



## Board Report

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### OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMMITTEE JANUARY 16, 2020

**SUBJECT: I-10 EXPRESSLANES BUSWAY HOV5+ PILOT IMPLEMENTATION PLAN**

**ACTION: APPROVE RECOMMENDATIONS**

#### **RECOMMENDATION**

CONSIDER:

- A. APPROVING I-10 ExpressLanes Busway HOV5+ Pilot Implementation Plan; and
- B. AUTHORIZING implementation of the I-10 ExpressLanes Busway HOV5+ Pilot.

#### **ISSUE**

In April 2018, the Metro Board of Directors adopted a motion requesting that Metro staff work with Caltrans and other stakeholders to develop a pilot program (Pilot) exclusively for the I-10 ExpressLanes increasing the required occupancy for toll free travel from HOV2/HOV3+ to buses and vanpools, as a means of preserving the ExpressLanes as a faster and more reliable travel option for ExpressLanes corridor travelers and transit users.. The stated objectives of the Pilot are to:

- Keep transit moving in the ExpressLanes.
- Move people more efficiently in the ExpressLanes.
- Reduce occupancy misrepresentation by ExpressLanes users.

In January 2019, Metro staff reported on the potential effects of the Pilot, key decision points and milestones for implementation including feedback received from corridor users on the potential impacts of the Pilot with emphasis on low-income commuters. At that time, the Metro Board of Directors authorized Metro staff to develop a more detailed implementation plan for the Pilot. This report is in response to the direction provided in January.

Staff is recommending a phased approach with Phase 1 providing free passage to transit and registered vanpools and Phase 2 adding HOV5+ vanpools to those traveling free of charge on the ExpressLanes. This approach will enable an expedited deployment of the Pilot and evaluation of two different policies which will better inform the final decision regarding the most effective policy to implement upon conclusion of the Pilot.

#### **DISCUSSION**

The I-10 ExpressLanes Busway HOV5+ Pilot Implementation Plan describes all major activities required to successfully deploy the Pilot. It has been informed by an extensive literature review of best practices, consultation with industry experts, and original research including 15 peer/partner agency interviews, 2,400 stakeholder surveys, nine focus groups, and detailed data analysis. The Implementation Plan discusses the following major activities associated with the pilot development and implementation:

- Phased Approach to Implementation
- Public education and marketing campaign efforts
- Mitigation strategies and incentives
- Roadside signage considerations
- Development of a robust solution for occupancy declaration and verification
- Before-and-after data collection and evaluation
- Concurrence from Caltrans and FHWA

The Implementation Plan concludes with a review of expected costs for implementation, a discussion of recommended deployment schedule for Phases 1 and 2, and a description of known risks and potential associated protections against them. Summaries of each category of activities in the Implementation Plan are provided in the following sections, with additional detail available in the full plan document (see Attachment A).

### **Public education and marketing campaign efforts**

The Implementation Plan includes a multi-faceted public education and marketing plan covering all impacted audiences, with a focus on historically underserved and low-income populations. Outreach for the Pilot will begin three to six months in advance of the anticipated go-live date for each phase and will include:

- Community events and meetings with community groups and civic leaders.
- Presentations to partner agencies and key stakeholder groups.
- Targeted outreach to existing customers by e-mail and postal mail.
- Broader public outreach to corridor users and other stakeholders (e.g., vanpools, employers, commuters) using a range of media including radio, digital display boards, social media, newspapers, and Metro channels (e.g., onboard vehicle advertising, 511, Metro web site development and updating).

### **Mitigation Strategies and Incentives**

Several complementary support strategies and programs are included in the Implementation Plan to promote a smooth and successful pilot deployment. These include mitigation strategies to address the potential impacts of the Pilot to existing HOV2-HOV4 corridor users that could lose toll-free access to the I-10 ExpressLanes, and incentive strategies to further encourage and facilitate shifts to more efficient travel modes including transit and vanpools. All strategies were selected based on a detailed screening across several metrics including alignment with Pilot objectives and goals, feasibility of deployment within the Pilot timeframe, and ability to address the specific program impacts and mode shift barriers identified by current users of the corridor through surveys and focus groups. The mitigation strategies and incentives that will be deployed on the I-10 ExpressLanes corridor as part of the Pilot are:

- Providing a two-month grace period for HOV2 and HOV3+ customers at the start of the

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- deployment period in which they continue to receive toll-free travel.
- Continuing existing Carpool Loyalty program for HOV2 and HOV3+ customers.
  - Continuing investment in transit services.
  - Expanding the existing Transit Rewards program to increase the frequency of rewards for transit users on the I-10 corridor.
  - Expanding the Carpool Loyalty program, as part of Phase 2, to include dedicated rewards for a new class of HOV5+ customers beyond those offered to HOV2/HOV3+ classes.
  - Promoting the existing Universal College Student Transit Pass (U-Pass) program for access to reduced transit fares for students using the corridor.

