

M e m o r a n d u m T A B 65

To: CHAIR AND COMMISSIONERS
CALIFORNIA TRANSPORTATION COMMISSION

CTC Meeting: May 16-17, 2018

Reference No.: 2.5d.(1) – **REPLACEMENT ITEM**
Action Item

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Subject: **ALLOCATION FOR PROJECT WITH COSTS THAT EXCEED THE PROGRAMMED AMOUNT BY MORE THAN 20 PERCENT (PPNO 03-2950) RESOLUTION FP-17-55**

ISSUE

Should the California Transportation Commission (Commission) approve the California Department of Transportation’s (Department’s) allocation request for \$15,969,000 for the State Highway Operation Protection Program (SHOPP) Roadway Rehabilitation project (PPNO 2950) on Highway 20, in Colusa County?

RECOMMENDATION

The Department recommends that the Commission approve an allocation of \$15,969,000 for the SHOPP Roadway Rehabilitation project (PPNO 2950) on Highway 20, in Colusa County.

Dist-Co-Rte	Construction Component	Programmed Amount	Program Adjustment	Funds Request	% Over Programmed Amount
03-COL-20	Capital	\$9,700,000	\$4,769,000	\$14,469,000	49%
	Support	\$1,500,000	\$0	\$ 1,500,000	0%
Total Allocation Request				\$15,969,000	

PROJECT DESCRIPTION

The project is located in Colusa County in and near Colusa from Market Street to 0.1 mile south of Butte Vista Drive. The roadway will be rehabilitated. The existing curb ramps will be reconstructed to meet American Disability Act (ADA) standards. Drainage facilities will be repaired and improved. New sidewalk curb and gutter will be placed. Landscaping will be placed and ITS elements will be installed.

This project has three out of four of the major asset classes (pavement, culverts, and transportation management system) consistent with the Commission adopted Transportation Asset Management Plan (TAMP). The project will bring 2.7 ln-mi of fair and poor pavement to good condition. To comply with ADA standards the project will construct 34 curb ramps, and about 9,100 linear feet (LF) of sidewalk, including over 1700 LF of new sidewalk. It will also install 10,805 LF of culverts, and 1 traffic count station. This will be the first major reconstruction for this section of highway since it was built in 1922.

REASON FOR INCREASE

A Project Initiation Document (PID) was approved October 13, 2011 with construction cost estimate of \$9,700,000. The project was programmed into the 2014 SHOPP by an amendment in October 2014 using the PID cost estimate for the 2016-2017 delivery year. A Project Report (PR) was completed on September 2016 at which time the cost estimate had risen to \$11,800,000, however, there was no opportunity to adjust the programmed cost because the PR was completed during the delivery year. Commission Interim SHOPP Guidelines (Guidelines) require that when a project reaches the year of delivery a sponsor must deliver the project as programmed, request a time extension to allocate construction funding, or delay the project to a future year. No SHOPP amendment within the same delivery year is permitted per the Guidelines. The Department accepted the risk of delivering the project with the programmed amount because the project provides significant improvement to three major assets in the TAMP. However, in February 2017 the project was delayed due to utility relocation and potential condemnation issues. As a result, in June 2017, an 11 month extension was requested and was approved by the Commission.

The project reached ready to list for advertising in March 2018 with a certified Engineer's Estimate (EE) of \$14,469,000, significantly higher than the programmed amount established by the 2011 PID.

The contract items causing most of the increase are all components of the drainage system upgrade, the upgrade and construction of sidewalks, and the traffic control system to facilitate a safe project construction zone.

The PID assumed the use of Alternative Pipe Culvert (APC) throughout the project. No hydraulic analysis was completed in the Project Approval and Environmental Document (PAED) phase. When the hydraulic plans were developed during the Design phase, additional geotechnical information became available that revealed unstable soils along the project length. The Department decided to use 48 inch Reinforced Concrete Pipe (RCP) instead of APC. The additional strength of RCP was needed due to the shallow cover over the pipe, and also it provided a heavier pipe which was needed due to high ground water elevation. The number of inlets and manholes were increased due to the curb and gutter elevation being raised above the existing ground, which required inlets behind the curb to drain runoff. Project survey and culvert inventory, both of which occurred after preparation of the PID, revealed more existing culverts and drainage systems than previously thought. The shallow depth of the existing culverts and drainage systems conflicted with the new 48 inch pipe requires the culverts to be removed. The total cost increase associated with the drainage improvement is \$1.9 Million.

