

## MEMORANDUM

To: CHAIR AND COMMISSIONERS  
CALIFORNIA TRANSPORTATION COMMISSION

CTC Meeting: December 7-8, 2022

From: STEVEN KECK, Chief Financial Officer

Reference Number: 2.5d.(2), Action Item

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District 05 – Director

Subject: ALLOCATION FOR PROJECT WITH COSTS THAT EXCEED THE  
PROGRAMMED AMOUNT BY MORE THAN 20 PERCENT  
PPNO 0226K /EA 3307C – SAN LUIS OBISPO COUNTY – STATE ROUTE 46  
RESOLUTION FP-22-29

### ISSUE:

Should the California Transportation Commission (Commission) approve the California Department of Transportation's (Department) allocation request for \$171,420,000 for the State Transportation Improvement Program (STIP) Roadway Widening project on State Route 46 (SR 46), in San Luis Obispo County, to award the construction contract?

### RECOMMENDATION:

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

### PROJECT DESCRIPTION:

This project is located on SR 46, near Shandon, from west of Davis Road to west of Antelope Road, in San Luis Obispo County. The project will convert the 2-lane conventional highway into a 4-lane expressway.

### FUNDING AND PROGRAMMING STATUS:

In March 2014, the project was programmed in the STIP with \$62,000,000 in Construction Capital and \$9,500,000 in Construction Support future need in Fiscal Year 2018-19. In March 2018, during development of the 2018 STIP, the project was reprogrammed for \$97,800,000 in Construction Capital, \$95,300,000 from the IIP and \$2,500,000 from the RIP, and \$13,400,000 in Construction Support from the IIP. In June 2022, the project received a 20-month allocation time extension for the Construction Capital and Construction Support to complete the

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Construction Management/General Contractor (CMGC) process after Ready to List was achieved.

In October 2022, the Agreed to Price with the CMGC reflected the need of \$155,870,000 in Construction Capital (59.4 percent over the programmed amount) and \$15,550,000 in Construction Support (16.0 percent over the programmed amount). The Department plans to award the project in January 2023, and begin construction in March 2023. Construction is planned for three construction seasons with a duration of 500 working days.

STIP Component	Programmed Amount	Allocation Amount	Increased Amount	Percent Over Programmed Amount
Capital				
IIP	\$95,300,000	\$151,880,000	\$56,580,000	59.4
RIP	\$2,500,000	\$3,990,000	\$1,490,000	59.6
Subtotal	\$97,800,000	\$155,870,000	\$58,070,000	59.4
Support				
IIP	\$13,400,000	\$15,550,000	\$2,150,000	16.0
Total	\$111,200,000	\$171,420,000	\$60,220,000	54.2

### **REASON FOR COST INCREASE:**

The construction capital cost estimate is greater than the programmed amount following the project's refinement of the final design at Plans, Specifications, and Estimate.

### **Capital Cost Increase:**

During Fiscal Year 2019-20, the Department elected to utilize the CMGC delivery method. The preconstruction services contract was awarded to a contractor during the middle of 2020-21. The CMGC process identified several innovations as the Department finalized the construction documents. Included in these innovations were switching the pavement from continuously reinforced concrete to asphalt concrete, utilizing existing SR 46 when allowable instead of reconstructing near the eastern limits of the project, and optimizing embankment settlement strategies. In total, the Department utilized 18 innovations developed by the Department's Division of Design, CMGC, and Independent Cost Estimator (ICE) consultant to reduce the project costs by 28 percent (nearly \$40,000,000). The Department received a 20-month allocation time extension in June 2022, to allow for the CMGC process to incorporate these innovations and allow flexibility to reach an Agreed to Price with the contractor. As part of the CMGC process, the Department also procured an ICE consultant, who works directly for the Department, to ensure the prices from the CMGC contractor are consistent with industry and the innovations proposed are feasible.

The three estimate results indicate the programmed amount for Construction Capital costs were underestimated due to the escalation costs the market has seen recently. Differences in the Engineer's Estimate versus the other estimates are attributed to higher subcontractor

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costs, as seen in the bids recently received, as well as increased fuel and oil pricing. This Construction Capital allocation request includes supplemental work, Department furnished materials and expenses, and a contingency of 3 percent. The contingency is lower than a typical project as the Department feels through the CMGC process, many of the risks have been identified and mitigation has been included in the current project costs.

The current cost estimate differs significantly from the estimate used to validate the current programming for the project. A major reason for this difference is trucking. Material and equipment delivered to the work site or transported on site are affected by the current higher trucking prices, so the impact is widespread. A comparison of trucking cost increases since January 2021, which is when the programming could last be updated per STIP guidelines, shows a 45.5 percent increase in hourly trucking rates. Trucking represents about 10.9 percent of the total price on this project, which is an increase of \$5,240,000. Other factors that lead to higher trucking costs include fuel prices and enforcement of recent legislation for temporary workers. Rising fuel costs have not only impacted trucking costs, but all other construction activities on the project utilizing equipment that run on gas/fuel. Prices for State diesel have increased by 80 percent from \$3.43/gal (Jan 2021) to \$6.16/gal (Oct 2022) and represents an 11.1 percent of the total price on this project, which is an increase of \$9,570,000. Categories of work most impacted from fuel costs are earthwork, drainage, asphalt, base material, and piling that is drilled and driven. In addition, the estimate used at programming under estimated and undervalued drainage, landscape, environmental, and stormwater items as well as mobilization and time related overhead. The biggest cost differences between the estimate at the last opportunity to adjust programming and the current CMGC estimate are related to the following items:

- Structures - increased by \$12,400,000
- Earthwork - increased by \$10,300,000
- Drainage items (Culverts, Inlets, and Ditch Paving) - increased by \$4,600,000
- Environmental items (Landscape and Stormwater) - increased by \$5,500,000
- Traffic items (Signs, Delineation, Barriers, and Electrical) - increased by \$5,100,000
- Mobilization - increased by \$12,200,000
- Time Related Overhead - increased by \$9,000,000

In aggregate, these items total \$59,100,000 and were offset by other items, resulting in a net increase of \$58,117,000.

