.46	0.03	0.37	0.58	0.40

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
5: Valencia Blvd & Magic Mountain Pkwy

08/18/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	183	244	43	179	404	47	44	951	103	24	1744	615
Future Volume (vph)	183	244	43	179	404	47	44	951	103	24	1744	615
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	13	12	11	12	11	11	14	12	11	11	12
Storage Length (ft)	310		0	250		200	180		200	190		190
Storage Lanes	1		0	2		0	1		1	1		2
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	0.95	0.97	0.95	0.95	1.00	0.91	1.00	1.00	0.91	0.88
Fr _t		0.977			0.984				0.850			0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3319	3573	0	3319	3483	0	1711	5424	1583	1711	4916	2787
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3319	3573	0	3319	3483	0	1711	5424	1583	1711	4916	2787
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		16			10				112			444
Link Speed (mph)		45			45			45				45
Link Distance (ft)		1046			2748			1989				572
Travel Time (s)		15.8			41.6			30.1				8.7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	199	265	47	195	439	51	48	1034	112	26	1896	668
Shared Lane Traffic (%)												
Lane Group Flow (vph)	199	312	0	195	490	0	48	1034	112	26	1896	668
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		22			22			11				11
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.04	0.96	1.00	1.04	1.00	1.04	1.04	0.92	1.00	1.04	1.04	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Size(ft)	50	50		50	50		50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	3	8		7	4		1	6		5	2	3
Permitted Phases									6			2
Detector Phase	3	8		7	4		1	6	6	5	2	3
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	45.0		12.0	45.0		12.0	38.0	38.0	12.0	39.0	12.0

Queues

5: Valencia Blvd & Magic Mountain Pkwy

08/18/2023



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	199	312	195	490	48	1034	112	26	1896	668
v/c Ratio	0.53	0.24	0.57	0.39	0.39	0.63	0.21	0.14	1.10	0.42
Control Delay	52.5	30.9	95.6	15.3	47.8	39.4	10.0	41.9	77.8	3.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.5	30.9	95.6	15.3	47.8	39.4	10.0	41.9	77.8	3.7
Queue Length 50th (ft)	89	99	88	54	39	312	35	16	~678	33
Queue Length 95th (ft)	118	140	130	234	m68	369	76	m20	m#715	m26
Internal Link Dist (ft)		966		2668		1909			492	
Turn Bay Length (ft)	310		250		180		200	190		190
Base Capacity (vph)	528	1321	528	1246	181	1643	535	181	1730	1712
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.38	0.24	0.37	0.39	0.27	0.63	0.21	0.14	1.10	0.39

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings

6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy

08/18/2023



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	93	333	338	1211	1583	153
Future Volume (vph)	93	333	338	1211	1583	153
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	265	265	260			270
Storage Lanes	1	1	2			1
Taper Length (ft)	25		25			
Lane Util. Factor	0.97	0.88	0.97	0.91	0.95	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3433	2787	3433	5085	3539	1583
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	3433	2787	3433	5085	3539	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		14				114
Link Speed (mph)	45			50	45	
Link Distance (ft)	2748			2280	1194	
Travel Time (s)	41.6			31.1	18.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	101	362	367	1316	1721	166
Shared Lane Traffic (%)						
Lane Group Flow (vph)	101	362	367	1316	1721	166
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	34			24	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	1	1	1
Detector Template						
Leading Detector (ft)	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	pt+ov	custom	NA	NA	Perm
Protected Phases	8	8 1	1	6	2	
Permitted Phases			1			2
Detector Phase	8	8 1	1	6	2	2
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	20.0		20.0	20.0	41.0	41.0
Total Split (s)	34.0		30.0	98.0	68.0	68.0

Lanes, Volumes, Timings

6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy

08/18/2023

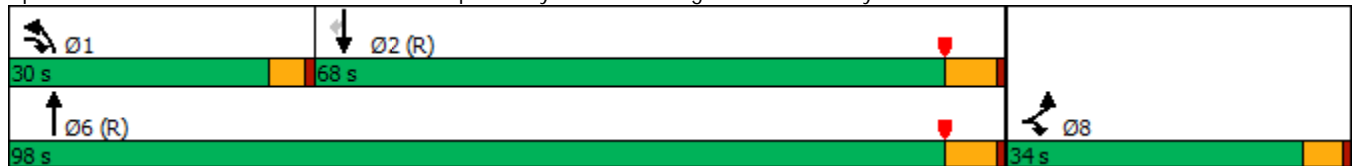


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Total Split (%)	25.8%		22.7%	74.2%	51.5%	51.5%
Maximum Green (s)	29.0		25.5	92.0	62.0	62.0
Yellow Time (s)	4.0		3.5	5.0	5.0	5.0
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0		-0.5	-2.0	-2.0	-2.0
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	Max		Min	C-Min	C-Min	C-Min
Walk Time (s)					7.0	7.0
Flash Dont Walk (s)					28.0	28.0
Pedestrian Calls (#/hr)					0	0
Act Effect Green (s)	30.0	54.4	20.4	94.0	69.6	69.6
Actuated g/C Ratio	0.23	0.41	0.15	0.71	0.53	0.53
v/c Ratio	0.13	0.31	0.69	0.36	0.92	0.19
Control Delay	30.4	18.8	59.5	7.7	37.3	6.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.4	18.8	59.5	7.7	37.3	6.5
LOS	C	B	E	A	D	A
Approach Delay	21.3			19.0	34.6	
Approach LOS	C			B	C	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 77 (58%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
 Natural Cycle: 85
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.92
 Intersection Signal Delay: 26.6
 Intersection LOS: C
 Intersection Capacity Utilization 66.7%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy



Queues

6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy

08/18/2023



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	101	362	367	1316	1721	166
v/c Ratio	0.13	0.31	0.69	0.36	0.92	0.19
Control Delay	30.4	18.8	59.5	7.7	37.3	6.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.4	18.8	59.5	7.7	37.3	6.5
Queue Length 50th (ft)	42	139	155	144	826	26
Queue Length 95th (ft)	63	179	198	167	#974	m43
Internal Link Dist (ft)	2668			2200	1114	
Turn Bay Length (ft)	265	265	260			270
Base Capacity (vph)	780	1274	676	3621	1864	888
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.28	0.54	0.36	0.92	0.19

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

























Queue shown is maximum after two cycles.

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

Lanes, Volumes, Timings

7: Bouquet Canyon Rd & Valencia Blvd/Soledad Canyon Rd

08/18/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	392	750	23	564	1474	294	23	710	423	329	1246	1063
Future Volume (vph)	392	750	23	564	1474	294	23	710	423	329	1246	1063
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	10	10	11	11	11	11	10	10	11
Storage Length (ft)	360		0	330		330	250		0	435		400
Storage Lanes	2		1	3		1	1		1	2		2
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.94	0.91	1.00	0.94	0.91	1.00	1.00	0.91	1.00	0.97	0.91	0.88
Fr _t			0.850			0.850			0.850			0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	4824	4916	1583	4658	4746	1531	1711	4916	1531	3204	4746	2694
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	4824	4916	1583	4658	4746	1531	1711	4916	1531	3204	4746	2694
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			161			99			460			453
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		2282			2858			2196			1054	
Travel Time (s)		34.6			43.3			33.3			12.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	426	815	25	613	1602	320	25	772	460	358	1354	1155
Shared Lane Traffic (%)												
Lane Group Flow (vph)	426	815	25	613	1602	320	25	772	460	358	1354	1155
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		33			33			20			20	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.00	1.09	1.09	1.04	1.04	1.04	1.04	1.09	1.09	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Free	Prot	NA	pm+ov
Protected Phases	7	4		3	8	1	5	2		1	6	7
Permitted Phases			4			8			Free			6
Detector Phase	7	4	4	3	8	1	5	2		1	6	7
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	12.0	44.0	44.0	12.0	48.0	12.0	12.0	46.0		12.0	44.0	12.0

Lanes, Volumes, Timings

7: Bouquet Canyon Rd & Valencia Blvd/Soledad Canyon Rd

08/18/2023

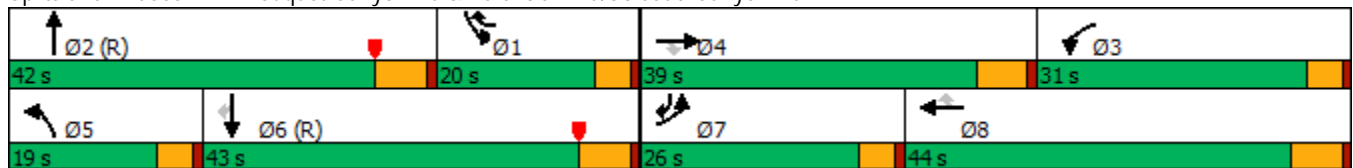


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	26.0	39.0	39.0	31.0	44.0	20.0	19.0	42.0		20.0	43.0	26.0
Total Split (%)	19.7%	29.5%	29.5%	23.5%	33.3%	15.2%	14.4%	31.8%		15.2%	32.6%	19.7%
Maximum Green (s)	21.5	33.0	33.0	26.5	38.0	15.5	14.5	36.0		15.5	37.0	21.5
Yellow Time (s)	3.5	5.0	5.0	3.5	5.0	3.5	3.5	5.0		3.5	5.0	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	-0.5	-2.0	0.0	-0.5	-2.0	-0.5	-0.5	-2.0		-0.5	-2.0	-0.5
Total Lost Time (s)	4.0	4.0	6.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lead		Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	None
Walk Time (s)		5.0	5.0		5.0			5.0				
Flash Dont Walk (s)		33.0	33.0		37.0			35.0				
Pedestrian Calls (#/hr)		0	0		0			0				
Act Effect Green (s)	20.4	29.9	27.9	32.1	41.6	57.6	8.0	38.0	132.0	16.0	50.2	74.6
Actuated g/C Ratio	0.15	0.23	0.21	0.24	0.32	0.44	0.06	0.29	1.00	0.12	0.38	0.57
v/c Ratio	0.57	0.73	0.05	0.54	1.07	0.44	0.24	0.55	0.30	0.92	0.75	0.67
Control Delay	29.2	18.5	0.2	45.7	86.7	15.5	59.1	37.8	0.8	59.7	21.2	11.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.2	18.5	0.2	45.7	86.7	15.5	59.1	37.8	0.8	59.7	21.2	11.1
LOS	C	B	A	D	F	B	E	D	A	E	C	B
Approach Delay		21.8			67.8			24.7			22.0	
Approach LOS		C			E			C			C	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 117 (89%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 120
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.07
 Intersection Signal Delay: 37.0
 Intersection LOS: D
 Intersection Capacity Utilization 79.0%
 ICU Level of Service D
 Analysis Period (min) 15

Splits and Phases: 7: Bouquet Canyon Rd & Valencia Blvd/Soledad Canyon Rd



Queues

7: Bouquet Canyon Rd & Valencia Blvd/Soledad Canyon Rd

08/18/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	426	815	25	613	1602	320	25	772	460	358	1354	1155
v/c Ratio	0.57	0.73	0.05	0.54	1.07	0.44	0.24	0.55	0.30	0.92	0.75	0.67
Control Delay	29.2	18.5	0.2	45.7	86.7	15.5	59.1	37.8	0.8	59.7	21.2	11.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.2	18.5	0.2	45.7	86.7	15.5	59.1	37.8	0.8	59.7	21.2	11.1
Queue Length 50th (ft)	36	56	0	193	-592	113	21	209	7	165	365	445
Queue Length 95th (ft)	75	65	m0	240	#691	176	51	255	20	m#208	436	538
Internal Link Dist (ft)		2202			2778			2116			974	
Turn Bay Length (ft)	360			330		330	250			435		400
Base Capacity (vph)	804	1303	516	1132	1495	723	194	1415	1531	388	1805	1746
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.63	0.05	0.54	1.07	0.44	0.13	0.55	0.30	0.92	0.75	0.66

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
 8: Bouquet Canyon Rd & Newhall Ranch Rd

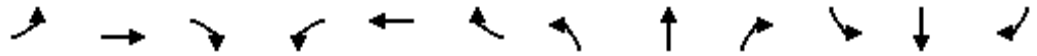
08/18/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	270	798	333	456	1778	457	395	830	162	450	1919	533
Future Volume (vph)	270	798	333	456	1778	457	395	830	162	450	1919	533
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	290		265	410		410	475		230	260		150
Storage Lanes	3		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.94	0.86	1.00	0.97	0.86	1.00	0.97	0.86	1.00	0.97	0.86	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	4990	6408	1583	3433	6408	1583	3433	6408	1583	3433	6408	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	4990	6408	1583	3433	6408	1583	3433	6408	1583	3433	6408	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			107			326			182			112
Link Speed (mph)		45		45			45			45		45
Link Distance (ft)		870		2469			1012			1082		
Travel Time (s)		13.2		37.4			15.3			16.4		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	293	867	362	496	1933	497	429	902	176	489	2086	579
Shared Lane Traffic (%)												
Lane Group Flow (vph)	293	867	362	496	1933	497	429	902	176	489	2086	579
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		36		36			24			24		
Link Offset(ft)		0		0			0			0		
Crosswalk Width(ft)		16		16			16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	3	8	1	7	4		1	6		5	2	3
Permitted Phases			8			4			6			2
Detector Phase	3	8	1	7	4	4	1	6	6	5	2	3
Switch Phase												
Minimum Initial (s)	4.0	5.0	4.0	4.0	5.0	5.0	4.0	10.0	10.0	4.0	10.0	4.0
Minimum Split (s)	12.0	43.0	12.0	12.0	43.0	43.0	12.0	49.0	49.0	12.0	50.0	12.0
Total Split (s)	21.0	36.0	22.0	21.0	36.0	36.0	22.0	45.0	45.0	30.0	53.0	21.0

Lanes, Volumes, Timings
 8: Bouquet Canyon Rd & Newhall Ranch Rd

08/18/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	15.9%	27.3%	16.7%	15.9%	27.3%	27.3%	16.7%	34.1%	34.1%	22.7%	40.2%	15.9%
Maximum Green (s)	16.5	30.0	17.5	17.0	30.0	30.0	17.5	39.0	39.0	26.0	47.0	16.5
Yellow Time (s)	3.5	5.0	3.5	3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.0	3.5
All-Red Time (s)	1.0	1.0	1.0	0.5	1.0	1.0	1.0	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	-0.5	-2.0	-0.5	-0.5	-2.0	-2.0	-0.5	-2.0	-2.0	-0.5	-2.0	-0.5
Total Lost Time (s)	4.0	4.0	4.0	3.5	4.0	4.0	4.0	4.0	4.0	3.5	4.0	4.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes		Yes	Yes			Yes			Yes		Yes
Vehicle Extension (s)	3.0	5.5	3.0	3.0	5.5	5.5	3.0	5.5	5.5	3.0	5.5	3.0
Minimum Gap (s)	3.0	2.5	3.0	3.0	2.5	2.5	3.0	4.5	4.5	3.0	4.5	3.0
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	10.0	0.0	10.0	0.0
Time To Reduce (s)	0.0	24.0	0.0	0.0	24.0	24.0	0.0	10.0	10.0	0.0	10.0	0.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	None
Walk Time (s)		5.0			5.0	5.0		5.0	5.0		5.0	
Flash Dont Walk (s)		32.0			32.0	32.0		38.0	38.0		39.0	
Pedestrian Calls (#/hr)		2			2	2		1	1		1	
Act Effect Green (s)	14.4	27.9	45.9	21.6	34.6	34.6	18.0	43.8	43.8	23.7	49.0	67.4
Actuated g/C Ratio	0.11	0.21	0.35	0.16	0.26	0.26	0.14	0.33	0.33	0.18	0.37	0.51
v/c Ratio	0.54	0.64	0.58	0.88	1.15	0.76	0.92	0.42	0.27	0.80	0.88	0.67
Control Delay	59.1	49.6	17.4	68.5	116.2	23.8	73.7	51.8	19.9	61.8	43.9	23.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.1	49.6	17.4	68.5	116.2	23.8	73.7	51.8	19.9	61.8	43.9	23.1
LOS	E	D	B	E	F	C	E	D	B	E	D	C
Approach Delay		43.8			92.4			54.3			42.9	
Approach LOS		D			F			D			D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 105 (80%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
 Natural Cycle: 130
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.15
 Intersection Signal Delay: 60.8
 Intersection LOS: E
 Intersection Capacity Utilization 83.3%
 ICU Level of Service E
 Analysis Period (min) 15

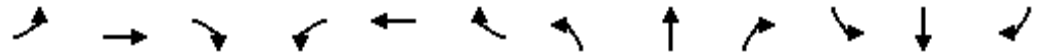
Splits and Phases: 8: Bouquet Canyon Rd & Newhall Ranch Rd



Queues

8: Bouquet Canyon Rd & Newhall Ranch Rd

08/18/2023



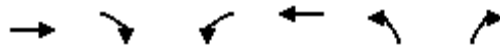
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	293	867	362	496	1933	497	429	902	176	489	2086	579
v/c Ratio	0.54	0.64	0.58	0.88	1.15	0.76	0.92	0.42	0.27	0.80	0.88	0.67
Control Delay	59.1	49.6	17.4	68.5	116.2	23.8	73.7	51.8	19.9	61.8	43.9	23.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.1	49.6	17.4	68.5	116.2	23.8	73.7	51.8	19.9	61.8	43.9	23.1
Queue Length 50th (ft)	85	198	111	210	-564	125	172	222	44	207	480	292
Queue Length 95th (ft)	115	227	179	#358	#675	272	#278	262	103	264	531	410
Internal Link Dist (ft)		790			2389			932			1002	
Turn Bay Length (ft)	290		265	410		410	475		230	260		150
Base Capacity (vph)	642	1553	620	562	1679	655	468	2127	647	689	2378	892
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.46	0.56	0.58	0.88	1.15	0.76	0.92	0.42	0.27	0.71	0.88	0.65

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lanes, Volumes, Timings
9: Commuter Way & Soledad Cyn

08/18/2023

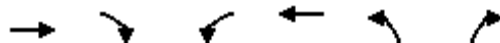


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↗	↖	↑↑↑	↘↗	
Traffic Volume (vph)	1369	40	11	2318	45	19
Future Volume (vph)	1369	40	11	2318	45	19
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		150	285		0	0
Storage Lanes		1	1		2	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	1.00	1.00	0.91	0.97	0.95
Frt		0.850			0.955	
Flt Protected			0.950		0.966	
Satd. Flow (prot)	5085	1583	1770	5085	3334	0
Flt Permitted			0.950		0.966	
Satd. Flow (perm)	5085	1583	1770	5085	3334	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		33			21	
Link Speed (mph)	50			50	30	
Link Distance (ft)	928			2825	392	
Travel Time (s)	12.7			38.5	8.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1488	43	12	2520	49	21
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1488	43	12	2520	70	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	1	1	1	1	1	
Detector Template						
Leading Detector (ft)	50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	
Turn Type	NA	Perm	Prot	NA	Prot	
Protected Phases	2		1	6	8	
Permitted Phases		2				
Detector Phase	2	2	1	6	8	
Switch Phase						
Minimum Initial (s)	10.0	10.0	4.0	10.0	4.0	
Minimum Split (s)	26.0	26.0	12.0	22.0	37.0	
Total Split (s)	75.0	75.0	20.0	95.0	37.0	

