

MEMORANDUM

Date: May 20, 2020
To: Bob Shattuck, Shattuck Community Planning
From: David Manciatì and David B. Robinson, Fehr & Peers
Subject: **Lakeside at Sutter Pointe: Impact Analysis – Revised**

RS19-3790

Introduction

Fehr & Peers has completed a transportation impact analysis of the proposed Lakeside at Sutter Pointe project. Lakeside would be built on 873.5 acres situated north of Riego Road and west of Natomas Road in Sutter County. The project would include the following proposed land uses.

- 3,388 single-family detached dwelling units
- 399 multi-family dwelling units
- 272,000 square feet of commercial land use
- 683,000 square feet of employment
- An elementary school
- 113.9 acres of parks/open space

This memorandum documents operations analysis methodology, establishes significance criteria, provides estimates of project trip generation and distribution, and presents analysis results.

Analysis Methodology

This study analyzes traffic conditions for the following scenarios:

- Existing Conditions – represents current conditions and the existing setting upon which project-specific impacts are identified
- Existing Plus Project Conditions – represents existing conditions plus full buildout of the proposed Lakeside at Sutter Pointe project. This includes proposed land development and transportation/circulation improvements.
- Cumulative Conditions – represents future conditions, including the completion of reasonably foreseeable land development and transportation projects. A modified version of

the Sacramento Area Council of Government’s (SACOG’s) SACSIM travel demand forecasting model was used to develop cumulative scenario traffic volume forecasts.

- Cumulative Plus Project Conditions – represents cumulative conditions plus full buildout of the proposed Lakeside at Sutter Pointe project. This includes proposed land development and transportation/circulation improvements.

The impact analysis consists of the following study area components, which are located in Sutter County, Placer County, and Sacramento County. All components are analyzed under existing, existing plus project, cumulative, and cumulative plus project conditions, unless otherwise specified below.

- 22 intersections
- 12 additional on-site project intersections (existing plus project only)
- 27 roadway segments
- 12 additional on-site project roadway segments (existing plus project only)
- Northbound and southbound SR 99 freeway facilities between south of the SR 99 / I-5 interchange and Sankey Road.

The operational characteristics of the study components are described using the term Level of service (LOS). LOS is a quantitative measure of traffic operating conditions whereby a letter grade from A (the best) to F (the worst) is assigned. In general, LOS A represents free-flow conditions with no congestion and LOS F represents severe congestion and delay under stop-and-go conditions. A LOS grade is assigned to each study intersection, roadway segment, and freeway facility. Intersection and freeway analyses are based on the methodologies contained in the *Highway Capacity Manual (HCM) 6th Edition* (Transportation Research Board, 2016).

Intersection Operations

The intersection operations analysis was conducted for AM and PM peak hour conditions. Peak hour traffic counts from January 2018 were used from nearby projects for 8 study intersections, and new traffic counts were collected in August 2019 for an additional 10 study intersections. Furthermore, traffic counts were collected in November 2019 at 4 study intersections (the SR 99 / Riego Road and SR 99 / Elverta Road ramp terminal intersections) as part of the freeway operations analysis after the opening of the SR 70/99 auxiliary lanes between Elkhorn Boulevard and I-5. All intersection traffic counts included peak hour heavy vehicles, bicycles, and pedestrians.

Intersection operations were analyzed using the Synchro (version 10) traffic analysis software. Due to the unique geometry of SR 99 / Sankey Road, this intersection was also analyzed using the SimTraffic (version 10) microsimulation software. SimTraffic analysis results are an average of ten model runs using different random seed values.

The HCM methodology determines the LOS at signalized intersections, all-way stop controlled intersections, and roundabouts by comparing the weighted average control delay per vehicle at the intersection. At unsignalized side-street stop-controlled intersections, LOS was calculated for each movement in addition to the intersection as a whole. **Table 1** presents delay ranges for each LOS for unsignalized and signalized intersections.

Table 1: Intersection Level of Service (LOS) Criteria

Level of Service	Average Control Delay (seconds / vehicle)	
	Unsignalized	Signalized
A	≤ 10	≤ 10
B	> 10 to 15	> 10 to 20
C	> 15 to 25	> 20 to 35
D	> 25 to 35	> 35 to 55
E	> 35 to 50	> 55 to 80
F	> 50	> 80

Source: Highway Capacity Manual, Transportation Research Board, 2016.

Roadway Segment Operations

Study roadway segments were analyzed by comparing the average daily traffic volume to daily volume thresholds specific to each jurisdiction in the study area. The use of daily traffic volume for the analysis of roadway segments is the preferred methodology for the analysis of roadway segment operations in Sutter County, Placer County, and Sacramento County. Twenty-four-hour traffic count data was collected at each of the study roadway segments on August 29, 2019.

Table 2 displays the daily volume thresholds for various roadway facility types in each of the study area jurisdictions. These thresholds are used as to identify the need for new or upgraded facilities based on daily traffic volumes.

Table 2: LOS Criteria – Roadway Segments¹

Jurisdiction	Facility Type	Number of Lanes & Classification	Daily Volume Threshold				
			LOS A	LOS B	LOS C	LOS D	LOS E
Sutter County	Rural Roadway	2 (2R)	-	-	7,200	12,200	20,800
	Urban Arterial	2 (2U)	-	-	13,170	14,800	16,460
		4 (4U)	-	-	26,340	29,640	32,930
		6 (6 U) ²	-	-	39,510	44,460	49,395
	Expressway	4 (4 E)	-	-	38,900	47,400	51,600
		6 (6 E) ³	-	-	58,350	71,100	77,400
Placer County / Sacramento County	Arterial – Low Access Control ⁴	2 (2L)	9,000	10,500	12,000	13,740 / 13,500 ⁷	15,000
		4 (4L)	18,000	21,000	24,000	27,480 / 27,000 ⁷	30,000
		6 (6L)	27,000	31,500	36,000	41,220 / 40,500 ⁷	45,000
	Arterial – Moderate Access Control ⁵	2 (2M)	10,800	12,600	14,400	16,200	18,000
		4 (4M)	21,600	25,200	28,800	32,400	36,000
		6 (6M)	32,400	37,800	43,200	48,600	54,000
	Arterial – High Access Control ⁶	4 (4H)	24,000	28,000	32,000	36,000	40,000
		6 (6H)	36,000	42,000 / 43,000 ⁸	48,000	54,000	60,000
Sacramento County Only	Rural highway	2 (2RH)	2,400	4,800	7,900	13,500	22,900
	Rural road, paved shoulders	2 (2RP)	2,200	4,300	7,100	12,200	20,000
	Rural road, no shoulders	2 (2RN)	1,800	3,600	5,900	10,100	17,000

Notes:

¹ Both number of lanes and daily volume thresholds are two-way totals.

² Urban Arterial thresholds extrapolated for six-lane facilities.

³ Expressway thresholds extrapolated for six-lane facilities.

⁴ Low access control roads generally have frequent driveways and speeds of 25 to 35 mph.

⁵ Medium access control roads generally have limited driveways and speeds of 30 to 35 mph.

⁶ High access control roads generally have no driveways and speeds of 35 to 50 mph.

⁷ LOS D threshold for low access control in Placer County/Sacramento County, respectively.

⁸ LOS B thresholds for high access control in Placer County/Sacramento County, respectively

Source: Sutter County General Plan, 1996; Placer County General Plan, 1994; Sacramento County Traffic Impact Analysis Guidelines, 2004; Fehr & Peers, 2008.

Freeway Operations

Per Caltrans standards, freeway study facility operations were evaluated using methodologies described in the HCM 6th Edition and Leisch Method (for weave sections). Specific inputs include freeway segment lengths, length of acceleration and deceleration lanes, lane widths, free flow speed, mainline and ramp volumes, mainline and ramp peak hour factors, and mainline and ramp heavy vehicle percentages. Caltrans PeMS mainline volume data was obtained and balanced against vehicle turning movements counts conducted at on- and off-ramp facilities during the same time period.

Table 3 presents the density range for each ramp merge/diverge (i.e., ramp junction) movements and freeway mainline segments. Freeway merge segments are those where two traffic streams combine into one single stream, while freeway diverge segments are those where one traffic stream separates into two separate streams.

Table 3: LOS Criteria – Freeway Facilities

Level of Service	Mainline (Density) ¹	Ramp Junctions (Density) ¹
A	≤ 11	≤ 10
B	> 11 to 18	> 10 to 20
C	> 18 to 26	> 20 to 28
D	> 26 to 35	> 28 to 35
E	> 35 to 45	> 35
F	> 45 or Demand exceeds capacity ²	Demand exceeds capacity ²

Notes:

¹ Density expressed in passenger car equivalents per hour per mile per lane.

² Occurs when freeway demand exceeds upstream (diverge) or downstream (merge) freeway segment capacity, or if off ramp demand exceeds off-ramp capacity.

Source: Highway Capacity Manual 6th Edition (Transportation Research Board, 2016).

Existing Conditions

Intersection Operations

Intersection operations were analyzed for existing conditions under AM and PM peak hour conditions. **Table 4** shows the intersection LOS and average delay for the 22 study intersections under existing conditions. As shown in Table 4, most study intersections operate at LOS D or better. The following 5 study intersections operate at a deficient LOS during one or both peak hours.

- SR 99 / Sankey Road (both AM and PM peak hours)

- Riego Road / Pleasant Grove Road (N) (both AM and PM peak hours)
- Baseline Road / Pleasant Grove Road (S) (both AM and PM peak hours)
- Baseline Road / Locust Road (both AM and PM peak hours)
- Baseline Road / Fiddymont Road / Walerga Road – (PM peak hour only)

Figure 1 shows intersection peak hour turning movement volumes, lane configurations, and control types under existing conditions.

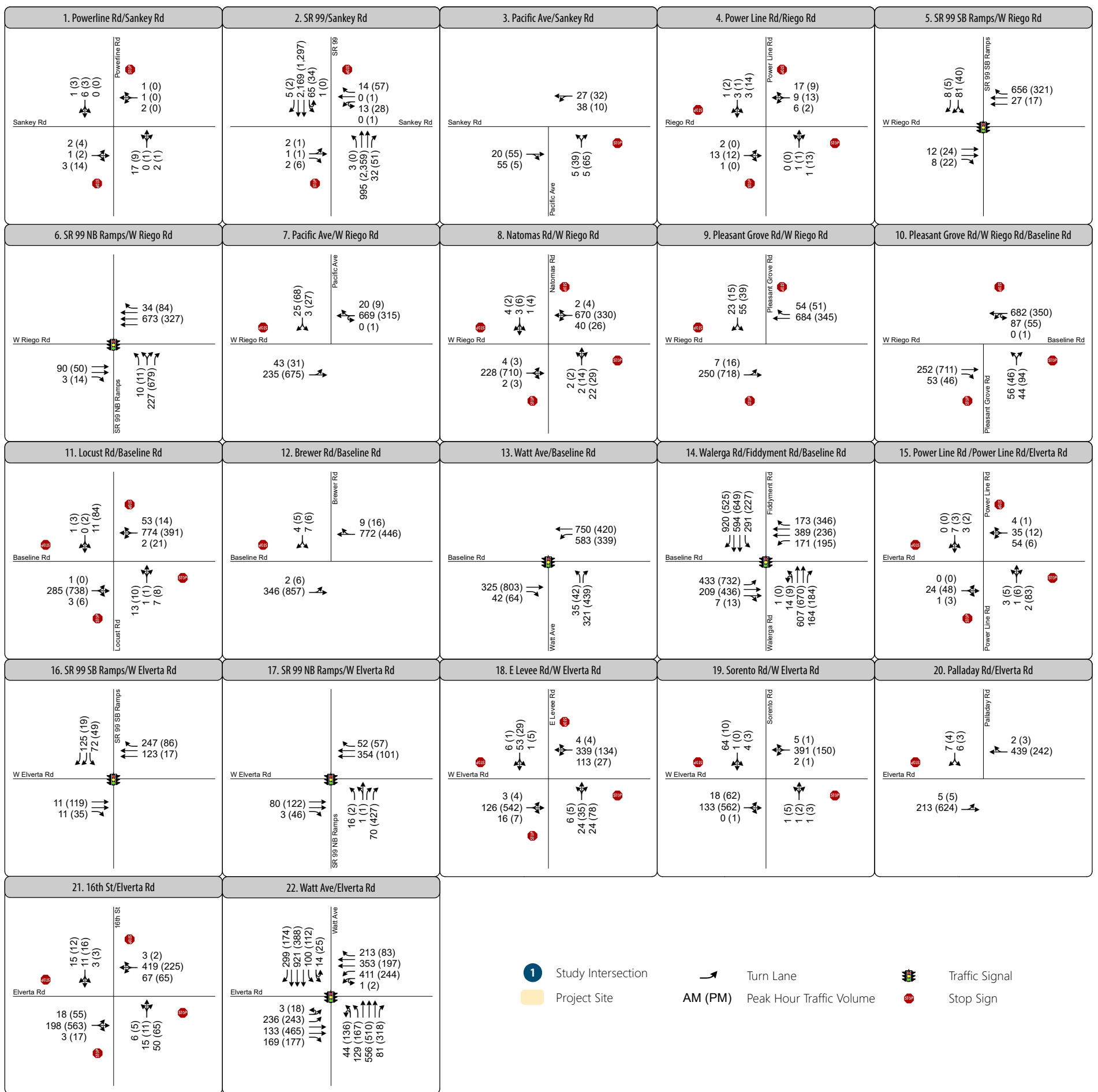
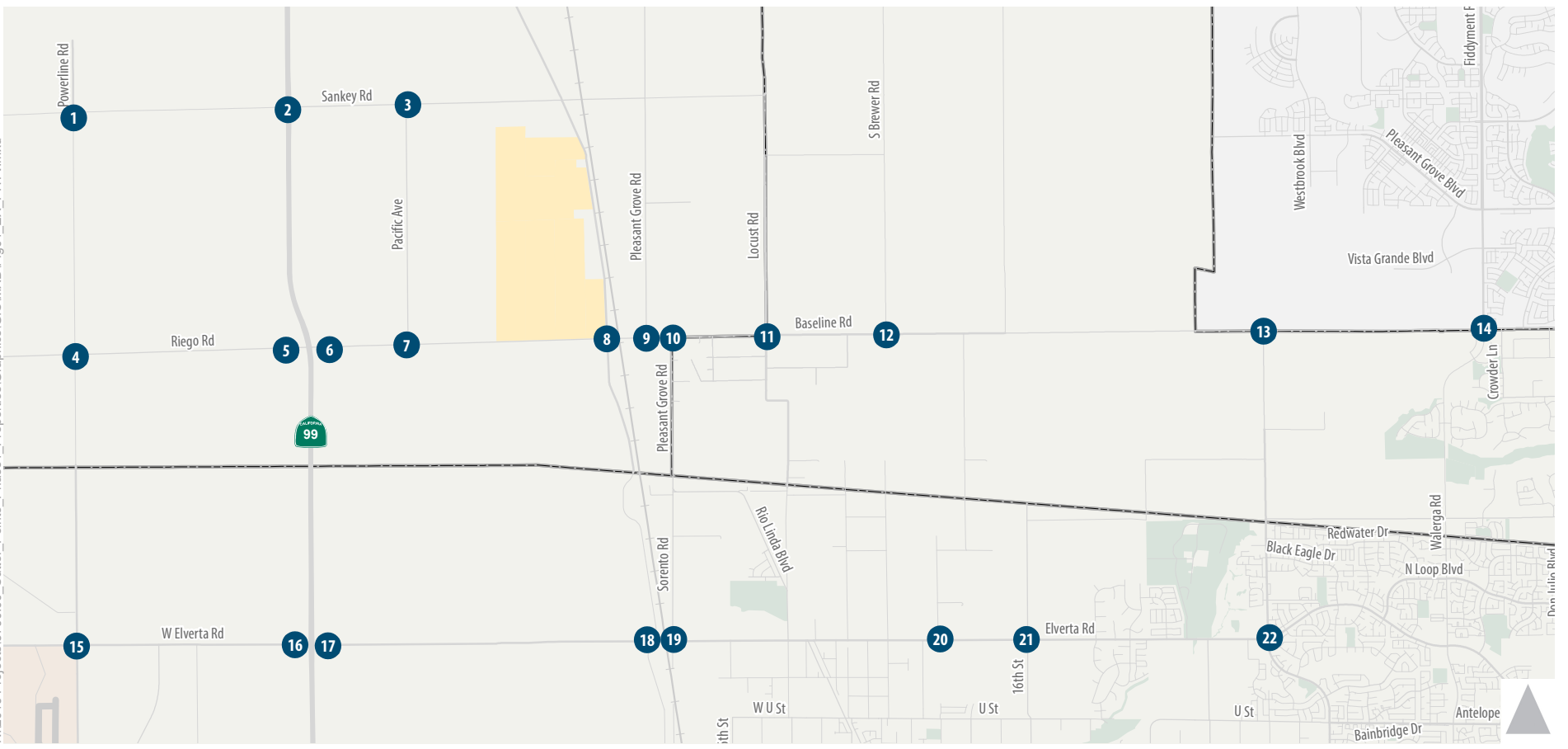


Figure 1
Peak Hour Traffic Volumes
and Lane Configurations -
Existing Conditions



Table 4: Intersection Operations – Existing Conditions

Jurisdiction	Intersection	Traffic Control	LOS Threshold	Peak Hour	Delay ¹	LOS ²
Sutter County	1. Sankey Road / Power Line Road	SSSC	D	AM PM	6 (9) 7 (9)	A (A) A (A)
	2. SR 99 / Sankey Road	SSSC	D	AM PM	3 (53) 5 (136)	A (F) A (F)
	3. Sankey Road / Pacific Avenue	SSSC	D	AM PM	3 (9) 5 (10)	A (A) A (A)
	4. Riego Road / Power Line Road	AWSC	D	AM PM	8 7	A A
	5. Riego Road / SR 99 Southbound Ramps	Signal	D	AM PM	8 7	A A
	6. Riego Road / SR 99 Northbound Ramps	Signal	D	AM PM	4 7	A A
	7. Riego Road / Pacific Avenue	SSSC	D	AM PM	1 (15) 2 (16)	A (C) A (C)
	8. Riego Road / Natomas Road	AWSC	D	AM PM	28 32	D D
	9. Riego Road / Pleasant Grove Road (N)	AWSC	D	AM PM	38 47	E E
Placer County	10. Baseline Road / Pleasant Grove Road (S)	AWSC	D	AM PM	47 70	E F
	11. Baseline Road / Locust Road	AWSC	D	AM PM	57 47	F E
	12. Baseline Road / Brewer Road ³	SSSC	D	AM PM	<1 (20) <1 (17)	A (C) A (C)
	13. Baseline Road / Watt Avenue	Signal	D	AM PM	15 31	B C
	14. Baseline Road / Fiddymont Road / Walerga Road	Signal	D	AM PM	47 84	D F
Sacramento County	15. Elverta Road / Power Line Road	AWSC	E	AM PM	8 7	A A
	16. Elverta Road / SR 99 Southbound Ramps	Signal	D	AM PM	7 7	A A
	17. Elverta Road / SR 99 Northbound Ramps	Signal	D	AM PM	5 4	A A
	18. Elverta Road / E. Levee Road	AWSC	E	AM PM	13 17	B C
	19. Elverta Road / Sorento Road	SSSC	E	AM PM	2 (13) 1 (18)	A (B) A (C)
	20. Elverta Road / Palladay Road	SSSC	E	AM PM	<1 (13) <1 (13)	A (B) A (B)

Table 4: Intersection Operations – Existing Conditions

Jurisdiction	Intersection	Traffic Control	LOS Threshold	Peak Hour	Delay ¹	LOS ²
	21. Elverta Road / 16th Street	AWSC	E	AM PM	13 22	B C
	22. Elverta Road / Watt Avenue	Signal	E	AM PM	31 26	C C

Notes: LOS = level of service. SSSC = side-street stop control. AWSC = all-way stop control. **Bold** indicates deficient LOS.

¹ Average control delay for signalized intersections is the weighted average for all movements. For side-street stop-controlled intersections, the average delay for the worse movement is shown in parentheses.

² LOS is calculated based on methodologies contained in the Highway Capacity Manual (HCM) 6th Edition.

³ Average control delay at Baseline Road/Brewer Road is calculated as the “overall weighted average delay for movements yielding the right-of-way,” per Placer County guidelines for side-street stop-controlled intersections.

Source: Fehr & Peers, 2020.

Roadway Segment Analysis

Roadway segment operations were analyzed for existing conditions based on daily roadway volumes. **Table 5** shows existing daily traffic, LOS, and volume-to-capacity ratio for the 20 study roadway segments. As shown in Table 5, most study roadway segments operate at LOS D or better on a daily basis. The following 3 study roadway segments operate at a deficient LOS.

- Baseline Road – Watt Avenue to Fiddymont Road / Walerga Road
- Walerga Road – Baseline Road to Sacramento County
- Elkhorn Boulevard – SR 99 to Natomas Boulevard

Table 5: Roadway Segment Analysis – Existing Conditions

Jurisdiction	Roadway Segment	Existing Conditions			
		Lanes	Classification ¹	ADT	LOS/VC
Sutter County	1. Sankey Rd – Power Line Rd to Pleasant Grove Rd	2	2R	1,128	C / 0.05
	2. Riego Rd – Power Line Rd to Pleasant Grove Rd (S)	2	2R	11,272	D / 0.54
	3. Power Line Rd – Sankey Rd to Sacramento County	2	2R	164	C / 0.01
	4. Pacific Ave – Sankey Rd to Riego Rd	2	2R	1,185	C / 0.06
	5. Natomas Rd – Sankey Rd to Sacramento County	2	2R	277	C / 0.01
	6. Pleasant Grove Rd – Sankey Rd to Rio Linda Blvd	2	2R	1,451	C / 0.07
Placer County	7. Baseline Rd – Pleasant Grove Rd (S) to Locust Rd	2	2R	11,272	D / 0.54
	8. Baseline Rd – Locust Rd to Watt Ave	2	2M	13,074	C / 0.73
	9. Baseline Rd – Watt Ave to Fiddymnt Rd / Walerga Rd	2	2M	19,657	F / 1.09
	10. Brewer Rd – Philip Rd to Baseline Rd	2	2M	282	A / 0.02
	11. Palladay Rd – Baseline Rd to Sacramento County	2	2M	21	A / 0.00
	12. Watt Ave – Baseline Rd to Sacramento County	2	2M	9,477	A / 0.53
	13. Walerga Rd – Baseline Rd to Sacramento County	2	2M	22,135	F / 1.23
Sacramento County	14. Elverta Rd – Power Line Rd to Watt Ave	2	2M	7,198	A / 0.40
	15. Power Line Rd – Sutter County to Elverta Rd	2	2RP	200	A / 0.01
	16. E. Levee Rd – Sacramento County to Elverta Rd	2	2RP	950	A / 0.05
	17. Sorento Rd – Rio Linda Blvd to Elverta Rd	2	2M	668	A / 0.04
	18. Palladay Rd – Placer County to Elverta Rd	2	2RP	205	A / 0.01
	19. 16th St – Placer County to Elverta Rd	2	2RP	650	A / 0.03
	20. Elkhorn Blvd – SR 99 to Natomas Blvd	2	2M	18,066	F / 1.00
	21. Watt Ave – Placer County to Elverta Rd	4	5M	17,016	A / 0.38

Notes: ADT = average daily traffic; LOS = level of service; VC = volume-to-capacity ratio; **Bold** indicates exceedance of General Plan LOS policy.

