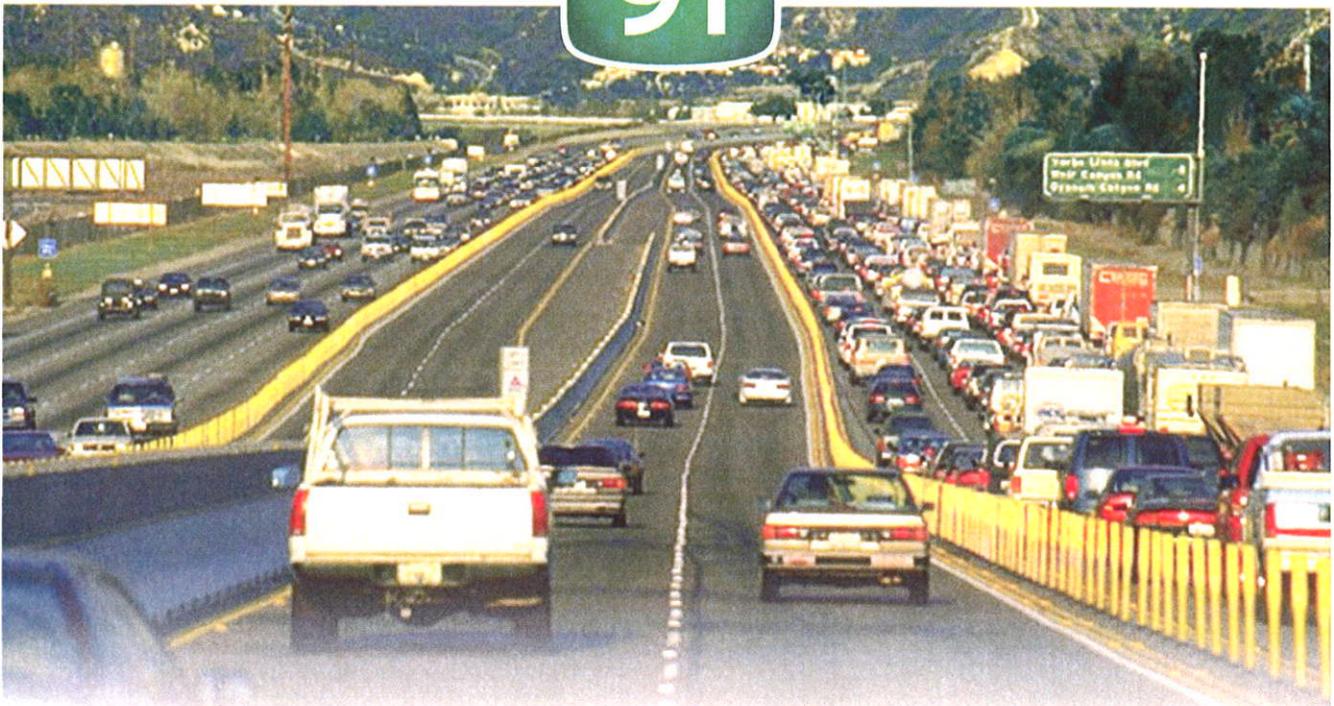
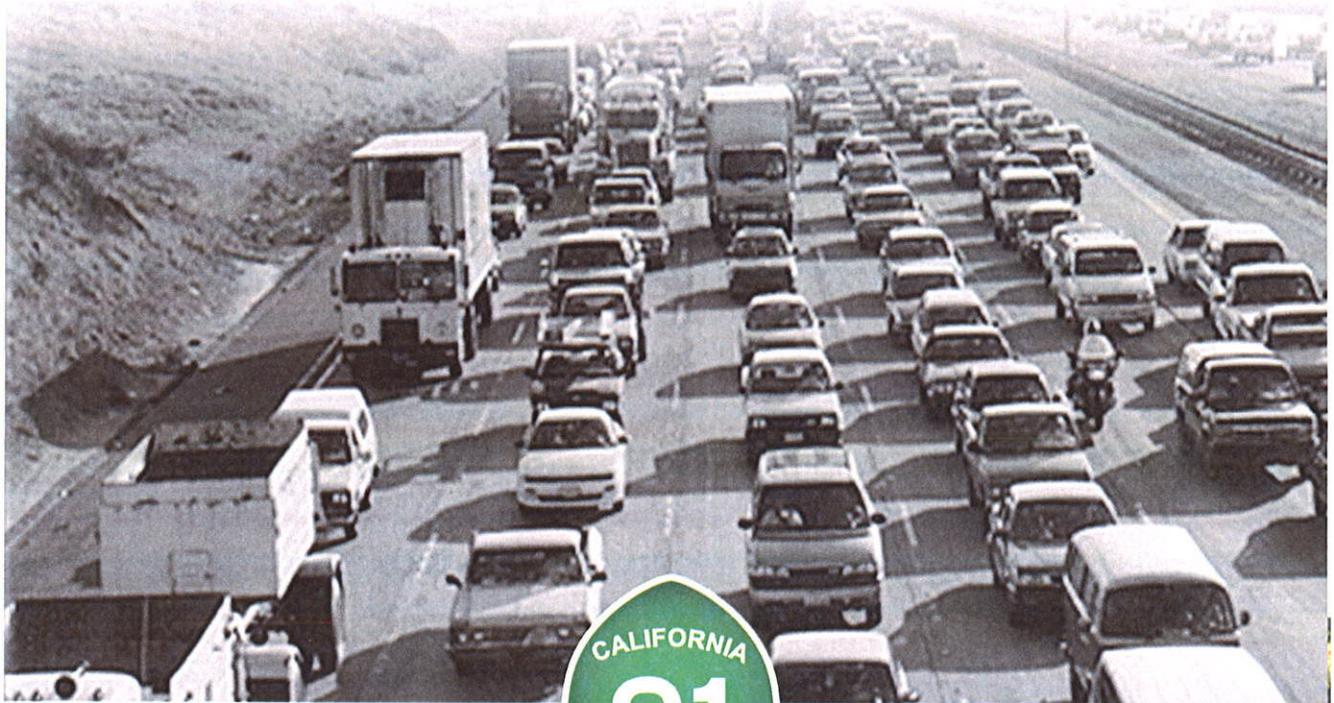


STATE ROUTE

91

Corridor Improvements Project Design-Build Demonstration Program Project Authorization Request

January 1, 2010



Submitted to:

CALIFORNIA
TRANSPORTATION
COMMISSION

Submitted by:

RCTC

Riverside County Transportation Commission



December 30, 2009

Ms. Bimla Rhinehart
Executive Director
CALIFORNIA TRANSPORTATION COMMISSION
1120 N Street, Room 2221 (MS-52)
Sacramento, CA 95814

Subject: CTC Application for Design-Build Demonstration Program for the
SR 91 Corridor Improvements Project in Riverside County

Dear Ms. Rhinehart:

On behalf of the Riverside County Transportation Commission (RCTC), I am pleased to submit to the California Transportation Commission (CTC) a project authorization request for the SR 91 Corridor Improvements project in Riverside County (Project) for inclusion in the Design-Build Demonstration Program (Program).

This request is submitted pursuant to Chapter 6.5 (commencing with Section 6800) of Part 1 of Division 2 of the Public Contract Code and the guidelines issued on September 9, 2009 by the CTC.

This request seeks inclusion for the Project as one of the five local transportation entity projects under the Program and as a project authorized to use the best value selection methodology.

RCTC believes that the Project represents an ideal candidate for inclusion in the Program both for purposes of design-build delivery and best value selection. We believe this project authorization request will establish that:

- There is a critical current need for the Project;
- The Project is regionally and nationally significant and will result in improved mobility, quality of life, goods movement and safety and decreased congestion, commute times and environmental impacts;
- The Project will be fully funded with minimal State funds;
- Significant work to date has been performed on the Project and it is on target for procurement and delivery well within the time constraints of the Program;
- The Project will substantially benefit from design-build delivery and such delivery is a critical component of the Project's financial plan;

- The benefits of the use of design-build for the Project include schedule acceleration, earlier cost certainty, access to capital markets, risk transfer and ability to capitalize on private sector innovation for the Project's technical and staging challenges; and
- Best value authorization will allow for the beneficial use of performance-based specifications and the ability to capture private sector innovations and ideas to achieve important Project goals and mitigation.

We appreciate your consideration of our project authorization request and we would be pleased to answer any questions or provide additional information at your request. We also would be pleased to meet with CTC staff and/or Commissioners about the project authorization request and the Project at your convenience.

Sincerely,



Anne Mayer, Executive Director
RIVERSIDE COUNTY TRANSPORTATION COMMISSION

cc: Andre Boutros, CTC Chief Deputy Director
Dr. Ray Wolfe, Caltrans District 8 Director
Syed Raza, Caltrans Deputy District Director and SR-91 Corridor Director
John Standiford, RCTC Deputy Executive Director
Michael Blomquist, RCTC Toll Program Director
Khalid Bazmi, RCTC Toll Project Manager
Karl Sauer, Bechtel
Jeff Rotman, Bechtel

**STATE ROUTE 91
CORRIDOR IMPROVEMENTS PROJECT
DESIGN-BUILD DEMONSTRATION PROGRAM
PROJECT AUTHORIZATION REQUEST**

Submitted to:
California Transportation Commission

Submitted by:
Riverside County Transportation Commission

January 1, 2010

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1. Executive Summary

The California Design-Build Demonstration Program is authorized under California Senate Bill No. 4 (SB 4), which was signed by Governor Schwarzenegger on February 20, 2009 and has since become effective as amended sections of the Public Contract Code and the Streets and Highways Code.

The purpose of the Design-Build Demonstration Program is described in Section 6800 of the Public Contract Code: *"The design-build method of procurement authorized under this chapter should be evaluated for the purposes of exploring whether the potential exists for reduced project costs, expedited project completion, or design features that are not achievable through the traditional design-bid-build method."*

In this context, the Riverside County Transportation Commission (RCTC), in partnership with Caltrans, through this Project Authorization Request, respectfully requests that the California Transportation Commission (Commission), in exercising its statutory role under SB 4 and pursuant to its adopted guidelines for the Design-Build Demonstration Program, authorize RCTC to utilize design-build to deliver and implement the Project (described in Section 2) and to pursue such delivery through a procurement process using a Best Value selection approach. This Project Authorization Request seeks one of the five project slots allocated to local transportation entity projects under SB 4.

The Project increases the capacity of the severely congested State Route (SR) 91 corridor and extends the existing Orange County Transportation Authority (OCTA) SR-91 Express Lanes to the east by eight miles to just beyond Interstate-15 (I-15) in Riverside County. The Project also includes improvements to I-15 in Riverside County between the Ontario Avenue interchange and SR-91 and direct connectors from SR-91 to the south I-15 that would connect with potential future High-Occupancy Vehicle (HOV) or Express Lanes on I-15.

In preparing this Project Authorization Request, RCTC has utilized the Commission's application template and offers this Project Authorization Request for the Commission's review and approval. RCTC believes that this Project is vitally important to the Inland Empire region and the State and fully meets the criteria for a design-build procurement using a Best Value selection approach.

Specifically:

- RCTC is a local transportation entity under Section 6800 of the Public Contract Code and, therefore, is entitled to pursue a potential project under the Design-Build Demonstration Program created by SB 4.
- The Project, if authorized by the Commission to use design-build, would be considered a local transportation entity project and use one of the five slots allotted for local transportation entity projects under the Design-Build Demonstration Program.
- Under Chapter 6.5 of the Public Contract Code and as articulated by the Commission guidelines, the Commission expects that it will approve 7-8 projects for selection by Best Value. As of the date of this Project Authorization Request, the Commission has not allotted any of the Best Value slots in the Design-Build Demonstration Program to a project and such slots are available for the Project.
- The Project falls within the "South" as defined in the State Transportation Improvement Program (STIP). The Commission's guidelines indicate that 8-10 projects will be approved in the "South". As of the date of this Project Authorization Request, the Commission has not allotted any of the slots in the "South" and such slots are available for the Project.

-
- The anticipated design-build contract price for the Project is \$794 million (nominal dollars) which would place the Project within the statutory requirements under Chapter 6.5 of the Public Contract Code and in the "over \$200 million" category for Project size. As of the date of this Project Authorization Request, the Commission has not allotted any of the slots in the Design-Build Demonstration Program to a project in excess of \$200 million.
 - Anticipated award for the Project is in late 2011, well before the January 1, 2014 deadline set forth in Chapter 6.5 of the Public Contract Code (and as further reinforced by the Commission guidelines).
 - The Project has a full funding plan that is comprehensive and supported by significant technical and financial analysis and modeling.
 - The RCTC Board/Commission issued a Resolution as presented in Attachment 1 documenting the funding commitment from local, state, and federal sources.
 - Caltrans supports RCTC's implementation of the Project on the state highway system and this application to the Commission as evidenced by Caltrans' letter set forth in Attachment 2.
 - RCTC has completed and is submitting the required Project Delivery Questionnaire as Attachment 3.
 - RCTC, Caltrans, and the Federal Highway Administration (FHWA) have entered into a three-way agreement under which FHWA has authorized tolling on the Project, as noted in Attachment 4.
 - The Project meets the statutory criteria for eligibility under Section 6803(c) of the Public Contract Code in that it has been subject of the STIP process and is currently listed in the STIP. To the great benefit of the State, Caltrans, and the Commission, the Project relies on only a small component of State funding, which has already been included within the STIP and is further evidenced as shown in Attachment 5, Project Programming Request, presenting the recent actions by RCTC recognizing the Project's inclusion in the STIP.

RCTC believes that these elements and the critical needs for and benefits of the Project, as evidenced throughout this Project Authorization Request, present a powerful argument for Commission authorization of the Project under the Design-Build Demonstration Program and pursuant to a Best Value procurement process.

RCTC looks forward to Commission review and approval of this design-build Project Authorization Request and Best Value procurement approach for the Project.

2. Background and Importance of Project

The Project that is the subject of this application to the California Transportation Commission (Commission) for Design-Build authority under a Best Value selection approach increases the capacity of the severely congested SR-91 corridor and extends the existing OCTA SR-91 Express Lanes to the east by eight miles to I-15 in Riverside County. The Project also includes improvements to I-15 in Riverside County between the Ontario Avenue interchange and SR-91 and direct connectors from SR-91 to the south I-15 that would connect with potential future High-Occupancy Vehicle (HOV) or Express Lanes on I-15. The Project is sponsored by the Riverside County Transportation Commission (RCTC), in cooperation with and approved by the California Department of Transportation (Caltrans) and in conformity with the charter of Measure A (Riverside County).

a. Description and Scope of the Project

Background

SR-91 currently has four General Purpose (GP) lanes in each direction, with those lanes varying in width from 11 to 12 feet from the SR-241/SR-91 interchange in Orange County to the SR-91/I-15 interchange in Riverside County. Currently, there are two tolled Express Lanes in each direction on the SR-91 in Orange County that are heavily used by commuters, residents, commercial businesses, and others traveling to and from Riverside and Orange counties. The existing Express Lanes, operated by OCTA, begin west of the SR-91/SR-55 interchange and terminate at the Riverside/Orange County line. This Project extends the Express Lanes to the east approximately eight miles into Riverside County to just beyond the I-15 interchange.

SR-91 is the only major surface transportation facility connecting Orange and Riverside counties and is the primary daily commuting route between the counties. The rapidly growing population, driven in part by the relatively affordable housing market in Riverside County, coupled with increasing employment opportunities in Orange County, has resulted in a large number of Riverside County residents commuting to jobs in Orange County. Based on long-term regional population and employment projections, this commute pattern is expected to continue and grow into the future. In addition, this state route is heavily used for goods movement from the Ports of Los Angeles and Long Beach to destinations in inland Southern California as well as other destinations across the United States.

SR-74 (Ortega Highway), an alternate route, is located approximately 20 miles south of SR-91 and carries about 12,000 vehicles per day (vpd). In stark contrast, SR-91 is currently used by more than 280,000 vpd at the Orange/Riverside County line, and this volume continues to grow. At the same time, SR-91 operates at stop-and-go conditions during the lengthy morning (westbound) and evening (eastbound) peak travel periods in this corridor. Traffic in this corridor is forecast to increase by approximately 50 percent by 2035, further exacerbating the already long travel times and congestion in this corridor and between the counties.

Planning History

The approved Route Concept Report (Caltrans, October 25, 1989) designated SR-91 as a 10-lane freeway with eight GP lanes and two HOV lanes as the ultimate concept facility for this segment of SR-91 based on the best available information at the time. In January 2003, the SR-91 Congestion Relief Alternatives Analysis (Caltrans, January 2003) outlined short-, mid-, and long-term alternatives to relieve congestion along SR-91 between SR-55 in Orange County and I-15 in Riverside County. Subsequent to that study, the 2003 SR-91 Implementation Plan (OCTA, 2003) was completed in June 2003, as required by Assembly Bill 1010 (AB 1010), which was signed into law in September 2002. AB 1010 required OCTA, in consultation with Caltrans and RCTC, to issue a plan and a proposed completion schedule to the State Legislature prior to July 1, 2003 for improvements to SR-91 from SR-55 to I-15. The 2003 SR-

91 Implementation Plan reiterated the alternatives in the SR-91 Congestion Relief Alternatives Analysis and provided additional approaches including the development of a Major Investment Study (MIS) to evaluate potential new corridors and multimodal alternatives.

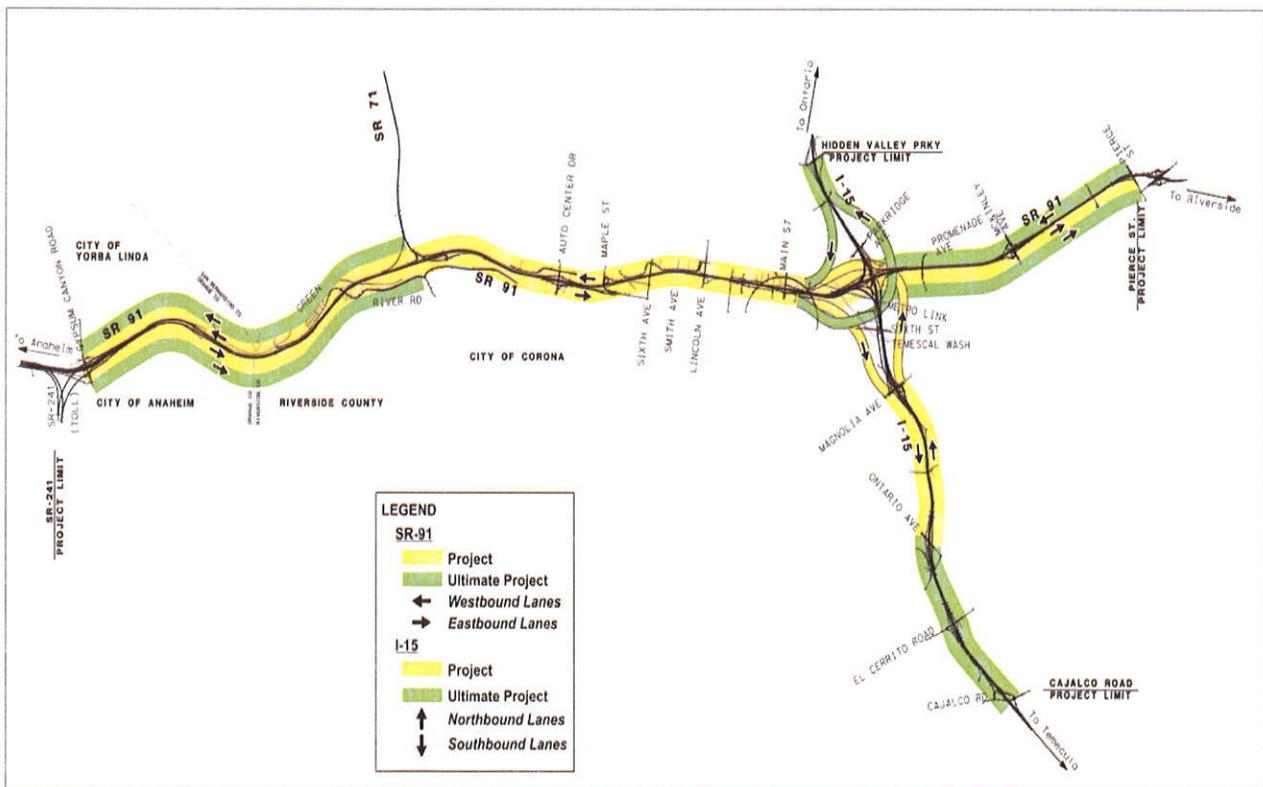
The development of the MIS for Riverside and Orange counties was initiated in June 2004 and was completed in December 2005. The MIS was prepared by RCTC and OCTA in cooperation with the Transportation Corridor Agencies (operator of the SR-73, SR-241, SR-261, and SR-133 toll roads in Orange County). Its purpose was to identify a range of feasible multimodal alternatives that would improve mobility between the two counties. The MIS led to the development of the alternatives for the currently proposed Project.