Lanes, Volumes, Timings

9: Commuter Way & Soledad Cyn

08/18/2023

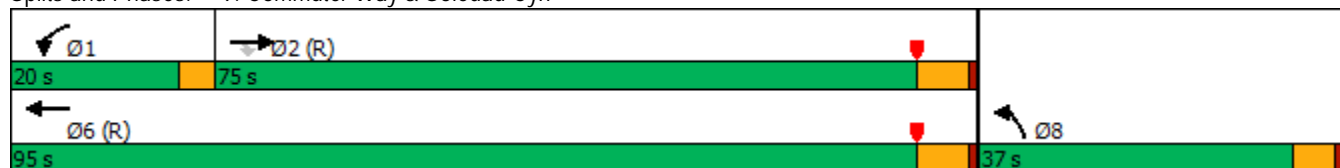


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Total Split (%)	56.8%	56.8%	15.2%	72.0%	28.0%	
Maximum Green (s)	69.0	69.0	16.5	89.0	31.0	
Yellow Time (s)	5.0	5.0	3.5	5.0	4.0	
All-Red Time (s)	1.0	1.0	0.0	1.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	0.5	-2.0	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Vehicle Extension (s)	5.0	5.0	1.5	5.0	2.0	
Minimum Gap (s)	4.0	4.0	1.5	4.0	2.0	
Time Before Reduce (s)	15.0	15.0	0.0	15.0	0.0	
Time To Reduce (s)	15.0	15.0	0.0	15.0	0.0	
Recall Mode	C-Max	C-Max	None	C-Max	None	
Walk Time (s)	7.0	7.0			7.0	
Flash Dont Walk (s)	13.0	13.0			24.0	
Pedestrian Calls (#/hr)	0	0			0	
Act Effect Green (s)	114.6	114.6	4.5	118.4	8.5	
Actuated g/C Ratio	0.87	0.87	0.03	0.90	0.06	
v/c Ratio	0.34	0.03	0.20	0.55	0.30	
Control Delay	0.8	0.1	81.3	1.4	45.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	0.8	0.1	81.3	1.4	45.2	
LOS	A	A	F	A	D	
Approach Delay	0.8			1.8	45.2	
Approach LOS	A			A	D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 16 (12%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Natural Cycle: 80
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.55
 Intersection Signal Delay: 2.2
 Intersection LOS: A
 Intersection Capacity Utilization 54.8%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 9: Commuter Way & Soledad Cyn



Queues

9: Commuter Way & Soledad Cyn

08/18/2023



Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Group Flow (vph)	1488	43	12	2520	70
v/c Ratio	0.34	0.03	0.20	0.55	0.30
Control Delay	0.8	0.1	81.3	1.4	45.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	0.8	0.1	81.3	1.4	45.2
Queue Length 50th (ft)	15	0	11	13	21
Queue Length 95th (ft)	32	0	m19	21	45
Internal Link Dist (ft)	848			2745	312
Turn Bay Length (ft)		150	285		
Base Capacity (vph)	4416	1379	214	4562	849
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.34	0.03	0.06	0.55	0.08

Intersection Summary

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

Lanes, Volumes, Timings
 10: Soledad Cyn/Soledad Cyn Rd & Valley Center

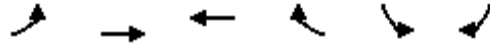
08/18/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø4
Lane Configurations							
Traffic Volume (vph)	100	906	1812	925	575	187	
Future Volume (vph)	100	906	1812	925	575	187	
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	250			310	235	0	
Storage Lanes	2			1	1	1	
Taper Length (ft)	25				25		
Lane Util. Factor	0.97	0.91	0.91	1.00	0.97	1.00	
Frt				0.850		0.850	
Flt Protected	0.950				0.950		
Satd. Flow (prot)	3433	5085	5085	1583	3433	1583	
Flt Permitted	0.950				0.950		
Satd. Flow (perm)	3433	5085	5085	1583	3433	1583	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)				509		203	
Link Speed (mph)		50	50		30		
Link Distance (ft)		2935	1764		1172		
Travel Time (s)		40.0	24.1		26.6		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	109	985	1970	1005	625	203	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	109	985	1970	1005	625	203	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Left	Left	Right	Left	Right	
Median Width(ft)		24	24		24		
Link Offset(ft)		0	0		0		
Crosswalk Width(ft)		16	16		16		
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (mph)	15			9	15	9	
Number of Detectors	1	1	1	1	1	1	
Detector Template							
Leading Detector (ft)	50	50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Turn Type	Prot	NA	NA	Free	Prot	pt+ov	
Protected Phases	5	2	6		3	3 5	4
Permitted Phases				Free			
Detector Phase	5	2	6		3	3 5	
Switch Phase							
Minimum Initial (s)	4.0	4.0	4.0		4.0		4.0
Minimum Split (s)	20.0	22.0	29.0		20.0		35.0
Total Split (s)	20.0	72.0	52.0		25.0		35.0

Lanes, Volumes, Timings
 10: Soledad Cyn/Soledad Cyn Rd & Valley Center

08/18/2023

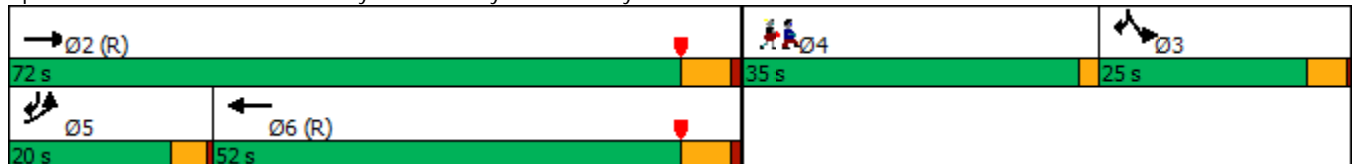


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø4	
Total Split (%)	15.2%	54.5%	39.4%		18.9%		27%	
Maximum Green (s)	16.0	66.0	46.0		20.5		33.0	
Yellow Time (s)	3.5	5.0	5.0		4.0		2.0	
All-Red Time (s)	0.5	1.0	1.0		0.5		0.0	
Lost Time Adjust (s)	0.0	-2.0	-2.0		-0.5			
Total Lost Time (s)	4.0	4.0	4.0		4.0			
Lead/Lag	Lead		Lag		Lag		Lead	
Lead-Lag Optimize?	Yes		Yes		Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		0.2	
Recall Mode	None	C-Max	C-Max		None		None	
Walk Time (s)				7.0				7.0
Flash Dont Walk (s)				16.0				26.0
Pedestrian Calls (#/hr)				0				0
Act Effct Green (s)	9.6	87.3	73.7	132.0	36.7	50.3		
Actuated g/C Ratio	0.07	0.66	0.56	1.00	0.28	0.38		
v/c Ratio	0.44	0.29	0.69	0.63	0.65	0.28		
Control Delay	46.9	18.3	6.4	6.7	30.4	1.7		
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		
Total Delay	46.9	18.3	6.4	6.7	30.4	1.7		
LOS	D	B	A	A	C	A		
Approach Delay	21.1		6.5		23.3			
Approach LOS	C		A		C			

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 37 (28%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Natural Cycle: 135
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.69
 Intersection Signal Delay: 12.6
 Intersection LOS: B
 Intersection Capacity Utilization 64.7%
 ICU Level of Service C
 Analysis Period (min) 15

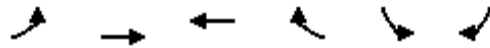
Splits and Phases: 10: Soledad Cyn/Soledad Cyn Rd & Valley Center



Queues

10: Soledad Cyn/Soledad Cyn Rd & Valley Center

08/18/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	109	985	1970	1005	625	203
v/c Ratio	0.44	0.29	0.69	0.63	0.65	0.28
Control Delay	46.9	18.3	6.4	6.7	30.4	1.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.9	18.3	6.4	6.7	30.4	1.7
Queue Length 50th (ft)	46	211	38	427	164	4
Queue Length 95th (ft)	77	249	m47	m461	246	9
Internal Link Dist (ft)		2855	1684		1092	
Turn Bay Length (ft)	250			310	235	
Base Capacity (vph)	416	3362	2839	1583	955	795
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.26	0.29	0.69	0.63	0.65	0.26

Intersection Summary

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

Lanes, Volumes, Timings
 11: Golden Valley Road & Valley Center Drive

08/18/2023



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4	Ø5	Ø12
Lane Configurations	↔↔↔	↔↔	↔↔	↑↑↑	↑↑↑	↔			
Traffic Volume (vph)	799	269	304	842	1052	487			
Future Volume (vph)	799	269	304	842	1052	487			
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900			
Storage Length (ft)	260	260	290			150			
Storage Lanes	2	1	2			1			
Taper Length (ft)	25		25						
Lane Util. Factor	0.94	0.88	0.97	0.91	0.91	1.00			
Frt		0.850				0.850			
Flt Protected	0.950		0.950						
Satd. Flow (prot)	4990	2787	3433	5085	5085	1583			
Flt Permitted	0.950		0.950						
Satd. Flow (perm)	4990	2787	3433	5085	5085	1583			
Right Turn on Red		Yes				Yes			
Satd. Flow (RTOR)		292				338			
Link Speed (mph)	30			50	50				
Link Distance (ft)	513			2601	1605				
Travel Time (s)	11.7			35.5	21.9				
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92			
Adj. Flow (vph)	868	292	330	915	1143	529			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	868	292	330	915	1143	529			
Enter Blocked Intersection	No	No	No	No	No	No			
Lane Alignment	Left	Right	Left	Left	Left	Right			
Median Width(ft)	36			24	24				
Link Offset(ft)	0			0	0				
Crosswalk Width(ft)	16			16	16				
Two way Left Turn Lane									
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00			
Turning Speed (mph)	15	9	15			9			
Number of Detectors	1	1	1	1	1	1			
Detector Template									
Leading Detector (ft)	50	50	50	50	50	50			
Trailing Detector (ft)	0	0	0	0	0	0			
Detector 1 Position(ft)	0	0	0	0	0	0			
Detector 1 Size(ft)	50	50	50	50	50	50			
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel									
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Turn Type	Prot	pt+ov	Prot	NA	NA	Perm			
Protected Phases	3	5 12	5 12	2	6		4	5	12
Permitted Phases						6			
Detector Phase	3	5 12	5 12	2	6	6			
Switch Phase									
Minimum Initial (s)	3.0			10.0	10.0	10.0	4.0	4.0	4.0
Minimum Split (s)	25.0			30.0	40.0	40.0	35.0	15.0	20.0
Total Split (s)	30.0			67.0	42.0	42.0	35.0	25.0	35.0

Lanes, Volumes, Timings
 11: Golden Valley Road & Valley Center Drive

08/18/2023

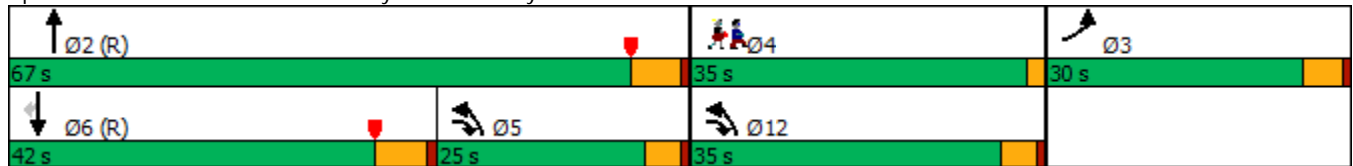


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4	Ø5	Ø12
Total Split (%)	22.7%			50.8%	31.8%	31.8%	27%	19%	27%
Maximum Green (s)	25.0			61.0	36.0	36.0	33.0	20.5	30.5
Yellow Time (s)	4.0			5.0	5.0	5.0	2.0	3.5	3.5
All-Red Time (s)	1.0			1.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)	-1.0			-2.0	-2.0	-2.0			
Total Lost Time (s)	4.0			4.0	4.0	4.0			
Lead/Lag					Lead	Lead		Lag	
Lead-Lag Optimize?					Yes	Yes		Yes	
Vehicle Extension (s)	3.0			3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None			C-Min	C-Min	C-Min	None	None	None
Walk Time (s)					7.0	7.0	7.0		5.0
Flash Dont Walk (s)					24.0	24.0	26.0		10.0
Pedestrian Calls (#/hr)					0	0	0		0
Act Effect Green (s)	30.5	28.5	28.5	82.3	61.0	61.0			
Actuated g/C Ratio	0.23	0.22	0.22	0.62	0.46	0.46			
v/c Ratio	0.75	0.35	0.45	0.29	0.49	0.58			
Control Delay	43.9	5.9	38.8	4.5	17.5	11.9			
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0			
Total Delay	43.9	5.9	38.8	4.5	17.5	11.9			
LOS	D	A	D	A	B	B			
Approach Delay	34.3			13.6	15.7				
Approach LOS	C			B	B				

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 26 (20%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 115
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.75
 Intersection Signal Delay: 20.4
 Intersection Capacity Utilization 54.2%
 Analysis Period (min) 15
 Intersection LOS: C
 ICU Level of Service A

Splits and Phases: 11: Golden Valley Road & Valley Center Drive



Queues

11: Golden Valley Road & Valley Center Drive

08/18/2023

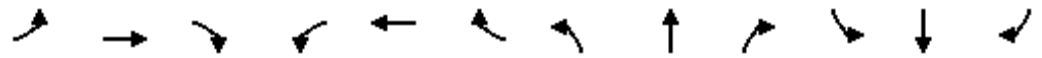


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	868	292	330	915	1143	529
v/c Ratio	0.75	0.35	0.45	0.29	0.49	0.58
Control Delay	43.9	5.9	38.8	4.5	17.5	11.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.9	5.9	38.8	4.5	17.5	11.9
Queue Length 50th (ft)	270	11	145	35	162	114
Queue Length 95th (ft)	274	27	194	41	189	286
Internal Link Dist (ft)	433			2521	1525	
Turn Bay Length (ft)	260	260	290			150
Base Capacity (vph)	1159	1265	1339	3170	2349	913
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.75	0.23	0.25	0.29	0.49	0.58

Intersection Summary

Lanes, Volumes, Timings
12: Ruther Ave & Soledad Cyn Rd

08/18/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	71	1161	95	211	2574	18	258	138	97	83	96	70
Future Volume (vph)	71	1161	95	211	2574	18	258	138	97	83	96	70
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	285		300	250		0	0		0	125		0
Storage Lanes	1		1	2		0	1		2	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	0.91	0.95	0.95	0.88	0.95	0.95	1.00
Frt			0.850		0.999				0.850		0.937	
Flt Protected	0.950			0.950			0.950	0.978		0.950		
Satd. Flow (prot)	1770	5085	1583	3433	5080	0	1681	1731	2787	1681	1658	0
Flt Permitted	0.950			0.950			0.950	0.978		0.950		
Satd. Flow (perm)	1770	5085	1583	3433	5080	0	1681	1731	2787	1681	1658	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			103		1				105		23	
Link Speed (mph)		50		50				40			30	
Link Distance (ft)		1764		2200				220			327	
Travel Time (s)		24.1		30.0				3.8			7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	77	1262	103	229	2798	20	280	150	105	90	104	76
Shared Lane Traffic (%)							42%			0%		
Lane Group Flow (vph)	77	1262	103	229	2818	0	162	268	105	90	180	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24		24				12			12	
Link Offset(ft)		0		0				0			0	
Crosswalk Width(ft)		16		16				16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1	1	1	1	
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50		50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	pt+ov	Split	NA	
Protected Phases	1	6		5	2		3	3	3 5	4	4	
Permitted Phases			6									
Detector Phase	1	6	6	5	2		3	3	3 5	4	4	
Switch Phase												
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	12.0	42.0	42.0	12.0	27.0		35.0	35.0		15.0	15.0	
Total Split (s)	18.0	52.0	52.0	30.0	64.0		30.0	30.0		20.0	20.0	

Lanes, Volumes, Timings
12: Ruther Ave & Soledad Cyn Rd

08/18/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	13.6%	39.4%	39.4%	22.7%	48.5%		22.7%	22.7%		15.2%	15.2%	
Maximum Green (s)	14.0	46.0	46.0	26.0	58.0		27.0	27.0		15.5	15.5	
Yellow Time (s)	3.5	5.0	5.0	3.5	5.0		3.0	3.0		3.5	3.5	
All-Red Time (s)	0.5	1.0	1.0	0.5	1.0		0.0	0.0		1.0	1.0	
Lost Time Adjust (s)	0.0	-2.0	-2.0	0.0	-2.0		1.0	1.0		-0.5	-0.5	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	4.5	4.5	1.5	4.5		3.0	3.0		3.0	3.0	
Minimum Gap (s)	1.5	3.0	3.0	1.5	3.0		3.0	3.0		3.0	3.0	
Time Before Reduce (s)	0.0	7.5	7.5	0.0	7.5		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	22.5	22.5	0.0	22.5		0.0	0.0		0.0	0.0	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None		None	None	
Walk Time (s)		7.0	7.0		7.0		5.0	5.0				
Flash Dont Walk (s)		25.0	25.0		11.0		27.0	27.0				
Pedestrian Calls (#/hr)		0	0		0		0	0				
Act Effect Green (s)	9.6	64.5	64.5	12.7	69.4		23.2	23.2	35.9	15.6	15.6	
Actuated g/C Ratio	0.07	0.49	0.49	0.10	0.53		0.18	0.18	0.27	0.12	0.12	
v/c Ratio	0.60	0.51	0.12	0.69	1.05		0.55	0.88	0.13	0.45	0.83	
Control Delay	93.5	8.4	1.0	68.7	65.7		56.4	81.5	3.8	61.9	79.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	93.5	8.4	1.0	68.7	65.7		56.4	81.5	3.8	61.9	79.7	
LOS	F	A	A	E	E		E	F	A	E	E	
Approach Delay		12.4			65.9			58.7			73.8	
Approach LOS		B			E			E			E	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
 Natural Cycle: 145
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.05
 Intersection Signal Delay: 51.0
 Intersection LOS: D
 Intersection Capacity Utilization 85.1%
 ICU Level of Service E
 Analysis Period (min) 15

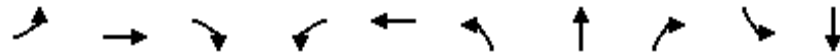
Splits and Phases: 12: Ruther Ave & Soledad Cyn Rd



Queues

12: Ruther Ave & Soledad Cyn Rd

08/18/2023



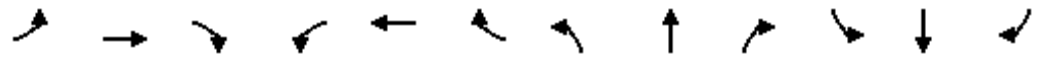
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	77	1262	103	229	2818	162	268	105	90	180
v/c Ratio	0.60	0.51	0.12	0.69	1.05	0.55	0.88	0.13	0.45	0.83
Control Delay	93.5	8.4	1.0	68.7	65.7	56.4	81.5	3.8	61.9	79.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	93.5	8.4	1.0	68.7	65.7	56.4	81.5	3.8	61.9	79.7
Queue Length 50th (ft)	66	161	1	99	~1031	131	233	0	75	140
Queue Length 95th (ft)	m111	202	m6	139	#1173	208	#369	16	136	#272
Internal Link Dist (ft)		1684			2120		140			247
Turn Bay Length (ft)	285		300	250					125	
Base Capacity (vph)	187	2484	826	676	2672	331	340	1161	207	224
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.41	0.51	0.12	0.34	1.05	0.49	0.79	0.09	0.43	0.80

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
 13: Golden Valley Road & Centre Pointe Parkway

