FTIP ID# (required) RIV090903

TCWG Consideration Date June 24, 2025

Project Description (clearly describe project)

The Riverside County Transportation Department (County), in cooperation with the California Department of Transportation (Caltrans), proposes to widen Cajalco Road, or a combination of Cajalco Road and El Sobrante Road, between Temescal Canyon Road to the west and Interstate 215 (I-215) to the east. Caltrans, as assigned by the Federal Highway Administration (FHWA), is the lead agency under the National Environmental Policy Act (NEPA). The County is the lead agency under the California Environmental Quality Act (CEQA). The proposed project is located in Riverside County, California, and covers a distance of approximately 15.7 miles. In general, Cajalco Road through the project area is a two-lane undivided roadway with one 12-foot lane in each direction and shoulders of varying widths. Please refer to Figures 1 and 2 for project location and vicinity maps.

Three build alternatives were analyzed for the project and included in the Draft EIR/EIS/4(f) circulated for public review from December 3, 2021, to March 3, 2022. On June 2, 2022, the Project Development Team identified Build Alternative 1 as the Preferred Alternative following discussion and consideration of comments received from individuals, agencies, and stakeholder groups, project alternative comparisons, and data presented in the Draft EIR/EIS/4(f). Therefore, this revised form only addresses Alternative 1.

Alternative 1

The project is located in Riverside County, California, and would widen existing Cajalco Road from Temescal Canyon Road to the I-215 southbound ramps and include minor alignment changes between Temescal Canyon Road and Gustin Road. A small portion of the westernmost part of the alignment is located in the City of Corona. The proposed project covers a distance of approximately 15.7 miles.

Within the project limits, existing Cajalco Road is a two-lane, undivided roadway with one 12-foot lane in each direction and shoulders of varying widths. The project would widen the roadway to four lanes between Harvill Avenue and Temescal Creek Bridge and to six lanes between the I-215 southbound ramps and Harvill Avenue, and between west of Temescal Canyon Road and Temescal Creek Bridge, to improve east–west mobility and provide increased capacity and improved traffic flow and safety.

New striping is proposed along Cajalco Road between Temescal Canyon Road and Grand Oaks and between the I-215 southbound and northbound ramps; however, the limit of roadway construction at the western end of the project would end at Temescal Canyon Road, and the eastern end of the project would end at the I-215 southbound ramp.

Proposed safety enhancements are described below.

- Construct medians.
- Pave roadway shoulders.
- Add left- and right-turn pockets in select locations.
- Restrict left turns from Cajalco Road onto local streets except in locations where traffic signals are present.
- Restrict north-south cross traffic to designated intersection areas.
- Construct Americans with Disabilities Act-compliant sidewalks along one side of the portions of the project where residential and commercial properties are present.

- Improve curves between Temescal Canyon Road and El Sobrante Road.
- Add roadway signage.
- Improve existing traffic signals along Cajalco Road and install new traffic signals at select locations.
- Install object markers and safety lighting at intersections.
- Construct designated bus pull-outs at select locations along Cajalco Road.

Medians of various widths and types are proposed to provide for the separation of opposing traffic, control cross traffic, provide a recovery area for out of control vehicles, allow space for speed changes and for left- and U-turns, and minimize headlight glare. The median between Temescal Canyon Road and La Sierra Avenue along Cajalco Road would be designed wide enough to accommodate two additional travel lanes (one in each direction) in the future. The actual construction of these lanes is not proposed and is not an option that is being considered for inclusion as part of the proposed project. The intent of including the additional median area is to ensure that future impacts on the Lake Mathews Multiple Species Habitat Conservation Plan and Natural Community Conservation Plan, Lake Mathews Multiple Species Habitat Conservation Plan and Natural Community Conservation Plan Criteria Areas would be minimized to the extent feasible if the roadway is widened to six lanes in the future. Any future roadway improvements would occur independently of the proposed Cajalco Road Widening and Safety Enhancement Project and would therefore be subject to separate environmental review and approvals under the National Environmental Policy Act, the California Environmental Quality Act, and all applicable laws.

Left-turn lanes and right-turn pocket lanes are proposed to be constructed along the roadway at selected intersections to accommodate through traffic and control cross-traffic movement. These leftand right-turn lanes would be designed to accommodate vehicles with trailers and provide alternate access options for local residents and business owners. Improvements to existing intersections are proposed and would vary from minor widening and turn pocket additions to complete reconstruction and installation of new signals.

The project would generally follow the existing alignment of Cajalco Road between Temescal Canyon Road and I-215. West of Lake Mathews Drive and north of Lynette Lane, Cajalco Road would be realigned, bypassing the Hollis Lane residential area to the south, and would include the construction of a bridge south of Lake Mathews. A cul-de-sac would be added at a new terminus of existing Cajalco Road west of Hollis Lane/Lynette Lane, and the remaining segment of existing Cajalco Road west to the new, realigned Cajalco Road would be removed. A connection between Dirt Road and Lake Mathews Drive also would be constructed for secondary access to residences in the Hollis Lane/Lynette Lane area.

Between Temescal Creek Bridge and Harley John Road, wildlife crossings of various widths and types would be constructed beneath the roadway; a wildlife undercrossing with bridge structure may also be constructed between Temescal Canyon Road and La Sierra Avenue. Roadway features such as shoulders, fencing, and bridges would be designed to support and facilitate wildlife use of the wildlife crossings.

Retaining walls would be constructed where feasible to avoid or otherwise minimize permanent right of way acquisition and utility impacts, as well as to accommodate construction staging. Slope easements are proposed in the more steep and hilly terrain areas of the build alignments between Temescal Creek and Harley John Road. The slope easements would be used for the construction and maintenance of slopes located along steep areas adjacent to the proposed roadway right of way. Best management practices for erosion control would be provided as part of the proposed project where feasible. In more

hilly areas, cross-slopes would be included where appropriate to better conform to the natural terrain and handle drainage. Along the more populated sections of Cajalco Road from Harley John Road to Harvill Avenue, curb and gutter would be installed along with the drainage facilities described above to handle on-site as well as off-site storm runoff and limit drainage flows across the roadway.

Detention basins are included in the project design in order to minimize concentration of stormwater flow crossing the roadway. Several small stormwater detention basins would be constructed along the north and south sides of the roadway under all alternatives, and a few, larger basins would be constructed for locations anticipated to experience additional stormwater volumes. Designated staging areas also would be utilized during construction and geotechnical borings would be conducted within the project's limits of disturbance, as needed for design of the project. Temporary Construction Easements would be necessary during construction of the project; it is anticipated that the project would be constructed in phases and that localized TCEs would be utilized only for each area of the project being constructed.

Partial and full property acquisitions are proposed to accommodate the widened roadway, areas of realigned roadway, utility relocations, cut and fill, and related project facilities. Affected utility poles/lines would be relocated within the project limits, as needed, to accommodate the roadway widening between Temescal Canyon Road and Harvill Avenue.

The following new bridge and large culvert replacements are proposed.

- Bridge No. 56C-155: The existing Temescal Creek Bridge over Temescal Creek along Cajalco Road, would be removed and replaced with a widened, 120.33-foot-wide, 440-foot-long, four-span bridge structure.
- **New bridge (STA #110):** A new 112.8-foot-wide, 106-foot-long, single-span bridge along Cajalco Road would be constructed between the slopes west of La Sierra Avenue.
- New bridge (STA #740): A new 57.2-foot-wide, 301.5-foot-long, two-span bridge for the westbound lanes of Cajalco Road would be constructed over Cajalco Creek, north of the existing Cajalco Road near Barton Street.
- Bridge No. 56-C196: The existing Ramona Expressway Overhead Bridge over Burlington Northern Santa Fe Railroad along Cajalco Road would be widened to a 119.8-foot-wide, 125-foot-long bridge structure.
- **New bridge:** A new 112.8-foot-wide, 160-foot-long, single-span bridge along realigned Cajalco Road west of Lake Mathews Drive would be constructed over a drainage.
- Large culvert replacement: Three 48-inch culverts located at the intersection of Cajalco Road and Harley John Road would be replaced with a four-cell, 20-foot-wide by 10-foot-high reinforced concrete box.

New regionally	t (use Table 1 on significant stree	t										
County Riverside	Narrativ	Narrative Location/Route & Postmiles Cajalco Road between I-15 and I-215										
	Caltran	s Proje	ects – I	EA# STPL 59	56 (195)							
Lead Agency:	Riverside Cour	nty Trar	nsporta	tion Departme	ent							
Contact Perso Azan Junaid		Phone# 951-955			Fax# N/A	Email ajunaid@rivo	co.org					
Hot Spot Pollutant of Concern (check one or both) PM2.5 x PM10 x												
Federal Action for which Project-Level PM Conformity is Needed (check appropriate box)												
Exclu	Categorical EA		r FONSI or Fina EIS X EIS			PS&E (Constr		Other				
Scheduled Dat	e of Federal Ad	ction: I	March 2	2026								
NEPA Assignn	nent – Project 1	Г уре (с	heck a	ppropriate box)								
Exempt			Section 326 – Categorical Exemption			X Section 327 – Non- Categorical Exemption						
Current Progra	amming Dates	(as app	propriat	te)								
	PE/Environme	ental		ENG		ROW		CON				
Start	September 20	012	A	pril 2026	A	oril 2026	November 2026					
End	March 2026	6	Oc	tober 2026	Oct	ober 2026	Dece	ember 2028				

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

Purpose

The purpose of the Cajalco Road Widening and Safety Enhancement Project (Project) is to:

- Improve the transportation facility to address anticipated growth and mobility needs;
- Improve interregional travel by improving east-west mobility in Riverside County;
- Improve roadway alignment and intersection design to enhance safety.

Need

Capacity and Transportation Demand

Under No-Build conditions, Cajalco Road is projected to continue operating at unsatisfactory LOS F between El Sobrante Road and Day Street in future years 2024 and 2044. When compared with existing conditions, annual average daily traffic (AADT) on Cajalco Road is estimated to increase an average of 6.4% by Year 2024 and 38.2% by Year 2044.

