RTIP ID# (<u>required</u>): RIV041052

TCWG Consideration Date: June 25, 2019

Project Description (clearly describe project)

The Moreno Project Phase 2 (EA 32303) is proposing to provide a westbound (WB) off-ramp to Moreno Beach Drive, north of State Route (SR) 60. Also at Moreno Beach Drive, a loop on-ramp with auxiliary lane for northbound (NB) traffic and a direct on-ramp for southbound (SB) traffic are proposed for vehicles to complete the SB Moreno Beach Drive to WB SR-60 movement. A traffic signal would be provided at the intersection of these ramps with Moreno Beach Drive. Ramp meters would be provided for the WB on-ramps. The existing two-lane bridge would be replaced with a new overcrossing that would provide six through lanes plus a dedicated left-turn lane with standard lane widths, and sidewalks as well as minimum 8-foot-wide shoulders that would accommodate bicycles in each direction. A minimum standard vertical clearance to SR-60 would be provided for the proposed bridge structure. In addition, SR-60 would be widened at this overcrossing location to provide standard 10-foot-wide shoulders.

IN MORENO VALLEY AT SR-60/MORENO BEACH DR IC: MODIFY MORENO BEACH DR IC - WIDEN OC FROM 2 TO 6 THROUGH LANES, REALIGN/WIDEN RAMPS (WB EXIT 1 TO 2 LANES), ADD NEW WB ENTRY RAMP (2 LANES), ADD WB AUX LANE, AND INSTALL RELATED DRAINAGE AND ASSOCIATED WORK (from 2013 FTIP #13-13, Riverside County)

Type of Project (use Table 1 on instruction sheet)

Reconfigure existing interchange

County	Narrative Location/Route & Postmiles
Riverside	City of Moreno Valley/State Route 60 (SR-60) from PM 18.8/19.6
	Caltrans Projects – EA# 32303

Lead Agency:

Contact Person	Phone#	Fax#	Email
Marge Lazarus	951-413-3133	951-413-3170	margeryl@moval.org

Hot Spot Pollutant of Concern (check one or both) PM_{2.5} X PM₁₀ X

Feder	al Action for wh	ich Project-Level P	M Conformity is Ne	eded (check appropriate bo	ox)
X	Categorical Exclusion (NEPA)	EA or Draft EIS	FONSI or Final EIS	PS&E or Construction	Other

Scheduled Date of Federal Action: Not Applicable (NEPA Document is a Categorical Exclusion)

NEPA Assignment – Project Type (check appropriate box)

Exempt	Section 326 –Categorical Exemption	Section 327 – Non- Categorical Exemption

Current Programming Dates (as appropriate)

	PE/Environmental	ENG	ROW	CON
Start	2004	2008	2009	2020
End	2007	2020	2019	2022

Project Purpose and Need (Summary): (attach additional sheets as necessary)

The purpose of the project is to provide operational improvements to facilitate traffic movement at and near the SR-60/Moreno Beach Drive interchange, alleviate existing traffic congestion, increase storage capacity at the SR-60/Moreno Beach Drive intersection, and address existing roadway and bridge deficiencies. The project is needed to improve safety, to bring the roadway and bridge features up to current standards, provide acceptable levels of service, and accommodate projected future traffic volumes.

Surrounding Land Use/Traffic Generators (especially effect on diesel traffic)

Northwest and northeast quadrants- Open space/single-family residential

Southwest and southeast quadrants - Commercial (including Walmart Super Center and Super Target)

Opening Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

See Table 1 for Freeway Opening Year (2022) Build and No Build Total AADT, Truck AADT and Truck Percentage.

See Tables 5 through 9 for Intersection and Freeway Opening Year (2022) LOS.

RTP Horizon Year/Design Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

See Table 2 for Horizon Year (2045) Build and No Build Total AADT, Truck AADT and Truck Percentage. See Tables 5 through 9 for Intersection and Freeway Horizon Year (2045) LOS.

Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

See Table 3 for Intersection Opening Year (2022) Build and No Build Total AADT, Truck AADT and Truck Percentage.

RTP Horizon Year/Design Year: If facility is an interchange (s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

See Table 4 for Intersection Horizon Year (2045) Build and No Build Total AADT, Truck AADT and Truck Percentage.