The proposed improvements that were identified in the SR-91 Project Study Report/Project Development Support (PSR/PDS; Caltrans, December 4, 2006) are consistent with the recommendations in previous studies. The passage of AB 1010 in 2002 permitted the purchase of the Express Lane Franchise in Orange County by OCTA, which facilitated capacity improvements in this corridor to be planned, funded, and implemented. The passage of Senate Bill 1316 (SB 1316) in 2008 allows RCTC to toll the future Express Lanes on SR-91 in Riverside County.

Project Details

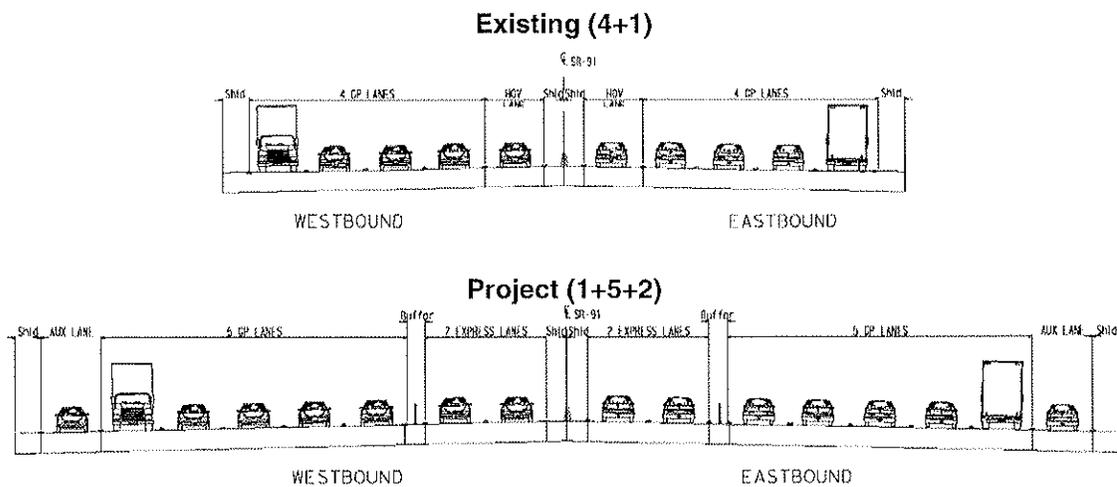
The Environmental Impact Statement and Environmental Impact Report currently under development for the SR-91 Corridor Improvement Project envision several construction steps or phases starting with the Project (the subject of this application) and ending with the Ultimate Project before 2035. See [Figure 1](#) for a map of the Project and to note the distinction between the Project and Ultimate Project.

Figure 1 - Project Map



In the segment of the SR-91 corridor between SR-71 and I-15, the Project will result in a total of seven lanes in each direction – five GP lanes and two tolled Express Lanes. This compares to the existing freeway which has a total of five lanes in each direction -- four GP lanes and one HOV lane. This will be accomplished by modifying one HOV lane to an Express Lane and by widening the SR-91 freeway by the equivalent of approximately three lanes in each direction. One of the lanes is a new GP lane, one is an additional GP lane to replace an existing inside GP lane that is modified to an Express Lane (so that there are two Express Lanes in each direction), and the third is to add the pavement necessary to widen all of the existing lanes from eleven feet to twelve feet and to provide standard inside shoulders. This segment of the freeway will then have five GP lanes and two tolled Express Lanes in each direction with one ingress point and one egress point. See [Figure 2](#) for typical cross sections. Specific details of the roadway features and components of the Project are noted in [Attachment 7](#).

Figure 2 - Typical Cross Sections



The additional phases that will supplement the Project as part of the Ultimate Project are:

1. Extend the Project three miles further east by adding one Express Lane and one GP lane in each direction from I-15 to Pierce Street in the City of Riverside.
2. Extend the Project two miles further south on I-15. Continue the one lane approach to the direct connectors in each direction in the median of I-15 from Ontario Ave. to Cajalco Rd.
3. Add one GP lane in each direction from the SR-71 interchange to the SR-241 interchange in Orange County.
4. Add a new freeway-to-freeway connector from eastbound SR-91 to northbound SR-71. Add other related improvements to the SR-91/SR-71 interchange
5. Add direct connectors to and from the north at I-15. Add one-lane connectors in each direction from the SR-91 tolled Express Lanes to future Express Lanes or HOV lanes in the median of I-15. Extend the one lane Express Lane in each direction in the median of I-15 one and one half mile north to Hidden Valley Parkway.

Just prior to procurement, RCTC intends to perform another update to the financial plan for the Project. At that time, additional phases of the Ultimate Project may be added to the scope of the Project. To do so, the design-build procurement process may be structured to allow for priced options to be added to the scope of the successful proposer. If all phases of the Ultimate Project are added, the scope of the Project would be that of the Ultimate Project as cleared by the ongoing environmental studies. This application seeks design-build authority for the Project, as it may be expanded through the procurement process to include elements of the Ultimate Project.

Tolling Systems and Rates

As with the current OCTA SR-91 Express Lanes, the Project will include an all electronic toll collection (ETC) system and will not accept cash on the road. All users will be required to have an account with a tolling agency which will issue a California standard (Title 21 compliant) FasTrak transponder or "toll tag" to the customer. FasTrak transponders are fully interoperable with all toll roads and express lanes in California. The Project will allow discounted access to carpool vehicles with 3+ occupants and tolled access by single-occupant vehicles and carpools with less than three occupants.

If the vehicle does not have a valid transponder, a digital image or photo is taken of the vehicle's license plate. The photo is used for enforcement purposes based on California statutes and a notification letter is sent to the vehicle's owner. Carpool vehicles will utilize self-declaration switchable transponders to allow the vehicle driver to declare if they are operating in HOV 3+ mode.

As presently envisioned, the toll rate will be set by time of day based on traffic demand observed over the previous three month period, similar to the pricing on the existing OCTA SR-91 Express Lanes. In order to optimize the through-put of vehicles, the Project tolling system will have the ability to operate under dynamic pricing in the future where the travel time differential between the SR-91 GP lanes and Express Lanes will be measured in real time between the entry and exit point and the price to travel in the Express Lanes will be adjusted, usually at 15 minute intervals, as required to maintain traffic flow.

A goal of the Project is to make the transition from the OCTA SR-91 Express Lanes to the extension of the Express Lanes in Riverside County as seamless as possible. As envisioned and as employed in the OCTA Express Lanes, the Project will be a toll facility employing open road tolling (ORT) technology to collect tolls and to screen carpool vehicles for compliance with occupancy rules. ORT allows for fully electronic collection of tolls at freeway speeds.

The Project includes paved areas near each tolling point where both maintenance vehicles can be parked and the California Highway Patrol can stage/park to monitor carpool occupancy and/or for enforcement. Signage for the Project will advise motorists of the location of the upcoming Express Lane entry, that it is a toll facility, and that a FasTrak tag is required. Supplemental signing will be deployed to address the business rules established for vehicle occupancy. A dynamic message sign would be installed advising motorists of the current price to use the Express Lanes on the RCTC SR-91 segment and the OCTA SR-91 segment.

RCTC currently contemplates that the Project tolling computers will be connected by a fiber backbone communications network to the existing SR-91 Toll Operations Center (TOC) and also to the existing customer service center (CSC) currently operated by OCTA. The existing OCTA SR-91 TOC and CSC will be used for this Project pursuant to an agreement between OCTA and RCTC, under which the two agencies shall collaborate, share costs, and cooperate in making the entire SR-91 Express Lanes a seamless facility to the user. The TOC will serve as the 24/7 operating and maintenance information hub for the Project, while the CSC will provide account services directly related to the facility's toll customers and violations verification and processing. The CSC is the central facility where customer accounts for ETC are set up and managed, toll transponders are issued and tested, and violation processing takes place.

b. Project Benefits

The primary purpose of the Project is to reduce congestion and improve mobility within the SR-91 corridor. The Project provides a greater distance of alternative travel lanes for motorists who choose to pay a toll to bypass congestion.

The Project is intended to achieve significant benefits, including:

- 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 consistent with the RCTC Measure A 10-Year Delivery Plan.
- Provide direct connections between HOV/tolled Express Lane facilities on SR-91 and planned future I-15 HOV/tolled Express Lanes, thereby improving a major choke-point location.
- Provide improvements on SR-91, I-15, and intersecting local roads to more effectively serve existing and forecast intraregional travel demand and to reduce diversion of regional traffic from the freeways into the surrounding communities.
- Reduce air pollution emissions associated with idling/slow-moving vehicles by improving vehicle speeds on SR-91 and I-15.
- Improve safety and reduce accident rates in the corridor by widening the travel lanes from 11 to 12 feet and adding standard shoulders in most locations. Wider lanes and shoulders allow for more maneuvering room for both normal and emergency situations and result in fewer accidents. In addition, interchange improvements along with the addition of auxiliary lanes will reduce weaving conflicts which also will contribute to a reduction in traffic accidents.
- Improve the quality of life for the thousands of commuters who use SR-91 daily to and from work by reducing their commuting time by 30 minutes or more.
- Provide immediate jobs in the design and construction industry in the Inland Empire, one of the areas of the country hit hardest by the economic downturn. High-paying construction jobs will last through 2015. Because a tolled express lane is included in the Project, there will be at least 50 and possibly as many as 100 permanent, full time jobs created in carrying out the operation and maintenance of the Express Lanes.
- Accommodate the Surface Transportation Assistance Act (STAA) National Network for trucks.

Even with the current economic downturn, the Inland Empire is forecast to be one of the fastest growing areas of California. It is well-known as an area in California with an established labor force and reasonable cost of housing and land for business and industry. The Project is a critical element of public infrastructure to meet the demand for mobility caused by the projected growth in jobs, population, and housing. Without the Project, transportation demands won't be constrained, quality of life and the environment will suffer, and jobs and population will move to other states with equal or lower cost of housing and better transportation infrastructure and mobility.

c. Regional Significance

The existing major east-west facilities in western Riverside County consist of SR-60, SR-74, and SR-91. These facilities provide links with the following major north-south facilities in Riverside County: SR-79, I-15, and I-215. SR-91 is the major east-west corridor connecting Orange and Riverside Counties. In Orange County, SR-91 provides connections to SR-55, SR-57, and I-5. These existing facilities provide for the primary throughput for all vehicles traveling in western Riverside County and into Orange County. The next several paragraphs highlight the critical need for this Project, concluding with a scenario of what would happen if this Project was not built. All referenced tables are provided in [Attachment 6](#).

Existing Traffic Volumes: Existing daily and peak-hour traffic count data were collected in the fall of 2007 for parts of the SR-91 and I-15. The data collection area extended on SR-91 from SR-241 on the west to Pierce Street on the east, and on I-15 from Hidden Valley Parkway on the north to Cajalco Road on the south. Table 1 presents the mainline traffic volumes noting, for example, that the 2007 daily traffic volume at the Orange/Riverside County line (the sum of the average daily traffic (ADT) on the Gypsum Canyon to Green River Road line item) is approximately 280,000 vpd. The line item in Table 2, which presents the existing freeway mainline peak-hour Level of Service (LOS), indicates that the LOS for this segment in the westbound direction is at LOS F, an unacceptable condition. Fourteen of 24 segments in the SR-91 corridor perform deficiently under existing conditions operating at LOS F in the peak direction of travel (both a.m. and p.m. peak hours). Table 2 also presents volume-to-capacity (V/C) ratios associated with LOS F segments. V/C ratios provide an assessment of how much of the capacity is utilized by the actual volume. V/C ratios over 1.0 illustrate extreme congestion. The higher the V/C value, the more congestion a specific segment will experience. The table illustrates that numerous SR-91 segments have V/C ratios over 1.0.

Future Traffic Projections: The growth in Riverside County is forecasted to increase both truck and general automobile traffic on SR-91 and I-15. Table 3 summarizes regional demographics for Southern California. The projected growth for Riverside County during the next 28 years is 105 percent. Table 4 summarizes vehicle trip generation projections. As calculated from the data in Table 4, ADT generation in Riverside County is forecast to increase by 63 percent between 2007 and 2035. Without any improvements to existing SR-91, the projected increases in traffic volumes in the Project area by 2035 will result in a significant decrease in its already poor LOS.

Future Traffic Volumes: Table 5 summarizes the peak-hour and daily traffic volumes on the Project segments of SR-91 and I-15 in 2035. Table 6 presents the LOS for each Project segment on SR-91 and I-15 in 2035. As shown in Table 6, all segments on both freeways with the exception of one segment on SR-91 are projected to operate at LOS F in the peak direction of travel, reflecting excessive delays and congestion in the future.

Travel Time: The existing average travel times for both the GP and the HOV lanes on SR-91 can be nearly four times higher during the peak periods than during free-flow traffic periods of the day. Under existing conditions, observed travel times for the eastbound direction show that trips from SR-241 to the SR-91/I-15 interchange during the PM peak take approximately 45 minutes to cover 11.5 miles, a distance that can be traveled in free-flow conditions in 12 minutes. Several existing physical constraints contribute to the congestion on SR-91. Choke points, where traffic streams merge and diverge at freeway-to-freeway interchanges, occur on SR-91 at I-15, SR-71, SR-90, SR-241, and SR-55. This results in heavy traffic volumes and weaving at these locations. Locations where mixed flow or auxiliary lanes terminate also result in traffic choke points. Several on-ramps on SR-91 east of SR-71 are not designed to handle the high traffic volumes, which affects operations on SR-91. The Project will improve weaving and chokepoints throughout the corridor as a result of the braided ramps, reconfigured ramps, collector-distributor facilities for interchanges, appropriate weaving distances, and other operational improvements incorporated in the Project.

Safety: Accident data in the Project vicinity were reviewed for the 3-year period from November 1, 2004, to October 31, 2007. Those data are summarized in Table 7 for accident rates on the mainline freeways, on freeway-to-freeway connector ramps, and on SR-91 and I-15 local road interchange ramps. The actual accident rate on the eastbound direction of the SR-91 mainline is very often higher than the Statewide average.

Existing Operational Deficiencies: The alignment of SR-91 passes through Santa Ana Canyon. The topography of the canyon is a constraint to the two major transportation corridors that run through it: SR-91 and the Burlington Northern Santa Fe (BNSF) rail line. Nearly all surface and rail traffic between Riverside and Orange counties is funneled into this single corridor, which has

limited physical opportunity for expansion as a result of the substantial slopes on the north and south sides of the Santa Ana Canyon. In addition, the topography of the canyon limits the opportunities for arterial road connections to SR-91.

Regional Goods Movement: The Southern California Association of Governments (SCAG) has identified goods movement as a critical component of transportation system planning in Southern California. On SR-91, truck trips are approximately 6 percent of the total daily traffic volumes as shown on Table 8. Both rail and highway capacity is constrained in the future and, as a result, truck traffic is expected to increase in the corridor. The greater the number of trucks, the worse the levels of service and operations of the facility become.

No Build Option: If the Project were not built, current substandard configurations of SR-91 would remain in the project area. There would be no additional GP lanes and no Express Lanes to offer the traveler a choice for faster, more reliable, safer, and less stressful driving through one of the most congested bottlenecks in California. Though smaller, localized projects could be considered, approved, and implemented on their own merits, no major corridor improvement would be effected. Continuing congestion with attendant degraded levels of service would be expected and eventually this would constrain growth and economic development in the Inland Empire and worsen safety, quality of life, and the environment.

Public Support: The regional significance of the Project is evidenced through the consistent and substantial public support of voters, elected officials, the RCTC Board, SR-91 corridor cities, other stakeholders, and the traveling public. The RCTC Governing Board has 32 members representing every city in Riverside County plus five members of the Riverside County Board of Supervisors and the Caltrans District 8 Director (non-voting). On December 13, 2006, the RCTC Board voted unanimously to proceed with the SR-91 Corridor Improvement Project, which included the Project. In the spring of 2008, RCTC conducted a public opinion survey to help structure the outreach program connected with the environmental process. At that time, 42% of the users of SR-91 were familiar with the plans to widen the freeway and extend the Express Lanes. In that same survey, 37% of the users of the SR-91 said they would be willing to pay an additional \$10 toll to save 30 minutes between SR-241 and I-15. (This is a realistic estimate of time savings for the Project during the afternoon peak travel time.) This percentage of usage of the Express Lanes would make the Project inherently successful and demonstrates high public awareness and interest even during the environmental process and reflects the broad public support for the Project. As Project plans, schedule, and delivery become more concrete, RCTC anticipates even higher levels of public interest and support in the future.

d. Project Status

RCTC has been intensively and aggressively moving forward with development of the Project for several years, utilizing its own personnel, retaining consultants and engaging with stakeholders such as Caltrans, OCTA, cities along the Project corridor, resource agencies and the public. Selected highlights of a few of the numerous activities that have been undertaken follow:

- Preliminary engineering and environmental studies were initiated on the Project in September 2007. The studies determined that a full Environmental Impact Statement and Environmental Impact Report were required and the documents are underway by a consultant under contract to RCTC. Caltrans is the lead agency for the environmental process under NEPA delegation.
- Feasibility studies have been carried out on a regular basis as the Project and other circumstances affecting the Project evolve. For example, RCTC conducted a comprehensive feasibility study in 2006/07 and this work has recently been updated by RCTC for changes to project scope and financial market conditions.

-
- A project and construction management firm is on board to assist RCTC in design-build procurement, right-of-way acquisition, utility relocation, and interagency agreements.
 - Negotiations are underway with OCTA and Caltrans for the cooperative agreements needed to toll the Express Lanes, share the toll operations contractor and some expenses, and administer the design-build contract.

Stage of Development

The Project stages of development are as follows:

- Preliminary Engineering: A draft project report has been submitted to Caltrans and reviewed. Comments are being incorporated. Geometric approval drawings for several segments have been completed and are under review by Caltrans.
- Environmental: Technical studies have been completed and submitted to Caltrans. The draft EIR/EIS is being prepared. Several chapters have been submitted to Caltrans for review. The work is on schedule for circulation of the draft document in the summer of 2010. The record of decision is anticipated in fall of 2011.
- Project Approvals: State legislation allowing RCTC to develop SR-91 tolled express lanes was approved in 2008. The FHWA approved the Project in a three-way agreement with Caltrans and RCTC in August 2009.