Safety Needs

Traffic collision data obtained from the RCTD for the three-year period from January 2015 to December 2017, was reviewed for Cajalco Road between Temescal Canyon Road and Harvill Avenue (a distance of approximately 16 miles). During the 3-year period, there were total of 355 collisions on Cajalco Road between Temescal Canyon Road and Harvill Avenue, including seven fatal accidents. The majority of collisions occurred between Alexander Street and Harvill Avenue, with 145 collisions over the three-year period.

Operational Deficiencies

<u>Driveways and Intersections:</u> The existing two-lane roadway of Cajalco Road has numerous driveways and intersecting cross-streets, which present conflict points that affect the operation of the roadway. Vehicles currently enter and exit Cajalco Road to access residences and businesses located directly along Cajalco Road as well as to areas accessed via connecting cross-streets. There are numerous cross-streets and driveways on Cajalco Road where these turning movements occur.

<u>Route Continuity between Existing Four-lane Roadways:</u> At the east and west terminus of the project, and between east of Wood Road and Carpinus Drive, Cajalco Road is a four-lane facility; however, between the east and west limits of the project, the majority of Cajalco Road is a two-lane facility. The narrower roadway section within the project area creates a bottleneck between the existing four-lane sections and decreases route continuity.

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

Land uses surrounding Cajalco Road include commercial and residential development as well as an aggregate operation near I-15. In the central portion of the alignment, vacant, undeveloped land predominates, with an occasional residence or cluster of residences. In the eastern third of the alignment, Cajalco Road is surrounded by low-density residences.

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

Original Opening Year: 2024 ADT=51,690; Truck ADT= 4,084 (7.9%)

Current Opening Year: 2028 ADT=32,830; Truck ADT= 2,594 (7.9%)

Table 4 shows the 2024 Opening Year AADT, roadway segment LOS, and truck percentages and volumes in the project vicinity (trucks include medium- and heavy-duty trucks) for the No Build Alternative compared with Build Alternative 1.

As shown in Table 4, the AADT for any roadway segment under the No Build Alternative would range from 10,200 in the western portion of the study area to 37,730 in the easternmost portion of the study area. Truck percentages range from 5.2% to 7.6% and truck volumes range from 564 to 2,641, with higher truck percentages and volumes occurring in the eastern portion of the study area.

As shown in Table 4, Under Alternative 1, the maximum AADT for any roadway segment that would be improved would be 51,690 in the easternmost portion of the study area. Alternative 1 AADT along Cajalco Road would be lowest in the central portion of the study area (AADT of 22,300). Opening year truck percentages under Alternative 1 would range from 7.4% to 8.4%, with daily truck volumes ranging from 1,832 to 4,084.

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

Original Horizon Year: 2044 ADT=39,710; Truck ADT= 1,787 (4.5%)

Current Horizon Year: 2048 ADT=35,740; Truck ADT= 1,608 (4.5%)

Table 5 shows the 2044 Opening Year AADT, roadway segment LOS, and truck percentages and volumes in the project vicinity (trucks include medium- and heavy-duty trucks) for the No Build Alternative compared with Build Alternative 1.

As shown in Table 5, the AADT for any roadway segment under the No Build Alternative would range from 4,310 in the western portion of the study area to 28,800 in the easternmost portion of the study area. Truck percentages range from 4.6% to 8.5% and truck volumes range from 340 to 1,411, with higher truck percentages and volumes occurring in the eastern portion of the study area.

As shown in Table 5, Under 2044 Alternative 1, the maximum AADT for any roadway segment that would be improved would be 39,710 in the eastern portion of the study area. 2044 Alternative 1 AADT along Cajalco Road would be lowest in the central portion of the study area (AADT of 8,950). Horizon year truck percentages under Alternative 1 would range from 4.5% to 5.8%, with daily truck volumes ranging from 519 to 1,807.

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

The proposed project is neither an interchange nor an intersection, although the project would have signalized intersections along the alignment. Appendix A shows the intersection LOS for the Opening Year 2024 No Build and Build Alternatives. The following intersections that operate at LOS D, E, or F for one or both peak hours under the Opening Year 2024 No Build Alternative would experience an increase in delay of 5 seconds or greater under Build Alternative 1:

Alternative 1

- 3: I-15 SB Ramps & Ontario Ave
- 12: Cajalco Rd & Temescal Canyon Rd
- 61: I-215 SB Ramps & Cajalco Expy/Cajalco Expy
- 62: I-215 NB Ramps & Cajalco Expy/Ramona Expy
- 67: Webster Ave & Ramona Expy

Passenger vehicle and truck volumes and percentages at each of the intersections on the improved project segments would be similar to those included in the Table 4.

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

The proposed project is neither an interchange nor an intersection, although the project would have signalized intersections along the alignment. Appendix A shows the intersection LOS for the Horizon Year 2044 No Build and Build Alternative 1. The following intersections that operate at LOS D, E, or F for one or both peak hours under the Horizon Year 2044 No Build Alternative would experience an increase in delay of 5 seconds or greater under Build Alternative 1:

Alternative 1

- 5: Bedford Canyon Rd & El Cerrito Rd
- 9: Cajalco Rd & Bedford Canyon Rd
- 12: Cajalco Rd & Temescal Canyon Rd
- 15: La Sierra Ave & Victoria Ave
- 18: Cajalco Rd & La Sierra Ave
- 23: Gavilian Rd & Cajalco Rd
- 26: Cajalco Rd & Harley John Rd
- 30: Alexander St & Cajalco Rd
- 36: Clark St & Cajalco Rd
- 41: Seaton Ave & Markham St
- 42: Seaton Ave & Cajalco Rd
- 47: Harvill Ave & Placentia Ave
- 48: Sycamore Cyn Rd & SR-60/I-215 SB Ramps

- 49: SR-60/I-215 NB Ramps & Fair Isle Dr/Box Springs Rd
- 51: Day St & SR-60 EB Ramps
- 52: I-215 Ramps & Eucalyptus Ave
- 54: I-215 NB Ramps & Alessandro Blvd
- 56: I-215 NB Ramps/Old 215 Frontage Rd & Cactus Ave
- 57: I-215 SB Ramps & Van Buren Blvd
- 61: I-215 SB Ramps & Cajalco Expy/Cajalco Expy
- 64: I-215 NB Frontage Rd & Placentia Ave
- 67: Webster Ave & Ramona Expy
- 68: Indian St & Ramona Expy

Passenger vehicle and truck volumes and percentages at each of the intersections on the improved project segments would be similar to those included in Table 5.

Describe potential traffic redistribution effects of congestion relief (*impact on other facilities*) The proposed project would provide additional east-west capacity between I-215 and I-15, which would improve operations on Cajalco Road. Under Build conditions, the project improvements are expected to relieve congestion, reduce average delay and improve overall mobility in the surrounding region. The project is expected to help reduce overall vehicular delay in the study area by as much as 3% to 5%.

Comments/Explanation/Details (attach additional sheets as necessary) See attached analysis

Environmental Re-validation

The Cajalco Road Widening and Safety Enhancement Project (Project) previously underwent TCWG review in April 2017. At that time, the Project was determined to be not a POAQC. The purpose of this PM hot-spot analysis is to reaffirm that the Project is not a POAQC.

Traffic Re-validation

The traffic analysis years for opening and design year conditions used in the April 2017 PM hotspot form were 2024 and 2044, respectively. The traffic analysis years have been modified since the prior TCWG review. The opening year for the project is now 2028 and the design year is now 2048. Future Year Validation analyses were prepared by Iteris (November 2024 and May 2025) to assess whether the forecast volumes and levels of service (LOS) for the 2024/2044 years can still be considered reasonable for the 2028/2048 analysis years.

Daily Volumes

Table 1 shows the comparison of opening year daily volumes (2024 vs. 2028). As shown in Table 1, the projected 2028 volume (total of the five segments), using RIVCOM, is approximately 31% below the volume total from the 2024 scenario in the DEIR/EIS. In addition, the maximum daily traffic volume projected for 2028 is approximately 36% below the maximum volume projected for 2024.

Segment (West to East)	2024 Volumes from DEIR	2028 Volumes (RIVCOM, post processed)	Difference
East of Temescal Canyon Road	28,940	26,370	
East of La Sierra Avenue	22,900	16,890	
West of El Sobrante Road	22,300	13,350	
East of Harley John Road	45,100	27,720	
East of Day Street	51,690	32,830	
Total	170,930	117,160	-31%
Maximum	51,690	32,830	-36%

Table 1: Opening Years (2024 vs 2028) Daily Volume Comparison

Source: Iteris 2024

Table 2 shows the comparison of future buildout year daily volumes (2044 vs. 2048). As shown in Table 2, the projected 2048 volume (total of the five segments), using RIVCOM, is higher than the 2044 volume total from the DEIR/EIS, though within approximately 20%. This higher post-processed volume using RIVCOM is primarily the result of the previous RivTAM assigning a larger share of volume onto the future CETAP facility, thus lower share on Cajalco Road, than the RIVCOM assigns. In the absence of the separate CETAP corridor, regional traffic volumes connecting between I-215 and I-15 would be expected to use Cajalco Road. Thus, Cajalco Road is projected to carry higher volumes under future buildout without-CETAP conditions than under with-CETAP conditions. However, as shown in Table 2, the maximum daily traffic volume projected for 2048 is approximately 10% below the maximum volume projected for 2044.

Segment (West to East)	2044 Volumes from DEIR	2048 Volumes (RIVCOM, post processed)	Difference
East of Temescal Canyon Road	20,340	33,800	
East of La Sierra Avenue	8,950	17,010	
West of El Sobrante Road	12,200	15,720	
East of Harley John Road	39,710	35,740	
East of Day Street	35,950	35,540	
Total	117,150	137,810	+18%
Maximum	39,710	35,740	-10%

Table 2: Future Buildout Years (2044 vs	s 2048) Daily Volume Comparison
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Source: Iteris 2024

Based on the results of the Future Year Validation, Caltrans concluded that the forecast volumes for the 2024/2044 years can still be considered reasonable for the 2028/2048 analysis years. Therefore, the 2024 and 2044 traffic volumes used in the following hot-spot analysis remain applicable.

