



## SR-91 Corridor Improvement Project

### A) Project Description

State Route 91 (SR-91) is a critical element of the only multi-modal transportation corridor between Riverside and Orange counties in Southern California (Figure 1). The corridor also includes the Metrolink commuter rail line and the Santa Ana River Trail (SART). SR-91 is currently used by more than 280,000 vehicles per day, and this volume is forecasted to increase by approximately 50% by 2035. The corridor provides a vital link between employment opportunities in Los Angeles, Orange, Riverside and San Bernardino counties, home to nearly 6.6 million jobs or approximately 45% of all jobs in California. SR-91 also serves national goods movement between Interstate 15 (I-15) and Interstate 10 (I-10) and the Ports of Los Angeles and Long Beach (POLA/POLB), the largest port complex in the United States.

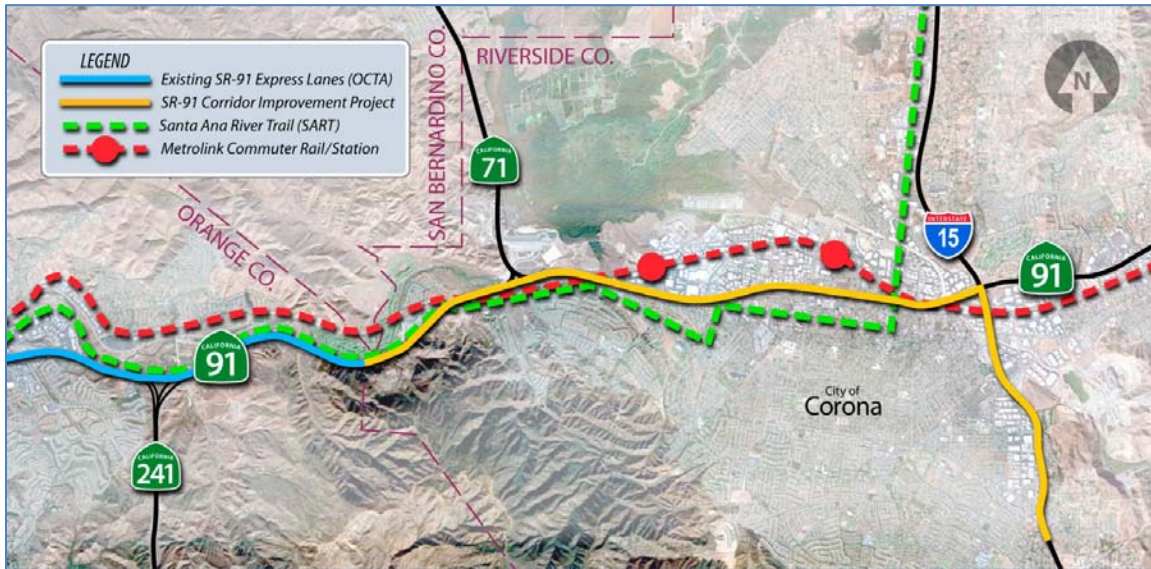


Figure 1 – SR-91 Multi-Modal Transportation Corridor

Based on long-term regional population and employment growth and increasing international trade projections, the need for additional investments in the SR-91 corridor is critical to achieve the following:

- Improve the quality of life in the corridor and adjacent communities by reducing congestion in general purpose lanes and local streets and provide a congestion-free option to those willing to pay a toll.
- Provide more transportation choices between affordable housing and jobs in southern California, home to more than 17 million Americans. The Project allows express bus to operate more efficiently making Bus Rapid Transit (BRT) a viable option in the corridor.
- Contribute to the economic competitiveness of the United States by improving the efficiency and reliability of goods movement in and out of the POLA/POLB, where more than 40% of the nation's imported goods enter the United States.
- Invest in the corridor to ensure the long-term safety, maintainability and reliability of the regional and interstate transportation network. The Project improves the existing bottleneck at the SR-91/I-15 interchange.

The proposed SR-91 Corridor Improvement Project (Project) is a critical element in an integrated strategy that the Riverside County Transportation Commission (RCTC), Caltrans and other partner agencies are pursuing to support a robust and connected corridor. Key elements of that strategy, including the Project, are described below.

**State Route 91** – SR-91 includes two tolled lanes (91 Express Lanes) in each direction within a 10-mile segment in Orange County. The Project will extend the 91 Express Lanes and construct one general purpose lane in each direction from the Orange County line to I-15 in Riverside County, a distance of approximately 8 miles.





The Project will also provide express lane connectors to I-15. The existing 91 Express Lanes feature fully automated tolling, including the first application of managed lane variable pricing in the United States. The variable pricing approach adjusts toll rates based on the number of vehicles on the road to maintain “free flow” conditions and maximize throughput. Using the extended 91 Express Lanes, commuters will save 30 minutes on average on the 8-mile segment of SR-91 in Riverside County. The primary features of the Project are shown in Figure 2.

**Metrolink Commuter Rail Lines** –RCTC has made a significant investment in expanding commuter rail service between Riverside and Orange counties, including two commuter rail lines (IEOC and 91 Lines) adjacent to SR-91 on the Burlington Northern Santa Fe railroad. The IEOC line operates eight trains in each direction during peak periods and the 91 line operates four trains in each direction. Two stations located in Corona are within 0.25-mile of SR-91 and the Project will improve access and reduce local congestion at the stations. RCTC is developing the Perris Valley Line (PVL), which will extend Metrolink 22 miles south of SR-91 at a cost of \$235 million. Completion of the PVL in 2013 will increase ridership opportunities between Riverside and Orange counties.

**Express Bus Service** - The addition of tolled Express Lanes on SR-91 provides the opportunity to nearly double the amount of express bus service that is currently offered along the corridor to a total of 40 trips per day. Commuters throughout Riverside County will be able to access buses with direct routes to employment centers in Orange County and additional buses will provide a direct connection to the Metrolink Commuter Rail system.

**Santa Ana River Trail (SART)** – The Santa Ana River Trail stretches from the Pacific Ocean in Huntington Beach along the Santa Ana River and SR-91 to Riverside County for a distance of 68 miles. The trail provides a dedicated, safe, and uninterrupted route for recreational and commuting cyclists and pedestrians. Ultimately, the trail will go from the Pacific Ocean to the crest of the San Bernardino Mountains for a distance of approximately 100 miles, making it the longest paved bicycle and pedestrian corridor in southern California.

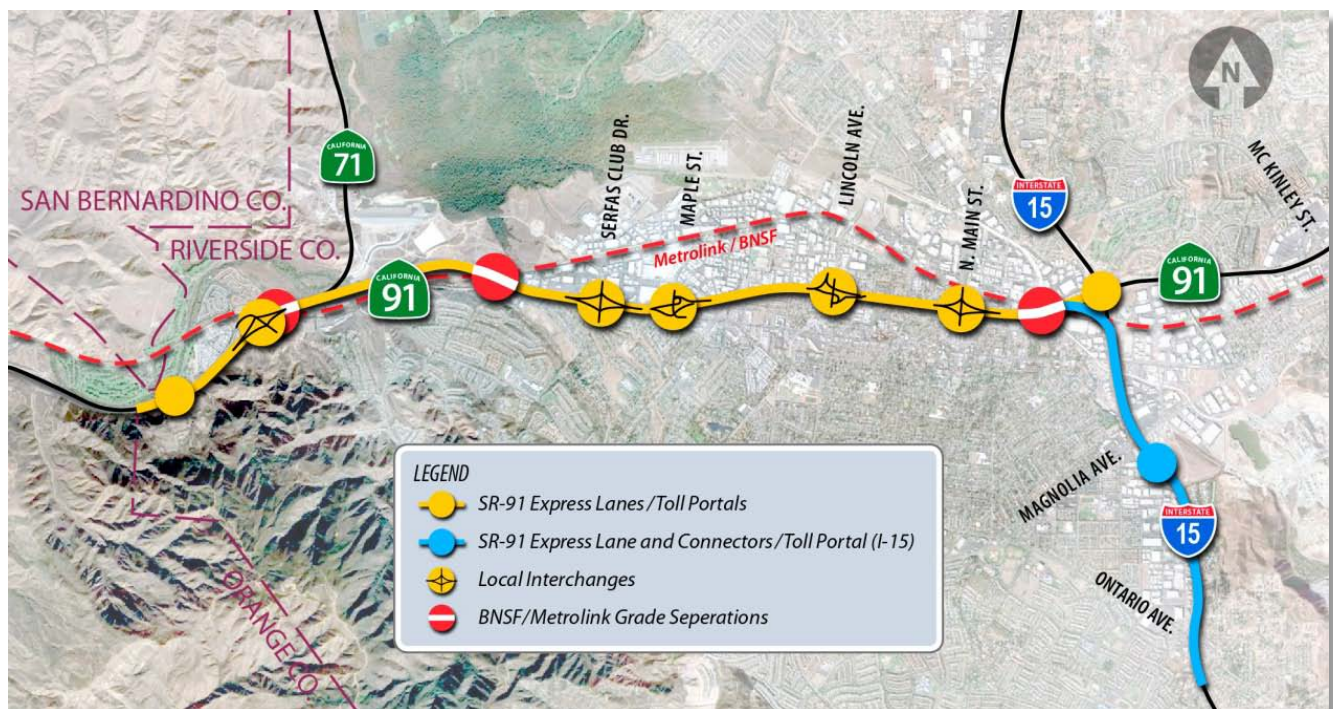
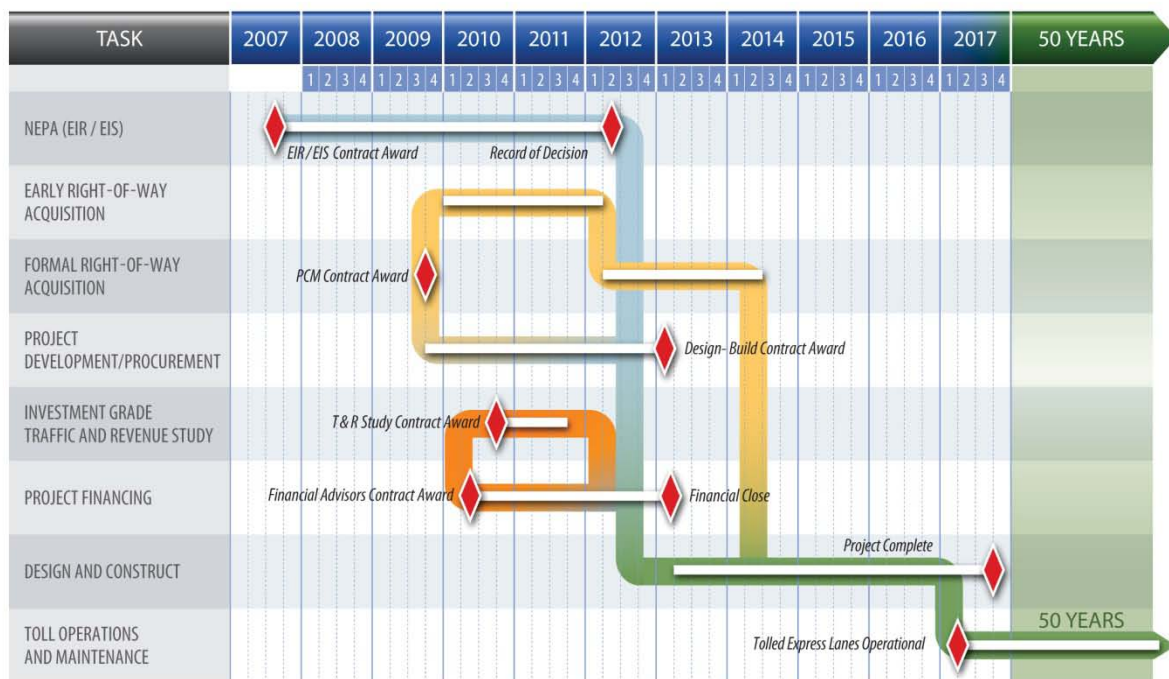