Describe potential traffic redistribution effects of congestion relief (impact on other facilities)

The project would not generate new vehicle trips and would not increase overall vehicle volumes or truck trips. By reducing congestion, the project could encourage some motorists to slightly alter their normal commute route and might encourage some commercial and industrial users to slightly alter their normal routes for obtaining raw materials and delivering finished goods.

Comments/Explanation/Details (attach additional sheets as necessary)

The project is not a Project of Air Quality Concern (40 Code of Federal Regulations [CFR] 93.123(b)(1))

- (i) New or expanded highway projects with significant number/increase in diesel vehicles?
 - ✓ Not a new highway project
 - ✓ Interchange and mainline improvements to relieve congestion (reducing delay and air pollutant emissions)
 - ✓ No substantial change in traffic volumes or truck percentages
- (ii) Affects intersections at LOS D, E, or F with a significant number of diesel vehicles?
 - ✓ The Moreno Beach Phase 2 Project would provide some congestion relief compared to the no-build condition as seen in Table 3. Operational improvements resulting from widening of the Moreno Beach overcrossing eliminates LOS F conditions at the intersection of Moreno Beach Drive and the eastbound (EB) SR-60 ramps that would arise in the year 2045 as a result of background growth. Even with the project in place, LOS F conditions would continue to arise at the intersection of Moreno Beach Drive and Ironwood Avenue, although conditions would be similar to no-build conditions because no capacity improvement or significant traffic pattern changes are introduced in this area under the project. This intersection does not have a significant number of diesel vehicles. As seen in Table 5, at the intersection of Moreno Beach Drive and the SR-60 EB ramps, which would have more diesel trucks, the LOS improves from E and F for the no-build horizon year to A and B for the build horizon year.
- (iii) New bus and rail terminals and transfer points?—Not Applicable
- (iv) Expanded bus and rail terminals and transfer points?—Not Applicable
- (v) Affects areas identified in PM_{10} or $PM_{2.5}$ implementation plan as site of violation?
 - \checkmark Not identified in a PM₁₀ or PM_{2.5} implementation plan as an area of potential violation.

See also Figures 1 and 2 and Tables 1 through 9 attached.