Level of Service

Table 3 shows the comparison of future buildout year levels of service (LOS) (2044 vs. 2048). As shown, the new future year 2048 with project traffic operations are generally consistent with the level of service results projected in the 2021 DEIR/EIS's future year 2044 with project scenario, with overall vehicle delay lower than those presented in the 2021 DEIR/EIS.

Table 3: Future Buildout Years (2044 vs 2048	b) Intersection LOS (Alternative 1)
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			AM Pea	ak Hour	PM Pea	ak Hour
	Intersection	Control Type	2044 Alt 1 Delay-LOS	2048 Alt 1 Delay-LOS	2044 Alt 1 Delay-LOS	2048 Alt 1 Delay-LOS
1	La Sierra Ave/Cajalco Rd	Signalized	25.0 – C	33.2 – C	95.0 – F	64.2 – E
2	Lake Mathews Dr/Cajalco Rd	Signalized	18.7 – B	41.6 – D	15.3 – B	6.6 – A
3	El Sobrante Rd/Cajalco Rd	Signalized	9.3 – A	16.0 – B	11.1 – B	17.4 – B
4	Harley John Rd/Cajalco Rd	Signalized	158.5 – F	58.7 – E	186.1 – F	35.1 – D
5	Wood Rd/Cajalco Rd	Signalized	23.4 – C	17.7 – B	26.2 – C	14.9 – B
6	Clark St/Cajalco Rd	Signalized	49.3 – D	46.2 – D	128.7 – F	38.9 – D
7	Harvill Ave/Cajalco Rd	Signalized	26.8 – C	54.8 – D	30.8 – C	46.2 – D

Source: Iteris 2025

This analysis shows that the use of more up-to-date traffic data (2025 traffic counts) and traffic forecast modeling (RIVCOM) methods are not forecast to result in new traffic impacts at intersections along Cajalco Road, as compared to the findings in the 2021 DEIR/EIS. Thus, it can be concluded that the traffic operations findings in the 2021 DEIR/EIS would still be valid. Therefore, the 2024 and 2044 levels of service used in the following hot-spot analysis remain applicable.

PM_{2.5}/PM₁₀ Hot-Spot Analysis

The Cajalco Road Widening and Safety Enhancement Project (Project) is located within a nonattainment area for federal $PM_{2.5}$ standards and a maintenance area for the federal PM_{10} standards. Therefore, per 40 CFR Part 93 hot-spot analyses are required for conformity purposes. However, the EPA does not require hot-spot analyses, qualitative or quantitative, for projects that are not listed in section 93.123(b)(1) as an air quality concern.

According to 40 CFR Part 93.123(b)(1), the following are Projects of Air Quality Concern (POAQC):

- i. New highway projects have a significant number of diesel vehicles, and expanded highway projects that have a significant increase in the number of diesel vehicles;
- ii. Projects affecting intersections that are at a Level of Service D, E, or F with a significant number of diesel vehicles, or those that will change to Level of Service D, E, or F because of increased traffic volumes from a significant number of diesel vehicles related to the project;
- iii. New bus and rail terminals and transfer points that have a significant number of diesel vehicles congregating at a single location;
- iv. Expanded bus and rail terminals and transfer points that significantly increase the number of diesel vehicles congregating at a single location; and
- v. Projects in or affecting locations, areas or categories of sites which are identified in the PM_{2.5} and PM₁₀ applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.

The project does not qualify as a POAQC because of the following reasons:

i) The proposed project would involve the widening of existing roadways connecting I-15 and I-215. Under Opening Year 2024 conditions (Table 4), medium- and heavy-duty truck traffic would increase in terms of AADT as well as percentage of total volumes. Truck volumes along improved Cajalco Road segments are expected to increase by 55% to 221% under Alternative 1 relative to the 2024 No Build scenario, with absolute increases of no more than 1,443 trucks per day. Diesel truck traffic would compose up to 8.4% of truck traffic under Alternative 1. Overall Opening Year AADT (including passenger vehicles) would be no greater than 52,170 under the build alternative.

Under Horizon Year 2044 conditions (Table 5), medium- and heavy-duty truck traffic would increase in terms of AADT as well as percentage of total volumes. Truck volumes along improved Cajalco Road segments are expected to increase by 25% to 79% under Alternative 1 relative to the 2044 No Build Scenario, with absolute increases of no more than 572 trucks per day. Diesel truck traffic would compose up to 5.8% of truck traffic under Alternatives 1. Overall Horizon Year AADT (including passenger vehicles) would be no greater than 43,860 under the build alternative. Of note, the total AADT as well as truck volumes and percentage of total AADT for most project roadway segments are lower under 2044 conditions than under 2024 conditions, as the parallel CETAP project (RTP ID: 3C01MA01) is assumed to be implemented prior to the 2044 Horizon Year.

 Overall, the proposed Project would reduce congestion at project vicinity intersections. Of the 69 study area intersections, some intersections that operate at LOS D, E, or F under the Opening Year 2024 No Build Alternative would experience an increase in peak-hour delay of 5 seconds or greater under Build Alternative 1. For Alternative 1, five intersections operating at LOS D, E, and F would experience delays of 5 seconds or greater.

Of the 69 study area intersections, some intersections that operate at LOS D, E, or F under the Horizon Year 2044 No Build Alternative would experience an increase in peakhour delay of 5 seconds or greater under the build alternative. For Alternative 1, 23 intersections operating at LOS D, E, and F would experience delays of 5 seconds or greater.

- iii) The proposed build alternative does not include the construction of a new bus or rail terminal.
- iv) The proposed build alternative does not expand an existing bus or rail terminal.
- v) The proposed build alternatives are not in or affecting locations, areas, or categories of sites that are identified in the PM_{2.5} and PM₁₀ applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.

Therefore, the proposed Cajalco Road Widening Project meets the CAA requirements and 40 CFR 93.116 without any explicit hot-spot analysis and would not create a new, or worsen an existing, PM₁₀ violations.

		No-Bui	ld Alterr	native		Alternative 1						
Segment	Lanes	2024 NB AADT	LOS	Truck %	Truck AADT	Lanes	2024 Alt 1 AADT	LOS	Truck %	Truck AADT		
Cajalco Road between Temescal Canyon Road and La Sierra Avenue	2	15,800	D	5.2%	822	6	28,940	A	7.4%	2,142		
Cajalco Road between La Sierra Avenue and Lake Mathews Drive	2	10,200	A	5.6%	571	4	22,900	В	8.0%	1,832		
Cajalco Road between Lake Mathews Drive and El Sobrante Road	2	10,250	A	5.5%	564	4	22,300	В	8.4%	1,873		
Cajalco Road between El Sobrante Road and Gavilian Road	2	26,170	F	7.6%	1,989	4	39,800	F	8.3%	3,303		
Cajalco Road between Gavilian Road and Harley John Road	2	30,050	F	7.0%	2,104	4	44,570	F	7.8%	3,476		
Cajalco Road East of Harley John Road	2	30,130	F	7.4%	2,230	4	45,100	F	8.0%	3,608		
Cajalco Road East of Day Street	2	37,730	F	7.0%	2,641	4	51,690	F	7.9%	4,084		

Table 4: 2024 Roadway Segment Volumes and LOS (No-Build v. Alternative 1)

Source: Iteris 2016

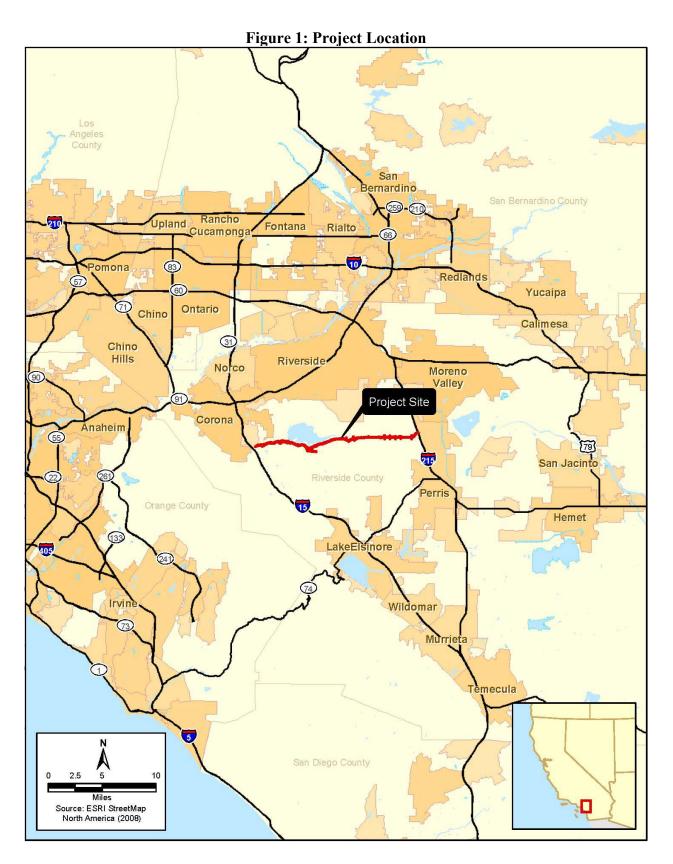
		No-Bui	ld Alterr	native	1		Al	ternative	1	
Segment	Lanes	2044 NB AADT	LOS	Truck %	Truck AADT	Lanes	2044 Alt 1 ADT	LOS	Truck %	Truck AADT
Cajalco Road between Temescal Canyon Road and La Sierra Avenue	2	13,460	С	4.9%	660	6	20,340	A	4.9%	997
Cajalco Road between La Sierra Avenue and Lake Mathews Drive	2	4,310	A	8.5%	366	4	8,950	A	5.8%	519
Cajalco Road between Lake Mathews Drive and El Sobrante Road	2	5,770	A	5.9%	340	4	12,200	A	5.0%	610
Cajalco Road between El Sobrante Road and Gavilian Road	2	23,800	F	5.2%	1,238	4	33,100	E	5.1%	1,688
Cajalco Road between Gavilian Road and Harley John Road	2	27,330	F	4.7%	1,285	4	39,280	F	4.6%	1,807
Cajalco Road East of Harley John Road	2	26,420	F	4.6%	1,215	4	39,710	F	4.5%	1,787
Cajalco Road East of Day Street	2	28,800	F	4.9%	1,411	4	35,950	F	4.9%	1,762