Figure 2 - Project Features



**Project Schedule**



**Predevelopment and Capital Costs**

RCTC SR-91 Corridor Improvement Project Predevelopment and Capital Cost Estimate (\$000) (2010)		
<b>RCTC Costs</b>	Preliminary Engineering & Environmental	\$33,000
	Program Management	\$68,630
	Project & Construction Management	\$128,660
	Project Financing	\$9,700
	Transit Enhancements 91 Express Bus	\$5,000
	Right-of-Way Acquisition	\$157,730
<b>Subtotal RCTC Costs</b>		<b>\$402,720</b>
<b>Design-Build Costs</b>	Final Design	\$49,560
	Utility Relocation	\$14,250
	Roadway and Drainage	\$161,200
	Structures	\$297,370
	ITS, Traffic, Environmental and Safety	\$156,930
	Toll Collection System	\$22,210
<b>Subtotal Design-Build Costs</b>		<b>\$701,520</b>
<b>Total Pre-Development and Capital Costs</b>	<b>Subtotal RCTC Costs</b>	<b>\$402,720</b>
	<b>Subtotal Design-Build Costs</b>	<b>\$701,520</b>
	<b>Total</b>	<b>\$1,104,240</b>



## ***B) Project Participants***

### **Name of Applicant/Borrower**

#### **Riverside County Transportation Commission (RCTC)**

RCTC will be the TIFIA applicant and borrower and will assume responsibility for providing the investment grade rating opinion letter, financial plan, and project management and monitoring plan, supporting documentation regarding the borrower's legal status, and other items as required. As the lead sponsor of the Project, RCTC is working in partnership with the California Department of Transportation (Caltrans) and Federal Highway Administration (FHWA) to environmentally clear the Project; procure a design-build contractor; secure project financing; design and construct; and operate and maintain the tolled express lane facility.

RCTC was created by the State Legislature in 1976 as one of four Southern California transportation commissions designed to provide more local control and input into transportation matters. RCTC is governed by a Commission that includes a mayor or council member from each of Riverside County's cities, all five members of the County Board of Supervisors, and a nonvoting appointee of the Governor.

In 1988, Measure A authorized a half-cent sales tax and spelled out a 20-year plan for transportation improvements that would help ensure mobility in Riverside County. When 78.9% of voters approved Measure A, RCTC became the agency charged with ensuring that the projects and programs voters wanted became a reality. In 2002, 69.2% of the voters approved an extension of Measure A through 2039. Today, RCTC plans and implements transportation and transit improvements, assists local governments with money for local streets and roads, helps smooth the way for commuters and goods movement, and works to ensure mobility choice. RCTC is also the agency that approves projects for allocations of state and federal transportation funds in Riverside County.

### **Organizational Structure**

FHWA, Caltrans, and RCTC are planned signatory parties to the High Profile Project Agreement (HPPA), which outlines the roles and responsibilities of the three major participants in the Project. These roles and responsibilities are in relation to FHWA's charge with stewardship and oversight responsibilities for all federally funded programs under the Federal-Aid Highway Program (FAHP). A description of each key agency participant is provided below. An organization chart, shown in Appendix A, provides additional details about the Project team structure.

#### **Federal Highway Administration (FHWA)**

FHWA's roles and responsibilities under the High Profile Project Agreement (HPPA) will include review and/or approval of federal funds obligations, right-of-way (ROW) certifications, utility relocations, environmental conformity to the Environmental Impact Statement (EIS), Financial Plans, and final Request for Proposals (RFP), Project Management Plans, and Cost Estimate Reviews (CER), as well as various construction phase activities. RCTC and FHWA executed a Section 129 Toll Agreement on August 18, 2009. In recognition of the national significance of the project and the critical need for jobs creation, this project is expected to be included in the Enhanced Technical Assistance component of the FHWA's Every Day Counts Program. An acceptance letter from FHWA is pending.

#### **California Department of Transportation (Caltrans)**

The Project will be built on Caltrans ROW, under rights granted to RCTC pursuant to Senate Bill 1316 (SB 1316) and pursuant to amendment of the existing franchise agreement between Caltrans and the Orange County Transportation Authority (OCTA), as set forth in SB 1316. SB 1316 provides RCTC the right to toll the new facilities for 50 years following service commencement. RCTC and Caltrans are entering into two separate agreements: a Design-Build Cooperative Agreement (relating to Caltrans' role and oversight of the design and construction of the Project) and a Toll Facilities Agreement (relating to RCTC's leasehold rights to Caltrans' ROW and Caltrans' role and oversight of the operations and maintenance of the Project). Both agreements are nearing completion and are expected to be executed in early 2012.



**Orange County Transportation Authority (OCTA)**

Beginning in 2003, OCTA assumed responsibility for the 91 Express Lanes in Orange and Riverside counties under assignment of a franchise agreement between Caltrans and a private toll road operator. SB 1316 authorizes OCTA to assign its rights, interests, and obligations in the Riverside County portion of the SR-91 toll lanes to RCTC. As conceived, the new managed lanes will be interoperable with OCTA’s express lanes and share a common operator.

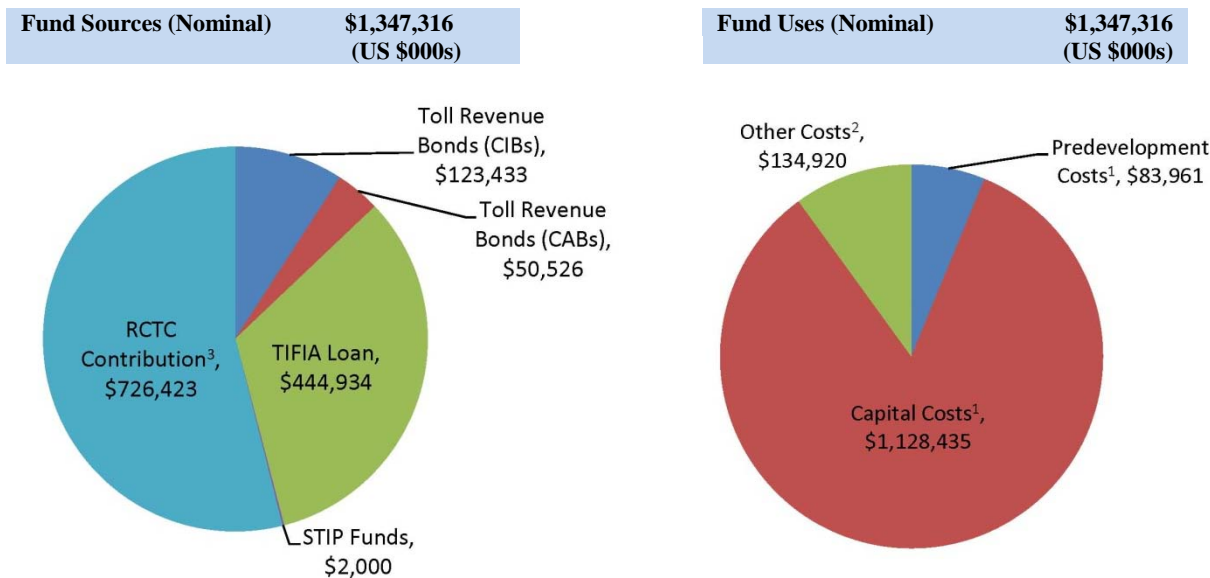
Under a cooperative agreement, RCTC and OCTA will use a common toll operator (currently Cofiroute USA LLC) and agree on cost and revenue sharing, toll policies and business rules, interoperability of technology, OCTA review of design plans and construction activities, and sharing marketing activities. This agreement is expected to be complete in early 2012 and will ensure a seamless 91 Express Lane facility crossing the two counties. RCTC and OCTA have recently executed a term sheet defining the sharing of operating costs and revenues.

**Project Website or Applicant/Borrower Website**

SR-91 Corridor Improvement Project Web site: [www.sr91project.info](http://www.sr91project.info)  
Riverside County Transportation Commission Web site: [www.rctc.org](http://www.rctc.org)

**C) Proposed Financing**

**Sources and Uses of Funds**



<sup>1</sup> On a nominal basis, pre-development costs and capital costs total approximately \$1,212,396,000. These estimates are based on a total project cost of \$ 1,104,240,000 in 2010 dollars adjusted for inflation based on the capital cost schedule.  
<sup>2</sup> Other costs include reserve account funding, financing fees, and capitalized interest.  
<sup>3</sup> RCTC’s contribution comes from receipts of its Measure A sales tax, a portion of which will be used for pre-development costs that will not be reimbursed from the financing, in the form of annual payments to the construction fund during construction or proceeds from Sales Tax Revenue Bonds.



**Type of Credit Assistance:** TIFIA Loan

<b>TIFIA Sizing (Nominal)</b>	<b>US \$000s</b>
Capital Costs	\$1,122,741
Predevelopment Costs	\$83,961
Capitalized Interest	\$111,050
Debt Service Reserve Fund	\$17,050
<b>Total TIFIA Eligible</b>	<b>\$1,334,802</b>

**Maximum TIFIA Amount \$444,934,000**

**Description of Revenue Source(s) Pledged to Repayment**

The TIFIA Loan will be secured by a pledge of the toll revenues generated by operation of the 91 Express Lanes in Riverside County. RCTC has structured the TIFIA Loan to obtain investment grade ratings (at or above “Baa3”/“BBB-“) and is seeking a preliminary credit assessment from Fitch Ratings that will confirm the investment grade rating. Among the features supporting the investment grade structure are:

**Coverage:** The coverage for all debt, including the TIFIA Loan, the junior lien, is structured to begin with a ratio of revenues to debt service of 1.15x, growing to 1.75x by the final maturity.