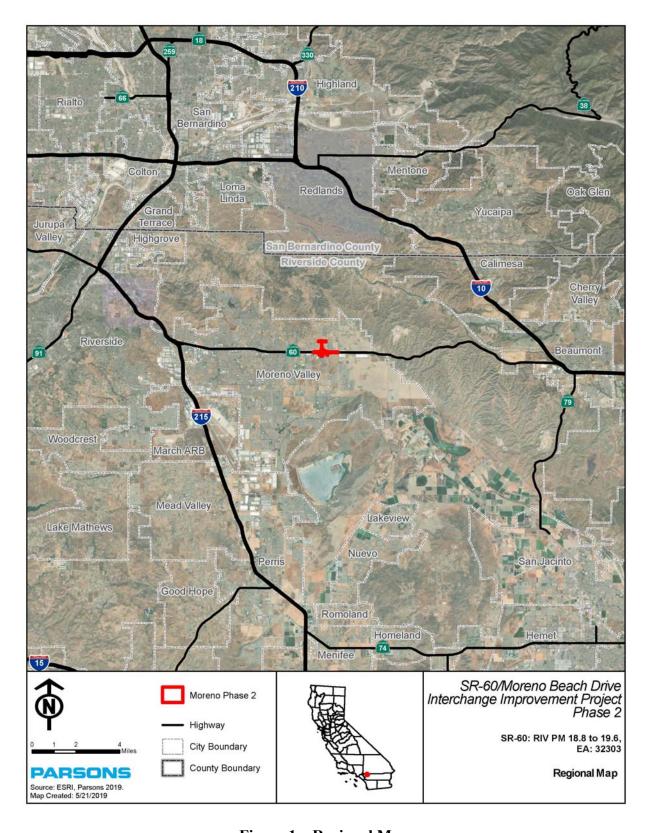


Figure 1 – Regional Map

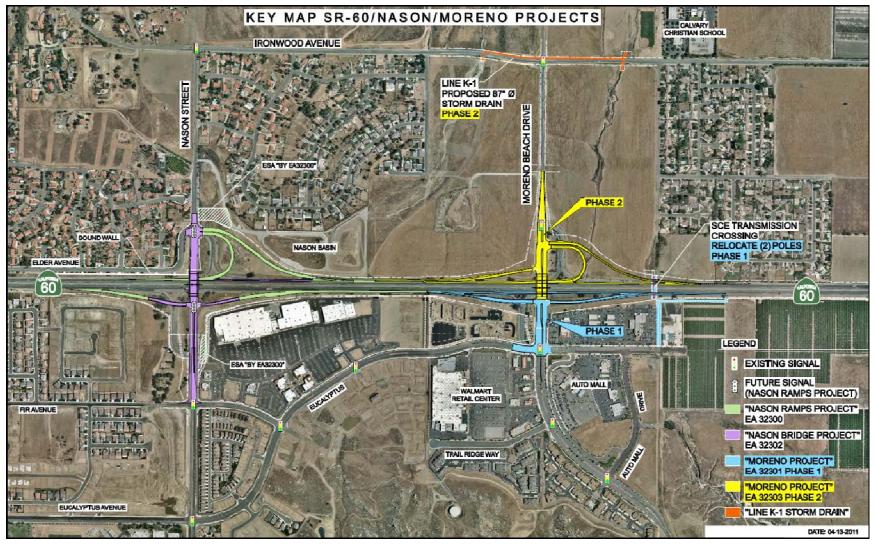


Figure 2 - Project Location

Table 1: Freeway Opening Year (2022) Build and No Build Total AADT, Truck AADT, and Truck Percentage

		Build		No Build			
	Total AADT	Truck AADT	Truck %	Total AADT	Truck AADT	Truck %	
Eastbound Mainline	292,444	64,226	22	292,518	64,282	22	
Eastbound Ramps	24,037	555	2	24,018	555	2	
Westbound Mainline	290,827	68,673	24	238,509	57,227	24	
Westbound Ramps	20,943	335	2	19,471	344	2	

Table 2: Freeway Horizon Year (2045) Build and No Build Total AADT, Truck AADT, and Truck Percentage

		Build		No Build				
	Total AADT	Truck AADT	Truck %	Total AADT	Truck AADT	Truck %		
Eastbound Mainline	361,399	89,535	25	361,518	89,645	25		
Eastbound Ramps	35,599	1,381	4	35,527	1,372	4		
Westbound Mainline	353,134	93,425	26	290,117	77,844	27		
Westbound Ramps	32,001	746	2	29,590	736	2		

Table 3: Intersection Opening Year (2022) Build and No Build Total AADT, Truck AADT, and Truck Percentage

		Build		No Build				
	Total AADT	Truck AADT	Truck %	Total AADT	Truck AADT	Truck %		
Moreno Beach Dr &								
EB 60 Ramps	17,691	191	1	26,636	282	1		
Moreno Beach Dr &								
Ironwood Ave	8,573	45	1	9,300	54	1		
Moreno Beach Dr &								
SR 60 WB Ramps	13,072	100	1	16,963	136	1		
Moreno Beach								
Dr/Auto Mall Pkwy &								
Auto Mall Dr	23,099	90	0	23,109	90	0		
Moreno Beach								
Dr/Auto Mall Pkwy &								
Trail Ridge Way	23,198	153	1	23,188	171	1		

Table 4: Intersection Horizon Year (2045) Build and No Build Total AADT, Truck AADT, and Truck Percentage

	Build No Build					
	Total AADT	Truck AADT	Truck %	Total AADT	Truck AADT	Truck %
Moreno Beach Dr &						
EB 60 Ramps	25,663	381	1	36,689	545	1
Moreno Beach Dr &						
Ironwood Ave	10,899	127	1	26,082	363	1
Moreno Beach Dr &						
SR 60 WB Ramps	18,755	273	1	26,272	345	1
Moreno Beach						
Dr/Auto Mall Pkwy &						
Auto Mall Dr	27,098	90	0	27,135	99	0
Moreno Beach						
Dr/Auto Mall Pkwy &						
Trail Ridge Way	27,280	217	1	27,289	235	1