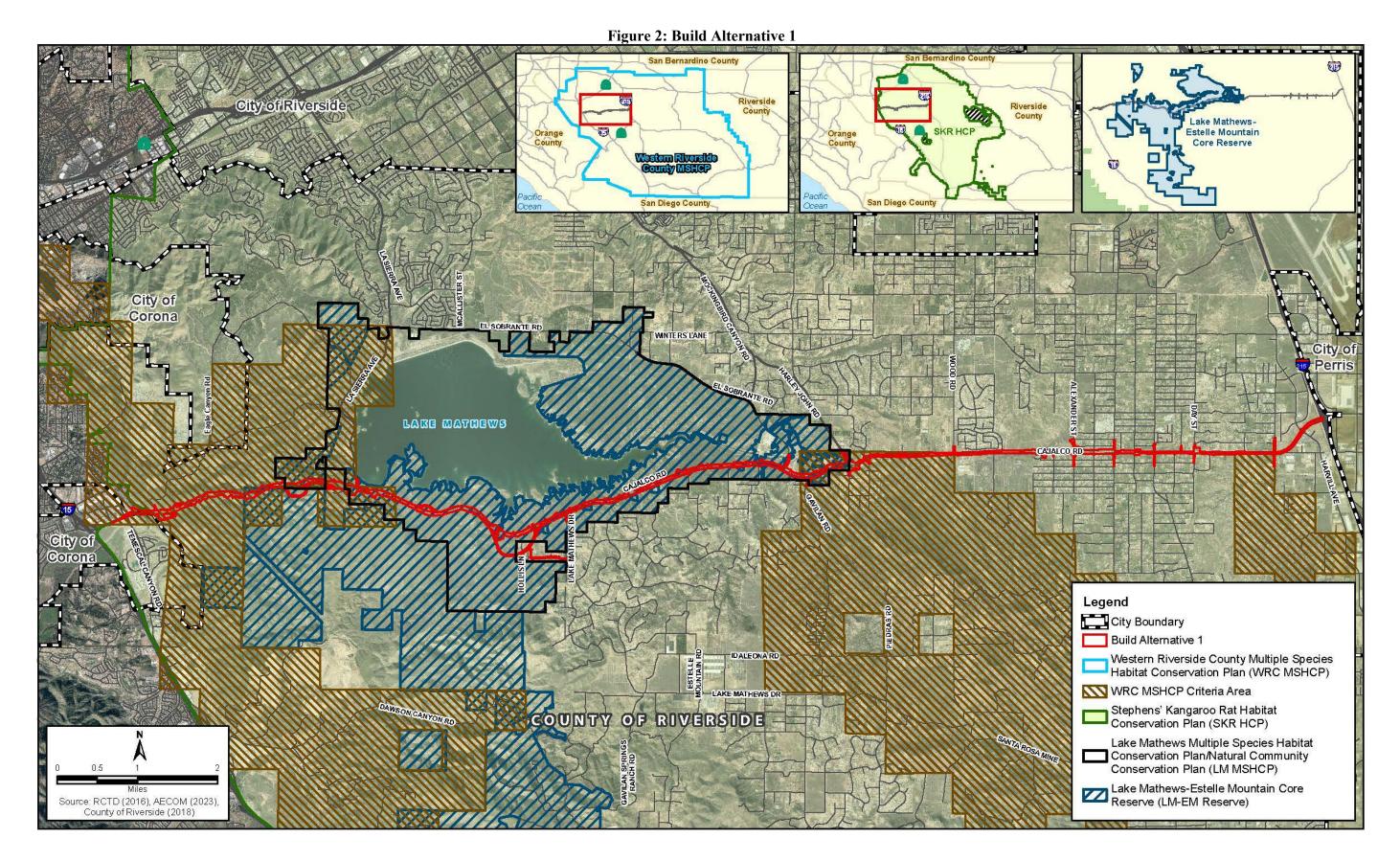
Table 5: 2044 Roadway Segment Volumes and LOS (No-Build v. Alternative 1)

Source: Iteris 2016

PM Conformity Hot Spot Analysis – Project Summary for Interagency Consultation

Attachments: Figure 1. Project Location Map Figure 2. Build Alternative 1 Appendix A. Roadway Segment Comparisons and Intersection Level of Service Data and Comparisons





PM Conformity Hot Spot Analysis – Project Summary for Interagency Consultation

Appendix A. Roadway Segment Comparisons and Intersection Level of Service Data and Comparisons

Roadway Segment Volumes

Opening Year 2024

		No Build					Alt	ernative 1	/2C			
Segment	Lanes	2024 No Build ADT	LOS	Truck %	Truck Vol	Lanes	2024 Alt 1 ADT	LOS	Truck %	Truck Vol	% Inc Trucks	Vol Inc
Cajalco Road East of Temescal Canyon Road	2	15,800	D	5.2%	822	6	28,940	А	7.4%	2,142	161%	1,320
Cajalco Road between La Sierra Avenue and Lake Mathews Drive	2	10,200	А	5.6%	571	4	22,900	В	8.0%	1,832	221%	1,261
Cajalco Road between Lake Mathews Drive and El Sobrante Road	2	10,250	А	5.5%	564	4	22,300	В	8.4%	1,873	232%	1,309
Cajalco Road between El Sobrante Road and Gavilian Road	2	26,170	F	7.6%	1,989	4	39,800	F	8.3%	3,303	66%	1,314
Cajalco Road between Gavilian Road and Harley John Road	2	30,050	F	7.0%	2,104	4	44,570	F	7.8%	3,476	65%	1,372
Cajalco Road East of Harley John Road	2	30,130	F	7.4%	2,230	4	45,100	F	8.0%	3,608	62%	1,378
Cajalco Road East of Day Street	2	37,730	F	7.0%	2,641	4	51,690	F	7.9%	4,084	55%	1,443
MIN		10,200			564		22,300		7.4%	1,832	_	
MAX		37,730			2,641		51,690		8.4%	4,084	_	
			No Build				A	lternative	4			

Segment	Lanes	2024 No Build ADT	LOS	Truck %	Truck Vol	Lanes	2024 Alt 4 ADT	LOS	Truck %	Truck Vol
El Sobrante Rd between Cajalco Rd and Harley John Rd	2	30,050	F	7.0%	2,104	6	32,030	А	9.4%	3,011
El Sobrante Rd between Harley John Rd and Mockingbird Canyon Rd	2	17,610	E	8.1%	1,426	4	22,170	В	9.0%	1,995
El Sobrante Rd between La Sierra Ave and Mockingbird Canyon Rd	2	14,140	с	8.5%	1,202	4	24,380	В	8.6%	2,097
Cajalco Rd between Temescal Canyon and La Sierra	2	15,800	D	5.2%	822	4	33,860	E	5.5%	1,862
Cajalco Rd east of El Sobrante Rd	2	30,130	F	7.4%	2,230	4	46,060	F	7.5%	3,455
Cajalco Rd between Gavilian Rd and Lake Mathews Dr	2	10,250	А	5.5%	564	2	11,860	В	7.3%	866
Cajalco Road between La Sierra Ave and Lake Mathews Dr	2	10,200	А	5.6%	571	2	14,140	С	7.2%	1,018
Cajalco Road East of Day St	2	37,730	F	7.0%	2,641	4	52,170	F	7.6%	3,965
MIN		10,200			564		11,860		5.5%	866
MAX		37,730			2,641		52,170		9.4%	3,965

rucks	Vol Inc	Corresponding Segment
IUCKS	VOLUC	corresponding segment

- 43% 907 Cajalco Rd between Harley John Rd and Gavilian
- 40% 569 El Sobrante Rd between Cajalco Rd and Mockingbird Canyon Rd
- 74% 895
- 127% 1,040
- 55% 1,225 Cajalco Rd east of Harley John Rd
- 54% 302 Cajalco Rd between El Sobrante and Lake Mathews Dr
- 78% 447 50% 1,324

Horizon Year 2044

			No Build				Alt	ernative 1/	/2C		1		
Segment	Lanes	2044 No Build ADT	LOS	Truck %	Truck Vol	Lanes	2044 Alt ADT	LOS	Truck %	Truck Vol	% Inc Trucks	Vol Inc	
Cajalco Road East of Temescal Canyon Road	2	13,460	С	4.9%	660	6	20,340	А	4.9%	997	51%	337	
Cajalco Road between La Sierra Avenue and Lake Mathews Drive	2	4,310	А	8.5%	366	4	8,950	А	5.8%	519	42%	153	
Cajalco Road between Lake Mathews Drive and El Sobrante Road	2	5,770	А	5.9%	340	4	12,200	А	5.0%	610	79%	270	
Cajalco Road between El Sobrante Road and Gavilian Road	2	23,800	F	5.2%	1,238	4	33,100	E	5.1%	1,688	36%	450	
Cajalco Road between Gavilian Road and Harley John Road	2	27,330	F	4.7%	1,285	4	39,280	F	4.6%	1,807	41%	522	
Cajalco Road East of Harley John Road	2	26,420	F	4.6%	1,215	4	39,710	F	4.5%	1,787	47%	572	
Cajalco Road East of Day Street	2	28,800	F	4.9%	1,411	4	35,950	F	4.9%	1,762	25%	351	
MIN		4,310		4.6%	340		8,950		4.5%	519			
MAX		28,800		8.5%	1,411		39,710		5.8%	1,807			
			No Build				Α	Iternative	4		1		
Segment	Lanes	2044 No Build ADT	LOS	Truck %	Truck Vol	Lanes	2044 Alt 4 ADT	LOS	Truck %	Truck Vol	% Inc Trucks	Vol Inc	Cor
El Sobrante Rd between Cajalco Rd and Harley John Rd	2	27,330	F	4.7%	1,285	6	39,490	с	5.6%	2,211	72%	926 (Caj
El Sobrante Rd between Harley John Rd and Mockingbird Canyon Rd	2	19,410	F	5.1%	990	4	21,280	В	5.5%	1,170	18%	180	EI S
El Sobrante Rd between La Sierra Ave and Mockingbird Canyon Rd	2	14,730	D	4.9%	722	4	22,450	В	5.2%	1,167	62%	445	
Cajalco Rd between Temescal Canyon and La Sierra	2	13,460	С	4.9%	660	4	30,810	В	4.0%	1,232	87%	572	
Cajalco Rd east of El Sobrante Rd	2	26,420	F	4.6%	1,215	4	43,860	F	4.3%	1,886	55%	671 (Caj
Cajalco Rd between Gavilian Rd and Lake Mathews Dr	2	5,770	Α	5.9%	340	2	6,810	Α	3.9%	266	-22%	(74) (Caji
Cajalco Road between La Sierra Ave and Lake Mathews Dr	2	4,310	А	8.5%	366	2	6,050	А	6.2%	375	2%	9	
Cajalco Road East of Day St	2	28,800	F	4.9%	1,411	4	37,630	F	7.6%	2,860	103%	1,449	