Current Schedule

From completion of the first feasibility study in 2007 and the decision to use toll revenue from the Express Lanes to fund their construction, RCTC has assumed that the Project would be implemented using design-build. The reasons for this are detailed in Section 3 of this application, but one of the primary reasons is accelerated delivery. The SR-91 corridor is one of the most congested in Southern California and getting worse every day. Caltrans, RCTC, and OCTA share the urgency of getting these improvements in place as soon as possible. If this Project were implemented as a traditional design-bid-build project, the Express Lanes would not be opened until 2019 at the earliest and likely significantly later. Design-build is projected to save at least three years over design-bid-build delivery, bringing increased mobility, congestion relief, enhanced safety, and improved environmental benefits far sooner. See Figure 3 for the project schedule using design-build and see Figure 4 for the comparative schedule showing the design-bid-build scenario. These schedules were generated based on critical path project scheduling methods and represent a consensus result as developed by project consultants including PB Americas, Bechtel, and Parsons Transportation Group.

Figure 3 - Overall Project Schedule using the Design-Build Approach

Project SR-91 Corridor Improvements Project Schedule: Design-Build

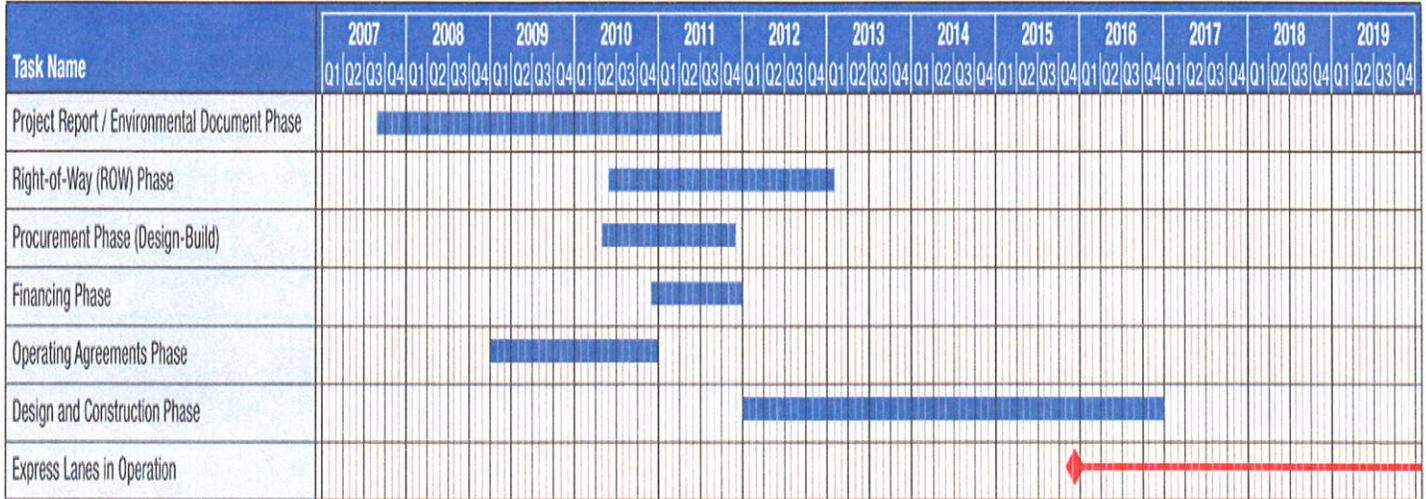
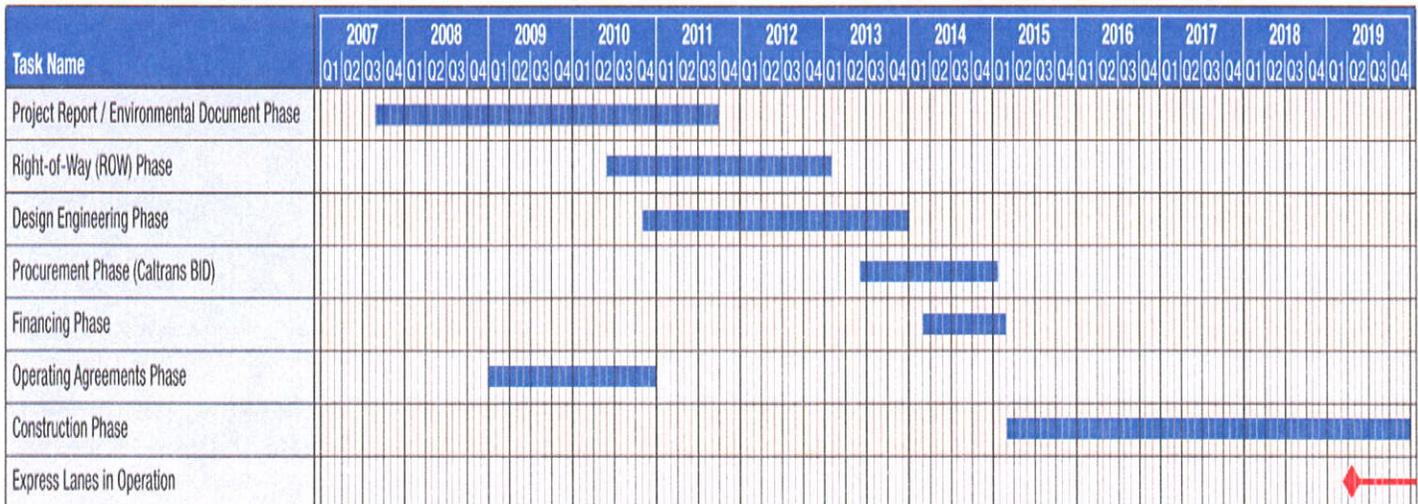


Figure 4 - Overall Project Schedule using the Design-Bid-Build Approach

Project SR-91 Corridor Improvements Project Schedule: Design-Bid-Build



e. Project Cost Estimate

RCTC SR-91 CORRIDOR IMPROVEMENTS COST ESTIMATE [\$ as of 2009]			TOTAL 2009\$
RCTC Costs			
	Preliminary Engineering / Environmental	\$	41,543,337
	Program/Construction Management	\$	152,690,541
	Financing Costs	\$	7,622,000
	Contingency on Above Costs	\$	15,772,016
	Right of Way Acquisition and Associated Costs - Residential	\$	13,076,384
	Right of Way Acquisition and Associated Costs - Commercial	\$	136,538,997
	Utility Relocation	\$	18,024,600
	Right of Way Contingency (5%)	\$	7,480,769
	<i>Subtotal Right of Way and Utilities</i>	\$	175,120,750
	Subtotal RCTC Cost	\$	392,748,645
Design-Build Contract			
	Final Design (6% Const)	\$	39,971,803
	Roadway Items Cost	\$	282,844,240
	Roadway Items Contingency	\$	56,568,848
	Structure Items Cost	\$	207,060,860
	Structure Items Contingency	\$	70,400,692
	<i>Subtotal Construction Cost</i>	\$	616,874,641
	Toll Collection System Cost	\$	11,678,048
	Toll Collection System Contingency	\$	2,335,610
	<i>Subtotal Toll Collection System</i>	\$	14,013,657
	Subtotal Design-Build Cost	\$	670,860,101
Total Capital Cost			
	Subtotal RCTC Cost	\$	392,748,645
	Subtotal Design-Build Cost	\$	670,860,101
	Total Capital Cost	\$	1,063,608,746

f. Vicinity Map

SR-91 is the major east-west corridor connecting Orange and Riverside Counties and is the primary daily commuting route between the counties.

Figure 5 – Vicinity Map



3. Justification for Design-Build Authorization

a. Summary of Analysis and Steps Taken to Date

In advancing the Project to its current stage of development, RCTC has rigorously and comprehensively assessed the Project and its potential. At each step of the analysis, RCTC has been able to confirm various important attributes of the Project, which have been recognized by RCTC Staff and by the RCTC Board as the rationale to continue development. RCTC's analysis has determined:

- The Project is needed for the SR-91 corridor, the region and the State, in terms of the traveling public and goods movement;
- Failure to undertake the Project or delay in doing so will result in worsening congestion, decreased mobility and safety, and further economic and environmental deterioration;
- With the environmental approval process well along and a procurement schedule defined, the Project is ready to be developed, priced, and procured;
- The Project will benefit from an existing built-in customer base using the OCTA SR-91 Express Lanes and that customer base will largely be the Project's customer base;
- The success of the OCTA SR-91 Express Lanes provides great assurance of success for the Project;
- The Project is broadly supported by the traveling public, SR-91 corridor cities, and other key stakeholders;
- The Project is consistent with prior corridor planning;
- The Project is technically feasible as contemplated;
- The Project is financially feasible and will be fully funded using only a nominal amount of State programmed funds; and
- There are great benefits to the Project to using design-build, and such delivery is an intrinsic part of the Project's delivery and financial plans.

In developing the above analysis and in pursuing overall Project development, RCTC has aggressively and actively pursued development of the Project. Following is a summary of some of the major steps taken.

Timing	Key Steps
2003	Orange County Transportation Authority purchases the 91 Express Lanes opening the door for future improvement to the SR-91 corridor.
2006	Major Investment Study work completed by OCTA and RCTC recommending a multi-pronged strategy to improve mobility between Orange and Riverside counties. RCTC awards contracts to technical, financial and legal advisors to perform toll feasibility work engaging strategic advisor consulting team to explore options for toll projects and public private partnerships, including analysis of the SR-91

Timing	Key Steps
	<p>corridor improvements and Express Lanes.</p> <p>Caltrans completes Project Study Report – the first step in project development.</p> <p>10-year Measure A Delivery Plan approved by RCTC including the extension of the SR-91 Express Lanes into Riverside County.</p>
September 2007	RCTC awards contract for the preliminary engineering and environmental permitting phase for the SR-91 Corridor Improvement Project.
February 2008	RCTC establishes a Stakeholder Advisory Committee comprised of Project stakeholders including environmental groups, business interests, local elected officials, and other agencies.
September 2008	RCTC obtains state tolling authority through the passage of SB 1316.
2009	<p>RCTC initiates work to obtain inter-agency agreements.</p> <ul style="list-style-type: none"> • February 2009: RCTC and OCTA commence discussions and negotiations regarding a cooperative agreement for coordination and joint operations of the extended 91 Express Lanes. • May 2009: RCTC, OCTA, and Caltrans commence discussions and negotiations regarding a toll facilities agreement and/or franchise agreement for the SR-91 Express Lanes in Riverside and Orange Counties. • November 2009: RCTC and Caltrans commence discussions and negotiations regarding a cooperative agreement for design-build implementation of the Project. • December 2009: RCTC and the City of Corona commence discussions and negotiations regarding implementation of the Project.
February 2009	RCTC authorizes staff to procure a Project and Construction Manager for the design-build phase of the SR-91 corridor improvements.
August 2009	Federal tolling authority obtained through execution of three-way agreement among FHWA, Caltrans, and RCTC.
October 2009	RCTC awards contract for Project and Construction Manager services for the design-build phase.
December 2009	RCTC adopts a Finance Plan in support of a Request for Project Authorization to the CTC seeking best-value, design-build authority for the Project.
January 2010	RCTC submits a Request for Project Authorization to the California Transportation Commission seeking best-value, design-build authority under SB 4.

b. Procurement Type Requested (Best Value or Low Bid)

RCTC respectfully requests that the Commission authorize this Project to use the Best Value selection approach. While SB 4 does require balancing of "low-bid" and "Best Value" authorizations under the Design-Build Demonstration Program, as a general rule, Best Value is always the preferred method of design-build contractor selection, particularly for large, complex design-build projects.

From a general perspective, some of the benefits of Best Value contracting in a large, complex Design-Build project environment include the following. In each case, these attributes apply to this Project and RCTC's decision to seek authority from the Commission to utilize a Best Value selection.

- With Best Value, design-build contractors are chosen on the basis of their tailored technical approach to the project, as well as price.
- Given the importance of engineering under a design-build contract, where the procurement package provides only 10-30% of the project design and the design-build contractor is responsible for completion of design, only Best Value contracting allows for a thorough evaluation of the technical capabilities and approach of the proposer teams and not just a lower level assessment of whether the teams are merely qualified.
- A Best Value contracting structure forces the early development of realistic overall project costs, dramatically reducing change orders and litigation.
- Focusing proposer teams on technical issues and approach as a means to potentially obtain award of the design-build contract enhances the quality of proposals and competition to the great benefit of the public agency.
- Best Value contracting rewards and provides incentives to innovation and creativity to solve complex technical issues.
- Best Value contracting provides the means (and incentives) for proposers to exceed the minimum technical requirements of the project.
- Best Value selection better allows the public agency to tailor the selection process to project goals, allowing the public agency to stress the technical issues that are of great importance and allowing the public agency to make the trade offs between quality and price.
- Shifting the point of competition from price only to include quality and approach issues ensures a higher quality product, as Design-Build contractors realize underperformance hurts their chances of winning future contracts.
- Best Value contracting allows better and easier use of performance specifications.
- Studies that have compared low-bid to Best Value contracting overwhelmingly find that Best Value contracting reduces cost growth and schedule growth, and increases customer satisfaction.

While low-bid design-build authorized under SB 4 certainly can work well for certain projects, particularly those projects that are fairly straightforward and not technically challenging or in need of creativity or innovation to solve technical challenges, this Project is an ideal candidate for use of the Best Value selection approach.

It will require great skill and care to design an approach to deliver the Project and undertake construction in a manner to not only minimize disruption of the existing general purpose lanes, but also the existing SR-91 Express Lanes operated by OCTA. At the same time, the opportunities to innovate and be creative, with design and construction elements such as traffic management plans, staging approaches, and minimizing right-of-way takes, are significant and may result in not only millions of dollars of savings, but significantly accelerated delivery and materially less dislocation and adverse impacts during construction (each to the great benefit of the traveling public and other stakeholders). Executing the Project successfully will require significant staging, traffic management, and highly skilled engineers and contractors, all performing under live traffic conditions.

Examples of how a Best Value selection is important to Project success include:

- The primary technical challenge in constructing this facility is that all work is performed on an operating and heavily congested freeway. There will be severe limits on lane closures. The key challenge in construction is traffic management. The design-build team that brings the most innovative approach to construction staging will save time and cost of construction, which will benefit the public by lowering cost of the Project and reducing impacts to commuters during construction. Only through a Best Value selection will proposers have an incentive to be creative and innovative to meet this challenge and will RCTC be able to substantively evaluate and differentiate proposals on this important Project metric.
- Major cost items include the long curved structures that make up the direct connectors at I-15. Innovative approaches to structural design of these bridges may be able to reduce total life cycle cost. Only Best Value selection will allow RCTC to emphasize life cycle costing and allow for the necessary motivation for proposers to innovate (instead of simply following RCTC's existing preliminary design).

With a Best Value selection approach, RCTC will be able to balance its need to have competitive pricing with the need to deliver a high quality Project that meets the long-term needs of the traveling public and region, while at the same time taking care to not overly disrupt a vital economic and commuter corridor.

If RCTC is unable to use Best Value contracting for the Project and is required to use low-bid, the likelihood and potentially huge benefits of innovation and creativity by proposers will be largely lost. Proposers will have no reason or ability to offer proposals that exceed the Project and RFP's minimum requirements. Without Best Value authority for the Project, RCTC believes the State, the traveling public, and stakeholders stand to lose significant value through the loss of enhanced competition, tailoring of the competition to Project goals and priorities and the absence of the higher quality proposals, designs, and construction that Best Value contracting can offer for a project with the characteristics of the Project.

In addition, if required to use low-bid design-build, RCTC will only be able to prequalify proposers rather than shortlist them. Consequently, RCTC will have to set the technical "bar" to the level of seeking qualified (responsible) design-build contractors and not necessarily the best ones that may be most capable of addressing the complexities and challenges of the Project. Similarly, because proposers will focus only on the lowest cost approaches to the technical requirements to the exclusion of creative solutions, they will not pursue innovative methods that enhance quality (but may have incremental additional costs). Without Best Value selection, the use of performance-based specifications will be significantly limited and RCTC will have to be more prescriptive in its technical requirements. In each case, RCTC believes it and the public loses value and benefits.

It is premature at this time to identify the specific evaluation criteria, weightings of such criteria or the overall weighting of technical and financial proposals. In that context, RCTC anticipates that

the RFP will require financial proposals and technical proposals from proposers. The technical proposals will include submittals that may address the following potential technical evaluation criteria:

- Project management approach to design
- Project management approach to construction
- Approach to quality issues (QC/QA)
- Technical approach:
 - Pavement
 - Structures
 - Staging and sequencing
 - Approach to traffic closures
 - Traffic management
 - Environmental management and compliance
 - Public outreach and relations
 - Drainage
 - Utilities
 - Right of way acquisition
- Approach to 3rd party approvals
- Schedule

Except as noted below, financial proposals will likely require submittal of a lump sum fixed price for performing the Project scope of work. RCTC may utilize maximum payment curves to accommodate any issues associated with matching payments to the availability of funds. Proposer commitments to reaching substantial completion ahead of the completion deadlines set forth in the design-build contract and RFP may be evaluated both qualitatively (as part of the technical proposal) and/or quantitatively (through an adjustment, for evaluation purposes, to price on a per day or other basis). Lane closures during construction may also be evaluated qualitatively and/or quantitatively (through an adjustment to price, for evaluation or other purposes, possibly using a lane rental concept).

With respect to combining financial proposals with technical proposals to determine the apparent Best Value proposer, RCTC is considering several potential approaches, including:

- Converting technical proposal points into dollar values and then combining the dollar values with price, with the apparent Best Value proposer being the proposer with the lowest adjusted dollar value
- Converting the financial proposal dollar values into points and then combining the points with the technical proposal points, with the apparent Best Value proposer being the proposer with the highest point score
- Specifying the maximum amount of funds that RCTC will contribute to the Project, setting a minimum Project scope and asking the proposers to propose what additional elements beyond the minimum Project scope they would deliver for that price. That element would then be scored (dollar values or points) and that score would then be combined with the technical proposal scores.

c. Implementation Schedule (Awarded before January 1, 2014)

The Project procurement phase and schedule will include several phases as shown in the following table:

Phase Duration	Key Steps	Timing
3-4 months	Request for Qualifications Phase <ul style="list-style-type: none"> • RFQ issued in 2nd quarter of 2010 • Responses due in approximately 60 days • Short listing of proposers within 30-60 days 	2nd-3rd Quarter 2010
2-4 months	Industry Review Phase <ul style="list-style-type: none"> • Issuance of draft documents (RFP, technical provisions and Design-Build contract or term sheet) • Receipt of input, comments and feedback from shortlisted proposers • One-on-one meetings and joint meetings with shortlisted proposers 	3rd-4th Quarter 2010
5-7 months	Request for Proposals Phase <ul style="list-style-type: none"> • RFP issued in 1st quarter of 2011 • Responses due in 90-150 days, depending on complexity of submittal requirements and other Project issues • Selection of apparent Best Value proposer within 60 days 	1st -3rd Quarter 2011
1-2 months	Negotiations and Award Phase <ul style="list-style-type: none"> • Final negotiations with apparent Best Value proposer • Award and execution of Design-Build contract 	3rd-4th Quarter 2011

RCTC may issue a limited notice to proceed for design immediately after award and execution and prior to financial close, using Measure A funds for the limited scope of work. This will allow the design-build contractor to begin some mobilization and early design work. A second notice to proceed to complete design and construction will be issued as soon as financial close is achieved, which is expected the fourth quarter of 2011 or the first quarter of 2012.