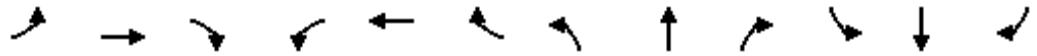
08/18/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	72	163	256	101	66	359	1019	354	136	1117	130
Future Volume (vph)	49	72	163	256	101	66	359	1019	354	136	1117	130
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		260	150		250	375		300	700		0
Storage Lanes	1		1	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	0.91	1.00	0.95	1.00
Frt			0.850		0.941			0.961				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	3433	1753	0	1770	4887	0	1770	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1863	1583	3433	1753	0	1770	4887	0	1770	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			103		25			65				136
Link Speed (mph)		30			30			50				50
Link Distance (ft)		1149			802			7898				1445
Travel Time (s)		26.1			18.2			107.7				19.7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	53	78	177	278	110	72	390	1108	385	148	1214	141
Shared Lane Traffic (%)												
Lane Group Flow (vph)	53	78	177	278	182	0	390	1493	0	148	1214	141
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1		1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50		50	50	50
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Size(ft)	50	50	50	50	50		50	50		50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Turn Type	Prot	NA	pm+ov	Prot	NA		Prot	NA		Prot	NA	Perm
Protected Phases	3	8	5	7	4		5	2		1	6	
Permitted Phases			8									6
Detector Phase	3	8	5	7	4		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	4.0	6.0	4.0	4.0	6.0		4.0	10.0		4.0	10.0	10.0
Minimum Split (s)	12.0	25.0	20.0	20.0	39.0		20.0	33.0		15.0	34.0	34.0
Total Split (s)	19.0	25.0	33.0	34.0	40.0		33.0	40.0		33.0	40.0	40.0

Lanes, Volumes, Timings
 13: Golden Valley Road & Centre Pointe Parkway

08/18/2023

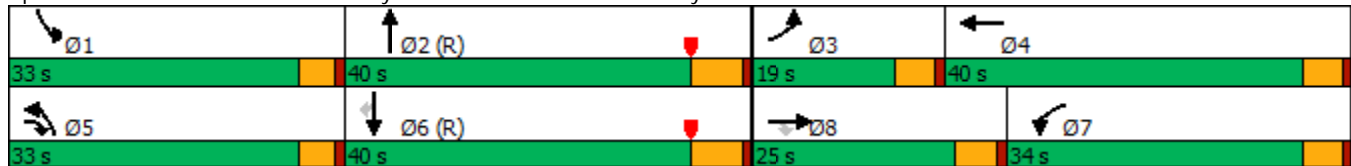


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	14.4%	18.9%	25.0%	25.8%	30.3%		25.0%	30.3%		25.0%	30.3%	30.3%
Maximum Green (s)	14.0	20.0	28.5	29.0	35.0		28.5	34.0		28.5	34.0	34.0
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0		3.5	5.0		3.5	5.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	-1.0	-1.0	-0.5	-1.0	-1.0		-0.5	-2.0		-0.5	-2.0	-2.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Min		None	C-Min	C-Min
Walk Time (s)					7.0			7.0			7.0	7.0
Flash Dont Walk (s)					27.0			20.0			21.0	21.0
Pedestrian Calls (#/hr)					0			0			0	0
Act Effct Green (s)	10.3	11.9	48.6	17.5	18.8		38.3	72.1		16.8	50.7	50.7
Actuated g/C Ratio	0.08	0.09	0.37	0.13	0.14		0.29	0.55		0.13	0.38	0.38
v/c Ratio	0.38	0.47	0.27	0.61	0.67		0.76	0.55		0.66	0.89	0.20
Control Delay	64.9	65.4	7.0	59.5	57.9		36.1	44.1		62.6	56.8	18.5
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	64.9	65.4	7.0	59.5	57.9		36.1	44.1		62.6	56.8	18.5
LOS	E	E	A	E	E		D	D		E	E	B
Approach Delay		31.8			58.8			42.4			53.8	
Approach LOS		C			E			D			D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 125 (95%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 125
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.89
 Intersection Signal Delay: 47.6
 Intersection LOS: D
 Intersection Capacity Utilization 76.8%
 ICU Level of Service D
 Analysis Period (min) 15

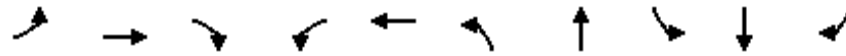
Splits and Phases: 13: Golden Valley Road & Centre Pointe Parkway



Queues

13: Golden Valley Road & Centre Pointe Parkway

08/18/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	53	78	177	278	182	390	1493	148	1214	141
v/c Ratio	0.38	0.47	0.27	0.61	0.67	0.76	0.55	0.66	0.89	0.20
Control Delay	64.9	65.4	7.0	59.5	57.9	36.1	44.1	62.6	56.8	18.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	64.9	65.4	7.0	59.5	57.9	36.1	44.1	62.6	56.8	18.5
Queue Length 50th (ft)	44	65	27	118	130	348	457	128	575	52
Queue Length 95th (ft)	86	115	47	157	200	m402	m498	133	#847	124
Internal Link Dist (ft)		1069			722		7818		1365	
Turn Bay Length (ft)	150		260	150		375		700		
Base Capacity (vph)	201	296	648	780	496	513	2700	388	1358	691
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.26	0.26	0.27	0.36	0.37	0.76	0.55	0.38	0.89	0.20

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

Lanes, Volumes, Timings
 14: Sierra Highway & Golden Valley Road

08/18/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑	↔↔	↔↔	↑↑↑	↔	↔↔	↑↔		↔	↑↑	↔
Traffic Volume (vph)	303	603	817	350	1108	63	562	205	18	44	1125	495
Future Volume (vph)	303	603	817	350	1108	63	562	205	18	44	1125	495
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	280		280	285		300	285		0	410		540
Storage Lanes	2		2	2		1	2		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	0.88	0.97	0.91	1.00	0.97	0.95	0.95	1.00	0.95	1.00
Fr _t			0.850			0.850		0.988				0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	2787	3433	5085	1583	3433	3497	0	1770	3539	1583
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	2787	3433	5085	1583	3433	3497	0	1770	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			476			136		7				538
Link Speed (mph)		50			50			30				30
Link Distance (ft)		2032			1202			1801				1671
Travel Time (s)		27.7			16.4			40.9				38.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	329	655	888	380	1204	68	611	223	20	48	1223	538
Shared Lane Traffic (%)												
Lane Group Flow (vph)	329	655	888	380	1204	68	611	243	0	48	1223	538
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24				24
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1		1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50		50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50		50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	custom
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						8
Detector Phase	7	4	4	3	8	8	5	2		1	6	8
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	8.5	29.6	29.6	8.5	40.0	40.0	15.0	49.0		8.5	46.0	40.0
Total Split (s)	29.0	41.0	41.0	29.0	41.0	41.0	25.0	44.0		18.0	37.0	41.0

Lanes, Volumes, Timings
 14: Sierra Highway & Golden Valley Road

08/18/2023

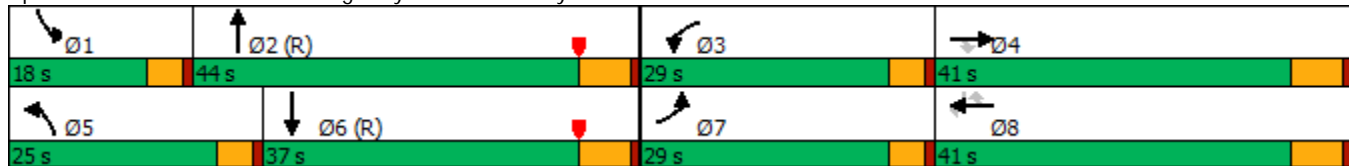


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	22.0%	31.1%	31.1%	22.0%	31.1%	31.1%	18.9%	33.3%		13.6%	28.0%	31.1%
Maximum Green (s)	24.5	35.0	35.0	24.5	35.0	35.0	20.5	38.0		13.5	31.0	35.0
Yellow Time (s)	3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.0		3.5	5.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	-0.5	-2.0	-2.0	-0.5	-2.0	-2.0	-0.5	-2.0		-0.5	-2.0	-2.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	None
Walk Time (s)					5.0	5.0		5.0			5.0	5.0
Flash Dont Walk (s)					29.0	29.0		33.0			30.0	29.0
Pedestrian Calls (#/hr)					0	0		0			0	0
Act Effct Green (s)	18.4	35.9	35.9	20.3	37.8	37.8	21.0	52.4		9.5	38.9	37.8
Actuated g/C Ratio	0.14	0.27	0.27	0.15	0.29	0.29	0.16	0.40		0.07	0.29	0.29
v/c Ratio	0.69	0.68	0.80	0.72	0.83	0.12	1.12	0.17		0.38	1.17	0.64
Control Delay	44.8	35.2	24.9	61.1	49.8	0.5	125.4	27.7		66.2	130.0	6.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	44.8	35.2	24.9	61.1	49.8	0.5	125.4	27.7		66.2	130.0	6.8
LOS	D	D	C	E	D	A	F	C		E	F	A
Approach Delay		32.0			50.4			97.6			91.7	
Approach LOS		C			D			F			F	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 96 (73%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 130
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.17
 Intersection Signal Delay: 63.4
 Intersection LOS: E
 Intersection Capacity Utilization 90.5%
 ICU Level of Service E
 Analysis Period (min) 15

Splits and Phases: 14: Sierra Highway & Golden Valley Road



Queues

14: Sierra Highway & Golden Valley Road

08/18/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	329	655	888	380	1204	68	611	243	48	1223	538
v/c Ratio	0.69	0.68	0.80	0.72	0.83	0.12	1.12	0.17	0.38	1.17	0.64
Control Delay	44.8	35.2	24.9	61.1	49.8	0.5	125.4	27.7	66.2	130.0	6.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.8	35.2	24.9	61.1	49.8	0.5	125.4	27.7	66.2	130.0	6.8
Queue Length 50th (ft)	120	262	260	161	355	0	-309	69	40	-652	0
Queue Length 95th (ft)	m115	m305	m320	207	406	0	#428	113	81	#869	91
Internal Link Dist (ft)		1952			1122			1721		1591	
Turn Bay Length (ft)	280		280	285		300	285		410		540
Base Capacity (vph)	650	991	1123	650	1460	551	546	1393	187	1041	837
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.66	0.79	0.58	0.82	0.12	1.12	0.17	0.26	1.17	0.64

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings

15: SR-14 SB Ramp & Newhall Ranch Road/Golden Valley Road

08/18/2023

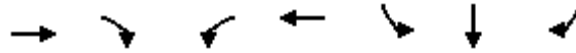


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗	↖	↑↑					↖	↗	↗
Traffic Volume (vph)	0	446	363	298	1031	0	0	0	0	41	194	493
Future Volume (vph)	0	446	363	298	1031	0	0	0	0	41	194	493
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	220		0	0		0	300		0
Storage Lanes	0		1	1		0	0		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850									0.850
Flt Protected				0.950						0.950	0.999	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	1681	1768	1583
Flt Permitted				0.950						0.950	0.999	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	1681	1768	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			395									61
Link Speed (mph)		50			50			30			30	
Link Distance (ft)		807			717			580			626	
Travel Time (s)		11.0			9.8			13.2			14.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	485	395	324	1121	0	0	0	0	45	211	536
Shared Lane Traffic (%)										10%		
Lane Group Flow (vph)	0	485	395	324	1121	0	0	0	0	40	216	536
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94		94							94	
Detector 2 Size(ft)		6		6							6	
Detector 2 Type		Cl+Ex		Cl+Ex							Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0		0.0							0.0	
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		6		5	2						4	
Permitted Phases			6							4		4

Queues

15: SR-14 SB Ramp & Newhall Ranch Road/Golden Valley Road

08/18/2023



Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	485	395	324	1121	40	216	536
v/c Ratio	0.60	0.59	0.85	0.65	0.06	0.29	0.76
Control Delay	35.2	7.5	42.7	13.8	15.8	18.5	28.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.2	7.5	42.7	13.8	15.8	18.5	28.1
Queue Length 50th (ft)	133	0	183	276	13	83	226
Queue Length 95th (ft)	186	76	#306	323	33	137	361
Internal Link Dist (ft)	727			637		546	
Turn Bay Length (ft)			220		300		
Base Capacity (vph)	808	666	413	1730	709	746	703
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.60	0.59	0.78	0.65	0.06	0.29	0.76

Intersection Summary

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

Lanes, Volumes, Timings
 16: SR 14 NB Ramp & Golden Valley Road

08/18/2023

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	225	256	0	0	1001	65	310	1	149	0	0	0
Future Volume (vph)	225	256	0	0	1001	65	310	1	149	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	230		0	0		280	0		140	0		0
Storage Lanes	2		0	0		1	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt						0.850			0.850			
Flt Protected	0.950						0.950	0.953				
Satd. Flow (prot)	3433	3539	0	0	3539	1583	1681	1686	1583	0	0	0
Flt Permitted	0.950						0.950	0.953				
Satd. Flow (perm)	3433	3539	0	0	3539	1583	1681	1686	1583	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						71			162			
Link Speed (mph)		50			50			30				30
Link Distance (ft)		717			541			632				618
Travel Time (s)		9.8			7.4			14.4				14.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	245	278	0	0	1088	71	337	1	162	0	0	0
Shared Lane Traffic (%)							50%					
Lane Group Flow (vph)	245	278	0	0	1088	71	168	170	162	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1	1	2	1			
Detector Template	Left	Thru			Thru	Right	Left	Thru	Right			
Leading Detector (ft)	20	100			100	20	20	100	20			
Trailing Detector (ft)	0	0			0	0	0	0	0			
Detector 1 Position(ft)	0	0			0	0	0	0	0			
Detector 1 Size(ft)	20	6			6	20	20	6	20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Prot	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	7	4			8			2				
Permitted Phases						8	2		2			

Lanes, Volumes, Timings
 16: SR 14 NB Ramp & Golden Valley Road

08/18/2023

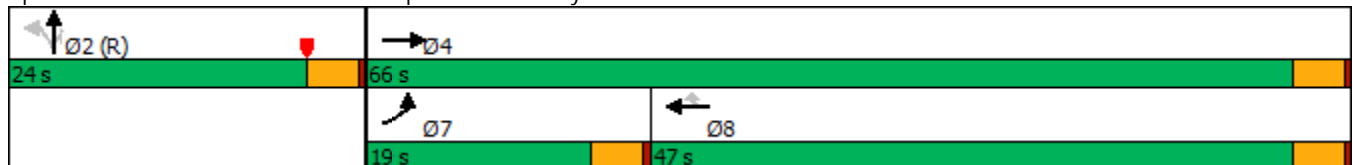


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	7	4			8	8	2	2	2			
Switch Phase												
Minimum Initial (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Minimum Split (s)	12.0	20.0			20.0	20.0	20.0	20.0	20.0			
Total Split (s)	19.0	66.0			47.0	47.0	24.0	24.0	24.0			
Total Split (%)	21.1%	73.3%			52.2%	52.2%	26.7%	26.7%	26.7%			
Maximum Green (s)	15.0	62.0			43.0	43.0	20.0	20.0	20.0			
Yellow Time (s)	3.5	3.5			3.5	3.5	3.5	3.5	3.5			
All-Red Time (s)	0.5	0.5			0.5	0.5	0.5	0.5	0.5			
Lost Time Adjust (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Total Lost Time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Lead/Lag	Lead				Lag				Lag			
Lead-Lag Optimize?	Yes				Yes				Yes			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Recall Mode	None	None			None	None	C-Max	C-Max	C-Max			
Walk Time (s)		5.0			5.0	5.0	5.0	5.0	5.0			
Flash Dont Walk (s)		10.0			10.0	10.0	10.0	10.0	10.0			
Pedestrian Calls (#/hr)		0			0	0	0	0	0			
Act Effct Green (s)	11.7	51.9			36.2	36.2	30.1	30.1	30.1			
Actuated g/C Ratio	0.13	0.58			0.40	0.40	0.33	0.33	0.33			
v/c Ratio	0.55	0.14			0.76	0.10	0.30	0.30	0.25			
Control Delay	16.0	10.1			26.7	3.9	26.8	26.9	5.9			
Queue Delay	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Total Delay	16.0	10.1			26.7	3.9	26.8	26.9	5.9			
LOS	B	B			C	A	C	C	A			
Approach Delay		12.8			25.3			20.1				
Approach LOS		B			C			C				

Intersection Summary

Area Type: Other
 Cycle Length: 90
 Actuated Cycle Length: 90
 Offset: 0 (0%), Referenced to phase 2:NBTL and 6:, Start of Yellow
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.76
 Intersection Signal Delay: 21.1
 Intersection LOS: C
 Intersection Capacity Utilization 65.7%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 16: SR 14 NB Ramp & Golden Valley Road



Queues

16: SR 14 NB Ramp & Golden Valley Road

08/18/2023



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	245	278	1088	71	168	170	162
v/c Ratio	0.55	0.14	0.76	0.10	0.30	0.30	0.25
Control Delay	16.0	10.1	26.7	3.9	26.8	26.9	5.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	16.0	10.1	26.7	3.9	26.8	26.9	5.9
Queue Length 50th (ft)	70	78	272	0	73	74	0
Queue Length 95th (ft)	106	119	303	21	152	153	49
Internal Link Dist (ft)		637	461			552	
Turn Bay Length (ft)	230			280			140
Base Capacity (vph)	572	2437	1691	793	561	563	636
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.43	0.11	0.64	0.09	0.30	0.30	0.25
Intersection Summary							

Lanes, Volumes, Timings
17: Studio Driveway & Soledad Cyn

08/18/2023

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↘	↑↑↑	↖	
Traffic Volume (vph)	1044	41	20	2185	21	10
Future Volume (vph)	1044	41	20	2185	21	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Fr _t	0.994				0.956	
Fl _t Protected			0.950		0.967	
Satd. Flow (prot)	5055	0	1770	5085	1722	0
Fl _t Permitted			0.218		0.967	
Satd. Flow (perm)	5055	0	406	5085	1722	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	16				11	
Link Speed (mph)	50			50	30	
Link Distance (ft)	469			185	392	
Travel Time (s)	6.4			2.5	8.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1135	45	22	2375	23	11
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1180	0	22	2375	34	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2		1	2	1	
Detector Template	Thru		Left	Thru	Left	
Leading Detector (ft)	100		20	100	20	
Trailing Detector (ft)	0		0	0	0	
Detector 1 Position(ft)	0		0	0	0	
Detector 1 Size(ft)	6		20	6	20	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA		Perm	NA	Prot	
Protected Phases	6			2	4	
Permitted Phases			2			
Detector Phase	6		2	2	4	
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	

Lanes, Volumes, Timings
 17: Studio Driveway & Soledad Cyn

08/18/2023



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Minimum Split (s)	20.0		20.0	20.0	20.0	
Total Split (s)	110.0		110.0	110.0	22.0	
Total Split (%)	83.3%		83.3%	83.3%	16.7%	
Maximum Green (s)	106.0		106.0	106.0	18.0	
Yellow Time (s)	3.5		3.5	3.5	3.5	
All-Red Time (s)	0.5		0.5	0.5	0.5	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	4.0		4.0	4.0	4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Recall Mode	Max		C-Max	C-Max	Max	
Walk Time (s)	5.0		5.0	5.0	5.0	
Flash Dont Walk (s)	10.0		10.0	10.0	10.0	
Pedestrian Calls (#/hr)	0		0	0	0	
Act Effect Green (s)	106.0		106.0	106.0	18.0	
Actuated g/C Ratio	0.80		0.80	0.80	0.14	
v/c Ratio	0.29		0.07	0.58	0.14	
Control Delay	0.8		4.0	4.8	39.0	
Queue Delay	0.0		0.0	0.0	0.0	
Total Delay	0.8		4.0	4.8	39.0	
LOS	A		A	A	D	
Approach Delay	0.8			4.8	39.0	
Approach LOS	A			A	D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 0 (0%), Referenced to phase 2:WBTL, Start of Yellow
 Natural Cycle: 55
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.58
 Intersection Signal Delay: 3.8
 Intersection LOS: A
 Intersection Capacity Utilization 52.2%
 ICU Level of Service A
 Analysis Period (min) 15

