

Executive Summary

Effective July 1, 2007, the California Department of Transportation (Department) has been assigned environmental review and consultation responsibilities under NEPA pursuant to Section 6005 of the Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) (23 United States Code [USC] 327). On projects for which the Department has assumed NEPA responsibilities, the Department has also assumed responsibility for environmental review and consultation under other federal environmental laws.

RCTC, in cooperation with the Department, has proposed capacity, operational, and safety improvements on part of SR-91 and part of I-15, designated as the SR-91 Corridor Improvement Project (CIP). The project would widen the existing SR-91 from the SR-91/SR-241 interchange in the cities of Anaheim and Yorba Linda in Orange County to Pierce Street in the City of Riverside in Riverside County. The project also includes improvements to I-15 in Riverside County between the I-15 and Cajalco Road interchange in the City of Corona and the I-15 and Hidden Valley Parkway interchange in the City of Corona. The project is subject to State and federal environmental review requirements. Project documentation has been prepared in compliance with both CEQA and NEPA. The Department is the lead agency under NEPA and CEQA for this project.

Lines were added to the margins of the pages in this document to assist the reader in noting places where substantive changes were made after the circulation of the Draft EIR/EIS during the preparation of this Final EIR/EIS.

S.1 Overview of the Project Study Area

The project study area extends along the project segments of SR-91 and I-15 in northeastern Orange County and western Riverside County. The Post Miles for the project on SR-91 in Orange County are between ORA-91-R14.43 and ORA-91-R18.91, in Riverside County between RIV-91-R0.00 and RIV-91-R13.04, and on I-15 in Riverside County between RIV-15-35.64 and RIV-15-45.14. The project limits on I-15 begin at Cajalco Road, approximately 5 mi south of SR-91 in the City of Corona. The project limits extend north on I-15 to Hidden Valley Parkway, approximately 1 mi north of SR-91 in the cities of Corona and Norco.

In the project study area, SR-91 currently has four 11- to 12-feet- (ft) wide, general-purpose (GP) travel lanes in each direction from the SR-241/SR-91 interchange to the

SR-91/I-15 interchange. It has three 12 ft wide GP lanes in each direction from the SR-91/I-15 interchange to Pierce Street. In addition, there are two tolled express lanes and one high-occupancy vehicle (HOV) lane in each direction within the project limits. The tolled express lanes, which are 11 or 12 ft wide depending on the location, begin west of the SR-91/State Route 55 (SR-55) interchange and terminate at the Orange/Riverside County line. The HOV lanes, which are 11 or 12 ft wide depending on the location, begin where the tolled express lanes end just east of the Orange/Riverside County line and extend east to Mary Street in the City of Riverside.

One project, which was recently completed, and several approved or planned projects in the project study area may affect or require design coordination with the project. These projects are:

- SR-91 Eastbound Lane Addition Project between SR-241 and State Route 71 (SR-71) (operational)
- Santa Ana Mainstem Project – Santa Ana River Reach 9 Phase 2B Realignment/ Santa Ana River Interceptor Pipeline Reaches III and IV
- SR-91/SR-71 Interchange Improvement Project
- I-15 Corridor Improvement Project
- SR-241/SR-91 Direct Connector Project
- SR-91 between SR-55 and SR-241
- SR-91 Lane Addition from SR-55 to Weir Canyon Road north of SR-91
- State Route 57 (SR-57) Northbound Truck Climbing Lane
- SR-241/SR-91 HOV/High-Occupancy Toll (HOT) Connector
- Express bus service operating on SR-91 that provides connections from Riverside County to employment centers in Anaheim, Costa Mesa, Fullerton, and Irvine in Orange County.
- Four additional express bus routes are planned for implementation in 2016.
- The parking capacity of the North Main Street Corona MetroLink parking structure adjacent to SR-91 was increased in June 2009, which allowed commuter rail ridership to increase, thereby diverting trips from SR-91.
- Future MetroLink service improvements are anticipated to include at least 40 daily trips each on the IEOC Line and 91-Line by 2020.
- Mid County Parkway
- Coal Canyon Landscape Project
- Corridor A-1: Community and Environmental Transportation Acceptability Process (CETAP), Riverside County to Orange County, construct an intercounty

transportation corridor with two toll lanes in each direction on a new facility parallel to SR-91 from SR-241 to I-15

- SR-241/SR-91 Toll Connectors: Provide HOV/HOT connectors from northbound SR-241 to eastbound SR-91 and from westbound SR-91 to southbound SR-241
- I-15 HOV/Express Lanes: Provide 2 HOV and 2 HOT lanes in each direction on I-15 from SR-74 to the San Bernardino County line
- SR-71 Widening: Widen SR-71 to 3 mixed-flow lanes in each direction from SR-91 to the San Bernardino County line

In addition to these projects, a number of other transportation and land use projects are identified within the cumulative impact study area, including projects identified in the most current *SR-91 Implementation Plan* (Orange County Transportation Authority [OCTA]).

S.2 Purpose and Need

S.2.1 Project Purpose

The purpose of the project is to:

1. Improve the vehicle, person, and goods movement within the SR-91 corridor to more effectively serve existing and future travel demand between and within Riverside and Orange Counties.
2. Provide improvements along the SR-91 and I-15 transportation corridors as well as to related local roads and to reduce diversion of regional traffic from the freeways into the surrounding communities.

S.2.2 Project Need

SR-91 is the only major highway corridor that provides the home-to-work connection for Riverside and San Bernardino County residents working in Orange and Los Angeles Counties. SR-91 is currently used by more than 280,000 vehicles per day (vpd) at the Orange/Riverside County line, and this volume continues to grow. At the same time, travel speeds on SR-91 are well below 30 miles per hour (mph) during the lengthy morning (westbound) and evening (eastbound) peak travel periods. Existing congestion and delays on SR-91 and I-15 during peak travel periods result in freeway traffic diverting to adjacent local roads to avoid congestion and delays. This diversion of freeway traffic is particularly prevalent in the City of Corona as motorists on westbound SR-91 and motorists transitioning from northbound I-15 to westbound SR-91 seek less congested routes in the morning (westbound) peak travel period. Similarly, diversion of freeway traffic into the City occurs as motorists on eastbound

SR-91 and motorists transitioning from eastbound SR-91 to southbound I-15 seek less congested routes in the evening (eastbound) peak travel period.

SR-91 is continuing to experience increased congestion as a result of population growth in Riverside and San Bernardino Counties and the increase in jobs in Orange and Los Angeles Counties. Demographic projections for the SCAG region (Orange, Los Angeles, Ventura, Santa Barbara, and Riverside Counties), show that population and employment in Riverside and Orange Counties are forecast to increase substantially by 2035. As a result, traffic volumes on SR-91 are expected to increase by approximately 50 percent by 2035, which would result in even greater congestion and delays on SR-91. The existing travel demand on SR-91 has led to a heavy directional commute pattern between Riverside and Orange/Los Angeles Counties that is projected to continue into the future.

Improvements are necessary to address existing and projected deficiencies regarding mobility, access, goods movement, and freeway capacity on the project segment of SR-91, which is the only major highway that links Riverside and Orange Counties.

S.3 Proposed Action

Both Build Alternatives would add one GP lane in each direction on SR-91 between SR-241 and I-15. Both Build Alternatives would include improvements to I-15 between the Cajalco Road interchange and the Hidden Valley Parkway interchange in the City of Corona.

The two Build Alternatives would provide auxiliary lanes or collector-distributor roads at interchanges and would modify the existing interchange geometrics within the project limits to improve traffic operations. The Build Alternatives would also upgrade existing SR-91 to standard shoulder, lane, and buffer widths where those upgrades can be accommodated.

Under Alternative 1, the existing HOV facilities and tolled express lanes on SR-91 would be maintained in their current configurations. Alternative 2 would result in two tolled express lanes in each direction on SR-91 between SR-241 and I-15. The existing HOV and express lanes would be converted into these two tolled express lanes. East of I-15, the HOV lanes in Alternative 1 and the tolled express lanes in Alternative 2 would be converted to join to the existing HOV and GP lanes at approximately Mary Street.

Alternative 1 would provide one median HOV lane in each direction on I-15 between SR-91 and Ontario Avenue. Alternative 2 would provide one median tolled express lane in each direction on I-15 between Hidden Valley Parkway and Cajalco Road.

Under Alternatives 1 and 2, existing local access to/from the existing interchanges is expected to be maintained except at West Grand Boulevard, where the existing half-diamond interchange ramps would be removed and replaced with improved local connectivity to the Lincoln Avenue interchange.

The Build and No Build Alternatives are described briefly in the following section.

S.3.1 Alternatives

S.3.1.1 No Build Alternative

The No Build Alternative would maintain existing SR-91 and I-15 in the project area. Under this alternative, there would be no additional GP lanes and no change in the existing express or HOV lanes on SR-91. No improvements on SR-91, I-15, or intersecting local roads would be provided. The *SR-91 Implementation Plan* would not be implemented under the No Build Alternative.

Under the future No Build Alternative, it is assumed the following independent projects have been constructed and are operational:

- SR-71/SR-91 Interchange Improvement Project
- SR-91 Eastbound Lane Addition Project between SR-241 and SR-71 (this project is now operational)
- SR-91 Lane Addition from SR-55 to Weir Canyon Road north of SR-91
- State Route 57 (SR-57) Northbound Truck Climbing Lane
- SR-241/SR-91 HOV/High-Occupancy Toll (HOT) Connector

It is not anticipated that other major corridor improvements would be implemented on the project segments of SR-91 and I-15 under the No Build Alternative. However, it is anticipated that smaller localized projects could be considered, approved, and implemented in the future on their own merits.

S.3.1.2 Alternative 1: Add General-Purpose Lanes and Maintain HOV Lanes (GP + HOV Lanes)

One GP lane would be constructed in each direction on SR-91 from the SR-91/SR-241 interchange in the Cities of Anaheim and Yorba Linda to Pierce Street in the City of Riverside under Alternative 1. The existing HOV lanes on SR-91 between the

Orange/Riverside County line and Pierce Street would be maintained. Alternative 1 would provide HOV lane connectors from eastbound SR-91 to southbound I-15 and from northbound I-15 to westbound SR-91. Those direct connectors would provide direct HOV lane access between I-15 and SR-91 which would allow vehicles in the HOV lanes to move from freeway to freeway, without the need to move through traffic in the GP lanes. One HOV lane would be constructed on I-15 in each direction from Ontario Avenue in the City of Corona to a proposed I-15/SR-91 HOV lane direct connector.

Alternative 1 would provide auxiliary lanes or collector-distributor roads at interchanges and would modify the existing interchanges within the project limits. Existing local access to/from the existing interchanges would be maintained except at West Grand Boulevard, where the existing nonstandard half-diamond interchange ramps would be removed and replaced with improved local connectivity to the Lincoln Avenue interchange. Alternative 1 also includes upgrades to existing SR-91 to standard shoulder, lane, and buffer widths where those upgrades can be accommodated.

Alternative 1 includes four design variations (1a through 1d) that provide different designs at Auto Center Drive/Maple Street (design variations 1a and 1b) and Lincoln Avenue/Grand Boulevard (design variations 1c and 1d). The construction of Alternative 1 will cost approximately \$990 million to \$1.0 billion, based on the design variation.

S.3.1.3 Alternative 2: Add General-Purpose Lanes and Extend Tolled Express Lanes (GP + Tolled Express Lanes)

RCTC identified Alternative 2 as the Locally Preferred Alternative (LPA), as discussed in Chapter 2, Project Alternatives.

Under Alternative 2, one GP lane would be constructed in each direction on SR-91, from the SR-91/SR-241 interchange in the Cities of Anaheim and Yorba Linda to Pierce Street in the City of Riverside. The existing express lanes in Orange County would be extended east from the Orange/Riverside County line to I-15 in the City of Corona. The existing HOV lanes would be converted to tolled express lanes, and one additional tolled express lane would be added in each direction on SR-91 from the Orange/Riverside County line to I-15.

On June 7, 2012, the RCTC formally adopted the “RCTC 91 Express Lanes Toll Policy.” The RCTC policy includes the same policies and toll pricing that exists today

for the OCTA 91 Express Lanes. Toll prices currently range from \$1.35 in the non-peak hours to \$10.05 in the eastbound SR-91 “super peak” hour from 3:00 to 4:00 p.m. on Fridays.¹ In addition to the posted tolls, the RCTC 91 Express Lane toll policy allows carpoolers with three or more persons (HOV3+), zero emission vehicles (ZEVs), motorcycles, disabled plates and disabled veterans to ride free during most hours. The exception is Monday through Friday 4:00 p.m. to 6:00 p.m. in the eastbound direction when they pay 50 percent of the posted toll.

A single eastbound SR-91 tolled express lane would extend past I-15 to McKinley Street and then convert back to an HOV lane at Pierce Street in each direction. In the westbound direction, the existing HOV lanes would be converted to a single tolled express lane east of McKinley Street and join a second tolled express lane at the I-15 interchange. Alternative 2 would add one tolled express lane in each direction on I-15 extending from the project express lane connectors north to Hidden Valley Parkway and south to Cajalco Road.

Single tolled express lane direct connectors between I-15 and SR-91 would provide access from northbound I-15 to westbound SR-91, extending on I-15 from SR-91 to the Hidden Valley Parkway interchange, and from eastbound SR-91 to southbound I-15, extending on I-15 from SR-91 to Cajalco Road. The direct connectors would allow express lane drivers to travel from the express lanes on one freeway into the express lanes on the other freeway without having to transition through the GP lanes.

Alternative 2 would also provide auxiliary lanes or collector-distributor roads at interchanges and would modify the existing interchanges within the project limits. Existing local access to/from the existing interchanges would be maintained except at West Grand Boulevard, where the existing nonstandard half-diamond interchange ramps would be removed and replaced with improved local connectivity to the Lincoln Avenue interchange. Alternative 2 also includes upgrades to existing SR-91 to standard shoulder, lane, and buffer widths where those upgrades can be accommodated.

Alternative 2 includes eight design variations (2a through 2h) that provide different design options at Auto Center Drive/Maple Street (two design options), Smith Avenue (two design options), and Lincoln Avenue (two design options). The construction of Alternative 2 will cost approximately \$1.345 to \$1.426 billion,

¹ <http://www.91expresslanes.com/schedules.asp>.

depending on the design variation. Alternative 2f is estimated to cost \$1,380,500,000, including roadway, structures and right-of-way costs.

S.3.1.4 Preferred Alternative

On September 20, 2011, the Project Development Team (PDT) evaluated the two Build Alternatives and the No Build Alternative to develop a recommendation to the Department and RCTC for the Preferred Alternative. The PDT is made up of representatives from Districts 8 and 12 of the Department; the Riverside County Transportation Commission; the Transportation Corridor Agencies, the Orange County Transportation Authority, the Cities of Corona, Riverside, Norco, and Anaheim; and consultants providing technical support to the Department and RCTC.

The approach of the PDT for developing that recommendation was conducted in two steps. Step 1 considered the ability of the two Build Alternatives and the No Build Alternative to meet the following five specific criteria: (1) the best alternative that meets the purpose of the project; (2) the alternative that provides the best travel time savings; (3) consideration of substantially differentiating environmental impacts for each of the Build Alternatives; (4) consideration of the comments provided by agencies and members of the general public during the public review period; and (5) consistency with transportation system planning for SR-91. As described in detail in Section 2.3.7.3, Development of the PDT Recommendation, Alternatives 1 and 2 both meet the project purpose. Alternative 2 results in the best travel time savings compared to Alternative 1 and the No Build Alternative. Alternatives 1 and 2 result in similar environmental impacts, but the larger footprint for Alternative 2 results in that Alternative having slightly greater impacts in some categories compared to Alternative 1. There was no strong preference for or against a specific alternative by the commenting agencies and members of the general public; however, the wider cross section in Alternative 2 better meets the system planning criterion compared to Alternative 1. Based on the evaluation of the ability of the No Build and Build Alternatives to meet these criteria, the PDT recommended Alternative 2 as the Preferred Alternative for the SR-91 CIP. RCTC, the Department, the City of Corona, the OCTA, and the Transportation Corridor Agencies (TCA), all members of the PDT, concurred with this recommendation. As a result, Alternative 2 is the Preferred Alternative for the SR-91 CIP.

Once the Preferred Alternative was identified, Step 2 considered the design variations for that Build Alternative and evaluated them on the following four criteria to determine which design variations should be included in the Preferred Alternative:

(1) the design variation that would minimize community and right-of-way impacts; (2) the design variation that would provide the best traffic operations; (3) consideration of substantially differentiating environmental impacts for each of the design variations; and (4) consideration of the comments provided by agencies and members of the general public during the public review period. The evaluation of the design variations provided in Section 2.3.7.4, PDT Recommendation for SR-91 CIP, based on a comparison of these four criteria, determined that design variation f better met these criteria than the other design variations applicable to Alternative 2.

The City of Corona indicated a strong preference for design variation f at the Auto Center Drive/Maple Street, Smith Avenue/Mid-City Access, and Lincoln Avenue interchanges. The PDT, including the Department and RCTC, concurred with the identification of design variation f for inclusion in the Preferred Alternative, and unanimously agreed with the recommendation of the identification of Alternative 2f as the Preferred Alternative for the SR-91 CIP.