Table 5: Intersection LOS Comparison

				Bı	uild		No Build			
Intersection	Approach	Movement	2022		20	2045		22	2045	
			AM	PM	AM	PM	AM	PM	AM	PM
	Westbound	Left	E (75.1)	F (151.2)	F (117.9)	F (135.0)	E (63.8)	E (56.9)	F (94.2)	F (90.8)
	Westbound	Through	F (83.4)	D (41.4)	F (244.7)	F (139.2)	E (77.2)	D (50.1)	F (234.9)	F (135.5)
1: Moreno	Eastbound	Left	F (87.3)	F (138.6)	F (199.9)	F (138.7)	F (83.7)	E (60.3)	F (204.0)	F (123.1)
Beach Drive & Ironwood	Eastbound	Through	D (48.3)	D (35.2)	F (106.4)	F (106.9)	D (46.5)	D (40.9)	F (81.6)	F (81.8)
Avenue	Northbound	Through	E (72.5)	D (54.7)	F (255.3)	F (128.6)	E (70.1)	D (53.2)	F (226.9)	F (127.4)
	Southbound	Through	E (69.6)	D (41.0)	F (191.4)	F (95.3)	E (63.8)	D (52.6)	F (161.9)	F (83.2)
	All	All	E (72.9)	E (65.9)	F (205.4)	F (125.0)	E (68.5)	D (51.7)	F (184.8)	F (112.2)
	Westbound	Left	D (36.6)	D (36.3)	D (37.9)	C (33.2)	D (44.3)	D (40.9)	D (44.6)	D (42.3)
	Westbound	Right					B (17.6)	B (11.7)	B (12.3)	A (6.8)
2: Moreno Beach Drive &	Northbound	Through	A (4.7)	A (6.2)	A (6.4)	A (5.5)	A (7.5)	A (6.1)	B (13.2)	B (12.8)
SR-60	Northbound	Right	B (17.1)	A (1.1)	A (0.9)	A (2.4)	A (0.4)	A (0.3)	A (0.4)	A (0.1)
Westbound Ramps	Southbound	Left					D (43.9)	D (40.9)	D (44.4)	D (47.4)
	Southbound	Through	A (4.1)	A (3.8)	A (5.3)	A (6.7)	A (5.2)	A (5.4)	A (9.0)	A (8.9)
	All	All	B (12.7)	A (8.7)	B (10.0)	B (10.9)	B (11.7)	B (10.4)	B (15.8)	B (15.1)
	Eastbound	Left	D (42.7)	D (40.4)	D (42.0)	D (36.3)				
	Eastbound	Through	B (14.0)	A (9.7)	A (9.3)	A (7.2)	D (42.0)	D (41.9)	D (43.7)	F (83.6)
3: Moreno	Eastbound	Right	B (11.5)	A (9.5)	A (8.7)	A (7.1)	B (12.1)	B (12.1)	B (11.2)	A (9.8)
Beach Drive & SR-60	Northbound	Through	A (1.2)	A (3.5)	A (3.6)	B (10.9)	C (27.8)	D (53.6)	D (37.3)	F (133.2)
Eastbound	Northbound	Right	A (0.7)	A (0.9)	A (1.8)	A (4.2)	A (9.7)	A (4.9)	A (6.5)	A (4.1)
Ramps	Southbound	Left	D (40.5)	D (43.1)	D (38.5)	D (37.2)				
	Southbound	Through	A (4.3)	A (4.4)	A (6.0)	B (10.2)	C (29.9)	C (25.0)	F (169.4)	F (126.7)
	All	All	A (8.4)	A (8.6)	B (10.4)	B (13.8)	C (23.4)	C (28.9)	E (74.9)	F (81.2)