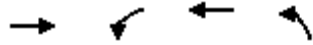
Splits and Phases: 17: Studio Driveway & Soledad Cyn



Queues

17: Studio Driveway & Soledad Cyn

08/18/2023



Lane Group	EBT	WBL	WBT	NBL
Lane Group Flow (vph)	1180	22	2375	34
v/c Ratio	0.29	0.07	0.58	0.14
Control Delay	0.8	4.0	4.8	39.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	0.8	4.0	4.8	39.0
Queue Length 50th (ft)	16	3	158	18
Queue Length 95th (ft)	m17	m8	208	51
Internal Link Dist (ft)	389		105	312
Turn Bay Length (ft)				
Base Capacity (vph)	4062	326	4083	244
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.29	0.07	0.58	0.14

Intersection Summary

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

Lanes, Volumes, Timings
 18: Residential Driveway 1 & Soledad Cyn

08/18/2023



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↙	↑↑↑		↘
Traffic Volume (vph)	1044	11	4	2205	0	26
Future Volume (vph)	1044	11	4	2205	0	26
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	100		0	0
Storage Lanes		0	1		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt	0.998					0.865
Flt Protected			0.950			
Satd. Flow (prot)	5075	0	1770	5085	0	1611
Flt Permitted			0.950			
Satd. Flow (perm)	5075	0	1770	5085	0	1611
Link Speed (mph)	50			50	30	
Link Distance (ft)	185			460	286	
Travel Time (s)	2.5			6.3	6.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1135	12	4	2397	0	28
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1147	0	4	2397	0	28
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	45.9%
Analysis Period (min)	15
	ICU Level of Service A

HCM 6th TWSC
 18: Residential Driveway 1 & Soledad Cyn

08/18/2023

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↑	↑↑↑		↑
Traffic Vol, veh/h	1044	11	4	2205	0	26
Future Vol, veh/h	1044	11	4	2205	0	26
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1135	12	4	2397	0	28

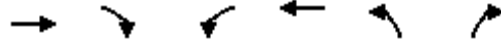
Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	1147	0	574
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	5.34	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	3.12	-	3.92
Pot Cap-1 Maneuver	-	-	332	0	396
Stage 1	-	-	-	0	-
Stage 2	-	-	-	0	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	332	-	396
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	14.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	396	-	-	332	-
HCM Lane V/C Ratio	0.071	-	-	0.013	-
HCM Control Delay (s)	14.8	-	-	16	-
HCM Lane LOS	B	-	-	C	-
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Lanes, Volumes, Timings
 19: Residential Driveway 2 & Soledad Cyn

08/18/2023



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↵	↑↑↑		↵
Traffic Volume (vph)	1054	15	8	2209	0	49
Future Volume (vph)	1054	15	8	2209	0	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	100		0	0
Storage Lanes		0	1		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt	0.998					0.865
Flt Protected			0.950			
Satd. Flow (prot)	5075	0	1770	5085	0	1611
Flt Permitted			0.950			
Satd. Flow (perm)	5075	0	1770	5085	0	1611
Link Speed (mph)	50			50	30	
Link Distance (ft)	460			928	378	
Travel Time (s)	6.3			12.7	8.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1146	16	9	2401	0	53
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1162	0	9	2401	0	53
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	46.0% ICU Level of Service A
Analysis Period (min)	15

HCM 6th TWSC
 19: Residential Driveway 2 & Soledad Cyn

08/18/2023

Intersection						
Int Delay, s/veh	0.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↘	↑↑↑		↗
Traffic Vol, veh/h	1054	15	8	2209	0	49
Future Vol, veh/h	1054	15	8	2209	0	49
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1146	16	9	2401	0	53

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	1162	0	- 581
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	5.34	-	- 7.14
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	3.12	-	- 3.92
Pot Cap-1 Maneuver	-	-	327	-	0 391
Stage 1	-	-	-	-	0 -
Stage 2	-	-	-	-	0 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	327	-	- 391
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	15.7
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	391	-	-	327	-
HCM Lane V/C Ratio	0.136	-	-	0.027	-
HCM Control Delay (s)	15.7	-	-	16.3	-
HCM Lane LOS	C	-	-	C	-
HCM 95th %tile Q(veh)	0.5	-	-	0.1	-

Lanes, Volumes, Timings
 20: Studio Driveway 2 & Soledad Cyn

08/18/2023



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑		↗
Traffic Volume (vph)	1085	0	0	2206	0	0
Future Volume (vph)	1085	0	0	2206	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Fr						
Flt Protected						
Satd. Flow (prot)	5085	0	0	5085	0	1863
Flt Permitted						
Satd. Flow (perm)	5085	0	0	5085	0	1863
Link Speed (mph)	50			50	30	
Link Distance (ft)	557			469	476	
Travel Time (s)	7.6			6.4	10.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1179	0	0	2398	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1179	0	0	2398	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	46.0%
Analysis Period (min)	15
	ICU Level of Service A

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑		↑
Traffic Vol, veh/h	1085	0	0	2206	0	0
Future Vol, veh/h	1085	0	0	2206	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1179	0	0	2398	0	0

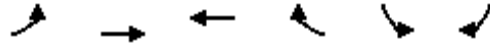
Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	-	-	590
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	3.92
Pot Cap-1 Maneuver	-	0	-	0	386
Stage 1	-	0	-	0	-
Stage 2	-	0	-	0	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	386
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

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

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

Lanes, Volumes, Timings
 1: Valencia Blvd & 5 Fwy SB Ramp

08/18/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑		↑↑	↑
Traffic Volume (vph)	0	519	808	193	258	78
Future Volume (vph)	0	519	808	193	258	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	15	12	14
Storage Length (ft)	0			0	0	455
Storage Lanes	0			0	2	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.91	0.95	0.95	0.97	1.00
Fr _t			0.971			0.850
Fl _t Protected					0.950	
Satd. Flow (prot)	0	5085	3437	0	3433	1689
Fl _t Permitted					0.950	
Satd. Flow (perm)	0	5085	3437	0	3433	1689
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			72			85
Link Speed (mph)		50	50		30	
Link Distance (ft)		616	917		417	
Travel Time (s)		8.4	12.5		9.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	564	878	210	280	85
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	564	1088	0	280	85
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		24	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	0.88	1.00	0.92
Turning Speed (mph)	15			9	15	9
Number of Detectors		1	1		1	1
Detector Template						
Leading Detector (ft)		50	50		50	50
Trailing Detector (ft)		0	0		0	0
Detector 1 Position(ft)		0	0		0	0
Detector 1 Size(ft)		50	50		50	50
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)		0.0	0.0		0.0	0.0
Detector 1 Queue (s)		0.0	0.0		0.0	0.0
Detector 1 Delay (s)		0.0	0.0		0.0	0.0
Turn Type		NA	NA		Prot	Perm
Protected Phases		2	6		4	
Permitted Phases						4
Detector Phase		2	6		4	4
Switch Phase						
Minimum Initial (s)		4.0	4.0		4.0	4.0
Minimum Split (s)		20.0	35.2		20.0	20.0

Lanes, Volumes, Timings
 1: Valencia Blvd & 5 Fwy SB Ramp

08/18/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Total Split (s)		41.0	41.0		25.0	25.0
Total Split (%)		62.1%	62.1%		37.9%	37.9%
Maximum Green (s)		34.8	34.8		19.2	19.2
Yellow Time (s)		5.2	5.2		4.8	4.8
All-Red Time (s)		1.0	1.0		1.0	1.0
Lost Time Adjust (s)		-2.2	-2.2		-1.8	-1.8
Total Lost Time (s)		4.0	4.0		4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Recall Mode		C-Max	C-Max		Min	Min
Walk Time (s)			5.0			
Flash Dont Walk (s)			18.0			
Pedestrian Calls (#/hr)			0			
Act Effect Green (s)		45.4	45.4		12.6	12.6
Actuated g/C Ratio		0.69	0.69		0.19	0.19
v/c Ratio		0.16	0.46		0.43	0.22
Control Delay		4.1	4.9		25.0	7.1
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		4.1	4.9		25.0	7.1
LOS		A	A		C	A
Approach Delay		4.1	4.9		20.8	
Approach LOS		A	A		C	

Intersection Summary

Area Type: Other
 Cycle Length: 66
 Actuated Cycle Length: 66
 Offset: 56 (85%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.46
 Intersection Signal Delay: 7.5
 Intersection LOS: A
 Intersection Capacity Utilization 42.5%
 ICU Level of Service A
 Analysis Period (min) 15

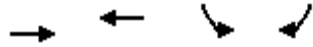
Splits and Phases: 1: Valencia Blvd & 5 Fwy SB Ramp



Queues

1: Valencia Blvd & 5 Fwy SB Ramp

08/18/2023














Lane Group	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	564	1088	280	85
v/c Ratio	0.16	0.46	0.43	0.22
Control Delay	4.1	4.9	25.0	7.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	4.1	4.9	25.0	7.1
Queue Length 50th (ft)	23	88	52	0
Queue Length 95th (ft)	42	89	77	30
Internal Link Dist (ft)	536	837	337	
Turn Bay Length (ft)				455
Base Capacity (vph)	3494	2384	1092	595
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.16	0.46	0.26	0.14

Intersection Summary

Lanes, Volumes, Timings
2: 5 Fwy NB Ramp & Valencia Blvd

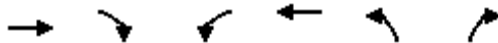
08/18/2023

						
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	742	31	212	1629	190	915
Future Volume (vph)	742	31	212	1629	190	915
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	14	12	12	12	12	14
Storage Length (ft)		0	200		220	220
Storage Lanes		0	2		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	0.97	0.86	0.97	0.88
Fr _t	0.994					0.850
Fl _t Protected			0.950		0.950	
Satd. Flow (prot)	5392	0	3433	6408	3433	2972
Fl _t Permitted			0.950		0.950	
Satd. Flow (perm)	5392	0	3433	6408	3433	2972
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	11					647
Link Speed (mph)	50			50	30	
Link Distance (ft)	917			476	493	
Travel Time (s)	12.5			6.5	11.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	807	34	230	1771	207	995
Shared Lane Traffic (%)						
Lane Group Flow (vph)	841	0	230	1771	207	995
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	24			24	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.92	1.00	1.00	1.00	1.00	0.92
Turning Speed (mph)		9	15		15	9
Number of Detectors	1		1	1	1	1
Detector Template						
Leading Detector (ft)	50		50	50	50	50
Trailing Detector (ft)	0		0	0	0	0
Detector 1 Position(ft)	0		0	0	0	0
Detector 1 Size(ft)	50		50	50	50	50
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0
Turn Type	NA		Prot	NA	Prot	Prot
Protected Phases	2		1	6	8	8
Permitted Phases						
Detector Phase	2		1	6	8	8
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	36.0		14.0	20.0	20.0	20.0

Lanes, Volumes, Timings

2: 5 Fwy NB Ramp & Valencia Blvd

08/18/2023

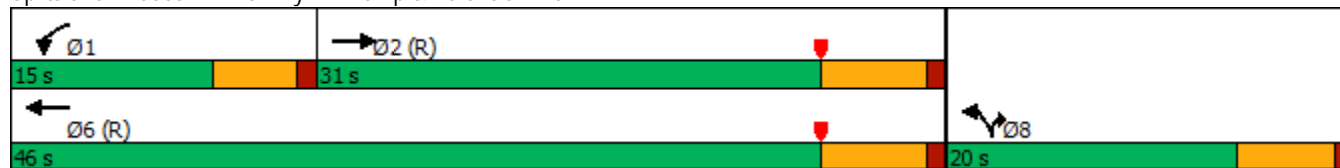


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Total Split (s)	31.0		15.0	46.0	20.0	20.0
Total Split (%)	47.0%		22.7%	69.7%	30.3%	30.3%
Maximum Green (s)	24.8		9.9	39.8	14.2	14.2
Yellow Time (s)	5.2		4.1	5.2	4.8	4.8
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-2.2		-1.1	-2.2	-1.8	-1.8
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0
Lead/Lag	Lag		Lead			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	C-Max		None	C-Max	None	None
Walk Time (s)	5.0					
Flash Dont Walk (s)	24.0					
Pedestrian Calls (#/hr)	0					
Act Effect Green (s)	29.0		10.1	43.2	14.8	14.8
Actuated g/C Ratio	0.44		0.15	0.65	0.22	0.22
v/c Ratio	0.35		0.44	0.42	0.27	0.85
Control Delay	9.6		30.0	6.9	21.6	16.7
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	9.6		30.0	6.9	21.6	16.7
LOS	A		C	A	C	B
Approach Delay	9.6			9.6	17.5	
Approach LOS	A			A	B	

Intersection Summary

Area Type: Other
 Cycle Length: 66
 Actuated Cycle Length: 66
 Offset: 45 (68%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Natural Cycle: 70
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.85
 Intersection Signal Delay: 11.9
 Intersection LOS: B
 Intersection Capacity Utilization 53.7%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 2: 5 Fwy NB Ramp & Valencia Blvd



Queues

2: 5 Fwy NB Ramp & Valencia Blvd

08/18/2023



Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	841	230	1771	207	995
v/c Ratio	0.35	0.44	0.42	0.27	0.85
Control Delay	9.6	30.0	6.9	21.6	16.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	9.6	30.0	6.9	21.6	16.7
Queue Length 50th (ft)	83	67	149	34	68
Queue Length 95th (ft)	104	m89	197	60	#164
Internal Link Dist (ft)	837		396	413	
Turn Bay Length (ft)		200		220	220
Base Capacity (vph)	2378	572	4190	832	1210
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.35	0.40	0.42	0.25	0.82

Intersection Summary






































95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

Lanes, Volumes, Timings
3: McBean Pkwy & Valencia Blvd

08/18/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	  		  	  		 	  	 	  	 	
Traffic Volume (vph)	471	1430	173	366	1099	205	167	953	467	241	888	556
Future Volume (vph)	471	1430	173	366	1099	205	167	953	467	241	888	556
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	11	11	13	11	11	12	11	11	12
Storage Length (ft)	350		280	290		225	130		200	190		300
Storage Lanes	2		1	2		1	2		2	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	0.88	0.97	0.91	0.88
Fr _t			0.850			0.850			0.850			0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3319	4916	1583	3319	4916	1636	3319	4916	2787	3319	4916	2787
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3319	4916	1583	3319	4916	1636	3319	4916	2787	3319	4916	2787
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			70			70			70			70
Link Speed (mph)		50			50			45			45	
Link Distance (ft)		1919			721			765			1359	
Travel Time (s)		26.2			9.8			11.6			20.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	512	1554	188	398	1195	223	182	1036	508	262	965	604
Shared Lane Traffic (%)												
Lane Group Flow (vph)	512	1554	188	398	1195	223	182	1036	508	262	965	604
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		22			22			22			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.00	1.04	1.04	0.96	1.04	1.04	1.00	1.04	1.04	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	1	6	7	5	2	3	7	4	5	3	8	1
Permitted Phases			6			2			4			8
Detector Phase	1	6	7	5	2	3	7	4	5	3	8	1
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	43.0	12.0	12.0	44.0	12.0	12.0	41.0	12.0	12.0	44.0	12.0

Queues

3: McBean Pkwy & Valencia Blvd

08/18/2023



























Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	512	1554	188	398	1195	223	182	1036	508	262	965	604
v/c Ratio	0.87	0.96	0.25	0.73	0.77	0.28	0.56	0.80	0.39	0.66	0.69	0.43
Control Delay	72.1	55.6	16.1	76.8	22.1	4.1	63.4	50.3	20.4	41.4	54.4	48.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	72.1	55.6	16.1	76.8	22.1	4.1	63.4	50.3	20.4	41.4	54.4	48.8
Queue Length 50th (ft)	234	~533	56	131	347	63	77	299	128	106	319	288
Queue Length 95th (ft)	m#328	#635	m89	m190	348	m58	117	352	176	153	367	353
Internal Link Dist (ft)		1839			641			685			1279	
Turn Bay Length (ft)	350		280	290		225	130		200	190		300
Base Capacity (vph)	587	1623	776	581	1559	815	352	1377	1347	427	1489	1410
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.87	0.96	0.24	0.69	0.77	0.27	0.52	0.75	0.38	0.61	0.65	0.43

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

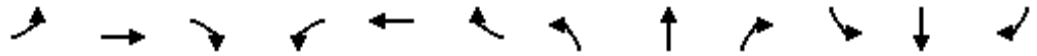
Lanes, Volumes, Timings
4: McBean Parkway & Magic Mountain Pkwy

08/18/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	885	689	139	230	566	361	144	1355	147	278	1305	284
Future Volume (vph)	885	689	139	230	566	361	144	1355	147	278	1305	284
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	16	12	12	14	11	11	16	11	11	16
Storage Length (ft)	360		360	210		0	175		175	300		340
Storage Lanes	1		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.91	1.00	0.97	0.86	1.00	0.97	0.86	1.00
Fr _t			0.850			0.850			0.850			0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	1794	3433	5085	1689	3319	6194	1794	3319	6194	1794
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1794	3433	5085	1689	3319	6194	1794	3319	6194	1794
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			151			254			198			299
Link Speed (mph)		50			45			45			50	
Link Distance (ft)		809			1452			1203			1219	
Travel Time (s)		11.0			22.0			18.2			16.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	962	749	151	250	615	392	157	1473	160	302	1418	309
Shared Lane Traffic (%)												
Lane Group Flow (vph)	962	749	151	250	615	392	157	1473	160	302	1418	309
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			22			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	0.85	1.00	1.00	0.92	1.04	1.04	0.85	1.04	1.04	0.85
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Free
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			Free			Free
Detector Phase	5	2	2	1	6	6	3	8		7	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Minimum Split (s)	12.0	41.0	41.0	12.0	40.0	40.0	12.0	37.0		12.0	37.0	