S.3.2 Travel Time and Travel Speed

Table S.1 summarizes travel times and speeds on SR-91 between SR-241 and I-15 for the Baseline/Existing (2007) condition, and for 2015 and 2035 with the No Build and Build Alternatives based on the peak directions and hours of travel (i.e., westbound on SR-91 in the a.m. peak hour and eastbound in the p.m. peak hour). Key travel time and speed comparisons of Baseline/Existing (2007) conditions with the 2015 and 2035 No Build and with project conditions are described in the following sections. The project conditions are the Alternative 1 and 2 Ultimate Projects for both 2015 and 2035 and the Initial Phases of Alternatives 1 and 2 for 2015 only, which include only the initial improvements in Alternatives 1 and 2. As shown in the following discussion regarding travel times and travel speeds, the additional lane provided in each direction in Alternative 2 compared to Alternative 1 generally results in reduced travel times and increased travel speeds under Alternative 2 compared to both Alternative 1 and the No Build Alternative.

No Build Conditions in the AM Peak Hour (Westbound SR-91)

In the GP lanes, travel time is forecast to increase by approximately 8 minutes from Baseline/Existing (2007) to 2015 No Build conditions and by approximately 15 minutes from Baseline/Existing (2007) to 2035 No Build conditions.

Table S.1 SR-91 Travel Time and Travel Speed Summary¹

Lanes	Baseline/ Existing (2007)	2015				2035		
		No Build	Alt 1 Ultimate Project	Alt 2 Ultimate Project	Alt 2 Initial Project	No Build	Alt 1 Ultimate Project	Alt 2 Ultimate Project
SR-91 Westbound (AM Peak Hour)								
Travel Time (minutes)								
General Purpose	28.5	36.1	30.7	28.9	32.6	43.2	36.6	37.3
Percent change compared to Baseline/ Existing (2007)	--	26.7%	7.7%	1.4%	14.4%	51.6%	28.4%	30.9%
HOV/Tolled Express	12.1	18.4	15.5	13.1	12.0	25.9	23.5	12.6
Percent change compared to Baseline/ Existing (2007)	--	52.1%	28.1%	8.3%	-0.8%	114.0%	94.2%	4.1%
Travel Speed (mph)								
General Purpose	24.2	19.1	22.5	23.8	21.2	16.0	18.9	18.5
Percent change compared to Baseline/ Existing (2007)	--	-21.1%	-7.0%	-1.7%	-12.4%	-33.9%	-21.9%	-23.6%
HOV/Tolled Express	56.8	37.5	44.4	52.8	57.3	26.6	29.4	55.0
Percent change compared to Baseline/ Existing (2007)	--	-34.0%	-21.8%	-7.0%	0.9%	-53.2%	-48.2%	-3.2%
SR-91 Eastbound (PM Peak Hour)								
Travel Time (minutes)								
General Purpose	44.0	79.1	66.3	63.7	70.6	86.4	73.3	73.7
Percent change compared to Baseline/ Existing (2007)	--	79.8%	50.7%	44.8%	60.5%	96.4%	66.6%	67.5%
HOV/Tolled Express	30.0	39.7	31.2	13.0	12.5	47.0	48.1	13.8
Percent change compared to Baseline/ Existing (2007)	--	32.3%	4.0%	-56.7%	-58.3%	56.7%	60.3%	-54.0%
Travel Speed (mph)								
General Purpose	15.7	8.7	10.4	10.8	9.8	8.0	9.4	9.4
Percent change compared to Baseline/ Existing (2007)	--	-44.6%	-33.8%	-31.2%	-37.6%	-49.0%	-40.1%	-40.1%
HOV/Tolled Express	23.0	17.4	22.1	53.0	55.0	14.7	14.4	50.0
Percent change compared to Baseline/ Existing (2007)	--	-24.3%	-3.9%	130.4%	139.1%	-36.1%	-37.4%	117.4%

Source: Speed surveys and the RCTC Model Results for the SR-91 CIP, as disclosed in Table 4-64 in the *Final Traffic Study Report* (January 2010).

¹ Travel times and speed are for SR-91 between SR-241 and I-15.

² The 2015 conditions under the Initial Phase of Alternative 1 are considered to be the same as for the Initial Phase of Alternative 2.

Alt = Alternative

CIP = Corridor Improvement Project

HOV = high-occupancy vehicle

I-15 = Interstate 15

mph = miles per hour

RCTC = Riverside County Transportation Commission

SR-91 = State Route 91

SR-241 = State Route 241

In the GP lanes, travel speed is forecast to decrease by approximately 5 mph from Baseline/Existing (2007) to 2015 No Build conditions and by approximately 8 mph from Baseline/Existing (2007) to 2035 No Build conditions.

In the HOV/tolled express lanes, travel time is forecast to increase by approximately 6 minutes from Baseline/Existing (2007) to 2015 No Build conditions and by approximately 14 minutes from Baseline/Existing (2007) to 2035 No Build conditions.

In the HOV/tolled express lanes, travel speed is forecast to decrease by approximately 19 mph from Baseline/Existing (2007) to 2015 No Build conditions and by approximately 30 mph from Baseline/Existing (2007) to 2035 No Build conditions.

Alternative 1 in the AM Peak Hour (Westbound SR-91)

In the GP lanes, travel time is forecast to increase by approximately 2 minutes from Baseline/Existing (2007) to 2015 with Alternative 1 conditions and by approximately 8 minutes from Baseline/Existing (2007) to 2035 with Alternative 1 conditions.

In the GP lanes, travel speed is forecast to decrease by approximately 2 mph from Baseline/Existing (2007) to 2015 with Alternative 1 conditions and by approximately 5 mph from Baseline/Existing (2007) to 2035 with Alternative 1 conditions.

In HOV/tolled lanes, travel time is forecast to increase by approximately 3 minutes from Baseline/Existing (2007) to 2015 with Alternative 1 conditions and by approximately 11 minutes from Baseline/Existing (2007) to 2035 with Alternative 1 conditions.

In HOV/tolled lanes, travel speed is forecast to decrease by approximately 12 mph from Baseline/Existing (2007) to 2015 with Alternative 1 conditions and by approximately 27 mph from Baseline/Existing (2007) to 2035 with Alternative 1 conditions.

Alternative 2 in the AM Peak Hour (Westbound SR-91)

In the GP lanes, travel time is forecast to increase by approximately 0.5 minute from Baseline/Existing (2007) to 2015 with Alternative 2 conditions and by approximately 9 minutes from Baseline/Existing (2007) to 2035 with Alternative 2 conditions.

In the GP lanes, travel speed is forecast to decrease by approximately 0.5 mph from Baseline/Existing (2007) to 2015 with Alternative 2 conditions and by approximately 6 mph from Baseline/Existing (2007) to 2035 with Alternative 2 conditions.

In the tolled express lanes, travel time is forecast to increase by approximately 1 minute from Baseline/Existing (2007) to 2015 with Alternative 2 conditions and by

approximately 0.5 minute from Baseline/Existing (2007) to 2035 with Alternative 2 conditions.

In the tolled express lanes, travel speed is forecast to decrease by approximately 4 mph from Baseline/Existing (2007) to 2015 with Alternative 2 conditions and by approximately 2 mph from Baseline/Existing (2007) to 2035 with Alternative 2 conditions.

No Build Conditions in the PM Peak Hour (Eastbound SR-91)

In the GP lanes, travel time is forecast to increase by approximately 35 minutes from Baseline/Existing (2007) to 2015 No Build conditions and by approximately 42 minutes from Baseline/Existing (2007) to 2035 No Build conditions.

In the GP lanes, travel speed is forecast to decrease by approximately 7 mph from Baseline/Existing (2007) to 2015 No Build conditions and by approximately 8 mph from Baseline/Existing (2007) to 2035 No Build conditions.

In the HOV/tolled express lanes, travel time is forecast to increase by approximately 10 minutes from Baseline/Existing (2007) to 2015 No Build conditions and by approximately 17 minutes from Baseline/Existing (2007) to 2035 No Build conditions.

In the HOV/tolled express lanes, travel speed is forecast to decrease by approximately 6 mph from Baseline/Existing (2007) to 2015 No Build conditions and by approximately 8 mph from Baseline/Existing (2007) to 2035 No Build conditions.

Alternative 1 in the PM Peak Hour (Eastbound SR-91)

In the GP lanes, travel time is forecast to increase by approximately 22 minutes from Baseline/Existing (2007) to 2015 with Alternative 1 conditions and by approximately 29 minutes from Baseline/Existing (2007) to 2035 with Alternative 1 conditions.

In the GP lanes, travel speed is forecast to decrease by approximately 5 mph from Baseline/Existing (2007) to 2015 with Alternative 1 conditions and by approximately 6 mph from Baseline/Existing (2007) to 2035 with Alternative 1 conditions.

In the HOV/tolled express lanes, travel time is forecast to increase by approximately 1 minute from Baseline/Existing (2007) to 2015 with Alternative 1 conditions and by approximately 18 minutes from Baseline/Existing (2007) to 2035 with Alternative 1 conditions.

In the HOV/tolled express lanes, travel speed is forecast to decrease by approximately 1 mph from Baseline/Existing (2007) to 2015 with Alternative 1 conditions and by approximately 9 mph from Baseline/Existing (2007) to 2035 with Alternative 1 conditions.

Alternative 2 in the PM Peak Hour (Eastbound SR-91)

In the GP lanes, travel time is forecast to increase by approximately 20 minutes from Baseline/Existing (2007) to 2015 with Alternative 2 conditions and by approximately 30 minutes from Baseline/Existing (2007) to 2035 with Alternative 2 conditions.

In the GP lanes, travel speed is forecast to decrease by approximately 5 mph from Baseline/Existing (2007) to 2015 with Alternative 2 conditions and by approximately 6 mph from Baseline/Existing (2007) to 2035 with Alternative 2 conditions.

In the tolled express lanes, travel time is forecast to decrease by approximately 17 minutes from Baseline/Existing (2007) to 2015 with Alternative 2 conditions and by approximately 16 minutes from Baseline/Existing (2007) to 2035 with Alternative 2 conditions.

In the tolled express lanes, travel speed is forecast to increase by approximately 30 mph from Baseline/Existing (2007) to 2015 with Alternative 2 conditions and by approximately 27 mph from Baseline/Existing (2007) to 2035 with Alternative 2 conditions.

S.3.3 Modal Interrelationships Include System Linkages

SR-91 is an integral component of the regional transportation system. It provides a key linkage between the Inland Empire (Riverside and San Bernardino Counties) and Orange County as well as a gateway into southern Los Angeles County. It connects a large residential population to substantial employment opportunities. The project would provide enhanced mobility and system linkages between the counties as well as additional connectivity as a result of the provision of the direct HOV connectors to the tolled express lanes within the region.

Existing public transit linkages between Riverside and Orange Counties include bus and commuter rail. MetroLink commuter rail services between the two counties are nearing capacity on existing equipment. As identified in the Major Investment Study (MIS) Locally Preferred Strategy (LPS), all transit components in the Riverside County/Orange County study area were to be maximized as part of all future transportation improvements. Alternatives 1 and 2 do not specifically identify these

transit improvements, but they are part of the overall background of transit and transportation improvements required through the extensive elected officials, interested stakeholders, and public outreach process implemented as part of the MIS process by RCTC, OCTA, and the Department.

Some of the existing and planned multimodal components of the overall transportation system include:

- Express bus service operating on SR-91 that provides connections from Riverside County to employment centers in Anaheim, Costa Mesa, Fullerton, and Irvine in Orange County.
- Four additional express bus routes are planned for implementation in 2016. These routes would originate in the Riverside and Temecula areas with destinations to employment centers in Anaheim and Orange in Orange County.
- The parking capacity of the North Main Street Corona MetroLink parking structure adjacent to SR-91 was increased in June 2009, which allowed commuter rail ridership to increase, thereby diverting trips from SR-91.
- MetroLink currently operates 23 trips daily on the Inland Empire-Orange County (IEOC) Line between downtown Riverside, Laguna Niguel/Mission Viejo, and Oceanside.
- Future MetroLink service improvements are anticipated to include at least 40 daily trips each on the IEOC Line and 91-Line by 2020.

S.3.3.1 Logical Termini and Independent Utility

Logical Termini

The project limits for the SR-91 CIP were defined based on providing a logical and independent set of improvements. Logical termini are defined as rational end points for a transportation improvement and rational end points for a review of the environmental impacts of a proposed project. Refer to Figures 2.14 and 2.17, provided later in Chapter 2, Project Alternatives, which show the improvements in the Alternative 1 and 2 Initial Phases and Alternative 1 and 2 Ultimate Projects, respectively.

Logical Termini for the Alternative 1 and 2 Ultimate Projects

The Alternative 1 and 2 Ultimate Projects provide logical termini because they connect to major transportation facilities (SR-241, SR-71, and I-15), which are destinations of the major traffic volumes along SR-91, and terminate at major arterial interchanges (SR-241 on the west and Pierce Street on the east on SR-91, and Hidden

Valley Parkway on the north, and Cajalco Road on the south on I-15). The SR-91 CIP Build Alternatives can be implemented without being dependent on any other improvements, and they would provide substantial benefits to the traveling public between the project termini described without other improvements. Alternatives 1 and 2 for the SR-91 CIP have logical termini that allow for evaluation of potential environmental effects for a project large enough to address the defined traffic need in the affected part of the corridor.

Logical Termini for the Alternative 1 and 2 Initial Phases

Similar to the Ultimate Projects for Alternatives 1 and 2, the limits for the Initial Phases of those Build Alternatives were also defined based on providing a logical and independent set of improvements. The Initial Phase of Alternative 1 provides logical termini because it connects to major transportation facilities (SR-71 and I-15) and terminates at major arterial or freeway interchanges (Green River Road on the west on SR-91, at I-15 on the east on SR-91, and at Ontario Avenue on I-15). The Initial Phase of Alternative 2 also provides logical termini because it connects to major transportation facilities (SR-241, SR-71, and I-15) and terminates at major arterial or freeway interchanges (SR-241, Pierce Street on SR-91, and Hidden Valley Parkway and Ontario Avenue on I-15).

Independent Utility

A project has independent utility if it meets a project purpose in the absence of other improvements in the project segment or in other parts of the corridor. The SR-91 CIP has independent utility because the Alternative 1 and 2 Initial Phases and Ultimate Projects are usable improvements and represent reasonable expenditures even if no additional transportation improvements are made in the area. Alternatives 1 and 2 can be implemented in the absence of any other improvements and do not restrict consideration of alternatives for other reasonably foreseeable transportation improvements in the SR-91 and I-15 corridors.

S.3.4 Phasing and Funding of Alternatives 1 and 2

Implementation of the project will be in phases over a 20-year period, beginning with an Initial Phase and culminating with completion of the Ultimate Project by 2035. Phasing plans for the Build Alternatives were developed based on the funding anticipated to be available for the project after completion of the environmental process, including identification and approval of the Preferred Alternative. Separate phases would be identified and programmed to incorporate the components of the improvements on SR-91 and I-15 between the Initial Phase which would be

completed in 2017 and completion of the Ultimate Project by 2035, as funding becomes available. A summary of anticipated funding sources for Alternatives 1 and 2 is shown in Table S.2. Additional funds will be needed to construct all phases of the project. Potential funding sources for future phases include federal grants, State Transportation Improvement Program (STIP) funds, and Measure A.

Table S.2 Anticipated Funding Sources

Potential Funding Source	Alternative 1	Alternative 2
RCTC Contribution (Measure A)	\$830,586,000	\$734,944,000
Federal TIFIA Loan	0	\$444,117,000
STIP Funds	\$2,000,000	\$2,000,000
Toll Revenue Bonds (CIBs/CABs)	0	\$163,768,000
Total	\$832,586,000	\$1,344,829,000

Source: Riverside County Transportation Commission (2011).
 CABs = Capital Appreciation Bonds
 CIBs = Current Interest Bonds
 RCTC = Riverside County Transportation Commission
 STIP = State Transportation Improvement Program
 TIFIA = Transportation Infrastructure Finance and Innovation Act

S.4 Joint CEQA/NEPA Document

The project is a joint project by the Department and FHWA, and is subject to State and federal environmental review requirements. Project documentation, therefore, has been prepared in compliance with both CEQA and NEPA. The Department is the lead agency under NEPA and CEQA. In addition, FHWA's responsibility for environmental review, consultation, and any other action required in accordance with applicable federal laws for this project is being, or has been, carried out by the Department under its assumption of responsibility pursuant to 23 USC 327.

Some impacts determined to be significant under CEQA may not lead to a determination of significance under NEPA. Because NEPA is concerned with the significance of the project as a whole, it is quite often the case that a "lower level" document is prepared for NEPA. One of the most commonly seen joint document types is an EIR/EIS.

In accordance with CEQA, the Department determined that the project could have a significant effect on the environment and prepared an EIR. In addition, the Department has determined that the action may substantially impact the environment. Therefore, the Department, as assigned by FHWA, prepared an EIS.

Following a review of public comments received on the Draft EIR/EIS and circulation of the Final EIS, the Department will take actions regarding the

environmental document. The Department will certify the Final EIR, issue Findings and a Statement of Overriding Considerations under CEQA; and approve the Final EIS and issue a Record of Decision (ROD) under NEPA. Based on the project phasing discussed in Section S.3.4, the Department anticipates issuing separate RODs for the Initial Phase and the Ultimate Project.

