Table 4.12-26
Existing Plus Project Conditions: Intersection Queuing Analysis

		ojeci conditions. i				rcentile
Inter	section				Queue/	Lane (ft)
			No.	Total	AM Peak	PM Peak
ID	Location	Movement	Lanes	Storage (ft) ¹	Hour	Hour
1	Madonna Road/Los Osos Valley Road	Northbound Right	1	175	92	250
2	Madonna Road/Oceanaire Drive	Westbound Right	1	100	46	165
3	Madonna Road/Dalidio	Eastbound Left	1	115	65	125
	Drive	Westbound Left	1	275	224	376
5	Madonna Road/US 101 SB Ramps/Madonna Inn	Eastbound Left	1	100	72	117
6	Madonna Road/US 101 NB Ramps	Northbound Left	1	185	141	192
7	Madonna Road/Higuera	Eastbound Right	1	150	325	265
	Street	Northbound Left	1	160	121	252
8	Higuera Street/South	Westbound Left	2	240	214	389
	Street	Northbound Left	1	60	88	72
		Northbound Right	1	60	149	150
		Southbound Left	1	70	130	107
9	Los Osos Valley Road/Froom Ranch Way	Westbound Right	1	50	56	87
11	Los Osos Valley	Northbound Through	2	235	139	135
	Road/Calle Joaquin	Southbound Left	1	180	217	209
		Southbound Through/Right	2	-	945	722
12	Los Osos Valley Road/US	Westbound Left	1	150	242	227
	101 SB Ramps	Northbound Left	1	80	101	117
		Southbound Through	1	240	308	279
		Southbound Right	1	240	220	262
13	Los Osos Valley Road/US	Eastbound Left/Right	1	200	228	246
	101 NB Ramps	Northbound Left	1	140	109	200
		Southbound Through	1	865	1119	811
		Southbound Right	1	60	204	221
14	S. Higuera Street/Los Osos Valley Road	Eastbound Right	1	90	165	136
16	S. Higuera Street/Tank	Northbound Right	1	100	194	123
	Farm Road	Southbound Left	1	165	89	215
18	S. Higuera Street/Prado	Northbound Left	1	100	132	170
	Road	Northbound Through/Right	2	-	134	379
		Southbound Left	1	60	117	108
		Southbound Through/Right	2	-	230	237
19	S. Higuera Street/Margarita Avenue	Southbound Left	1	60	51	75

- 1. Bolded entries indicate queues exceed available storage
- 2. Storage Length of " " represents a lane which exceeds 900 feet, usually a through lane.
- 3. For Movements with more than one lane, the maximum of the 95th percentile queue is reported.
- 4. * Represents storage lengths for one lane; second lane is a left or right trap lane.

Table 4.12-27
Near-Term Plus Project Conditions: Intersection Queuing Analysis

				OF th Do	rcentile
oction			Total		
l ection		No			PM
Location	Movement	_			Peak Hour
					261
Valley Road					
Madonna Road/Oceanaire	Westbound Right	1	100	58	140
Madonna Road/Dalidio	Westbound Left	1	275	194	336
Drive	Westbound	3	570	108	610
	Through/Right				
Madonna Road/El	Westbound Left	2	260	50	535
Mercado					
Madonna Road/US 101	Eastbound Left	1	100	83	111
SB Ramps/Madonna Inn	Westbound Left	1	260	170	539
Madonna Road/US 101 NB Ramps	Northbound Left	1	185	156	258
	Eastbound Right	1	150	248	314
•				185	376
					430
		_			
		2	340	164	592
Higuera Street/South					85
					1024
					44
					127
					122
Los Osos Valley	Westbound Right	1	50	60	119
Los Osos Valley Road/US	Westbound	1	180	259	216
	,	1	240	293	273
					177
Los Osos Valley Road/US	Southbound Right	1	130	244	248
S. Higuera Street/Los	Eastbound Right	1	90	189	156
S. Higuera	Southbound Left	1	200	149	259
	Northbound Right	1	100	186	170
_					243
S. Higuera	Southbound Left	1	80	85	65
	Westbound Left	1	105	110	131
_					137
					186
S. Higuera					70
					99
Prado Road/US 101 SB	Westbound	1	250	158	424
	Madonna Road/Oceanaire Drive Madonna Road/Dalidio Drive Madonna Road/El Mercado Madonna Road/US 101 SB Ramps/Madonna Inn Madonna Road/US 101 NB Ramps Madonna Road/Higuera Street Higuera Street/South Street Los Osos Valley Road/Froom Ranch Way Los Osos Valley Road/US 101 SB Ramps Los Osos Valley Road/US 101 NB Ramps S. Higuera Street/Los Osos Valley Road S. Higuera Street/Suburban Drive S. Higuera Street/Granada Drive S. Higuera Street/Granada Drive S. Higuera Street/Prado Road S. Higuera Street/Prado Road S. Higuera Street/Prado Road S. Higuera Street/Margarita Avenue	Madonna Road/Los Osos Valley Road Westbound Right	Madonna Road/Los Osos Valley Road Movement Moveme	Location	Location

- 1. Bolded entries indicate queues exceed available storage
- 2. Storage Length of " " represents a lane which exceeds 900 feet, usually a through lane.
- 3. For Movements with more than one lane, the maximum of the 95th percentile queue is reported.
- 4. * Represents storage lengths for one lane; second lane is a left or right trap lane.

Mitigative Components of the Specific Plan and Impact Conclusion. The San Luis Ranch Specific Plan includes a mix of commercial and residential uses, a new transit connection, and workforce housing to balance jobs and housing. The Specific Plan also emphasizes bikeways and pedestrian connections, all of which contribute to reduced trips and VMT. However, as shown in Table 4.12-26 and Table 4.12-27, under Existing Plus Project and Near-Term Plus Project conditions, the volume of traffic at 19 study area intersections would exceed lane capacities during peak hours. Therefore, the project would conflict with the City's established measures of effectiveness for the performance of the circulation system and vehicle queuing standards, and transportation impacts would be potentially significant at these intersections.

Mitigation Measures. The following mitigation measures identify improvements at study area facilities that are required to reduce potentially significant project-specific impacts at study area intersections under Existing and Near-Term Plus Project Conditions. Each mitigation measure refers to one of the required Transportation Improvement Measures identified in Table 4.12-1 at the beginning of this section. The required timing of each required Transportation Improvement Measure is also described in Table 4.12-1. The project's equitable share of these improvements will be calculated using the method for calculating equitable mitigation measures outlined in the Caltrans Guide for the Preparation of Traffic Impact Studies (Caltrans, December 2002). Costs above and beyond the project's equitable share can be addressed through such options as fee credits, reimbursement agreements, or development agreements, based on City requirements.

T-2(a) Intersection #1: Madonna Road & Los Osos Valley Road.

Construct Prado Road Overpass (Overpass Only, Phase 2)

T-2(b) Intersection #2: Madonna Road & Oceanaire Drive.

Construct Prado Road Overpass (Overpass Only, Phase 2)

T-2(c) Intersection #5: Madonna Road & U.S. 101 S.B Ramps.

• Extend northbound Madonna Road left turn lane to 150' (Phase 1)

T-2(d) Intersection #6: Madonna Road & U.S. 101 Northbound Ramps.

Construct Prado Road Overpass (Overpass Only, Phase 2)

T-2(e) Intersection #7: Madonna Road & Higuera Street.

• Construct Prado Road Overpass (Overpass Plus U.S. 101 northbound ramps, Phase 2)

T-2(f) Intersection #9: Los Osos Valley Road & Froom Ranch Way.

- Install dedicated 230' right turn lane on Los Osos Valley Road approach to northbound Froom Ranch Way (with Froom Ranch Way bridge construction)
- Extend right turn lane on Los Osos Valley Road approach to southbound Froom Ranch Way to 110' (with Froom Ranch Way Bridge construction)
- Install 2nd southbound left turn lane on Froom Ranch Way approach to eastbound Los Osos Valley Road (with Froom Ranch Way bridge construction)

T-2(g) Intersection #12: Los Osos Valley Road & U.S. 101 Southbound Ramps.

Extend off-ramp left turn pocket to 320' (Phase 1)

T-2(h) Intersection #13: Los Osos Valley Road & U.S. 101 Northbound Ramps.

Construct Prado Road Overpass (Overpass Only, Phase 2)

T-2(i) Intersection #14: Los Osos Valley Road & Higuera Street.

Extend eastbound right turn lane to 180' (Phase 1)

T-2(j) Intersection #18: Prado Road & Higuera Street.

- Install 2nd U.S. 101 northbound left turn lane (Phase 1)
- Extend westbound right turn pocket to 400' (Phase 1)

<u>Plan Requirements and Timing</u>. Fair share traffic impact fees shall be paid upon acceptance by the City of final design plans and in accordance with the timing of improvements. Implementation of improvements shall occur by time of occupancy of the specified phase of the project. Implementation of the Prado Road/U.S. 101 overpass and associated improvements shall occur prior to occupancy of Phase 2 development.

Monitoring. City Public Works staff shall confirm payment of applicable fees. City Public Works staff shall also ensure implementation of these improvements following approval of the final design plans for the Specific Plan Area.

Significance After Mitigation. Implementation of the identified mitigation measures would reduce impacts to lane capacities at most impacted intersections to acceptable levels, and impacts on these facilities would be less than significant after mitigation. However, potential right-of-way constraints at Los Osos Valley Road & Froom Ranch Way (Intersection #9) may reduce the feasibility of mitigation at this intersection. Accordingly, some of the potential impacts associated with lane capacities identified for Existing and Near-Term Plus Project conditions may not be feasibly mitigated to a less than significant level. As a result, impacts to lane capacities at this intersection under Existing and Near-Term Plus Project conditions would remain significant and unavoidable. Potential residual impacts that may result from project mitigation that would require construction of the Prado Road & U.S. 101 overpass (Mitigation Measures T-2[a], T-2[b], T-2[d], T-1[e], and T-2[h]) are discussed in Section 4.12.5(d).

Threshold 1: Would the project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? Threshold 2: Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways? Threshold 6: Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

Impact T-3 Under Existing and Near-Term conditions four study area segment groups would operate at unacceptable automobile, bicycle, pedestrian, and transit LOS based on adopted multimodal level of service standards during AM and PM peak hours. Mitigation would reduce impacts at three of these segment groups to an acceptable level. However, impacts at Higuera Street roadway segments would be Class I, significant and unavoidable.

MMLOS was calculated for the area intersections based on the 2010 HCM methodology. Table 4.12-28 through Table 4.12-35 provide a summary of the multimodal AM and PM peak hour segment LOS under existing and near-term plus project conditions. Intersections where the AM or PM LOS exceed the minimum LOS standard are bolded.

Table 4.12-28
Existing Plus Project Conditions Segment Level of Service: Automobile Analysis

			-				AM Pea	ak			PM Pe	eak	
							Base				Base		
							Free-Flow	Travel			Free-Flow	Travel	
						Travel	Speed	Speed/		Travel	Speed	Speed/	
					LOS	Speed	BFFS	BFFS		Speed	BFFS	BFFS	
ID	Roadway	From	То	Direction	Threshold	(mph)	(mph)	(%)	LOS	(mph)	(mph)	(%)	LOS
1	Madonna Rd	Oceanaire Dr	LOVR	WB	D	20.4	40.1	51%	С	10.7	40.1	27%	F
	Madonna Rd	LOVR	Oceanaire Dr	EB	D	28.1	40.0	70%	В	29.8	40.0	74%	В
2	Madonna Rd	Dalidio	Oceanaire Dr	WB	D	22.7	40.8	56%	С	24.6	40.7	60%	С
	Madonna Rd	Oceanaire Dr	Dalidio	EB	D	15.5	40.7	38%	Е	13.4	40.8	33%	Е
3	Madonna Rd	El Mercado	Dalidio Dr	WB	D	17.1	34.8	49%	D	16.0	34.8	46%	D
	Madonna Rd	Dalidio Dr	El Mercado	EB	D	20.9	34.7	60%	С	12.7	34.6	37%	Е
4	Madonna Rd	US 101 SB Ramps	El Mercado	WB	D	31.9	37.9	84%	В	20.7	37.3	55%	С
	Madonna Rd	El Mercado	US 101 SB Ramps	EB	D	22.3	37.8	59%	С	17.5	37.7	46%	D
5	Madonna Rd	US 101 NB Ramps	US 101 SB Ramps	WB	D	34.2	37.8	90%	Α	33.8	37.8	89%	Α
	Madonna Rd	US 101 SB Ramps	US 101 NB Ramps	EB	D	32.5	37.8	86%	Α	33.3	37.8	88%	Α
6	Madonna Rd	Higuera St	US 101 NB Ramps	WB	D	9.4	37.2	25%	F	11.0	37.2	30%	F
	Madonna Rd	US 101 NB Ramps	Higuera St	EB	D	16.5	37.2	44%	D	12.9	37.2	35%	Е
7	S. Higuera St	Madonna Rd	Margarita Ave	SB	D	37.1	44.5	83%	В	35.3	44.5	79%	В
	S. Higuera St	Margarita Ave	Madonna Rd	NB	D	35.6	44.8	79%	В	35.7	44.8	80%	В
8	S. Higuera St	Margarita Ave	Prado Rd	SB	D	18.6	38.9	48%	D	16.5	38.9	42%	D
	S. Higuera St	Prado Rd	Margarita Ave	NB	D	25.4	38.9	65%	С	21.0	38.9	54%	С
9	S. Higuera St	Prado Rd	Granada Dr	SB	D	33.8	41.8	81%	В	30.6	41.8	73%	В
	S. Higuera St	Granada Dr	Prado Rd	NB	D	25.5	41.9	61%	С	28.1	41.9	67%	В
10	S. Higuera St	Granada Dr	Tank Farm Road	SB	D	42.6	41.6	102%	Α	27.3	42.6	64%	С
	S. Higuera St	Tank Farm Road	Granada Dr	NB	D	30.5	41.6	73%	В	28.7	42.6	67%	В
11	S. Higuera St	Tank Farm Road	Suburban Drive	SB	D	27.3	42.4	65%	С	24.8	41.2	60%	С
	S. Higuera St	Suburban Drive	Tank Farm Road	NB	D	20.2	42.5	47%	D	18.9	41.3	46%	D
12	S. Higuera St	Suburban Drive	Los Osos Valley Road	SB	D	20.6	42.1	49%	D	15.8	39.1	40%	D
	S. Higuera St	Los Osos Valley Road	Suburban Drive	NB	D	24.7	42.0	59%	С	21.5	39.0	55%	С
13	Los Osos Valley	Madonna Rd	Froom Ranch Way	SB	D	23.3	41.9	56%	С	17.2	41.8	41%	D
	Los Osos Valley	Froom Ranch Way	Madonna Rd	NB	D	20.3	41.8	49%	D	16.7	41.8	40%	Е
14	Los Osos Valley	Froom Ranch Way	Calle Joaquin	SB	D	34.6	43.0	81%	В	30.9	43.0	72%	В
	Los Osos Valley	Calle Joaquin	Froom Ranch Way	NB	D	29.2	43.2	68%	В	22.4	43.2	52%	С
15	Los Osos Valley	Calle Joaquin	US 101 SB Ramps	SB	D	13.2	32.1	41%	D	8.3	32.1	26%	F
	Los Osos Valley	US 101 SB Ramps	Calle Joaquin	NB	D	16.9	31.1	54%	С	15.2	31.1	49%	D
16	Los Osos Valley	US 101 SB Ramps	US 101 NB Ramps	SB	D	11.0	37.7	29%	F	12.9	37.7	34%	E
	Los Osos Valley	US 101 NB Ramps	US 101 SB Ramps	NB	D	32.6	37.4	87%	Α	31.8	37.4	85%	В
17	Los Osos Valley	S. Higuera St	US 101 NB Ramps	WB	D	29.1	39.2	74%	В	25.5	39.2	65%	С
	Los Osos Valley	US 101 NB Ramps	S. Higuera St	EB	D	21.3	39.4	54%	С	18.1	39.4	46%	D
18	Prado Rd	S. Higuera St	US 101 NB Ramps	WB	D	28.0	38.3	73%	В	24.7	38.3	64%	С



							AM Pea	ık			PM Pe	eak	
		_			Los	Travel Speed	Base Free-Flow Speed BFFS	Travel Speed/ BFFS		Travel Speed	Base Free-Flow Speed BFFS	Travel Speed/ BFFS	
ID	Roadway	From	То	Direction	Threshold	(mph)	(mph)	(%)	LOS	(mph)	(mph)	(%)	LOS
	Prado Rd	US 101 NB Ramps	S. Higuera St	EB	D	23.7	38.3	62%	С	21.2	38.3	55%	С
19	Froom Ranch Way	Dick's Sporting Goods Dwy	Los Osos Valley	WB	D	17.7	38.0	46%	D	12.8	38.0	34%	E
	Froom Ranch Way	Los Osos Valley	Dick's Sporting Goods Dwy	EB	D	34.7	37.4	93%	Α	34.5	37.4	92%	Α
20	Dalidio Dr	Madonna Rd	Froom Ranch Way	SB	D	29.3	39.3	74%	В	29.5	39.3	75%	В
	Dalidio Dr	Froom Ranch Way	Madonna Rd	NB	D	6.3	39.4	16%	F	1.6	39.4	4%	F
21	Froom Ranch Way	Dalidio	Dick's Sporting Goods Dwy	WB	D	40.0	40.6	98%	Α	39.9	40.6	98%	А
	Froom Ranch Way	Dick's Sporting Goods Dwy	Dalidio	EB	D	34.1	40.8	84%	В	33.9	40.8	83%	В

Table 4.12-29
Near-Term Plus Project Conditions Segment Level of Service: Automobile Analysis

