APPENDIX M

Supplemental Traffic Operations Analysis for LOVR/U.S. 101

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TECHNICAL MEMORANDUM

FROOM RANCH SPECIFIC PLAN
SUPPLEMENTAL TRAFFIC OPERATIONS ANALYSIS FOR LOVR/U.S. 101
June 1, 2020

BACKGROUND

During the public review period for the Froom Ranch Specific Plan (FRSP) Draft Environmental Impact Report (DEIR), Caltrans District 5 submitted a comment letter (dated December 20, 2019) expressing questions and concerns on several topics ranging from traffic operations to stormwater hydraulics. Two primary concerns regarding traffic operations include the following:

- Concern that the baseline traffic data used in the FRSP Transportation Impact Study (TIS) is now outdated and newer traffic count data should be utilized
- Concern that the proposed mitigation measures at the Los Osos Valley Road (LOVR)/U.S. 101 Southbound (SB) Off-Ramp are not adequate to address queuing issues

Following the public review period for the DEIR, City of San Luis Obispo staff met with Caltrans District 5 staff to discuss these concerns. Caltrans staff articulated their concern that the traffic operations analysis provided in the TIS did not adequately capture the complex interaction between the closely-spaced LOVR/Calle Joaquin and LOVR/U.S. 101 SB Ramps intersections, where vehicles exiting the off-ramp are frequently impeded by queues spilling back from the upstream intersection at Calle Joaquin. Caltrans' primary concern was that conditions at the off-ramp would continue to degrade with additional development growth within the City until the Prado Road Interchange is completed, which will relieve traffic demand at the LOVR interchange. While Caltrans initially suggested that more substantial improvements were desired at the off-ramp, such as widening the full ramp to two-lanes, ultimately City and Caltrans staff agreed that the following alternate strategy would be acceptable:

- Continue with the mitigation improvements at the LOVR/U.S. 101 SB Ramps intersection as recommended in the FRSP DEIR, which include extension of the SB LOVR right-turn pocket, and extension of the WB thru/left-turn lane turn pocket storage at the SB 101 off-ramp; and
- Implement signal coordination between the City-operated LOVR/Calle Joaquin traffic signal and the Caltrans-operated LOVR/U.S. 101 SB Ramps traffic signal to allow more efficient signal progression between these intersections to reduce queue spillback at the off-ramp.

City staff agreed to proceed with the additional mitigation recommendations and to provide a supplemental traffic operations analysis with more current baseline traffic data to verify that

the recommended measures would adequately address the queueing concerns at the off-ramp. This technical memorandum provides a summary of this supplemental traffic analysis prepared by City traffic engineering division to verify that the final mitigation recommendations at this location adequately address the queueing concerns at the off-ramp.

ANALYSIS

Study Locations and Analysis Scenarios

For the purposes of this focused analysis, the study area was selected based on the specific concerns identified by Caltrans at LOVR/U.S. 101 Interchange. The analysis includes intersection operations analysis for autos only and focuses on the following four intersections on LOVR in the vicinity of the LOVR/U.S. 101 interchange (study intersection numbering consistent with FRSP TIS):

- Int. #9 – LOVR/Calle Joaquin
- Int. #10 – LOVR/U.S. 101 SB Ramps
- Int. #11 – LOVR/U.S. 101 NB Ramps
- Int. #12 – LOVR/S. Higuera

This focused analysis evaluates AM and PM peak hour conditions for the following traffic volume scenarios:

- Existing Conditions
    - Existing (2020) traffic volumes and intersection geometrics
- Existing Plus Project Conditions
    - Existing conditions plus traffic generated by FRSP development
- Near Term (2025) Conditions
    - Existing traffic levels plus background traffic generated by currently planned/approved development projects, including buildout of San Luis Ranch and Avila Ranch
    - Assumes Prado Road Interchange is not yet complete
- Near Term Plus Project Conditions
    - Near Term Conditions plus traffic generated by FRSP development

Existing Conditions

Traffic Volumes

As mentioned above, in the comment letter on the FRSP DEIR, Caltrans requested that additional analysis be conducted using more recent traffic count data. The City's current TIS Guidelines require that traffic studies utilize existing traffic data that is no more than two years old. In addition, per CEQA Section 15125, the environmental setting established for analysis within an EIR shall be prepared based upon existing information available at the time of publication of the Notice of Preparation (NOP). The FRSP EIR NOP and project TIS were initiated July of 2017 and the project TIS utilized the most recent traffic data available from the City at that time—counts collected during spring of 2016. At the time, this count data was less than two years old, which was consistent with City standard procedures and CEQA best practices. While the analysis presented in the DEIR is considered adequate for CEQA purposes, City staff agreed to provide supplemental analysis to Caltrans using more recent traffic data for the LOVR/U.S. 101 Interchange study intersections.

The City of San Luis Obispo collected traffic counts on LOVR at the Calle Joaquin, U.S. 101 SB and NB Ramps intersections in February 2020. Peak period queuing observations were also collected at the SB ramps as part of this data collection effort. The 2020 counts are provided as Attachment A.

Analysis Approach

The SB U.S. 101 off-ramp at LOVR is approximately 1,170 feet long measured from the gore point to the limit line. Approximately 185 feet from the intersection, the off-ramp widens to provide a trap right-turn lane and a shared through/right-turn lane. While the analysis results reported in the FRSP TIS did not report substantial queuing spillback at the SB off-ramp, anecdotal reports indicate that during peak periods, extensive queuing sometimes occurs at the off-ramp due to upstream queues at the LOVR/Calle Joaquin intersection spilling back and blocking traffic flow from the off-ramp. While Synchro traffic analysis software, which was used in the FRSP EIR and is generally the industry standard analysis tool for evaluating traffic operations at intersections, is generally appropriate for queueing analysis, Synchro may not fully capture effects of downstream bottlenecks. For this reason, the four consecutive intersections along the LOVR corridor from Calle Joaquin to South Higuera were modeled using SimTraffic, a microsimulation analysis tool that can account for the complex interaction between closely-spaced intersections by tracking individual vehicle performance through a network and aggregating the results.

All queueing analysis results reported herein were calculated using SimTraffic software based on an average of five model runs simulating the AM and PM peak hour periods. Industry standard practice recommends that SimTraffic models be calibrated to ensure they reasonably reflect field conditions. Based on the AM peak hour, when off-ramp queues are longer, the observed 95th percentile queuing, as documented in Appendix A, is within one vehicle length of the SimTraffic reported queues. This indicates that the SimTraffic model reasonably replicates observed conditions and is appropriate for use in testing improvement alternatives and future volume scenarios. All intersection level of service (LOS) and delay results reported herein were calculated using Synchro software and Highway Capacity Manual (HCM) 6th Edition methodologies.

Intersection Levels of Service

Existing Conditions intersection levels of service are summarized in Table 1 below.

Table 1: Existing Conditions Levels of Service

#	Intersection	Peak Hour	Delay[1]	LOS
9	LOVR/Calle Joaquin	AM	4.3	A
		PM	5.8	A
10	LOVR/US 101 SB Ramps	AM	11.1	B
		PM	10.4	B
11	LOVR/US 101 NB Ramps	AM	18.6	B
		PM	17.2	B
12	LOVR/S. Higuera	AM	14.2	B
		PM	22.8	C

1. HCM 6th Edition average control delay in seconds per vehicle (Synchro results)

As shown above, all intersections operate at acceptable LOS D or better for Existing Conditions.

Intersection Queueing
Existing 95th percentile vehicle queues are summarized below in Table 2.

Table 2: Existing Conditions Queuing

#	Intersection	Peak Hour	NBL		NBR		SBL		SBR		EBL		EBR		WBL		WBR	
			Storage	Queue	Storage	Queue	Storage	Queue	Storage	Queue	Storage	Queue	Storage	Queue	Storage	Queue	Storage	Queue
9	LOVR/ Calle Joaquin	AM	260	38	260	23	100	72			120	64	120	25	130	71	130	34
		PM		32		29		87				74		56		66		86
10	LOVR/ US 101 SB Ramps	AM					190	227	TRAP	448			120	145	220	59		
		PM						211		272				142		101		
11	LOVR/ US 101 NB Ramps	AM	610	293	TRAP	262							130	172	400	155		
		PM		283		241								134		178		
12	LOVR/ S. Higuera	AM	200	41					TRAP	95	TRAP	271	100	89				
		PM		54						185		261		114				

1. Queueing estimates calculated using SimTraffic software and reported in feet. Values represent queues that would not be exceeded 95% of the time.
2. Queues that exceed available storage by at least one car length (25') are highlighted.
3. For purposes of this analysis, LOVR is considred the East-West street, with all cross streets considered the North-South Streets.

As shown above, queues exceed available turn pocket storage at the following locations:

- Int. #10: LOVR/U.S. 101 SB Ramps
  - SBL (AM)
  - EBR (AM)
- Int. #11: LOVR/U.S. 101 NB Ramps
  - EBR (AM)

Existing Plus Project Conditions

Traffic Volumes
Existing plus Project traffic volumes were developed by adding the FRSP project traffic to existing (2020) traffic volumes. Buildout of the FRSP development is expected to generate a total of 220 AM and 277 PM peak hour vehicle trips. Detailed project trip generation documentation is included in the FRSP TIS. Project traffic assignment is also summarized in Appendix B of this memorandum.

Intersection Levels of Service
Existing plus Project Conditions intersection levels of service are summarized in Table 3 below.

Table 2: Existing Plus Project Levels of Service

#	Intersection	Peak Hour	Existing		Existing + Project	
			Delay[1]	LOS	Delay[1]	LOS
9	LOVR/Calle Joaquin	AM	4.3	A	4.3	A
		PM	5.8	A	5.8	A
10	LOVR/US 101 SB Ramps	AM	11.1	B	10.9	B
		PM	10.4	B	10.8	B
11	LOVR/US 101 NB Ramps	AM	18.6	B	18.5	B
		PM	17.2	B	17.2	B
12	LOVR/S. Higuera	AM	14.2	B	14.8	B
		PM	22.8	C	24.4	C

1. HCM 6th Edition average control delay in seconds per vehicle (Synchro results)

As shown above, all intersections operate at acceptable LOS D or better for Existing plus Project conditions.

Intersection Queueing

Existing plus Project conditions 95th percentile vehicle queues are summarized below in Table 4.

Table 4: Existing Plus Project Queuing

#	Intersection	Peak Hour	NBL		NBR		SBL		SBR		EBL		EBR		WBL		WBR	
			Storage	Queue	Storage	Queue	Storage	Queue	Storage	Queue	Storage	Queue	Storage	Queue	Storage	Queue	Storage	Queue
9	LOVR/ Calle Joaquin	AM	260	37	260	18	100	73			120	52	120	29	130	55	130	29
		PM		33		30		86				80		97		85		95
10	LOVR/ US 101 SB Ramps	AM					190	229	TRAP	418			120	146	220	74		
		PM						211		310				134		109		
11	LOVR/ US 101 NB Ramps	AM	610	279	TRAP	241							130	183	400	148		
		PM		296		254								141		193		
12	LOVR/ S. Higuera	AM	200	54					TRAP	96	TRAP	293	100	102				
		PM		55						214		278		117				

1. Queueing estimates calculated using SimTraffic software and reported in feet. Values represent queues that would not be exceeded 95% of the time.
2. Queues that exceed available storage by at least one car length (25') are highlighted.
3. For purposes of this analysis, LOVR is considred the East-West street, with all cross streets considered the North-South Streets.

As shown above, queues exceed available turn pocket storage at the following locations:

- Int. #10: LOVR/U.S. 101 SB Ramps
  - SBL (AM)
  - EBR (AM)
- Int. #11: LOVR/U.S. 101 NB Ramps
  - EBR (AM)

At the LOVR/U.S. 101 SB Ramps intersection, addition of FRSP project traffic increases deficient queues at the SBL and EBR movements by a small amount (1-2 feet). At the LOVR/U.S. 101 NB Ramps intersection, project traffic increases the EBR queue by approximately 11 feet—less than one car length.

Near Term (2025) Conditions

Traffic Volumes

Near Term conditions represent conditions anticipated to exist at the time that the FRSP development could reasonably be constructed and occupied—assumed as year 2025 for the purposes of this analysis. Near Term traffic includes existing (2020) traffic levels with the addition of traffic added to the street network by other approved and pending development projects in the area. This volume set was derived by calculating the growth increment between the FRSP TIS's Existing and Near Term scenarios and adding that growth to the recently-collected 2020 traffic counts. Note that this is conservative, as some of the count growth is attributable to Near Term projects that have been occupied since the FRSP TIS was prepared.

Near Term volume projections include additional traffic from several major projects approved in recent years, including full build out of San Luis Ranch, Avila Ranch, the Orcutt Area (Righetti Ranch, Taylor Ranch, West Creek, etc.), Long-Bonetti Market, and the Coker/Ellsworth developments. Consistent with the Near Term Scenario 2 analysis assumptions from the FRSP, for the purposes of this study all Near Term traffic projections

conservatively assume that the Prado Interchange is not yet in place, reflecting a worst-case assumption in terms of traffic levels at the LOVR/U.S. 101 interchange.

Intersection Levels of Service
Near Term intersection levels of service are summarized in Table 5 below.

Table 5: Near Term Conditions Levels of Service

#	Intersection	Peak Hour	Delay[1]	LOS
9	LOVR/Calle Joaquin	AM	4.9	A
		PM	7.1	A
10	LOVR/US 101 SB Ramps	AM	11.8	B
		PM	12.6	B
11	LOVR/US 101 NB Ramps	AM	21.0	C
		PM	19.6	B
12	LOVR/S. Higuera	AM	24.3	C
		PM	53.9	D

1. HCM 6th Edition average control delay in seconds per vehicle (Synchro results)

As shown above, all intersections operate at acceptable LOS D or better for Near Term conditions.

Intersection Queueing
Near Term conditions 95th percentile vehicle queues are summarized below in Table 6.

Table 6: Near Term Conditions Queuing

#	Intersection	Peak Hour	NBL		NBR		SBL		SBR		EBL		EBR		WBL		WBR	
			Storage	Queue	Storage	Queue	Storage	Queue	Storage	Queue	Storage	Queue	Storage	Queue	Storage	Queue	Storage	Queue
9	LOVR/ Calle Joaquin	AM	260	46	260	40	100	76			120	60	120	55	130	80	130	33
		PM		51		64		88				130		124		105		119
10	LOVR/ US 101 SB Ramps	AM					190	226	TRAP	467			120	151	220	104		
		PM						230		407				133		162		
11	LOVR/ US 101 NB Ramps	AM	610	324	TRAP	288							130	188	400	159		
		PM		291		261								177		240		
12	LOVR/ S. Higuera	AM	200	105					TRAP	154	TRAP	880	100	166				
		PM		72						489		515		149				

1. Queueing estimates calculated using SimTraffic software and reported in feet. Values represent queues that would not be exceeded 95% of the time.
2. Queues that exceed available storage by at least one car length (25') are highlighted.
3. For purposes of this analysis, LOVR is considred the East-West street, with all cross streets considered the North-South Streets.

As shown above, queues exceed available turn pocket storage at the following locations:

- Int. #10: LOVR/U.S. 101 SB Ramps
  - SBL (AM & PM)
  - EBR (AM)
- Int. #11: LOVR/U.S. 101 NB Ramps
  - EBR (AM & PM)
- Int. #12: LOVR/S. Higuera
  - EBR (AM & PM)

Near Term Plus Project Conditions

Traffic Volumes
Near Term plus Project volumes were derived by adding the FRSP project traffic to baseline Near Term traffic levels.

Intersection Levels of Service
Near Term plus Project Conditions intersection levels of service are summarized in Table 7 below.

Table 7: Near Term Plus Project Levels of Service

#	Intersection	Peak Hour	Near Term		Near Term + Project	
			Delay[1]	LOS	Delay[1]	LOS
9	LOVR/Calle Joaquin	AM	4.9	A	4.9	A
		PM	7.1	A	7.2	A
10	LOVR/US 101 SB Ramps	AM	11.8	B	11.8	B
		PM	12.6	B	14.4	B
11	LOVR/US 101 NB Ramps	AM	21.0	C	21.1	C
		PM	19.6	B	19.8	B
12	LOVR/S. Higuera	AM	24.3	C	30.7	C
		PM	53.9	D	64.0	E

1. HCM 6th Edition average control delay in seconds per vehicle (Synchro results)
2. Highlighted locations exceed the City's minimum LOS standard.

As shown above, all intersections operate at acceptable LOS D or better for Near Term plus Project conditions, which the exception of the LOVR/S. Higuera intersection, which operates at unacceptable LOS E during the PM peak hour with the addition of the FRSP project. This would represent a potentially significant project-related impact.

Intersection Queueing
Near Term plus Project conditions 95th percentile vehicle queues are summarized below in Table 8.

Table 8: Near Term Plus Project Queuing

#	Intersection	Peak Hour	NBL		NBR		SBL		SBR		EBL		EBR		WBL		WBR	
			Storage	Queue	Storage	Queue	Storage	Queue	Storage	Queue	Storage	Queue	Storage	Queue	Storage	Queue	Storage	Queue
9	LOVR/ Calle Joaquin	AM	260	48	260	37	100	78			120	75	120	46	130	73	130	39
		PM		46		40		84				116		124		117		115
10	LOVR/ US 101 SB Ramps	AM					190	223	TRAP	540			120	145	220	123		
		PM						232		540				135		204		
11	LOVR/ US 101 NB Ramps	AM	610	372	TRAP	325							130	201	400	159		
		PM		331		284								188		259		
12	LOVR/ S. Higuera	AM	200	85					TRAP	166	TRAP	987	100	171				
		PM		81						564		773		158				

1. Queueing estimates calculated using SimTraffic software and reported in feet. Values represent queues that would not be exceeded 95% of the time.
2. Queues that exceed available storage by at least one car length (25') are highlighted.
3. For purposes of this analysis, LOVR is considred the East-West street, with all cross streets considered the North-South Streets.

As shown above, queues exceed available turn pocket storage at the following locations:

- Int. #10: LOVR/U.S. 101 SB Ramps
  - SBL (AM & PM)
  - EBR (AM)
- Int. #11: LOVR/U.S. 101 NB Ramps
  - EBR (AM & PM)

- Int. #12: LOVR/S. Higuera (AM & PM)

At the LOVR/U.S. 101 SB Ramps intersection, addition of FRSP project traffic causes deficient queues at the SBL and EBR movements to change by small amount (5 feet or less). At the LOVR/U.S. 101 NB Ramps intersection, project traffic increases the EBR queues by approximately 12-13 feet—less than one car length. At the LOVR/S. Higuera intersection, project traffic increases the EBR queues by a small amount (5-9 feet), also less than one car length.

Mitigation Analysis

Proposed Mitigation Measures
The San Luis Ranch development project was approved with a mitigation requirement to extend the storage length for the SB off-ramp shared through/left-turn lane to address queueing concerns. The proposed improvement would lengthen the off-ramp through/left-turn pocket to provide a 320-foot striped turn lane plus a 60-foot entry and sharp taper, which provides an effective storage capacity of nearly 380 feet. These improvement plans have been submitted to Caltrans and are currently under review.

The FRSP DEIR identified a similar mitigation measure at the LOVR/U.S. 101 SB Ramps intersection, requiring the FRSP project to contribute a fair share financial contribution towards the off-ramp capacity improvements to be constructed by the San Luis Ranch development. The DEIR also recommended that the FRSP project extend the EBR turn pocket length to provide additional queuing capacity for the LOVR to U.S. 101 On-Ramp right-turn movement. By reconstructing the southwest corner of this intersection to reduce the existing corner radii, the right-turn pocket could be striped at roughly 140-160 feet, with a usable storage length of approximately 210 feet before queues would begin to impede through traffic in the adjacent vehicle lane. In addition to these geometric improvements, the FRSP DEIR also recommended a mitigation measure requiring development of an optimized signal timing plan for the LOVR corridor to improve corridor-wide traffic operations.

As discussed previously, in addition to the mitigation measures identified in the FRSP DEIR, this supplemental analysis includes the additional measure agreed to by the City and Caltrans, which includes establishing traffic signal coordination between the LOVR/Calle Joaquin intersection and the adjacent Caltrans ramp intersections. In coordinating these signals, this analysis assumes that optimized timing plans would be implemented, with the following recommendations:

- Convert the westbound left-turn phase from LOVR to Calle Joaquin from “lead” to “lag” phasing.
- Operate a 75 second cycle length for the AM peak period coordinated timing plan, with a 65 second offset at the LOVR/Calle Joaquin intersection.
- Operate a 90 second cycle length for the PM peak period coordinated timing plan, with a 80 second offset at the LOVR/Calle Joaquin intersection.

Mitigated Existing Plus Project Conditions
Table 9 below summarizes the Existing plus Project intersection LOS, while Table 10 summarizes the Existing plus Project queuing results with addition of the abovementioned mitigation measures.

Table 9: Mitigated Existing Plus Project Levels of Service

#	Intersection	Peak Hour	Existing + Project		Mitigated Existing + Project	
			Delay[1]	LOS	Delay[1]	LOS
9	LOVR/Calle Joaquin	AM	4.3	A	11.1	B
		PM	5.8	A	19.7	B
10	LOVR/US 101 SB Ramps	AM	10.9	B	9.2	A
		PM	10.8	B	8.3	A
11	LOVR/US 101 NB Ramps	AM	18.5	B	16.0	B
		PM	17.2	B	15.9	B
12	LOVR/S. Higuera	AM	14.8	B	14.3	B
		PM	24.4	C	25.8	C

1. HCM 6th Edition average control delay in seconds per vehicle (Synchro results)

As shown above, with addition of the proposed mitigation measures, all study intersections operate at acceptable LOS D or better for Existing plus Project conditions.

Table 10: Mitigated Existing Plus Project Queuing

#	Intersection	Peak Hour	NBL		NBR		SBL		SBR		EBL		EBR		WBL		WBR	
			Storage	Queue	Storage	Queue	Storage	Queue	Storage	Queue	Storage	Queue	Storage	Queue	Storage	Queue	Storage	Queue
9	LOVR/ Calle Joaquin	AM	260	32	260	12	100	71			120	64	120	28	130	60	130	49
		PM		29		33		85				96		70		77		89
10	LOVR/ US 101 SB Ramps	AM					320	271	TRAP	149			140	165	220	55		
		PM						185		255				194		95		
11	LOVR/ US 101 NB Ramps	AM	610	258	TRAP	225							130	177	400	136		
		PM		284		249								126		183		
12	LOVR/ S. Higuera	AM	200	53					TRAP	80	TRAP	294	100	99				
		PM		56						618		267		104				

1. Queueing estimates calculated using SimTraffic software and reported in feet. Values represent queues that would not be exceeded 95% of the time.
2. Queues that exceed available storage by at least one car length (25') are highlighted.
3. For purposes of this analysis, LOVR is considred the East-West street, with all cross streets considered the North-South Streets.

As shown above, with mitigation, queues exceed available turn pocket storage at the following locations:

- Int. #10: LOVR/U.S. 101 SB Ramps
  - EBR (AM & PM)
- Int. #11: LOVR/U.S. 101 NB Ramps
  - EBR (AM)

At the LOVR/U.S. 101 SB Ramps intersection, addition of FRSP project traffic and mitigation improvements resolves the queueing deficiencies at the off-ramp approach. While the eastbound right-turn pocket (right-turn from LOVR to U.S. 101 SB on-ramp) queues will continue to exceed the striped turn pocket length, the effective turn pocket storage at this movement reaches approximately 210 feet with the recommended mitigation improvements required of the FRSP project. For this reason, this queueing impact is considered to be contextually less than significant with the proposed mitigation measures.

At the LOVR/U.S. 101 NB Ramps intersection, queues at the eastbound right-turn movement (LOVR to U.S. 101 NB on-ramp) will continue to exceed the striped turn pocket length. However, the effective turn pocket storage is approximately 175 feet. With addition of project traffic and the recommended mitigation improvements, the resulting queue length increases nominally (5 feet) compared to Existing Conditions without the FRSP project. Because the effective turn pocket storage can generally accommodate the peak queue estimate of 177

feet and the project traffic results in a nominal increase in queue lengths, this queuing impact is considered to be contextually less than significant with the proposed mitigation measures.

Mitigated Existing Plus Project Conditions

Table 11 below summarizes the Near Term plus Project intersection LOS, while Table 12 summarizes the Near Term plus Project queuing results with addition of the abovementioned mitigation measures.

Table 11: Mitigated Near Term Plus Project Levels of Service

#	Intersection	Peak Hour	Near Term + Project		Mitigated Near Term + Project	
			Delay[1]	LOS	Delay[1]	LOS
9	LOVR/Calle Joaquin	AM	4.9	A	13.1	B
		PM	7.2	A	31.9	C
10	LOVR/US 101 SB Ramps	AM	11.8	B	10.2	B
		PM	14.4	B	16.6	B
11	LOVR/US 101 NB Ramps	AM	21.1	C	20.3	C
		PM	19.8	B	20.4	C
12	LOVR/S. Higuera	AM	30.7	C	22.7	C
		PM	64.0	E	37.8	D

1. HCM 6th Edition average control delay in seconds per vehicle (Synchro results)
2. Highlighted locations exceed the City's minimum LOS standard.

As shown above, with addition of the proposed mitigation measures, including optimizing signal timings along the LOVR corridor, all study intersections operate at acceptable LOS D or better for Near Term plus Project Conditions.

Table 12: Mitigated Near Term Plus Project Queuing

#	Intersection	Peak Hour	NBL		NBR		SBL		SBR		EBL		EBR		WBL		WBR	
			Storage	Queue	Storage	Queue	Storage	Queue	Storage	Queue	Storage	Queue	Storage	Queue	Storage	Queue	Storage	Queue
9	LOVR/ Calle Joaquin	AM	260	29	260	25	100	84			120	101	120	76	130	86	130	91
		PM		47		46		87				129		107		115		122
10	LOVR/ US 101 SB Ramps	AM					320	200	TRAP	270			140	195	220	101		
		PM						252		344				206		242		
11	LOVR/ US 101 NB Ramps	AM	610	289	TRAP	250							130	127	400	174		
		PM		323		291								177		219		
12	LOVR/ S. Higuera	AM	200	59					TRAP	571	TRAP	254	100	107				
		PM		76						629		404		142				

1. Queueing estimates calculated using SimTraffic software and reported in feet. Values represent queues that would not be exceeded 95% of the time.
2. Queues that exceed available storage by at least one car length (25') are highlighted.
3. For purposes of this analysis, LOVR is considred the East-West street, with all cross streets considered the North-South Streets.

As shown above, with mitigation, queues exceed available turn pocket storage at the following locations:

- Int. #10: LOVR/U.S. 101 SB Ramps
  - EBR (AM & PM)
- Int. #11: LOVR/U.S. 101 NB Ramps
  - EBR (PM)
- Int. #12: LOVR/S. Higuera
  - EBR (PM)

At the LOVR/U.S. 101 SB Ramps intersection, addition of FRSP project traffic and mitigation improvements resolves the queueing deficiencies at the off-ramp approach. While the

eastbound right-turn pocket (right-turn from LOVR to U.S. 101 SB on-ramp) queues will continue to exceed the striped turn pocket length, the effective turn pocket storage at this movement reaches approximately 210 feet with the recommended mitigation improvements required of the FRSP project, which will functionally accommodate the peak right-turn queues. For this reason, this queueing impact is considered to be contextually less than significant with the proposed mitigation measures.

At the LOVR/U.S. 101 NB Ramps intersection, the AM peak hour queuing deficiency at the eastbound right-turn movement (LOVR to U.S. 101 NB on-ramp) is resolved with the proposed mitigation measures. However, the queue at this movement will continue to exceed the striped turn pocket length during the PM peak hour. The effective turn pocket storage at this movement reaches approximately 175 feet before queues would begin to impede through traffic in the adjacent vehicle lane. With addition of project traffic and the recommended mitigation improvements, the resulting queue length is reduced to the same level as Near Term Conditions without the FRSP project. Because the effective turn pocket storage can generally accommodate the peak queue estimate of 177 feet and the project traffic results in a nominal increase in queue lengths, this queuing impact is considered to be contextually less than significant with the proposed mitigation measures.