At the time the Ultimate Project is programmed, RCTC will assess whether the project scope has changed, existing conditions in the study area have changed, and/or there is potential for substantial new adverse impacts not evaluated in the original Final EIR/EIS. That assessment may result a determination that additional environmental documentation (such as an Environmental Reevaluation under NEPA and an Addendum to the Final EIR under CEQA if there are no substantial changes in the project, the existing environment and the project impacts) and/or updated technical studies are needed prior to implementation of the Ultimate Project.

S.4.1 Determining Significance Under the California Environmental Quality Act

One of the primary differences between NEPA and CEQA is the way significance is determined. Under NEPA, significance is used to determine whether an EIS, or some lower level of documentation, will be required. NEPA requires that an EIS be prepared when the proposed federal action (project) *as a whole* has the potential to “significantly affect the quality of the human environment.” The determination of significance under NEPA is based on context and intensity. Some impacts determined to be significant under CEQA may not be of sufficient magnitude to be determined significant under NEPA. Under NEPA, once a decision is made regarding the need for an EIS, it is the magnitude of the impact that is evaluated and no judgment of its individual significance is deemed important for the text. NEPA does not require that a determination of significant impacts be stated in the environmental document.

CEQA, on the other hand, does require the Department to identify each “significant effect on the environment” resulting from the project and ways to mitigate each significant effect. If the project may have a significant effect on any environmental resource, then an EIR must be prepared. Each and every significant effect on the environment must be disclosed in the EIR and mitigated if feasible. In addition, the CEQA Guidelines list a number of mandatory findings of significance, which also require the preparation of an EIR. There are no types of actions under NEPA that parallel the findings of mandatory significance of CEQA.

S.4.2 Discussion of Significance of Impacts Under CEQA

The significance of the potential impacts of the Build Alternatives under CEQA was assessed based on the CEQA Environmental Checklist provided in Appendix A, CEQA Environmental Checklist, as required per the California Department of Transportation (Caltrans) *Standard Environmental Reference*, and the analyses of project impacts discussed in detail in Chapter 3, Affected Environment, Environmental Consequences, and Avoidance, Minimization and/or Mitigation Measures. The impacts of the Build Alternatives and the No Build Alternative are discussed and summarized throughout Chapter 3. Chapter 4, California Environmental Quality Act Evaluation, provides the applicable discussion regarding the determination of significance under CEQA based on the responses to the CEQA Checklist questions.

S.5 Project Impacts

S.5.1 Summary of Impacts and Measures

Table S.3, which follows the last page of text in this Executive Summary, summarizes the impacts of the Build Alternatives where there is a difference in the impacts between Alternatives 1 and 2. The environmental commitments (measures to avoid, minimize and/or mitigate impacts) to address those impacts are also summarized in Table S.3. All the measures in Table S.3 apply to both Alternatives 1 and 2, unless otherwise noted.

Table S.4, which follows Table S.3 at the end of this Executive Summary, lists those impacts that are the same or very similar for Alternatives 1 and 2. Measures to address those impacts are also summarized in Table S.4.

Tables S.3 and S.4 also indicate whether the individual avoidance, minimization, and mitigation measures apply to the Initial Phase (IP in Tables S.3 and S.4), the Ultimate Project (UP in Tables S.3 and S.4), or the Initial Phase and the Ultimate Project (IP and UP in Tables S.3 and S.4).

The impacts in Tables S.3 and S.4 are organized in the order in which the impact analyses occur in Chapter 3. For more detailed information regarding the impacts summarized in Tables S.3 and S.4, refer to the following sections in Chapter 3:

- 3.1 Land Use
- 3.2 Growth
- 3.3 Farmlands/Timberlands

- 3.4 Community Impacts
- 3.5 Utilities/Emergency Services
- 3.6 Traffic and Transportation/Pedestrian and Bicycle Facilities
- 3.7 Visual/Aesthetics
- 3.8 Cultural Resources
- 3.9 Hydrology and Floodplains
- 3.10 Water Quality and Storm Water Runoff
- 3.11 Geology/Soils/Seismic/Topography
- 3.12 Paleontology
- 3.13 Hazardous Waste/Materials
- 3.14 Air Quality
- 3.15 Noise
- 3.16 Energy
- 3.17 Natural Communities
- 3.18 Wetlands and Other Waters
- 3.19 Plant Species
- 3.20 Animal Species
- 3.21 Threatened and Endangered Species
- 3.22 Invasive Species
- 3.23 Relationship Between Local Short-Term Uses of the Human Environment and the Maintenance and Enhancement of Long-Term Productivity
- 3.24 Irreversible and Irretrievable Commitments of Resources That Would Be Involved in the Proposed Action
- 3.25 Cumulative Impacts

S.5.2 Summary of Significant Adverse Impacts Under CEQA after Mitigation

As discussed in detail in Chapter 4, the following impacts of Alternatives 1 and 2 were determined to be significant, adverse, and unavoidable under CEQA, after implementation of the identified avoidance, minimization, and mitigation measures, as well as project design features:

- Permanent impacts to oak woodland
- Cumulative impacts
- Long-term noise
- Adverse effects on human beings

The remaining impacts of the Build Alternatives were determined to be either not significant or to be avoided or reduced to below a level of significance under CEQA, based on implementation of the project avoidance, minimization, and mitigation measures and project design features, as described in detail in Chapter 4.

S.6 Coordination with Public and Other Agencies

Public participation and agency consultation for this project have been accomplished through a variety of formal and informal methods, including monthly PDT meetings, interagency coordination meetings, resource agency meetings, public meetings, and consultation with interested parties.

S.6.1 Notice of Intent

The Notice of Intent (NOI) under NEPA was prepared by the Department and was published on July 3, 2008 in the Federal Register, Volume 73, No. 129. No written comments were received in response to the NOI.

S.6.2 Notice of Preparation

The Notice of Preparation (NOP) under CEQA was distributed to federal, tribal, State, regional, county, and local agencies; elected officials; special districts; groups; businesses, major property owners, and organizations; and property owners within 700 ft of the project segments of SR-91 and I-15.

The State Clearinghouse (SCH) distributed the NOP to a number of State agencies on July 15, 2008.

The Notice of Scoping/Initiation of Studies letters were sent on August 7, 2008, to elected and City officials, agencies, and other interested parties. These letters included a project location map.

In response to the NOP, letters were received from one federal agency, four State agencies, eight regional agencies, and three organizations/interested parties. The responses to the NOP are provided in Attachment 5.D, Responses to the Notice of Preparation, in Chapter 5, Comments and Coordination.

S.6.3 Public Outreach

S.6.3.1 Scoping Meetings

The RCTC and the Department hosted a public scoping meeting for the proposed project at the City of Corona Multi-Purpose Room at 400 South Vicentia Avenue in Corona, California, on July 29, 2008. Project aerial maps and display boards that

showed the project alternatives and display boards of the environmental process were provided. The aerial maps and display boards were described to meeting attendees by the RCTC, the Department, and consultant staff. Tables for scoping meeting participants to write and submit comment cards were provided. A court reporter was available to document verbal comments provided at the meeting.

The scoping meeting sign-in sheets showed 14 agencies and elected officials in attendance, as well as 11 property owners. A total of 64 people attended the meeting.

Refer to Section 5.2.5, Scoping Meetings, for additional discussion regarding the project scoping meetings.

S.6.3.2 Public Information Meetings

Two public information meetings were held to update interested parties on the progress of the project. The first meeting was on March 3, 2009, with 60 people attending. The second public information meeting was on August 26, 2010, with 280 people attending. Both public information meetings were held at the Corona Public Library, 650 South Main Street, Corona, California, 92882.

S.6.3.3 June 9, 2011 Public Hearing

On June 9, 2011, RCTC and the Department held an open-house format public hearing to provide information to the public regarding the project alternatives and the Draft EIR/EIS and to solicit input from the attendees regarding the project alternatives and the analyses provided in the Draft EIR/EIS. The public hearing was announced in newspaper advertisements and several mailings of project and hearing related materials. The open-house format included 17 stations, 53 exhibit boards, 5 large maps, and 6 viewing display monitors. Agency and consultant staff were available at each station to greet the attendees, describe the material at the station, answer attendees' questions, and direct attendees to other stations for other information relevant to their questions and/or comments. Approximately 260 agency representatives and members of the general public attended the public hearing. The meeting format allowed attendees to move from station to station at their own pace, and to review the available materials and discuss their questions/comments with the staff at each station. A total of 49 comment cards and 19 verbal comments transcribed by court reporters were received from attendees at the public hearing. In addition, many attendees discussed their concerns with staff present at the individual topic stations. Based on those interactions, the majority of the comments raised were related to right-of-way acquisition. Other topics of concern included the location of

noise walls, the phasing of the project, the proposed construction date of the project, and a preference for a certain alternative or design variation.

Refer to Section 5.2.6.3, June 9, 2011, Public Hearing, for additional description of the public hearing and comments provided by the hearing attendees regarding the project and the EIR/EIS.

S.6.3.4 Noise Barrier Survey Public Outreach Efforts

Permanent noise impacts were identified at 416 properties. In accordance with Department procedures, a noise barrier survey package was sent by certified mail to each property owner on May 20, 2011. Of the 416 packages sent, 320 went unclaimed and were returned. Only 24 completed surveys were received.

Based on the low number of completed surveys returned as part of the first noise barrier survey mail-out and the fact that several residents had requested additional clarification on the purpose of the noise barrier survey and the voting process, RCTC initiated an additional noise barrier public outreach effort that included a focused meeting for property owners affected by Noise Barriers (NBs) D1-B, I-1, and I-2, and a second mail-out of noise barrier survey information to all confirmed property owner addresses on the noise barrier mailing list.

The second noise barrier survey mail-out occurred on August 5, 2011. During the second round mail-out, 319 property owners received a noise barrier survey package. Of the 319 packages sent by both certified mail and regular first class mail, 45 went unclaimed and were returned, and 74 completed surveys were received.

Invitations to two noise barrier focus meetings were also sent on August 5, 2011, to residents affected by NBs D1-B, I-1, and I-2. A second mailing for that noise barrier focus meeting was sent August 17, 2011, to the same residents as a reminder of the upcoming focus meetings.

The first noise barrier focus meeting for property owners affected by NBs I-1 and I-2, was held at The Veranda at the Green River Golf Club, 5215 Green River Road, Corona, on August 23, 2011, from 7:00 p.m. to 8:00 p.m. A similar meeting with the same format and handouts was held for property owners affected by NB D1-B from 7:00 p.m. to 8:00 p.m. on August 25, 2011, in the Multipurpose Room in Corona City Hall, at 400 South Vicentia Avenue, Corona. All property owners were requested to provide their votes by September 9, 2011.

Due to a large number of no responses received from affected property owners, RCTC and the Department conducted a third round of public outreach efforts. RCTC and the Department prepared a cover letter and noise barrier survey that were distributed during door-to-door home visits conducted between the hours of 3:30 p.m. and 7:30 p.m. on September 30, 2011, and October 4, 2011. All teams that made personal visits to property owners were bilingual and provided noise barrier surveys with self-addressed stamped envelopes that requested the completed surveys be returned and postmarked no later than October 5, 2011. A total of 140 homes were visited during the third round public outreach process. A total of 39 noise barrier surveys were returned.

In addition, a focused effort was made to inform the Villaggio Condo Homeowners Association (HOA) about the proposed location of NB D1-B. RCTC and the Department held a meeting with the Villaggio HOA and interested residents at the Villaggio community pool on Saturday, November 12, 2011, from 11:00 a.m. to 12:30 p.m. Six agency and consultant staff and 15 homeowners attended the meeting. After the meeting, the HOA was asked to vote in support or against the construction of NB D1-B.

Based on comments received during the public review period of the Draft EIR/EIS and prior commitments made by previous Department projects to build NB K1-A, along I-15, a noise barrier survey was conducted for property owners affected by the construction of NB K1-A. Based on the surveys submitted by affected property owners, NB K1-A received a majority approval and will be carried through construction.

Refer to Sections 5.2.7, Noise Barrier Survey Public Outreach Efforts, and 3.15.3.2, Permanent Impacts (in the subsection titled Noise Barrier Survey Public Outreach Efforts) for additional discussion regarding the public outreach efforts regarding noise barriers.

S.6.4 Coordination with Agencies and Utilities

The Department has coordinated with the following agencies as Participating Agencies:

- United States Environmental Protection Agency (EPA), Region IX
- United States Fish and Wildlife Service (USFWS)
- Southern California Association of Governments (SCAG)
- South Coast Air Quality Management District (SCAQMD)

- Transportation Corridor Agencies (TCA)
- Orange County Transportation Authority (OCTA)
- Riverside County Transportation Department
- City of Corona
- City of Riverside

The Department has coordinated with the following agency as a Cooperating Agency:

- United States Army Corps of Engineers (Corps)

In addition to those agencies, coordination has been conducted with the following agencies and utility providers:

- Department of the Interior, National Park Service
- California Department of Transportation (Caltrans), District 12
- California Department of Fish and Game (CDFG)
- State Historic Preservation Officer
- Western Riverside County Regional Conservation Authority (RCA)
- Orange County Parks (OC Parks)
- California State Parks (State Parks)
- SCAG Transportation Conformity Working Group (TCWG)
- Regional Water Quality Control Board
- Orange County Flood Control District
- Orange County Public Works
- Riverside County Flood Control and Water Conservation District
- Burlington Northern Santa Fe Railroad
- Southern California Regional Rail Authority
- AT&T/Pac Bell
- Southern California Edison Company
- Southern California Gas Company
- Comcast Cable
- Sprint
- Time Warner Cable
- Level 3 Communications
- Santa Ana Watershed Project Authority
- Western Riverside Regional Wastewater
- Questar (Four Corners Pipeline Company)

Native American consultation and coordination was conducted with the following:

- Native American Heritage Commission (NAHC)
- Augustine Band of Cahuilla Mission Indians: Mary Ann Green
- Juaneño Band of Cahuilla Mission Indians: Anita Espinoza
- Juaneño Band of Cahuilla Mission Indians: Joe Ocampo
- Juaneño Band of Cahuilla Mission Indians, Acjachemen Nation: David Belardes
- Juaneño Band of Cahuilla Mission Indians: Sonia Johnston
- Gabrieleno/Tongva San Gabriel Band of Mission Indians: Anthony Morales
- Pechanga Band of Mission Indians: Paul Macarro
- Soboba Band of Luiseño Indians: Erica Helms
- Ti'At Society: Cindi Alvitre

S.7 Permits and Approvals

Table S.5 identifies the permits and/or approvals that are or may be required prior to or during construction and/or operation of Alternatives 1 and 2. Table S.5 is provided following Table S.4 at the end of this Executive Summary.

The SR-91 CIP is designated as an FHWA Major Project due to the project cost exceeding \$500 million. For federal funding to be authorized for the financing of Major Projects such as the SR-91 CIP, the project owner (i.e., RCTC for the SR 91 CIP) must demonstrate to FHWA that the project has been carefully planned (i.e., costs have been estimated as accurately and meticulously as possible; risks have been carefully considered and mitigated; financing requirements and strategies have been clearly defined; and the implementation of the project delivery has been carefully planned). Through the different phases of project delivery and as required under SAFETEA-LU, the FHWA Major Project designation triggers a number of deliverables for submittal to FHWA for approval on the SR-91 CIP, including: (1) a Cost Estimate Review (CER), which must be approved prior to approval of a Final EIS; (2) an Operational Independence and Non-Concurrent Construction (OINCC) Determination; (3) an Initial Financial Plan (IFP); and (4) a Draft and Final Project Management Plan (PMP). The Draft PMP should be submitted to FHWA 60 days prior to approval of an ROD, and the Final PMP must be submitted no later than 90 days after approval of the ROD. The Plan of Finance (POF) required with RCTC's application for Transportation Infrastructure Finance and Innovation Act (TIFIA) funds will be submitted in lieu of the IFP per FHWA financial plan guidance. The FHWA Major Project deliverables schedule of approvals is included in Table S.5.

S.8 Unresolved Issues

The project involves consideration of a complex set of interrelated issues. Local and federal decision-makers (RCTC and the Department, respectively) must balance the need to provide transportation infrastructure to serve an increasing traffic demand with the need to protect natural resources and improve environmental quality. As part of the SAFETEA-LU 6002 process, the EPA sent a letter dated June 18, 2010, that identified that agency's concerns with regard to the proposed project. These concerns include independent utility, premature comparisons of the No Build and Build Alternatives, consistency with the RCTC's 10-Year Measure A Delivery Plan and the *SR-91 Implementation Plan*, transit and transportation system management/transportation demand management alternatives and options, methodologies that include Mobile Source Air Toxics (MSAT), waters of the United States and waters assessment, on-site alternatives and minimization, compensatory mitigation, greenhouse gas (GHG) emissions and sustainable communities strategies, Section 6002 coordination for future projects, purpose and need and range of alternatives, Section 6002 process, and participating agency coordination meetings.

In addition, through the public review of this Draft EIR/EIS, issues that were identified have been resolved prior to approval of this Final EIR/EIS, the issuance of the Notice of Determination (NOD) under CEQA, and the issuance of the ROD under NEPA.

S.9 Areas of Controversy

During the scoping process, agencies and members of the general public identified a number of concerns and environmental issues regarding the proposed project. Those issues are summarized in Table S.6, which is provided following Table S.5 at the end of this Executive Summary.