### **Roadside Signage Considerations**

Aspects of the Pilot that affect roadside signage on I-10 include the toll-free travel for buses and registered vanpools (Phase 1) and the new definition of HOVs and the new declaration method (Phase 2). To address the new definition of HOVs, the existing signage that defines the occupancy requirements by time of day is anticipated to be replaced with new signage indicating, "Buses and registered Vanpools No Toll" (Phase 1), and "HOV5+ & registered Vanpools must register for No Toll" (Phase 2). Additionally, for Phase 2, a supplemental sign stipulating "HOV5+ is 5 or more persons per vehicle" will be placed along the corridor intermittently. To address toll-free travel during Phase 1 and Phase 2, the existing optional/discretionary signage that reminds drivers that "All HOV must have FasTrak" would be replaced with new signage reading, "Vanpools call 511 for tolling info," or "HOV 5+ call 511 for discount info" respectively. Upon calling 511, and depending on the current phase of Pilot operation, drivers would be informed about how to travel toll free on the I-10 ExpressLanes and/or about the new Pilot Mobile App and how to use it to receive toll-free trips when traveling with 5 or more occupants. The pricing signs along the corridor would also be updated to remove the line, "HOV2+ \$0 w/Flex" or "HOV3+ \$0 w/Flex." The final signs to be deployed require concurrence from Caltrans and FHWA.

### **Development of a Robust Solution for Occupancy Declaration and Verification**

A core component of the Pilot is the development and deployment of a robust method for declaring and verifying vehicle occupancies for toll-free trips (i.e., the Pilot Mobile App). For this purpose, Metro will procure the services of a mobile app developer to provide a reliable, fast, and easy-to-use smartphone-based automated vehicle occupancy declaration and verification solution, subject to accuracy requirements. A secondary alternative mobile phone method for declaration and verification will also be available for customers that do not have smartphones or for instances where the primary system is unavailable. At no time would vehicle occupants be required to interact with the Pilot Mobile App while driving. Because of the pioneering nature of this app-based approach to vehicle occupancy verification, there is a degree of schedule uncertainty and potential liability exposure associated with this aspect of the Pilot. The contract will include provisions to protect against, but not fully eliminate, these risks.

### **Before-and-After Data Collection and Evaluation**

The primary performance metrics used in the evaluation of the I-10 HOV5+ Pilot were selected based on their alignment with the Pilot's stated objectives from the original April 2018 Board Motion. In collaboration with FHWA, and Caltrans, the following performance criteria were selected for post-Pilot evaluation:

- Travel time and travel time reliability (ExpressLanes and general-purpose lanes)

- Maintenance of 45 mph speeds on the ExpressLanes/reduction in HOV only mode.
- Transit ridership
- Transit running time
- Person throughput (ExpressLanes and general-purpose lanes)

### **Concurrence from Caltrans and FHWA**

Concurrence from Caltrans and FHWA is required to revise the definition of HOVs on this corridor as part of the Pilot. Caltrans District 7 formally indicated its support in a letter dated September 12, 2018. On November 8, 2018, the FHWA California Division responded with a similar letter of support. Metro staff has been coordinating with representatives from both agencies throughout the development of the Implementation Plan to ensure that it remains consistent with their expectations. Both agencies are reviewing the final draft of the Implementation Plan at this time, and their concurrence is anticipated after the final review cycle.

### **Cost Estimate**

The cost estimate for all activities associated with performing the pilot implementation plan is \$7.7 million. The major cost components are estimated as follows:

- Public education and marketing campaign: \$1.9 million
- Mitigation strategies and incentives: \$2.5 million
- Operational Elements (i.e. design, signage, CSC/BOS, mobile app) and integration: \$2.1 million
- Before-and-after data collection and Management: \$1.2 million

### **Schedule**

Staff recommends two phases for the I-10 Pilot, with each phase containing a 12-month full deployment period, a two-month initial grace period, and a five-month post-deployment evaluation period. Additional detail about the activities preceding, within, and following the two phases are provided in the sections below. The decision to implement Phase 2 will be dependent on the performance evaluation data from Phase 1, as well as the readiness of the declaration and verification mobile app. Any delay in availability of the mobile app will delay the start of Phase 2.