**Repayment:** The term of the TIFIA Loan is 15 years shorter than the term of RCTC’s authority to impose tolls.

**Flexibility:** The proposed toll policy is designed to maximize throughput, not revenue, providing flexibility in raising additional revenues if necessary through toll policy alterations.

**Reserves:** RCTC will provide an additional reserve of \$20 million dedicated solely to payment of the TIFIA Loan from the proceeds of the sale of excess right of way property (estimated to be more than \$29 million) and from residual revenues. RCTC has agreed to fund the additional reserve by June 30, 2019 if right of way sale proceeds have not provided at least \$20 million by that date.

RCTC has based its Plan of Finance on projections completed in August 2011. First, an Investment Grade Traffic and Revenue study was prepared by Stantec Engineering. The study included traffic counts along SR-91 and its ingress and egress points to develop an hourly travel demand profile of the corridor. Second, projections of capital and operating costs and non-operating revenues were developed by Parsons Transportation Group, the project manager.

The Traffic and Revenue study projects toll revenues based on a toll policy focused on maximizing throughput while maintaining speed targets. This policy is not focused directly on maximizing toll revenues. However, in the event that additional toll revenues are needed to pay debt service on either the Toll Revenue Bonds or the TIFIA Loan, RCTC can alter the policy to adopt elements which increase revenues.

While project construction would start in early 2013, the Plan of Finance anticipates that the beginning of toll operations is March 2017, although that date would likely be accelerated with a TIGER III grant and related TIFIA Loan. Debt service payable from toll revenues will begin during FY 2017-18 and will continue through FY 2050-51. However, RCTC’s authority to levy tolls continues for 50 years after opening day, providing significant ability to make up any shortfall in revenues during the scheduled repayment. Moreover, tolls have been collected in the corridor for the existing Express Lanes since 1995, providing a significant history of data on which to base projections.

Key features of the Plan of Finance are:

- Beginning of toll operations in March 2017 (likely accelerated upon award of TIFIA Loan).
- Debt service payable from toll revenues starts in FY 2017-18 and continues through FY 2050-51.
- Senior Toll Revenue bonds have debt service coverage from 1.80x to 4.90x.
- For all debt, including the TIFIA Loan, coverage ranges from 1.15x in early years to 1.75x later.
- O&M and Repair and Rehabilitation reserve funded through toll revenues after all debt service.
- Funds anticipated to be received from sale of surplus right of way (estimated at \$29 million) are directed to fund a reserve up to \$20 million to make payments on the TIFIA Loan.



## *D) Satisfaction of TIFIA Selection Criteria*

### **Significance (20%)**

The Project is nationally and regionally significant in terms of its ability to generate economic, livability, and safety benefits in Riverside County, as well as supporting international commerce through the POLA/POLB and the associated logistics industry in the region. Key considerations include:

- **Livability:** The Project will provide transportation options that are linked with housing and commercial development to enhance economic opportunities and the quality of life for those living along the corridor.
- **Economic Competitiveness:** The Project will contribute to the economic competitiveness of the United States by improving the long-term efficiency and reliability of goods movement and direct creation of permanent jobs.
- **Safety:** The Project will improve the safety of SR-91, SR-71, I-15, and adjoining local roadways.



### **Livability**

Home to more than 17 million Americans; Los Angeles, Orange, Riverside and San Bernardino counties form the largest urban area in the United States. Traveling to and from work without insufferable congestion and delay is the primary measure of livability and the quality of life in southern California. The Project not only delivers transportation benefits, but is also designed and planned in such a way that it will have a positive impact on the communities it serves. SR-91 and Metrolink serve millions of users annually, all of whom will benefit from the large scale improvements proposed by the Project. Over the next 30 years, the number of potential users is expected to nearly double, magnifying the livability benefits even further.

### **Provide More Transportation Choices**

Creating a strong integration of alternative commuting choices is a cornerstone element of a comprehensive multi-modal strategy that RCTC, Metrolink and the Riverside Transit Agency (RTA) have been implementing to address growing travel demand in the SR-91 corridor. The Project will enable RCTC and RTA to implement an enhanced Express Bus plan on the SR-91 Corridor that includes:

- Nearly doubling current express bus trips on SR-91;
- Providing 15-20 minute headways on the 91 Express Lanes during peak hours;
- Add five new express bus routes in Western Riverside County;
- Direct rides to employment centers in Orange County with no need to transfer;
- Implement “interceptor” routes that take SR-91 commuters to Metrolink stations before they get to the freeway; and
- Wi-Fi enabled buses to maximize commuter productivity while in transit.

Without the Project, express bus service is not competitive with single-occupant vehicles. The Project provides the necessary reliability, flexibility and cost- and time-savings to entice commuters of all income levels to shift modes. These and other elements of the strategy are discussed below:

**91 Express Lanes** - The current experience of the 91 Express Lanes in Orange County demonstrates that the current tolling structure encourages carpooling. In FY 2010/11, 25% of all trips on the 91 Express Lanes were made by 3+ carpools or transit vehicles. RCTC expects a similar mode split on the Riverside County section of the Express Lanes. The Project will feature a managed lane variable pricing approach, which adjusts toll rates to maximize total throughput and ensure attractive express bus service and travel time savings. Express lane users will save 30 minutes on average on the 18-mile segment of SR-91 between Orange and Riverside counties. Without the Project, future congestion in the corridor would be severe and express bus service would not be viable.

**Express Bus Service** – Upon completion of the proposed 91 Express Lanes, RCTC expects to nearly double express bus service on SR-91. Currently, RTA and OCTA operate 21 bus trips per day on SR-91 and RCTC envisions adding 20 additional trips,



bringing the total to 40 daily trips. Service duration for this expansion will increase by 11,500 hours per year and will be served by six new transit coaches to be procured specifically for this service.

**Metrolink** –The Project will support and enhance the significant investments already made in the North Main Corona and Corona Metrolink Stations by improving station access to SR-91 and reducing local street congestion near the stations. Easier access and less congestion in and out of the stations will make Metrolink a more attractive travel choice. RCTC’s plan also intends to leverage the investment in four new stations that will serve the PVL in order to attract more riders to the train directly serving the SR-91 corridor.

**Commuter Assistance Program (CAP)** The CAP has averaged well over 8,000 participants over the past three years and in FY 2011, the CAP program recorded a reduction of 1.9 million one-way auto based trips with a savings of 44.3 million vehicle miles and a reduction of 790,000 pounds of emissions. For the proposed 91 Express Lanes, the CAP will provide incentives including express bus pass subsidies along with reduced or toll-free use of the express lane by carpoolers. RCTC is about to deliver both an iPhone and Android application that will include rideshare information and a direct linkage to Google Transit for transit trip planning. The applications will provide a convenient and powerful use of technology to support better mode choice decision-making in the SR-91 corridor and throughout Riverside County.

**Access to Affordable Housing**

In a perfect world, southern California residents could live within a short distance to work; however, this ignores the unique housing and employment realities faced by its workforce. Riverside, Orange and Los Angeles counties form a large and dynamic urban economy with a diverse mix of employment and housing opportunities. Extremely high housing prices in Los Angeles and Orange counties have left little choice for many workers but to live in Riverside County and commute to jobs in Orange and Los Angeles counties. Based on August 2011 data, the housing affordability advantage in Riverside County is \$266,300 compared to Orange County (Figure 3). Assuming a 30-year mortgage at 5% interest, this amounts to a monthly savings of \$1,430 per month. These savings are reduced by the increased commuting costs of \$400 per month, assuming an extra 40 miles per day at 50 cents per mile. The resulting affordability advantage of \$1,030/month is with the Riverside County commuter when comparing the combined cost of housing and transportation, a key livability metric. These are unavoidable facts, and as the region continues to grow, it requires a continued investment in the transportation system that allows people to access affordable housing and get to and from work without insufferable congestion and delay.

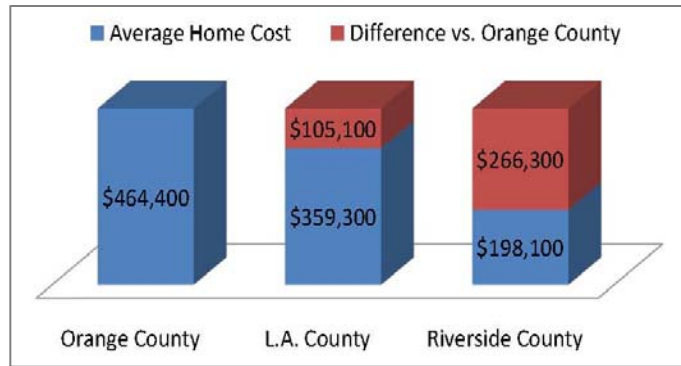


Figure 3 – Average Housing Costs

Finally, if Riverside County is to increase the number of jobs located near affordable housing, it must be possible for employers, employees, and their goods and services to traverse SR-91 eastward at all times of the day, which is currently not possible without extreme loss of economic productivity. The Project is a critical step within a larger mobility strategy to make that possible. Currently, a typical afternoon commute on SR-91 from Anaheim to Corona, which is approximately 23 miles, can take an hour and 40 minutes during the peak hour. The Project will reduce this time by approximately 30 minutes if the 91 Express Lanes are used. By 2035, annual vehicle hours of delay will be reduced by 5,900,000 hours in the corridor, a reduction of over 10% overall, a benefit that will not be realized if the Project does not go forward.

**Enhanced Quality of Life**

During peak-periods, traffic on SR-91 backs up onto city streets, and drivers choose to use parallel local streets cutting through neighborhoods to avoid congestion on the freeway and interchanges. The Project will directly benefit the quality of life in communities along SR-91 by relieving severe traffic congestion on the city streets adjoining each of the five interchanges of SR-91. Most notably, the ramps at Maple Street and Lincoln Avenue will be reconfigured, including the use of a braided on-ramp that will move traffic away from sensitive residential areas. The Project will also improve the interchanges at North Main Street, Serfas Club Drive and Green River Road, which will improve local circulation and



access to the North Main Corona and West Corona Metrolink stations located 0.25-mile north of SR-91. Each of these locations will include standard sidewalks and bicycle lanes to enhance the safety and convenience for bicyclists and pedestrians.