Table S.3 Summary of Impacts for the No Build Alternative and Impacts with Differences Between Alternatives 1 and 2

Potential Impact	No Build Alternative	Alternative 1	Alternative 2	Avoidance, Minimization, and Mitigation Measures ²
Total Costs (Final Design, Right-of-Way, and Construction)	Not applicable	\$990 million to \$1.0 billion, depending on the design variation.	\$1.345 to \$1.426 billion, depending on the design variation. Alternative 2f is anticipated to cost \$1.38 billion.	Not applicable
Acquisition and removal of Homes	No impact	Purchase and removal of 93 to 117 homes, depending on the design variation.	Purchase and removal of 114 to 161 homes, depending on the design variation. Alternative 2f would purchase and remove 145 homes.	Measure CI-1: Design refinements to minimize property acquisition. (IP and UP) Measure CI-2: Compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 and Title VI of the Civil Rights Act of 1964. Parking studies will be conducted to investigate the use of adjacent acquisitions for replacement parking and options for reconfiguring parking lots, driveways, and/or delivery locations to reduce the project effects on partial acquisition properties. (IP and UP)
Number of Residents Displaced	No impact	252 to 410 residents displaced, depending on the design variation.	399 to 564 residents displaced, depending on the design variation. Alternative 2f would displace 507 residents.	Measure CI-1: Design refinements to minimize property acquisition. (IP and UP) Measure CI-2: Compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 and Title VI of the Civil Rights Act of 1964. Parking studies will be conducted to investigate the use of adjacent acquisitions for replacement parking and options for reconfiguring parking lots, driveways, and/or delivery locations to reduce the project effects on partial acquisition properties. (IP and UP)
Acquisition and removal of Businesses	No impact	Purchase and removal of 110 to 189 businesses, depending on the design variation; removal of 9 billboards.	Purchase and removal of 221 to 275 businesses, depending on the design variations; removal of 10 billboards. Alternative 2f would purchase and removal 88 businesses, displace 242 nonresidential units, and remove 10 billboards.	Measure CI-1: Design refinements to minimize property acquisition; assistance in relocating billboards. (IP and UP) Measure CI-2: Compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 and Title VI of the Civil Rights Act of 1964. Parking studies will be conducted to investigate the use of adjacent acquisitions for replacement parking and options for reconfiguring parking lots, driveways, and/or delivery locations to reduce the project effects on partial acquisition properties. (IP and UP)

Table S.3 Summary of Impacts for the No Build Alternative and Impacts with Differences Between Alternatives 1 and 2

Potential Impact	No Build Alternative	Alternative 1	Alternative 2	Avoidance, Minimization, and Mitigation Measures ²
				Measure CI-4: Assist with relocation of billboards within the City of Corona. (IP and UP)
Number of Employees Displaced	No impact	A range of between 114 and 527 employees, depending on the design variation and the employee displacement factors.	A range of between 133 and 554 employees, depending on the design variation and the employee displacement factors. Alternative 2f would displace 169 to 576 employees.	Measure CI-1: Design refinements to minimize property acquisition. (IP and UP) Measure CI-2: Compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 and Title VI of the Civil Rights Act of 1964. Parking studies will be conducted to investigate the use of adjacent acquisitions for replacement parking and options for reconfiguring parking lots, driveways, and/or delivery locations to reduce the project effects on partial acquisition properties. (IP and UP) Measure CI-3: Reconfigure nonresidential uses on property only partially acquired for the project. (IP and UP)
Land Use: Existing and Future Land Uses	No impact	The Ultimate Project under Alternative 1 would result in the permanent use of between 61.8 and 65.7 ac of land designated in local General Plans for uses other than transportation.	The Initial Phase of Alternative 2 would result in the permanent use of 64.0 ac of land designated in local General Plans for uses other than transportation. The Ultimate Project under Alternative 2 would result in the permanent use of between 78.0 and 94.6 ac of land designated in local General Plans for uses other than transportation. The Initial Phase of Alternative 2f would also result in the permanent use of 64.0 ac and the Ultimate Project under Alternative 2f would result in the permanent use of 78.0 ac of land designated in local General Plans for uses other than transportation.	Measure LU-1: General Plan Amendments to modify the land use designations to transportation. (IP and UP)

Table S.3 Summary of Impacts for the No Build Alternative and Impacts with Differences Between Alternatives 1 and 2

Potential Impact	No Build Alternative	Alternative 1	Alternative 2	Avoidance, Minimization, and Mitigation Measures ²
Land Use: Parks and Recreation Facilities	No impact	Alternative 1 would result in a 1.65 ac permanent subsurface easement at CHSP. Alternative 1 would result in a 0.4 ac permanent subsurface easement at the New OC Park (NNL).	Alternative 2 would result in a 1.88 ac permanent subsurface easement at CHSP. Alternative 2 would result in a 2.2 ac permanent subsurface easement at the New OC Park (NNL).	Measure CI-1: Design refinements to minimize property acquisition. (IP and UP) Measure CI-2: Compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 and Title VI of the Civil Rights Act of 1964. Parking studies will be conducted to investigate the use of adjacent acquisitions for replacement parking and options for reconfiguring parking lots, driveways, and/or delivery locations to reduce the project effects on partial acquisition properties. (IP and UP)
Farmlands and Timberlands	No Impact	The Initial Phase of Alternative 1 and its design variations would result in a permanent conversion of 3.8 ac of designated Farmland of Local Importance and 2.7 ac of Grazing Land to nonagricultural uses. Alternative 1 and its design variations would result in a permanent conversion of 1.8 ac of designated Farmland of Local Importance and 15.2 ac of Grazing Land to nonagricultural uses. Alternative 1 and its design variations would result in the temporary use of 3.4 ac of Grazing Land.	The Initial Phase of Alternative 2 and its design variations, including Alternative 2f, would result in a permanent conversion of 3.8 ac of designated Farmland of Local Importance and 2.7 ac of Grazing Land to nonagricultural uses. Alternative 2 and its design variations, including Alternative 2f, would result in the permanent conversion of 4.1 ac of Farmland of Local Importance and 16.6 ac of Grazing Land. Alternative 2 and its design variations, including Alternative 2f, would result in the temporary use of 0.1 ac of Farmland of Local Importance and 3.5 ac of Grazing Land.	Measure CI-2: Compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 and Title VI of the Civil Rights Act of 1964. Parking studies will be conducted to investigate the use of adjacent acquisitions for replacement parking and options for reconfiguring parking lots, driveways, and/or delivery locations to reduce the project effects on partial acquisition properties. (IP and UP)
Community Impacts: Community Character and Cohesion	No impact	Alternative 1 would result in expanded right-of-way, which would add additional hardscape, graded slopes, modified and new ramps, overcrossings and bridges, concrete barriers, and new retaining tieback and sound walls, thereby modifying existing visual quality and impacting community character.	Although Alternatives 1 and 2 including Alternative 2f would impact community character through the decrease of visual quality and cohesion, the visual quality under Alternative 2 and Alternative 2f would be altered more than under Alternative 1 due to a larger amount of hardscape, including retaining walls and sound walls.	Measure CI-1: Design refinements to minimize property acquisition. (IP and UP) Measure CI-2: Compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 and Title VI of the Civil Rights Act of 1964. Parking studies will be conducted to investigate the use of adjacent acquisitions for replacement parking and options for reconfiguring parking lots, driveways, and/or delivery

Table S.3 Summary of Impacts for the No Build Alternative and Impacts with Differences Between Alternatives 1 and 2

Potential Impact	No Build Alternative	Alternative 1	Alternative 2	Avoidance, Minimization, and Mitigation Measures ²
		Widened freeway cross sections would result in wider overcrossings and undercrossings, and increased lengths of pedestrian paths on/under those structures. The new parts of undercrossings would include lighting for vehicles and pedestrians consistent with local standards. However, segments of those roads under the existing overcrossings would experience a reduction in amount of natural light, which could be perceived by pedestrians and bicyclists as adversely affecting their experiences as they cross the freeways.	Alternative 2 including Alternative 2f would result in expanded right-of-way, which would add additional hardscape, graded slopes, modified and new ramps, overcrossings and bridges, concrete barriers, and new retaining tieback and sound walls, thereby modifying existing visual quality and impacting community character. Widened freeway cross sections would result in wider overcrossings and undercrossings, and increased lengths of pedestrian paths on/under those structures. The new parts of undercrossings would include lighting for vehicles and pedestrians consistent with local standards. However, segments of those roads under the existing overcrossings would experience a reduction in amount of natural light, which could be perceived by pedestrians and bicyclists as adversely affecting their experiences as they cross the freeways.	locations to reduce the project effects on partial acquisition properties. (IP and UP) Measure CI-3: Reconfigure nonresidential uses on property only partially acquired for the project. (IP and UP) Measure T-4: Provision of lighting in undercrossings. (IP and UP)
Community Impacts: Relocations and Real Property Acquisition	No impact	Alternative 1 would result in the acquisition and removal of 21 single-family homes under all design variations, and 72 to 96 multifamily homes, depending on the design variation. Alternative 1 would result in the acquisition of between 110 and 189 business parcels, depending on the design variation. The total employees displaced under Alternative 1 range from 114 to 527 employees, depending on the design variation.	Alternative 2 would result in the acquisition and removal of 23 to 24 single-family homes and 81 to 129 multifamily homes, depending on the design variation. Alternative 2 would result in the acquisition of 221 and 275 business parcels, depending on the design variation. The total employees displaced under Alternative 2 range from 133 to 554 employees, depending on the design variation. Alternative 2 would result in between \$274,216 and \$399,372 in property tax	Measure CI-1: Design refinements to minimize property acquisition. (IP and UP) Measure CI-2: Compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 and Title VI of the Civil Rights Act of 1964. Parking studies will be conducted to investigate the use of adjacent acquisitions for replacement parking and options for reconfiguring parking lots, driveways, and/or delivery locations to reduce the project effects on partial acquisition properties. (IP and UP) Measure CI-3: Reconfigure nonresidential uses on property only partially acquired for the project. (IP and UP)

Table S.3 Summary of Impacts for the No Build Alternative and Impacts with Differences Between Alternatives 1 and 2

Potential Impact	No Build Alternative	Alternative 1	Alternative 2	Avoidance, Minimization, and Mitigation Measures ²
		Alternative 1 would result in between \$188,691 and \$279,889 in property tax revenue losses in the City of Corona, depending on the design variation. Under Alternative 1, the potential sales tax loss from the business displacements in the City of Corona would range between \$314,888 and \$359,872 (depending on the design variation), representing a loss of 1.1 to 1.2 percent of the overall sales tax revenues in the City. Alternative 1 would remove 50 to 122 storage units, depending on the design variation. Alternative 1 would generate between 21,762 and 22,736 total direct and indirect jobs, depending on the design variation.	revenue losses in the City of Corona, depending on the design variation. Under Alternative 2, the potential sales tax losses from the business displacements in the City of Corona would range between \$277,402 and \$299,894 (depending on the design variation), representing a loss of 0.8 to 1 percent of overall sales tax revenues in the City. Alternative 2 would remove 157 to 199 storage units, depending on the design variation. Alternative 2 would generate between 30,563 and 32,154 total direct and indirect jobs, depending on the design variation. The Initial Phase under Alternative 2f would result in the acquisition and removal of 18 single-family homes and 127 multifamily homes. The Ultimate Project under Alternative 2f would result in the additional acquisition and removal of 9 multifamily homes. Alternative 2f would result in the acquisition and removal of 88 businesses and a total of 242 nonresidential unit displacements. The total employees displaced under Alternative 2f range from 169 to 576 employees. Alternative 2f would result in \$298,825 in property tax revenue losses in the City of Corona.	Measure CI-4: Assist with relocation of billboards within the City of Corona. (IP and UP)

Table S.3 Summary of Impacts for the No Build Alternative and Impacts with Differences Between Alternatives 1 and 2

Potential Impact	No Build Alternative	Alternative 1	Alternative 2	Avoidance, Minimization, and Mitigation Measures ²
			Under Alternative 2f, the potential sales tax losses from the business displacements in the City of Corona would be \$659,766, representing a loss of 2.2 percent of overall sales tax revenues in the City. Alternative 2f would remove 154 storage units. Alternative 2f would displace 10 billboards. The Initial Phase of Alternative 2f would generate 7,681 direct jobs and 14,796 indirect jobs. The Ultimate Project under Alternative 2f would generate an additional 2,931 direct jobs and an additional 5,645 indirect jobs. Alternative 2f would generate a total of 31,053 direct and indirect jobs.	
Utilities and Emergency Services	No impact	No relocation of the SCE substation.	Design Variations 2c, 2d, 2g, and 2h would require relocation of the SCE substation. Design Variations 2a, 2b, 2e, and 2f would not require relocation of the SCE substation.	Measure UES-1: Coordination with SCE on the substation relocation (applies to Alternatives 2c, 2d, 2g, and 2h only). (IP and UP) Other: Coordinate with SCE on SCE preparation and processing of environmental documents for the substation relocation (applies to Alternatives 2c, 2d, 2g, and 2h only). Refer also to Measure HW-15 under Hazardous Waste and Materials.
Utilities	No impact	During construction, Alternative 1 and its design variations would result in the relocation, removal, or protection in-place of approximately 150 utility lines or facilities.	During construction, Alternative 2 and its design variations, including Alternative 2f, would result in the relocation, removal, or protection in-place of approximately the same 150 utility lines or facilities as Alternative 1 and would result in the relocation, removal, or protection in-place of the following additional utility facilities not affected by Alternative 1 and its design variations:	Measure UES-1: Coordination with utility providers/owners for relocation of utility facilities. (IP and UP) Measure HW-12: Notify Underground Service Alert (USA) at least 2 days prior to excavation. (IP and UP)

Table S.3 Summary of Impacts for the No Build Alternative and Impacts with Differences Between Alternatives 1 and 2

Potential Impact	No Build Alternative	Alternative 1	Alternative 2	Avoidance, Minimization, and Mitigation Measures ²
			• 4 SCG natural gas lines (includes 2 high-risk lines) • 4 SCE overhead and underground electric lines (includes 1 high-risk line) • 1 potable water line in Corona • 1 sanitary sewer line in Corona • 2 AT&T underground and overhead telephone lines • 1 Comcast cable television cable	
Traffic and Transportation/ Pedestrian and Bicycle Facilities	No impacts to pedestrian and bicycle facilities	Would increase the lengths of seven undercrossings on SR-91 and four undercrossings on I-15 to new total lengths of between 145 and 487 ft, depending on the individual undercrossing. Would increase the lengths of two overcrossings on SR-91 to new total lengths of between 250 and 375 ft, depending on the design variation and individual overcrossing.	Alternative 2 and Alternative 2f would increase the lengths of seven undercrossings on SR-91 and five undercrossings on I-15 to new total lengths of between 158 and 519 ft, depending on the individual undercrossing. Alternative 2 and Alternative 2f would increase the lengths of three overcrossings on SR-91 to new total lengths of between 250 and 690 ft, depending on the design variation and the individual overcrossing.	Measure T-4: Provision of lighting in undercrossings. (IP and UP) Measure V-1: Textured/site-specific aesthetic features on paved slopes along pedestrian and bicyclist travel paths. (IP and UP)
Visual and Aesthetics	No impact	Alternative 1 would result in expanded right-of-way; added hardscape; graded slopes; modified and new ramps, overcrossings, and bridges; concrete barriers; and new retaining, tieback, and sound walls. The lengths of the retaining walls in Alternative 1 range between 50 and 5,550 ft, and the heights of those retaining walls range between 2 and 28 ft. The lengths of the recommended noise barriers for Alternative 1 range from 424 to 9,284 ft, and the heights of those noise barriers range from 10 to 14 ft. The fill slopes, bridges, and other structures in Alternative 1 could	Alternative 2 including Alternative 2f would result in expanded right-of-way; added hardscape; graded slopes; modified and new ramps, overcrossings, and bridges; concrete barriers; and new retaining, tieback, and sound walls. The lengths of the retaining walls in Alternative 2 including Alternative 2f range from 50 to 5,755 ft, and the heights of those retaining walls range from 2 to 40 ft. The lengths of the recommended noise barriers for Alternative 2 range from 424 to 9,284 ft, and the heights of the recommended noise barriers range from 8 to 14 ft. Although Alternatives 1 and 2 and Alternative 2f have similar retaining wall and noise	Measure V-1: Structural enhancements and design measures identified in the <i>215/91 Corridor Master Plan</i> will be incorporated in the design and construction of sound walls, retaining walls, and bridge elements. (IP and UP) Measure V-2: Mitigation for the loss of landscaping through replacement planting approved by the District Landscape Architect. (IP and UP) Measure V-3: Lighting fixtures with non-glare hoods will be designed to illuminate only the right-of-way. (IP and UP) Measure V-4: Graffiti Reduction, Removal, and Control. The Department and the City of Corona have existing ongoing maintenance programs for Graffiti Removal and

Table S.3 Summary of Impacts for the No Build Alternative and Impacts with Differences Between Alternatives 1 and 2