ks	Vol Inc	Corresponding Segment
72%	926	Cajalco Rd between Harley John Rd and Gavilian
18%	180	El Sobrante Rd between Cajalco Rd and Mockingbird Canyon Rd
62%	445	
87%	572	
55%	671	Cajalco Rd east of Harley John Rd
-22%	(74)	Cajalco Rd between El Sobrante and Lake Mathews Dr

2024 Intersection LOS

2024 Intersection LOS																				т
			No-Build		~ '			natives 1 an	1				Alternative	1			Compari			
	Control		Peak		Peak	Control		Peak		Peak	Control	AM			Peak	Alt 1/2C - I			No Build	ND D /5 /5
	Type	Delay	LOS	Delay	LOS	Type	Delay	LOS	Delay	LOS	Type	Delay	LOS	Delay	LOS	AM Delay -0.3	PM Delay	AM Delay	PM Delay	NB D/E/F
1: I-15 SB Ramps & Magnolia Avenue 2: I-15 NB Ramps & Magnolia Avenue	Signal Signal	38.8 17.2	D B	92.8 17.4	F	Signal Signal	38.5 18.4	D B	88.4 16.5	F	Signal Signal	36.9 17.1	D B	86.7 18	F	-0.3	-4.4 -0.9	-1.9 -0.1		No Build D/E/F No Build A/B/C
3: I-15 SB Ramps & Magnolia Avenue	Signal	98.4	F	17.4	B	Signal	18.4	F	23	B	Signal	91.1	F	20.8	C B	8.9	-0.9	-0.1		
4: I-15 NB Ramps & Ontario Ave	Signal	98.4 44	P D	50.7	D	Signal	46	P D	44.2	D	Signal	44.7	P D	20.8	C C	2	-6.5	-7.3		
5: Bedford Canyon Rd & El Cerrito Rd	Signal	22.2	c	21.9	c	Signal	21.8	C C	23.9	C	Signal	21.5	C	23.3	c	-0.4	-0.3	-0.7		No Build A/B/C
6: I-15 SB Ramps & El Cerrito Rd	Signal	11.3	В	8.7	A	Signal	16.9	В	8.6	A	Signal	16.3	В	8.3	A	-0.4	-0.1	-0.7		No Build A/B/C
7: I-15 NB Ramps & El Cerrito Rd	Signal	38.9	D	37.3	D	Signal	39	D	37.6	D	Signal	46.9	D	37.5	D	0.1	-0.1	8	•••	
8: Temescal Canyon Rd & El Cerrito Rd	Signal	7.1	A	7.2	A	Signal	7.3	A	6.9	A	Signal	7.7	A	6.8	A	0.1	-0.3	0.6	0.2	No Build A/B/C
9: Cajalco Rd & Bedford Canyon Rd	Signal	9	A	13.9	B	Signal	8.8	A	14.9	B	Signal	8.4	A	15.2	B	-0.2	-0.3	-0.6		No Build A/B/C
10: Cajalco Rd & I-15 SB Ramps	Signal	12.5	B	13.9	B	Signal	12.2	B	14.9	B	Signal	11.8	B	15.1	B	-0.2	2	-0.0		No Build A/B/C
11: I-15 NB Ramps & Cajalco Rd	Signal	3.9	A	10.1	B	Signal	3.9	A	11.6	B	Signal	4.3	A	11.8	B	-0.3	1.5	-0.7		No Build A/B/C
12: Cajalco Rd & Temescal Canyon Rd	Signal	66.8	E	83.2	F	Signal	135	F	186.8	F	Signal	4.5	F	231.4	F	68.2	1.5	99.7		
13: I-15 SB Ramps & Weirick Rd	Signal	23.4	C	32.6	C	Signal	23.4	C	32.7	C	Signal	22.7	C	28.9	C	00.2	0.1	-0.7		No Build A/B/C
14: I-15 NB Ramps & Weirick Rd	Signal	8.5	A	13.5	В	Signal	9.7	A	12.5	В	Signal	8.4	A	13.9	B	1.2	-1	-0.7		No Build A/B/C
15: La Sierra Ave & Victoria Ave	Signal	106.1	F	119.1	F	Signal	107.7	F	12.5	F	Signal	114.7	F	122.6	F	1.2	-15.1	8.6		No Build D/E/F
16: La Sierra Ave & McAllister Pkwy	Signal	22.6	C	115.1	B	Signal	22.8	C	104	В	Signal	43.1	D	33.7	C	0.2	-13.1	20.5		No Build A/B/C
17: La Sierra Ave & El Sobrante Rd	AWSC	53.9	F	60.1	5	AWSC	56.7	F	57	F	Signal	36.9	D	146.3	E	2.8	-1.5	-17		
	Signal	18.1	B	20.4	C F		18.9	B	43.8	D		15.5	B	24.3	C	0.8	23.4	-2.6		No Build A/B/C
18: Cajalco Rd & La Sierra Ave 19: Lake Mathews Dr & Cajalco Rd	TWSC	2.3	A	20.4	A	Signal	18.9 6.4	A	43.8	A	Signal TWSC	15.5 3.2	A	24.3 5.7	A	0.8 4.1	23.4	-2.6		
	AWSC	8.3		8.4	A	Signal	7.8		7.7	A	AWSC	3.2 7.9		8.8	A	-0.5	-0.5	-0.4		No Build A/B/C
20: Mockingbird Canyon Rd & Harley John Rd 21: El Sobrante Rd & Mockingbird Canyon Rd		8.3 6.1	A	8.4 6.2	A	AWSC TWSC	7.8	A	7.9 2.1			7.9 9.8	A		A	-0.5 -2.9	-0.5 -4.1	-0.4		No Build A/B/C
, , , , , , , , , , , , , , , , , , ,	TWSC		A B		A B		3.2	A		A	TWSC	9.8 19.6	A B	6.3 44.3	A D	-2.9 -2.6	-4.1			No Build A/B/C
22: Cajalco Rd & El Sobrante Rd	Signal	11.6	-	13.7		Signal		A	12.7	В	Signal				-		-1 -24			No Build A/B/C
23: Gavilian Rd & Cajalco Rd	Signal	16.4	B	51.2	D	Signal	12.6	B	27.2	C	Signal	14.8	B	22.5	C	-3.8		-1.6		
24: Gavilian Rd & Lake Mathews Dr	TWSC	2.8	A	5.4	A	TWSC	2.9	A	5.5	A	TWSC	3	A	4.4	A	0.1	0.1	0.2		No Build A/B/C
25: Harley John Rd & Washington Rd	TWSC	1.5	A	3.4	A	TWSC	1.5	A	2.6	A	TWSC	2.3	A	4.6	A	0	-0.8	0.8		No Build A/B/C
26: Cajalco Rd & Harley John Rd	Signal	37.9	D	49.5	D	Signal	34.9	С	47.3	D	Signal	15	В	24.9	С	-3	-2.2	-22.9		
27: Wood Rd & Markham St	Signal	14.6	В	12.8	В	Signal	13.1	В	13	В	Signal	12.5	В	11.7	В	-1.5	0.2	-2.1		No Build A/B/C
28: Cajalco Rd & Wood Rd	Signal	32.5	С	18	В	Signal	20.1	С	26.9	С	Signal	18.9	В	22.4	С	-12.4	8.9	-13.6		No Build A/B/C
29: Alexander St & Markham St	AWSC	16	С	9.8	A	AWSC	15.8	С	9.4	A	AWSC	15.3	С	9.2	A	-0.2	-0.4	-0.7		No Build A/B/C
30: Alexander St & Cajalco Rd	Signal	45.5	D	34.7	С	Signal	25	С	30.6	С	Signal	24.6	С	29.5	С	-20.5	-4.1	-20.9		No Build D/E/F
31: Rider St & Alexander St	TWSC	3.7	A	4.1	A	TWSC	3.6	A	3.2	A	TWSC	4.8	A	4	A	-0.1	-0.9	1.1		No Build A/B/C
32: Brown St & Markham St	TWSC	2.3	A	2.2	A	TWSC	0.8	A	2.2	A	TWSC	0.8	A	0.8	A	-1.5	0	-1.5		No Build A/B/C
33: Brown St & Cajalco Rd	Signal	19.8	В	29.9	С	Signal	10.3	В	27.7	С	Signal	10.5	В	20.1	С	-9.5	-2.2	-9.3		No Build A/B/C
34: Brown St & Rider St	AWSC	8.4	A	8.4	A	AWSC	8.5	A	8.7	A	AWSC	8.5	A	8.5	A	0.1	0.3	0.1		No Build A/B/C
35: Clark St & Markham St	AWSC	10.8	В	11.5	В	AWSC	9.7	A	10.6	В	AWSC	9.4	A	10.2	В	-1.1	-0.9	-1.4	-1.3	No Build A/B/C
36: Clark St & Cajalco Rd	Signal	70	E	70.5	E	Signal	30.1	С	55.7	E	Signal	30.5	С	47	D	-39.9	-14.8	-39.5		No Build D/E/F
37: Old Elsinore Rd/Clark St & Rider St	Signal	16.3	В	14.2	В	Signal	15.9	В	14	В	Signal	15.9	В	14.3	В	-0.4	-0.2	-0.4	0.1	No Build A/B/C
38: Day St & Markham St	AWSC	10.3	В	12.4	В	AWSC	9.3	Α	9.9	Α	AWSC	9.2	A	9.6	Α	-1	-2.5	-1.1	-2.8	No Build A/B/C
39: Day St & Cajalco Rd	TWSC	19.1	С	150.7	F	Signal	9.3	A	16.5	В	TWSC	9.4	Α	13.3	В	-9.8	-134.2	-9.7		No Build D/E/F
40: Day St & Rider St	TWSC	5.2	Α	4.1	A	TWSC	5.2	Α	3	Α	TWSC	5.4	Α	3.5	Α	0	-1.1	0.2	-0.6	No Build A/B/C
41: Seaton Ave & Markham St	AWSC	13.8	В	19.3	С	AWSC	11.2	В	13.8	В	AWSC	11.1	В	12.7	В	-2.6	-5.5	-2.7	-6.6	No Build A/B/C
42: Seaton Ave & Cajalco Rd	TWSC	238.4	F	1108.5	F	Signal	4.3	А	0.3	Α	TWSC	4.4	Α	9.9	А	-234.1	-1108.2	-234	-1098.6	No Build D/E/F
43: Rider St & Seaton Ave	TWSC	4	Α	5.8	Α	TWSC	4.6	А	6.6	Α	TWSC	4.2	Α	7.3	А	0.6	0.8	0.2	1.5	No Build A/B/C
44: Harvill Ave & Markham St	AWSC	10.7	В	11.4	В	AWSC	10.4	В	11.1	В	AWSC	10.4	В	11.2	В	-0.3	-0.3	-0.3	-0.2	No Build A/B/C
45: Cajalco Expy & Harvill Ave	Signal	20.4	С	20.9	С	Signal	31.3	С	37.1	D	Signal	31.4	С	32.7	С	10.9	16.2	11	11.8	No Build A/B/C
46: Harvill Ave & Rider St	TWSC	2.1	А	2.7	А	TWSC	0.6	А	1	Α	TWSC	0.6	Α	1.1	А	-1.5	-1.7	-1.5	-1.6	No Build A/B/C
47: Harvill Ave & Placentia Ave	Signal	15.1	В	20.9	С	Signal	18.4	В	38.7	D	Signal	17.1	В	37.5	D	3.3	17.8	2	16.6	No Build A/B/C
48: Sycamore Cyn Rd & SR-60/I-215 SB Ramps	Signal	22.7	С	20.6	С	Signal	22.7	С	20	С	Signal	22.9	С	20.5	С	0	-0.6	0.2		No Build A/B/C
49: SR-60/I-215 NB Ramps & Fair Isle Dr/Box Springs Rd	Signal	48.5	D	16.6	В	Signal	47.5	D	15.9	В	Signal	45	D	16.7	В	-1	-0.7	-3.5		No Build D/E/F
50: Day St & SR-60 WB Ramps	Signal	15.5	В	69.2	E	Signal	15.3	В	67.6	E	Signal	15.2	В	16.9	В	-0.2	-1.6		-52.3	No Build D/E/F
51: Day St & SR-60 EB Ramps	Signal	13.2	В	39.3	D	Signal	14.3	В	37.8	D	Signal	14.4	В	67.2	E	1.1	-1.5			No Build D/E/F
52: I-215 Ramps & Eucalyptus Ave	Signal	19.4	В	34.8	С	Signal	19.4	В	32.7	С	Signal	19.9	В	185.5	F	0	-2.1			No Build A/B/C
53: Alessandro Blvd & I-215 SB Ramp	Signal	9.1	Α	10.9	В	Signal	9.5	Α	10.8	В	Signal	9.1	А	10.5	В	0.4	-0.1	0		No Build A/B/C
54: I-215 NB Ramps & Alessandro Blvd	Signal	33.8	С	22.7	С	Signal	26.9	С	23.4	С	Signal	32.7	С	21.7	С	-6.9	0.7	-1.1		No Build A/B/C
55: I-215 SB Ramps & Cactus Ave	Signal	5.1	A	7.7	A	Signal	5.1	A	8.5	A	Signal	5.4	A	8.3	A	0	0.8	0.3	0.6	No Build A/B/C
56: I-215 NB Ramps/Old 215 Frontage Rd & Cactus Ave	Signal	23.8	С	19.7	В	Signal	23.6	C	19.2	В	Signal	22	C	18.8	В	-0.2	-0.5	-1.8		No Build A/B/C
57: I-215 SB Ramps & Van Buren Blvd	Signal	11.4	В	14.7	В	Signal	10	В	34.4	C	Signal	9.7	A	30.1	C	-1.4	19.7	-1.7		No Build A/B/C
58: I-215 NB Ramps & Van Buren Blvd	Signal	15.1	В	20.5	C	Signal	14.7	В	14.9	В	Signal	14.8	В	15	B	-0.4	-5.6			No Build A/B/C
59: I-215 SB Ramps & Harley Knox Blvd	Signal	19.9	B	19.9	B	Signal	19.5	B	20.3	C	Signal	20.1	C	20.3	C	-0.4	0.4	0.2		No Build A/B/C
60: I-215 NB Ramps & Harley Knox Blvd	Signal	8.4	A	14.3	B	Signal	8.9	A	13.9	В	Signal	8.6	A	13.6	B	0.5	-0.4			No Build A/B/C
61: I-215 SB Ramps & Cajalco Expy/Cajalco Expy	Signal	142.3	F	51.9	D	Signal	118.3	F	83.7	F	Signal	96	F	43.5	D	-24	31.8	-46.3		No Build D/E/F
62: I-215 NB Ramps & Cajalco Expy/Cajalco Expy	Signal	73.1	E	42.6	D	Signal	82.7	F	61.7	E	Signal	78.8	E	61.1	E	9.6	19.1	5.7		No Build D/E/F
	Jigilai		B	14.9	B	Signal	16.9	B	14.7	B	Signal	16.9	B	14.8	B	9.0 0	-0.2			No Build A/B/C
	Signal			14.7			38.9	D	35.2	D	Signal	38.9	D	35.2	D	0	-0.2	0		No Build A/B/C
63: I-215 SB Frontage Rd & Placentia Ave	Signal	16.9 38.9	П	35.2																
63: I-215 SB Frontage Rd & Placentia Ave 64: I-215 NB Frontage Rd & Placentia Ave	Signal	38.9	D	35.2	D	Signal									-	-	-			
63: I-215 SB Frontage Rd & Placentia Ave 64: I-215 NB Frontage Rd & Placentia Ave 65: I-215 SB Ramps & Nuevo Rd	Signal Signal	38.9 27.5	С	60.2	E	Signal	26	С	52.7	D	Signal	22.7	С	53.9	D	-1.5	-7.5	-4.8	-6.3	No Build D/E/F
63: I-215 SB Frontage Rd & Placentia Ave 64: I-215 NB Frontage Rd & Placentia Ave 65: I-215 SB Ramps & Nuevo Rd 66: I-215 NB Ramps & Nuevo Rd	Signal Signal Signal	38.9 27.5 54.9	C D	60.2 98.1	E F	Signal Signal	26 57.9	C E	52.7 89.9	D	Signal Signal	22.7 76.5	C E	53.9 88.9	D F	-1.5 3	-7.5 -8.2	-4.8 21.6	-6.3 -9.2	No Build D/E/F No Build D/E/F
63: I-215 SB Frontage Rd & Placentia Ave 64: I-215 NB Frontage Rd & Placentia Ave 65: I-215 SB Ramps & Nuevo Rd 66: I-215 NB Ramps & Nuevo Rd 67: Webster Ave & Ramona Expy	Signal Signal Signal Signal	38.9 27.5 54.9 20	C D C	60.2 98.1 38.9	E F D	Signal Signal Signal	26 57.9 22.2	C E C	52.7 89.9 48.5	D F D	Signal Signal Signal	22.7 76.5 21.9	C E C	53.9 88.9 45.8	D F D	-1.5 3 2.2	-7.5 -8.2 9.6	-4.8 21.6 1.9	-6.3 -9.2 6.9	No Build D/E/F No Build D/E/F No Build D/E/F
63: I-215 SB Frontage Rd & Placentia Ave 64: I-215 NB Frontage Rd & Placentia Ave 65: I-215 SB Ramps & Nuevo Rd 66: I-215 NB Ramps & Nuevo Rd	Signal Signal Signal	38.9 27.5 54.9	C D	60.2 98.1	E F	Signal Signal	26 57.9	C E	52.7 89.9	D	Signal Signal	22.7 76.5	C E	53.9 88.9	D F	-1.5 3	-7.5 -8.2	-4.8 21.6 1.9 2.6	-6.3 -9.2 6.9 -4.5	No Build D/E/F No Build D/E/F