¹ Classification codes are based on “Table 2: LOS Criteria – Roadway Segments”.

Source: Fehr & Peers, 2020.

Freeway Facilities

Freeway operations were analyzed for northbound and southbound SR 99 between south of the SR 99 / I-5 interchange and Sankey Road. **Table 6** displays LOS and density for all 37 study freeway facilities under existing conditions. As shown in Table 6, all study freeway facilities operate at LOS E or better based on the HCM analysis. However, field observations and data from Caltrans Performance Measurement System (PeMS) indicates that sections of SR 99 are congested (i.e., operate at speeds of 35 miles per hour or less) during the morning and evening peak hours. These locations are identified with shading and bold text in **Table 6**.

Table 6: Freeway Operations Analysis – Existing Conditions

Freeway	Segment	Type	AM Peak Hour		PM Peak Hour		
			LOS	Density	LOS	Density	
SR 99 Northbound	1. I-5 NB to I-5 SB On-Ramp	Basic	B	16.0	C	25.8	
	2. I-5 On-Ramp to Elkhorn Blvd Off-Ramp	Weave ¹	B	13.7	B	-	
	3. Elkhorn Blvd	Basic	B	11.4	D	27.8	
	4. Elkhorn Blvd Loop On-Ramp	Merge	B	13.4	D	29.4	
	5. Elkhorn Blvd Slip On-Ramp	Merge	B	14.9	D	31.0	
	6. Elkhorn Blvd to Lane Add	Basic	B	12.4	D	29.8	
	7. Elkhorn Blvd to Elverta Road	Diverge	A	0.8	B	12.7	
	8. Elverta Road	Basic	B	11.3	C	24.8	
	9. Elverta Road Loop On-Ramp	Merge	B	13.5	C	27.2	
	10. Elverta Rd Btw. On Ramps	Basic	B	11.4	C	25.1	
	11. Elverta Road Slip On-Ramp	Merge	B	14.1	C	27.9	
	12. Elverta Road to Riego Road	Basic	B	11.6	C	25.3	
	13. Riego Road Off-Ramp	Diverge	B	15.9	D	31.0	
	14. Riego Road	Basic	A	9.3	C	19.0	
	15. Riego Road Loop On-Ramp	Merge	B	11.8	C	22.1	
	16. Riego Rd Btw. On Ramps	Basic	A	9.4	C	19.1	
	17. Riego Road Slip On-Ramp	Merge	B	12.2	C	22.7	
	SR 99 Southbound	18. Riego Road to Sankey Road	Basic	A	9.7	C	19.8
		19. Sankey Road to Riego Road	Basic	C	19.8	B	12.3
20. Riego Road Off-Ramp		Diverge	C	25.7	B	17.1	
21. Riego Road		Basic	C	19.0	B	11.9	
22. Riego Road Loop On-Ramp		Merge	C	26.9	B	16.6	
23. Riego Road Btw. On Ramps		Basic	C	25.3	B	14.4	
24. Riego Road Slip On-Ramp		Merge	C	27.9	B	17.3	
25. Riego Road to Elverta Road		Basic	C	25.4	B	14.6	
26. Elverta Road Off-Ramp		Diverge	D	31.4	B	19.6	
27. Elverta Road		Basic	C	23.7	B	14.3	
28. Elverta Road Loop On-Ramp		Merge	D	28.0	B	17.2	
29. Elverta Road Bet. On Ramps		Basic	D	26.4	B	15.1	
30. Elverta Road Slip On-Ramp		Merge	D	28.7	B	18.0	
31. Elverta Road to Elkhorn Blvd		Basic	D	26.9	B	15.7	
32. Elkhorn Blvd Off-Ramp		Diverge	D	31.9	C	20.1	
33. Elkhorn Blvd		Basic	C	24.2	B	14.6	
34. Elkhorn Blvd Loop On-Ramp		Merge	C	20.5	B	17.4	
35. Elkhorn Blvd Slip On-Ramp		Merge	C	21.5	C	21.6	
36. I-5 NB Off-Ramp		Diverge	C	20.8	B	12.3	
37. I-5 NB Off-Ramp to I-5 SB	Basic	C	25.4	A	10.5		

Notes:

Table 6: Freeway Operations Analysis – Existing Conditions

Freeway	Segment	Type	AM Peak Hour		PM Peak Hour	
			LOS	Density	LOS	Density

¹Weave segment is analyzed according to Leisch Method for Weaving Analysis. If the segment is out of the realm of weaving, HCM procedures apply and LOS/density are reported. If Leisch Method is applicable, this method only reports LOS.
 Source: Fehr & Peers, 2020.

Significance Criteria

The roadway impact significance criteria outlined below were developed based on the applicable policies of Sutter County, Placer County, and Sacramento County. Consistent with those policies, an impact to the roadway system is considered significant if implementation of the Lakeside project would meet the following criteria.

- **Sutter County Roadways and Intersections**
 - Cause the existing or cumulative no project level of service for study locations to deteriorate from LOS D (or better) to LOS E (or worse).
 - Exacerbate the existing or cumulative no project LOS E (or worse) conditions for study locations. The proposed project would exacerbate the existing or cumulative no project condition by increasing average delay per vehicle for intersections, or average daily traffic for roadways.

- **Placer County Roadways and Intersections**
 - Cause the existing or cumulative no project level of service for study locations not within one-half mile of a state highway to deteriorate from LOS C (or better) to LOS D (or worse) or for study locations within one-half mile of a state highway to deteriorate from LOS D (or better) to LOS E (or worse).
 - Exacerbate the existing or cumulative no project LOS D (or worse) conditions for study locations not within one-half mile of a state highway or LOS E (or worse) conditions for study locations within one-half mile of a state highway. For intersections, the proposed project would exacerbate the existing or cumulative no project condition by increasing the average delay per vehicle. For roadway segments, the proposed project would exacerbate the existing or cumulative no project condition by increasing average daily traffic by 100 or more vehicles per lane or by increasing the volume-to-capacity ratio by 0.05 or more.
 - Cause or exacerbate LOS E or worse conditions on roadways or intersections within or on the boundary of the Placer Vineyards Specific Plan Area plan area, which includes roadway segments and intersections on Baseline Road (Pleasant Grove Road

(South) to Walerga Road) and Watt Avenue (Baseline Road to Dyer Lane). For intersections, the proposed project would exacerbate the existing or cumulative no project condition by increasing the average delay per vehicle. For roadway segments, the proposed project would exacerbate the existing or cumulative no project condition by increasing average daily traffic by 100 or more vehicles per lane or by increasing the volume-to-capacity ratio by 0.05 or more.

- **Sacramento County Roadways and Intersections**

- Cause the existing or cumulative no project level of service for study locations within the Urban Service Boundary of Sacramento County to deteriorate from LOS E (or better) to LOS F.
- Cause the existing or cumulative no project level of service for study locations outside the Urban Service Boundary of Sacramento County to deteriorate from LOS D (or better) to LOS E.
- Exacerbate the existing or cumulative no project LOS F conditions for study locations within the Urban Service Boundary of Sacramento. The proposed project would exacerbate the existing or cumulative no project condition by increasing average delay per vehicle for intersections by 5 or more seconds or by increasing the volume-to-capacity ratio by 0.05 or more for roadways.
- Exacerbate the existing or cumulative no project LOS E (or worse) conditions for study locations outside the Urban Service Boundary of Sacramento. The proposed project would exacerbate the existing or cumulative no project condition by increasing average delay per vehicle for intersections by 5 or more seconds or by increasing the volume-to-capacity ratio by 0.05 or more for roadways.

- **Caltrans Facilities**

- Cause the existing or cumulative no project level of service for study locations to deteriorate from LOS E (or better) to LOS F.
- Exacerbate the existing or cumulative no project LOS F (or worse) conditions for study locations by adding traffic to a freeway/highway segment, ramp terminal intersection, or ramp junction influence area.

Existing Plus Project Conditions

Trip Generation

The internalization of trips within the Lakeside area was estimated using a Mixed-Use Trip Generation Model (MXD), which was developed for the US Environmental Protection Agency (EPA) to estimate internal trip-making and external trips by non-auto travel modes. This model was developed by consultants and academic researchers to more accurately estimate the external vehicular trip generation of mixed-use land development projects than prior methods (e.g., ITE internalization spreadsheet). The model was developed based on empirical evidence at 240 mixed-use projects located across the U.S. The model considers various built environment variables such as land use density, regional location, proximity to transit, and various design variables when calculating the project’s internal trips, and external trips made by auto, transit, and non-motorized modes. The MXD model has been applied in numerous EIRs and other CEQA documents throughout California. The MXD+ model output for the proposed Lakeside at Sutter Pointe is provided in Attachment A.

Table 7 displays the daily, AM peak hour, and PM peak hour trip generation of the proposed project under baseline conditions. This table shows that between 14 and 21 percent of Lakeside trips (depending on the analysis period) are expected to remain internal to the site. Due to the rural location of the proposed project, external travel by walk, bike, and transit is less than 1% of project trips for all analysis periods. Lakeside at Sutter Pointe would generate approximately 45,971 external daily trips, 3,644 AM peak hour trips (57 percent outbound), and 4,472 PM peak hour trips (47 percent outbound).

Table 7: Peak Hour and Daily Trip Generation Estimate – Lakeside at Sutter Pointe

Land Use	ITE Code	Quantity	Trips ¹						
			Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Single-Family Residential	210	3,388 d.u.	32,115	629	1,888	2,517	2,122	1,246	3,368
Multi-Family Residential	221	399 d.u.	2,173	35	98	133	102	65	167
Shopping Center	820	272 ksf	11,872	179	109	288	547	592	1,139
General Office Building	710	683 ksf	5,758	701	114	815	129	679	808
Elementary School	520	1,200 students	2,268	434	370	804	98	106	204
Gross Trips			54,186	1,978	2,579	4,557	2,998	2,688	5,686

Table 7: Peak Hour and Daily Trip Generation Estimate – Lakeside at Sutter Pointe

Land Use	ITE Code	Quantity	Trips ¹						
			Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Reduction for Internal Trips ² (14.6% Daily / 19.2% AM / 20.8% PM)			-7,906	-379	-495	-874	-623	-559	-1,182
Reduction for Walk/Bike/Transit Trips ² (0.6% Daily / 0.9% AM / 0.6% PM)			-309	-17	-22	-39	-17	-15	-32
Net External Vehicle Trips			45,971	1,582	2,062	3,644	2,358	2,114	4,472

Notes: ksf = thousand square feet, d.u. = dwelling units

¹ Gross trip rates based on *Trip Generation Manual, 10th Edition* (ITE, 2017) for all land uses with the exception of the General Office Building daily rate, which is based on a custom rate that accounts for the age of ITE General Office Building data. Trip rates for Single Family Residential, General Office Building (except for daily rate), and Elementary School are based on ITE weighted average rates. Trip rates for Multi-Family Residential and Shopping Center are based on ITE fitted curve equations.

² Internal trips, and external trips made by transit, walking, and bicycling, are based on MXD+ model output.

Source: Fehr & Peers, 2020.

Trip Distribution and Assignment

A modified version of SACOG’s SACSIM base year (2012) travel demand forecasting model, which is based on the 2016 *Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS)*, was used to estimate trip distribution for Lakeside. The model was validated for daily, AM peak hour, and PM peak hour conditions using Caltrans’ validation criteria (see Attachment A for validation test details). A select zone assignment of the proposed project was used to estimate project trip distribution on the surrounding roadway network.

Table 8 shows the proposed project’s trip distribution. It is estimated that most trips (67.5%) would travel to or from destinations south of the project site, while modest percentages would travel to/from destinations east (21%) and north (11%) of the project site. A small percentage of project trips (0.5%) would travel to/from the west.

Table 8: Trip Distribution – Lakeside at Sutter Pointe

Scenario	Direction (to/from)				
	North	South	East	West	Total
Sutter Pointe Phase 1 (Existing Plus Project Conditions)	11%	67.5%	21%	0.5%	100%

Source: Fehr & Peers, 2020.

Project trips were assigned to the study roadway network (intersections, roadways, and freeway facilities) based on the travel characteristics (i.e., trip generation and distribution) outlined above to produce existing plus project conditions volumes. **Figure 2** shows peak hour turning movements, lane configurations, and control types for the 34 study and project-only intersections under existing plus project conditions.

Intersection Operations

Intersection operations were analyzed for existing plus project conditions and results were compared to existing conditions to determine project impacts based on the applicable significance criteria. **Table 9** shows intersection LOS results for existing plus project conditions. As shown in Table 9, most existing study intersections would continue to operate at acceptable levels of service with the addition of the proposed project. The following 9 study intersections would operate at a deficient LOS during both peak hours.

- SR 99 / Sankey Road
- Riego Road / Pacific Avenue
- Riego Road / Natomas Road
- Riego Road / Pleasant Grove Road (N)
- Baseline Road / Pleasant Grove Road (S)
- Baseline Road / Locust Road
- Baseline Road / Brewer Road
- Baseline Road / Watt Avenue
- Baseline Road / Fiddymment Road / Walerga Road

Figures 2A and 2B show intersection peak hour turning movement volumes, lane configurations, and control types under existing plus project conditions.

Table 9: Intersection Operations – Existing Plus Project Conditions

Jurisdiction	Intersection	Traffic Control	LOS Threshold	Peak Hour	Existing Conditions		Existing Plus Project Conditions	
					Delay ¹	LOS ²	Delay	LOS
Sutter County	1. Sankey Road / Power Line Road	SSSC	D	AM	6 (9)	A (A)	6 (9)	A (A)
				PM	7 (9)	A (A)	7 (9)	A (A)
	2. SR 99 / Sankey Road	SSSC	D	AM	3 (53)	A (F)	4 (54)	A (F)
				PM	5 (136)	A (F)	7 (239)	A (F)
	3. Sankey Road / Pacific Avenue	SSSC	D	AM	3 (9)	A (A)	4 (9)	A (A)
				PM	5 (10)	A (A)	6 (10)	A (A)

Table 9: Intersection Operations – Existing Plus Project Conditions

Jurisdiction	Intersection	Traffic Control	LOS Threshold	Peak Hour	Existing Conditions		Existing Plus Project Conditions	
					Delay ¹	LOS ²	Delay	LOS
	4. Riego Road / Power Line Road	AWSC	D	AM PM	8 7	A A	8 7	A A
	5. Riego Road / SR 99 Southbound Ramps	Signal	D	AM PM	8 7	A A	9 9	A A
	6. Riego Road / SR 99 Northbound Ramps	Signal	D	AM PM	4 7	A A	6 16	A B
	7. Riego Road / Pacific Avenue	SSSC	D	AM PM	1 (15) 2 (16)	A (C) A (C)	11 (631) 36 (1049)	B (F) E (F)
	8. Riego Road / Natomas Road	AWSC	D	AM PM	28 32	D D	482 691	F F
	9. Riego Road / Pleasant Grove Road (N)	AWSC	D	AM PM	38 47	E E	470 680	F F
	10. Baseline Road / Pleasant Grove Road (S)	AWSC	D	AM PM	47 70	E F	440 713	F F
	11. Baseline Road / Locust Road	AWSC	D	AM PM	57 47	F E	404 536	F F
	12. Baseline Road / Brewer Road ³	SSSC	D	AM PM	<1 (20) <1 (17)	A (C) A (C)	1 (109) 17 (1246)	A (F) C (F)
Placer County	13. Baseline Road / Watt Avenue	Signal	D	AM PM	15 31	B C	169 259	F F
	14. Baseline Road / Fiddymment Road / Walerga Road	Signal	D	AM PM	47 84	D F	77 129	E F
	15. Elverta Road / Power Line Road	AWSC	E	AM PM	8 7	A A	8 7	A A
	16. Elverta Road / SR 99 Southbound Ramps	Signal	D	AM PM	7 7	A A	7 7	A A
	17. Elverta Road / SR 99 Northbound Ramps	Signal	D	AM PM	5 4	A A	5 4	A A
	18. Elverta Road / E. Levee Road	AWSC	E	AM PM	13 17	B C	23 27	C D
	19. Elverta Road / Sorento Road	SSSC	E	AM PM	2 (13) 1 (18)	A (B) A (C)	4 (17) 3 (29)	A (C) A (D)
Sacramento County	20. Elverta Road / Palladay Road	SSSC	E	AM PM	<1 (13) <1 (13)	A (B) A (B)	<1 (13) <1 (13)	A (B) A (B)
	21. Elverta Road / 16th Street	AWSC	E	AM PM	13 22	B C	14 24	B C

Table 9: Intersection Operations – Existing Plus Project Conditions

Jurisdiction	Intersection	Traffic Control	LOS Threshold	Peak Hour	Existing Conditions		Existing Plus Project Conditions	
					Delay ¹	LOS ²	Delay	LOS
	22. Elverta Road / Watt Avenue	Signal	E	AM PM	31 26	C C	33 29	C C

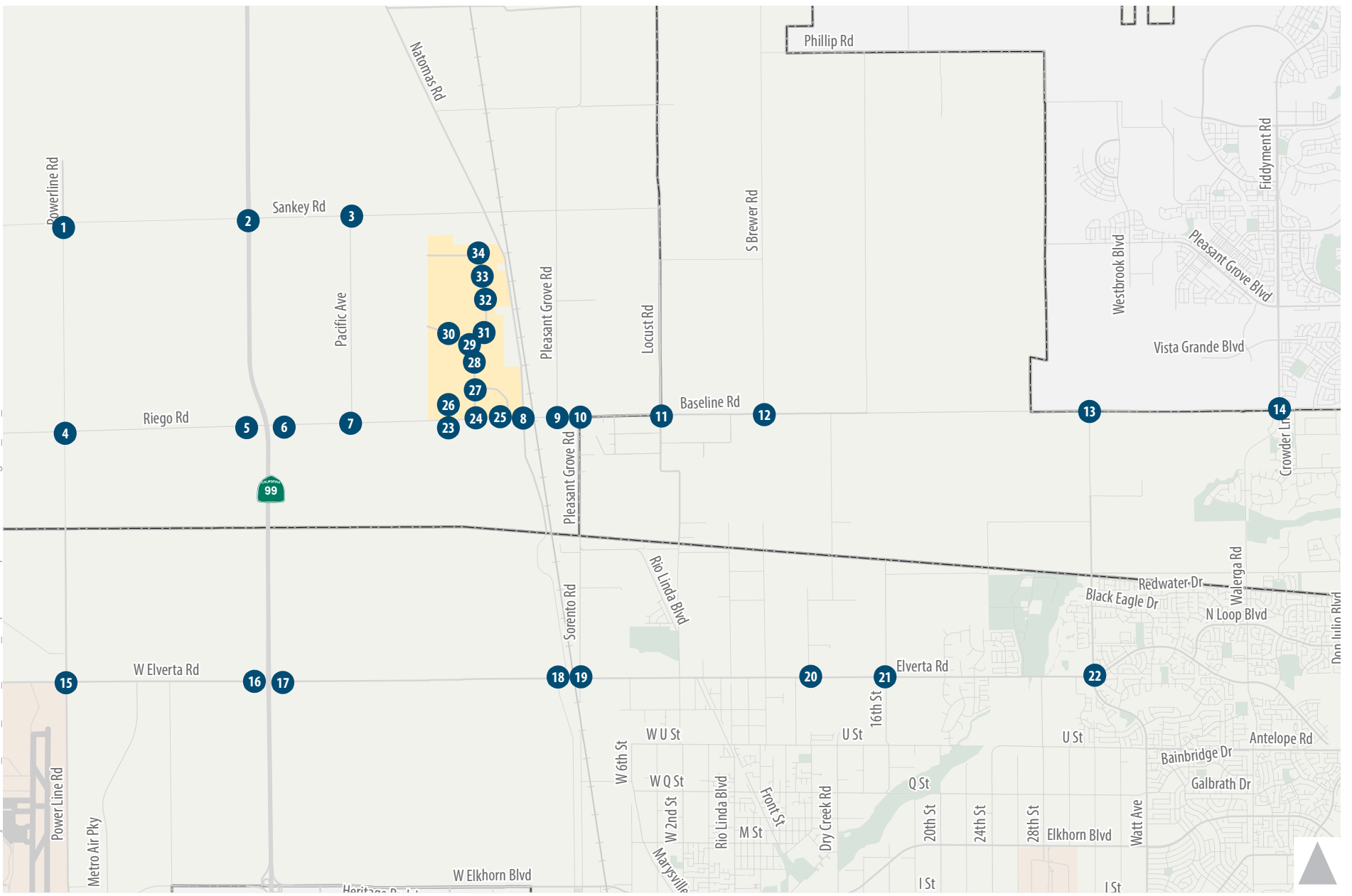
Notes: LOS = level of service. SSSC = side-street stop control. AWSC = all-way stop control. **Bold** indicates deficient LOS. **Bold and underline** indicates a significant impact.

¹ Average control delay for signalized intersections is the weighted average for all movements. For side-street stop-controlled intersections, the average delay for the worse movement is shown in parentheses.

² LOS is calculated based on methodologies contained in the Highway Capacity Manual (HCM) 6th Edition.

³ Average control delay at Baseline Road/Brewer Road is calculated as the “overall weighted average delay for movements yielding the right-of-way,” per Placer County guidelines for side-street stop-controlled intersections.

Source: Fehr & Peers, 2020.