Potential Impact	No Build Alternative	Alternative 1	Alternative 2	Avoidance, Minimization, and Mitigation Measures ²
		result in light and glare impacts. Alternative 1 would result in a graded/disturbed area of 351 ac. The largest wall (i.e., largest wall area in one location) in Alternative 1 would be 28 ft high and 1,894 ft long. In Alternative 1, the maximum cut slopes would be approximately 190 ft high and 700 ft long, and the maximum fill slopes would be approximately 45 ft high and 1,200 ft long. Alternative 1 would add 120 ac of new impervious area/paving, which is a 27.5 percent increase over the existing facility, resulting in a smaller-scale facility under Alternative 1 than under Alternative 2.	barrier lengths and heights, the visual quality of the study area under Alternative 2 would be altered more than under Alternative 1 due to a larger total amount of hardscape features, including retaining walls and noise barriers. The fill slopes, bridges, and other structures in Alternative 2 including Alternative 2f could result in light and glare impacts. Alternative 2 including Alternative 2f would result in a graded/disturbed area of 503 ac. The largest wall (i.e., largest wall area in one location) in Alternative 2 would be 40 ft high and 2,376 ft long. Under Alternative 2 including Alternative 2f, the maximum cut slopes would be approximately 190 ft high and 700 ft long, and the maximum fill slopes would be approximately 45 ft high and 1,650 ft long. Alternative 2 including Alternative 2f would add 173 ac of new impervious area/paving, which is a 39.6 percent increase over the existing facility, resulting in a larger-scale facility under Alternative 2 and Alternative 2f than under Alternative 1.	Control. Those programs would apply to all new and modified structures for Alternatives 1 and 2. (IP and UP)
Water Quality and Storm Water Runoff	No impact	Potential water quality benefits based on the Treatment BMPs. Would increase the impervious surface area by 117 ac (i.e., 27.0 percent) compared to the existing freeway facilities. Would increase the potential for erosion and sedimentation during	Potential water quality benefits based on the Treatment BMPs. Would increase the impervious surface area by 173 ac (i.e., 39.6 percent increase) compared to the existing freeway facilities. Would increase the potential for erosion and sedimentation during construction. The total soil area to be disturbed during construction	Measure WQ-1: Compliance with the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ, NPDES No. CAS000002), and any subsequent permit, as they relate to construction activities for the project. (IP and UP) Measure WQ-2: Compliance with the provisions of the General Waste Discharge Requirements for Discharges to Surface Waters that Pose an Insignificant (De Minimus)

Table S.3 Summary of Impacts for the No Build Alternative and Impacts with Differences Between Alternatives 1 and 2

Potential Impact	No Build Alternative	Alternative 1	Alternative 2	Avoidance, Minimization, and Mitigation Measures ²
		construction. The total soil area to be disturbed during construction is estimated to be approximately 351 ac.	is estimated to be approximately 503 ac. Alternative 2f would increase the impervious surface the same as discussed for Alternative 2. Alternative 2f would increase the potential for erosion, and the total soil area to be disturbed during construction would be the same as discussed for Alternative 2.	Threat to Water Quality, Order No. R8-2009-0003, NPDES No. CAG998001, as they relate to discharge of non-storm-water dewatering wastes for the project. (IP and UP) Measure WQ-3: Prior to dewatering activities, issuance of the discharge authorization letter from RWQCB Executive Director will be required for the project.(IP and UP) Measure WQ-4: Compliance with the Caltrans Storm Water Quality Handbooks, Project Planning and Design Guide (July 2010 or subsequent issuance) for implementing Design Pollution Prevention and Treatment BMPs for the project. Compliance with the provisions of the NPDES Permit, Statewide Storm Water Permit, and Waste Discharge Requirements for the State of California, Department of Transportation, Order No. 99-06-DWQ, NPDES No. CAS000003 and NPDES Permit and Waste Discharge Requirements for the Riverside County Flood Control and Water Conservation District, the County of Riverside, and the incorporated cities of Riverside County within the Santa Ana Region, Order No. R8-2010-0033, NPDES No. CAS618033. (IP and UP)
Geology, Soil, Seismic, Topography	No impact	Alternative 1 would excavate (cut) 708,420 to 761,723 cy of material (depending on the design variation), which would be used elsewhere on the project site during construction. Alternative 1 would require 275,467 to 343,004 cy of additional imported fill material, depending on the design variation.	Alternative 2 would excavate 725,719 to 793,107 cy of material (depending on the design variation), which would be used elsewhere on the project site during construction. Alternative 2 would require 644,110 to 738,946 cy of additional imported fill material, depending on the design variation.	Measure GEO-1: A final geotechnical design report. (IP and UP)

Table S.3 Summary of Impacts for the No Build Alternative and Impacts with Differences Between Alternatives 1 and 2

Potential Impact	No Build Alternative	Alternative 1	Alternative 2	Avoidance, Minimization, and Mitigation Measures ²
Hazardous Waste and Materials	No impact	Would not require relocation of the SCE substation.	Design Variations 2c, 2d, 2g, and 2h would require the relocation of the SCE substation. Design Variations 2a, 2b, 2e, and 2f would not require the relocation of the SCE substation.	Measure HW-15: Coordination with SCE regarding relocation of the SCE substation. (IP)
Noise	Increased noise levels as a result of increased traffic	Would result in noise levels in 2035 greater than 67 dBA at up to 38 locations, depending on the design variation. Would result in noise level increases from existing levels to 2035 by 12 or more dBA at 6 or 7 receivers, depending on the design variation. Would result in noise levels in 2035 at 75 dBA or greater at 34 to 37 receivers depending on the design variation.	Would result in noise levels in 2035 greater than 67 dBA at up to 41 locations, depending on the design variation. Would result in noise level increases from existing levels to 2035 by 12 or more dBA at 6 or 7 receivers, depending on the design variation. Would result in noise levels in 2035 at 75 dBA or greater at 37 to 41 receivers depending on the design variation. Initial Phase under Alternative 2f in 2015 and the Ultimate Project in 2035 would result in noise levels greater than 67 dBA at up to 87 locations; 46 are predicted to have noise levels 75 dBA or greater.	Measure N-1: Provision of noise barriers as follows: <u>Alternative 1</u> Heights: 8 to 14 ft Number of Benefited Residences and Other Uses: 4 to 119 homes and the Green River Golf Club Lengths of Barriers: 424 to 9,284 ft Number of Barriers: 13 approved barriers <u>Alternative 2</u> Heights: 8 to 14 ft Number of Benefited Residences and Other Uses: 4 to 119 homes and the Green River Golf Club Lengths of Barriers: 424 to 9,284 ft Number of Barriers: 13 approved barriers (IP) Measure N-4: Separate project for the I-15 sound barriers (with the exception of NB K1-A) if the I-15 improvements are not constructed within 5 years of the completion of construction of the SR-91 CIP. (IP and UP)
Natural Communities	No impact	The Alternative 1 Ultimate Project would result in permanent impacts to 17.37 ac of CSS, 0.48 ac of riparian/riverine habitat, and 0.01 ac of oak woodlands. The Alternative 1 Ultimate Project would result in temporary impacts to 7.59 ac of CSS, 1.60 ac of riparian/riverine and 0.51 ac of oak woodlands.	The Alternative 2 Ultimate Project would result in permanent impacts to 25.58 ac of CSS, 0.47 ac of riparian/riverine habitat, and 0.02 ac of oak woodlands. The Alternative 1 Ultimate Project would result in temporary impacts to 8.02 ac of CSS, 2.04 ac of riparian/riverine and 0.50 ac of oak woodlands. The Alternative 2f Ultimate Project would result in permanent impacts to 25.58 ac of CSS, 0.47 ac of riparian/riverine habitat, and 0.02 ac of oak woodlands.	Compensatory Mitigation: Restoration of CSS and other vegetation communities used by CAGN and implementation of a project-specific HMMP for compensatory mitigation for impacts to CSS and riparian habitat. (IP) Measure NC-1: ESAs for CSS, chaparral, riparian/riverine vegetation, oak habitat, and restoration and mitigation areas in Coal Canyon. (IP and UP) Measure NC-2: Wildlife monitoring in the vicinity of ESAs. (IP and UP) Measure NC-3: Preconstruction nesting bird surveys and timing of vegetation removal. (IP and UP)

Table S.3 Summary of Impacts for the No Build Alternative and Impacts with Differences Between Alternatives 1 and 2

Potential Impact	No Build Alternative	Alternative 1	Alternative 2	Avoidance, Minimization, and Mitigation Measures ²
			The Alternative 2f Ultimate Project would result in temporary impacts to 8.04 ac of CSS, 1.29 ac of riparian/riverine and 0.50 ac of oak woodlands.	Measure NC-4: Vegetation clearing during the fire season. Operation of mechanized equipment not allowed during Red Flag Warning Periods as issued by the National Weather Service. (IP and UP) Measure NC-5: Use of nonsensitive upland areas during construction for equipment storage, fueling, and related activities. (IP and UP) Measure NC-7: The habitat areas adjacent to Coal Canyon, B Canyon, Fresno Canyon/Wardlow Wash, and Bedford Wash that were disturbed during construction will be restored on a 1:1 ratio as construction in the affected areas is completed. Restoration will include the use of native vegetation, as determined by RCTC and the Department in coordination with the resource agencies. (IP and UP) Measure NC-17: Compliance with the Western Riverside County MSHCP Urban/Wildlands Interface Guidelines. (IP and UP) Measure NC-18: Compliance with the Western Riverside County MSHCP Construction Guidelines for Criteria Areas. (IP and UP) Measure NC-19: Compliance with the Western Riverside County MSHCP Construction Guidelines and Standard BMPs. (IP and UP)
Wetlands and Other Waters of the United States	No impact	Depending on the design variation, permanent impacts as follows: - Corps jurisdictional waters: 2.18 to 2.69 ac - CDFG jurisdictional areas: 2.84 to 3.54 ac - RWQCB jurisdictional areas: 1.68 ac	Depending on the design variation, permanent impacts as follows: - Corps jurisdictional waters: 0.42 to 2.49 ac - CDFG jurisdictional areas: 1.31 to 4.41 ac - RWQCB jurisdictional areas: 0.42 to 2.69 ac	Measure WET-1: Section 404 Nationwide Permit. (IP and UP) Measure WET-2: CDFG Streambed Alteration Agreement. (IP and UP) Measure WET-3: Section 401 Water Quality Certification from the RWQCB. (IP and UP)

Table S.3 Summary of Impacts for the No Build Alternative and Impacts with Differences Between Alternatives 1 and 2

Potential Impact	No Build Alternative	Alternative 1	Alternative 2	Avoidance, Minimization, and Mitigation Measures ²
			Alternative 2f permanent impacts: - Corps Jurisdictional Waters: 0.42 ac - CDFG Jurisdictional Areas: 1.31 ac - RWQCB Jurisdictional Areas: 0.42 ac	
		Depending on the design variation, temporary impacts as follows: - Corps jurisdictional waters: 1.90 to 1.91ac CDFG jurisdictional areas: 2.43 to 3.45 ac - RWQCB jurisdictional areas: 1.90 ac	Depending on the design variation, temporary impacts as follows: - Corps jurisdictional waters: 1.72 to 1.98 ac - CDFG jurisdictional areas: 2.01 to 3.85 ac - RWQCB jurisdictional areas: 1.94 to 2.07 ac Alternative 2f temporary impacts: - Corps Jurisdictional Waters: 1.98 ac - CDFG Jurisdictional Areas: 2.01 ac - RWQCB Jurisdictional Areas: 1.98 ac	Measure WET-1: Section 404 Nationwide Permit. (IP and UP) Measure WET-2: CDFG Streambed Alteration Agreement. (IP and UP) Measure WET-3: Section 401 Water Quality Certification from the RWQCB. (IP and UP)
Threatened and Endangered Species	No impact	6.56 ac of permanent direct impacts to CAGN habitat. The Ultimate Project under Alternative 1 would result in direct permanent impacts to 1.23 ac and temporary impacts to 2.6 ac of SKR HCP fee area. Permanent indirect impacts to 0.94 ac of LBV habitat. 1.08 ac of temporary direct impacts to CAGN habitat.	6.32 ac of permanent direct impacts to CAGN habitat. The Ultimate Project under Alternative 2 would result in direct permanent impact of 5.72 ac and temporary impacts to 18.88 ac of SKR HCP fee area. Permanent indirect impacts to 0.94 ac of LBV habitat. 2.09 ac of temporary direct impacts to CAGN habitat. The impacts under Alternative 2f would be the same as Alternative 2.	Measure TE-1: Designated biologist to be identified throughout the construction period. (IP and UP) Measure TE-2: Construction site to be watered to reduce dust during construction. (IP and UP) Measure TE-3: Erosion and sediment control devices will be biodegradable. (IP and UP) Measure TE-4: Noise during construction activity will be consistent with Caltrans Standard Specifications and will be limited at night. (IP and UP) Measure TE-5: Noise will be controlled near biologically sensitive areas. (IP and UP) Measure TE-6: Construction work conducted after 7:00 p.m. and before 7:00 a.m. will be coordinated with the affected local jurisdiction. (IP and UP) Measure TE-7: Construction work conducted after 7:00 p.m. and before 7:00 a.m. near major wildlife movement

Table S.3 Summary of Impacts for the No Build Alternative and Impacts with Differences Between Alternatives 1 and 2

Potential Impact	No Build Alternative	Alternative 1	Alternative 2	Avoidance, Minimization, and Mitigation Measures ²
				corridors will be coordinated with the Wildlife Agencies. (IP and UP) Measure TE-8: Pre-construction survey for Branton's milk-vetch will be conducted at Coal Canyon. (IP and UP) Measure TE-9: Biologist will monitor construction in vicinity of CAGN designated critical habitat. (IP and UP) Measure TE-10: 16.03 ac of habitat suitable for CAGN breeding, dispersal, and foraging will be restored to offset permanent impacts. (IP) Measure TE-11: Loss of 3.01 ac of occupied CAGN habitat in Orange County, including 2.09 ac of CAGN-designated critical habitat, with in-kind on-site restoration. (IP) Measure TE-12: A restoration plan will be developed and approved by the USFWS for impacts to CAGN-designated critical habitat. (IP and UP) Measure TE-13: During nighttime construction, lighting will be shielded away from coastal sage scrub in CAGN-designated critical habitat. (IP and UP) Measure TE-14: Pre-construction survey will be conducted near riparian and riverine areas during the bird breeding season. (IP and UP) Measure TE-15: Additional project features will be investigated along with the USFWS to minimize effects from light intrusion and potential fire threat at Coal Canyon from operation of SR-91. (IP and UP) Measure TE-16: Coordination with Corps during SR-91 CIP construction for areas restored as part of the Santa Ana Reach 9 Phase 2B Realignment Project. (IP and UP)

Table S.3 Summary of Impacts for the No Build Alternative and Impacts with Differences Between Alternatives 1 and 2

Potential Impact	No Build Alternative	Alternative 1	Alternative 2	Avoidance, Minimization, and Mitigation Measures ²
				Measure TE-17: Coordination with Corps during construction of SR-91 CIP to not affect releases from Prado Dam or result in a permanent reduction of acreage within Santa Ana River Canyon Habitat Management Area. (IP and UP) Measures for natural communities, wetlands and other waters, plant species, and animal species would also mitigate project effects to threatened and endangered species.

¹ The Western Riverside County MSHCP provides this measurement in metric units.

² IP = Applies to the Initial Phases of Alternatives 1 and 2

UP = Applies to the Alternative 1 and 2 Ultimate Projects

IP and UP = Applies to the Initial Phases and Ultimate Projects for Alternatives 1 and 2

ac = acre, acres

BMPs = best management practices

CAGN = California gnatcatcher

Caltrans = California Department of Transportation

CDFG = California Department of Fish and Game

CHSP = Chino Hills State Park

CIP = Corridor Improvement Project

Corps = United States Army Corps of Engineers

CSS = coastal sage scrub

cy = cubic yards

dBA = A-weighted decibels

ESA = Environmentally Sensitive Areas

ft = feet, foot

HCP = Habitat Conservation Plan

HMMP = Habitat Mitigation and Monitoring Plan

I-15 = Interstate 15

LBV = least Bell's vireo

MSHCP = Multiple Species Habitat Conservation Plan

NB = Noise Barrier

New OC Park (NNL) = New Orange County Park (National Natural Landmark)

NPDES = National Pollutant Discharge Elimination System

RWQCB = Regional Water Quality Control Board

SCE = Southern California Edison

SCG = Southern California Gas Company

SKR = Stephens' kangaroo rat

SR-91 = State Route 91

**Table S.4 Summary of Impacts for the No Build Alternative and Impacts
With No Substantial Difference Between Alternatives 1 and 2**