/F	Alt 1_5+ Sec	Alt 4 5+ Sec
E/F	Faster	Faster
3/C	Faster	Faster
E/F	Slower	Faster
E/F	Faster	Faster
3/C 3/C	Faster Slower	Faster Faster
5/C E/F	Faster	Slower
3/C	Faster	Faster
B/C	Faster	Faster
3/C	Faster	Faster
3/C	Faster	Faster
E/F	Slower	Slower
3/C 3/C	Faster Faster	Faster Faster
E/F	Faster	Slower
3/C	Faster	Slower
E/F	Faster	Slower
3/C	Slower	Faster
3/C	Slower	Faster
3/C 3/C	Faster Faster	Faster Faster
3/C	Faster	Slower
E/F	Faster	Faster
3/C	Faster	Faster
3/C	Faster	Faster
E/F	Faster	Faster
3/C 3/C	Faster Slower	Faster Faster
3/C 3/C	Faster	Faster
E/F	Faster	Faster
3/C	Faster	Faster
3/C	Faster	Faster
3/C	Faster	Faster
3/C 3/C	Faster Faster	Faster Faster
5/C E/F	Faster	Faster
3/C	Faster	Faster
3/C	Faster	Faster
E/F	Faster	Faster
3/C	Faster	Faster
3/C E/F	Faster Faster	Faster Faster
3/C	Faster	Faster
3/C	Faster	Faster
3/C	Slower	Slower
3/C	Faster	Faster
3/C	Slower	Slower
3/C E/F	Faster Faster	Faster Faster
=/F	Faster	Faster
E/F	Faster	Slower
3/C	Faster	Slower
3/C	Faster	Faster
3/C 3/C	Faster Faster	Faster Faster
3/C 3/C	Faster	Faster
3/C	Slower	Slower
3/C	Faster	Faster
3/C	Faster	Faster
B/C	Faster	Faster
=/F = /F	Slower	Faster Slower
E/F B/C	Slower Faster	Faster
E/F	Faster	Faster
, E/F	Faster	Faster
E/F	Faster	Slower
E/F	Slower	Slower
E/F E/F	Faster Faster	Faster Faster
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2044 Intersection LOS

2044 Intersection LOS			No. Duild										A t = = t :				6			r
	Control	0.04	No-Build Peak	PM I	Poak	Control		<mark>lternative 1</mark> Peak	1	Peak	Control		Alternative Peak	PM	Peak	Alt 1 - N	Compar o Build		No Build	i
	Туре	Delay	LOS	Delay	LOS	Туре	Delay	LOS	Delay	LOS	Туре	Delay	LOS	Delay	LOS	AM Delay	PM Delay	AM Delay		NB D/E/F
1: I-15 SB Ramps & Magnolia Avenue	Signal	42.2	D	45.9	D	Signal	43.9	D	43.5	D	Signal	43.3	D	48.7	D	1.7	-2.4			No Build D/E/F
2: I-15 NB Ramps & Magnolia Avenue	Signal	18.6	B	22.9	C	Signal	19.8	B	22.9	C	Signal	19.7	B	21.2	C	1.2	0	1.1		No Build A/B/C
3: I-15 SB Ramps & Ontario Ave	Signal	96.3	F	93.7	F	Signal	95	F	91.2	F	Signal	92.9	F	85.1	F	-1.3	-2.5			No Build D/E/F
4: I-15 NB Ramps & Ontario Ave	Signal	156.4	F	146.6	F	Signal	133.9	F	83.4	F	Signal	168.8	F	105.9	F	-22.5	-63.2	12.4		No Build D/E/F
5: Bedford Canyon Rd & El Cerrito Rd	Signal	38.3	D	174.6	F	Signal	27.5	С	181.2	F	Signal	32.5	С	165.7	F	-10.8	6.6	-5.8		No Build D/E/F
6: I-15 SB Ramps & El Cerrito Rd	Signal	25.1	С	7.7	Α	Signal	13	В	10.5	В	Signal	18.8	В	12.3	В	-12.1	2.8	-6.3	4.6	No Build A/B/C
7: I-15 NB Ramps & El Cerrito Rd	Signal	9.4	Α	7.8	Α	Signal	9.9	Α	7.4	Α	Signal	9.1	A	6.9	Α	0.5	-0.4	-0.3		No Build A/B/C
8: Temescal Canyon Rd & El Cerrito Rd	Signal	12.6	В	13.6	В	Signal	15.9	В	11.9	В	Signal	14	В	12.3	В	3.3	-1.7	1.4		No Build A/B/C
9: Cajalco Rd & Bedford Canyon Rd	Signal	103.9	F	207.6	F	Signal	103	F	247.8	F	Signal	64.2	E	197.5	F	-0.9	40.2	-39.7	-10.1	No Build D/E/F
10: Cajalco Rd & I-15 SB Ramps	Signal	8.7	Α	122.3	F	Signal	8.7	Α	112.1	F	Signal	9	A	104	F	0	-10.2	0.3	-18.3	No Build D/E/F
11: I-15 NB Ramps & Cajalco Rd	Signal	13.6	В	52.5	D	Signal	4.1	Α	47.9	D	Signal	6.4	A	21.7	С	-9.5	-4.6	-7.2	-30.8	No Build D/E/F
12: Cajalco Rd & Temescal Canyon Rd	Signal	140.2	F	160.7	F	Signal	181.8	F	207.3	F	Signal	249.4	F	289.7	F	41.6	46.6	109.2	129	No Build D/E/F
13: I-15 SB Ramps & Weirick Rd	Signal	29.3	С	26	С	Signal	22	С	24.2	С	Signal	21	С	23.3	С	-7.3	-1.8	-8.3	-2.7	No Build A/B/C
14: I-15 NB Ramps & Weirick Rd	Signal	108.6	F	25.8	С	Signal	85.5	F	22.7	С	Signal	113.1	F	31.6	С	-23.1	-3.1	4.5	5.8	No Build D/E/F
15: La Sierra Ave & Victoria Ave	Signal	175.4	F	326.2	F	Signal	219	F	373.9	F	Signal	235.5	F	299.7	F	43.6	47.7	60.1	-26.5	No Build D/E/F
16: La Sierra Ave & McAllister Pkwy	Signal	17.6	В	9.8	Α	Signal	18.2	В	12.4	В	Signal	21.8	С	11.7	В	0.6	2.6	4.2	1.9	No Build A/B/C
17: La Sierra Ave & El Sobrante Rd	AWSC	47.4	E	50.2	F	AWSC	49.4	E	53.4	F	Signal	52.1	D	48.8	D	2	3.2	4.7	-1.4	No Build D/E/F
18: Cajalco Rd & La Sierra Ave	Signal	18.6	В	41.6	D	Signal	25	С	95	F	Signal	16.3	В	17.7	В	6.4	53.4	-2.3	-23.9	No Build D/E/F
19: Lake Mathews Dr & Cajalco Rd	TWSC	2.3	A	1.2	Α	Signal	18.7	В	15.3	В	TWSC	2.3	A	1.1	A	16.4	14.1	0	-0.1	No Build A/B/C
20: Mockingbird Canyon Rd & Harley John Rd	AWSC	9.1	A	12.2	В	AWSC	9.6	А	12.9	В	AWSC	9.2	A	12.1	В	0.5	0.7	0.1		No Build A/B/C
21: El Sobrante Rd & Mockingbird Canyon Rd	TWSC	3.1	A	5.2	А	TWSC	2.8	А	1.8	A	Signal	9.7	A	7.4	A	-0.3	-3.4	6.6	2.2	No Build A/B/C
22: Cajalco Rd & El Sobrante Rd	Signal	10.2	В	11.9	В	Signal	9.3	А	11.1	В	Signal	13.5	В	27.7	С	-0.9	-0.8	3.3	15.8	No Build A/B/C
23: Gavilian Rd & Cajalco Rd	Signal	24.8	С	110.6	F	Signal	35.6	D	48.1	D	Signal	17.1	В	44.8	D	10.8	-62.5	-7.7	-65.8	No Build D/E/F
24: Gavilian Rd & Lake Mathews Dr	TWSC	0.7	A	199.2	F	TWSC	0.7	А	198	F	TWSC	0.7	A	71.7	F	0	-1.2	0	-127.5	No Build D/E/F
25: Harley John Rd & Washington Rd	TWSC	2.2	Α	51	F	TWSC	3.5	А	39.6	E	TWSC	3.7	A	27.6	D	1.3	-11.4	1.5	-23.4	No Build D/E/F
26: Cajalco Rd & Harley John Rd	Signal	116.5	F	86.3	F	Signal	158.5	F	186.1	F	Signal	42	D	45.4	D	42	99.8	-74.5	-40.9	No Build D/E/F
27: Wood Rd & Markham St	Signal	11.2	В	10.3	В	Signal	11.3	В	9.4	Α	Signal	9.9	Α	9.2	Α	0.1	-0.9	-1.3	-1.1	No Build A/B/C
28: Cajalco Rd & Wood Rd	Signal	26.9	С	12.6	В	Signal	23.4	С	26.2	С	Signal	21.2	С	18.4	В	-3.5	13.6	-5.7	5.8	No Build A/B/C
29: Alexander St & Markham St	AWSC	37.9	E	50.8	F	AWSC	41.5	E	52.3	F	AWSC	30.5	D	49.1	E	3.6	1.5	-7.4	-1.7	No Build D/E/F
