



AGENDA

Regional Planning and Highways Committee Meeting

Committee Members

Mark A. Murphy, Chairman
Barbara Delgleize, Vice Chair
Lisa A. Bartlett
Doug Chaffee
Joe Muller
Richard Murphy
Miguel Pulido

Orange County Transportation Authority
Headquarters
550 South Main Street
Board Room – Conf. Room 07
Orange, California
Monday, July 1, 2019 at 10:30 a.m.

Any person with a disability who requires a modification or accommodation in order to participate in this meeting should contact the OCTA Clerk of the Board, telephone (714) 560-5676, no less than two (2) business days prior to this meeting to enable OCTA to make reasonable arrangements to assure accessibility to this meeting.

Agenda descriptions are intended to give members of the public a general summary of items of business to be transacted or discussed. The posting of the recommended actions does not indicate what action will be taken. The Committee may take any action which it deems to be appropriate on the agenda item and is not limited in any way by the notice of the recommended action.

All documents relative to the items referenced in this agenda are available for public inspection at www.octa.net or through the Clerk of the Board's office at the OCTA Headquarters, 600 South Main Street, Orange, California.

Call to Order

Pledge of Allegiance

Director Bartlett

1. Public Comments

Special Calendar

There are no Special Calendar matters.

Consent Calendar (Items 2 through 5)

All items on the Consent Calendar are to be approved in one motion unless a Committee Member or a member of the public requests separate action or discussion on a specific item.

2. Approval of Minutes

Approval of the minutes of the Regional Planning and Highways Committee meeting of June 3, 2019.



AGENDA

Regional Planning and Highways Committee Meeting

3. Amendment to Cooperative Agreement with Southern California Regional Rail Authority for the Interstate 5 High-Occupancy Vehicle Improvement Project Between State Route 55 and State Route 57

Niall Barrett/James G. Beil

Overview

Cooperative Agreement No. C-6-1574 with the Southern California Regional Rail Authority provides for design review services and limited construction inspection for the Interstate 5 high-occupancy vehicle improvement project between State Route 55 and State Route 57. An amendment to the cooperative agreement is required for additional railroad flagging and inspection services.

Recommendations

- A. Authorize the Chief Executive Officer to negotiate and execute Amendment No. 2 to Cooperative Agreement No. C-6-1574 between the Orange County Transportation Authority and Southern California Regional Rail Authority, in the amount of \$40,425, for additional railroad flagging and inspection services. This will increase the maximum obligation of the cooperative agreement to a total contract value of \$89,925.
- B. Authorize the use of \$40,425 in OC Go funds for construction inspection, which will increase Cooperative Agreement No. C-6-1574 from \$49,500 to \$89,925, for the Interstate 5 high-occupancy vehicle improvement project between State Route 55 and State Route 57.

4. Measure M2 Eligibility Review Recommendations for Fiscal Year 2017-18 Expenditure Reports

Kelsey Imler/Kia Mortazavi

Overview

The Measure M2 Ordinance requires that all Orange County local agencies annually satisfy eligibility requirements in order to receive net Measure M2 revenues. As part of this requirement, fiscal year 2017-18 expenditure reports and resolutions were submitted by all local agencies. In May, the cities of Santa Ana and Stanton were deemed ineligible by the Board of Directors, and their expenditure reports were subsequently excluded from further review. In June, the Orange County Transportation Authority Taxpayer Oversight Committee reviewed and affirmed that all currently conditionally eligible local agencies' (excluding the cities of Santa Ana and Stanton) expenditure reports were consistent with Measure M2 requirements. Based upon this determination, Board of Directors approval is now requested to find all currently conditionally eligible local agencies eligible to receive net Measure M2 revenues for fiscal year 2018-19.



AGENDA

Regional Planning and Highways Committee Meeting

4. (Continued)

Recommendation

Find all conditionally eligible local agencies (excluding the cities of Santa Ana and Stanton) eligible to receive net Measure M2 revenues for fiscal year 2018-19.

5. Grant Acceptance for the Safe Travels Education Program and the Freeway Bus Rapid Transit Concept Study

Jennifer Haith Farinas/Kia Mortazavi

Overview

The Orange County Transportation Authority was recently awarded \$500,000 for the Safe Travels Education Program through the statewide Active Transportation Program, Cycle 4, and \$210,602 for the Freeway Bus Rapid Transit Concept Study through the statewide Sustainable Transportation Planning Grant Program. In order to utilize these grants, staff is seeking Board of Directors' approval to accept the awards and enter into agreements with the granting agencies.

Recommendations

- A. Authorize the Chief Executive Officer, or designee, to accept the Active Transportation Program grant award and execute grant-related agreements and documents with the California Department of Transportation and the Southern California Association of Governments.
- B. Adopt Orange County Transportation Authority Resolution No. 2019-059 authorizing the Chief Executive Officer, or designee, to accept the Sustainable Transportation Planning Grant award and execute grant-related agreements and documents with the California Department of Transportation and the Southern California Association of Governments.
- C. Authorize the Chief Executive Officer, or designee, to amend the Federal Transportation Improvement Program and process all necessary amendments to facilitate the recommendation above.



AGENDA

Regional Planning and Highways Committee Meeting

Regular Calendar

6. Draft 2019 State Route 91 Implementation Plan

Alison Army/Kia Mortazavi

Overview

The Orange County Transportation Authority and the Riverside County Transportation Commission annually prepare a plan for potential improvements along the State Route 91 corridor between State Route 57 in Orange County and Interstate 15 in Riverside County. The plan includes a listing of potential improvements, preliminary cost estimates, and potential implementation timeframes. These improvements are sponsored by various agencies such as the Orange County Transportation Authority, the Riverside County Transportation Commission, the Transportation Corridor Agencies, the California Department of Transportation, and cities along the corridor. The Draft 2019 State Route 91 Implementation Plan is provided.

Recommendation

Receive and file as an information item.

Discussion Items

7. Chief Executive Officer's Report

8. Committee Members' Reports

9. Closed Session

There are no Closed Session items scheduled.

10. Adjournment

The next regularly scheduled meeting of this Committee will be held at **10:30 a.m. on Monday, August 5, 2019**, at the Orange County Transportation Authority Headquarters, 550 South Main Street, Board Room - Conference Room 07, Orange, California.



MINUTES

Regional Planning and Highways Committee Meeting

Committee Members Present

Mark A. Murphy, Chairman
Barbara Delgleize, Vice Chair
Doug Chaffee
Joe Muller

Staff Present

Darrell E. Johnson, Chief Executive Officer
Ken Phipps, Deputy Chief Executive Officer
Laurena Weinert, Clerk of the Board
James Donich, General Counsel
OCTA Staff and Members of the General Public

Committee Members Absent

Lisa A. Bartlett
Richard Murphy
Miguel Pulido

Call to Order

The June 3, 2019 regular meeting of the Regional Planning and Highways Committee was called to order by Committee Chairman M. Murphy at 10:30 a.m.

Pledge of Allegiance

Committee Vice Chair Delgleize led in the Pledge of Allegiance.

1. Public Comments

No public comments were received.

Special Calendar

There were no Special Calendar matters.

Consent Calendar (Items 2 through 9)

2. Approval of Minutes

A motion was made by Director Chaffee, seconded by Committee Vice Chair Delgleize, and declared passed by those present, to approve the minutes of the Regional Planning and Highways Committee meeting of May 6, 2019.



MINUTES

Regional Planning and Highways Committee Meeting

3. Contract Change Order for Demolition and Clearance Services for the Transit Security and Operations Center in the City of Anaheim

A motion was made by Director Chaffee, seconded by Committee Vice Chair Delgleize, and declared passed by those present, to authorize the Chief Executive Officer to negotiate and execute Contract Change Order No. 1 to Agreement No. C-7-2115 between the Orange County Transportation Authority and OFRS, Inc., in the amount of \$14,014, and to add 221 calendar days to the contract duration for demolition and clearance services for the Transit Security and Operations Center in the City of Anaheim.

4. Contract Change Order for Additional Construction Efforts for the Interstate 405 Improvement Project Between State Route 73 and Interstate 605

A motion was made by Director Chaffee, seconded by Committee Vice Chair Delgleize, and declared passed by those present, to authorize the Chief Executive Officer to negotiate and execute Contract Change Order No. 35 to Agreement No. C-5-3843 between the Orange County Transportation Authority and OC 405 Partners, a joint venture, in the amount of \$2,900,557, for additional construction costs to comply with California Department of Transportation pavement smoothness requirements.

5. Cooperative Agreement with the California Department of Transportation for the State Route 91 Improvement Project Between State Route 57 and State Route 55

A motion was made by Director Chaffee, seconded by Committee Vice Chair Delgleize, and declared passed by those present, to:

- A. Authorize the Chief Executive Officer to negotiate and execute Cooperative Agreement No. C-9-1274 between the Orange County Transportation Authority and the California Department of Transportation, in the amount of \$1,500,000, to provide oversight of the plans, specifications, and estimates, and to advertise and award the construction contracts for the State Route 91 improvement project between State Route 57 and State Route 55.
- B. Authorize staff to amend the Federal Transportation Improvement Program and execute all necessary agreements to facilitate the above recommendation.



6. Capital Programming Update

A motion was made by Director Chaffee, seconded by Committee Vice Chair Delgleize, and declared passed by those present, to:

- A. Authorize the use of up to \$3.280 million in Proposition 1B Transit System Safety, Security and Disaster Response Account Program funds and \$0.538 million in Proposition 1B Public Transportation Modernization, Improvement and Service Enhancement Account funding (\$3.818 million total) for the Raymond Avenue Railroad Grade Separation Project from the following projects contingent on the approval of the funding agencies:
 - Transit Security Operations Center Project design phase (\$1.858 million);
 - Video Surveillance System Upgrade Project (\$0.373 million);
 - Generator at bus bases (\$0.450 million);
 - Goldenwest Transportation Center Light Poles Project (\$0.380 million);
 - San Juan Creek Bridge Project right-of-way phase (\$0.101 million);
 - Interest earned on Proposition 1B Transit System Safety, Security and Disaster Response Account Program funds (\$0.118 million); and
 - Interest earned on Proposition 1B Public Transportation Modernization, Improvement and Service Enhancement Account funds (\$0.538 million).
- B. Authorize the Chief Executive Officer to negotiate and execute Amendment No. 8 to Cooperative Agreement No. C-9-0576 between the Orange County Transportation Authority and the City of Fullerton, to increase funding in the agreement by \$1.484 million, and replace \$3.100 million in existing funds, for the Raymond Avenue Railroad Grade Separation Project. This will increase the maximum obligation of the agreement to a total contract value of \$126.317 million.
- C. Authorize staff to process all necessary amendments to the Federal Transportation Improvement Program and execute or amend all necessary agreements to facilitate the above actions.



MINUTES

Regional Planning and Highways Committee Meeting

7. Comprehensive Transportation Funding Programs Semi-Annual Review - March 2019

A motion was made by Director Chaffee, seconded by Committee Vice Chair Delgleize, and declared passed by those present, to:

- A. Approve adjustments to the Comprehensive Transportation Funding Programs projects and Local Fair Share funds.
- B. Authorize the Chief Executive Officer, or his designee, to execute Cooperative Agreement No. C-9-1380 between the Orange County Transportation Authority and the City of Brea to administer Measure M2 grant funds, in an amount not to exceed \$13,114,578, for the construction and landscaping components of the State Route 57 Lambert Road Interchange Project to establish appropriate roles and responsibilities.

8. Comprehensive Transportation Funding Programs - 2019 Call for Projects Programming Recommendations

A motion was made by Director Chaffee, seconded by Committee Vice Chair Delgleize, and declared passed by those present, to:

- A. Approve the award of \$.835 million in 2019 Regional Capacity Program funds to one local agency project.
- B. Approve the award of \$7.695 million in 2019 Regional Traffic Signal Synchronization Program funds to five local agency projects.

9. Orange County Transportation Authority State and Federal Grant Programs - Update and Recommendations

A motion was made by Director Chaffee, seconded by Committee Vice Chair Delgleize, and declared passed by those present, to:

- A. Authorize conditional approval of delay requests for three projects from the cities of Anaheim, Garden Grove, and the County of Orange, contingent on the availability of Orange County Transportation Authority's Congestion Mitigation and Air Quality Improvement Program funds.
- B. Approve one project cancellation from the City of Costa Mesa and authorize staff to reprogram savings to the 2019 Bicycle Corridor Improvement Program.



9. (Continued)

- C. Authorize staff to make all necessary amendments to the Federal Transportation Improvement Program and execute any required agreements or amendments to facilitate the recommendations above.

Regular Calendar

10. Funding Recommendations for the 2019 Bicycle Corridor Improvement Program

Louis Zhao, Section Manager of Discretionary Funding Programs, Planning, provided a report on the following:

- Background information on the Bicycle Corridor Improvement Program (BCIP).
- The BCIP is funded with a 10 percent set aside of Orange County Transportation Authority's (OCTA) share of Federal Congestion Mitigation and Air Quality Improvement (CMAQ) program funds. CMAQ is funded through the Federal Fixing America's Surface Transportation Act.
- The goals of the BCIP are to:
 - Increase the number of bicycling and walking trips;
 - Provide regional linkages to key destinations;
 - Close bikeway corridor gaps;
 - Promote mobility options by increasing safety;
 - Implement projects with community support; and
 - Improve air quality throughout Orange County.
- On September 24, 2019, the Board of Directors (Board) approved the 2019 BCIP Guidelines, releasing a call for projects for \$25 million. The funds were to be awarded from fiscal year (FY) 2019-20 through FY 2023-24.
- Eligible phases of work include environmental, design, right-of-way, and construction.
- Twenty projects from 12 Orange County agencies were submitted requesting \$32.24 million in CMAQ funds. Three requests were withdrawn, leaving 17 projects requesting \$30 million.
- OCTA conducted an eligibility review of all projects to ensure project elements and engineers estimates were eligible for funding.
- An advisory panel consisting of OCTA staff, Technical Advisory Committee members, the Chair of the Bicycle and Pedestrian Citizen Advisory Sub-Committee, and California Department of Transportation staff reviewed the projects.
- All 17 projects reviewed were recommended for funding for a total of \$25.84 million in requests.



10. (Continued)

A motion was made by Director Muller, seconded by Committee Vice Chair Delgleize, and declared passed by those present, to:

- A. Approve 12 projects for \$20.40 million in Congestion Mitigation and Air Quality Improvement Program funds, contingent on the California Department of Transportation's approval of project eligibility.
- B. Approve conditional award of four projects in the City of Santa Ana for \$4.37 million in Congestion Mitigation and Air Quality Improvement Program funds, contingent on completion and consideration of the Bristol Street Transit Corridor Study, and the California Department of Transportation's approval of project eligibility.
- C. Approve conditional award of one project in the City of San Clemente for \$1.07 million in Congestion Mitigation and Air Quality Improvement Program funds, contingent on the Master Plan of Arterial Highways amendment approval, and the California Department of Transportation's approval of project eligibility.
- D. Authorize the Chief Executive Officer to negotiate and execute cooperative agreements with each local agency selected to receive funding through the Bicycle Corridor Improvement Program.
- E. Authorize staff to process all necessary amendments to the Federal Transportation Improvement Program and execute or amend any necessary agreements to facilitate the above actions.

Discussion Items

11. Fiscal Year 2019-20 Budget Workshop Follow-up

Darrell E. Johnson, Chief Executive Officer (CEO), provided opening remarks and introduced Victor Velazquez, Department Manager of Financial Planning and Analysis.

Mr. Velazquez referred to a handout provided at today's meeting, which listed questions and answers that resulted from the May 13, 2019 Board Budget Workshop and Committee meetings, as well as offered one-on-one meetings to all Board Members.



11. (Continued)

Committee Vice Chair Delgleize inquired on the OC Flex program. Mr. Johnson, CEO, responded that the OC Flex pilot program will end October 2019, and staff will report to the Board on the full year of activities and provide recommendations. Additionally, he reported if at that time it is decided to make changes, i.e., add additional zones or expand zones, a budget amendment would be required.

Mr. Velazquez reported that funding for both OC Flex zones is budgeted for the next fiscal year.

Alice Rogan, Director, External Affairs, provided an update on planned promotions for the OC Flex and stated a tool kit for the Board Members would be provided by the end of the week to help promote the program.

No action was taken on this information item.

12. Chief Executive Officer's Report

Darrell E. Johnson, CEO, reported the following:

Interstate 5 Ground Breaking Ceremony:

- On Thursday, June 6th, at 10:00 a.m. in the City of Mission Viejo, OCTA is hosting a ground breaking event for the Interstate 5 widening project.
- Project is listed as Measure M2 Project C.

Open Space Hike:

- On Saturday, June 8th, OCTA will be hosting a family hike at the Wren's View Preserve to give the public an opportunity to explore this 116-acre open space property located northwest of the City of Rancho Santa Margarita in Trabuco Canyon.
- The one-hour moderate hike will start at 8:30 a.m.

Mobility 21 Advocacy Trip:

- Today, he will be traveling to Washington, D.C., as part of the Mobility 21 delegation trip.
- He will be participating in a series of meetings with the Administration and legislators, and will return to the office on Thursday.



MINUTES

Regional Planning and Highways Committee Meeting

13. Committee Members' Reports

Committee Chairman M. Murphy invited everyone to attend the City of Orange's fireworks display on July 3, 2019.

14. Closed Session

There were no Closed Session items scheduled.

15. Adjournment

The meeting adjourned at 10:42 a.m.

The next regularly scheduled meeting of this Committee will be held at **10:30 a.m. on Monday, July 1, 2019**, at the Orange County Transportation Authority Headquarters, 550 South Main Street, Board Room - Conference Room 07, Orange, California.

ATTEST

Mark A. Murphy
Committee Chairman

Olga Prado
Assistant Clerk of the Board



July 1, 2019

To: Regional Planning and Highways Committee

From: Darrell E. Johnson, Chief Executive Officer

Subject: Amendment to Cooperative Agreement with Southern California Regional Rail Authority for the Interstate 5 High-Occupancy Vehicle Improvement Project Between State Route 55 and State Route 57

Overview

Cooperative Agreement No. C-6-1574 with the Southern California Regional Rail Authority provides for design review services and limited construction inspection for the Interstate 5 high-occupancy vehicle improvement project between State Route 55 and State Route 57. An amendment to the cooperative agreement is required for additional railroad flagging and inspection services.

Recommendations

- A. Authorize the Chief Executive Officer to negotiate and execute Amendment No. 2 to Cooperative Agreement No. C-6-1574 between the Orange County Transportation Authority and Southern California Regional Rail Authority, in the amount of \$40,425, for additional railroad flagging and inspection services. This will increase the maximum obligation of the cooperative agreement to a total contract value of \$89,925.
- B. Authorize the use of \$40,425 in OC Go funds for construction inspection, which will increase Cooperative Agreement No. C-6-1574 from \$49,500 to \$89,925, for the Interstate 5 high-occupancy vehicle improvement project between State Route 55 and State Route 57.

Discussion

The Orange County Transportation Authority (OCTA), in partnership with the California Department of Transportation, is implementing the Interstate 5 (I-5) high-occupancy vehicle (HOV) improvement project between State Route 55 and State Route 57 (Project). The 6.4-mile long Project includes the addition of a second HOV lane in each direction; removal of the existing median barriers between the HOV lanes and the general purpose lanes, which will improve

Amendment to Cooperative Agreement with Southern California Regional Rail Authority for the Interstate 5 High-Occupancy Vehicle Improvement Project Between State Route 55 and State Route 57 **Page 2**

access to the HOV lanes, except in locations where bridge columns necessitate leaving the barriers in place; and demolition of the existing I-5 HOV drop ramp at Main Street in the City of Santa Ana.

On February 20, 2017, OCTA entered into Cooperative Agreement No. C-6-1574 with Southern California Regional Rail Authority to provide design review services relating to a proposed retaining wall under the existing railroad as part of the Project.

On May 31, 2018, Amendment No. 1 to Cooperative Agreement No. C-6-1574 modified the Scope of Services to include limited construction railroad flagging and inspection services relating to work required for the proposed retaining wall.

Construction began on the Project on February 20, 2019. The contractor's schedule has been reviewed and it was determined that additional railroad flagging, beyond the amount remaining in the cooperative agreement, is now required. Staff is recommending authorization to execute Amendment No. 2 to Cooperative Agreement No. C-6-1574 to approve the use of \$40,425 in OC Go funds.

Fiscal Impact

Funding for the Project can be accommodated in OCTA's Fiscal Year (FY) 2019-20 Budget, Capital Programs Division, via a proposed budget transfer from Account 0017-9084-FC101-073 (FY20-2386 line item) to Account 0017-9084-FA101-06R.

Summary

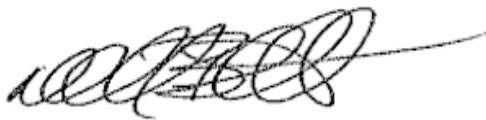
Staff requests Board of Directors' approval for the Chief Executive Officer to negotiate and execute Amendment No. 2 to Cooperative Agreement No. C-6-1574 between the Orange County Transportation Authority and Southern California Regional Rail Authority, to increase funding by \$40,425, for additional railroad flagging and inspection services for the Interstate 5 high-occupancy vehicle improvement project between State Route 55 and State Route 57. This will increase the maximum obligation of the cooperative agreement to a total contract value of \$89,925.

Amendment to Cooperative Agreement with Southern California Regional Rail Authority for the Interstate 5 High-Occupancy Vehicle Improvement Project Between State Route 55 and State Route 57 **Page 3**

Attachment

- A. Southern California Regional Rail Authority, Cooperative Agreement No. C-6-1574 Fact Sheet

Prepared by:



Niall Barrett, P.E.
Program Manager
(714) 560-5879



Virginia Abadessa
Director, Contracts Administration and
Materials Management
(714) 560-5623

Approved by:



James G. Beil, P.E.
Executive Director, Capital Programs
(714) 560-5646

**Southern California Regional Rail Authority
Cooperative Agreement No. C-6-1574 Fact Sheet**

1. February 20, 2017, Cooperative Agreement No. C-6-1574, \$49,500, approved by Contracts Administration and Materials Management (CAMM) Department.
 - Design review services for plans, specifications, and estimates for the Interstate 5 high-occupancy vehicle improvement project between State Route 55 and State Route 57.
2. May 31, 2018, Amendment No. 1 to Cooperative Agreement No. C-6-1574, \$0, approved by CAMM Department.
 - Allocate unused design funds for construction inspection of a proposed retaining wall.
3. July 8, 2019, Amendment No. 2 to Cooperative Agreement No. C-6-1574, \$40,425, pending Board of Directors' approval.
 - To increase funding for construction railroad flagging and inspection services.

Total committed to the Southern California Regional Rail Authority after approval of Amendment No. 2 to Cooperative Agreement No. C-6-1574: \$89,925.



