

MEMORANDUM

To: CHAIR AND COMMISSIONERS
CALIFORNIA TRANSPORTATION COMMISSION

CTC Meeting: December 5-6, 2024

From: STEVEN KECK, Chief Financial Officer

Reference Number: 2.5d.(4), Action Item

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District 07 – Director

Subject: **ALLOCATION FOR PROJECT WITH COSTS THAT EXCEED THE
PROGRAMMED AMOUNT BY MORE THAN 20 PERCENT
PPNO 6024/EA 39020 – LOS ANGELES COUNTY – STATE ROUTE 47
RESOLUTION FP-24-39**

ISSUE:

Should the California Transportation Commission (Commission) approve the California Department of Transportation's (Department) allocation request for \$30,360,000 for the Plans, Specifications, and Estimate (PS&E) and \$1,683,000 in Right of Way (RW) Capital Outlay Support (COS), for the State Highway Operation and Protection Program (SHOPP) Bridge Formula Program project on State Route (SR) 47, in Los Angeles County, to complete the PS&E and RW Support phases?

RECOMMENDATION:

The Department recommends that the Commission approve the requested allocation for this SHOPP project.

PROJECT DESCRIPTION:

This project is located on SR 47 in the City of Los Angeles, near the Port of Long Beach, at the Vincent Thomas Bridge (No. 53-1471), in Los Angeles County. The project will replace the bridge deck, expansion joints, fencing, bridge rails, and seismic sensors.

FUNDING AND PROGRAMMING STATUS:

In January 2023, this project was programmed in the SHOPP for \$20,900,000 in PS&E and \$17,000 in RW Support for allocation in Fiscal Year 2023-24. In May 2023, the project was amended to include the Construction Manager/General Contractor (CMGC) delivery method. In March 2024, the project was amended again to change the program code. In June 2024,

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the project requested an allocation time extension for the PS&E and RW Support phases. However, the request was deferred to the August 2024 meeting and approved for seven months.

In October 2024, the Department updated the estimate and reflected the need for \$30,360,000 in PS&E (45.3 percent over the programmed amount) and \$1,683,000 in RW Support (9,800.0 percent over the programmed amount). The project is scheduled to be Ready to List (RTL) by August 2025, and complete the remaining PS&E activities by December 2025 and RW Support activities by December 2027.

REASON FOR COST INCREASE:

The Vincent Thomas Bridge, which connects Terminal Island at the Port of Los Angeles with San Pedro and Interstate 110, is the fourth longest suspension bridge in the state. The bridge has two lanes in each direction that carries approximately 53,000 vehicles per day on average, including nearly 4,700 heavy-duty trucks. The bridge is in an environmental justice community, is also historically significant, and serves one of the busiest container ports in the nation.

Due to its location, type of structure, and physical and environmental constraints, the project has challenging construction staging and traffic control, extensive coordination with port authorities and railroads, challenging deck type selection, and a time constraint for project completion. With the selection of the CMGC delivery method, the CMGC will assist during design, manage and mitigate risks during delivery and construction, and deliver the project sooner.

The PS&E estimate is greater than the current programmed amount due to additional efforts required for traffic handling plans, public outreach, and structural analysis and design which was beyond what was initially anticipated. The RW Support estimate is greater than the current programmed amount due to additional efforts to acquire temporary construction and access easements that will be required during construction, identify utilities and mitigate conflicts, and acquire various agreements with the property owners and the cities.

PS&E Cost Increase:

The scope of this project proposes to replace various components of the bridge, including the bridge deck, expansion joints, fencing, bridge rails, and seismic sensors. In addition, detour routes will be utilized as a result of full closure of the bridge during construction. During the Project Approval and Environmental Document (PA&ED) phase, after receiving feedback from several stakeholders' concerns regarding the proposed detour routes, the Department recognized the complexity of establishing detour routes. As a result, traffic modeling for additional intersections, along with additional internal and external stakeholders' meetings, will be required during the PS&E phase that were not initially anticipated.

The Department is expected to conduct extensive public outreach efforts in working with the communities, the ports, businesses, elected officials, and residents to develop a robust traffic management plan for closing the bridge during construction. The bridge closure will impact the access to and from both ports and the adjacent underserved environmental justice

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communities. During the PA&ED phase, this effort was determined to be much more than originally planned during the Project Initiation Document (PID) phase.