			-				AM Pea	k			PM PE	AK	
ID	Roadway	From	То	Direction	LOS Threshold	Travel Speed (mph)	Base Free- Flow Speed BFFS (mph)	Travel Speed/ BFFS (%)	LOS	Travel Speed (mph)	Base Free- Flow Speed BFFS (mph)	Travel Speed/ BFFS (%)	LOS
1	Madonna Rd	Oceanaire Dr	LOVR	WB	D	21.1	40.1	53%	С	10.1	40.1	25%	F
	Madonna Rd	LOVR	Oceanaire Dr	EB	D	27.0	40.0	68%	В	27.5	40.0	69%	В
2	Madonna Rd	Dalidio	Oceanaire Dr	WB	D	23.6	40.8	58%	С	23.8	40.7	59%	С
	Madonna Rd	Oceanaire Dr	Dalidio	EB	D	11.5	40.7	28%	F	16.3	40.8	40%	Е
3	Madonna Rd	El Mercado	Dalidio Dr	WB	D	14.9	34.1	44%	D	14.2	34.8	41%	D
	Madonna Rd	Dalidio Dr	El Mercado	EB	D	26.0	38.2	68%	В	11.5	34.6	33%	Е
4	Madonna Rd	US 101 SB Ramps	El Mercado	WB	D	30.8	37.9	81%	В	22.0	37.3	59%	С
	Madonna Rd	El Mercado	US 101 SB Ramps	EB	D	20.7	37.8	55%	С	17.5	37.7	46%	D
5	Madonna Rd	US 101 NB Ramps	US 101 SB Ramps	WB	D	28.4	37.8	75%	В	22.3	37.8	59%	С
	Madonna Rd	US 101 SB Ramps	US 101 NB Ramps	EB	D	32.8	37.8	87%	Α	33.3	37.8	88%	Α
6	Madonna Rd	Higuera St	US 101 NB Ramps	WB	D	10.6	37.2	29%	F	14.1	37.2	38%	E
	Madonna Rd	US 101 NB Ramps	Higuera St	EB	D	12.6	37.2	34%	Е	8.0	37.2	21%	F
7	S. Higuera St	Madonna Rd	Margarita Ave	SB	D	32.6	44.5	73%	В	33.1	44.5	74%	В
	S. Higuera St	Margarita Ave	Madonna Rd	NB	D	33.0	44.8	74%	В	33.5	44.8	75%	В
8	S. Higuera St	Margarita Ave	Prado Rd	SB	D	16.2	38.9	42%	D	11.5	38.9	30%	F
	S. Higuera St	Prado Rd	Margarita Ave	NB	D	21.2	38.9	55%	С	19.1	38.9	49%	D
9	S. Higuera St	Prado Rd	Granada Dr	SB	D	33.5	41.8	80%	В	29.3	41.8	70%	В
	S. Higuera St	Granada Dr	Prado Rd	NB	D	21.6	41.9	52%	С	23.9	41.9	57%	С
10	S. Higuera St	Granada Dr	Tank Farm Road	SB	D	42.3	41.6	102%	Α	24.7	42.6	58%	С
	S. Higuera St	Tank Farm Road	Granada Dr	NB	D	29.7	41.6	71%	В	26.8	42.6	63%	С
11	S. Higuera St	Tank Farm Road	Suburban Drive	SB	D	27.1	42.4	64%	С	21.5	41.2	52%	С
	S. Higuera St	Suburban Drive	Tank Farm Road	NB	D	17.8	42.5	42%	D	16.2	41.3	39%	E
12	S. Higuera St	Suburban Drive	Los Osos Valley Road	SB	D	20.4	42.1	49%	D	13.4	39.1	34%	E
	S. Higuera St	Los Osos Valley Road	Suburban Drive	NB	D	23.7	42.0	56%	С	18.9	39.0	49%	D
13	Los Osos Valley	Madonna Rd	Froom Ranch Way	SB	D	22.7	41.9	54%	С	15.2	41.8	36%	Е
	Los Osos Valley	Froom Ranch Way	Madonna Rd	NB	D	20.5	41.8	49%	D	14.8	41.8	36%	E
14	Los Osos Valley	Froom Ranch Way	Calle Joaquin	SB	D	29.0	43.0	67%	В	30.3	43.0	71%	В
	Los Osos Valley	Calle Joaquin	Froom Ranch Way	NB	D	28.1	43.2	65%	С	21.4	43.2	50%	D
15	Los Osos Valley	Calle Joaquin	US 101 SB Ramps	SB	D	6.2	32.1	19%	F	13.1	32.1	41%	D
	Los Osos Valley	US 101 SB Ramps	Calle Joaquin	NB	D	16.2	31.1	52%	С	13.9	31.1	45%	D
16	Los Osos Valley	US 101 SB Ramps	US 101 NB Ramps	SB	D	24.7	37.7	66%	С	21.0	37.7	56%	С
	Los Osos Valley	US 101 NB Ramps	US 101 SB Ramps	NB	D	20.2	37.4	54%	С	32.2	37.4	86%	Α
17	Los Osos Valley	S. Higuera St	US 101 NB Ramps	WB	D	25.0	39.4	63%	С	27.8	39.4	70%	В
	Los Osos Valley	US 101 NB Ramps	S. Higuera St	EB	D	16.9	39.4	43%	D	15.6	39.4	39%	E

							AM Pea	ak			PM PE	AK	
ID	Roadway	From	То	Direction	LOS Threshold	Travel Speed (mph)	Base Free- Flow Speed BFFS (mph)	Travel Speed/ BFFS (%)	LOS	Travel Speed (mph)	Base Free- Flow Speed BFFS (mph)	Travel Speed/ BFFS (%)	LOS
18	Prado Rd	S. Higuera St	US 101 NB Ramps	WB	D	27.4	39.1	70%	В	23.9	39.1	61%	С
	Prado Rd	US 101 NB Ramps	S. Higuera St	EB	D	23.4	39.0	60%	С	21.7	39.0	56%	С
19	Froom Ranch Way	Dick's Sporting Goods Dwy	Los Osos Valley	WB	D	17.8	38.0	47%	D	13.0	37.4	35%	E
	Froom Ranch Way	Los Osos Valley	Dick's Sporting Goods Dwy	EB	D	34.7	37.4	93%	А	34.9	37.9	92%	Α
20	Dalidio Dr	Madonna Rd	Froom Ranch Way	SB	D	29.3	39.3	74%	В	29.5	39.3	75%	В
	Dalidio Dr	Froom Ranch Way	Madonna Rd	NB	D	11.2	37.8	30%	F	1.1	37.8	3%	F
21	Froom Ranch Way	Dalidio	Dick's Sporting Goods Dwy	WB	D	40.0	40.6	98%	А	39.9	40.6	98%	Α
	Froom Ranch Way	Dick's Sporting Goods Dwy	Dalidio	EB	D	34.1	40.8	84%	В	33.9	40.8	83%	В

Table 4.12-30 Existing Plus Project Conditions Segment Level of Service: Pedestrian Analysis

								Peak	PM F	Peak
ID	Roadway	From	То	Direction	LOS Threshold	Average Ped. Space (ft²/p)	Segment Score	LOS	Segment Score	LOS
1	Madonna Rd	Oceanaire Dr	LOVR	WB	С	2648	3.54	D	3.82	D
	Madonna Rd	LOVR	Oceanaire Dr	EB	C	17482	3.74	D	3.88	D
2	Madonna Rd	Dalidio	Oceanaire Dr	WB	C	12000	3.60	D	3.92	D
	Madonna Rd	Oceanaire Dr	Dalidio	EB	C	5833	3.87	D	3.97	D
3	Madonna Rd	El Mercado	Dalidio Dr	WB	С	37450	3.59	D	3.92	D
	Madonna Rd	Dalidio Dr	El Mercado	EB	C	52920	3.70	D	3.86	D
4	Madonna Rd	US 101 SB Ramps	El Mercado	WB	C	26250	3.66	D	3.84	D
	Madonna Rd	El Mercado	US 101 SB Ramps	EB	С	27915	3.93	D	4.17	D
5	Madonna Rd	US 101 NB Ramps	US 101 SB Ramps	WB	C	No Peds	3.73	D	3.90	F
	Madonna Rd	US 101 SB Ramps	US 101 NB Ramps	EB	C	No Peds	4.15	D	4.10	D
6	Madonna Rd	Higuera St	US 101 NB Ramps	WB	С	25200	3.65	D	3.81	D
	Madonna Rd	US 101 NB Ramps	Higuera St	EB	С	19838	3.90	D	3.79	D
7	S. Higuera St	Madonna Rd	Margarita Ave	SB	С	23247	3.82	D	3.80	D
	S. Higuera St	Margarita Ave	Madonna Rd	NB	С	5398	3.61	D	3.80	D
8	S. Higuera St	Margarita Ave	Prado Rd	SB	С	40979	3.61	D	3.63	D
	S. Higuera St	Prado Rd	Margarita Ave	NB	С	21700	3.45	С	3.58	D
9	S. Higuera St	Prado Rd	Granada Dr	SB	С	9292	3.55	D	3.66	D
	S. Higuera St	Granada Dr	Prado Rd	NB	С	8400	3.16	С	3.38	С
10	- U	Granada Dr	Tank Farm Road	SB	С	46305	3.54	D	3.69	D
	S. Higuera St	Tank Farm Road	Granada Dr	NB	С	49140	3.11	С	3.26	С
11	S. Higuera St	Tank Farm Road	Suburban Drive	SB	С	12600	3.57	D	3.80	D
	S. Higuera St	Suburban Drive	Tank Farm Road	NB	С	31500	3.48	С	3.44	С
12	S. Higuera St	Suburban Drive	Los Osos Valley Road	SB	С	39312	3.57	D	3.85	D
	S. Higuera St	Los Osos Valley Road	Suburban Drive	NB	С	43533	3.85	D	3.89	D
13	Los Osos Valley	Madonna Rd	Froom Ranch Way	SB	С	3853	3.81	D	3.88	D
	Los Osos Valley	Froom Ranch Way	Madonna Rd	NB	С	0	3.70	F	4.05	F
14	Los Osos Valley	Froom Ranch Way	Calle Joaquin	SB	С	27300	3.77	D	4.01	D
	Los Osos Valley	Calle Joaquin	Froom Ranch Way	NB	С	22050	3.68	D	4.00	D
15	Los Osos Valley	Calle Joaquin	US 101 SB Ramps	SB	С	No Peds	3.61	D	3.70	D
	Los Osos Valley	US 101 SB Ramps	Calle Joaquin	NB	С	63000	3.63	D	3.93	D
16	Los Osos Valley	US 101 SB Ramps	US 101 NB Ramps	SB	С	No Peds	4.17	D	4.22	D
	Los Osos Valley	US 101 NB Ramps	US 101 SB Ramps	NB	С	53928	3.63	D	3.13	С
17	Los Osos Valley	S. Higuera St	US 101 NB Ramps	WB	С	1680	3.68	D	4.09	D
	Los Osos Valley	US 101 NB Ramps	S. Higuera St	EB	С	39393	3.78	D	3.69	D
18	Prado Rd	S. Higuera St	US 101 NB Ramps	WB	С	25200	2.90	С	2.90	С
	Prado Rd	US 101 NB Ramps	S. Higuera St	EB	С	3019	3.42	С	3.32	С

							AM F	Peak	PM F	eak
ID	Roadway	From	То	Direction	LOS Threshold	Average Ped. Space (ft²/p)	Segment Score	LOS	Segment Score	LOS
19	Froom Ranch Way	Dick's Sporting Goods Dwy	Los Osos Valley	WB	С	4500	3.03	С	3.28	С
	Froom Ranch Way	Los Osos Valley	Dick's Sporting Goods Dwy	EB	С	7350	1.76	Α	1.79	Α
20	Dalidio Dr	Madonna Rd	Froom Ranch Way	SB	С	3500	1.64	Α	1.61	Α
	Dalidio Dr	Froom Ranch Way	Madonna Rd	NB	С	21000	3.14	С	3.40	С
21	Froom Ranch Way	Dalidio	Dick's Sporting Goods Dwy	WB	С	2520	1.55	Α	1.57	Α
	Froom Ranch Way	Dick's Sporting Goods Dwy	Dalidio	EB	С	No Peds	1.64	Α	1.64	Α

^{1.} Sidewalk is present along frontage roads for segments #1 - Madonna Road and #13 - Los Osos Valley Road, and is not accounted for in this analysis.

^{2.} HCM 2010 Methodologies do not model segments bounded by all-way stop control. Procedures have not been developed yet to address the effect of all-way stop control or yield control on intersection performance from a pedestrian or bicyce perspective. No methodology exists for evaluating two-way stop-controlled intersection performance (with the cross-street stop controlled) for pedestrians and bicycles. However, it is reasoned that it has negligible influence on pedestrian service along the segment.

Table 4.12-31
Near-Term Plus Project Conditions Segment Level of Service: Pedestrian Analysis

			ida i roject conditi	<u> </u>						
							AM I	Peak	PM	Peak
					LOS	Average Ped. Space	Segment		Segment	
ID	Roadway	From	То	Direction	Threshold	(ft ² /p)	Score	LOS	Score	LOS
1	Madonna Rd	Oceanaire Dr	LOVR	WB	С	2648	3.52	D	3.86	D
	Madonna Rd	LOVR	Oceanaire Dr	EB	С	17482	3.91	D	4.08	D
2	Madonna Rd	Dalidio	Oceanaire Dr	WB	С	12000	3.64	D	4.00	D
	Madonna Rd	Oceanaire Dr	Dalidio	EB	С	5833	3.84	D	3.97	D
3	Madonna Rd	El Mercado	Dalidio Dr	WB	С	37450	3.61	D	3.99	D
	Madonna Rd	Dalidio Dr	El Mercado	EB	С	52920	3.74	D	3.89	D
4	Madonna Rd	US 101 SB Ramps	El Mercado	WB	С	26250	3.68	D	3.87	D
	Madonna Rd	El Mercado	US 101 SB Ramps	EB	С	27915	3.77	D	3.87	D
5	Madonna Rd	US 101 NB Ramps	US 101 SB Ramps	WB	С	No Peds	3.76	D	3.95	F
	Madonna Rd	US 101 SB Ramps	US 101 NB Ramps	EB	С	No Peds	4.12	D	4.07	D
6	Madonna Rd	Higuera St	US 101 NB Ramps	WB	С	25200	3.70	D	3.88	D
	Madonna Rd	US 101 NB Ramps	Higuera St	EB	С	19838	3.90	D	3.86	D
7	S. Higuera St	Madonna Rd	Margarita Ave	SB	С	23247	3.87	D	3.90	D
	S. Higuera St	Margarita Ave	Madonna Rd	NB	С	5398	3.68	D	3.92	D
8	S. Higuera St	Margarita Ave	Prado Rd	SB	С	40979	3.71	D	3.74	D
	S. Higuera St	Prado Rd	Margarita Ave	NB	С	21700	3.55	D	3.71	D
9	S. Higuera St	Prado Rd	Granada Dr	SB	С	9292	3.65	D	3.77	D
	S. Higuera St	Granada Dr	Prado Rd	NB	С	8400	3.26	С	3.53	D
10	S. Higuera St	Granada Dr	Tank Farm Road	SB	С	46305	3.62	D	3.80	D
	S. Higuera St	Tank Farm Road	Granada Dr	NB	С	49140	3.24	С	3.36	С
11	S. Higuera St	Tank Farm Road	Suburban Drive	SB	С	12600	3.66	D	3.96	D
	S. Higuera St	Suburban Drive	Tank Farm Road	NB	С	31500	3.66	D	3.56	D
12	S. Higuera St	Suburban Drive	Los Osos Valley Road	SB	С	39312	3.64	D	4.02	D
	S. Higuera St	Los Osos Valley Road	Suburban Drive	NB	С	43533	4.00	D	4.06	D
13	Los Osos Valley	Madonna Rd	Froom Ranch Way	SB	С	3853	3.86	D	3.99	D
	Los Osos Valley	Froom Ranch Way	Madonna Rd	NB	С	0	3.75	F	4.19	F
14	Los Osos Valley	Froom Ranch Way	Calle Joaquin	SB	С	27300	3.87	D	4.08	D
	Los Osos Valley	Calle Joaquin	Froom Ranch Way	NB	С	22050	3.75	D	4.11	D
15	Los Osos Valley	Calle Joaquin	US 101 SB Ramps	SB	С	44100	3.71	D	3.72	D
	Los Osos Valley	US 101 SB Ramps	Calle Joaquin	NB	С	63000	3.68	D	4.03	D
16	Los Osos Valley	US 101 SB Ramps	US 101 NB Ramps	SB	С	No Peds	3.94	D	3.92	D
	Los Osos Valley	US 101 NB Ramps	US 101 SB Ramps	NB	С	53928	3.83	D	3.29	С
17		S. Higuera St	US 101 NB Ramps	WB	С	1680	3.62	D	3.81	D
	Los Osos Valley	US 101 NB Ramps	S. Higuera St	EB	С	39393	3.94	D	3.79	D
18	Prado Rd	S. Higuera St	US 101 NB Ramps	WB	С	25200	2.76	С	2.85	С
	Prado Rd	US 101 NB Ramps	S. Higuera St	EB	C	3019	3.44	C	3.42	C

							AM I	Peak	PM F	Peak
ID	Roadway	From	То	Direction	LOS Threshold	Average Ped. Space (ft²/p)	Segment Score	LOS	Segment Score	LOS
19	Froom Ranch Way	Dick's Sporting Goods Dwy	Los Osos Valley	WB	С	4846	3.06	С	3.26	С
	Froom Ranch Way	Los Osos Valley	Dick's Sporting Goods Dwy	EB	С	No Peds	1.79	А	1.75	Α
20	Dalidio Dr	Madonna Rd	Froom Ranch Way	SB	С	3500	1.64	Α	1.60	А
	Dalidio Dr	Froom Ranch Way	Madonna Rd	NB	С	21000	3.10	С	3.30	С
21	Froom Ranch Way	Dalidio	Dick's Sporting Goods Dwy	WB	С	8400	1.55	A	1.57	А
	Froom Ranch Way	Dick's Sporting Goods Dwy	Dalidio	EB	С	No Peds	1.64	А	1.64	Α

^{1.} Sidewalk is present along frontage roads for segments #1 - Madonna Road and #13 - Los Osos Valley Road, and is not accounted for in this analysis.

^{2.} HCM 2010 Methodologies do not model segments bounded by all-way stop control. Procedures have not been developed yet to address the effect of all-way stop control or yield control on intersection performance from a pedestrian or bicyce perspective. No methodology exists for evaluating two-way stop-controlled intersection performance (with the cross-street stop controlled) for pedestrians and bicycles. However, it is reasoned that it has negligible influence on pedestrian service along the segment.