July 1, 2019

To: Regional Planning and Highways Committee

From: Darrell E. Johnson, Chief Executive Officer

Subject: Measure M2 Eligibility Review Recommendations for
Fiscal Year 2017-18 Expenditure Reports

Overview

The Measure M2 Ordinance requires that all Orange County local agencies annually satisfy eligibility requirements in order to receive net Measure M2 revenues. As part of this requirement, fiscal year 2017-18 expenditure reports and resolutions were submitted by all local agencies. In May, the cities of Santa Ana and Stanton were deemed ineligible by the Board of Directors, and their expenditure reports were subsequently excluded from further review. In June, the Orange County Transportation Authority Taxpayer Oversight Committee reviewed and affirmed that all currently conditionally eligible local agencies' (excluding the cities of Santa Ana and Stanton) expenditure reports were consistent with Measure M2 requirements. Based upon this determination, Board of Directors approval is now requested to find all currently conditionally eligible local agencies eligible to receive net Measure M2 revenues for fiscal year 2018-19.

Recommendation

Find all conditionally eligible local agencies (excluding the cities of Santa Ana and Stanton) eligible to receive net Measure M2 revenues for fiscal year 2018-19.

Background

The Measure M2 (M2) Ordinance requires local jurisdictions to meet 13 eligibility requirements (identified below).

- Adoption of a Capital Improvement Program;
- Adoption of general plan circulation element consistent with the Master Plan of Arterial Highways;
- Compliance with the Congestion Management Program;
- Adoption of local signal synchronization plans;
- Fulfilling maintenance of effort (MOE) requirements;

- Documentation of Developer Impact Fee Programs;
- Adoption of Pavement Management Plans;
- Timely submission of project final reports;
- Timely expenditure of M2 net revenues;
- Confirmation that net revenues shall not be used to supplant developer funding commitments;
- Participation in traffic forums;
- Documentation of transit/non-motorized considerations in local general plans; and
- Submittal of expenditure reports and adopted resolutions.

All required eligibility components were reviewed by the Orange County Transportation Authority (OCTA) Board of Directors (Board), and all 35 local agencies were deemed to be conditionally eligible to receive net M2 revenues for fiscal year (FY) 2018-19 on December 10, 2018. The remaining component that was required to determine final eligibility was local agencies' submittal of FY 2017-18 expenditure reports and adopted resolutions.

Expenditure reports and adopted resolutions are required to be submitted within six months of the close of each FY. This allows local jurisdictions time to finalize comprehensive annual financial reports and to prepare final expenditure reports. The M2 Ordinance also requires that local jurisdictions satisfy MOE requirements by maintaining a minimum level of local streets and roads expenditures from local discretionary funds. These MOE expenditures are then also reported as a component of the expenditure report process.

Per the M2 Ordinance, the OCTA Taxpayer Oversight Committee (TOC) is responsible for receiving and reviewing eligibility materials, which takes place prior to Board action. However, it should be noted that expenditure reports from the cities of Santa Ana and Stanton were not included in this review as these cities were found ineligible to receive net M2 revenues by the Board on May 13, 2019, due to failure to comply with the MOE eligibility requirement.

Discussion

On May 14, 2019, the Annual Eligibility Review (AER) Subcommittee of the TOC reviewed all remaining conditionally eligible local agencies' M2 expenditure report submittals and affirmed that the documents were consistent with M2 requirements. The AER Subcommittee also requested that staff issue a letter communicating its appreciation to the City of Rancho Santa Margarita (City) for heeding its direction from the previous year and increasing its MOE expenditure reporting above the minimum benchmark. OCTA staff will send out a letter to the City (Attachment A) to acknowledge the City for taking this step, upon Board approval of this staff report.

On June 11, 2019, the TOC reviewed and concurred with the AER Subcommittee's affirmation that all currently conditionally eligible local agencies' M2 expenditure reports and adopted resolutions are consistent with M2 requirements. The TOC's recommendations (Attachment B) are now being advanced to the Board for a final finding that the 33 currently conditionally eligible local agencies (excluding the cities of Santa Ana and Stanton) be deemed eligible to receive net M2 revenues for FY 2018-2019.

Summary

On June 11, 2019, the OCTA TOC convened and found that 33 of Orange County's 35 local agencies had submitted acceptable expenditure reports. A Board finding that all currently conditionally eligible local agencies have met M2 eligibility requirements and are now eligible to receive net M2 revenues for FY 2018-19 is requested. Note, the cities of Santa Ana and Stanton were deemed ineligible through prior Board action.

Attachments

- A. Draft letter to Mr. Brenden Dugan, PE, Public Works Director/City Engineer, City of Rancho Santa Margarita, from Kia Mortazavi, Orange County Transportation Authority, dated July 8, 2019, Measure M2 Maintenance of Effort Follow-Up from the Orange County Transportation Authority's Annual Eligibility Review Subcommittee and Taxpayer Oversight Committee
- B. FY 2018-19 Measure M2 Eligibility Review of FY 2017-18 Expenditure Reports Summary

Prepared by:



Kelsey Imler
Transportation Funding Analyst,
Associate
(714) 560-5397

Approved by:



Kia Mortazavi
Executive Director, Planning
(714) 560-5741

July 8, 2019

Mr. Brendan Dugan, PE
Public Works Director/City Engineer
City of Rancho Santa Margarita
22112 El Paseo
Rancho Santa Margarita, CA 92688

RE: **Measure M2 Maintenance of Effort Follow-Up from the
Orange County Transportation Authority's Annual Eligibility Review
Subcommittee and Taxpayer Oversight Committee**

Dear Mr. Dugan:

As you know, local jurisdictions are required to submit Measure M (M2) eligibility verification packages to the Orange County Transportation Authority (OCTA) annually to remain eligible to receive net M2 revenues. The OCTA Taxpayer Oversight Committee (TOC) is responsible for reviewing M2 eligibility requirements with reliance upon an Annual Eligibility Review (AER) Subcommittee to review this information, which includes M2 Expenditure Reports.

Last year, the AER Subcommittee and TOC sent a letter to the City of Rancho Santa Margarita (City) expressing concerns with respect to the City's identified maintenance of effort (MOE) expenditures. The AER Subcommittee and TOC observed that the City was the only local agency in Orange County that reported MOE expenditures exactly equal to its MOE benchmark. However, based upon its recent review of the City's fiscal year 2017-18 M2 Expenditure Report submittal, members of the AER Subcommittee were pleased to see that the City had heeded its previous direction and is now reporting in excess of its MOE benchmark.

As has been demonstrated by recent OCTA Board of Directors' actions, if any MOE expenditures are deemed ineligible through an audit and there is not sufficient capacity within a city's MOE expenditure report, local agencies may jeopardize their M2 eligibility status.

If you have any questions, please contact me at kmortazavi@octa.net or at (714) 560-5741.

Sincerely,

Kia Mortazavi
Executive Director, Planning

KM:ki

c: Kurt Brotcke, OCTA
Joe Alcock, OCTA

**FY 2018-19 Measure M2 Eligibility Review
of FY 2017-18 Expenditure Reports Summary**

Local Jurisdiction	Expenditure Report Received by Deadline	Resolution Received by Deadline	MOE Reported	Compliant
Aliso Viejo	Yes	Yes	Yes	Yes
Anaheim	Yes	Yes	Yes	Yes
Brea	Yes	Yes	Yes	Yes
Buena Park	Yes	Yes	Yes	Yes
Costa Mesa	Yes	Yes	Yes	Yes
County of Orange	Yes	Yes	N/A	Yes
Cypress	Yes	Yes	Yes	Yes
Dana Point	Yes	Yes	Yes	Yes
Fountain Valley	Yes	Yes	Yes	Yes
Fullerton	Yes	Yes	Yes	Yes
Garden Grove	Yes	Yes	Yes	Yes
Huntington Beach	Yes	Yes	Yes	Yes
Irvine	Yes	Yes	Yes	Yes
La Habra	Yes	Yes	Yes	Yes
La Palma	Yes	Yes	Yes	Yes
Laguna Beach	Yes	Yes	Yes	Yes
Laguna Hills	Yes	Yes	Yes	Yes
Laguna Niguel	Yes	Yes	Yes	Yes
Laguna Woods	Yes	Yes	Yes	Yes
Lake Forest	Yes	Yes	Yes	Yes
Los Alamitos	Yes	Yes	Yes	Yes
Mission Viejo	Yes	Yes	Yes	Yes
Newport Beach	Yes	Yes	Yes	Yes
Orange	Yes	Yes	Yes	Yes
Placentia	Yes	Yes	Yes	Yes
Rancho Santa Margarita	Yes	Yes	Yes	Yes
San Clemente	Yes	Yes	Yes	Yes
San Juan Capistrano	Yes	Yes	Yes	Yes
Santa Ana	N/A	N/A	N/A	N/A
Seal Beach	Yes	Yes	Yes	Yes
Stanton	N/A	N/A	N/A	N/A
Tustin	Yes	Yes	Yes	Yes
Villa Park	Yes	Yes	Yes	Yes
Westminster	Yes	Yes	Yes	Yes
Yorba Linda	Yes	Yes	Yes	Yes

FY - Fiscal Year

MOE - Maintenance of Effort

N/A - Not Applicable



July 1, 2019

To: Regional Planning and Highways Committee

From: Darrell E. Johnson, Chief Executive Officer

Subject: Grant Acceptance for the Safe Travels Education Program and the Freeway Bus Rapid Transit Concept Study

Overview

The Orange County Transportation Authority was recently awarded \$500,000 for the Safe Travels Education Program through the statewide Active Transportation Program, Cycle 4, and \$210,602 for the Freeway Bus Rapid Transit Concept Study through the statewide Sustainable Transportation Planning Grant Program. In order to utilize these grants, staff is seeking Board of Directors' approval to accept the awards and enter into agreements with the granting agencies.

Recommendations

- A. Authorize the Chief Executive Officer, or designee, to accept the Active Transportation Program grant award and execute grant-related agreements and documents with the California Department of Transportation and the Southern California Association of Governments.
- B. Adopt Orange County Transportation Authority Resolution No. 2019-059 authorizing the Chief Executive Officer, or designee, to accept the Sustainable Transportation Planning Grant award and execute grant-related agreements and documents with the California Department of Transportation and the Southern California Association of Governments.
- C. Authorize the Chief Executive Officer, or designee, to amend the Federal Transportation Improvement Program and process all necessary amendments to facilitate the recommendation above.

Background

The Active Transportation Program (ATP) was created to encourage increased use of active modes of transportation, such as walking and bicycling. On May 16, 2018, the California Transportation Commission (CTC) issued a statewide competitive call for projects (call), which made available approximately \$439.6 million in federal and state funding. In response to this opportunity, the Orange County Transportation Authority (OCTA) submitted the Safe Travels Education Program (STEP) Campaign application requesting \$500,000.

The Sustainable Transportation Planning Grant was created to support the California Department of Transportation's (Caltrans) mission to provide a safe, sustainable, integrated, and efficient transportation system to enhance California's economy and livability. On January 5, 2018, Caltrans issued a statewide call, which made available approximately \$40.8 million for Sustainable Transportation Planning Grant programs. In response to this opportunity, OCTA submitted the Freeway Bus Rapid Transit (BRT) Concept Study application requesting \$210,602.

Discussion

ATP

The STEP Campaign application was submitted to the ATP, Cycle 4, call on July 31, 2018. The CTC approved funding for the project on May 15, 2019. OCTA will collaborate with the Orange County Health Care Agency to administer the STEP Campaign, which includes activities such as safety training at school assemblies, walk/bike to school day training events, and classroom/blacktop training activities directed to both students (during and after school) and families (on nights or weekends) at 25 public elementary schools in Orange County. The STEP Campaign will also engage with local city staff and police departments to successfully promote and leverage education and encouragement activities for walking and biking to/from school by youth. The award of the \$500,000 supports the project in its entirety.

Caltrans Sustainable Transportation Planning Grants

The Freeway BRT Concept Study application was submitted to Caltrans for the Caltrans Sustainable Transportation Planning grants on November 30, 2018. On May 27, 2019, OCTA was notified that Caltrans selected the project for funding. Building on prior studies by OCTA, Caltrans, and the Southern California Association of Governments, the study will develop a conceptual plan for two Freeway BRT routes on Interstate 5 and State Route 55 that were identified as high priority BRT corridors in the Orange County Transit Vision (Orange County Transit Master Plan). BRT is a high-frequency, limited-stop bus service with improved passenger amenities to improve headways. The BRT concept envisions operating in high-occupancy vehicle or managed lanes on freeways and may examine stopping at existing transit hubs or at new stations in the freeway right-of-way. Stations could be located to connect with key transit routes, including the Amtrak and Metrolink commuter rail service. The study will identify short- and long-term recommendations for project implementation. The award of \$210,602 will be matched with \$27,398 State Transportation Improvement Program Planning, Programming, and Monitoring funds, for a total project cost of \$238,000, and will support the project in its entirety. In order to execute the grant agreement, OCTA must approve Resolution 2019-059 (Attachment A).

Next Steps

Following execution of the CTC ATP and Caltrans Sustainable Transportation Planning grants, staff will follow OCTA's procurement process to award professional services contracts in the fall and winter of 2019.

Summary

OCTA was awarded \$710,602 for two competitive grants from the CTC and Caltrans. A resolution to accept one grant award and authorization to enter into grant-related agreements and documents is presented for adoption as required by each grant program.

Attachment

- A. Resolution No. 2019-059 of the Orange County Transportation Authority,
2019-2020 Sustainable Transportation Planning Grant Program
Authorization

Prepared by:



Jennifer Haith Farinas
Senior Transportation Funding Analyst
(714) 560-5392

Approved by:



Kia Mortazavi
Executive Director, Planning
(714) 560-5741

**RESOLUTION NO. 2019-059
OF THE
ORANGE COUNTY TRANSPORTATION AUTHORITY**

**2019-2020 SUSTAINABLE TRANSPORTATION PLANNING GRANT PROGRAM
AUTHORIZATION**

WHEREAS, the California Department of Transportation administers the Sustainable Transportation Planning Grant Program to support its mission, which is to provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability; and

WHEREAS, the Orange County Transportation Authority, as an eligible grantee of the California Department of Transportation's Sustainable Transportation Planning Grant Program, applied for and was awarded \$210,602 in grant funds for the Freeway Bus Rapid Transit Concept Study; and

WHEREAS, the California Department of Transportation requires the grantee to certify, by resolution, the acceptance of awarded grant funds and authority to execute grant-related agreements;

WHEREAS, the Orange County Transportation Authority will provide a cash match of \$27,398 in State Transportation Improvement Program Planning, Programming, and Monitoring funds to complete the Freeway Bus Rapid Transit Concept Study; and

THEREFORE, BE IT RESOLVED that the Orange County Transportation Authority Board of Directors accepts the awarded grant funds and authorizes the Chief Executive Officer, or designee, to file and execute grant applications and agreements, certifications and assurances, and other documents for and on behalf of Orange County Transportation Authority with the California Department of Transportation.

ADOPTED, SIGNED, AND APPROVED this ____ day of _____, 2019.

AYES:

NOES:

ABSENT:

ATTEST:

Laurena Weinert
Clerk of the Board

Tim Shaw, Chairman
Orange County Transportation Authority



July 1, 2019

To: Regional Planning and Highways Committee
From: Darrell E. Johnson, Chief Executive Officer
Subject: Draft 2019 State Route 91 Implementation Plan

Overview

The Orange County Transportation Authority and the Riverside County Transportation Commission annually prepare a plan for potential improvements along the State Route 91 corridor between State Route 57 in Orange County and Interstate 15 in Riverside County. The plan includes a listing of potential improvements, preliminary cost estimates, and potential implementation timeframes. These improvements are sponsored by various agencies such as the Orange County Transportation Authority, the Riverside County Transportation Commission, the Transportation Corridor Agencies, the California Department of Transportation, and cities along the corridor. The Draft 2019 State Route 91 Implementation Plan is provided.

Recommendation

Receive and file as an information item.

Background

SB 1316 (Chapter 714, Statutes of 2008) requires the Orange County Transportation Authority (OCTA) and the Riverside County Transportation Authority (RCTC) to annually prepare a plan for improvements along State Route 91 (SR-91) between Interstate 15 (I-15) and State Route 57 (SR-57). SB 1316 also enables the use of 91 Express Lanes excess toll revenues, when available, for congestion relief projects or services along the SR-91 corridor between SR-57 and the Orange/Riverside County line for OCTA and between the Orange/Riverside County line and I-15 for RCTC.

The Draft SR-91 Implementation Plan (Plan) serves as a snapshot of current and planned activities within the SR-91 corridor. The Plan describes projects and transportation benefits and anticipated costs through the post-2035 timeframe.

The intent of the Plan is to serve as a compilation of information for projects along the SR-91 corridor. This Plan was prepared in consultation with the California Department of Transportation, the Transportation Corridor Agencies, and the cities of Anaheim, Corona, Orange, and Yorba Linda who have provided feedback on the Plan.

Discussion

Since 2002, significant progress has been made in improving the SR-91 corridor. Nearly \$2 billion has been invested in the completion of eight projects, including the addition of 66.5 lane miles throughout the SR-91 corridor. Since 2003, average daily traffic throughput has increased by 15 percent. This indicates that improvements within the corridor have helped to alleviate the effects of population growth and employment between Orange and Riverside counties by enhancing capacity and improving mobility. Completed projects from the Plan include:

- Green River Road Overcrossing Improvement Project;
- North Main Street Corona Metrolink Parking Structure Project;
- Eastbound lane addition from State Route 241 (SR-241) to State Route 71 (SR-71);
- Lane addition in both directions between State Route 55 (SR-55) and SR-241;
- Westbound lane at Tustin Avenue;
- Metrolink service improvements;
- SR-91 Corridor Improvement Project (CIP) initial phase; and
- La Sierra Metrolink parking improvements.

OCTA and RCTC have adopted similar goals for the 91 Express Lanes to continue to maintain a safe, reliable, and predictable travel time for motorists traversing seamlessly between the two counties. These guiding principles include:

- Optimizing vehicle throughput at free-flow speeds and increasing average vehicle occupancy;
- Balancing capacity and demand to serve customers who pay tolls, as well as carpoolers (3+) who are offered discounted tolls;
- Generating sufficient revenue to sustain the financial viability of the 91 Express Lanes
- Paying debt service and maintaining debt service coverage; and
- Reinvesting net revenues on the SR-91 corridor to improve regional mobility, when appropriate.

As information for projects in the Plan is updated annually, it is important to ensure that the planning and implementation of each project are carefully coordinated to determine the appropriate sequencing that provides maximum benefits to the SR-91 corridor. Additionally, projects on the corridor should be coordinated to minimize construction impacts to communities and the surrounding communities. Going forward, operational analysis by OCTA and RCTC will need to be prepared for each project prior to implementation. This effort will ensure that the projects meet the OCTA and RCTC goals for the SR-91 corridor.

The 2019 Plan projects (Attachment A) are organized as follows: Orange County projects, Riverside County projects, and bi-county projects.

- The Orange County set of projects includes four improvements at a total cost of approximately \$600 million. They are:
 - SR-91 improvements between SR-57 and SR-55;
 - Anaheim Canyon Metrolink Station improvements;
 - Placentia Metrolink Rail Station; and
 - Fairmont Boulevard improvements.
- The Riverside County set of projects includes three improvements at a total cost of more than \$350 million:
 - I-15/SR-91 Express Lanes connector;
 - SR-71/SR-91 interchange; and
 - Improvements east of I-15.
- Bi-county projects which benefit both Orange and Riverside counties include:
 - Express Bus service improvements;
 - SR-91 Corridor Operations Project;
 - Sixth general purpose lane addition from SR-241 to SR-71; and
 - SR-241/91 Express Connector.

The 2019 Plan includes an accelerated new project, RCTC's SR-91 Corridor Operations Project, which will enhance the recently completed SR-91 CIP. This project will provide an additional westbound lane between Green River Road and SR-241. The portion between the SR-241 and the Orange/Riverside county line is part of OCTA's Measure M2 commitment. This project will help relieve morning peak operating conditions for motorists traveling from Riverside County to Orange County.

The Plan includes the SR-241/91 Express Lanes Connector project. The project could offer some positive benefits to the SR-91 corridor, provided it is implemented with or following improvements in Riverside County to allow for the traffic to dissipate downstream. Without the downstream eastbound improvements, implementing the SR-241/91 Express Lanes Connector Project could exacerbate the conditions near the county line, otherwise known as the “mixing bowl.” This is an area where there are multiple movements, causing very complex traffic conditions. These movements would be further complicated with the addition of the SR-241/91 Express Lanes Connector Project. There remain unanswered technical issues that OCTA and RCTC believe would enable a better understanding of the SR-241/91 Express Lanes Connector Project implications to the users of the SR-91 corridor. These include an in-depth understanding of the toll schedules, baseline traffic assumptions, and potential impacts to the operations of the general purpose and 91 Express Lanes during and after construction.

The improvements included in Appendix A of the Plan are highly conceptual in nature. Some of the concepts are derived from the Riverside-Orange County Major Investment Study (MIS). Appendix A includes an elevated four-lane facility between SR-241 and I-15 (MIS Corridor A), Anaheim to Ontario International Airport high-speed ground transportation system, and the Irvine-Corona Expressway (ICE) from SR-241/State Route 133 to I-15/Cajalco Road, connector improvements at the SR-91/SR-55 interchange, and an eastbound fifth lane addition near SR-241. The projected cost of the conceptual improvements exceeds \$14 billion, and the implementation will require a significant amount of planning, design, external funding, and future policy and public input.

Staff continues to monitor the financial viability of the ICE concept as requested by the SR-91 Advisory Committee and the Riverside Orange Corridor Authority in 2010. The ICE has not moved beyond the conceptual phase due to the current economic climate, lack of state and federal transportation funding, and the high construction cost. Until considerable advancements are made in efficient and affordable tunneling technology, and more state and federal funding is available, this project will be a major challenge to complete.

Summary

OCTA and RCTC have completed the 2019 Plan required by SB 1316. As the Plan is updated annually, it is important to ensure that projects are coordinated in such a way that they provide maximum benefits to the SR-91 corridor. This would be achieved through implementing projects that optimize the operations of the corridor and the 91 Express Lanes. The 2019 Plan projects have been updated and are organized by county jurisdiction.

Attachment

- A. Draft State Route 91 Implementation Plan 2019

Prepared by:



Alison Army
Principal Transportation Analyst,
Project Development
(714) 560-5537

Approved by:



Kia Mortazavi
Executive Director, Planning
(714) 560-5741

Draft **STATE ROUTE 91**

IMPLEMENTATION PLAN

2019



Prepared by: **Michael Baker**
INTERNATIONAL



STATE ROUTE 91 (SR-91) IMPLEMENTATION PLAN KEEPING MOTORISTS MOVING ON THE SR-91 CORRIDOR

Every year since 2002, OCTA, RCTC, and stakeholders have worked collaboratively to review a program of projects along the SR-91 corridor.