It is expected that, with this approach, some construction would start within six months of the second notice to proceed. RCTC's preliminary construction schedule contemplates that the Express Lanes will be open for traffic within four years of the second notice to proceed and all construction completed and the project closed out within five years (note, however, that with Best Value authority RCTC is currently contemplating evaluating proposals, in part, on the basis of proposer schedule commitments that exceed the mandated completion deadlines, so further acceleration may be possible).

d. Expected Design-Build Benefits

RCTC believes that design-build delivery of the Project offers the greatest potential for both cost and time savings. The region is facing rapidly increasing levels of congestion and decreasing levels of air quality. The benefits from this method of delivery, which have been well documented in California (e.g., with the SR-22, the San Joaquin and Foothill/Eastern Toll Roads and the Alameda Corridor) and elsewhere, including in, Utah, Colorado, Texas, Michigan, New Jersey, Minnesota and Florida, include the following.

Schedule Acceleration

As shown in [Figure 3](#), RCTC expects design-build delivery to accelerate the benefits of congestion relief and better air quality by at least three years as compared to a design-bid-build approach. This will have a significant impact on mobility, safety, and the environment in the Southern California region by providing less severe congestion on GP lanes, enhanced expressway options, and network connectivity, 36 or more months ahead of design-did-build delivery (as detailed in the comparative schedules presented in [Figures 3 and 4](#)). Furthermore, by choosing a delivery option which accelerates Project delivery, RCTC can also increase the Project funding capacity and feasibility by reducing forecasted construction cost inflation.

Innovation

The Project is comprised of several construction elements and may include additional elements of the Ultimate Project. The construction will have to take place on an existing, working and heavily congested facility requiring a challenging traffic management plan. Furthermore, the implementation of the Project tolling solution will require coordination with the existing network, system operator, and adjacent stakeholders.

Using a design-bid-build approach, a highway design firm, under Caltrans oversight, would prepare detailed plans, specifications, and estimates for the Project. Once approved by Caltrans, the Project would go out for bids, with contractors required to bid on the Project exactly as designed. Consequently, the opportunity for innovation on these critical Project elements will be lost. Only through design-build, when the contractor works directly with the designer to find the best solutions for construction staging, traffic management, and generating efficiencies, can RCTC and the traveling public reap the benefits of creativity and innovation, including better traffic management, reduced costs, and shortened construction time.

The potential for value engineering for the Project is also greatly enhanced under a design-build approach. For example, under separate design and construction contracts, each entity is incentivized to maximize their own value of time spent, resulting in a design solution based on conservative specifications. The same design solution may be more aggressive under a design-build contract where the cost of materials is included as part of the fixed lump sum price under the same design-build contract as the cost of design. For the Project, including several interchanges and requiring a complex traffic management plan, the potential for such value engineering is greatly enhanced.

Risk Transfer

With a traditional design-bid-build approach, final design plans and specifications are given to the contractor who is responsible for building exactly what is shown on the plans. If new information is found, there are undiscovered conditions, or a design error, the contractor may have a claim against the owner. In the case of design error, some of the cost may be born by the design firm, but, in any event, cost increase and schedule delay are incurred on the project. More often than not, the designer and the contractor differ as to the cause of the issue, with the designer claiming construction defects and the contractor claiming design error. In many cases, the agency is in the "middle" of the dual claims.

With design-build, that interface between design and construction is the responsibility of the design-build contractor. With design-build, a significant amount of risk is shifted away from the agency to the design-builder, including in areas relating to design risk, differing site conditions, third party approvals and utilities relocation.

Cost Certainty

Through the enhanced transfer of risk available through design-build, the opportunities for change orders, cost escalation and schedule extension are materially less in a design-build context than with design-bid-build. Since part of this Project is being funded by toll revenue and through the sale of toll revenue bonds, it is very important to fix Project costs as early as possible and for both RCTC and the capital markets to have a higher level of assurance on the certainty of those costs. RCTC will not be able to sell toll revenue bonds until the total cost of the Project is known with a high degree of certainty and a fixed price and schedule for Project delivery is known. If design-bid-build is used, the Project costs will not be known until design is 100% complete, bid packages are approved and released, bids are received, and awards made. This approach is inconsistent with the Project's financial plan and accessing the capital markets through the sale of toll revenue bonds. The ability to sell toll revenue bonds not only accelerates the Project, but reduces RCTC funds needed prior to selling bonds for construction. This benefits the traveling public as well as other projects in Riverside County that can use the RCTC funds saved.

Other Benefits

The opportunities for a high quality delivery are greater under a design-build scenario as the agency engineers and contractors work together on technical and synergistic solutions to the challenges of a project. This collaboration fosters efficient phasing and construction, higher quality, cost-effective solutions, and reduced risk of change orders.

e. Proposed Project Funding Plan

The proposed Project Funding Plan for the Project consists of four key sources summarized below. Each of these funding sources will be described in further detail in subsequent parts of this section as well as in Attachment 8.

- 1) **Toll Revenue Bonds** – to be issued by RCTC and repaid from net revenues of the Project, after operations and routine maintenance costs. *Estimated total funds from this source: \$410 million*
- 2) **Transportation Infrastructure Finance and Innovation Act (TIFIA) loan** – subordinate debt to the toll revenue bonds to be obtained by RCTC from the USDOT TIFIA program and repaid from net revenues of the Project, after operations and routine maintenance costs. *Estimated total funds from this source: \$410 million*
- 3) **RCTC Contribution** – to be funded by RCTC from Measure A sales tax revenues, both on a “pay-as-you go” basis and through Sales Tax Revenue Commercial Paper and Bonds issued by RCTC. *Estimated total funds from this source: \$448 million*
- 4) **State Transportation Improvement Program (STIP)/Regional Improvement Program (RIP) grant**. *Estimated total funds from this source: \$2 million*

Estimated total funds from all sources: \$1,270 million (nominal dollars)

Timing Assumptions: RCTC currently anticipates a financial close of the Toll Revenue Bonds and TIFIA loan by December 31, 2011 and full authorization by RCTC of the planned Measure A sales tax contribution, which will be funded throughout the course of construction. Funding sources are scheduled to be applied to Project costs on a pro-rata basis throughout the construction period of the Project, with the exception of the state STIP-RIP grant, the full amount of which is programmed to be available in 2011/12.

In addition, RCTC's funding plan is based on the reasonable expectation that markets will have evolved to normalized conditions by 2011. Although it is not possible to know the exact market conditions that will be in effect in late 2011, RCTC's funding plan assumes neither the "boom" conditions of the earlier part of this decade nor the "bust" conditions of late 2008 and early 2009.

Financing Instruments: Three of the four funding sources for the Project are comprised of locally-managed financing instruments that accelerate the receipt of funds to coincide with the timing of the need for cash to build and deliver the Project. The fourth funding source is the state STIP-RIP grant, which is programmed by the Commission.

RCTC's three financing tools are as follows, with additional details offered in Attachment 8.

1) Toll Revenue Bonds

RCTC contemplates that the Toll Revenue Bonds will be structured as 30-year, non-recourse bonds, payable solely from the Project's net revenues after costs of operations, routine maintenance, and required reserves for maintenance and contingencies. To take advantage of diverse investor interest and to increase the up-front bonding capacity of the Project, RCTC will use multiple instruments, including current interest bonds (CIBs) and capital appreciation bonds (CABs), as further described herein.

The terms described below reflect assumptions based on normalized market conditions, recognizing that actual market conditions at financial close shall dictate the structuring of the bond issue and may result in modifications to the below structure. These assumptions have been developed based on industry standards, market indices, and information on successful transactions in the market, among other sources.

Current Interest Bonds (CIBs): Current interest bonds (CIBs) require regular payments of interest, typically on an annual or semi-annual basis, as well as scheduled principal repayment, typically on an annual basis following an initial period of "interest-only" payments. CIBs carry attractive interest rates that reflect the frequent and regular payment of principal and interest, and, therefore, will provide the largest proportion of senior toll revenue bonds for the Project. In addition to CIBs, RCTC's financing plan is tailored to the specific cash flows projected for the Project and other circumstances, and accordingly envisions additional bonds being issued as capital appreciation bonds (CABs).

Capital Appreciation Bonds (CABs): Capital Appreciation Bonds (CABs) are "zero coupon bonds" that enable RCTC to defer interest payments on a portion of the Project debt. CABs are issued at a discount (RCTC will receive a price below the par or "face" value of the bonds), with interest being accrued, and interest payments deferred until the repayment of principal at full face value on a later date. While this aspect typically makes CABs carry higher interest rates, CABs are a useful tool in project financing of toll highway projects (due to projected revenue growth over the long term). This is because the ability to defer interest payments in the early years of a project, when cash is commonly most scarce and traffic ramp-up is occurring, increases the borrowing capacity of the project. It does so by increasing the ability to rely on higher revenues in later years when structuring the repayment schedule for the bonds.

2) TIFIA Loan

The Transportation Infrastructure Finance and Innovation Act of 1998 (TIFIA) established a program for eligible transportation projects under which the federal government may provide secured loans, loan guarantees, standby lines of credit or a combination of the foregoing. For the Project, a federally-secured loan under the TIFIA program is planned in the amount of \$410 million. The inclusion of a TIFIA loan is desirable for the Project since the funds typically carry a lower borrowing cost than other forms of debt and have an advantageous interest and principal payment profile, including deferred interest and principal payments.

3) RCTC Contribution

Riverside County voters approved Measure A in 1988 and renewed it in 2009. Under Measure A, a half-cent sales tax program was implemented to collect funds for transportation improvement projects in Riverside County. Measure A will continue to fund transportation improvements in Riverside County through 2039. The SR-91 Corridor Improvement Program (CIP) is one of the transportation projects that received funding as part of the RCTC 2009 Measure A 10-Year Delivery Plan.

RCTC will supplement Project debt with a contribution from its Measure A program, for which funding is derived from local sales tax revenues approved by voters. Measure A allows for both pay-as-you-go and bond funding for eligible projects. In return for its contribution, RCTC will receive the residual Project revenues after meeting operating, maintenance and debt service costs. SR-91 is one of the projects specified for improvements in Measure A.

Planned Uses and Sources of Funds:

Uses (\$ nominal millions)

• Pre-development costs ¹	\$219
• Capital costs ¹	\$993
• Other costs ²	\$58
• Total Funding Requirement	\$1,270

Sources (\$ nominal millions)

• Senior debt funding (CIBs)	\$246
• Senior debt funding (CABs)	\$164
• TIFIA funding	\$410
• RCTC contribution	\$448
• STIP funding	\$2
• Total Funding Sources	\$1,270

Notes:

¹ On a nominal basis, pre-development costs and capital costs total approximately [\$1,212 million]. These estimates are based on capital costs of [\$1,064 million] adjusted for inflation based on the capital cost schedule.

² Other costs include reserve account funding, financing fees, and O&M costs net of toll revenues and interest income.

Project Economics: As can be seen from the planned sources and uses information, the funding plan presently includes approximately 35% of the upfront funding for the Project from the Measure A contribution from RCTC. It is projected that RCTC would recoup a significant portion of its contribution from remaining net revenues of the Project during operations over the life of the Project. Such returns would be available for additional transportation improvements to the SR-91 corridor.

Funding Plan Risks: The SR-91 funding plan faces the same risks as for any similar project at this stage of planning, since uncertainties remain about various elements of the funding plan and other aspects of the Project delivery plan. Approval by the Commission of RCTC's application for design-build authority is an important element of the Project's funding plan as it will allow RCTC to transfer some Project risks to the private sector and achieve greater cost certainty, two important elements for project financing and access to the capital markets. The Project will take advantage of the existing OCTA SR-91 Express Lanes' successful operating experience which allows greater assurance of this Project's success. The risks inherent in the funding plan include the following:

TIFIA Authorization

While many of the current federal legislative proposals for reauthorization contemplate continuation of the TIFIA program or a similar concept (such as a national infrastructure bank), it is possible that the TIFIA program will not be reauthorized, or will not have sufficient credit subsidies or obligation authority to meet demand for the program. As a result, it is possible the planned TIFIA loan for the Project may not be obtained, or not in the amounts planned. Such an occurrence would increase the proportion of toll revenue bonds and/or RCTC contribution required in the funding plan.

RCTC believes the TIFIA program to be an important federal program that will be retained as an element of the federal reauthorization. RCTC also believes the Project is a very strong candidate for TIFIA approval, for a number of reasons, including that it would provide TIFIA with an opportunity to support an important project of high regional significance in Southern California and it would leverage both local and Project debt, and meet TIFIA's other requirements.

Environmental Approval Delays

It is possible that delays could occur in the process of obtaining the necessary environmental approvals for the Project. Such delays could result in escalation of the funding requirement of the Project due to potential inflationary factors, and possibly other Project cost factors, and, therefore, adversely affect the economics. To the extent these factors proved material; it could increase the required RCTC contribution to the Project, or require offsetting adjustments in Project scope or phasing to reduce upfront costs.

At this time, the environmental approval process is proceeding on schedule and is not anticipated to present any material impact to the Project procurement and financial closing schedule.

Capital Market Conditions

The funding plan is based on a return to "more normal" financial market conditions (than are presently being observed) by the time of financial closing for the Project in late 2011. It is possible, however, that conditions will not be consistent with this presumption, which may affect the ability of the Project to raise financing and the financing costs for the Project, either positively or adversely.

RCTC's funding plan includes sensitivity analyses reflecting less favorable market conditions. Under these conditions, the proportions of the various sources in the funding plan change, with the primary result being somewhat higher reliance on RCTC contributions relative to the base case funding plan.

f. Project Considerations

Project Eligibility

RCTC is a local transportation entity under Section 6800 of the Public Contract Code and, therefore, is entitled to pursue a potential project under the Design-Build Demonstration Program created by SB 4. The Project meets the statutory criteria for eligibility under Section 6803(c) of the Public Contract Code in that it has been subject of the State Transportation Improvement program process and is currently listed in the STIP. See [Attachment 1](#) for the recent action by RCTC recognizing the Project's inclusion in the STIP. In addition, as of the date of this Project Authorization Request, the five slots reserved for local transportation entities under Chapter 6.5 of the Public Contract Code have not been allotted. Finally, as evidenced by Caltrans' letter set

forth in Attachment 2, Caltrans has approved RCTC's implementation of the Project on the state highway system.

State or Local Project

The Project, if authorized by the Commission to use design-build, would be considered a local transportation entity project and use one of the five slots allotted for local transportation entity projects under the Design-Build Demonstration Program.

Selection Method

Under this Project Authorization Request, RCTC has requested authorization by the Commission to use a Best Value selection process. Under Chapter 6.5 of the Public Contract Code and as articulated by the Commission guidelines, the Commission expects that it will approve 7-8 projects for selection by Best Value. As of the date of this Project Authorization Request, the Commission has not allotted any of the Best Value slots in the Design-Build Demonstration Program to a project and such slots are available for the Project.

Geographic Location

The Project falls within the "South" as defined in the STIP. The Commission's guidelines indicate that 8-10 projects will be approved in the "South". As of the date of this Project Authorization Request, the Commission has not allotted any of the slots in the "South" and such slots are available for the Project.

Project Size

The anticipated design-build contract price for the Project is \$794 million (nominal dollars) which would place the Project within the statutory requirements under Chapter 6.5 of the Public Contract Code and in the "over \$200 million" category for Project size. As of the date of this Project Authorization Request, the Commission has not allotted any of the slots in the Design-Build Demonstration Program to a project in excess of \$200 million.

Schedule

As set forth in Section 3c, anticipated award for the Project is in late 2011, well before the January 1, 2014 deadline set forth in Chapter 6.5 of the Public Contract Code (and as further reinforced by the Commission guidelines).

Full Funding

As set forth in Section 3e, the Project has a full funding plan that is comprehensive and supported by significant technical and financial analysis and modeling. As noted in Section 3e and to the great benefit of the State, Caltrans and the Commission, the Project relies on only a small component of State funding, which has already been included within the STIP.

As noted in Section 3e, RCTC anticipates procuring the design-build contract and then taking the lump sum fixed price to the capital markets and TIFIA Joint Projects Office in order to sell bonds and close on the TIFIA financing, respectively. The design-build contract will provide for the issuance of a notice to proceed upon financial closing (and only if it is achieved), so there will be no commitment of funds or obligation to pay the design-build contractor until all funds have been secured.

4. Conclusion/Summary

The SR-91 corridor is one of the most vital, yet congested commuting and goods movement routes in Southern California. Existing conditions do not meet travel demands and needs and they are getting materially worse every day.

The Project is a well-analyzed, publicly supported and necessary means to help address the vital needs of the corridor and the region. Design-build delivery, married with a Best Value procurement, is a key component of making the Project a viable reality and bringing the measurable relief and multiple benefits to fruition. Without the Project's improvements to the SR-91 corridor, current substandard configurations would remain prevalent and worsen, with no or limited effective alternatives to address existing and projected needs.

Approval of this Project Authorization Request by the Commission and inclusion of the Project in the Design-Build Demonstration Program with the authority to use a Best Value procurement is critically important to the Inland Empire region and the State, to RCTC, and to Caltrans. The benefits to be realized, such as improved travel time, increased safety, and more reliable commuting and goods movement, are demonstrable and critical to the future of this region.

RCTC believes that the Project is an ideal candidate for both design-build delivery with Best Value procurement and the Design-Build Demonstration Program.

5. Attachments

- Attachment 1. Local Board/Commission Resolution with Commitment of Funds
- Attachment 2. Letter from Caltrans Approving State Highway Project Implementation
- Attachment 3. Project Delivery Selection Questionnaire
- Attachment 4. August 18, 2009, Tolling Agreement
- Attachment 5. October 22, 2009, Project Programming Request; SCAG 2010 Federal TIP Project Sheet; and December 2009 STIP Amendment
- Attachment 6. Tables 1 through 8
- Attachment 7. Specific Project Features
- Attachment 8. Project Funding Plan Details

Attachment 1.

Local Board/Commission Resolution with Commitment of Funds

RESOLUTION NO. 09-019

**RESOLUTION OF THE
RIVERSIDE COUNTY TRANSPORTATION COMMISSION ADOPTING A FINANCE
PLAN IN SUPPORT OF ITS REQUEST FOR PROJECT AUTHORIZATION TO THE
CALIFORNIA TRANSPORTATION COMMISSION TO SEEK BEST VALUE DESIGN-
BUILD AUTHORITY UNDER THE SBX2 4 DESIGN-BUILD DEMONSTRATION
PROGRAM**

WHEREAS, the Riverside County Transportation Commission was created by State law in 1976 to serve as Riverside County's transportation agency with key responsibilities in the coordination of state and federal funding; and

WHEREAS, state and federal funding for transportation funded by gas tax and other revenue has declined over the past years; and

WHEREAS, agencies such as the Riverside County Transportation Commission have been forced to seek local funding for transportation priorities to supplement declining state and federal funding; and

WHEREAS, Riverside County voters have shown strong support for transportation investment and have approved, by more than a two-thirds vote, a half-cent transportation tax known as Measure A twice over the past 20 years; and

WHEREAS, Riverside County continues to be one of the fastest growing urbanized counties in California, thus requiring a high level of transportation investment; and

WHEREAS, in December of 2006, the Riverside County Transportation Commission approved a 10-Year Western Riverside County Highway Delivery Plan (Delivery) to guide its major transportation investments from 2010-2019; and

WHEREAS, the Delivery Plan calls for improvements to 14 miles of State Route 91, primarily through the City of Corona by the addition of mixed flow and tolled Express Lanes (high occupancy toll lanes); and

WHEREAS, the proposed improvements to the SR-91 corridor have an estimated cost of more than a \$1 billion; and

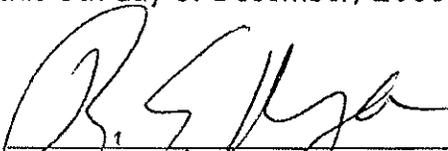
WHEREAS, as part of its consideration process for approving its Delivery Plan, the Riverside County Transportation Commission carefully studied and evaluated various financing models, which included private sector participation and tolling; and

WHEREAS the Riverside County Transportation Commission has demonstrated a track record of combining federal, state and local funding for large-scale transportation projects.