Lanes, Volumes, Timings
 4: McBean Parkway & Magic Mountain Pkwy

08/18/2023

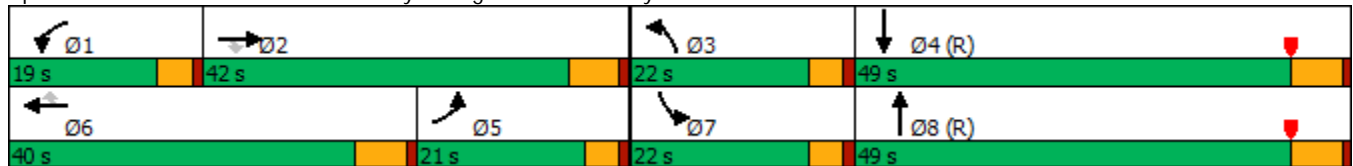


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	21.0	42.0	42.0	19.0	40.0	40.0	22.0	49.0		22.0	49.0	
Total Split (%)	15.9%	31.8%	31.8%	14.4%	30.3%	30.3%	16.7%	37.1%		16.7%	37.1%	
Maximum Green (s)	16.5	36.0	36.0	14.5	34.0	34.0	17.5	43.0		17.5	43.0	
Yellow Time (s)	3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.0		3.5	5.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	-0.5	-2.0	-2.0	-0.5	-2.0	-2.0	-0.5	-2.0		-0.5	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	Max	Max	None	Max	Max	None	C-Max		None	C-Max	
Walk Time (s)		5.0	5.0		5.0	5.0		5.0			5.0	
Flash Dont Walk (s)		30.0	30.0		29.0	29.0		26.0			26.0	
Pedestrian Calls (#/hr)		0	0		0	0		0			0	
Act Effect Green (s)	17.0	39.0	39.0	14.0	36.0	36.0	12.1	46.5	132.0	16.5	50.9	132.0
Actuated g/C Ratio	0.13	0.30	0.30	0.11	0.27	0.27	0.09	0.35	1.00	0.12	0.39	1.00
v/c Ratio	2.18	0.72	0.24	0.69	0.44	0.61	0.52	0.68	0.09	0.73	0.59	0.17
Control Delay	563.9	46.4	6.2	72.2	51.4	28.9	77.6	29.1	0.1	66.1	33.8	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	563.9	46.4	6.2	72.2	51.4	28.9	77.6	29.1	0.1	66.1	33.8	0.2
LOS	F	D	A	E	D	C	E	C	A	E	C	A
Approach Delay		310.5			48.6			30.8			33.5	
Approach LOS		F			D			C			C	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 30 (23%), Referenced to phase 4:SBT and 8:NBT, Start of Yellow
 Natural Cycle: 125
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 2.18
 Intersection Signal Delay: 109.9
 Intersection LOS: F
 Intersection Capacity Utilization 77.2%
 ICU Level of Service D
 Analysis Period (min) 15

Splits and Phases: 4: McBean Parkway & Magic Mountain Pkwy



Queues

4: McBean Parkway & Magic Mountain Pkwy

08/18/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	962	749	151	250	615	392	157	1473	160	302	1418	309
v/c Ratio	2.18	0.72	0.24	0.69	0.44	0.61	0.52	0.68	0.09	0.73	0.59	0.17
Control Delay	563.9	46.4	6.2	72.2	51.4	28.9	77.6	29.1	0.1	66.1	33.8	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	563.9	46.4	6.2	72.2	51.4	28.9	77.6	29.1	0.1	66.1	33.8	0.2
Queue Length 50th (ft)	~679	305	0	106	168	122	73	163	0	128	279	0
Queue Length 95th (ft)	#810	380	51	154	219	244	m95	192	m0	178	331	0
Internal Link Dist (ft)		729			1372			1123			1139	
Turn Bay Length (ft)	360		360	210			175		175	300		340
Base Capacity (vph)	442	1044	635	390	1386	645	452	2179	1794	452	2390	1794
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	2.18	0.72	0.24	0.64	0.44	0.61	0.35	0.68	0.09	0.67	0.59	0.17

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings

5: Valencia Blvd & Magic Mountain Pkwy

08/18/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↕↔		↔↔	↕↔		↔	↕↕↕	↔	↔	↕↕↕	↔↔
Traffic Volume (vph)	679	668	30	231	509	91	58	1829	251	92	1444	446
Future Volume (vph)	679	668	30	231	509	91	58	1829	251	92	1444	446
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	13	12	11	12	11	11	14	12	11	11	12
Storage Length (ft)	310		0	250		200	180		200	190		190
Storage Lanes	1		0	2		0	1		1	1		2
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	0.95	0.97	0.95	0.95	1.00	0.91	1.00	1.00	0.91	0.88
Frt		0.993			0.977				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3319	3632	0	3319	3458	0	1711	5424	1583	1711	4916	2787
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3319	3632	0	3319	3458	0	1711	5424	1583	1711	4916	2787
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3			15				161			367
Link Speed (mph)		50			45			45			45	
Link Distance (ft)		1046			2778			1989			572	
Travel Time (s)		14.3			42.1			30.1			8.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	738	726	33	251	553	99	63	1988	273	100	1570	485
Shared Lane Traffic (%)												
Lane Group Flow (vph)	738	759	0	251	652	0	63	1988	273	100	1570	485
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		22			22			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	0.96	1.00	1.04	1.00	1.04	1.04	0.92	1.00	1.04	1.04	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	0
Detector 1 Size(ft)	50	50		50	50		50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	3	8		7	4		1	6		5	2	3
Permitted Phases									6			2
Detector Phase	3	8		7	4		1	6	6	5	2	3
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	12.0	35.0		12.0	39.0		12.0	38.0	38.0	12.0	41.0	12.0

Queues

5: Valencia Blvd & Magic Mountain Pkwy

08/18/2023



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	738	759	251	652	63	1988	273	100	1570	485
v/c Ratio	1.28	0.72	0.63	0.79	0.46	1.01	0.42	0.55	0.79	0.27
Control Delay	178.9	41.5	42.9	42.4	88.8	43.1	6.1	41.0	16.6	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	178.9	41.5	42.9	42.4	88.8	43.1	6.1	41.0	16.6	0.6
Queue Length 50th (ft)	~425	347	112	292	56	~303	16	80	118	0
Queue Length 95th (ft)	#594	419	156	357	m69	m#698	m26	m96	m174	m5
Internal Link Dist (ft)		966		2698		1909			492	
Turn Bay Length (ft)	310		250		180		200	190		190
Base Capacity (vph)	576	1054	578	927	181	1972	656	181	1995	1784
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.28	0.72	0.43	0.70	0.35	1.01	0.42	0.55	0.79	0.27

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings

6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy

08/18/2023



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	257	515	418	1589	1222	168
Future Volume (vph)	257	515	418	1589	1222	168
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	265	265	260			270
Storage Lanes	1	1	2			1
Taper Length (ft)	25		25			
Lane Util. Factor	0.97	0.88	0.97	0.91	0.95	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3433	2787	3433	5085	3539	1583
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	3433	2787	3433	5085	3539	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		47				164
Link Speed (mph)	45			50	45	
Link Distance (ft)	2778			2280	1171	
Travel Time (s)	42.1			31.1	17.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	279	560	454	1727	1328	183
Shared Lane Traffic (%)						
Lane Group Flow (vph)	279	560	454	1727	1328	183
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	34			24	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	1	1	1
Detector Template						
Leading Detector (ft)	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	pt+ov	custom	NA	NA	Perm
Protected Phases	8	8 1	1	6	2	
Permitted Phases			1			2
Detector Phase	8	8 1	1	6	2	2
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	4.0
Minimum Split (s)	20.0		20.0	20.0	41.0	41.0
Total Split (s)	34.0		30.0	98.0	68.0	68.0

Lanes, Volumes, Timings

6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy

08/18/2023

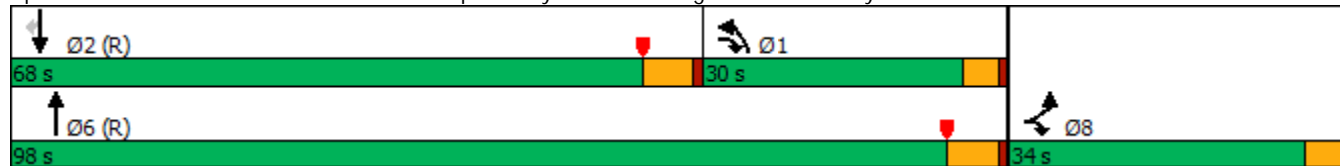


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Total Split (%)	25.8%		22.7%	74.2%	51.5%	51.5%
Maximum Green (s)	29.0		25.5	92.0	62.0	62.0
Yellow Time (s)	4.0		3.5	5.0	5.0	5.0
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0		-0.5	-2.0	-2.0	-2.0
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0
Lead/Lag			Lag		Lead	Lead
Lead-Lag Optimize?			Yes		Yes	Yes
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	Max		Min	C-Min	C-Min	C-Min
Walk Time (s)					7.0	7.0
Flash Dont Walk (s)					28.0	28.0
Pedestrian Calls (#/hr)					0	0
Act Effect Green (s)	36.9	64.5	23.5	87.1	59.5	59.5
Actuated g/C Ratio	0.28	0.49	0.18	0.66	0.45	0.45
v/c Ratio	0.29	0.40	0.74	0.51	0.83	0.23
Control Delay	34.9	13.6	59.1	11.9	36.9	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.9	13.6	59.1	11.9	36.9	4.5
LOS	C	B	E	B	D	A
Approach Delay	20.7			21.8	33.0	
Approach LOS	C			C	C	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 75 (57%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
 Natural Cycle: 85
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.83
 Intersection Signal Delay: 25.3
 Intersection LOS: C
 Intersection Capacity Utilization 63.0%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy



Queues

6: Railroad Avenue/Bouquet Canyon Road & Magic Mountain Pkwy

08/18/2023










































Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	279	560	454	1727	1328	183
v/c Ratio	0.29	0.40	0.74	0.51	0.83	0.23
Control Delay	34.9	13.6	59.1	11.9	36.9	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.9	13.6	59.1	11.9	36.9	4.5
Queue Length 50th (ft)	120	208	189	242	506	9
Queue Length 95th (ft)	163	211	246	242	575	48
Internal Link Dist (ft)	2698			2200	1091	
Turn Bay Length (ft)	265	265	260			270
Base Capacity (vph)	960	1373	679	3621	1715	852
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.41	0.67	0.48	0.77	0.21

Intersection Summary

Lanes, Volumes, Timings
7: Bouquet Canyon Rd & Valencia Blvd

08/18/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	  	  		  	  			  		  	  	 
Traffic Volume (vph)	1216	1757	30	455	1109	326	37	1271	761	366	924	668
Future Volume (vph)	1216	1757	30	455	1109	326	37	1271	761	366	924	668
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	10	10	11	11	11	11	10	10	11
Storage Length (ft)	360		0	330		330	250		0	435		400
Storage Lanes	2		1	3		1	1		1	2		2
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.94	0.91	1.00	0.94	0.91	1.00	1.00	0.91	1.00	0.97	0.91	0.88
Fr _t			0.850			0.850			0.850			0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	4824	4916	1583	4658	4746	1531	1711	4916	1531	3204	4746	2694
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	4824	4916	1583	4658	4746	1531	1711	4916	1531	3204	4746	2694
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			149			124			490			452
Link Speed (mph)		45			45			45				45
Link Distance (ft)		2282			2684			2196				1017
Travel Time (s)		34.6			40.7			33.3				12.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1322	1910	33	495	1205	354	40	1382	827	398	1004	726
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1322	1910	33	495	1205	354	40	1382	827	398	1004	726
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		33			33			20				20
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.00	1.09	1.09	1.04	1.04	1.04	1.04	1.09	1.09	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Free	Prot	NA	pm+ov
Protected Phases	7	4		3	8	1	5	2		1	6	7
Permitted Phases			4			8			Free			6
Detector Phase	7	4	4	3	8	1	5	2		1	6	7
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	12.0	44.0	44.0	12.0	48.0	12.0	12.0	46.0		12.0	44.0	12.0

Lanes, Volumes, Timings
7: Bouquet Canyon Rd & Valencia Blvd

08/18/2023

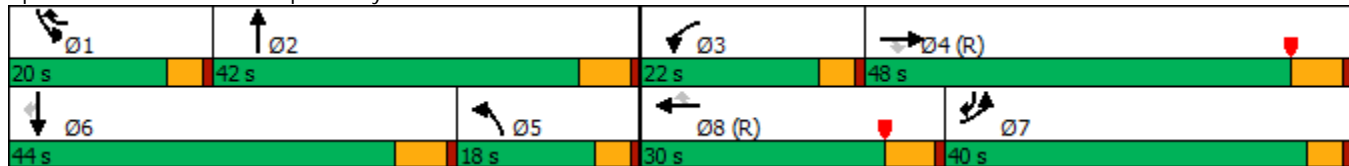


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	40.0	48.0	48.0	22.0	30.0	20.0	18.0	42.0		20.0	44.0	40.0
Total Split (%)	30.3%	36.4%	36.4%	16.7%	22.7%	15.2%	13.6%	31.8%		15.2%	33.3%	30.3%
Maximum Green (s)	35.5	42.0	42.0	17.5	24.0	15.5	13.5	36.0		15.5	38.0	35.5
Yellow Time (s)	3.5	5.0	5.0	3.5	5.0	3.5	3.5	5.0		3.5	5.0	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	-0.5	-2.0	0.0	-0.5	-2.0	-0.5	-0.5	-2.0		-0.5	-2.0	-0.5
Total Lost Time (s)	4.0	4.0	6.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lag		Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	Max		None	None	None
Walk Time (s)		5.0	5.0		5.0			5.0				
Flash Dont Walk (s)		33.0	33.0		37.0			35.0				
Pedestrian Calls (#/hr)		0	0		0			0				
Act Effect Green (s)	36.0	44.5	42.5	17.5	26.0	42.0	14.5	38.0	132.0	16.0	41.5	81.5
Actuated g/C Ratio	0.27	0.34	0.32	0.13	0.20	0.32	0.11	0.29	1.00	0.12	0.31	0.62
v/c Ratio	1.01	1.15	0.05	0.80	1.29	0.62	0.21	0.98	0.54	1.03	0.67	0.40
Control Delay	73.4	119.1	0.1	58.9	169.8	7.4	55.8	65.5	1.4	100.9	56.1	13.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	73.4	119.1	0.1	58.9	169.8	7.4	55.8	65.5	1.4	100.9	56.1	13.9
LOS	E	F	A	E	F	A	E	E	A	F	E	B
Approach Delay		99.4			115.1			41.7			50.1	
Approach LOS		F			F			D			D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 51 (39%), Referenced to phase 4:EBT and 8:WBT, Start of Yellow
 Natural Cycle: 150
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.29
 Intersection Signal Delay: 78.5
 Intersection LOS: E
 Intersection Capacity Utilization 92.9%
 ICU Level of Service F
 Analysis Period (min) 15

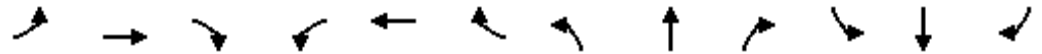
Splits and Phases: 7: Bouquet Canyon Rd & Valencia Blvd



Queues

7: Bouquet Canyon Rd & Valencia Blvd

08/18/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	1322	1910	33	495	1205	354	40	1382	827	398	1004	726
v/c Ratio	1.01	1.15	0.05	0.80	1.29	0.62	0.21	0.98	0.54	1.03	0.67	0.40
Control Delay	73.4	119.1	0.1	58.9	169.8	7.4	55.8	65.5	1.4	100.9	56.1	13.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	73.4	119.1	0.1	58.9	169.8	7.4	55.8	65.5	1.4	100.9	56.1	13.9
Queue Length 50th (ft)	~428	~726	0	123	-467	45	31	430	0	-188	327	176
Queue Length 95th (ft)	m408	m#674	m0	173	#567	74	70	#536	0	m#292	360	232
Internal Link Dist (ft)		2202			2604			2116				937
Turn Bay Length (ft)	360			330		330	250			435		400
Base Capacity (vph)	1315	1656	610	635	934	571	208	1415	1531	388	1567	1836
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.01	1.15	0.05	0.78	1.29	0.62	0.19	0.98	0.54	1.03	0.64	0.40

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
8: Bouquet Canyon Rd & Newhall Ranch Road

08/18/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	724	1640	468	342	1042	349	499	1678	371	396	1171	280
Future Volume (vph)	724	1640	468	342	1042	349	499	1678	371	396	1171	280
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	290		265	410		410	475		230	260		150
Storage Lanes	3		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.94	0.86	1.00	0.97	0.86	1.00	0.97	0.86	1.00	0.97	0.86	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	4990	6408	1583	3433	6408	1583	3433	6408	1583	3433	6408	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	4990	6408	1583	3433	6408	1583	3433	6408	1583	3433	6408	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			62			295			299			99
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		2675			2485			1030			669	
Travel Time (s)		40.5			37.7			15.6			10.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	787	1783	509	372	1133	379	542	1824	403	430	1273	304
Shared Lane Traffic (%)												
Lane Group Flow (vph)	787	1783	509	372	1133	379	542	1824	403	430	1273	304
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		36			36			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	2	1	1	2	1
Detector Template	Left		Right	Left		Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	50	20	20	50	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	50	20	20	50	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)								94			94	
Detector 2 Size(ft)								6			6	
Detector 2 Type								Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)								0.0			0.0	
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	3	8	1	7	4		1	6		5	2	3
Permitted Phases			8			4			6			2

Lanes, Volumes, Timings
 8: Bouquet Canyon Rd & Newhall Ranch Road

08/18/2023

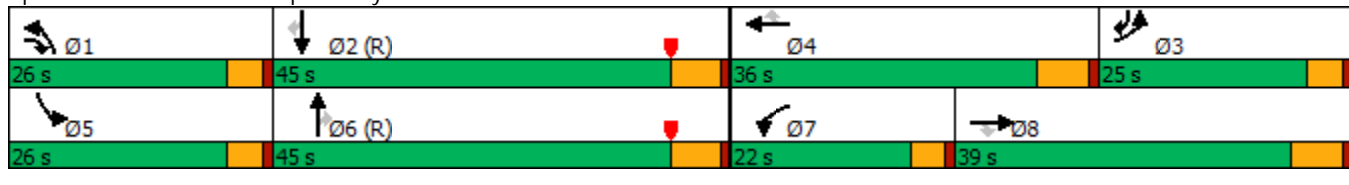


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	3	8	1	7	4	4	1	6	6	5	2	3
Switch Phase												
Minimum Initial (s)	4.0	5.0	4.0	4.0	5.0	5.0	4.0	10.0	10.0	4.0	10.0	4.0
Minimum Split (s)	12.0	43.0	12.0	12.0	43.0	43.0	12.0	49.0	49.0	12.0	50.0	12.0
Total Split (s)	25.0	39.0	26.0	22.0	36.0	36.0	26.0	45.0	45.0	26.0	45.0	25.0
Total Split (%)	18.9%	29.5%	19.7%	16.7%	27.3%	27.3%	19.7%	34.1%	34.1%	19.7%	34.1%	18.9%
Maximum Green (s)	20.5	33.0	21.5	17.5	30.0	30.0	21.5	39.0	39.0	21.5	39.0	20.5
Yellow Time (s)	3.5	5.0	3.5	3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.0	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	-2.0	0.0	0.0	-2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.0	4.5	4.5	4.0	6.0	4.5	6.0	6.0	4.5	6.0	4.5
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes		Yes	Yes			Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	5.5	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Minimum Gap (s)	3.0	2.5	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	24.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	Max	C-Max	None
Walk Time (s)		5.0			5.0	5.0		5.0	5.0		5.0	
Flash Dont Walk (s)		32.0			32.0	32.0		38.0	38.0		39.0	
Pedestrian Calls (#/hr)		2			5	5		1	1		1	
Act Effect Green (s)	21.3	35.5	61.0	17.0	31.2	29.2	21.5	39.0	39.0	21.5	39.0	61.8
Actuated g/C Ratio	0.16	0.27	0.46	0.13	0.24	0.22	0.16	0.30	0.30	0.16	0.30	0.47
v/c Ratio	0.98	1.03	0.67	0.84	0.75	0.65	0.97	0.96	0.59	0.77	0.67	0.38
Control Delay	82.3	78.1	29.2	72.4	48.8	19.2	62.7	50.9	13.2	63.1	43.0	9.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	82.3	78.1	29.2	72.4	48.8	19.2	62.7	50.9	13.2	63.1	43.0	9.2
LOS	F	E	C	E	D	B	E	D	B	E	D	A
Approach Delay		71.1			47.5			47.7			42.2	
Approach LOS		E			D			D			D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 33 (25%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
 Natural Cycle: 140
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.03
 Intersection Signal Delay: 53.9
 Intersection LOS: D
 Intersection Capacity Utilization 85.0%
 ICU Level of Service E
 Analysis Period (min) 15