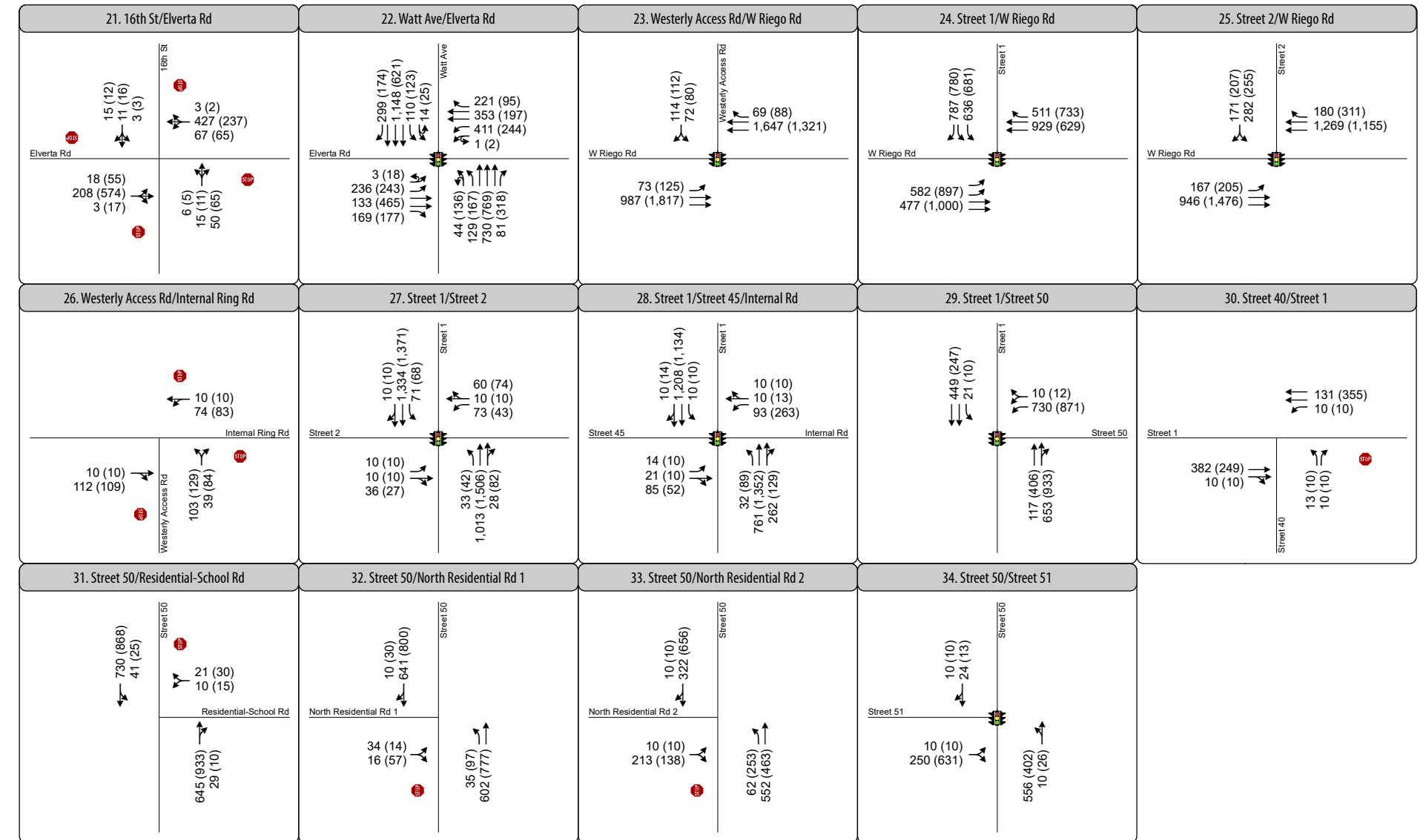
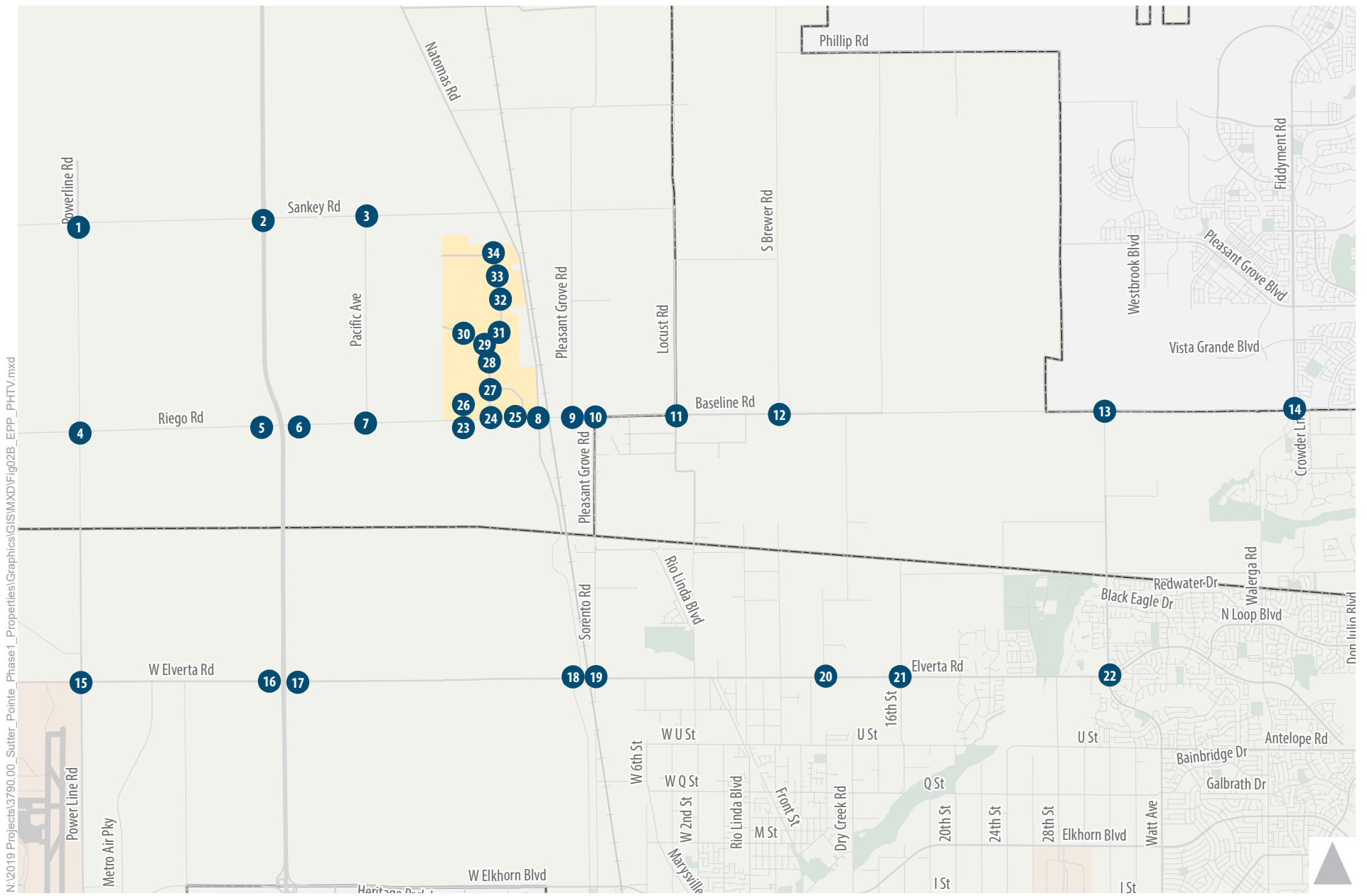
<p>1. Powerline Rd/Sankey Rd</p>	<p>2. SR 99/Sankey Rd</p>	<p>3. Pacific Ave/Sankey Rd</p>	<p>4. Power Line Rd/Riego Rd</p>	<p>5. SR 99 SB Ramps/W Riego Rd</p>
<p>6. SR 99 NB Ramps/W Riego Rd</p>	<p>7. Pacific Ave/W Riego Rd</p>	<p>8. Natomas Rd/W Riego Rd</p>	<p>9. Pleasant Grove Rd/W Riego Rd</p>	<p>10. Pleasant Grove Rd/W Riego Rd/Baseline Rd</p>
<p>11. Locust Rd/Baseline Rd</p>	<p>12. Brewer Rd/Baseline Rd</p>	<p>13. Watt Ave/Baseline Rd</p>	<p>14. Walerga Rd/Fiddymnt Rd/Baseline Rd</p>	<p>15. Power Line Rd /Power Line Rd/Elverta Rd</p>
<p>16. SR 99 SB Ramps/W Elverta Rd</p>	<p>17. SR 99 NB Ramps/W Elverta Rd</p>	<p>18. E Levee Rd/W Elverta Rd</p>	<p>19. Sorento Rd/W Elverta Rd</p>	<p>20. Palladay Rd/Elverta Rd</p>

- 1 Study Intersection
- Project Site
- Turn Lane
- Traffic Signal
- AM (PM)** Peak Hour Traffic Volume
- Stop Sign

Figure 2A

Peak Hour Traffic Volumes and Lane Configurations - Existing Plus Project Conditions





- 1 Study Intersection
- Project Site
- Turn Lane
- AM (PM)** Peak Hour Traffic Volume
- Traffic Signal
- Stop Sign

Figure 2B
Peak Hour Traffic Volumes
and Lane Configurations -
Existing Plus Project Conditions



Roadway Segment Analysis

Roadway segment operations were analyzed for existing plus project conditions based on daily roadway volumes. Results were compared to existing conditions to determine project impacts based on applicable significance criteria. **Table 10** shows existing plus project daily traffic, LOS, and volume-to-capacity ratio for study roadway segments. As shown in Table 10, most study roadway segments would operate at LOS D or better on a daily basis. The following 8 roadway segments would operate at a deficient LOS.

- Riego Road – SR 99 Northbound Ramps to Pacific Avenue
- Riego Road – Pacific Avenue to westerly project driveway
- Riego Road – Street 2 to Natomas Road
- Riego Road – Natomas Road to Pleasant Grove Road (S)
- Baseline Road – Pleasant Grove Road (S) to Locust Road
- Baseline Road – Locust Road to Watt Avenue
- Baseline Road – Watt Avenue to Fiddymment Road / Walerga Road
- Walerga Road – Baseline Road to Sacramento County
- Elkhorn Boulevard – SR 99 to Natomas Boulevard

Table 10: Roadway Segment Analysis – Existing Plus Project Conditions

Juris-diction	Roadway Segment	Existing Conditions				Existing Plus Project Conditions			
		Lanes	Classification ¹	ADT	LOS/VC	Lanes	Classification	ADT	LOS/VC
Sutter County	1. Sankey Rd – Power Line Rd to Pleasant Grove Rd	2	2R	1,128	C / 0.05	2	2R	1,588	C / 0.08
	2. Riego Rd – Power Line Rd to Locust Rd	2	2R	11,272	D / 0.54	-	-	-	-
	2A. Riego Rd – Power Line Rd to SR 99 SB Ramps	-	-	-	-	2	2R	11,732	D / 0.56
	2B. Riego Rd – SR 99 SB Ramps to SR 99 NB Ramps	-	-	-	-	4	4E	23,224	C / 0.45
	2C. Riego Rd – SR 99 NB Ramps to Pacific Ave	-	-	-	-	2	2R	34,717	F / 1.67
	2D. Riego Rd – Pacific Ave to westerly project dwy	-	-	-	-	2	2R	35,177	F / 1.69
	2E. Riego Rd – westerly project dwy to Street 1	-	-	-	-	4	4E	34,462	C / 0.67
	2F. Riego Rd – Street 1 to Street 2	-	-	-	-	4	4E	31,774	C / 0.62
2G. Riego Rd – Street 2 to Natomas Rd	-	-	-	-	2	2R	33,338	F / 1.60	

Table 10: Roadway Segment Analysis – Existing Plus Project Conditions

Juris-diction	Roadway Segment	Existing Conditions				Existing Plus Project Conditions			
		Lanes	Classification ¹	ADT	LOS/VC	Lanes	Classification	ADT	LOS/VC
Placer County	2H. Riego Rd – Natomas Rd to Pleasant Grove Rd (S)	-	-	-	-	2	2R	32,648	<u>F/1.57</u>
	3. Power Line Rd – Sankey Rd to Sacramento County	2	2R	164	C / 0.01	2	2R	202	C / 0.01
	4. Pacific Ave – Sankey Rd to Riego Rd	2	2R	1,185	C / 0.06	2	2R	1,645	C / 0.08
	5. Natomas Rd – Sankey Rd to Sacramento County	2	2R	277	C / 0.01	2	2R	507	C / 0.02
	6. Pleasant Grove Rd – Sankey Rd to Rio Linda Blvd	2	2R	1,451	C / 0.07	2	2R	1,681	C / 0.08
	7. Baseline Rd – Pleasant Grove Rd (S) to Locust Rd	2	2R	11,272	D / 0.54	2	2R	32,648	<u>F/1.57</u>
	8. Baseline Rd – Locust Rd to Watt Ave	2	2M	13,074	C / 0.73	2	2M	30,084	<u>F/1.67</u>
	9. Baseline Rd – Watt Ave to Fiddymt Rd / Walerga Rd	2	2M	19,657	F / 1.09	2	2M	31,149	<u>F/1.73</u>
	10. Brewer Rd – Philip Rd to Baseline Rd	2	2M	282	A / 0.02	2	2M	512	A / 0.03
	11. Palladay Rd – Baseline Rd to Sacramento County	2	2M	21	A / 0.00	2	2M	21	A / 0.00
	12. Watt Ave – Baseline Rd to Sacramento County	2	2M	9,477	A / 0.53	2	2M	14,993	D / 0.83
	13. Walerga Rd – Baseline Rd to Sacramento County	2	2M	22,135	F / 1.23	2	2M	22,365	<u>F/1.24</u>
	Sacramento County	14. Elverta Rd – Power Line Rd to Watt Ave	2	2M	7,198	A / 0.40	2	2M	7,428
15. Power Line Rd – Sutter County to Elverta Rd		2	2RP	200	A / 0.01	2	2RP	238	A / 0.01
16. E. Levee Rd – Sacramento County to Elverta Rd		2	2RP	950	A / 0.05	2	2RP	1,410	A / 0.07
17. Sorento Rd – Rio Linda Blvd to Elverta Rd		2	2M	668	A / 0.04	2	2M	2,736	A / 0.15
18. Palladay Rd – Placer County to Elverta Rd		2	2RP	205	A / 0.01	2	2RP	205	A / 0.01
19. 16th St – Placer County to Elverta Rd		2	2RP	650	A / 0.03	2	2RP	650	A / 0.03
20. Elkhorn Blvd – SR 99 to Natomas Blvd		2	2M	18,066	F / 1.00	2	2M	18,526	F / 1.03
21. Watt Ave – Placer County to Elverta Rd		4	5M	17,016	A / 0.38	4	5M	22,302	A / 0.50

Notes: ADT = average daily traffic; LOS = level of service; VC = volume-to-capacity ratio; **Bold** indicates exceedance of General Plan LOS policy. **Bold and underline** indicates a significant impact.

Table 10: Roadway Segment Analysis – Existing Plus Project Conditions

Juris-diction	Roadway Segment	Existing Conditions				Existing Plus Project Conditions			
		Lanes	Classification ¹	ADT	LOS/VC	Lanes	Classification	ADT	LOS/VC

¹ Classification codes are based on "Table 2: LOS Criteria – Roadway Segments".

Source: Fehr & Peers, 2020.

Freeway Facilities

Freeway operations were analyzed under existing plus project conditions and results were compared to existing conditions to determine project impacts. **Table 11** displays LOS and density for the 37 study freeway facilities under existing plus project conditions. As shown in Table 11, most study freeway facilities would continue to operate at LOS E or better. The following 4 northbound SR 99 segments would operate at unacceptable LOS.

- Elkhorn Boulevard loop on-ramp – merge segment (PM peak hour)
- Elkhorn Boulevard slip on-Ramp – merge segment (PM peak hour)
- Elkhorn Boulevard to lane addition – basic segment (PM peak hour)
- Riego Road off-ramp – diverge segment (PM peak hour)

The following southbound SR 99 segments would operate at unacceptable LOS.

- Elverta Road off-ramp – diverge segment (AM peak hour)
- Elkhorn Boulevard off-ramp – diverge segment (AM peak hour)

Table 11: Freeway Operations Analysis – Existing Plus Project Conditions

Freeway	Segment	Type	Existing Conditions				Existing Plus Project Conditions			
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
			LOS	Density	LOS	Density	LOS	Density	LOS	Density
SR 99 Northbound	1. I-5 NB to I-5 SB On-Ramp	Basic	B	16.0	C	25.8	C	21.4	E	35.9
	2. I-5 On-Ramp to Elkhorn Blvd Off-Ramp	Weave ¹	B	13.7	B	-	B	-	E	-
	3. Elkhorn Blvd	Basic	B	11.4	D	27.8	C	18.4	E	44.1
	4. Elkhorn Blvd Loop On-Ramp	Merge	B	13.4	D	29.4	C	20.5	F	-
	5. Elkhorn Blvd Slip On-Ramp	Merge	B	14.9	D	31.0	C	22.2	F	-
	6. Elkhorn Blvd to Lane Add	Basic	B	12.4	D	29.8	C	19.6	F	-
	7. Elkhorn Blvd to Elverta Road	Diverge	A	0.8	B	12.7	A	6.0	B	18.2
	8. Elverta Road	Basic	B	11.3	C	24.8	C	18.4	E	39.2
	9. Elverta Road Loop On-Ramp	Merge	B	13.5	C	27.2	C	20.7	E	36.5

Table 11: Freeway Operations Analysis – Existing Plus Project Conditions

Freeway	Segment	Type	Existing Conditions				Existing Plus Project Conditions			
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
			LOS	Density	LOS	Density	LOS	Density	LOS	Density
SR 99 South-bound	10. Elverta Rd Btw. On Ramps	Basic	B	11.4	C	25.1	C	18.4	E	39.8
	11. Elverta Road Slip On-Ramp	Merge	B	14.1	C	27.9	C	21.3	E	37.2
	12. Elverta Road to Riego Road	Basic	B	11.6	C	25.3	C	18.6	E	40.3
	13. Riego Road Off-Ramp	Diverge	B	15.9	D	31.0	C	23.9	F	-
	14. Riego Road	Basic	A	9.3	C	19.0	A	9.3	C	19.0
	15. Riego Road Loop On-Ramp	Merge	B	11.8	C	22.1	B	11.8	C	22.1
	16. Riego Rd Btw. On Ramps	Basic	A	9.4	C	19.1	A	9.4	C	19.1
	17. Riego Road Slip On-Ramp	Merge	B	12.2	C	22.7	B	13.3	C	23.7
	18. Riego Road to Sankey Road	Basic	A	9.7	C	19.8	A	10.7	C	20.7
	19. Sankey Road to Riego Road	Basic	C	19.8	B	12.3	C	20.6	B	13.4
	20. Riego Road Off-Ramp	Diverge	C	25.7	B	17.1	C	26.5	B	18.3
	21. Riego Road	Basic	C	19.0	B	11.9	C	19.0	B	11.9
	22. Riego Road Loop On-Ramp	Merge	C	26.9	B	16.6	D	34.7	C	24.6
	23. Riego Road Btw. On Ramps	Basic	C	25.3	B	14.4	E	39.6	C	23.3
	24. Riego Road Slip On-Ramp	Merge	C	27.9	B	17.3	E	36.8	C	26.3
	25. Riego Road to Elverta Road	Basic	C	25.4	B	14.6	E	39.7	C	23.5
	26. Elverta Road Off-Ramp	Diverge	D	31.4	B	19.6	F	-	D	29.5
	27. Elverta Road	Basic	C	23.7	B	14.3	E	36.3	C	23.3
	28. Elverta Road Loop On-Ramp	Merge	D	28.0	B	17.2	E	36.9	C	26.3
	29. Elverta Road Bet. On Ramps	Basic	D	26.4	B	15.1	E	41.3	C	24.1
	30. Elverta Road Slip On-Ramp	Merge	D	28.7	B	18.0	E	37.6	C	27.0
	31. Elverta Road to Elkhorn Blvd	Basic	D	26.9	B	15.7	E	42.0	C	24.9
	32. Elkhorn Blvd Off-Ramp	Diverge	D	31.9	C	20.1	F	-	D	30.1
	33. Elkhorn Blvd	Basic	C	24.2	B	14.6	E	36.4	C	23.3
	34. Elkhorn Blvd Loop On-Ramp	Merge	C	20.5	B	17.4	D	26.6	D	26.5
	35. Elkhorn Blvd Slip On-Ramp	Merge	C	21.5	C	21.6	C	26.6	D	30.3
	36. I-5 NB Off-Ramp	Diverge	C	20.8	B	12.3	D	27.0	C	18.1
	37. I-5 NB Off-Ramp to I-5 SB	Basic	C	25.4	A	10.5	D	34.8	B	15.0

Notes:

¹Weave segment is analyzed according to Leisch Method for Weaving Analysis. If the segment is out of the realm of weaving, HCM procedures apply and LOS/density are reported. If Leisch Method is applicable, this method only reports LOS. Source: Fehr & Peers, 2020.

Cumulative Conditions

Cumulative (No Project) Conditions

The cumulative (no project) conditions scenario reflects future conditions without the proposed Lakeside at Sutter Pointe project. A modified version of SACOG’s SACSIM cumulative year (2036) travel demand forecasting model was used to develop cumulative year (no project) forecasts at study intersections, roadway segments, and freeway facilities. The cumulative year model includes population and employment growth and reasonably foreseeable transportation improvements in the SACOG region, including projects from SACOG’s 2016 *Metropolitan Transportation Plan/Sustainable Communities Strategy* (MTP/SCS).