BENEFITS	<ul style="list-style-type: none"> • Provides seamless connectivity between Orange and Riverside Counties • Increases travel options • Optimizes vehicle throughput • Reinvests net 91 Express Lanes revenues on the SR-91 corridor to improve regional mobility • Investments to date: \$1.9 billion
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COMPLETED EFFORTS		PROJECT	COST (MILLIONS)	COMPLETION
	Orange County	Eastbound Lane Addition (SR-241 to SR-71)	\$51.2	2010
		Fifth Lane Addition (SR-55 to SR-241)	\$85.2	2013
		Westbound Lane at Tustin Avenue	\$43.3	2016
	Riverside County	Green River Road Overcrossing	\$24.3	2009
		North Main Street Corona Metrolink Parking Structure	\$25	2009
		91 Corridor Improvement Project (Initial Phase)	\$1,407	2017
		La Sierra Metrolink Parking Improvements	\$6.3	2019
	Bi-County	Metrolink Service Improvements	\$249	2016

ANTICIPATED PROJECTS		PROJECT	COST (MILLIONS)	CURRENT PHASE
	Orange County	SR-91 Improvements (SR-57 to SR-55)	\$460	Environmental
		Anaheim Canyon Metrolink Station Improvements	\$27.9	Final Design
		Placentia Metrolink Rail Station	\$34.8	Final Design
		Fairmont Boulevard Improvements	\$76.8	Preliminary Engineering
	Riverside County	15/91 Express Lanes Connector	\$200-\$230	EnvironmentalFinal Design
		SR-71/SR-91 Interchange Improvements	\$117	Final Design
		Improvements East of I-15	TBD	Environmental
	Bi-County	Express Bus Service	\$6	Underway
		SR-91 Corridor Operations Project	\$38	Final Design
		6th General Purpose Lane Addition (SR-241 to SR-71)	TBD	Environmental
		SR-241/91 Express Connector	\$181	Environmental

CONCEPTS	LOCATION		COST (MILLIONS)
	Elevated 4-Lane Facility (MIS Corridor A) from SR-241 to I-15 (Post-2035)		\$2,720
	Anaheim to Ontario International Airport Maglev High Speed Rail (Post-2035)		\$2,770 - \$3,200
	Irvine-Corona Expressway (ICE) 4-Lane Facility from SR-241/SR-133 to I-15/Cajalco Road (Post-2035)		\$8,855
	WB SR-91 to SB SR-55 Connector Improvements (Post-2035)		\$75 - \$150
	EB SR-91 Fifth Lane Addition at SR-241		\$31

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SECTION 1: INTRODUCTION

2019 STATUS REPORT AND UPDATE

Previous law authorized the California Department of Transportation (Caltrans) to enter into franchise agreements with private companies to construct and operate four demonstration toll road projects in California. This resulted in the development of the 91 Express Lanes facility in Orange County. The four-lane, 10-mile toll road runs along the median of State Route 91 (SR-91) in northeast Orange County between the Orange/Riverside County line and State Route 55 (SR-55). Since the 91 Express Lanes carried its first vehicle on December 27, 1995, the facility has saved users tens of millions of hours of commuting time.

While the 91 Express Lanes facility has improved travel time along the SR-91 corridor, provisions in the franchise agreement between Caltrans and the private franchisee, the California Private Transportation Company (CPTC), prohibited Caltrans and county transportation agencies from adding transportation capacity or operational improvements to the SR-91 corridor through the year 2030 from Interstate 15 (I-15) in Riverside County to the Orange/Los Angeles Counties border. Consequently, the public agencies were barred from adding new lanes, improving interchanges, and adding other improvements to decrease congestion on the SR-91 freeway.

Recognizing the need to eliminate the non-compete provision of the franchise agreement, Governor Gray Davis signed Assembly Bill 1010 (Lou Correa) (AB 1010) into law in September 2002, paving the way for much-needed congestion relief for millions of annual commuters who use SR-91 to travel between Riverside and Orange Counties each day. The bill allowed the Orange County Transportation Authority (OCTA) to purchase the 91 Express Lanes franchise and eliminate non-compete clause that prohibited capacity-enhancing improvements from being made to SR-91 until 2030. Although the 91 Express Lanes operate within a 10-mile stretch of Orange County, between SR-55 and Orange/Riverside county lines the franchise technically allowed operation of toll lanes into Riverside County. The purchase agreement for the 91 Express Lanes was completed on January 3, 2003, placing the road in public hands at a cost of \$207.5 million. With the elimination of the non-compete

provision through AB 1010 and the subsequent 91 Express Lanes purchase by OCTA, Orange County and Riverside County public officials and Caltrans Districts 8 and 12 have been coordinating improvement plans for SR-91.

Senate Bill 1316 (Lou Correa) (SB 1316) was signed into law in September 2008 as an update to the provisions of AB 1010. SB 1316 authorizes OCTA to transfer its rights and interests in the Riverside County portion of SR-91 toll lanes by assigning them to the Riverside County Transportation Commission (RCTC) and authorizes RCTC to operate express lanes until 2065. In 2017, RCTC opened the extension of the 91 Express Lanes to traffic into Riverside County with completion of the initial phase of the SR-91 Corridor Improvement Project (see Appendix B). SB 1316 also requires OCTA and RCTC, in consultation with Caltrans, to continue to issue an annual SR-91 Implementation Plan (Plan) and a proposed completion schedule for SR-91 improvements from State Route 57 (SR-57) to I-15. The Plans prior to adoption of SB 1316 included a westerly project limit of SR-55. The Plan establishes a program of potential improvements to relieve congestion and improve operations in the SR-91 corridor.

This 2019 Plan fulfills the requirement to provide the State Legislature with an annual Implementation Plan for SR-91 improvements and builds on the 2018 report. This year's update includes concepts that were identified in the 2006 Riverside County – Orange County Major Investment Study (MIS) as well as other project development efforts, including the RCTC 10-Year Western County Highway Delivery Plan that outlines a number of projects such as the extension of the 91 Express Lanes from the Orange/Riverside County line to I-15. The projects included in the 2019 Plan have been infused with various sources of local, state, and federal funding. The 2019 Plan includes an overview and identification of issues and needs to improve mobility on SR-91. Project descriptions include conceptual lane diagrams (as appropriate), cost estimates (in 2019 dollars, or as noted), and discussion of key considerations that need to be addressed in the planning and development of each project. This Plan will



provide OCTA, RCTC, and Caltrans with a framework to implement SR-91 and other related improvements. Future annual Plan updates will continue to refine the scope, cost, and schedule of each project included in this version of the Plan.

91 EXPRESS LANES TOLL POLICY GOALS

With the completion of the State Route 91 Corridor Improvement Project's initial phase in spring 2017, there are now approximately 18 miles of Express Lanes between Orange and Riverside counties. OCTA and RCTC have adopted goals for the 91 Express Lanes to continue to maintain a safe, reliable, and predictable travel time for express lane users traversing seamlessly between the two counties. The goals below take into consideration the 91 Express Lanes as well as the SR-91 corridor at large. These guiding principles include:

- optimizing vehicle throughput at free flow speeds;
- increasing average vehicle occupancy;
- balancing capacity and demand to serve customers who pay tolls as well as carpoolers (3+) who are offered discounted tolls;
- generating sufficient revenue to sustain the financial viability of the 91 Express Lanes;
- paying debt service and maintaining debt service coverage; and
- when appropriate, reinvesting net revenues on the SR-91 corridor to improve regional mobility.

The Riverside County portion of the 91 Express Lanes began operation in March 2017. Throughout the first year of operation, RCTC made minor operational improvements to improve SR-91 corridor travel between State Route 241 (SR-241) and McKinley Street. In November 2018, RCTC implemented additional striping and signage improvements to further enhance efficiency on WB SR-91 between McKinley Street and SR-241. In December 2018, the RCTC Commission authorized its staff to proceed with a project to construct an additional westbound lane along SR-91 between Green River Road and SR-241.

PROJECT ACCOMPLISHMENTS

Much progress has been made since the initial 2003 SR-91 Implementation Plan was approved. The 2019 Plan includes select completed project exhibits as a historical reference, (see Appendix B).

Completed Construction/Improvement Projects

As of June 2019, the following improvements have been constructed or implemented:

- ❖ Repaved and sealed pavement surfaces, restriped, and replaced raised channelizers on the 91 Express Lanes.
- ❖ On EB SR-91 the roadway was restriped, and the median barrier was reconstructed. This project removed the CHP enforcement area and extended the EB auxiliary lane from SR-71 to the Serfas Club Drive off-ramp.
- ❖ The WB auxiliary lane was extended between the County line and SR-241. This project eliminated the lane drop at the 91 Express Lanes and extended the existing auxiliary lane from the County line to SR-241 in the westbound direction. This improvement minimized the traffic delays at the lane drop area, resulting in improved vehicle progression.
- ❖ On WB SR-91 the roadway was restriped to extend the auxiliary lane between SR-71 and the County line. This resulted in a new continuous lane between SR-71 and SR-241.
- ❖ Safety Improvements were constructed at the Truck Scales. Existing shoulders were improved, lanes were re-striped, illumination improved, and signage was modified into and out of the EB facilities.
- ❖ Green River Road overcrossing replacement (see Appendix B).
- ❖ Metrolink parking structure at the North Main Street Corona Metrolink Station (see Appendix B).
- ❖ EB SR-91 lane addition from SR-241 to SR-71 (see Appendix B).
- ❖ Additional SR-91 WB and EB travel lane between SR-55 and SR-241 (see Appendix B).
- ❖ SR-91 WB bypass lane to Tustin Avenue at SR-55 (see Appendix B).
- ❖ Metrolink Service Improvements (see Appendix B).
- ❖ Initial SR-91 Corridor Improvement Project (CIP) (see Appendix B).

❖ La Sierra Metrolink Parking Improvements (see Appendix B)

These projects provide enhanced freeway capacity and/or improved mobility for one of the most congested segments of SR-91.

The completed EB SR-91 lane addition project from SR-241 to SR-71 (see Appendix B) has improved highway operations. This accounts for some of the improvement in existing EB p.m. peak hour travel time from approximately 70+ minutes in 2010 to approximately 50 minutes in 2014.

The Initial CIP project has provided significant benefits to drivers on SR-91. This \$1.4 billion investment project included widening SR-91 by one GP lane in each direction east of SR-71, adding collector-distributor (CD) roads and direct south connectors at I-15/SR-91, extending the 91 Express Lanes to I-15, and providing system/local interchange improvements. The new lanes and other improvements save time, offer choice and reliability, boost safety, enhance access and job creation, promote ridesharing, reduce pollution and aid the movement of goods along the region's roadways.

The WB SR-91 Widening Project completed construction in 2016 from State College Blvd to Interstate 5 (I-5). This project added one WB general purpose lane and removed the dedicated exit lane to State College Blvd from the SB SR-57 to WB SR-91 Connector that was causing operational issues due to the short weaving distance. While this project falls just to the west of the limits for the Plan study area, it will have an influence on operations within the Plan area.

In addition, there are two projects that have a direct impact upon future SR-91 widening projects. The first is the \$2 billion U.S. Army Corps of Engineers (Corps) Santa Ana River Mainstem (SARM) improvement project that provides flood protection from the recently improved Prado Dam (near SR-71) to the Pacific Ocean. As part of the Corps' project, existing riverbanks have been improved due to the increased capacity of the Prado Dam outlet works, which can now release up to 30,000 cubic feet per second (cfs) compared to the previous facility capacity of 10,000 cfs. The only remaining segments of the Santa Ana River Mainstem Reach 9 project to be constructed are Phase 4 and Phase 5A. SR-91 project design teams have coordinated with the Corps, Caltrans, and other federal, regional, and local agencies in order to accommodate future SR-91 improvements by the Corps bank protection project within Reach 9 Phase 2B by relocating the Santa Ana River. This has greatly enhanced the ability of Caltrans and other regional transportation agencies to implement many of the

SR-91 improvement projects listed herein. The Corps SARM Reach 9 Phase 2B improvements were under construction as of September 2009 with American Recovery and Reinvestment Act (ARRA) "stimulus" funding and construction was finalized in April 2015.

The other project with a direct impact to SR-91 is the \$120 million Santa Ana Regional Interceptor (SARI) sewer trunk line relocation. The existing SARI line is within the Santa Ana River floodplain and was in jeopardy of failure due to scour from the potential increased flood releases by the aforementioned Corps project. In order to relocate the proposed 48-inch diameter SARI line outside of the floodplain, which is immediately adjacent to SR-91, Caltrans highway R/W was relinquished to the Orange County Flood Control District (OCFCD) for location of the SARI line. SR-91 project teams have coordinated with the OCFCD, Caltrans, and other federal, regional, and local agencies in order to accommodate planned SR-91 improvements within the remaining State R/W subsequent to relinquishment. This project completed the construction phase in mid-2014.

Completed Designs and Reports

There are various project development phase documents (Feasibility Reports, Studies, PSR, PA/ED, or PS&E) that are completed, or are in draft form and anticipated to be approved that identify mobility improvements. These documents include (also see Section 5):

- ❖ MIS – Final Project Report: Locally Preferred Strategy Report (January 2006).
- ❖ Renewed Measure M Transportation Investment Plan (November 2006).
- ❖ RCTC 10-Year Western County Highway Delivery Plan (December 2006).
- ❖ SR-91/Fairmont Boulevard Feasibility Study (December 2009).
- ❖ Corridor System Management Plan (CSMP) Orange County SR-91 Corridor Final Report (August 2010).
- ❖ Renewed Measure M Early Action Plan, approved August 2007 and subsequently renamed as the Capital Action Plan (April 2011).
- ❖ PSR-PDS for SR-241/SR-91 Connector (January 2012).
- ❖ PSR-PDS on SR-91 between SR-57 and SR-55 (October 2014).
- ❖ SR-71/SR-91 Interchange Environmental Phase (2011) and Final Design (2015).

- ❖ 2018 Next 10 Delivery Plan approved by OCTA Board, (September 2018).
- ❖ Project Report & Environmental Document for SR-241/91 Express Connector (underway).

Updates from the 2018 SR-91 Implementation Plan

The following items have been added or modified for the 2019 Plan update:

- ❖ The RCTC Corridor Operations Project has been added as a new project that will enhance the recently completed SR-91 CIP project.
- ❖ The La Sierra Metrolink parking improvements has been added as a completed project.
- ❖ The Metrolink station improvement project has been split into individual exhibits for the Anaheim Canyon Station and Placentia Station.
- ❖ Various project descriptions, costs, and schedules have been updated from the 2018 Plan based on continued project development.

SR-91 CORRIDOR CONDITIONS

Project Limits

The project study limits encompass the segment of SR-91 from west of the junction of SR-57 and SR-91 in the City of Anaheim in Orange County, to east of the junction of SR-91 and I-15 in the City of Corona in Riverside County. The freeway segment is approximately 20.3 miles long, and includes 12.7 miles within Orange County and 7.6 miles within Riverside County.

Existing Traffic Conditions Summary

A review of traffic conditions in the Corridor indicates that the existing capacity of the facility is inadequate to accommodate current and future peak demand volumes. Level of Service (LOS) F prevails in the peak direction during the entire peak period. The definition of LOS F is a density of more than 45 passenger cars/lane/mile and the worst freeway operating condition. The results also indicate that there are several physical conditions that contribute to unacceptable traffic queues.

During the weekdays, westbound SR-91 experiences heavier traffic conditions during the morning commute for travelers leaving Riverside County to employment areas in Orange and Los Angeles counties. The Corridor

is generally congested between the hours of 5 a.m. to 10 a.m. in the westbound direction. The afternoon experiences heavy congestion in the eastbound direction between the hours of 3 p.m. to 7 p.m. The eastbound afternoon conditions tend to be exacerbated by the lack of receiving capacity in the Riverside County portion of the SR-91 Corridor. Accordingly, RCTC is working closely with Caltrans District 8 to sponsor improvements that will provide congestion relief for the eastbound afternoon condition. Some of these improvements include the I-15/SR-91 Express Lane Connector, SR-71/SR-91 Interchange, and Improvements East of I-15.

The following is a summary of the deficiencies identified along the SR-91 corridor:

- ❖ Heavy traffic volumes to/from I-15 converge with the SR-91 and increase delay during the morning and evening peak hours.
- ❖ SR-71 traffic demand as well as physical and operational constraints for the EB SR-91 to NB SR-71 connector contribute to mainline and EB SR-91 corridor delays.
- ❖ High traffic volumes entering the freeway from Gypsum Canyon Road, Santa Ana Canyon Road, Green River Road, Weir Canyon Road, Imperial Highway and Lakeview Avenue contribute to congestion on the SR-91 mainline.
- ❖ One of the two lanes from the Eastern Transportation Corridor (State Route 241) connector is dropped at the merge to EB SR-91 causing additional congestion on the EB SR-91 general purpose lanes.
- ❖ Traffic entering the freeway from the truck scales merges at slow speeds affecting the general purpose lanes.
- ❖ At the NB SR-55 interchange with EB SR-91, a lane on SR-91 is dropped (as a dedicated exit) at Lakeview Avenue and a second lane is dropped (as a dedicated exit) at Imperial Highway creating a weave condition.
- ❖ WB SR-91 drops two GP lanes and a 91 Express Lane to SB SR-55, contributing to mainline congestion. This drop also occurs on the left-hand side of SR-91, creating a weaving condition.

- ❖ WB traffic entering SR-91 at Lakeview Avenue traveling to SB SR-55 contributes to mainline congestion by weaving across three lanes on SR-91.
- ❖ The existing two-lane connector from WB SR-91 to SB SR-55 traffic volume exceeds operational capacity causing a queue on the SR-91 mainline.
- ❖ A lane drop on EB SR-91 at SB SR-241 creates a chokepoint.

Project Coordination

As noted, the SR-91 Corridor in Riverside County, in the EB direction, lacks the receiving capacity during the afternoon peak period which creates a bottleneck condition. Due to the high levels of congestion experienced on this segment of the corridor, there is sensitivity to any changes that may affect traffic operations. Without first addressing the congestion in Riverside County, any performance or capacity enhancing projects in Orange County would further exacerbate congested conditions causing additional delays and queueing. Therefore, projects that have the potential to impact demand and/or provide additional capacity in the EB direction should be implemented in a coordinated manner to ensure that there is sufficient receiving capacity in Riverside County.

As information for projects in this Plan is updated annually, it is important to ensure that the planning of each project is carefully coordinated to determine the logical sequencing that provides maximum benefits to the SR-91 corridor. Additionally, projects on the corridor should also be closely coordinated to minimize “throwaway” costs and construction impacts to drivers and the surrounding communities. Detailed operational analysis will need to be conducted separately by OCTA and RCTC at the project level.

PROJECT SUMMARY

Many of the highway projects and concepts identified in this 2019 Plan are based on the MIS that was completed in January 2006. The projects are presented in the following groups: Orange County Projects, Riverside County Projects and Bi-County Projects. The stage of development for each project, such as planning, final design, construction, or procurement and implementation, varies as noted in the project summaries. Table 1 summarizes the various planned projects,

Table 1 – SR-91 Implementation Plan Projects

Project Summary	Cost (\$M)
Orange County Projects	
SR-91 Improvements between SR-57 and SR-55	460
Anaheim Canyon Metrolink Station Improvements	27.9
Placentia Metrolink Rail Station	34.8
Fairmont Boulevard Improvements	76.8
SUBTOTAL	600
Riverside County Projects	
15/91 Express Lanes Connector	220
SR-71/SR-91 Interchange Improvements	117
SR-91 Improvements East of I-15	TBD
SUBTOTAL	337+
Bi-County Projects	
Express Bus Service Improvements Between Orange County and Riverside County	6
SR-91 Corridor Operations Project	38
6th General Purpose Lane Addition (SR-241 to SR-71)	TBD
SR-241/91 Express Connector	181
SUBTOTAL	225+
Concept Project Summary	Cost (\$M)
Conceptual Projects	
Elevated 4-Lane Facility (MIS Corridor A) from SR-241 to I-15	2,720
Anaheim to Ontario International Airport Maglev High Speed Rail	2,770 – 3,200
Irvine-Corona Expressway (ICE) 4-Lane Facility from SR-241/SR-133 to I-15/Cajalco Road	8,855
WB SR-91 to SB SR-55 Improvements	75 – 150
EB SR-91 Fifth Lane Addition at SR-241	31
SUBTOTAL	14,451 – 14,956
Completed Project Summary Since 2006 (Constructed Year)	Cost (\$M)
Green River Road Overcrossing Replacement (March 2009)	24.3
North Main Street Corona Metrolink Station Parking Structure (June 2009)	25
Eastbound Lane Addition from SR-241 to SR-71 (September 2010)	51.2
Widen SR-91 between SR-55 and SR-241 by Adding a 5 th GP Lane in Each Direction (January 2013)	85.2
SR-91 WB Lane at Tustin Avenue (April 2016)	45.2
Metrolink Service Improvements (June 2016)	249
Initial Phase CIP: Widen SR-91 by One GP Lane in Each Direction East of Green River Rd, CD Roads and I-15/SR-91 Direct South Connector, Extension of Express Lanes to I-15 and System/Local Interchange Improvements (2017)	1,407
La Sierra Metrolink Parking Improvements (2019)	6.26

concept projects, and completed projects. For details on each project refer to Section 2 for planned projects and Appendix B for selected complete projects:

- ❖ The Orange County projects have a total cost of approximately \$600 million. The projects include the SR-91 improvements between SR-57 and SR-55, Anaheim Canyon Metrolink station improvements, Placentia Metrolink rail station, and Fairmont Boulevard improvements.
- ❖ The Riverside County projects have a total cost of approximately \$337 million. The improvements include: a 15/91 Express Lanes Connector, the SR-71/SR-91 interchange, and the SR-91 improvements east of I-15.
- ❖ The Bi-County projects benefit both Orange and Riverside Counties. The total cost for the Bi-County projects exceeds \$225 million. The improvements include: Express Bus service improvements, SR-91 Corridor Operations Project, a 6th General Purpose Lane Addition (SR-241 to SR-71), and a SR-241/91 Express Connector.

Traffic Analysis

For the 2019 Plan, the traffic analysis for major SR-91 capacity projects used the latest freeway operations software model available from UC Berkeley (FREQ) and traffic data calibrated to reflect traffic patterns. This freeway operations model provides a better depiction of actual travel delays experienced by motorists compared to traditional travel demand models. The model can be used to analyze freeway bottlenecks sometimes neglected in traditional travel demand models. This approach is especially important given high SR-91 traffic volumes and the potential for relatively few vehicles to significantly slow down traffic. For example, a minor freeway merging area can cause many vehicles to slow, cascading delay through the traffic stream, and rapidly decreasing both speed and volume for major segments of the freeway. The operations analysis quantified travel time savings for WB morning and EB afternoon conditions for the following major capacity enhancing projects:

- ❖ SR-91 Improvements between SR-57 and SR-55.