Potential Impact	No Build Alternative	Potential Impacts Under Alternatives 1 and 2 and Their Design Variations	Avoidance, Minimization, and Mitigation Measures ¹
Land Use: Existing and Future Land Uses	No impact	Alternatives 1, 2, and Alternative 2f would result in temporary impacts to existing land uses during construction that are related to disruption of local traffic patterns and access, noise, vibration, dust, and temporary uses of land for temporary construction easements.	Measure CI-1: Design refinements to minimize property acquisition. (IP and UP) Measure CI-2: Compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 and Title VI of the Civil Rights Act of 1964. Parking studies will be conducted to investigate the use of adjacent acquisitions for replacement parking and options for reconfiguring parking lots, driveways and/or delivery locations to reduce the project effects on partial acquisition properties. (IP and UP) Measure T-1: Development and implementation of the Final TMP. (IP and UP) Measure T-2: Development and implementation of the Final Ramp Closure Study. (IP and UP) Measure N-2: Compliance with Caltrans Standard Specifications Section 14-08.02, "Noise Control," and SSP S5-310. (IP and UP) Measure N-3: Compliance with local noise ordinances (Cities of Anaheim, Corona, Norco, and Riverside). (IP and UP)
Land Use: Consistency with Federal, State, Regional, and Local Plans	Inconsistent with most plans	Alternatives 1 and 2 are consistent with the RCP, CGV, and the Western Riverside County MSHCP. The SR-91 CIP Preferred Alternative (Alternative 2f) is programmed in the 2012 RTP and 2011 FTIP (Amendment 24). The 2012 RTP and 2011 FTIP/Amendment 24 were approved on June 4, 2012; therefore, the SR-91 CIP is consistent with the RTP and FTIP.	No mitigation is required.
Land Use: Parks and Recreation Facilities	No impact	Alternatives 1 and 2 would not result in the permanent use of any land from the Santa Ana River Trail/Bike Lane, Featherly Regional Park, New OC Park (NNL), Griffith Park, and El Cerrito Sports Park.	No mitigation is required.
	No impact	Alternatives 1 and 2 would result in the permanent use of 0.48 ac in CHSP for two column footings, and an aerial easement for the Green River Road westbound off-ramp. Alternatives 1 and 2 would potentially result in temporary detours of part of the Santa Ana River Trail/Bike Lane during construction to protect Trail/Bike Lane users and construction workers, and TCEs at Featherly Regional Park (0.2 ac), CHSP (2.0 ac), Griffin Park (0.5 ac), and El Cerrito Sports Park (0.19 ac).	Measure CI-1: Design refinements to minimize property acquisition. (IP and UP) Measure CI-2: Compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 and Title VI of the Civil Rights Act of 1964. Parking studies will be conducted to investigate the use of adjacent acquisitions for replacement parking and options for reconfiguring parking lots, driveways and/or delivery locations to reduce the project effects on partial acquisition properties. (IP and UP)

**Table S.4 Summary of Impacts for the No Build Alternative and Impacts
With No Substantial Difference Between Alternatives 1 and 2**

Potential Impact	No Build Alternative	Potential Impacts Under Alternatives 1 and 2 and Their Design Variations	Avoidance, Minimization, and Mitigation Measures ¹
		Alternatives 1 and 2 would permanently relocate an approximately 200 ft long segment of the Santa Ana River Trail/Bike Lane further north.	Measure PR-1: During final design/construction of the Initial Phase, RCTC will contribute \$100,000 to the planning and implementation of improvements in that area that would support and expand regional trail connectivity. (IP) Measure PR-2: During final design/construction of the Initial Phase, RCTC will coordinate with State Parks on the aesthetic features that will be included in the project specifications for the proposed retaining wall facing CHSP between SR-71 and the westbound Green River Road exit ramp, consistent with the aesthetic and features required in Measure V-1. The aesthetic treatment will include a texture to simulate a natural type appearance such as a soil or rock surface or equivalent. (IP) Measure PR-3: RCTC's Resident Engineer will require the design/build contractor to limit the hours of construction in CHSP to daylight hours (7:00 a.m. to 7:00 p.m.), with the exception of limited periods when evening or night construction is necessary for operational reasons. The entry gates at Coal Canyon must remain closed at all times except to provide access to and from the construction site for construction workers, materials delivery, and construction equipment, to prevent wildlife from inadvertently entering the freeway area. (IP and UP) Other Commitments by RCTC Relevant to CHSP. RCTC has committed to an a stand-alone project to construct barriers on the south and north sides of SR-91 to shield headlight glare and freeway noise, in tandem with the completion of the SR-91 widening in this area currently planned for completion in 2035. The following other measures would also benefit CHSP. Measure V-1: Structural enhancements and design measures identified in the <i>215/91 Corridor Master Plan</i> will be incorporated in the design and construction of sound walls, retaining walls, and bridge elements to address adverse impacts and bridge elements. (IP and UP)

Table S.4 Summary of Impacts for the No Build Alternative and Impacts With No Substantial Difference Between Alternatives 1 and 2

Potential Impact	No Build Alternative	Potential Impacts Under Alternatives 1 and 2 and Their Design Variations	Avoidance, Minimization, and Mitigation Measures ¹
			Measure V-2: Mitigation for the loss of landscaping through replacement planting approved by the District Landscape Architect. (IP and UP) Measure V-3: Lighting fixtures with non-glare hoods will be designed to illuminate only the right-of-way. (IP and UP) Measure V-4: The Department and the City of Corona have existing ongoing maintenance programs for Graffiti Removal and Control. Those programs would apply to all new and modified structures for Alternatives 1 and 2. (IP and UP) Measure SC-1: Compliance with SCAQMD Rule 403, control of ozone precursor emissions from construction equipment, compliance with State Vehicle Code Section 23114, with special attention to Section 23114(b)(F), (e)(2), and (e)(4) as amended, regarding hauling of loads of materials, and compliance with Caltrans Standard Specifications for Construction (Sections 10 and 18 for dust control, Section 39-3.06 for asphalt concrete plant emissions). (IP and UP) Measure SC-4: Testing for ACMs. (IP and UP) Measure SC-5: Appropriate removal and disposal of ACMs. (IP and UP) Measure N-2: Compliance with Caltrans Standard Specifications Section 14-08.02, "Noise Control," and SSP S5-310. (IP and UP) Measure N-3: Compliance with local noise ordinances (Cities of Anaheim, Corona, Norco, and Riverside). (IP and UP) Areas used for TCEs will be restored prior to return of those lands to their original owners.
Growth	No impact	Alternatives 1 and 2 would not result in project related growth impacts.	No mitigation is required.
Farmlands and Timberlands	No impact	No permanent impacts related to remainder parcels, access to agricultural parcels, policies related to agricultural uses, and agricultural preserve and Williamson Act Contract lands.	Measure CI-3: Modifications to partial acquisitions. (IP and UP)

**Table S.4 Summary of Impacts for the No Build Alternative and Impacts
With No Substantial Difference Between Alternatives 1 and 2**

Potential Impact	No Build Alternative	Potential Impacts Under Alternatives 1 and 2 and Their Design Variations	Avoidance, Minimization, and Mitigation Measures ¹
Community Impacts: Community Character, Cohesion and Environmental Justice	No impact	Alternatives 1 and 2, including Alternative 2f, would introduce additional hardscape, graded slopes, modified and new ramps, overcrossings and bridges, concrete barriers, and new retaining, tieback, and sound walls along the project segments of SR-91 and I-15. These changes would modify the visual quality of the area by introducing more urbanized and hardscape elements, and as a result, would affect the existing community character.	Measure V-1: Structural enhancements and design measures identified in the <i>215/91 Corridor Master Plan</i> will be incorporated in the design and construction of sound walls, retaining walls, and bridge elements to address adverse impacts and bridge elements. (IP and UP) Measure V-2: Mitigation for the loss of landscaping through replacement planting approved by the District Landscape Architect. (IP and UP) Measure V-3: Lighting fixtures with non-glare hoods will be designed to illuminate only the right-of-way. (IP and UP) Measure V-4: The Department and the City of Corona have existing ongoing maintenance programs for Graffiti Removal and Control. Those programs would apply to all new and modified structures for Alternatives 1 and 2. (IP and UP)
		Alternatives 1 and 2, including Alternative 2f, would improve pedestrian and bicycle facilities within the project limits with improved sidewalks on the arterials crossing SR-91.	Measure T-4: Provision of lighting in undercrossings. (IP and UP)
		Under Alternatives 1 and 2, and Alternative 2f, freeway cross sections would be widened, resulting in wider overcrossings and undercrossings that would increase the lengths of the roads and sidewalks on the overcrossings or in the undercrossings. Therefore, the amount of time pedestrians and bicyclists spend on the overcrossings or in the undercrossings would increase compared to existing conditions. As a result, some pedestrians and bicyclists may perceive the longer overcrossings and undercrossings as negatively affecting their experiences as they cross the freeways, which may inhibit their desire to cross the freeways and would therefore be an adverse effect on community cohesion.	Measure V-1: Structural enhancements and design measures identified in the <i>215/91 Corridor Master Plan</i> will be incorporated in the design and construction of sound walls, retaining walls, and bridge elements to address adverse impacts and bridge elements. (IP and UP) Measure V-4: The Department and the City of Corona have existing ongoing maintenance programs for Graffiti Removal and Control. Those programs would apply to all new and modified structures for Alternatives 1 and 2. (IP and UP)
		Construction activities would temporarily disrupt local traffic patterns and access to residences and businesses, increase traffic congestion, and increase noise, vibration, and dust.	Measure T-1: Development and implementation of the Final TMP. (IP and UP) Measure T-2: Development and implementation of the Final Ramp Closure Study. (IP and UP)

Table S.4 Summary of Impacts for the No Build Alternative and Impacts With No Substantial Difference Between Alternatives 1 and 2

Potential Impact	No Build Alternative	Potential Impacts Under Alternatives 1 and 2 and Their Design Variations	Avoidance, Minimization, and Mitigation Measures ¹
			Measure SC-1: Compliance with SCAQMD Rule 403, control of ozone precursor emissions from construction equipment, compliance with State Vehicle Code Section 23114, with special attention to Section 23114(b)(F), (e)(2), and (e)(4) as amended, regarding hauling of loads of materials, and compliance with Caltrans Standard Specifications for Construction (Sections 10 and 18 for dust control, Section 39-3.06 for asphalt concrete plant emissions). (IP and UP) Measure SC-4: Testing for ACMs. (IP and UP) Measure SC-5: Appropriate removal and disposal of ACMs. (IP and UP) Measure N-2: Compliance with Caltrans Standard Specifications Section 14-08.02, "Noise Control," and SSP S5-310. (IP and UP) Measure N-3: Compliance with local noise ordinances (Cities of Anaheim, Corona, Norco, and Riverside). (IP and UP)
		Alternatives 1 and 2 and Alternative 2f would not cause disproportionately high and adverse effects on any minority or low-income populations per Executive Order 12898 regarding environmental justice.	No mitigation is required.
Utilities and Emergency Services	No impact	Alternatives 1 and 2 and their design variations 2a, 2b, 2e, and 2f would not result in permanent adverse impacts related to utilities and emergency services providers.	No mitigation is required.
		Alternatives 1 and 2 and their design variations, including Alternative 2f, would include additional CHP enforcement areas on SR-91.	No mitigation is required.
		During construction of Alternatives 1 and 2 and their design variations including Alternative 2f, the ability of emergency services providers to meet response times could be impaired as a result of temporary traffic delays; road, lane, and/or ramp closures; or detours.	Measure T-1: Development and implementation of the Final TMP. (IP and UP) Measure T-2: Development and implementation of the Final Ramp Closure Study. (IP and UP) Measure UES-2: Coordination of the Final TMP and the Final Ramp Closure Study with affected utility and emergency service providers. (IP and UP)

**Table S.4 Summary of Impacts for the No Build Alternative and Impacts
With No Substantial Difference Between Alternatives 1 and 2**

Potential Impact	No Build Alternative	Potential Impacts Under Alternatives 1 and 2 and Their Design Variations	Avoidance, Minimization, and Mitigation Measures ¹
		Potential for fires in construction areas, associated with operating construction equipment, vehicles, and the presence of construction personnel.	Measure UES-3: Fire prevention and coordination with local fire departments during construction. (IP and UP) Measure UES-4: Fire prevention adjacent to CHSP with the equivalent of a continuous barrier 30 to 36 inches high on the edge of the shoulder on both westbound and eastbound SR-91 from SR-71 to SR-241. (UP)
		Alternative 1 and all its design variations and Alternative 2 with Design Variations 2a, 2b, 2e, and 2f would require the use of 0.018 ac of land from the SCE property for use as a TCE during construction.	Measure CI-1: Design refinements to minimize property acquisition. (IP and UP) Measure CI-2: Compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 and Title VI of the Civil Rights Act of 1964. Parking studies will be conducted to investigate the use of adjacent acquisitions for replacement parking and options for reconfiguring parking lots, driveways, and/or delivery locations to reduce the project effects on partial acquisition properties. (IP and UP)
Traffic and Transportation/ Pedestrian and Bicycle Facilities	Impacts to traffic and transportation would worsen through continued increase of traffic congestion Deterioration of LOS	Alternatives 1 and 2 including Alternative 2f in design year 2035 would maintain or slightly improve VHT, VHD, and LOS along the SR-91 freeway mainline compared to 2035 No Build conditions. Under Alternative 1 in design year 2035, there would be a 2 percent reduction in VHT, a decrease of 13,000 hours in VHD, and four freeway segments on SR-91 would be improved from LOS F to LOS D or E when compared to 2035 No Build conditions. On I-15, one segment would worsen from LOS E to LOS F, one segment would improve from LOS F to LOS E, and one segment would improve from LOS D to LOS C when compared to 2035 No Build conditions.	No mitigation is required.
		Under Alternative 2 including Alternative 2f in design year 2035, there would be a 4 percent reduction in VHT, a decrease of 23,000 hours in VHD, and eight segments on SR-91 would improve from LOS F to LOS D or E when compared to 2035 No Build conditions. On I-15, one segment would improve from LOS F and two segments would respectively worsen from LOS B and C to LOS C and D when compared to 2035 No Build conditions. Permanent impacts may occur to local intersections.	Measure T-3: Fair Share Contributions. (IP and UP)

**Table S.4 Summary of Impacts for the No Build Alternative and Impacts
With No Substantial Difference Between Alternatives 1 and 2**

Potential Impact	No Build Alternative	Potential Impacts Under Alternatives 1 and 2 and Their Design Variations	Avoidance, Minimization, and Mitigation Measures ¹
	No permanent impacts to pedestrian or bicycle facilities No added benefit related to pedestrian and bicycle access	Alternatives 1 and 2 and Alternative 2f in design year 2035 would provide an overall positive improvement to pedestrian and bicycle facilities within the project limits. All local streets that cross the project segments of SR-91 and I-15 would be returned to their existing conditions or, in some cases, widened across sections. Most sidewalks replaced under Alternatives 1 and 2 and Alternative 2f will be designed consistent with applicable ADA requirements for handicap access. The Santa Ana River Trail/Bike Lane within the State right-of-way for SR-91 will be relocated farther north as part of the project.	No mitigation required.
	No temporary impacts to traffic and transportation	Construction of Alternatives 1 and 2 and Alternative 2f would require complete closure of ramps or connectors for certain periods of time or on weekends. Staging plans were developed to ensure that closure durations are minimized, and every effort is made to prevent concurrent multiple closures. Because longer closures may occur as a result of Alternatives 1 and 2 and Alternative 2f, detour routes will be provided.	Measure T-1: Final TMP. (IP and UP) Measure T-2: Development and implementation of the Final Ramp Closure Study. (IP and UP)
	No temporary impacts to pedestrian or bicycle facilities	Temporary sidewalk closures at certain crossings would occur during construction. These closures may temporarily impact accessibility in the project limits. On street bicycle facilities along Green River Road and the Magnolia Avenue crossing at SR-91 may also experience temporary closures. It is possible that short segments of the Santa Ana River Trail/Bike Lane west of Green River Golf Club and east of Featherly Regional Park may be detoured temporarily during construction. However, these detours are anticipated to be very limited in duration, and alternate routes would be provided.	Measure T-1: Final TMP. (IP and UP)
Visual and Aesthetics	No impact	Alternatives 1 and 2, including Alternative 2f, would include no new lighting except for safety lighting at the interchanges and in undercrossings. Existing lighting on local streets, SR-91, and I-15 would be modified or relocated. Alternatives 1 and 2, including Alternative 2f, would result in an adverse impact to the segment of SR-91 eligible for designation as a State Scenic Highway.	Measure V-1: Structural enhancements and design measures identified in the <i>215/91 Corridor Master Plan</i> will be incorporated in the design and construction of sound walls, retaining walls, and bridge elements to address adverse impacts and bridge elements. (IP and UP) Measure V-2: Mitigation for the loss of landscaping through replacement planting approved by the District Landscape Architect. (IP and UP) Measure V-3: Lighting fixtures with non-glare hoods will be designed to illuminate only the right-of-way. The RCTC Project Engineer will coordinate with the City of Corona and other applicable cities and counties to ensure that sufficient lighting is provided as part of the improvements to local streets consistent with applicable local policies and street lighting codes. (IP and UP)

**Table S.4 Summary of Impacts for the No Build Alternative and Impacts
With No Substantial Difference Between Alternatives 1 and 2**

Potential Impact	No Build Alternative	Potential Impacts Under Alternatives 1 and 2 and Their Design Variations	Avoidance, Minimization, and Mitigation Measures ¹
			Measure V-4: Sound barriers will include vine planting. The Department and the City of Corona have existing ongoing maintenance programs for Graffiti Removal and Control. Those programs would apply to all new and modified structures for Alternatives 1 and 2. (IP and UP)
Cultural Resources	No impact	Alternatives 1 and 2 and their design variations including Alternative 2f would result in permanent impacts to the National Register-listed Grand Boulevard Historic District; this would result in a finding of No Adverse Effect with Standard Conditions on this property.	Condition for Acorn-Style Streetlights: Up to seven acorn-style streetlights in the project limits will be relocated as close to their existing locations as possible based on the project design or elsewhere within the boundaries of the Grand Boulevard Historic District. An architectural historian will be on site during the removal, dismantling, and reinstallation of the acorn-style streetlights. (IP)
		Alternatives 1 and 2 and their design variations including Alternative 2f would result in the removal of 18 trees in the Grand Boulevard Historic District.	Measure CR-1: The 18 trees removed from the Grand Boulevard Historic District will be replaced at a ratio of 1:1 and will be compatible with the existing plantings in the Grand Boulevard Historic District. The replacement trees will be identified in consultation with the City of Corona, the Department's District Landscape Architect, and a Professional Qualified Staff Architectural Historian from the District. All replacement trees will be installed no later than the completion of construction activities in the Grand Boulevard Historic District. (IP)
		Discovery of cultural materials during construction.	Measure CR-2: Discovery of Cultural Materials. If cultural materials are discovered during construction, all earthmoving activity will be diverted within and around the immediate discovery area until a qualified archaeologist can assess the nature and significance of the find. (IP and UP)
		Discovery of human remains during construction.	Measure CR-3: Discovery of Human Remains. If human remains are discovered during construction, State Health and Safety Code Section 7050.5 will be complied with, activities shall cease in the area, and the County Coroner shall be contacted. Pursuant to PRC Section 5097.98, if the remains are thought to be Native American, the Coroner will notify the NAHC, which will then notify the MLD. The Department will be contacted so they may work with the MLD on the respectful treatment and disposition of the remains. (IP and UP)
		Potential to impact archaeological resources.	Measure CR-4: A Native American monitor will be present and conducting monitoring during construction in areas identified and considered sensitive by the Pechanga Band of Mission Indians as shown on the project plans. (IP and UP)