In the study area, the following transportation improvements were included in the cumulative conditions analysis, since they are identified in the 2016 MTP/SCS (i.e., with a completion date by 2036) or are conditions placed on study-area development projects (e.g., Placer Vineyards Specific Plan¹):

- Baseline Road (Brady Lane to Fiddymont Road) – Widen from 3 to 4 lanes
- Baseline Road (Fiddymont Road to Sierra Vista Western edge west of Watt Avenue) – Widen from 2 to 4 lanes
- Baseline Road (Brady Lane to Fiddymont Road) – Widen from 3 to 4 lanes
- Baseline Road (Watt Avenue to 16th Street) – Widen from 2 to 4 lanes
- Baseline Road (Sutter County Line to 16th Street) – Widen from 2 to 4 lanes
- Riego Road (SR 99 to Placer County) – Widen from 2 to 4 lanes
- Riego Road/ Natomas Road – Install traffic signal (750 DUEs in Placer Vineyards Specific Plan)
- Riego Road/ Pleasant Grove Road (N) – Install traffic signal (750 DUEs in Placer Vineyards Specific Plan)
- Baseline Road/ Pleasant Grove Road (S) – Install traffic signal (750 DUEs in Placer Vineyards Specific Plan)
- Baseline Road/Locust Road – Install traffic signal (750 DUEs in Placer Vineyards Specific Plan)

This study applies a forecasting procedure known as the “difference method” to develop future year forecasts. The difference method takes the difference between future year and base year traffic volumes from the model and adds them to the existing traffic volumes. This method corrects any potential anomalies within the model. This forecasting procedure is calculated as follows:

¹ Placer Vineyards Specific Plan Development Phase Phasing Plan (April, 2017)

$$\text{Cumulative (No Project) Forecast} = \text{Existing Traffic Count} + \\ (\text{“Cumulative No Project” Raw Model Volume} - \text{Base Year Raw Model Volume})$$

In instances where a turning movement at a study intersection does not exist today, the cumulative raw model volume is used directly. **Figure 3** presents the intersection turning lane geometrics, traffic control, and cumulative AM and PM peak hour traffic forecasts for the 22 study intersections.

Cumulative Plus Project Conditions

The cumulative plus project conditions scenario reflects future conditions with buildout of the proposed Lakeside at Sutter Pointe project. The cumulative conditions travel demand forecasting model was modified as follows to develop the cumulative plus project conditions model.

- Modifications were made to include the proposed project land use and roadway circulation system.
- Instead of just adding the project on top of cumulative conditions, a land use reallocation method was used to maintain SACOG’s 2016 MTP/SCS population and employment growth assumptions under cumulative conditions with the addition of the proposed project. Land use was reallocated to the Lakeside at Sutter Pointe project from other projects designated as “Developing Communities” in the 2016 MTP/SCS.

Different scenarios, such as cumulative (no project) versus cumulative plus project, should be treated as different “snapshots” of the future. When changing land uses or roadway networks between future scenarios, the model produces a new set of forecasts reflecting different trip distribution and trip assignment results based on the changed input. This capability of the model recognizes that travel patterns 20 or more years in the future would likely be different if a significant roadway link is excluded or a major new land use development is added. Under this approach, the project’s traffic is not added to a fixed amount of traffic from the no project scenario. Rather, the “difference method” is applied using the cumulative plus project model. Therefore, the project may contribute traffic to many roadways under the cumulative plus project scenario but may not necessarily result in higher volumes on a roadway segment when compared to the no project scenario, and therefore not cause an impact. **Figure 4** presents the intersection turning lane geometrics, traffic control, and AM and PM peak hour traffic forecasts for the 22 study intersections under cumulative plus project conditions.

Intersection Operations

Intersection operations were analyzed for cumulative conditions and results were compared between no project and plus project conditions to determine project impacts based on the applicable significance criteria. **Table 12** shows intersection LOS results for cumulative and cumulative plus

project conditions. As shown in Table 12, the following 10 study intersections would operate at a deficient level of service:

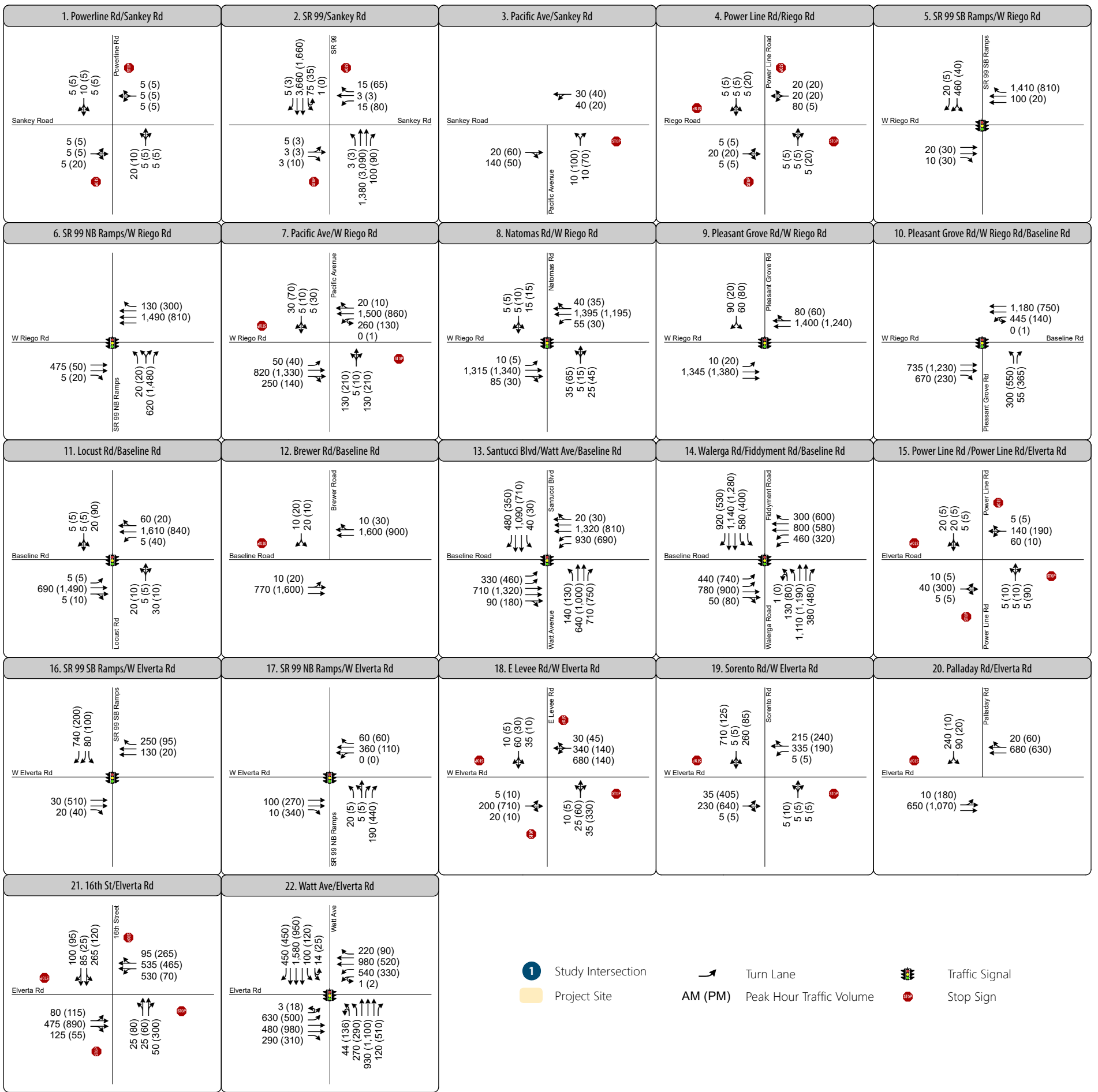
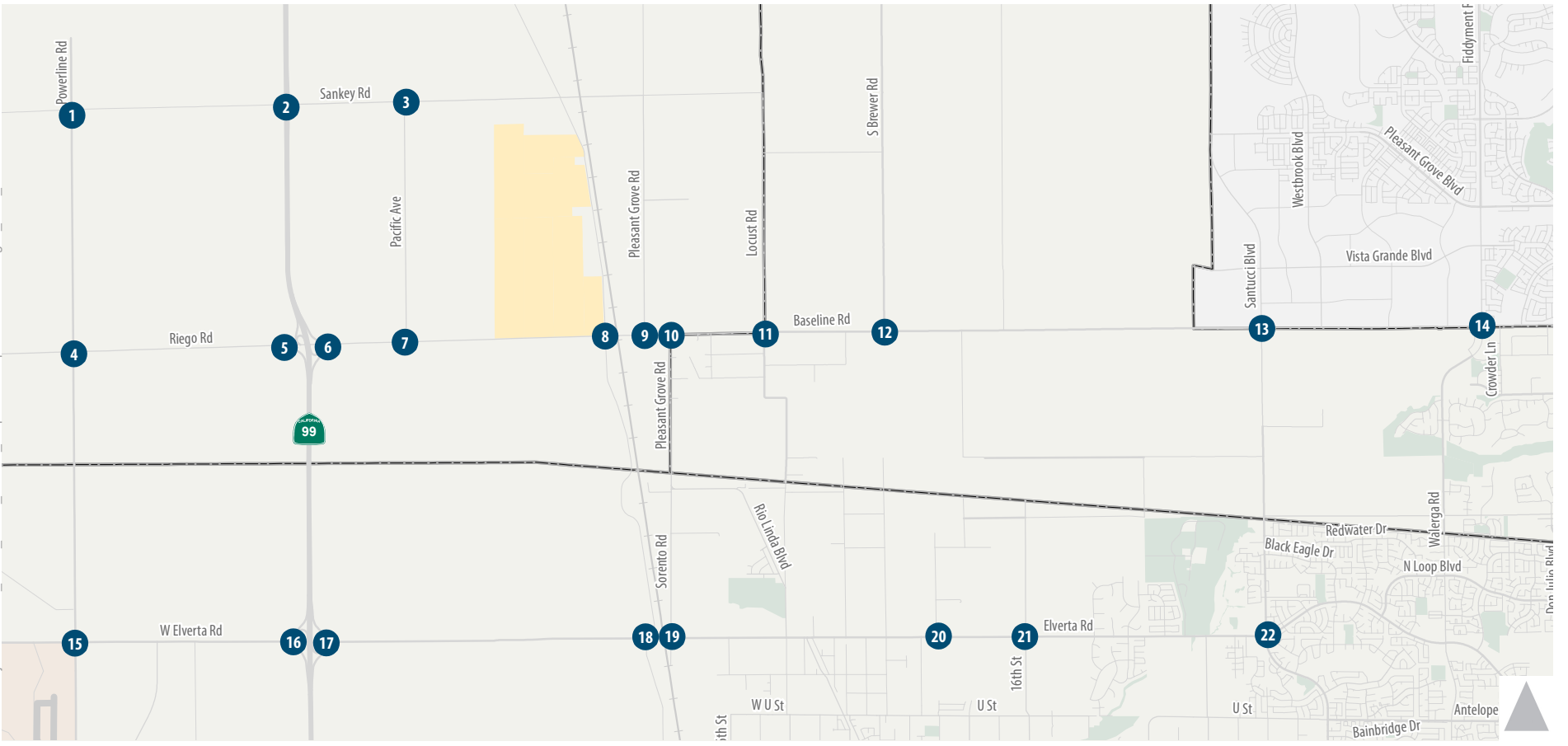
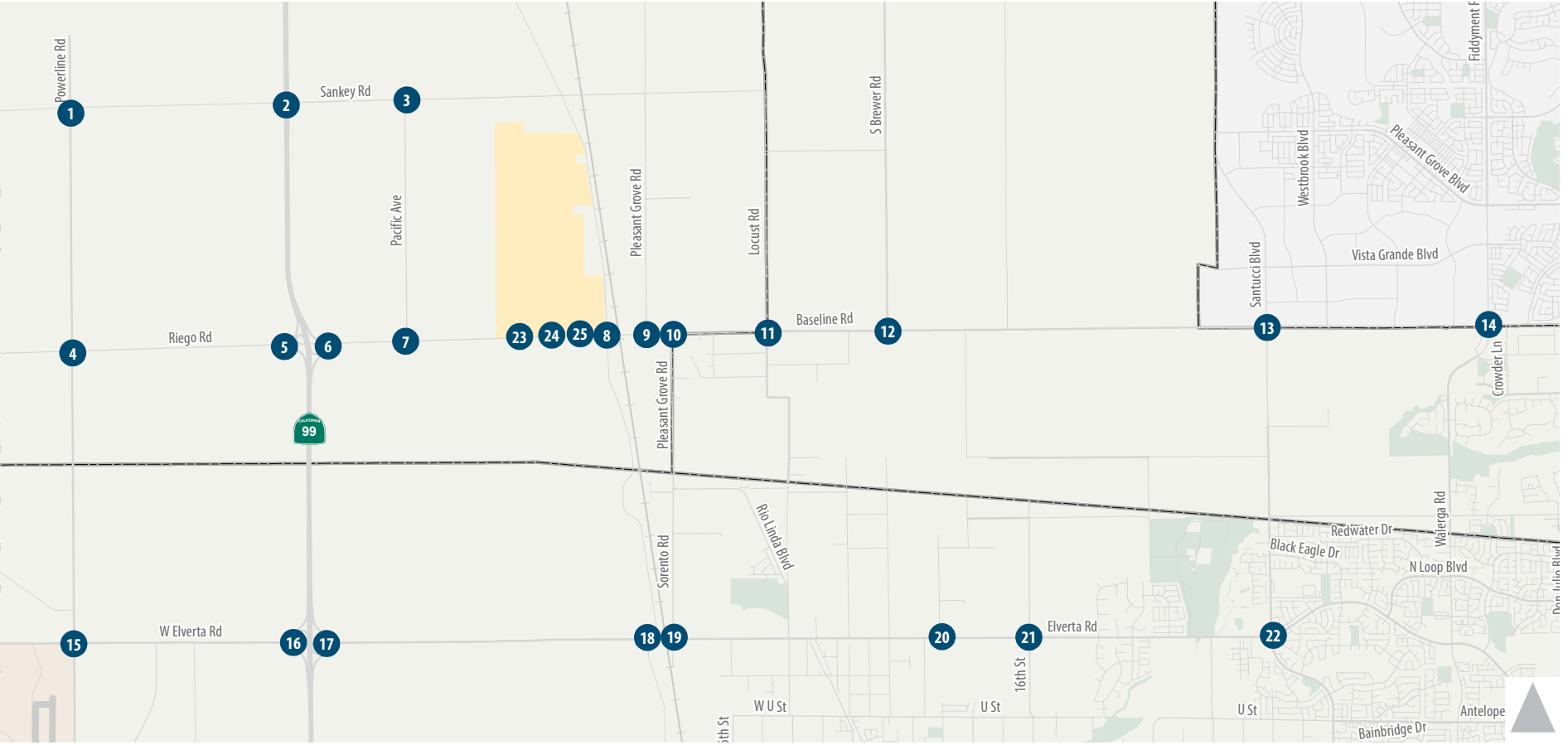


Figure 3
Peak Hour Traffic Volumes
and Lane Configurations -
Cumulative No Project Conditions





<p>1. Powerline Rd/Sankey Rd</p>	<p>2. SR 99/Sankey Rd</p>	<p>3. Pacific Ave/Sankey Rd</p>	<p>4. Power Line Rd/Riego Rd</p>	<p>5. SR 99 SB Ramps/W Riego Rd</p>
<p>6. SR 99 NB Ramps/W Riego Rd</p>	<p>7. Pacific Ave/W Riego Rd</p>	<p>8. Natomas Rd/W Riego Rd</p>	<p>9. Pleasant Grove Rd/W Riego Rd</p>	<p>10. Pleasant Grove Rd/W Riego Rd/Baseline Rd</p>
<p>11. Locust Rd/Baseline Rd</p>	<p>12. Brewer Rd/Baseline Rd</p>	<p>13. Santucci Blvd/Watt Ave/Baseline Rd</p>	<p>14. Walerga Rd/Fiddymnt Rd/Baseline Rd</p>	<p>15. Power Line Rd /Power Line Rd/Elverta Rd</p>
<p>16. SR 99 SB Ramps/W Elverta Rd</p>	<p>17. SR 99 NB Ramps/W Elverta Rd</p>	<p>18. E Levee Rd/W Elverta Rd</p>	<p>19. Sorento Rd/W Elverta Rd</p>	<p>20. Palladay Rd/Elverta Rd</p>
<p>21. 16th Street/Elverta Rd</p>	<p>22. Watt Ave/Elverta Rd</p>	<p>23. Westery Access Rd/Riego Rd</p>	<p>24. Street 1/W Riego Rd</p>	<p>25. Street 2/W Riego Rd</p>



- 1 Study Intersection
- Project Site
- Turn Lane
- Traffic Signal
- AM (PM)** Peak Hour Traffic Volume
- Stop Sign

Figure 4
**Peak Hour Traffic Volumes
 and Lane Configurations -
 Cumulative Plus Project Conditions**

- SR 99 / Sankey Road (both AM and PM peak hours)
- Riego Road / Pacific Avenue (both AM and PM peak hours)
- Baseline Road / Brewer Road (both AM and PM peak hours)
- Baseline Road / Watt Avenue (AM peak hour)
- Baseline Road / Fiddymment Road / Walerga Road (AM peak hour)
- Elverta Road / E. Levee Road (both AM and PM peak hours)
- Elverta Road / Sorento Road (both AM and PM peak hours)
- Elverta Road / Palladay Road (PM peak hour)
- Elverta Road / 16th Street (PM peak hour)
- Elverta Road / Watt Avenue (AM peak hour)

Table 12: Intersection Operations – Cumulative Plus Project Conditions

Jurisdiction	Intersection	Traffic Control	LOS Threshold	Peak Hour	Cumulative Conditions		Cumulative Plus Project Conditions	
					Delay ¹	LOS ²	Delay	LOS
Sutter County	1. Sankey Road / Power Line Road	SSSC	D	AM PM	6 (10) 7 (10)	A (A) A (A)	6 (10) 7 (10)	A (A) A (A)
	2. SR 99 / Sankey Road	SSSC	D	AM PM	25 (1,488) 27 (776)	D (F) D (F)	28 (1,520) 24 (792)	D (F) C (F)
	3. Sankey Road / Pacific Avenue	SSSC	D	AM PM	2 (10) 6 (11)	A (A) A (B)	2 (10) 6 (11)	A (A) A (B)
	4. Riego Road / Power Line Road	AWSC	D	AM PM	9 7	A A	9 7	A A
	5. Riego Road / SR 99 Southbound Ramps	Signal	D	AM PM	10 7	A A	10 8	A A
	6. Riego Road / SR 99 Northbound Ramps	Signal	D	AM PM	5 10	A A	4 11	A B
	7. Riego Road / Pacific Avenue	SSSC	D	AM PM	>1,000 (>1,000) >1,000 (>1,000)	F (F) F (F)	>1,000 (>1,000) >1,000 (>1,000)	F (F) F (F)
	8. Riego Road / Natomas Road	Signal	D	AM PM	17 18	B B	18 25	B C
	9. Riego Road / Pleasant Grove Road (N)	Signal	D	AM PM	9 9	A A	9 10	A B
Placer County	10. Baseline Road / Pleasant Grove Road (S)	Signal	D	AM PM	24 42	C D	29 55	C D
	11. Baseline Road / Locust Road	Signal	D	AM PM	11 15	B B	11 18	B B
	12. Baseline Road / Brewer Road ³	SSSC	D	AM PM	2 (136) 4 (109)	A (F) A (F)	3 (145) 78 (3,999)	A (F) A (F)

Table 12: Intersection Operations – Cumulative Plus Project Conditions

Jurisdiction	Intersection	Traffic Control	LOS Threshold	Peak Hour	Cumulative Conditions		Cumulative Plus Project Conditions	
					Delay ¹	LOS ²	Delay	LOS
	13. Baseline Road / Watt Avenue	Signal	D	AM	71	E	73	E
				PM	70	E	70	E
	14. Baseline Road / Fiddymment Road / Walerga Road	Signal	D	AM	85	F	85	F
				PM	108	F	108	F
Sacramento County	15. Elverta Road / Power Line Road	AWSC	E	AM	9	A	9	A
				PM	10	A	11	B
	16. Elverta Road / SR 99 Southbound Ramps	Signal	D	AM	6	A	6	A
				PM	6	A	6	A
	17. Elverta Road / SR 99 Northbound Ramps	Signal	D	AM	5	A	5	A
				PM	5	A	5	A
	18. Elverta Road / E. Levee Road	AWSC	E	AM	214	F	218	F
				PM	124	F	127	F
19. Elverta Road / Sorento Road	SSSC	E	AM	310 (4,158)	F (F)	331 (4,158)	F (F)	
			PM	226 (1,955)	F (F)	349 (2,956)	F (F)	
20. Elverta Road / Palladay Road	SSSC	E	AM	12 (62)	B (F)	11 (56)	B (F)	
			PM	4 (103)	A (F)	4 (111)	A (F)	
21. Elverta Road / 16th Street	AWSC	E	AM	196	F	194	F	
			PM	138	F	138	E	
22. Elverta Road / Watt Avenue	Signal	E	AM	87	F	90	F	
			PM	49	D	49	D	

Notes: LOS = level of service. SSSC = side-street stop control. AWSC = all-way stop control. **Bold** indicates deficient LOS. **Bold and underline** indicates a significant impact.

¹ Average control delay for signalized intersections is the weighted average for all movements. For side-street stop-controlled intersections, the average delay for the worse movement is shown in parentheses.

² LOS is calculated based on methodologies contained in the Highway Capacity Manual (HCM) 6th Edition.

³ Average control delay at Baseline Road/Brewer Road is calculated as the “overall weighted average delay for movements yielding the right-of-way,” per Placer County guidelines for side-street stop-controlled intersections.

Source: Fehr & Peers, 2020.