At the LOVR/S. Higuera intersection, the AM peak hour queuing deficiency at the eastbound right-turn movement (LOVR to SB S. Higuera) is resolved with the proposed mitigation measures. The PM peak hour queue for this movement is projected to continue to exceed the available turn pocket storage by a little less than two car lengths (44 feet); however, because the proposed mitigation measures reduce the queue length to less than “before project” conditions, this queuing impact is considered to be less than significant with the proposed mitigation measures.

CONCLUSIONS

With coordination of the LOVR/Calle Joaquin signal with the adjacent U.S. 101 Ramps intersections, as well as the turn pocket capacity improvements and LOVR corridor signal timing improvements identified in the FRSP DEIR transportation mitigations, operations at the LOVR/U.S. 101 interchange will be improved and peak hour queues at the SB off-ramp are expected to remain within the available turn pocket storage. The FRSP Final EIR should include revised mitigation language to require coordination of these three closely-spaced traffic signals. Based on the supplemental traffic analysis presented herein, which includes volume adjustments to reflect current (2020) baseline traffic volumes, no additional transportation impacts or mitigation measures are required for inclusion in the FRSP Final EIR.

Attachments:

A – Traffic Counts and Queue Observations
B – Peak Hour Volumes
C – Synchro LOS Analysis Output Sheets
D – SimTraffic Queuing Analysis Output Sheets

Attachment A:
Traffic Counts and Queue Observations

Metro Traffic Data Inc.
310 N. Irwin Street - Suite 20
Hanford, CA 93230

800-975-6938 Phone/Fax
www.metrotrafficdata.com

Turning Movement Report

Prepared For:
City of San Luis Obispo
919 Palm Street
San Luis Obispo, CA 93401

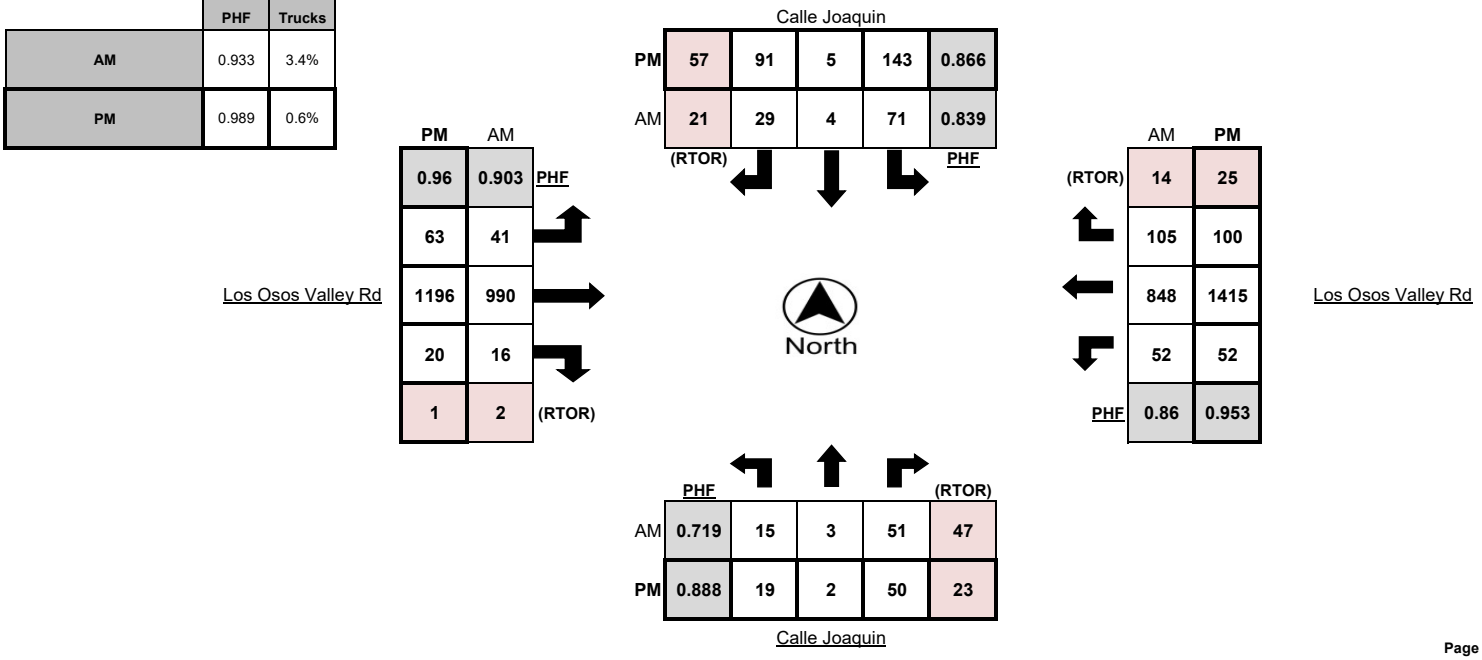
LOCATION LOVR @ Calle Joaquin
LATITUDE 35.2467
COUNTY San Luis Obispo
LONGITUDE -120.6831
COLLECTION DATE Tuesday, February 25, 2020
WEATHER Clear

	Northbound					Southbound					Eastbound					Westbound				
Time	**Left**	**Thru**	**Right**	**(RTOR)**	**Trucks**	**Left**	**Thru**	**Right**	**(RTOR)**	**Trucks**	**Left**	**Thru**	**Right**	**(RTOR)**	**Trucks**	**Left**	**Thru**	**Right**	**(RTOR)**	**Trucks**
7:00 AM - 7:15 AM	2	1	9	9	3	5	1	3	3	0	5	153	0	0	2	1	134	19	3	7
7:15 AM - 7:30 AM	3	1	16	16	0	12	1	9	9	0	8	185	10	3	3	12	150	23	5	7
7:30 AM - 7:45 AM	4	0	13	13	2	21	0	6	4	0	8	228	3	0	7	11	215	21	2	10
7:45 AM - 8:00 AM	6	2	16	16	0	16	2	9	6	1	8	240	5	1	9	17	239	36	7	15
8:00 AM - 8:15 AM	3	0	11	7	1	16	0	3	2	0	13	248	4	1	5	9	206	26	5	10
8:15 AM - 8:30 AM	2	1	11	11	0	18	2	11	9	1	12	274	4	0	6	15	188	22	0	8
8:30 AM - 8:45 AM	4	0	9	6	0	30	0	9	6	2	9	207	3	0	5	13	199	36	8	14
8:45 AM - 9:00 AM	3	0	13	12	1	22	0	11	9	1	13	254	7	1	12	11	216	36	2	10
TOTAL	**27**	**5**	**98**	**90**	**7**	**140**	**6**	**61**	**48**	**5**	**76**	**1789**	**36**	**6**	**49**	**89**	**1547**	**219**	**32**	**81**

	Northbound					Southbound					Eastbound					Westbound				
Time	**Left**	**Thru**	**Right**	**(RTOR)**	**Trucks**	**Left**	**Thru**	**Right**	**(RTOR)**	**Trucks**	**Left**	**Thru**	**Right**	**(RTOR)**	**Trucks**	**Left**	**Thru**	**Right**	**(RTOR)**	**Trucks**
4:00 PM - 4:15 PM	5	1	8	5	1	35	3	32	22	1	11	319	3	0	11	9	361	20	4	2
4:15 PM - 4:30 PM	1	1	12	8	0	22	1	19	15	0	13	309	9	1	3	15	343	22	6	3
4:30 PM - 4:45 PM	3	0	12	8	0	28	0	20	14	1	18	288	5	0	2	15	372	24	5	5
4:45 PM - 5:00 PM	7	1	12	6	0	41	3	25	16	0	18	286	5	0	3	7	362	23	5	0
5:00 PM - 5:15 PM	2	1	15	4	0	41	1	24	17	0	15	314	4	0	2	15	340	26	8	3
5:15 PM - 5:30 PM	7	0	11	5	0	33	1	22	10	0	12	308	6	1	2	15	341	27	7	2
5:30 PM - 5:45 PM	4	1	14	9	0	35	0	22	6	0	12	285	8	0	1	21	353	18	8	3
5:45 PM - 6:00 PM	1	2	8	5	0	36	1	20	9	0	13	250	9	5	2	19	292	11	4	4
TOTAL	**30**	**7**	**92**	**50**	**1**	**271**	**10**	**184**	**109**	**2**	**112**	**2359**	**49**	**7**	**26**	**116**	**2764**	**171**	**47**	**22**

	Northbound					Southbound					Eastbound					Westbound				
PEAK HOUR	**Left**	**Thru**	**Right**	**(RTOR)**	**Trucks**	**Left**	**Thru**	**Right**	**(RTOR)**	**Trucks**	**Left**	**Thru**	**Right**	**(RTOR)**	**Trucks**	**Left**	**Thru**	**Right**	**(RTOR)**	**Trucks**
7:30 AM - 8:30 AM	15	3	51	47	3	71	4	29	21	2	41	990	16	2	27	52	848	105	14	43
4:30 PM - 5:30 PM	19	2	50	23	0	143	5	91	57	1	63	1196	20	1	9	52	1415	100	25	10

	PHF	Trucks
AM	0.933	3.4%
PM	0.989	0.6%



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Turning Movement Report

Prepared For:

City of San Luis Obispo
919 Palm Street
San Luis Obispo, CA 93401

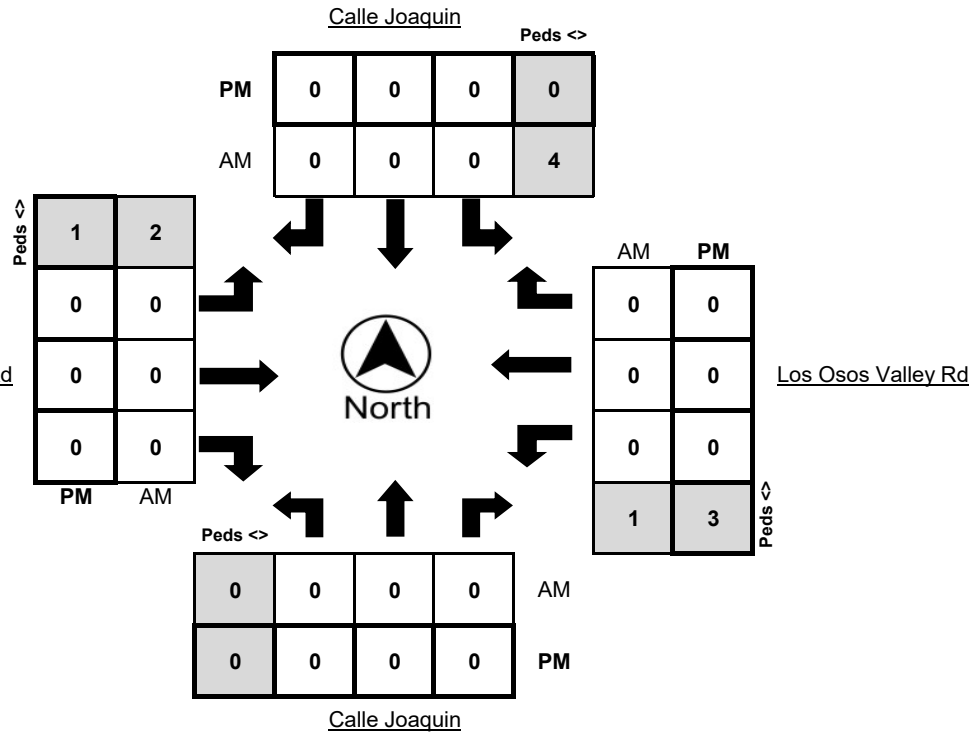
LOCATION LOVR @ Calle Joaquin
LATITUDE 35.2467
COUNTY San Luis Obispo
LONGITUDE -120.6831
COLLECTION DATE Tuesday, February 25, 2020
WEATHER Clear

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
7:00 AM - 7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM - 7:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
7:30 AM - 7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:45 AM - 8:00 AM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM - 8:15 AM	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0
8:15 AM - 8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM - 8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM - 9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**2**

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
4:00 PM - 4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM - 4:30 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM - 4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0
5:00 PM - 5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM - 5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM - 5:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
5:45 PM - 6:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**3**

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
PEAK HOUR	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
7:30 AM - 8:30 AM	0	0	0	4	0	0	0	0	0	0	0	1	0	0	0	2
4:30 PM - 5:30 PM	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1

	Bikes	Peds
AM Peak Total	0	7
PM Peak Total	0	4



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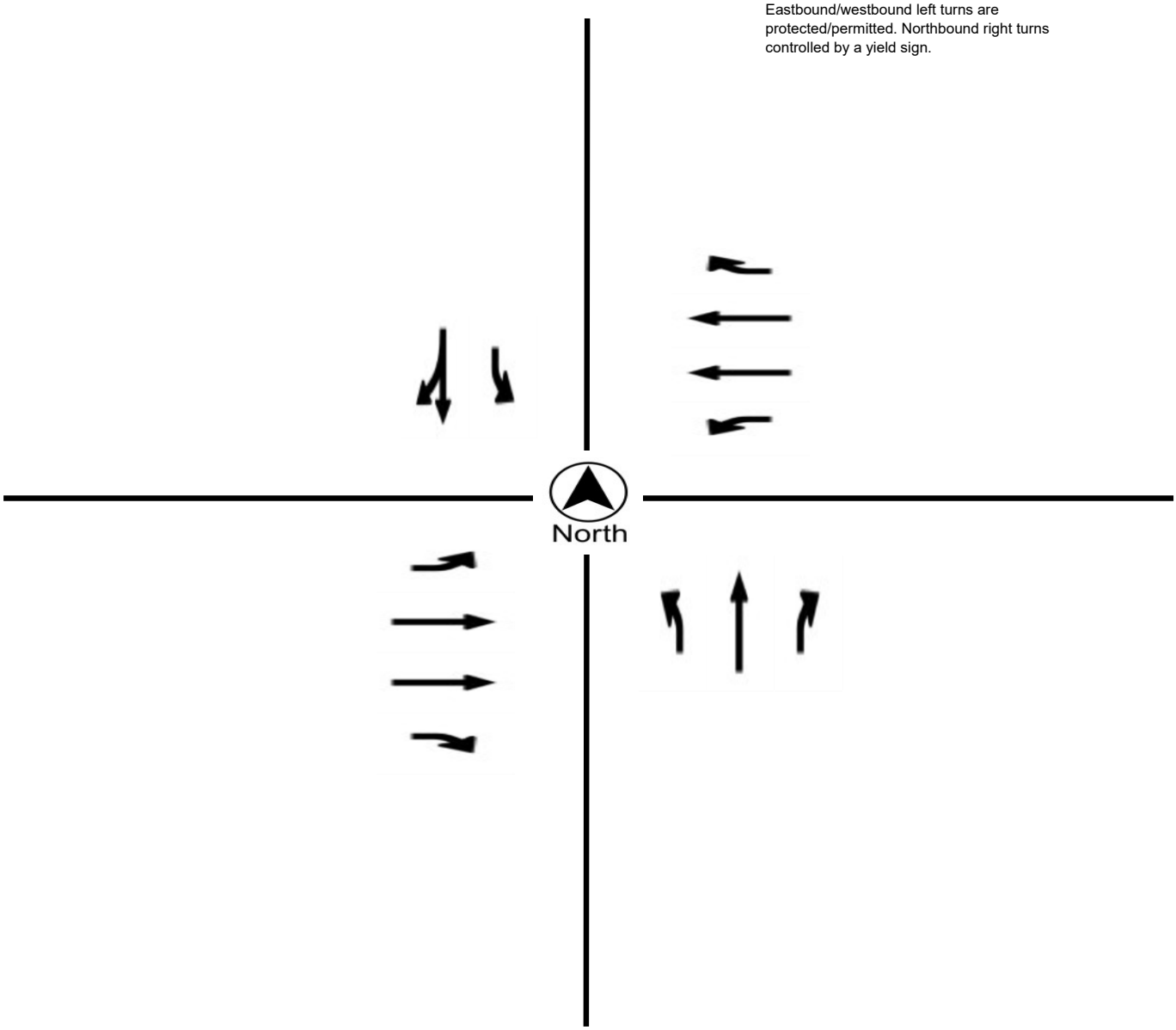
Turning Movement Report

Prepared For:

City of San Luis Obispo
919 Palm Street
San Luis Obispo, CA 93401

LOCATION	LOVR @ Calle Joaquin	**N/S STREET**	Calle Joaquin
COUNTY	San Luis Obispo	**E/W STREET**	Los Osos Valley Rd
COLLECTION DATE	Tuesday, February 25, 2020	**WEATHER**	Clear
CYCLE TIME	91 Seconds	**CONTROL TYPE**	Signal

COMMENTS Northbound/southbound left turns are permitted. Eastbound/westbound left turns are protected/permitted. Northbound right turns controlled by a yield sign.



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Turning Movement Report

Prepared For:
City of San Luis Obispo
919 Palm Street
San Luis Obispo, CA 93401

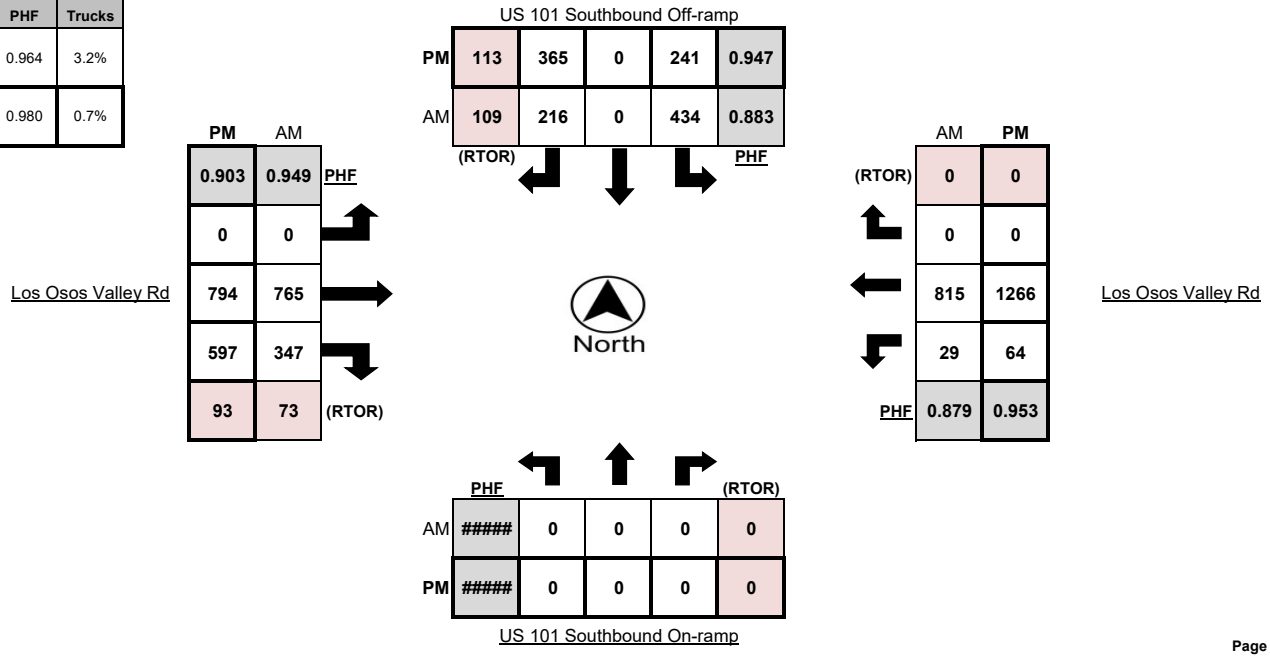
LOCATION LOVR @ 101 Southbound Ramps
LATITUDE 35.2459
COUNTY San Luis Obispo
LONGITUDE -120.6827
COLLECTION DATE Tuesday, February 25, 2020
WEATHER Clear

	Northbound					Southbound					Eastbound					Westbound				
Time	Left	Thru	Right	(RTOR)	Trucks	Left	Thru	Right	(RTOR)	Trucks	Left	Thru	Right	(RTOR)	Trucks	Left	Thru	Right	(RTOR)	Trucks
7:00 AM - 7:15 AM	0	0	0	0	0	70	2	23	15	6	0	114	69	24	7	2	138	0	0	5
7:15 AM - 7:30 AM	0	0	0	0	0	76	0	43	30	4	0	108	97	12	3	4	147	0	0	4
7:30 AM - 7:45 AM	0	0	0	0	0	89	0	39	18	2	0	162	94	19	7	7	233	0	0	16
7:45 AM - 8:00 AM	0	0	0	0	0	118	0	66	27	3	0	199	73	19	7	7	213	0	0	12
8:00 AM - 8:15 AM	0	0	0	0	0	103	0	51	26	3	0	205	88	20	6	5	203	0	0	8
8:15 AM - 8:30 AM	0	0	0	0	0	124	0	60	38	5	0	199	92	15	8	10	166	0	0	6
8:30 AM - 8:45 AM	0	0	0	0	0	94	0	47	25	5	0	176	69	9	5	9	208	0	0	15
8:45 AM - 9:00 AM	0	0	0	0	0	84	0	67	34	3	0	200	78	16	14	12	206	0	0	13
TOTAL	**0**	**0**	**0**	**0**	**0**	**758**	**2**	**396**	**213**	**31**	**0**	**1363**	**660**	**134**	**57**	**56**	**1514**	**0**	**0**	**79**

	Northbound					Southbound					Eastbound					Westbound				
Time	Left	Thru	Right	(RTOR)	Trucks	Left	Thru	Right	(RTOR)	Trucks	Left	Thru	Right	(RTOR)	Trucks	Left	Thru	Right	(RTOR)	Trucks
4:00 PM - 4:15 PM	0	0	0	0	0	70	0	103	31	3	0	211	158	28	13	10	295	0	0	3
4:15 PM - 4:30 PM	0	0	0	0	0	53	0	107	30	0	0	195	152	20	2	20	313	0	0	5
4:30 PM - 4:45 PM	0	0	0	0	0	66	0	91	31	2	0	183	145	24	3	14	335	0	0	3
4:45 PM - 5:00 PM	0	0	0	0	0	65	0	81	31	2	0	193	138	25	2	14	313	0	0	0
5:00 PM - 5:15 PM	0	0	0	0	0	57	0	86	21	1	0	223	162	24	2	16	305	0	0	1
5:15 PM - 5:30 PM	0	0	0	0	0	72	0	81	25	2	0	200	148	17	2	17	304	0	0	0
5:30 PM - 5:45 PM	0	0	0	0	0	51	0	81	12	2	0	200	147	39	1	18	306	0	0	6
5:45 PM - 6:00 PM	0	0	0	0	0	49	0	58	20	2	0	143	130	22	2	17	261	0	0	3
TOTAL	**0**	**0**	**0**	**0**	**0**	**483**	**0**	**688**	**201**	**14**	**0**	**1548**	**1180**	**199**	**27**	**126**	**2432**	**0**	**0**	**21**

	Northbound					Southbound					Eastbound					Westbound				
PEAK HOUR	Left	Thru	Right	(RTOR)	Trucks	Left	Thru	Right	(RTOR)	Trucks	Left	Thru	Right	(RTOR)	Trucks	Left	Thru	Right	(RTOR)	Trucks
7:30 AM - 8:30 AM	0	0	0	0	0	434	0	216	109	13	0	765	347	73	28	29	815	0	0	42
4:15 PM - 5:15 PM	0	0	0	0	0	241	0	365	113	5	0	794	597	93	9	64	1266	0	0	9

	PHF	Trucks
AM	0.964	3.2%
PM	0.980	0.7%



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Turning Movement Report

Prepared For:

City of San Luis Obispo
919 Palm Street
San Luis Obispo, CA 93401

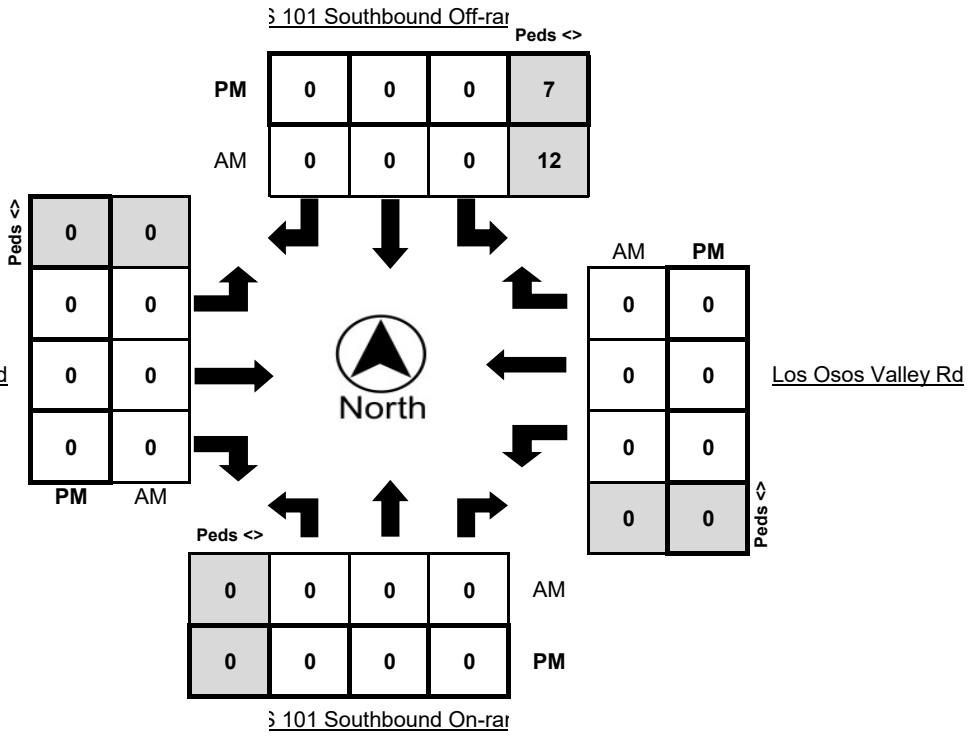
LOCATION LOVR @ 101 Southbound Ramps
LATITUDE 35.2459
COUNTY San Luis Obispo
LONGITUDE -120.6827
COLLECTION DATE Tuesday, February 25, 2020
WEATHER Clear

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
7:00 AM - 7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM - 7:30 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM - 7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM - 8:00 AM	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM - 8:15 AM	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM - 8:30 AM	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM - 8:45 AM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM - 9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	**0**	**0**	**0**	**15**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
4:00 PM - 4:15 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM - 4:30 PM	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM - 4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM - 5:00 PM	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM - 5:15 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM - 5:30 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM - 5:45 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM - 6:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	**0**	**0**	**0**	**11**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
PEAK HOUR	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
7:30 AM - 8:30 AM	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM - 5:15 PM	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0

	Bikes	Peds
AM Peak Total	0	12
PM Peak Total	0	7



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Turning Movement Report

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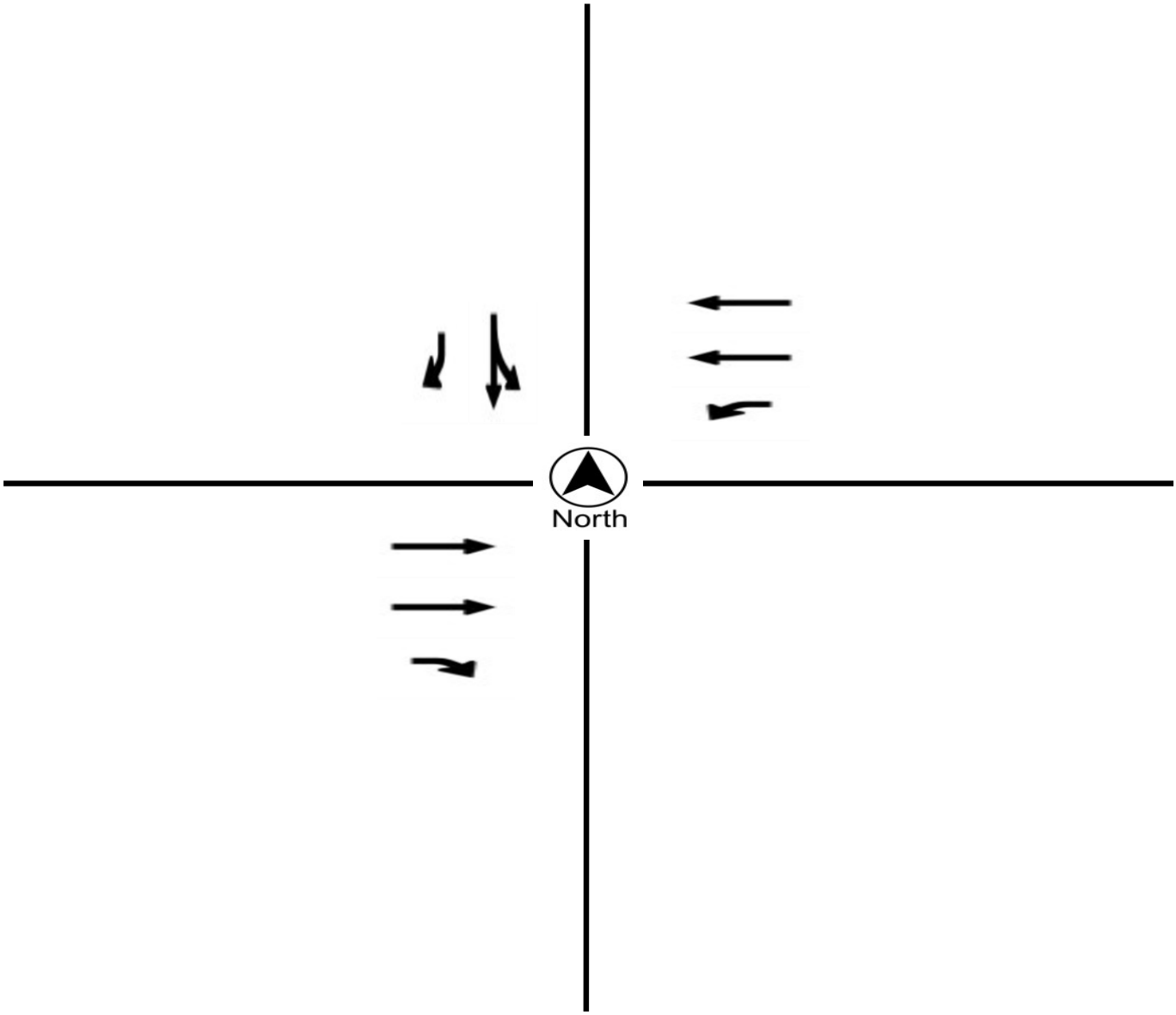
919 Palm Street
San Luis Obispo, CA 93401

LOCATION	LOVR @ 101 Southbound Ramps	**N/S STREET**	US 101 Southbound Ramps
COUNTY	San Luis Obispo	**E/W STREET**	Los Osos Valley Rd
COLLECTION DATE	Tuesday, February 25, 2020	**WEATHER**	Clear
CYCLE TIME	87 Seconds	**CONTROL TYPE**	Signal

COMMENTS Westbound left turns are protected.