NOW, THEREFORE, BE IT RESOLVED by the Riverside County Transportation Commission that it adopts a finance plan for the SR-91 Corridor Improvement Project that includes revenues from its Measure A sales tax program, state funding, federal funding, toll revenue bonds and borrowing from the US Department of Transportation under the federal Transportation Infrastructure Finance and Innovation Act (TIFIA).

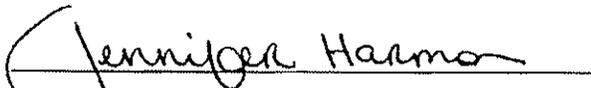
BE IT FURTHER RESOLVED that the actions of the Riverside County Transportation Commission are fully compliant with state legislation which authorizes tolling on SR-91 and the utilization of design-build contracting, including Senate Bill 1316, which was approved in 2008 and SBX2 4 which was approved in 2009.

APPROVED AND ADOPTED this 9th day of December, 2009.



Robert E. Magee, Chair
Riverside County Transportation Commission

ATTEST:



Jennifer Harmon, Clerk of the Board
Riverside County Transportation Commission

Attachment 2.

**Letter from Caltrans Approving State Highway Project
Implementation**

January 1, 2010

DEPARTMENT OF TRANSPORTATION

OFFICE OF THE DISTRICT DIRECTOR
464 WEST FOURTH STREET, MS 1201
SAN BERNARDINO, CA 92401-1400
PHONE (909) 383-4055
FAX (909) 383-6239
TTY 711



*Flex your power!
Be energy efficient!*

December 15, 2009

Bimla Rhinehart
Executive Director
California Transportation Commission
1120 N Street, MS-52
Sacramento, Ca 925814

08-RIV-91 PM R0.00/R13.04
08-RIV-15 PM35.64/45.14
12-ORA-91-PM14.43/18.91
EA 0F540
Corridor Improvements

Dear Ms. Rhinehart:

The California Department of Transportation (Department) supports Design-Build as an innovative way to deliver transportation projects to reduce costs, and expedite delivery that may some times be not achievable by traditional methods.

Riverside County Transportation Commission (RCTC) proposes to increase the capacity of the severely congested State Route 91 (SR-91) corridor by adding general purpose lanes, auxiliary lanes, collector-distributor roads, interchange improvements and extend the existing Orange County Transportation Authority (OCTA) SR-91 Express Lanes to the east by approximately eight miles to just beyond Interstate 15 (I-15) in Riverside County. The Project also includes improvements to I-15 between the Cajalco Road and Hidden Valley interchanges and construct direct connectors to and from SR-91 to I-15 that would connect with potential future Express Lanes on I-15.

Extensive traffic micro-simulation modeling performed for this project has indicated that it will significantly improve traffic flow on this extremely congested urban corridor. RCTC has obtained legislative authority for this project, and the Department, RCTC and the Federal Highway Administration (FHWA) have entered into a three-way Agreement authorizing collecting tolls for one or more lanes of the reconstructed facility under section 129(a) (1)(D) of Title 23, United States Code as amended. The Department is currently working closely with RCTC in developing a Design-Build Cooperative Agreement, and a Toll Facilities Agreement that will describe the roles and responsibilities for Maintenance and Operations of the toll lanes.

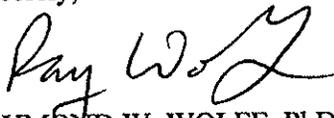
Ms. Bimla Rhinehart
December 15, 2009
Page 2

It is our understanding that RCTC will be submitting a Design-Build application to the California Transportation Commission (CTC) under Design-Build Demonstration Program authorized by the Legislature under Senate Bill 4.

The Department has been working closely with RCTC on this project and strongly supports its application for Design-Build authorization. Using this method of project delivery is expected to help the project meet its opening date of 2016 and reduce cost. As required by the CTC Design-Build Demonstration Program Guidelines, the Department has approved RCTC's request to service as the Implementing Agency for this project (copy attached).

If you have any questions or need additional information, please contact me at (909) 383-4055 or Syed Raza, Deputy District Director, Traffic Operations at (909) 383-5979.

Sincerely,



RAYMOND W. WOLFE, PhD.
District Director

cc:Randell Iwasaki, Director, California Department of Transportation
Anne Mayer, Executive Director, Riverside County Transportation Commission
SRaza

DEPARTMENT OF TRANSPORTATION

DISTRICT 8
DISTRICT DIRECTOR (MS 1201)
464 WEST FOURTH STREET, 6TH FLOOR
SAN BERNARDINO, CA 92401-1400
PHONE (909) 383-4055
FAX (909) 383-6239
TTY (909) 383-6300



*Flex your power!
Be energy efficient!*

December 14, 2009

Anne Mayer
Executive Director
Riverside County Transportation Commission
4080 Lemon Street, 3rd Floor
Riverside, CA 92502-2208

08-RIV-91 PM R0.00/R13.04
08-RIV-15 PM35.64/45.14
12-ORA-91-PM14.43/18.91
Corridor Improvements

Dear Mrs. Mayer:

This is in response to your letter requesting approval of Riverside County Transportation Commission (RCTC) to serve as the implementing agency for State Route 91 Corridor Improvement Project.

The California Department of Transportation, after carefully reviewing your request, approves RCTC's request to serve as the implementing agency for this project.

If you have any further questions or need additional information, please do not hesitate to call me at (909) 383-4055, or Syed Raza, Deputy District Director, Traffic Operations at (909) 383-5977.

Sincerely,

A handwritten signature in black ink that reads "Ray Wolfe".

RAYMOND W. WOLFE, Ph.D
District Director

- c: Basem Muallem, Deputy District Director, Program Project Management
- Christy Connors, Deputy District Director, Design
- Syed Raza, Deputy District Director, Traffic Operations
- Michael Blomquist, Riverside County Transportation Commission

Attachment 3.

Project Delivery Selection Questionnaire

DESIGN-BUILD PROJECT SELECTION TOOL

The following is a tool that the Department of Transportation is developing to assist in determining the appropriate delivery method for projects. The Department is testing this tool on projects on the State Highway System that have been nominated for the Design-Build Demonstration Program authorized by Senate Bill (X2) 4. Please provide a response to each question below.

EVALUATION OF PROJECT SCOPE AND CHARACTERISTICS		
QUESTION No.	QUESTION	Rating (A, B or C)
1a)	Where is the project in the project development process? A. Detailed or final engineering stage B. Preliminary design C. Conceptual engineering stage	B
1b)	What is the size/complexity of the project? A. Relatively simple, smaller project with no need for specialized outside expertise B. Medium size project with more technically complex components and schedule complexity C. Large, complex project with significant schedule complexity (e.g. multiple phases, extensive third-party issues, specialized expertise needed)	C
1c)	Does the project involve significant impacts to highway users and local businesses/community during construction? A. No more than typical B. More than typical C. Much more than typical	C
1d)	Does the project present right-of-way limitations that would benefit from a contractor's assistance? A. No more than typical B. More than typical C. Much more than typical	C
1e)	Does the project present environmental permitting issues that would benefit from a contractor's assistance? A. No more than typical B. More than typical C. Much more than typical	B
1f)	Does the project present utility or third-party issues that would benefit from a contractor's assistance? A. No more than typical B. More than typical C. Much more than typical	C
1g)	Does the project present unique work restrictions or traffic maintenance requirements that would benefit from a contractor's assistance? A. No more than typical B. More than typical C. Much more than typical	C
1h)	Would the project benefit by packaging features of work to allow early lock-in of construction materials/labor pricing? A. No more than typical B. More than typical C. Much more than typical	C
1i)	Would the project benefit by raising quality standards/benchmarks to minimize maintenance and achieve lower life-cycle cost? A. No more than typical B. More than typical C. Much more than typical	C

EVALUATION OF SUCCESS CRITERIA		
QUESTION No.	QUESTION	Rating (A, B or C)
2a) Schedule Issues		
1	Can time savings be realized through concurrent design and construction activities (fast-tracking)? A. No more than typical B. More than typical C. Much more than typical	C
2	Can the schedule be compressed? A. No more than typical B. More than typical C. Much more than typical	C
2b) Opportunity for Innovation		
1	Will the project scope allow for innovation (e.g., alternate designs, traffic management, construction means and methods, etc.)? A. No more than typical B. More than typical C. Much more than typical	C
2	Must the project scope be primarily defined in terms of prescriptive specifications (i.e., predetermined materials and methods), or can performance specifications (expressing desired end results) be used, or a combination of both? A. Primarily prescriptive specifications B. Combination of prescriptive and performance specifications C. Performance specifications for significant elements	B
2c) Quality Enhancement		
1	Will there be opportunities for contractors to provide materials or methods that provide greater value than normally specified by the state on similar projects? A. No more than typical B. More than typical C. Much more than typical	C
2	Will there be the opportunity for realization of greater value due to designs tailored to contractor's area of expertise? A. No more than typical B. More than typical C. Much more than typical	C
3	Will warranties or maintenance agreements be used? A. No B. Limited to short-term workmanship and materials C. Much more than typical	C

EVALUATION OF SUCCESS CRITERIA (Continued)		
QUESTION No.	QUESTION	Rating (A, B or C)
2d) Cost Issues		
1	Will there be opportunities for contractors to provide designs with lower initial construction costs than those typically specified by the state? A. No more than typical B. More than typical C. Much more than typical	C
2	Will there be opportunities for contractors to provide alternate design concepts with lower lifecycle costs than those typically specified by the state? A. No more than typical B. More than typical C. Much more than typical	C
3	Is funding for the project committed and available? A. Secured for design phase only or cannot support accelerated construction B. Funding can accommodate fast-tracking to some extent C. Funding will accommodate compressed schedule/fast-tracking	C
4	Will the cost of procurement affect the number of bidders? A. Procurement cost would significantly limit competition B. Procurement cost could affect the number of bidders C. Procurement cost would not be a significant issue given the size or complexity of the project	B
5	Will project budget control benefit from the use of formal contingencies? A. No benefit B. A formal contingency may permit the Transportation Entity to add project scope or enhance quality within the constraints of its published budget C. A formal contingency is required to allow the Transportation Entity to maximize project scope and quality within the constraints of its published budget	C
2e) Staffing Issues		
1	Does the Transportation Entity have the expertise and resources necessary for a complicated procurement process? A. Inadequate resources or expertise B. Limited resources or expertise C. Adequate resources and expertise	C
2	Are resources available to complete the design? A. Resources are available to complete design B. Resources are available for partial design C. Specialized expertise, not available in-house, is required	B
3	Are resources available to provide construction oversight? A. Resources are available B. Full-time construction oversight could strain staff resources C. Resources are unavailable	A

Please provide name and telephone number of person most familiar with the responses to this questionnaire for potential follow-up questions:

Michael Blomquist _____
 Name

(951) 778-1098 _____
 Telephone Number

Attachment 4.

August 18, 2009, Tolling Agreement

January 1, 2010

AGREEMENT
By and among
FEDERAL HIGHWAY ADMINISTRATION
UNITED STATES DEPARTMENT OF TRANSPORTATION,

CALIFORNIA DEPARTMENT OF TRANSPORTATION

AND

RIVERSIDE COUNTY TRANSPORTATION COMMISSION

THIS AGREEMENT ("Agreement"), made and entered into this 18th day of August 2009, by and between the CALIFORNIA DEPARTMENT OF TRANSPORTATION, an agency of the State of California, (hereinafter referred to as "Caltrans"), the RIVERSIDE COUNTY TRANSPORTATION COMMISSION, (hereinafter referred to as "RCTC") and the FEDERAL HIGHWAY ADMINISTRATION, UNITED STATES DEPARTMENT OF TRANSPORTATION, (hereinafter referred to as "FHWA"):

WITNESSETH:

WHEREAS, RCTC desires to reconstruct a highway designated as "State Route 91" and located in Riverside County, California, along with approaches, onramps, offramps and direct connectors to State Route 91, which currently operates as a free facility and, following such reconstruction, have one or more of the lanes on the reconstructed facility, approaches, onramps, offramps and direct connectors be a toll facility (hereinafter referred to as the "toll facility"); and

WHEREAS, Caltrans as the state department of transportation, currently provides oversight and maintenance in connection with State Route 91 and will provide certain oversight during the reconstruction of the toll facility; and

WHEREAS, Section 129(a)(1)(D) of Title 23, United States Code, as amended, permits Federal participation in the reconstruction of a toll free highway (other than a highway on the Interstate System) and conversion of that highway into a toll facility; and

WHEREAS, RCTC, Caltrans and FHWA have agreed to be bound by and to comply with provisions of Section 129(a) of Title 23, United States Code, as amended, for the toll facility; and

WHEREAS, Paragraph 3 of Section 129(a) of Title 23, United States Code, as amended, restricts the use of revenues:

“(3) Limitation on Use of Revenues . . . all toll revenues received from operation of the toll facility will be used first for debt service, for reasonable return on investment of any private person financing the project, and for the costs necessary for the proper operation and maintenance of the toll facility, including reconstruction, resurfacing, restoration, and rehabilitation. If the State certifies annually that the tolled facility is being adequately maintained, the State may use any toll revenues in excess of amounts required under the preceding sentence for any purpose for which Federal funds may be obligated by a State under this title[;]”

NOW THEREFORE, RCTC, Caltrans and FHWA hereby agree as follows:

1. RCTC and Caltrans agree that the toll revenues from the operation of the toll facility will be used first for debt service, for reasonable return on investment of any private person financing the project, and for the costs necessary for the proper operation and maintenance of the toll facility, including reconstruction, resurfacing, restoration, and rehabilitation, as provided in paragraph 3 of Section 129(a) of Title 23, United States Code, as amended.

2. In accordance with Section 129(a) of Title 23, United States Code, as amended, RCTC and Caltrans hereby certify that they can and will comply with the following requirements provided in paragraph 3 of Section 129(a), Title 23, United States Code, as amended:

RCTC agrees to provide Caltrans with sufficient information that the toll facility is being adequately maintained and, based on that information, Caltrans shall confirm and then annually certify that the toll facility is being adequately maintained. Upon such certification(s), RCTC is entitled to use any toll revenues in excess of amounts required under paragraph 3 of Section 129(a), as amended, for any purpose for which Federal funds may be obligated by a State under Title 23, United States Code.

3. RCTC agrees, upon reasonable notice, to make all its records pertaining to the toll facility subject to audit by FHWA and Caltrans. RCTC agrees to annually audit these records for compliance with the provisions of this agreement and report the results thereof to FHWA and Caltrans. In lieu of RCTC performing said audit, a report of an independent auditor furnished to FHWA, Caltrans and RCTC may satisfy the requirements of this section.

4. Authorization for tolling under this Agreement shall be contingent upon the completion of any required review under the National Environmental Policy Act (NEPA) review process.

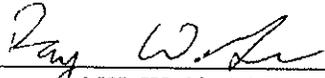
5. This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns.

6. This Agreement shall be prepared in triplicate originals so that each signatory will have an original Agreement.

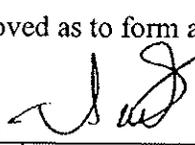
IN WITNESS THEREOF, the parties hereto have caused this instrument to be duly executed, the day and year first written above.

CALIFORNIA DEPARTMENT OF TRANSPORTATION

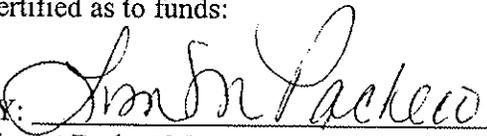
3s Will Kempton
Director

BY: 
Name: Raymond W. Wolfe, PhD
Title: District Director

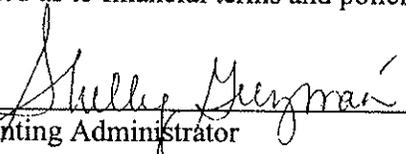
Approved as to form and procedure:

BY: 
Name: Fodd Van Santen
Title: Attorney

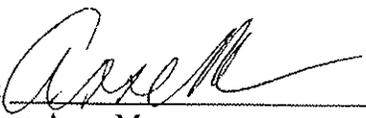
Certified as to funds:

BY: 
District Budget Manager

Certified as to financial terms and policies:

BY: 
Accounting Administrator

RIVERSIDE COUNTY TRANSPORTATION COMMISSION

BY: 
Name: Anne Mayer
Title: Executive Director

FEDERAL HIGHWAY ADMINISTRATION
UNITED STATES DEPARTMENT OF TRANSPORTATION

BY: 
Name: King W. Gee
Title: Associate Administrator for Infrastructure

Attachment 5.

**October 22, 2009, Project Programming Request; SCAG 2010
Federal TIP Project Sheet; and December 2009 STIP Amendment**

Riverside County Transportation Commission

October 22, 2009

Mr. Basem Muallem
Deputy District Director
Program Project Management
Caltrans District 8
464 W. Fourth Street, 6th Floor
San Bernardino, CA 92401-1400

Dear Mr. Muallem:

Riverside County Transportation Commission (Commission) requests that the California Transportation Commission (CTC) amend the State Transportation Improvement Program (STIP) to reprogram \$2 million in Regional Improvement Program (RIP) funds from the SR-91/SR-71 interchange and connectors project to the SR-91 corridor improvement project, which is a new STIP project. The proposed amendment is a swap of funds and will not impact the total STIP-RIP programming in Riverside County. The details are contained in the attached project programming request forms and are described below.

SR-91/SR-71 Interchange and Connectors (PPNO 007G/EA 0F541)

The proposed amendment will replace \$2 million in STIP-RIP funding programmed in FY 2010/11 for plans, specifications, and estimates with \$2 million in federal TEA-21 demonstration funding designated for improvements to SR-71. The proposed change will allow for use of federal funds that are designated for projects in the SR-71 corridor and do not have the flexibility to be used elsewhere. The proposed change does not affect the ability to implement this project.

SR-91 Corridor Improvement Project (EA 0F540)

The Commission will submit the SR-91 corridor improvement project to the CTC in January 2010 for consideration for the Design-Build Demonstration Program. The SR-91 corridor improvement project is not currently programmed in a state-funded program; therefore, the Commission proposes to reprogram STIP-RIP funds from the SR-91/SR-71 interchange and connectors project to this new STIP project to ensure eligibility for the Design-Build Demonstration Program. The proposed amendment will program the \$2 million STIP-RIP funds in FY 2011/12 for the design-build contract.

Please contact Shirley Medina, Programming and Planning Manager, at (951) 787-7141 if you have questions concerning this request.