Roadway Segment Analysis

Roadway segment operations were analyzed for cumulative conditions based on daily roadway forecasts. Results were compared between no project and plus project to determine project impacts based on applicable significance criteria. **Table 13** shows cumulative and cumulative plus project daily traffic, LOS, and volume-to-capacity ratio for study roadway segments. As shown in Table 13, most study roadway segments would operate at LOS D or better on a daily basis under cumulative plus project conditions. The following 2 roadway segments would operate at a deficient LOS:

- Watt Avenue – Baseline Road to Sacramento County
- Walerga Road – Baseline Road to Sacramento County

Table 13: Roadway Segment Analysis – Cumulative Plus Project Conditions

Jurisdiction	Roadway Segment	Cumulative Conditions				Cumulative Plus Project Conditions			
		Lanes	Classification ¹	ADT	LOS/VC	Lanes	Classification	ADT	LOS/VC
Sutter County	1. Sankey Rd – Power Line Rd to Pleasant Grove Rd	2	2R	1,530	C / 0.07	2	2R	1,440	C / 0.07
	2. Riego Rd – Power Line Rd to Locust Rd	4	4E	27,980	C / 0.54	-	-	-	-
	2A. Riego Rd – Power Line Rd to SR 99 SB Ramps	-	-	-	-	2	2R	11,272	D / 0.54
	2B. Riego Rd – SR 99 SB Ramps to SR 99 NB Ramps	-	-	-	-	4	4E	19,161	C / 0.37
	2C. Riego Rd – SR 99 NB Ramps to Pacific Ave	-	-	-	-	4	4E	27,470	C / 0.53
	2D. Riego Rd – Pacific Ave to westerly project dwy	-	-	-	-	4	4E	28,202	C / 0.55
	2E. Riego Rd – westerly project dwy to Street 1	-	-	-	-	4	4E	28,533	C / 0.55
	2F. Riego Rd – Street 1 to Street 2	-	-	-	-	4	4E	30,171	C / 0.58
	2G. Riego Rd – Street 2 to Natomas Rd	-	-	-	-	4	4E	32,026	C / 0.62
	2H. Riego Rd – Natomas Rd to Pleasant Grove Rd (S)	-	-	-	-	4	4E	32,318	C / 0.63
	3. Power Line Rd – Sankey Rd to Sacramento County	2	2R	170	C / 0.01	2	2R	170	C / 0.01
	4. Pacific Ave – Sankey Rd to Riego Rd	2	2R	1,200	C / 0.06	2	2R	1,200	C / 0.06
	5. Natomas Rd – Sankey Rd to Sacramento County	2	2R	770	C / 0.04	2	2R	790	C / 0.04
	6. Pleasant Grove Rd – Sankey Rd to Rio Linda Blvd	2	2R	1,460	C / 0.07	2	2R	1,460	C / 0.07
Placer County	7. Baseline Rd – Pleasant Grove Rd (S) to Locust Rd	4	4E	27,980	C / 0.54	4	4E	32,318	C / 0.63
	8. Baseline Rd – Locust Rd to Watt Ave	4	4H	25,740	B / 0.64	4	4H	27,110	B / 0.68
	9. Baseline Rd – Watt Ave to Fiddymnt Rd / Walerga Rd	6	6M	36,410	B / 0.67	6	6M	36,990	B / 0.69
	10. Brewer Rd – Philip Rd to Baseline Rd	2	2M	790	A / 0.04	2	2M	740	A / 0.04

Table 13: Roadway Segment Analysis – Cumulative Plus Project Conditions

Jurisdiction	Roadway Segment	Cumulative Conditions				Cumulative Plus Project Conditions			
		Lanes	Classification ¹	ADT	LOS/VC	Lanes	Classification	ADT	LOS/VC
	11. Palladay Rd – Baseline Rd to Sacramento County	2	2M	2,170	A / 0.12	2	2M	2,050	A / 0.11
	12. Watt Ave – Baseline Rd to Sacramento County	4	4M	44,050	F / 1.22	4	4M	43,610	F / 1.21
	13. Walerga Rd – Baseline Rd to Sacramento County	4	4M	43,800	F / 1.22	4	4M	43,830	F / 1.22
Sacramento County	14. Elverta Rd – Power Line Rd to Watt Ave	2	2M	13,110	C / 0.73	2	2M	13,800	C / 0.77
	15. Power Line Rd – Sutter County to Elverta Rd	2	2RP	210	A / 0.01	2	2RP	210	A / 0.01
	16. E. Levee Rd – Sacramento County to Elverta Rd	2	2RP	2,040	A / 0.10	2	2RP	2,190	A / 0.11
	17. Sorento Rd – Rio Linda Blvd to Elverta Rd	2	2M	1,470	A / 0.08	2	2M	1,580	A / 0.09
	18. Palladay Rd – Placer County to Elverta Rd	2	2M	2,120	A / 0.12	2	2M	2,040	A / 0.11
	19. 16th St – Placer County to Elverta Rd	4	4M	9,066	A / 0.25	4	4M	9,058	A / 0.25
	20. Elkhorn Blvd – SR 99 to Natomas Blvd	6	6M	19,420	A / 0.36	6	6M	20,580	A / 0.38
	21. Watt Ave – Placer County to Elverta Rd	4	5M	43,340	E / 0.96	4	5M	43,010	E / 0.96

Notes: ADT = average daily traffic; LOS = level of service; VC = volume-to-capacity ratio; **Bold** indicates exceedance of General Plan LOS policy.

¹ Classification codes are based on "Table 2: LOS Criteria – Roadway Segments".

Source: Fehr & Peers, 2020.

Freeway Facilities

Freeway operations were analyzed under cumulative project conditions and results were compared between no project and plus project to determine project impacts. **Table 14** displays LOS and density for study freeway facilities under cumulative and cumulative plus project conditions. As shown in Table 14, most freeway facilities would operate at unacceptable LOS in the peak direction (i.e., southbound in the AM peak hour and northbound in the PM peak hour).

Table 14: Freeway Operations Analysis – Cumulative Plus Project Conditions

Freeway	Segment	Type	Cumulative Conditions				Cumulative Plus Project Conditions			
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
			LOS	Density	LOS	Density	LOS	Density	LOS	Density
SR 99 North-bound	1. I-5 NB to I-5 SB On-Ramp	Basic	C	21.3	C	25.8	C	21.1	E	41.8
	2. I-5 On-Ramp to Elkhorn Blvd Off-Ramp	Weave ¹	B	-	F	-	B	-	F	-
	3. Elkhorn Blvd	Basic	C	18.5	D	27.8	B	17.9	F	-
	4. Elkhorn Blvd Loop On-Ramp	Merge	C	24.4	D	29.4	C	23.8	F	-
	5. Elkhorn Blvd Slip On-Ramp	Merge	C	24.3	D	31.0	C	23.5	F	-
	6. Elkhorn Blvd to Lane Add	Basic	C	21.6	D	29.8	C	20.8	F	-
	7. Elkhorn Blvd to Elverta Road	Diverge	A	7.7	B	12.7	A	7.1	F	-
	8. Elverta Road	Basic	C	19.1	C	24.8	C	18.3	F	-
	9. Elverta Road Loop On-Ramp	Merge	C	21.6	C	27.2	C	20.8	E	-
	10. Elverta Rd Btw. On Ramps	Basic	C	19.2	C	25.1	C	18.4	F	-
	11. Elverta Road Slip On-Ramp	Merge	C	22.2	C	27.9	C	21.4	F	-
	12. Elverta Road to Riego Road	Basic	C	19.4	C	25.3	C	18.7	F	-
	13. Riego Road Off-Ramp	Diverge	C	24.9	D	31.0	C	24.0	F	-
	14. Riego Road	Basic	B	13.3	C	19.0	B	13.4	C	24.1
	15. Riego Road Loop On-Ramp	Merge	B	15.9	C	22.1	B	16.0	C	27.1
	16. Riego Rd Btw. On Ramps	Basic	B	13.3	C	19.1	B	13.4	C	24.3
	17. Riego Road Slip On-Ramp	Merge	B	17.4	C	22.7	B	17.6	D	29.5
	18. Riego Road to Sankey Road	Basic	B	14.6	C	19.8	B	14.8	D	27.2
SR 99 South-bound	19. Sankey Road to Riego Road	Basic	E	39.8	B	12.3	E	39.0	B	16.3
	20. Riego Road Off-Ramp	Diverge	F	-	B	17.1	F	-	C	21.6
	21. Riego Road	Basic	D	31.4	B	11.9	D	31.4	B	15.7
	22. Riego Road Loop On-Ramp	Merge	F	-	B	16.6	F	-	C	24.8
	23. Riego Road Btw. On Ramps	Basic	F	-	B	14.4	F	-	C	23.1
	24. Riego Road Slip On-Ramp	Merge	F	-	B	17.3	F	-	C	26.1
	25. Riego Road to Elverta Road	Basic	F	-	B	14.6	F	-	C	23.3
	26. Elverta Road Off-Ramp	Diverge	F	-	B	19.6	F	-	D	29.3
	27. Elverta Road	Basic	E	43.0	B	14.3	E	43.0	C	20.8
	28. Elverta Road Loop On-Ramp	Merge	F	-	B	17.2	F	-	C	23.9
	29. Elverta Road Bet. On Ramps	Basic	F	-	B	15.1	F	-	C	21.7
	30. Elverta Road Slip On-Ramp	Merge	F	-	B	18.0	F	-	C	24.7
	31. Elverta Road to Elkhorn Blvd	Basic	F	-	B	15.7	F	-	C	22.4
	32. Elkhorn Blvd Off-Ramp	Diverge	F	-	C	20.1	F	-	C	27.5
	33. Elkhorn Blvd	Basic	E	42.1	B	14.6	E	42.8	C	20.5
	34. Elkhorn Blvd Loop On-Ramp	Merge	D	28.8	B	17.4	D	29.1	C	23.4
	35. Elkhorn Blvd Slip On-Ramp	Merge	D	29.0	C	21.6	D	29.1	C	27.6

Table 14: Freeway Operations Analysis – Cumulative Plus Project Conditions

Freeway	Segment	Type	Cumulative Conditions				Cumulative Plus Project Conditions			
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
			LOS	Density	LOS	Density	LOS	Density	LOS	Density
	36. I-5 NB Off-Ramp	Diverge	F	-	B	12.3	F	-	B	16.3
	37. I-5 NB Off-Ramp to I-5 SB	Basic	F	-	A	10.5	F	-	B	14.5

Notes:

¹Weave segment is analyzed according to Leisch Method for Weaving Analysis. If the segment is out of the realm of weaving, HCM procedures apply and LOS/density are reported. If Leisch Method is applicable, this method only reports LOS. Source: Fehr & Peers, 2020.

Impact Analysis

The impact analysis contains impact statements and mitigation measures for those impact identified through the analysis of the study area intersections, roadway segments, and freeway facilities.

Existing Conditions

Transportation impacts identified under existing conditions with the addition of the Lakeside at Sutter pointe project are summarized below.

Impact 1: Implementation of the proposed Lakeside at Sutter Pointe project would cause significant LOS-related impacts at Sutter County intersections under existing plus project conditions.

Implementation of the proposed Lakeside at Sutter Pointe project would cause significant impacts at the following Sutter County intersections:

1. SR 99/Sankey Road – (Worsen unacceptable LOS F operations during the AM and PM peak hours and peak hour signal warrant not met)
2. Riego Road/Pacific Avenue – (LOS C to LOS F during the AM and PM peak hours and peak hour signal warrant met)
3. Riego Road/Natomas Road – (LOS D to LOS F during the AM and PM peak hours and signal warrant met)
4. Riego Road/Pleasant Grove Road (N) – (LOS E to LOS F during the AM and and PM peak hours and signal warrant met)

Impacts of the proposed Lakeside at Sutter Pointe at these four intersections is considered **significant**.

Summary

The proposed Lakeside at Sutter Pointe project would cause significant LOS-related impacts at four Sutter County intersections. Therefore, this impact is considered **significant**. Mitigation measures are required for the significant impact and are available to improve operations to acceptable levels.

Mitigation Measure

Mitigation measures identified below are recommended for significant intersection impacts:

Mitigation Measure 1

The project applicant shall construct the following mitigation projects, consistent with Mitigation Measure 3.3-1 of the Sutter Pointe Specific Plan DEIR. The analysis of the project under existing conditions assumes that the entire project develops immediately. However, development of the Lakeside at Sutter Pointe project will occur over time. Consequently, the timing of offsite infrastructure improvement is not certain and will be influenced by the following factors:

- The rate, location, and type of regional development, including Sutter County, Placer County, Sacramento County
- The implementation of roadway improvements constructed by others
- The location of development within the project site
- The type of development within the project site

Individual intersection widening and traffic control modifications will be largely constructed directly by the project applicant and other developers in the same area depending on when specific development project advance to the implementation phase.

1. Prior to issuance of building permits for 1,501 dwelling units, install directional signing on Sankey Rd (in advance of Pacific Ave) and on Pacific Ave (in advance of Riego Rd) directing driver to use Pacific Ave to Riego Rd to access SB SR 99 and areas west of SR 99.
2. Riego Road/Pacific Avenue
 - a. Prior to issuance of building permits for 1,101 dwelling units, construct an eastbound left-turn lane to allow for protected left-turn operations on eastbound Riego Road, a westbound right-turn lane, and separate southbound left- and right-turn lanes.

- b. Prior to issuance of building permits for 2,801 dwelling units, install a traffic signal and construct two eastbound and westbound through lanes.
3. Prior to issuance of building permits for 101 dwelling units, remove all-way stop control, install raised median to restrict access to Natomas Road to right-in/right-out only at the Riego Road/Natomas Road intersection. Riego Road will be uncontrolled.
4. Prior to issuance of building permits for 101 dwelling units, install a traffic signal and widen at the Riego Road/Pleasant Grove (N) intersection to provide a left-turn lane on the eastbound approach.

The intersection projects recommended above are needed to accommodate previously approved development in Placer County and surrounding jurisdictions. The need for these facilities could be accelerated with implementation of the Lakeside at Sutter Pointe project.

Significance After Mitigation: Successful implementation of Mitigation Measure 1-1 through 1-4 would reduce this impact to a less than significant level (see Table 15), in the long-term, once the required improvements have been funded and installed. In the short-term: however, the impact will be **significant and unavoidable** because the timing of the improvement cannot be guaranteed relative to when the impact may occur.

Impact 2: Implementation of the proposed Lakeside at Sutter Pointe project would cause significant LOS-related impacts at Placer County intersections under existing plus project conditions.

Implementation of the proposed Lakeside at Sutter Pointe project would cause significant impacts at the following Placer County intersections:

1. Baseline Road/Pleasant Grove Road (S) – (Worsen unacceptable LOS E or F operations during the AM and PM peak hours and peak hour signal warrant met)
2. Baseline Road/Locust Road – (Worsen unacceptable LOS E operations during the AM and LOS F operations during the PM peak hours and peak hour signal warrant met)
3. Baseline Road/Brewer Road – (LOS C to LOS F during the AM and PM peak hours)
4. Baseline Road/Watt Avenue – (LOS B to LOS F during the AM and LOS C to F during the PM peak hour)
5. Baseline Road/Fiddymont Road – (LOS D to LOS E during the AM and worsen unacceptable LOS F operations during the PM peak hour)

Impacts of the proposed Lakeside at Sutter Pointe at these five intersections is considered **significant**.

Summary

The proposed Lakeside at Sutter Pointe project would cause significant LOS-related impacts at five Placer County intersections. Therefore, this impact is considered **significant**. Mitigation measures are required for the significant impact and are available to improve operations to acceptable levels.

Mitigation Measure

Mitigation measures identified below are recommended for significant intersection impacts:

Mitigation Measure 2

The project applicant shall pay its fair share of costs for the following mitigation projects, consistent with Mitigation Measure 3.3-1 of the Sutter Pointe Specific Plan DEIR. The analysis of the project under existing conditions assumes that the entire project develops immediately. However, development of the Lakeside at Sutter Pointe project will occur over time. Consequently, the timing of offsite infrastructure improvement is not certain and will be influenced by the following factors:

- The rate, location, and type of regional development, including Sutter County, Placer County, Sacramento County
- The implementation of roadway improvements constructed by others
- The location of development within the project site
- The type of development within the project site
- The timing and ability of Sutter County to reach agreements with other public agencies regarding improvements outside Sutter County, as specified in Mitigation Measure 3.3-1 of the Sutter Pointe Specific Plan DEIR

Individual intersection widening and traffic control modifications will be largely constructed directly by the project applicant and other developers in the same area depending on when specific development project advance to the implementation phase.

1. Prior to the issuance of building permits for 101 dwelling units, install a traffic signal at the Baseline Road/Pleasant Grove Road (S) intersection and construct a westbound left-turn lane.
2. Prior to the issuance of building permits for 101 dwelling units, install a traffic signal at the Baseline Road/Locust Road intersection and construct eastbound and westbound left-turn lanes to allow for protected left-turn operations on eastbound and westbound Baseline Road.

3. Prior to the issuance of building permits for 3,401 dwelling units, construct eastbound left-turn lane at the Baseline Road/Brewer Road intersection.
4. Prior to the issuance of building permits for 3,401 dwelling units, widen Watt Avenue at the Baseline Road/Watt Avenue intersection to provide a second northbound left-turn lane.-OR- construct a second westbound left-turn lane and an overlap phase for the eastbound right-turn lane.
5. Prior to the issuance of building permits for 1,201 dwelling units, widen Walerga Road at the Baseline Road/Fiddymment Road intersection to construct a second northbound left-turn lane, widen Fiddymment Road to construct a second southbound left-turn lane, and provide an overlap phase for the southbound right-turn lane.

The roadway projects recommended above are needed to accommodate previously approved development in Placer County and surrounding jurisdictions. The need for these facilities could be accelerated with implementation of the Lakeside at Sutter Pointe project.

Significance After Mitigation: While successful implementation of Mitigation Measure 2-1 through 2-5 would reduce this impact to a less than significant level (see Table 15), these intersection projects are outside the jurisdiction of Sutter County, and for that reason the County must conservatively assume that the impact will be **significant and unavoidable**, despite the County's own commitment to work with Placer County. Consistent with CEQA Guidelines section 15091, subdivision (a)(2), Sutter County concludes that Placer County can and should cooperate with Sutter County in implementing the mitigation. In addition, even if all mitigation measures are successfully implemented, there may be a short-term **significant and unavoidable** impact, in the form of unacceptable levels of service, until such time as the contemplated improvements are in place.

Impact 3: Implementation of the proposed Lakeside at Sutter Pointe project would add traffic to Sacramento County intersections but would not cause significant LOS-related impacts under existing plus project conditions.

Summary

The proposed Lakeside at Sutter Pointe project would add traffic to Sacramento County intersection but would not cause significant LOS-related impacts. Therefore, this impact is considered **less than significant**. No mitigation measures are required.

Impact 4: Implementation of the proposed Lakeside at Sutter Pointe project would cause significant LOS-related impacts to Sutter County roadways under existing plus project conditions.

Implementation of the proposed Lakeside at Sutter Pointe project would cause significant impacts on the following Sutter County roadways:

1. Riego Road (SR 99 NB Ramps to Pacific Avenue) – (LOS D to LOS F)
2. Riego Road (Pacific Avenue to Westerly Project Driveway) – (LOS D to LOS F)
3. Riego Road (Street 2 to Natomas Road) – (LOS D to LOS F)
4. Riego Road (Natomas Road to Pleasant Grove Road (S)) – (LOS D to LOS F)

Impacts of the proposed Lakeside at Sutter Pointe at these four roadway segments is considered **significant**.

Summary

The proposed Lakeside at Sutter Pointe project would cause significant LOS-related impacts to four Sutter County roadways. Therefore, this impact is considered **significant**. Mitigation measures are required for the significant impact and are available to improve operations to acceptable levels.

Mitigation Measure

Mitigation measures identified below are recommended for significant roadway impacts:

Mitigation Measure 4

The project applicant shall construct the following mitigation projects, consistent with Mitigation Measure 3.3-1 of the Sutter Pointe Specific Plan DEIR. The analysis of the project under existing conditions assumes that the entire project develops immediately. However, development of the Lakeside at Sutter Pointe project will occur over time. Consequently, the timing of offsite infrastructure improvement is not certain and will be influenced by the following factors:

- The rate, location, and type of regional development, including Sutter County, Placer County, Sacramento County
- The implementation of roadway improvements constructed by others
- The location of development within the project site
- The type of development within the project site

Individual roadway widening and traffic control modifications will be largely constructed directly by the project applicant and other developers in the same area depending on when specific development project advance to the implementation phase.

Prior to issuance of building permits for 3,201 dwelling units, widen Riego Road from two to four lanes along the following segments:

- a) SR 99 NB Rams to Pacific Avenue
- b) Pacific Avenue to West Project Driveway

Prior to issuance of building permits for 3,401 dwelling units, pay fair share towards the widening of Riego Road from two to four lanes along the following segments:

- c) Street 2 to Natomas Road
- d) Natomas Road to Pleasant Grove Road (S)

Mitigation Measure 4-4 recommended above is needed to accommodate previously approved development in Placer County and surrounding jurisdictions. The need for these facilities could be accelerated with implementation of the Lakeside at Sutter Pointe project.

Significance After Mitigation: While successful implementation of Mitigation Measure 4-1 through 4-4 would reduce this impact to a less than significant level (see Table 16), in the long-term, once the required improvements have been funded and installed. In the short-term: however, the impact will be **significant and unavoidable** because the timing of the improvement cannot be guaranteed relative to when the impact may occur.

Impact 5: Implementation of the proposed Lakeside at Sutter Pointe project would cause significant LOS-related impacts to Placer County roadways under existing plus project conditions.

Implementation of the proposed Lakeside at Sutter Pointe project would cause significant impacts on the following Placer County roadways:

1. Baseline Road (Pleasant Grove Road (S) to Locust Road) – (LOS D to LOS F)
2. Baseline Road (Locust Road to Watt Avenue) – (LOS C to LOS F)
3. Baseline Road (Watt Avenue to Fiddymont Road/Walerga Road) – (Worsen LOS F conditions)
4. Walerga Road (Baseline Road to Sacramento County) – (Worsen LOS F conditions)

Impacts of the proposed Lakeside at Sutter Pointe at these three roadway segments is considered **significant**.

Summary

The proposed Lakeside at Sutter Pointe project would cause significant LOS-related impacts to three Placer County roadways. Therefore, this impact is considered **significant**. Mitigation measures are required for the significant impact and are available to improve operations to acceptable levels.

Mitigation Measure

Mitigation measures identified below are recommended for significant roadway impacts:

Mitigation Measure 5

The project applicant shall pay its fair share of costs for the following mitigation projects, consistent with Mitigation Measure 3.3-1 of the Sutter Pointe Specific Plan DEIR. The analysis of the project under existing conditions assumes that the entire project develops immediately. However, development of the Lakeside at Sutter Pointe project will occur over time. Consequently, the timing of offsite infrastructure improvement is not certain and will be influenced by the following factors

- The rate, location, and type of regional development, including Sutter County, Placer County, Sacramento County
- The implementation of roadway improvements constructed by others
- The location of development within the project site
- The type of development within the project site
- The timing and ability of Sutter County to reach agreements with other public agencies regarding improvements outside Sutter County, as specified in Mitigation Measure 3.3-1 of the Sutter Pointe Specific Plan DEIR

Individual roadway widening and traffic control modifications will be largely constructed directly by the project applicant and other developers in the same area depending on when specific development project advance to the implementation phase.