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San Luis Obispo, CA 93401

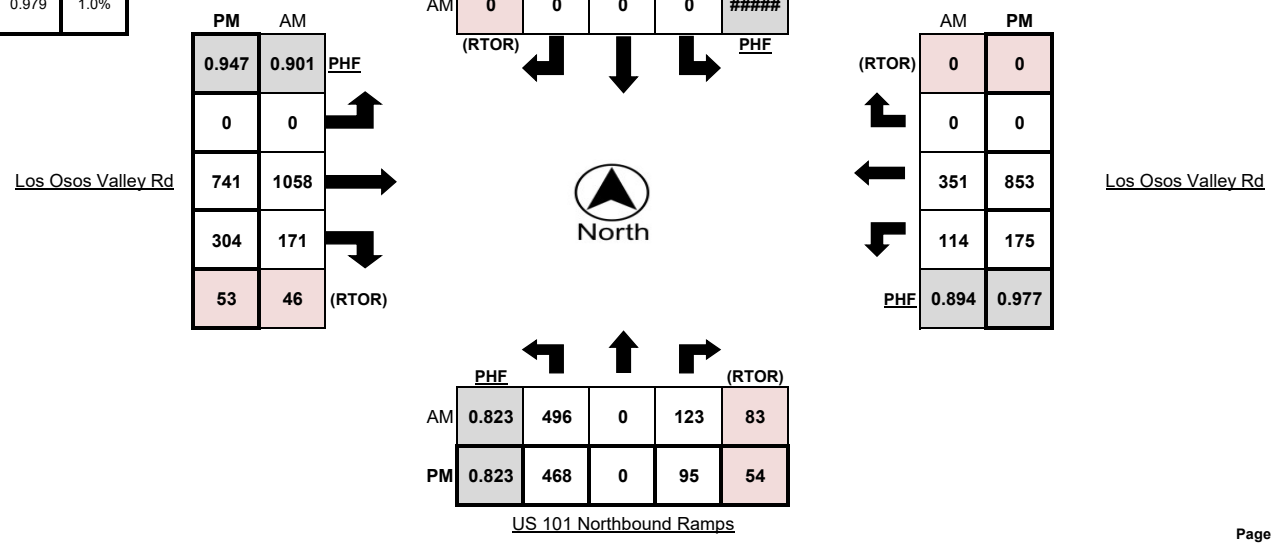
LOCATION LOVR @ 101 Northbound Ramps
LATITUDE 35.2434
COUNTY San Luis Obispo
LONGITUDE -120.6816
COLLECTION DATE Tuesday, February 25, 2020
WEATHER Clear

	Northbound					Southbound					Eastbound					Westbound				
Time	Left	Thru	Right	(RTOR)	Trucks	Left	Thru	Right	(RTOR)	Trucks	Left	Thru	Right	(RTOR)	Trucks	Left	Thru	Right	(RTOR)	Trucks
7:00 AM - 7:15 AM	90	0	41	25	5	0	0	0	0	0	0	126	17	7	8	16	46	0	0	7
7:15 AM - 7:30 AM	96	0	27	22	5	0	0	0	0	0	0	185	26	12	4	18	61	0	0	5
7:30 AM - 7:45 AM	159	0	29	20	7	0	0	0	0	0	0	201	50	11	5	33	76	0	0	7
7:45 AM - 8:00 AM	125	0	28	23	7	0	0	0	0	0	0	291	43	14	8	28	102	0	0	4
8:00 AM - 8:15 AM	123	0	29	19	7	0	0	0	0	0	0	262	41	13	7	25	83	0	0	7
8:15 AM - 8:30 AM	89	0	37	21	4	0	0	0	0	0	0	304	37	8	7	28	90	0	0	6
8:30 AM - 8:45 AM	106	0	31	26	9	0	0	0	0	0	0	214	48	9	7	25	105	0	0	10
8:45 AM - 9:00 AM	127	0	36	23	6	0	0	0	0	0	0	229	49	6	8	26	94	0	0	7
TOTAL	**915**	**0**	**258**	**179**	**50**	**0**	**0**	**0**	**0**	**0**	**0**	**1812**	**311**	**80**	**54**	**199**	**657**	**0**	**0**	**53**

	Northbound					Southbound					Eastbound					Westbound				
Time	Left	Thru	Right	(RTOR)	Trucks	Left	Thru	Right	(RTOR)	Trucks	Left	Thru	Right	(RTOR)	Trucks	Left	Thru	Right	(RTOR)	Trucks
4:00 PM - 4:15 PM	123	0	20	16	0	0	0	0	0	0	0	199	94	25	6	40	186	0	0	8
4:15 PM - 4:30 PM	121	0	13	8	5	0	0	0	0	0	0	187	65	15	3	39	200	0	0	2
4:30 PM - 4:45 PM	142	0	29	21	3	0	0	0	0	0	0	168	71	12	4	52	211	0	0	4
4:45 PM - 5:00 PM	117	0	22	14	0	0	0	0	0	0	0	182	82	16	5	39	214	0	0	0
5:00 PM - 5:15 PM	112	0	25	11	1	0	0	0	0	0	0	189	77	15	1	48	208	0	0	2
5:15 PM - 5:30 PM	97	0	19	8	0	0	0	0	0	0	0	202	74	10	3	36	220	0	0	4
5:30 PM - 5:45 PM	129	0	16	11	1	0	0	0	0	0	0	150	79	19	2	44	194	0	0	2
5:45 PM - 6:00 PM	94	0	20	11	0	0	0	0	0	0	0	145	72	11	2	36	184	0	0	1
TOTAL	**935**	**0**	**164**	**100**	**10**	**0**	**0**	**0**	**0**	**0**	**0**	**1422**	**614**	**123**	**26**	**334**	**1617**	**0**	**0**	**23**

	Northbound					Southbound					Eastbound					Westbound				
PEAK HOUR	Left	Thru	Right	(RTOR)	Trucks	Left	Thru	Right	(RTOR)	Trucks	Left	Thru	Right	(RTOR)	Trucks	Left	Thru	Right	(RTOR)	Trucks
7:30 AM - 8:30 AM	496	0	123	83	25	0	0	0	0	0	0	1058	171	46	27	114	351	0	0	24
4:30 PM - 5:30 PM	468	0	95	54	4	0	0	0	0	0	0	741	304	53	13	175	853	0	0	10

	PHF	Trucks
AM	0.937	3.3%
PM	0.979	1.0%



Metro Traffic Data Inc.
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Turning Movement Report

Prepared For:

City of San Luis Obispo
919 Palm Street
San Luis Obispo, CA 93401

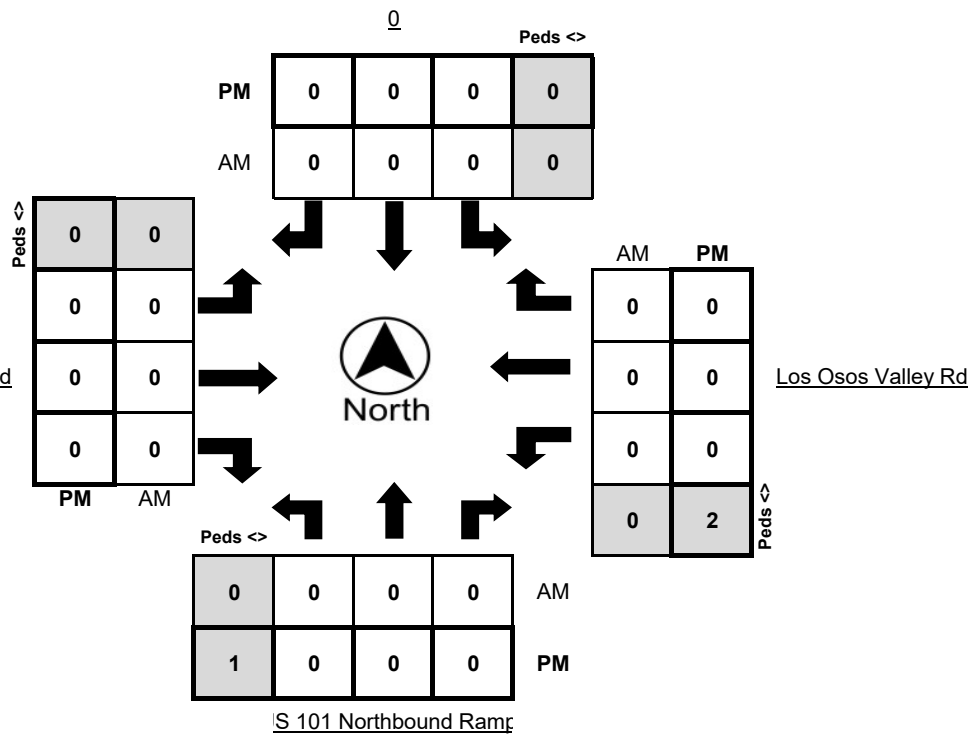
LOCATION LOVR @ 101 Northbound Ramps
LATITUDE 35.2434
COUNTY San Luis Obispo
LONGITUDE -120.6816
COLLECTION DATE Tuesday, February 25, 2020
WEATHER Clear

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
7:00 AM - 7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM - 7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM - 7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM - 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM - 8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM - 8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM - 8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM - 9:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
4:00 PM - 4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM - 4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM - 4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
4:45 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0
5:00 PM - 5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM - 5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM - 5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM - 6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**

	Northbound Bikes			N.Leg	Southbound Bikes			S.Leg	Eastbound Bikes			E.Leg	Westbound Bikes			W.Leg
PEAK HOUR	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
7:30 AM - 8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM - 5:30 PM	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	0

	Bikes	Peds
AM Peak Total	0	0
PM Peak Total	0	3



Metro Traffic Data Inc.
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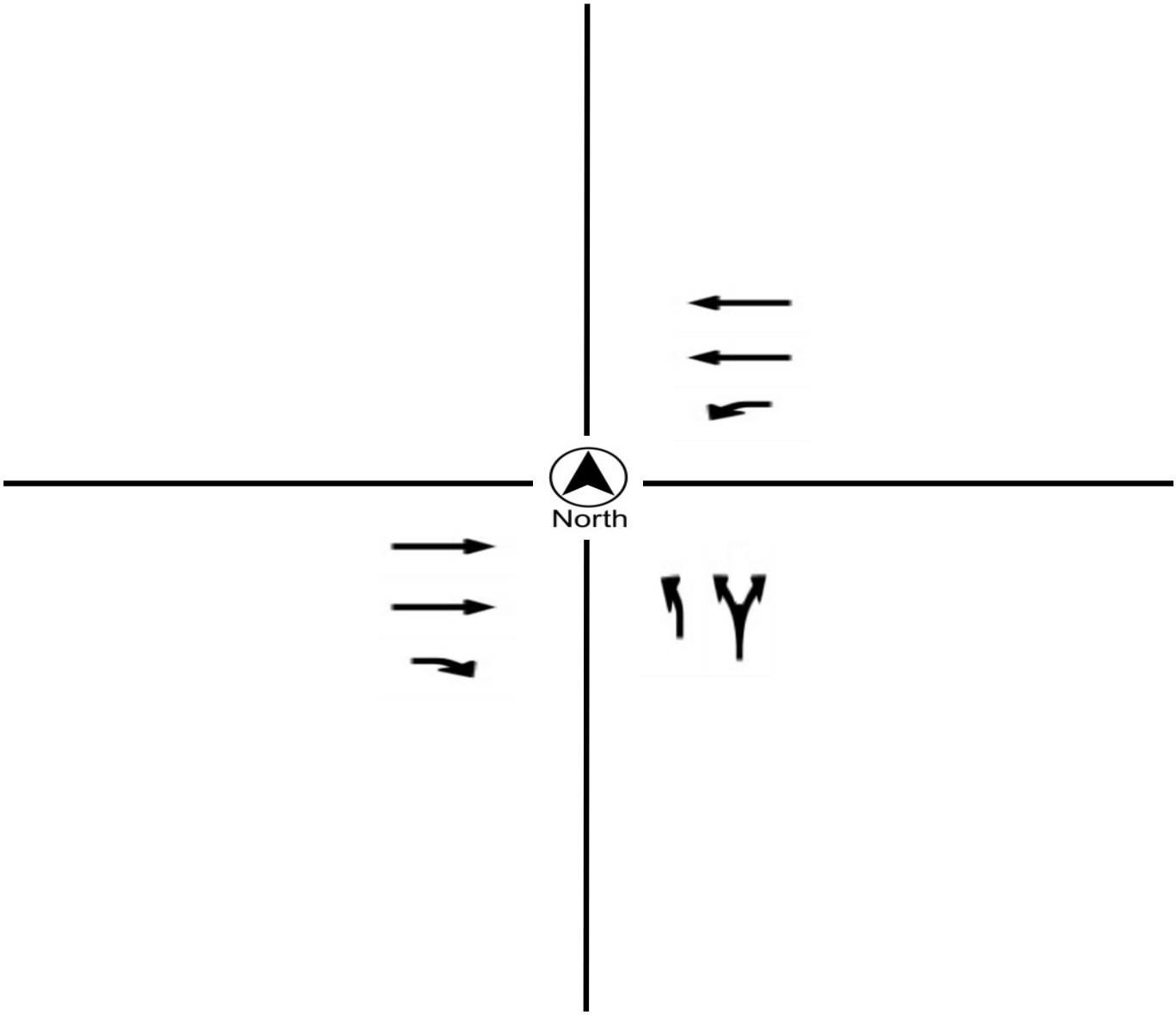
Turning Movement Report

Prepared For:

City of San Luis Obispo
919 Palm Street
San Luis Obispo, CA 93401

LOCATION	LOVR @ 101 Northbound Ramps	**N/S STREET**	US 101 Northbound Ramps
COUNTY	San Luis Obispo	**E/W STREET**	Los Osos Valley Rd
COLLECTION DATE	Tuesday, February 25, 2020	**WEATHER**	Clear
CYCLE TIME	99 Seconds	**CONTROL TYPE**	Signal

COMMENTS Westbound left turns are protected.



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Hanford, CA 93230

800-975-6938 Phone/Fax
www.metrotrafficdata.com

Approach Queue Report

Prepared For:

City of San Luis Obispo
919 Palm Street
San Luis Obispo, CA 93401

LOCATION US 101 Southbound Offramp @ LOVR
LATITUDE 35.2459
COUNTY San Luis Obispo
LONGITUDE -120.6827
COLLECTION DATE Tuesday, February 25, 2020
WEATHER Clear

Vehicles in Queue: AM

Time	Left	Right	Queue Cleared?
7:01 AM	4	1	Yes
7:03 AM	6	1	Yes
7:04 AM	6	-	Yes
7:06 AM	6	-	Yes
7:07 AM	5	-	Yes
7:09 AM	4	1	Yes
7:10 AM	6	-	Yes
7:12 AM	5	-	Yes
7:13 AM	4	-	Yes
7:15 AM	4	1	Yes
7:16 AM	6	-	Yes
7:18 AM	10	2	Yes
7:19 AM	7	-	Yes
7:21 AM	5	-	Yes
7:22 AM	3	-	Yes
7:24 AM	10	-	Yes
7:25 AM	12	-	Yes
7:27 AM	7	-	Yes
7:28 AM	6	-	Yes
7:30 AM	6	-	Yes
7:31 AM	6	-	Yes
7:33 AM	4	-	Yes
7:34 AM	7	-	Yes
7:26 AM	6	-	Yes
7:37 AM	5	5	Yes
7:39 AM	8	-	Yes
7:41 AM	12	-	Yes
7:42 AM	9	-	Yes
7:44 AM	11	1	Yes
7:45 AM	9	-	Yes
7:47 AM	12	-	Yes
7:49 AM	16	-	Yes
7:50 AM	11	2	Yes
7:52 AM	8	-	Yes
7:54 AM	**16**	**-**	**No**
7:55 AM	**26**	**-**	**No**
7:56 AM	**18**	**-**	**No**
7:58 AM	**13**	**-**	**No**
8:00 AM	**18**	**-**	**No**
8:01 AM	**15**	**-**	**No**
8:03 AM	11	-	Yes
8:04 AM	**19**	**4**	**No**
8:06 AM	13	-	Yes
8:07 AM	10	-	Yes
8:09 AM	9	-	Yes
8:11 AM	2	-	Yes
8:12 AM	1	1	Yes
8:14 AM	6	2	Yes
8:15 AM	10	-	Yes
8:17 AM	11	-	Yes
8:19 AM	13	-	Yes
8:20 AM	**13**	**2**	**No**
8:22 AM	14	4	Yes
8:23 AM	13	-	Yes
8:25 AM	4	-	Yes
8:26 AM	13	1	Yes
8:28 AM	12	-	Yes
8:30 AM	7	-	Yes
8:31 AM	4	-	Yes
8:33 AM	8	-	Yes
8:34 AM	7	4	Yes
8:36 AM	12	1	Yes
8:37 AM	4	-	Yes
8:39 AM	2	-	Yes
8:41 AM	8	-	Yes
8:42 AM	11	1	Yes
8:44 AM	5	-	Yes
8:45 AM	6	-	Yes
8:47 AM	10	2	Yes
8:49 AM	5	3	Yes
8:50 AM	2	2	Yes
8:52 AM	9	4	Yes
8:53 AM	5	-	Yes
8:55 AM	**15**	**3**	**No**
8:57 AM	5	2	Yes
8:58 AM	5	1	Yes
9:00 AM	6	1	Yes

Vehicles in Queue: Mid-day

Time	Left	Right	Queue Cleared?
11:00 AM	1	1	Yes
11:01 AM	1	3	Yes
11:03 AM	5	3	Yes
11:04 AM	5	5	Yes
11:06 AM	5	2	Yes
11:07 AM	0	4	Yes
11:09 AM	3	4	Yes
11:10 AM	4	5	Yes
11:12 AM	5	-	Yes
11:13 AM	4	2	Yes
11:15 AM	4	3	Yes
11:16 AM	7	3	Yes
11:18 AM	4	3	Yes
11:19 AM	4	5	Yes
11:21 AM	2	4	Yes
11:22 AM	4	3	Yes
11:24 AM	7	-	Yes
11:25 AM	7	3	Yes
11:27 AM	6	4	Yes
11:28 AM	8	4	Yes
11:30 AM	5	2	Yes
11:31 AM	5	5	Yes
11:32 AM	9	4	Yes
11:34 AM	7	8	Yes
11:36 AM	3	1	Yes
11:37 AM	2	3	Yes
11:39 AM	6	7	Yes
11:40 AM	5	8	Yes
11:42 AM	2	5	Yes
11:43 AM	5	-	Yes
11:45 AM	5	1	Yes
11:46 AM	6	1	Yes
11:47 AM	3	1	Yes
11:49 AM	5	4	Yes
11:51 AM	6	-	Yes
11:52 AM	10	4	Yes
11:54 AM	4	8	Yes
11:55 AM	8	1	Yes
11:57 AM	5	3	Yes
11:58 AM	4	1	Yes
12:00 PM	5	3	Yes
12:01 PM	9	-	Yes
12:03 PM	5	3	Yes
12:04 PM	4	1	Yes
12:06 PM	6	4	Yes
12:07 PM	1	9	Yes
12:09 PM	2	1	Yes
12:10 PM	3	2	Yes
12:12 PM	2	8	Yes
12:13 PM	8	4	Yes
12:15 PM	7	1	Yes
12:16 PM	6	4	Yes
12:18 PM	2	4	Yes
12:19 PM	4	6	Yes
12:21 PM	3	7	Yes
12:22 PM	5	3	Yes
12:24 PM	2	-	Yes
12:25 PM	7	3	Yes
12:27 PM	3	2	Yes
12:28 PM	6	2	Yes
12:30 PM	9	-	Yes
12:31 PM	3	7	Yes
12:33 PM	7	4	Yes
12:34 PM	5	2	Yes
12:36 PM	6	4	Yes
12:37 PM	10	9	Yes
12:39 PM	1	-	Yes
12:40 PM	3	-	Yes
12:42 PM	5	3	Yes
12:43 PM	7	7	Yes
12:45 PM	5	5	Yes
12:46 PM	4	2	Yes
12:48 PM	7	1	Yes
12:49 PM	2	-	Yes
12:51 PM	1	3	Yes
12:52 PM	5	1	Yes
12:54 PM	3	3	Yes
12:55 PM	4	3	Yes
12:57 PM	5	2	Yes
12:58 PM	4	-	Yes
1:00 PM	6	-	Yes

Vehicles in Queue: PM

Time	Left	Right	Queue Cleared?
4:00 PM	5	9	Yes
4:01 PM	6	2	Yes
4:03 PM	11	6	Yes
4:05 PM	11	5	Yes
4:06 PM	6	5	Yes
4:08 PM	5	6	Yes
4:10 PM	2	9	Yes
4:11 PM	3	5	Yes
4:13 PM	5	2	Yes
4:15 PM	5	1	Yes
4:16 PM	5	5	Yes
4:18 PM	1	7	Yes
4:20 PM	3	2	Yes
4:21 PM	5	8	Yes
4:23 PM	7	6	Yes
4:25 PM	5	2	Yes
4:26 PM	5	6	Yes
4:28 PM	4	3	Yes
4:30 PM	8	6	Yes
4:31 PM	5	1	Yes
4:33 PM	8	2	Yes
4:35 PM	4	1	Yes
4:36 PM	4	3	Yes
4:38 PM	8	1	Yes
4:40 PM	6	2	Yes
4:41 PM	5	6	Yes
4:43 PM	8	4	Yes
4:45 PM	5	-	Yes
4:46 PM	10	2	Yes
4:48 PM	6	5	Yes
4:50 PM	3	1	Yes
4:51 PM	5	4	Yes
4:53 PM	5	5	Yes
4:55 PM	4	6	Yes
4:56 PM	5	1	Yes
4:58 PM	2	1	Yes
5:00 PM	7	2	Yes
5:01 PM	7	8	Yes
5:03 PM	0	3	Yes
5:05 PM	3	8	Yes
5:06 PM	4	1	Yes
5:08 PM	2	3	Yes
5:10 PM	1	2	Yes
5:11 PM	6	8	Yes
5:13 PM	6	5	Yes
5:15 PM	8	1	Yes
5:16 PM	4	2	Yes
5:18 PM	3	2	Yes
5:20 PM	4	2	Yes
5:21 PM	5	6	Yes
5:23 PM	4	4	Yes
5:25 PM	7	1	Yes
5:26 PM	7	7	Yes
5:28 PM	3	-	Yes
5:29 PM	4	4	Yes
5:31 PM	3	6	Yes
5:33 PM	3	2	Yes
5:34 PM	7	5	Yes
5:36 PM	5	6	Yes
5:37 PM	2	3	Yes
5:39 PM	1	4	Yes
5:40 PM	6	4	Yes
5:42 PM	7	1	Yes
5:43 PM	2	-	Yes
5:45 PM	2	1	Yes
5:46 PM	1	3	Yes
5:48 PM	2	5	Yes
5:49 PM	6	3	Yes
5:51 PM	2	2	Yes
5:52 PM	2	2	Yes
5:54 PM	7	-	Yes
5:55 PM	5	1	Yes
5:57 PM	6	1	Yes
5:58 PM	5	5	Yes
6:00 PM	1	-	Yes

***Maximum queues during each peak period are highlighted in yellow.**

Attachment B:
Peak Hour Volumes

APPENDIX B:
FROOM RANCH SPECIFIC PLAN SUPPLEMENTAL TRAFFIC OPERATIONS ANALYSIS -PEAK HOUR ANALYSIS VOLUMES

Existing Conditions (2020)

Intersection	Period	NB			SB			EB			WB		
		L	T	R	L	T	R	L	T	R	L	T	R
LOVR/Calle Joaquin	AM	15	3	51	71	4	29	41	990	16	52	848	105
LOVR/US 101 SB Ramps	AM				434		216		765	347	29	815	
LOVR/US 101 NB Ramps	AM	496		123					1,058	171	114	351	
LOVR/S. Higuera	AM	23	422			275	376	1,069		70			
LOVR/Calle Joaquin	PM	13	3	51	133	5	88	64	1,207	23	52	1,417	95
LOVR/US 101 SB Ramps	PM				241		365		794	597	64	1,266	
LOVR/US 101 NB Ramps	PM	494		89					736	299	178	836	
LOVR/S. Higuera[2]	PM	31	262			794	559	687		81			

1. For purposes of this analysis, LOVR is considred the East-West street, with all cross streets considered the North-South Streets.

2. 2020 traffic counts were not available at the LOVR/S. Higuera intersection. Thus, for the purposes of this analysis, 2016 traffic counts at this location were adjusted to reflect 2020 conditions using a growth rate of 19%, which is based on the average 2016-2020 traffic growth observed at the adjacent intersection of LOVR/U.S. 101 NB Ramps

Near-Term Conditions

Intersection	Period	NB			SB			EB			WB		
		L	T	R	L	T	R	L	T	R	L	T	R
LOVR/Calle Joaquin	AM	22	3	61	78	4	38	51	1,144	25	65	973	113
LOVR/US 101 SB Ramps	AM				495		234		946	371	50	1,023	
LOVR/US 101 NB Ramps	AM	547		177					1,288	174	135	526	
LOVR/S. Higuera	AM	110	477			299	511	1,280		101			
LOVR/Calle Joaquin	PM	26	3	75	168	5	105	75	1,369	35	67	1,631	102
LOVR/US 101 SB Ramps	PM				314		375		926	646	105	1,505	
LOVR/US 101 NB Ramps	PM	539		134					908	335	246	1,070	
LOVR/S. Higuera	PM	64	290			690	1,068	967		92			

1. For purposes of this analysis, LOVR is considred the East-West street, with all cross streets considered the North-South Streets.

