

**Board Report**

File #: 2019-0129, **File Type:** Project**Agenda Number:** 6.

**AD HOC CONGESTION, HIGHWAY AND ROADS COMMITTEE
APRIL 17, 2019****SUBJECT: I-10 EXPRESSLANES EXTENSION FROM I-605 TO LA/SB COUNTY LINE****ACTION: APPROVE RECOMMENDATION****RECOMMENDATION**

AUTHORIZE the use of toll revenues, in a not-to-exceed amount of \$3.9 million for the upgrade of a 42-strand bundle of single mode fiber optic (SMFO) cable to a 72-strand bundle of SMFO cable and a fiber patch panel for Segment 3 of the I-10 High Occupancy Vehicle (HOV) lane project to accommodate for the communications network necessary for conversion to future ExpressLanes. Additional improvements include the installation of 2-inch conduit, pull boxes, cast-in-drilled-hole (CIDH) pile foundations, and modified concrete barrier for median lighting improvements for Segments 2 and 3 for improved lighting. If authorized, the improvements will accommodate for future communications for the I-10 ExpressLanes Extension project, as well as any related Intelligent Transportation System (ITS) efforts, and improved visibility at HOV lane ingress/egress points.

ISSUE

At the February 20, 2019 Ad Hoc Congestion, Highway and Roads Committee meeting, Director Fasana directed staff to work with Caltrans to explore opportunities to incorporate additional improvements that would benefit future ExpressLanes as part of the I-10 HOV lane project currently in construction with the intent of minimizing future costs and impacts.

BACKGROUND

The I-10 HOV lane project includes construction of one HOV lane in each direction along I-10 between I-605 (San Gabriel River Freeway) and SR-57 (Orange Freeway).

The I-10 HOV lane project is comprised of three segments, with total Life of Project (LOP) budget of approximately \$550 million:

1. Segment 1, between I-605 and Puente Ave in Baldwin Park has been completed as of 2013.
2. Segment 2, between Puente Ave and Citrus St is currently in construction and expected to be completed by December 2019.
3. Segment 3, between Citrus St and SR-57 is currently in construction and is expected to be completed by Summer 2021.

DISCUSSION

Metro and Caltrans explored opportunities to incorporate additional improvements that would better accommodate future ExpressLanes needs, ITS deployment, and other highway improvements as part of Segments 2 and 3 of the I-10 HOV lane project currently in construction. The improvements considered include improved lighting at ingress/egress locations and installation of upgraded SMFO cables for communications for the potential I-10 ExpressLane Extension project and ITS enhancements, amongst other highway improvements.

The I-10 ExpressLane Extension project is identified as a Tier I (near-term) priority in the 2017 Metro Countywide ExpressLane Strategic Plan. In addition, the I-10 ExpressLane Extension project has been identified as a key project for Metro and Los Angeles County and is included in Metro's Twenty-Eight by '28 project list, which intends to construct twenty-eight projects before the 2028 Summer Olympics and Paralympics. The anticipated Twenty-Eight by '28 completion year for the project is 2028.

Findings

Construction of Segments 2 and 3 of the I-10 HOV lane project is currently underway. Construction contractors are expected to initiate work within the median barrier in Spring 2019, while work within the outside shoulder for the eastbound portion for Segment 3 is expected in Fall 2019.

Given the timing of construction within the median, Metro and Caltrans staff identified this as an opportunity to include the installation of 2-inch conduit, pull boxes, CIDH pile foundations, and modified concrete barrier for the median lighting at the HOV lane egress/ingress locations along I-10 for Segments 2 and 3. The improvements will provide improved visibility for drivers at HOV lane egress/ingress points where lane changing and turbulence is concentrated. The proposed improvements are also consistent with Caltrans Transportation Operations Policy Directive 11-02 providing updated lighting standards at access openings for managed lanes, including ExpressLanes.

In addition, to improved lighting, staff consulted with Caltrans staff on the potential sharing of conduit for future communications. In consultation with Caltrans, Metro proposes to improve communications for Segment 3, by upgrading the proposed 48-strand bundle of SMFO to a 72-strand bundle of SMFO, and a fiber patch panel to allow for additional fiber strands for communications that could potentially be used for the communications network necessary for the I-10 ExpressLanes Extension project.

The additional scope includes the installation of 2-inch conduits, pull boxes, CIDH pile foundations, and modified concrete barrier for the median lighting for Segments 2 and 3. In addition to the installation of a 72-strand bundle of SMFO cable and a fiber patch panel for Segment 3. The cost for the additional improvements is approximately \$3.9 million.

In leveraging ongoing construction efforts, cost savings are achieved by minimizing the need for future trenching and excavation of the median and outside shoulder. The additional improvements

may also serve to expedite the delivery of the I-10 ExpressLane Extension project, which has been identified as a priority in Metro's Twenty-Eight by '28 project list and the 2017 Metro Countywide ExpressLane Strategic Plan. Metro will continue to coordinate with Caltrans on further improvements throughout the construction of Segments 2 and 3 of the I-10 HOV lane project.

DETERMINATION OF SAFETY IMPACT

The approval of funding will not have any impact on the safety of our customers and employees.

FINANCIAL IMPACT

Funding in the amount of \$3.9 million is available in the FY19 and proposed FY20 budget in cost center 2220 to implement this effort. Because this is a multi-year program, the cost center manager and the Executive Officer of the Congestion Reduction programs will be responsible for budgeting for future years.

Impact to Budget

The funding for this action will come from toll revenues generated from the Metro I-10 ExpressLanes operations. No other funds were considered for this activity.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

The project is consistent with the following Metro Vision 2020 Goals and Objectives:

Strategic Goal 1: Provide high quality mobility options that enable people to spend less time traveling by providing the potential for improved ITS communications in an effort to improve future mobility.

ALTERNATIVES CONSIDERED

The Board could choose not to approve the staff's recommendation. This alternative is not recommended as it would result in the deferment of potential cost savings and improvements to allow for improved lighting, power and communications for the planned I-10 ExpressLanes Extension project.

NEXT STEPS

Upon Board approval, staff will coordinate with Caltrans on final construction costs, enter into any necessary agreements and implement the identified enhancements.

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