Sincerely,



Anne Mayer
Executive Director

cc: Patrick Hally, District Local Assistance Engineer

PROJECT PROGRAMMING REQUEST

DTP-0001 (REV. 8/09)

General Instructions

<input type="checkbox"/> New Project	<input checked="" type="checkbox"/> Amendment (Existing Project)	Date:	10/26/09
Caltrans District	EA	PPNO	MPO ID
8	0F541	0077G	RIV070308
TCRP No.			
County	Route/Corridor	Project Sponsor/Lead Agency	MPO
RIV	91	Riverside County Trans Commission (RC	SCAG
Element	CO		
Project Title			
Route 91/71 Interchange and Connectors			
PM Bk	PM Ahd	Project Mgr/Contact	Phone
R0.4	R3.7	Khalid Bazmi	(951) 787-7141
E-mail Address			
kbazmi@rtc.org			
Location, Project Limits, Description, Scope of Work, Legislative Description			
Reconstruct Rte 91 to northbound Rte 71 loop connector w/a direct fly-over connector, construct a collector/distributor system in the eastbound direction between the Green River Road and Serfas Club Drive			
Component	Implementing Agency		Reimbursements
PA&ED	Riverside County Trans Commission (RCTC)		
PS&E	Riverside County Trans Commission (RCTC)		
Right of Way	Riverside County Trans Commission (RCTC)		
Construction			
Legislative Districts			
Assembly:	64, 66	Senate:	36
Congressional:	44		
Purpose and Need			
The purpose of the proposed project are as follows: (1) To improve the operational efficiency of the eastbound State Route 91 to northbound State Route 71 connector; (2) Minimize additional congestion and delay in the eastbound direction of SR 91 between Green River Road and the SR 91/SR 71 interchange; and (3) Improve access and reduce congestion associated with weaving from Green River Road to eastbound SR 91. The need of the project is related to the inability of the existing eastbound SR 91 to northbound SR 71 connector to handle the increased traffic volumes that are expected on SR 91 between the present year and the year 2035.			
Project Benefits			
The proposed project is anticipated to provide freeway operational benefits along SR 91 and SR 71 by providing a two-lane connector from SR 91 eastbound to SR 71 northbound. Upon construction of the project, the two lane connector is expected to carry 2,080 vehicles in the evening peak hour- a volume that would exceed the capacity of the existing loop ramp and result in a backup on the SR 91 eastbound mainline.			
Project Milestone		Existing	Proposed
Project Study Report Approved			12/20/06
Begin Environmental (PA&ED) Phase			10/10/07
Circulate Draft Environmental Document	Document Type	ND/CE	04/30/10
Draft Project Report			04/30/10
End Environmental Phase (PA&ED Milestone)			08/30/10
Begin Design (PS&E) Phase			09/01/10
End Design Phase (Ready to List for Advertisement Milestone)			12/01/12
Begin Right of Way Phase			09/01/10
End Right of Way Phase (Right of Way Certification Milestone)			12/01/12
Begin Construction Phase (Contract Award Milestone)			07/01/13
End Construction Phase (Construction Contract Acceptance Milestone)			12/31/16
Begin Closeout Phase			01/01/17
End Closeout Phase (Closeout Report)			03/01/17

ADA Notice

For individuals with sensory disabilities, this document is available in alternate formats. For information call (916) 654-6410 or TDD (916) 654-3880 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814

PROJECT PROGRAMMING REQUEST

DTP-0001 (REV 8/09)

Date: 10/26/09

County	CT District	PPNO	TCRP Project No.	EA
RIV	B	0077G		0F541
Project Title: Route 91/71 Interchange and Connectors				

Existing Total Project Cost									Implementing Agency
Component	Prior	08/09	09/10	10/11	11/12	12/13	13/14+	Total	
E&P (PA&ED)	5,273							5,273	Riverside County Trans
PS&E				6,127				6,127	Riverside County Trans
RAW SUP (CT)									
CON SUP (CT)									
RAW				485			3,330	3,815	Riverside County Trans
CON						106,760		106,760	
TOTAL	5,273			6,612			110,090	121,975	

Proposed Total Project Cost									Implementing Agency
Component	Prior	08/09	09/10	10/11	11/12	12/13	13/14+	Total	
E&P (PA&ED)	5,273							5,273	
PS&E				6,127				6,127	
RAW SUP (CT)									
CON SUP (CT)									
RAW				485		3,330		3,815	
CON						106,760		106,760	
TOTAL	5,273			6,612		110,090		121,975	

Fund No. 1:	RIP - State Cash (ST-CASH)								Program Code
Existing Funding									20,XX,075,800
Component	Prior	08/09	09/10	10/11	11/12	12/13	13/14+	Total	Funding Agency
E&P (PA&ED)	5,273							5,273	Riverside County Trans Commissio
PS&E				6,127				6,127	\$5273 PA&ED voted 09/06/07
RAW SUP (CT)									
CON SUP (CT)									
RAW				485				485	
CON						106,760		106,760	
TOTAL	5,273			6,612				11,685	

Proposed Funding									Notes
Component	Prior	08/09	09/10	10/11	11/12	12/13	13/14+	Total	
E&P (PA&ED)	5,273							5,273	Move \$2M to new STIP project - EA 0F540 (SR-91 CIP)
PS&E				4,127				4,127	
RAW SUP (CT)									
CON SUP (CT)									
RAW				485				485	
CON						106,760		106,760	
TOTAL	5,273			4,612				9,885	

Fund No. 2:	Future Need - Future Funds (NO-FUND)								Program Code
Existing Funding									FUTURE
Component	Prior	08/09	09/10	10/11	11/12	12/13	13/14+	Total	Funding Agency
E&P (PA&ED)									
PS&E									
RAW SUP (CT)									
CON SUP (CT)									
RAW							3,330	3,330	
CON						106,760		106,760	
TOTAL							110,090	110,090	

Proposed Funding									Notes
Component	Prior	08/09	09/10	10/11	11/12	12/13	13/14+	Total	
E&P (PA&ED)									Funding adjusted to fit current schedule
PS&E									
RAW SUP (CT)									
CON SUP (CT)									
RAW						3,330		3,330	
CON						106,760		106,760	
TOTAL						110,090		110,090	

PROJECT PROGRAMMING REQUEST

DTP-0001 (REV. 8/09)

Date: 10/26/09

County	CT District	PPNO	TCRP Project No.	EA
RIV	8	0077G		0F541
Project Title: Route 91/71 Interchange and Connectors				

Fund No. 3:									Program Code
Existing Funding									
Component	Prior	08/09	09/10	10/11	11/12	12/13	13/14+	Total	Funding Agency
E&P (PA&ED)									
PS&E									
RAW SUP (CT)									
CON SUP (CT)									
RAW									
CON									
TOTAL									
Proposed Funding									Notes
E&P (PA&ED)									Federal TEA-21 Demo funds to replace STIP-RIP
PS&E				2,000				2,000	
RAW SUP (CT)									
CON SUP (CT)									
RAW									
CON									
TOTAL				2,000				2,000	

Fund No. 4:									Program Code
Existing Funding									
Component	Prior	08/09	09/10	10/11	11/12	12/13	13/14+	Total	Funding Agency
E&P (PA&ED)									
PS&E									
RAW SUP (CT)									
CON SUP (CT)									
RAW									
CON									
TOTAL									
Proposed Funding									Notes
E&P (PA&ED)									
PS&E									
RAW SUP (CT)									
CON SUP (CT)									
RAW									
CON									
TOTAL									

Fund No. 5:									Program Code
Existing Funding									
Component	Prior	08/09	09/10	10/11	11/12	12/13	13/14+	Total	Funding Agency
E&P (PA&ED)									
PS&E									
RAW SUP (CT)									
CON SUP (CT)									
RAW									
CON									
TOTAL									
Proposed Funding									Notes
E&P (PA&ED)									
PS&E									
RAW SUP (CT)									
CON SUP (CT)									
RAW									
CON									
TOTAL									

Complete this page for amendments only

Date: 10/22/09

District	Co	Route	EA	PPNO	TCRP No.
8	RIV	91	0F541	0077G	

SECTION 1 - All Projects

Project Background

Preparation of the Project Report and Environmental Document is underway. This project is being coordinated with the ongoing SR-91 Corridor Improvement Project which is also in the PA&ED stage.

Programming Change Requested

RCTC is requesting the \$2M of STIP-RIP funds be removed from the final design phase and replaced with federal TEA-21 demonstration funds that are available for this project.

Reason for Proposed Change

The proposed change will allow for use of federal funds that are designated for projects in the SR-71 corridor that do not have the flexibility to be used elsewhere. In addition, the unprogrammed STIP funds will be used to ensure eligibility for the SR-91 Capital Improvement Project that RCTC will be submitting to the CTC in January 2010 for consideration for the Design Build Demonstration Program.

If proposed change will delay one or more components, clearly explain 1) reason the delay, 2) cost increase related to the delay, and 3) how cost increase will be funded

The proposed change will not affect the project schedule.

Other Significant Information

SECTION 2 - For TCRP Projects Only

- Alternative Project Request (Please follow instructions at <http://www.dot.ca.gov/tcrp/LETTERguidelines>)
 Letter of No Prejudice (LONP) (Please follow Guidelines at <http://www.dot.ca.gov/tcrp/docs/042706.pdf>)

SECTION 3 - All Projects

Approvals

I hereby certify that the above information is complete and accurate and all approvals have been obtained for the processing of this amendment request.*

Name (Print or Type)	Signature	Title	Date
Andrea Zureick	<i>Andrea Zureick</i>	Sr. Staff Analyst	10-22-09

Attachments

- 1) Concurrence from Implementing Agency and/or Regional Transportation Planning Agency
- 2) Project Location Map

PROJECT PROGRAMMING REQUEST

DTP-0001 (REV. 3/08)

General Instructions

<input checked="" type="checkbox"/> New Project		<input type="checkbox"/> Amendment (Existing Project)		Date:	10/21/09
Caltrans District	EA	PPNO	MPO ID	TCRP No.	
08	0F540		RIV071250		
County	Route/Corridor	Project Sponsor/Lead Agency	MPO	Element	
RIV	91	Riverside County Transportation Commis	SCAG	CO	
Project Title					
SR-91 Corridor Improvement Project					
PM Bk	PM Ahd	Project Mgr/Contact	Phone	E-mail Address	
0	13.04	Khalid Bazmi	951-787-7141	kbazmi@rctc.org	
Location, Project Limits, Description, Scope of Work, Legislative Description					
On SR-91(OC PM 14.43 to 18.91/Riv Co PM 0.00 to 13.04): Construct 1 Mixed flow lane, ea dir, from SR 241 to Pierce St, Construct Collector Distributor System from Lincoln to I-15, Construct 1 HOT lane/convert 1 existing HOV lane to HOT lane ea dir from OC Line to I-15. Construct a HOT median direct connector at JCT SR 91/I-15, On I-15 (PM 35.64 to 45.14) Construct 1 HOT lane in each direction.					
Component	Implementing Agency		AB 3090	Letter of No Prejudice	
PA&ED	RCTC		<input type="checkbox"/>	<input type="checkbox"/>	
PS&E	RCTC		<input type="checkbox"/>	<input type="checkbox"/>	
Right of Way	RCTC		<input type="checkbox"/>	<input type="checkbox"/>	
Construction	RCTC		<input type="checkbox"/>	<input type="checkbox"/>	
Legislative Districts					
Assembly: 64,66			Senate: 36		
Congressional: 44					
Purpose and Need					
The purpose of the project is to reduce congestion and improve mobility within the project segments of SR-91, between SR-241 and Pierce St., and I-15, between Cajalco Rd. and the Hidden Valley Parkway. Current average daily traffic on SR-91 is approximately 280,000 vehicles at the Orange/Riverside County line with recurring congestion experienced on a daily basis during weekday peak periods and frequently on weekends. Anticipated continued growth in commuter traffic and goods movement along the corridor indicates a projected traffic growth of 50% to 70% by the year 2035. The proposed Build Alternatives would implement a combination of general purpose lanes or general purpose with tolled express lanes and other operational improvements to alleviate the congestion that exists now and is projected for the future.					
Project Benefits					
The proposed project will accomplish the following; Improve travel times on SR-91 and I-15, provide direct connections between I-15 and high occupancy vehicle/express toll lane facilities on SR-91, reduce air pollution emissions associated with idling/slow moving vehicles, provide improvements at local SR-91 interchanges to improve access to SR-91, accommodate the STAA National Network for trucks, and improve safety by upgrading standards and reducing congestion and congestion related accidents along the project limits.					
Project Milestone					Date
Project Study Report Approved					12/04/06
Begin Environmental (PA&ED) Phase					09/04/07
Circulate Draft Environmental Document			Document Type	EIR/FONSI	07/30/10
Draft Project Report					06/30/10
End Environmental Phase (PA&ED Milestone)					08/31/11
Begin Design (PS&E) Phase					10/30/11
End Design Phase (Ready to List for Advertisement Milestone)					07/06/16
Begin Right of Way Phase					10/30/11
End Right of Way Phase (Right of Way Certification Milestone)					10/30/14
Begin Construction Phase (Contract Award Milestone)					10/30/11
End Construction Phase (Construction Contract Acceptance Milestone)					07/06/16
Begin Closeout Phase					07/07/16
End Closeout Phase (Closeout Report)					07/07/17

ADA Notice

For individuals with sensory disabilities, this document is available in alternate formats. For information call (916) 654-6410 or TDD (916) 654-3880 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION
PROJECT PROGRAMMING REQUEST
 DTP-0001 (REV. 3/08)

Date: 10/21/09

County	CT District	PPNO	TCRP Project No.	EA
RIV	08			0F540
Project Title: SR-91 Corridor Improvement Project				

Existing Total Project Cost									Implementing Agency
Component	Prior	08/09	09/10	10/11	11/12	12/13	13/14+	Total	
E&P (PA&ED)									
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL									
Proposed Total Project Cost									Riverside County Trans Commissio
E&P (PA&ED)	32,000							32,000	
PS&E					98,052			98,052	
R/W SUP (CT)									
CON SUP (CT)									
R/W					70,000	8,031		78,031	
CON					1,092,434			1,092,434	
TOTAL	32,000				1,260,486	8,031		1,300,517	

Fund No. 1:	RIP - State Cash (ST-CASH)								Program Code
Existing Funding									20.XX:075.600
Component	Prior	08/09	09/10	10/11	11/12	12/13	13/14+	Total	Funding Agency
E&P (PA&ED)									Riverside County Trans Commissio
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL									
Proposed Funding									Notes
E&P (PA&ED)									This amendment moves \$2M STIP-RIP from PPNO 08-0077G (SR91/71 IC) to this project for the Design Build contract in FY 11/12
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON					2,000			2,000	
TOTAL					2,000			2,000	

Fund No. 2:	Loc Funds - Local Measure (MEA)								Program Code
Existing Funding									Local Funds
Component	Prior	08/09	09/10	10/11	11/12	12/13	13/14+	Total	Funding Agency
E&P (PA&ED)									Riverside County Trans Commissio
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL									
Proposed Funding									Notes
E&P (PA&ED)	32,000							32,000	
PS&E					98,052			98,052	
R/W SUP (CT)									
CON SUP (CT)									
R/W					70,000	8,031		78,031	
CON					1,090,434			1,090,434	
TOTAL	32,000				1,258,486	8,031		1,298,517	

Project ID	RIV071250	County	Riverside	Amendment	0	
Agency	RIVERSIDE COUNTY TRANS COMMISSION (RCTC)					
System	S	Route	91	Last Update	11/24/2009 10:08:59 PM	
PM Begin		Conform Cat.	NON-EXEMPT	Updated by	Andrea	
PM End	13.04	Air Basin	SCAB			
Phase	Environmental Document/Pre-design Phase (PA&ED)					
Program Code:	CAX62	HIGHWAY/ROAD IMP-LANE ADD'S W/ HOV LN: RS			CTIPS ID	20940003645
Second				Model No.		
Third				Env. Doc. Type	EIS	
Scheduled	Starting	Ending	Completion Date	Env. Doc. Date	8/31/2011	
PAED	9/4/2007	8/31/2011	7/6/2016			
PS&E(ENG)	10/30/2011	7/6/2016	Conformity Category	Year Added		
ROW	10/30/2011	10/30/2014	NON-EXEMPT			
CON	10/30/2011	7/6/2016	Current Project Status			
Actual Dates:	Starting	Ending	Draft (as of)			
PAED						
PS&E(ENG)				Project Total Cost	1,300,517	
ROW						
CON						
Change Reasons:	C/O 2008	UZAs:		PPNOs		
Sub Regions:				Sub Areas		
Fed Demo IDs						

Project Description:

ON SR91/I15, SR91 - CONST I MF LN & I AUX LN EA DIR AT VAR LOCS (SR24)- PIERCE ST) (OC PM 14.43-18.91), CD SYSTEM (2 & 3 LNS FROM LINCOLN-I15), I HOT LN & CONVERT HOV LN TO HOT LN EA DIR (OC TO I15), I15 - CONST HOT MED DIRECT CONNECTOR JCT SR91/I15 FROM NB I15 TO WB SR91/EB SR91 TO SB I15/SB I15 TO WB SR91/EB SR91 TO NB I15, I HOT LN EA DIR HIDDEN VALLEY PKWY TO CAJALCO RD (I15 PM 35.64-45.14)

FUNDING

Fund Type	Fiscal Year	ENG	ROW	CON	Fund Total
AGENCY	2007/2008	32,000			32,000
	2009/2010		78,031		78,031
	2010/2011	98,052			98,052
	2012/2013			1,092,434	1,092,434
Subtotal		130,052	78,031	1,092,434	1,300,517
Total		130,052	78,031	1,092,434	1,300,517

Comments

Amendment 08A01 - Sept 08: Changed scope and cost.
2011 FTIP A0: Carried over from 2008 RTIP with minor changes.

funding
general

Complete Description:
On SR91 (OC PM Limits 14.43 to 18.91 and Riv Co PM Limits 0.00 to 13.04):
Construct 1 Mixed Flow Lane in Each Direction from SR241 to Pierce St in the City of Riverside. Construct 1 Auxiliary Lane in Each Direction at Various Locations Where Feasible from SR241 to Pierce St, Construct a Collector Distributor System (2 & 3 Lanes) in Each Direction from Lincoln St to I-15, Construct 1 HOT Lane and Convert 1 Existing HOV Lane to a HOT Lane in Each Direction from the Orange County Line to I-15
On I-15 (PM Limits 35.64 to 45.14)
Construct a HOT Median Direct Connector at Jct SR91/I-15 from Northbound I-15 to Westbound SR91, from Eastbound SR91 to SB I-15, from Southbound I-15 to Westbound SR-91, and from Eastbound SR-91 to Northbound I-15, Construct 1 HOT Lane in Each Direction from Hidden Valley Parkway south to Cajalco Rd (EA: 0F540K)
Project crosses multiple mainline facilities and combines multiple RTP project references, but will clear environmental doc as one project and is being programmed in the RTIP as one project. Project construction will be phased over multiple years.
RTP ID References: 3M04MA10 = SR91MF lanes + 3M04MA11 = SR91 CD system + 3HL0401 = SR91 HOT Lanes + 3HL0402 = I-15 HOV/HOT Lanes

main
Modeling
CTC

Project modeling based on Alternative 2 (HOT Lanes Alternative):
EXISTING CONDITIONS:
SR91: 3 & 4 MF Lanes in each direction from SR241 in OC to e/o I-15 + 1 and 2 HOV/HOT lanes
I-15: 3 MF lanes in each direction
IMPROVEMENTS:
SR91: Add 1 mixed flow lane in each direction from SR241 to Pierce St
SR91: Add aux lanes in each direction between each IC where feasible not proceeding through ICs from SR241 to Pierce St., Eastbound Aux lane in OC portion are being completed by OCTA.
SR91: Add Collector Distributor lane system in each direction (2 and 3 lanes) between Lincoln Ave and I-15
SR91: Construct 1 HOT lane and convert 1 HOV lane to a HOT lane in each direction from the OC line to I-15
I-15: Construct 2 lane HOT Median Direct Connector at SR91/I-15 Jct (NB I-15 to WB SR91 and EB SR91 to SB I-15 and SB I-15 to WB SR-91 and EB SR-91 to NB I-15)
I-15: Construct 1 HOV/HOT lane in each direction from Hidden Valley Parkway south to Cajalco Rd

Modeling
Modeler
Modeling
SCAG
Status

tcm Non TCM. Construction years are outside 1st two years of 2008 RTIP

Memorandum

To: CHAIR AND COMMISSIONERS

CTC Meeting: December 9-10, 2009

Reference No.: 2.1b.(1)
Information Item

From: NORMA ORTEGA
Chief Financial Officer (Interim)

Prepared by: Rachel Falsetti
Division Chief
Transportation Programming

Subject: STIP AMENDMENT 08S-058

SUMMARY:

The Riverside County Transportation Commission (RCTC) proposes to amend the 2008 State Transportation Improvement Program (STIP) to reprogram \$2,000,000 Regional Improvement Program (RIP) funds from the State Route (SR)-91/SR-71 Interchange and Connectors project (PPNO 0077G) to a new SR-91 Corridor Improvement project (PPNO 0077J) in Riverside County.