Table S.4 Summary of Impacts for the No Build Alternative and Impacts With No Substantial Difference Between Alternatives 1 and 2

Potential Impact	No Build Alternative	Potential Impacts Under Alternatives 1 and 2 and Their Design Variations	Avoidance, Minimization, and Mitigation Measures ¹
Hydrology and Floodplain	No impact	Assuming a worst case using the existing FIRMs and the total improvements under Alternative 2, including Alternative 2f, the Build Alternatives would result in encroachments into the 100-year floodplain at the Santa Ana River at Wardlow Wash, at Country Club Creek, and at West Grand Boulevard. There would be no appreciable increase in the 100-year surface water elevations under Alternatives 1 and 2 and Alternative 2f. There would not be significant encroachments, and the encroachments would not result in significant adverse impacts to natural and beneficial floodplain values.	Construction Site, Design Pollution Prevention, and Treatment BMPs would be implemented to minimize water quality-related impacts to the 100-year floodplain and the associated beneficial uses. As discussed below for natural communities and wetlands and other waters, measures to minimize impacts and preserve natural and beneficial floodplain values include installation of construction fencing around riparian/riverine vegetation to be preserved and compensatory mitigation for temporary and permanent impacts to riparian and aquatic habitats. No further mitigation measures for impacts to floodplains are required. (IP and UP)
		Alternatives 1 and 2 and Alternative 2f could result in the erosion of exposed soil surfaces during construction, which would be controlled using BMPs as described in the SWPPP. Temporary detention basins would be used, as needed, during construction to prevent localized flooding. Therefore, the construction of Alternatives 1 and 2 and Alternative 2f will not result in adverse impacts related to floodplains.	The measures for water quality and storm water runoff, natural communities, and wetlands and other waters would minimize construction-related water quality impacts and preserve natural and beneficial floodplain values. No further mitigation measures for impacts to floodplains are needed. (IP and UP)
Geology, Soil, Seismic, Topography	No impact	Alternatives 1 and 2 and Alternative 2f would similarly permanently result in or be affected by the following geotechnical conditions: ground motion, liquefaction, fault rupture, and other effects related to seismic activity; retaining walls for slope stability; erosion of slopes and other unpaved areas; and permanent subsurface easements in CHSP and the New OC Park (NNL) adjacent to SR-91 for engineered tiebacks for the wall along SR-91 in those areas.	Measure GEO-1: A final geotechnical design report. (IP and UP) BMPs for water quality/erosion. (IP and UP)
		The construction of Alternatives 1 and 2 and their design variations, including Alternative 2f, would temporarily result in or be affected by the following geotechnical conditions: increased potential for soil erosion in areas of disturbed soil; ground motion, liquefaction, fault rupture, and other effects related to seismic activity; and the potential need for blasting in areas with non-rippable granitic bedrock.	Standard construction good housekeeping and worker safety practices. Measure GEO-1: A final geotechnical design report. (IP and UP) Measure GEO-2: Quality assurance/quality control plan. (IP and UP) Measure GEO-3: Blasting Plan. (IP and UP) BMPs for water quality/erosion. (IP and UP)
Paleontology	No impact	The construction of Alternatives 1 and 2 and their design variations could result in permanent impacts on paleontological resources in the following sediments: all types of Pleistocene alluvium, sedimentary rocks of the Norco area, the Fernando Formation, sandstone of the Norco area, Chino Hills Pliocene sediments, the Puente Formation, the Topanga Formation, the Sespe and Vaqueros Formations, the Santiago Formation, the Silverado Formation, the Williams Formation, and the	Measure PAL-1: Preparation and Implementation of a Paleontological Mitigation Plan to provide guidance for developing and implementing paleontological mitigation efforts including field work, laboratory methods, and curation for significant paleontological resources that may exist within the project disturbance limits, including measures specific to sediments with high and low sensitivity.

**Table S.4 Summary of Impacts for the No Build Alternative and Impacts
With No Substantial Difference Between Alternatives 1 and 2**

Potential Impact	No Build Alternative	Potential Impacts Under Alternatives 1 and 2 and Their Design Variations	Avoidance, Minimization, and Mitigation Measures ¹
		Ladd Formation. While there will be minor differences in areas disturbed during construction, the impacts of Alternatives 1 and 2 and their design variations including Alternative 2f on these sediments would be very similar because the construction of these alternatives would use similar techniques and would disturb approximately the same areas along the alignments. As a result, there is not a substantive difference in permanent impacts on paleontological resources under Alternatives 1 and 2 and their design variations including Alternative 2f.	
Hazardous Waste and Materials	No impact	Routine operation and maintenance of the facilities under Alternatives 1 and 2 including Alternative 2f would not introduce new sources of hazardous materials and wastes. Continued exposure to existing hazardous wastes through vehicle transport would continue. However, the transport of hazardous waste and/or materials is heavily regulated. Therefore, no new permanent adverse impacts related to hazardous wastes/materials (direct or indirect) beyond existing conditions would occur during operation of Alternatives 1 and 2 and their design variations and Alternative 2f. There is no difference in permanent impacts between Alternatives 1 and 2.	No mitigation is required.
		Properties zoned for industrial and automotive uses within the project disturbance limits may routinely store hazardous wastes and materials on site. Therefore, prior to acquisition of these properties, any potentially hazardous waste material present will be relocated and/or removed off site.	Measure HW-1: Phase I Environmental Site Assessments for 2 properties were conducted to characterize the extent of the contamination. These sites were identified to be a potential environmental concern during construction. Additional testing and/or remediation are required for these sites during the design/build phase. (IP)
		Impacted soils and/or groundwater have been identified at two properties within the disturbance limits for Alternatives 1 and 2 and their design variations.	Measure HW-2: Site investigations for any new potential release sites. (IP and UP)
		Contact with hazardous materials during construction would be further minimized through the sampling (Phase II Environmental Site Assessments) of suspected hazardous materials prior to construction. Other areas of environmental concern include potentially contaminated soils related to the BNSF railroad tracks, agricultural land uses, and ADL in areas not previously sampled; ACMs, LBPs, and PCBs in building structures that will be disturbed or demolished under Alternatives 1 and 2 and Alternative 2f; and ACMs and LBPs in road structures that will be disturbed or renovated as part of Alternatives 1 and 2 and Alternative 2f.	Measure HW-3: ADL testing in previously untested areas. (IP and UP) Measure HW-4: ACM, LBP, and PCB surveys for building structures during the design phase. ACM and LBP surveys were conducted for 21 freeway structures. Six bridges contained ACMs and three bridges contained LBPs. ACMs and LBPs must be removed by a certified contractor prior to disturbance or demolition. (IP and UP) Measure HW-5: Inspections for PCBs in utility pole-mounted transformers. (IP and UP)

Table S.4 Summary of Impacts for the No Build Alternative and Impacts With No Substantial Difference Between Alternatives 1 and 2

Potential Impact	No Build Alternative	Potential Impacts Under Alternatives 1 and 2 and Their Design Variations	Avoidance, Minimization, and Mitigation Measures ¹
			Measure HW-6: Testing and removal of traffic striping. (IP and UP) Measure HW-7: Compliance with NPDES permit requirements during construction dewatering. (IP and UP) Measure HW-8: Sampling of soil adjacent to the BNSF railroad tracks. (IP and UP) Measure HW-9: Preparation of a HASP prior to construction and implementation of the HASP. (IP and UP) Measure HW-10: Preparation and implementation of a Contaminant Management Plan. (IP and UP) Measure HW-11: Preparation and implementation of a Construction Contingency Plan for unknown hazards. (IP and UP) Measure HW-12: Notify Underground Service Alert at least 2 days prior to excavation. (IP and UP) Measure HW-13: Fee submittal to the SCAQMD at least 10 days prior to demolition or renovation of structure. (IP and UP) Measure HW-14: Testing and disposal for wood-treated materials. (IP and UP)
Air Quality	Potential permanent increase in pollutants associated with increased congestion	In the long term, Alternatives 1 and 2 including Alternative 2f would improve traffic flow by reducing congestion. This improvement in traffic flow would reduce regional vehicle emissions. In addition, the Build Alternatives would not delay the attainment of the federal CO, PM _{2.5} , and PM ₁₀ standards. Therefore, Alternatives 1 and 2 and their design variations including Alternative 2f would not result in long-term adverse impacts related to air quality.	No mitigation is needed.
	No construction along the project segments of SR-91 and I-15 and, therefore, would not result in temporary air quality impacts	The construction of Alternatives 1 and 2, including Alternative 2f, has the potential to temporarily increase air quality emissions in the project area.	Measure SC-1: Finalization of the project-specific Construction Emissions Mitigation Plan, compliance with the Department's Standard Specification Section 10 and 18 (Dust Control), Section 39.3.06 for asphalt concrete plant emissions, and SCAQMD Rule 403. (IP and UP) Measure SC-2: Implementation of the Construction Emissions Mitigation Plan. (IP and UP)

**Table S.4 Summary of Impacts for the No Build Alternative and Impacts
With No Substantial Difference Between Alternatives 1 and 2**

Potential Impact	No Build Alternative	Potential Impacts Under Alternatives 1 and 2 and Their Design Variations	Avoidance, Minimization, and Mitigation Measures ¹
			Measure SC-3: Project Engineer will ensure that grading plans and project specifications show anticipated duration of construction in individual areas along the project alignment. (IP and UP) Measure SC-4: During final design and prior to any ground disturbance, appropriate testing to determine if ACMs are present in the project disturbance limits. (IP and UP) Measure SC-5: Appropriate removal and disposal of ACMs. (IP and UP)
Noise	No impact	During construction of Alternatives 1 and 2 including Alternative 2f, noise from construction equipment and activities could reach 89 dBA at 50 ft from the noise source.	Measure N-2: Compliance with Caltrans Standard Specifications Section 14-08.02, "Noise Control," and SSP S5-310. (IP and UP) Measure N-3: Compliance with local noise ordinances (Cities of Anaheim, Corona, Norco, and Riverside). (IP and UP) Measure N-4: RCTC will initiate a separate project to construct noise barriers for I-15 (with the exception of NB K1-A) if they are not constructed as part of a separate I-15 project within 5 years of completion of the construction of the SR-91 CIP. (UP) Measure N-5: Unusual and extraordinary abatement measures will be implemented if certain residences will experience a severe traffic noise impact of 75 dBA L_{eq} or higher. (IP and UP)
Energy	No impact	Alternatives 1 and 2 including Alternative 2f would result in permanent direct reductions of up to 3.0 percent in fuel consumption in 2015 and up to 4.15 percent by 2035.	No mitigation is needed.
		Alternatives 1 and 2 including Alternative 2f would result in very minor increases in indirect energy consumption, up to 0.7 percent, for energy used for the manufacturing and maintenance of vehicles operating on roads in the project study area; however, there would be no increase in indirect energy consumption for vehicles in the SCAG region. Alternatives 1 and 2 including Alternative 2f would not result in a substantial change in the demand for electricity for road and sign lighting, toll facilities, and ramp metering.	No mitigation is needed.
		Temporary energy consumption during the construction of Alternatives 1 and 2 including Alternative 2f would represent a very small percent of total regional consumption and would not result in a noticeable impact related to short-term energy demand.	No mitigation is needed.

Table S.4 Summary of Impacts for the No Build Alternative and Impacts With No Substantial Difference Between Alternatives 1 and 2

Potential Impact	No Build Alternative	Potential Impacts Under Alternatives 1 and 2 and Their Design Variations	Avoidance, Minimization, and Mitigation Measures ¹
Natural Communities	No impact	The Initial Phases of Alternatives 1 and 2, and Alternative 2f would result in permanent impacts of 9.87 ac of CSS, and temporary impacts to 3.38 ac of CSS, 1.72 ac of riparian/riverine, and 0.04 ac of oak woodlands.	Refer to compensatory mitigation and measures listed in Table S.3 for natural communities.
		The Initial Phases and Ultimate Projects under Alternatives 1 and 2 and Alternative 2f will not impact NCCP lands in Orange County.	No mitigation is needed.
		Alternatives 1 and 2 and Alternative 2f will result in temporary impacts to wildlife corridors during construction.	Measure NC-6: Identification of locations with existing wildlife fencing, installation of new fencing prior to removal of existing fencing, and protection of fencing. (IP and UP) Measure NC-8: Limiting construction equipment maintenance, lighting, and staging away from wildlife corridor entrances. (IP and UP) Measure NC-9: Directing construction noise and light away from wildlife corridors, bridges, and biologically sensitive areas. (IP and UP) Measure NC-10: Locating construction equipment and structures to avoid barriers to wildlife passage. (IP and UP) Measure NC-11: Existing overcrossing and culvert designs compatible with wildlife usage. Openness ratios of 1.96 for large mammals and 0.81 for medium-sized mammals will be provided in modified overcrossings and culverts as appropriate at each crossing. (IP and UP) Measure NC-12: Limiting construction to daylight hours in Coal Canyon, B Canyon, Fresno Canyon/Wardlow Wash, and Bedford Canyon with the exception of limited periods when evening or night work is required for operational reasons. (IP and UP) Measure NC-13: Structures for bridge work structures will not block the main underpasses in Coal Canyon, B Canyon, Fresno Canyon/Wardlow Wash, and Bedford Canyon. (IP and UP) Measure NC-14: Location restrictions for construction staging areas in Coal Canyon. (IP and UP)

**Table S.4 Summary of Impacts for the No Build Alternative and Impacts
With No Substantial Difference Between Alternatives 1 and 2**

Potential Impact	No Build Alternative	Potential Impacts Under Alternatives 1 and 2 and Their Design Variations	Avoidance, Minimization, and Mitigation Measures ¹
			Measure NC-15: Maintenance of Coal Canyon for emergency access during construction. (IP and UP) Measure NC-16: Closing of the gates at Coal Canyon at the end of each construction day. (IP and UP)
Plant Species	No impact	Alternatives 1 and 2 including Alternative 2f would result in the permanent removal of 0.74 ac on which Southern California black walnut trees were observed, and the permanent removal of 0.33 ac on which Coulter's matilija poppy was observed.	The measures provided elsewhere in this table for natural communities and threatened and endangered species will adequately avoid and minimize permanent impacts to special-status plant species during construction of the Build Alternatives. However, Measure PS-1 was added as an additional minimization measure for: Measure PS-1: Replacement planting of Southern California black walnut and Coulter's matilija poppy.
		Alternatives 1 and 2 would not result in permanent or temporary impacts to any other special-status species in the BSA.	No mitigation is needed.
Animal Species	No impact	Alternatives 1 and 2 including Alternative 2f would not result in permanent direct impacts on BUOW but could result in indirect impacts to BUOW as a result of the loss of potential habitat.	Measure AS-1: Preconstruction BUOW surveys. (IP and UP)
		Alternatives 1 and 2 including Alternative 2f would not result in permanent direct impacts to other special-status animal species. Alternatives 1 and 2 and Alternative 2f could result in permanent indirect impacts to other special-status species as a result of habitat loss and fragmentation and edge effects such as noise, litter, lighting, and human encroachment.	Measures for natural communities, wetlands and other waters, and plant species would also mitigate project effects to animal species.
		Alternatives 1 and 2 including Alternative 2f would result in temporary effects to the BUOW and other special-interest animal species as a result of unavailability of potential habitat, noise, vibration, lighting, and other edge effects.	Measure AS-1: Preconstruction BUOW surveys. (IP and UP) Measure AS-2: Preconstruction bat surveys. (IP and UP) Measure AS-3: Bat exclusion devices installed for any structure with potential bat habitat. (IP and UP) Measure AS-4: Limited night construction at bridges. Limited evening and/or night construction may be required for safety and/or operations reasons. (IP and UP) Measure AS-5: Retention of riparian vegetation near bat roosting sites. (IP and UP) Measure AS-6: Bridge construction outside bird nesting season and installation of bird nesting exclusion devices. (IP and UP)

Table S.4 Summary of Impacts for the No Build Alternative and Impacts With No Substantial Difference Between Alternatives 1 and 2

Potential Impact	No Build Alternative	Potential Impacts Under Alternatives 1 and 2 and Their Design Variations	Avoidance, Minimization, and Mitigation Measures ¹
			Measure AS-7: Permanent bat exclusion and the provision of habitat replacement structures. (IP and UP) Measure AS-8: Installation and maintenance of silt fence barriers at all staging or construction areas at Coal Canyon and areas within CHSP to prevent small animals from entering those areas. (IP and UP)
Threatened and Endangered Species	No impact	Alternatives 1 and 2 and Alternative 2f would not result in permanent impacts to Branton's milk vetch, the Santa Ana sucker, western yellow-billed cuckoo, SWWF, and bald eagle.	No mitigation is needed.
		Alternatives 1 and 2 and Alternative 2f would result in temporary indirect impacts to Branton's milk vetch, CAGN, LBV, Santa Ana sucker, western yellow-billed cuckoo, SWWF, and bald eagle.	Compensatory Mitigation: Based on compliance with the Western Riverside County MSHCP for SKR and Measures TE-1 to TE-15, provided earlier in Table S.3. Measures for natural communities, wetlands and other waters, plant species, and animal species would also mitigate project effects to threatened and endangered species.
Invasive Species	No impact	Revegetation and landscaping under Alternatives 1 and 2 and Alternative 2f would be similar, would not include any plants with high or moderate ratings in the California Invasive Plant Inventory, and therefore would help to inhibit the spread of invasive species.	No mitigation is needed.
		Construction activities for Alternatives 1 and 2 and Alternative 2f have similar potential to spread invasive species.	Measure IS-1: Development and implementation of a Weed Abatement Program. (IP and UP)
Cumulative Impacts	No impact	Alternatives 1 and 2 and Alternative 2f would contribute incrementally, when considered with the other cumulative projects, to cumulative impacts related to: • Conversion of designated farmlands to nonagricultural use • Community character and cohesion • Acquisition and removal of existing residential and nonresidential uses • Short-term traffic impacts during construction • Impacts to the visual/aesthetic environment • Short- and long-term impacts to water quality • Permanent impacts to paleontological resources • Short-term air quality impacts associated with fugitive dust and construction equipment emissions • Long-term noise levels in the project area	Refer to the measures in Tables S.3 and S.4 for project-specific measures by environmental resource that address project-specific impacts.