- ❖ 15/91 Express Lanes Connector.
- ❖ SR-71/SR-91 Interchange Improvements.
- ❖ SR-91 Improvements East of I-15.
- ❖ Widen SR-91 by One GP Lane from SR-241 to SR-71 in both directions.
- ❖ SR-241/91 Express Connector.
- ❖ SR-91 Corridor Operations Project

The WB morning (a.m.) traffic analysis results indicate that for the year 2035 forecasts, travel times in Riverside County are anticipated to improve (by about 10 minutes) and increase slightly (by about 5 minutes) in Orange County. Bottlenecks are anticipated at the Orange-Riverside County line and at the SR-241 interchange/Gypsum Canyon interchange area. A bottleneck occurs at the SR-55 interchange area. The main bottlenecks in Riverside County will decrease because of the completion of proposed projects, though some congestion is still forecasted. Travel time in Orange County shows an increase in 2035 due to the growth in traffic and alleviation of bottlenecks upstream. The WB SR-91 to SB SR-55 Improvements is a concept to address the operational aspects for the WB SR-91 to SB SR-55 movement. In addition, OCTA and RCTC are exploring multi-modal opportunities on, or adjacent to, the SR-91 corridor that could provide additional congestion relief.

The EB evening (p.m.) peak hour traffic analysis indicates that for the year 2035 forecasts, travel times in Riverside County are anticipated to increase slightly (by about 3 minutes), and gradually increase (by about 12 minutes) in Orange County. Bottlenecks appear at SR-55, at SR-241, and just before the Main Street interchange.

CONCEPT PROJECT SUMMARY

Many of the highway concept projects identified in this 2019 Plan are long lead time projects and/or projects without sufficient project development detail to be advanced into the Project Summary section. These potential concepts include significant environmental constraints and right of way requirements in addition to requiring a significant amount of planning, design, and future policy and public input. Many of these concept projects are multi-billion-dollar improvements that will remain a challenge to implement. Refer to Appendix A for details on each concept project.

ICE STATUS SUMMARY

The ICE concept was conceived as part of the MIS and was established as part of a suite of projects to support future peak demand volumes between Riverside and Orange Counties. The ICE was further evaluated in 2009 for financial and geotechnical feasibility. Seven (7) primary feasibility issues were considered:

- ❖ Geologic, hydrogeologic/hydrologic, and geotechnical conditions.
- ❖ Corridor concepts (full tunnel and partial tunnel/partial surface road).
- ❖ Tunnel configuration.
- ❖ Tunnel excavation and support methods.
- ❖ Tunnel systems (e.g. ventilation, emergency fire system, operation building, toll system, etc.).
- ❖ Construction considerations.
- ❖ Construction, Operation & Maintenance (O&M) costs.

At the conclusion of the financial and geotechnical feasibility study in 2010, the Riverside-Orange Corridor Authority Board (ROCA) directed staff to shelve the project due to its high construction cost and the difficult economic climate, and to reevaluate the concept on an annual basis during the preparation of the SR-91 Implementation Plan.

The National Forest Service has continued monitoring of the ground water level along the preliminary alignment of the tunnel and has not found any significant changes since 2010. The technological ability to construct the large-diameter tunnels is currently available; however, the cost of tunnel boring machines (TBM) and the associated tunneling process required to construct this project has not been reduced significantly. In general, no significant changes to the seven feasibility issues considered for the ICE concept have occurred over the last nine (9) years.

An assessment of current economic conditions, lack of state and federal transportation funding; and the high construction cost is hampering the ability of OCTA and RCTC to implement this concept. Until considerable advancements are made in regard to efficient and affordable tunneling technology, and more state and federal funding are made available, the concept will remain a challenge to implement.

OVERVIEW

The 2019 Plan describes projects, key considerations, benefits, current status, schedule, and costs (in 2019 dollars, or as noted) for major projects and concepts through 2035 and beyond. Some of the projects and concepts identified in this Implementation Plan are based on the MIS that was completed in January 2006. The projects are grouped as follows: Orange County Projects, Riverside County Projects and Bi-County Projects.

As the Plan is updated on an annual basis, project implementation can be achieved in such a way that provides maximum benefits to the SR-91 corridor. Separately, and as part of the project development process, detailed operational analysis will need to be conducted to evaluate operational issues associated with each project. The project development phases are discussed in the status updates and are defined as follows:

- ❖ **Conceptual Engineering = Pre-Project Study Report (Pre-PSR)** – Conceptual planning and

engineering for project scoping and feasibility prior to initiating the PSR phase.

- ❖ **Preliminary Engineering = Project Study Report (PSR)** – Conceptual planning and engineering phase that allows for programming of funds.
- ❖ **Environmental = Project Approval/Environmental Document (PA/ED)** – The detailed concept design that provides environmental clearance for the project and programs for final design and right of way acquisition. The duration for this phase is typically 2-3 years.
- ❖ **Design = Plans, Specifications and Estimates (PS&E)** – Provide detailed design to contractors for construction bidding and implementation.
- ❖ **Construction** = The project has completed construction and will provide congestion relief to motorists.

The intent of the Implementation Plan is to present a list of projects and studies along the SR-91 corridor and highlight coordination between OCTA, RCTC and Caltrans to improve the corridor.

Figure 2-1 – SR-91 Project Study Area from SR-57 to I-15



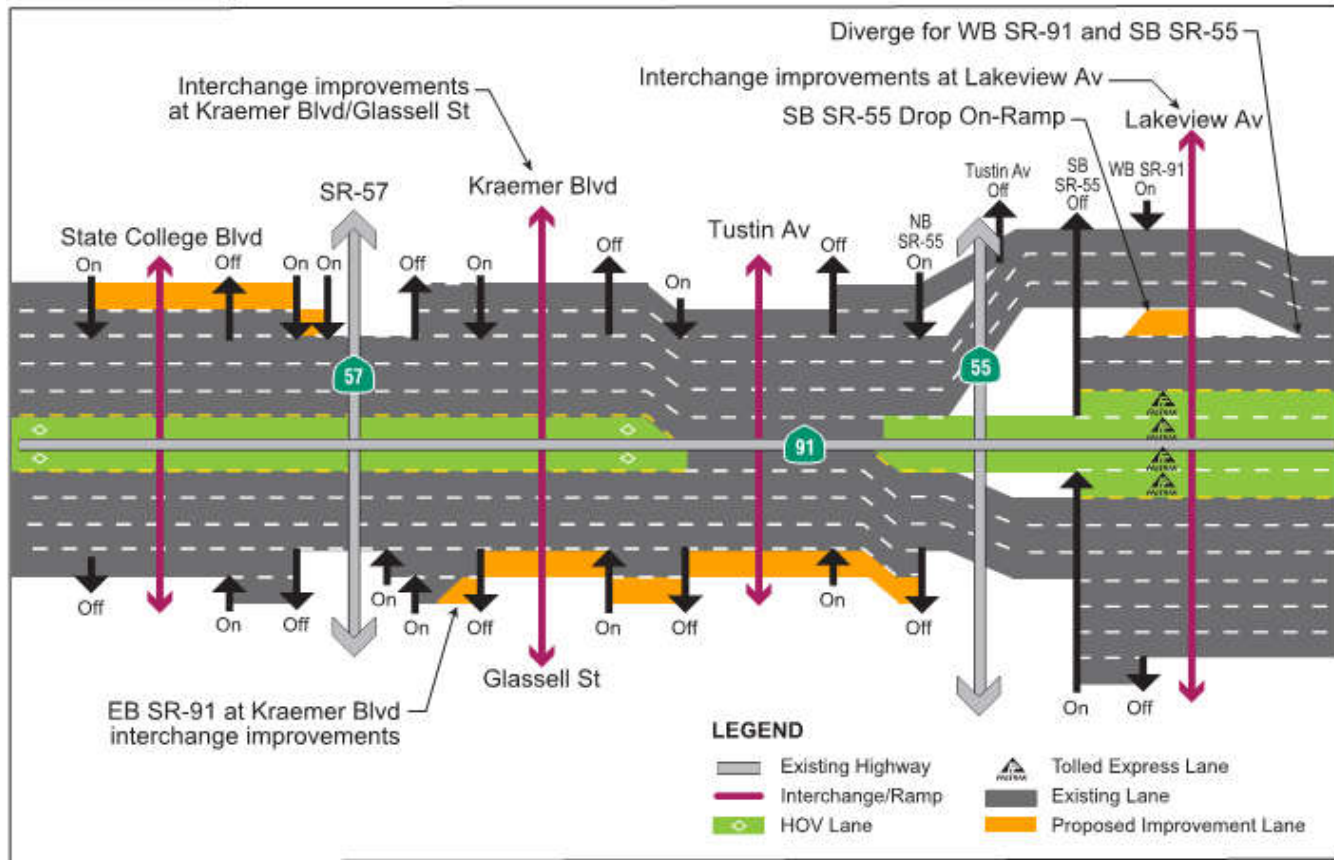
ORANGE COUNTY PROJECTS

The Orange County set of projects include four improvements at a total cost of approximately \$600 million (in 2019 dollars, or as noted). The projects include: SR-91 improvements between SR-57 and SR-55, Anaheim Canyon Metrolink station improvements, new Placentia Metrolink rail station, and Fairmont Boulevard Improvements. Further details for each of the projects are included following the summary below.

Orange County Project Summary	Cost (\$M)
SR-91 Improvements between SR-57 and SR-55	460
Anaheim Canyon Metrolink Station Improvements	27.9
Placentia Metrolink Rail Station	34.8
Fairmont Boulevard Improvements	76.8
SUBTOTAL	600



SR-91 Improvements between SR-57 and SR-55



Project Description

Improves the SR-57/SR-91 and SR-55/SR-91 interchanges, local interchanges, and adds EB capacity between SR-55 and SR-57. An improvement to NB SR-57 for an Orangethorpe Av Bypass was analyzed, but does not provide congestion relief to SR-91; therefore, the concept was dropped from consideration. A drop on-ramp from Lakeview Av would be located between realigned WB SR-91 lanes for direct access to SB SR-55 with a barrier separating WB SR-91 from SB SR-55 from just east of Lakeview Av.

Specific improvements will be subject to approved plans developed in cooperation with local jurisdictions and affected communities. Improvements also include splitting the WB SR-91 Connector into separate exits for NB and SB SR-57 and extending WB SR-91 lane additions through State College Blvd to connect with the auxiliary lane to Raymond Av-East St. The improvements for the Build Alternative include one EB GP lane from east of SR-57 to the SR-55 connector. One WB GP lane is added from NB SR-57 Connector through the State College Blvd interchange. An additional option was considered for WB SR-91 that included SR-57 connector metering instead of the lane additions from the SR-57 connectors; however, it did not relieve traffic congestion and was not considered further.

Key Considerations

The proposed project improvements on WB and EB SR-91 may require partial right-of-way acquisition. A non-standard geometric cross-section will reduce the right-of-way impacts.

Benefits

The proposed project improvements on WB and EB SR-91 between SR-57 and SR-55 include, among other features, adding one EB general purpose lane to achieve lane balancing and interchange improvements. Project improvements will reduce congestion and delay, and reduce weaving.

Current Status

The project improvements were studied by the SR-91 Feasibility Study, which was completed in June 2009. Preliminary engineering was completed in 2014 and the Environmental phase began in early 2015 and is anticipated to be completed in early 2020. The proposed improvements are included in the Measure M program through the Environmental phase.

Schedule and Cost

Construction is anticipated to be completed in 2030 and the project cost is estimated to be approximately \$460,000,000.

Anaheim Canyon Metrolink Rail Station Improvements

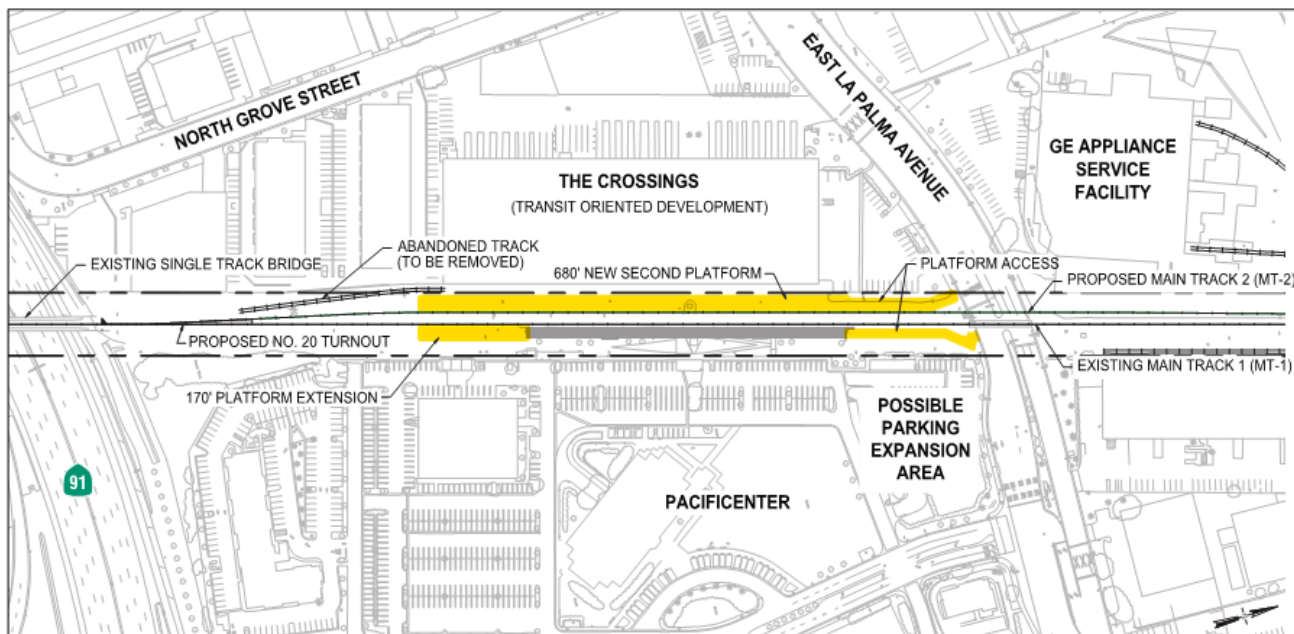


Image source:
Anaheim Canyon Station Project Definition Report, February 23, 2015

Project Description

The improvement project will transform the Anaheim Canyon Metrolink Station into a multi-modal transit center to accommodate additional capacity for Metrolink commuter rail service along the Inland Empire-Orange County Line, OCTA bus service, and Anaheim Resort Transit buses. The project will construct approximately 3,400 linear feet of second track, a new 680-foot second platform, extend the existing platform, improve the at-grade crossings, and upgrade the parking lot to comply with federal regulations.

Benefits

The project will enable future Metrolink service expansion, improve train service efficiency, and foster train ridership growth in the region, which will contribute to congestion relief on SR-91.

Current Status

OCTA is the lead agency on the project. Funding for the project is programmed to use Federal Congestion Mitigation and Air Quality Improvement Program (CMAQ), 5307 Federal Formula, M2 (OC Go), and City of Anaheim funds.

Schedule and Cost

The plans are anticipated to be complete, approved by all agencies and ready to bid in July of 2019. Construction is anticipated to begin in December 2019 and completed in March 2021. The total project cost is estimated to be \$27.9 million.

Placentia Metrolink Rail Station



Image source:
www.placentia.org/Placentia-Metrolink-Site-Plan (Wildan Engineering)

Project Description

The new Placentia Metrolink Station will serve the Metrolink 91/Perris Valley Line, providing commuter rail service between Perris and Los Angeles, via Riverside and Orange counties. The project includes construction of a parking structure, OCTA bus access, an area for passenger pick-up and drop-off, and two station platforms.

Benefits

The station will meet the current transit demand and foster train ridership growth in the region, contributing to congestion relief on SR-91.

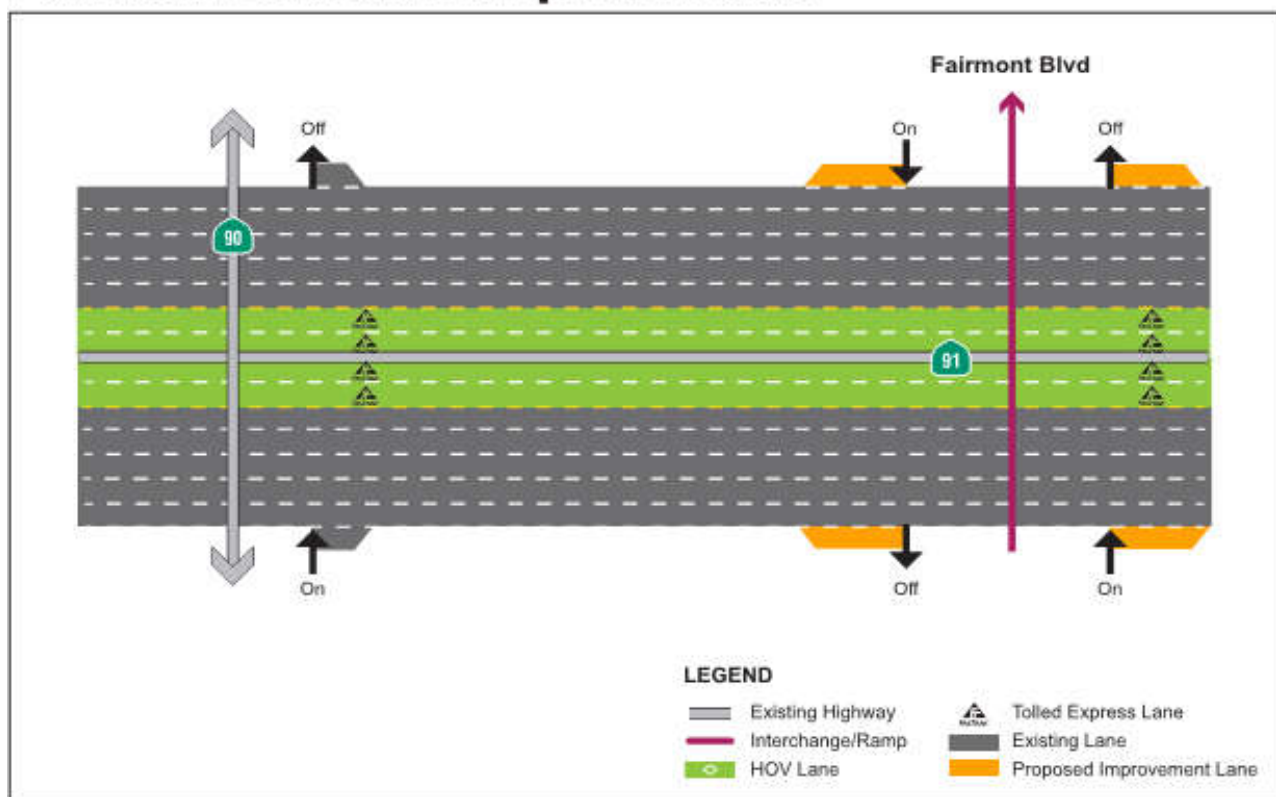
Current Status

The City of Placentia is the lead on right-of-way and environmental clearance, and OCTA is the lead agency for design and construction of the project. Funding for the project is programmed to use 91 Toll Revenues, M2 (OC Go) and the City of Placentia funds for the construction phase. State Transportation Improvement Program (STIP), Public Transportation Modernization, Improvement, and Service Enhancement Account (PTMISEA), OC Go and City funds are programmed for the design and right-of-way costs.

Schedule and Cost

Plans are 100 percent complete, however, the construction contract cannot be advertised until a Construction and Maintenance Agreement is in place with BNSF Railway, the right-of-way owner. Construction is anticipated to be completed in June 2021. The total project cost is estimated to be \$34.8 million.

Fairmont Boulevard Improvements



Project Description

The project would provide a new interchange with SR-91 at Fairmont Boulevard. On and off ramps will connect Fairmont Boulevard from the north to eastbound (EB) and westbound (WB) SR-91. The proposed interchange does not include a vehicular Fairmont Boulevard connection to Santa Ana Canyon Road to the south.

A pedestrian/bicycle connection is also proposed between La Palma Avenue and Santa Ana Canyon Road. This bridge and pathway will allow for direct Santa Ana River Trail access from both Anaheim south of SR-91 and from Yorba Linda.

Key Considerations

Interchange spacing and weaving issues (to SR-55) need to be evaluated. Widening of SR-91 may be needed to accommodate interchange ramps. Proximity of the Santa Ana River may require that the WB ramp junction be located north of the river. New connection requirements and interchange spacing needs to be considered. Ramp and bridge placement needs to take pedestrian/bicycle bridge into account, or incorporate the pedestrian/bike path into the design beyond the vehicular access limits of the project.

Benefits

The interchange is expected to relieve congestion at Imperial Highway (SR-90), Lakeview Avenue, and Weir Canyon Road Interchanges. Preliminary traffic modeling shows a 10-15% decrease in volumes at Weir Canyon and SR-90 interchanges with the interchange alternative.

Current Status

The City of Anaheim completed a conceptual engineering study in December 2009 for the interchange. Multiple alternatives have been developed as part of the conceptual engineering study. Bicycle/pedestrian bridge is currently in initial planning stages. Project development is pending funding identification.

On July 24, 2017, OCTA staff along with a senior staff member of WSP presented the findings of a 91 Express Lanes intermediate access study. The study provided various alternatives, traffic modeling, and financial impacts of the additional access. At the conclusion of the discussion, the OCTA Board of Directors did not authorize additional analysis for the intermediate access.

Schedule and Cost

Anticipated project completion is 2035 and construction cost is estimated to be \$76,800,000. Costs from Feasibility Study (2009 dollars). R/W cost is undetermined at this time. Cost excludes any potential impact to Santa Ana River.