To enhance the livability and quality of life in Corona, RCTC and its partners have transit-oriented redevelopment (TOD) plans for the North Main Corona Station including the area along North Main Street north of SR-91 (Figure 4). The Western Riverside Council of Governments (WRCOG) has taken the lead in organizing a TOD Advisory Committee to develop the station area planning effort. As a member of the advisory committee, RCTC works in close collaboration with the City of Corona and other stakeholders to realize a vision “on the ground” for the station. The Project is consistent with that vision, and by reducing congestion on the local streets near the station, it will improve the viability and implementation of the TOD plan.

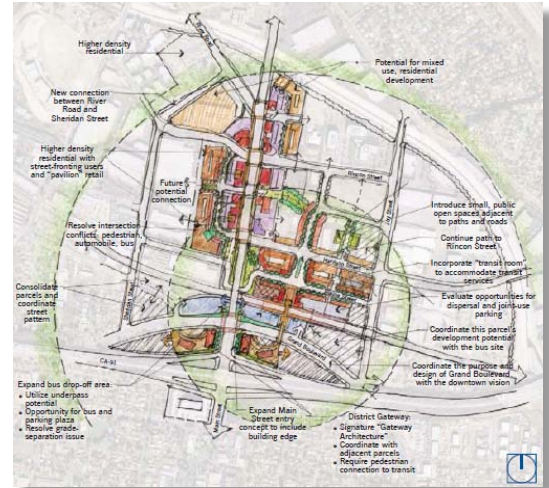


Figure 4 – North Main Corona Station TOD Plan

### Economic Competitiveness

To increase global economic competitiveness, the Obama Administration has laid out an ambitious vision for “winning the future” that includes investing in our transportation infrastructure; putting people back to work, and doubling United States exports over the next five years. Much of this depends on our ability to efficiently move goods and commodities through our major ports, most notably the POLA/POLB. As one of the primary routes between the ports and I-10/I-15, SR-91 is a part of a highly interconnected and dependent network where congestion, delay, and incidents have a dramatic effect on interstate and interregional mobility. An investment in the SR-91 corridor is a proven means to address severe congestion in the corridor and an important step in enhancing economic competitiveness as described below:

### Efficient Goods Movement

The SR-91 corridor is one of three primary freight routes between the POLA/POLB and I-15 and I-10 (Figure 5). More than 40% of the nation’s imported goods enter the United States through the POLA/POLB, which are then distributed to markets throughout the country. United States container traffic doubled over the past decade and is expected to nearly triple by 2030 according to studies completed in July 2009.



Figure 5 – Primary Routes Serving POLA/POLB

The rail lines and highways are already heavily congested, and with an expected 25% increase in regional population by 2030, the congestion problem will only get worse. A recent study published by the USDOT Bureau of Transportation Statistics<sup>1</sup> identified traffic bottlenecks on the landside transportation system serving the nation’s seaports as a critical impediment to the efficient movement of goods. According to the study, the POLA/POLB was the largest port complex in



the United States and, at the same time, suffered from the worst congestion in the nation, averaging approximately 72 hours of annual traffic delay per traveler. Nowhere is this more evident than on SR-91, which has the worst peak-hour congestion of the primary routes serving the POLA/POLB (Table 1).

**Table 1 – POLA/POLB Freight Travel Time Comparison**

<b>POLA/POLB to I-15 East (Devore)</b>	<b>Distance</b>	<b>Travel Time (Off-Peak)</b>	<b>Travel Time (Peak)</b>
Via I-10	75 miles	1:20	2:50
Via SR-91	78 miles	1:23	3:30
<b>POLA/POLB to I-10 East (Banning)</b>			
Via I-10	98 miles	1:45	3:10
Via SR-91	94 miles	1:42	3:40

<sup>1</sup> U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, America's Container Ports: Freight Hubs that Connect Our Nation to Global Markets (Washington, DC: 2009).

Recognizing the critical goods movement issues being faced in the region, a multi-agency collaborative team has been assembled to address existing and projected landside transportation system congestion (i.e., outside the Ports) and its potential impact on cargo throughout the Ports, and environmental and community impacts caused by goods movement. The Southern California National Freight Gateway Collaboration encompasses five southern California counties and extends from the POLA/POLB to the border with Nevada and Arizona. As a member of the collaborative, RCTC is advancing the Project as a means to reduce congestion and delay and improve the long-term efficiency, cost, and reliability of goods movement, which influences the price of goods delivered throughout the United States.

**Job Creation and the Economy**

The SR-91 corridor provides a vital link between employment opportunities in Los Angeles and Orange counties and the Inland Empire. According to the Bureau of Labor Statistics (BLS), these areas are home to nearly 6.6 million jobs or approximately 45% of all jobs in California. In Riverside County, unemployment stands at 14 %, one of the highest of any major metropolitan area in the United States. Current data show that every sector of the Inland Empire economy, except for construction and manufacturing, are slowly recovering, but many areas remain economically distressed with unemployment 62% higher than the national average of 9.4%. In November 2010, 63% of Riverside County voters approved Measure K to increase the debt limit to borrow against future Measure A sales tax revenue. The vote was a clear indication that residents value infrastructure investment enough that they are willing to pay for it with local sales tax revenue. More than that, the vote was a call to accelerate construction of transportation projects and create badly needed jobs in Riverside County.

*In Riverside County, unemployment stands at 14%, one of the highest of any major metropolitan area in the United States.*

The Project would provide an urgently needed “employment bridge,” employing those with construction skills who have been hit hardest by job losses until a broad-based recovery occurs. It is estimated that the Project would create over 16,000 jobs, including 4,600 jobs directly involved with construction and support of the Project.

The Project is estimated to permanently increase the area’s base taxable sales by 2.3%, illustrating the Project’s positive long-term economic benefit. In addition, it is imperative that infrastructure investments are made to support the growth sectors that will replace declining construction and manufacturing employment in the area. According to a 2006 Southern California Association of Governments (SCAG)<sup>2</sup> study, in Riverside County, the most promising sector is the logistics group, which includes companies in fields such as wholesale trade; truck and rail transportation; and general warehousing required to support the POLA/POLB. Since 1990, the logistics group was one of the few nonpopulation-related sections of the economy to provide significant job growth. Despite the recent economic downturn, the POLA/POLB continue to provide more than 3.4 million jobs nationally, with one-third of those located in six states of the





southwest United States; however, continued growth of the sector depends on timely investments in transportation infrastructure between the POLA/POLB and logistics centers in Riverside County. The Project is a key component of that investment strategy, ensuring a healthy and efficient goods movement industry and the jobs it provides.

<sup>2</sup> *Southern California Association of Governments, Logistics & Distribution: An Answer to Regional Upward Social Mobility (2006)*

## Safety

The Project will improve overall corridor safety and reduce accident potential at the following locations:

- The actual accident rate on the eastbound direction of the SR-91 mainline is higher than the statewide average. The predominant types of accidents are rear end accidents, which account for approximately 50% of all accident types. The Project will reduce congestion and the stop and go traffic conditions that cause most rear end accidents.
- The accident rates on southbound SR-71 to westbound SR-91 are more than twice the state average for highway connectors. This is potentially due to the tight radius of the horizontal alignment, which will be upgraded to current standards to reduce accident potential.
- The northbound I-15 to SR-91 connectors experience an accident rate that is more than four times the statewide average. The connectors will be improved using a collector-distributor facility in the westbound direction on SR-91 between I-15 and Main Street, which is expected to reduce congestion and related accidents on the connectors.
- The fatality rate on the eastbound SR-91 to northbound I-15 connector is above the statewide average, likely due to weaving operations from the Main Street ramps. The Project will braid the Main Street ramps, which is expected to improve safety by eliminating the short weave section and potential vehicle conflicts.
- Approximately 35% of all local interchange ramps in the project area have reported accident rates higher than the statewide average. In addition, some interchange ramps have reported fatality rates above the state average. All of the interchanges in the Project limits will be improved to current design standards, which will enhance operations, efficiency, and safety.
- The 91 Express Lanes will be separated from the general purpose (GP) lanes using a “soft barrier,” including a 4-foot-wide buffer and plastic delineators to deter vehicles from crossing into the toll lanes. This is the same configuration used on many managed lane facilities nationally and the existing 91 Express Lanes, which have an excellent safety record since opening in 1995. Accident data indicate that the cut through traffic has not resulted in an increase in accidents compared to the GP lanes. According to a 2009 Customer Survey, over 95% of drivers using the 91 Express Lanes in Orange County perceive that the facility is safe.



## Private Participation (20%)

RCTC’s early planning activities included a rigorous assessment of alternative project delivery models and how best to meet the objectives of the agency, including expediting project delivery, risk allocation and the need for a common toll operator for the 91 Express Lanes in Orange and Riverside counties. This assessment also considered RCTC’s ability to use the excess revenues generated from the 91 Express Lanes to fund long-term corridor needs, including alternative modes. With the assistance of a diverse team of advisors and consultants with substantial experience developing and delivering public-private-partnership (P3) projects, it was determined that a traditional tax-exempt, “publicly-driven” P3 approach would best achieve RCTC’s objectives, while complying with state legislative mandates.

Under the “publicly driven” P3 approach, RCTC, working in partnership with Caltrans, is the Project developer providing the investment capital needed to advance the Project through the NEPA and the project development process. In this capacity, RCTC has identified and mitigated the legislative and political risks of the Project including securing federal tolling authority through execution of a Section 129 Agreement with the FHWA and Caltrans, state tolling authority through SB 1316, and state design-build authority through AB 2098, which amended Section 6800 of the Public Contract Code. In addition, RCTC is obtaining state and local agency cooperative agreements that define project delivery roles and responsibilities and review and approval rights between the parties. RCTC is providing the local funding contribution through their Measure A local sales tax program to support the financial planning and affordability of the Project. This



contribution will be issued as supplemental debt, and is a primary component of the “publicly-driven” P3 approach summarized below:

- **Private Financing** – Project financing will be secured through the issuance of toll revenue bonds. These bonds will be issued on a non-recourse 30 year basis, as supported by the investment grade traffic and revenue study performed by Stantec, through RCTC’s financing team of Fieldman, Rolapp & Associates, Goldman Sachs and Bank of America Merrill Lynch. Significant financial review, modeling work and market analysis has been performed in support of the financial plan presented in Section C of this LOI.
- **Design/Build Delivery** – The Project will be procured and contracted through a single private entity under a competitively bid, best-value, design-build procurement. Design-build is a prerequisite to securing financing through the sale of toll revenue bonds in providing cost and schedule certainty by a qualified design-build contractor. The design-build contractor as a major private participant assumes risk in areas relating to design, construction schedule, differing site conditions, third party approvals and utilities relocation. Other benefits of the design-build approach include single source responsibility and opportunities for innovation that can be captured through alternative technical concepts offered during procurement and value engineering during design and construction. These opportunities offer means to mitigate impacts to project cost and schedule and are critical to the delivery process and securing the Project financing.
- **Toll Operations** - Operation and maintenance of the 91 Express Lanes will be provided through a three party agreement with OCTA to Cofiroute USA LLP (Cofiroute), the existing operator for the 91 Express Lanes in Orange County. The services provided by Cofiroute will include toll systems installation, integration, testing and acceptance and facility operation and maintenance including toll collection and enforcement and back office accounting and customer service. Cofiroute has been operating and maintaining the OCTA 91 Express Lanes for the past 16 years with proven performance and metrics that provide certainty in costs and in facility performance that add significant value to the financing of the Project.