Table 5: Intersection LOS Comparison

				Bı	uild		No Build			
Intersection	Approach	Movement	2022		2045		20	22	2045	
			AM	PM	AM	PM	AM	PM	AM	PM
	Westbound	Through	D (41.3)	D (47.6)	D (49.8)	D (54.7)	D (43.3)	D (43.7)	D (49.8)	D (47.9)
	Westbound	Left	D (41.7)	D (43.7)	D (43.9)	D (50.1)	C (21.7)	B (18.5)	C (28.0)	C (25.3)
	Southbound	Right	A (1.1)	B (11.5)	A (1.0)	A (8.2)				
	Eastbound	Left	D (42.2)	D (43.3)	D (47.4)	D (52.7)	D (44.4)	D (42.9)	D (51.3)	E (55.2)
	Eastbound	Through	C (32.4)	C (32.8)	D (36.2)	C (33.3)	B (15.3)	B (13.9)	B (17.8)	C (20.5)
4: Moreno	Eastbound	Right	A (1.1)	A (4.2)	A (7.2)	A (5.9)				
Beach Drive & Eucalyptus	Northbound	Left	D (35.8)	D (35.0)	D (36.4)	D (50.1)	D (45.7)	D (35.4)	D (46.7)	D (46.9)
Avenue	Northbound	Through	B (14.1)	B (17.8)	B (19.0)	C (31.0)	B (17.7)	B (19.3)	C (24.4)	C (27.5)
	Northbound	Right	A (0.1)	A (0.1)	A (0.1)	A (0.8)	A (0.1)	A (0.1)	A (0.1)	A (0.8)
	Southbound	Left	D (43.2)	D (42.1)	D (46.7)	D (44.8)	D (50.5)	D (47.6)	D (42.9)	D (53.6)
	Southbound	Through	B (14.7)	C (20.3)	B (17.3)	D (37.2)	B (16.3)	B (18.2)	C (20.6)	C (23.6)
	Southbound	Right	A (1.4)	A (2.8)	A (3.2)	C (21.1)	A (2.4)	A (2.2)	A (3.5)	A (4.6)
	All	All	C (20.2)	C (22.9)	C (24.1)	C (33.6)	C (23.5)	C (22.1)	C (25.8)	C (28.6)
	Eastbound	Left	D (39.6)	D (39.2)	D (39.8)	D (36.0)	D (39.6)	D (39.2)	D (39.8)	D (35.9)
	Eastbound	Right	B (15.0)	B (13.8)	B (14.4)	C (22.2)	B (15.0)	B (13.8)	B (14.4)	C (22.4)
5: Moreno	Northbound	Left	A (2.2)	A (1.4)	A (2.6)	A (2.6)	A (2.2)	A (1.4)	A (2.7)	A (2.4)
Beach Drive & Trail Ridge	Northbound	Through	A (1.9)	A (0.2)	A (2.3)	A (0.4)	A (1.9)	A (0.2)	A (2.4)	A (0.3)
Way	Southbound	Through	A (1.3)	A (8.1)	A (1.8)	A (9.4)	A (3.7)	A (5.8)	A (2.8)	A (4.4)
	Southbound	Right	A (0.1)	A (4.1)	A (0.1)	A (5.1)	A (1.8)	A (2.1)	A (0.5)	A (1.7)
	All	All	A (4.3)	A (7.6)	A (4.8)	A (9.5)	A (5.2)	A (6.7)	A (5.1)	A (7.5)

Table 5: Intersection LOS Comparison

				В	uild		No Build			
Intersection	Approach	Movement	2022		20	2045		2022		145
			AM	PM	AM	PM	AM	PM	AM	PM
	Westbound	Left	D (40.8)	D (49.8)	D (41.2)	D (53.9)	D (41.2)	D (54.8)	D (41.5)	D (53.9)
	Westbound	Through	C (28.0)	C (26.0)	C (28.0)	A (0.0)	C (28.0)	A (0.0)	C (28.0)	A (0.0)
	Westbound	Right	A (0.0)	A (0.1)						
	Eastbound	Left	D (54.5)	D (47.4)	D (52.7)	D (50.9)	D (53.4)	D (48.0)	D (52.0)	D (50.5)
6: Automall	Eastbound	Through	A (0.1)	A (0.0)	A (0.1)	A (0.0)	B (12.1)	A (0.0)	A (0.1)	A (0.0)
Drive & Moreno Beach	Northbound	Left	D (41.0)	D (44.9)	D (42.4)	D (46.0)	D (42.2)	D (48.1)	D (42.8)	D (44.4)
Drive	Northbound	Through	B (16.2)	B (17.5)	B (17.8)	B (18.2)	B (16.3)	B (16.8)	C (20.4)	B (18.3)
	Northbound	Right	A (0.2)	A (0.1)	A (0.2)	A (0.1)	A (0.2)	A (0.1)	A (0.3)	A (0.1)
	Southbound	Left	C (34.2)	D (55.0)	D (43.5)	D (51.0)	C (32.8)	D (53.2)	D (36.7)	D (48.6)
	Southbound	Through	B (11.4)	A (9.6)	B (11.8)	B (12.6)	B (11.0)	B (10.6)	B (11.7)	B (16.3)
	Southbound	Right	A (0.8)	A (0.2)	A (0.3)	A (0.3)	A (1.2)	A (0.2)	A (1.0)	A (0.3)

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Note: Intersection LOS defined in terms of average control delay (in seconds per vehicle)

Table 6: No Build (2022 and 2045) Westbound SR-60 Freeway Segment Density and Level of Service