Table 4.12-32
Existing Plus Project Conditions Segment Level of Service: Bicycle Analysis

						•	Peak	PM F	Peak
ID	Roadway	From	То	Direction	LOS Threshold	Segment Score	LOS	Segment Score	LOS
1	Madonna Rd	Oceanaire Dr	LOVR	WB	D	3.61	D	3.97	D
	Madonna Rd	LOVR	Oceanaire Dr	EB	D	3.73	D	3.80	D
2	Madonna Rd	Dalidio	Oceanaire Dr	WB	D	3.13	С	3.22	С
	Madonna Rd	Oceanaire Dr	Dalidio	EB	D	3.58	D	3.44	С
3	Madonna Rd	El Mercado	Dalidio Dr	WB	D	3.30	С	3.22	С
	Madonna Rd	Dalidio Dr	El Mercado	EB	D	3.51	D	3.41	C
4	Madonna Rd	US 101 SB Ramps	El Mercado	WB	D	3.97	D	4.36	E
	Madonna Rd	El Mercado	US 101 SB Ramps	EB	D	3.64	D	3.66	D
5	Madonna Rd	US 101 NB Ramps	US 101 SB Ramps	WB	D	3.32	С	3.37	С
	Madonna Rd	US 101 SB Ramps	US 101 NB Ramps	EB	D	3.42	С	3.36	С
6	Madonna Rd	Higuera St	US 101 NB Ramps	WB	D	3.50	D	3.56	D
	Madonna Rd	US 101 NB Ramps	Higuera St	EB	D	3.73	D	3.59	D
7	S. Higuera St	Madonna Rd	Margarita Ave	SB	D	3.89	D	3.80	D
	S. Higuera St	Margarita Ave	Madonna Rd	NB	D	4.06	D	4.15	D
8	S. Higuera St	Margarita Ave	Prado Rd	SB	D	3.64	D	3.64	D
	S. Higuera St	Prado Rd	Margarita Ave	NB	D	3.87	D	3.87	D
9	S. Higuera St	Prado Rd	Granada Dr	SB	D	3.84	D	3.87	D
	S. Higuera St	Granada Dr	Prado Rd	NB	D	3.42	С	3.50	С
10	S. Higuera St	Granada Dr	Tank Farm Road	SB	D	4.10	D	4.16	D
	S. Higuera St	Tank Farm Road	Granada Dr	NB	D	3.48	С	3.52	D
11	S. Higuera St	Tank Farm Road	Suburban Drive	SB	D	3.33	С	3.41	С
	S. Higuera St	Suburban Drive	Tank Farm Road	NB	D	3.40	С	3.39	С
12	S. Higuera St	Suburban Drive	Los Osos Valley Road	SB	D	3.24	С	3.60	D
	S. Higuera St	Los Osos Valley Road	Suburban Drive	NB	D	3.90	D	3.86	D
13	Los Osos Valley	Madonna Rd	Froom Ranch Way	SB	D	3.71	D	3.71	D
	Los Osos Valley	Froom Ranch Way	Madonna Rd	NB	D	3.38	С	3.46	С
14	Los Osos Valley	Froom Ranch Way	Calle Joaquin	SB	D	3.56	D	3.59	D
	Los Osos Valley	Calle Joaquin	Froom Ranch Way	NB	D	3.81	D	3.89	D
15	Los Osos Valley	Calle Joaquin	US 101 SB Ramps	SB	D	3.34	С	3.54	D
	Los Osos Valley	US 101 SB Ramps	Calle Joaquin	NB	D	3.54	D	3.60	D
16	Los Osos Valley	US 101 SB Ramps	US 101 NB Ramps	SB	D	3.73	D	3.73	D
	Los Osos Valley	US 101 NB Ramps	US 101 SB Ramps	NB	D	3.40	С	3.51	D
17	Los Osos Valley	S. Higuera St	US 101 NB Ramps	WB	D	3.29	С	3.43	С
	Los Osos Valley	US 101 NB Ramps	S. Higuera St	EB	D	3.39	С	3.35	С
18	Prado Rd	S. Higuera St	US 101 NB Ramps	WB	D	3.44	С	3.44	С
	Prado Rd	US 101 NB Ramps	S. Higuera St	EB	D	3.94	D	3.68	D
19	Froom Ranch Way	Dick's Sporting Goods Dwy	Los Osos Valley	WB	D	3.08	С	3.55	D
	Froom Ranch Way	Los Osos Valley	Dick's Sporting Goods Dwy	EB	D	3.24	С	2.49	В

						AM I	Peak	PM F	Peak
					LOS	Segment		Segment	
ID	Roadway	From	То	Direction	Threshold	Score	LOS	Score	LOS
20	Dalidio Dr	Madonna Rd	Froom Ranch Way	SB	D	3.35	С	3.05	С
	Dalidio Dr	Froom Ranch Way	Madonna Rd	NB	D	3.32	С	3.43	С
21	Froom Ranch Way	Dalidio	Dick's Sporting Goods Dwy	WB	D	2.50	В	2.92	С
	Froom Ranch Way	Dick's Sporting Goods Dwy	Dalidio	EB	D	3.42	С	3.41	С

^{1.} HCM 2010 Methodologies do not model segments bounded by all-way stop control. Procedures have not been developed yet to address the effect of all-way stop control or yield control on intersection performance from a pedestrian or bicyce perspective. No methodology exists for evaluating two-way stop-controlled intersection performance (with the cross-street stop controlled) for pedestrians and bicycles. However, it is incorporated into the methodology for evaluating bicycle segment performance.

Table 4.12-33
Near-Term Plus Project Conditions Segment Level of Service: Bicycle Analysis

							Peak	PM F	Peak
					LOS	Segment		Segment	
ID	Roadway	From	То	Direction	Threshold	Score	LOS	Score	LOS
1	Madonna Rd	Oceanaire Dr	LOVR	WB	D	3.61	D	4.17	D
	Madonna Rd	LOVR	Oceanaire Dr	EB	D	3.73	D	3.79	D
2	Madonna Rd	Dalidio	Oceanaire Dr	WB	D	3.15	С	3.24	С
	Madonna Rd	Oceanaire Dr	Dalidio	EB	D	3.57	D	3.44	С
3	Madonna Rd	El Mercado	Dalidio Dr	WB	D	3.31	С	3.24	С
	Madonna Rd	Dalidio Dr	El Mercado	EB	D	3.40	С	3.42	С
4	Madonna Rd	US 101 SB Ramps	El Mercado	WB	D	3.98	D	4.38	E
	Madonna Rd	El Mercado	US 101 SB Ramps	EB	D	3.64	D	3.65	D
5	Madonna Rd	US 101 NB Ramps	US 101 SB Ramps	WB	D	3.33	С	3.38	С
	Madonna Rd	US 101 SB Ramps	US 101 NB Ramps	EB	D	3.40	С	3.35	С
6	Madonna Rd	Higuera St	US 101 NB Ramps	WB	D	3.52	D	3.58	D
	Madonna Rd	US 101 NB Ramps	Higuera St	EB	D	3.77	D	3.59	D
7	S. Higuera St	Madonna Rd	Margarita Ave	SB	D	3.91	D	3.90	D
	S. Higuera St	Margarita Ave	Madonna Rd	NB	D	4.09	D	4.19	D
8	S. Higuera St	Margarita Ave	Prado Rd	SB	D	3.67	D	3.67	D
	S. Higuera St	Prado Rd	Margarita Ave	NB	D	3.87	D	3.97	D
9	S. Higuera St	Prado Rd	Granada Dr	SB	D	3.88	D	3.91	D
	S. Higuera St	Granada Dr	Prado Rd	NB	D	3.45	С	3.53	D
10	S. Higuera St	Granada Dr	Tank Farm Road	SB	D	4.13	D	4.19	D
	S. Higuera St	Tank Farm Road	Granada Dr	NB	D	3.52	D	3.55	D
11	S. Higuera St	Tank Farm Road	Suburban Drive	SB	D	3.35	С	3.46	С
	S. Higuera St	Suburban Drive	Tank Farm Road	NB	D	3.46	С	3.43	С
12	S. Higuera St	Suburban Drive	Los Osos Valley Road	SB	D	3.28	С	3.94	D
	S. Higuera St	Los Osos Valley Road	Suburban Drive	NB	D	3.94	D	3.88	D
13	Los Osos Valley	Madonna Rd	Froom Ranch Way	SB	D	3.72	D	3.74	D
	Los Osos Valley	Froom Ranch Way	Madonna Rd	NB	D	3.39	С	3.49	С
14	Los Osos Valley	Froom Ranch Way	Calle Joaquin	SB	D	3.57	D	3.60	D
	Los Osos Valley	Calle Joaquin	Froom Ranch Way	NB	D	3.83	D	3.91	D
15	Los Osos Valley	Calle Joaquin	US 101 SB Ramps	SB	D	3.29	С	3.35	С
	Los Osos Valley	US 101 SB Ramps	Calle Joaquin	NB	D	3.55	D	3.62	D
16	Los Osos Valley	US 101 SB Ramps	US 101 NB Ramps	SB	D	3.72	D	3.69	D
	Los Osos Valley	US 101 NB Ramps	US 101 SB Ramps	NB	D	3.71	D	3.82	D
17	Los Osos Valley	S. Higuera St	US 101 NB Ramps	WB	D	3.27	С	3.36	С
	Los Osos Valley	US 101 NB Ramps	S. Higuera St	EB	D	3.35	С	3.37	С
18	Prado Rd	S. Higuera St	US 101 NB Ramps	WB	D	3.14	С	3.18	С
	Prado Rd	US 101 NB Ramps	S. Higuera St	EB	D	3.91	D	3.86	D
19	Froom Ranch Way	Dick's Sporting Goods Dwy	Los Osos Valley	WB	D	3.42	С	3.52	D
	Froom Ranch Way	Los Osos Valley	Dick's Sporting Goods Dwy	EB	D	3.33	С	3.52	D
20	Dalidio Dr	Madonna Rd	Froom Ranch Way	SB	D	3.35	С	2.93	С



					AM Peak		PM Peak		
					LOS	Segment		Segment	
ID	Roadway	From	То	Direction	Threshold	Score	LOS	Score	LOS
	Dalidio Dr	Froom Ranch Way	Madonna Rd	NB	D	3.35	С	3.42	С
21	Froom Ranch Way	Dalidio	Dick's Sporting Goods Dwy	WB	D	2.49	В	2.92	С
	Froom Ranch Way	Dick's Sporting Goods Dwy	Dalidio	EB	D	3.42	С	3.40	С

^{1.} HCM 2010 Methodologies do not model segments bounded by all-way stop control. Procedures have not been developed yet to address the effect of all-way stop control or yield control on intersection performance from a pedestrian or bicyce perspective. No methodology exists for evaluating two-way stop-controlled intersection performance (with the cross-street stop controlled) for pedestrians and bicycles. However, it is incorporated into the methodology for evaluating bicycle segment performance.

Table 4.12-34
Existing Plus Project Conditions Segment Level of Service: Transit Analysis

							AM Pe	eak	PM Pe	ak
					LOS		Segment		Segment	
ID	Roadway	From	То	Direction	Threshold	Route Name	Score	LOS	Score	LOS
1	Madonna Rd	Oceanaire Dr	LOVR	WB	D	Route 4	4.19	D	4.32	Е
	Madonna Rd	LOVR	Oceanaire Dr	EB	D	Route 5	4.31	Е	4.01	D
2	Madonna Rd	Dalidio	Oceanaire Dr	WB	D	Route 4	4.46	Е	4.57	Е
	Madonna Rd	Oceanaire Dr	Dalidio	EB	D	Route 5	4.74	Е	4.54	E
3	Madonna Rd	El Mercado	Dalidio Dr	WB	D	Route 4	4.35	Е	4.51	Е
	Madonna Rd	Dalidio Dr	El Mercado	EB	D	Route 5	Not	N/A	Not	N/A
							Analyzed		Analyzed	
4	Madonna Rd	US 101 SB Ramps	El Mercado	WB	D	Route 4	4.36	E	4.59	E
	Madonna Rd	El Mercado	US 101 SB Ramps	EB	D	Route 5	4.67	E	4.48	E
5	Madonna Rd	US 101 NB Ramps	US 101 SB Ramps	WB	D	Route 4	3.97	D	4.09	D
	Madonna Rd	US 101 SB Ramps	US 101 NB Ramps	EB	D	Route 5	4.35	Е	4.04	D
6	Madonna Rd	Higuera St	US 101 NB Ramps	WB	D	Route 4	4.33	Е	4.44	E
	Madonna Rd	US 101 NB Ramps	Higuera St	EB	D	Route 5	4.55	Е	4.29	E
7	S. Higuera St	Madonna Rd	Margarita Ave	SB	D	Route 2	Not	N/A	3.51	D
							Analyzed			
	S. Higuera St	Margarita Ave	Madonna Rd	NB	D	Route 2	3.65	D	3.69	D
8	S. Higuera St	Margarita Ave	Prado Rd	SB	D	Route 2	Not	N/A	4.19	D
							Analyzed			
	S. Higuera St	Prado Rd	Margarita Ave	NB	D	Route 2	4.15	D	4.23	D
9	S. Higuera St	Prado Rd	Granada Dr	SB	D	Route 2	4.35	E	4.28	E
	S. Higuera St	Granada Dr	Prado Rd	NB	D	Route 2	3.76	D	3.83	D
10	S. Higuera St	Granada Dr	Tank Farm Road	SB	D	Route 2	3.75	D	3.83	D
	S. Higuera St	Tank Farm Road	Granada Dr	NB	D	Route 2	3.51	D	3.58	D
11	S. Higuera St	Tank Farm Road	Suburban Drive	SB	D	-	Not	N/A	Not	N/A
							Analyzed		Analyzed	
	S. Higuera St	Suburban Drive	Tank Farm Road	NB	D	Route 2	3.97	D	3.96	D
12	S. Higuera St	Suburban Drive	Los Osos Valley Road	SB	D	-	Not	N/A	Not	N/A
							Analyzed		Analyzed	
	S. Higuera St	Los Osos Valley Road	Suburban Drive	NB	D	-	Not	N/A	Not	N/A
							Analyzed		Analyzed	
13	Los Osos Valley	Madonna Rd	Froom Ranch Way	SB	D	Route 4	4.50	E	4.53	E
	Los Osos Valley	Froom Ranch Way	Madonna Rd	NB	D	Route 4	4.22	D	4.38	E
13	Los Osos Valley	Madonna Rd	Froom Ranch Way	SB	D	Route 5	4.61	E	4.38	E
	Los Osos Valley	Froom Ranch Way	Madonna Rd	NB	D	Route 5	4.36	E	4.21	D
14	Los Osos Valley	Froom Ranch Way	Calle Joaquin	SB	D	Route 4	4.22	D	4.35	E
	Los Osos Valley	Calle Joaquin	Froom Ranch Way	NB	D	Route 4	4.24	D	4.49	E
14	Los Osos Valley	Froom Ranch Way	Calle Joaquin	SB	D	Route 5	4.37	E	4.16	D
	Los Osos Valley	Calle Joaquin	Froom Ranch Way	NB	D	Route 5	4.37	E	4.33	E

							AM Pe	ak	PM Pe	ak
ID	Roadway	From	То	Direction	LOS Threshold	Route Name	Segment Score	LOS	Segment Score	LOS
15	Los Osos Valley	Calle Joaquin	US 101 SB Ramps	SB	D		Not Analyzed	N/A	Not Analyzed	N/A
	Los Osos Valley	US 101 SB Ramps	Calle Joaquin	NB	D		Not Analyzed	N/A	Not Analyzed	N/A
16	Los Osos Valley	US 101 SB Ramps	US 101 NB Ramps	SB	D		Not Analyzed	N/A	Not Analyzed	N/A
	Los Osos Valley	US 101 NB Ramps	US 101 SB Ramps	NB	D		Not Analyzed	N/A	Not Analyzed	N/A
17	Los Osos Valley	S. Higuera St	US 101 NB Ramps	WB	D		Not Analyzed	N/A	Not Analyzed	N/A
	Los Osos Valley	US 101 NB Ramps	S. Higuera St	EB	D		Not Analyzed	N/A	Not Analyzed	N/A
18	Prado Rd	S. Higuera St	US 101 NB Ramps	WB	D		Not Analyzed	N/A	Not Analyzed	N/A
	Prado Rd	US 101 NB Ramps	S. Higuera St	EB	D	Route 2	3.83	D	Not Analyzed	N/A
19	Froom Ranch Way	Dick's Sporting Goods Dwy	Los Osos Valley	WB	D		Not Analyzed	N/A	Not Analyzed	N/A
	Froom Ranch Way	Los Osos Valley	Dick's Sporting Goods Dwy	EB	D		Not Analyzed	N/A	Not Analyzed	N/A
20	Dalidio Dr	Madonna Rd	Froom Ranch Way	SB	D	Route 4	4.05	D	4.08	D
	Dalidio Dr	Froom Ranch Way	Madonna Rd	NB	D	Route 5	4.20	D	4.03	D
21	Froom Ranch Way	Dalidio	Dick's Sporting Goods Dwy	WB	D		Not Analyzed	N/A	Not Analyzed	N/A
	Froom Ranch Way	Dick's Sporting Goods Dwy	Dalidio	EB	D		Not Analyzed	N/A	Not Analyzed	N/A

Segment 20 transit is southbound for routes 4 and 5
Route 2 Serves the Prado Day Center stop during the AM peak hour, and the DMV/Margarita stop during the PM Peak Hour

Table 4.12-35
Near-Term Plus Project Conditions Segment Level of Service: Transit Analysis