The RCTC “publically driven” P3 model selected for the Project, and the structuring of the public-private partnerships provides the best opportunity for success with the optimal balance of public and private participation and allocation of risks. This balance between private and public participation from project inception through the 50-year term of operations and maintenance represents a level of private participation of over 96% of the Project’s lifecycle costs which amounts to \$2.175 billion.

*....private participation of over 96% of the project’s lifecycle costs which amounts to \$2.175 billion.*

## **Environment (20%)**

The Project utilizes a context-sensitive approach to development, implementation, and operation of the facility, which will yield sustainable and tangible benefits to the environment. Key environmental considerations are summarized here and discussed in more detail below:

- **Sustainability:** The Project includes tolled express lanes and pricing structures designed to manage the high levels of congestion on SR-91 and encourage the use of alternative transportation options. This will encourage energy efficiency, reduce our dependence on oil, reduce greenhouse gas (GHG) emissions, and reduce other transportation-related impacts.
- **Environmental Stewardship:** The Project will address its potential impacts within the framework of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), a pioneering Habitat Conservation Plan that takes an integrated approach to the mitigation and enhancement of sensitive habitats in the corridor.
- **State of Good Repair:** The Project will make a significant investment in the corridor to ensure its long-term maintainability and a reduction in life-cycle costs.



## Sustainability

### Congestion Management Pricing

The Project is an important element in ensuring that traffic flows more smoothly between Orange and Riverside counties. The variable pricing approach of the 91 Express Lanes adjusts toll rates based on the number of vehicles on the road to maintain a “free flow” commute at all times. RCTC will optimize operation of the 91 Express Lanes to maximize total throughput. Motorists pay tolls through the convenient use of windshield-mounted FasTrak transponders that automatically deduct fees from a prepaid account. FasTrak transponders are fully interoperable with all other toll roads, bridges, and express lanes in California. Depending on the time of day, commuters will save 30 minutes on average on their drive time by using the 91 Express Lanes in Riverside County.

The benefits to the individual user are clear, but just as important, the extension of the 91 Express Lanes into Riverside County provides greater control and the flexibility to respond to a variety of future scenarios and uncertainties, including jobs and housing shifts, gas price fluctuations, scarcity of other funding sources, changing travel behavior, and attitudes about sustainability, among others. The variable pricing approach provides a means to actively respond to any future scenario in a way that balances the benefits of the individual user, society, and the environment.

*.... incentives could be adjusted to include the use of alternative fuel vehicles and the expansion of other mode such as express bus service on SR-91.*

### Greenhouse Gas (GHG) Reduction

A quantitative analysis was completed to determine the estimated daily carbon dioxide (CO<sub>2</sub>) emissions associated with vehicle trips that would be generated with the Project. The analysis indicates that, without the Project, CO<sub>2</sub> emissions would increase by 65% by 2035. With the Project, CO<sub>2</sub> emissions would decrease by up to 4.4%, a 69.4% reduction in emissions compared to the no project conditions.

Another factor in reducing GHG emissions is the reduction in vehicle hours traveled (VHT). Without the Project, the peak-hour travel time on the SR-91 HOV lane increases from 44 minutes currently to 86 minutes in 2035 and average speed is reduced to 14 miles per hour (mph). With the Project, the travel time in the 91 Express Lanes would be decreased to approximately 12 minutes with a speed over 50 mph; therefore, the reduced travel time and increased speeds of the build alternative will result in reduced VHT in the project area, which is critical in reducing CO<sub>2</sub> emissions.

*Without the Project, CO<sub>2</sub> emissions would increase by 65% by 2035. With the Project, CO<sub>2</sub> emissions would decrease by up to 4.4%.*

The Project is consistent with the Caltrans Climate Action Program, which indicates that relieving congestion by enhancing operations and improving travel times in highly congested corridors would lead to an overall reduction in GHG emissions and fuel consumption. The build versus no-build operational conditions will result in reduced fuel consumption of up to 4% within the Project area, saving 8,320,000 gallons of fuel by 2035 – the equivalent of 554,000 barrels of crude oil and 2% within the SCAG region, saving 156,000,000 gallons of fuel by 2035 - the equivalent of 10,400,000 barrels of crude oil, primarily associated with local and regional congestion relief.

### Project Sustainability Plan

The sustainability "triple bottom line" captures the need to balance the economic, ecological, and social aspects in the planning and implementation of infrastructure projects. RCTC will deploy sustainable solutions to the design, construction and operations and maintenance of the Project through the “Best Value” Design Build selection process and the integration of the operations and maintenance requirements. As part of the technical selection process, evaluation criteria have been established that score potential design-build proposers on their “Project Sustainability Plan”. This Plan will be based on specific criteria defined in the technical provisions of the procurement documents that use existing state standards with respect to recycled materials, as well as defined objectives in reducing life cycle energy and emissions; alternative fuel incentives/credits for construction fleet conversion; recycle, reuse and renewable construction methods; conservation and ecosystem management; watershed driven storm water management; and, total life cycle cost reductions. RCTC and the design-build team will implement the Plan to define the measures needed to ensure delivery of a sustainable project, including:



- Improve air quality and lower fuel consumption, by incentivizing the design-build contractor to use alternative fuel and hybrid vehicles and equipment.
- Protect water quality through the use of non potable and recycled water. Water treatment BMPs, LID techniques, and spill containment practices will be deployed to prevent transport of sediments and pollutants.
- Support the local economy and reduce secondary transport impacts, with the utilization of local labor and locally sourced material that account for the full life-cycle savings.
- Reduce the waste stream by recycling and reusing pavement millings and other construction waste where possible. In addition, the contractor will resource materials with high contents of repurposed waste products and embedded energy.
- Introduce and reinforce the use of sustainability measures with the construction and inspection staff through training and regular brown bag meetings.
- Respect community values through continuous stakeholder engagement programs.

## **Environmental Stewardship**

### **Biology – Natural Communities**

To assist with sustaining the biodiversity in this area, the Project will implement mitigation measures in the Riverside County/Santa Ana Watershed area, including Chino Hills State Park and Riverside County Regional Conservation Lands. SR-91 is located within the Santa Ana Canyon, which is an important area for biodiversity because of the Santa Ana River, Cleveland National Forest, and Puente-Chino Hills. This area has been disrupted by encroaching development and infrastructure improvements over the years. Mitigation will include creation of wetlands, restoration of riparian/riverine areas, and restoration of upland habitats. Within the Project area are marginal habitat areas, and as part of mitigation for impacts to these areas, RCTC will mitigate offsite in areas identified for conservation or open space. RCTC's approach to environmental stewardship provides mitigation in advance of construction completion whenever possible. Mitigation will be deployed during construction of the Project to ensure early and successful establishment of habitat success.



### **Multiple Species Habitat Conservation Plan (MSHCP)**

RCTC and the Riverside County government are utilizing a pioneering planning process to ensure transportation, land use, and environmental planning are coherent and consistent. The Riverside County Integrated Project (RCIP) was one of the first efforts in the nation to incorporate three formerly distinct plans that affect the placement of infrastructure and open spaces in the County. The plan includes a General Plan for land use, a Multiple Species Habitat Conservation Plan (MSHCP) to determine which land should be set aside for conservation, and the Community and Environmental Transportation Acceptability Process (CETAP) identifying improvements for highways and transit systems. In recognition of this collaborative planning approach, the CETAP was identified as a priority project under Presidential Executive Order 13274 for environmental stewardship.

***The MSHCP is the largest in the nation providing protection of 146 plant and animal species within a planning area of 1.26 million acres. Nearly 500,000 acres of resources, or about 40% of the planning area, will be protected and placed into conservation.***

The Western Riverside County MSHCP is the largest in the nation providing protection of 146 plant and animal species within a planning area of 1.26 million acres. Nearly 500,000 acres of resources, or about 40% of the planning area, will be protected placed into conservation. RCTC continues to demonstrate its firm commitment to environmental protection and the MSHCP by pledging \$153 million for environmental mitigation. Within the first five years of MSHCP implementation, RCTC provided over \$125 million to the Western Riverside County Regional Conservation Authority to assist in the acquisition of 9,000 acres of habitat now placed in conservation.



### **Wildlife Connectivity**

In addition, RCTC also plans to enhance wildlife connectivity in the Santa Ana Canyon area by improving the B Canyon wildlife corridor, which is widely used by small to mid-sized mammals between the Cleveland National Forest, Santa Ana River, and Puente-Chino Hills. This effort will be completed through widening of an existing SR-91 culvert and by restoring native habitat between the Cleveland National Forest and the Chino Hills State Park. The B Canyon wildlife corridor will be completed through the collaborative effort of several agencies including the RCTC, US Fish and Wildlife Service, United States Forest Service, and the California Department of Fish and Game. The B Canyon Wildlife Crossing is a holistic approach toward mitigating the cumulative impacts of projects within this environmentally sensitive area.

### **Air Quality Benefits**

The Project will provide air quality benefits by supplying preferential lanes for carpoolers, ramp metering, auxiliary lanes, traffic signal coordination, and bike/pedestrian facilities, which will improve the efficiency of the system and reduce emissions. The Project will also promote current RCTC and OCTA ride-sharing programs. The Project incorporates a Transportation Demand Management (TDM) strategy by allowing the express lanes to provide free or discounted tolls to vehicles with three or more occupants. More HOV users in the express lane will result in a higher vehicle occupancy rate for SR-91 and less traffic demand.