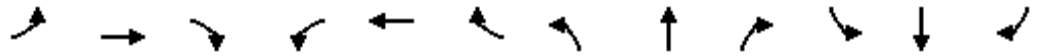
Splits and Phases: 8: Bouquet Canyon Rd & Newhall Ranch Road



Queues

8: Bouquet Canyon Rd & Newhall Ranch Road

08/18/2023



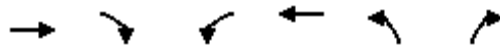
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	787	1783	509	372	1133	379	542	1824	403	430	1273	304
v/c Ratio	0.98	1.03	0.67	0.84	0.75	0.65	0.97	0.96	0.59	0.77	0.67	0.38
Control Delay	82.3	78.1	29.2	72.4	48.8	19.2	62.7	50.9	13.2	63.1	43.0	9.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	82.3	78.1	29.2	72.4	48.8	19.2	62.7	50.9	13.2	63.1	43.0	9.2
Queue Length 50th (ft)	~247	~482	296	172	269	84	227	402	91	184	279	57
Queue Length 95th (ft)	#339	#559	429	#242	318	224	m#240	m420	m100	243	321	95
Internal Link Dist (ft)		2595			2405			950			589	
Turn Bay Length (ft)	290		265	410		410	475		230	260		150
Base Capacity (vph)	803	1723	765	455	1553	587	559	1893	678	559	1893	793
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.98	1.03	0.67	0.82	0.73	0.65	0.97	0.96	0.59	0.77	0.67	0.38

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
9: Commuter Way & Soledad Cyn

08/18/2023



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↑	↓	↑↑↑	↓	↓
Traffic Volume (vph)	2684	29	26	1731	43	15
Future Volume (vph)	2684	29	26	1731	43	15
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		150	285		0	0
Storage Lanes		1	1		2	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	1.00	1.00	0.91	0.97	0.95
Frt		0.850			0.962	
Flt Protected			0.950		0.964	
Satd. Flow (prot)	5085	1583	1770	5085	3351	0
Flt Permitted			0.950		0.964	
Satd. Flow (perm)	5085	1583	1770	5085	3351	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		12			16	
Link Speed (mph)	50			50	30	
Link Distance (ft)	911			2825	388	
Travel Time (s)	12.4			38.5	8.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2917	32	28	1882	47	16
Shared Lane Traffic (%)						
Lane Group Flow (vph)	2917	32	28	1882	63	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	24	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	1	1	1	1	1	
Detector Template						
Leading Detector (ft)	50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	
Turn Type	NA	Perm	Prot	NA	Prot	
Protected Phases	2		1	6	8	
Permitted Phases		2				
Detector Phase	2	2	1	6	8	
Switch Phase						
Minimum Initial (s)	10.0	10.0	4.0	10.0	4.0	
Minimum Split (s)	26.0	26.0	12.0	22.0	37.0	
Total Split (s)	75.0	75.0	20.0	95.0	37.0	

Lanes, Volumes, Timings
 9: Commuter Way & Soledad Cyn

08/18/2023

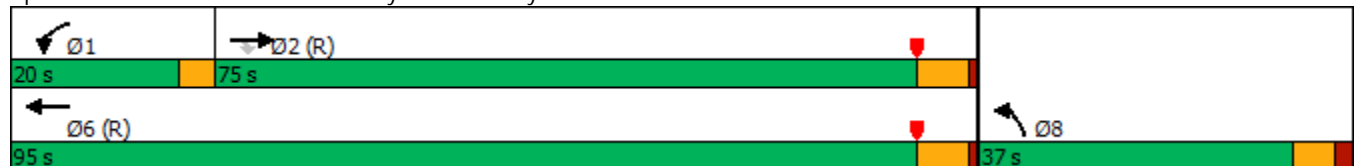


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Total Split (%)	56.8%	56.8%	15.2%	72.0%	28.0%	
Maximum Green (s)	69.0	69.0	16.5	89.0	31.0	
Yellow Time (s)	5.0	5.0	3.5	5.0	4.0	
All-Red Time (s)	1.0	1.0	0.0	1.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	0.5	-2.0	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Vehicle Extension (s)	5.0	5.0	1.5	5.0	2.0	
Minimum Gap (s)	4.0	4.0	1.5	4.0	2.0	
Time Before Reduce (s)	15.0	15.0	0.0	15.0	0.0	
Time To Reduce (s)	15.0	15.0	0.0	15.0	0.0	
Recall Mode	C-Max	C-Max	None	C-Max	None	
Walk Time (s)	7.0	7.0			7.0	
Flash Dont Walk (s)	13.0	13.0			24.0	
Pedestrian Calls (#/hr)	0	0			0	
Act Effect Green (s)	112.1	112.1	5.6	118.5	8.4	
Actuated g/C Ratio	0.85	0.85	0.04	0.90	0.06	
v/c Ratio	0.68	0.02	0.37	0.41	0.28	
Control Delay	7.4	3.0	99.7	1.7	47.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	7.4	3.0	99.7	1.7	47.6	
LOS	A	A	F	A	D	
Approach Delay	7.4			3.2	47.6	
Approach LOS	A			A	D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 58 (44%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Natural Cycle: 120
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.68
 Intersection Signal Delay: 6.3
 Intersection LOS: A
 Intersection Capacity Utilization 61.9%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 9: Commuter Way & Soledad Cyn



Queues

9: Commuter Way & Soledad Cyn

08/18/2023



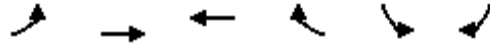
Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Group Flow (vph)	2917	32	28	1882	63
v/c Ratio	0.68	0.02	0.37	0.41	0.28
Control Delay	7.4	3.0	99.7	1.7	47.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	7.4	3.0	99.7	1.7	47.6
Queue Length 50th (ft)	320	3	23	31	20
Queue Length 95th (ft)	402	12	m36	13	43
Internal Link Dist (ft)	831			2745	308
Turn Bay Length (ft)		150	285		
Base Capacity (vph)	4318	1346	214	4566	849
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.68	0.02	0.13	0.41	0.07

Intersection Summary

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

Lanes, Volumes, Timings
10: Soledad Cyn & Valley Center

08/18/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø4
Lane Configurations	↖↖	↑↑↑	↑↑↑	↗	↘↘	↘	
Traffic Volume (vph)	138	2042	1287	791	897	197	
Future Volume (vph)	138	2042	1287	791	897	197	
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	250			310	235	0	
Storage Lanes	2			1	1	1	
Taper Length (ft)	25				25		
Lane Util. Factor	0.97	0.91	0.91	1.00	0.97	1.00	
Frt				0.850		0.850	
Flt Protected	0.950				0.950		
Satd. Flow (prot)	3433	5085	5085	1583	3433	1583	
Flt Permitted	0.950				0.950		
Satd. Flow (perm)	3433	5085	5085	1583	3433	1583	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)				614		185	
Link Speed (mph)		50	50		30		
Link Distance (ft)		2935	1764		1116		
Travel Time (s)		40.0	24.1		25.4		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	150	2220	1399	860	975	214	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	150	2220	1399	860	975	214	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Left	Left	Right	Left	Right	
Median Width(ft)		24	24		24		
Link Offset(ft)		0	0		0		
Crosswalk Width(ft)		16	16		16		
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (mph)	15			9	15	9	
Number of Detectors	1	1	1	1	1	1	
Detector Template							
Leading Detector (ft)	50	50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Turn Type	Prot	NA	NA	Free	Prot	pt+ov	
Protected Phases	5	2	6		3	3 5	4
Permitted Phases				Free			
Detector Phase	5	2	6		3	3 5	
Switch Phase							
Minimum Initial (s)	4.0	4.0	4.0		4.0		4.0
Minimum Split (s)	20.0	22.0	29.0		20.0		35.0
Total Split (s)	20.0	72.0	52.0		25.0		35.0

Lanes, Volumes, Timings
 10: Soledad Cyn & Valley Center

08/18/2023

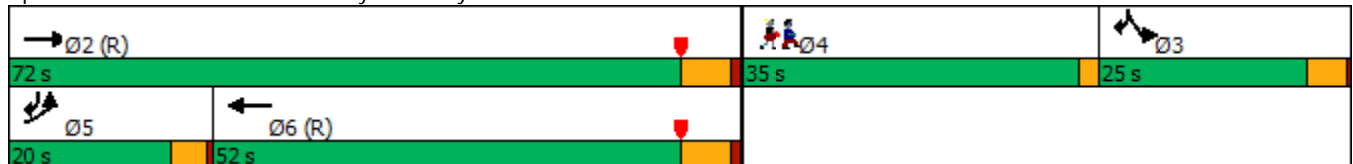


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø4	
Total Split (%)	15.2%	54.5%	39.4%		18.9%		27%	
Maximum Green (s)	16.0	66.0	46.0		20.5		33.0	
Yellow Time (s)	3.5	5.0	5.0		4.0		2.0	
All-Red Time (s)	0.5	1.0	1.0		0.5		0.0	
Lost Time Adjust (s)	0.0	-2.0	-2.0		-0.5			
Total Lost Time (s)	4.0	4.0	4.0		4.0			
Lead/Lag	Lead		Lag		Lag		Lead	
Lead-Lag Optimize?	Yes		Yes		Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		0.2	
Recall Mode	None	C-Max	C-Max		None		None	
Walk Time (s)				7.0				7.0
Flash Dont Walk (s)				16.0				26.0
Pedestrian Calls (#/hr)				0				0
Act Effct Green (s)	11.1	68.9	53.8	132.0	55.1	70.2		
Actuated g/C Ratio	0.08	0.52	0.41	1.00	0.42	0.53		
v/c Ratio	0.52	0.84	0.68	0.54	0.68	0.23		
Control Delay	53.2	33.9	15.9	7.7	33.6	5.5		
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		
Total Delay	53.2	33.9	15.9	7.7	33.6	5.5		
LOS	D	C	B	A	C	A		
Approach Delay	35.1		12.8		28.5			
Approach LOS	D		B		C			

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 35 (27%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
 Natural Cycle: 145
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.84
 Intersection Signal Delay: 25.1
 Intersection LOS: C
 Intersection Capacity Utilization 71.7%
 ICU Level of Service C
 Analysis Period (min) 15

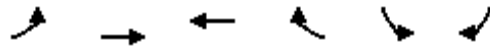
Splits and Phases: 10: Soledad Cyn & Valley Center



Queues

10: Soledad Cyn & Valley Center

08/18/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	150	2220	1399	860	975	214
v/c Ratio	0.52	0.84	0.68	0.54	0.68	0.23
Control Delay	53.2	33.9	15.9	7.7	33.6	5.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.2	33.9	15.9	7.7	33.6	5.5
Queue Length 50th (ft)	61	677	316	390	430	28
Queue Length 95th (ft)	m88	778	161	633	501	m42
Internal Link Dist (ft)		2855	1684		1036	
Turn Bay Length (ft)	250			310	235	
Base Capacity (vph)	416	2652	2070	1583	1434	980
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.84	0.68	0.54	0.68	0.22

Intersection Summary

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

Lanes, Volumes, Timings
 11: Golden Valley Road & Valley Center Drive

08/18/2023



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4	Ø5	Ø12
Lane Configurations	↶↶↶	↷↷	↶↶	↑↑↑	↑↑↑	↷			
Traffic Volume (vph)	551	436	383	1266	1118	806			
Future Volume (vph)	551	436	383	1266	1118	806			
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900			
Storage Length (ft)	260	260	290			150			
Storage Lanes	2	1	2			1			
Taper Length (ft)	25		25						
Lane Util. Factor	0.94	0.88	0.97	0.91	0.91	1.00			
Frt		0.850				0.850			
Flt Protected	0.950		0.950						
Satd. Flow (prot)	4990	2787	3433	5085	5085	1583			
Flt Permitted	0.950		0.950						
Satd. Flow (perm)	4990	2787	3433	5085	5085	1583			
Right Turn on Red		Yes				Yes			
Satd. Flow (RTOR)		474				528			
Link Speed (mph)	30			50	50				
Link Distance (ft)	456			2527	1665				
Travel Time (s)	10.4			34.5	22.7				
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92			
Adj. Flow (vph)	599	474	416	1376	1215	876			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	599	474	416	1376	1215	876			
Enter Blocked Intersection	No	No	No	No	No	No			
Lane Alignment	Left	Right	Left	Left	Left	Right			
Median Width(ft)	36			24	24				
Link Offset(ft)	0			0	0				
Crosswalk Width(ft)	16			16	16				
Two way Left Turn Lane									
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00			
Turning Speed (mph)	15	9	15			9			
Number of Detectors	1	1	1	1	1	1			
Detector Template									
Leading Detector (ft)	50	50	50	50	50	50			
Trailing Detector (ft)	0	0	0	0	0	0			
Detector 1 Position(ft)	0	0	0	0	0	0			
Detector 1 Size(ft)	50	50	50	50	50	50			
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel									
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Turn Type	Prot	pt+ov	Prot	NA	NA	Perm			
Protected Phases	3	5 12	5 12	2	6		4	5	12
Permitted Phases						6			
Detector Phase	3	5 12	5 12	2	6	6			
Switch Phase									
Minimum Initial (s)	3.0			10.0	10.0	10.0	4.0	4.0	4.0
Minimum Split (s)	25.0			30.0	40.0	40.0	35.0	15.0	20.0
Total Split (s)	30.0			67.0	42.0	42.0	35.0	25.0	35.0

Lanes, Volumes, Timings
 11: Golden Valley Road & Valley Center Drive

08/18/2023

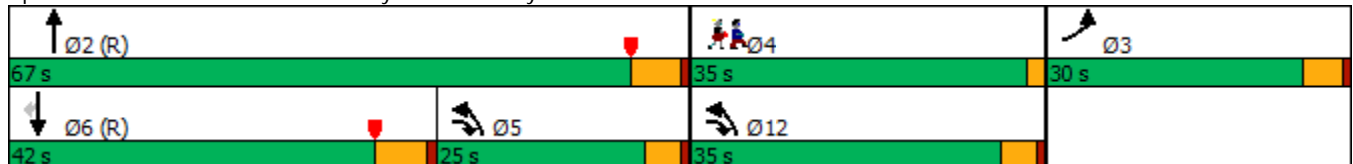


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø4	Ø5	Ø12
Total Split (%)	22.7%			50.8%	31.8%	31.8%	27%	19%	27%
Maximum Green (s)	25.0			61.0	36.0	36.0	33.0	20.5	30.5
Yellow Time (s)	4.0			5.0	5.0	5.0	2.0	3.5	3.5
All-Red Time (s)	1.0			1.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)	-1.0			-2.0	-2.0	-2.0			
Total Lost Time (s)	4.0			4.0	4.0	4.0			
Lead/Lag					Lead	Lead		Lag	
Lead-Lag Optimize?					Yes	Yes		Yes	
Vehicle Extension (s)	3.0			3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None			C-Min	C-Min	C-Min	None	None	None
Walk Time (s)					7.0	7.0	7.0		5.0
Flash Dont Walk (s)					24.0	24.0	26.0		10.0
Pedestrian Calls (#/hr)					0	0	0		0
Act Effect Green (s)	22.3	32.0	32.0	89.4	65.6	65.6			
Actuated g/C Ratio	0.17	0.24	0.24	0.68	0.50	0.50			
v/c Ratio	0.71	0.46	0.50	0.40	0.48	0.83			
Control Delay	43.3	7.0	24.4	4.2	5.8	16.0			
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0			
Total Delay	43.3	7.0	24.4	4.2	5.8	16.0			
LOS	D	A	C	A	A	B			
Approach Delay	27.3			8.9	10.1				
Approach LOS	C			A	B				

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 115
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.83
 Intersection Signal Delay: 13.4
 Intersection LOS: B
 Intersection Capacity Utilization 67.5%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 11: Golden Valley Road & Valley Center Drive



Queues

11: Golden Valley Road & Valley Center Drive

08/18/2023



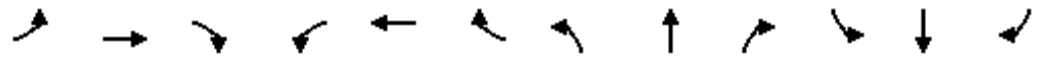
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	599	474	416	1376	1215	876
v/c Ratio	0.71	0.46	0.50	0.40	0.48	0.83
Control Delay	43.3	7.0	24.4	4.2	5.8	16.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.3	7.0	24.4	4.2	5.8	16.0
Queue Length 50th (ft)	161	25	128	84	42	439
Queue Length 95th (ft)	198	61	m122	m74	m65	m348
Internal Link Dist (ft)	376			2447	1585	
Turn Bay Length (ft)	260	260	290			150
Base Capacity (vph)	990	1425	1411	3442	2527	1052
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.61	0.33	0.29	0.40	0.48	0.83

Intersection Summary

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

Lanes, Volumes, Timings
12: Ruther & Soledad Cyn

08/18/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	47	2384	167	196	1798	19	185	79	232	130	89	67
Future Volume (vph)	47	2384	167	196	1798	19	185	79	232	130	89	67
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	285		300	250		0	0		0	125		0
Storage Lanes	1		1	2		0	1		2	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	0.91	0.95	0.95	0.88	0.95	0.95	1.00
Frt			0.850		0.998				0.850		0.938	
Flt Protected	0.950			0.950			0.950	0.977		0.950	0.998	
Satd. Flow (prot)	1770	5085	1583	3433	5075	0	1681	1729	2787	1681	1657	0
Flt Permitted	0.950			0.950			0.950	0.977		0.950	0.998	
Satd. Flow (perm)	1770	5085	1583	3433	5075	0	1681	1729	2787	1681	1657	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			103		1				121		22	
Link Speed (mph)		50		50				40			30	
Link Distance (ft)		1764		2480				220			327	
Travel Time (s)		24.1		33.8				3.8			7.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	51	2591	182	213	1954	21	201	86	252	141	97	73
Shared Lane Traffic (%)							37%			5%		
Lane Group Flow (vph)	51	2591	182	213	1975	0	127	160	252	134	177	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24		24				12			12	
Link Offset(ft)		0		0				0			0	
Crosswalk Width(ft)		16		16				16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1	1	1	1	
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50		50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	pt+ov	Split	NA	
Protected Phases	1	6		5	2		3	3	3 5	4	4	
Permitted Phases			6									
Detector Phase	1	6	6	5	2		3	3	3 5	4	4	
Switch Phase												
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	12.0	42.0	42.0	12.0	27.0		37.0	37.0		15.0	15.0	
Total Split (s)	26.0	49.0	49.0	25.0	48.0		38.0	38.0		20.0	20.0	