							AM I		PM Pe	ak
ID	Roadway	From	То	Direction	LOS Threshold	Route Name	Segment Score	LOS	Segment Score	LOS
1	Madonna Rd	Oceanaire Dr	LOVR	WB	D	Route 4	4.17	D	4.30	E
	Madonna Rd	LOVR	Oceanaire Dr	EB	D	Route 5	4.36	Е	4.04	D
2	Madonna Rd	Dalidio	Oceanaire Dr	WB	D	Route 4	4.47	E	4.63	Е
	Madonna Rd	Oceanaire Dr	Dalidio	EB	D	Route 5	4.70	E	4.44	Е
3	Madonna Rd	El Mercado	Dalidio Dr	WB	D	Route 4	4.34	Е	4.49	E
	Madonna Rd	Dalidio Dr	El Mercado	EB	D	Route 5	Not Analyzed	N/A	Not Analyzed	N/A
4	Madonna Rd	US 101 SB Ramps	El Mercado	WB	D	Route 4	4.35	E	4.55	E
	Madonna Rd	El Mercado	US 101 SB Ramps	EB	D	Route 5	4.60	E	4.35	E
5	Madonna Rd	US 101 NB Ramps	US 101 SB Ramps	WB	D	Route 4	4.09	D	4.38	E
	Madonna Rd	US 101 SB Ramps	US 101 NB Ramps	EB	D	Route 5	4.25	D	3.83	D
6	Madonna Rd	Higuera St	US 101 NB Ramps	WB	D	Route 4	4.31	Е	4.43	Е
	Madonna Rd	US 101 NB Ramps	Higuera St	EB	D	Route 5	4.51	E	4.16	D
7	S. Higuera St	Madonna Rd	Margarita Ave	SB	D	Route 2	Not Analyzed	N/A	3.58	D
	S. Higuera St	Margarita Ave	Madonna Rd	NB	D	Route 2	3.72	D	3.75	D
8	S. Higuera St	Margarita Ave	Prado Rd	SB	D	Route 2	Not Analyzed	N/A	4.21	D
	S. Higuera St	Prado Rd	Margarita Ave	NB	D	Route 2	4.22	D	4.34	E
9	S. Higuera St	Prado Rd	Granada Dr	SB	D	Route 2	4.41	ш	4.33	E
	S. Higuera St	Granada Dr	Prado Rd	NB	D	Route 2	3.77	D	3.95	D
10	S. Higuera St	Granada Dr	Tank Farm Road	SB	D	Route 2	3.82	D	3.91	D
	S. Higuera St	Tank Farm Road	Granada Dr	NB	D	Route 2	3.54	D	3.64	D
11	S. Higuera St	Tank Farm Road	Suburban Drive	SB	D	ı	Not Analyzed	N/A	Not Analyzed	N/A
	S. Higuera St	Suburban Drive	Tank Farm Road	NB	D	Route 2	4.03	D	4.00	D
12	S. Higuera St	Suburban Drive	Los Osos Valley Road	SB	D	-	Not Analyzed	N/A	Not Analyzed	N/A
	S. Higuera St	Los Osos Valley Road	Suburban Drive	NB	D	-	Not Analyzed	N/A	Not Analyzed	N/A
13	Los Osos Valley	Madonna Rd	Froom Ranch Way	SB	D	Route 4	4.53	E	4.56	E
	Los Osos Valley	Froom Ranch Way	Madonna Rd	NB	D	Route 4	4.25	E	4.43	E
13	Los Osos Valley	Madonna Rd	Froom Ranch Way	SB	D	Route 5	4.61	E	4.38	E
	Los Osos Valley	Froom Ranch Way	Madonna Rd	NB	D	Route 5	4.36	E	4.21	D
14	Los Osos Valley	Froom Ranch Way	Calle Joaquin	SB	D	Route 4	4.34	E	4.37	E
	Los Osos Valley	Calle Joaquin	Froom Ranch Way	NB	D	Route 4	4.27	E	4.54	E
14	Los Osos Valley	Madonna Rd	Froom Ranch Way	SB	D	Route 5	4.45	E	4.14	D
	Los Osos Valley	Froom Ranch Way	Madonna Rd	NB	D	Route 5	4.38	E	4.35	E
15	Los Osos Valley	Calle Joaquin	US 101 SB Ramps	SB	D		Not Analyzed	N/A	Not Analyzed	N/A
	Los Osos Valley	US 101 SB Ramps	Calle Joaquin	NB	D		Not Analyzed	N/A	Not Analyzed	N/A
16	Los Osos Valley	US 101 SB Ramps	US 101 NB Ramps	SB	D		Not Analyzed	N/A	Not Analyzed	N/A
	Los Osos Valley	US 101 NB Ramps	US 101 SB Ramps	NB	D		Not Analyzed	N/A	Not Analyzed	N/A
17	Los Osos Valley	S. Higuera St	US 101 NB Ramps	WB	D		Not Analyzed	N/A	Not Analyzed	N/A
	Los Osos Valley	US 101 NB Ramps	S. Higuera St	EB	D		Not Analyzed	N/A	Not Analyzed	N/A

							AM F	Peak	PM Pe	ak
ID	Roadway	From	То	Direction	LOS Threshold	Route Name	Segment Score	LOS	Segment Score	LOS
18	Prado Rd	S. Higuera St	US 101 NB Ramps	WB	D		Not Analyzed	N/A	Not Analyzed	N/A
	Prado Rd	US 101 NB Ramps	S. Higuera St	EB	D	Route 2	3.83	D	Not Analyzed	N/A
19	Froom Ranch Way	Dick's Sporting Goods Dwy	Los Osos Valley	WB	D		Not Analyzed	N/A	Not Analyzed	N/A
	Froom Ranch Way	Los Osos Valley	Dick's Sporting Goods Dwy	EB	D		Not Analyzed	N/A	Not Analyzed	N/A
20	Dalidio Dr	Madonna Rd	Froom Ranch Way	SB	D	Route 4	3.64	D	3.65	D
	Dalidio Dr	Madonna Rd	Froom Ranch Way	SB	D	Route 5	4.20	D	3.96	D
21	Dalidio Dr	Froom Ranch Way	Madonna Rd	NB	D	0.00	Not Analyzed	N/A	Not Analyzed	N/A
	Froom Ranch Way	Dalidio	Dick's Sporting Goods Dwy	WB	D	0.00	Not Analyzed	N/A	Not Analyzed	N/A

- Segment 20 transit is southbound for routes 4 and 5
 Route 2 Serves the Prado Day Center stop during the AM peak hour, and the DMV/Margarita stop during the PM Peak Hour

Mitigative Components of the Specific Plan and Impact Conclusion. The San Luis Ranch Specific Plan includes a mix of commercial and residential uses, a new transit connection, and workforce housing to balance jobs and housing. The Specific Plan also emphasizes bikeways and pedestrian connections, all of which contribute to reduced trips and VMT. However, as shown in Table 4.12-28 through Table 4.12-35, under Existing Plus Project and Near-Term Plus Project conditions, four study area segment groups (Madonna Road, S. Higuera Street, Los Osos Valley Road, and Dalidio Drive/Prado Road) would operate at unacceptable automobile, bicycle, pedestrian, and transit LOS based on adopted multimodal LOS standards during AM and PM peak hours. Therefore, the project would conflict with the City's established measures of effectiveness for the performance of the circulation system and vehicle queuing standards, and transportation impacts would be potentially significant at these roadway segments.

<u>Mitigation Measures</u>. The following mitigation measures identify improvements at study area facilities that are required to reduce potentially significant project-specific impacts to study area roadway segments under Existing and Near-Term Plus Project conditions. Each mitigation measure refers to one of the required Transportation Improvement Measures identified in Table 4.12-1 at the beginning of this section. The required timing of each required Transportation Improvement Measure is also described in Table 4.12-1. The project's equitable share of these improvements will be calculated using the method for calculating equitable mitigation measures outlined in the Caltrans Guide for the Preparation of Traffic Impact Studies (Caltrans, December 2002). Costs above and beyond the project's equitable share can be addressed through such options as fee credits, reimbursement agreements, or development agreements, based on City requirements.

T-3(a) Segments #1 - #6: Madonna Road (Los Osos Valley Road to Higuera Street)

- Construct Prado Road Overpass (Overpass Only, Phase 2)
- Fund assessment of decreasing transit headways to 25 min
- Construct parallel Class I multiuse paths or bike boulevard (Phase 1)

T-3(b) Segments #7 - #8: Higuera Street (Madonna Road to Prado Road)

- Construct Prado Road Overpass (Overpass and U.S. 101 northbound ramps, Phase 2)
- Construct parallel Class I multiuse paths or bike boulevard (Phase 1)

T-3(c) Segments #13 - #17: Los Osos Valley Road (Madonna Road to Higuera Street)

- Construct Prado Road Overpass (Overpass and U.S. 101 northbound ramps, Phase 2)
- Construct parallel Class I multiuse paths or bike boulevard (Phase 3)

T-3(d) Segments #18 - #20: Dalidio Drive/Prado Road (Froom Ranch Way to Higuera Street)

 Construct parallel Class I multiuse paths or bike boulevard (when Prado Road is constructed/improved)

<u>Plan Requirements and Timing</u>. Fair share traffic impact fees shall be paid upon acceptance by the City of final design plans and in accordance with

the timing of improvements. Implementation of most improvements shall occur by time of occupancy of the final phase of the project. Implementation of the Prado Road/U.S. 101 overpass and associated improvements shall occur prior to occupancy of Phase 2 development.

Monitoring. City Public Works staff shall confirm payment of applicable fees. City Public Works staff shall also ensure implementation of these improvements following approval of the final design plans for the Specific Plan Area.

Significance After Mitigation. Implementation of the identified mitigation measures would improve LOS at all impacted study area roadway segments to acceptable levels, and impacts on these facilities under Existing and Near-Term Plus Project conditions would be less than significant after mitigation. However, potential right-of-way constraints along Higuera Street (Segments #7 and #8) may reduce the feasibility of mitigation along these segments. Accordingly, some of the potential impacts associated with multimodal level of service standards identified for Existing and Near-Term Plus Project conditions may not be feasibly mitigated to a less than significant level. As a result, impacts associated with multimodal level of service standards at these roadway segments under Existing and Near-Term Plus Project conditions would remain significant and unavoidable. Potential residual impacts that may result from project mitigation that would require construction of the Prado Road & U.S. 101 overpass (Mitigation Measures T-3[a], T-3[b], and T-3[c]) are discussed in Section 4.12.5(d).

Threshold 4:	Would the project substantially increase hazards due to a design feature
	(e.g., sharp curves or dangerous intersections) or incompatible uses (e.g.
	farm equipment)?

Impact T-4 Project construction activities would create traffic impacts due to construction vehicles causing congestion and deteriorating pavement conditions. Mitigation would reduce these impacts to an acceptable level. This impact would be Class II, less than significant with mitigation.

The location and intensity of construction-related increases in traffic would vary by construction phase. However, each phase would incrementally contribute to road or intersection congestion over the planning horizon. Increased construction traffic, particularly large haul trucks and other heavy equipment, may disrupt local traffic flows, congest limited turn lane capacities, and generally slow traffic movement. Construction activity during site preparation typically includes use of cement trucks, material and equipment delivery trucks, and worker vehicles. These vehicles would likely use U.S. 101 to travel to and from the site. Furthermore, construction activities would require parking onsite for construction workers.

Construction may require temporary or extended closure of traffic lanes to accommodate parked vehicles, operation of construction equipment, installation of project improvements, including offsite trenching for utilities along surrounding roadways. Other potential construction-related impacts include idling, parked, or queued heavy trucks that could potentially obstruct visibility, traffic flows, and interfere with pedestrian and bicycle flows. This would cause delays and disrupt bicyclist and pedestrian flows, requiring travelers of the area to utilize alternative routes. Depending on final construction plan details, such lane and sidewalk closures could extend for several weeks.

Mitigative Components of the Specific Plan and Impact Conclusion. The project does not include design features that would reduce construction-related traffic impacts. Construction-related traffic would be ongoing for the duration of the project buildout, and construction traffic could create potentially significant impacts. However, with preparation of a management plan to control construction transportation as well as pavement condition study before and after each phase, impacts could be minimized. Therefore, with implementation of the mitigation measure listed below, construction traffic impacts would be reduced to a less than significant level.

<u>Mitigation Measures</u>. The following mitigation is required to reduce potentially significant construction traffic impacts.

- **T-4** Construction Traffic Management Plan. Prior to construction, a traffic management plan shall be prepared for review and approval by the City of San Luis Obispo Public Works Department. The traffic management plan shall be based on the type of roadway traffic conditions, duration of construction, physical constraints, nearness of the work zone to traffic and other facilities (bicycle, pedestrian, driveway access, etc.). The traffic management plan shall include:
 - Advertisement. The project developer shall prepare an advertisement campaign informing the public of the proposed construction activities. Advertisements shall occur prior to beginning work and periodically during the course of the project construction. The advertising shall include notification of changes to bus schedules and potential changes to bus stop locations, potential impacts during school drop-off and pick-up times, and major intersections that may be impacted during construction.
 - Property Access. Access to parcels along the construction area shall be maintained to the greatest extent feasible. Affected property owners shall receive advance notice of work adjacent to their property access and when driveways would be potentially closed.
 - *Schools*. Any construction adjacent to schools shall ensure that access is maintained for vehicles, pedestrians, and bicyclists, particularly at the beginning and end of the school day.
 - Buses, Bicycles, and Pedestrians. The work zone shall provide for passage by buses, bicyclists, and pedestrians, particularly in the vicinity of schools.
 - *Intersections*. Traffic control (i.e., use of flag persons) shall be used at intersections that are determined to be unacceptably congested due to construction traffic.

<u>Plan Requirements and Timing</u>. The project applicant shall submit the construction traffic management plan for review and approval by the City prior to the initiation of construction.

<u>Monitoring</u>. The City shall ensure compliance with the construction traffic management plan through routine monitoring throughout all phases of project construction.

<u>Significance After Mitigation</u>. Implementation of the identified mitigation would ensure that impacts associated with construction traffic would be less than significant after mitigation.

Threshold 1: Would the project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

Threshold 2: Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county

Impact T-5 Construction of the proposed Froom Ranch Way bridge during phase 3 of the Specific Plan buildout would result in significant level of service and queuing impacts at study area intersections and roadway segments. Mitigation would reduce these impacts to an acceptable level. This impact would be Class II, less than significant with mitigation.

congestion management agency for designated roads or highways?

The project would construct the proposed Froom Ranch Way bridge, completing connectivity between the project and Los Osos Valley Road, during phase 3 of Specific Plan buildout. Under this condition, traffic volumes from the phase 1 and phase 2 land uses, which would otherwise route through the Los Osos Valley Road & Froom Ranch Way intersection, would re-route through Prado Road and Dalidio Drive until phase 3 of Specific Plan buildout.

Mitigative Components of the Specific Plan and Impact Conclusion. The project proposes to defer construction of the Froom Ranch Way bridge to phase 3 of Specific Plan buildout, which would cause potentially significant LOS and queuing impacts. Changing the phase of the Froom Ranch Way bridge connection to prior to occupancy of phase 1 would mitigate these impacts.

<u>Mitigation Measures</u>. The following mitigation is required to reduce potentially significant LOS and queuing impacts that would result from the project's proposed infrastructure phasing.

T-5 Froom Ranch Way Bridge Phasing. The Froom Ranch Way bridge connection shall be completed prior to occupancy of Phase 1 of the Specific Plan buildout.

<u>Plan Requirements and Timing</u>. The project applicant shall adjust the proposed infrastructure phasing plan to include the Froom Ranch Way bridge as part of the final design plans for Phase 1 of the Specific Plan.

<u>Monitoring</u>. City Public Works staff shall confirm appropriate infrastructure phasing as part of approval of final design plans for Phase 1.

<u>Significance After Mitigation</u>. Implementation of the identified mitigation would ensure that LOS and queuing impacts associated with the project's proposed infrastructure phasing would be less than significant after mitigation.

Threshold 4:	Would the project substantially increase hazards due to a design feature
	(e.g., sharp curves or dangerous intersections) or incompatible uses (e.g.
	farm equipment)?

Impact T-6 The project site plan would result in and contribute to increased access conflicts. Proposed access controls are not consistent with General Plan policy. Mitigation would reduce these impacts to an acceptable level. This impact would be Class II, less than significant with mitigation.

The project's proposed site plan and access was evaluated using guidelines established under the Transportation Research Board's Access Management Manual. The project includes an internal circulation plan for vehicles and bicycles (refer to Figures 2-7 and 2-8 in Section 2.0, Project Description). The proposed street network within the Specific Plan Area consists primarily of collector and residential streets. Access to the residential areas would be provided on the south from the proposed Froom Ranch Way extension and on the north from Madonna Road.

Project traffic, in addition to the extension of Prado Road/Dalidio Drive through the project site, would exacerbate conflicts associated with the existing post office driveways. In addition, the intersection of Froom Ranch Way & Prado Road/Dalidio Drive is closer than the minimum spacing of various ramp intersection design options being considered by the City for the future Prado Road/U.S. 101 overpass.

Mitigative Components of the Specific Plan and Impact Conclusion. San Luis Ranch Specific Plan Policies 6.1, 6.2, and 6.3 are intended to integrate the proposed new development and associated circulation into the City's existing circulation system by ensuring a multimodal approach to the transportation networks for the Specific Plan Area, development of a circulation system that interfaces with existing adjacent streets and paths, and development of a safe and efficient circulation system that successfully interfaces with adjacent streets and paths. The project proposes signalized control at various intersections. However, General Plan Circulation Element Policy 7.1.2 requires roundabout control unless otherwise physically infeasible. Therefore, the proposed project site intersections within the Specific Plan area would be inconsistent with General Plan Circulation Element Policy 7.1.2, which would be a potentially significant impact.

<u>Mitigation Measures</u>. The following mitigation is required to ensure that the project would be consistent with General Plan Circulation Element Policy 7.1.2, which requires roundabout control unless otherwise physically infeasible.

T-6 Project Site Intersection Roundabout Control. New roadway intersections within the Specific Plan Area shall be controlled using roundabout design, unless the City Public Works Department determines that roundabout control is infeasible.

<u>Plan Requirements and Timing</u>. The project applicant shall include intersection controls on final design plans for development within the

Specific Plan Area. Intersection controls shall be approved by City Public Works.

<u>Monitoring</u>. City Public Works staff shall confirm inclusion of appropriate intersection controls and approve final design plans prior to issuance of grading permits.

Significance After Mitigation. Implementation of the identified mitigation would ensure that the project would be consistent with General Plan Circulation Element Policy 7.1.2. This mitigation would ensure roundabout control at all project site intersections that could feasibly accommodate it, and would ensure that transportation impacts due to access conflicts would be reduced to a less than significant level after mitigation.

Threshold 4:	Would the project substantially increase hazards due to a design feature
	(e.g., sharp curves or dangerous intersections) or incompatible uses (e.g.
	farm equipment)?

Impact T-7 The project site plan would result in on-site traffic volumes and speeds that may exceed General Plan policy thresholds, resulting potential traffic hazards within the project site.

Mitigation would reduce these impacts to an acceptable level.

This impact would be Class II, less than significant with mitigation.

The proposed street network within the Specific Plan Area consists primarily of collector and residential streets. The proposed layout of San Luis Ranch Road and other roadways internal to the Specific Plan area would result in on-site neighborhood traffic speeds that would exceed General Plan thresholds. San Luis Ranch Road would provide a bypass to the intersection at Madonna Road and Dalidio Drive/Prado Road through the residential neighborhood on the project site, which may result in a high propensity for cut-through traffic and volumes that exceed General Plan thresholds.