Project Traffic Assignment

Intersection	Period	NB			SB			EB			WB		
		L	T	R	L	T	R	L	T	R	L	T	R
LOVR/Calle Joaquin	AM								80			65	
LOVR/US 101 SB Ramps	AM						18		65	15		48	
LOVR/US 101 NB Ramps	AM	12							44	22		36	
LOVR/S. Higuera	AM	2					34	41		2			
LOVR/Calle Joaquin	PM								85			98	
LOVR/US 101 SB Ramps	PM						27		15	70		71	
LOVR/US 101 NB Ramps	PM	18							46	23		53	
LOVR/S. Higuera	PM	3					50	44		3			

1. For purposes of this analysis, LOVR is considred the East-West street, with all cross streets considered the North-South Streets.

Existing+Project

Intersection	Period	NB			SB			EB			WB		
		L	T	R	L	T	R	L	T	R	L	T	R
LOVR/Calle Joaquin	AM	15	3	51	71	4	29	41	1,070	16	52	913	105
LOVR/US 101 SB Ramps	AM				434		234		830	362	29	863	
LOVR/US 101 NB Ramps	AM	508		123					1,102	193	114	387	
LOVR/S. Higuera	AM	25	422			275	410	1,110		72			
LOVR/Calle Joaquin	PM	13	3	51	133	5	88	64	1,292	23	52	1,515	95
LOVR/US 101 SB Ramps	PM				241		392		809	667	64	1,337	
LOVR/US 101 NB Ramps	PM	512		89					782	322	178	889	
LOVR/S. Higuera	PM	34	262			794	609	731		84			

1. For purposes of this analysis, LOVR is considred the East-West street, with all cross streets considered the North-South Streets.

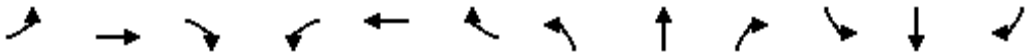
Near Term + Project

Intersection	Period	NB			SB			EB			WB		
		L	T	R	L	T	R	L	T	R	L	T	R
LOVR/Calle Joaquin	AM	22	3	61	78	4	38	51	1,224	25	65	1,038	113
LOVR/US 101 SB Ramps	AM				495		252		1,011	386	50	1,071	
LOVR/US 101 NB Ramps	AM	559		177					1,332	196	135	562	
LOVR/S. Higuera	AM	112	477			299	545	1,321		103			
LOVR/Calle Joaquin	PM	26	3	75	168	5	105	75	1,454	35	67	1,729	102
LOVR/US 101 SB Ramps	PM				314		402		941	716	105	1,576	
LOVR/US 101 NB Ramps	PM	557		134					954	358	246	1,123	
LOVR/S. Higuera	PM	67	290			690	1,118	1,011		95			

1. For purposes of this analysis, LOVR is considred the East-West street, with all cross streets considered the North-South Streets.

Attachment C:
Synchro LOS Analysis Output Sheets

9: Calle Joaquin & LOVR



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	990	16	52	848	105	15	3	51	71	4	29
Future Volume (veh/h)	41	990	16	52	848	105	15	3	51	71	4	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		1.00	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	44	1065	15	56	912	98	16	3	0	76	4	8
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	543	2654	1181	469	2667	1186	179	151		187	45	90
Arrive On Green	0.03	0.76	0.76	0.06	1.00	1.00	0.08	0.08	0.00	0.08	0.08	0.08
Sat Flow, veh/h	1753	3497	1556	1753	3497	1556	1371	1841	1560	1381	545	1090
Grp Volume(v), veh/h	44	1065	15	56	912	98	16	3	0	76	0	12
Grp Sat Flow(s),veh/h/ln	1753	1749	1556	1753	1749	1556	1371	1841	1560	1381	0	1635
Q Serve(g_s), s	0.5	10.0	0.2	0.7	0.0	0.0	1.0	0.1	0.0	5.1	0.0	0.6
Cycle Q Clear(g_c), s	0.5	10.0	0.2	0.7	0.0	0.0	1.7	0.1	0.0	5.2	0.0	0.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.67
Lane Grp Cap(c), veh/h	543	2654	1181	469	2667	1186	179	151		187	0	135
V/C Ratio(X)	0.08	0.40	0.01	0.12	0.34	0.08	0.09	0.02		0.41	0.00	0.09
Avail Cap(c_a), veh/h	603	2654	1181	559	2667	1186	413	465		423	0	413
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	2.2	4.0	2.8	2.6	0.0	0.0	41.1	40.1	0.0	42.5	0.0	40.3
Incr Delay (d2), s/veh	0.1	0.5	0.0	0.1	0.3	0.1	0.2	0.1	0.0	1.4	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	2.8	0.1	0.1	0.1	0.0	0.4	0.1	0.0	1.8	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	2.3	4.4	2.8	2.7	0.3	0.1	41.3	40.1	0.0	43.9	0.0	40.6
LnGrp LOS	A	A	A	A	A	A	D	D		D	A	D
Approach Vol, veh/h		1124			1066			19	A		88	
Approach Delay, s/veh		4.3			0.4			41.1			43.4	
Approach LOS		A			A			D			D	

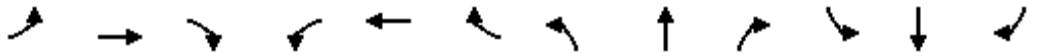
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.1	76.1		11.8	6.7	76.4		11.8				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	8.0	51.0		24.0	6.0	53.0		24.0				
Max Q Clear Time (g_c+I1), s	2.7	12.0		7.2	2.5	2.0		3.7				
Green Ext Time (p_c), s	0.0	10.0		0.2	0.0	8.3		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		4.3
HCM 6th LOS		A

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

10: Hwy 101 SB On-Ramp/Hwy 101 SB Off-Ramp & LOVR



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	765	347	29	815	0	0	0	0	434	0	216
Future Volume (veh/h)	0	765	347	29	815	0	0	0	0	434	0	216
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1841	1841	1841	1841	0				1841	1841	1841
Adj Flow Rate, veh/h	0	797	285	30	849	0				452	0	111
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96				0.96	0.96	0.96
Percent Heavy Veh, %	0	4	4	4	4	0				4	4	4
Cap, veh/h	0	1606	716	44	1705	0				512	0	456
Arrive On Green	0.00	0.92	0.92	0.05	0.97	0.00				0.29	0.00	0.29
Sat Flow, veh/h	0	3589	1560	1753	3589	0				1753	0	1560
Grp Volume(v), veh/h	0	797	285	30	849	0				452	0	111
Grp Sat Flow(s),veh/h/ln	0	1749	1560	1753	1749	0				1753	0	1560
Q Serve(g_s), s	0.0	3.3	2.2	1.6	1.1	0.0				23.4	0.0	5.2
Cycle Q Clear(g_c), s	0.0	3.3	2.2	1.6	1.1	0.0				23.4	0.0	5.2
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1606	716	44	1705	0				512	0	456
V/C Ratio(X)	0.00	0.50	0.40	0.68	0.50	0.00				0.88	0.00	0.24
Avail Cap(c_a), veh/h	0	1606	716	161	1705	0				738	0	657
HCM Platoon Ratio	1.00	2.00	2.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.92	0.92	0.83	0.83	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	2.2	2.2	44.7	0.6	0.0				32.1	0.0	25.6
Incr Delay (d2), s/veh	0.0	1.0	1.5	14.2	0.9	0.0				8.9	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.9	0.8	0.8	0.4	0.0				10.9	0.0	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	3.2	3.7	59.0	1.5	0.0				40.9	0.0	25.9
LnGrp LOS	A	A	A	E	A	A				D	A	C
Approach Vol, veh/h		1082			879						563	
Approach Delay, s/veh		3.4			3.5						38.0	
Approach LOS		A			A						D	

Timer - Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	5.7	45.3				51.0		31.8				
Change Period (Y+Rc), s	3.5	4.9				4.9		4.2				
Max Green Setting (Gmax), s	8.5	34.1				46.1		39.8				
Max Q Clear Time (g_c+I1), s	3.6	5.3				3.1		25.4				
Green Ext Time (p_c), s	0.0	5.9				4.5		2.2				

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

11: NB ramp & LOVR

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1032	167	114	350	494	123
Future Volume (veh/h)	1032	167	114	350	494	123
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1900
Adj Flow Rate, veh/h	1098	129	121	372	566	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	4	4	4	4	0
Cap, veh/h	2060	1242	175	2500	745	329
Arrive On Green	0.59	0.59	0.10	0.71	0.21	0.00
Sat Flow, veh/h	3589	1560	1753	3589	3506	1610
Grp Volume(v), veh/h	1098	129	121	372	566	0
Grp Sat Flow(s),veh/h/ln	1749	1560	1753	1749	1753	1610
Q Serve(g_s), s	17.9	1.7	6.3	3.2	14.4	0.0
Cycle Q Clear(g_c), s	17.9	1.7	6.3	3.2	14.4	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2060	1242	175	2500	745	329
V/C Ratio(X)	0.53	0.10	0.69	0.15	0.76	0.00
Avail Cap(c_a), veh/h	2060	1242	249	2500	1008	449
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	11.7	2.2	41.4	4.3	35.1	0.0
Incr Delay (d2), s/veh	0.9	0.2	4.9	0.1	2.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.6	1.2	2.9	1.0	6.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	12.6	2.3	46.2	4.4	37.5	0.0
LnGrp LOS	B	A	D	A	D	A
Approach Vol, veh/h	1227			493	566	
Approach Delay, s/veh	11.5			14.7	37.5	
Approach LOS	B			B	D	

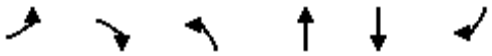
Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	12.0	60.1				72.1	22.9
Change Period (Y+Rc), s	3.5	4.9				4.9	4.5
Max Green Setting (Gmax), s	12.5	44.1				60.1	25.5
Max Q Clear Time (g_c+I1), s	8.3	19.9				5.2	16.4
Green Ext Time (p_c), s	0.1	6.9				1.7	2.0

Intersection Summary	
HCM 6th Ctrl Delay	18.6
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

12: S. Higuera & LOVR



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	1069	70	23	422	275	376
Future Volume (veh/h)	1069	70	23	422	275	376
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1091	71	23	431	281	384
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1332	611	266	710	439	983
Arrive On Green	0.39	0.39	0.03	0.38	0.23	0.23
Sat Flow, veh/h	3456	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	1091	71	23	431	281	384
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1870	1870	1585
Q Serve(g_s), s	14.5	1.5	0.5	9.5	6.9	6.2
Cycle Q Clear(g_c), s	14.5	1.5	0.5	9.5	6.9	6.2
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1332	611	266	710	439	983
V/C Ratio(X)	0.82	0.12	0.09	0.61	0.64	0.39
Avail Cap(c_a), veh/h	1692	776	567	1319	1831	2163
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.1	10.1	13.4	12.8	17.6	4.9
Incr Delay (d2), s/veh	2.6	0.1	0.1	0.8	1.6	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	1.6	0.2	3.1	2.7	3.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	16.7	10.2	13.6	13.6	19.1	5.1
LnGrp LOS	B	B	B	B	B	A
Approach Vol, veh/h	1162			454	665	
Approach Delay, s/veh	16.3			13.6	11.0	
Approach LOS	B			B	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		25.4		25.7	7.4	18.0
Change Period (Y+Rc), s		6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		36.0		25.0	10.0	50.0
Max Q Clear Time (g_c+I1), s		11.5		16.5	2.5	8.9
Green Ext Time (p_c), s		2.4		3.2	0.0	3.1

Intersection Summary	
HCM 6th Ctrl Delay	14.2
HCM 6th LOS	B

9: Calle Joaquin & LOVR

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	1207	23	52	1417	95	13	3	51	133	5	88
Future Volume (veh/h)	64	1207	23	52	1417	95	13	3	51	133	5	88
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		1.00	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	65	1232	22	53	1446	73	13	3	0	136	5	27
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	379	2561	1142	380	2552	1138	233	253		260	34	184
Arrive On Green	0.03	0.72	0.72	0.06	1.00	1.00	0.13	0.13	0.00	0.13	0.13	0.13
Sat Flow, veh/h	1795	3582	1598	1795	3582	1598	1380	1885	1598	1415	254	1373
Grp Volume(v), veh/h	65	1232	22	53	1446	73	13	3	0	136	0	32
Grp Sat Flow(s),veh/h/ln	1795	1791	1598	1795	1791	1598	1380	1885	1598	1415	0	1627
Q Serve(g_s), s	1.0	14.9	0.4	0.8	0.0	0.0	0.8	0.1	0.0	9.2	0.0	1.7
Cycle Q Clear(g_c), s	1.0	14.9	0.4	0.8	0.0	0.0	2.6	0.1	0.0	9.4	0.0	1.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.84
Lane Grp Cap(c), veh/h	379	2561	1142	380	2552	1138	233	253		260	0	218
V/C Ratio(X)	0.17	0.48	0.02	0.14	0.57	0.06	0.06	0.01		0.52	0.00	0.15
Avail Cap(c_a), veh/h	498	2561	1142	522	2552	1138	490	603		523	0	521
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.76	0.76	0.76	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	3.3	6.2	4.1	4.5	0.0	0.0	39.4	37.5	0.0	41.6	0.0	38.2
Incr Delay (d2), s/veh	0.2	0.6	0.0	0.1	0.7	0.1	0.1	0.0	0.0	1.6	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	4.7	0.1	0.2	0.2	0.0	0.3	0.1	0.0	3.3	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	3.6	6.8	4.1	4.6	0.7	0.1	39.5	37.6	0.0	43.2	0.0	38.5
LnGrp LOS	A	A	A	A	A	A	D	D		D	A	D
Approach Vol, veh/h		1319			1572			16	A		168	
Approach Delay, s/veh		6.6			0.8			39.1			42.3	
Approach LOS		A			A			D			D	

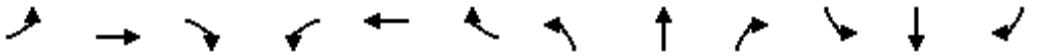
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.1	75.5		17.4	7.3	75.2		17.4				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	11.0	45.0		32.0	10.0	46.0		32.0				
Max Q Clear Time (g_c+I1), s	2.8	16.9		11.4	3.0	2.0		4.6				
Green Ext Time (p_c), s	0.0	10.6		0.5	0.1	16.0		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	5.8
HCM 6th LOS	A

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

10: Hwy 101 SB On-Ramp/Hwy 101 SB Off-Ramp & LOVR



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	794	597	64	1266	0	0	0	0	241	0	365
Future Volume (veh/h)	0	794	597	64	1266	0	0	0	0	241	0	365
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1885	1885	1885	1885	0				1885	1885	1885
Adj Flow Rate, veh/h	0	810	514	65	1292	0				246	0	257
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98				0.98	0.98	0.98
Percent Heavy Veh, %	0	1	1	1	1	0				1	1	1
Cap, veh/h	0	1653	737	87	1837	0				354	0	315
Arrive On Green	0.00	0.92	0.92	0.10	1.00	0.00				0.20	0.00	0.20
Sat Flow, veh/h	0	3676	1598	1795	3676	0				1795	0	1598
Grp Volume(v), veh/h	0	810	514	65	1292	0				246	0	257
Grp Sat Flow(s),veh/h/ln	0	1791	1598	1795	1791	0				1795	0	1598
Q Serve(g_s), s	0.0	3.2	7.0	3.5	0.0	0.0				12.7	0.0	15.4
Cycle Q Clear(g_c), s	0.0	3.2	7.0	3.5	0.0	0.0				12.7	0.0	15.4
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1653	737	87	1837	0				354	0	315
V/C Ratio(X)	0.00	0.49	0.70	0.74	0.70	0.00				0.70	0.00	0.82
Avail Cap(c_a), veh/h	0	1653	737	192	1837	0				718	0	639
HCM Platoon Ratio	1.00	2.00	2.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.85	0.85	0.86	0.86	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	2.2	2.3	44.5	0.0	0.0				37.4	0.0	38.4
Incr Delay (d2), s/veh	0.0	0.9	4.6	10.3	2.0	0.0				2.5	0.0	5.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.9	1.9	1.7	0.5	0.0				5.7	0.0	6.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	3.1	7.0	54.8	2.0	0.0				39.8	0.0	43.6
LnGrp LOS	A	A	A	D	A	A				D	A	D
Approach Vol, veh/h		1324			1357						503	
Approach Delay, s/veh		4.6			4.5						41.7	
Approach LOS		A			A						D	

Timer - Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	8.2	47.8				56.0		23.7				
Change Period (Y+Rc), s	3.5	4.9				4.9		4.2				
Max Green Setting (Gmax), s	10.5	37.1				51.1		39.8				
Max Q Clear Time (g_c+I1), s	5.5	9.0				2.0		17.4				
Green Ext Time (p_c), s	0.1	7.4				8.3		2.1				

Intersection Summary												
HCM 6th Ctrl Delay			10.4									
HCM 6th LOS			B									

11: NB Off ramp & LOVR

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	736	299	178	836	494	89
Future Volume (veh/h)	736	299	178	836	494	89
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1900
Adj Flow Rate, veh/h	759	248	184	862	543	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	0
Cap, veh/h	2027	1215	239	2592	718	312
Arrive On Green	0.57	0.57	0.13	0.73	0.20	0.00
Sat Flow, veh/h	3647	1584	1781	3647	3563	1610
Grp Volume(v), veh/h	759	248	184	862	543	0
Grp Sat Flow(s),veh/h/ln	1777	1584	1781	1777	1781	1610
Q Serve(g_s), s	11.7	4.3	10.0	8.7	14.4	0.0
Cycle Q Clear(g_c), s	11.7	4.3	10.0	8.7	14.4	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2027	1215	239	2592	718	312
V/C Ratio(X)	0.37	0.20	0.77	0.33	0.76	0.00
Avail Cap(c_a), veh/h	2027	1215	401	2592	1044	459
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.92	0.92	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	11.7	3.2	41.8	4.8	37.6	0.0
Incr Delay (d2), s/veh	0.5	0.3	5.2	0.3	1.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	2.7	4.6	2.6	6.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	12.2	3.6	47.0	5.2	39.5	0.0
LnGrp LOS	B	A	D	A	D	A
Approach Vol, veh/h	1007			1046	543	
Approach Delay, s/veh	10.1			12.5	39.5	
Approach LOS	B			B	D	

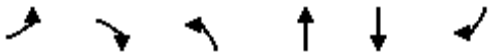
Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	15.9	61.2				77.1	22.9
Change Period (Y+Rc), s	3.5	4.9				4.9	4.5
Max Green Setting (Gmax), s	21.5	38.1				63.1	27.5
Max Q Clear Time (g_c+I1), s	12.0	13.7				10.7	16.4
Green Ext Time (p_c), s	0.4	5.0				4.6	2.0

Intersection Summary	
HCM 6th Ctrl Delay	17.2
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

12: S. Higuera & LOVR

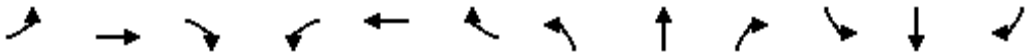


Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	687	81	31	262	794	559
Future Volume (veh/h)	687	81	31	262	794	559
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	747	88	34	285	845	595
Peak Hour Factor	0.92	0.92	0.92	0.92	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	862	395	180	1142	950	1200
Arrive On Green	0.25	0.25	0.03	0.61	0.51	0.51
Sat Flow, veh/h	3456	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	747	88	34	285	845	595
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1870	1870	1585
Q Serve(g_s), s	17.7	3.8	0.7	6.0	34.7	12.5
Cycle Q Clear(g_c), s	17.7	3.8	0.7	6.0	34.7	12.5
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	862	395	180	1142	950	1200
V/C Ratio(X)	0.87	0.22	0.19	0.25	0.89	0.50
Avail Cap(c_a), veh/h	1009	463	330	1142	1092	1321
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.8	25.5	17.0	7.7	18.9	4.0
Incr Delay (d2), s/veh	7.2	0.3	0.5	0.1	8.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.8	0.0	0.3	2.0	15.1	8.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	38.0	25.8	17.5	7.8	27.3	4.4
LnGrp LOS	D	C	B	A	C	A
Approach Vol, veh/h	835			319	1440	
Approach Delay, s/veh	36.7			8.8	17.8	
Approach LOS	D			A	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		58.3		27.3	8.8	49.5
Change Period (Y+Rc), s		6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		36.0		25.0	10.0	50.0
Max Q Clear Time (g_c+I1), s		8.0		19.7	2.7	36.7
Green Ext Time (p_c), s		1.5		1.6	0.0	6.8

Intersection Summary		
HCM 6th Ctrl Delay		22.8
HCM 6th LOS		C

9: Calle Joaquin & LOVR



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	1144	25	65	973	113	22	3	61	78	4	38
Future Volume (veh/h)	51	1144	25	65	973	113	22	3	61	78	4	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		1.00	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	55	1230	25	70	1046	107	24	3	0	84	4	18
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	491	2616	1164	404	2628	1169	181	166		198	26	118
Arrive On Green	0.03	0.75	0.75	0.07	1.00	1.00	0.09	0.09	0.00	0.09	0.09	0.09
Sat Flow, veh/h	1753	3497	1556	1753	3497	1556	1359	1841	1560	1382	290	1305
Grp Volume(v), veh/h	55	1230	25	70	1046	107	24	3	0	84	0	22
Grp Sat Flow(s),veh/h/ln	1753	1749	1556	1753	1749	1556	1359	1841	1560	1382	0	1595
Q Serve(g_s), s	0.7	13.0	0.4	0.9	0.0	0.0	1.6	0.1	0.0	5.6	0.0	1.2
Cycle Q Clear(g_c), s	0.7	13.0	0.4	0.9	0.0	0.0	2.8	0.1	0.0	5.7	0.0	1.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.82
Lane Grp Cap(c), veh/h	491	2616	1164	404	2628	1169	181	166		198	0	144
V/C Ratio(X)	0.11	0.47	0.02	0.17	0.40	0.09	0.13	0.02		0.42	0.00	0.15
Avail Cap(c_a), veh/h	545	2616	1164	490	2628	1169	402	465		423	0	403
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.83	0.83	0.83	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	2.4	4.6	3.1	3.2	0.0	0.0	41.2	39.4	0.0	42.0	0.0	39.9
Incr Delay (d2), s/veh	0.1	0.6	0.0	0.2	0.4	0.1	0.3	0.0	0.0	1.4	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	3.8	0.1	0.2	0.1	0.0	0.5	0.1	0.0	2.0	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	2.5	5.3	3.1	3.4	0.4	0.1	41.5	39.4	0.0	43.4	0.0	40.4
LnGrp LOS	A	A	A	A	A	A	D	D		D	A	D
Approach Vol, veh/h		1310			1223			27	A		106	
Approach Delay, s/veh		5.1			0.5			41.3			42.8	
Approach LOS		A			A			D			D	

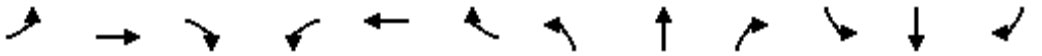
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.4	75.1		12.6	7.1	75.4		12.6				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	8.0	51.0		24.0	6.0	53.0		24.0				
Max Q Clear Time (g_c+I1), s	2.9	15.0		7.7	2.7	2.0		4.8				
Green Ext Time (p_c), s	0.0	12.1		0.3	0.0	10.1		0.0				

Intersection Summary		
HCM 6th Ctrl Delay	4.9	
HCM 6th LOS	A	

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

10: Hwy 101 SB On-Ramp/Hwy 101 SB Off-Ramp & LOVR



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	946	371	50	1023	0	0	0	0	495	0	234
Future Volume (veh/h)	0	946	371	50	1023	0	0	0	0	495	0	234
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1841	1841	1841	1841	0				1841	1841	1841
Adj Flow Rate, veh/h	0	985	310	52	1066	0				516	0	130
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96				0.96	0.96	0.96
Percent Heavy Veh, %	0	4	4	4	4	0				4	4	4
Cap, veh/h	0	1555	693	70	1705	0				575	0	512
Arrive On Green	0.00	0.89	0.89	0.08	0.97	0.00				0.33	0.00	0.33
Sat Flow, veh/h	0	3589	1560	1753	3589	0				1753	0	1560
Grp Volume(v), veh/h	0	985	310	52	1066	0				516	0	130
Grp Sat Flow(s),veh/h/ln	0	1749	1560	1753	1749	0				1753	0	1560
Q Serve(g_s), s	0.0	6.8	3.5	2.8	1.9	0.0				26.6	0.0	5.8
Cycle Q Clear(g_c), s	0.0	6.8	3.5	2.8	1.9	0.0				26.6	0.0	5.8
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1555	693	70	1705	0				575	0	512
V/C Ratio(X)	0.00	0.63	0.45	0.75	0.63	0.00				0.90	0.00	0.25
Avail Cap(c_a), veh/h	0	1555	693	161	1705	0				738	0	657
HCM Platoon Ratio	1.00	2.00	2.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.87	0.87	0.79	0.79	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	3.3	3.1	43.3	0.6	0.0				30.4	0.0	23.4
Incr Delay (d2), s/veh	0.0	1.7	1.8	11.8	1.4	0.0				11.6	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.6	1.1	1.4	0.6	0.0				12.7	0.0	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	5.0	4.9	55.0	2.0	0.0				42.0	0.0	23.7
LnGrp LOS	A	A	A	E	A	A				D	A	C
Approach Vol, veh/h		1295			1118						646	
Approach Delay, s/veh		5.0			4.5						38.3	
Approach LOS		A			A						D	

Timer - Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	7.1	43.9				51.0		35.2				
Change Period (Y+Rc), s	3.5	4.9				4.9		4.2				
Max Green Setting (Gmax), s	8.5	34.1				46.1		39.8				
Max Q Clear Time (g_c+I1), s	4.8	8.8				3.9		28.6				
Green Ext Time (p_c), s	0.0	7.3				6.2		2.3				

Intersection Summary												
HCM 6th Ctrl Delay			11.8									
HCM 6th LOS			B									

11: NB ramp & LOVR

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1288	174	135	526	547	177
Future Volume (veh/h)	1288	174	135	526	547	177
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1900
Adj Flow Rate, veh/h	1370	136	144	560	675	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	4	4	4	4	0
Cap, veh/h	1915	1222	197	2400	845	375
Arrive On Green	0.55	0.55	0.11	0.69	0.24	0.00
Sat Flow, veh/h	3589	1560	1753	3589	3506	1610
Grp Volume(v), veh/h	1370	136	144	560	675	0
Grp Sat Flow(s),veh/h/ln	1749	1560	1753	1749	1753	1610
Q Serve(g_s), s	27.7	2.0	7.5	5.7	17.2	0.0
Cycle Q Clear(g_c), s	27.7	2.0	7.5	5.7	17.2	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1915	1222	197	2400	845	375
V/C Ratio(X)	0.72	0.11	0.73	0.23	0.80	0.00
Avail Cap(c_a), veh/h	1915	1222	249	2400	1008	449
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.78	0.78	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	16.0	2.4	40.8	5.6	33.9	0.0
Incr Delay (d2), s/veh	1.8	0.1	7.9	0.2	3.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.7	1.4	3.6	1.8	7.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	17.8	2.6	48.7	5.8	37.8	0.0
LnGrp LOS	B	A	D	A	D	A
Approach Vol, veh/h	1506			704	675	
Approach Delay, s/veh	16.4			14.6	37.8	
Approach LOS	B			B	D	

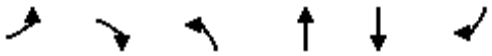
Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	13.2	56.2				69.4	25.6
Change Period (Y+Rc), s	3.5	4.9				4.9	4.5
Max Green Setting (Gmax), s	12.5	44.1				60.1	25.5
Max Q Clear Time (g_c+I1), s	9.5	29.7				7.7	19.2
Green Ext Time (p_c), s	0.1	7.1				2.7	1.9

Intersection Summary		
HCM 6th Ctrl Delay		21.0
HCM 6th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