Phase 1 of the Pilot is scheduled to begin October 2020 and continue for 23 months through August 2022 and is inclusive of the following:

- Two-month “grace period” which gives commuters time to acclimate to the new occupancy requirements for toll-free travel, including formation of vanpools or switching to transit,
- Twelve months of full Pilot operations,
- Five months to evaluate Phase 1 results, which will inform the decision to move forward to Phase 2 and secure Board concurrence; and
- Four months for outreach and any other necessary preparations prior to the beginning of Phase 2 operations.

During the evaluation, Metro staff will review the effectiveness of the Pilot and, based on the before and after analysis and other criteria, make a recommendation to the Metro Board. Metro anticipates a Board decision by May 2022. The Board decision could range from rolling back to pre-Pilot

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implementation operation, transitioning Phase 1 to permanent operation, transitioning Phase 1 to Phase 2 operations, or some other operating scenario. Following the Board decision, Metro staff will prepare the appropriate action plan and timetable for remaining Pilot activities.

Should the Board direct staff to move forward with Phase 2 of the Pilot, Phase 2 implementation could begin by September 1, 2022 and continue for 19 months through March 2024. As this Pilot features components that are industry innovations that have not been attempted before, there is a degree of schedule uncertainty associated with achieving each of these four stages within the estimated timeframes above. The above schedule should be considered an approximate forecast only. The 19 months include:

- Two-month “grace period” which gives commuters time to acclimate to the new occupancy requirements for toll-free travel,
- Twelve months of full Pilot operations, and
- Five months to evaluate Phase 2 and to compare the results from both phases which will culminate in a Metro Board decision regarding the status of Pilot operations moving forward.

It is anticipated that following the conclusion of Phase 2 operations (November 30, 2023), staff will review the effectiveness of the Pilot and, based on the before and after analysis and other criteria, make a recommendation to the Metro Board. Metro anticipates a Board decision by April 2024, which could range from 1) the continuance of Phase 2 operations (or some form thereof), 2) reversion back to Phase 1, or 3) roll back to pre-Pilot operations. Based on the analysis and staff recommendation, the Metro Board will decide how to move forward. If the Board decides to transition the Pilot to permanent operations, Metro staff will prepare and implement a Transition to Permanent (TPO) action plan. It is anticipated Phase 2 operations will continue during the evaluation and Metro Board decision periods.

## **IMPLEMENTATION OF STRATEGIC PLAN GOALS**

The FY18 I-10 ExpressLanes Pilot Program aligns with Strategic Goal 1: Provide high quality mobility options that enable people to spend less time traveling. ExpressLanes provides drivers with the option of a more reliable trip while improving the overall operational efficiency of the freeway network.

## **FINANCIAL IMPACT**

Funds in the amount of \$1.9 million to initiate implementation of the Pilot are available in the FY20 budget in cost center 2220. Because this is a multi-year program, the cost center manager and the Executive Officer, 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.

## **ALTERNATIVES CONSIDERED**

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The Board may elect not to implement the Pilot. This alternative is not recommended since, based on current analysis, the Pilot can increase overall person throughput, assure travel time reliability for transit vehicles, and address current enforcement challenges related to scofflaws, revenue leakage and HOV-only restrictions.

**NEXT STEPS**

Upon Board approval, staff will perform all tasks and activities discussed in the Implementation in pursuit of the I-10 ExpressLanes Busway HOV5+ Pilot.

**ATTACHMENTS**

Attachment A: April 26, 2018 Board Motion 43

Attachment B: Draft I-10 ExpressLanes/Busway Pilot Implementation Plan - Executive Summary

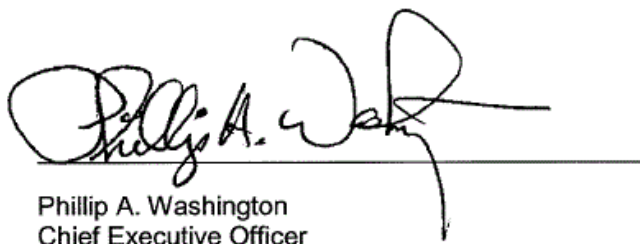
Attachment C: Draft I-10 ExpressLanes/Busway Pilot Implementation Plan

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