During the PA&ED phase, the bridge was re-evaluated for load rating for the approach spans, and it was determined that the load rating has decreased, requiring additional structural analysis to determine the required strengthening to bring the approach spans to the required rating. To achieve this increased rating, additional design effort is required. In addition, there is no national standard method of determining and evaluating load rating for suspension bridges, therefore, additional effort is needed to validate the results. The loading requirement has changed since the bridge was built 60 years ago. This change, plus the increased deck weight, even though light-weight concrete will be used, leads the design team to look at various ways to better evaluate the capacity of the bridge superstructure, including taking samples from the bridge, testing, and instrumenting the bridge. It was determined that a structure consultant would be required along with Department staff to perform the various analyses of the bridge, including resistance to seismic events, replacement of the existing bridge deck joints, implementing the new deck and connections, utilization of a median steel barrier in lieu of concrete barrier, and resistance to wind events. The Department, after initial analysis, found that modifying the bridge deck joints to withstand seismic activity, and allow for serviceability and maintainability, will be very challenging. This effort far exceeds what was estimated at the time of programming.

Therefore, additional resources in the amount of \$9,460,000 will be required to complete the PS&E phase. The project is anticipated to be RTL by August 2025 and complete the PS&E phase by December 2025. After detailed analysis is completed, the project's Construction Capital and Support phases will be adjusted, if needed, at a future Commission meeting.

RW Support Cost Increase:

Initially, right of way efforts were very minimal with no parcels being impacted. However, it has been determined that there is a need for temporary elevators during construction to facilitate the movement of workers from ground level to the elevated portions of the bridge. The movement of workers, materials, and equipment will require 24/7 access to the Ports of Los Angeles' and Long Beach's roads to expedite construction and minimize the bridge closure duration and community impacts. It is anticipated that six temporary construction easements (TCEs) will be required to construct the temporary elevators and facilitate materials and equipment movements. These TCEs will impact private leasehold interests within the Ports, necessitating aid from the Relocation Assistance Program regarding the temporary relocation of personal property.

Due to the complex nature of property rights established within the Ports, there is a high risk of long-lead acquisition efforts. In addition, there may be utility conflicts that have yet to be identified within the Ports. The use of positive location investigations for underground utilities are anticipated to be extensive. There is also a moderate risk that utilities discovered to be in conflict will need to be relocated.

Furthermore, agreements will be required with local railroad owners within the Port of

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Los Angeles, Union Pacific Railroad, and the cities of Los Angeles, Long Beach, and Carson. Therefore, additional resources in the amount of \$1,666,000 will be required to complete the RW Support phase by July 2027. The project's RW Capital phase will be amended at a future Commission meeting.

CONSEQUENCES:

If this allocation request is not approved, the Department will not be able to proceed with the design of this project, which proposes to address the critical deficiencies of the bridge that serves two major ports and could have direct impacts to the economy. To address all of the deficiencies, the project will have to be reprogrammed, which will result in delays and could result in higher costs due to escalation.

FINANCIAL RESOLUTION:

Resolved, that \$30,360,000 be allocated for PS&E and \$1,683,000 be allocated for RW Support to provide funds to complete the pre-construction phases for this SHOPP project.

Attachment

2.5 Highway Financial Matters

Project No. Dist-Co-Rte Postmile	PPNO Project ID	Location/Description	EA	Program Year	Phase	Programmed Amount	Allocation Amount
2.5d.(4)	Allocation of Project with COS Cost that Exceeds 20 Percent of the Programmed Amount					Resolution FP-24-39	
1 07-LA-47 R0.4/2.0	6024 0722000334	In the city of Los Angeles, near the Port of Long Beach, at Vincent Thomas Bridge No. 53-1471. <u>Outcome/Outputs:</u> Replace bridge deck and seismic sensors. This is a Construction Manager/General Contractor (CMGC) project. (G13 Contingency) <u>Program Code</u> 201.116 - Bridge Formula Program <u>Performance Measure:</u> 1.0 Bridge(s) Concurrent consideration of funding under Resolution E-24-116; December 2024. Seven month allocation time extension for PS&E and R/W Sup approved under Waiver 24-125; August 2024.	39020	25-26	PS&E RW Sup	\$20,900,000 \$17,000	\$30,360,000 \$1,683,000