

MEMORANDUM

TAB 65

To: CHAIR AND COMMISSIONERS
CALIFORNIA TRANSPORTATION COMMISSION

CTC Meeting: May 16-17, 2024

From: STEVEN KECK, Chief Financial Officer

Reference Number: 2.5e.(2), Action Item - **YELLOW REPLACEMENT ITEM**

Prepared By: Matthew Brady
District 01 – Director

Subject: **SUPPLEMENTAL FUNDS FOR CAPITAL OUTLAY SUPPORT PHASE
PPNO 4695/EA 0H570 – MENDOCINO COUNTY –
UNITED STATES HIGHWAY 101
RESOLUTION FA-23-102**

ACTION UPDATE: *Adjustment to the requested amount.*

ISSUE:

Should the California Transportation Commission (Commission) approve the California Department of Transportation's (Department) request for an additional \$900,000 in Capital Outlay Support (COS), for the State Highway Operation and Protection Program (SHOPP) Roadway Rehabilitation project on United States Highway (US) 101, in Mendocino County, to complete the Plans, Specifications, and Estimate (PS&E) phase?

RECOMMENDATION:

The Department recommends that the Commission approve this request for a COS supplemental funds allocation for this SHOPP project.

PROJECT DESCRIPTION:

This project is located on US 101 in and near the City of Ukiah, from north of Robinson Creek Bridge to the Pomo Lane Undercrossing, in Mendocino County. The project will rehabilitate the roadway, install vegetation control, upgrade guardrail, lighting, and transportation management system elements; and apply high friction surface treatment.

FUNDING AND PROGRAMMING STATUS:

In May 2020, the project's PS&E phase was programmed for \$867,000 in the SHOPP for allocation in Fiscal Year 2021-22. In March 2022, the project was amended to increase the PS&E to \$1,150,000 and move out the allocation of PS&E and Right of Way Support from

“Provide a safe and reliable transportation network that serves all people and respects the environment.”

2021-22 to 2022-23. In June 2022, the project received a PS&E allocation for \$1,150,000. In June 2023, the project was amended again to increase the Construction phase to incorporate guardrail upgrades and install vegetation control to improve climate resiliency through Infrastructure Investment and Jobs Act (IIJA) funds. In February 2024, the project received G-12 funds in the amount of \$315,000 for PS&E. The PS&E phase is currently 60 percent complete, with a remaining budget of \$242,000, which is insufficient to complete the phase. The project is scheduled to be Ready to List in November 2024. If this request for additional funding is approved, it is anticipated to complete the remaining PS&E activities by May 2025.

REASON FOR COST INCREASE:

The project realized cost increases due to the incorporation of climate resiliency scope and changes in the design strategy resulting from new information that was obtained during PS&E.

Originally, the project proposed to rehabilitate the roadway, upgrade lighting and transportation management system elements, and apply high friction surface treatment. In June 2023, the project was amended to incorporate guardrail upgrades and the installation of vegetation control to improve climate resiliency through IIJA funds. However, the effort was further complicated due to recent updates and new design standards for concrete barriers that resulted in switching from a metal guardrail transition system to the new concrete barrier transition. The new transition increases the barrier height and requires upgrading the concrete transition blocks that are connected to the existing concrete bridge railing at 41 locations. The Department's Design and Engineering Services staff are currently working on design changes to update these transition details in the project plans. This change now requires the preparation of traffic handling plans that were not necessary for the programmed metal guardrail transition systems.

As part of the roadway rehabilitation strategy, the pavement was scheduled to be resurfaced. During the design process, a pavement deflection study was to be performed on all lanes. However, the Department's Materials office was only able to complete a partial deflection study of the northbound number one lane before the equipment failed. Due to the consistency of the cores, deflection data, and as-builts showing that all of the lanes were constructed under the same project, the materials recommendation from the data collected was applied to all lanes to stay on schedule. With this material recommendation, it was apparent that the initial structural section strategy would change. The initial recommendation had been to crack, seat, and overlay the existing roadway with approximately four inches of hot mix asphalt. Prior to the deflection study, it was anticipated that the overlay thickness recommendation would decrease based on results from similar projects. During the development of this project, the Statewide method for determining structural section recommendations was changed. As a result, the updated pavement design standards increased the pavement overlay thickness from four to nine inches for the 26 lane miles, creating a significant cost increase and requires extensive design rework. Since the surface elevation increased, the ramp profiles require to be redesigned, and other impacts to the embankment and drainage facilities need to be reanalyzed and adjusted. The redesign affects nearly all of the plan sheets, as well as recalculation of the

quantities and capital cost estimates. In addition, the original design did not require complex staging/traffic handling plans. However, the higher profile will now require thorough staging/traffic handling plans, which is a significant added effort when developing PS&E.

The project limits include pavement resurfacing under overcrossings and tapers at bridge approaches and departures. The original structural section design under the eight overcrossings was to overlay the existing pavement. However, the increased overlay thickness creates vertical clearance deficiencies and therefore the new strategy requires a redesign that will maintain the vertical clearance under each overcrossing by removing the existing structural section and replacing it with a new structural section. As a result, this will also require a redesign of the mainline roadway profile so that it tapers down from the new 9-inch higher elevation to the existing pavement elevation at each overcrossing and at 11 bridges.

These changes will require additional PS&E support costs in the amount of \$900,000 for developing new plans for pavement taper construction details, staging/traffic handling, post construction stormwater treatment (as a result of revising the existing storm water data report); and fund the completion of the remaining PS&E activities by May 2025.

CONSEQUENCES:

If this request for supplemental funds is not approved, the Department will not be able to complete the PS&E phase of this project, which would incorporate climate resiliency improvements through IIJA funds and address pavement deficiencies. The Department will need to reduce the scope of work on this project and initiate another project to address some of the pavement deficiencies. To address the climate resiliency scope and all of the deficiencies, the project will need to be reprogrammed in a future SHOPP cycle which could lead to the potential of a project cost increase.

FINANCIAL RESOLUTION:

Resolved, that \$900,000 be allocated to provide funds to complete the PS&E phase for this SHOPP project.

Attachment

2.5 Highway Financial Matters

Project #	Allocation Amount	Recipient	County	Dist-Co-Rte	Postmile	Location	Project Description	PPNO	Program	Phase	Program Code	Project ID	Adv Phase	EA	Original Amount	This Supplemental Request
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2.5e.(2) COS Supplemental Funds for Previously Voted Project Resolution FA-23-102

1	\$900,000	Department of Transportation	Mendocino	01-Men-101	21.00/28.60	In and near Ukiah, from north of Robinson Creek Bridge to Pomo Lane Undercrossing.	<u>Outcome/Output:</u> Rehabilitate roadway, install vegetation control, upgrade guardrail, lighting, and Transportation Management System (TMS) elements, and apply High Friction Surface Treatment (HFST).	01-4695	SHOPP	PS&E	20.10.201.122	0117000237	1	0H570	\$1,150,000	\$900,000
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Supplemental funds are needed to complete PS&E.

CEQA - CE, 4/1/2022

NEPA - CE, 4/1/2022

Change to the program code from 20.20.201.122 to 20.10.201.122 and to the supplemental request amount and allocation amount from \$1,100,000 to \$900,000 made via the Yellow Replacement distributed at the May 2024 CTC meeting.