Mitigative Components of the Specific Plan and Impact Conclusion. San Luis Ranch Specific Plan Policies 6.1, 6.2, and 6.3 are intended to integrate the proposed new development and associated circulation into the City's existing circulation system by ensuring a multimodal approach to the transportation networks for the Specific Plan Area, development of a circulation system that interfaces with existing adjacent streets and paths. The proposed layout of San Luis Ranch Road and other roadways internal to the Specific Plan area would result in on-site traffic speeds that would exceed General Plan thresholds, which may result in potential traffic hazards within the Specific Plan area. Therefore, the project may result in traffic hazards along on-site collector and residential streets, which would be a potentially significant impact.

<u>Mitigation Measures</u>. The following mitigation is required to ensure that on-site traffic volumes and speeds would not exceed General Plan policy thresholds, and potential traffic hazards along on-site collector and residential streets would be reduced.

T-7 Traffic Calming Features. New roadway intersections along San Luis Ranch Road shall include neighborhood traffic circles at key intersections, and traffic-calming features, such as diverters, along longer uninterrupted segments.

<u>Plan Requirements and Timing</u>. The project applicant shall include neighborhood traffic circles at key intersections and traffic-calming features on final design plans for development within the Specific Plan Area.

<u>Monitoring</u>. City Public Works staff shall confirm inclusion of neighborhood traffic circles at key intersections and traffic-calming features, and approve final design plans prior to issuance of grading permits.

<u>Significance After Mitigation</u>. Implementation of the identified mitigation would ensure that new roadways on the project site would not result on-site neighborhood traffic speeds that would exceed General Plan thresholds. This mitigation would ensure that potential traffic hazards within the Specific Plan area would be reduced to a less than significant level after mitigation.

c. Project Impacts and Mitigation Measures - Cumulative.

<u>Cumulative Scenario Background</u>. The project traffic study (refer to Appendix K) evaluated the project under cumulative conditions. Cumulative + project conditions reflect the potential impacts of the project within the context of the complete buildout of all planned development and infrastructure. Mitigation measures identified for impacts under the cumulative scenario would not need to be physically constructed as part of the project; these improvements would be required to be components of a fee project to which the project would be required to contribute its fair share for the eventual implementation of required measures on a schedule to be determined by the City Public Works Department.

<u>Cumulative 2035 Conditions</u>. Under cumulative conditions, the City's buildout circulation system is assumed to be constructed, including the improvements listed in the near-term conditions (refer to Section 4.12.5[c]), as well as the following improvements:

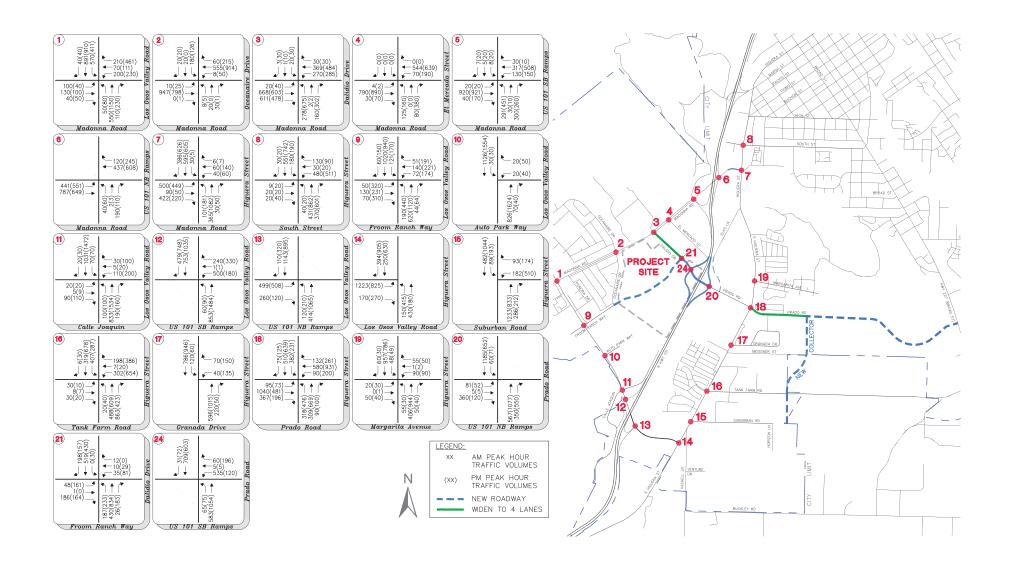
- A new North/South Collector between Prado Road and Tank Farm Road
- Prado Road extension to Broad Street
- Prado Road widening to four lanes with bike lanes between S. Higuera Street, and removal parking along this roadway segment
- Madonna Road at S. Higuera Street realignment to Bridge Street
- New North/South Collector between Tank Farm Road and Prado Road
- Restrict intersection of S. Higuera Street/Vachell Lane to be right-in right-out only
- Froom Ranch Way extension to Dalidio Road
- Dalidio Road widening to four lanes with Class II Bike Lanes
- Prado Road Overpass Only, no U.S. 101 Access

For the purposes of this study, cumulative conditions were analyzed for two different configurations for the Prado Road/U.S. 101 improvements: a full access interchange (overpass with ramps serving both northbound and southbound U.S. 101) and an overpass only. The peak hour traffic volumes for both scenarios were developed utilizing the City's TDM to establish the networks for both potential configurations, and used the same land use inputs for both potential configurations. Figure 4.12-8 shows the Cumulative peak hour intersection traffic volumes.

Cumulative traffic volume forecasts were derived for each potential configuration by applying the model's volume growth increment to existing traffic counts. The model's growth increment is based on the peak hour intersection turning outputs between the base year (2008) model and each of the 2035 buildout models, and factored to account for growth to existing conditions (2014). Based on existing travel patterns and counts, and to balance the volumes to account for midblock driveways, manual adjustments were made where necessary. This establishes the base forecasts for each alternative, without the proposed San Luis Ranch Specific Plan development. These base volumes are consistent with the projections for the Project Study Report for the Prado Road/U.S. 101 improvements.

Threshold 1:	Would the project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?
Threshold 2:	Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?
Threshold 6:	Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

Impact T-8 Under Cumulative Plus Project conditions nine study area intersections would operate at unacceptable automobile, bicycle, or pedestrian LOS based on adopted multimodal level of service standards during AM and PM peak hours. Mitigation would reduce impacts at seven of these intersections to an acceptable level. However, impacts at the Madonna Road & Dalidio Drive and Los Osos Valley Road & Froom Ranch Way intersections would be Class I, significant and unavoidable.



Year 2035 Full Build Prado Road Interchange Peak Hour Traffic Volumes

Figure 4.12-8

Source: Omni-Means, Ltd., 2016

Table 4.12-36 through Table 4.12-38 provide a summary of the multimodal AM and PM peak hour intersection LOS under Cumulative Plus Project conditions. Intersections where the AM or PM LOS exceed the minimum LOS standard are bolded. Figure 4.12-9 shows the Cumulative Plus Project peak hour traffic volumes.

Table 4.12-36
Cumulative Plus Project Conditions Intersection
Level of Service: Automobile Analysis

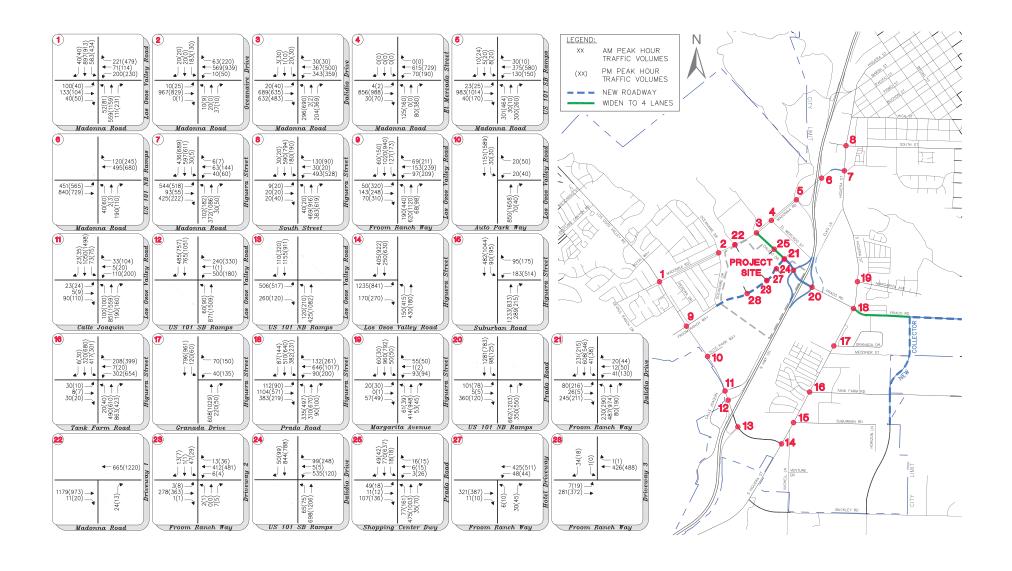
		Control	Target		Peak H	our		Peak H	our
#	Intersection	Type ^{1,2}	LOS	v/c ³	Delay	LOS	v/c ³	Delay	LOS
1	Madonna Road/Los Osos Valley Road	Signal	D		37.3	D		45.1	D
2	Madonna Road/Oceanaire Drive	Signal	D		24.2	С		17.6	В
3	Madonna Road/Dalidio Drive	Signal	D	4.04	258. 4	F	8.66	806. 7	F
4	Madonna Road/El Mercado	Signal	D		10.7	В		23.5	С
5	Madonna Road/US 101 SB Ramps/Madonna Inn	Signal	С		34.5	С		31.4	С
6	Madonna Road/US 101 NB Ramps	Signal	С		26.5	С		28.3	С
7	Madonna Road/Higuera Street	Signal	D		43.8	D		47.0	D
8	Higuera Street/South Street	Signal	D		20.8	C		28.6	С
9	Los Osos Valley Road/Froom Ranch Way	Signal	D		24.4	С	1.11	63.8	E
10	Los Osos Valley Road/Auto Park Way	TWSC	D		18.2	С	0.44	49.1	E
11	Los Osos Valley Road/Calle Joaquin	Signal	D		26.0	C		14.5	В
12	Los Osos Valley Road/US 101 SB Ramps	Signal	С	1.26	41.8	D		29.9	С
13	Los Osos Valley Road/US 101 NB Ramps	Signal	С	1.17	57.6	Е		24.4	С
14	S. Higuera Street/Los Osos Valley Road	Signal	D		23.6	С	1.10	79.9	E
15	S. Higuera Street/Suburban Drive	Signal	D		7.5	Α		16.7	В
16	S. Higuera Street/Tank Farm Road	Signal	D	1.48	114. 9	F		26.2	С
17	S. Higuera Street/Granada Drive	Signal	D		8.3	Α		10.9	В
18	S. Higuera Street/Prado Road	Signal	D		34.9	С		32.2	С
19	S. Higuera Street/Margarita Avenue	Signal	D		17.9	В		13.0	В
21	Froom Ranch Road/Dalidio Drive/Prado Road	Signal	D		20.5	С		32.0	С
22	Madonna Road/Project Driveway	TWSC	D		15.8	C		13.2	В
23	Froom Ranch Road/Project Driveway #2	TWSC	D		20.1	C		21.9	С
25	Dalidio Drive/SC Project Driveway	Signal	D		10.6	В		15.7	В
27	Froom Ranch Road/Hotel Project Driveway	TWSC	D		13.8	В		14.3	В
28	Froom Ranch Road/Project Driveway #3	TWSC	D		11.9	В		12.2	В
1	Madonna Road/Los Osos Valley Road	Signal	D		37.3	D		45.1	D
2	Madonna Road/Oceanaire Drive	Signal	D		24.2	С		17.6	В

^{1.} AWSC = All Way Stop Control; TWSC = Two Way Stop Control; RNDBT = Roundabout

^{2.} LOS = Delay based on worst minor street approach for TWSC intersections, average of all approaches for AWSC, Signal, RNDBT

^{3.} Volume to Capacity Ratio (v/c) is for worst movement delay, for unacceptable LOS only

^{4.} Warrant is based on California MUTCD Warrant 3



Year 2035 Full Build Prado Road Interchange Plus Project Peak Hour Traffic Volumes

Figure 4.12-9

Table 4.12-37
Cumulative Plus Project Conditions Intersection Level of Service: Pedestrian Analysis

Ou			100011011	AM Peak Hour PM Peak Hour				
				Ped.	пош	Ped.	noui	
			Target	Crosswalk		Crosswalk		
#	Intersection	Approach	LOS	Score	LOS	Score	LOS	
1	Madonna Road/Los Osos	EB	C	2.12	В	2.12	В	
	Valley Road	WB	C	3.05	С	3.27	С	
	valley read	NB	C	3.11	С	3.35	С	
		SB	C					
2	Madonna Road/Oceanaire		C	3.30	С	3.34	С	
2	Drive	EB WB	C	2.89 3.31	С	2.98 3.40	C	
	Billye	NB	С		В		В	
		SB	С	2.03		2.02		
3	Madonna Road/Dalidio Drive	EB	C	1.86 3.73	A D	1.87 4.23	A D	
3	Wadonna Road/Dandio Drive	WB	C	3.73	C	3.08	С	
		NB	C					
				2.72	В	2.79	C	
4	NA 1 D 1/51NA 1	SB	С	1.97	Α	2.01	В	
4	Madonna Road/El Mercado	EB	С	n/a	-	n/a	-	
		WB	С	3.09	С	3.19	С	
		NB	С	2.36	В	2.76	С	
		SB	С	1.74	Α	1.74	Α	
5	Madonna Road/US 101 SB	EB	С	3.02	С	3.15	С	
	Ramps/Madonna Inn	WB	С	n/a	-	n/a	-	
		NB	С	2.83	С	2.74	В	
		SB	С	2.17	В	2.20	В	
6	Madonna Road/US 101 NB	EB	С	n/a	-	n/a	-	
	Ramps	WB	С	3.12	С	3.13	С	
		NB	С	2.03	В	2.04	В	
		SB	С	n/a	-	n/a	-	
7	Madonna Road/Higuera Street	EB	С	2.96	С	3.10	С	
		WB	С	2.05	В	2.07	В	
		NB	С	3.05	С	3.10	С	
		SB	С	n/a	-	n/a	-	
8	Higuera Street/South Street	EB	С	2.02	В	2.05	В	
		WB	С	2.77	С	2.84	С	
		NB	С	n/a	-	n/a	-	
		SB	С	2.64	В	2.74	В	
9	Los Osos Valley Road/Froom	EB	C	2.45	В	2.66	В	
	Ranch Way	WB	C	2.51	В	2.70	В	
		NB	C	n/a	-	n/a	-	
		SB	С	3.10	С	3.33	С	
10	Los Osos Valley Road/Auto	EB	С	n/a	-	n/a	-	
	Park Way	WB	C		-	.,,	-	
	,	NB	С					
		SB	С		-		_	
11	Los Osos Valley Road/Calle	EB	С	2.59	В	2.47	В	
	Joaquin	WB	C	2.26	В	2.33	В	
		NB	C	3.19	С	3.54	D	
		SB	C					
12	Los Osos Valloy Bood/US 404			3.08	С	3.37	С	
12	Los Osos Valley Road/US 101 SB Ramps	EB WB	С	2.03 2.21	B B	2.46 2.14	B B	
	OD Namps		C					
		NB	U	n/a	-	n/a	-	

				AM Peak	Hour	PM Peak Hour		
				Ped.		Ped.		
			Target	Crosswalk		Crosswalk		
#	Intersection	Approach	LOS	Score	LOS	Score	LOS	
		SB	С	n/a	-	n/a	-	
13	Los Osos Valley Road/US 101	EB	С	2.70	В	2.56	В	
	NB Ramps	NB	С	2.89	C	2.97	С	
		SB	С	n/a	-	n/a	-	
14	S. Higuera Street/Los Osos Valley Road	EB	С	3.11	С	3.68	D	
		NB	С	2.51	В	2.73	В	
		SB	С	n/a	-	n/a	-	
15	S. Higuera Street/Suburban Drive	WB	С	2.18	В	2.60	В	
		NB	С	3.32	С	3.84	D	
		SB	С	3.00	С	3.09	С	
16	S. Higuera Street/Tank Farm Road	EB	С	2.02	В	2.02	В	
		WB	С	2.96	С	3.24	С	
		NB	С	3.62	D	3.36	С	
		SB	С	2.82	С	3.02	С	
17	S. Higuera Street/Granada	WB	С	2.08	В	2.13	В	
	Drive	NB	С	n/a	-	n/a	-	
		SB	С	2.74	В	2.96	С	
18	S. Higuera Street/Prado Road	EB	С	2.98	С	3.02	С	
		WB	С	3.04	С	3.20	С	
		NB	С	2.93	С	3.34	С	
		SB	С	2.92	С	3.18	С	
19	S. Higuera Street/Margarita Avenue	EB	С	2.27	В	2.11	В	
		WB	С	2.22	В	2.28	В	
		NB	С	2.97	С	3.08	С	
_		SB	С	2.92	С	3.06	С	
21	Froom Ranch Road/Dalidio	EB	С	2.54	В	2.47	В	
	Drive/Prado Road	WB	С	1.87	A	1.91	Α	
		NB	С	2.65	В	2.71	В	
		SB	С	2.85	С	2.96	С	
25	Dalidio Drive/SC Project	EB	С	1.91	A	2.01	<u>B</u>	
	Driveway	WB	С	1.74	Α	1.80	Α	
		NB	С	2.57	В	2.66	В	
		SB	С	2.58	В	2.67	В	

^{1.} HCM 2010 Methodologies do not model segments bounded by all-way stop control. Procedures have not been developed yet to address the effect of all-way stop control or yield control on intersection performance from a pedestrian or bicyce perspective.

2. HCM 2010 Methodologies for the pedestrian mode at two-way stop-controlled intersections is limited to the uncontrolled crossing. No methodology exists for evaluating pedestrian performance for the stop controlled approach (cross-street). However, it is reasoned that this type of control has negligible influence on pedestrian service along the segment.