Prior to issuance of building permits for 3,401 dwelling units, widen Baseline Road and prior to issuance of building permits for 3501 dwelling units, widen Walerga Road from two to four lanes along the following segments:

- a) Baseline Road (Pleasant Grove Road (S) to Locust Road)
- b) Baseline Road (Locust Road to Watt Avenue)
- c) Baseline Road (Watt Avenue to Fiddymont Road/Walerga Road)

Walerga Road (Baseline Road to Sacramento County)

The roadway projects recommended above are needed to accommodate previously approved development in Placer County and surrounding jurisdictions. The need for these facilities could be accelerated with implementation of the Lakeside at Sutter Pointe project.

Significance After Mitigation: While successful implementation of Mitigation Measure 5-1 through 5-3 would reduce this impact to a less than significant level (see Table 16), these roadway projects are outside the jurisdiction of Sutter County, and for that reason the County must conservatively assume that the impact will be **significant and unavoidable**, despite the County's own commitment to work with Placer County. Consistent with CEQA Guidelines section 15091, subdivision (a)(2), Sutter County concludes that Placer County can and should cooperate with Sutter County in implementing the mitigation. In addition, even if all mitigation measures are successfully implemented, there may be a short-term **significant and unavoidable** impact, in the form of unacceptable levels of service, until such time as the contemplated improvements are in place.

Impact 6: Implementation of the proposed Lakeside at Sutter Pointe project would add traffic to Sacramento County roadways but would not cause significant LOS-related impacts under existing plus project conditions.

Summary

The proposed Lakeside at Sutter Pointe project would add traffic to Sacramento County roadways but would not cause significant LOS-related impacts. Therefore, this impact is considered **less than significant**. No mitigation measures are required.

Impact 7: Implementation of the proposed Lakeside at Sutter Pointe project would worsen unacceptable operations on Caltrans facilities under existing plus project conditions.

Implementation of the proposed Lakeside at Sutter Pointe project would worsen unacceptable operations on the following Caltrans roadways:

1. NB Elkhorn Blvd loop on-ramp merge – (Worsen LOS F conditions during the PM peak hour)
2. NB Elkhorn Blvd slip on-ramp merge – (Worsen LOS F conditions during the PM peak hour)
3. NB Elkhorn Blvd to lane add basic segment – (Worsen LOS F conditions during the PM peak hour)
4. NB Riego Rd off-ramp basic segment – (LOS D to LOS F)
5. SB Elverta Rd off-ramp diverge – Worsen LOS F conditions during the AM peak hour)

6. SB Elkhorn Blvd off-ramp diverge – Worsen LOS F conditions during the AM peak hour)

Impacts of the proposed Lakeside at Sutter Pointe at these six roadway segments is considered **significant**.

Summary

The proposed Lakeside at Sutter Pointe project would worsen unacceptable operations on six Caltrans facilities and cause significant LOS-related impact to one facility. Therefore, this impact is considered **significant**. Mitigation measures are required for the significant impact and are available to improve operations to acceptable levels.

Mitigation Measure

Mitigation measures identified below are recommended for significant roadway impacts:

Mitigation Measure 7

The project applicant shall pay its fair share of costs for the following mitigation projects, consistent with Mitigation Measure 3.3-1 of the Sutter Pointe Specific Plan DEIR. The analysis of the project under existing conditions assumes that the entire project develops immediately. However, development of the Lakeside at Sutter Pointe project will occur over time. Consequently, the timing of offsite infrastructure improvement is not certain and will be influenced by the following factors

- The rate, location, and type of regional development, including Sutter County, Placer County, Sacramento County
- The implementation of roadway improvements constructed by others
- The location of development within the project site
- The type of development within the project site

Individual roadway widening and traffic control modifications will be largely constructed directly by the project applicant and other developers in the same area depending on when specific development project advance to the implementation phase.

1. Construct HOV lanes NB and SB on SR 70/99 from north of Riego to I-5, and direct HOV connector ramps between SR 70/99 and I-5 HOV lanes.

The roadway projects recommended above are needed to accommodate previously approved development in Placer County and surrounding jurisdictions. The need for these facilities could be accelerated with implementation of the Lakeside at Sutter Pointe project.

Significance After Mitigation: While successful implementation of Mitigation Measure 7 would reduce this impact to a less than significant level, these roadway projects are outside the jurisdiction of Sutter County, and for that reason the County must conservatively assume that the impact will be **significant and unavoidable**, despite the County’s own commitment to work with Caltrans. Consistent with CEQA Guidelines section 15091, subdivision (a)(2), Sutter County concludes that Caltrans can and should cooperate with Sutter County in implementing the mitigation. In addition, even if all mitigation measures are successfully implemented, there may be a short-term **significant and unavoidable** impact, in the form of unacceptable levels of service, until such time as the contemplated improvements are in place.

Table 15: Intersection Operations – Existing Plus Project Conditions (Mitigation)

Jurisdiction	Intersection	Traffic Control	LOS Threshold	Peak Hour	Existing Plus Project Conditions		Existing Plus Project Conditions (With Mitigation)	
					Delay ¹	LOS ²	Delay	LOS
Sutter County	2. SR 99 / Sankey Road	SSSC	D	AM	4 (54)	A (F)	28	C
				PM	7 (239)	A (F)	50	D
	7. Riego Road / Pacific Avenue	SSSC	D	AM	11 (631)	B (F)	10	A
				PM	36 (1049)	E (F)	10	B
	8. Riego Road / Natomas Road	AWSC	D	AM	482	F	<1 (16)	A (C)
PM				691	F	<1 (23)	A (C)	
9. Riego Road / Pleasant Grove Road (N)	AWSC	D	AM	470	F	8	A	
			PM	680	E	8	A	
Placer County	10. Baseline Road / Pleasant Grove Road (S)	AWSC	D	AM	440	F	12	B
				PM	713	F	20	C
	11. Baseline Road / Locust Road	AWSC	D	AM	404	F	11	B
				PM	536	F	14	B
	12. Baseline Road / Brewer Road ³	SSSC	D	AM	1 (109)	A (F)	<1 (29)	A (D)
PM				17 (1246)	C (F)	<1 (28)	A (D)	
13. Baseline Road / Watt Avenue	Signal	D	AM	169	F	24	C	
			PM	259	F	53	D	
14. Baseline Road / Fiddymont Road / Walerga Road	Signal	D	AM	77	E	50	D	
			PM	129	F	55	D	

Notes: LOS = level of service. SSSC = side-street stop control. AWSC = all-way stop control. **Bold** indicates deficient LOS. **Bold and underline** indicates a significant impact.

¹ Average control delay for signalized intersections is the weighted average for all movements. For side-street stop-controlled intersections, the average delay for the worse movement is shown in parentheses.

² LOS is calculated based on methodologies contained in the Highway Capacity Manual (HCM) 6th Edition.

³ Average control delay at Baseline Road/Brewer Road is calculated as the “overall weighted average delay for movements yielding the right-of-way,” per Placer County guidelines for side-street stop-controlled intersections.

Source: Fehr & Peers, 2020.

Table 16: Roadway Segment Analysis – Existing Plus Project Conditions (Mitigation)

Juris-diction	Roadway Segment	Existing Plus Project Conditions				Existing Plus Project Conditions (With Mitigation)			
		Lanes	Classification ¹	ADT	LOS/VC	Lanes	Classification	ADT	LOS/VC
Sutter County	2C. Riego Rd – SR 99 NB Ramps to Pacific Ave	2	2R	34,717	F/1.67	4	4E	34,717	C/0.67
	2D. Riego Rd – Pacific Ave to Westerly Project Dwy	2	2R	35,177	F/1.69	4	4E	35,177	C/0.68
	2G. Riego Rd – Street 2 to Natomas Rd	2	2R	33,338	F/1.60	4	4E	33,338	C/0.65
	2H. Riego Rd – Natomas Rd to Pleasant Grove Rd (S)	2	2R	32,648	F/1.57	4	4E	32,648	C/0.63
Placer County	7. Baseline Rd – Pleasant Grove Rd (S) to Locust Rd	2	2R	32,648	F/1.57	4	4E	32,648	C/0.63
	8. Baseline Rd – Locust Rd to Watt Ave	2	2M	30,084	F/1.67	4	4M	30,084	D/0.84
	9. Baseline Rd – Watt Ave to Fiddymont Rd / Walerga Rd	2	2M	31,149	F/1.73	4	4M	31,149	D/0.87
	13. Walerga Rd – Baseline Rd to Sacramento County	2	2M	22,365	F/1.24	4	4M	23,365	B/0.62

Notes: ADT = average daily traffic; LOS = level of service; VC = volume-to-capacity ratio; **Bold** indicates exceedance of General Plan LOS policy. **Bold and underline** indicates a significant impact.

¹ Classification codes are based on "Table 2: LOS Criteria – Roadway Segments".

Source: Fehr & Peers, 2020.

Cumulative Conditions

Transportation impacts identified under cumulative conditions with the addition of the Lakeside at Sutter pointe project are summarized below.

Impact 8: Implementation of the proposed Lakeside at Sutter Pointe project would increase peak hour traffic volumes using Sutter County intersections, which would exacerbate unacceptable LOS under cumulative plus project conditions.

Implementation of the proposed Lakeside at Sutter Pointe project would worsen unacceptable operations at the following Sutter County intersections:

1. SR 99/Sankey Road – (Worsen unacceptable LOS F operations during the AM and PM peak hours and peak hour signal warrant met)

2. Riego Road/Pacific Avenue – (Worsen LOS F operations during the AM and PM peak hours and peak hour signal warrant met)

Impacts of the proposed Lakeside at Sutter Pointe at these two intersections is considered **significant**.

Summary

The proposed Lakeside at Sutter Pointe project would worsen unacceptable operations at two Sutter County intersections. Therefore, this impact is considered **significant**. Mitigation measures are required for the significant impact and are available to reduce the significance of the impact.

Mitigation Measure

Mitigation measures identified below are recommended for significant intersection impacts:

Mitigation Measure 8

The project applicant shall pay its fair share of costs for the following mitigation projects as defined in Mitigation Measure 3.3-1 of the Sutter Pointe Specific Plan DEIR. Because the Lakeside at Sutter Pointe project will develop over time, implementation of the following mitigation projects will likely occur in phases and through various forms outlined in Mitigation Measure 3.3-1 of the Sutter Pointe Specific Plan DEIR. Consequently, the timing of offsite infrastructure improvement is not certain and will be influenced by the following factors:

- The rate, location, and type of regional development, including Sutter County, Placer County, Sacramento County
- The implementation of roadway improvements constructed by others
- The location of development within the project site
- The type of development within the project site

Individual intersection widening and traffic control modifications will be largely constructed directly by the project applicant and other developers in the same area depending on when specific development project advance to the implementation phase. Major roadway and intersection widening outside the plan area, in Sutter County, are expected to be constructed by the County using traffic impact fees paid by the project applicant and other developers in the same area possibly in combination with state and federal funding.

1. Construct a grade-separated locally-serving interchange.

2. Install a traffic signal and construct an eastbound left-turn lane to allow for protected left-turn operations on eastbound Riego Road.

Significance After Mitigation: While successful implementation of Mitigation Measure 8-1 and 8-2 would reduce this impact to a less than significant level (see Table 17), in the long-term, once Caltrans has granted the necessary approvals and the required improvements have been funded and installed. In the short-term: however, the impact will be **significant and unavoidable**, in the form of unacceptable levels of service, because the County does not control the timing of construction of Caltrans’s improvements or traffic generated by development outside of Sutter County that might contribute to the need for the interchange.

Impact 9: Implementation of the proposed Lakeside at Sutter Pointe project would increase peak hour traffic volumes using Placer County intersections, which would exacerbate unacceptable LOS under cumulative plus project conditions.

Implementation of the proposed Lakeside at Sutter Pointe project would worsen unacceptable operations at the following Placer County intersections:

1. Baseline Road/Brewer Road – (Worsen LOS F during the AM and PM peak hours)
2. Baseline Road/Watt Avenue – (Worsen LOS E during the AM and PM peak hours)
3. Baseline Road/Fiddymont Road – (Worsen LOS F during the AM and PM peak hours)

Impacts of the proposed Lakeside at Sutter Pointe at these three intersections is considered **significant**.

Summary

The proposed Lakeside at Sutter Pointe project would worsen unacceptable operations at three Placer County intersections. Therefore, this impact is considered **significant**. Mitigation measures are required for the significant impact and are available to reduce the significance of the impact.

Mitigation Measure

Mitigation measures identified below are recommended for significant intersection impacts:

Mitigation Measure 9

The project applicant shall pay its fair share of costs for the following mitigation projects, consistent with Mitigation Measure 3.3-1 of the Sutter Pointe Specific Plan DEIR. Because the Lakeside at Sutter Pointe project will develop over time, implementation of the following mitigation projects will likely occur in phases and through various forms outlined in

Mitigation Measure 3.3-1 of the Sutter Pointe Specific Plan DEIR. However, development of the Lakeside at Sutter Pointe project will occur over time. Consequently, the timing of offsite infrastructure improvement is not certain and will be influenced by the following factors:

- The rate, location, and type of regional development, including Sutter County, Placer County, Sacramento County
- The implementation of roadway improvements constructed by others
- The location of development within the project site
- The type of development within the project site
- The timing and ability of Sutter County to reach agreements with other public agencies regarding improvements outside Sutter County, as specified in Mitigation Measure 3.3-1 of the Sutter Pointe Specific Plan DEIR

Individual intersection widening and traffic control modifications will be largely constructed directly by the project applicant and other developers in the same area depending on when specific development project advance to the implementation phase. Major roadway and intersection widening outside the plan area (in Sutter County) are expected to be constructed by the County using traffic impact fees paid by the project applicant and other developers in the same area possibly in combination with state and federal funding.

1. Widen Baseline Road at the intersection to construct eastbound left-turn lane.
2. Provide an overlap phase for the northbound right-turn movement.
3. Provide an overlap phase for the southbound right-turn movement.

Significance After Mitigation: While successful implementation of Mitigation Measure 9-1 through 9-3 would reduce this impact to a less than significant level (see Table 17), these intersection projects are outside the jurisdiction of Sutter County, and for that reason the County must conservatively assume that the impact will be **significant and unavoidable**, despite the County's own commitment to work with Placer County. Consistent with CEQA Guidelines section 15091, subdivision (a)(2), Sutter County concludes that Placer County can and should cooperate with Sutter County in implementing the mitigation. In addition, even if all mitigation measures are successfully implemented, there may be a short-term **significant and unavoidable** impact, in the form of unacceptable levels of service, until such time as the contemplated improvements are in place.

Impact 10: Implementation of the proposed Lakeside at Sutter Pointe project would increase peak hour traffic volumes using Sacramento County intersections, which would exacerbate unacceptable LOS under cumulative plus project conditions.

Implementation of the proposed Lakeside at Sutter Pointe project would worsen unacceptable operations at the following Sacramento County intersections:

1. Elverta Road/E. Levee Road – (Worsen LOS F during the AM and PM peak hours)
2. Elverta Road/Sorento Road – (Worsen LOS F during the AM and PM peak hours and peak hour signal warrant met)
3. Elverta Road/Palladay Road – (Worsen LOS F during the AM and PM peak hours)
4. Elverta Road/16th Street – (Worsen LOS F during the AM and PM peak hours and peak hour signal warrant met)
5. Elverta Road/Watt Avenue – (Worsen LOS F during the AM and PM peak hours)

Impacts of the proposed Lakeside at Sutter Pointe at these five intersections is considered **significant**.

Summary

The proposed Lakeside at Sutter Pointe project would worsen unacceptable operations at five Sacramento County intersections. Therefore, this impact is considered **significant**. Mitigation measures are required for the significant impact and are available to reduce the significance of the impact.

Mitigation Measure

Mitigation measures identified below are recommended for significant intersection impacts:

Mitigation Measure 10

The project applicant shall pay its fair share of costs for the following mitigation projects, consistent with Mitigation Measure 3.3-1 of the Sutter Pointe Specific Plan DEIR. Because the Lakeside at Sutter Pointe project will develop over time, implementation of the following mitigation projects will likely occur in phases and through various forms outlined in Mitigation Measure 3.3-1 of the Sutter Pointe Specific Plan DEIR. However, development of the Lakeside at Sutter Pointe project will occur over time. Consequently, the timing of offsite infrastructure improvement is not certain and will be influenced by the following factors:

- The rate, location, and type of regional development, including Sutter County, Placer County, Sacramento County
- The implementation of roadway improvements constructed by others
- The location of development within the project site
- The type of development within the project site

Individual intersection widening and traffic control modifications will be largely constructed directly by the project applicant and other developers in the same area depending on when specific development project advance to the implementation phase. Major roadway and intersection widening outside the plan area (in Sutter County) are expected to be constructed by the County using traffic impact fees paid by the project applicant and other developers in the same area possibly in combination with state and federal funding.

1. Widen Elverta Road at the intersection to construct westbound left-turn lane.
2. Install traffic signal, widen Elverta Road at the intersection to construct eastbound and westbound left-turn pockets, and widen Sorento Road at the intersection to construct a southbound left-turn pocket.
3. Widen Elverta Road at the intersection to construct eastbound left-turn lane.
4. Install traffic signal, widen 16th Street at the intersection to construct one left-turn lane and a shared through/right-turn lane on the northbound and southbound approaches, widen Elverta Road at the intersection to construct one left-turn lane, one through lane, and a shared through/right-turn lane on the eastbound and westbound approaches.
5. Restripe the westbound approach at the intersection to provide three through lanes.

Significance After Mitigation: While successful implementation of Mitigation Measure 10-1 through 10-5 would reduce this impact to a less than significant level (see Table 17), these intersection projects are outside the jurisdiction of Sutter County, and for that reason the County must conservatively assume that the impact will be **significant and unavoidable**, despite the County's own commitment to work with Sacramento County. Consistent with CEQA Guidelines section 15091, subdivision (a)(2), Sutter County concludes that Sacramento County can and should cooperate with Sutter County in implementing the mitigation. In addition, even if all mitigation measures are successfully implemented, there may be a short-term **significant and unavoidable** impact, in the form of unacceptable levels of service, until such time as the contemplated improvements are in place.

Impact 11: Implementation of the proposed Lakeside at Sutter Pointe project would add traffic to Sutter County roadways but would not cause significant LOS-related impacts or worsen unacceptable operations under cumulative plus project conditions.

Summary

The proposed Lakeside at Sutter Pointe project would add traffic to Sutter County roadways but would not cause significant LOS-related impacts or worsen unacceptable operations. Therefore, this impact is considered **less than significant**. No mitigation measures are required.

Impact 12: Implementation of the proposed Lakeside at Sutter Pointe project would add traffic to Placer County roadways but would not cause significant LOS-related impacts or worsen unacceptable operations under cumulative plus project conditions.

Summary

The proposed Lakeside at Sutter Pointe project would add traffic to Placer County roadways but would not cause significant LOS-related impacts or worsen unacceptable operations. Therefore, this impact is considered **less than significant**. No mitigation measures are required.

Impact 13: Implementation of the proposed Lakeside at Sutter Pointe project would add traffic to Sacramento County roadways but would not cause significant LOS-related impacts or worsen unacceptable operations under cumulative plus project conditions.

Summary

The proposed Lakeside at Sutter Pointe project would add traffic to Sacramento County roadways but would not cause significant LOS-related impacts or worsen unacceptable operations. Therefore, this impact is considered **less than significant**. No mitigation measures are required.

Impact 14: Implementation of the proposed Lakeside at Sutter Pointe project would cause significant LOS-related impacts to Caltrans facilities.

Implementation of the proposed Lakeside at Sutter Pointe project would worsen unacceptable operations that would occur on SR 70/99 under cumulative conditions. As shown in Table 14, many of the SR 70/99 freeway mainline segments, off-ramp diverge areas, on-ramp merge areas, weave sections would operate unacceptably due to mainline capacity constraints.

Impacts of the proposed Lakeside at Sutter Pointe to Caltrans facilities is considered **significant**.

Summary

The proposed Lakeside at Sutter Pointe project would worsen unacceptable operations on SR 70/99 facilities. Therefore, this impact is considered **significant**. Mitigation measures are required for the significant impact and are available to reduce the significance of the impact.

Mitigation Measure

Mitigation measures identified below are recommended to reduce the impact:

Mitigation Measure 14

The project applicant shall pay its fair share of costs for the following mitigation projects, consistent with Mitigation Measure 3.3-1 of the Sutter Pointe Specific Plan DEIR. The analysis of the project under existing conditions assumes that the entire project develops immediately. However, development of the Lakeside at Sutter Pointe project will occur over time. Consequently, the timing of offsite infrastructure improvement is not certain and will be influenced by the following factors

- The rate, location, and type of regional development, including Sutter County, Placer County, Sacramento County
- The implementation of roadway improvements constructed by others
- The location of development within the project site
- The type of development within the project site
- The timing and ability of Sutter County to reach agreements with other public agencies regarding improvements outside Sutter County, as specified in Mitigation Measure 3.3-1 of the Sutter Pointe Specific Plan DEIR

Individual roadway widening and traffic control modifications will be largely constructed directly by the project applicant and other developers in the same area depending on when specific development project advance to the implementation phase.

1. Implement Mitigation Measure 7.

The roadway projects recommended above are needed to accommodate previously approved development in Placer County and surrounding jurisdictions. The need for these facilities could be accelerated with implementation of the Lakeside at Sutter Pointe project.

Significance After Mitigation: While successful implementation of Mitigation Measure 7 would reduce this impact to a less than significant level, these roadway projects are outside the jurisdiction

of Sutter County, and for that reason the County must conservatively assume that the impact will be **significant and unavoidable**, despite the County's own commitment to work with Caltrans. Consistent with CEQA Guidelines section 15091, subdivision (a)(2), Sutter County concludes that Caltrans can and should cooperate with Sutter County in implementing the mitigation. In addition, even if all mitigation measures are successfully implemented, there may be a short-term **significant and unavoidable** impact, in the form of unacceptable levels of service, until such time as the contemplated improvements are in place.