By 2015, the RCTC is planning to increase commuter rail service by 2 trips on the Metrolink Inland Empire-Orange County Line and 3 trips on the 91 Line (doubling peak-hour service) so that there is a train every 30 minutes in the peak direction. It is expected that the extension of the Express Lanes into Riverside County will decrease travel time for existing express bus services and facilitate the planned expansion of express buses to work with the Metrolink schedule. The Project will provide reliable connectivity between the region's robust bus and rail transit network.

### **State of Good Repair**

Future maintenance and repair of the 91 Express Lanes system will be paid by the users of the facility through the collection of tolls. Over the 50-year life of the facility, this will reduce the overall federal and state cost to maintain I-15 and SR-91 at a time when the nation's unmet infrastructure maintenance needs are at an all-time high and funding resources are limited.

Life-Cycle Cost Analysis (LCCA) was used to evaluate long-term alternative investment options, especially for comparing the value of alternative pavement structures and strategies. The life-cycle cost consists of the agency cost, the road user cost, and the toll fee revenue loss in the work zone for construction, future maintenance and rehabilitation, and routine annual maintenance. Based on the conclusions of the LCCA study, the Project will include long-life (40 years) Portland Cement Concrete (PCC) pavements (PCCP/jointed plain concrete pavement [JPCP]) on the SR-91 and I-15 lane widening and on the SR-91 ramps. Using the long-life pavement for the Project is approximately 30% more cost effective in net present value (NPV) compared to the next best alternative, which includes Continuous Reinforced Concrete Pavement (CRCP).

Based on the April 2007 pavement condition survey, the predominant pavement distresses observed in the Project limits were faulting at the concrete pavement panel joints and poor ride quality. This situation has required above-average maintenance efforts to maintain pavement structural integrity and ride quality. In response, two roadway rehabilitation projects are underway in advance of the Project to restore the pavement on SR-91 and I-15 to a state of good repair. This work includes replacing damaged PCC slabs, pavement grinding/leveling, and an overlay of recycled rubberized asphalt concrete (RAC) on SR-91 and similar rehabilitation on I-15.

Structure rehabilitation and seismic upgrading requirements have been identified by the Project, which will restore and extend the service life and reliability of several major structures, including:

- I-15/Ontario Avenue UC (56-0498 L/R) – Extend abutment seats
- I-15/Old Temescal Road UC (56-0644 L/R) – Extend abutment seats
- SR-91/SR-71 Connector (56-0635) – Abutment diaphragm upgrade
- SR-91/Serfas Club Drive UC (56-0638 L/R) – Abutment diaphragm/vertical restrainer



## **Project Acceleration (12.5%)**

TIFIA assistance will ensure the accelerated delivery of the Project and the benefits it provides, including better mobility and travel mode choices, travel time savings, safer roadway operations, improved air quality, increased job opportunities, and easier access to affordable housing. Without TIFIA assistance, it is likely that the Project would be delayed for at least a decade, and a rare opportunity would be missed to put more than \$1 billion in local funds to work improving the regional and interstate transportation network and provide jobs when they are most needed. This would deal a serious blow to efforts to bridge the near and long-term job losses in the Inland Empire, where unemployment is one of the highest of the 50 largest metropolitan areas in the U.S. Throughout the Project development phase, RCTC has adopted and implemented innovative strategies to accelerate Project delivery for this very reason, including:

### **Leveraging Toll Revenues**

The funding plan detailed in this LOI leverages the Project's anticipated toll revenues by proposing the use of less-traditional funding sources – TIFIA and toll revenue bonds. These funding sources are critical to complete the plan of finance given the current dearth of traditional federal and state funding. Without TIFIA and toll revenue bonds, RCTC's local monies cannot fund the Project, thereby delaying project progress; therefore, using TIFIA and toll revenue bonds will allow the Project to be fully funded earlier compared to traditional sources. It is difficult to determine how long it would take to fund the Project with traditional state and federal funding; however, we anticipate a lengthy delay of many years.

### **Early Implementation Authority**

Another strategy to accelerate the Project was to gain authority for project implementation early in development to maintain the schedule. Several authorities were needed – state and federal tolling authority and design-build authority. In the case of state tolling authority (SB 1316) and design-build authority (AB 2098), legislation was approved by the California State Legislature and signed by the Governor on a bi-partisan basis with broad support from labor and business groups throughout California. Obtaining TIFIA loan approval in 2011 would build upon past implementation authority milestones to proceed with the Project.

### **Design-Build Project Delivery**

RCTC expects that the design-build approach will save more than three years compared to a traditional design-bid-build contract. This time savings is achieved primarily through overlapping final design and construction. Obtaining TIFIA loan approval in 2011 directly impacts RCTC's ability to issue an RFP to procure a design-builder for the Project. Without TIFIA loan approval, RCTC will likely delay this procurement due to the lack of full project funding and the expense and time for RCTC and industry to participate in a design-build procurement. Obtaining a TIFIA loan is critical to maintain the current momentum of the design-build delivery approach.

### **At-Risk Project Development**

RCTC has committed its resources to perform the project development phases concurrently and created forward momentum to deliver the benefits of the Project as early as possible. RCTC has engaged FHWA throughout these phases of work to move the Project forward, including commencing a NEPA EIS in 2007, entering into a Section 129 Toll Agreement for the Project on August 18, 2009, and negotiating an HPPA between FHWA, Caltrans, and RCTC. Design-build planning and procurement has been underway since 2009. Acquisition of residential and commercial property on the open market began in 2010 consistent with state and federal laws. This nonlinear approach poses some risk to RCTC; however, we have managed and balanced these risks against the clear benefits of early project delivery and lower project costs overall.

## **Creditworthiness (12.5%)**

The Creditworthiness of the TIFIA Loan and the related low Credit Subsidy Cost are results of the existence of solid Recovery Factors, based on the nature of the Project and toll revenues, and the Default Mitigants, including the structure of all of the debt financings and the anticipated ratings. RCTC has structured the TIFIA Loan to obtain investment grade ratings (at or above "Baa3"/"BBB-") and is seeking a preliminary credit assessment from Fitch Ratings that will confirm the investment grade rating. The key features supporting the investment grade credit quality are:

**Strategic Location.** The SR-91 corridor has a strategic location as the only freeway connecting Riverside and Orange counties, with a combined population of 5,305,996. These counties, along with their solid economic foundations, have benefited from considerable population and employment growth over the last decade.



**Conservative Debt Structure.** The Plan of Finance provides for significant levels of coverage for all toll related debt. Specifically, the net revenues are projected to be no less than 1.15 times all debt service, including payments on the TIFIA Loan. Moreover, the coverage is projected to be no less than 1.15 times at any time, less than 1.20 times for only three years and over 1.40 times every year after 2034. Coverage exceeds 1.70 times during the last six years of the term up to a projected maximum of 1.75x.

RCTC will also create an additional reserve of \$20 million pledged to fund the TIFIA Loan from the proceeds received from sales of excess right of way property, estimated at over \$29 million. In addition, if RCTC does not receive proceeds of right of way sales of at least \$20 million by June 30, 2019, it will provide such funds.

**Commitment of RCTC Resources.** The Plan of Finance has a mix of debt and equity. The equity comes in two forms: RCTC contributions of pre-development expenses and RCTC annual payments into the construction fund. The total amount in addition to the proceeds of debt that RCTC will provide is \$203,067,000. That amount is more than 15% of the total TIFIA eligible costs of the Project and more than 27% of RCTC's total contribution to the Project.

**Length of Toll Authority.** RCTC's authority to impose tolls on SR-91 extends for fifty years after opening, currently estimated to be 2067, while the debt under the Plan of Finance, including the TIFIA Loan, matures in 2051. After payment of the TIFIA Loan, the net toll revenues are projected to exceed \$100 million each year. If payments on the TIFIA Loan became delinquent, the continuing receipts would ensure ultimate repayment of the TIFIA Loan with any accrued interest.

**Toll Policy Flexibility.** The currently anticipated toll policy is designed to maximize throughput on the corridor, not toll revenues. If the toll revenues are less than the projections, RCTC has the option to modify the toll policy to generate additional revenues.

**Existing Congestion Fuels Demand.** Traffic congestion in the corridor is a fact of life. The Traffic and Revenue projection estimates that in 2017 there will be more than 4.2 million toll transactions, with that number growing to over 9.2 million by 2020. The corridor is estimated to handle 11.5 million transactions annually in 2035.

**Demonstrated Success of Tolls in the Corridor.** The project is not a Greenfield project, but builds on the success of the 91 Express Lanes in Orange County, effectively extending the existing 91 Express Lanes into Riverside County. These lanes have a 16 year proven history of traffic demand and profitability. A survey of existing 91 Express Lanes customers found that 8 out of 10 will use the extension into Riverside County, demonstrating a significant demand from the current customer base. The Project will be interoperable with the existing 91 Express Lanes and provide a seamless experience for users. This substantially reduces the execution and implementation risk of similar toll facilities. Toll revenue bonds secured by revenues derived from operation of the existing 91 Express Lanes by OCTA have been assigned a long-term, unsecured debt rating by Standard & Poor's of "A" with a stable outlook.

**Synergy of Operations with Existing 91 Express Lanes.** The Project will share a common operator and operations center with the existing 91 Express Lanes. It will benefit from OCTA's extensive record of operations and experience in managing the 91 Express Lanes' variable tolling system effectively and efficiently in a manner that maximized throughput while maintaining speed targets and delivering cost and time-to-destination certainty to users. This also means RCTC will have an accurate estimate of operations and maintenance costs, and RCTC and OCTA will benefit from having lower operating costs for each agency than would occur with two stand-alone operations.

**Political Support.** The Project benefits from strong political support. Despite the challenging economy, lowered sales tax receipts, lack of state funding, and other challenges of delivering the Project, RCTC's willingness to proceed with the Project and the scope of the funding it is contributing, both in the form of bond proceeds and cash on hand, estimated at \$726,423,000, underscores the importance of this Project to RCTC and the region. This high level of support allows the Project to be financed with a lower amount of overall toll-based funding, considering both the first lien toll revenue bonds and the TIFIA Loan.

**RCTC's High Quality Credit.** RCTC's sales tax revenue bonds have very strong ratings of "Aa1"/"AA+"/"AA" from Moody's Investors Service, Standard & Poor's Ratings Service and Fitch Ratings, respectively. While the Plan of Finance provides for \$510,985,000 of sales tax revenue bonds as part of RCTC's contribution to the Project, the credit strength of those bonds will continue to be in the "AA" category. Sales tax revenues will continue to generate significant coverage of total debt service even after issuance of the bonds for the Project. The issuance of that principal amount of bonds does not bring RCTC up to its legal maximum for outstanding sales tax revenue bonds.