			2022	Year 2045					
Segment Name	Segment	AM		PM		AM		PM	
Segment Name	Туре	Density (veh/mi/ln)	LOS	Density (veh/mi/ln)	LOS	Density (veh/mi/ln)	LOS	Density (veh/mi/ln)	LOS
General Purpose Lanes									
Before Redlands Boulevard On-Ramp	BFS	19	С	20	С	26.8	D	24.3	С
Redlands Boulevard On-Ramp	Merge	26	С	26.7	С	38.7	D	34.2	D
After Redlands Boulevard On-Ramp	BFS	22.6	С	23.7	С	35	D	31.3	D
Moreno Beach Drive Off-Ramp	Diverge	26.9	С	28	С	36.6	D	34.5	D
Between Moreno Beach Drive Off-Ramp and On-Ramp	BFS	21.7	С	22.3	С	31.6	D	27.6	D
Between Moreno Beach Drive On-Ramp and Nason Street Off-Ramp	Weaving	18.5	В	19.4	В	24.9	С	24	С
After Nason Street Off-Ramp	BFS	15.4	В	15.9	В	20	С	18	В
Managed Lanes									
After Redlands Boulevard On-Ramp	BFS	6.1	Α	5.7	Α	8	Α	6.9	Α
Moreno Beach Drive Off-Ramp	Diverge	5.9	Α	5.4	Α	7.5	Α	6.2	Α
Between Moreno Beach Drive Off-Ramp and On-Ramp	BFS	4.8	Α	4.4	Α	6.2	Α	5.1	Α
Between Moreno Beach Drive On-Ramp and Nason Street Off-Ramp	Weaving	5.9	Α	5.4	Α	7.5	А	6.2	Α
After Nason Street Off-Ramp	BFS	5.9	А	5.4	Α	7.5	А	6.4	А

Table 7: No Build (2022 and 2045) Eastbound SR-60 Freeway Segment Density and Level of Service

Segment Name			2022	Year 2045					
	Segment	AM		PM		AM		PM	
	Туре	Density (veh/mi/ln)	LOS	Density (veh/mi/ln)	LOS	Density (veh/mi/ln)	LOS	Density (veh/mi/ln)	LOS
General Purpose Lanes									
Before Nason Street On-Ramp	BFS	16.1	В	27.8	D	26.8	D	24.3	С
Nason Street On-Ramp	Merge	11.6	В	18.1	С	38.7	D	34.2	D
Moreno Beach Drive Off-Ramp	Diverge	13.2	В	20.2	С	35	D	31.3	D
Between Moreno Beach Drive Off-Ramp and On-Ramp	BFS	9.9	Α	15.2	В	36.6	D	34.5	D
Moreno Beach Drive On-Ramp	Merge	17.9	В	28.6	С	31.6	D	27.6	D
After Moreno Beach Drive On-Ramp	BFS	15.8	В	25.3	С	24.9	С	24	С
Redlands Boulevard Off-Ramp	Diverge	19.5	В	28.1	С	20	С	18	В
Managed Lanes									
Before Nason Street On-Ramp	BFS	7	Α	10.5	Α	6.6	Α	5.6	Α
Nason Street On-Ramp	Merge	7	Α	10.5	Α	6.6	Α	5.6	Α
Moreno Beach Drive Off-Ramp	Diverge	6.4	Α	9.2	Α	8	Α	6.9	Α
Between Moreno Beach Drive Off-Ramp and On-Ramp	BFS	6.4	Α	9.2	Α	7.5	А	6.2	Α
Moreno Beach Drive On-Ramp	Merge	6.4	Α	9.2	Α	6.2	Α	5.1	Α
After Moreno Beach Drive On-Ramp	BFS	6.9	Α	9.7	Α	7.5	А	6.2	Α
Redlands Boulevard Off-Ramp	Diverge	6.9	А	9.7	А	7.5	А	6.4	А

Table 81: Build Conditions (2022 and 2045) Westbound SR-60 Freeway Segment Density and Level of Service