Table 4.12-38
Cumulative Plus Project Conditions Intersection Level of Service: Bicycle Analysis

				AM Peak		PM Peak Hour	
			Target	Bicycle LOS		Bicycle	
#	Intersection	Approach	LOS	Score	LOS	LOS Score	LOS
1	Madonna Road/Los Osos Valley Road	EB	D	3.30	C	3.16	С
	·	WB	D	3.47	С	4.17	D
		NB	D	1.70	A	2.10	В
		SB	D	2.96	C	2.78	С
2	Madonna Road/Oceanaire Drive	EB	D	3.07	C	2.91	C
		WB	D	1.32	A	1.81	A
		NB	D	2.76	C	2.74	В
		SB	D	2.29	<u> </u>	2.25	В
3	Madonna Road/Dalidio Drive	EB	D	2.39	В	2.13	В
		WB	D	1.66	A	1.73	A
		NB	D	2.82	C	3.81	D
		SB	D	1.79	A	1.86	A
4	Madonna Road/El Mercado	EB	D	1.68	A	1.78	A
		WB	D	1.83	A	1.92	A
		NB	D	3.39	C	3.94	D
		SB	D	3.03	C		
5	Madonna Road/US 101 SB	EB	D	1.90	A	3.03 2.08	C B
ľ	Ramps/Madonna Inn	WB	D	1.69	A	1.71	A
		NB	D				
		SB	D	n/a 2.91		n/a	C
6	Madonna Road/US 101 NB Ramps	EB	D	2.91	В	2.99	В
U	Wadonia Road/00 ToT No Ramps	WB	D	1.89	A	2.41	В
			D				В
7	Madonna Road/Higuera Street	NB EB	D	n/a	 D	n/a	C
'	Wadofila Noad/Higuera Street		D D	3.95	В	2.83	С
		WB	D D	2.61		2.78	
		NB SB		2.05	B	2.76	С
8	Higuera Street/South Street	EB	D D	2.52	<u>В</u> В	2.59	B C
0	Triguera Street/South Street			2.71		2.77	
		WB	D	2.54	В	2.72	В
		NB	D	3.08	C	3.62	D
9	Los Osos Vallov Boad/Eroom Banch	SB	D	1.96	A	2.02	В
9	Los Osos Valley Road/Froom Ranch Way	EB	D	3.56	D	4.62	E
		WB	D	2.28	B	3.18	С
		NB	D	1.83	A	2.28	В
10	Los Osos Valloy Bood/Auto Bork Way	SB	D	1.84	Α	1.94	Α
10	Los Osos Valley Road/Auto Park Way	EB	D	n/a	-	n/a	-
		WB	D		-		-
		NB	D		-		-
14	Los Ossa Valley Bood/Calle Jacquiis	SB	D	0.00	-	0.10	-
11	Los Osos Valley Road/Calle Joaquin	EB	D	3.08	С	3.12	С
		WB	D	3.21	C	3.49	С
		NB	D	1.67	Α	2.17	В
		SB	D	0.58	Α	1.02	Α

				AM Peak	Hour	PM Peak Hour	
#	Intersection	Approach	Target LOS	Bicycle LOS Score	LOS	Bicycle LOS Score	LOS
12	Los Osos Valley Road/US 101 SB Ramps	WB	D	n/a	-	n/a	-
		NB	D	2.89	С	3.37	С
		SB	D	1.75	А	2.29	В
13	Los Osos Valley Road/US 101 NB Ramps	EB	D	n/a	-	n/a	-
		NB	D	2.00	А	2.60	В
		SB	D	2.93	С	2.93	С
14	S. Higuera Street/Los Osos Valley Road	EB	D	2.45	В	2.12	В
		NB	D	2.32	В	2.33	В
		SB	D	2.73	В	4.14	D
15	S. Higuera Street/Suburban Drive	WB	D	0.95	Α	1.64	Α
		NB	D	2.68	В	2.22	В
		SB	D	1.91	Α	2.50	В
16	S. Higuera Street/Tank Farm Road	EB	D	2.72	В	2.66	В
		WB	D	2.43	В	3.34	С
		NB	D	2.58	В	2.31	В
		SB	D	1.93	Α	2.24	В
17	S. Higuera Street/Granada Drive	WB	D	2.63	В	2.93	С
		NB	D	1.84	Α	2.17	В
		SB	D	2.05	В	2.27	В
18	S. Higuera Street/Prado Road	EB	D	1.54	Α	1.38	Α
		WB	D	2.63	В	2.51	В
		NB	D	1.82	Α	2.20	В
		SB	D	2.18	В	2.11	В
19	S. Higuera Street/Margarita Avenue	EB	D	2.50	В	2.56	В
		WB	D	2.74	В	2.77	С
		NB	D	1.86	Α	2.38	В
		SB	D	2.45	В	2.26	В
21	Froom Ranch Road/Dalidio Drive/Prado Road	EB	D	2.17	В	2.19	В
		WB	D	2.81	С	3.09	С
		NB	D	1.59	Α	2.05	В
		SB	D	2.03	В	1.96	Α
25	Dalidio Drive/SC Project Driveway	EB	D	2.70	В	2.73	В
		WB	D	2.50	В	2.56	В
		NB	D	2.43	В	3.03	С
N-4-		SB	D	2.78	С	2.64	В

As shown in Table 4.12-36 through Table 4.12-38, seven intersections (Madonna Road & Dalidio Drive/Prado Road, Los Osos Valley Road & Froom Ranch Way, Los Osos Valley Road & Auto Park Way, Los Osos Valley Road & U.S. 101 ramps in both directions, S. Higuera Street & Los Osos Valley Road and S. Higuera Street & Tank Farm Road) would exceed the City's minimum automobile LOS threshold under the Cumulative Plus Project Scenario. Five intersections (Madonna Road & Dalidio Drive/Prado Road, Los Osos Valley Road & Froom Ranch Way, Los



^{1.} HCM 2010 Methodologies do not model segments bounded by all-way stop control. Procedures have not been developed yet to address the effect of all-way stop control or yield control on intersection performance from a pedestrian or bicyce perspective.

^{2.} No methodology exists for evaluating bicycle performance at two-way stop-controlled intersections. However, it is reasoned that this type of control has negligible influence on bicycle service along the segment for stop control on the cross-street.

Osos Valley Road & Calle Joaquin, S. Higuera Street & Los Osos Valley Road, S. Higuera Street & Suburban Drive, and S. Higuera Street & Tank Farm Road) would exceed the City's minimum pedestrian or bicycle LOS threshold under the Cumulative Plus Project Scenario.

Mitigative Components of the Specific Plan and Impact Conclusion. The San Luis Ranch Specific Plan includes a mix of commercial and residential uses, a new transit connection, and workforce housing to balance jobs and housing. The Specific Plan also emphasizes bikeways and pedestrian connections, all of which contribute to reduced trips and VMT. However, under Cumulative Plus Project conditions, the following nine study area intersections would operate at unacceptable automobile, bicycle, and pedestrian LOS based on adopted MMLOS standards during AM and PM peak hours.

- Madonna Road & Dalidio Drive/Prado Road
- Los Osos Valley Road & Froom Ranch Way
- Los Osos Valley Road & Auto Park Way
- Los Osos Valley Road & Calle Joaquin
- Los Osos Valley Road & U.S. 101 southbound ramps
- Los Osos Valley Road & U.S. 101 northbound ramps
- S. Higuera Street & Los Osos Valley Road
- S. Higuera Street & Tank Farm Road
- S. Higuera Street & Suburban Drive

Therefore, the project would conflict with the City's established measures of effectiveness for the performance of the circulation system and LOS standards, and transportation impacts would be potentially significant at these intersections.

<u>Mitigation Measures</u>. The following mitigation measures identify improvements at study area facilities that are required to reduce potentially significant cumulative impacts to study area intersections under Cumulative Plus Project conditions. Each mitigation measure refers to one of the required Transportation Improvement Measures identified in Table 4.12-1 at the beginning of this section. The project's equitable share of these improvements will be calculated using the method for calculating equitable mitigation measures outlined in the Caltrans Guide for the Preparation of Traffic Impact Studies (Caltrans, December 2002). Costs above and beyond the project's equitable share can be addressed through such options as fee credits, reimbursement agreements, or development agreements, based on City requirements.

T-8(a) Intersection #3: Madonna Road & Dalidio Drive/Prado Road.

 Existing & Near-Term Plus Project Mitigation (Mitigation Measure T-1[b])

T-8(b) Intersection #9: Los Osos Valley Road & Froom Ranch Way.

 Existing & Near-Term Plus Project Mitigation (Mitigation Measure T-1[e]/Mitigation Measure T-2[f])

T-8(c) Intersection #10: Los Osos Valley Road & Auto Park Way.

 Existing & Near-Term Plus Project Mitigation (Mitigation Measure T-1[f])

T-8(d) Intersection #12: Los Osos Valley Road & U.S. 101 Southbound Ramps.

• Construct Prado Road Overpass (Overpass with U.S. 101 northbound and southbound ramps)

T-8(e) Intersection #13: Los Osos Valley Road & U.S. 101 Northbound Ramps.

 Construct Prado Road Overpass (Overpass with U.S. 101 northbound and southbound ramps)

T-8(f) Intersection #14: Los Osos Valley Road & S. Higuera Street.

 Construct Prado Road Overpass (Overpass with U.S. 101 northbound and southbound ramps)

T-8(g) Intersection #16: S. Higuera Street & Tank Farm Road.

 Existing & Near-Term Plus Project Mitigation (Mitigation Measure T-1[f])

<u>Plan Requirements and Timing</u>. Fair share traffic impact fees shall be paid upon acceptance by the City of final design plans and in accordance with the timing of improvements.

Monitoring. City Public Works staff shall confirm payment of applicable fees. City Public Works staff shall also ensure implementation of these improvements following approval of the final design plans for the Specific Plan Area.

Significance After Mitigation. Implementation of the identified mitigation measures would improve LOS at most impacted intersections to acceptable levels, and impacts on these facilities would be less than significant after mitigation. However, potential right-of-way constraints at Madonna Road & Dalidio Drive (Intersection #3) and Los Osos Valley Road & Froom Ranch Way (Intersection #9) may reduce the feasibility of mitigation at these intersections. Accordingly, some of the potential impacts associated with multimodal level of service standards identified for Cumulative Plus Project conditions may not be feasibly mitigated to a less than significant level. As a result, impacts associated with multimodal level of service standards at these intersections under Cumulative Plus Project conditions would remain significant and unavoidable. Potential residual impacts that may result from project mitigation that would require construction of the Prado Road & U.S. 101 overpass (Mitigation Measures T-8[d], T-8[e], and T-8[f]) are discussed in Section 4.12.5(d).

Threshold 1: Would the project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

Impact T-9 Under Cumulative Plus Project conditions, the volume of traffic at 18 study area intersections would exceed lane capacities.

Mitigation would reduce impacts at 18 of these intersections to an acceptable level. Mitigation would reduce impacts at 17 of these intersections to an acceptable level. However, impacts at the Madonna Road & Dalidio Drive and Los Osos Valley Road & Froom Ranch Way intersections would be Class I, significant and unavoidable.

Table 4.12-39 provides a summary of the queueing under Cumulative Plus Project conditions. Intersections where vehicle queues would exceed lane capacity during peak hours are bolded.

Table 4.12-39
Cumulative Plus Project Conditions Intersection Queue Capacity Analysis

	Cumulative Plus Project Conditions Intersection Queue Capacity Analysis 95 th Percentile											
Inters	ection					Lane (ft)						
			No.	Total	AM Peak	PM Peak						
ID	Location	Movement	Lanes	Storage (ft) ¹	Hour	Hour						
1	Madonna Road/Los	Northbound Right	1	175	102	259						
	Osos Valley Road	Southbound Left	2	350	393	267						
2	Madonna	Westbound Right	1	100	72	132						
	Road/Oceanaire Drive	Westbound Left	1	275	703	335						
3	Madonna	Westbound Left	2	260	317	538						
	Road/Dalidio Drive	Eastbound Left	1	100	77	112						
		Westbound Left	1	260	185	548						
4	Madonna Road/El Mercado	Northbound Left	1	185	202	300						
5	Madonna Road/US 101 SB Ramps/Madonna Inn	Eastbound Right	1	150	337	225						
6	Madonna Road/US 101 NB Ramps	Northbound Left	1	160	330	332						
7	Madonna	Southbound Left/Through	2	250	328	668						
	Road/Higuera Street	Southbound Right	2	340	44	635						
		Eastbound Right	1	60	43	88						
		Westbound Left	2	240	179	1024						
8	Higuera Street/South	Northbound Left	1	60	89	49						
	Street	Northbound Right	1	60	112	168						
		Southbound Left	1	70	119	126						
		Eastbound Through/Right	1	445	189	617						
		Westbound Left	1	295	143	354						
		Westbound Right	1	50	80	100						
9	Los Osos Valley	Southbound Left	2	200	134	296						
-	Road/Froom Ranch	Northbound Right	1	105	112	64						
	Way	Southbound Right	2	80	91	153						
10	Los Osos Valley Road/Auto Park Way	Westbound Left/Through	1	180	272	255						
11	Los Osos Valley Road/Calle Joaquin	Southbound Through	1	240	356	358						
12	Los Osos Valley	Southbound Right	1	125	194	180						
	Road/US 101 SB	Eastbound Left/Right	1	625	1365	454						
	Ramps	Southbound Through	1	865	1069	429						
13	Los Osos Valley	Southbound Right	1	130	271	231						
	Road/US 101 NB	Eastbound Right	1	90	207	202						
	Ramps	Northbound Left	1	160	153	222						
14	S. Higuera Street/Los	Westbound Right	1	170	57	288						
	Osos Valley Road	Southbound Left	1	200	92	328						
15	S. Higuera	Northbound Right	1	100	179	205						
	Street/Suburban Drive	Southbound Left	1	165	261	238						
16	S. Higuera	Southbound Left	1	80	99	66						
	Street/Tank Farm	Eastbound Right	1	140	165	92						
	Road	Westbound Left	1	105	205	233						
17	S. Higuera Street/Granada Drive	Westbound Right	1	100	284	275						

Interse	ection					rcentile _ane (ft)
ID	Location	Movement	No. Lanes	Total Storage (ft) ¹	AM Peak Hour	PM Peak Hour
18	S. Higuera	Northbound Left	1	100	101	204
	Street/Prado Road	Southbound Left	1	60	183	159
		Northbound Left	1	60	84	73
		Southbound Left	1	60	122	95
		Northbound Right	1	175	102	259
		Southbound Left	2	350	393	267
19	S. Higuera	Westbound Right	1	100	72	132
	Street/Margarita Avenue	Westbound Left	1	275	703	335

Notes:

- 1. Bolded entries indicate queues exceed available storage
- 2. Storage Length of " " represents a lane which exceeds 1,000 feet, usually a through lane.
- 3. For Movements with more than one lane, the maximum of the 95th percentile queue is reported.
- 4. * Represents storage lengths for one lane, second lane is a left or right trap lane.

Mitigative Components of the Specific Plan and Impact Conclusion. The San Luis Ranch Specific Plan includes a mix of commercial and residential uses, a new transit connection, and workforce housing to balance jobs and housing. The Specific Plan also emphasizes bikeways and pedestrian connections, all of which contribute to reduced trips and VMT. However, as shown in Table 4.12-39, under Cumulative Plus Project conditions, the volume of traffic at 18 study area intersections would exceed lane capacities during peak hours. Therefore, the project would conflict with the City's established measures of effectiveness for the performance of the circulation system and vehicle queuing standards, and transportation impacts would be potentially significant at these intersections.

Mitigation Measures. The following mitigation measures identify improvements at study area facilities that are required to reduce potentially significant cumulative impacts at study area intersections under Cumulative Plus Project Conditions. Each mitigation measure refers to one of the required Transportation Improvement Measures identified in Table 4.12-1 at the beginning of this section. The project's equitable share of these improvements will be calculated using the method for calculating equitable mitigation measures outlined in the Caltrans Guide for the Preparation of Traffic Impact Studies (Caltrans, December 2002). Costs above and beyond the project's equitable share can be addressed through such options as fee credits, reimbursement agreements, or development agreements, based on City requirements.

T-9(a) Intersection #1: Madonna Road & Los Osos Valley Road.

- Extend northbound right turn pocket on Los Osos Valley Road to 295'
- Extend southbound left turn pocket on Madonna Road to 395'

T-9(b) Intersection #2: Madonna Road & Oceanaire Drive.

- Existing & Near-Term Plus Project Mitigation (Mitigation Measure T-1[b])
- Extend westbound right turn land on Madonna Road to 200'

T-9(c) Intersection #3: Madonna Road & Dalidio Drive.

 Existing & Near-Term Plus Project Mitigation (Mitigation Measure T-1[bl)

T-9(d) Intersection #4: Madonna Road & El Mercado.

 Existing & Near-Term Plus Project Mitigation (Mitigation Measures T-1[b])

T-9(e) Intersection #5: Madonna Road & U.S. 101 Southbound Ramps.

 Construct Prado Road Overpass (Overpass with U.S. 101 northbound and southbound ramps)

T-9(f) Intersection #6: Madonna Road & U.S. 101 Northbound Ramps.

• Construct Prado Road Overpass (Overpass with U.S. 101 northbound and southbound ramps)

T-9(g) Intersection #8: Higuera Street & South Street.

- Extend northbound Higuera Street left turn pocket to 120'
- Extend eastbound South Street right turn pocket to 100'

T-9(h) Intersection #9: Los Osos Valley Road & Froom Ranch Way.

• Existing & Near-Term Plus Project Mitigation (Mitigation Measure T-1[d]/Mitigation Measure T-2[f])

T-9(i) Intersection #11: Los Osos Valley Road & Calle Joaquin.

• Construct Prado Road Overpass (Overpass with U.S. 101 northbound and southbound ramps)

T-9(j) Intersection #12: Los Osos Valley Road & U.S. 101 Southbound Ramps.

• Construct Prado Road Overpass (Overpass with U.S. 101 northbound and southbound ramps)

T-9(k) Intersection #14: Los Osos Valley Road & S. Higuera Street.

• Construct Prado Road Overpass (Overpass with U.S. 101 northbound and southbound ramps)

T-9(1) Intersection #16: S. Higuera Street & Tank Farm Road.

 Existing & Near-Term Plus Project Mitigation (Mitigation Measure T-1[g])

T-9(m) Intersection #18: Higuera Street & Prado Road.

 Existing & Near-Term Plus Project Mitigation (Mitigation Measure T-2[j])

<u>Plan Requirements and Timing</u>. Fair share traffic impact fees shall be paid upon acceptance by the City of final design plans and in accordance with the timing of improvements.