30: Alexander St & Cajalco Rd	Signal	35.7	D	27.1	С	Signal	32.1	С	40.6	D	Signal	31.5	С	25.2	С	-3.6	13.5	-4.2	-1.9	No Build D/E/F
31: Rider St & Alexander St	TWSC	8.2	А	7.4	Α	TWSC	9.1	А	7.3	A	TWSC	11.7	В	7.5	A	0.9	-0.1	3.5	0.1	No Build A/B/C
32: Brown St & Markham St	AWSC	7.8	Α	8.1	А	AWSC	7.8	Α	8.1	A	AWSC	6.9	Α	6.9	A	0	0	-0.9	-1.2	No Build A/B/C
33: Brown St & Cajalco Rd	Signal	14.1	В	20.6	С	Signal	18.3	В	31.7	С	Signal	12.7	В	18.4	В	4.2	11.1	-1.4	-2.2	No Build A/B/C
34: Brown St & Rider St	AWSC	9	Α	8.7	Α	AWSC	8.9	Α	8.7	А	AWSC	8.9	Α	8.6	A	-0.1	0	-0.1	-0.1	No Build A/B/C
35: Clark St & Markham St	AWSC	9.9	Α	10.8	В	AWSC	10.3	В	12.3	В	AWSC	9.6	Α	10.7	В	0.4	1.5	-0.3	-0.1	No Build A/B/C
36: Clark St & Cajalco Rd	Signal	46.8	D	99.1	F	Signal	49.3	D	128.7	F	Signal	60	E	120.4	F	2.5	29.6	13.2	21.3	No Build D/E/F
37: Old Elsinore Rd/Clark St & Rider St	Signal	23.3	С	18	В	Signal	29.8	С	23.1	С	Signal	28.1	С	20.9	С	6.5	5.1	4.8	2.9	No Build A/B/C
38: Day St & Markham St	AWSC	10.5	В	10.3	В	AWSC	10.5	В	11.7	В	AWSC	10	A	10.5	В	0	1.4	-0.5	0.2	No Build A/B/C
39: Day St & Cajalco Rd	TWSC	8.9	Α	30.6	D	Signal	11.8	В	22.6	С	Signal	12.4	В	16.5	В	2.9	-8			No Build D/E/F
40: Day St & Rider St	TWSC	13.4	Α	3.9	Α	TWSC	12.8	В	4.6	A	TWSC	13.9	В	4.4	A	-0.6	0.7	0.5	0.5	No Build A/B/C
41: Seaton Ave & Markham St	AWSC	22	С	25.4	D	AWSC	16.9	С	37.5	E	AWSC	15.4	С	19	C	-5.1	12.1	-6.6	-6.4	No Build D/E/F
42: Seaton Ave & Cajalco Rd	TWSC	426.2	F	1.5	Α	Signal	27.9	С	37.8	D	Signal	14	В	19.8	В	-398.3	36.3	-412.2	18.3	No Build D/E/F
43: Rider St & Seaton Ave	TWSC	6	Α	9.3	Α	TWSC	8.7	A	28.9	D	TWSC	9.3	A	18	C	2.7	19.6	3.3	8.7	No Build A/B/C
44: Harvill Ave & Markham St	AWSC	14.4	В	19.9	С	AWSC	19.7	С	35.8	E	AWSC	13.2	В	17.3	С	5.3	15.9	-1.2		No Build A/B/C
45: Cajalco Expy & Harvill Ave	Signal	20	С	24.3	С	Signal	26.8	С	30.8	С	Signal	21.4	С	24.6	С	6.8	6.5	1.4		No Build A/B/C
46: Harvill Ave & Rider St	TWSC	4.8	A	4.2	Α	TWSC	5.2	A	5.7	A	TWSC	6.8	Α	6.1	A	0.4	1.5			No Build A/B/C
47: Harvill Ave & Placentia Ave	Signal	19.5	В	40.8	D	Signal	26.3	С	65.8	E	Signal	22.3	С	50.9	D	6.8	25			No Build D/E/F
48: Sycamore Cyn Rd & SR-60/I-215 SB Ramps	Signal	136.6	F	116.7	F	Signal	149.4	F	128.5	F	Signal	144.1	F	122.7	F	12.8	11.8			No Build D/E/F
49: SR-60/I-215 NB Ramps & Fair Isle Dr/Box Springs Rd	Signal	233	F	62	E	Signal	208.3	F	125	F	Signal	231.2	F	56.2	E	-24.7	63			No Build D/E/F
50: Day St & SR-60 WB Ramps	Signal	16.3	В	207	F	Signal	17.6	В	37.8	D	Signal	16.6	В	49	D	1.3	-169.2			No Build D/E/F
51: Day St & SR-60 EB Ramps	Signal	29.2	С	64.4	E	Signal	32.7	С	97.8	F	Signal	37.1	D	86.9	F	3.5	33.4			No Build D/E/F
52: I-215 Ramps & Eucalyptus Ave	Signal	22.9	С	205.9	F	Signal	26.9	С	226.6	F	Signal	22.2	С	209.6	F	4	20.7	-0.7		No Build D/E/F
53: Alessandro Blvd & I-215 SB Ramp	Signal	18	В	21.1	С	Signal	27.4	С	30.5	С	Signal	19.1	В	19.9	В	9.4	9.4			No Build A/B/C
54: I-215 NB Ramps & Alessandro Blvd	Signal	60.7	E	35.5	D	Signal	77.9	E	34.8	С	Signal	59.6	E	36	D	17.2	-0.7			No Build D/E/F
55: I-215 SB Ramps & Cactus Ave	Signal	7.8	A	16.1	В	Signal	10.3	В	17.9	В	Signal	5.1	A	16.5	В	2.5	1.8			No Build A/B/C
56: I-215 NB Ramps/Old 215 Frontage Rd & Cactus Ave	Signal	83.8	F	67.5	E	Signal	85.6	F	121.6	F	Signal	102.1	F	87.5	F	1.8	54.1	18.3		No Build D/E/F
57: I-215 SB Ramps & Van Buren Blvd	Signal	11.5	В	35.2	D	Signal	11	В	61.7	E	Signal	11.4	В	33.6	С	-0.5	26.5	-0.1		No Build D/E/F
58: I-215 NB Ramps & Van Buren Blvd	Signal	16.2	В	22.9	С	Signal	15.5	В	21.3	С	Signal	15.6	В	20.6	С	-0.7	-1.6			No Build A/B/C
59: I-215 SB Ramps & Harley Knox Blvd	Signal	32	С	22.4	C	Signal	25.8	С	22	C	Signal	30.9	С	17.5	В	-6.2	-0.4			No Build A/B/C
60: I-215 NB Ramps & Harley Knox Blvd	Signal	23.5	С	95.9	F	Signal	26.6	С	83.4	F	Signal	21.3	С	85.7	F	3.1	-12.5			No Build D/E/F
61: I-215 SB Ramps & Cajalco Expy/Cajalco Expy	Signal	130.4	F	35.6	D	Signal	107.3	F	51.7	D	Signal	111.5	F	30.2	С	-23.1	16.1	-18.9		No Build D/E/F
	C	74.7	E	67.6	E	Signal	71.5	E	53.7	D	Signal	75.6	E	63.2	E	-3.2	-13.9	0.9		No Build D/E/F
62: I-215 NB Ramps & Cajalco Expy/Ramona Expy	Signal	-		17.5	В	Signal	16.2	В	14.1	В	Signal	16.5	В	14.8	В	-0.7	-3.4			No Build A/B/C
63: I-215 SB Frontage Rd & Placentia Ave	Signal	16.9	В							-	C	46.2		1 1 2 2						No Build D/E/F
63: I-215 SB Frontage Rd & Placentia Ave 64: I-215 NB Frontage Rd & Placentia Ave	Signal Signal	49.8	D	48.5	D	Signal	34	С	55.2	E	Signal	46.3	D	47.3	D	-15.8	6.7			
63: I-215 SB Frontage Rd & Placentia Ave 64: I-215 NB Frontage Rd & Placentia Ave 65: I-215 SB Ramps & Nuevo Rd	Signal Signal Signal	49.8 27.8		48.5 101	D	Signal Signal	26.1	C C	96.9	F	Signal	25.5	C	100.4	F	-1.7	-4.1	-2.3	-0.6	No Build D/E/F
63: I-215 SB Frontage Rd & Placentia Ave 64: I-215 NB Frontage Rd & Placentia Ave	Signal Signal	49.8	D	48.5		-										-1.7 -1.3	-4.1 -2.2	-2.3 3.5	-0.6 -1.9	No Build D/E/F No Build D/E/F
63: I-215 SB Frontage Rd & Placentia Ave 64: I-215 NB Frontage Rd & Placentia Ave 65: I-215 SB Ramps & Nuevo Rd	Signal Signal Signal	49.8 27.8	D C	48.5 101	F	Signal	26.1	С	96.9	F	Signal	25.5	С	100.4	F	-1.7 -1.3 23.8	-4.1	-2.3 3.5 2.8	-0.6 -1.9 60.4	No Build D/E/F No Build D/E/F No Build D/E/F
63: I-215 SB Frontage Rd & Placentia Ave 64: I-215 NB Frontage Rd & Placentia Ave 65: I-215 SB Ramps & Nuevo Rd 66: I-215 NB Ramps & Nuevo Rd	Signal Signal Signal Signal	49.8 27.8 59.7	D C E	48.5 101 46.5	F	Signal Signal	26.1 58.4	C E	96.9 44.3	F	Signal Signal	25.5 63.2	C E	100.4 44.6	F	-1.7 -1.3	-4.1 -2.2	-2.3 3.5	-0.6 -1.9 60.4	No Build D/E/F No Build D/E/F