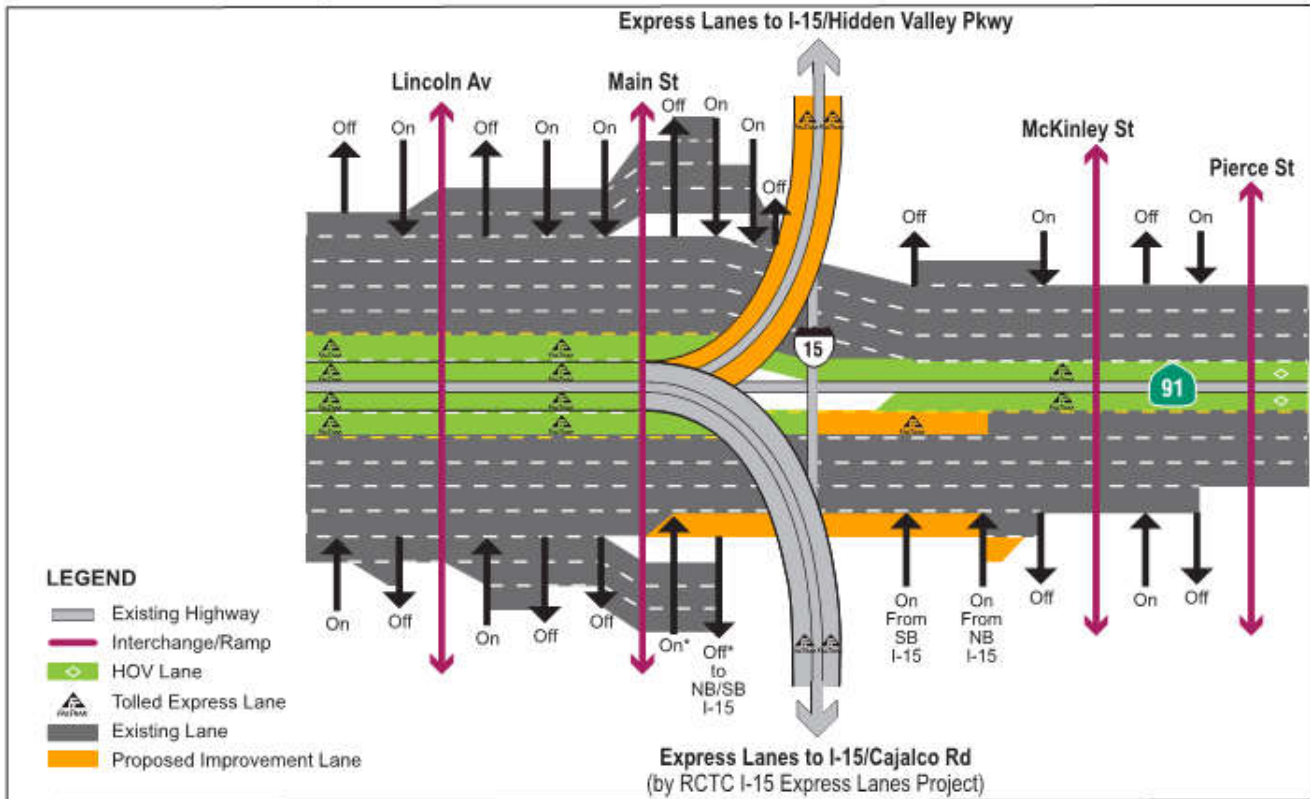
RIVERSIDE COUNTY PROJECTS

The Riverside County set of projects include three improvements: a 15/91 Express Lanes Connector, the SR-71/SR-91 interchange, and SR-91 Improvements east of I-15. Projects for implementation in Riverside County are anticipated to cost in excess of \$337 million (in 2019 dollars, or as noted).

Riverside County Project Summary		Cost (\$M)
15/91 Express Lanes Connector		220
SR-71/SR-91 Interchange Improvements		117
SR-91 Improvements East of I-15		TBD
SUBTOTAL		337+



I-15/SR-91 Express Lanes Connector



Project Description

The Project Approval and Environmental Document (PA/ED) for the SR-91 Corridor Improvement Project (CIP), from SR-241 to Pierce Street, included the addition of a 5th lane in each direction, the addition of auxiliary lanes at various locations, the addition of collector-distributor (CD) lanes at the I-15/SR-91 interchange, the extension of the 91 Express Lanes from the Orange County line to I-15, the construction of a SR-91 Express Lanes median direct connector to and from I-15 South, a SR-91 Express Lanes median direct connector to and from I-15 North (15/91 Express Lanes Connector, the subject project), and the construction of one Express Lane in each direction from the I-15/SR-91 interchange southerly to I-15/Cajalco Road (now part of RCTC I-15 Express Lanes Project [ELP]), and easterly to east of McKinley Street. Due to economic conditions, a Project Phasing Plan was developed to allow an Initial Phase, with reduced improvements, to move forward as scheduled, with the remaining ultimate improvements to be completed later. Subsequently, the proposed 15/91 Express Lanes Connector improvements (the subject of this project) have been pulled out from the CIP as a standalone project.

Key Considerations

Coordination among many of the SR-91 freeway projects that overlap the project limits is critical to successfully delivering these projects on schedule and within budget. Designing to accommodate future projects is a recurring theme for each of these projects. Minimizing conflicts in

scope between projects requires direct coordination between each project team. Additionally, future projects frequently have multiple alternatives under study, each with differing scope and construction footprints. Specifically, the project improvements need to continue to be coordinated with the SR-71/SR-91 interchange, the SR-241/91 Express Connector, and RCTC's I-15 Express Lanes Project.

Benefits

The 15/91 Express Lanes Connector project will reduce congestion and operational delays by providing direct median-to-median access between the SR-91 Express Lanes and I-15 Express Lanes. Traffic operations will improve by eliminating weaving conflicts and out-of-direction travel along SR-91 and I-15 by the use of the direct connectors. The project will provide motorists a choice to use the 15/91 Express Lanes Connector for a fee in exchange for timesavings.

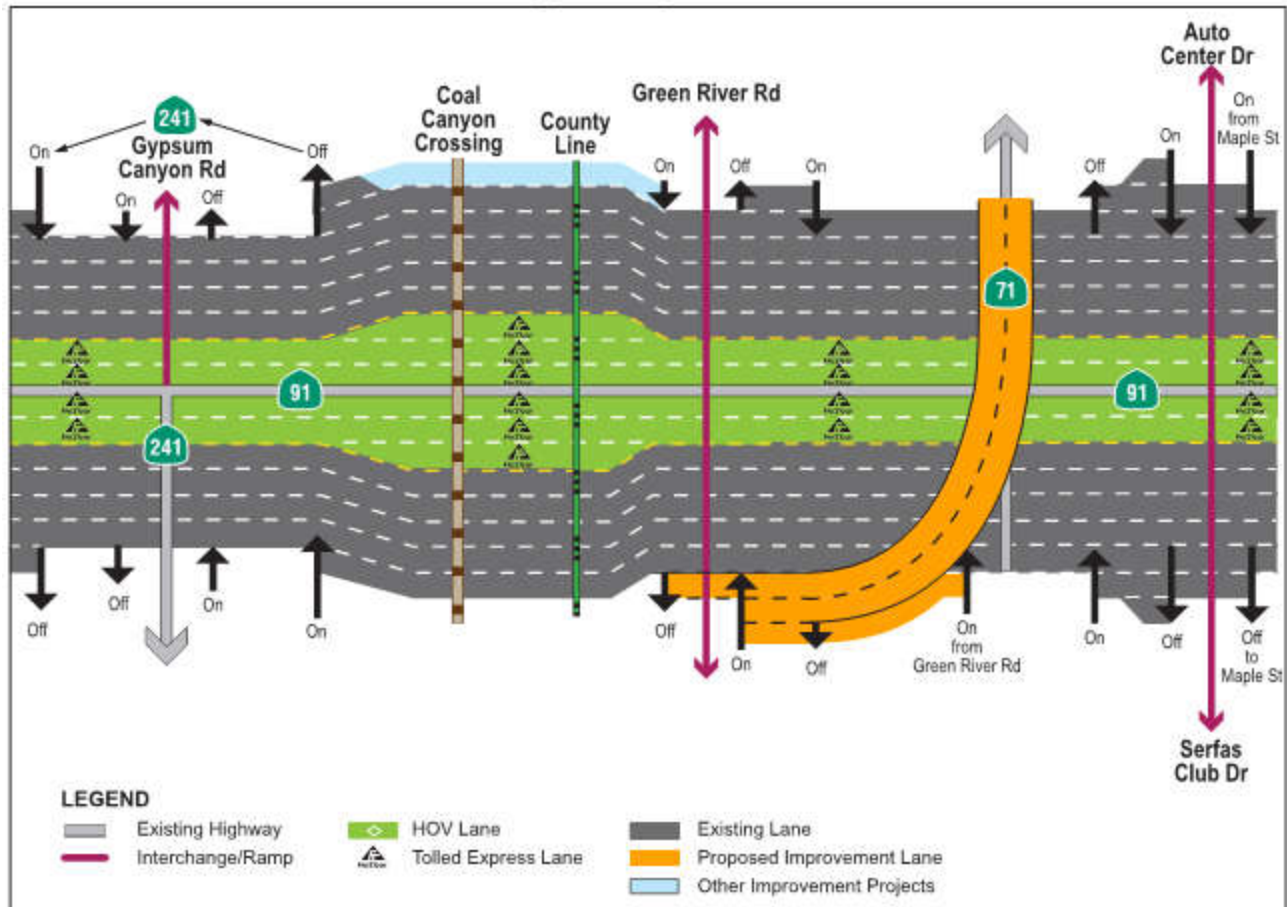
Current Status

The 15/91 Express Lanes Connector is currently discussed in the environmental document for the SR-91 CIP that was completed in 2012. However, an environmental revalidation is anticipated to be completed in 2019. Procurement of a Design-Build contractor is underway with contract award anticipated in Spring 2020.

Schedule and Cost

Anticipated project completion is 2023 and construction cost is estimated to be between \$110M - \$130M. The total project cost is estimated to be \$220M.

SR-71/SR-91 Interchange Improvements



Project Description

The current project includes a new two-lane direct connector from eastbound (EB) SR-91 to northbound (NB) SR-71 and realignment of the existing Green River Road SR-91 EB on-ramp to provide connection to NB SR-71 and EB SR-91.

Key Considerations

Project improvements must be coordinated with the following projects: the SR-91 Sixth GP Lane Addition and the SR-241/91 Express Connector.

Close coordination with the U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, and California Department of Fish and Wildlife will also be required as the connector crosses the Santa Ana River west of the Prado Dam.

Benefits

The project will provide a new direct connector improvement from EB SR-91 to NB SR-71, replacing the geometric choke point created by the existing loop connector. The project will also improve traffic operations and operational efficiency by eliminating or minimizing weaving conflicts through the use of auxiliary lanes.

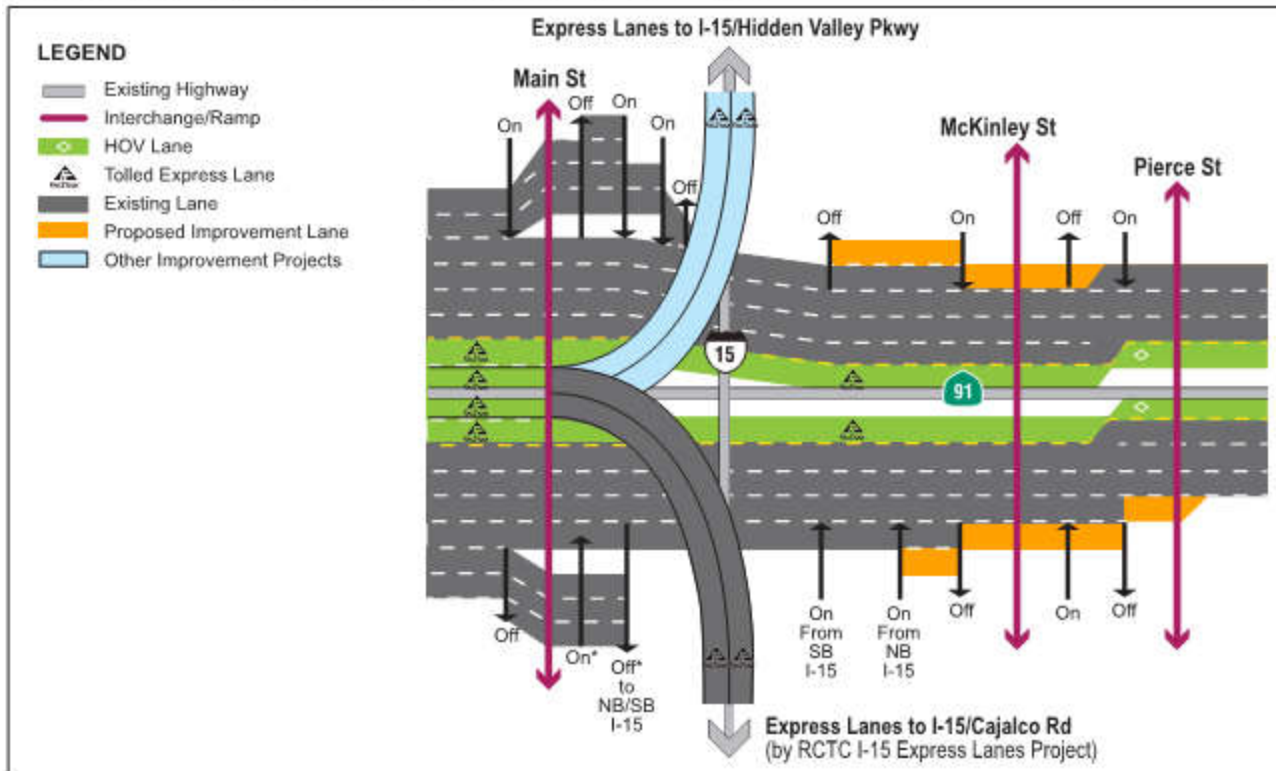
Current Status

The environmental phase was completed in 2011 and final design in 2015. An environmental revalidation and update to the final design is underway.

Schedule and Cost

Construction is planned for completion in 2023 pending funding availability. Construction cost is estimated to be \$117,000,000.

SR-91 Improvements East of I-15



Project Description

The Project Approval and Environmental Document (PA/ED) for the SR-91 Corridor Improvement Project (CIP), from SR-241 to Pierce Street, included the addition of a 5th lane in each direction, the addition of auxiliary lanes at various locations, the addition of collector-distributor (CD) lanes at the I-15/SR-91 interchange, the extension of the 91 Express Lanes from the Orange County line to I-15, the construction of a SR-91 Express Lanes median direct connector to and from I-15 South, a SR-91 Express Lanes median direct connector to and from I-15 North, and the construction of one Express Lane in each direction from the I-15/SR-91 interchange southerly to I-15/Cajalco Road (now part of RCTC I-15 Express Lanes Project [ELP]), and easterly to east of McKinley Street. Due to economic conditions, a Project Phasing Plan was developed to allow an Initial Phase, with reduced improvements, to move forward as scheduled, with the remaining ultimate improvements to be completed later. The SR-91 improvements east of I-15, which includes extending an Express Lane east of McKinley Street and adding a general purpose lane to Pierce Street in each direction (the subject project), is a component of the SR-91 CIP that was not constructed with the Initial Phase.

Key Considerations

Coordination among many of the SR-91 freeway projects that overlap the project limits is critical to successfully delivering these projects on schedule and within budget. Designing to accommodate future projects is a recurring theme for each of these projects. Minimizing conflicts in scope between projects requires direct coordination between each project team. Additionally, future projects frequently have multiple alternatives under study, each with differing scope and construction footprints. Specifically, the project improvements need to continue to be coordinated with the SR-71/SR-91 interchange, the SR-241/91 Express Connector, 15/91 Express Lanes Connector, and RCTC's I-15 Express Lanes Project.

Benefits

The SR-91 Improvements east of I-15 will reduce congestion and delays by providing additional SR-91 capacity from I-15 to Pierce Street.

Current Status

Preliminary engineering is complete but may need to be revisited at a future date. The SR-91 Improvements east of I-15 is currently discussed in the SR-91 CIP environmental document for the SR-91 that was completed in 2012.

Schedule and Cost

Anticipated project completion and cost are to be determined.

Bi-COUNTY PROJECTS

There are four Bi-County improvement projects that will benefit both Orange and Riverside Counties. These projects include: Express Bus service improvements, SR-91 Corridor Operations Project, a 6th General Purpose Lane Addition (SR-241 to SR-71), and a SR-241/ 91 Express Connector. The total cost for the four projects is expected to be more than \$225 million (in 2019 dollars, or as noted).

Bi-County Project Summary	Cost (\$M)
Express Bus Service Improvements	6
SR-91 Corridor Operations Project	38
Sixth GP Lane Addition (SR-241 to SR-71)	TBD
SR-241/SR-91 Express Connector	181
SUBTOTAL	225+



Express Bus Service Improvements



Project Description

Orange County Transportation Authority (OCTA), working with the Riverside County Transportation Commission (RCTC) and the Riverside Transit Agency (RTA), operate Express Bus service between Riverside and Orange counties. Commuters lack direct transit connections to some Orange County employment centers not served by Metrolink. The Express Bus service provides this connection.

Existing Service

OCTA has operated Route 794 since 2006 from Riverside County to Hutton Centre and South Coast Metro (shown in orange above). On Route 794, OCTA removed trips to Corona in February 2018 based on low ridership. OCTA currently operates six morning westbound trips and five afternoon eastbound trips to/from the La Sierra Metrolink Station. Two new Express Bus routes were implemented by RTA in January 2018 between Riverside County and Orange County including RTA Route 200 (shown in blue above) from San Bernardino/Riverside to the Anaheim Resort. The route provides hourly service on weekdays and 90-120 minute service on weekends with a fleet of six buses. RTA Route 205 (shown in green above) from Lake Elsinore/Temecula/Corona to the Village at Orange includes three AM and three PM roundtrips with 3 buses.

New Service

The Express Bus Routes have been fully implemented as of FY19 and there are no planned service additions. Changes to routes may be made in the future based on available funding and ridership demand.

Key Considerations

Intercounty Express Bus service is effective between locations where transit travel times by Express Bus would be more competitive than Metrolink and connecting rail feeder buses.

Benefits

Express Bus services contribute to congestion relief on SR-91.

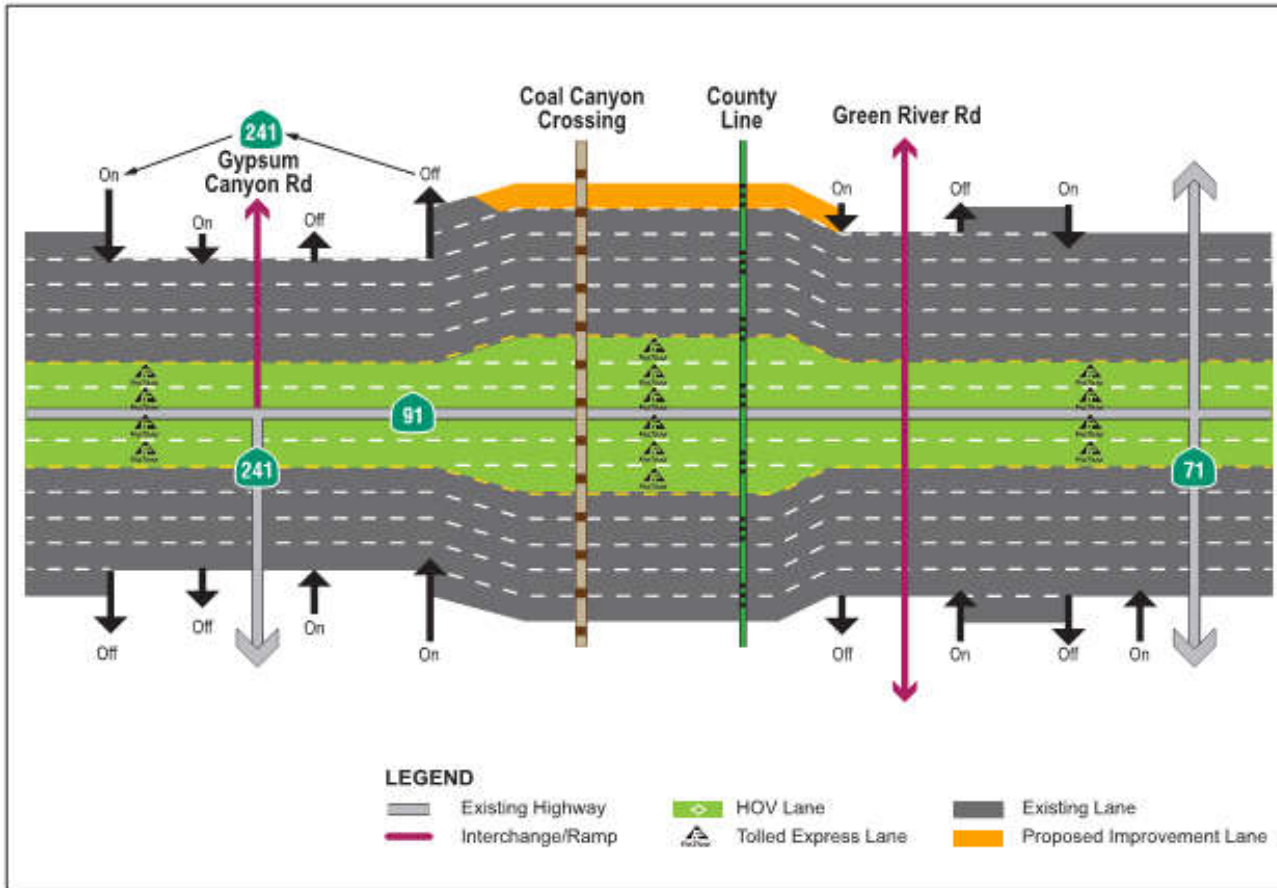
Current Status

Since completion of the 91 Express Lanes, RTA more than doubled its Express Bus service on SR-91. Currently, OCTA operates 11 bus trips per day on SR-91. RTA now operates 47 trips on weekdays (up from 18 trips that Route 216 provided weekdays) and 18 trips on weekends (up from 8 trips provided by Route 216) on SR-91 Express Lanes. Service hours for this expansion is an extra 21,445 hours per year and is being served by five new coaches added to the RTA fleet.

Schedule and Cost

The Express Bus Routes have been fully implemented as of FY19. Ongoing operating costs average \$4,892,000 per year and capital costs average \$1,174,000 per year. The annual capital cost has increased to reflect the future cost of complying with the new Innovative Clean Transit regulation.

SR-91 Corridor Operations Project



Project Description

The Riverside County portion of the 91 Express Lanes began operation in March 2017. Throughout the first year of operation, RCTC made minor operational improvements to improve the SR-91 corridor travel between State Route 241 (SR-241) and McKinley Street. In November 2018, RCTC implemented additional striping and signage improvements to westbound SR-91 at the McKinley entrance to the 91 Express Lanes as well as the County Line access location to further enhance efficiency along the westbound SR-91 corridor between McKinley Street and SR-241. In December 2018, the RCTC Commission authorized its staff to proceed with a project to construct an additional westbound lane along SR-91 between Green River Road and SR-241 (the subject of this project). This new project is now known as the SR-91 Corridor Operations Project (91 COP).

Key Considerations

The goal of this project is to implement a substantial operational improvement that is cost effective and timely to address the peak period bottleneck conditions along westbound SR-91 near the County Line. Key considerations

include reducing impacts to adjacent land and local streets by the use of retaining walls and minimizing throw-away costs with future projects. Specifically, the project improvements need to be coordinated with the SR-241/91 Express Connector and the SR-91 Sixth GP Lane Addition projects.

Benefits

The 91 COP will reduce congestion and delays along westbound SR-91 between McKinley Street and SR-241.