<u>Monitoring.</u> City Public Works staff shall confirm payment of applicable fees. City Public Works staff shall also ensure implementation of these

improvements following approval of the final design plans for the Specific Plan Area.

Significance After Mitigation. Implementation of the identified mitigation measures would reduce impacts to lane capacities at most impacted intersections to acceptable levels, and impacts on these facilities would be less than significant after mitigation. However, potential right-of-way constraints at Madonna Road & Dalidio Drive (Intersection #3) and Los Osos Valley Road & Froom Ranch Way (Intersection #9) may reduce the feasibility of mitigation at these intersections. Accordingly, some of the potential impacts associated with lane capacities identified for Cumulative Plus Project conditions may not be feasibly mitigated to a less than significant level. As a result, impacts to lane capacities at these intersections under Cumulative Plus Project conditions would remain significant and unavoidable. Potential residual impacts that may result from project mitigation that would require construction of the Prado Road & U.S. 101 overpass (Mitigation Measures T-9[e], T-9[f], T-9[f], T-9[i], and T-9[j]) are discussed in Section 4.12.5(d).

Threshold 1:	Would the project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?
Threshold 2:	Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?
Threshold 6:	Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

Impact T-10 Under Cumulative Plus Project conditions five study area segment groups, as well as mainline segments of U.S. 101, would operate at unacceptable automobile, bicycle, pedestrian, and transit LOS based on adopted multimodal level of service standards during AM and PM peak hours. Mitigation would reduce impacts at each of the five study area segment groups to an acceptable level. However, impacts at the mainline segments of U.S. 101 at Los Osos Valley Road and Madonna Road would be Class I, significant and unavoidable.

Table 4.12-40 through Table 4.12-44 provide a summary of the multimodal AM and PM peak hour segment LOS under Cumulative Plus Project conditions. Intersections where the AM or PM LOS exceed the minimum LOS standard are bolded.

Table 4.12-40
Cumulative Plus Project Conditions Segment
Level of Service: Automobile Analysis

			-		loc. Auto		AM Pea	ak			PM Pea	ık	
ID	Roadway	From	То	Direction	LOS Threshold	Travel Speed (mph)	Base Free-Flow Speed BFFS (mph)	Travel Speed/ BFFS (%)	LOS	Travel Speed (mph)	Base Free-Flow Speed BFFS (mph)	Travel Speed/ BFFS (%)	LOS
1	Madonna Rd	Oceanaire Dr	LOVR	WB	D	19.5	40.1	49%	D	14.2	40.1	35%	E
•	Madonna Rd	LOVR	Oceanaire Dr	EB	D	24.2	40.0	60%	C	27.3	40.0	68%	В
2	Madonna Rd	Dalidio	Oceanaire Dr	WB	D	22.2	40.8	54%	С	23.5	40.7	58%	С
	Madonna Rd	Oceanaire Dr	Dalidio	EB	D	6.1	40.7	15%	F	15.9	40.8	39%	Е
3	Madonna Rd	El Mercado	Dalidio Dr	WB	D	14.9	34.1	44%	D	15.0	34.8	43%	D
	Madonna Rd	Dalidio Dr	El Mercado	EB	D	27.4	38.2	72%	В	11.5	34.6	33%	Е
4	Madonna Rd	US 101 SB Ramps	El Mercado	WB	D	30.6	37.9	81%	В	21.2	37.3	57%	С
	Madonna Rd	El Mercado	US 101 SB Ramps	EB	D	10.5	37.8	28%	F	16.5	37.7	44%	D
5	Madonna Rd	US 101 NB Ramps	US 101 SB Ramps	WB	D	26.0	37.8	69%	В	23.1	37.8	61%	С
	Madonna Rd	US 101 SB Ramps	US 101 NB Ramps	EB	D	32.4	37.8	86%	Α	33.4	37.8	88%	А
6	Madonna Rd	Higuera St	US 101 NB Ramps	WB	D	9.4	37.2	25%	F	11.6	37.2	31%	Е
	Madonna Rd	US 101 NB Ramps	Higuera St	EB	D	11.5	37.2	31%	E	9.1	37.2	25%	F
7	S. Higuera St	Madonna Rd	Margarita Ave	SB	D	29.6	44.5	66%	С	34.9	44.5	78%	В
	S. Higuera St	Margarita Ave	Madonna Rd	NB	D	35.4	44.8	79%	В	29.3	44.8	65%	С
8	S. Higuera St	Margarita Ave	Prado Rd	SB	D	13.3	38.9	34%	E	12.1	38.9	31%	E
	S. Higuera St	Prado Rd	Margarita Ave	NB	D	20.4	38.9	53%	С	18.7	38.9	48%	D
9	S. Higuera St	Prado Rd	Granada Dr	SB	D	33.3	41.8	80%	В	29.8	41.8	71%	В
	S. Higuera St	Granada Dr	Prado Rd	NB	D	16.2	41.9	39%	E	15.4	41.9	37%	E
10	S. Higuera St	Granada Dr	Tank Farm Road	SB	D	42.1	41.6	101%	Α	23.5	42.6	55%	С
	S. Higuera St	Tank Farm Road	Granada Dr	NB	D	29.6	41.6	71%	В	25.6	42.6	60%	С
11	S. Higuera St	Tank Farm Road	Suburban Drive	SB	D	27.0	42.4	64%	С	23.0	41.2	56%	С
	S. Higuera St	Suburban Drive	Tank Farm Road	NB	D	18.5	42.5	43%	D	14.8	41.3	36%	E
12	S. Higuera St	Suburban Drive	Los Osos Valley Road	SB	D	20.3	42.1	48%	D	4.3	39.1	11%	F
	S. Higuera St	Los Osos Valley Road	Suburban Drive	NB	D	23.3	42.0	55%	С	19.6	39.0	50%	С
13	Los Osos Valley	Madonna Rd	Froom Ranch Way	SB	D	22.4	41.9	54%	С	12.7	41.8	30%	E

							AM Pea	ık			PM Pea	ık	
ID	Roadway	From	То	Direction	LOS Threshold	Travel Speed (mph)	Base Free-Flow Speed BFFS (mph)	Travel Speed/ BFFS (%)	LOS	Travel Speed (mph)	Base Free-Flow Speed BFFS (mph)	Travel Speed/ BFFS (%)	LOS
	Los Osos	Froom Ranch		Direction	11110011010	(p)	((/0)		(p)	(p)	(/0/	
	Valley	Way	Madonna Rd	NB	D	19.2	41.8	46%	D	15.7	41.8	38%	Е
14	Los Osos Valley	Froom Ranch Way	Calle Joaquin	SB	D	22.0	43.0	51%	С	23.5	43.0	55%	С
	Los Osos Valley	Calle Joaquin	Froom Ranch Way	NB	D	28.2	43.2	65%	С	18.9	43.2	44%	D
15	Los Osos Valley	Calle Joaquin	US 101 SB Ramps	SB	D	6.4	32.1	20%	F	15.4	32.1	48%	D
	Los Osos Valley	US 101 SB Ramps	Calle Joaquin	NB	D	6.6	31.1	21%	F	14.6	31.1	47%	D
16	Los Osos Valley	US 101 SB Ramps	US 101 NB Ramps	SB	D	14.9	37.7	40%	E	15.7	37.7	42%	D
	Los Osos Valley	US 101 NB Ramps	US 101 SB Ramps	NB	D	29.8	37.4	80%	В	19.7	37.4	53%	С
17	Los Osos Valley	S. Higuera St	US 101 NB Ramps	WB	D	28.3	39.2	72%	В	25.7	39.2	66%	С
	Los Osos Valley	US 101 NB Ramps	S. Higuera St	EB	D	17.5	39.4	44%	D	10.7	39.4	27%	F
18	Prado Rd	S. Higuera St	Froom Ranch Way	WB	D	29.7	40.3	74%	В	23.9	40.3	59%	С
	Prado Rd	Froom Ranch Way	S. Higuera St	EB	D	24.7	40.1	62%	С	24.0	40.1	60%	С
19	Froom Ranch Way	Dick's Sporting Goods Dwy	Los Osos Valley	WB	D	22.6	37.7	60%	С	10.6	37.7	28%	F
	Froom Ranch Way	Los Osos Valley	Dick's Sporting Goods Dwy	EB	D	35.1	38.0	92%	А	34.7	38.0	91%	Α
20	Dalidio Dr	Madonna Rd	SC Project Dwy	SB	D	21.8	36.0	61%	С	18.3	36.0	51%	С
	Dalidio Dr	SC Project Dwy	Madonna Rd	NB	D	0.7	38.0	2%	F	0.2	38.0	1%	F
21	Froom Ranch Way	Dalidio	Dick's Sporting Goods Dwy	WB	D	39.2	40.8	96%	Α	38.7	40.6	95%	А
	Froom Ranch Way	Dick's Sporting Goods Dwy	Dalidio	EB	D	25.6	40.7	63%	С	24.8	40.8	61%	С
24	Dalidio Dr	SC Project Dwy	Froom Ranch Way	SB	D	15.5	36.4	43%	D	14.0	36.4	38%	Е
	Dalidio Dr	Froom Ranch Way	SC Project Dwy	NB	D	25.7	37.9	68%	В	20.6	37.9	54%	С



Table 4.12-41
Cumulative Plus Project Conditions Segment Level of Service: Pedestrian Analysis

			c i lus i loject colle				AM F		PM F	Peak
ID	Roadway	From	То	Direction	LOS Threshold	Average Ped. Space (ft²/p)	Segment Score	LOS	Segment Score	LOS
1	Madonna Rd	Oceanaire Dr	LOVR	WB	С	3045	3.58	D	3.81	D
	Madonna Rd	LOVR	Oceanaire Dr	EB	С	11655	4.11	D	4.06	D
2	Madonna Rd	Dalidio	Oceanaire Dr	WB	С	8400	3.76	D	4.01	D
	Madonna Rd	Oceanaire Dr	Dalidio	EB	С	3750	4.09	D	4.17	D
3	Madonna Rd	El Mercado	Dalidio Dr	WB	С	37450	3.52	D	3.80	D
	Madonna Rd	Dalidio Dr	El Mercado	EB	С	52920	3.64	D	3.88	D
4	Madonna Rd	US 101 SB Ramps	El Mercado	WB	С	26250	3.67	D	3.73	D
	Madonna Rd	El Mercado	US 101 SB Ramps	EB	С	27915	3.69	D	3.82	D
5	Madonna Rd	US 101 NB Ramps	US 101 SB Ramps	WB	С	No Peds	3.72	D	3.75	F
	Madonna Rd	US 101 SB Ramps	US 101 NB Ramps	EB	С	No Peds	4.10	D	4.02	D
6	Madonna Rd	Higuera St	US 101 NB Ramps	WB	С	25200	3.79	D	3.96	D
	Madonna Rd	US 101 NB Ramps	Higuera St	EB	С	19838	3.98	D	3.78	О
7	S. Higuera St	Madonna Rd	Margarita Ave	SB	С	23247	3.21	С	3.95	D
	S. Higuera St	Margarita Ave	Madonna Rd	NB	С	5398	3.84	D	4.13	D
8	S. Higuera St	Margarita Ave	Prado Rd	SB	С	10245	3.79	D	3.83	D
	S. Higuera St	Prado Rd	Margarita Ave	NB	С	21700	3.66	D	3.91	D
9	S. Higuera St	Prado Rd	Granada Dr	SB	С	9292	3.69	D	3.83	D
	S. Higuera St	Granada Dr	Prado Rd	NB	С	8400	3.30	С	3.56	D
10	S. Higuera St	Granada Dr	Tank Farm Road	SB	С	46305	3.69	D	3.88	D
	S. Higuera St	Tank Farm Road	Granada Dr	NB	С	49140	3.22	С	3.43	С
11	S. Higuera St	Tank Farm Road	Suburban Drive	SB	С	12600	3.73	D	4.02	D
	S. Higuera St	Suburban Drive	Tank Farm Road	NB	С	31500	3.79	D	3.60	D
12	S. Higuera St	Suburban Drive	Los Osos Valley Road	SB	С	6552	3.70	D	4.00	D
	S. Higuera St	Los Osos Valley Road	Suburban Drive	NB	С	43533	4.14	D	4.07	D
13	Los Osos Valley	Madonna Rd	Froom Ranch Way	SB	С	5458	3.90	D	4.02	D
	Los Osos Valley	Froom Ranch Way	Madonna Rd	NB	С	0	3.71	F	4.10	F

							AM F	Peak	PM F	Peak
ID	Roadway	From	То	Direction	LOS Threshold	Average Ped. Space (ft²/p)	Segment Score	LOS	Segment Score	LOS
14	Los Osos Valley	Froom Ranch Way	Calle Joaquin	SB	С	27300	3.89	D	4.19	D
	Los Osos Valley	Calle Joaquin	Froom Ranch Way	NB	С	3675	3.76	D	4.10	D
15	Los Osos Valley	Calle Joaquin	US 101 SB Ramps	SB	С	No Peds	3.75	D	4.15	D
	Los Osos Valley	US 101 SB Ramps	Calle Joaquin	NB	С	12600	3.77	D	4.15	D
16	Los Osos Valley	US 101 SB Ramps	US 101 NB Ramps	SB	С	No Peds	3.98	D	4.00	D
	Los Osos Valley	US 101 NB Ramps	US 101 SB Ramps	NB	С	10786	3.84	D	4.15	D
17	Los Osos Valley	S. Higuera St	US 101 NB Ramps	WB	С	335	4.04	D	4.79	E
	Los Osos Valley	US 101 NB Ramps	S. Higuera St	EB	С	39393	4.09	D	3.91	D
18	Prado Rd	S. Higuera St	Froom Ranch Way	WB	С	9450	3.56	D	3.77	D
	Prado Rd	Froom Ranch Way	S. Higuera St	EB	С	8400	3.85	D	3.75	D
19	Froom Ranch Way	Dick's Sporting Goods Dwy	Los Osos Valley	WB	С	6852	3.69	D	3.89	D
	Froom Ranch Way	Los Osos Valley	Dick's Sporting Goods Dwy	EB	С	9450	1.91	А	2.01	В
20	Dalidio Dr	Madonna Rd	SC Project Dwy	SB	С	4500	3.42	С	3.39	С
	Dalidio Dr	SC Project Dwy	Madonna Rd	NB	С	15750	3.30	С	3.59	D
21	Froom Ranch Way	Dalidio	Dick's Sporting Goods Dwy	WB	С	0	1.76	F	1.79	А
	Froom Ranch Way	Dick's Sporting Goods Dwy	Dalidio	EB	С	No Peds	3.41	С	3.41	С
24	Dalidio Dr	SC Project Dwy	Froom Ranch Way	SB	С	4500	3.49	С	3.43	С
	Dalidio Dr	Froom Ranch Way	SC Project Dwy	NB	С	15750	3.27	С	3.55	D

Notes:

^{1.} Sidewalk is present along frontage roads for segments #1 - Madonna Road and #13 - Los Osos Valley Road, and is not accounted for in this analysis.

^{2.} HCM 2010 Methodologies do not model segments bounded by all-way stop control. Procedures have not been developed yet to address the effect of all-way stop control or yield control on intersection performance from a pedestrian or bicyce perspective. No methodology exists for evaluating two-way stop-controlled intersection performance (with the cross-street stop controlled) for pedestrians and bicycles. However, it is reasoned that it has negligible influence on pedestrian service along the segment.

Table 4.12-42
Cumulative Plus Project Conditions Segment Level of Service: Bicycle Analysis

			_			AM I	Peak	PM I	Peak
					LOS	Segment		Segment	
ID	Roadway	From	То	Direction	Threshold	Score	LOS	Score	LOS
1	Madonna Rd	Oceanaire Dr	LOVR	WB	D	3.65	D	4.06	D
	Madonna Rd	LOVR	Oceanaire Dr	EB	D	3.83	D	3.78	D
2	Madonna Rd	Dalidio	Oceanaire Dr	WB	D	3.17	С	3.24	С
	Madonna Rd	Oceanaire Dr	Dalidio	EB	D	3.60	D	3.44	С
3	Madonna Rd	El Mercado	Dalidio Dr	WB	D	3.31	С	3.20	С
	Madonna Rd	Dalidio Dr	El Mercado	EB	D	3.37	С	3.41	C
4	Madonna Rd	US 101 SB Ramps	El Mercado	WB	D	3.98	D	4.33	E
	Madonna Rd	El Mercado	US 101 SB Ramps	EB	D	3.60	D	3.64	D
5	Madonna Rd	US 101 NB Ramps	US 101 SB Ramps	WB	D	3.32	С	3.33	С
	Madonna Rd	US 101 SB Ramps	US 101 NB Ramps	EB	D	3.40	С	3.34	С
6	Madonna Rd	Higuera St	US 101 NB Ramps	WB	D	3.54	D	3.59	D
	Madonna Rd	US 101 NB Ramps	Higuera St	EB	D	3.96	D	3.54	D
7	S. Higuera St	Madonna Rd	Margarita Ave	SB	D	3.94	D	3.91	D
	S. Higuera St	Margarita Ave	Madonna Rd	NB	D	4.14	D	4.27	E
8	S. Higuera St	Margarita Ave	Prado Rd	SB	D	3.69	D	3.68	D
	S. Higuera St	Prado Rd	Margarita Ave	NB	D	3.96	D	4.03	D
9	S. Higuera St	Prado Rd	Granada Dr	SB	D	3.89	D	3.93	D
	S. Higuera St	Granada Dr	Prado Rd	NB	D	3.46	С	3.53	D
10	S. Higuera St	Granada Dr	Tank Farm Road	SB	D	4.16	D	4.21	D
	S. Higuera St	Tank Farm Road	Granada Dr	NB	D	3.51	D	3.57	D
11	S. Higuera St	Tank Farm Road	Suburban Drive	SB	D	3.37	С	3.48	С
	S. Higuera St	Suburban Drive	Tank Farm Road	NB	D	3.50	С	3.45	С
12	S. Higuera St	Suburban Drive	Los Osos Valley Road	SB	D	3.31	С	3.87	D
	S. Higuera St	Los Osos Valley Road	Suburban Drive	NB	D	3.99	D	3.90	D
13	Los Osos Valley	Madonna Rd	Froom Ranch Way	SB	D	3.73	D	3.75	D
	Los Osos Valley	Froom Ranch Way	Madonna Rd	NB	D	3.38	С	3.47	С
14	Los Osos Valley	Froom Ranch Way	Calle Joaquin	SB	D	3.57	D	3.61	D
	Los Osos Valley	Calle Joaquin	Froom Ranch Way	NB	D	3.83	D	3.91	D
15	Los Osos Valley	Calle Joaquin	US 101 SB Ramps	SB	D	3.30	С	3.39	С
	Los Osos Valley	US 101 SB Ramps	Calle Joaquin	NB	D	3.56	D	3.64	D
16	Los Osos Valley	US 101 SB Ramps	US 101 NB Ramps	SB	D	3.74	D	3.74	D
	Los Osos Valley	US 101 NB Ramps	US 101 SB Ramps	NB	D	3.71	D	3.87	D
17	Los Osos Valley	S. Higuera St	US 101 NB Ramps	WB	D	3.46	С	3.48	С
	Los Osos Valley	US 101 NB Ramps	S. Higuera St	EB	D	3.39	С	3.39	С



						AM I	Peak	PM	Peak
ID	Roadway	From	То	Direction	LOS Threshold	Segment Score	LOS	Segment Score	LOS
18	Prado Rd	S. Higuera St	Froom Ranch Way	WB	D	3.72	D	3.80	D
	Prado Rd	Froom Ranch Way	S. Higuera St	EB	D	3.69	D	3.67	D
19	Froom Ranch Way	Dick's Sporting Goods Dwy	Los Osos Valley	WB	D	3.42	С	3.71	D
	Froom Ranch Way	Los Osos Valley	Dick's Sporting Goods Dwy	EB	D	3.51	D	3.57	D
20	Dalidio Dr	Madonna Rd	SC Project Dwy	SB	D	3.79	D	3.76	D
	Dalidio Dr	SC Project Dwy	Madonna Rd	NB	D	3.56	D	3.94	D
21	Froom Ranch Way	Dalidio	Dick's Sporting Goods Dwy	WB	D	2.63	В	3.04	С
	Froom Ranch Way	Dick's Sporting Goods Dwy	Dalidio	EB	D	3.80	D	3.81	D
24	Dalidio Dr	SC Project Dwy	Froom Ranch Way	SB	D	3.70	D	3.69	D
	Dalidio Dr	Froom Ranch Way	SC Project Dwy	NB	D	3.51	D	3.57	D

Note:

^{1.} HCM 2010 Methodologies do not model segments bounded by all-way stop control. Procedures have not been developed yet to address the effect of all-way stop control or yield control on intersection performance from a pedestrian or bicyce perspective. No methodology exists for evaluating two-way stop-controlled intersection performance (with the cross-street stop controlled) for pedestrians and bicycles. However, it is incorporated into the methodology for evaluating bicycle segment performance.