F		5+ Sec
/F	Faster	Faster
/C	Faster	Faster
/F	Faster	Faster
/F /F	Faster	Slower
/F /C	Slower Faster	Slower Faster
/C	Faster	Faster
/C	Faster	Faster
/F	Slower	Slower
/F	Faster	Faster
/F	Faster	Faster
/F	Slower	Slower
/C /F	Faster Faster	Faster Slower
/F	Slower	Slower
/C	Faster	Faster
/F	Faster	Faster
/F	Slower	Slower
/C	Slower	Slower
/C /C	Faster	Faster
/C /C	Faster Faster	Slower Slower
/C /F	Slower	Slower
/F	Faster	Faster
/F	Faster	Faster
/F	Slower	Slower
/C	Faster	Faster
/C /F	Slower Faster	Slower Faster
/F /F	Slower	Slower
/C	Faster	Faster
/C	Faster	Faster
/C	Slower	Slower
/C	Faster	Faster
/C	Faster	Faster
/F /C	Slower Slower	Slower Slower
/C	Faster	Faster
/F	Faster	Faster
/C	Faster	Faster
/F	Slower	Slower
/F	Slower	Slower
/C /C	Slower	Slower
/C /C	Slower Slower	Slower Slower
/c	Faster	Faster
/F	Slower	Slower
/F	Slower	Slower
/F	Slower	Slower
/F /c	Faster	Faster
/F /F	Slower Slower	Slower Slower
/C	Slower	Slower
/F	Slower	Slower
/C	Faster	Faster
/F	Slower	Slower
/F	Slower	Slower
/C /C	Faster Faster	Faster
/C /F	Faster	Faster Faster
/F /F	Slower	Slower
/F	Faster	Faster
/C	Faster	Faster
/F	Slower	Slower
/F	Faster	Faster
/F	Faster	Faster
/F /F	Slower Slower	Slower Slower
/F /F	Faster	Faster
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