



June 7, 2021

To: Regional Planning and Highways Committee
From: Darrell E. Johnson, Chief Executive Officer
Subject: Draft 2021 State Route 91 Implementation Plan

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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 proposed 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 2021 State Route 91 Implementation Plan is provided for information purposes.

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 Commission (RCTC) to prepare a plan for potential improvements annually along the State Route 91 (SR-91) corridor between State Route 57 (SR-57) in Orange County and Interstate 15 (I-15) in Riverside County. The Draft 2021 SR-91 Implementation Plan (Plan) serves as a snapshot of current and planned activities within the SR-91 corridor. The Plan describes projects, transportation benefits, and anticipated costs and schedules to implement through the post-2035 timeframe. The intent of the Plan is to provide a compilation of information for projects along the SR-91 corridor. This Plan was prepared in consultation with the California Department of Transportation (Caltrans), the Transportation Corridor Agencies (TCA), and the cities of Anaheim, Corona, Orange, and Yorba Linda.

Discussion

Since 2003, substantial progress has been made in improving the SR-91 corridor. Over \$1.9 billion has been invested with the completion of nine projects, including the addition of 66.5 lane miles throughout the SR-91 corridor. Average daily traffic throughput has also increased by 15 percent. This indicates that improvements within the corridor have helped alleviate population growth and employment between Orange and Riverside counties by enhancing capacity and improving mobility. Completed projects include:

- Green River Road Overcrossing Improvement Project;
- North Main Street Corona Metrolink Parking Structure Project;
- Eastbound (EB) 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 (WB) lane addition at Tustin Avenue;
- Metrolink service improvements;
- SR-91 Corridor Improvement Project initial phase;
- Express Bus Service; 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.

Information for projects in the Plan is updated annually. This ensures that the planning and implementation of each project are carefully coordinated to determine the appropriate timing to provide maximum benefits within the SR-91 corridor. Additionally, projects in the corridor should be coordinated to minimize construction impacts to commuters and the surrounding communities. In the future, operational analysis by OCTA and RCTC will be prepared for each project before implementation to ensure that the projects meet the OCTA and RCTC goals for the SR-91 corridor.

In October 2019, a consensus was reached that set the stage for a series of projects included in the Plan to be implemented sequentially to improve the SR-91 corridor. OCTA, RCTC, TCA, Caltrans District 8 and District 12, as well as Caltrans Headquarters agreed to project sequencing in order to enable the streamlining of the SR-241/SR-91 Tolloed Express Lanes Connector Project while minimizing impacts to the SR-91 corridor. The agencies reached a consensus on a program of projects and sequencing as follows:

1. 15/91 Express Lanes Connector
2. SR-91 Corridor Operations Project
3. SR-71/SR-91 interchange improvements*
4. SR-241/SR-91 Tolloed Express Lanes Connector

*Note: SR-241/SR-91 Tolloed Express Lanes Connector is not dependent upon completing SR-71/SR-91 interchange improvements.

Coordination efforts for the Plan (Attachment A) resulted in various updates to project status, costs, and schedules. Projects included in the Plan are organized as follows: Orange County projects, Riverside County projects, and bi-county projects.

- Orange County projects include three improvements at a total cost of approximately \$524 million:
 - SR-91 improvements between SR-57 and SR-55;
 - Anaheim Canyon Metrolink Station improvements; and
 - Placentia Metrolink Rail Station.
- Riverside County projects include three improvements, totaling over \$390 million:
 - 15/91 Express Lanes Connector;
 - SR-71/SR-91 interchange; and
 - Improvements east of I-15.
- Bi-county projects, which benefit both Orange and Riverside counties, total over \$288 million and include:
 - SR-91 Corridor Operations Project;
 - Sixth general-purpose lane addition from SR-241 to SR-71; and
 - SR-241/SR-91 Tolloed Express Lanes Connector.

Due to the effects of the coronavirus (COVID-19) pandemic, the 2020 traffic patterns are not considered a true reflection of the typical existing conditions nor as a proper baseline to forecast the future demand and operations of the SR-91 corridor. Daily travel demand on the SR-91 corridor shifted from an uptrend of four percent in January and February 2020 compared to the same months in 2019.

There was a 12 percent reduction in March 2020 and a reduction of 30 percent in April 2020, when compared to the respective months in 2019. From May 2020 through December 2020, the SR-91 traffic demand changes varied from three percent to 16 percent lower than the same months in 2019. Therefore, the pre-COVID-19 traffic conditions are being utilized for the 2021 Plan.

The operations analysis quantified travel time savings for WB morning and EB afternoon conditions for the capacity-enhancing projects in 2030 and beyond. The WB morning traffic analysis results indicate that for the year 2030 forecasts, travel times are anticipated to improve in Riverside County (by about six minutes), and in Orange County (by about 11 minutes). The EB afternoon traffic analysis indicates that for the year 2030 forecasts, travel times in Riverside County are anticipated to improve (by about seven minutes), and increase (by about 11 minutes) in Orange County. OCTA and RCTC will continue monitoring the SR-91 traffic pattern changes throughout 2021. If traffic conditions show a trend of normalization, then the traffic analysis will be updated for the 2022 Plan.

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 the following concepts:

- Elevated four-lane facility between SR-241 and I-15 (MIS Corridor A);
- Anaheim to Ontario International Airport high-speed ground transportation system;
- Irvine-Corona Expressway (ICE) from SR-241/State Route 133 to I-15/Cajalco Road;
- Connector improvements at the SR-91/SR-55 interchange;
- EB fifth lane addition near SR-241; and
- Improvements at Fairmont Boulevard.

The projected cost of the conceptual improvements exceeds \$14 billion, and the implementation would require a significant amount of planning, design, external funding, and future policy and public input.

Staff continues to monitor the financial viability and geotechnical feasibility of the ICE concept as requested by the SR-91 Advisory Committee and the Riverside Orange Corridor Authority in 2010. A review of recent tunneling projects shows feasibility for the ICE tunnel concept is slowly improving as tunneling technology progresses. Technology has not advanced to the point where long, wide highway tunnels can be constructed at a reasonable, fundable, or viable cost. However, modern boring methods have lowered the cost on smaller, shorter tunnels. If this scales to larger tunnels, then the ICE corridor could become more feasible. Although some tunneling projects have been completed in California with similar lane configurations as the ICE concept, without significant state and federal funding, this project will be a major challenge to complete.

Summary

OCTA and RCTC have completed the 2021 update to the 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 Plan serves as a compilation of future potential projects and project-level decisions can be made when individual projects are being considered for implementation. Traffic conditions on the SR-91 corridor are expecting continued changes due to uncertainties related to the COVID-19 pandemic. OCTA and RCTC will continue monitoring the SR-91 traffic pattern changes throughout the 2021 year.

Attachment

- A. Draft State Route 91 Implementation Plan 2021

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