



**September 2, 2021**

**To:** Regional Planning and Highways Committee

**From:** Darrell E. Johnson, Chief Executive Officer

**Subject:** Capital Programming Update

### **Overview**

The Orange County Transportation Authority uses various funding sources to implement planning efforts, capital projects, and transit operations. Project costs can vary from the programmed amount in response to changing circumstances, which may require funding revisions. Board of Directors' authorization is required to provide funding for current or planned freeway, grade separation, and transit capital projects.

### **Recommendations**

- A. Consistent with right-of-way phase estimates for the Interstate 5 Improvement Project from Yale Avenue to State Route 55 (Segment 2), authorize the use of \$23.926 million from the following fund sources:
- Surface Transportation Block Grant (\$17.5 million),
  - Measure M2 freeway funds (\$5.575 million),
  - Repurposed earmarks (up to \$0.851 million), contingent on Federal Highway Administration approval, and
  - Additional Measure M2 freeway funds in lieu of \$0.851 million of repurposed earmarks, in the event the federal funds are not available.
- B. Consistent with updated design phase estimates for the State Route 55 Improvement Project from Interstate 5 to State Route 91, authorize the use of the funding below, increasing total funding for the phase from \$8.921 million to \$11 million, and reducing Measure M2 funds by \$3.921 million:
- Surface Transportation Block Grant (\$3.359 million), and
  - Highway Infrastructure Program (\$2.641 million).

- C. Authorize the use of \$1.720 million in Measure M2 for the State Route 55 Improvement Project from Interstate 405 to Interstate 5 to support anticipated increased costs for the design phase, changing the total project estimated cost from \$504 million to \$505.720 million.
- D. Consistent with the forecasted cost for the environmental phase for the Interstate 5 Managed Lanes Project from the Orange County/San Diego County line to Avenida Pico, authorize the use of \$0.907 million in additional Surface Transportation Block Grant funds to fund this change in the project cost estimate from \$5.5 million to \$6.407 million.
- E. Authorize the use of up to \$3.207 million in additional Measure M2 Regional Capacity Program funds for the OC Bridges Railroad Grade Separation Program in lieu of federal Congestion Mitigation and Air Quality improvement funding.
- F. Authorize the use of \$12.526 million in Congestion Mitigation and Air Quality Improvement Program funds for 173 bus engine repowers.
- G. 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.

***Background***

The Orange County Transportation Authority (OCTA) directs the use of federal, state, and local funds based on the Board of Directors' (Board)-approved Capital Programming Policies (Attachment A), and this Capital Programming update item seeks approval to fund cost increases, and upcoming projects or phases of projects. Additionally, staff will continue to seek cost savings and minimize the use of funding where applicable.

As projects progress through development, costs can change, funding agency requirements may limit the anticipated use of funds, opportunities to maximize external funding may arise, savings may be identified, or additional or different funding may be required. OCTA regularly reports on specific project costs through the quarterly Capital Action Plan (CAP), which highlights project costs, schedules, and status. Board action to update funding for projects is requested periodically to support costs consistent with the revised funding need for projects. Project descriptions and additional information for each of the projects discussed in this staff report are included in Attachment B. The Capital Funding Program (CFP) includes a summary of how OCTA's capital projects are currently funded along with the proposed changes in this item and is provided as Attachment C. A list of Board actions, which directed capital funds towards OCTA capital projects over the last six months, is provided in Attachment D.

The Federal Highway Administration (FHWA) allows states to use stale and unspent federal earmarks or repurpose them to other transportation projects. FHWA and the California Department of Transportation (Caltrans) have identified three stale earmarks from Orange County, with unspent funding remaining available to be repurposed to other projects. These are included in Attachment B. The original projects are now complete or did not proceed using the federal funds. The earmarks that appear to be available to OCTA for repurposing total \$0.851 million and may be repurposed to other projects. To repurpose these funds, OCTA requests approval through Caltrans and the FHWA. Staff recommendations for repurposing these funds are described below. While these earmarks are listed as available for repurposing, FHWA makes the final determination.

### ***Discussion***

The CAP lists highway, grade separation, rail, and transit projects and includes the cost estimate at completion, as well as the schedule for key milestones for each project. In coordination with project managers, programming staff refers to the CAP from the Capital Programs Division to recommend or make funding adjustments for new projects, ongoing projects, and projects that have met key milestones or other adjustments.