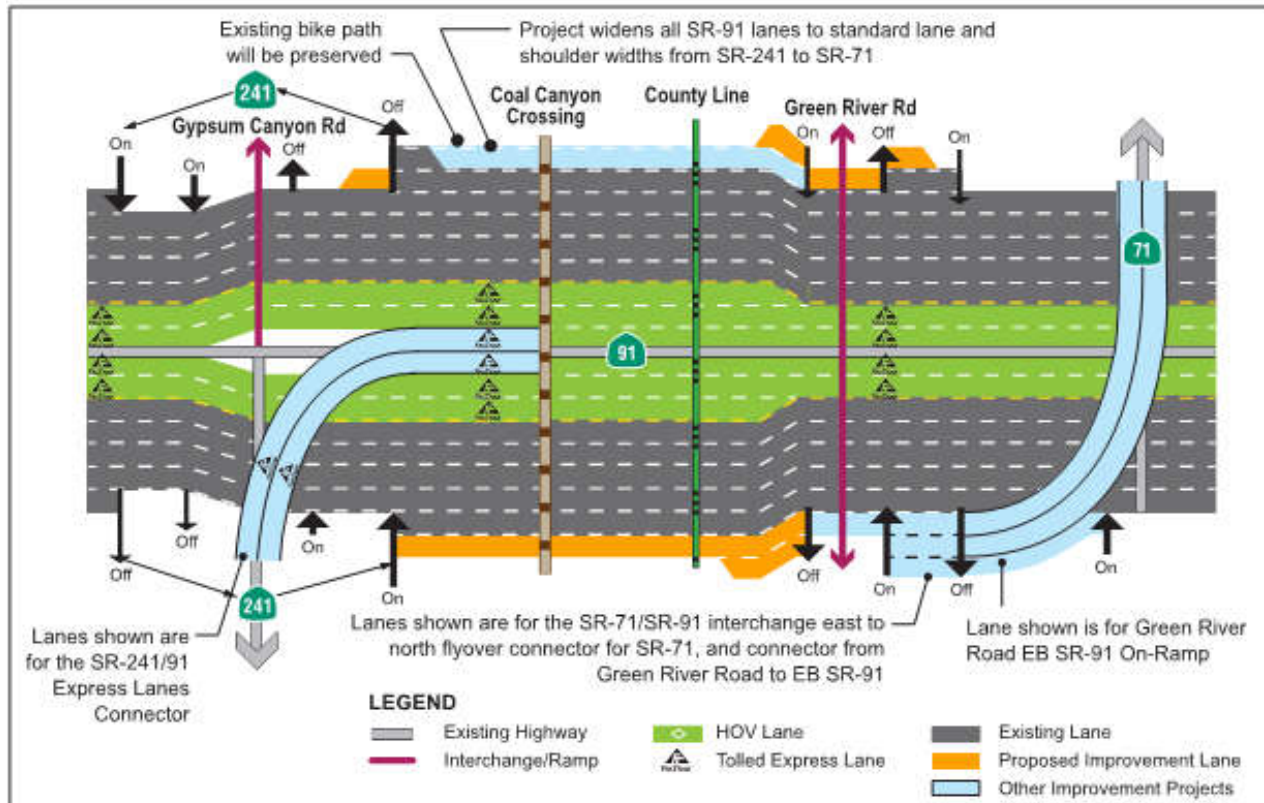
Current Status

This project is within the footprint of the SR-91 Sixth GP Lane Addition project that was an element of the SR-91 CIP environmental document approved in 2012. An environmental revalidation for the 91 COP is currently underway and anticipated to be completed in 2019. Final design is also proceeding with project advertisement and contract award anticipated in 2020.

Schedule and Cost

Construction is planned for completion in 2021/2022 pending funding availability. Construction cost is estimated to be \$38,000,000.

SR-91 Sixth General Purpose Lane Addition



Project Description

The Project Approval and Environmental Document (PA/ED) for the SR-91 Corridor Improvement Project (CIP), from SR-241 to Pierce Street, included the addition of a 5th lane in each direction, the addition of auxiliary lanes at various locations, the addition of collector-distributor (CD) lanes at the I-15/SR-91 interchange, the extension of the 91 Express Lanes from the Orange County line to I-15, the construction of a SR-91 Express Lanes median direct connector to and from I-15 South, a SR-91 Express Lanes median direct connector to and from I-15 North, and the construction of one Express Lane in each direction from the I-15/SR-91 interchange southerly to I-15/Cajalco Road (now part of RCTC I-15 Express Lanes Project [ELP]), and easterly to east of McKinley Street. Due to economic conditions, a Project Phasing Plan was developed to allow an Initial Phase, with reduced improvements, to move forward as scheduled, with the remaining ultimate improvements to be completed later. The SR-91 sixth general purpose lane in each direction between SR-241 and SR-71 (the subject of this project) is a component of the SR-91 CIP that was not constructed with the Initial Phase.

Key Considerations

Coordination among many of the SR-91 freeway projects that overlap the project limits is critical to successfully delivering these projects on schedule and within budget. Designing to accommodate future projects is a recurring theme for each of these projects. Minimizing conflicts in scope between projects requires direct coordination between each project team. Additionally, future projects frequently have multiple alternatives under study, each with differing scope and construction footprints. Specifically, the project improvements need to continue to be coordinated with the 91 COP SR-71/SR-91 interchange, the SR-241/91 Express Connector, 15/91 Express Lanes Connector, and RCTC's I-15 Express Lanes Project.

Benefits

The SR-91 Sixth General Purpose Lane Addition will reduce congestion and delays by providing additional SR-91 capacity from SR-241 to SR-71.

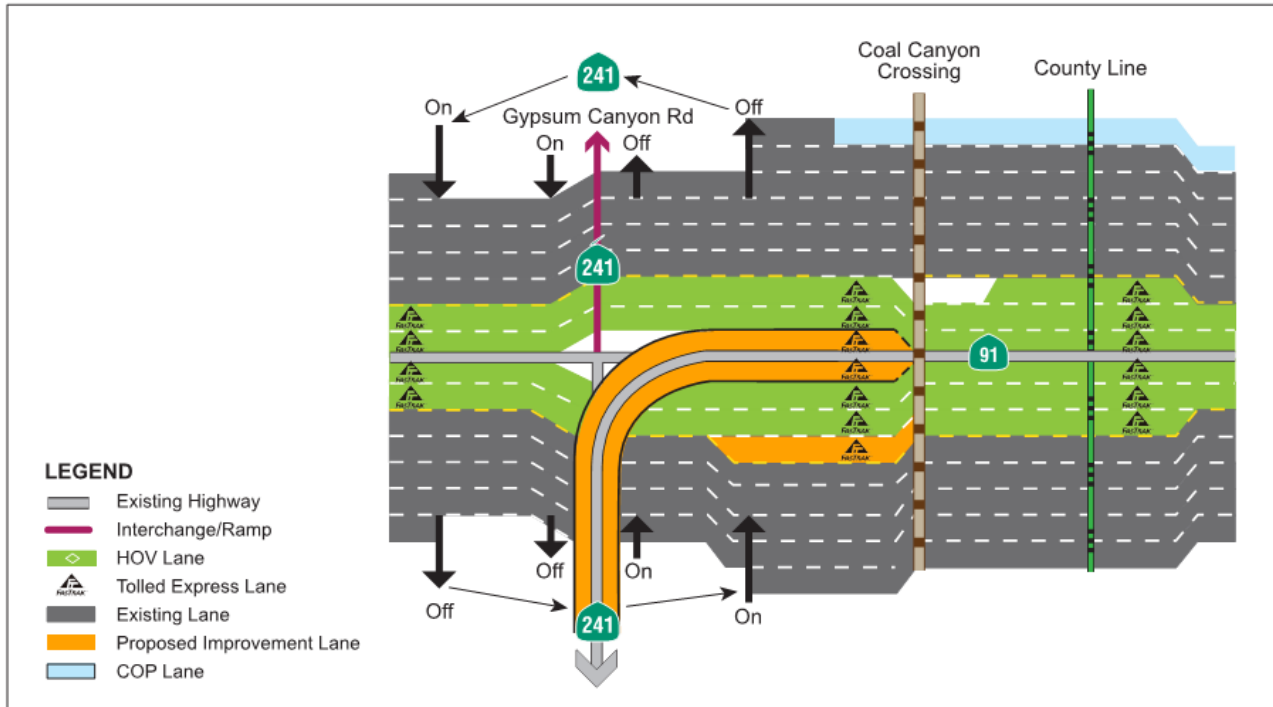
Current Status

Preliminary engineering is complete but may need to be revisited at a future date. The SR-91 Sixth General Purpose Lane Addition is currently discussed in the SR-91 CIP environmental document for the SR-91 that was completed in 2012.

Schedule and Cost

Anticipated project completion and cost are to be determined.

SR-241/SR-91 Express Connector



Project Description

The SR-241/91 Express Connector will carry northbound (NB) SR-241 traffic to eastbound (EB) 91 Express Lanes and carry westbound (WB) 91 Express Lanes traffic to southbound (SB) SR-241. Outside widening would be required on the south side of SR-91 for realignment of EB lanes up to the Coal Canyon Crossing.

Key Considerations

This project was originally planned as a High Occupancy Vehicle (HOV) connector into the SR-91 HOV lane in the early 1990s which preceded the operations of the 91 Express Lanes. With the implementation of the 91 Express Lanes, the project will need to carefully coordinate the traffic operations and tolling policies that will result from the convergence of the SR 241 Toll Road, the OCTA 91 Express Lanes, and the RCTC 91 Express Lanes. Maintaining reliable travel times and free flow speeds during peak periods on the 91 Express Lanes will be a key consideration for this project. The project requires SR-91 to be widened to the south to make room for a two lane (one in each direction) direct connector and associated Express Auxiliary Lanes in each direction in the median. Other projects which improve downstream capacity should be considered prior to or concurrent with the implementation of this project. Coordination will be conducted with local agencies to ensure the project avoids impacts to planned bicycle and trail connections on Gypsum Canyon Road per City of Anaheim General Plan and OCTA Commuter Bikeways Strategic Plan.

Benefits

The project will provide connectivity from the 91 Express Lanes and the SR-241 Toll Road.

Current Status

Preliminary engineering concepts for a SR-241/91 Express Lanes direct connector have been developed by The Foothill/Eastern Transportation Corridor Agency (TCA) and Caltrans. The 91 Express Lanes Extension and SR-241 Connector Feasibility Study was completed in March 2009 and was initiated to evaluate the various alternatives. A Project Study Report was initiated in January 2011 and was completed by January 2012. The Draft Project Report and Draft Environmental Document were completed in late-2016, and the Final Project Report and Environmental Document are underway. Final Engineering is anticipated to be completed in 2021.

All agencies involved will work together to find a solution that results in the completion of this project and to ensure other necessary downstream capacity enhancing projects are implemented prior to or concurrent with the implementation of this project.

Schedule and Cost

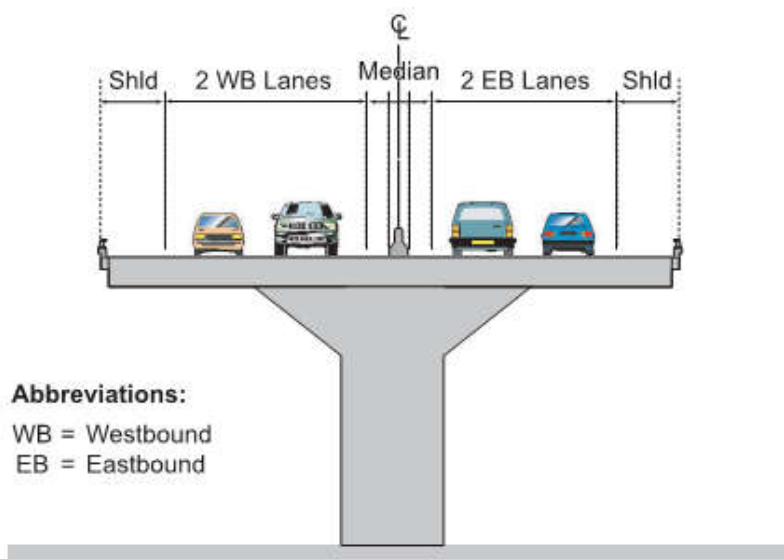
The project is anticipated to be completed concurrent with new eastbound capacity projects. The cost is estimated to be \$181,000,000.

APPENDIX A - POST-2035 AND CONCEPTUAL PROJECTS

Concepts for potential Post-2035 implementation (potentially earlier if funding becomes available) focus on longer-lead time projects. This multi-billion dollar program may include: an elevated 4-lane facility (MIS Corridor A) from SR-241 to I-15; the Anaheim to Ontario International Airport Maglev High Speed Rail; the Irvine-Corona Expressway (ICE) 4-lane facility from SR-241/SR-133 to I-15/Cajalco Road (formerly known as MIS Corridor B), WB SR-91 to SB SR-55 Connector Improvements, and EB SR-91 Fifth Lane Addition at SR-241. These potential concepts include significant environmental constraints and right of way requirements in addition to requiring a significant amount of planning, design, and future policy and public input. The MIS Corridor A concept may incorporate projects being developed in the earlier programs as concept components.

Concept Summary	Cost (\$M)
Elevated 4-Lane Facility (MIS Corridor A) from SR-241 to I-15	2,720
Anaheim to Ontario International Airport Maglev High Speed Rail	2,770-3,200
Irvine-Corona Expressway (ICE) 4-Lane Facility from SR-241/SR-133 to I-15/Cajalco Road	8,855
WB SR-91 to SB SR-55 Connector Improvements	75-150
EB SR-91 Fifth Lane Addition at SR-241	31
SUBTOTAL	14,451 – 14,956

Elevated 4-Lane Facility (MIS Corridor A) from SR-241 to I-15



Abbreviations:

WB = Westbound

EB = Eastbound

Elevated 4-Lane Facility (MIS Corridor A) Cross-Section

Concept Description

The improvements primarily consist of constructing a new 4-lane elevated expressway near or within the Santa Ana Canyon with freeway-to-freeway connectors at SR-241 and I-15. The facility may include managed lanes and potential reversible operations.

Key Considerations

Choice of alignment will be key to determining net capacity increase. Extensive right-of-way (R/W) will be required to implement the improvements if the alignment is not in the SR-91 corridor. When median connector projects or HOV/HOT projects are constructed and this 4-lane elevated facility is proposed within the median of SR-91 through Corona, then extensive managed lane closures would be required during construction (thus temporarily reducing SR-91 capacity during construction).

An alternative could be studied for the median Corridor A viaduct along with reduced SR-91 geometric standards to minimize R/W impacts. Also, direct connectors (such as for High Occupancy Vehicle (HOV) / High Occupancy Toll (HOT) at I-15/SR-91) to/from the median could be precluded by Maglev columns located within the same median area. Caltrans and Maglev highway R/W, maintenance, safety, and operations considerations would need to be analyzed if

shared use with a Maglev facility were pursued. Additional mitigation costs may be required for improvements to SR-241 and SR-133 as a result of additional Corridor traffic volumes. Corridor A as managed lanes, with the extension of 91 Express Lanes to I-15, this project concept may affect traffic distribution due to "parallel" tolled facilities.

Benefits

The concept would provide significant congestion relief by allowing vehicles to bypass the at-grade freeway lanes and local arterial interchanges between SR-241 and I-15. Connections are proposed directly between SR-91, SR-241, and I-15.

Current Status

This concept is identified in the Riverside County - Orange County Major Investment Study (MIS) as part of the Locally Preferred Strategy to improve mobility between Riverside County and Orange County. No project development work is planned at this time.

Schedule and Cost

Anticipated project completion is post-2035 and construction cost is estimated to be \$2,720,000,000 (2005 dollars).

Anaheim to Ontario International Airport Maglev High Speed Rail



LEGEND

- Existing Highway
- High Speed Rail
Representative Alignment

REPRESENTATIVE ALIGNMENT SHOWN FOR ILLUSTRATIVE PURPOSES ONLY

Concept Description

Proposals for a new super-speed train corridor from Anaheim to Ontario are included in this concept. This concept includes an alternative that would use SR-91 right-of-way, or would be aligned adjacent to SR-91 right-of-way, or could potentially be co-located with the Major Investment Study (MIS) Corridor A alignment. Another alignment opportunity is being investigated along SR-57.

Key Considerations

Alternative alignment impacts to SR-91 right-of-way envelope and/or Santa Ana River are undetermined. The choice of alignment will potentially impact MIS Corridor A. Right-of-way (R/W) will be required to implement the improvements. Potential considerations for co-locating the Magnetic Levitation (Maglev) train adjacent to Corridor A (and also SR-91) include providing a two-column structure with a barrier between the trains and vehicles. Caltrans and Maglev highway R/W, maintenance, safety, and operations considerations would need to be analyzed if shared use with a Maglev facility were pursued. See the MIS Corridor A project for additional considerations. Coordination with Metrolink improvements will be required.

Benefits

The concept would provide congestion relief by providing a direct high-speed/high-capacity connection with Ontario International Airport for Orange County air passengers and business next-day deliveries. Maglev will make the trip in just 14.5 minutes. Relieves congestion on SR-91 by providing additional capacity in the corridor.

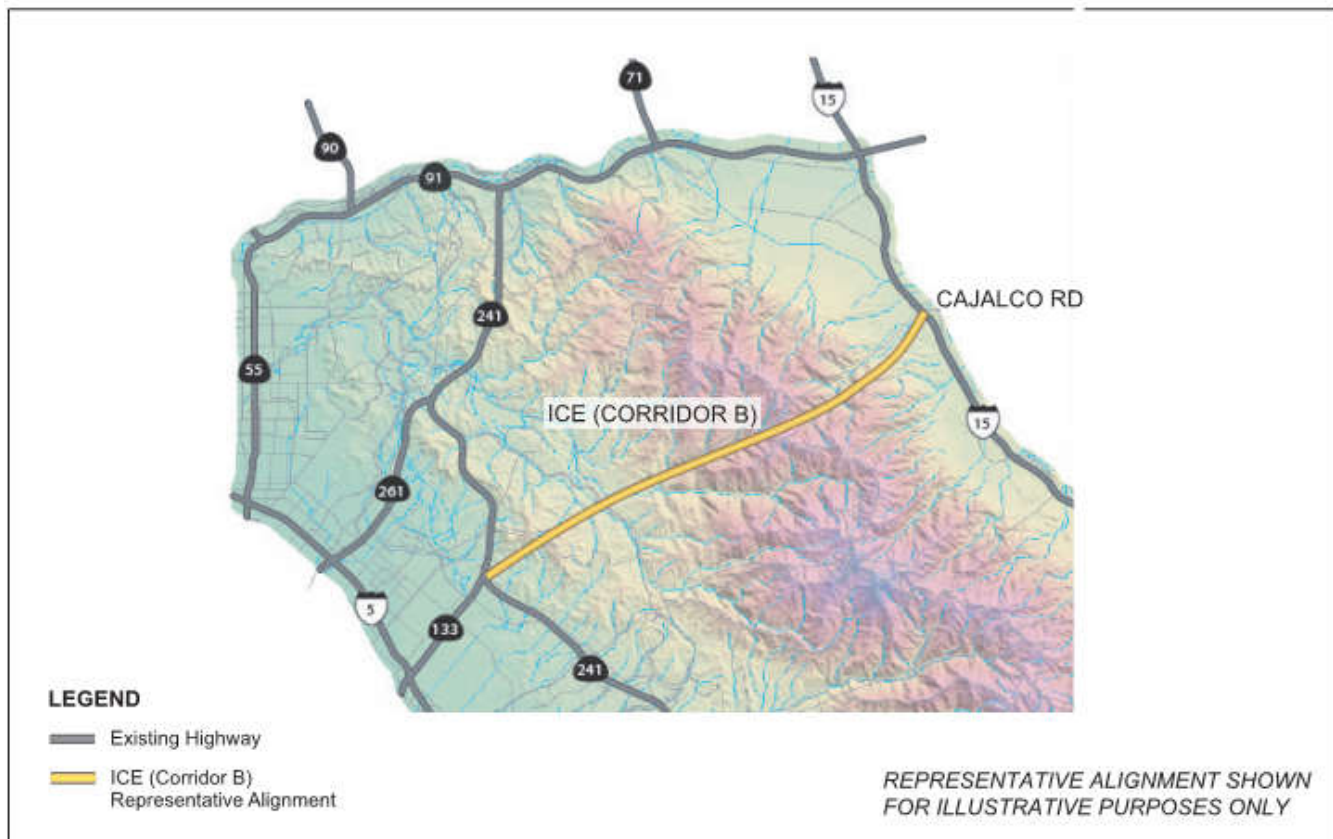
Status

Since 2012, no progress on this project has occurred. Preliminary design, engineering and Phases 1 and 2 of a Preliminary Environmental Impact Statement/Environmental Impact Statement (PEIS/EIS) are completed. Congress approved \$45M in SAFETEA-LU for the environmental phase of the project. Construction funding of up to \$7 billion was identified through a loan commitment from the China Export-Import Bank.

Schedule and Cost

Anticipated project completion is to be determined and construction cost is estimated to be from \$2,770,000,000 to \$3,200,000,000 (2012 dollars).

Irvine-Corona Expressway (ICE) 4-Lane Facility from SR-241/SR-133 to I-15/Cajalco Road



Concept Description

The improvements primarily consist of constructing a highway and rail facility through the Cleveland National Forest with freeway-to-freeway connectors at SR-241/SR-133 and I-15/Cajalco Road. The facility would essentially be a continuation of SR-133 on the west end of the corridor, to I-15 on the east end.

Key Considerations

The tunnel concept is technically feasible based on the geotechnical investigation completed in December 2009. The initial project phase would be the construction of one 2-lane highway tunnel and one rail tunnel. The second project phase would include construction of a second 2-lane highway tunnel. Additional technical studies and geotechnical borings would be needed to refine the tunnel alignments and grades. Costs associated with the Irvine-Corona Expressway (ICE) tunnels are based on the Feasibility Evaluation Report completed in December 2009. A financial analysis will be needed for the construction, operations and toll requirements of the ICE tunnels.

Benefits

The concept would provide significant congestion relief by providing an alternative route between Orange and Riverside counties and would allow vehicles to bypass SR-91 between SR-241 and I-15. The concept would not disrupt SR-91 traffic during construction and would allow for additional route selection for incident management, emergency evacuation, and for continuity of the highway network by linking SR-133 to I-15.

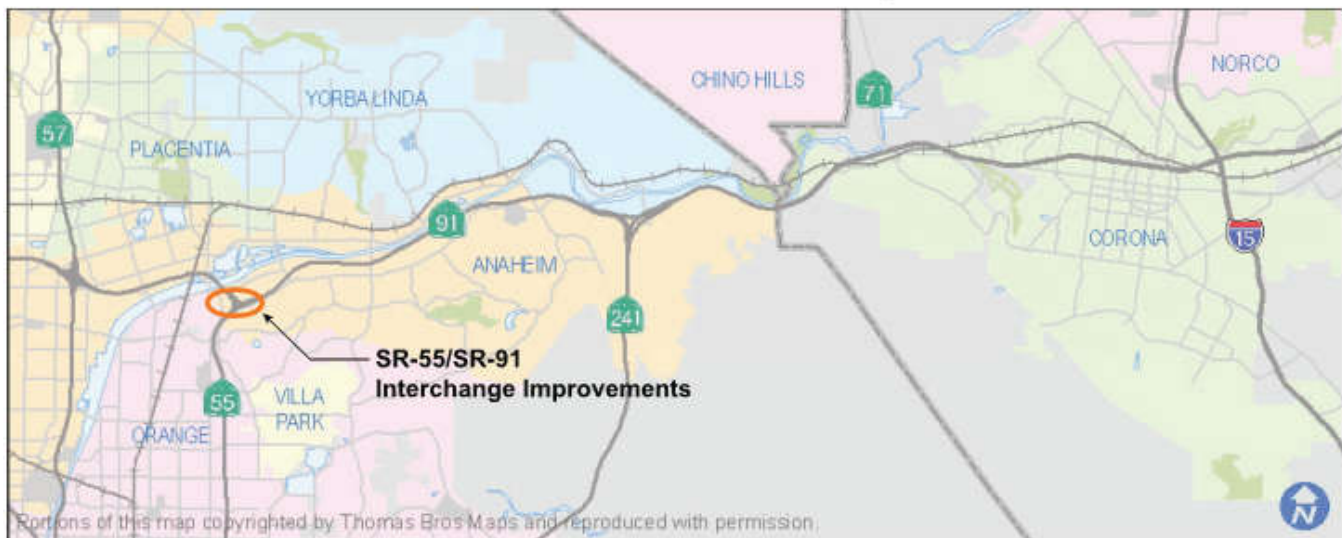
Current Status

On August 27, 2010 the Riverside Orange Corridor Authority Board took action to defer additional study of the ICE concept until such time as financial considerations improve and/or technological advancements warrant reexamination. Review of the concept shall be done annually through the SR-91 Implementation Plan update to determine if any of the major assumptions with regard to financial considerations, private sector interest, or technological advancements have changed to make the tunnel financially viable. (See "ICE status summary" for further discussion).