#### **Additional Financial Detail**

Appendix B includes a more specific description of the Plan of Finance and the structural elements of the TIFIA Loan.



## **Use of Technology (5%)**

As with the existing 91 Express Lanes, the Project will include an all Electronic Toll Collection (ETC) system to streamline collections and avoid forcing motorists to stop for cash transactions. All users will be required to have an account with a tolling agency that will issue a FasTrak transponder or “toll tag” to the customer. FasTrak transponders are fully interoperable with all toll roads and bridges and express lanes in California. The Project will allow free or reduced toll access to HOV 3+ carpool vehicles and tolled access for vehicles 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. Vehicles will utilize a separate third lane to declare themselves as carpoolers consistent with existing practice.

As presently envisioned, the toll rate will be set by time of day based on traffic demand observed over the previous three month period. This variable pricing approach is identical to the current pricing approach used successfully on the existing 91 Express Lanes for the last 16 years. Toll rates average \$2.93 per trip and currently vary from a minimum of \$1.30 to a maximum of \$9.75 for one hour during the Friday afternoon peak period. The Project tolling system will have the ability to operate under dynamic pricing in the future where the actual travel time in the 91 Express Lanes or the travel time differential between the SR-91 general purpose lanes and 91 Express Lanes will be measured in real time between the entry and exit point, and the price to travel in the 91 Express Lanes will be adjusted, usually at 15-minute intervals, as required to maintain traffic flow.



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 the Project pursuant to an agreement between OCTA and RCTC, under which the two agencies shall collaborate, share costs, and cooperate in making the entire 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.

## **Budget Authority (5%)**

The ultimate credit quality and, in turn, subsidy rate for the Project will be a function of Project-specific (see above) and proposer-specific credit concerns (e.g., the final capital structure, the nature of the successful proposer, performance bonds obtained). RCTC is developing the Project to establish and maintain a strong credit profile. This strong credit is developed through the willingness of RCTC to invest large amounts of its Measure A sales tax revenues in the financial plan. Sales tax revenues are projected to be the primary source of funding and financing for the Project. Given the importance of TIFIA credit assistance to the Project, the inverse relationship between credit quality and subsidy cost encourages RCTC to strengthen credit quality in an effort to minimize the impact on budget authority.

The financial strength of the Project enhances the position of the federal government. The Project maintains a strong credit profile by: (1) its straightforward capital structure; (2) the conservative nature of RCTC and successful financial history and credit ratings; and (3) the performance bonds that will be required from any proposer.

## **Reduced Federal Grant Assistance (5%)**

The costs of the Project, with the minor exception of \$2 million of federal and state STIP funds, will be borne completely by the users of the 91 Express Lanes and residents of Riverside County. The current financial plan does not include any federal grant assistance. The TIFIA loan will reduce and possibly eliminate the need for federal grant assistance for the Project. Assuming all else remains constant, except for leverage ratios, if there is no competitively priced and structured subordinate or mezzanine debt available to replace TIFIA, and TIFIA is not available to the Project, then the level of public funds required of RCTC increases by approximately \$391 million (\$2010). Under traditional pay-as-you go financing for National Highway System-designated projects, FHWA pays 80% of construction costs, and the state and local governments pay for the remaining costs. If the public funds contribution for the Project is sourced using similar split, federal grant





**J) Identify a key contact person with whom all communication should flow.**

Michael Blomquist  
Toll Program Director  
4080 Lemon Street, 3rd Floor  
Riverside, CA 92501-3634  
Phone: (951) 787-7141  
Fax: (951) 787-7920  
E-mail: mblomquist@rctc.org

**Fees** – The undersigned certifies that, if invited to submit a formal application, payment of a nonrefundable \$50,000 application fee will be made to the DOT concurrent with the application submission. For projects that enter credit negotiations, the undersigned further certifies that a transaction fee will be paid at closing or, in the event no final credit agreement is reached, upon invoicing by the DOT, in the amount equal to the actual costs incurred by the DOT in procuring the assistance of outside financial advisors and legal counsel. This fee is due whether or not the loan closes.

**Debarment** – The undersigned certifies that it is not currently, nor has it been in the preceding three years: (1) debarred, suspended, or declared ineligible from participating in any federal program; (2) formally proposed for debarment, with a final determination still pending; (3) voluntarily excluded from participation in a federal transaction; or (4) indicted, convicted, or had a civil judgment rendered against it for any of the offenses listed in the Regulations Governing Debarment and Suspension (Government-wide Nonprocurement Debarment and Suspension Regulations: 49 CFR Part 29).

**Default/Delinquency** – The undersigned further certifies that neither it nor any of its subsidiaries or affiliates are currently in default or delinquent on any debt or loans provided or guaranteed by the federal government.

**Signature** – By submitting this LOI, the undersigned certifies that the facts stated herein are true, to the best of the applicant's knowledge and belief after due inquiry, and that the applicant has not omitted any material facts. The undersigned is an authorized representative of the applicant.

**Submitted by:**

**Applicant/Borrower Name:** Anne Mayer

**Title:** Executive Director

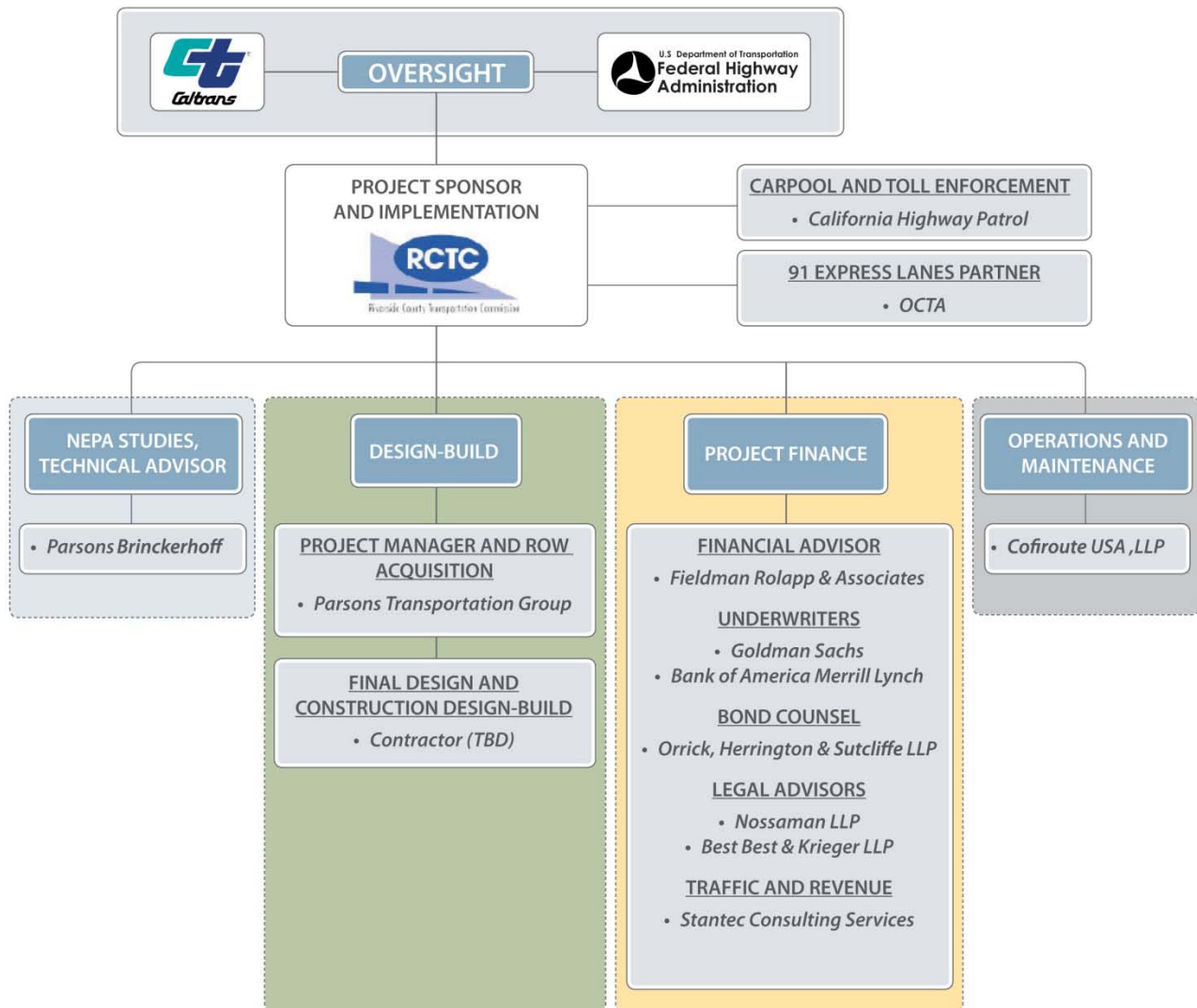
**Organization:** Riverside County Transportation Commission

**Date:** October 31, 2011



## Appendix A

### Exhibit 1 - Project Team Organization





## Appendix B

### Detailed Financial Information

**Sources of Funding for the Project.** Funding for the project comes primarily from toll revenues paid by users of the project, sales tax revenues from taxable transactions within Riverside County and State Transportation Improvement Program funds.

- **Toll revenues** – A senior lien on toll revenues is provided to toll revenue bonds issued to the public. Repayments of the TIFIA Loan have a subordinate priority. RCTC has structured the TIFIA Loan to obtain investment grade ratings (at or above “Baa3”/“BBB-“) and is seeking a preliminary credit assessment from Fitch Ratings that will confirm the investment grade rating.
- **Sales tax revenues (RCTC contribution)** – RCTC will apply funds received under its Measure A sales tax in three ways: (i) contribution of predevelopment costs; (ii) annual contribution during construction – RCTC will make an annual contribution to the construction costs during FYs 2013-14, 2014-15, and 2015-16 of approximately \$39,700,000; and (iii) sales tax revenue bonds – RCTC will issue sales tax revenue bonds, to be rated in the “AA/Aa” category (existing ratings of “Aa1”/“AA+”/“AA”), at financial close in an estimated principal amount of \$510,985,000, resulting in \$525,354,000 including investment proceeds.
- **State Transportation Improvement Program** – RCTC will apply \$2,000,000 of funds received under STIP to the project.

#### Breakdown of RCTC Contribution (000’s)

RCTC’s contribution to the Project comes from its Measure A sales tax, a 0.50% sales tax within Riverside County.

