State of California
DEPARTMENT OF TRANSPORTATION

California State Transportation Agency

Tab 95

M e m o r a n d u m

To: CHAIR AND COMMISSIONERS
CALIFORNIA TRANSPORTATION COMMISSION

CTC Meeting: May 28, 2015

Reference No.: 2.5d.(1)
Action Item

From: NORMA ORTEGA
Chief Financial Officer

Prepared by: Bruce de Terra, Acting Chief
Division of
Transportation Programming

Subject: **ALLOCATION FOR PROJECT WITH COSTS THAT EXCEED THE PROGRAMMED AMOUNT BY MORE THAN 20 PERCENT**
RESOLUTION FP-14-52

RECOMMENDATION:

The California Department of Transportation (Department) recommends the California Transportation Commission (Commission) allocate $2,339,000 for one State Highway Operation and Protection Program (SHOPP) project identified below.

ISSUE:

Additional funds are needed for one programmed project in order to advertise the construction contract.

RESOLUTION:

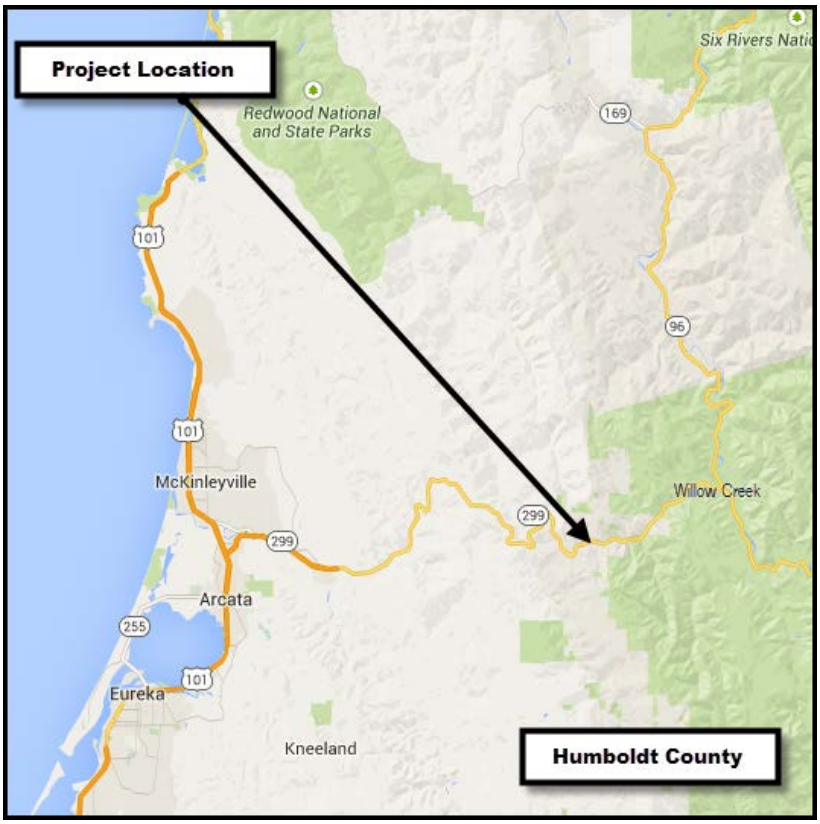
Resolved, that $2,339,000 be allocated from the Budget Act of 2013, Budget Act Item 2660-302-0042 and 2660-302-0890, to provide additional funds for the project identified below.

Project	Dist-Co-Rte	Original Programmed Amount	Program Adjustment	Revised Programmed Amount	% Increase Above Current Programmed Amount
1	01-Hum-299	$1,419,000	$920,000	$2,339,000	64.8%

Project # / Allocation Amount / County / Dist-Co-Rte / Postmile	Location / Project Description	PPNO / Program/Year / Prgm'd Amount / Project ID / Adv Phase / EA	Budget Year / Item # / Fund Type / Program Code	Amount by Fund Type
2.5d.(1) Allocation for Project with Costs that Exceed the Programmed Amount by more than 20 Percent				**Resolution FP-14-52**
1 $2,339,000 Humboldt 01-Hum-299 30.2/30.6	Near Willow Creek, from 0.3 mile west to 0.1 mile east of Cedar Creek Road. Outcomes/Outputs: Realign curve, widen shoulders, modify drainage, and install rumble strips to improve safety and reduce the number of collisions Preliminary Engineering / Programmed / Expended PA&ED $300,000 $741,693 PS&E $423,000 $218,073 R/W Sup $54,000 $25,585 (Construction Support: $323,000)	01-2305 SHOPP/14-15 $1,419,000 0100020307 0A3204	2013-14 302-0042 SHA 302-0890 FTF 20.20.201.010	$47,000 $2,292,000

RECOMMENDATION:

The Department recommends that this request for $2,339,000 be approved to allow this project to be advertised.



PROJECT DESCRIPTION:

This project is located in Humboldt County on Route 299, approximately nine miles west of Willow Creek. At this location, Route 299 is a conventional two-lane highway on curvy alignment. The project proposes to improve safety by widening the shoulders, improving roadway cross-slopes, flattening the radius of an existing curve, placing an asphalt overlay, and installing shoulder rumble strips. The project was initiated by the Department to reduce collisions within the project limits.

FUNDING STATUS:

The project was amended into the SHOPP in September 2011, and is currently programmed in Fiscal Year 2014-15 in the 2014 SHOPP for $1,419,000. This allocation request for $2,339,000 is an increase of 64.8 percent above the programmed amount.

REASON FOR INCREASE:

At the time the project was initially scoped, the Project Initiation Document (PID) assumed subsurface soil and rock conditions based on prior experience in the general area. Detailed geotechnical investigations are not done during the early planning stage. Therefore, the planning estimate and programmed cost was based on these assumptions.

In the summer of 2014, a detailed subsurface geotechnical testing of the soil and rock was conducted. The resulting study recommended flatter side slopes to improve stability and also the removal of potentially unstable material. The geotechnical studies also recommended controlled blasting at some of the planned excavations. The use of controlled blasting requires additional traffic control and causes slower work production rates, resulting in a greater expense for these items and increased the project duration from one season of construction to two. These changes were significant deviations from the conditions assumed during the early planning stages.

Moreover, additional water quality requirements resulted in modifications to the drainage design to separate flows for water quality treatment. In addition, the quantity of asphalt concrete increased as identified once detailed ground surveys became available. Surveys revealed the need to correct the roadway cross-slopes leading into the curve. This detailed survey information was not available when the project was first being planned and initially estimated.

LESSONS LEARNED:

On projects where a significant amount of work relies on the understanding of subsurface conditions, geotechnical testing should be scheduled and accomplished soon after project programming, so that assumptions made during project planning can be validated and cost estimates updated earlier. In addition, the level of contingency estimated in the planning and programming project cost should be evaluated and adjusted accordingly based on project-specific risk factors, unknowns, assumptions, and the likelihood of risks occurring.

FUNDING OPTIONS:

OPTION A: Approve this request, as represented above, for $2,339,000 to allow this project to be advertised.

OPTION B: Deny this request and direct the Department to adjust the project to remain within the programmed amount. The Department has considered this option and determined that reducing the scope of work on this project, and executing another project to complete the deleted work later, would result in greater costs and more disruption to the traveling public.

RECOMMENDED OPTION

The Department recommends that this request for $2,339,000 as presented in Option A above, be approved to allow this project to be advertised.