12: S. Higuera & LOVR

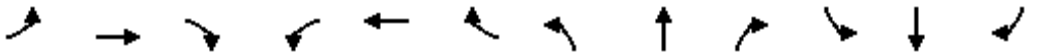


Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	1280	101	110	477	299	511
Future Volume (veh/h)	1280	101	110	477	299	511
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1306	103	112	487	305	521
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1346	617	311	792	491	1034
Arrive On Green	0.39	0.39	0.07	0.42	0.26	0.26
Sat Flow, veh/h	3456	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	1306	103	112	487	305	521
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1870	1870	1585
Q Serve(g_s), s	23.8	2.7	2.8	13.0	9.2	10.9
Cycle Q Clear(g_c), s	23.8	2.7	2.8	13.0	9.2	10.9
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1346	617	311	792	491	1034
V/C Ratio(X)	0.97	0.17	0.36	0.61	0.62	0.50
Avail Cap(c_a), veh/h	1346	617	469	1049	1457	1852
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.2	12.8	15.2	14.4	20.8	5.8
Incr Delay (d2), s/veh	17.8	0.1	0.7	0.8	1.3	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.3	3.0	1.0	4.6	3.7	7.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	37.1	12.9	15.9	15.2	22.1	6.2
LnGrp LOS	D	B	B	B	C	A
Approach Vol, veh/h	1409			599	826	
Approach Delay, s/veh	35.3			15.3	12.1	
Approach LOS	D			B	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		33.2		31.0	10.3	22.9
Change Period (Y+Rc), s		6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		36.0		25.0	10.0	50.0
Max Q Clear Time (g_c+I1), s		15.0		25.8	4.8	12.9
Green Ext Time (p_c), s		2.7		0.0	0.1	3.9

Intersection Summary	
HCM 6th Ctrl Delay	24.3
HCM 6th LOS	C

9: Calle Joaquin & LOVR



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	75	1369	35	67	1631	102	26	3	75	168	5	105
Future Volume (veh/h)	75	1369	35	67	1631	102	26	3	75	168	5	105
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	77	1397	35	68	1664	80	27	3	0	171	5	44
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	327	2465	1099	317	2460	1097	251	298		294	26	229
Arrive On Green	0.04	0.69	0.69	0.07	1.00	1.00	0.16	0.16	0.00	0.16	0.16	0.16
Sat Flow, veh/h	1795	3582	1598	1795	3582	1598	1360	1885	1598	1417	165	1450
Grp Volume(v), veh/h	77	1397	35	68	1664	80	27	3	0	171	0	49
Grp Sat Flow(s),veh/h/ln	1795	1791	1598	1795	1791	1598	1360	1885	1598	1417	0	1614
Q Serve(g_s), s	1.2	19.9	0.7	1.1	0.0	0.0	1.8	0.1	0.0	11.6	0.0	2.6
Cycle Q Clear(g_c), s	1.2	19.9	0.7	1.1	0.0	0.0	4.4	0.1	0.0	11.7	0.0	2.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.90
Lane Grp Cap(c), veh/h	327	2465	1099	317	2460	1097	251	298		294	0	255
V/C Ratio(X)	0.24	0.57	0.03	0.21	0.68	0.07	0.11	0.01		0.58	0.00	0.19
Avail Cap(c_a), veh/h	443	2465	1099	454	2460	1097	471	603		523	0	517
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.68	0.68	0.68	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	4.0	8.0	5.0	6.2	0.0	0.0	38.5	35.5	0.0	40.5	0.0	36.6
Incr Delay (d2), s/veh	0.4	1.0	0.1	0.2	1.0	0.1	0.2	0.0	0.0	1.8	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	6.7	0.2	0.3	0.4	0.0	0.6	0.1	0.0	4.1	0.0	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.4	8.9	5.0	6.4	1.0	0.1	38.7	35.5	0.0	42.3	0.0	36.9
LnGrp LOS	A	A	A	A	A	A	D	D		D	A	D
Approach Vol, veh/h		1509			1812			30	A		220	
Approach Delay, s/veh		8.6			1.2			38.4			41.1	
Approach LOS		A			A			D			D	

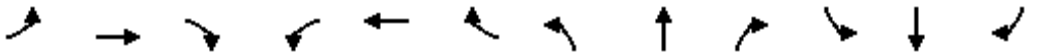
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.4	72.8		19.8	7.5	72.7		19.8				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	11.0	45.0		32.0	10.0	46.0		32.0				
Max Q Clear Time (g_c+I1), s	3.1	21.9		13.7	3.2	2.0		6.4				
Green Ext Time (p_c), s	0.1	11.4		0.7	0.1	20.1		0.1				

Intersection Summary		
HCM 6th Ctrl Delay		7.1
HCM 6th LOS		A

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

10: Hwy 101 SB On-Ramp/Hwy 101 SB Off-Ramp & LOVR



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	926	646	105	1505	0	0	0	0	314	0	348
Future Volume (veh/h)	0	926	646	105	1505	0	0	0	0	314	0	348
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1885	1885	1885	1885	0				1885	1885	1885
Adj Flow Rate, veh/h	0	945	564	107	1536	0				320	0	240
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98				0.98	0.98	0.98
Percent Heavy Veh, %	0	1	1	1	1	0				1	1	1
Cap, veh/h	0	1554	693	137	1837	0				387	0	344
Arrive On Green	0.00	0.87	0.87	0.15	1.00	0.00				0.22	0.00	0.22
Sat Flow, veh/h	0	3676	1598	1795	3676	0				1795	0	1598
Grp Volume(v), veh/h	0	945	564	107	1536	0				320	0	240
Grp Sat Flow(s),veh/h/ln	0	1791	1598	1795	1791	0				1795	0	1598
Q Serve(g_s), s	0.0	7.4	15.9	5.7	0.0	0.0				17.0	0.0	13.9
Cycle Q Clear(g_c), s	0.0	7.4	15.9	5.7	0.0	0.0				17.0	0.0	13.9
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1554	693	137	1837	0				387	0	344
V/C Ratio(X)	0.00	0.61	0.81	0.78	0.84	0.00				0.83	0.00	0.70
Avail Cap(c_a), veh/h	0	1554	693	192	1837	0				718	0	639
HCM Platoon Ratio	1.00	2.00	2.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.78	0.78	0.79	0.79	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	4.2	4.8	41.6	0.0	0.0				37.4	0.0	36.2
Incr Delay (d2), s/veh	0.0	1.4	8.1	10.4	3.8	0.0				4.5	0.0	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.8	3.4	2.7	1.0	0.0				7.8	0.0	5.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	5.6	12.9	52.0	3.8	0.0				42.0	0.0	38.8
LnGrp LOS	A	A	B	D	A	A				D	A	D
Approach Vol, veh/h		1509			1643						560	
Approach Delay, s/veh		8.3			6.9						40.6	
Approach LOS		A			A						D	

Timer - Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	10.9	45.1				56.0		25.5				
Change Period (Y+Rc), s	3.5	4.9				4.9		4.2				
Max Green Setting (Gmax), s	10.5	37.1				51.1		39.8				
Max Q Clear Time (g_c+I1), s	7.7	17.9				2.0		19.0				
Green Ext Time (p_c), s	0.1	7.7				11.2		2.3				

Intersection Summary												
HCM 6th Ctrl Delay			12.6									
HCM 6th LOS			B									

11: NB Off ramp & LOVR

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	908	335	246	1070	539	134
Future Volume (veh/h)	908	335	246	1070	539	134
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1900
Adj Flow Rate, veh/h	936	285	254	1103	633	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	0
Cap, veh/h	1804	1154	307	2505	806	351
Arrive On Green	0.51	0.51	0.17	0.70	0.23	0.00
Sat Flow, veh/h	3647	1583	1781	3647	3563	1610
Grp Volume(v), veh/h	936	285	254	1103	633	0
Grp Sat Flow(s),veh/h/ln	1777	1583	1781	1777	1781	1610
Q Serve(g_s), s	17.6	6.0	13.8	13.3	16.7	0.0
Cycle Q Clear(g_c), s	17.6	6.0	13.8	13.3	16.7	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1804	1154	307	2505	806	351
V/C Ratio(X)	0.52	0.25	0.83	0.44	0.79	0.00
Avail Cap(c_a), veh/h	1804	1154	401	2505	1044	459
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.87	0.87	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	16.5	4.5	40.0	6.3	36.4	0.0
Incr Delay (d2), s/veh	0.9	0.4	10.6	0.6	3.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.0	3.8	6.8	4.3	7.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	17.4	4.9	50.5	6.9	39.5	0.0
LnGrp LOS	B	A	D	A	D	A
Approach Vol, veh/h	1221			1357	633	
Approach Delay, s/veh	14.5			15.0	39.5	
Approach LOS	B			B	D	

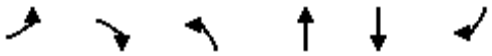
Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	19.7	55.0				74.7	25.3
Change Period (Y+Rc), s	3.5	4.9				4.9	4.5
Max Green Setting (Gmax), s	21.5	38.1				63.1	27.5
Max Q Clear Time (g_c+I1), s	15.8	19.6				15.3	18.7
Green Ext Time (p_c), s	0.5	5.9				6.5	2.1

Intersection Summary	
HCM 6th Ctrl Delay	19.6
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

12: S. Higuera & LOVR



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	967	92	64	290	690	1068
Future Volume (veh/h)	967	92	64	290	690	1068
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1051	100	70	315	734	1136
Peak Hour Factor	0.92	0.92	0.92	0.92	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	888	407	201	1159	962	1222
Arrive On Green	0.26	0.26	0.04	0.62	0.51	0.51
Sat Flow, veh/h	3456	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	1051	100	70	315	734	1136
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1870	1870	1585
Q Serve(g_s), s	25.0	4.9	1.7	7.5	30.5	50.0
Cycle Q Clear(g_c), s	25.0	4.9	1.7	7.5	30.5	50.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	888	407	201	1159	962	1222
V/C Ratio(X)	1.18	0.25	0.35	0.27	0.76	0.93
Avail Cap(c_a), veh/h	888	407	306	1159	962	1222
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.1	28.6	16.6	8.5	18.9	8.3
Incr Delay (d2), s/veh	93.9	0.3	1.0	0.1	3.7	12.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	21.6	0.0	0.6	2.6	12.8	31.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	130.0	29.0	17.6	8.6	22.6	20.6
LnGrp LOS	F	C	B	A	C	C
Approach Vol, veh/h	1151			385	1870	
Approach Delay, s/veh	121.2			10.2	21.4	
Approach LOS	F			B	C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		66.2		31.0	10.2	56.0
Change Period (Y+Rc), s		6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		36.0		25.0	10.0	50.0
Max Q Clear Time (g_c+I1), s		9.5		27.0	3.7	52.0
Green Ext Time (p_c), s		1.7		0.0	0.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	53.9
HCM 6th LOS	D

9: Calle Joaquin & LOVR

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	1070	16	52	913	105	15	3	51	71	4	29
Future Volume (veh/h)	41	1070	16	52	913	105	15	3	51	71	4	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		1.00	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	44	1151	15	56	982	98	16	3	0	76	4	8
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	516	2654	1181	436	2667	1186	179	151		187	45	90
Arrive On Green	0.03	0.76	0.76	0.06	1.00	1.00	0.08	0.08	0.00	0.08	0.08	0.08
Sat Flow, veh/h	1753	3497	1556	1753	3497	1556	1371	1841	1560	1381	545	1090
Grp Volume(v), veh/h	44	1151	15	56	982	98	16	3	0	76	0	12
Grp Sat Flow(s),veh/h/ln	1753	1749	1556	1753	1749	1556	1371	1841	1560	1381	0	1635
Q Serve(g_s), s	0.5	11.2	0.2	0.7	0.0	0.0	1.0	0.1	0.0	5.1	0.0	0.6
Cycle Q Clear(g_c), s	0.5	11.2	0.2	0.7	0.0	0.0	1.7	0.1	0.0	5.2	0.0	0.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.67
Lane Grp Cap(c), veh/h	516	2654	1181	436	2667	1186	179	151		187	0	135
V/C Ratio(X)	0.09	0.43	0.01	0.13	0.37	0.08	0.09	0.02		0.41	0.00	0.09
Avail Cap(c_a), veh/h	576	2654	1181	527	2667	1186	413	465		423	0	413
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.90	0.90	0.90	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	2.2	4.1	2.8	2.8	0.0	0.0	41.1	40.1	0.0	42.5	0.0	40.3
Incr Delay (d2), s/veh	0.1	0.5	0.0	0.1	0.4	0.1	0.2	0.1	0.0	1.4	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	3.2	0.1	0.1	0.1	0.0	0.4	0.1	0.0	1.8	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	2.3	4.6	2.8	2.9	0.4	0.1	41.3	40.1	0.0	43.9	0.0	40.6
LnGrp LOS	A	A	A	A	A	A	D	D		D	A	D
Approach Vol, veh/h		1210			1136			19	A		88	
Approach Delay, s/veh		4.5			0.5			41.1			43.4	
Approach LOS		A			A			D			D	

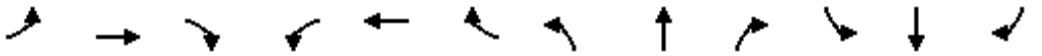
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.1	76.1		11.8	6.7	76.4		11.8				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	8.0	51.0		24.0	6.0	53.0		24.0				
Max Q Clear Time (g_c+I1), s	2.7	13.2		7.2	2.5	2.0		3.7				
Green Ext Time (p_c), s	0.0	11.1		0.2	0.0	9.2		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		4.3	
HCM 6th LOS		A	

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

10: Hwy 101 SB On-Ramp/Hwy 101 SB Off-Ramp & LOVR



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	830	362	29	863	0	0	0	0	434	0	234
Future Volume (veh/h)	0	830	362	29	863	0	0	0	0	434	0	234
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1841	1841	1841	1841	0				1841	1841	1841
Adj Flow Rate, veh/h	0	865	301	30	899	0				452	0	130
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96				0.96	0.96	0.96
Percent Heavy Veh, %	0	4	4	4	4	0				4	4	4
Cap, veh/h	0	1606	716	44	1705	0				513	0	457
Arrive On Green	0.00	0.92	0.92	0.05	0.97	0.00				0.29	0.00	0.29
Sat Flow, veh/h	0	3589	1560	1753	3589	0				1753	0	1560
Grp Volume(v), veh/h	0	865	301	30	899	0				452	0	130
Grp Sat Flow(s),veh/h/ln	0	1749	1560	1753	1749	0				1753	0	1560
Q Serve(g_s), s	0.0	3.8	2.4	1.6	1.3	0.0				23.3	0.0	6.1
Cycle Q Clear(g_c), s	0.0	3.8	2.4	1.6	1.3	0.0				23.3	0.0	6.1
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1606	716	44	1705	0				513	0	457
V/C Ratio(X)	0.00	0.54	0.42	0.68	0.53	0.00				0.88	0.00	0.28
Avail Cap(c_a), veh/h	0	1606	716	161	1705	0				738	0	657
HCM Platoon Ratio	1.00	2.00	2.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.90	0.90	0.83	0.83	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	2.3	2.2	44.7	0.6	0.0				32.0	0.0	25.9
Incr Delay (d2), s/veh	0.0	1.2	1.6	14.2	1.0	0.0				8.7	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.0	0.9	0.8	0.5	0.0				10.8	0.0	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	3.4	3.8	59.0	1.6	0.0				40.7	0.0	26.2
LnGrp LOS	A	A	A	E	A	A				D	A	C
Approach Vol, veh/h		1166			929						582	
Approach Delay, s/veh		3.5			3.5						37.5	
Approach LOS		A			A						D	

Timer - Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	5.7	45.3				51.0		31.8				
Change Period (Y+Rc), s	3.5	4.9				4.9		4.2				
Max Green Setting (Gmax), s	8.5	34.1				46.1		39.8				
Max Q Clear Time (g_c+I1), s	3.6	5.8				3.3		25.3				
Green Ext Time (p_c), s	0.0	6.5				4.9		2.3				

Intersection Summary												
HCM 6th Ctrl Delay			10.9									
HCM 6th LOS			B									

11: NB ramp & LOVR

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1102	193	114	387	508	123
Future Volume (veh/h)	1102	193	114	387	508	123
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1900
Adj Flow Rate, veh/h	1172	156	121	412	580	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	4	4	4	4	0
Cap, veh/h	2046	1242	175	2487	759	335
Arrive On Green	0.59	0.59	0.10	0.71	0.22	0.00
Sat Flow, veh/h	3589	1560	1753	3589	3506	1610
Grp Volume(v), veh/h	1172	156	121	412	580	0
Grp Sat Flow(s),veh/h/ln	1749	1560	1753	1749	1753	1610
Q Serve(g_s), s	19.9	2.2	6.3	3.7	14.8	0.0
Cycle Q Clear(g_c), s	19.9	2.2	6.3	3.7	14.8	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2046	1242	175	2487	759	335
V/C Ratio(X)	0.57	0.13	0.69	0.17	0.76	0.00
Avail Cap(c_a), veh/h	2046	1242	249	2487	1008	449
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.89	0.89	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	12.3	2.2	41.4	4.5	35.0	0.0
Incr Delay (d2), s/veh	1.0	0.2	4.9	0.1	2.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	1.5	2.9	1.1	6.5	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	13.3	2.4	46.2	4.6	37.5	0.0
LnGrp LOS	B	A	D	A	D	A
Approach Vol, veh/h	1328			533	580	
Approach Delay, s/veh	12.1			14.1	37.5	
Approach LOS	B			B	D	

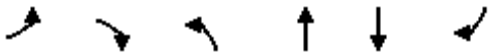
Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	12.0	59.8				71.7	23.3
Change Period (Y+Rc), s	3.5	4.9				4.9	4.5
Max Green Setting (Gmax), s	12.5	44.1				60.1	25.5
Max Q Clear Time (g_c+I1), s	8.3	21.9				5.7	16.8
Green Ext Time (p_c), s	0.1	7.4				1.9	2.0

Intersection Summary		
HCM 6th Ctrl Delay		18.5
HCM 6th LOS		B

Notes

User approved volume balancing among the lanes for turning movement.

12: S. Higuera & LOVR



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	1110	72	25	422	275	410
Future Volume (veh/h)	1110	72	25	422	275	410
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1133	73	26	431	281	418
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1356	622	265	709	440	995
Arrive On Green	0.39	0.39	0.03	0.38	0.24	0.24
Sat Flow, veh/h	3456	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	1133	73	26	431	281	418
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1870	1870	1585
Q Serve(g_s), s	15.6	1.5	0.5	9.8	7.1	7.0
Cycle Q Clear(g_c), s	15.6	1.5	0.5	9.8	7.1	7.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1356	622	265	709	440	995
V/C Ratio(X)	0.84	0.12	0.10	0.61	0.64	0.42
Avail Cap(c_a), veh/h	1643	754	550	1281	1779	2130
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.4	10.2	13.8	13.2	18.1	5.0
Incr Delay (d2), s/veh	3.3	0.1	0.2	0.8	1.6	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	1.7	0.2	3.3	2.8	4.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	17.7	10.3	13.9	14.0	19.7	5.2
LnGrp LOS	B	B	B	B	B	A
Approach Vol, veh/h	1206			457	699	
Approach Delay, s/veh	17.3			14.0	11.0	
Approach LOS	B			B	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		25.9		26.6	7.6	18.4
Change Period (Y+Rc), s		6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		36.0		25.0	10.0	50.0
Max Q Clear Time (g_c+I1), s		11.8		17.6	2.5	9.1
Green Ext Time (p_c), s		2.4		3.1	0.0	3.2

Intersection Summary	
HCM 6th Ctrl Delay	14.8
HCM 6th LOS	B

9: Calle Joaquin & LOVR

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	1292	23	52	1515	95	13	3	51	133	5	88
Future Volume (veh/h)	64	1292	23	52	1515	95	13	3	51	133	5	88
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		1.00	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	65	1318	22	53	1546	73	13	3	0	136	5	27
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	356	2561	1142	353	2552	1138	233	253		260	34	184
Arrive On Green	0.03	0.72	0.72	0.06	1.00	1.00	0.13	0.13	0.00	0.13	0.13	0.13
Sat Flow, veh/h	1795	3582	1598	1795	3582	1598	1380	1885	1598	1415	254	1373
Grp Volume(v), veh/h	65	1318	22	53	1546	73	13	3	0	136	0	32
Grp Sat Flow(s),veh/h/ln	1795	1791	1598	1795	1791	1598	1380	1885	1598	1415	0	1627
Q Serve(g_s), s	1.0	16.6	0.4	0.8	0.0	0.0	0.8	0.1	0.0	9.2	0.0	1.7
Cycle Q Clear(g_c), s	1.0	16.6	0.4	0.8	0.0	0.0	2.6	0.1	0.0	9.4	0.0	1.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.84
Lane Grp Cap(c), veh/h	356	2561	1142	353	2552	1138	233	253		260	0	218
V/C Ratio(X)	0.18	0.51	0.02	0.15	0.61	0.06	0.06	0.01		0.52	0.00	0.15
Avail Cap(c_a), veh/h	476	2561	1142	495	2552	1138	490	603		523	0	521
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.71	0.71	0.71	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	3.3	6.4	4.1	4.8	0.0	0.0	39.4	37.5	0.0	41.6	0.0	38.2
Incr Delay (d2), s/veh	0.2	0.7	0.0	0.1	0.8	0.1	0.1	0.0	0.0	1.6	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	5.3	0.1	0.2	0.3	0.0	0.3	0.1	0.0	3.3	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	3.6	7.2	4.1	4.9	0.8	0.1	39.5	37.6	0.0	43.2	0.0	38.5
LnGrp LOS	A	A	A	A	A	A	D	D		D	A	D
Approach Vol, veh/h		1405			1672			16	A		168	
Approach Delay, s/veh		7.0			0.9			39.1			42.3	
Approach LOS		A			A			D			D	

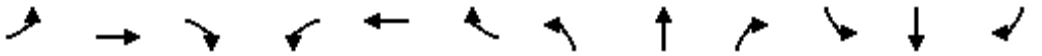
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.1	75.5		17.4	7.3	75.2		17.4				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	11.0	45.0		32.0	10.0	46.0		32.0				
Max Q Clear Time (g_c+I1), s	2.8	18.6		11.4	3.0	2.0		4.6				
Green Ext Time (p_c), s	0.0	11.3		0.5	0.1	17.8		0.0				

Intersection Summary		
HCM 6th Ctrl Delay	5.8	
HCM 6th LOS	A	

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

10: Hwy 101 SB On-Ramp/Hwy 101 SB Off-Ramp & LOVR



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	809	667	64	1337	0	0	0	0	241	0	392
Future Volume (veh/h)	0	809	667	64	1337	0	0	0	0	241	0	392
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1885	1885	1885	1885	0				1885	1885	1885
Adj Flow Rate, veh/h	0	826	586	65	1364	0				246	0	285
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98				0.98	0.98	0.98
Percent Heavy Veh, %	0	1	1	1	1	0				1	1	1
Cap, veh/h	0	1653	737	87	1837	0				385	0	343
Arrive On Green	0.00	0.92	0.92	0.10	1.00	0.00				0.21	0.00	0.21
Sat Flow, veh/h	0	3676	1598	1795	3676	0				1795	0	1598
Grp Volume(v), veh/h	0	826	586	65	1364	0				246	0	285
Grp Sat Flow(s),veh/h/ln	0	1791	1598	1795	1791	0				1795	0	1598
Q Serve(g_s), s	0.0	3.3	10.6	3.5	0.0	0.0				12.5	0.0	17.1
Cycle Q Clear(g_c), s	0.0	3.3	10.6	3.5	0.0	0.0				12.5	0.0	17.1
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1653	737	87	1837	0				385	0	343
V/C Ratio(X)	0.00	0.50	0.79	0.74	0.74	0.00				0.64	0.00	0.83
Avail Cap(c_a), veh/h	0	1653	737	192	1837	0				718	0	639
HCM Platoon Ratio	1.00	2.00	2.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.82	0.82	0.85	0.85	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	2.2	2.5	44.5	0.0	0.0				35.7	0.0	37.5
Incr Delay (d2), s/veh	0.0	0.9	7.2	10.2	2.4	0.0				1.8	0.0	5.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.9	2.5	1.7	0.6	0.0				5.5	0.0	7.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	3.1	9.7	54.7	2.4	0.0				37.5	0.0	42.7
LnGrp LOS	A	A	A	D	A	A				D	A	D
Approach Vol, veh/h		1412			1429						531	
Approach Delay, s/veh		5.8			4.7						40.3	
Approach LOS		A			A						D	

Timer - Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	8.2	47.8				56.0		25.5				
Change Period (Y+Rc), s	3.5	4.9				4.9		4.2				
Max Green Setting (Gmax), s	10.5	37.1				51.1		39.8				
Max Q Clear Time (g_c+I1), s	5.5	12.6				2.0		19.1				
Green Ext Time (p_c), s	0.1	7.8				9.1		2.2				

Intersection Summary												
HCM 6th Ctrl Delay			10.8									
HCM 6th LOS			B									

11: NB Off ramp & LOVR

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	782	322	178	889	512	89
Future Volume (veh/h)	782	322	178	889	512	89
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1900
Adj Flow Rate, veh/h	806	272	184	916	562	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	0
Cap, veh/h	2009	1215	239	2574	737	320
Arrive On Green	0.57	0.57	0.13	0.72	0.21	0.00
Sat Flow, veh/h	3647	1584	1781	3647	3563	1610
Grp Volume(v), veh/h	806	272	184	916	562	0
Grp Sat Flow(s),veh/h/ln	1777	1584	1781	1777	1781	1610
Q Serve(g_s), s	12.8	4.8	10.0	9.6	14.9	0.0
Cycle Q Clear(g_c), s	12.8	4.8	10.0	9.6	14.9	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2009	1215	239	2574	737	320
V/C Ratio(X)	0.40	0.22	0.77	0.36	0.76	0.00
Avail Cap(c_a), veh/h	2009	1215	401	2574	1044	459
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	12.2	3.3	41.8	5.1	37.3	0.0
Incr Delay (d2), s/veh	0.5	0.4	5.2	0.4	2.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	3.0	4.6	2.9	6.5	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	12.8	3.7	47.0	5.5	39.5	0.0
LnGrp LOS	B	A	D	A	D	A
Approach Vol, veh/h	1078			1100	562	
Approach Delay, s/veh	10.5			12.5	39.5	
Approach LOS	B			B	D	

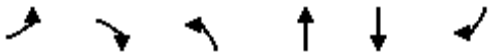
Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	15.9	60.7				76.6	23.4
Change Period (Y+Rc), s	3.5	4.9				4.9	4.5
Max Green Setting (Gmax), s	21.5	38.1				63.1	27.5
Max Q Clear Time (g_c+I1), s	12.0	14.8				11.6	16.9
Green Ext Time (p_c), s	0.4	5.4				5.0	2.0

Intersection Summary	
HCM 6th Ctrl Delay	17.2
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

12: S. Higuera & LOVR



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	731	84	34	262	794	609
Future Volume (veh/h)	731	84	34	262	794	609
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	795	91	37	285	845	648
Peak Hour Factor	0.92	0.92	0.92	0.92	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	893	409	175	1133	943	1209
Arrive On Green	0.26	0.26	0.03	0.61	0.50	0.50
Sat Flow, veh/h	3456	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	795	91	37	285	845	648
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1870	1870	1585
Q Serve(g_s), s	19.6	4.0	0.8	6.3	36.1	14.5
Cycle Q Clear(g_c), s	19.6	4.0	0.8	6.3	36.1	14.5
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	893	409	175	1133	943	1209
V/C Ratio(X)	0.89	0.22	0.21	0.25	0.90	0.54
Avail Cap(c_a), veh/h	977	448	317	1133	1057	1305
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.6	25.8	17.9	8.1	19.8	4.2
Incr Delay (d2), s/veh	9.7	0.3	0.6	0.1	9.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.9	3.9	0.3	2.1	16.1	9.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	41.3	26.1	18.5	8.2	29.2	4.6
LnGrp LOS	D	C	B	A	C	A
Approach Vol, veh/h	886			322	1493	
Approach Delay, s/veh	39.7			9.4	18.5	
Approach LOS	D			A	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		59.6		28.8	9.0	50.6
Change Period (Y+Rc), s		6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		36.0		25.0	10.0	50.0
Max Q Clear Time (g_c+I1), s		8.3		21.6	2.8	38.1
Green Ext Time (p_c), s		1.5		1.2	0.0	6.5