Since 2021 when bids were received for the preceding project on the corridor, some bid prices have further increased. The Department made the economic decision to switch to less expensive materials based on anticipated prices and innovate construction methods to bring the project closer in alignment with programming. Despite the efforts taken in early 2022 to reduce costs in key areas, other project costs continued to escalate. Hot Mix Asphalt prices increased from what was seen in 2021 by 21 percent, resulting in \$3,350,000 additional costs than were anticipated. Roadway excavation costs are 55 percent higher than last year which has resulted in an increase of \$5,160,000. Striping unit prices have increased over 200 percent which has resulted in an increased cost of \$600,000 above what was bid last year. Rock slope protection items have increased between 75 and 100 percent which has resulted in

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an increased cost of \$150,000. Finally, the project is located in rural eastern San Luis Obispo County and the lack of available contractors and subcontractors impacts labor prices as well as material costs. Limited suppliers and trucking costs from remote suppliers are reflected in the bid prices, which make up 67 percent of contract item costs.

**Support Cost Increase:**

With the refinement of the project scope, the support costs increased in the year of delivery. While the original working day estimate of 515 working days did not increase, there are additional overlapping activities and additional work that did not qualify as working days for the contractor. Geotechnical Design determined a 180-day embankment settlement mitigation is required for all five bridge site locations with additional settlement at other non-critical path locations. The added settlement mitigation requires additional resources for Division of Engineering Services staff to monitor and analyze the embankment fills without increasing the total working days. Also, an additional structure was added after the 95 percent constructability review which increased Structure Construction resources. Drainage, landscape, and stormwater quantities also increased from the time of programming requiring more inspection than anticipated. These items resulted in an increase of \$2,150,000 in support costs.

**CONSEQUENCES:**

If the additional funds are not approved, the Department will not be able to complete the conversion of the 2-lane Conventional Highway into a 4-lane expressway along this important transportation corridor. The current time extension would expire, and programmed construction funding would lapse. A new project would need to be programmed to fulfill the intended purpose and need of the project. This delay would lead to an increase in cost due to escalation.

**FINANCIAL RESOLUTION:**

Resolved, that \$155,870,000 be allocated from the Budget Act of 2022, Budget Act Items 2660-301-0042, 2660-301-0890, and 2660-304-6058 for Construction Capital, and \$15,550,000 for Construction Support to provide funds to award this STIP project.

Attachment

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## 2.5 Highway Financial Matters

Project #	Project Title	PPNO			
Allocation Amount	Location	Program/Year			
Recipient	Project Description	Phase			
<u>RTPA/CTC</u>		Prgm'd Amount			
County		Project ID	Budget Year		
Dist-Co-Rte	Project Support Expenditures	Adv Phase	Item # Fund Type		Amount by
Postmile		EA	Program Code		Fund Type

## 2.5d.(2) Allocation for Projects with Cost Increase Greater than 20 Percent

Resolution FP-22-29

1	<b>Route 46/41 Wye.</b> Near Cholame, from 0.7 miles west of Davis Road to 0.5 miles west of Antelope Road. Convert to a 4 lane expressway.		05-0226K	2022-23	
\$171,420,000			RIP/21-22	301-0042 SHA	\$458,000
Department of			CONST	301-0890 FTF	<u>\$3,532,000</u>
Transportation			<del>\$2,500,000</del>	20.20.075.600	\$3,990,000
<u>SLOCOG</u>	<u>Outputs</u>	<u>Unit</u>	<b>\$3,990,000</b>		
San Luis Obispo	New roadway lane-mile(s)	Miles			
05-SLO-46		7.4			
54.1/57.8					
	Final Project Development (IIP)		IIP/21-22	001-0042 SHA	\$1,784,000
	Support Estimate:	\$15,300,000	CON ENG	001-0890 FTF	<u>\$13,766,000</u>
	Programmed Amount:	<u>\$13,200,000</u>		20.10.025.700	\$15,550,000
	Adjustments: (<20%)	\$0			
	Final Right of Way (IIP)				
	Right of Way Estimate:	\$11,672,000			
	Programmed Amount:	<u>\$21,800,000</u>			
	Adjustments: (Credit)	<u>\$10,128,000</u>			
	CEQA - EIR, 05/19/2008; Re-validation 06/22/2022				
	NEPA - FONSI, 05/19/2008; Re-validation 06/22/2022				
	(Future Consideration of Funding under Resolution E-06-23; July 2006.)				
	Right of Way Certification: 06/29/2022				
	This project is being delivered through CMGC delivery method.				
	As part of this allocation request, the Department is requesting to extend the completion of CONST and CON ENG an additional 6 months beyond the 36 month deadline for a total of 42 months.				
	<b><u>ALLOCATION IS CONTINGENT UPON THE APPROVAL OF A BUDGET REVISION BY THE DEPARTMENT OF FINANCE.</u></b>				