The California Department of Transportation (Department) will request that the California Transportation Commission (Commission) approve this STIP amendment at the next scheduled Commission meeting following the notice period.

BACKGROUND:

SR-91/SR-71 Interchange and Connectors project (PPNO 0077G)

This project will provide operational benefits along SR-91 and SR-71 by constructing a direct two lane connector from eastbound SR-91 to northbound SR-71 and a collector/distributor system in the eastbound direction, between Green River Road and Serfas Club Drive.

SR-91 Corridor Improvement project (PPNO 0077J)

This project will reduce congestion and improve mobility within the corridor limits by constructing:

- One mixed-flow lane, in each direction, from SR-241 to Pierce Street.
- A collector/distributor system from Lincoln Avenue to Interstate (I)-15.
- One high occupancy toll (HOT) lane and/or converting one existing high occupancy vehicle (HOV) lane, in each direction, from the County Line to I-15.
- A HOT median direct connector at the SR-91/I-15 interchange.

RCTC is planning to submit the SR-91 Corridor Improvement project (PPNO 0077J) to the Commission for consideration for the Design-Build Program. This project is currently not programmed in any state-funded program, a key eligibility requirement for the Design-Build Program. RCTC, therefore, is proposing to reprogram \$2,000,000 RIP funds from the SR-91/SR-71 Interchange and Connectors project (PPNO 0077G) to the SR-91 Corridor Improvement project (PPNO 0077J). These RIP funds will be backfilled with the Federal Demonstration funds.

This amendment proposes to add programming as described above and illustrated in the following tables:

REVISES:

SR-91/SR-71 Interchange and Connectors project (PPNO 0077G)

County	District	PPNO	EA	Element	Const. Year	PM Back	PM Ahead	Route/Corridor					
Riverside	8	0077G	0F541	CO	2012-13	R0.4	R3.7	91					
Implementing Agency: (by component)	PA&ED	RCTC				PS&E	RCTC						
	R/W	RCTC				CON	RCTC						
RTPA/CTC:	Riverside County Transportation Commission (RCTC)												
Project Title:	Route 91/71 Interchange and Connectors												
Location	On Route 91 to northbound Route 71.												
Description:	Replace Route 91 to northbound Route 71 loop connector with a direct fly-over connector, construct a collector/distributor system in the eastbound direction between the Green River Road and Serfas Club Drive.												
(DOLLARS IN THOUSANDS)													
FUND	TOTAL	Project Totals by Fiscal Year						Project Totals by Component					
		Prior	08/09	09/10	10/11	11/12	12/13	R/W	CON	PA&ED	PS&E	R/W Supp	CON Supp
Regional Improvement Program													
Existing	11,885	5,273			6,612		485		5,273	6,127			
Change	(2,000)	0			(2,000)		0		0	(2,000)			
Proposed	9,885	5,273			4,612		485		5,273	4,127			
Federal Demonstration													
Existing	0				0					0			
Change	2,000				2,000					2,000			
Proposed	2,000				2,000					2,000			
Future Need													
Existing	110,090					110,090	3,330	106,760					
Change	0					0	0	0					
Proposed	110,090					110,090	3,330	106,760					
Total													
Existing	121,975	5,273			6,612	110,090	3,815	106,760	5,273	6,127			
Change	0	0			0	0	0	0	0	0			
Proposed	121,975	5,273			6,612	110,090	3,815	106,760	5,273	6,127			

ADDS:

SR-91 Corridor Improvement project (PPNO 0077J)

County	District	PPNO	EA	Element	Const. Year	PM Back	PM Ahead	Route/Corridor					
Riverside	8	0077J	0F540	CO	2011-12	0.0	13	91					
Implementing Agency: (by component)	PA&ED	RCTC				PS&E	RCTC						
	R/W	RCTC				CON	RCTC						
RTPA/CTC:	Riverside County Transportation Commission (RCTC)												
Project Title:	SR-91 Corridor Improvement Project												
Location	In Riverside County, on Route 91 and I-15												
Description:	On Route 91, construct the following: One mixed flow lane, each direction, from Route 241 to Pierce Street; collector distributor system from Lincoln Avenue to I-15; One HOT lane/convert one existing HOV lane, each direction, from county line to I-15; HOT median connector at junction SR-91/I-15. On I-15, construct one HOT lane in each direction.												
(DOLLARS IN THOUSANDS)													
FUND	TOTAL	Project Totals by Fiscal Year					Project Totals by Component						
		Prior	08/09	09/10	10/11	11/12	12/13	R/W	CON	PA & ED	PS & E	R/W Supp	CON Supp
Regional Improvement Program													
Existing	0					0		0					
Change	2,000					2,000		2,000					
Proposed	2,000					2,000		2,000					
Local Measure													
Existing	0	0				0	0	0	0	0			
Change	1,298,517	32,000				1,266,517	78,031	1,090,434	32,000	98,052			
Proposed	1,298,517	32,000				1,266,517	78,031	1,090,434	32,000	98,052			
Total													
Existing	0	0				0	0	0	0	0			
Change	1,300,517	32,000				1,268,517	78,031	1,092,434	32,000	98,052			
Proposed	1,300,517	32,000				1,268,517	78,031	1,092,434	32,000	98,052			

Attachment 6.

Tables 1 through 8

Table 1. Existing 2007 Mainline Traffic Volumes

SR-91 Segment	Eastbound GP			Eastbound Toll/HOV			Westbound GP			Westbound Toll/HOV		
	AM	PM	ADT	AM	PM	ADT	AM	PM	ADT	AM	PM	ADT
SR-241 to Gypsum Canyon Rd	3,800	7,000	92,170	720	3,380	18,400	9,130	6,130	99,230	2,420	1,070	18,500
Gypsum Canyon Rd to Green River Rd	5,820	8,280	121,600	720	3,380	18,400	10,830	6,990	121,500	2,420	1,070	18,500
Green River Rd to SR-71	5,810	8,780	116,800	800	1,750	14,800	10,400	7,040	119,400	1,780	1,130	12,500
SR-71 to Auto Center Dr	5,980	8,630	117,100	390	1,940	15,900	10,180	6,880	116,600	1,850	1,030	16,700
Auto Center Dr to Maple St/Sixth St	5,390	8,970	118,400	880	1,650	16,000	9,300	6,680	120,600	1,860	1,030	12,500
Maple St/Sixth St to Lincoln Ave	4,810	8,090	113,800	900	1,620	15,800	8,640	6,690	116,500	1,590	810	12,000
Lincoln Ave to Grand Blvd	5,070	8,000	121,600	900	1,580	12,800	8,290	6,780	116,600	1,450	940	15,100
Grand Blvd to Main St	4,820	7,530	119,200	900	1,580	11,200	7,905	6,420	116,600	1,325	900	11,600
Main St to I-15	5,370	8,675	125,700	800	1,125	11,100	8,400	6,530	122,200	970	870	12,500
I-15 to McKinley St	4,270	7,400	100,900	780	940	11,100	8,245	5,360	99,900	665	630	11,600
McKinley St to Pierce St	4,160	7,340	93,500	790	1,090	11,100	8,350	4,990	92,700	920	780	11,900
Pierce St to Magnolia Ave	3,600	6,390	79,600	640	900	11,100	7,590	4,260	79,600	790	670	11,000
I-15 Segment	Northbound GP			Not applicable			Southbound GP			Not applicable		
	AM	PM	ADT				AM	PM	ADT			
N/O Hidden Valley Pkwy	4,600	5,220	84,000				5,680	5,990	86,700			
Hidden Valley Pkwy to SR-91	4,680	5,210	85,500				5,290	5,830	85,300			
SR-91 to Magnolia Ave	5,020	6,030	99,700				6,220	6,890	101,100			
Magnolia Ave to Ontario Ave	5,690	5,360	89,600				5,090	6,430	89,600			
Ontario Ave to El Cerrito Rd	5,890	5,020	83,600				4,500	6,360	84,000			
El Cerrito Rd to Cajalco Rd	5,630	4,940	80,800				4,500	6,470	81,600			
S/O Cajalco Rd	5,050	4,640	75,700				4,160	6,040	77,300			

Source: State Route 91 Corridor Improvements Project Revised Draft Traffic Volumes Report, PB, December 2008.

ADT = average daily traffic

GP = general purpose lanes

HOV = high-occupancy vehicle lanes

I-15 = Interstate 15

N/O = north of

S/O = south of

SR-241 = State Route 241

SR-71 = State Route 71

SR-91 = State Route 91

Table 2. Existing 2007 Mainline Peak-Hour Performance

SR-91 Segment	AM Peak Hour						PM Peak Hour					
	Eastbound			Westbound			Eastbound			Westbound		
	Den	LOS	V/C	Den	LOS	V/C	Den	LOS	V/C	Den	LOS	V/C
SR-241 to Gypsum Canyon Rd	16.4	B		>45	<i>F</i>	1.10	31.2	D		27.1	D	
Gypsum Canyon Rd to Green River Rd	25.4	C		>45	<i>F</i>	1.31	43.5	E		23.8	C	
Green River Rd to SR-71	19.6	C		>45	<i>F</i>	1.25	30.9	D		33.1	D	
SR-71 to Auto Center Dr	25.9	C		>45	<i>F</i>	1.23	>45	<i>F</i>	1.04	30.2	D	
Auto Center Dr to Maple St/Sixth St	23.9	C		>45	<i>F</i>	1.12	>45	<i>F</i>	1.08	31.0	D	
Maple St/Sixth St to Lincoln Ave	21.3	C		>45	<i>F</i>	1.04	41.7	D		31.1	D	
Lincoln Ave to Grand Blvd	22.4	C		44.3	E		40.6	E		31.7	D	
Grand Blvd to Main St	21.3	C		39.6	E		36.1	E		29.3	D	
Main St to I-15	23.8	C		>45	<i>F</i>	1.01	>45	<i>F</i>	1.05	30.0	D	
I-15 to McKinley St	18.4	C		43.0	E		34.2	D		23.2	C	
McKinley St to Pierce St	24.6	C		>45	<i>F</i>	1.34	>45	<i>F</i>	1.19	30.7	C	
Pierce St to Magnolia Ave	23.6	C			<i>F</i>	1.22	>45	<i>F</i>	1.03	27.9	D	
I-15 Segment	Northbound			Southbound			Northbound			Southbound		
	Den	LOS	V/C	Den	LOS	V/C	Den	LOS	V/C	Den	LOS	V/C
N/O Hidden Valley Pkwy	22.3	C		26.9	D		24.9	C		28.7	D	
Hidden Valley Pkwy to SR-91	21.3	C		24.2	C		23.8	C		27.2	D	
SR-91 to Magnolia Ave	21.9	C		27.7	D		26.7	D		31.8	D	
Magnolia Ave to Ontario Ave	24.4	C		21.7	C		22.9	C		28.3	D	
Ontario Ave to El Cerrito Rd	38.6	E		19.7	C		29.8	D		28.6	D	
El Cerrito Rd to Cajalco Rd	35.4	E		26.1	D		29.1	D		>45	<i>F</i>	1.03
South of Cajalco Rd	30.0	D		24	C		35.5	E		>45	<i>F</i>	1.06

Source: State Route 91 Corridor Improvement Project Revised Draft Traffic Volumes Report, PB, December 2008.

Note: At LOS F, the Highway Capacity Software does not report a density greater than 45 passenger cars per mile per lane (pc/mi/ln) and, as a result, for that condition, the V/C ratio is calculated to quantify LOS F.

Bold, italic = unacceptable LOS

Den = Density measured in pc/mi/ln

I-15 = Interstate 15

LOS = level of service

N/O = north of

S/O = south of

SR-241 = State Route 241

SR-71 = State Route 71

SR-91 = State Route 91

V/C = volume-to-capacity ratio

Level of Service: The quality of traffic flow can be defined in terms of levels of service (LOS). The measure used to provide an estimate of LOS on a transportation facility is the density of vehicles traveling on the facility at a specific time. There are six grades of LOS, ranging from LOS A (representing free flow traffic conditions with low volumes and high speeds, resulting in low densities) to F (representing conditions where the traffic volumes exceed capacity and result in forced flow operations at low speeds, resulting in high densities and delays).

Table 3. Regional Demographics

County	Resident Population	Households	Residents Employed	Employment		
				Retail	Service	Other
2007						
Orange County	3,088,805	995,930	1,505,733	262,032	477,904	925,564
Los Angeles	10,150,878	3,353,688	4,350,670	745,294	1,949,761	2,110,727
Ventura	812,061	266,104	386,654	62,084	128,067	178,518
San Bernardino	1,896,234	593,927	785,714	150,508	225,648	334,636
Riverside	1,891,540	637,532	794,215	135,454	233,947	284,111
Total	17,839,517	5,847,181	7,822,986	1,355,370	3,015,327	3,833,555
2035						
Orange County	3,503,759	1,097,869	1,726,017	301,217	549,765	1,070,818
Los Angeles	12,218,726	4,075,232	11,993,975	854,881	2,365,214	2,321,531
Ventura	984,349	324,772	966,270	77,940	169,147	206,694
San Bernardino	2,678,172	831,100	2,605,508	235,974	340,935	478,223
Riverside	3,068,667	1,035,610	3,020,671	226,329	390,592	414,226
Total	22,503,353	7,364,583	22,090,183	1,696,341	3,815,653	4,491,492

Source: State Route 91 Corridor Improvement Project Revised Draft Traffic Volumes Report, PB, December 2008.

Table 4. Regional Vehicle Trip Generation Projections

County	AM Peak Period	PM Peak Period	Daily
2007			
Orange County	2,266,565	3,444,428	10,893,861
Los Angeles	5,844,423	8,937,368	28,358,667
Ventura	577,148	905,054	2,865,211
San Bernardino	1,251,078	1,933,159	6,138,482
Riverside	1,134,826	1,774,288	5,631,613
Total	11,074,040	16,994,297	53,887,834
2035			
Orange County	2,544,506	3,860,647	12,205,429
Los Angeles	6,920,673	10,616,879	33,806,837
Ventura	700,621	1,105,922	3,500,385
San Bernardino	1,768,435	2,733,155	8,673,549
Riverside	1,829,235	2,888,410	9,170,997
Total	13,763,470	21,205,013	67,357,197

Source: State Route 91 Corridor Improvement Project Revised Draft Traffic Volumes Report, PB, December 2008.

Table 5. 2035 Mainline Traffic Volumes

SR-91 Segment	Eastbound GP			Eastbound Toll/HOV			Westbound GP			Westbound Toll/HOV		
	AM	PM	ADT	AM	PM	ADT	AM	PM	ADT	AM	PM	ADT
SR-241 to Gypsum Canyon Rd	4,700	13,600	118,100	900	1,400	12,400	13,970	6,860	120,800	1,300	900	11,300
Gypsum Canyon Rd to Green River Rd	6,100	13,500	136,200	1,700	3,600	30,400	14,100	6,900	130,000	3,600	2,000	28,600
Green River Rd to SR-71	6,570	11,640	120,000	1,300	3,600	33,600	12,730	7,060	118,200	2,500	1,700	30,500
SR-71 to Auto Center Dr	6,020	12,720	127,700	1,400	2,300	24,800	13,050	6,970	118,700	2,100	1,600	28,900
Auto Center Dr to Maple St/Sixth St	5,850	12,780	127,200	1,400	2,100	26,100	11,920	7,110	117,300	2,100	1,500	29,300
Maple St/Sixth St to Lincoln Ave	5,340	12,270	120,800	1,400	1,800	25,600	10,650	6,820	111,700	2,100	1,400	27,800
Lincoln Ave to Grand Blvd	6,300	12,200	125,400	1,300	1,700	26,300	10,270	6,870	114,400	1,900	1,500	28,300
Grand Blvd to Main St	6,020	11,460	120,100	1,300	1,700	26,800	9,750	6,380	109,300	1,700	1,300	28,900
Main St to I-15	6,390	12,400	134,600	1,000	1,700	21,200	9,880	6,470	128,000	1,700	1,300	22,100
I-15 to McKinley St	5,460	13,010	120,100	1,000	1,600	17,100	9,840	5,300	115,400	950	950	20,600
McKinley St to Pierce St	5,120	12,520	113,300	1,300	2,000	19,800	9,710	4,800	111,500	1,400	1,200	19,800
Pierce St to Magnolia Ave	4,440	11,470	96,500	1,200	1,800	19,300	8,440	3,880	94,300	1,600	1,100	20,100
I-15 Segment	Northbound GP			Northbound Toll			Southbound GP			Southbound Toll		
	AM	PM	ADT	AM	PM	ADT	AM	PM	ADT	AM	PM	ADT
N/O Hidden Valley Pkwy	10,220	7,930	148,100	1,900	600	13,700	8,830	11,400	146,600	600	1,800	12,600
Hidden Valley Pkwy to SR-91	9,210	7,690	143,600	3,200	1,000	21,100	8,130	10,500	138,500	900	2,700	20,600
SR-91 to Magnolia Ave	9,350	8,700	147,900	3,200	1,000	21,100	8,460	11,330	147,300	900	2,700	20,600
Magnolia Ave to Ontario Ave	10,100	7,700	137,000	3,200	1,000	21,100	7,000	10,200	139,500	900	2,700	20,600
Ontario Ave to El Cerrito Rd	10,160	7,380	131,900	3,200	1,000	21,100	6,200	10,400	136,300	900	2,700	20,600
El Cerrito Rd to Cajalco Rd	11,260	7,420	134,200	1,300	300	10,900	6,530	11,290	139,500	300	1,100	11,000
S/O Mid County Pkwy	6,760	6,290	106,300	1,300	300	10,900	4,920	7,580	112,500	300	1,100	11,000

Source: State Route 91 Corridor Improvement Project Revised Draft Traffic Volumes Report, PB, December 2008.