Intersection Summary	
HCM 6th Ctrl Delay	24.4
HCM 6th LOS	C

9: Calle Joaquin & LOVR

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	1224	25	65	1038	113	22	3	61	78	4	38
Future Volume (veh/h)	51	1224	25	65	1038	113	22	3	61	78	4	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		1.00	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	55	1316	25	70	1116	107	24	3	0	84	4	18
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	468	2616	1164	377	2628	1169	181	166		198	26	118
Arrive On Green	0.03	0.75	0.75	0.07	1.00	1.00	0.09	0.09	0.00	0.09	0.09	0.09
Sat Flow, veh/h	1753	3497	1556	1753	3497	1556	1359	1841	1560	1382	290	1305
Grp Volume(v), veh/h	55	1316	25	70	1116	107	24	3	0	84	0	22
Grp Sat Flow(s),veh/h/ln	1753	1749	1556	1753	1749	1556	1359	1841	1560	1382	0	1595
Q Serve(g_s), s	0.7	14.4	0.4	0.9	0.0	0.0	1.6	0.1	0.0	5.6	0.0	1.2
Cycle Q Clear(g_c), s	0.7	14.4	0.4	0.9	0.0	0.0	2.8	0.1	0.0	5.7	0.0	1.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.82
Lane Grp Cap(c), veh/h	468	2616	1164	377	2628	1169	181	166		198	0	144
V/C Ratio(X)	0.12	0.50	0.02	0.19	0.42	0.09	0.13	0.02		0.42	0.00	0.15
Avail Cap(c_a), veh/h	522	2616	1164	463	2628	1169	402	465		423	0	403
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.81	0.81	0.81	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	2.4	4.8	3.1	3.5	0.0	0.0	41.2	39.4	0.0	42.0	0.0	39.9
Incr Delay (d2), s/veh	0.1	0.7	0.0	0.2	0.4	0.1	0.3	0.0	0.0	1.4	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	4.2	0.1	0.2	0.1	0.0	0.5	0.1	0.0	2.0	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	2.5	5.5	3.1	3.7	0.4	0.1	41.5	39.4	0.0	43.4	0.0	40.4
LnGrp LOS	A	A	A	A	A	A	D	D		D	A	D
Approach Vol, veh/h		1396			1293			27	A		106	
Approach Delay, s/veh		5.4			0.6			41.3			42.8	
Approach LOS		A			A			D			D	

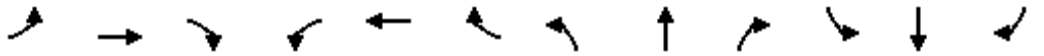
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.4	75.1		12.6	7.1	75.4		12.6				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	8.0	51.0		24.0	6.0	53.0		24.0				
Max Q Clear Time (g_c+I1), s	2.9	16.4		7.7	2.7	2.0		4.8				
Green Ext Time (p_c), s	0.0	13.2		0.3	0.0	11.1		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			4.9									
HCM 6th LOS			A									

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

10: Hwy 101 SB On-Ramp/Hwy 101 SB Off-Ramp & LOVR



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1011	386	50	1071	0	0	0	0	495	0	252
Future Volume (veh/h)	0	1011	386	50	1071	0	0	0	0	495	0	252
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1841	1841	1841	1841	0				1841	1841	1841
Adj Flow Rate, veh/h	0	1053	326	52	1116	0				516	0	148
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96				0.96	0.96	0.96
Percent Heavy Veh, %	0	4	4	4	4	0				4	4	4
Cap, veh/h	0	1555	693	70	1705	0				576	0	512
Arrive On Green	0.00	0.89	0.89	0.08	0.97	0.00				0.33	0.00	0.33
Sat Flow, veh/h	0	3589	1560	1753	3589	0				1753	0	1560
Grp Volume(v), veh/h	0	1053	326	52	1116	0				516	0	148
Grp Sat Flow(s),veh/h/ln	0	1749	1560	1753	1749	0				1753	0	1560
Q Serve(g_s), s	0.0	8.0	3.8	2.8	2.1	0.0				26.6	0.0	6.7
Cycle Q Clear(g_c), s	0.0	8.0	3.8	2.8	2.1	0.0				26.6	0.0	6.7
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1555	693	70	1705	0				576	0	512
V/C Ratio(X)	0.00	0.68	0.47	0.75	0.65	0.00				0.90	0.00	0.29
Avail Cap(c_a), veh/h	0	1555	693	161	1705	0				738	0	657
HCM Platoon Ratio	1.00	2.00	2.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.85	0.85	0.79	0.79	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	3.4	3.1	43.3	0.6	0.0				30.4	0.0	23.7
Incr Delay (d2), s/veh	0.0	2.0	1.9	11.8	1.6	0.0				11.4	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.8	1.2	1.4	0.7	0.0				12.7	0.0	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	5.4	5.1	55.0	2.2	0.0				41.8	0.0	24.0
LnGrp LOS	A	A	A	E	A	A				D	A	C
Approach Vol, veh/h		1379			1168						664	
Approach Delay, s/veh		5.3			4.6						37.8	
Approach LOS		A			A						D	

Timer - Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	7.1	43.9				51.0		35.2				
Change Period (Y+Rc), s	3.5	4.9				4.9		4.2				
Max Green Setting (Gmax), s	8.5	34.1				46.1		39.8				
Max Q Clear Time (g_c+I1), s	4.8	10.0				4.1		28.6				
Green Ext Time (p_c), s	0.0	7.8				6.6		2.4				

Intersection Summary												
HCM 6th Ctrl Delay			11.8									
HCM 6th LOS			B									

11: NB ramp & LOVR

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1332	196	135	562	559	177
Future Volume (veh/h)	1332	196	135	562	559	177
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1900
Adj Flow Rate, veh/h	1417	160	144	598	688	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	4	4	4	4	0
Cap, veh/h	1904	1222	197	2389	857	380
Arrive On Green	0.54	0.55	0.11	0.68	0.24	0.00
Sat Flow, veh/h	3589	1560	1753	3589	3506	1610
Grp Volume(v), veh/h	1417	160	144	598	688	0
Grp Sat Flow(s),veh/h/ln	1749	1560	1753	1749	1753	1610
Q Serve(g_s), s	29.5	2.4	7.5	6.2	17.5	0.0
Cycle Q Clear(g_c), s	29.5	2.4	7.5	6.2	17.5	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1904	1222	197	2389	857	380
V/C Ratio(X)	0.74	0.13	0.73	0.25	0.80	0.00
Avail Cap(c_a), veh/h	1904	1222	249	2389	1008	449
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.74	0.74	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	16.6	2.5	40.8	5.8	33.7	0.0
Incr Delay (d2), s/veh	2.0	0.2	7.9	0.3	4.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.4	1.7	3.6	2.0	7.9	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	18.6	2.6	48.7	6.0	37.9	0.0
LnGrp LOS	B	A	D	A	D	A
Approach Vol, veh/h	1577			742	688	
Approach Delay, s/veh	17.0			14.3	37.9	
Approach LOS	B			B	D	

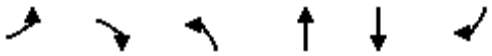
Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	13.2	55.9				69.1	25.9
Change Period (Y+Rc), s	3.5	4.9				4.9	4.5
Max Green Setting (Gmax), s	12.5	44.1				60.1	25.5
Max Q Clear Time (g_c+I1), s	9.5	31.5				8.2	19.5
Green Ext Time (p_c), s	0.1	6.8				3.0	1.9

Intersection Summary		
HCM 6th Ctrl Delay		21.1
HCM 6th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

12: S. Higuera & LOVR



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	1321	103	112	477	299	545
Future Volume (veh/h)	1321	103	112	477	299	545
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1348	105	114	487	305	556
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1317	604	316	815	519	1044
Arrive On Green	0.38	0.38	0.07	0.44	0.28	0.28
Sat Flow, veh/h	3456	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	1348	105	114	487	305	556
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1870	1870	1585
Q Serve(g_s), s	25.0	2.9	2.8	13.0	9.2	12.1
Cycle Q Clear(g_c), s	25.0	2.9	2.8	13.0	9.2	12.1
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1317	604	316	815	519	1044
V/C Ratio(X)	1.02	0.17	0.36	0.60	0.59	0.53
Avail Cap(c_a), veh/h	1317	604	469	1027	1426	1812
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.3	13.5	14.9	14.1	20.4	5.9
Incr Delay (d2), s/veh	30.9	0.1	0.7	0.7	1.1	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.1	3.1	1.0	4.6	3.7	8.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	51.2	13.6	15.5	14.8	21.5	6.3
LnGrp LOS	F	B	B	B	C	A
Approach Vol, veh/h	1453			601	861	
Approach Delay, s/veh	48.5			15.0	11.7	
Approach LOS	D			B	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		34.6		31.0	10.4	24.2
Change Period (Y+Rc), s		6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		36.0		25.0	10.0	50.0
Max Q Clear Time (g_c+I1), s		15.0		27.0	4.8	14.1
Green Ext Time (p_c), s		2.7		0.0	0.1	4.1

Intersection Summary	
HCM 6th Ctrl Delay	30.7
HCM 6th LOS	C

9: Calle Joaquin & LOVR

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	75	1454	35	67	1729	102	26	3	75	168	5	105
Future Volume (veh/h)	75	1454	35	67	1729	102	26	3	75	168	5	105
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	77	1484	35	68	1764	80	27	3	0	171	5	44
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	309	2465	1099	295	2460	1097	251	298		294	26	229
Arrive On Green	0.04	0.69	0.69	0.07	1.00	1.00	0.16	0.16	0.00	0.16	0.16	0.16
Sat Flow, veh/h	1795	3582	1598	1795	3582	1598	1360	1885	1598	1417	165	1450
Grp Volume(v), veh/h	77	1484	35	68	1764	80	27	3	0	171	0	49
Grp Sat Flow(s),veh/h/ln	1795	1791	1598	1795	1791	1598	1360	1885	1598	1417	0	1614
Q Serve(g_s), s	1.2	22.1	0.7	1.1	0.0	0.0	1.8	0.1	0.0	11.6	0.0	2.6
Cycle Q Clear(g_c), s	1.2	22.1	0.7	1.1	0.0	0.0	4.4	0.1	0.0	11.7	0.0	2.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.90
Lane Grp Cap(c), veh/h	309	2465	1099	295	2460	1097	251	298		294	0	255
V/C Ratio(X)	0.25	0.60	0.03	0.23	0.72	0.07	0.11	0.01		0.58	0.00	0.19
Avail Cap(c_a), veh/h	425	2465	1099	431	2460	1097	471	603		523	0	517
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.62	0.62	0.62	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	4.0	8.3	5.0	6.8	0.0	0.0	38.5	35.5	0.0	40.5	0.0	36.6
Incr Delay (d2), s/veh	0.4	1.1	0.1	0.2	1.1	0.1	0.2	0.0	0.0	1.8	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	7.4	0.2	0.3	0.4	0.0	0.6	0.1	0.0	4.1	0.0	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.5	9.4	5.0	7.0	1.1	0.1	38.7	35.5	0.0	42.3	0.0	36.9
LnGrp LOS	A	A	A	A	A	A	D	D		D	A	D
Approach Vol, veh/h		1596			1912			30	A		220	
Approach Delay, s/veh		9.1			1.3			38.4			41.1	
Approach LOS		A			A			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.4	72.8		19.8	7.5	72.7		19.8				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	11.0	45.0		32.0	10.0	46.0		32.0				
Max Q Clear Time (g_c+I1), s	3.1	24.1		13.7	3.2	2.0		6.4				
Green Ext Time (p_c), s	0.1	11.6		0.7	0.1	22.1		0.1				

Intersection Summary		
HCM 6th Ctrl Delay		7.2
HCM 6th LOS		A

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

10: Hwy 101 SB On-Ramp/Hwy 101 SB Off-Ramp & LOVR

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	941	716	105	1576	0	0	0	0	314	0	375
Future Volume (veh/h)	0	941	716	105	1576	0	0	0	0	314	0	375
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1885	1885	1885	1885	0				1885	1885	1885
Adj Flow Rate, veh/h	0	960	636	107	1608	0				320	0	268
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98				0.98	0.98	0.98
Percent Heavy Veh, %	0	1	1	1	1	0				1	1	1
Cap, veh/h	0	1554	693	137	1837	0				389	0	346
Arrive On Green	0.00	0.87	0.87	0.15	1.00	0.00				0.22	0.00	0.22
Sat Flow, veh/h	0	3676	1598	1795	3676	0				1795	0	1598
Grp Volume(v), veh/h	0	960	636	107	1608	0				320	0	268
Grp Sat Flow(s),veh/h/ln	0	1791	1598	1795	1791	0				1795	0	1598
Q Serve(g_s), s	0.0	7.6	25.8	5.7	0.0	0.0				17.0	0.0	15.8
Cycle Q Clear(g_c), s	0.0	7.6	25.8	5.7	0.0	0.0				17.0	0.0	15.8
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1554	693	137	1837	0				389	0	346
V/C Ratio(X)	0.00	0.62	0.92	0.78	0.88	0.00				0.82	0.00	0.77
Avail Cap(c_a), veh/h	0	1554	693	192	1837	0				718	0	639
HCM Platoon Ratio	1.00	2.00	2.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.74	0.74	0.77	0.77	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	4.2	5.4	41.6	0.0	0.0				37.3	0.0	36.9
Incr Delay (d2), s/veh	0.0	1.4	15.2	10.1	4.9	0.0				4.4	0.0	3.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.8	5.0	2.7	1.2	0.0				7.7	0.0	6.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	5.6	20.6	51.7	4.9	0.0				41.7	0.0	40.6
LnGrp LOS	A	A	C	D	A	A				D	A	D
Approach Vol, veh/h		1596			1715						588	
Approach Delay, s/veh		11.6			7.8						41.2	
Approach LOS		B			A						D	

Timer - Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	10.9	45.1				56.0		25.7				
Change Period (Y+Rc), s	3.5	4.9				4.9		4.2				
Max Green Setting (Gmax), s	10.5	37.1				51.1		39.8				
Max Q Clear Time (g_c+I1), s	7.7	27.8				2.0		19.0				
Green Ext Time (p_c), s	0.1	5.4				12.1		2.5				

Intersection Summary												
HCM 6th Ctrl Delay			14.4									
HCM 6th LOS			B									

11: NB Off ramp & LOVR

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	954	358	246	1123	557	134
Future Volume (veh/h)	954	358	246	1123	557	134
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1900
Adj Flow Rate, veh/h	984	309	254	1158	651	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	0
Cap, veh/h	1787	1154	307	2488	822	359
Arrive On Green	0.50	0.51	0.17	0.70	0.23	0.00
Sat Flow, veh/h	3647	1583	1781	3647	3563	1610
Grp Volume(v), veh/h	984	309	254	1158	651	0
Grp Sat Flow(s),veh/h/ln	1777	1583	1781	1777	1781	1610
Q Serve(g_s), s	19.0	6.6	13.8	14.5	17.2	0.0
Cycle Q Clear(g_c), s	19.0	6.6	13.8	14.5	17.2	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1787	1154	307	2488	822	359
V/C Ratio(X)	0.55	0.27	0.83	0.47	0.79	0.00
Avail Cap(c_a), veh/h	1787	1154	401	2488	1044	459
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.85	0.85	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	17.1	4.6	40.0	6.7	36.2	0.0
Incr Delay (d2), s/veh	1.0	0.5	10.6	0.6	3.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.5	4.2	6.8	4.7	7.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	18.1	5.1	50.5	7.3	39.5	0.0
LnGrp LOS	B	A	D	A	D	A
Approach Vol, veh/h	1293			1412	651	
Approach Delay, s/veh	15.0			15.1	39.5	
Approach LOS	B			B	D	

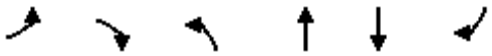
Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	19.7	54.5				74.2	25.8
Change Period (Y+Rc), s	3.5	4.9				4.9	4.5
Max Green Setting (Gmax), s	21.5	38.1				63.1	27.5
Max Q Clear Time (g_c+I1), s	15.8	21.0				16.5	19.2
Green Ext Time (p_c), s	0.5	6.1				7.0	2.1

Intersection Summary		
HCM 6th Ctrl Delay		19.8
HCM 6th LOS		B

Notes

User approved volume balancing among the lanes for turning movement.

12: S. Higuera & LOVR



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	1011	95	67	290	690	1118
Future Volume (veh/h)	1011	95	67	290	690	1118
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1099	103	73	315	734	1189
Peak Hour Factor	0.92	0.92	0.92	0.92	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	888	407	199	1159	961	1222
Arrive On Green	0.26	0.26	0.04	0.62	0.51	0.51
Sat Flow, veh/h	3456	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	1099	103	73	315	734	1189
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1870	1870	1585
Q Serve(g_s), s	25.0	5.0	1.8	7.5	30.6	50.0
Cycle Q Clear(g_c), s	25.0	5.0	1.8	7.5	30.6	50.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	888	407	199	1159	961	1222
V/C Ratio(X)	1.24	0.25	0.37	0.27	0.76	0.97
Avail Cap(c_a), veh/h	888	407	303	1159	961	1222
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.2	28.7	17.0	8.5	18.9	8.3
Incr Delay (d2), s/veh	116.7	0.3	1.1	0.1	3.7	19.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	24.4	0.0	0.7	2.6	12.8	34.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	152.8	29.1	18.1	8.6	22.6	27.8
LnGrp LOS	F	C	B	A	C	C
Approach Vol, veh/h	1202			388	1923	
Approach Delay, s/veh	142.2			10.4	25.8	
Approach LOS	F			B	C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		66.3		31.0	10.3	56.0
Change Period (Y+Rc), s		6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		36.0		25.0	10.0	50.0
Max Q Clear Time (g_c+I1), s		9.5		27.0	3.8	52.0
Green Ext Time (p_c), s		1.7		0.0	0.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	64.0
HCM 6th LOS	E

9: Calle Joaquin & LOVR

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	1070	16	52	913	105	15	3	51	71	4	29
Future Volume (veh/h)	41	1070	16	52	913	105	15	3	51	71	4	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		1.00	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	44	1151	15	56	982	98	16	3	0	76	4	8
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	341	1585	704	700	2530	1125	203	156		211	46	92
Arrive On Green	0.03	0.45	0.45	0.60	1.00	1.00	0.08	0.08	0.00	0.08	0.08	0.08
Sat Flow, veh/h	1753	3497	1553	1753	3497	1556	1371	1841	1560	1382	545	1090
Grp Volume(v), veh/h	44	1151	15	56	982	98	16	3	0	76	0	12
Grp Sat Flow(s),veh/h/ln	1753	1749	1553	1753	1749	1556	1371	1841	1560	1382	0	1635
Q Serve(g_s), s	1.1	20.1	0.4	0.0	0.0	0.0	0.8	0.1	0.0	4.0	0.0	0.5
Cycle Q Clear(g_c), s	1.1	20.1	0.4	0.0	0.0	0.0	1.3	0.1	0.0	4.1	0.0	0.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.67
Lane Grp Cap(c), veh/h	341	1585	704	700	2530	1125	203	156		211	0	138
V/C Ratio(X)	0.13	0.73	0.02	0.08	0.39	0.09	0.08	0.02		0.36	0.00	0.09
Avail Cap(c_a), veh/h	425	1585	704	700	2530	1125	507	564		518	0	501
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.89	0.89	0.89	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.7	16.7	11.3	6.6	0.0	0.0	32.3	31.5	0.0	33.4	0.0	31.7
Incr Delay (d2), s/veh	0.2	2.9	0.1	0.0	0.4	0.1	0.2	0.0	0.0	1.0	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	7.9	0.1	0.3	0.1	0.0	0.3	0.1	0.0	1.4	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.8	19.6	11.4	6.7	0.4	0.1	32.4	31.5	0.0	34.4	0.0	31.9
LnGrp LOS	B	B	B	A	A	A	C	C		C	A	C
Approach Vol, veh/h		1210			1136			19	A		88	
Approach Delay, s/veh		19.3			0.7			32.3			34.1	
Approach LOS		B			A			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	26.6	38.0		10.4	6.4	58.2		10.4				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	6.0	34.0		23.0	6.0	34.0		23.0				
Max Q Clear Time (g_c+I1), s	2.0	22.1		6.1	3.1	2.0		3.3				
Green Ext Time (p_c), s	0.0	6.4		0.2	0.0	8.5		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	11.3
HCM 6th LOS	B

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

10: Hwy 101 SB On-Ramp/Hwy 101 SB Off-Ramp & LOVR

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	830	362	29	863	0	0	0	0	434	0	234
Future Volume (veh/h)	0	830	362	29	863	0	0	0	0	434	0	234
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1841	1841	1841	1841	0				1841	1841	1841
Adj Flow Rate, veh/h	0	865	301	30	899	0				452	0	130
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96				0.96	0.96	0.96
Percent Heavy Veh, %	0	4	4	4	4	0				4	4	4
Cap, veh/h	0	1583	706	48	1693	0				523	0	465
Arrive On Green	0.00	0.91	0.91	0.05	0.97	0.00				0.30	0.00	0.30
Sat Flow, veh/h	0	3589	1560	1753	3589	0				1753	0	1560
Grp Volume(v), veh/h	0	865	301	30	899	0				452	0	130
Grp Sat Flow(s),veh/h/ln	0	1749	1560	1753	1749	0				1753	0	1560
Q Serve(g_s), s	0.0	3.5	2.2	1.3	1.3	0.0				18.3	0.0	4.8
Cycle Q Clear(g_c), s	0.0	3.5	2.2	1.3	1.3	0.0				18.3	0.0	4.8
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1583	706	48	1693	0				523	0	465
V/C Ratio(X)	0.00	0.55	0.43	0.62	0.53	0.00				0.86	0.00	0.28
Avail Cap(c_a), veh/h	0	1583	706	157	1693	0				701	0	624
HCM Platoon Ratio	1.00	2.00	2.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.89	0.89	0.87	0.87	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	2.1	2.1	35.1	0.6	0.0				24.9	0.0	20.1
Incr Delay (d2), s/veh	0.0	1.2	1.7	10.9	1.0	0.0				8.5	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.9	0.8	0.7	0.5	0.0				8.4	0.0	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	3.3	3.7	46.0	1.7	0.0				33.4	0.0	20.5
LnGrp LOS	A	A	A	D	A	A				C	A	C
Approach Vol, veh/h		1166			929						582	
Approach Delay, s/veh		3.4			3.1						30.5	
Approach LOS		A			A						C	

Timer - Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	5.4	35.6				41.0		26.4				
Change Period (Y+Rc), s	3.5	4.9				4.9		4.2				
Max Green Setting (Gmax), s	6.5	26.1				36.1		29.8				
Max Q Clear Time (g_c+I1), s	3.3	5.5				3.3		20.3				
Green Ext Time (p_c), s	0.0	5.9				4.8		1.9				

Intersection Summary												
HCM 6th Ctrl Delay			9.2									
HCM 6th LOS			A									

11: NB ramp & LOVR

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1102	193	114	387	508	123
Future Volume (veh/h)	1102	193	114	387	508	123
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1900
Adj Flow Rate, veh/h	1172	156	121	412	580	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	4	4	4	4	0
Cap, veh/h	1896	1198	175	2363	815	357
Arrive On Green	0.54	0.55	0.10	0.68	0.23	0.00
Sat Flow, veh/h	3589	1560	1753	3589	3506	1610
Grp Volume(v), veh/h	1172	156	121	412	580	0
Grp Sat Flow(s),veh/h/ln	1749	1560	1753	1749	1753	1610
Q Serve(g_s), s	17.3	1.9	5.0	3.2	11.4	0.0
Cycle Q Clear(g_c), s	17.3	1.9	5.0	3.2	11.4	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1896	1198	175	2363	815	357
V/C Ratio(X)	0.62	0.13	0.69	0.17	0.71	0.00
Avail Cap(c_a), veh/h	1896	1198	175	2363	1206	537
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.88	0.88	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	11.8	2.2	32.6	4.5	26.5	0.0
Incr Delay (d2), s/veh	1.3	0.2	10.9	0.2	1.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	1.2	2.6	0.9	4.8	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	13.2	2.4	43.5	4.6	27.6	0.0
LnGrp LOS	B	A	D	A	C	A
Approach Vol, veh/h	1328			533	580	
Approach Delay, s/veh	11.9			13.5	27.6	
Approach LOS	B			B	C	

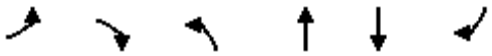
Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	10.0	44.9				54.9	20.1
Change Period (Y+Rc), s	3.5	4.9				4.9	4.5
Max Green Setting (Gmax), s	6.5	31.6				41.6	24.0
Max Q Clear Time (g_c+I1), s	7.0	19.3				5.2	13.4
Green Ext Time (p_c), s	0.0	5.6				1.9	2.2

Intersection Summary	
HCM 6th Ctrl Delay	16.0
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

12: S. Higuera & LOVR

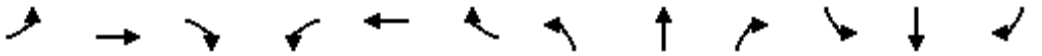


Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	1110	72	25	422	275	410
Future Volume (veh/h)	1110	72	25	422	275	410
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1133	73	26	431	281	418
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1389	637	260	700	434	1005
Arrive On Green	0.40	0.40	0.03	0.37	0.23	0.23
Sat Flow, veh/h	3456	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	1133	73	26	431	281	418
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1870	1870	1585
Q Serve(g_s), s	15.6	1.5	0.6	10.0	7.3	7.0
Cycle Q Clear(g_c), s	15.6	1.5	0.6	10.0	7.3	7.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1389	637	260	700	434	1005
V/C Ratio(X)	0.82	0.11	0.10	0.62	0.65	0.42
Avail Cap(c_a), veh/h	1870	858	373	1711	1327	1761
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.3	10.0	14.2	13.6	18.6	4.9
Incr Delay (d2), s/veh	2.1	0.1	0.2	0.9	1.6	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	1.7	0.2	3.4	2.9	4.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	16.4	10.1	14.3	14.5	20.2	5.1
LnGrp LOS	B	B	B	B	C	A
Approach Vol, veh/h	1206			457	699	
Approach Delay, s/veh	16.0			14.5	11.2	
Approach LOS	B			B	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		26.0		27.5	7.6	18.4
Change Period (Y+Rc), s		6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		49.0		29.0	5.0	38.0
Max Q Clear Time (g_c+I1), s		12.0		17.6	2.6	9.3
Green Ext Time (p_c), s		2.6		3.9	0.0	3.2

Intersection Summary	
HCM 6th Ctrl Delay	14.3
HCM 6th LOS	B

9: Calle Joaquin & LOVR



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	1292	23	52	1515	95	13	3	51	133	5	88
Future Volume (veh/h)	64	1292	23	52	1515	95	13	3	51	133	5	88
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		1.00	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	65	1318	22	53	1546	73	13	3	0	136	5	27
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	244	1393	621	696	2480	1106	245	258		272	35	188
Arrive On Green	0.04	0.39	0.39	0.68	1.00	1.00	0.14	0.14	0.00	0.14	0.14	0.14
Sat Flow, veh/h	1795	3582	1598	1795	3582	1598	1380	1885	1598	1416	254	1373
Grp Volume(v), veh/h	65	1318	22	53	1546	73	13	3	0	136	0	32
Grp Sat Flow(s),veh/h/ln	1795	1791	1598	1795	1791	1598	1380	1885	1598	1416	0	1627
Q Serve(g_s), s	2.1	32.0	0.8	0.0	0.0	0.0	0.8	0.1	0.0	8.3	0.0	1.6
Cycle Q Clear(g_c), s	2.1	32.0	0.8	0.0	0.0	0.0	2.3	0.1	0.0	8.4	0.0	1.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.84
Lane Grp Cap(c), veh/h	244	1393	621	696	2480	1106	245	258		272	0	223
V/C Ratio(X)	0.27	0.95	0.04	0.08	0.62	0.07	0.05	0.01		0.50	0.00	0.14
Avail Cap(c_a), veh/h	376	1393	621	696	2480	1106	547	670		581	0	579
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.71	0.71	0.71	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.8	26.6	17.0	9.4	0.0	0.0	35.2	33.6	0.0	37.2	0.0	34.2
Incr Delay (d2), s/veh	0.6	14.3	0.1	0.0	0.8	0.1	0.1	0.0	0.0	1.4	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	15.5	0.3	0.3	0.3	0.0	0.3	0.1	0.0	2.9	0.0	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.3	40.9	17.1	9.4	0.8	0.1	35.3	33.6	0.0	38.6	0.0	34.5
LnGrp LOS	B	D	B	A	A	A	D	C		D	A	C
Approach Vol, veh/h		1405			1672			16	A		168	
Approach Delay, s/veh		39.5			1.1			35.0			37.8	
Approach LOS		D			A			C			D	