#### **Freeway Program Funding Changes**

The following recommendations for increased or exchanged funding for freeway projects are primarily based on estimates included in the CAP, presented to the Board on May 10, 2021. For project phases already underway, some changes are based on a forecast of actual costs. The projects are proposed to receive federal funds from the Surface Transportation Block Grant Program (STBG), Highway Infrastructure Program (HIP), repurposed earmark funds, and Measure M2 (M2) Freeway Program funds. The STBG and HIP funds are available to be used for these projects as they were previously set aside to be used for the construction phase of the State Route 55 (SR-55) Improvement Project from Interstate 405 (I-405) to Interstate 5 (I-5). However, the SR-55 project was alternatively funded with SB 1 (Chapter 5, Statutes of 2017) competitive program funds. Staff is recommending the following funding changes which are further described in Attachment B.

#### **I-5, Yale Avenue to SR-55**

The I-5 Improvement Project from Yale Avenue to SR-55 (Segment 2) entered the plans, specifications, and estimates (PS&E) phase in May 2021. This project will add one mixed-flow lane in both the northbound and southbound directions from the SR-55 on-ramp to Yale Avenue in the City of Irvine. OCTA staff is also currently developing a right-of-way (ROW) cooperative agreement with Caltrans.

Based on the status of the design phase, staff recommends funding the ROW phase, which is estimated to cost \$23.926 million with approximately:

- \$17.5 million in STBG funds,
- \$5.575 million in M2 freeway funds, and
- \$0.851 million in repurposed earmark funding.

The proposed use of \$0.851 million in repurposed earmarks contingent upon approval from the FHWA. If FHWA does not authorize any portion of the federal earmarks for this project, staff is requesting authorization to use additional M2 Freeway Program funds instead. Funding recommendations for the construction phase will be presented to the Board at a future date as project design work is completed. Staff will also report back on the success of the use of repurposed earmarks as part of a future Capital Programming Update item.

#### SR-55, I-5 to State Route 91 (SR-91)

The SR-55 Project from I-5 to SR-91 will add one general-purpose lane in each direction between State Route 22 (SR-22) and I-5, and includes operational improvements between SR-22 and SR-91. The Board approved the use of \$8.921 million in M2 funding for the PS&E phase on January 13, 2020. Based on a review of the scope and actual cost for several similar projects, OCTA staff has determined that the project will require an additional \$2.079 million for the design phase, for a total estimated cost of \$11 million. Staff is proposing to use \$2.641 million in federal HIP funds and \$3.359 million in STBG for the PS&E phase. Using additional federal funds allows OCTA to preserve \$3.921 million in local M2 freeway funds for future M2 freeway projects. The total estimated the PS&E cost after these proposals stands at \$11 million. The funding changes for PS&E phase are noted in the table below and are further described in Attachment B.

Existing Funding (in 000s)	STBG	M2	HIP	Total
PS&E		\$ 8,921		\$ 8,921

Proposed Funding (in 000s)	STBG	M2	HIP	Total
PS&E	\$ 3,359	\$ 5,000	\$ 2,641	\$ 11,000
CHANGE	\$ 3,359	(\$3,921)	\$ 2,641	\$ 2,079

HIP - Highway Infrastructure Program

#### SR-55, I-405 to I-5

The SR-55 Improvement Project between the I-405 and I-5 will add a general-purpose, high-occupancy vehicle (HOV), and auxiliary lanes in both directions between I-405 and I-5. This project is nearing completion of the PS&E

phase and is expected to be advertised for construction in the December 2021 timeframe. Additional funding is needed to complete the PS&E phase. Staff estimates that an additional \$1.720 million is needed to address additional roadway design, survey, utility and ROW coordination, engineering reports modifications, environmental services, and OCTA labor costs. A complementary staff report to amend the existing design services contract will be presented at the same Board meeting and provide more detail on the need for the additional funding. This adjustment changes the total project cost estimate from \$504 million to \$505.720 million, and is proposed to be funded with M2 Freeway Program funds. Attachment B also provides additional detail on this requested action.