ADT = average daily traffic

GP = general purpose lanes

HOV = high-occupancy vehicle lanes

I-15 = Interstate 15

N/O = north of

S/O = south of

SR-241 = State Route 241

SR-71 = State Route 71

SR-91 = State Route 91

Table 6. 2035 Mainline Peak-Hour Performance

SR-91 Segment	AM Peak Hour						PM Peak Hour					
	Eastbound			Westbound			Eastbound			Westbound		
	Den	LOS	V/C	Den	LOS	V/C	Den	LOS	V/C	Den	LOS	V/C
SR-241 to Gypsum Canyon Rd	20.3	C			<i>F</i>	1.69		<i>F</i>	1.64	31.7	D	
Gypsum Canyon Rd to Green River Rd	14.7	B		40.0	E		36.4	E		16.7	B	
Green River Rd to SR-71	22.3	C			<i>F</i>	1.54		<i>F</i>	1.12	33.2	D	
SR-71 to Auto Center Dr	26.2	D			<i>F</i>	1.57		<i>F</i>	1.53	32.2	D	
Auto Center Dr to Maple St/Sixth St	26.1	D			<i>F</i>	1.44		<i>F</i>	1.54	34.2	D	
Maple St/Sixth St to Lincoln Ave	18.5	C			<i>F</i>	1.03		<i>F</i>	1.18	23.7	C	
Lincoln Ave to Grand Blvd	28.6	D			<i>F</i>	1.24		<i>F</i>	1.47	32.4	D	
Grand Blvd to Main St	27.0	D			<i>F</i>	1.18		<i>F</i>	1.38	29.1	D	
Main St to I-15	29.2	D			<i>F</i>	1.19		<i>F</i>	1.50	29.6	D	
I-15 to McKinley St	23.7	C			<i>F</i>	1.19		<i>F</i>	1.57	22.9	C	
McKinley St to Pierce St	22.1	C			<i>F</i>	1.17		<i>F</i>	1.51	20.7	C	
Pierce St to Magnolia Ave	29.1	D			<i>F</i>	1.36		<i>F</i>	1.84	25.4	C	
I-15 Segment	Northbound			Southbound			Northbound			Southbound		
	Den	LOS	V/C	Den	LOS	V/C	Den	LOS	V/C	Den	LOS	V/C
N/O Hidden Valley Pkwy		<i>F</i>	1.20		<i>F</i>	1.04	40.2	E			<i>F</i>	1.34
Hidden Valley Pkwy to SR-91		<i>F</i>	1.08	41.9	E		37.0	E			<i>F</i>	1.23
SR-91 to Magnolia Ave		<i>F</i>	1.10		<i>F</i>	0.99		<i>F</i>	1.02		<i>F</i>	1.33
Magnolia Ave to Ontario Ave		<i>F</i>	1.19	31.4	D		37.1	E			<i>F</i>	1.20
Ontario Ave to El Cerrito Rd		<i>F</i>	1.59	27.1	D			<i>F</i>	1.16		<i>F</i>	1.22
El Cerrito Rd to Cajalco Rd		<i>F</i>	1.76		<i>F</i>	1.02		<i>F</i>	1.16		<i>F</i>	1.77
S/O Mid County Pkwy		<i>F</i>	1.06	28.5	D		43.3	E			<i>F</i>	1.19

Source: State Route 91 Corridor Improvement Project Traffic Study, PB, April 2009.

Note: At LOS *F*, the Highway Capacity Software does not report a density greater than 45 passenger cars per mile per lane (pc/mi/ln) and, as a result, for that condition, the V/C ratio is calculated to quantify LOS *F*.

Bold, italic = unacceptable LOS

Den = Density measured in pc/mi/ln

I-15 = Interstate 15

LOS = level of service

N/O = north of

S/O = south of

SR-241 = State Route 241

SR-71 = State Route 71

SR-91 = State Route 91

V/C = volume-to-capacity ratio

Table 7. Summary of Accident Rates

Segment	Actual			Statewide Average		
	F	F+I	Total	F	F+I	Total
Mainline						
Ora-91 EB SR-241 to Riverside County Line	0.003	0.39	1.60	0.006	0.39	1.23
Ora-91 WB SR-241 to Riverside County Line	0.010	0.27	0.98	0.006	0.39	1.23
Riv-91 EB Orange County Line to Pierce St.	0.004	0.35	1.18	0.006	0.36	1.13
Riv-91 WB Orange County Line to Pierce St.	0.005	0.26	0.89	0.006	0.36	1.13
Riv-15 NB Cajalco Rd. to Hidden Valley Pkwy.	0.004	0.25	0.95	0.011	0.37	1.07
Riv-15 SB Cajalco Rd. to Hidden Valley Pkwy.	0.006	0.17	0.61	0.011	0.37	1.07
Freeway-to-Freeway Direct Connector						
EB SR-91 off to SB SR-241	0.000	0.00	0.00	0.004	0.15	0.45
WB SR-91 on from NB SR-241	0.000	0.26	0.26	0.006	0.19	0.55
EB SR-91 on from NB SR-241	0.000	0.14	0.92	0.006	0.33	0.90
WB SR-91 off to SB SR-241	0.000	0.04	0.24	0.006	0.21	0.60
WB on from SR-71 SB	0.076	0.38	0.91	0.004	0.13	0.40
EB off to SR-71 NB	0.000	0.00	0.37	0.004	0.26	0.90
WB off to SR-71 NB	0.065	0.20	0.39	0.004	0.15	0.45
EB on from SR-71 SB	0.000	0.00	0.63	0.006	0.19	0.55
WB SR-91 to SB I-15	0.000	0.05	0.20	0.006	0.19	0.55
NB I-15 to SR-91 (both EB & WB)	0.000	0.22	1.10	0.002	0.08	0.25
EB SR-91 to SB I-15	0.000	0.00	0.06	0.004	0.13	0.40
SB I-15 to EB SR-91	0.000	0.07	0.33	0.004	0.26	0.90
WB SR-91 to NB I-15	0.064	0.13	0.32	0.004	0.13	0.40
SB I-15 to WB SR-91	0.000	0.18	0.42	0.004	0.15	0.45
EB SR-91 to NB I-15	0.000	0.03	0.13	0.006	0.19	0.55
SR-91 Local Interchange Ramps						
Ora-91 Gypsum Canyon Rd. EB off-ramp	0.000	0.38	0.38	0.005	0.61	1.50
Ora-91 Gypsum Canyon Rd. WB on-ramp	0.000	0.00	0.00	0.003	0.22	0.60
Ora-91 Gypsum Canyon Rd. EB off-ramp	0.000	0.38	0.38	0.005	0.61	1.50
Ora-91 Gypsum Canyon Rd. WB on-ramp	0.000	0.00	0.00	0.003	0.22	0.60
Ora-91 Gypsum Canyon Rd. EB on-ramp	0.000	0.20	0.20	0.001	0.24	0.70
Ora-91 Gypsum Canyon Rd. WB on-ramp	0.000	0.00	0.00	0.001	0.24	0.70
Ora-91 Gypsum Canyon Rd. EB on-ramp	0.000	0.00	1.53	0.003	0.22	0.60
Ora-91 Gypsum Canyon Rd. WB off-ramp	0.000	0.24	0.24	0.005	0.61	1.50
Riv-91 Green River Rd. EB off-ramp	0.000	0.15	0.46	0.005	0.61	1.50
Riv-91 Green River Rd. WB on-ramp	0.000	0.00	0.10	0.002	0.32	0.80
Riv-91 Green River Rd. WB off-ramp	0.000	0.23	1.87	0.005	0.61	1.50
Riv-91 Green River Rd. EB on-ramp	0.000	0.51	0.51	0.002	0.32	0.80
Riv-91 Serfas Club Dr. WB on-ramp	0.000	0.00	0.69	0.002	0.32	0.80
Riv-91 Serfas Club Dr. EB off-ramp	0.000	0.42	0.69	0.005	0.61	1.50
Riv-91 Serfas Club Dr. EB on-ramp	0.000	0.11	0.34	0.002	0.32	0.80
Riv-91 Serfas Club Dr. WB off-ramp	0.000	0.43	1.14	0.005	0.61	1.50
Riv-91 Maple St. EB off-ramp	0.083	0.83	1.49	0.005	0.61	1.50
Riv-91 Maple St. WB on-ramp	0.000	0.09	0.60	0.003	0.32	0.85
Riv-91 Maple St. EB on-ramp	0.000	0.29	0.44	0.003	0.17	0.45
Riv-91 Maple St. WB off-ramp	0.000	0.46	1.22	0.005	0.61	1.50
Riv-91 Lincoln Ave. WB on-ramp	0.000	0.00	0.42	0.002	0.32	0.80
Riv-91 Lincoln Ave. EB off-ramp	0.000	1.27	3.68	0.004	0.50	1.35
Riv-91 Lincoln Ave. WB off-ramp	0.000	0.08	0.38	0.005	0.61	1.50
Riv-91 Lincoln Ave. EB on-ramp	0.000	0.61	1.98	0.002	0.32	0.80
Riv-91 Vicentia Ave. EB off-ramp	0.000	0.00	0.23	0.003	0.31	0.90
Riv-91 School St. (Grand) WB on-ramp	0.000	0.00	0.00	0.002	0.19	0.55
Riv-91 Main St. WB on-ramp	0.000	0.32	0.86	0.003	0.17	0.45
Riv-91 Main St. EB off-ramp	0.000	0.27	2.15	0.006	0.33	0.90
Riv-91 Main St. WB off-ramp	0.000	0.30	1.04	0.006	0.35	0.90
Riv-91 Main St. EB on-ramp	0.000	0.55	1.34	0.002	0.32	0.80
Riv-91 McKinley St. WB on-ramp	0.000	0.21	0.66	0.002	0.32	0.80
Riv-91 McKinley St. EB off-ramp	0.000	0.13	0.87	0.005	0.61	1.50
Riv-91 McKinley St. WB off-ramp (loop)	0.000	0.44	1.31	0.003	0.42	1.25
Riv-91 McKinley St. EB on-ramp (loop)	0.000	0.00	0.31	0.001	0.24	0.70
Riv-91 McKinley St. EB on-ramp	0.000	0.19	1.33	0.003	0.22	0.60
Riv-91 McKinley St. WB off-ramp	0.000	0.00	0.34	0.006	0.33	0.90

Table 7. Summary of Accident Rates

Segment	Actual			Statewide Average		
	F	F+I	Total	F	F+I	Total
Riv-91 Pierce St. WB on-ramp	0.000	0.39	0.52	0.002	0.32	0.80
Riv-91 Pierce St. EB off-ramp	0.000	0.20	0.92	0.005	0.61	1.50
Riv-91 Magnolia Ave. WB on-ramp	0.000	0.83	1.04	0.003	0.22	0.60
Riv-91 Magnolia Ave. EB off-ramp	0.000	0.00	1.22	0.003	0.42	1.25
Riv-91 Magnolia Ave. WB off-ramp	0.000	0.57	0.71	0.003	0.42	1.25
Riv-91 Magnolia Ave. EB on-ramp	0.000	0.00	0.45	0.003	0.22	0.60
I-15 Local Interchange Ramps						
Riv-15 Cajalco Rd. NB off-ramp	0.000	0.55	1.46	0.006	0.19	0.60
Riv-15 Cajalco Rd. NB on-ramp	0.000	0.36	0.54	0.005	0.16	0.45
Riv-15 Cajalco Rd. SB on-ramp	0.000	0.00	0.30	0.009	0.35	0.85
Riv-15 Cajalco Rd. SB off-ramp	0.000	0.18	0.71	0.007	0.24	0.70
Riv-15 El Cerrito Rd. NB off-ramp	0.000	1.28	2.88	0.005	0.61	1.50
Riv-15 El Cerrito Rd. SB on-ramp	0.000	0.27	0.54	0.002	0.32	0.80
Riv-15 El Cerrito Rd. NB on-ramp	0.000	0.00	0.32	0.002	0.32	0.80
Riv-15 El Cerrito Rd. SB off-ramp	0.000	0.63	2.99	0.005	0.61	1.50
Riv-15 Ontario Ave. NB off-ramp	0.000	0.24	0.96	0.005	0.61	1.50
Riv-15 Ontario Ave. SB on-ramp	0.000	0.56	0.89	0.002	0.32	0.80
Riv-15 Ontario Ave. NB on-ramp	0.000	0.13	0.67	0.002	0.32	0.80
Riv-15 Ontario Ave. SB off-ramp	0.000	0.13	0.79	0.005	0.61	1.50
Riv-15 Magnolia Ave. SB on-ramp	0.000	0.46	1.70	0.002	0.32	0.80
Riv-15 Magnolia Ave. NB off-ramp	0.000	1.72	3.65	0.005	0.61	1.50
Riv-15 Magnolia Ave. NB on-ramp	0.000	0.05	1.57	0.002	0.32	0.80
Riv-15 Magnolia Ave. SB off-ramp	0.000	0.23	1.01	0.005	0.61	1.50
Riv-15 Hidden Valley Pkwy. NB off-ramp	0.000	0.37	0.73	0.005	0.61	1.50
Riv-15 Hidden Valley Pkwy. SB on-ramp	0.000	0.21	1.27	0.002	0.32	0.80
Riv-15 Hidden Valley Pkwy. NB on-ramp	0.000	0.11	0.75	0.002	0.32	0.80
Riv-15 Hidden Valley Pkwy. SB off-ramp	0.000	0.18	2.01	0.005	0.61	1.50

Source: Caltrans District 8, 2004-2007 Traffic Accident and Surveillance and Analysis System

EB = eastbound

F = number of fatal accidents per million vehicle miles traveled

F+I = number of accidents with both fatalities and injuries per million vehicle miles traveled

I-15 = Interstate 15

NB = northbound

Ora-91 = Orange County--SR-91

PM = Post Mile

Riv-91 = Riverside County--SR-91

SB = southbound

SR-241 = State Route 241

SR-71 = State Route 71

SR-91 = State Route 91

WB = westbound

In Table 7, the "Total" column shows the total accident rate. The columns typically reported are the fatal accidents (column "F"), fatal + injury accidents (columns F+I), and total accidents, which include property-damage-only accidents. The "Total" column is not a sum of the other columns but rather a "Total" aggregated to accommodate variations in the number of traffic lanes and traffic volumes..

Table 8. Existing 2007 Truck Volumes

Segment	Daily Trucks	Truck Percent of Total Traffic
SR-91 at Orange/Riverside County Line	15,500	5.5
SR-91 west of I-15	14,500	5.3
SR-91 east of I-15	16,300	7.3
I-15 north of SR-91	17,900	10.5
I-15 south of SR-91	10,300	5.1

Source: State Route 91 Corridor Improvement Project revised Draft Traffic Volumes Report, PB, December 2008.

I-15 = Interstate 15

SR-91 = State Route 91

Attachment 7. Specific Project Features

The Project includes the following specific features and components on eastbound SR-91:

- From SR-241 to Green River Road, an additional lane would be provided between the egress and ingress points for the proposed Express Lanes at the Orange County line which would be achieved by restriping the existing pavement.
- From the Orange County line to SR-71, the two HOV lanes will become two Express Lanes.
- From the Green River on-ramp to the SR-71 east-north loop connector, an auxiliary lane would be added. An optional second lane would be added at the entrance to the loop connector.
- From SR-71 to I-15, the existing HOV lane will become an Express Lane, a second Express Lane will be added, and a fifth GP lane will be added with interchange improvements at Serfas Club Drive/Auto Center Drive, Maple Street, Lincoln Avenue, and Main Street.
- I-15 connectors would diverge from SR-91 and merge with the eastbound Main Street on ramp within a collector-distributor road.
- From I-15 to Pierce Street, a single Express Lane transition to a fourth GP lane and an HOV lane is added by restriping the existing pavement.

The Project includes the following specific features and components on westbound SR-91:

- From Pierce Street to I-15, no improvements are proposed.
- I-15 connectors would merge with the westbound Main Street off ramp within a collector-distributor road before merging with SR-91.
- From I-15 to the SR-71, the existing HOV lane will become an Express Lane, a second Express Lane will be added, and a fifth GP lane will be added with interchange improvements at Main Street, Lincoln Avenue, Maple Street, and Serfas Club Drive/Auto Center Drive.
- From SR-71 to County line, the existing HOV lane will become an Express Lane, and a second Express Lane will be added.
- From the SR-71 south-west connector to the Green River Road off-ramp, an auxiliary lane would be added.
- The westbound Green River off-ramp would be reconstructed to accommodate future phases and development of the Ultimate Project.
- From Green River Road to County line, Green River Road will be realigned to its ultimate location.
- From Green River Road to SR-241, an additional lane would be provided between the egress and ingress points for the proposed Express Lanes at the Orange County line which would be achieved by a combination of widening and restriping the existing pavement.

The Project includes the following specific major features and components on I-15:

- A single lane Express Lane connector would be provided from eastbound SR-91 to southbound I-15 continuing as a single lane Express Lane in the median of I-15 terminating south of Magnolia Avenue interchange.
- A single lane Express Lane would be constructed in the median of I-15 beginning south of Magnolia Avenue interchange and continuing northbound as a single lane Express Lane connector to westbound SR-91.

Attachment 8. Project Funding Plan Details

Overall Toll Revenue Bond Elements

Term	<ul style="list-style-type: none"> • 30 years
Minimum debt service coverage ratio	<ul style="list-style-type: none"> • 1.75x net pledge (excluding rehabilitation costs)
Ratings	<ul style="list-style-type: none"> • AAA with wrap
Financing fees	<ul style="list-style-type: none"> • 1.25%, assumed to cover underwriting and trustee fees
Wrap fee	<ul style="list-style-type: none"> • 1.00% paid up-front

Current Interest Bond Elements

Interest rates	<ul style="list-style-type: none"> • Based on 5-year average Insured 30-year MMD rate - 4.68% • Yield based on weighted average loan life of outstanding bonds
Repayment profile	<ul style="list-style-type: none"> • Current interest paid annually • Level principal and interest payments over the final 10 years of the bonds

Capital Appreciation Bond Elements

Interest rates	<ul style="list-style-type: none"> • As for Current Interest Bonds with an additional premium of 75 bps
Repayment profile	<ul style="list-style-type: none"> • Series of zero-coupon bonds with debt service sculpted to coverage ratio
Other	<ul style="list-style-type: none"> • CABs are limited to 40% of senior debt issuance

Transportation Infrastructure Financing and Innovation Act (TIFIA) Loan Elements

Nature of Financing	<ul style="list-style-type: none"> • Secured loan
Term	<ul style="list-style-type: none"> • 35 years following substantial completion of the Project
Minimum debt service coverage ratio	<ul style="list-style-type: none"> • 1.20x net pledge (excluding rehabilitation costs)
Financing fees	<ul style="list-style-type: none"> • \$500,000 up-front fee • Annual agency fee of \$10,000 per year indexed to CPI
Interest rates	<ul style="list-style-type: none"> • 4.59% (5-year average of the 30-year SLGS rate)
Margin	<ul style="list-style-type: none"> • 1 bp
Repayment profile	<ul style="list-style-type: none"> • Years 1-5 of operations: accrued interest • Years 6-10 of operations: interest only • Years 11-35 of operations: level principal and interest payments
Other	<ul style="list-style-type: none"> • TIFIA loan "draws" are limited to 33% of eligible project costs with outstanding balance not to exceed 49.99% of the combined par amount of total project debt (toll revenue bonds and the TIFIA loan, combined).