Table 17: Intersection Operations – Cumulative Plus Project Conditions (Mitigation)

Jurisdiction	Intersection	Traffic Control	LOS Threshold	Peak Hour	Cumulative Plus Project Conditions		Cumulative Plus Project Conditions (With Mitigation)	
					Delay ¹	LOS ²	Delay	LOS
Sutter County	2. SR 99 / Sankey Road	SSSC	D	AM	28 (1,520)	D (F)	-	-
				PM	24 (792)	C (F)	-	-
	7. Riego Road / Pacific Avenue	SSSC	D	AM	>1,000	F (F)	14	B
				PM	>1,000	F (F)	18	B
Placer County	12. Baseline Road / Brewer Road ³	SSSC	D	AM	3 (145)	A (F)	<1 (37)	A(E)
				PM	78 (3,999)	A (F)	<1 (17)	A(C)
	13. Baseline Road / Watt Avenue	Signal	D	AM	73	E	70	E
PM				70	E	64	E	
	14. Baseline Road / Fiddymment Road / Walerga Road	Signal	D	AM	85	F	82	F
				PM	108	F	104	F
Sacramento County	18. Elverta Road / E. Levee Road	AWSC	E	AM	218	F	70	F
				PM	127	F	122	F
	19. Elverta Road / Sorento Road	SSSC	E	AM	331 (4,158)	F (F)	30	C
				PM	349 (2,956)	F (F)	27	C
	20. Elverta Road / Palladay Road	SSSC	E	AM	11 (56)	B (F)	11 (56)	B (F)
PM				4 (111)	A (F)	2 (52)	A (F)	
21. Elverta Road / 16th Street	AWSC	E	AM	194	F	46	D	
			PM	138	F	25	C	
22. Elverta Road / Watt Avenue	Signal	E	AM	90	F	70	E	
			PM	49	D	49	D	

Notes: LOS = level of service. SSSC = side-street stop control. AWSC = all-way stop control. **Bold** indicates deficient LOS. **Bold and underline** indicates a significant impact.

¹ Average control delay for signalized intersections is the weighted average for all movements. For side-street stop-controlled intersections, the average delay for the worse movement is shown in parentheses.

² LOS is calculated based on methodologies contained in the Highway Capacity Manual (HCM) 6th Edition.

³ Average control delay at Baseline Road/Brewer Road is calculated as the “overall weighted average delay for movements yielding the right-of-way,” per Placer County guidelines for side-street stop-controlled intersections.

Source: Fehr & Peers, 2020.

Improvement Phasing & Triggers

The development of the Lakeside at Sutter Pointe project will occur over time. Consequently, the timing of offsite infrastructure improvement is not certain and will be influenced by the following factors

- The rate, location, and type of regional development, including Sutter County, Placer County, Sacramento County
- The implementation of roadway improvements constructed by others
- The location of development within the project site
- The type of development within the project site
- The timing and ability of Sutter County to reach agreements with other public agencies regarding improvements outside Sutter County, as specified in Mitigation Measure 3.3-1 of the Sutter Pointe Specific Plan DEIR

This is particularly true for the Riego Road/Baseline Road corridor that is key arterial for travel to/from Placer County today, which will continue in that capacity for the proposed project and other planned development projects in Placer County, like the Placer Vineyards Specific Plan.

The phasing and triggers were developed by first identifying modest intersection improvements (i.e., like traffic signal control and turn lane improvements) followed by more comprehensive roadway widening. Improvement triggers were identified by equating the volume of traffic added to a particular study facility (i.e., that resulted in an operational deficiency) to the amount of traffic added to the facility by the Lakeside at Sutter Pointe project. The corresponding trip generation was normalized to the trip generation of a single family dwelling to estimate dwelling unit equivalents (DUE) for each improvement.

Table 18 summarizes improvement phasing for impacts to intersections and roadways identified under the existing plus project conditions analysis.

Table 18: Intersection and Roadway Improvement Triggers

Dwelling Unit Trigger	Jurisdiction	Lakeside at Sutter Pointe	
		Facility	Improvement ¹
Initial Development	Sutter County	Any <u>one</u> site access intersection	<ul style="list-style-type: none"> • Install traffic signal with the following: <ul style="list-style-type: none"> ○ EB Approach – 1 left-turn lane, 1 through lane ○ WB Approach – 1 through lane, 1 right-turn lane ○ SB Approach – 1 left-turn lane, 1 right-turn lane
101	Sutter County	Riego Rd/Natomas Rd	<ul style="list-style-type: none"> • Remove all-way stop control • Install raised median • Restrict access NB and SB approaches to right-in/right-out only with stop control • Allow uncontrolled EB and WB approaches
		Riego Rd/Pleasant Grove Rd (N)	<ul style="list-style-type: none"> • Install traffic signal and add left-turn lane on EB approach
101	Placer County	Baseline Rd/Pleasant Grove Rd (S)	<ul style="list-style-type: none"> • Pay fair share: towards installation of traffic signal, and addition of left-turn lane on WB approach
		Baseline Rd/Locust Rd	<ul style="list-style-type: none"> • Pay fair share: towards installation of traffic signal, add additional of left-turn lanes on EB and WB approaches
1,101	Sutter County	Riego Rd/Pacific Ave	<ul style="list-style-type: none"> • Construct EB left-turn lane on one through lane • Construct WB right-turn lane and one through lane • Construct separate SB left- and right-turn lanes

Table 18: Intersection and Roadway Improvement Triggers

Dwelling Unit Trigger	Jurisdiction	Lakeside at Sutter Pointe	
		Facility	Improvement ¹
1,201	Placer County	Baseline Rd/Fiddymnt Rd	<ul style="list-style-type: none"> • Pay fair share towards modification of intersection and traffic signal to add second NB and SB left-turn lanes and an overlap phase for the southbound right-turn lane.
1,501	Sutter County	Sankey Rd/SR 70/99	<ul style="list-style-type: none"> • Pay fair share towards installation of directional signing on Sankey Rd (in advance of Pacific Ave) and on Pacific Ave (in advance of Riego Rd) directing driver to use Pacific Ave to Riego Rd to access SB SR 99 and areas west of SR 99.
		Any <u>one</u> site access intersection	<ul style="list-style-type: none"> • Install traffic signal with the following: <ul style="list-style-type: none"> ○ EB Approach – 1 left-turn lane, 2 through lanes ○ WB Approach – 2 through lanes, 1 right-turn lane ○ SB Approach – 1 left-turn lane, 1 right-turn lane (2-Lane widening through the intersection only)
2,501		Any <u>two</u> site access intersections	<ul style="list-style-type: none"> • Install traffic signal with the following: <ul style="list-style-type: none"> ○ EB Approach – 1 left-turn lane, 2 through lanes ○ WB Approach – 2 through lanes, 1 right-turn lane ○ SB Approach – 1 left-turn lane, 1 right-turn lane (2-Lane widening through the intersection only)
2,801		Street 1	<ul style="list-style-type: none"> • Install traffic signal with the following: <ul style="list-style-type: none"> ○ EB Approach – 2 left-turn lanes, 2 through lanes ○ WB Approach – 2 through lanes, 1 right-turn lane ○ SB Approach – 2 left-turn lanes, 1 right-turn lane (2-Lane widening through the intersection only)
	Riego Rd/Pacific Ave	<ul style="list-style-type: none"> • Install traffic signal with the following: <ul style="list-style-type: none"> ○ Two EB and WB through lanes (2-Lane widening through the intersection only) 	

Table 18: Intersection and Roadway Improvement Triggers

Dwelling Unit Trigger	Jurisdiction	Lakeside at Sutter Pointe	
		Facility	Improvement ¹
3,201	Sutter County	Riego Rd	<ul style="list-style-type: none"> Widen Riego Road from 2 to 4 lanes from SR 99 to Street 2
3,401	Sutter County	Riego Rd	<ul style="list-style-type: none"> Pay fair share towards widen Riego Road from 2 to 4 lanes from Street 2 to Pleasant Grove Rd (S)
3,401	Placer County	Baseline Rd	<ul style="list-style-type: none"> Pay fair share towards widening of Baseline Road from 2 to 4 lanes from Pleasant Grove Rd (S) to Fiddymet Rd/Walerga Rd
3,401	Placer County	Baseline Rd/Brewer Rd	<ul style="list-style-type: none"> Pay fair share towards the addition of an EB left-turn lane
		Baseline Rd/Watt Ave	<ul style="list-style-type: none"> Pay fair share towards the addition of a second NB left-turn lane -OR- Pay fair share towards the addition of a second WB left-turn lane and an overlap phase for the EB right-turn
3,501	Placer County	Walerga Rd	<ul style="list-style-type: none"> Pay fair share towards widening Walerga Road from 2 to 4 lanes from Baseline Rd to the Sacramento County line

Notes:

The project applicant shall pay its fair share of costs for mitigation projects, consistent with **Mitigation Measure 3.3-1 of the Sutter Pointe Specific Plan DEIR**. The analysis of the project under existing conditions assumes that the entire project develops immediately. However, development of the Lakeside at Sutter Pointe project will occur over time. Consequently, the timing of offsite infrastructure improvement is not certain and will be influenced by the following factors:

- The rate, location, and type of regional development, including Sutter County, Placer County, Sacramento County
- The implementation of roadway improvements constructed by others
- The location of development within the project site
- The type of development within the project site
- The timing and ability of Sutter County to reach agreements with other public agencies regarding improvements outside Sutter County, as specified in Mitigation Measure 3.3-1 of the Sutter Pointe Specific Plan DEIR

Table 18: Intersection and Roadway Improvement Triggers

Dwelling Unit Trigger	Jurisdiction	Lakeside at Sutter Pointe	
		Facility	Improvement ¹

Individual intersection widening and traffic control modifications will be largely constructed directly by the project applicant and other developers in the same area depending on when specific development project advance to the implementation phase.

Fehr & Peers, 2020

Addendum Evaluation

This section compares the findings of the Lakeside at Sutter Pointe transportation analysis to the impact analysis documented in the Draft Environmental Impact Report (DEIR) for the Sutter Pointe Specific Plan (December 2008) to determine if changes due to Lakeside at Sutter Pointe have the potential to result in a substantial increase in the severity of the DEIR transportation analysis.

CEQA Guidelines section 15162 provides that no subsequent EIR is required when an EIR has previously been certified for a project, unless there are substantial changes to the project or its circumstances that will require major revisions to the existing EIR.

The evaluation compares vehicle trip generation, compares the impact analysis of roadway segments, intersections, and freeway facilities, and evaluates and compares project-generated VMT and the VMT effect of the Lakeside at Sutter Pointe project.

Proposed Project

The proposed Lakeside at Sutter Pointe project include the following land uses:

- 3,388 single-family detached dwelling units
- 399 multi-family dwelling units
- 272,000 square feet of commercial land use
- 703,000 square feet of employment
- An elementary school
- 116.2 acres of parks/open space

Table 19 compares the residential and employment land use of Lakeside at Sutter Pointe to Specific Plan Buildout, as analyzed in the Specific Plan DEIR. As shown, Lakeside at Sutter Pointe represents 21.6% of residential land use and 4.3% of employment land use.

Table 19: Residential and Employment Land Use Comparison

Scenario	Residential and Employment Land Use					
	Residential			Employment		
	SF	MF	Total	Retail	Non-Retail	Total
DEIR (Specific Plan Buildout)	13,476	4,024	17,500	8,791	48,860	57,651
Lakeside at Sutter Pointe	3,388	399	3,787	495	2,008	2,503
Difference	10,088	3,625	13,699	8,296	46,852	55,148
Percent of Buildout	25.1%	9.9%	21.6%	5.6%	4.1%	4.3%

Source: Fehr & Peers, 2020.

Proposed Project

Table 20 compares the total daily, AM peak hour, and PM peak hour trip generation of Lakeside at Sutter Pointe to total trip generation with Specific Plan Buildout, as analyzed in the Specific Plan DEIR. As shown, Lakeside at Sutter Pointe would generate about 11% of the daily trip generation estimated for Specific Plan Buildout.

Table 20: Trip Generation Comparison

Scenario	Vehicle Trip Generation		
	Daily	Peak Hour	
		AM	PM
DEIR (Specific Plan Buildout)	491,500	31,500	45,700
Lakeside at Sutter Pointe	54,200	4,600	5,700
Difference	437,300	26,900	40,000
Percent of Buildout	11.0%	14.6%	12.5%

Source: Fehr & Peers, 2020.

Traffic Operations

Tables 21 through 25 compare the impact analysis documented in the Sutter Pointe Specific Plan DEIR to the analysis conducted for Lakeside at Sutter Pointe, under existing and cumulative conditions. The Sutter Pointe Specific Plan DEIR impact analysis covers traffic operations, represented by roadway segments, intersections, and freeway facilities.

For each study facility type (i.e., roadway segments, intersections, or freeway facility) the following information from the DEIR is compared to the analysis for Lakeside at Sutter Pointe (by jurisdiction/agency):

- DEIR Impact
- Facility Impacted
- Mitigation
- Significance After Mitigation

After the comparison, the findings of the analysis are presented to identify if changes due to Lakeside at Sutter Pointe have the potential to result in a substantial increase in the severity of the DEIR transportation analysis.

Tables 3 through 7 present the following:

- **Table 21** – Roadway Segment Analysis (Existing Plus Project Conditions)
- **Table 22** – Roadway Segment Analysis (Cumulative Plus Project Conditions)
- **Table 23** – Intersection Analysis (Existing Plus Project Conditions)
- **Table 24** – Intersection Analysis (Cumulative Plus Project Conditions)
- **Table 25** – Freeway Analysis (Existing Plus Project & Cumulative Plus Project Conditions)

As presented in **Tables 21 through 25**, in the context of traffic operations, the project changes do not have the potential to result in a substantial increase in the severity of the previously analyzed transportation impacts.

Table 21: Roadway Segment Analysis Comparison & Findings (Existing Plus Project Conditions)

Jurisdiction	DEIR					Lakeside at Sutter Pointe				
	Impact	Impacted Facility	Mitigation Summary	Significance After Mitigation ¹		Impacted Facility	Mitigation Summary	Significance After Mitigation ¹		Findings
				Short-Term	Long-Term			Short-Term	Long-Term	
Sutter County	Impact 3.3-2 Unacceptable Operations on Sutter County Roadways	1. Riego Rd – Natomas Rd to Pleasant Grove Rd(S)	1. Widen from 2 to 4 lanes	S&U	LTS	1. Riego Rd – SR 70/99 to Pacific St 2. Riego Rd – Pacific St to Project Access (West) 3. Riego Rd – Street 2 to Natomas Rd 4. Riego Rd – Natomas Rd to Pleasant Grove Rd (S)	Mitigation 4	S&U	LTS	Sutter Pointe Specific Plan includes 6/8 lanes on this section of Riego Road (the DEIR analysis assumed this widening). Therefore, the identified mitigation needed for Lakeside at Sutter Pointe is consistent with the Specific Plan. The project changes do not have the potential to result in a substantial increase in the severity of the previously analyzed transportation impacts.
Placer County	Impact 3.3-3 Unacceptable Operations on Placer County Roadways	1. Baseline Rd – Pleasant Grove Rd to (S) to Locust Rd 2. Baseline Rd – Locust Rd to Brewer Rd 3. Baseline Rd – Brewer Rd to Watt Ave 4. Baseline Rd – Watt Ave to Fiddymont Rd	1. Widen from 2 to 4 lanes 2. Widen from 2 to 4 lanes 3. Widen from 2 to 4 lanes 4. Widen from 2 to 4 lanes	S&U	S&U	1. Baseline Rd – Pleasant Grove Rd (S) to Watt Ave 2. Baseline Rd – Watt Ave to Fiddymont Rd 3. Walerga Rd – Baseline Rd to Sacramento Co	Mitigation 5	S&U	S&U	Implementation of mitigation would reduce impact to a less than significant level. However, facilities are outside the jurisdiction of Sutter County. Therefore, the impact will be significant and unavoidable. The project changes do not have the potential to result in a substantial increase in the severity of the previously analyzed transportation impacts.
Sacramento County	Impact 3.3-4 Unacceptable Operations on Sacramento County Roadways	1. Powerline Road – Sacramento Co to Elverta Rd	1. Widen to Sacramento Co standard as 2 lane roadway	S&U	S&U	No impact	No mitigation needed	N/A	N/A	The project changes do not have the potential to result in a substantial increase in the severity of the previously analyzed transportation impacts.

Notes:
¹LTS: Less Than Significant, S&U: Significant and Unavoidable

Table 22: Roadway Segment Analysis Comparison & Findings (Cumulative Plus Project Conditions)

Jurisdiction	DEIR				Lakeside at Sutter Pointe					
	Impact	Impacted Facility	Mitigation Summary	Significance After Mitigation ¹		Impacted Facility	Mitigation Summary	Significance After Mitigation ¹		Findings
				Short-Term	Long-Term			Short-Term	Long-Term	
Sutter County	Impact 3.3-10 Unacceptable Operations on Sutter County Roadways	1. Riego Rd – Natomas Rd to Pleasant Grove Rd(S)	1. Widen from 2 to 6 lanes. Modify access at Natomas Rd, Construct 6-lane railroad grade-separated crossing, Realign Pleasant Grove Rd (N) to Pleasant Grove Rd (S) and Install traffic signal	S&U	LTS	No Impact	No mitigation needed	N/A	N/A	The project changes do not have the potential to result in a substantial increase in the severity of the previously analyzed transportation impacts.
Placer County	Impact 3.3-11 Unacceptable Operations on Placer County Roadways	1. Baseline Rd – Brewer Rd to Watt Ave 2. Watt Ave – Baseline Rd to PFE Rd 3. Walerga Rd – Baseline Rd to PFE Rd	1. Construct Placer Pkwy, add center lanes to 16 th Street (for a total of 4 lanes) 2. Construct Placer Pkwy, add center lanes to 16 th Street (for a total of 4 lanes) 3. Construct Placer Pkwy, add center lanes to 16 th St (for a total of 4 lanes), widen Watt Ave to 6 lanes	S&U	S&U	No Impact	No mitigation needed	S&U	S&U	The project changes do not have the potential to result in a substantial increase in the severity of the previously analyzed transportation impacts.
Sacramento County	Impact 3.3-12 Unacceptable Operations on Sacramento County Roadways	1. Elverta Rd – SR 70/99 to East Levee Rd 2. Elverta Rd – East Levee Rd to Sorento Rd 3. Elverta Rd – Sorento Rd to 16 th St 4. Powerline Rd – Sacramento Co to Elverta Rd	1. Widen Elverta Rd from 2 to 4 lanes 2. Widen Elverta Rd from 2 to 4 lanes 3. Construct Placer Pkwy 4. Add center lanes to 16 th St (for a total of 4 lanes) 5. Widen to Sacramento Co standard as 2 lane roadway	S&U	S&U	No Impact	No mitigation needed	N/A	N/A	The project changes do not have the potential to result in a substantial increase in the severity of the previously analyzed transportation impacts.

Notes:
¹LTS: Less Than Significant, S&U: Significant and Unavoidable

Table 23: Intersection Analysis Comparison & Findings (Existing Plus Project Conditions)

Jurisdiction	DEIR					Lakeside at Sutter Pointe				
	Impact	Impacted Facility	Mitigation Summary	Significance After Mitigation ¹		Impacted Facility	Mitigation Summary	Significance After Mitigation ¹		Findings
				Short-Term	Long-Term			Short-Term	Long-Term	
Sutter County	Impact 3.3-6 Unacceptable Operations at Sutter County Intersections	1. Sankey Rd/SR 70/99 2. Riego Rd/Pleasant Grove Rd (N) 3. Riego Rd/SR 70/99	1. Construct grade-separated interchange 2. Widen Riego Road from 2 to 4 lanes, install traffic signal, add turn lanes on SB and EB approaches 3. Construct grade-separated interchange	S&U	LTS	1. Sankey Rd/SR 70/99 2. Riego Rd/Pacific Ave 3. Riego Rd/Natomas Rd 4. Riego Rd/Pleasant Grove Rd (N)	Mitigation 1	S&U	LTS	Sutter Pointe Specific Plan includes 6/8 lanes on this section of Riego Road (the DEIR analysis assumed this widening). Therefore, the identified mitigation needed for Lakeside at Sutter Pointe is consistent with the Specific Plan. The project changes do not have the potential to result in a substantial increase in the severity of the previously analyzed transportation impacts.
Placer County	Impact 3.3-7 Unacceptable Operations at Placer County Intersections	1. Riego Rd/Pleasant Grove Rd (S) 2. Baseline Rd/Locust Rd 3. Baseline Rd/Brewer Rd 4. Baseline Rd/Fiddymnt Rd	1. Construct Placer Pkwy, add center lanes to 16 th Street (for a total of 4 lanes) 2. Construct Placer Pkwy, add center lanes to 16 th Street (for a total of 4 lanes) 3. Construct Placer Pkwy, add center lanes to 16 th St (for a total of 4 lanes), widen Watt Ave to 6 lanes	S&U	S&U	1. Baseline Rd/Pleasant Grove Rd (S) 2. Baseline Rd/Locust Rd 3. Baseline Rd/Brewer Rd 4. Baseline Rd/Watt Avenue 5. Baseline Rd/Fiddymnt Rd	Mitigation 2	S&U	S&U	Implementation of mitigation would reduce impact to a less than significant level. However, facilities are outside the jurisdiction of Sutter County. Therefore, the impact will be significant and unavoidable. The project changes do not have the potential to result in a substantial increase in the severity of the previously analyzed transportation impacts.
Sacramento County	Impact 3.3-8 Unacceptable Operations at Sacramento County Intersections	1. Elverta Rd/Power Line Rd 2. Elverta Rd/SR 70/99 3. Elverta Rd/East Levee Rd 4. Elverta Rd/Sorento Rd 5. Elkhorn Blvd/SR 70/99 NB/SB Ramps 6. Elkhorn Blvd/East Levee Rd	1. Widen Elverta Rd from 2 to 4 lanes 2. Widen Elverta Rd from 2 to 4 lanes 3. Construct Placer Pkwy 4. Add center lanes to 16 th St (for a total of 4 lanes) 5. Widen to Sacramento Co standard as 2 lane roadway	S&U	S&U	No Impact	No mitigation needed	N/A	N/A	The project changes do not have the potential to result in a substantial increase in the severity of the previously analyzed transportation impacts.