Schedule and Cost

Anticipated project completion is post-2035 and construction cost is estimated to be \$8,855,000,000 (2009 dollars).

WB SR-91 to SB SR-55 Connector Improvements



Concept Description

The project consists of operational improvements by modifying the connector to SB SR-55 from WB SR-91. The improvements would extend to Lakeview Avenue to the east and would include a new connector from WB SR-91 to SB SR-55 as a potential right-hand exit.

Key Considerations

Right-of-way impacts, detailed SR-55/SR-91 interchange improvements, and downstream impacts to SR-55 require further evaluation in a subsequent phase of project development. Conceptual design of SR-55/SR-91 would be coordinated with completed improvements at SR-91 and Tustin Avenue, and with the SR-91 Environmental Study Improvements from SR-57 to SR-55. This study is currently being conducted.

Operational enhancements between SR-55 and Lakeview Avenue will provide some benefit for SR-55/SR-91 by addressing WB SR-91 weaving issues. In addition, the proposed WB drop-ramp from Lakeview AV has been designed to accommodate three WB through lanes on either side in order to reduce throwaway costs in the future should the SR-91 be shifted to accommodate a right-hand exit for SB SR-55.

Benefits

Interchange improvements are anticipated to provide congestion relief for WB SR-91 traffic and potentially improve the connection from WB SR-91 to SB SR-55.

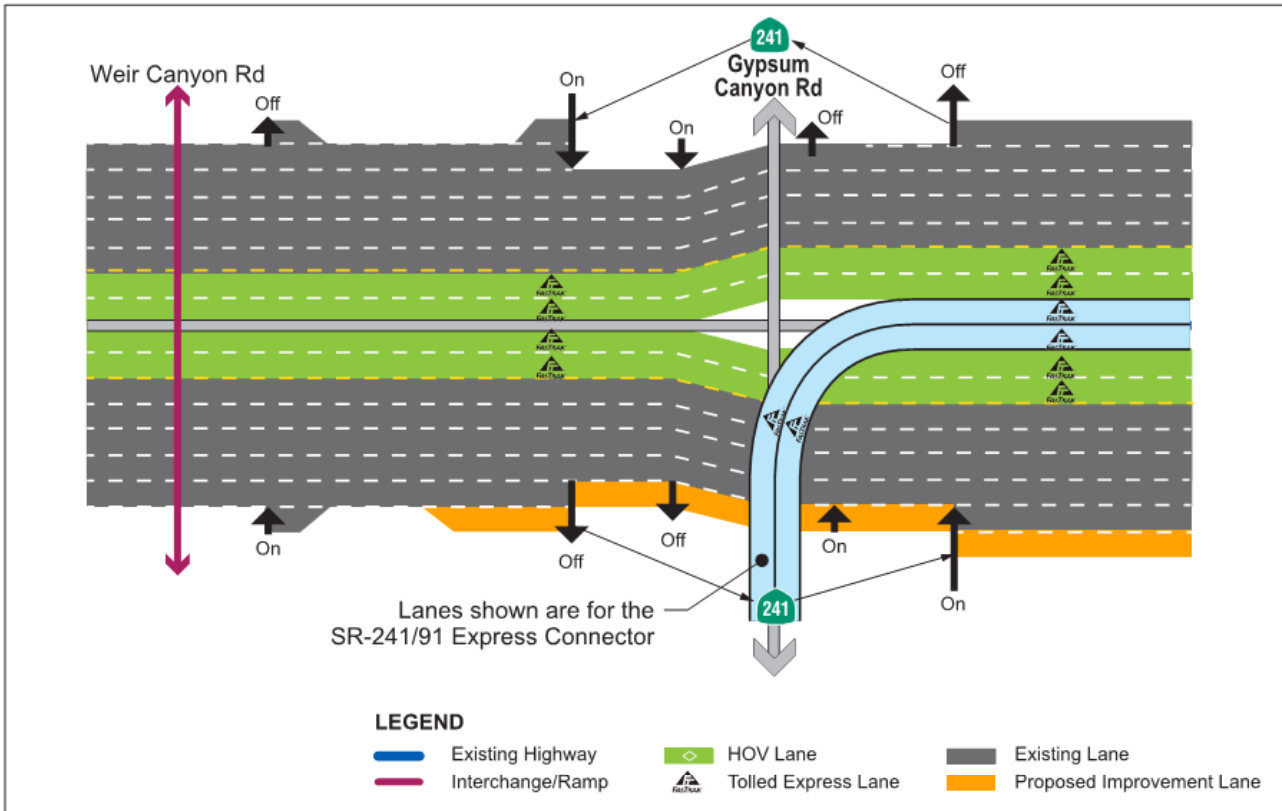
Current Status

SR-55/SR-91 project information was derived from the Final Alternatives Evaluation and Refinement Report, December 2005, by the Riverside County - Orange County Major Investment Study (MIS). Focused SR-91/SR-55 conceptual engineering needs to be scheduled. However, initial conceptual engineering was also studied as part of the SR-91 Feasibility Study Between State Route 57 and State Route 55 Interchange Areas in June 2009, and as part of the SR-91 Environmental Study Improvements from SR-57 to SR-55.

Schedule and Cost

Anticipated project completion is post-2035 and construction cost is estimated to be from \$75,000,000 to \$150,000,000 (2014 dollars).

EB SR-91 Fifth Lane Addition at SR-241



Concept Description

The location of the proposed EB SR-91 fifth general purpose (GP) lane addition (The Segment) is on EB SR-91 from Weir Canyon Road to the NB SR-241 Connector. The Segment consists of 4 (four) GP lanes and 2 (two) managed lanes (91 Express Lanes).

Upstream (westerly) from The Segment the EB SR-91 has 5 GP lanes and the 5th lane drops to the SB SR-241 Connector as some traffic volume exits to the SB SR-241. Downstream from The Segment the EB SR-91 gains the 5th lane back as the NB SR-241 Connector merges with SR-91 in a dedicated lane addition. This 5th lane continues beyond the Riverside County line providing enhanced mobility.

Key Considerations

This segment with 4 GP lanes might be creating a traffic choke point due to the decrease of capacity, potentially contributing to significant traffic delays passing through this segment along with other traffic issues such as queue jumping, weaving, merging and operational speed differential. However, additional traffic from NB SR-241 to EB SR-91 and Gypsum Canyon Rd on-ramp suggest balancing the number of lanes should be carefully examined. As such, additional capacity will enhance EB freeway operations along this Segment.

Benefits

1. Extends the existing 5th EB GP lane easterly and ties it to the existing 5th lane downstream. This could provide capacity enhancement and may result in removing an existing choke point. Significant delay savings is anticipated.
2. Potentially eliminate queue jumping in this area from EB SR-91 as well as Weir Canyon Rd.
3. Potentially reduce speed differential between through lanes, thus creating a more balanced flow.
4. Potentially provide balanced lane utilization at high traffic demand area.

Current Status

Additional traffic analysis and study is required to confirm the benefits to EB SR-91 by the proposed improvements. This location was identified by Caltrans as a high congestion location in the County. The concept is intended to improve the choke point that exists due to the presence of a 4 lane segment between 5 lane freeway segments.

Schedule and Cost

Total project cost, based on Caltrans' estimate, is \$31.25 million. Project schedule has not been determined.

APPENDIX B - COMPLETED PROJECT EXHIBITS

The following exhibits represent completed projects from previous Plans since 2006 and are intended to be used as a reference to illustrate the progress made since the inception of the Plan. Note: some projects listed in the Plan as completed (see Section 1, Project Accomplishments) are not included herein since there was no exhibit created or necessary for use with prior Plans (such as for restriping projects, various safety enhancements, minor operational improvements, etc.).

Project Improvements	Constructed
Green River Road Overcrossing Replacement	March 2009
North Main Street Corona Metrolink Station Parking Structure	June 2009
Eastbound Lane Addition from SR-241 to SR-71	September 2010
Widen SR-91 between SR-55 and SR-241 by Adding a 5 th GP Lane in Each Direction	December 2012
SR-91 WB Lane at Tustin Avenue	April 2016
Metrolink Service Improvements	June 2016
Initial Phase CIP: Widen SR-91 by One GP Lane in Each Direction East of Green River Rd, CD Roads and I-15/SR-91 Direct South Connector, Extension of Express Lanes to I-15 and System/Local Interchange Improvements	July 2017
La Sierra Metrolink Parking Improvements	February 2019

Green River Road Overcrossing Replacement

Appendix Project No: B-1

Actual Completion: March 2009

Project Costs

Capital Cost	\$ 21,000,000
Support Cost	\$ 3,000,000
R/W Cost	\$301,000
Total Project Cost	\$ 24,301,000

Project Schedule

Preliminary Engineering	Completed
Environmental	Completed
Design	Completed
Construction	Completed

Project Schedule Caltrans Equivalents:

Preliminary Engineering = PID

Environmental = PA/ED

Design = PS&E

Abbreviations:

CD = Collector Distributor Lane

FTR = Future

HOV = High Occupancy Vehicle

SHLD = Shoulder

Project Description

Improvements primarily consist of replacing the existing Green River Road overcrossing with a new six-lane wide, 4-span overcrossing to accommodate future widening of SR-91. The interior spans will accommodate up to eight mainline lanes in each direction including two HOV lanes. The exterior spans can accommodate two lanes, either for auxiliary lanes or collector distributor roads. Entrance and exit ramps will be realigned and widened to accommodate the new bridge, yet the interchange will retain its current configuration. New signals will be installed at the ramp intersections. Ramp and bridge improvements will be constructed within existing right of way.

Key Considerations

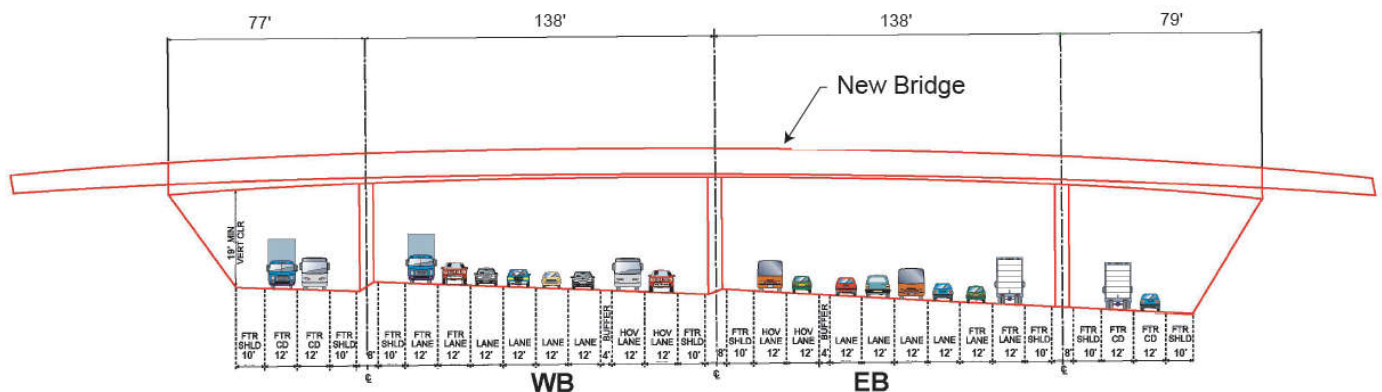
Design interface is required with the Eastbound Lane Addition from SR-241 to SR-71, SR-71/SR-91 Interchange Improvements, SR-91 Corridor Improvement Project, and SR-241/SR-91 HOV/HOT Connector.

Benefits

The project will improve the level of service at ramp and local street intersections at the interchange. Improvements will reduce ramp queues that extend into the freeway's general purpose lanes, thus contributing to congestion relief on SR-91.

Current Status

The project began construction in March 2007 and was completed in March 2009.



GREEN RIVER BRIDGE CROSS-SECTION

NOTE: All dimensions are approximate



North Main Street Corona Metrolink Station Parking Structure

Appendix Project No: B-2

Actual Completion: June 2009

Project Costs

Capital Cost	\$ 20,000,000
Support Cost	\$ 5,000,000
R/W Cost	\$0
Total Project Cost	\$ 25,000,000

Project Schedule

Preliminary Engineering	Completed
Environmental	Completed
Design	Completed
Construction	Completed

Project Description

The project provides a six level parking structure with 1,065 parking stalls. The construction is within the existing North Main Street Metrolink station property in Corona.

Key Considerations

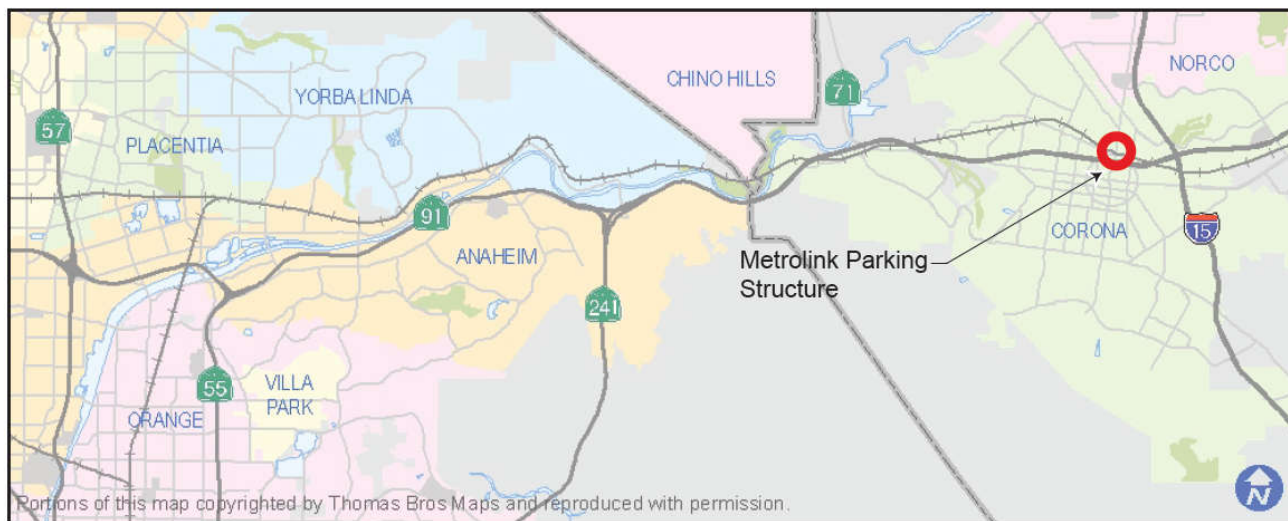
Proposed improvements were constructed within existing right of way. Currently there are 700 users of the facility, 200 more that were previously able to accommodate. Additionally RCTC has opened up the lot to park and ride carpools and vanpools and has issued over 120 permits for carpoolers to use the expanded station. This shows an added benefit of supporting carpooling as well as transit to offset congestion on SR-91.

Benefits

Demand for parking currently exceeds the capacity at the North Main Street Corona station. New parking capacity will allow Metrolink ridership to increase thereby diverting vehicle trips from SR-91.

Current Status

Construction was initiated in January 2008 and was completed in June 2009. The project was funded with Federal Congestion Management and Air Quality (CMAQ) funds.



Eastbound Lane Addition from SR-241 to SR-71

Appendix Project No: B-3

Actual Completion: September 2010

Project Cost Estimate

Capital Cost	\$ 41,000,000
Support Cost	\$ 8,000,000
R/W Cost	\$ 2,200,000
Total Project Cost	\$ 51,200,000

Project Schedule

Preliminary Engineering	Completed
Environmental	Completed
Design	Completed
Construction	Completed

Project Description

The project will provide an additional eastbound (EB) lane from the SR-91/SR-241 interchange to the SR-71/SR-91 interchange and will widen all EB lanes and shoulders to standard widths.

Key Considerations

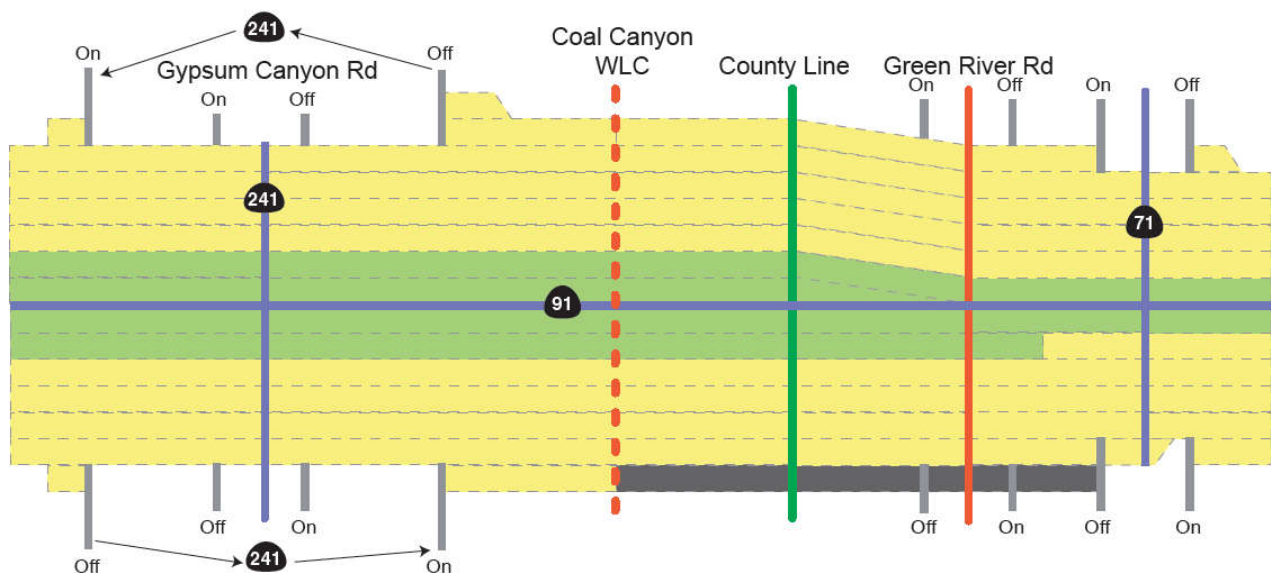
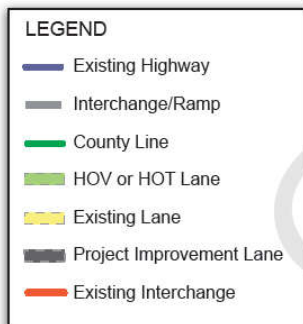
Coordination with the SR-91 Corridor Improvement Projects (Project #3 and #11) will be required. Staged construction would be required for all ramp reconstruction and freeway widening. Freeway operations would most likely be affected by this project, however, freeway lane closures are not anticipated. An EB concrete shoulder will be constructed with a 12 foot width to provide for future widening as contemplated by Project #3 and #11.

Benefits

The lane addition would help to alleviate the weaving condition between SR-241 and SR-71, as well as remove vehicles from the SR-91 mainline that would be exiting at Green River Road and SR-71.

Current Status

Funding is from the American Recovery and Reinvestment Act (ARRA) with \$71.44M approved, and the balance of project costs are from other sources. Construction began in late 2009 and was completed in September 2010.



Widen SR-91 between SR-55 and SR-241 by Adding a 5th GP Lane in Each Direction

Appendix Project No: B-4 Actual Completion: January 2013

Project Costs

Capital Cost	\$ 65,005,000
Support Cost	\$ 19,639,000
R/W Cost	\$ 573,000
Total Project Cost	\$ 85,217,000

Project Schedule

Preliminary Engineering	Completed
Environmental	Completed
Design	Completed
Construction	Completed

Project Description

This project proposes capacity and operational improvements by adding one general purpose (GP) lane on eastbound (EB) SR-91 from the SR-55/SR-91 connector to east of the Weir Canyon Road interchange and on westbound (WB) SR-91 from just east of Weir Canyon Road interchange to the Imperial Highway (SR-90) interchange. Additionally, this project would facilitate truck traffic approaching the truck scales in both directions.

Key Considerations

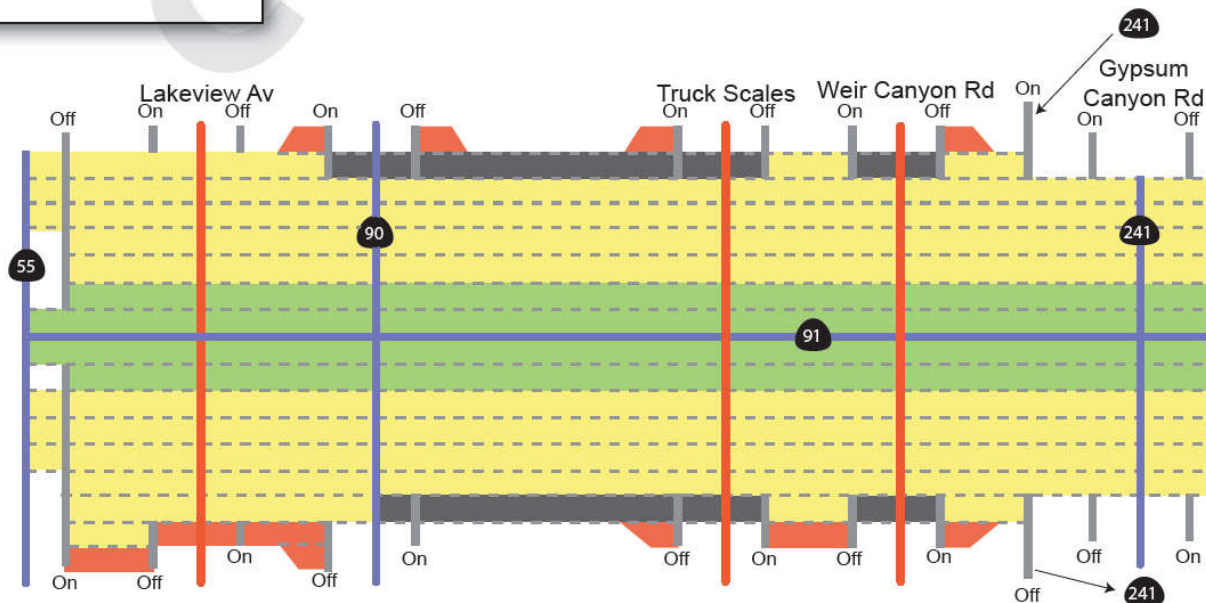
Caltrans is not considering relocation of the truck scales at this time.