Lanes, Volumes, Timings
12: Ruther & Soledad Cyn

08/18/2023

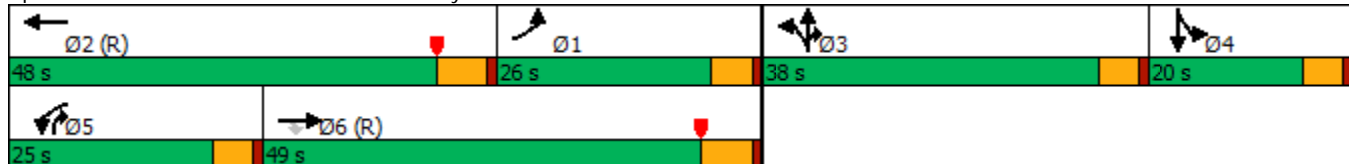


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	19.7%	37.1%	37.1%	18.9%	36.4%		28.8%	28.8%		15.2%	15.2%	
Maximum Green (s)	21.0	43.0	43.0	20.0	42.0		33.0	33.0		15.0	15.0	
Yellow Time (s)	4.0	5.0	5.0	4.0	5.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	-1.0	-2.0	-2.0	-1.0	-2.0		-1.0	-1.0		-1.0	-1.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead		Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	4.5	4.5	1.5	4.5		3.0	3.0		3.0	3.0	
Minimum Gap (s)	1.5	3.0	3.0	1.5	3.0		3.0	3.0		3.0	3.0	
Time Before Reduce (s)	0.0	7.5	7.5	0.0	7.5		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	22.5	22.5	0.0	22.5		0.0	0.0		0.0	0.0	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None		None	None	
Walk Time (s)		7.0	7.0		7.0		5.0	5.0				
Flash Dont Walk (s)		25.0	25.0		11.0		27.0	27.0				
Pedestrian Calls (#/hr)		0	0		0		0	0				
Act Effect Green (s)	18.6	64.9	64.9	13.1	61.1		18.9	18.9	32.0	19.2	19.2	
Actuated g/C Ratio	0.14	0.49	0.49	0.10	0.46		0.14	0.14	0.24	0.15	0.15	
v/c Ratio	0.20	1.04	0.22	0.63	0.84		0.53	0.65	0.33	0.55	0.68	
Control Delay	48.0	56.3	12.2	65.2	38.1		59.4	64.9	12.4	60.3	59.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	48.0	56.3	12.2	65.2	38.1		59.4	64.9	12.4	60.3	59.8	
LOS	D	E	B	E	D		E	E	B	E	E	
Approach Delay		53.3			40.7			39.1			60.0	
Approach LOS		D			D			D			E	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
 Natural Cycle: 140
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.04
 Intersection Signal Delay: 47.6
 Intersection LOS: D
 Intersection Capacity Utilization 80.2%
 ICU Level of Service D
 Analysis Period (min) 15

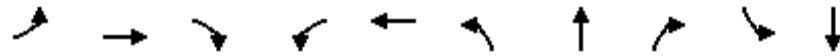
Splits and Phases: 12: Ruther & Soledad Cyn



Queues

12: Ruther & Soledad Cyn

08/18/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	51	2591	182	213	1975	127	160	252	134	177
v/c Ratio	0.20	1.04	0.22	0.63	0.84	0.53	0.65	0.33	0.55	0.68
Control Delay	48.0	56.3	12.2	65.2	38.1	59.4	64.9	12.4	60.3	59.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.0	56.3	12.2	65.2	38.1	59.4	64.9	12.4	60.3	59.8
Queue Length 50th (ft)	32	-863	35	91	577	107	138	36	113	133
Queue Length 95th (ft)	m45	#1155	m69	130	#834	168	206	50	178	211
Internal Link Dist (ft)		1684			2400		140			247
Turn Bay Length (ft)	285		300	250					125	
Base Capacity (vph)	295	2498	830	546	2351	432	445	1226	252	267
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	1.04	0.22	0.39	0.84	0.29	0.36	0.21	0.53	0.66

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
 13: Golden Valley Road & Centre Pointe Parkway

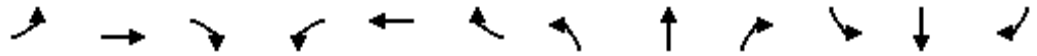
08/18/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	177	99	556	272	78	197	283	1353	282	245	1428	65
Future Volume (vph)	177	99	556	272	78	197	283	1353	282	245	1428	65
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		260	150		250	300		300	700		0
Storage Lanes	1		1	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	0.91	1.00	0.95	1.00
Frt			0.850		0.893			0.974				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	3433	1663	0	1770	4953	0	1770	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1863	1583	3433	1663	0	1770	4953	0	1770	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			91		94			33				136
Link Speed (mph)		30			30			50				50
Link Distance (ft)		1149			802			7902				1475
Travel Time (s)		26.1			18.2			107.8				20.1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	192	108	604	296	85	214	308	1471	307	266	1552	71
Shared Lane Traffic (%)												
Lane Group Flow (vph)	192	108	604	296	299	0	308	1778	0	266	1552	71
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1		1	1		1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50		50	50	50
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Size(ft)	50	50	50	50	50		50	50		50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Turn Type	Prot	NA	pm+ov	Prot	NA		Prot	NA		Prot	NA	Perm
Protected Phases	3	8	5	7	4		5	2		1	6	
Permitted Phases			8									6
Detector Phase	3	8	5	7	4		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	4.0	6.0	4.0	4.0	6.0		4.0	10.0		4.0	10.0	10.0
Minimum Split (s)	12.0	25.0	20.0	20.0	39.0		20.0	33.0		15.0	34.0	34.0
Total Split (s)	19.0	25.0	33.0	34.0	40.0		33.0	40.0		33.0	40.0	40.0

Lanes, Volumes, Timings
 13: Golden Valley Road & Centre Pointe Parkway

08/18/2023

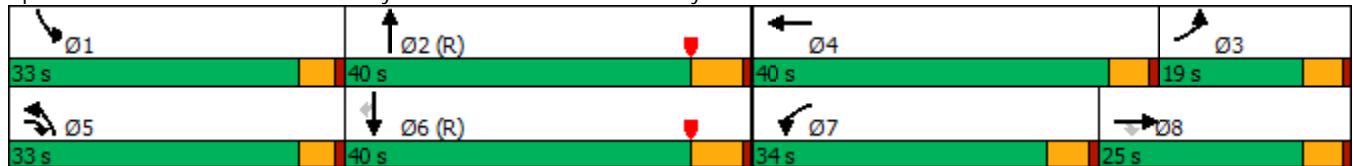


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	14.4%	18.9%	25.0%	25.8%	30.3%		25.0%	30.3%		25.0%	30.3%	30.3%
Maximum Green (s)	14.0	20.0	28.5	29.0	35.0		28.5	34.0		28.5	34.0	34.0
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0		3.5	5.0		3.5	5.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	-1.0	-1.0	-0.5	-1.0	-1.0		-0.5	-2.0		-0.5	-2.0	-2.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lag	Lag	Lead	Lead	Lead		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Min		None	C-Min	C-Min
Walk Time (s)					7.0			7.0			7.0	7.0
Flash Dont Walk (s)					27.0			20.0			21.0	21.0
Pedestrian Calls (#/hr)					0			0			0	0
Act Effct Green (s)	20.8	26.7	57.2	17.7	23.6		26.6	47.1		24.6	45.1	45.1
Actuated g/C Ratio	0.16	0.20	0.43	0.13	0.18		0.20	0.36		0.19	0.34	0.34
v/c Ratio	0.69	0.29	0.82	0.64	0.80		0.87	0.99		0.81	1.28	0.11
Control Delay	66.1	45.6	37.0	60.6	50.6		69.0	54.2		55.8	175.4	8.6
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	66.1	45.6	37.0	60.6	50.6		69.0	54.2		55.8	175.4	8.6
LOS	E	D	D	E	D		E	D		E	F	A
Approach Delay		44.2			55.6			56.4			152.3	
Approach LOS		D			E			E			F	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 103 (78%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 145
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.28
 Intersection Signal Delay: 87.4
 Intersection LOS: F
 Intersection Capacity Utilization 94.5%
 ICU Level of Service F
 Analysis Period (min) 15

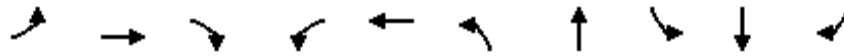
Splits and Phases: 13: Golden Valley Road & Centre Pointe Parkway



Queues

13: Golden Valley Road & Centre Pointe Parkway

08/18/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	192	108	604	296	299	308	1778	266	1552	71
v/c Ratio	0.69	0.29	0.82	0.64	0.80	0.87	0.99	0.81	1.28	0.11
Control Delay	66.1	45.6	37.0	60.6	50.6	69.0	54.2	55.8	175.4	8.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	66.1	45.6	37.0	60.6	50.6	69.0	54.2	55.8	175.4	8.6
Queue Length 50th (ft)	154	77	357	125	173	277	-619	218	-981	1
Queue Length 95th (ft)	#285	132	526	168	258	m#362	#794	317	#1168	38
Internal Link Dist (ft)		1069			722		7822		1395	
Turn Bay Length (ft)	150		260	150		300		700		
Base Capacity (vph)	278	383	767	780	521	391	1787	388	1209	630
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.69	0.28	0.79	0.38	0.57	0.79	0.99	0.69	1.28	0.11

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
 14: Sierra Highway & Golden Valley Road

08/18/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑	↔↔	↔↔	↑↑↑	↔	↔↔	↑↔		↔	↑↑	↔
Traffic Volume (vph)	370	974	549	68	918	111	681	1045	132	69	254	230
Future Volume (vph)	370	974	549	68	918	111	681	1045	132	69	254	230
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	280		280	285		300	285		0	410		540
Storage Lanes	2		2	2		1	2		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	0.88	0.97	0.91	1.00	0.97	0.95	0.95	1.00	0.95	1.00
Fr _t			0.850			0.850		0.983				0.850
Fl _t Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	2787	3433	5085	1583	3433	3479	0	1770	3539	1583
Fl _t Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	2787	3433	5085	1583	3433	3479	0	1770	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			547			186		11				250
Link Speed (mph)		50		50			30			30		
Link Distance (ft)		1983		1208			1801			1671		
Travel Time (s)		27.0		16.5			40.9			38.0		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	402	1059	597	74	998	121	740	1136	143	75	276	250
Shared Lane Traffic (%)												
Lane Group Flow (vph)	402	1059	597	74	998	121	740	1279	0	75	276	250
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24		24			24			24		24
Link Offset(ft)		0		0			0			0		0
Crosswalk Width(ft)		16		16			16			16		16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1	1	1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50	50	50	50		50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50	50	50		50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	custom
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						8
Detector Phase	7	4	4	3	8	8	5	2		1	6	8
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	8.5	29.6	29.6	8.5	40.0	40.0	15.0	49.0		8.5	46.0	40.0
Total Split (s)	29.0	50.0	50.0	20.0	41.0	41.0	37.0	44.0		18.0	25.0	41.0

Lanes, Volumes, Timings
 14: Sierra Highway & Golden Valley Road

08/18/2023

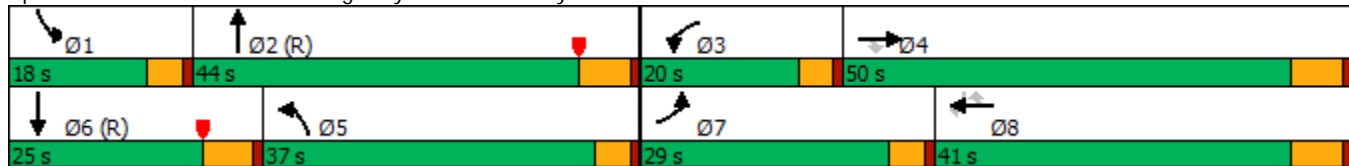


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (%)	22.0%	37.9%	37.9%	15.2%	31.1%	31.1%	28.0%	33.3%		13.6%	18.9%	31.1%
Maximum Green (s)	24.5	44.0	44.0	15.5	35.0	35.0	32.5	38.0		13.5	19.0	35.0
Yellow Time (s)	3.5	5.0	5.0	3.5	5.0	5.0	3.5	5.0		3.5	5.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	-0.5	-2.0	-2.0	-0.5	-2.0	-2.0	-0.5	-2.0		-0.5	-2.0	-2.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lag		Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	None
Walk Time (s)					5.0	5.0		5.0			5.0	5.0
Flash Dont Walk (s)					29.0	29.0		33.0			30.0	29.0
Pedestrian Calls (#/hr)					0	0		0			0	0
Act Effect Green (s)	20.9	49.3	49.3	8.7	35.0	35.0	33.0	51.3		11.1	27.1	35.0
Actuated g/C Ratio	0.16	0.37	0.37	0.07	0.27	0.27	0.25	0.39		0.08	0.21	0.27
v/c Ratio	0.74	0.80	0.43	0.33	0.74	0.22	0.86	0.94		0.51	0.38	0.41
Control Delay	40.9	42.3	14.2	62.2	48.0	1.4	58.8	54.1		69.1	48.6	6.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	40.9	42.3	14.2	62.2	48.0	1.4	58.8	54.1		69.1	48.6	6.5
LOS	D	D	B	E	D	A	E	D		E	D	A
Approach Delay		33.8			44.1			55.8			33.6	
Approach LOS		C			D			E			C	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 65 (49%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
 Natural Cycle: 140
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.94
 Intersection Signal Delay: 43.5
 Intersection LOS: D
 Intersection Capacity Utilization 80.5%
 ICU Level of Service D
 Analysis Period (min) 15

Splits and Phases: 14: Sierra Highway & Golden Valley Road



Queues

14: Sierra Highway & Golden Valley Road

08/18/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	402	1059	597	74	998	121	740	1279	75	276	250
v/c Ratio	0.74	0.80	0.43	0.33	0.74	0.22	0.86	0.94	0.51	0.38	0.41
Control Delay	40.9	42.3	14.2	62.2	48.0	1.4	58.8	54.1	69.1	48.6	6.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.9	42.3	14.2	62.2	48.0	1.4	58.8	54.1	69.1	48.6	6.5
Queue Length 50th (ft)	175	463	118	31	281	0	314	~614	62	110	0
Queue Length 95th (ft)	m164	m421	m111	57	333	5	#410	#840	113	162	64
Internal Link Dist (ft)		1903			1128			1721		1591	
Turn Bay Length (ft)	280		280	285		300	285		410		540
Base Capacity (vph)	650	1321	1383	416	1425	577	858	1357	187	727	623
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.62	0.80	0.43	0.18	0.70	0.21	0.86	0.94	0.40	0.38	0.40

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
 15: SR 14 SB Ramp & Golden Valley Road

08/18/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗	↖	↑↑					↘	↙	↗
Traffic Volume (vph)	0	862	331	168	732	0	0	0	0	72	4	437
Future Volume (vph)	0	862	331	168	732	0	0	0	0	72	4	437
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	220		0	0		0	300		0
Storage Lanes	0		1	1		0	0		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt			0.850									0.850
Flt Protected				0.950						0.950	0.957	
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	1681	1694	1583
Flt Permitted				0.950						0.950	0.957	
Satd. Flow (perm)	0	3539	1583	1770	3539	0	0	0	0	1681	1694	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			360									173
Link Speed (mph)		50			50			30			30	
Link Distance (ft)		861			697			508			640	
Travel Time (s)		11.7			9.5			11.5			14.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	937	360	183	796	0	0	0	0	78	4	475
Shared Lane Traffic (%)										48%		
Lane Group Flow (vph)	0	937	360	183	796	0	0	0	0	41	41	475
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		2	1	1	2					1	2	1
Detector Template		Thru	Right	Left	Thru					Left	Thru	Right
Leading Detector (ft)		100	20	20	100					20	100	20
Trailing Detector (ft)		0	0	0	0					0	0	0
Detector 1 Position(ft)		0	0	0	0					0	0	0
Detector 1 Size(ft)		6	20	20	6					20	6	20
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Detector 2 Position(ft)		94			94							94
Detector 2 Size(ft)		6			6							6
Detector 2 Type		Cl+Ex			Cl+Ex							Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0							0.0
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		6		5		2					4	
Permitted Phases		6								4		4

Lanes, Volumes, Timings
 15: SR 14 SB Ramp & Golden Valley Road

08/18/2023

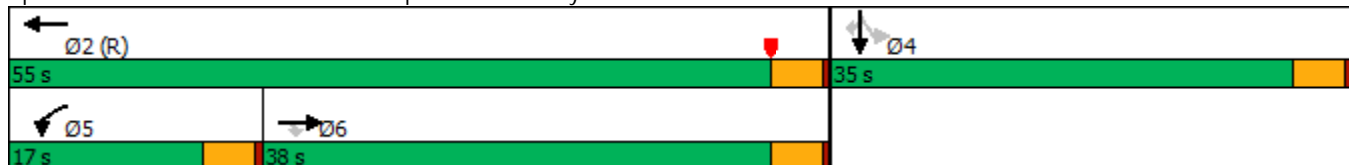


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase		6	6	5	2					4	4	4
Switch Phase												
Minimum Initial (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Minimum Split (s)		20.0	20.0	12.0	20.0					20.0	20.0	20.0
Total Split (s)		38.0	38.0	17.0	55.0					35.0	35.0	35.0
Total Split (%)		42.2%	42.2%	18.9%	61.1%					38.9%	38.9%	38.9%
Maximum Green (s)		34.0	34.0	13.0	51.0					31.0	31.0	31.0
Yellow Time (s)		3.5	3.5	3.5	3.5					3.5	3.5	3.5
All-Red Time (s)		0.5	0.5	0.5	0.5					0.5	0.5	0.5
Lost Time Adjust (s)		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Total Lost Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lead/Lag		Lag	Lag	Lead								
Lead-Lag Optimize?		Yes	Yes	Yes								
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Recall Mode		Max	Max	None	C-Max					Max	Max	Max
Walk Time (s)		5.0	5.0		5.0					5.0	5.0	5.0
Flash Dont Walk (s)		10.0	10.0		10.0					10.0	10.0	10.0
Pedestrian Calls (#/hr)		0	0		0					0	0	0
Act Effect Green (s)		34.8	34.8	12.2	51.0					31.0	31.0	31.0
Actuated g/C Ratio		0.39	0.39	0.14	0.57					0.34	0.34	0.34
v/c Ratio		0.69	0.43	0.76	0.40					0.07	0.07	0.72
Control Delay		26.5	4.0	59.6	13.6					20.4	20.4	23.3
Queue Delay		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Total Delay		26.5	4.0	59.6	13.6					20.4	20.4	23.3
LOS		C	A	E	B					C	C	C
Approach Delay		20.2			22.2						22.8	
Approach LOS		C			C						C	

Intersection Summary

Area Type:	Other
Cycle Length:	90
Actuated Cycle Length:	90
Offset:	0 (0%), Referenced to phase 2:WBT, Start of Yellow
Natural Cycle:	55
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.76
Intersection Signal Delay:	21.4
Intersection LOS:	C
Intersection Capacity Utilization	54.0%
ICU Level of Service	A
Analysis Period (min)	15

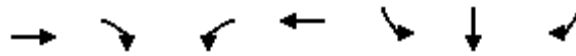
Splits and Phases: 15: SR 14 SB Ramp & Golden Valley Road



Queues

15: SR 14 SB Ramp & Golden Valley Road

08/18/2023


























Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	937	360	183	796	41	41	475
v/c Ratio	0.69	0.43	0.76	0.40	0.07	0.07	0.72
Control Delay	26.5	4.0	59.6	13.6	20.4	20.4	23.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.5	4.0	59.6	13.6	20.4	20.4	23.3
Queue Length 50th (ft)	233	0	114	139	16	16	149
Queue Length 95th (ft)	303	54	#205	171	40	40	270
Internal Link Dist (ft)	781			617		560	
Turn Bay Length (ft)			220		300		
Base Capacity (vph)	1366	832	255	2005	579	583	658
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.69	0.43	0.72	0.40	0.07	0.07	0.72