**Table S.4 Summary of Impacts for the No Build Alternative and Impacts
With No Substantial Difference Between Alternatives 1 and 2**

Potential Impact	No Build Alternative	Potential Impacts Under Alternatives 1 and 2 and Their Design Variations	Avoidance, Minimization, and Mitigation Measures ¹
		- Incremental impacts on natural communities and the plant and animal species associated with them - Incremental impacts on jurisdictional and other waters - Incremental impacts on threatened and endangered species and other special-interest species - Incremental impacts related to invasive species in northeast Orange County and western Riverside County	

¹ IP = Applies to the Initial Phases of Alternatives 1 and 2

UP = Applies to the Alternative 1 and 2 Ultimate Projects

IP and UP = Applies to the Initial Phases and Ultimate Projects for Alternatives 1 and 2

ac = acres, acre

ACMs = asbestos containing materials

ADA = Americans with Disabilities Act

ADL = aerially deposited lead

BMPs = best management practices

BNSF = Burlington Northern Santa Fe Railroad

BSA = biological study area

BUOW = burrowing owl

CAGN = California gnatcatcher

Caltrans = California Department of Transportation

CGV = Compass Growth Vision

CHP = California Highway Patrol

CHSP = Chino Hills State Park

CO = carbon monoxide

dBA = A-weighted decibels

Department = California Department of Transportation

EIR = Environmental Impact Report

EIS = Environmental Impact Statement

FIRMs = Flood Insurance Rate Maps

FSTIP = Federal Statewide Transportation Improvement Program

ft = foot/feet

HASP = Health and Safety Plan

I-15 = Interstate 15

LBP = lead-based paint

LBV = least Bell's vireo

LOS = level of service

MLD = Most Likely Descendant

MSHCP = Multiple Species Habitat Conservation Plan

NAHC = Native American Heritage Commission

National Register = National Register of Historic Places

NCCP = Natural Communities Conservation Plan

New OC Park (NNL) = New Orange County Park (National Natural Landmark)

NPDES = National Pollutant Discharge Elimination System

PCBs = polychlorinated biphenyls

PM_{2.5} = particulate matter less than 2.5 microns in size

PM₁₀ = particulate matter less than 10 microns in size

PRC = Public Resources Code

RCP = Regional Comprehensive Plan

RTP = Regional Transportation Plan

SCAG = Southern California Association of Governments

SCAQMD = South Coast Air Quality Management District

SCE = Southern California Edison

SKR = Stephens' kangaroo rat

SR-91 = State Route 91

SSPs = Standard Special Provisions

State Parks = California State Parks

SWPPP = Storm Water Pollution Prevention Plan

SWWF = southwestern willow flycatcher

TCEs = temporary construction easements

TMP = Transportation Management Plan

VHD = vehicle hours daily

VHT = vehicle hours traveled

Table S.5 Permits and Approvals Needed

Agency	Permit/Approval	Status/When Required
Federal Agencies		
FHWA	Approval for Modified Access Report to the Interstate System	A "Letter of Acceptability" approving the modified access was received from FHWA in a letter to the Department dated May 11, 2011. Final approval will occur in August 2012 after approval of the ROD
	Section 6005 of SAFETEA-LU for satisfying Air Quality Conformity Requirements	Approval was received from FHWA on June 6, 2012
	Major Project Operational Independence and Non-Concurrent Construction Determination	Concept submitted January 20, 2012 and final approval is expected by June 2012
	Cost Estimate Review	Approval received on March 23, 2012
	Draft Project Management Plan	Approved in May 2012
	Plan of Finance (in lieu of Initial Financial Plan)	Submittal is expected by July 2012
	Final Project Management Plan	Approval is expected by October 2012
	Close of Finance/Financial Plan Annual Update	The first annual update would be submitted in May 2013.
USFWS	Section 7 Consultation for Threatened and Endangered Species	The BO was approved on November 30, 2011, by USFWS (refer to Appendix Q).
	Review and Comment on 404 Permit	
Corps	Section 404 Nationwide Permit for filling or dredging waters of the United States.	The application for this permit was submitted in July 2011.
	Section 408 Permit for modifications to Corps' facilities in three locations and a modified easement at a fourth location.	An initial application for this permit was submitted in December 2011.
National Park Service	Approval of the use of land from CHSP if that land is protected under Section 6(f)	Because the 0.48 ac of land in CHSP that will be used by the project is not currently protected by Section 6(f), no NPS approval is required at this time. If that land becomes protected under Section 6(f) prior to the use of 0.48 ac in CHSP for the SR-91 CIP, the requirements for protection under Section 6(f) will be analyzed and addressed with State Parks and the California Department of Parks and Recreation, Office of Grants and Local Services.
State Agencies		
CDFG	1602 Agreement for Streambed Alteration	The application for this agreement was submitted in February 2011.

Table S.5 Permits and Approvals Needed

Agency	Permit/Approval	Status/When Required
California State Parks	Concurrence regarding the determination of the project effects on CHSP	State Parks provided written concurrence with the de minimis determination for project effects on CHSP in a letter dated March 26, 2012; a copy of that letter is provided in Appendix B.
	Right-of-Entry/Encroachment Permit	An approved Right-of-Entry/Encroachment Permit will be required prior to any construction encroaching onto land within the boundary of CHSP.
	Approval of a permanent aerial easement in CHSP	Prior to construction of the Green River Road westbound off-ramp.
California Transportation Commission	Approval of STIP funding	After the Department approves the Final EIR and files the Notice of Determination.
SWRCB	Section 402 NPDES (Construction Activity)	The notification for coverage under Order No. 2009-0009-DWQ, NPDES No. CAS000002 will be submitted prior to construction.
	Section 402 NPDES Permit (Department NPDES Permit)	Coverage under Order No. 99-06-DWQ, NPDES No. CAS000003 will be addressed with submittal of the NOI under NPDES No. CAS000002, which will be submitted prior to construction.
Santa Ana RWQCB	Section 402 NPDES (Groundwater Dewatering)	The notification for coverage under Order No. R8-2009-0003, NPDES No. CAG998001, will be submitted prior to construction.
	Section 401 Water Quality Certification	The application for this agreement was submitted in February 2011.
Regional and Local Agencies		
Western Riverside County RCA and the RCTC	JPARP	A Preliminary Determination of Biologically Equivalent or Superior Preservation is provided in Appendix O of the <i>Natural Environment Study</i> (2010).
Cities of Anaheim, Corona, Riverside, and Norco, and Counties of Riverside and Orange	Freeway Agreements	Freeway agreements reflecting the project will be finalized after completion of the Final EIR/EIS.
Cities of Anaheim, Corona, and Riverside, and Counties of Orange and Riverside	Encroachment permits for any encroachments into public right-of-way owned by these jurisdictions.	Prior to any encroachment
Cities of Anaheim, Corona, and Riverside, and Counties of Orange and Riverside	Approval of the TMP and any detour plans using local streets	Prior to construction
Orange County Flood Control District and Riverside County Flood Control District	Coordination for, and approval of, any project-related changes to the existing flood control facilities	During final design
County of Orange	Approval of a permanent subsurface easement in the New OC Park (NNL)	Prior to construction of the Ultimate Project

Table S.5 Permits and Approvals Needed

Agency	Permit/Approval	Status/When Required
Railroads		
BNSF Railroad Company	Memorandum of Understanding and a Construction and Maintenance Agreement with the railroad	Prior to any construction within or above railroad right-of-way
California Public Utilities Commission	Approval of the project, based on review of the Construction and Maintenance Agreement	Prior to any construction within or above railroad right-of-way
Utilities		
SCG SCE City of Corona AT&T/Pacific Bell Comcast Cable Sprint Time Warner Cable Questar/Four Corner Pipeline Company Level 3 Communications Temescal Valley Regional Interceptor City of Riverside Santa Ana Watershed Project Authority Western Riverside Regional Wastewater	Approvals to relocate, protect in place, or remove utility facilities	Prior to any construction activities that would affect utility facilities

BNSF = Burlington Northern Santa Fe
 BO = Biological Opinion
 CDFG = California Department of Fish and Game
 Corps = United States Army Corps of Engineers
 Department = California Department of Transportation
 EIR = Environmental Impact Report
 EIS = Environmental Impact Statement
 FHWA = Federal Highway Administration
 JPARP = Joint Project Acquisition/Review Process
 NOD = Notice of Determination
 NOI = Notice of Intent

NPDES = National Pollutant Discharge Elimination System
 RCA = Regional Conservation Authority
 RCTC = Riverside County Transportation Commission
 ROD = Record of Decision
 RWQCB = Regional Water Quality Control Board
 SCE = Southern California Edison
 SCG = Southern California Gas Company
 SWRCB = State Water Resources Control Board
 TMP = Transportation Management Plan
 USFWS = United States Fish and Wildlife Service

Table S.6 Summary of Issues Raised During Scoping

General Topic	Issues	EIR/EIS Section Where Topic is Discussed
Project Alternatives	Comments related to the individual alternatives, funding, the use of Measure A funds for Alternative 2, operations, public transit instead of project.	Chapter 2, Project Alternatives
Right-of-Way Acquisition and Relocation	Comments related to the effect of project acquisition on residences and businesses adjacent to the project segment of SR-91. Comments from the City of Corona regarding the importance of attempting to avoid and minimize right-of-way impacts within the City limits and requesting the identification of potential right-of-way impacts for each Build Alternative.	Chapter 2, Project Alternatives and Section 3.4.2, Relocations and Real Property Acquisitions
Traffic	Comments regarding the expected traffic volumes for the proposed MCP project, how the project will address traffic congestion in the area once MCP begins to distribute numerous vehicles onto I-15 and how that might distribute the congestion onto SR-91, and the importance of optimizing SR-91 corridor traffic to accommodate future traffic demand.	Section 3.6, Traffic and Transportation/Pedestrian and Bicycle Facilities
Biological Resources	Comments regarding the importance of maximizing Chino Hills and Santa Ana Mountains habitat protection for future generations, effects of additional incremental lighting at entrances and exits to the constrained wildlife corridors, and the need to protect existing wildlife habitat and listed species on or near the project site.	Sections 3.17, Natural Communities; 3.18, Wetlands and Other Waters; 3.19, Plant Species; 3.20, Animal Species; 3.21, Threatened and Endangered Species; and 3.22, Invasive Species.
Land Use	Comments regarding consistency of the project with General Plans and regional plans.	Section 3.1, Land Use
Air Quality	Comments regarding air quality impacts during construction and operations, and compliance with AB 32.	Section 3.14, Air Quality
Cumulative Impacts	Suggestion to include other transportation projects in the analysis, including the MCP; cumulative analysis within the context of other CETAP projects.	Section 3.25, Cumulative Impacts
Growth	Growth inducement	Section 3.2, Growth
Floodplains and Drainage	Consider additional flood control improvements in the Lower Santa Ana River, including bank protection on the south bank of the River at several locations between Prado Dam and the western part of the Green River Golf Club as part of the County of Orange and Corps projects. Comments regarding the importance of fully evaluating the potential impacts of the project to master planned drainage facilities such as the La Sierra MDP facilities, which would provide flood protection and adequate drainage outlets to relieve substantial flooding problems. Concerns regarding the alteration of existing drainage patterns, the potential diversion or concentration of storm water flows, and the potential for increased runoff and potential impacts that could result from that runoff.	Section 3.9, Hydrology and Floodplains

Table S.6 Summary of Issues Raised During Scoping

General Topic	Issues	EIR/EIS Section Where Topic is Discussed
Noise	Comments regarding potential noise and vibration impacts at entrances to and exits from the constrained wildlife corridors and potential noise barriers constructed in front of homes and businesses.	Section 3.15, Noise
Historical Resources	Comments to protect historical resources.	Section 3.8, Cultural Resources
Hazards	The potential for exposure to hazardous wastes during construction activities.	Section 3.13, Hazardous Waste/Materials
Construction Impacts	Comments regarding potential impacts during construction, including air quality, visibility, biological resources, noise, traffic, and hazardous wastes; and requests for advanced notice of construction activities.	In the impacts analyses by topic throughout Chapter 3, Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures
Mitigation	Mitigation for direct, indirect, and cumulative impacts.	In the avoidance, minimization, and/or mitigation measure sections by topic throughout Chapter 3, Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures

AB 32 = Assembly Bill 32

CETAP = Community and Environmental Transportation Acceptability Process

Corps = United States Army Corps of Engineers

I-15 = Interstate 15

MCP = Mid County Parkway

MDP = Master Drainage Plan

SR-91 = State Route 91

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State Route 91 Corridor Improvement Project

Riverside and Orange Counties, California

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Final Environmental Impact Report/Environmental Impact Statement Volume I



Prepared by the
State of California Department of Transportation
and the
Riverside County Transportation Commission

The environmental review, consultation, and any other action required in accordance with applicable federal laws for this project is being, or has been, carried out by the Department under its assumption of responsibility pursuant to 23 USC 327.



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General Information about This Document

For individuals with sensory disabilities, this document can be made available in alternate formats. To obtain a copy in an alternate format, please call or write to the Riverside County Transportation Commission, Attn: Cathy Bechtel, Project Development Director, P.O. Box 12008, Riverside, CA 92502-2208, (951) 787-7141; or use the California Relay Service TTY number, 1 (800) 735-2929, or voice number 1 (800) 735-2922, or 711.

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The State Route 91 Corridor Improvement Project proposes widening, including the construction of one mixed-flow lane in each direction, one auxiliary lane in each direction, high-occupancy or tolled express lanes, and direct high-occupancy or tolled express lane connections between State Route 91 and Interstate 15.

FINAL ENVIRONMENTAL IMPACT REPORT/ENVIRONMENTAL IMPACT STATEMENT

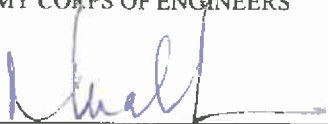
Submitted Pursuant to: (State) Division 13, California Public Resources Code
(Federal) 42 USC 4332(2)(C) and 49 USC 303

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

COOPERATING AGENCY:
UNITED STATES ARMY CORPS OF ENGINEERS

8/10/12

Date of Approval



Basem Muallem
District Director
District 8
California Department of Transportation
NEPA and CEQA Lead Agency

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Abstract: The project is in Orange and Riverside Counties, within the jurisdiction of California Department of Transportation (Department) Districts 8 and 12. The Build Alternatives would provide facility improvements along State Route 91 (SR-91) and Interstate 15 (I-15), spanning the Cities of Anaheim and Yorba Linda in Orange County, and the Cities of Corona, Norco, and Riverside in Riverside County. There are two Build Alternatives extending on SR-91 from State Route 241 (SR-241) (in the Cities of Anaheim and Yorba Linda) to Pierce Street (in the City of Riverside), a distance of approximately 14 miles (mi), and on I-15 from the Hidden Valley Parkway interchange in the Cities of Corona and Norco to the Cajalco Road interchange in the City of Corona, a distance of approximately 6 mi. SR-91 is continuing to experience increased congestion as a result of population growth in Riverside County and the increase in jobs in Orange County. Improvements are necessary to address existing and projected deficiencies regarding mobility, access, goods movement, and freeway capacity on SR-91. The Build Alternatives would improve the vehicle, person, and goods movement travel times on SR-91 and I-15 to more effectively serve existing and future travel demand between and within Riverside and Orange Counties. Key issues include impacts to community character and cohesion, utilities and emergency services, biological resources, cultural resources, paleontological resources, aesthetics, residential and business relocations, water quality, air quality, and noise effects.

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