During the Design phase, it was determined that the shallow cover on the 48 inch RCP require the installation of concrete caps at several locations along the 1-mile project to protect it from surface loading caused by shoulder vehicular traffic. The 2011 PID did not account for this and the cost associated with this item is \$1.4 million.

During the Design phase, it was also determined that sidewalk, new driveways, and curb and gutter need to be added for the length of the project for ADA standards and the Department's Complete Streets policy. A new sidewalk of over 1700 LF is proposed on the north side of highway 20 to service a disadvantaged community. The PID did not account for this item. The total cost associated with these elements is \$800,000.

The 2011 PID assumed partial road closure from Sioc Street to Market Street. After the final constructability review, it was changed to shorter construction zones which will enable greater traffic flow and will reduce the impact to local businesses during construction. However, this significantly increased the cost for temporary construction/traffic control. The level of detail for temporary construction and traffic control was significantly underestimated in the 2011 PID. The total cost increase associated for the temporary construction staging and traffic control is \$500,000.

Although the change of drainage strategy from the APC to the RCP was a significant cost increase from the original PID estimate, it is evident that the addition of elements identified to comply with ADA and complete streets also significantly contributed to the increase from the 2011 PID estimate.

CONSEQUENCES

The Department has determined that it is in the best interest of the State to proceed with allocating this project and has completed multiple reviews including a Certified Cost Estimate, Safety Review and Constructability Review. The Risk Register was updated in June 2017, and the Department believes this is a project that provides significant value to the Commission adopted TAMP. If this allocation request for \$15,969,000 is not approved, the purpose and benefits to the

traveling public will not be attainable as the Department will have to reprogram this SHOPP Roadway Rehabilitation project. Reprogramming is likely to be at higher costs in the future. The funds for this project will lapse and the Department will not be able to advertise this SHOPP Roadway Rehabilitation project.

RESOLUTION

Resolved, that \$14,469,000 in Construction Capital be allocated from the Budget Act of 2018, Budget Act Items 2660-802-3290 and 2660-302-0890 and \$ 1,500,000 in Construction Support be allocated from Budget Act Item 2660-001-3290 and 2660-001-0890, to provide funds to advertise the following project.

Attachment

2.5 Highway Financial Matters

REPLACEMENT

Project #	Allocation Amount	County	Location	Project Description	PPNO Program/Year Phase	Prgm'd Amount	Project ID	Budget Year	Amount by Fund Type
Dist-Co-Rte	Postmile		Project Support Expenditures		Adv Phase	EA	Item #	Fund Type Program Code	Fund Type
2.5d.(1) Allocations for Projects with Cost Increase Greater than 20 Percent					Resolution FP-17-55				
1	\$15,969,000	Colusa	03-Col-20	31.7/32.9	In Colusa, between Market Street and Butte Vista Way. <u>Outcome/Output:</u> Rehabilitate existing pavement, improve roadway profile and cross slopes, repair and improve drainage facilities, upgrade signal and curb ramps, relocate overhead utilities underground, and construct sidewalks. This project will improve safety, ride quality, and extend service life of the pavement.	03-2950	SHOPP/16-17	001-3290 RMRA	\$172,000
						\$1,500,000	CON ENG	001-0890 FTF	<u>\$1,328,000</u>
						CONST		20.10.201.120	\$1,500,000
						\$9,700,000		2018-19	
						0312000026		802-3290 RMRA	\$1,660,000
						4		302-0890 FTF	<u>\$12,809,000</u>
						2F980		20.20.201.120	\$14,469,000
					<u>Performance Measure:</u>				
					Planned: 4.0, Actual: 2.7 Lane mile(s)				
					Preliminary				
					<u>Engineering</u>				
					PA&ED	\$1,410,000	\$1,409,307		
					PS&E	\$900,000	\$722,417		
					R/W Supp	\$950,000	\$707,313		
					(CEQA - ND, 09/22/2016; Re-validation 04/04/2017)				
					(NEPA - CE, 09/22/2016; Re-validation 04/04/2017)				
					(Future consideration of funding approved under Resolution E-16-83; December 2016.)				
					<u>CONTINGENT ON THE PASSAGE OF THE 2018 BUDGET ACT.</u>				