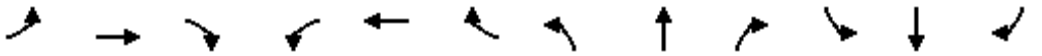
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	34.7	39.0		16.3	7.4	66.3		16.3				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	11.0	35.0		32.0	10.0	36.0		32.0				
Max Q Clear Time (g_c+I1), s	2.0	34.0		10.4	4.1	2.0		4.3				
Green Ext Time (p_c), s	0.1	0.8		0.5	0.0	16.0		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		19.7	
HCM 6th LOS		B	

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

10: Hwy 101 SB On-Ramp/Hwy 101 SB Off-Ramp & LOVR



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	809	667	64	1337	0	0	0	0	241	0	392
Future Volume (veh/h)	0	809	667	64	1337	0	0	0	0	241	0	392
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1885	1885	1885	1885	0				1885	1885	1885
Adj Flow Rate, veh/h	0	826	586	65	1364	0				246	0	285
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98				0.98	0.98	0.98
Percent Heavy Veh, %	0	1	1	1	1	0				1	1	1
Cap, veh/h	0	1815	810	87	2002	0				388	0	345
Arrive On Green	0.00	1.00	1.00	0.10	1.00	0.00				0.22	0.00	0.22
Sat Flow, veh/h	0	3676	1598	1795	3676	0				1795	0	1598
Grp Volume(v), veh/h	0	826	586	65	1364	0				246	0	285
Grp Sat Flow(s),veh/h/ln	0	1791	1598	1795	1791	0				1795	0	1598
Q Serve(g_s), s	0.0	0.0	0.0	3.2	0.0	0.0				11.2	0.0	15.3
Cycle Q Clear(g_c), s	0.0	0.0	0.0	3.2	0.0	0.0				11.2	0.0	15.3
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1815	810	87	2002	0				388	0	345
V/C Ratio(X)	0.00	0.45	0.72	0.74	0.68	0.00				0.63	0.00	0.83
Avail Cap(c_a), veh/h	0	1815	810	174	2002	0				618	0	550
HCM Platoon Ratio	1.00	2.00	2.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.80	0.80	0.85	0.85	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	40.1	0.0	0.0				32.0	0.0	33.7
Incr Delay (d2), s/veh	0.0	0.7	4.5	10.1	1.6	0.0				1.7	0.0	5.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.2	1.0	1.6	0.4	0.0				4.9	0.0	6.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.7	4.5	50.1	1.6	0.0				33.8	0.0	39.3
LnGrp LOS	A	A	A	D	A	A				C	A	D
Approach Vol, veh/h		1412			1429						531	
Approach Delay, s/veh		2.3			3.8						36.7	
Approach LOS		A			A						D	

Timer - Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	7.7	47.3				55.0		23.5				
Change Period (Y+Rc), s	3.5	4.9				4.9		4.2				
Max Green Setting (Gmax), s	8.5	38.1				50.1		30.8				
Max Q Clear Time (g_c+I1), s	5.2	2.0				2.0		17.3				
Green Ext Time (p_c), s	0.0	8.6				9.1		1.9				

Intersection Summary												
HCM 6th Ctrl Delay			8.3									
HCM 6th LOS			A									

11: NB Off ramp & LOVR

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	782	322	178	889	512	89
Future Volume (veh/h)	782	322	178	889	512	89
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1900
Adj Flow Rate, veh/h	806	272	184	916	562	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	0
Cap, veh/h	1943	1193	244	2528	755	327
Arrive On Green	0.55	0.55	0.14	0.71	0.21	0.00
Sat Flow, veh/h	3647	1584	1781	3647	3563	1610
Grp Volume(v), veh/h	806	272	184	916	562	0
Grp Sat Flow(s),veh/h/ln	1777	1584	1781	1777	1781	1610
Q Serve(g_s), s	12.0	4.6	8.9	9.0	13.3	0.0
Cycle Q Clear(g_c), s	12.0	4.6	8.9	9.0	13.3	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1943	1193	244	2528	755	327
V/C Ratio(X)	0.41	0.23	0.76	0.36	0.74	0.00
Avail Cap(c_a), veh/h	1943	1193	386	2528	1081	474
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	11.9	3.3	37.4	5.0	33.2	0.0
Incr Delay (d2), s/veh	0.6	0.4	4.7	0.4	1.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	2.8	4.1	2.7	5.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	12.5	3.7	42.1	5.5	34.9	0.0
LnGrp LOS	B	A	D	A	C	A
Approach Vol, veh/h	1078			1100	562	
Approach Delay, s/veh	10.3			11.6	34.9	
Approach LOS	B			B	C	

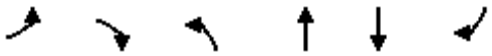
Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	14.8	53.4				68.2	21.8
Change Period (Y+Rc), s	3.5	4.9				4.9	4.5
Max Green Setting (Gmax), s	18.5	33.1				55.1	25.5
Max Q Clear Time (g_c+I1), s	10.9	14.0				11.0	15.3
Green Ext Time (p_c), s	0.4	5.1				5.0	2.0

Intersection Summary			
HCM 6th Ctrl Delay		15.9	
HCM 6th LOS		B	

Notes

User approved volume balancing among the lanes for turning movement.

12: S. Higuera & LOVR



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	731	84	34	262	794	609
Future Volume (veh/h)	731	84	34	262	794	609
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	795	91	37	285	845	648
Peak Hour Factor	0.92	0.92	0.92	0.92	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	943	432	163	1082	877	1176
Arrive On Green	0.27	0.27	0.03	0.58	0.47	0.47
Sat Flow, veh/h	3456	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	795	91	37	285	845	648
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1870	1870	1585
Q Serve(g_s), s	17.5	3.6	0.8	6.1	35.3	14.4
Cycle Q Clear(g_c), s	17.5	3.6	0.8	6.1	35.3	14.4
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	943	432	163	1082	877	1176
V/C Ratio(X)	0.84	0.21	0.23	0.26	0.96	0.55
Avail Cap(c_a), veh/h	1242	570	211	1136	881	1179
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.7	22.6	18.6	8.5	20.7	4.5
Incr Delay (d2), s/veh	4.2	0.2	0.7	0.1	21.7	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.2	3.5	0.3	2.0	18.5	9.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	31.9	22.9	19.3	8.6	42.5	5.1
LnGrp LOS	C	C	B	A	D	A
Approach Vol, veh/h	886			322	1493	
Approach Delay, s/veh	31.0			9.8	26.2	
Approach LOS	C			A	C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		52.7		28.0	8.8	43.8
Change Period (Y+Rc), s		6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		49.0		29.0	5.0	38.0
Max Q Clear Time (g_c+I1), s		8.1		19.5	2.8	37.3
Green Ext Time (p_c), s		1.6		2.5	0.0	0.5

Intersection Summary	
HCM 6th Ctrl Delay	25.8
HCM 6th LOS	C

9: Calle Joaquin & LOVR

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	1224	25	65	1038	113	22	3	61	78	4	38
Future Volume (veh/h)	51	1224	25	65	1038	113	22	3	61	78	4	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		1.00	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	55	1316	25	70	1116	107	24	3	0	84	4	18
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	323	1585	704	648	2482	1104	206	173		224	27	123
Arrive On Green	0.04	0.45	0.45	0.59	1.00	1.00	0.09	0.09	0.00	0.09	0.09	0.09
Sat Flow, veh/h	1753	3497	1553	1753	3497	1556	1360	1841	1560	1383	290	1306
Grp Volume(v), veh/h	55	1316	25	70	1116	107	24	3	0	84	0	22
Grp Sat Flow(s),veh/h/ln	1753	1749	1553	1753	1749	1556	1360	1841	1560	1383	0	1596
Q Serve(g_s), s	1.4	24.7	0.7	0.0	0.0	0.0	1.2	0.1	0.0	4.4	0.0	0.9
Cycle Q Clear(g_c), s	1.4	24.7	0.7	0.0	0.0	0.0	2.2	0.1	0.0	4.5	0.0	0.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.82
Lane Grp Cap(c), veh/h	323	1585	704	648	2482	1104	206	173		224	0	150
V/C Ratio(X)	0.17	0.83	0.04	0.11	0.45	0.10	0.12	0.02		0.38	0.00	0.15
Avail Cap(c_a), veh/h	399	1585	704	648	2482	1104	496	564		518	0	489
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.79	0.79	0.79	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.8	18.0	11.4	9.1	0.0	0.0	32.2	30.8	0.0	32.9	0.0	31.2
Incr Delay (d2), s/veh	0.2	5.2	0.1	0.1	0.5	0.1	0.2	0.0	0.0	1.0	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	10.1	0.2	0.4	0.2	0.0	0.4	0.0	0.0	1.5	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.0	23.2	11.5	9.2	0.5	0.1	32.5	30.9	0.0	33.9	0.0	31.7
LnGrp LOS	B	C	B	A	A	A	C	C		C	A	C
Approach Vol, veh/h		1396			1293			27	A		106	
Approach Delay, s/veh		22.6			0.9			32.3			33.5	
Approach LOS		C			A			C			C	

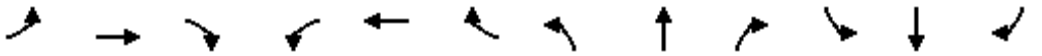
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	26.0	38.0		11.0	6.7	57.2		11.0				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	6.0	34.0		23.0	6.0	34.0		23.0				
Max Q Clear Time (g_c+I1), s	2.0	26.7		6.5	3.4	2.0		4.2				
Green Ext Time (p_c), s	0.0	4.9		0.3	0.0	10.1		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		13.1
HCM 6th LOS		B

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

10: Hwy 101 SB On-Ramp/Hwy 101 SB Off-Ramp & LOVR



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1011	386	50	1071	0	0	0	0	495	0	252
Future Volume (veh/h)	0	1011	386	50	1071	0	0	0	0	495	0	252
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1841	1841	1841	1841	0				1841	1841	1841
Adj Flow Rate, veh/h	0	1053	326	52	1116	0				516	0	148
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96				0.96	0.96	0.96
Percent Heavy Veh, %	0	4	4	4	4	0				4	4	4
Cap, veh/h	0	1540	687	70	1693	0				582	0	518
Arrive On Green	0.00	0.88	0.88	0.08	0.97	0.00				0.33	0.00	0.33
Sat Flow, veh/h	0	3589	1560	1753	3589	0				1753	0	1560
Grp Volume(v), veh/h	0	1053	326	52	1116	0				516	0	148
Grp Sat Flow(s),veh/h/ln	0	1749	1560	1753	1749	0				1753	0	1560
Q Serve(g_s), s	0.0	6.8	3.2	2.2	2.1	0.0				20.9	0.0	5.3
Cycle Q Clear(g_c), s	0.0	6.8	3.2	2.2	2.1	0.0				20.9	0.0	5.3
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1540	687	70	1693	0				582	0	518
V/C Ratio(X)	0.00	0.68	0.47	0.75	0.66	0.00				0.89	0.00	0.29
Avail Cap(c_a), veh/h	0	1540	687	157	1693	0				701	0	624
HCM Platoon Ratio	1.00	2.00	2.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.82	0.82	0.83	0.83	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	2.9	2.7	34.2	0.7	0.0				23.7	0.0	18.5
Incr Delay (d2), s/veh	0.0	2.0	1.9	12.4	1.7	0.0				11.5	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.5	1.0	1.1	0.7	0.0				9.9	0.0	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	5.0	4.6	46.5	2.3	0.0				35.2	0.0	18.8
LnGrp LOS	A	A	A	D	A	A				D	A	B
Approach Vol, veh/h		1379			1168						664	
Approach Delay, s/veh		4.9			4.3						31.5	
Approach LOS		A			A						C	

Timer - Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	6.3	34.7				41.0		28.9				
Change Period (Y+Rc), s	3.5	4.9				4.9		4.2				
Max Green Setting (Gmax), s	6.5	26.1				36.1		29.8				
Max Q Clear Time (g_c+I1), s	4.2	8.8				4.1		22.9				
Green Ext Time (p_c), s	0.0	6.8				6.4		1.8				

Intersection Summary			
HCM 6th Ctrl Delay		10.2	
HCM 6th LOS		B	

11: NB ramp & LOVR

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1332	196	135	562	559	177
Future Volume (veh/h)	1332	196	135	562	559	177
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1900
Adj Flow Rate, veh/h	1417	160	144	598	688	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	4	4	4	4	0
Cap, veh/h	1791	1198	175	2258	920	405
Arrive On Green	0.51	0.52	0.10	0.65	0.26	0.00
Sat Flow, veh/h	3589	1560	1753	3589	3506	1610
Grp Volume(v), veh/h	1417	160	144	598	688	0
Grp Sat Flow(s),veh/h/ln	1749	1560	1753	1749	1753	1610
Q Serve(g_s), s	24.9	2.0	6.0	5.5	13.5	0.0
Cycle Q Clear(g_c), s	24.9	2.0	6.0	5.5	13.5	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1791	1198	175	2258	920	405
V/C Ratio(X)	0.79	0.13	0.82	0.26	0.75	0.00
Avail Cap(c_a), veh/h	1791	1198	175	2258	1206	537
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.74	0.74	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	15.0	2.2	33.1	5.7	25.4	0.0
Incr Delay (d2), s/veh	2.7	0.2	25.8	0.3	1.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.3	1.3	3.7	1.6	5.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	17.7	2.4	58.8	6.0	27.2	0.0
LnGrp LOS	B	A	E	A	C	A
Approach Vol, veh/h	1577			742	688	
Approach Delay, s/veh	16.2			16.2	27.2	
Approach LOS	B			B	C	

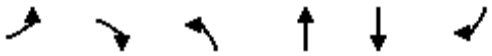
Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	10.0	42.6				52.6	22.4
Change Period (Y+Rc), s	3.5	4.9				4.9	4.5
Max Green Setting (Gmax), s	6.5	31.6				41.6	24.0
Max Q Clear Time (g_c+I1), s	8.0	26.9				7.5	15.5
Green Ext Time (p_c), s	0.0	3.2				2.9	2.4

Intersection Summary	
HCM 6th Ctrl Delay	18.7
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

12: S. Higuera & LOVR



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	1321	103	112	477	299	545
Future Volume (veh/h)	1321	103	112	477	299	545
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1348	105	114	487	305	556
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1430	656	295	772	488	1070
Arrive On Green	0.41	0.41	0.06	0.41	0.26	0.26
Sat Flow, veh/h	3456	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	1348	105	114	487	305	556
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1870	1870	1585
Q Serve(g_s), s	25.9	2.9	3.1	14.3	10.0	12.2
Cycle Q Clear(g_c), s	25.9	2.9	3.1	14.3	10.0	12.2
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1430	656	295	772	488	1070
V/C Ratio(X)	0.94	0.16	0.39	0.63	0.62	0.52
Avail Cap(c_a), veh/h	1448	664	308	1324	1027	1526
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.5	12.7	16.6	16.1	22.6	5.6
Incr Delay (d2), s/veh	12.4	0.1	0.8	0.9	1.3	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.2	0.0	1.1	5.3	4.1	8.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	31.9	12.8	17.5	17.0	23.9	6.0
LnGrp LOS	C	B	B	B	C	A
Approach Vol, veh/h	1453			601	861	
Approach Delay, s/veh	30.5			17.1	12.3	
Approach LOS	C			B	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		34.6		34.6	10.5	24.1
Change Period (Y+Rc), s		6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		49.0		29.0	5.0	38.0
Max Q Clear Time (g_c+I1), s		16.3		27.9	5.1	14.2
Green Ext Time (p_c), s		3.0		0.7	0.0	3.9

Intersection Summary		
HCM 6th Ctrl Delay		22.4
HCM 6th LOS		C

9: Calle Joaquin & LOVR

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	75	1454	35	67	1729	102	26	3	75	168	5	105
Future Volume (veh/h)	75	1454	35	67	1729	102	26	3	75	168	5	105
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	77	1484	35	68	1764	80	27	3	0	171	5	44
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	235	1393	621	648	2369	1057	264	304		307	27	234
Arrive On Green	0.04	0.39	0.39	0.63	1.00	1.00	0.16	0.16	0.00	0.16	0.16	0.16
Sat Flow, veh/h	1795	3582	1598	1795	3582	1598	1360	1885	1598	1417	165	1450
Grp Volume(v), veh/h	77	1484	35	68	1764	80	27	3	0	171	0	49
Grp Sat Flow(s),veh/h/ln	1795	1791	1598	1795	1791	1598	1360	1885	1598	1417	0	1615
Q Serve(g_s), s	2.6	35.0	1.2	0.0	0.0	0.0	1.6	0.1	0.0	10.4	0.0	2.4
Cycle Q Clear(g_c), s	2.6	35.0	1.2	0.0	0.0	0.0	3.9	0.1	0.0	10.5	0.0	2.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.90
Lane Grp Cap(c), veh/h	235	1393	621	648	2369	1057	264	304		307	0	261
V/C Ratio(X)	0.33	1.07	0.06	0.10	0.74	0.08	0.10	0.01		0.56	0.00	0.19
Avail Cap(c_a), veh/h	355	1393	621	648	2369	1057	528	670		582	0	574
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.59	0.59	0.59	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.9	27.5	17.2	11.3	0.0	0.0	34.3	31.7	0.0	36.1	0.0	32.6
Incr Delay (d2), s/veh	0.8	43.6	0.2	0.0	1.3	0.1	0.2	0.0	0.0	1.6	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	22.3	0.5	0.5	0.4	0.0	0.5	0.1	0.0	3.6	0.0	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.7	71.1	17.4	11.3	1.3	0.1	34.5	31.7	0.0	37.7	0.0	33.0
LnGrp LOS	B	F	B	B	A	A	C	C		D	A	C
Approach Vol, veh/h		1596			1912			30	A		220	
Approach Delay, s/veh		67.5			1.6			34.2			36.6	
Approach LOS		E			A			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	32.5	39.0		18.5	7.9	63.5		18.5				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	11.0	35.0		32.0	10.0	36.0		32.0				
Max Q Clear Time (g_c+I1), s	2.0	37.0		12.5	4.6	2.0		5.9				
Green Ext Time (p_c), s	0.1	0.0		0.7	0.1	19.3		0.1				

Intersection Summary		
HCM 6th Ctrl Delay		31.9
HCM 6th LOS		C

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

10: Hwy 101 SB On-Ramp/Hwy 101 SB Off-Ramp & LOVR

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	941	716	105	1576	0	0	0	0	314	0	402
Future Volume (veh/h)	0	941	716	105	1576	0	0	0	0	314	0	402
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1885	1885	1885	1885	0				1885	1885	1885
Adj Flow Rate, veh/h	0	960	636	107	1608	0				320	0	295
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98				0.98	0.98	0.98
Percent Heavy Veh, %	0	1	1	1	1	0				1	1	1
Cap, veh/h	0	1715	765	138	2002	0				404	0	359
Arrive On Green	0.00	0.96	0.96	0.15	1.00	0.00				0.22	0.00	0.22
Sat Flow, veh/h	0	3676	1598	1795	3676	0				1795	0	1598
Grp Volume(v), veh/h	0	960	636	107	1608	0				320	0	295
Grp Sat Flow(s),veh/h/ln	0	1791	1598	1795	1791	0				1795	0	1598
Q Serve(g_s), s	0.0	2.2	7.4	5.2	0.0	0.0				15.1	0.0	15.8
Cycle Q Clear(g_c), s	0.0	2.2	7.4	5.2	0.0	0.0				15.1	0.0	15.8
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1715	765	138	2002	0				404	0	359
V/C Ratio(X)	0.00	0.56	0.83	0.78	0.80	0.00				0.79	0.00	0.82
Avail Cap(c_a), veh/h	0	1715	765	174	2002	0				618	0	550
HCM Platoon Ratio	1.00	2.00	2.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.67	0.67	0.77	0.77	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	1.0	1.1	37.4	0.0	0.0				32.9	0.0	33.2
Incr Delay (d2), s/veh	0.0	0.9	7.1	12.5	2.7	0.0				4.0	0.0	5.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.6	2.0	2.6	0.8	0.0				6.8	0.0	6.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	1.9	8.2	49.9	2.7	0.0				36.9	0.0	39.0
LnGrp LOS	A	A	A	D	A	A				D	A	D
Approach Vol, veh/h		1596			1715						615	
Approach Delay, s/veh		4.4			5.7						37.9	
Approach LOS		A			A						D	

Timer - Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	10.2	44.8				55.0		24.2				
Change Period (Y+Rc), s	3.5	4.9				4.9		4.2				
Max Green Setting (Gmax), s	8.5	38.1				50.1		30.8				
Max Q Clear Time (g_c+I1), s	7.2	9.4				2.0		17.8				
Green Ext Time (p_c), s	0.0	9.7				12.1		2.3				

Intersection Summary												
HCM 6th Ctrl Delay			10.2									
HCM 6th LOS			B									

11: NB Off ramp & LOVR

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	954	358	246	1123	557	134
Future Volume (veh/h)	954	358	246	1123	557	134
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1900
Adj Flow Rate, veh/h	984	309	254	1158	651	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	0
Cap, veh/h	1354	965	473	2451	832	362
Arrive On Green	0.38	0.38	0.27	0.69	0.23	0.00
Sat Flow, veh/h	3647	1583	1781	3647	3563	1610
Grp Volume(v), veh/h	984	309	254	1158	651	0
Grp Sat Flow(s),veh/h/ln	1777	1583	1781	1777	1781	1610
Q Serve(g_s), s	21.3	8.5	11.0	13.5	15.4	0.0
Cycle Q Clear(g_c), s	21.3	8.5	11.0	13.5	15.4	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1354	965	473	2451	832	362
V/C Ratio(X)	0.73	0.32	0.54	0.47	0.78	0.00
Avail Cap(c_a), veh/h	1354	965	473	2451	1021	447
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.86	0.86	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	23.8	8.5	28.3	6.4	32.3	0.0
Incr Delay (d2), s/veh	3.0	0.8	1.2	0.7	3.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.0	4.9	4.7	4.2	6.8	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	26.8	9.3	29.5	7.1	35.6	0.0
LnGrp LOS	C	A	C	A	D	A
Approach Vol, veh/h	1293			1412	651	
Approach Delay, s/veh	22.6			11.1	35.6	
Approach LOS	C			B	D	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	27.8	38.5				66.3	23.7
Change Period (Y+Rc), s	4.9	* 4.9				4.9	4.5
Max Green Setting (Gmax), s	19.5	* 34				56.6	24.0
Max Q Clear Time (g_c+I1), s	13.0	23.3				15.5	17.4
Green Ext Time (p_c), s	0.5	4.7				6.9	1.8

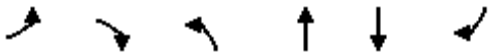
Intersection Summary	
HCM 6th Ctrl Delay	20.3
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

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

12: S. Higuera & LOVR



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	1011	95	67	290	690	1118
Future Volume (veh/h)	1011	95	67	290	690	1118
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1099	103	73	315	734	1189
Peak Hour Factor	0.92	0.92	0.92	0.92	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1124	515	177	1010	797	1191
Arrive On Green	0.33	0.33	0.05	0.54	0.43	0.43
Sat Flow, veh/h	3456	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	1099	103	73	315	734	1189
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1870	1870	1585
Q Serve(g_s), s	28.1	4.2	1.9	8.3	33.1	38.0
Cycle Q Clear(g_c), s	28.1	4.2	1.9	8.3	33.1	38.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1124	515	177	1010	797	1191
V/C Ratio(X)	0.98	0.20	0.41	0.31	0.92	1.00
Avail Cap(c_a), veh/h	1124	515	193	1028	797	1191
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.8	21.7	20.4	11.3	24.2	7.5
Incr Delay (d2), s/veh	21.6	0.2	1.5	0.2	15.9	25.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.1	4.3	0.8	3.0	16.7	34.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	51.4	21.9	21.9	11.5	40.1	33.2
LnGrp LOS	D	C	C	B	D	C
Approach Vol, veh/h	1202			388	1923	
Approach Delay, s/veh	48.8			13.5	35.8	
Approach LOS	D			B	D	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		54.2		35.0	10.2	44.0
Change Period (Y+Rc), s		6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		49.0		29.0	5.0	38.0
Max Q Clear Time (g_c+I1), s		10.3		30.1	3.9	40.0
Green Ext Time (p_c), s		1.8		0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	37.8
HCM 6th LOS	D

Attachment D:
SimTraffic Queuing Analysis Output Sheets

Intersection: 9: Calle Joaquin & LOVR

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	T	T	R	L	T	T	R	L	T	R	L
Maximum Queue (ft)	92	155	197	52	86	71	95	53	51	22	51	74
Average Queue (ft)	24	59	73	4	31	13	24	8	13	2	3	41
95th Queue (ft)	64	128	159	25	71	45	66	34	38	12	23	72
Link Distance (ft)		614	614			235	235			446		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	125			100	125			100	300		300	50
Storage Blk Time (%)		0	3	0		0	0	0				19
Queuing Penalty (veh)		0	0	0		0	0	0				6

Intersection: 9: Calle Joaquin & LOVR

Movement	SB
Directions Served	TR
Maximum Queue (ft)	113
Average Queue (ft)	27
95th Queue (ft)	73
Link Distance (ft)	237
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	1
Queuing Penalty (veh)	1

Intersection: 10: Hwy 101 SB On-Ramp/Hwy 101 SB Off-Ramp & LOVR

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	240	283	115	74	245	263	200	483
Average Queue (ft)	132	150	86	22	133	145	178	200
95th Queue (ft)	234	270	145	59	230	251	227	448
Link Distance (ft)	235	235			699	699		672
Upstream Blk Time (%)	0	3						
Queuing Penalty (veh)	3	15						
Storage Bay Dist (ft)			90	220			175	
Storage Blk Time (%)		13	1		1		18	0
Queuing Penalty (veh)		44	5		0		38	0

Intersection: 11: NB ramp & LOVR

Movement	EB	EB	EB	WB	WB	WB	NB	NB
Directions Served	T	T	R	L	T	T	L	LR
Maximum Queue (ft)	270	294	150	191	114	89	310	280
Average Queue (ft)	150	166	68	86	53	30	203	163
95th Queue (ft)	237	264	172	155	101	69	293	262
Link Distance (ft)	699	699			669	669	678	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			125	375				600
Storage Blk Time (%)		11	0					
Queuing Penalty (veh)		19	0					

Intersection: 12: S. Higuera & LOVR

Movement	EB	EB	EB	NB	NB	SB	SB
Directions Served	L	L	R	L	T	T	R
Maximum Queue (ft)	314	318	125	44	214	172	128
Average Queue (ft)	184	142	28	14	119	87	46
95th Queue (ft)	271	236	89	41	184	145	95
Link Distance (ft)	846	846			417	596	596
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)			100	200			
Storage Blk Time (%)		10	0		0		
Queuing Penalty (veh)		7	0		0		

Network Summary

Network wide Queuing Penalty: 140

Intersection: 9: Calle Joaquin & LOVR

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	T	T	R	L	T	T	R	L	T	R	L
Maximum Queue (ft)	100	324	407	122	84	237	236	125	51	26	55	74
Average Queue (ft)	38	101	209	8	31	92	109	26	8	2	5	59
95th Queue (ft)	74	245	390	56	66	182	197	86	32	14	29	87
Link Distance (ft)		380	380			235	235			481		
Upstream Blk Time (%)		0	5			0	0					
Queuing Penalty (veh)		0	0			2	4					
Storage Bay Dist (ft)	125			100	125			100	300		300	50
Storage Blk Time (%)		1	20	0	0	2	7	0				34
Queuing Penalty (veh)		1	5	0	0	1	7	0				32

Intersection: 9: Calle Joaquin & LOVR

Movement	SB
Directions Served	TR
Maximum Queue (ft)	203
Average Queue (ft)	78
95th Queue (ft)	168
Link Distance (ft)	237
Upstream Blk Time (%)	0
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	7
Queuing Penalty (veh)	10

Intersection: 10: Hwy 101 SB On-Ramp/Hwy 101 SB Off-Ramp & LOVR

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	243	288	115	147	283	296	200	348
Average Queue (ft)	139	187	102	52	149	161	131	148
95th Queue (ft)	242	309	142	101	266	283	211	272
Link Distance (ft)	235	235			699	699		618
Upstream Blk Time (%)	1	9						
Queuing Penalty (veh)	5	63						
Storage Bay Dist (ft)			90	220			175	
Storage Blk Time (%)		18	4		2		3	4
Queuing Penalty (veh)		107	15		1		12	9