Segment Name			2022		Year 2045						
	Segment Type	AM		PM		AM		PM			
		Density (veh/mi/ln)	LOS	Density (veh/mi/ln)	LOS	Density (veh/mi/ln)	LOS	Density (veh/mi/ln)	LOS		
General Purpose Lanes											
Before Redlands Boulevard On-Ramp	BFS	18.9	С	19.9	С	26.5	D	24	С		
Redlands Boulevard On-Ramp	Merge	25.7	С	26.6	С	38.2	D	33.8	D		
After Redlands Boulevard On-Ramp	BFS	23	С	24.3	С	36.5	Е	32.4	D		
Moreno Beach Drive Off-Ramp	Diverge	25	С	26.2	С	34.1	D	32.1	D		
Between Moreno Beach Drive Off-Ramp and On-Ramp	BFS	22	С	22.9	С	33.2	D	28.2	D		
On-Ramp from NB Moreno Beach Drive	Merge	15.7	В	16.4	В	20.8	С	19.7	С		
On-Ramp from SB Moreno Beach Drive	Merge	18.5	В	19.1	В	24.5	С	23.4	С		
Between On-Ramp from SB Moreno Beach Drive and Nason Street Off-Ramp	Overlap	15.9	В	16.6	В	21.3	С	20	С		
Nason Street Off-Ramp	Diverge	17.2	С	17.8	С	23.1	С	21.5	С		
After Nason Street Off-Ramp	BFS	15.4	В	15.9	В	20.1	С	18.5	С		
			Manage	d Lanes	•		•		•		
After Redlands Boulevard On-Ramp	BFS	5.7	Α	5.8	Α	7.4	Α	7.1	Α		
Moreno Beach Drive Off-Ramp	Diverge	5.4	Α	5.5	Α	6.9	Α	6.3	Α		
Between Moreno Beach Drive Off-Ramp and On-Ramp	BFS	5.4	Α	5.5	Α	6.9	Α	6.3	Α		
On-Ramp from NB Moreno Beach Drive	Merge	5.4	Α	5.5	Α	6.9	Α	6.3	Α		
On-Ramp from SB Moreno Beach Drive	Merge	5.4	Α	5.5	Α	6.9	Α	6.3	Α		
Between On-Ramp from SB Moreno Beach Drive and Nason Street Off-Ramp	Overlap	6.4	А	6.5	А	8	А	7.7	Α		
Nason Street Off-Ramp	Diverge	6.1	Α	6.3	Α	7.5	Α	7.1	Α		
After Nason Street Off-Ramp	BFS	6.1	Α	6.3	Α	7.5	Α	7.1	Α		

Table 9: Build Conditions (2022 and 2045) Eastbound SR-60 Freeway Segment Density and Level of Service

Segment Name			Yea	r 2022		Year 2045				
	Segment Type	AM		PM		AM		PM		
		Density (veh/mi/ln)	LOS	Density (veh/mi/ln)	LOS	Density (veh/mi/ln)	LOS	Density (veh/mi/ln)	LOS	
General Purpose Lanes										
Before Nason Street On-Ramp	BFS	16.1	В	27.9	D	21.4	С	40.6	E	
Nason Street On-Ramp	Merge	11.6	В	18.1	С	14.8	В	24.3	С	
Moreno Beach Drive Off-Ramp	Diverge	13.2	В	20.2	С	16.9	В	26	С	
Between Moreno Beach Drive Off-Ramp and On-Ramp	BFS	9.9	Α	15.1	В	12.9	В	19	С	
Moreno Beach Drive On-Ramp	Merge	17.8	В	28.5	С	23.7	С	40.3	D	
After Moreno Beach Drive On-Ramp	BFS	15.8	В	25.3	С	21.1	С	37	Е	
Redlands Boulevard Off-Ramp	Diverge	18.3	В	28	С	24.4	С	36.3	D	
Managed Lanes										
Before Nason Street On-Ramp	BFS	6.8	Α	10.6	Α	8.5	Α	13.3	В	
Nason Street On-Ramp	Merge	6.8	Α	10.6	Α	8.5	Α	13	В	
Moreno Beach Drive Off-Ramp	Diverge	6.4	Α	9.6	Α	8.1	Α	11.8	В	
Between Moreno Beach Drive Off-Ramp and On-Ramp	BFS	6.4	Α	9.6	Α	8.1	Α	11.8	В	
Moreno Beach Drive On-Ramp	Merge	6.2	Α	9.2	Α	7.7	Α	11.5	В	
After Moreno Beach Drive On-Ramp	BFS	6.6	Α	9.8	Α	8.5	Α	12.4	В	
Redlands Boulevard Off-Ramp	Diverge	6.6	Α	9.8	Α	8.5	Α	12.4	В	