Intersection Summary

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

Lanes, Volumes, Timings
 16: SR 14 NB Ramp & Golden Valley Road

08/18/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 			 			 				
Traffic Volume (vph)	442	507	0	0	465	230	422	2	393	0	0	0
Future Volume (vph)	442	507	0	0	465	230	422	2	393	0	0	0
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	230		0	0		280	0		140	0		0
Storage Lanes	2		0	0		1	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt						0.850			0.850			
Flt Protected	0.950						0.950	0.953				
Satd. Flow (prot)	3433	3539	0	0	3539	1583	1681	1686	1583	0	0	0
Flt Permitted	0.950						0.950	0.953				
Satd. Flow (perm)	3433	3539	0	0	3539	1583	1681	1686	1583	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						250			324			
Link Speed (mph)		50			50			30				30
Link Distance (ft)		697			616			615				491
Travel Time (s)		9.5			8.4			14.0				11.2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	480	551	0	0	505	250	459	2	427	0	0	0
Shared Lane Traffic (%)							50%					
Lane Group Flow (vph)	480	551	0	0	505	250	229	232	427	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2			2	1	1	2	1			
Detector Template	Left	Thru			Thru	Right	Left	Thru	Right			
Leading Detector (ft)	20	100			100	20	20	100	20			
Trailing Detector (ft)	0	0			0	0	0	0	0			
Detector 1 Position(ft)	0	0			0	0	0	0	0			
Detector 1 Size(ft)	20	6			6	20	20	6	20			
Detector 1 Type	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Detector 2 Position(ft)		94			94			94				
Detector 2 Size(ft)		6			6			6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Prot	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	1	6			2			8				
Permitted Phases						2	8		8			

Lanes, Volumes, Timings
 16: SR 14 NB Ramp & Golden Valley Road

08/18/2023

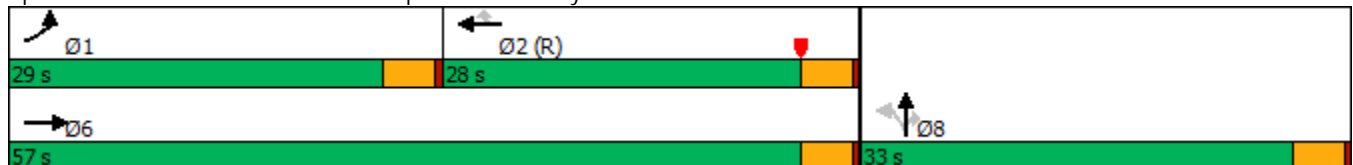


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	1	6			2	2	8	8	8			
Switch Phase												
Minimum Initial (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Minimum Split (s)	12.0	20.0			20.0	20.0	20.0	20.0	20.0			
Total Split (s)	29.0	57.0			28.0	28.0	33.0	33.0	33.0			
Total Split (%)	32.2%	63.3%			31.1%	31.1%	36.7%	36.7%	36.7%			
Maximum Green (s)	25.0	53.0			24.0	24.0	29.0	29.0	29.0			
Yellow Time (s)	3.5	3.5			3.5	3.5	3.5	3.5	3.5			
All-Red Time (s)	0.5	0.5			0.5	0.5	0.5	0.5	0.5			
Lost Time Adjust (s)	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Total Lost Time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Lead/Lag	Lead				Lag		Lag					
Lead-Lag Optimize?	Yes				Yes		Yes					
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Recall Mode	None	Max			C-Max	C-Max	Max	Max	Max			
Walk Time (s)		5.0			5.0	5.0	5.0	5.0	5.0			
Flash Dont Walk (s)		10.0			10.0	10.0	10.0	10.0	10.0			
Pedestrian Calls (#/hr)		0			0	0	0	0	0			
Act Effct Green (s)	17.8	53.0			31.2	31.2	29.0	29.0	29.0			
Actuated g/C Ratio	0.20	0.59			0.35	0.35	0.32	0.32	0.32			
v/c Ratio	0.71	0.26			0.41	0.35	0.42	0.43	0.59			
Control Delay	57.7	5.7			24.4	4.8	26.9	27.0	10.1			
Queue Delay	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Total Delay	57.7	5.7			24.4	4.8	26.9	27.0	10.1			
LOS	E	A			C	A	C	C	B			
Approach Delay		29.9			17.9			18.9				
Approach LOS		C			B			B				

Intersection Summary

Area Type:	Other
Cycle Length:	90
Actuated Cycle Length:	90
Offset:	0 (0%), Referenced to phase 2:WBT, Start of Yellow
Natural Cycle:	55
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.71
Intersection Signal Delay:	22.8
Intersection LOS:	C
Intersection Capacity Utilization	54.0%
ICU Level of Service	A
Analysis Period (min)	15

Splits and Phases: 16: SR 14 NB Ramp & Golden Valley Road



Queues

16: SR 14 NB Ramp & Golden Valley Road

08/18/2023



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	480	551	505	250	229	232	427
v/c Ratio	0.71	0.26	0.41	0.35	0.42	0.43	0.59
Control Delay	57.7	5.7	24.4	4.8	26.9	27.0	10.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.7	5.7	24.4	4.8	26.9	27.0	10.1
Queue Length 50th (ft)	154	30	113	0	106	108	42
Queue Length 95th (ft)	205	57	171	53	175	177	132
Internal Link Dist (ft)		617	536			535	
Turn Bay Length (ft)	230			280			140
Base Capacity (vph)	953	2084	1227	712	541	543	729
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.50	0.26	0.41	0.35	0.42	0.43	0.59

Intersection Summary

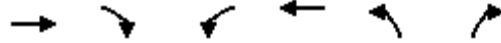
Lanes, Volumes, Timings
17: Studio Driveway & Soledad Cyn

08/18/2023

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↙	↑↑↑	↘	
Traffic Volume (vph)	1074	34	17	1990	45	22
Future Volume (vph)	1074	34	17	1990	45	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Fr _t	0.995				0.956	
Fl _t Protected			0.950		0.968	
Satd. Flow (prot)	5060	0	1770	5085	1724	0
Fl _t Permitted			0.210		0.968	
Satd. Flow (perm)	5060	0	391	5085	1724	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	11				16	
Link Speed (mph)	50			50	30	
Link Distance (ft)	419			233	380	
Travel Time (s)	5.7			3.2	8.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1167	37	18	2163	49	24
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1204	0	18	2163	73	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2		1	2	1	
Detector Template	Thru		Left	Thru	Left	
Leading Detector (ft)	100		20	100	20	
Trailing Detector (ft)	0		0	0	0	
Detector 1 Position(ft)	0		0	0	0	
Detector 1 Size(ft)	6		20	6	20	
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA		Perm	NA	Prot	
Protected Phases	6			2	4	
Permitted Phases			2			
Detector Phase	6		2	2	4	
Switch Phase						
Minimum Initial (s)	4.0		4.0	4.0	4.0	

Lanes, Volumes, Timings
 17: Studio Driveway & Soledad Cyn

08/18/2023



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Minimum Split (s)	20.0		20.0	20.0	20.0	
Total Split (s)	107.0		107.0	107.0	25.0	
Total Split (%)	81.1%		81.1%	81.1%	18.9%	
Maximum Green (s)	103.0		103.0	103.0	21.0	
Yellow Time (s)	3.5		3.5	3.5	3.5	
All-Red Time (s)	0.5		0.5	0.5	0.5	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	4.0		4.0	4.0	4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Recall Mode	Max		C-Max	C-Max	Max	
Walk Time (s)	5.0		5.0	5.0	5.0	
Flash Dont Walk (s)	10.0		10.0	10.0	10.0	
Pedestrian Calls (#/hr)	0		0	0	0	
Act Effect Green (s)	103.0		103.0	103.0	21.0	
Actuated g/C Ratio	0.78		0.78	0.78	0.16	
v/c Ratio	0.30		0.06	0.55	0.25	
Control Delay	8.8		5.6	7.4	40.4	
Queue Delay	0.0		0.0	0.0	0.0	
Total Delay	8.8		5.6	7.4	40.4	
LOS	A		A	A	D	
Approach Delay	8.8			7.4	40.4	
Approach LOS	A			A	D	

Intersection Summary

Area Type: Other
 Cycle Length: 132
 Actuated Cycle Length: 132
 Offset: 0 (0%), Referenced to phase 2:WBTL, Start of Yellow
 Natural Cycle: 50
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.55
 Intersection Signal Delay: 8.6
 Intersection LOS: A
 Intersection Capacity Utilization 49.0%
 ICU Level of Service A
 Analysis Period (min) 15

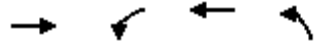
Splits and Phases: 17: Studio Driveway & Soledad Cyn



Queues

17: Studio Driveway & Soledad Cyn

08/18/2023



Lane Group	EBT	WBL	WBT	NBL
Lane Group Flow (vph)	1204	18	2163	73
v/c Ratio	0.30	0.06	0.55	0.25
Control Delay	8.8	5.6	7.4	40.4
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	8.8	5.6	7.4	40.4
Queue Length 50th (ft)	176	3	189	43
Queue Length 95th (ft)	m163	m11	273	90
Internal Link Dist (ft)	339		153	300
Turn Bay Length (ft)				
Base Capacity (vph)	3950	305	3967	287
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.30	0.06	0.55	0.25

Intersection Summary

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

Lanes, Volumes, Timings
 18: Residential Driveway 1 & Soledad Cyn

08/18/2023



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↵	↑↑↑	↵	
Traffic Volume (vph)	1066	30	10	2006	0	18
Future Volume (vph)	1066	30	10	2006	0	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	100		0	0
Storage Lanes		0	1		1	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt	0.996				0.865	
Flt Protected			0.950			
Satd. Flow (prot)	5065	0	1770	5085	1611	0
Flt Permitted			0.950			
Satd. Flow (perm)	5065	0	1770	5085	1611	0
Link Speed (mph)	50			50	30	
Link Distance (ft)	233			397	318	
Travel Time (s)	3.2			5.4	7.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1159	33	11	2180	0	20
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1192	0	11	2180	20	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	48.8%
Analysis Period (min)	15
	ICU Level of Service A

HCM 6th TWSC
 18: Residential Driveway 1 & Soledad Cyn

08/18/2023

Intersection						
Int Delay, s/veh	0.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↵	↑↑↑	↵	
Traffic Vol, veh/h	1066	30	10	2006	0	18
Future Vol, veh/h	1066	30	10	2006	0	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1159	33	11	2180	0	20

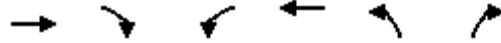
Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	1192	0	2070
Stage 1	-	-	-	-	1176
Stage 2	-	-	-	-	894
Critical Hdwy	-	-	5.34	-	5.74
Critical Hdwy Stg 1	-	-	-	-	6.64
Critical Hdwy Stg 2	-	-	-	-	6.04
Follow-up Hdwy	-	-	3.12	-	3.82
Pot Cap-1 Maneuver	-	-	316	-	86
Stage 1	-	-	-	-	189
Stage 2	-	-	-	-	326
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	316	-	83
Mov Cap-2 Maneuver	-	-	-	-	83
Stage 1	-	-	-	-	189
Stage 2	-	-	-	-	315

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	14.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	383	-	-	316	-
HCM Lane V/C Ratio	0.051	-	-	0.034	-
HCM Control Delay (s)	14.9	-	-	16.8	-
HCM Lane LOS	B	-	-	C	-
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-

Lanes, Volumes, Timings
 19: Residential Driveway 2 & Soledad Cyn

08/18/2023



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↵	↑↑↑		↵
Traffic Volume (vph)	1043	41	21	2016	0	35
Future Volume (vph)	1043	41	21	2016	0	35
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	100		0	0
Storage Lanes		0	1		0	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt	0.994					0.865
Flt Protected			0.950			
Satd. Flow (prot)	5055	0	1770	5085	0	1611
Flt Permitted			0.950			
Satd. Flow (perm)	5055	0	1770	5085	0	1611
Link Speed (mph)	50			50	30	
Link Distance (ft)	397			911	422	
Travel Time (s)	5.4			12.4	9.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1134	45	23	2191	0	38
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1179	0	23	2191	0	38
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	42.3% ICU Level of Service A
Analysis Period (min)	15

HCM 6th TWSC
 19: Residential Driveway 2 & Soledad Cyn

08/18/2023

Intersection						
Int Delay, s/veh	0.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↖	↑↑↑		↗
Traffic Vol, veh/h	1043	41	21	2016	0	35
Future Vol, veh/h	1043	41	21	2016	0	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1134	45	23	2191	0	38

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	1179	0	- 590
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	5.34	-	- 7.14
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	3.12	-	- 3.92
Pot Cap-1 Maneuver	-	-	320	-	0 386
Stage 1	-	-	-	-	0 -
Stage 2	-	-	-	-	0 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	320	-	- 386
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	15.3
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	386	-	-	320	-
HCM Lane V/C Ratio	0.099	-	-	0.071	-
HCM Control Delay (s)	15.3	-	-	17.1	-
HCM Lane LOS	C	-	-	C	-
HCM 95th %tile Q(veh)	0.3	-	-	0.2	-

Lanes, Volumes, Timings
20: Studio Driveway 2 & Soledad Cyn

08/18/2023



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑		↗
Traffic Volume (vph)	1108	0	0	2034	0	0
Future Volume (vph)	1108	0	0	2034	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Fr						
Flt Protected						
Satd. Flow (prot)	5085	0	0	5085	0	1863
Flt Permitted						
Satd. Flow (perm)	5085	0	0	5085	0	1863
Link Speed (mph)	50			50	30	
Link Distance (ft)	765			419	381	
Travel Time (s)	10.4			5.7	8.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1204	0	0	2211	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1204	0	0	2211	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	42.6%
Analysis Period (min)	15
	ICU Level of Service A

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑		↑
Traffic Vol, veh/h	1108	0	0	2034	0	0
Future Vol, veh/h	1108	0	0	2034	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1204	0	0	2211	0	0

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	-	-	602
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	3.92
Pot Cap-1 Maneuver	-	0	-	0	379
Stage 1	-	0	-	0	-
Stage 2	-	0	-	0	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	379
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

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

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

Appendix F

Conceptual Intersection Improvement Drawings

RIVERVIEW OFFSITE IMPROVEMENTS
BOUQUET CANYON ROAD/VALENCIA BLVD. LANE CONFIGURATION OPTION 3
 6/12/23

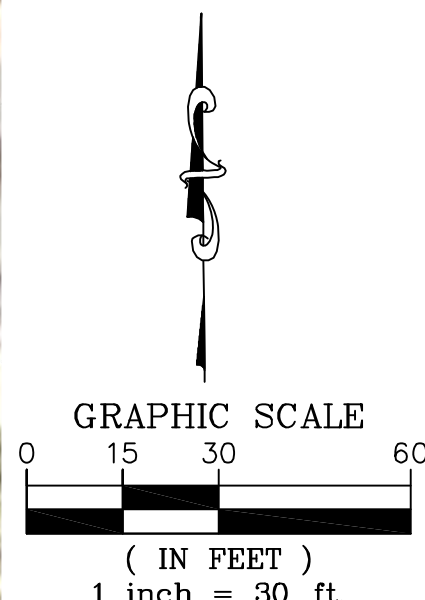


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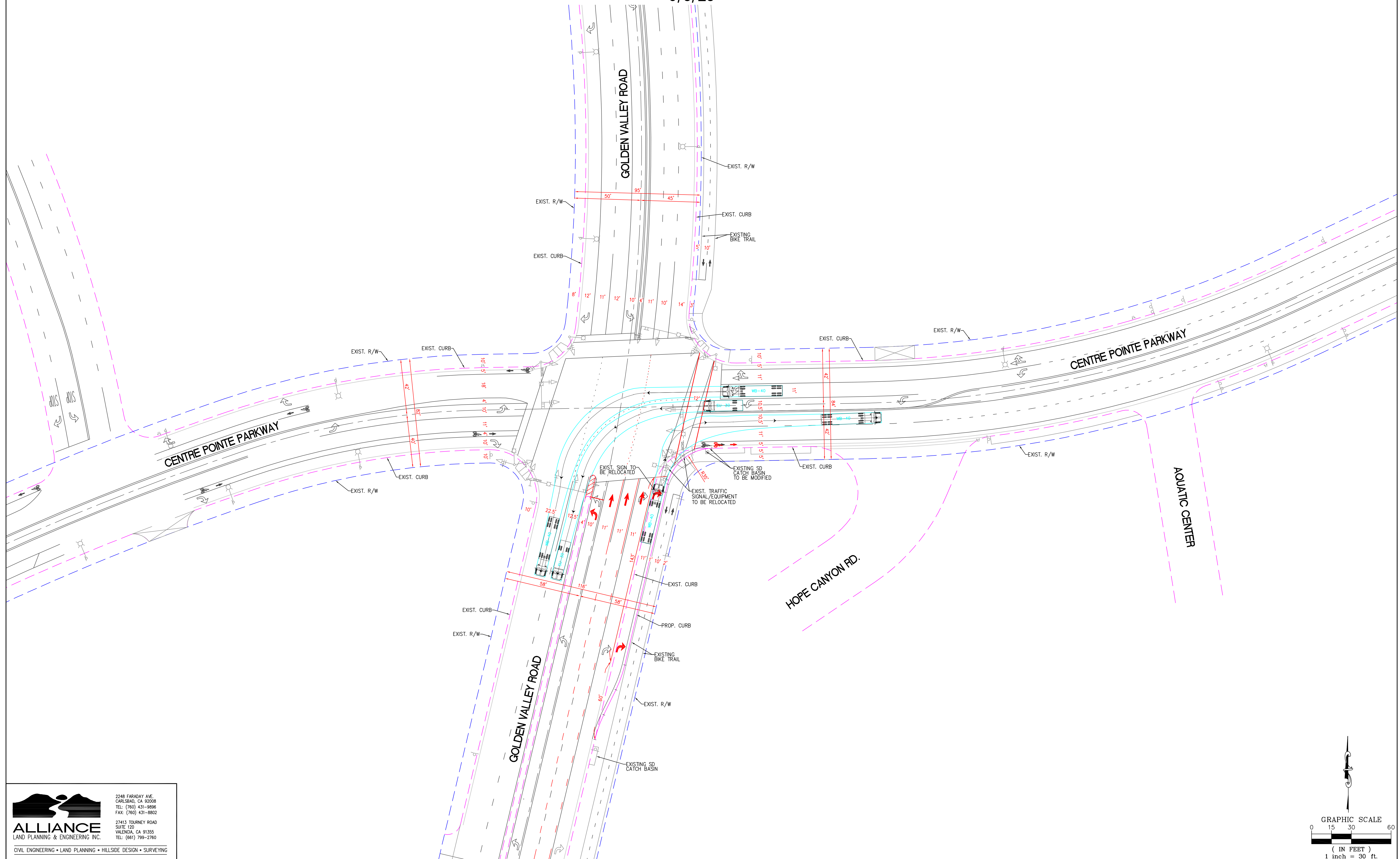


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RIVERVIEW OFFSITE IMPROVEMENTS

GOLDEN VALLEY ROAD/CENTRE POINTE PARKWAY LANE CONFIGURATION

6/8/23



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