Intersection: 11: NB Off ramp & LOVR

Movement	EB	EB	EB	WB	WB	WB	NB	NB
Directions Served	T	T	R	L	T	T	L	LR
Maximum Queue (ft)	204	268	150	213	213	173	309	270
Average Queue (ft)	106	106	57	110	113	85	201	155
95th Queue (ft)	169	184	134	178	194	153	283	241
Link Distance (ft)	699	699			802	802	646	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			125	375				600
Storage Blk Time (%)		4	0					
Queuing Penalty (veh)		11	1					

Intersection: 12: S. Higuera & LOVR

Movement	EB	EB	EB	NB	NB	SB	SB
Directions Served	L	L	R	L	T	T	R
Maximum Queue (ft)	282	250	125	65	146	522	328
Average Queue (ft)	182	142	45	22	66	245	60
95th Queue (ft)	261	235	114	54	123	405	185
Link Distance (ft)	846	846			417	596	596
Upstream Blk Time (%)						0	0
Queuing Penalty (veh)						0	0
Storage Bay Dist (ft)			100	200			
Storage Blk Time (%)		10	0		0		
Queuing Penalty (veh)		8	1		0		

Network Summary

Network wide Queuing Penalty: 294

Intersection: 9: Calle Joaquin & LOVR

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	T	T	R	L	T	T	R	L	T	R	L
Maximum Queue (ft)	98	260	298	104	97	81	106	50	59	22	82	74
Average Queue (ft)	28	84	103	10	38	23	37	8	18	3	5	44
95th Queue (ft)	60	184	221	55	80	63	83	33	46	15	40	76
Link Distance (ft)		614	614			235	235			446		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	125			100	125			100	300		300	50
Storage Blk Time (%)		2	8	0	0		0					20
Queuing Penalty (veh)		1	2	0	0		0					8

Intersection: 9: Calle Joaquin & LOVR

Movement	SB
Directions Served	TR
Maximum Queue (ft)	107
Average Queue (ft)	30
95th Queue (ft)	76
Link Distance (ft)	237
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	2
Queuing Penalty (veh)	1

Intersection: 10: Hwy 101 SB On-Ramp/Hwy 101 SB Off-Ramp & LOVR

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	252	304	115	148	300	299	200	489
Average Queue (ft)	189	209	96	46	160	174	183	227
95th Queue (ft)	283	309	151	104	264	273	226	467
Link Distance (ft)	235	235			699	699		672
Upstream Blk Time (%)	4	11						
Queuing Penalty (veh)	24	71						
Storage Bay Dist (ft)			90	220			175	
Storage Blk Time (%)		23	1		1		20	0
Queuing Penalty (veh)		87	6		1		47	2

Intersection: 11: NB ramp & LOVR

Movement	EB	EB	EB	WB	WB	WB	NB	NB
Directions Served	T	T	R	L	T	T	L	LR
Maximum Queue (ft)	400	417	150	180	151	132	377	360
Average Queue (ft)	228	246	80	97	77	50	221	183
95th Queue (ft)	350	375	188	159	135	102	324	288
Link Distance (ft)	699	699			669	669	678	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			125	375				600
Storage Blk Time (%)		27	0					
Queuing Penalty (veh)		46	1					

Intersection: 12: S. Higuera & LOVR

Movement	EB	EB	EB	NB	NB	SB	SB
Directions Served	L	L	R	L	T	T	R
Maximum Queue (ft)	809	788	125	143	227	179	203
Average Queue (ft)	497	465	79	56	124	103	85
95th Queue (ft)	880	841	166	105	202	165	154
Link Distance (ft)	846	846			417	596	596
Upstream Blk Time (%)	7	6					
Queuing Penalty (veh)	0	0					
Storage Bay Dist (ft)			100	200			
Storage Blk Time (%)		50	0	0	0		
Queuing Penalty (veh)		50	1	0	0		

Network Summary

Network wide Queuing Penalty: 349

Intersection: 9: Calle Joaquin & LOVR

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	T	T	R	L	T	T	R	L	T	R	L
Maximum Queue (ft)	149	403	419	125	149	247	259	125	67	22	104	75
Average Queue (ft)	57	292	387	36	45	143	165	38	21	2	15	64
95th Queue (ft)	130	478	457	124	105	247	269	119	51	13	64	88
Link Distance (ft)		380	380			235	235			481		
Upstream Blk Time (%)		4	59			1	2					
Queuing Penalty (veh)		0	0			6	21					
Storage Bay Dist (ft)	125			100	125			100	300		300	50
Storage Blk Time (%)	0	9	53	0	0	9	17	0				40
Queuing Penalty (veh)	1	7	19	0	0	6	17	0				44

Intersection: 9: Calle Joaquin & LOVR

Movement	SB
Directions Served	TR
Maximum Queue (ft)	224
Average Queue (ft)	107
95th Queue (ft)	211
Link Distance (ft)	237
Upstream Blk Time (%)	0
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	10
Queuing Penalty (veh)	17

Intersection: 10: Hwy 101 SB On-Ramp/Hwy 101 SB Off-Ramp & LOVR

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	249	298	115	244	396	407	200	533
Average Queue (ft)	184	234	109	87	190	202	156	204
95th Queue (ft)	285	325	133	162	326	344	230	407
Link Distance (ft)	235	235			699	699		618
Upstream Blk Time (%)	4	21						0
Queuing Penalty (veh)	32	173						0
Storage Bay Dist (ft)			90	220			175	
Storage Blk Time (%)		28	8		5		6	7
Queuing Penalty (veh)		178	37		5		22	21

Intersection: 11: NB Off ramp & LOVR

Movement	EB	EB	EB	WB	WB	WB	NB	NB
Directions Served	T	T	R	L	T	T	L	LR
Maximum Queue (ft)	254	262	150	262	243	213	332	292
Average Queue (ft)	140	142	82	163	142	117	211	167
95th Queue (ft)	212	225	176	240	217	197	291	261
Link Distance (ft)	699	699			802	802	646	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			125	375				600
Storage Blk Time (%)		11	0					
Queuing Penalty (veh)		38	1					

Intersection: 12: S. Higuera & LOVR

Movement	EB	EB	EB	NB	NB	SB	SB
Directions Served	L	L	R	L	T	T	R
Maximum Queue (ft)	613	541	125	82	142	576	610
Average Queue (ft)	327	291	66	39	71	277	223
95th Queue (ft)	515	475	149	72	130	487	489
Link Distance (ft)	846	846			417	596	596
Upstream Blk Time (%)						1	2
Queuing Penalty (veh)						0	0
Storage Bay Dist (ft)			100	200			
Storage Blk Time (%)		44	0				
Queuing Penalty (veh)		40	2				

Network Summary

Network wide Queuing Penalty: 685

Intersection: 9: Calle Joaquin & LOVR

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	T	T	R	L	T	T	R	L	T	R	L
Maximum Queue (ft)	68	203	254	61	68	78	109	31	49	22	37	73
Average Queue (ft)	21	64	83	3	25	17	30	8	11	3	2	40
95th Queue (ft)	52	149	193	29	55	52	75	28	37	13	18	73
Link Distance (ft)		614	614			235	235			446		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	125			100	125			100	300		300	50
Storage Blk Time (%)		1	4	0			0					18
Queuing Penalty (veh)		0	1	0			0					6

Intersection: 9: Calle Joaquin & LOVR

Movement	SB
Directions Served	TR
Maximum Queue (ft)	150
Average Queue (ft)	31
95th Queue (ft)	92
Link Distance (ft)	237
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	1
Queuing Penalty (veh)	0

Intersection: 10: Hwy 101 SB On-Ramp/Hwy 101 SB Off-Ramp & LOVR

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	247	285	115	101	243	257	200	526
Average Queue (ft)	145	158	88	28	136	145	173	175
95th Queue (ft)	242	278	146	74	236	261	229	418
Link Distance (ft)	235	235			699	699		672
Upstream Blk Time (%)	1	3						0
Queuing Penalty (veh)	5	21						0
Storage Bay Dist (ft)			90	220			175	
Storage Blk Time (%)		14	1		0		16	0
Queuing Penalty (veh)		51	5		0		37	0

Intersection: 11: NB ramp & LOVR

Movement	EB	EB	EB	WB	WB	WB	NB	NB
Directions Served	T	T	R	L	T	T	L	LR
Maximum Queue (ft)	301	304	150	188	136	112	320	264
Average Queue (ft)	156	169	78	81	58	32	195	152
95th Queue (ft)	245	265	183	148	117	80	279	241
Link Distance (ft)	699	699			669	669	678	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			125	375				600
Storage Blk Time (%)		12	0					
Queuing Penalty (veh)		24	1					

Intersection: 12: S. Higuera & LOVR

Movement	EB	EB	EB	NB	NB	SB	SB
Directions Served	L	L	R	L	T	T	R
Maximum Queue (ft)	335	310	125	72	218	199	131
Average Queue (ft)	202	168	34	22	115	97	46
95th Queue (ft)	293	268	102	54	185	166	96
Link Distance (ft)	846	846			417	596	596
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)			100	200			
Storage Blk Time (%)		15	0		1		
Queuing Penalty (veh)		11	0		0		

Network Summary

Network wide Queuing Penalty: 163

Intersection: 9: Calle Joaquin & LOVR

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	T	T	R	L	T	T	R	L	T	R	L
Maximum Queue (ft)	113	387	406	125	132	245	250	125	57	22	58	75
Average Queue (ft)	38	162	302	23	37	104	128	26	9	2	4	61
95th Queue (ft)	80	372	497	97	85	206	232	95	33	11	30	86
Link Distance (ft)		380	380			235	235			481		
Upstream Blk Time (%)		1	25			0	1					
Queuing Penalty (veh)		0	0			2	6					
Storage Bay Dist (ft)	125			100	125			100	300		300	50
Storage Blk Time (%)		2	35	0	0	3	9	0				39
Queuing Penalty (veh)		1	8	0	0	2	9	0				36

Intersection: 9: Calle Joaquin & LOVR

Movement	SB
Directions Served	TR
Maximum Queue (ft)	191
Average Queue (ft)	75
95th Queue (ft)	158
Link Distance (ft)	237
Upstream Blk Time (%)	0
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	8
Queuing Penalty (veh)	11

Intersection: 10: Hwy 101 SB On-Ramp/Hwy 101 SB Off-Ramp & LOVR

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	246	284	115	140	346	342	200	406
Average Queue (ft)	154	209	107	54	173	178	127	162
95th Queue (ft)	259	326	134	109	304	300	211	310
Link Distance (ft)	235	235			699	699		618
Upstream Blk Time (%)	2	13						
Queuing Penalty (veh)	12	93						
Storage Bay Dist (ft)			90	220			175	
Storage Blk Time (%)		19	8		3		2	7
Queuing Penalty (veh)		128	31		2		9	16

Intersection: 11: NB Off ramp & LOVR

Movement	EB	EB	EB	WB	WB	WB	NB	NB
Directions Served	T	T	R	L	T	T	L	LR
Maximum Queue (ft)	234	234	150	216	198	174	322	298
Average Queue (ft)	108	108	58	114	121	90	203	161
95th Queue (ft)	181	190	141	193	182	166	296	254
Link Distance (ft)	699	699			802	802	646	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			125	375				600
Storage Blk Time (%)		4	0					
Queuing Penalty (veh)		12	1					

Intersection: 12: S. Higuera & LOVR

Movement	EB	EB	EB	NB	NB	SB	SB
Directions Served	L	L	R	L	T	T	R
Maximum Queue (ft)	307	293	125	61	150	502	364
Average Queue (ft)	192	159	48	22	68	246	72
95th Queue (ft)	278	264	117	55	127	396	214
Link Distance (ft)	846	846			417	596	596
Upstream Blk Time (%)						0	0
Queuing Penalty (veh)						0	0
Storage Bay Dist (ft)			100	200			
Storage Blk Time (%)		15	0		0		
Queuing Penalty (veh)		12	0		0		

Network Summary

Network wide Queuing Penalty: 392

Intersection: 9: Calle Joaquin & LOVR

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	T	T	R	L	T	T	R	L	T	R	L
Maximum Queue (ft)	111	297	319	82	94	66	96	57	67	13	70	74
Average Queue (ft)	32	112	128	7	35	22	39	11	18	1	6	46
95th Queue (ft)	75	229	259	46	73	57	86	39	48	9	37	78
Link Distance (ft)		614	614			235	235			446		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	125			100	125			100	300		300	50
Storage Blk Time (%)		4	12	0	0		0	0				22
Queuing Penalty (veh)		2	3	0	0		0	0				9

Intersection: 9: Calle Joaquin & LOVR

Movement	SB
Directions Served	TR
Maximum Queue (ft)	144
Average Queue (ft)	36
95th Queue (ft)	98
Link Distance (ft)	237
Upstream Blk Time (%)	0
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	1
Queuing Penalty (veh)	1

Intersection: 10: Hwy 101 SB On-Ramp/Hwy 101 SB Off-Ramp & LOVR

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	254	290	115	187	286	312	200	596
Average Queue (ft)	195	224	102	47	167	185	186	261
95th Queue (ft)	281	314	145	123	271	288	223	540
Link Distance (ft)	235	235			699	699		672
Upstream Blk Time (%)	5	14						1
Queuing Penalty (veh)	35	93						0
Storage Bay Dist (ft)			90	220			175	
Storage Blk Time (%)		24	2	0	2		23	1
Queuing Penalty (veh)		94	8	0	1		57	4

Intersection: 11: NB ramp & LOVR

Movement	EB	EB	EB	WB	WB	WB	NB	NB
Directions Served	T	T	R	L	T	T	L	LR
Maximum Queue (ft)	424	443	150	186	173	158	413	374
Average Queue (ft)	240	264	90	93	81	55	248	207
95th Queue (ft)	380	407	201	159	145	112	372	325
Link Distance (ft)	699	699			669	669	678	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			125	375				600
Storage Blk Time (%)		29	0					
Queuing Penalty (veh)		56	1					

Intersection: 12: S. Higuera & LOVR

Movement	EB	EB	EB	NB	NB	SB	SB
Directions Served	L	L	R	L	T	T	R
Maximum Queue (ft)	875	852	125	102	247	215	211
Average Queue (ft)	656	619	87	51	130	107	87
95th Queue (ft)	987	951	171	85	212	185	166
Link Distance (ft)	846	846			417	596	596
Upstream Blk Time (%)	18	16					
Queuing Penalty (veh)	0	0					
Storage Bay Dist (ft)			100	200			
Storage Blk Time (%)		60	0		1		
Queuing Penalty (veh)		61	1		1		

Network Summary

Network wide Queuing Penalty: 427

Intersection: 9: Calle Joaquin & LOVR

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	T	T	R	L	T	T	R	L	T	R	L
Maximum Queue (ft)	145	396	431	125	149	248	254	125	63	22	61	75
Average Queue (ft)	52	276	386	36	52	167	187	36	18	2	9	65
95th Queue (ft)	116	461	465	124	117	283	293	115	46	12	40	84
Link Distance (ft)		380	380			235	235			481		
Upstream Blk Time (%)		3	60			1	4					
Queuing Penalty (veh)		0	0			10	43					
Storage Bay Dist (ft)	125			100	125			100	300		300	50
Storage Blk Time (%)	0	10	52	0	0	14	22	0				42
Queuing Penalty (veh)	1	8	18	0	0	9	22	0				46

Intersection: 9: Calle Joaquin & LOVR

Movement	SB
Directions Served	TR
Maximum Queue (ft)	250
Average Queue (ft)	105
95th Queue (ft)	209
Link Distance (ft)	237
Upstream Blk Time (%)	1
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	11
Queuing Penalty (veh)	19

Intersection: 10: Hwy 101 SB On-Ramp/Hwy 101 SB Off-Ramp & LOVR

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	249	298	115	244	545	525	200	503
Average Queue (ft)	186	237	110	100	246	258	156	253
95th Queue (ft)	282	319	135	204	440	456	232	540
Link Distance (ft)	235	235			699	699		618
Upstream Blk Time (%)	3	18			0	0		7
Queuing Penalty (veh)	28	154			0	0		0
Storage Bay Dist (ft)			90	220			175	
Storage Blk Time (%)		27	8		9		5	16
Queuing Penalty (veh)		194	40		10		17	51

Intersection: 11: NB Off ramp & LOVR

Movement	EB	EB	EB	WB	WB	WB	NB	NB
Directions Served	T	T	R	L	T	T	L	LR
Maximum Queue (ft)	244	288	150	284	234	220	380	333
Average Queue (ft)	143	152	94	164	144	123	230	185
95th Queue (ft)	219	243	188	259	222	200	331	284
Link Distance (ft)	699	699			802	802	646	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			125	375				600
Storage Blk Time (%)		12	0					
Queuing Penalty (veh)		44	2					

Intersection: 12: S. Higuera & LOVR

Movement	EB	EB	EB	NB	NB	SB	SB
Directions Served	L	L	R	L	T	T	R
Maximum Queue (ft)	770	723	125	91	178	559	563
Average Queue (ft)	485	449	71	40	73	287	277
95th Queue (ft)	773	731	158	81	137	524	564
Link Distance (ft)	846	846			417	596	596
Upstream Blk Time (%)	1	0				1	3
Queuing Penalty (veh)	0	0				0	0
Storage Bay Dist (ft)			100	200			
Storage Blk Time (%)		60	0		0		
Queuing Penalty (veh)		57	2		0		

Network Summary

Network wide Queuing Penalty: 776

Intersection: 9: Calle Joaquin & LOVR

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	T	T	R	L	T	T	R	L	T	R	L
Maximum Queue (ft)	95	205	302	80	68	101	110	93	43	26	19	73
Average Queue (ft)	25	71	91	3	29	28	40	12	10	2	1	41
95th Queue (ft)	64	171	205	28	60	70	87	49	32	12	12	71
Link Distance (ft)		614	614			235	235			446		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	125			100	125			100	300		300	50
Storage Blk Time (%)		1	5	0		0	0	0				17
Queuing Penalty (veh)		1	1	0		0	0	0				5

Intersection: 9: Calle Joaquin & LOVR

Movement	SB
Directions Served	TR
Maximum Queue (ft)	128
Average Queue (ft)	28
95th Queue (ft)	80
Link Distance (ft)	237
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	1
Queuing Penalty (veh)	1

Intersection: 10: Hwy 101 SB On-Ramp/Hwy 101 SB Off-Ramp & LOVR

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	230	248	164	70	180	191	301	232
Average Queue (ft)	122	124	82	22	86	95	174	68
95th Queue (ft)	212	227	165	55	159	168	271	149
Link Distance (ft)	235	235			699	699		672
Upstream Blk Time (%)	0	1						
Queuing Penalty (veh)	1	5						
Storage Bay Dist (ft)			140	220			320	
Storage Blk Time (%)		3	0		0		0	0
Queuing Penalty (veh)		11	1		0		1	0

Intersection: 11: NB ramp & LOVR

Movement	EB	EB	EB	WB	WB	WB	NB	NB
Directions Served	T	T	R	L	T	T	L	LR
Maximum Queue (ft)	332	337	150	155	129	105	299	239
Average Queue (ft)	166	181	74	77	61	35	177	131
95th Queue (ft)	266	286	177	136	109	78	258	225
Link Distance (ft)	699	699			669	669	678	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			125	375				600
Storage Blk Time (%)		14	0					
Queuing Penalty (veh)		28	1					

Intersection: 12: S. Higuera & LOVR

Movement	EB	EB	EB	NB	NB	SB	SB
Directions Served	L	L	R	L	T	T	R
Maximum Queue (ft)	328	312	125	64	298	184	110
Average Queue (ft)	201	166	30	20	131	92	39
95th Queue (ft)	294	279	99	53	227	154	80
Link Distance (ft)	846	846			417	596	596
Upstream Blk Time (%)					0		
Queuing Penalty (veh)					0		
Storage Bay Dist (ft)			100	200			
Storage Blk Time (%)		13	0		1		
Queuing Penalty (veh)		9	0		0		

Network Summary

Network wide Queuing Penalty: 65

Intersection: 9: Calle Joaquin & LOVR

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	T	T	R	L	T	T	R	L	T	R	L
Maximum Queue (ft)	128	389	408	124	121	251	254	125	38	27	58	75
Average Queue (ft)	42	138	262	13	34	109	128	25	8	2	5	58
95th Queue (ft)	96	328	462	70	77	231	241	89	29	13	33	85
Link Distance (ft)		380	380			235	235			481		
Upstream Blk Time (%)		1	12			1	1					
Queuing Penalty (veh)		0	0			6	9					
Storage Bay Dist (ft)	125			100	125			100	300		300	50
Storage Blk Time (%)	0	3	25	0		3	9	0				33
Queuing Penalty (veh)	0	2	6	0		2	8	0				30

Intersection: 9: Calle Joaquin & LOVR

Movement	SB
Directions Served	TR
Maximum Queue (ft)	216
Average Queue (ft)	74
95th Queue (ft)	157
Link Distance (ft)	237
Upstream Blk Time (%)	0
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	8
Queuing Penalty (veh)	10

Intersection: 10: Hwy 101 SB On-Ramp/Hwy 101 SB Off-Ramp & LOVR

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	232	261	165	134	230	248	232	299
Average Queue (ft)	108	134	107	44	121	132	110	156
95th Queue (ft)	190	242	194	95	200	224	185	255
Link Distance (ft)	235	235			699	699		618
Upstream Blk Time (%)	0	1						
Queuing Penalty (veh)	1	7						
Storage Bay Dist (ft)			140	220			320	
Storage Blk Time (%)		3	2		0			0
Queuing Penalty (veh)		22	9		0			0

Intersection: 11: NB Off ramp & LOVR

Movement	EB	EB	EB	WB	WB	WB	NB	NB
Directions Served	T	T	R	L	T	T	L	LR
Maximum Queue (ft)	171	217	150	217	192	205	311	270
Average Queue (ft)	100	97	55	111	119	97	197	153
95th Queue (ft)	156	172	126	183	187	171	284	249
Link Distance (ft)	699	699			802	802	646	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			125	375				600
Storage Blk Time (%)		2	0					
Queuing Penalty (veh)		7	0					

Intersection: 12: S. Higuera & LOVR

Movement	EB	EB	EB	NB	NB	SB	SB
Directions Served	L	L	R	L	T	T	R
Maximum Queue (ft)	298	275	125	60	181	624	619
Average Queue (ft)	183	139	40	26	73	410	211
95th Queue (ft)	267	236	104	56	138	666	618
Link Distance (ft)	846	846			417	596	596
Upstream Blk Time (%)						10	7
Queuing Penalty (veh)						0	0
Storage Bay Dist (ft)			100	200			
Storage Blk Time (%)		9	0		0		
Queuing Penalty (veh)		7	1		0		

Network Summary

Network wide Queuing Penalty: 127

Intersection: 9: Calle Joaquin & LOVR

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	T	T	R	L	T	T	R	L	T	R	L
Maximum Queue (ft)	138	385	408	124	121	251	256	125	38	27	54	75
Average Queue (ft)	44	144	272	16	37	113	131	26	8	2	4	57
95th Queue (ft)	101	333	469	76	86	237	247	91	29	13	25	84
Link Distance (ft)		380	380			235	235			481		
Upstream Blk Time (%)		1	13			1	1					
Queuing Penalty (veh)		0	0			7	10					
Storage Bay Dist (ft)	125			100	125			100	300		300	50
Storage Blk Time (%)	0	3	26	0	0	4	9	0				31
Queuing Penalty (veh)	0	2	6	0	0	2	8	0				29

Intersection: 9: Calle Joaquin & LOVR

Movement	SB
Directions Served	TR
Maximum Queue (ft)	214
Average Queue (ft)	70
95th Queue (ft)	154
Link Distance (ft)	237
Upstream Blk Time (%)	0
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	8
Queuing Penalty (veh)	11

Intersection: 10: Hwy 101 SB On-Ramp/Hwy 101 SB Off-Ramp & LOVR

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	235	265	165	158	244	257	255	303
Average Queue (ft)	107	133	108	45	128	140	113	161
95th Queue (ft)	196	243	195	101	211	232	200	270
Link Distance (ft)	235	235			699	699		618
Upstream Blk Time (%)	0	1						
Queuing Penalty (veh)	1	8						
Storage Bay Dist (ft)			140	220			320	
Storage Blk Time (%)		3	2		0			0
Queuing Penalty (veh)		21	10		0			1

Intersection: 11: NB Off ramp & LOVR

Movement	EB	EB	EB	WB	WB	WB	NB	NB
Directions Served	T	T	R	L	T	T	L	LR
Maximum Queue (ft)	175	218	150	209	216	209	326	282
Average Queue (ft)	98	97	55	108	120	94	203	157
95th Queue (ft)	156	172	127	174	191	170	289	250
Link Distance (ft)	699	699			802	802	646	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			125	375				600
Storage Blk Time (%)		2	0					
Queuing Penalty (veh)		7	0					

Intersection: 12: S. Higuera & LOVR

Movement	EB	EB	EB	NB	NB	SB	SB
Directions Served	L	L	R	L	T	T	R
Maximum Queue (ft)	274	259	125	67	179	627	619
Average Queue (ft)	178	134	41	27	74	400	187
95th Queue (ft)	254	228	107	59	138	651	571
Link Distance (ft)	846	846			417	596	596
Upstream Blk Time (%)						9	5
Queuing Penalty (veh)						0	0
Storage Bay Dist (ft)			100	200			
Storage Blk Time (%)		9	0		0		
Queuing Penalty (veh)		7	1		0		

Network Summary

Network wide Queuing Penalty: 131

Intersection: 9: Calle Joaquin & LOVR

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	T	T	R	L	T	T	R	L	T	R	L
Maximum Queue (ft)	149	659	690	125	138	263	258	125	56	22	76	75
Average Queue (ft)	61	387	523	29	50	168	182	40	18	2	10	63
95th Queue (ft)	129	771	806	107	115	286	287	122	47	12	46	87
Link Distance (ft)		660	660			235	235			481		
Upstream Blk Time (%)		3	24			2	3					
Queuing Penalty (veh)		0	0			23	33					
Storage Bay Dist (ft)	125			100	130			100	300		300	50
Storage Blk Time (%)	1	10	43	0	0	10	20	0				36
Queuing Penalty (veh)	4	7	15	0	0	6	20	0				40

Intersection: 9: Calle Joaquin & LOVR

Movement	SB
Directions Served	TR
Maximum Queue (ft)	245
Average Queue (ft)	101
95th Queue (ft)	196
Link Distance (ft)	237
Upstream Blk Time (%)	1
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	14
Queuing Penalty (veh)	24

Intersection: 10: Hwy 101 SB On-Ramp/Hwy 101 SB Off-Ramp & LOVR

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	246	298	165	245	565	591	322	451
Average Queue (ft)	148	183	138	109	245	248	144	196
95th Queue (ft)	248	297	206	242	482	493	252	344
Link Distance (ft)	235	235			699	699		618
Upstream Blk Time (%)	1	6			0	0		0
Queuing Penalty (veh)	5	51			1	2		0
Storage Bay Dist (ft)			140	220			320	
Storage Blk Time (%)		6	5	0	13		0	2
Queuing Penalty (veh)		43	24	0	14		0	5

Intersection: 11: NB Off ramp & LOVR

Movement	EB	EB	EB	WB	WB	WB	NB	NB
Directions Served	T	T	R	L	T	T	L	LR
Maximum Queue (ft)	263	272	150	244	235	222	359	319
Average Queue (ft)	141	144	100	138	139	120	227	185
95th Queue (ft)	222	235	177	219	211	200	323	291
Link Distance (ft)	699	699			998	998	646	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			125	375				600
Storage Blk Time (%)		12	1					
Queuing Penalty (veh)		41	6					

Intersection: 12: S. Higuera & LOVR

Movement	EB	EB	EB	NB	NB	SB	SB
Directions Served	L	L	R	L	T	T	R
Maximum Queue (ft)	460	422	125	91	154	819	807
Average Queue (ft)	279	246	60	38	79	311	272
95th Queue (ft)	404	376	142	76	135	599	629
Link Distance (ft)	846	846			1155	1259	1259
Upstream Blk Time (%)						0	
Queuing Penalty (veh)						0	
Storage Bay Dist (ft)			100	200			
Storage Blk Time (%)		33	0				
Queuing Penalty (veh)		31	1				

Network Summary

Network wide Queuing Penalty: 397