#### I-5, Orange County/San Diego County Line to Avenida Pico

On May 11, 2020, the Board approved \$5.5 million in STBG funds for the project approval and environmental document phase for the I-5 Project from the Orange County/San Diego County line to Avenida Pico. The project entered the environmental phase in March 2021. While drafting the cooperative agreement with Caltrans, additional project risks and OCTA costs related to outreach were identified, necessitating an increase in the project budget. This increase adjusts the cost estimate for the environmental phase from \$5.5 million to \$6.407 million. Staff is proposing up to \$0.907 million in additional STBG funding for the project. This project complements Project C in the M2 Freeway Program, which extended the HOV lane from San Juan Creek Road to Avenida Pico. It is also a key project that has been identified to address congestion in south Orange County.

#### OC Bridges Railroad Grade Separations

OCTA initiated the OC Bridges Railroad Grade Separation Program (OC Bridges Program) in 2007, in coordination with the cities of Anaheim, Fullerton, and Placentia. Undercrossings at Placentia Avenue and Kraemer Boulevard and overcrossings at Orangethorpe Avenue, Tustin Avenue/Rose Drive, and Lakeview Avenue were implemented by OCTA. The City of Fullerton has implemented undercrossings at State College Boulevard and Raymond Avenue. All seven grade separations were constructed and opened to traffic by the end of 2017.

In July 2020, the Board approved funding changes to the OC Bridges Program, which were anticipated to be the final funding changes necessary to closeout these projects. However, staff is returning to the Board to seek approval to use additional M2 Regional Capacity Program (RCP) in lieu of CMAQ funds to close out the OC Bridges Program. The changes are primarily related to the State College Boulevard grade separation, Lakeview Avenue, and Raymond Avenue grade separations and are reflected in Attachment B.

CMAQ funds may be used to support grade separation projects, but are intended to support projects that improve air quality and cannot be used for roadway widening.

FHWA would not approve the use of a portion of the federal funds assigned to the grade separation projects, given roadway widening components were included in the projects. All other funding sources have been exhausted, including the use of proceeds from the surplus property. Based on these recommendations, the current M2 RCP amount used for the OC Bridges Program totals \$152.625 million, which is below the July 2010 Board-approved M2 RCP amount of \$169.397 million for the program.

### **Bus Upgrades**

Staff is recommending use up to \$12.526 million in CMAQ funds to purchase 173 Cummins L9N, 8.9-liter, compressed natural gas-powered engines. The new engines will replace the older 8.9L Cummins ISL-G engines, which will reach the manufacturer-recommended engine replacement mileage by early 2022. The timing of this engine repower is consistent with maintaining the useful life of the fleet as stated in the 20-Year Fleet Outlook and the Transit Asset Management Plan. Of the 173 engines, 16 will be installed in 60-foot buses and the remaining 157 will be for 40-foot buses. The proposed engines have been certified by the California Air Resources Board as a near-zero-emission engine, which will further decrease the emissions profile of the entire bus fleet. A portion of the proposed CMAQ funds are being redirected from the OC Bridges program. The additional CMAQ was previously set aside to be used for the construction of High Occupancy Vehicle lanes for the State Route 55 Improvement Project from I-405 to I-5. However, the SR-55 project was alternatively funded with SB 1 (Chapter 5, Statutes of 2017) competitive program funds. The use of CMAQ for bus repowers is consistent with the Capital Programming Policies regarding bus transit capital projects. Additionally, this project was anticipated in the OCTA Comprehensive Business Plan, and this action identifies the funding source that will support the project.

### **Summary**

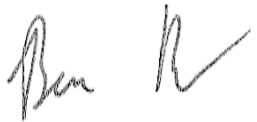
To ensure that OCTA projects are fully funded, external funds are maximized, and funding levels are consistent with the estimate at completion listed in the quarterly CAP, staff is seeking Board approval to use and redistribute federal and local funds for several freeway, grade separation, and transit projects.

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***Attachments***

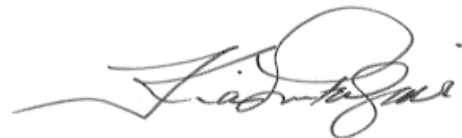
- A. Existing Capital Programming Policies by Fund Source, February 2019
- B. Capital Programming Update Project Descriptions
- C. Capital Funding Program Report
- D. List of Board of Directors Reports with Programming Actions, January 2021 – June 2021

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