Table 4.12-43
Cumulative Plus Project Conditions Segment Level of Service: Transit Analysis

			Tida Troject coi				AM Peak	- y	PM Peak	
					LOS					
ID	Roadway	From	То	Direction	Threshold	Route Name	Segment Score	LOS	Segment Score	LOS
1	Madonna Rd	Oceanaire Dr	LOVR	WB	D	Route 4	4.18	D	4.28	Е
	Madonna Rd	LOVR	Oceanaire Dr	EB	D	Route 5	4.50	Е	4.04	D
2	Madonna Rd	Dalidio	Oceanaire Dr	WB	D	Route 4	4.50	Е	4.59	Е
	Madonna Rd	Oceanaire Dr	Dalidio	EB	D	Route 5	4.72	Е	4.43	Е
3	Madonna Rd	El Mercado	Dalidio Dr	WB	D	Route 4	4.34	Е	4.42	Е
	Madonna Rd	Dalidio Dr	El Mercado	EB	D	Route 5	4.21	D	4.26	Е
4	Madonna Rd	US 101 SB Ramps	El Mercado	WB	D	Route 4	4.35	E	4.52	Е
	Madonna Rd	El Mercado	US 101 SB Ramps	EB	D	Route 5	4.56	Е	4.34	Е
5	Madonna Rd	US 101 NB Ramps	US 101 SB Ramps	WB	D	Route 4	4.15	D	4.28	Е
	Madonna Rd	US 101 SB Ramps	US 101 NB Ramps	EB	D	Route 5	4.25	E	3.82	D
6	Madonna Rd	Higuera St	US 101 NB Ramps	WB	D	Route 4	4.33	E	4.44	E
	Madonna Rd	US 101 NB Ramps	Higuera St	EB	D	Route 5	4.55	E	4.14	D
7	S. Higuera St	Madonna Rd	Margarita Ave	SB	D	Route 2	Not Analyzed	N/A	3.53	D
	S. Higuera St	Margarita Ave	Madonna Rd	NB	D	Route 2	3.69	D	3.85	D
8	S. Higuera St	Margarita Ave	Prado Rd	SB	D	Route 2	Not Analyzed	N/A	4.22	D
	S. Higuera St	Prado Rd	Margarita Ave	NB	D	Route 2	4.30	E	4.55	E
9	S. Higuera St	Prado Rd	Granada Dr	SB	D	Route 2	4.42	E	4.40	E
	S. Higuera St	Granada Dr	Prado Rd	NB	D	Route 2	3.85	D	4.02	D
10	S. Higuera St	Granada Dr	Tank Farm Road	SB	D	Route 2	3.82	D	3.96	D
	S. Higuera St	Tank Farm Road	Granada Dr	NB	D	Route 2	3.54	D	3.67	D
11	S. Higuera St	Tank Farm Road	Suburban Drive	SB	D	Ī	Not Analyzed	N/A	Not Analyzed	N/A
	S. Higuera St	Suburban Drive	Tank Farm Road	NB	D	Route 2	4.06	D	4.02	D
12	S. Higuera St	Suburban Drive	Los Osos Valley Road	SB	D	-	Not Analyzed	N/A	Not Analyzed	N/A
	S. Higuera St	Los Osos Valley Road	Suburban Drive	NB	D	-	Not Analyzed	N/A	Not Analyzed	N/A
13	Los Osos Valley	Madonna Rd	Froom Ranch Way	SB	D	Route 4	4.54	E	4.58	Е
	Los Osos Valley	Froom Ranch Way	Madonna Rd	NB	D	Route 4	4.23	D	4.40	Е
13	Los Osos Valley	Madonna Rd	Froom Ranch Way	SB	D	Route 5	4.63	E	4.39	E
	Los Osos Valley	Froom Ranch Way	Madonna Rd	NB	D	Route 5	4.34	E	4.19	D
14	Los Osos Valley	Froom Ranch Way	Calle Joaquin	SB	D	Route 4	4.45	Е	4.55	Е
	Los Osos Valley	Calle Joaquin	Froom Ranch Way	NB	D	=	Not Analyzed	N/A	Not Analyzed	N/A
14	Los Osos Valley	Madonna Rd	Froom Ranch Way	SB	D	Route 5	4.55	E	4.34	E
	Los Osos Valley	Froom Ranch Way	Madonna Rd	NB	D	•	Not Analyzed	N/A	Not Analyzed	N/A
15	Los Osos Valley	Calle Joaquin	US 101 SB Ramps	SB	D		Not Analyzed	N/A	Not Analyzed	N/A
	Los Osos Valley	US 101 SB Ramps	Calle Joaquin	NB	D		Not Analyzed	N/A	Not Analyzed	N/A
16	Los Osos Valley	US 101 SB Ramps	US 101 NB Ramps	SB	D		Not Analyzed	N/A	Not Analyzed	N/A
	Los Osos Valley	US 101 NB Ramps	US 101 SB Ramps	NB	D		Not Analyzed	N/A	Not Analyzed	N/A
17	Los Osos Valley	S. Higuera St	US 101 NB Ramps	WB	D		Not Analyzed	N/A	Not Analyzed	N/A
	Los Osos Valley	US 101 NB Ramps	S. Higuera St	EB	D		Not Analyzed	N/A	Not Analyzed	N/A



							AM Peak		PM Peak	
		_	_		LOS					
ID	Roadway	From	То	Direction	Threshold	Route Name	Segment Score	LOS	Segment Score	LOS
18	Prado Rd	S. Higuera St	Froom Ranch Way	WB	D		Not Analyzed	N/A	Not Analyzed	N/A
	Prado Rd	Froom Ranch Way	S. Higuera St	EB	D	Route 2	3.73	D	Not Analyzed	N/A
19	Froom Ranch Way	Dick's Sporting Goods Dwy	Los Osos Valley	WB	D		Not Analyzed	N/A	Not Analyzed	N/A
	Froom Ranch Way	Los Osos Valley	Dick's Sporting Goods Dwy	EB	D		Not Analyzed	N/A	Not Analyzed	N/A
20	Dalidio Dr	Madonna Rd	SC Project Dwy	SB	D	Route 4	4.22	D	4.25	D
	Dalidio Dr	Madonna Rd	SC Project Dwy	SB	D	Route 5	4.27	E	4.09	D
21	Froom Ranch Way	Dalidio	Dick's Sporting Goods Dwy	WB	D	0.00	Not Analyzed	N/A	Not Analyzed	N/A
	Froom Ranch Way	Dalidio	Dick's Sporting Goods Dwy	WB	D	0.00	Not Analyzed	N/A	Not Analyzed	N/A
24	Dalidio Dr	SC Project Dwy	Froom Ranch Way	SB	D	Route 4	4.25	Е	4.22	D
	Dalidio Dr	SC Project Dwy	Froom Ranch Way	SB	D	Route 5	4.16	D	4.40	E

Notes:

- 1. Route 2 Serves the Prado Day Center stop during the AM peak hour, and the DMV/Margarita stop during the PM Peak Hour 2. Segment 20 transit is southbound for routes 4 and 5

Table 4.12-44
Cumulative Plus Project Conditions Segment Level of Service: U.S. 101

					AM Peak Hour				PM Peak Hou	•
#	Interchange Location	Target LOS	Segment Type	No. of Lanes	Volume	Density (pc/mi/ln)	LOS	Volume	Density (pc/mi/ln)	LOS
	US 101 at Los Osos Valley Road									
1	US 101 NB South of Los Osos Valley Road	С	Freeway	2	3,481	33.0	D	2,723	24.0	С
2	US 101 SB South of Los Osos Valley Road	С	Freeway	2	1,835	16.1	В	3,911	40.4	E
	US 101 at Madonna Road									
4	US 101 NB South of Madonna Road	С	Freeway	2	2,849	25.3	С	2,690	23.7	С
5	US 101 SB South of Madonna Road	С	Freeway	2	2,090	18.4	С	3,608	35.0	D

Mitigative Components of the Specific Plan and Impact Conclusion. The San Luis Ranch Specific Plan includes a mix of commercial and residential uses, a new transit connection, and workforce housing to balance jobs and housing. The Specific Plan also emphasizes bikeways and pedestrian connections, all of which contribute to reduced trips and VMT. However, as shown in Table 4.12-40 through Table 4.12-44, under Cumulative Plus Project conditions, five study area segment groups (Madonna Road, S. Higuera Street, Los Osos Valley Road, and Dalidio Drive/Prado Road, and Froom Ranch Way), as well as mainline segments of U.S. 101 northbound and southbound at Los Osos Valley road and Madonna Road, would operate at unacceptable automobile, bicycle, pedestrian, and transit LOS based on adopted multimodal LOS standards during AM and PM peak hours. Therefore, the project would conflict with the City's established measures of effectiveness for the performance of the circulation system and vehicle queuing standards, and transportation impacts would be potentially significant at these roadway segments.

Mitigation Measures. The following mitigation measures identify improvements at study area facilities that are required to reduce potentially significant project-specific impacts to study area roadway segments under Cumulative Plus Project conditions. Each mitigation measure refers to one of the required Transportation Improvement Measures identified in Table 4.12-1 at the beginning of this section. The project's equitable share of these improvements will be calculated using the method for calculating equitable mitigation measures outlined in the Caltrans Guide for the Preparation of Traffic Impact Studies (Caltrans, December 2002). Costs above and beyond the project's equitable share can be addressed through such options as fee credits, reimbursement agreements, or development agreements, based on City requirements.

T-10(a) Segments #1 - #6: Madonna Road (Higuera Street to Los Osos Valley Road).

 Construct Prado Road Overpass (Overpass with U.S. 101 northbound and southbound ramps)

T-10(b)Segments #15 - #16: Los Osos Valley Road (Calle Joaquin to U.S. 101 Northbound Ramps).

• Construct Prado Road Overpass (Overpass with U.S. 101 northbound and southbound ramps)

T-10(c)Segment #24: Prado Road/Dalidio Drive (Project Driveway to Froom Ranch Way).

• Construct Prado Road Overpass (Overpass with U.S. 101 northbound and southbound ramps)

<u>Plan Requirements and Timing</u>. Fair share traffic impact fees shall be paid upon acceptance by the City of final design plans and in accordance with the timing of improvements.

Monitoring. City Public Works staff shall confirm payment of applicable fees. City Public Works staff shall also ensure implementation of these improvements following approval of the final design plans for the Specific Plan Area.

Significance After Mitigation. Implementation of the identified mitigation measures would improve LOS at impacted study area roadway segments to acceptable levels, and impacts on these facilities under Cumulative Plus Project conditions would be less than significant after mitigation. However, potential impacts identified for the northbound and southbound lanes of the mainline segments of U.S. 101 at Los Osos Valley Road and Madonna Road under Cumulative Plus Project conditions would not be mitigated to a less than significant level. As a result, impacts under Cumulative Plus Project conditions would remain significant and unavoidable. Potential residual impacts that may result from project mitigation that would require construction of the Prado Road & U.S. 101 overpass (Mitigation Measures T-10[a], T-10[b], and T-10[c]) are discussed in Section 4.12.5(d).

d. Residual Impacts Associated with Off-Site Improvements. Implementation of mitigation measures that require off-site improvements would generally not result in significant residual impacts, as these improvements would occur within existing roadway rights-of-way, or within urbanized paved/landscaped areas immediately adjacent to existing roadway rights-of-way. The primary exception to this is the Prado Road/U.S 101 overpass/interchange, which is required by mitigation measures in Impacts T-1, T-2, T-3, T-8, T-9, and T-10 in Sections 4.12.5(b) and 4.12.5(c). Implementation of mitigation measures that require the development of the Prado Road/U.S. 101 overpass/interchange would improve LOS at impacted intersections and roadway segments in the study area. As described in Section 4.12.5(a), the project would be required to pay a fair share contribution toward infrastructure improvements required to mitigate project impacts.

As described in Section 4.12.4, the transportation and circulation impact analysis for the project identifies three general designs of the Prado Road & U.S. 101 interchange, where identified transportation impacts that would result from the project trigger the need for this improvement. These three general designs include:

- 1. Impacts that trigger the Prado Overpass-Only
- 2. Impacts that trigger the Prado Overpass Plus U.S. 101 northbound ramps, and
- 3. Impacts that trigger the Prado Overpass Plus U.S. 101 northbound ramps and U.S. 101 southbound ramps

Ultimately, these three general designs represent a tiered approach to constructing a full access interchange at Prado Road and U.S. 101. While a complete interchange could be constructed at one time, this analysis assumes that it may be necessary to build an overpass-only connection for the Prado Road extension, followed by rebuilding the northbound ramps on the east side of U.S. 101, and eventually followed by constructing new southbound ramps on the west side of U.S. 101.

Policy 9.2.2 of the Circulation Element requires the sponsors of development projects that contribute to the need for the Prado Road interchange or overpass to prepare or fund the preparation of a Project Study Report (PSR) for the interchange project. A PSR is an engineering report prepared cooperatively by Caltrans and local and regional agencies for projects on the State highway system, with the purpose of documenting agreement on the scope, schedule and estimated cost of a project so the project can be considered for inclusion in a future programming document such as the State Transportation Improvement Program (STIP). The PSR for Highway 101/Prado Road is currently being undertaken, in parallel with the review of the proposed San Luis Ranch Project. As the timing, features, design, and specific area of

disturbance of the Prado Road/U.S. 101 project comes into greater focus through preparation of the PSR, project-level CEQA review of the impacts of the improvement will be prepared. At this time, because the specific details of the improvement are not known with certainty, a generalized analysis of potential impacts is provided herein.

Existing Conditions at U.S. 101 and Prado Road. The western terminus of Prado Road is located immediately east of U.S. 101, with northbound on- and off-ramps for U.S. 101, and an intersection with Elks Lane. North and east of Prado Road and Elks Lane there is an unlined drainage channel that parallels U.S. 101, Sunset drive-in movie theater, and an abandoned gas station located at 253 Elks Lane. A City of San Luis Obispo corporation yard is located south of Prado Road.

Description of Potential Improvements at U.S. 101 and Prado Road. While the improvements have not been designed, the following is intended to provide a generalized description of potential characteristics of the improvements. For the purposes of this analysis, the future Prado Road/U.S. 101 overpass/interchange would include a four-lane overpass that would connect Prado Road on the east side of U.S. 101 with the proposed Prado Road Extension (Dalidio Drive) on the west side of U.S. 101, including reconstructed northbound ramps on the east side of U.S. 101 and a new southbound ramp system located primarily within the San Luis Ranch Specific Plan area west of U.S. 101. Elks Lane would be relocated to the east and the Prado Road/U.S. 101 northbound ramp system would be bounded to the east and north by the realigned Elks Lane and to the south by the existing City of San Luis Obispo corporation yard and Water Resource Recovery Facility.

Potential Environmental Effects of U.S. 101 and Prado Road Overpass/Interchange. The Prado Road/U.S. 101 overpass/interchange would not involve construction of any new residential units or commercial structures, demolition of any residences or commercial space, or displacement of any residences. However, reconstruction of the northbound ramp system and relocation of Elks Lane would require removal of the U-Haul storage facility located at the northeast corner of Prado Road and Elks Lane. Constructing new southbound ramps on the west side of U.S. 101 would encroach upon existing agricultural fields west of U.S. 101. The proposed interchange would require acquisition of additional right-of-way, either through fee title (purchase of property) or by acquiring a public service easement (PSE).

During construction of the overpass, northbound ramps, and southbound ramps, potential issue areas that may be temporarily affected would include air quality, cultural resources, hazards and hazardous materials, water quality, noise and transportation. Construction-related environmental impacts would be mitigated through compliance with City and Caltrans permitting and construction monitoring requirements and standard SLOAPCD dust and diesel emission control measures.

Long-term impacts of the Prado Road/U.S. 101 overpass/interchange would include potential obstruction of scenic views, loss of prime agricultural land west of U.S. 101, and land use impacts associated with acquisition of additional right-of-way.