RCTC Sales Tax Bonds	\$ 525,354	72.3%
Pay Go during Construction	\$ 119,107	16.4%
Pre-development Costs	\$ 81,962	11.3%
	<u>\$ 726,423</u>	

#### Application of Financing Proceeds (000’s)

The portion of Project costs not previously paid by RCTC as pre-development costs or paid by RCTC on an annual basis will be funded through the issuance of four series of financings:

- First Lien Current Pay Toll Revenue Bonds
- First Lien Capital Appreciation Bonds
- TIFIA Loan (Third Lien to provide the possibility of an additional second lien of bonds while maintaining projected investment grade ratings on TIFIA Loan)
- RCTC Sales Tax Revenue Bonds

Sources	Third Lien (TIFIA)	First Lien CAB	First Lien Current Pay	RCTC Sales Tax Bonds	Total
Par Amount	\$ 444,934	\$ 49,317	\$ 121,180	\$ 510,985	\$ 1,126,416
Investment Earnings		1,209	2,253	14,369	17,831
<b>TOTAL</b>	<b>\$ 444,934</b>	<b>\$ 50,526</b>	<b>\$ 123,433</b>	<b>\$ 525,354</b>	<b>\$ 1,144,247</b>
<b>Uses</b>					
Project Fund Deposit	\$ 444,934	\$ 45,101	\$ 78,218	\$ 441,073	\$ 1,009,326
Debt Service Reserve Fund		4,932	12,118		17,050
Capitalized Interest Fund			31,883	79,167	111,050
Issuance Costs		493	1,214	5,114	6,821
<b>TOTAL</b>	<b>\$ 444,934</b>	<b>\$ 50,526</b>	<b>\$ 123,433</b>	<b>\$ 525,354</b>	<b>\$ 1,144,247</b>



**Amortization of TIFIA Loan (000s)**

The table below contains the proposed amortization of the TIFIA Loan, including the accretion and repayment of interest.

	TIFIA Draws	Principal	Interest	Compounded Interest	Debt Service	Nominal Principal Balance	Accreted Interest	Total Bond Value
6/30/2012								
12/31/2012								
6/30/2013	\$ 54,065					\$ 54,065		\$ 54,065
12/31/2013						54,065	1,216	55,281
6/30/2014	107,099					161,164	2,460	163,624
12/31/2014						161,164	6,142	167,306
6/30/2015	119,219					280,383	9,906	290,289
12/31/2015						280,383	16,438	296,821
6/30/2016	101,865					382,248	23,116	405,364
12/31/2016						382,248	32,237	414,485
6/30/2017	48,588					430,836	41,563	472,399
12/31/2017						430,836	65,981	496,817
6/30/2018	14,098					444,934	63,061	507,995
12/31/2018		447		261	708	444,487	74,233	518,720
6/30/2019		457		267	724	444,030	85,632	529,662
12/31/2019		464		271	735	443,566	97,280	540,846
6/30/2020		474		277	751	443,092	109,173	552,265
12/31/2020		916		536	1,452	442,176	121,067	563,243
6/30/2021		937		548	1,485	441,239	133,191	574,430
12/31/2021		1,879		1,098	2,977	439,360	145,013	584,373
6/30/2022		1,922		1,123	3,045	437,438	157,038	594,476
12/31/2022		1,021		597	1,618	436,417	169,820	606,237
6/30/2023		1,044		610	1,654	435,373	182,852	618,225
12/31/2023		1,480		865	2,345	433,893	195,896	629,789
6/30/2024		1,514		885	2,399	432,379	209,179	641,558
12/31/2024		7,107		4,154	11,261	425,272	219,462	644,734
6/30/2025		7,267		4,247	11,514	418,005	229,722	647,727
12/31/2025		6,495		3,796	10,291	411,510	240,503	652,013
6/30/2026		771	14,670	450	15,891	410,739	240,053	650,792
12/31/2026			14,643		14,643	410,739	240,053	650,792
6/30/2027			14,643		14,643	410,739	240,053	650,792
12/31/2027			14,643		14,643	410,739	240,053	650,792
6/30/2028			14,643		14,643	410,739	240,053	650,792
12/31/2028			14,643		14,643	410,739	240,053	650,792
6/30/2029			14,643		14,643	410,739	240,053	650,792
12/31/2029		107	14,643	63	14,813	410,632	239,990	650,622
6/30/2030		107	14,639	63	14,809	410,525	239,927	650,452
12/31/2030		920	14,635	538	16,093	409,605	239,389	648,994
6/30/2031		920	14,602	537	16,059	408,685	238,852	647,537
12/31/2031		1,833	14,570	1,072	17,475	406,852	237,780	644,632
6/30/2032		1,834	14,504	1,072	17,410	405,018	236,709	641,727
12/31/2032		2,860	14,439	1,672	18,971	402,158	235,037	637,195
6/30/2033		2,860	14,337	1,671	18,868	399,298	233,366	632,664
12/31/2033		4,008	14,235	2,343	20,586	395,290	231,023	626,313
6/30/2034		4,009	14,092	2,343	20,444	391,281	228,680	619,961
12/31/2034		4,059	13,949	2,373	20,381	387,222	226,307	613,529
6/30/2035		4,061	13,804	2,373	20,238	383,161	223,934	607,095
12/31/2035		3,862	13,660	2,257	19,779	379,299	221,677	600,976
6/30/2036		3,863	13,522	2,257	19,642	375,436	219,420	594,856
12/31/2036		4,564	13,384	2,667	20,615	370,872	216,752	587,624
6/30/2037		4,564	13,222	2,668	20,454	366,308	214,085	580,393
12/31/2037		5,323	13,059	3,111	21,493	360,985	210,974	571,959
6/30/2038		5,324	12,869	3,111	21,304	355,661	207,862	563,523
12/31/2038		6,302	12,679	3,683	22,664	349,359	204,179	553,538
6/30/2039		6,303	12,455	3,683	22,441	343,056	200,496	543,552
12/31/2039		7,341	12,230	4,291	23,862	335,715	196,205	531,920
6/30/2040		7,341	11,968	4,291	23,600	328,374	191,915	520,289
12/31/2040		8,291	11,706	4,846	24,843	320,083	187,069	507,152
6/30/2041		8,293	11,411	4,846	24,550	311,790	182,222	494,012
12/31/2041		9,314	11,115	5,443	25,872	302,476	176,779	479,255
6/30/2042		9,314	10,783	5,444	25,541	293,162	171,335	464,497
12/31/2042		10,413	10,451	6,086	26,950	282,749	165,249	447,998
6/30/2043		10,412	10,080	6,086	26,578	272,337	159,134	431,471
12/31/2043		11,593	9,709	6,775	28,077	260,744	152,389	413,133
6/30/2044		11,593	9,295	6,775	27,663	249,151	145,613	394,764
12/31/2044		12,860	8,882	7,516	29,258	236,291	138,097	374,388
6/30/2045		12,859	8,424	7,516	28,799	223,432	130,582	354,014
12/31/2045		14,218	7,965	8,310	30,493	209,214	122,272	331,486
6/30/2046		14,218	7,458	8,310	29,986	194,996	113,962	308,958
12/31/2046		15,675	6,952	9,161	31,788	179,321	104,801	284,122
6/30/2047		15,675	6,393	9,161	31,229	163,646	95,640	259,286
12/31/2047		17,266	5,834	10,091	33,191	146,380	85,549	231,929
6/30/2048		17,265	5,218	10,091	32,574	129,115	75,459	204,574
12/31/2048		19,283	4,603	11,270	35,156	109,832	64,189	174,021
6/30/2049		19,282	3,915	11,270	34,467	90,550	52,919	143,469
12/31/2049		21,462	3,228	12,544	37,234	69,088	40,376	109,464
6/30/2050		21,462	2,463	12,543	36,468	47,626	27,833	75,459
12/31/2050		23,812	1,698	13,916	39,426	23,814	13,916	37,730
6/30/2051		23,811	849	13,916	38,576			
		\$ 444,931	\$ 562,457	\$ 260,040	\$ 1,267,428		\$ 11,612,496	\$ 36,568,821



	TIFIA Draws	Principal	Interest	Compounded Interest	Debt Service	Nominal Principal Balance	Accreted Interest	Outstanding Obligation
6/30/2039		6,303	12,455	3,683	22,441	343,056	200,496	543,552
12/31/2039		7,341	12,230	4,291	23,862	335,715	196,205	531,920
6/30/2040		7,341	11,968	4,291	23,600	328,374	191,915	520,289
12/31/2040		8,291	11,706	4,846	24,843	320,083	187,069	507,152
6/30/2041		8,293	11,411	4,846	24,550	311,790	182,222	494,012
12/31/2041		9,314	11,115	5,443	25,872	302,476	176,779	479,255
6/30/2042		9,314	10,783	5,444	25,541	293,162	171,335	464,497
12/31/2042		10,413	10,451	6,086	26,950	282,749	165,249	447,998
6/30/2043		10,412	10,080	6,086	26,578	272,337	159,134	431,471
12/31/2043		11,593	9,709	6,775	28,077	260,744	152,389	413,133
6/30/2044		11,593	9,295	6,775	27,663	249,151	145,613	394,764
12/31/2044		12,860	8,882	7,516	29,258	236,291	138,097	374,388
6/30/2045		12,859	8,424	7,516	28,799	223,432	130,582	354,014
12/31/2045		14,218	7,965	8,310	30,493	209,214	122,272	331,486
6/30/2046		14,218	7,458	8,310	29,986	194,996	113,962	308,958
12/31/2046		15,675	6,952	9,161	31,788	179,321	104,801	284,122
6/30/2047		15,675	6,393	9,161	31,229	163,646	95,640	259,286
12/31/2047		17,266	5,834	10,091	33,191	146,380	85,549	231,929
6/30/2048		17,265	5,218	10,091	32,574	129,115	75,459	204,574
12/31/2048		19,283	4,603	11,270	35,156	109,832	64,189	174,021
6/30/2049		19,282	3,915	11,270	34,467	90,550	52,919	143,469
12/31/2049		21,462	3,228	12,544	37,234	69,088	40,376	109,464
6/30/2050		21,462	2,463	12,543	36,468	47,626	27,833	75,459
12/31/2050		23,812	1,698	13,916	39,426	23,814	13,916	37,730
6/30/2051		23,811	849	13,916	38,576			
	<b>\$ 444,931</b>	<b>\$ 562,457</b>	<b>\$ 260,040</b>	<b>\$ 1,267,428</b>				

<sup>1</sup> differences due to rounding

### Total Debt Service Payable

The chart below demonstrates a comparison between the available cashflow (revenues after payment of O&M) and the projected debt service. It also includes the coverage calculation of the TIFIA Loan, both including and excluding the proposed reserve fund.