Notes:
¹LTS: Less Than Significant, S&U: Significant and Unavoidable

Table 24: Intersection Analysis Comparison & Findings (Cumulative Plus Project Conditions)

Jurisdiction	DEIR					Lakeside at Sutter Pointe				
	Impact	Impacted Facility	Mitigation Summary	Significance After Mitigation ¹		Impacted Facility	Mitigation Summary	Significance After Mitigation ¹		Findings
				Short-Term	Long-Term			Short-Term	Long-Term	
Sutter County	Impact 3.3-14 Unacceptable Operations at Sutter County Intersections	1. Sankey Rd/SR 70/99 2. Riego Rd/Pleasant Grove Rd (N) 3. Riego Rd/SR 70/99	1. Construct grade-separated interchange 2. Widen from 2 to 6 lanes. Modify access at Natomas Rd, Construct 6-lane railroad grade-separated crossing, Realign Pleasant Grove Rd (N) to Pleasant Grove Rd (S) and Install traffic signal, add turn lanes on the NB, SB, EB, WB approaches 3. Construct grade-separated interchange to accommodate ultimate 8 travel lanes on Riego Rd	S&U	LTS	1. Sankey Rd/SR 70/99 2. Riego Rd/Pacific Ave	Mitigation 8	S&U	LTS	Sutter Pointe Specific Plan includes 6/8 lanes on this section of Riego Road (the DEIR analysis assumed this widening). Therefore, the identified mitigation needed for Lakeside at Sutter Pointe is consistent with the Specific Plan. The project changes do not have the potential to result in a substantial increase in the severity of the previously analyzed transportation impacts.
Placer County	Impact 3.3-15 Unacceptable Operations at Placer County Intersections	1. Riego Rd/Pleasant Grove Rd (S) 2. Baseline Rd/Locust Rd 3. Baseline Rd/Brewer Rd 4. Baseline Rd/Fiddymont Rd	1. Widen from 2 to 6 lanes. Modify access at Natomas Rd, Construct 6-lane railroad grade-separated crossing, Realign Pleasant Grove Rd (N) to Pleasant Grove Rd (S) and Install traffic signal, add turn lanes on the NB, SB, EB, WB approaches 2. Widen from 2 to 6 lanes. Modify access at Natomas Rd, Construct 6-lane railroad grade-separated crossing, Realign Pleasant Grove Rd (N) to Pleasant Grove Rd (S) and Install traffic signal, add turn lanes on the NB, SB, EB, WB approaches 3. Provide right-turn overlap on SB approach 4. Provide right-turn overlap for SB and WB right-turns	S&U	S&U	1. Baseline Rd/Brewer Rd 2. Baseline Rd/Watt Avenue	Mitigation 9	S&U	S&U	Implementation of mitigation would reduce impact to a less than significant level. However, facilities are outside the jurisdiction of Sutter County. Therefore, the impact will be significant and unavoidable. The project changes do not have the potential to result in a substantial increase in the severity of the previously analyzed transportation impacts.
Sacramento County	Impact 3.3-16 Unacceptable Operations at Sacramento County Intersections	1. Elverta Rd/Power Line Rd 2. Elverta Rd/East Levee Rd 3. Elverta Rd/Sorento Rd 4. Elverta Rd/Watt Ave 5. Elkhorn Blvd/Natomas Blvd	<ul style="list-style-type: none"> Install traffic signal, add turn lanes on all approaches Install traffic signal, restrict access to East Levee Rd to right-in/right-out Construct turn lanes on SB approach Provide right-turn overlap on SB approach Construct 2nd WB left-turn lane 	S&U	S&U	1. Elverta Rd/East Levee Rd 2. Elverta Rd/Sorento Rd 3. Elverta Rd/Palladay Rd 4. Elverta Road/16 th St 5. Elverta Rd/Watt Avenue	Mitigation 10	S&U	S&U	Implementation of mitigation would reduce impact to a less than significant level. However, facilities are outside the jurisdiction of Sutter County. Therefore, the impact will be significant and unavoidable. The project changes do not have the potential to result in a substantial increase in the severity of the previously analyzed transportation impacts.

Notes:
¹LTS: Less Than Significant, S&U: Significant and Unavoidable

Table 25: Freeway Analysis Comparison & Findings (Existing Plus Project & Cumulative Plus Project Conditions)

Agency	DEIR					Lakeside at Sutter Pointe				
	Impact	Impacted Facility	Mitigation Summary	Significance After Mitigation ¹		Impacted Facility	Mitigation Summary	Significance After Mitigation ¹		Findings
				Short-Term	Long-Term			Short-Term	Long-Term	
Existing Plus Project Conditions										
Caltrans	Impact 3.3-9 Unacceptable Operations on Caltrans Facilities	1. NB SR 70/99 Riego Rd off-ramp diverge 2. NB SR 70/99/Elkhorn Blvd off-ramp diverge 3. NB SR 70/99 mainline between I-5 and Elkhorn Blvd 4. SB SR 70/99 to SB I-5 on-ramp weaving section with Del Paso Rd SB I-5 off-ramp 5. SB I-5 to NB SR 70/99 on-ramp merge 6. NB and SB SR 70/99 between Riego Rd and I-5	<u>Without Placer Parkway</u> <ul style="list-style-type: none"> Construct HOV lanes NB and SB on SR 70/99 from midway between Sankey Rd and Riego Rd to I-5 Construct direct HOV connector ramps between SR 70/99 and I-5, linking the SR 70/99 and I-5 HOV lanes Construct auxiliary lanes between the SB I-5 to NB SR 70/99 and SB SR 70/99 to NB I-5 connector and Elkhorn Blvd <u>With Placer Parkway</u> <ul style="list-style-type: none"> The improvements would be the same as the “without” Placer Parkway, except for the following: The SB HOV lane would begin just north of the WB Placer Parkway to SB SR 70/99 on-ramp The NB HOV lane would end and the third mainline lane would be a trap lane to EB Placer Parkway with two mixed-flow lanes continuing to NB SR 70/99 	S&U	S&U	1. NB I-5 on-ramp to Elkhorn Blvd off-ramp weave 2. NB Elkhorn Blvd loop on-ramp merge 3. NB Elkhorn Blvd slip on-ramp merge 4. NB Elkhorn Blvd to lane add basic segment 5. NB Riego Rd off-ramp basic segment 6. SB Elverta Rd off-ramp diverge 7. SB Elkhorn Blvd off-ramp diverge	Mitigation 7	S&U	S&U	Implementation of mitigation would reduce impact to a less than significant level. However, facilities are outside the jurisdiction of Sutter County. Therefore, the impact will be significant and unavoidable. The project changes do not have the potential to result in a substantial increase in the severity of the previously analyzed transportation impacts.
Cumulative Plus Project Conditions										
Caltrans	Impact 3.3-17 Unacceptable Operations on Caltrans Facilities	1. Most SR 70/99 mainline basic segment, off-ramp diverge areas, on-ramp merge areas, and weaving sections	<ul style="list-style-type: none"> Implement Mitigation Measure 3.3-9 	S&U	S&U	1. Many SR 70/99 mainline basic segment, off-ramp diverge areas, on-ramp merge areas, and weaving sections	Mitigation 14	S&U	S&U	Implementation of mitigation would reduce impact to a less than significant level. However, facilities are outside the jurisdiction of Sutter County. Therefore, the impact will be significant and unavoidable. The project changes do not have the potential to result in a substantial increase in the severity of the previously analyzed transportation impacts.

Notes:
¹LTS: Less Than Significant, S&U: Significant and Unavoidable

Vehicle Miles Traveled (VMT)

CEQA Guidelines section 15162 provides that no subsequent EIR is required when an EIR has previously been certified for a project, unless there are substantial changes to the project or its circumstances that will require major revisions to the existing EIR. (CEQA Guidelines, § 15162, subd. (a), italics added; see also Pub. Resources Code § 21166.) “An agency that proposes project changes thus must determine whether the previous environmental document retains any relevance in light of the proposed changes and, if so, whether major revisions to the previous environmental document are nevertheless required due to the involvement of new, previously unstudied significant environmental impacts.” (Friends of College of San Mateo Gardens v. San Mateo County Community College Dist. (2016) 1 Cal.5th 937, 944.) However, new regulations or methodologies for studying impacts do not trigger the requirement to prepare a subsequent EIR. For example, courts have routinely held that because greenhouse gas emissions have been “widely known” for decades “the adoption of guidelines for analyzing and evaluating the significance of [GHG] data does not constitute new information...” (Concerned Dublin Citizens v. City of Dublin (2013) 214 Cal.App.4th 1301, 1319-1320; see also Citizens for Responsible Equitable Environmental Development v. City of San Diego (2011) 196 Cal. App. 4th 515, 532 [holding effect of greenhouse gas emissions on climate did not constitute significant new information as it could have been raised in 1994 when the city consider the original EIR]; Citizens Against Airport Pollution v. City of San Jose (2014) 227 Cal.App.4th 788, 808 (CAAP) [holding GHG impacts did not constitute significant new information].)

Just as information about GHG emissions have been widely known for decades, information about transportation impacts as well as the potential use of vehicle miles traveled as a tool for evaluating environmental impacts have been known for decades. (See, e.g., Village Laguna of Laguna Beach, Inc. v. Board of Supervisors (1982) 134 Cal.App.3d 1022, 1029, fn. 4 [demonstrating that an EIR released over three decades ago included a discussion of impacts associated with vehicle miles traveled].) The fact that CEQA Guidelines section 15064.3, which establishes guidance for evaluating transportation impacts using VMT, was adopted in late 2018 (and is effective statewide as of July 1, 2020) does not require the traffic impact analysis for previous EIR to be redone in consideration of a vehicle miles traveled analysis. For example, in *A Local & Regional Monitor v. City of Los Angeles* (1993) 12 Cal.App.4th 1773, the petitioner argued that, Public Resources Code section 21092.4 – which was enacted after the EIR at issue in that case was certified and requires lead agencies to consult with local traffic agencies and analyze regional freeway impacts – required the city to conduct a further traffic analysis to comply with CEQA. (Id. at p. 1801, fn. 10.) The court disagreed because the “statute did not exist when the EIR was certified, and its subsequent enactment did not retroactively invalidate all previous EIR traffic analyses, such as the analysis done in the Project EIR.” (Ibid.) In other words, for the purposes of subsequent CEQA review, the critical question is whether there are changes in physical impacts and not changes in the legal characterization of those impacts. (See, e.g., *Fort Mojave Indian*

Tribe v. Department of Health Services (1995) 38 Cal.App.4th 1574, 1605-1606 [holding a new regulation designating critical habitat for an endangered species, the tortoise, was not significant new information because, “however legally characterized, the habitat would be affected the same as before”].)

While not required by CEQA, VMT analysis is provided for informational purposes. The potential for the project changes to result in an increase in VMT as compared to the originally approved project has been evaluated for the purposes of public disclosure and is discussed below.

Table 26 compares total cumulative project-generated VMT of Lakeside at Sutter Pointe to total cumulative project-generated VMT with Specific Plan Buildout, as documented in the Specific Plan DEIR. As shown, Lakeside at Sutter Pointe VMT would generate about 11.7% of the VMT forecast for Specific Plan Buildout. That level of VMT is similar in magnitude to the share of Lakeside at Sutter Pointe trip generation (i.e., relative to Specific Plan Buildout), which is about 11.0% (refer to **Table 20**). Therefore, in the context of project generated VMT, the project changes do not have the potential to result in a substantial increase in the severity of the previously analyzed transportation impacts.

Table 26: VMT Comparison

Scenario	Total Project Generated VMT (Cumulative Conditions)
DEIR (Specific Plan Buildout)	3,347,000
Lakeside at Sutter Pointe	392,720
Difference	2,954,280
Percent of Buildout	11.7%

Source: Fehr & Peers, 2020.

Table 27 summarizes total VMT for the six-county SACOG region under existing and cumulative conditions with and without Lakeside at Sutter Pointe. The VMT analysis is based on the regional change in total VMT under existing and cumulative conditions to measure the project’s effect on travel. Total VMT was developed as follows, using a modified version of SACOG’s 2016 MTP/SCS SACSIM activity-based forecasting model:

- Existing Conditions – Multiplied link volume by link distance for all links in the model to calculate VMT.

- Existing Project Conditions – Added the Lakeside at Sutter Pointe project to the base year model and multiplied link volume by link distance for all links in the model to calculate VMT.
- Cumulative Conditions – Multiplied link volume by link distance for all links in the model without the Lakeside at Sutter Pointe project to calculate VMT.
- Cumulative Project Conditions – Added the Lakeside at Sutter Pointe project to the future year model by reallocating forecasted household and employment growth from SACOG-designated “Developing Communities” to the Lakeside at Sutter Pointe project, maintaining the model-wide population and employment growth totals from the 2016 MTP/SCS. The “Developing Communities” were selected because they are most similar to Lakeside at Sutter Pointe, relative to location and type of development. Multiplied link volume by link distance for all links to calculate VMT.

Table 27: Lakeside at Sutter Pointe Effect on VMT

Scenario	Total Model-wide VMT					
	Existing Conditions			Cumulative Conditions		
	No Project	Plus Project	Difference	No Project	Plus Project	Difference
VMT	60,345,157	60,765,612	420,455	78,879,419	78,828,858	-50,561
Service Population ¹ (Population & Employment)	3,156,501	3,169,005		4,409,563	4,409,563	
VMT/Service Population	19.12	19.17		17.89	17.88	

Source: Fehr & Peers, 2020

¹Service population calculated from modified version of 2016 MTP/SCS SACSIM travel demand forecasting model

As shown in **Table 27**, the addition of the Lakeside at Sutter Pointe under existing conditions would increase model wide VMT. This is a reasonable outcome, since the project adds population and employment to the region’s current population and employment (i.e., more people traveling). Under cumulative conditions, the addition of the project would result is slightly lower model-wide VMT, assuming a competitive market where people select Lakeside at Sutter Pointe project over other areas designated as “Developing Communities.” This outcome is due to the project site being more efficient (i.e., more centrally located regionally) than others. This is also shown in the lower VMT/Service Population performance metric. Therefore, in the context of VMT effect, the project changes do not have the potential to result in a substantial increase in the severity of the previously analyzed transportation impacts.

On-Site Facilities

Tables 28 summarize intersection operations for on-site facilities. The traffic volume forecasts and assumed traffic control and turn lane configurations for the on-site study intersections are shown on **Figure 2A and 2B**. As shown in **Table 28**, all of the study intersection would operate acceptably (i.e., LOS D or better) based on the assumed traffic control and lane configurations shown on **Figures 2A and 2B**.

Table 28: Intersection Operations – On-Site Facilities

Intersection	Traffic Control	LOS Threshold	Peak Hour	Delay	LOS
23. Riego Road / Westerly Project Driveway	Signal	D	AM PM	15 13	B B
24. Riego Road / Street 1	Signal	D	AM PM	47 41	D D
25. Riego Road / Street 2	Signal	D	AM PM	38 34	D C
26. Westerly Project Driveway / Internal Ring Road	AWSC	D	AM PM	8 9	A A
27. Street 1 / Street 2	Signal	D	AM PM	17 21	B C
28. Street 1 / Street 45	Signal	D	AM PM	17 29	B C
29. Street 1 / Street 50	Signal	D	AM PM	12 19	B B
30. Street 1 / Street 40	SSSC	D	AM PM	1 (13) 1 (13)	A (B) A (B)
31. Street 50 / Residential-School Road	SSSC	D	AM PM	1 (18) 1 (25)	A (C) A (D)
32. Street 50 / North Residential Road 1	SSSC	D	AM PM	1 (19) 2 (23)	A (C) A (C)
33. Street 50 / North Residential Road 2	SSSC	D	AM PM	3 (15) 5 (32)	A (C) A (D)
34. Street 50 / Street 51	Signal	D	AM PM	15 17	B B

Notes: LOS = level of service. SSSC = side-street stop control. AWSC = all-way stop control. **Bold** indicates deficient LOS. **Bold and underline** indicates a significant impact.

¹ Average control delay for signalized intersections is the weighted average for all movements. For side-street stop-controlled intersections, the average delay for the worse movement is shown in parentheses.

² LOS is calculated based on methodologies contained in the Highway Capacity Manual (HCM) 6th Edition.

³ Average control delay at Baseline Road/Brewer Road is calculated as the “overall weighted average delay for movements yielding the right-of-way,” per Placer County guidelines for side-street stop-controlled intersections.

Source: Fehr & Peers, 2020.

Under cumulative plus project conditions, eastbound and westbound through movement volumes at the three project frontage intersections would change as compared to through movement volumes under existing plus project conditions. As a result, operations at the three intersections were also evaluated under cumulative plus project conditions. These results are shown in **Table 29**. The traffic volume forecasts and assumed traffic control and turn lane configurations for the site access intersections under cumulative plus project conditions are shown on **Figure 4**. As shown in **Table 29**, all of the site access intersections would operate acceptably (i.e., LOS D or better) based on the assumed traffic control and lane configurations shown on **Figure 4**.

Table 29: Cumulative Plus Project Intersection Operations – Project Frontage Intersections

Intersection	Traffic Control	LOS Threshold	Peak Hour	Delay	LOS
23. Riego Road / Westerly Project Driveway	Signal	D	AM	14	B
			PM	13	B
24. Riego Road / Street 1	Signal	D	AM	46	D
			PM	41	D
25. Riego Road / Street 2	Signal	D	AM	37	D
			PM	34	C

Notes: LOS = level of service. **Bold** indicates deficient LOS. **Bold and underline** indicates a significant impact.

¹ Average control delay for signalized intersections is the weighted average for all movements.

² LOS is calculated based on methodologies contained in the Highway Capacity Manual (HCM) 6th Edition.

Source: Fehr & Peers, 2020.

MEMORANDUM

Date: September 15, 2020
To: Bob Shattuck, Shattuck Community Planning
From: David B. Robinson, Fehr & Peers
Subject: *Lakeside at Sutter Pointe: Riego Road West Improvement Triggers*

RS19-3790

Introduction

Fehr & Peers has completed an evaluation of the improvement trigger for widening Riego Road west of the project from two to four lanes. The proposed Lakeside at Sutter Pointe project would be built on 873.5 acres situated north of Riego Road and west of Natomas Road in Sutter County. The project would include the following proposed land uses.

- 3,388 single-family detached dwelling units
- 399 multi-family dwelling units
- 272,000 square feet of commercial land use
- 683,000 square feet of employment
- An elementary school
- 113.9 acres of parks/open space

Improvement Phasing & Triggers

The development of the Lakeside at Sutter Pointe project will occur over time. Consequently, the timing of offsite infrastructure improvement is not certain and will be influenced by the following factors

- The rate, location, and type of regional development, including Sutter County, Placer County, Sacramento County
- The implementation of roadway improvements constructed by others
- The location of development within the project site
- The type of development within the project site

- The timing and ability of Sutter County to reach agreements with other public agencies regarding improvements outside Sutter County, as specified in Mitigation Measure 3.3-1 of the Sutter Pointe Specific Plan DEIR

This is particularly true for the Riego Road/Baseline Road corridor that is key arterial for travel to/from Placer County today, which will continue in that role for the proposed project and other planned development projects in Placer County, like the Placer Vineyards Specific Plan.

The improvement triggers were developed by first identifying modest intersection improvements (i.e., like traffic signal control and turn lane improvements) followed by more comprehensive roadway widening. Improvement triggers were identified by equating the volume of traffic added to a particular study facility (i.e., that resulted in an operational deficiency) to the amount of traffic added to the facility by the Lakeside at Sutter Pointe project. The corresponding PM peak hour trip generation was normalized to the trip generation of a single family residential dwelling to estimate dwelling unit equivalents (DUE) for each improvement.

Table 1 identifies the improvement trigger for widening Riego Road from two to four lanes between SR 99 and Street 2. As shown, the improvement would be triggered at 3,201 DUEs.

Table 1: Riego Road Widening (West) Improvement Trigger

Dwelling Unit Equivalent Trigger	Jurisdiction	Lakeside at Sutter Pointe	
		Facility	Improvement ¹
3,201	Sutter County	Riego Rd	<ul style="list-style-type: none"> • Widen Riego Road from 2 to 4 lanes from SR 99 to Street 2

Notes:

The project applicant shall pay its fair share of costs for mitigation projects, consistent with **Mitigation Measure 3.3-1 of the Sutter Pointe Specific Plan DEIR**. The analysis of the project under existing conditions assumes that the entire project develops immediately. However, development of the Lakeside at Sutter Pointe project will occur over time. Consequently, the timing of offsite infrastructure improvement is not certain and will be influenced by the following factors:

- The rate, location, and type of regional development, including Sutter County, Placer County, Sacramento County
- The implementation of roadway improvements constructed by others
- The location of development within the project site
- The type of development within the project site
- The timing and ability of Sutter County to reach agreements with other public agencies regarding improvements outside Sutter County, as specified in Mitigation Measure 3.3-1 of the Sutter Pointe Specific Plan DEIR

Individual intersection widening and traffic control modifications will be largely constructed directly by the project applicant and other developers in the same area depending on when specific development project advance to the implementation phase.

Fehr & Peers, 2020

Since the DUE calculation is normalized to the PM peak hour trip generation of a single family dwelling unit, the improvement would be required with construction of the 3,201 single family dwelling units.

Improvement Triggers and Development Type

As outlined above, the improvement triggers are identified based on DUEs and not dwelling units (DUs). Therefore, the number of actual single family residential dwelling units that can be constructed in the project before triggering the improvement will depend on the type of development constructed in the project. The following different development types would affect improvement triggers relative to single family residential land use:

- More Intense Development – If development in the project occurs that has a higher PM peak hour trip generation rate, relative to single family residential, than fewer single family dwellings could be constructed before triggering an improvement.
- Less Intense Development – If development in the project occurs that has a lower PM peak hour trip generation rate, relative to single family residential, than more single family dwellings could be constructed before triggering an improvement.

Influence of Active Adult Residential

Table 2 compares the number of dwelling units from the proposed Lakeside at Sutter Pointe project that would satisfy the improvement trigger for Riego Road (west) between SR 99 and Street 2. We compared a scenario with only single family dwelling units to a scenario that includes both of active adult and traditional single family dwelling units.

As shown, the introduction of 1,000 active adult dwelling units would increase the total number of dwelling units (both types combined) from 3,210 to 3,898. The increase in total dwelling units is due to the lower PM peak hour trip generation rate for the active adult dwelling units, which is only 30% of the traditional single family unit trip rate.

Table 2: Riego Road Widening (West) Improvement Trigger Comparison

Residential Land Use Scenario	Land Use	PM Peak Hour Trip Rate	Dwelling Units	PM Peak Hour Trip Generation
Only Single Family	Single Family	0.99	3,201	3,169
Single Family & Active Adult	Total		3,898	3,169
	Active Adult ¹	0.30	1,000	300
	Single Family	0.99	2,898	2,869

¹Active Adult – Trip 1 Generation Manual 10th Edition. Land Use Category 251 (Senior Adult Housing Detached)
Fehr & Peers, 2020