Benefits

Alleviates congestion on WB SR-91 by eliminating the lane drop at the truck scales and providing a continuous GP lane to SR-90. Alleviates congestion on EB SR-91 by eliminating the lane drop for northbound (NB) SR-55 at SR-91 by providing an auxiliary lane to Lakeview Avenue, and at SR-90 by providing a continuous GP lane through Weir Canyon

LEGEND

- Existing Highway
- Interchange/Ramp
- Existing Interchange
- HOV or HOT Lane
- Existing Lane
- Project Improvement Lane
- Auxiliary Lane



NOTE: FAIRMONT BLVD IS CONTINGENT UPON IMPLEMENTATION OF THE PROJECT



SR-91 WB Lane at Tustin Avenue

Appendix Project No: B-5

Actual Completion: April 2016

Project Cost Estimate*

Capital Cost	\$ 22,218,000
Support Cost	\$ 16,382,000
R/W Cost	\$ 4,682,000
Total Project Cost	\$ 43,282,000

Project Schedule

Preliminary Engineering	Completed
Environmental	Completed
Design	Completed
Construction	Completed

Project Description

The project will add a westbound (WB) auxiliary lane on SR-91 beginning at the northbound (NB) SR-55 to WB SR-91 connector through the Tustin Avenue interchange. This project includes approximately 1.1 lane miles.

Key Considerations

Build Alternative 3 was selected from the Project Study Report (PSR), *On Westbound (WB) SR-91 Auxiliary Lane from the Northbound (NB) SR-55/WB SR-91 Connector to the Tustin Avenue Interchange*, and requires additional right-of-way. City of Anaheim utilities are within close proximity of the proposed widening section. Widening of the Santa Ana River bridge is required. Coordination with the City of Anaheim occurred for widening of Tustin Avenue and the WB SR-91 Off-Ramp that was completed in early 2011.

Benefits

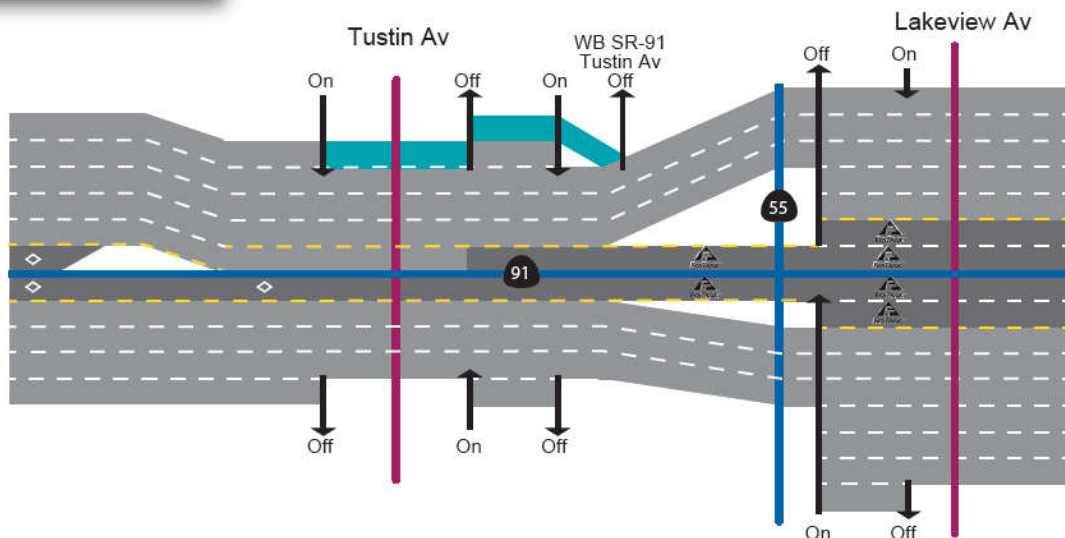
The project would reduce or eliminate operational problems and deficiencies on this section of WB SR-91 including weaving and merging maneuvers. This project would also address choke-point conditions, which are caused primarily by extensive weaving between the NB SR-55 to WB SR-91 connector and the WB SR-91 off-ramp to Tustin Avenue.

Current Status

Preliminary engineering was completed and approved by Caltrans. The environmental phase was completed in November 2010, and design was completed in mid-2013. Construction was initiated in February 2014. The project received \$14M from the Proposition 1B State-Local Partnership Program (SLPP), \$14M from Measure M, with the balance from Regional Improvement Program (RIP) funds. Contract acceptance and open to traffic in May 2016.

LEGEND

- Existing Highway
- Interchange/Ramp
- County Line
- ◇ HOV Lane
-  Tolled Express Lane
- Existing Lane
- Proposed Improvement Lane



Appendix Project No: B-6

Actual Completion: 2016

Project Cost Estimate*

IEOC Service Cost	\$ 1,160,000
Perris Valley Line Cost	\$ 248,000,000
Total Metrolink Costs	\$ 249,160,000

Project Schedule

Complete 2016

* Costs from OCTA and RCTC
(in 2015 dollars)

Project Description

There are sixteen daily trains that run on the IEOC Line and nine trains running on the Los Angeles to Riverside portion of 91/Perris Valley (91/PV) Line for a total of 25 daily trains. The long-term service improvements will include 24 IEOC trains by 2030.

The Perris Valley portion of the 91 Line extends Metrolink service southeast by 25 miles, from Riverside to Perris. The project is located within the right of way of the existing San Jacinto Branch Line through Riverside, Moreno Valley and Perris. Construction began in October 2013, cost approximately \$248 million, and the extension opened to the public in June 2016. The inaugural schedule (December 2015) includes nine trains through to Los Angeles and 12 between Perris and Riverside.

Key Considerations

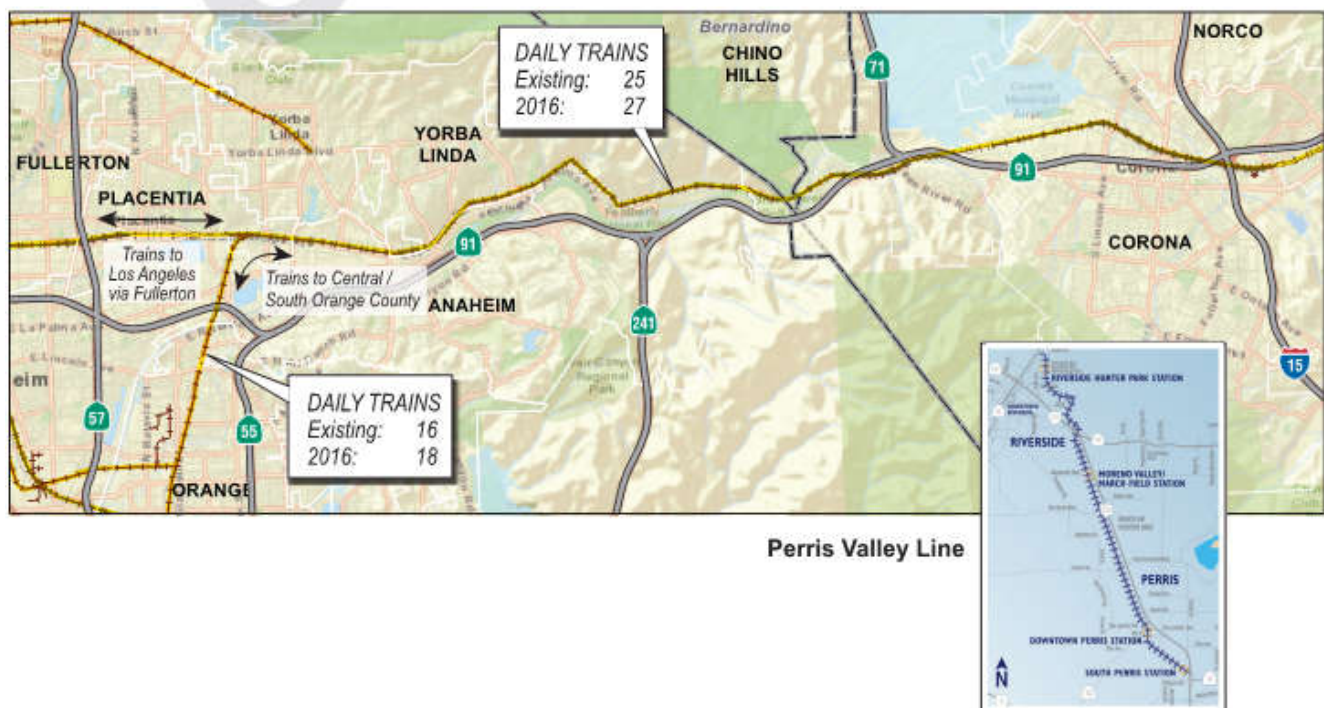
Construction of the new Placentia Metrolink station will improve passenger access to the 91/PV Line, by creating a station between Fullerton and Corona. Improvements at the Anaheim Canyon station are designed to account for future expansion of the IEOC rail service.

Benefits

Enables development of expanded Metrolink service, improved efficiency, and fosters train ridership growth in the region, which will contribute to congestion relief on SR-91.

Current Status

Two additional IEOC Line roundtrips were added in late 2015, and in mid-2016, nine trains began service on the Perris Valley extension to the 91/PV Line.



Initial Phase CIP: Widen SR-91 by One GP lane In Each Direction East of Green River Road, CD Roads and I-15/SR-91 Direct South Connector, Extension of Express Lanes to I-15 and System / Local Interchange Improvements

Project No: B-7
Actual Completion: 2017

Project Cost Estimate*

Total Capital Cost	\$ 1,161,000,000
Support Cost	\$ 246,000,000
Total Project Cost	\$ 1,407,000,000

Project Schedule**

Preliminary Engineering	Completed
Environmental	Completed
Design/Construction	2013-2017

* Cost obtained for Initial Phase is from RCTC (2014 dollars)
** Schedule for Initial Phase; subsequent phase for Ultimate Project anticipated in 2035

Project Description

The approved Project Study Report (PSR) for the SR-91 Corridor Improvement Project (CIP), from SR-241 to Pierce Street, includes the addition of a 5th general purpose lane in each direction, the addition of auxiliary lanes at various locations, additional lanes at the SR-71/SR-91 interchange (Project #5), and collector-distributor (CD) lanes at the I-15/SR-91 interchange. Subsequently, the Riverside County Transportation Commission's (RCTC) 10-Year Delivery Plan recommended the following in addition to the PSR recommended improvements: the extension of the 91 Express Lanes from the Orange County line to I-15, the construction of SR-91 (EB/WB)/I-15 (SB/NB) Express Lanes median direct connectors, and the construction of one Express Lane in each direction from the I-15/SR-91 interchange southerly to I-15/Cajalco Road, and northerly to I-15/Hidden Valley Parkway. An Express Lanes ingress/egress lane is also planned near the County Line. Due to economic conditions, a Project Phasing Plan was developed to allow an Initial Phase with reduced improvements to move forward as scheduled, with the remaining ultimate improvements to be completed later. The following is a summary of the deferred ultimate improvements: I-15/SR-91 median North Direct Connector, and I-15 Express Lanes North to Hidden Valley Parkway (Project #9); general purpose lanes and Express Lanes from I-15 to Pierce Street; and general purpose lanes from SR-241 to SR-71. The I-15 Express Lanes to be extended from Ontario Avenue to Cajalco Road are included in RCTC's I-15 Express Lane Project with an anticipated completion in 2020.

Key Considerations

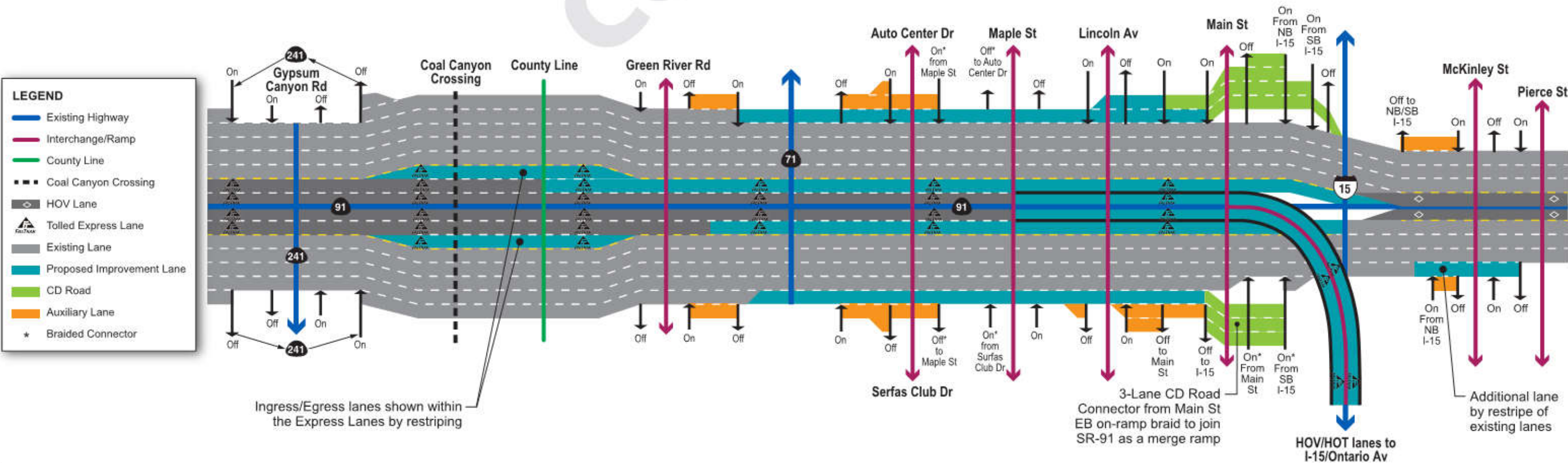
Coordination among many of the SR-91 freeway projects that overlap the project limits is critical to successfully delivering these projects on schedule and within budget. Designing to accommodate future projects is a recurring theme for each of these projects. Minimizing conflicts in scope between projects requires direct coordination between each project team. Additionally, future projects frequently have multiple alternatives under study, each with differing scope and construction footprints. Specifically, the project improvements need to continue to be coordinated with the SR-71/SR-91 Interchange, the SR-241/91 Express Connector, and RCTC's I-15 Express Lane Project.

Benefits

The Initial Phase and Ultimate CIP projects will reduce congestion and delays by providing additional SR-91 capacity from SR-241 to Pierce Street, along I-15 from SR-91 to Cajalco Road to the south, and to Hidden Valley Parkway to the north. Traffic operations will improve by eliminating or reducing weaving conflicts along SR-91 and I-15 by the use of CD roads and auxiliary lanes. The project will provide motorists a choice to use Express Lanes for a fee in exchange for time savings.

Current Status

The environmental phase was completed in Fall 2012. A Design-Build contractor was selected in May 2013 and construction activities began in early 2014 for the Initial Phase. The project is anticipated to open to traffic in Spring 2017 with final project acceptance anticipated at the end of 2017.



La Sierra Metrolink Parking Improvements



*Image source:
Riverside Transit Agency, April 2019*

Project Description

There are currently 1,000 spaces available. RCTC is implementing a parking lot expansion to include an additional 496 spaces and six bus bays to accommodate RTA Express Lane Service 200 that originates at Metrolink San Bernardino Transit Center with stops along Riverside Downtown Metrolink Station, Metrolink La Sierra, the Village at Orange, ARTIC, Disneyland, and Anaheim Convention Center, as well as other potential bus routes in the future.

Benefits

The 496 parking spaces will provide for existing and future demand. The parking lot expansion will provide for ADA parking, RTA express service, commuter rail, and vanpool.

Current Status

Construction and project implementation has begun.

Schedule and Cost

Construction was completed in February 2019. The project cost is estimated to be \$6,260,000.

APPENDIX C – REFERENCES

The following documents and resources were used in the development of the 2019 Plan. Data was provided by OCTA, RCTC, Caltrans Districts 8 and 12, Transportation Corridor Agencies (TCA), other agencies and online resources.

Measure M Next 10 Delivery Plan (Next 10 Plan), November 14, 2016

Riverside Transit Agency, Ten-Year Transit Network Plan, January 22, 2015

PSR-PDS on Route 91 Between SR-57 and SR-55, October 2014

PS&E for “Westbound State Route 91 Auxiliary Lane from the NB SR-55/WB SR-91 Connector to the Tustin Avenue Interchange”, 2014

PS&E for Initial SR-91 CIP Project, 2014

California Transportation Commission, Corridor Mobility Improvement Account (CMIA), Amended December 2012

M2020 Plan (Measure M), September 2012

PSR-PDS for SR-241/SR-91 Connector, January 2012

Project Report and Environmental Document (EIR/EIS) for SR-91 CIP from SR-241 to Pierce Street Project, October 2012

PS&E “On State Route 91 Between the SR-91/SR-55 Interchange and the SR-91/SR-241 Interchange in Orange County”, April 2011

Corridor System Management Plan (CSMP) Orange County SR-91 Corridor Final Report, August 2010

Project Study Report/Project Report “Right of Way Relinquishment on Westbound State Route 91 Between Weir Canyon Road and Coal Canyon”, May 2010

SR-91/Fairmont Boulevard Feasibility Study, December 2009

Feasibility Evaluation Report for Irvine-Corona Expressway Tunnels, December 2009

Plans, Specifications and Estimates (PS&E) for Eastbound SR-91 lane addition from SR-241 to SR-71, May 2009

PSR “On State Route 91 Between the SR-91/SR-55 Interchange and the SR-91/SR-241 Interchange in Orange County”, April 2009

91 Express Lanes Extension and State Route 241 Connector Feasibility Study, March 2009

PSR/PR “On Gypsum Canyon Road Between the Gypsum Canyon Road/SR-91 Westbound Off-Ramp (PM 16.4) and the Gypsum Canyon Road/SR-91 Eastbound Direct On-Ramp (PM 16.4)”, June 2008

Orange County Transportation Authority Renewed Measure M Transportation Investment Plan, November 2006

Riverside County-Orange County Major Investment Study (MIS) – Final Project Report: Locally Preferred Strategy Report, January 2006

California – Nevada Interstate Maglev Project Report, Anaheim-Ontario Segment; California-Nevada Super Speed Train Commission, American Magline Group, August 2003

Route Concept Reports for SR-91, Caltrans Districts 8 and 12

Various Preliminary Drawings and Cross Sections, Caltrans Districts 8 and 12



Draft 2019 State Route 91 Implementation Plan



SR-91 Implementation Plan

- Required by SB 1316 (Chapter 714, Statutes of 2008)
- Updated annually to capture past, present, and future projects along SR-91
 - I-15 to SR-57
- Not financially constrained
- Bi-county collaborative effort

SR-91 – State Route 91
I-15 – Interstate 15
SR-57 – State Route 57

Culmination of Efforts

- Eight projects completed



- \$1.9 billion invested

Culmination of Efforts (continued)

- 66.5 lane miles added



- 15 percent increase in throughput

Culmination of Efforts (continued)

Benefits of Coordinated Efforts

- Addresses population/traffic growth
- Provides seamless connectivity between the counties
- Increases travel options
- Improves quality of life



Guiding Principles

- SR-91 corridor improvements phased in such a way that will minimize traffic impacts to the corridor
- Optimize vehicle throughput at free flow speeds and increase vehicle occupancy
- Balance capacity and demand to serve toll customers and carpoolers (3+) at a discounted rate
- Generate sufficient revenue to sustain the financial viability of the 91 Express Lanes
- Pay debt service and maintain debt service coverage
- Reinvest net revenues on the SR-91 corridor to improve regional mobility, when appropriate

Orange County Projects

- SR-91 improvements between SR-57 and SR-55
- Anaheim Canyon Metrolink Station improvements
- Placentia Metrolink Rail Station
- Fairmont Boulevard improvements



SR-55 - State Route 55

Riverside County Projects

- 15/91 Express Lanes Connector
- SR-71/SR-91 interchange
- Improvements east of I-15



SR-71 - State Route 71

Bi-County Projects

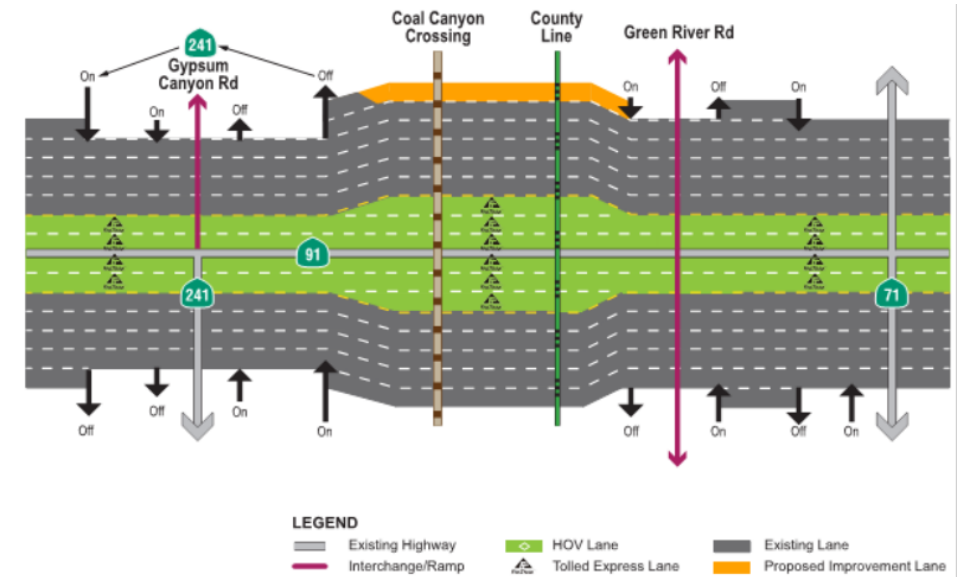
- Express bus service
- SR-91 Corridor Operations Project
- General purpose lane addition (SR-241 to SR-71)
- SR-241/91 Express Connector



SR-241 – State Route 241

SR-91 Corridor Operations Project

- New westbound lane
- Green River Road to SR-241
- Enhances recently completed SR-91 Corridor Improvement Project
- Construction completion: 2021/2022
- Estimated cost: \$38 million



SR-241/91 Express Lanes Connector

- Positive benefits if timed correctly
- OCTA and RCTC requesting additional information to understand implications
- Should be implemented concurrently with or following new eastbound capacity projects
- Estimated cost: \$181 million



OCTA – Orange County Transportation Authority
RCTC – Riverside County Transportation Commission

Project Implementation

- Coordinate projects responding to:
 - Operational issues
 - Traffic dynamics
 - Project readiness
 - Construction fatigue/community impacts/throwaway costs
 - Funding

Recommendation/Next Steps

- Approve 2019 SR-91 Implementation Plan
- Continue project implementation efforts