State of California
DEPARTMENT OF TRANSPORTATION

California State Transportation Agency

Memorandum

TAB 77

To: CHAIR AND COMMISSIONERS
CALIFORNIA TRANSPORTATION COMMISSION

CTC Meeting: October 8, 2013

Reference No.: 2.5e.(1) - **REVISED**
Action Item

PASSED BY CTC OCT - 8 2013 CALIFORNIA TRANSPORTATION COMMISSION

From: STEVEN KECK
Acting Chief Financial Officer

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Division Chief
Transportation Programming

Subject: **ALLOCATION FOR SUPPLEMENTAL FUNDS FOR PREVIOUSLY VOTED PROJECT RESOLUTION FA-13-07**

RECOMMENDATION:

The California Department of Transportation (Department) recommends that the California Transportation Commission allocate an additional $1,470,000 for one State Highway Operation and Protection Program (SHOPP) project identified below.

ISSUE:

Additional funds are needed for one previously approved project in order to complete construction.

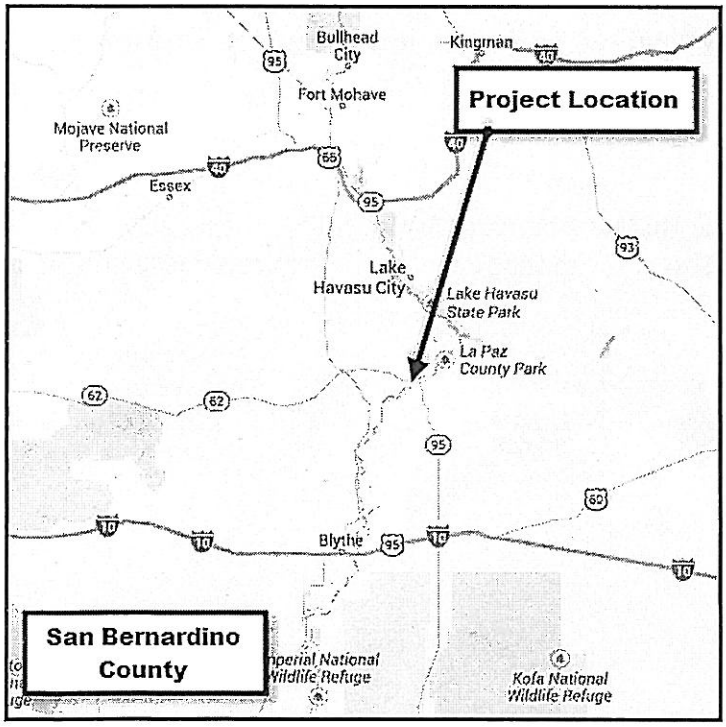
RESOLUTION:

Resolved, that $1,470,000 be allocated from the Budget Act of 2013, Budget Act Items 2660-302-0042 and 2660-302-0890 to provide additional funds to allow the following project to complete construction.

Project	Dist-Co-Rte	Original Allocated Amount	Current Allocation	Allocation Adjustment	Revised Allocation	% Increase Above Current Allocation
1	08-SBd-62	$12,047,000	$13,008,000	$1,470,000	$14,478,000	11.3%

Project # Allocation Amount Recipient County Dist-Co-Rte Postmile	Location Project Description Reason for Supplemental Funds	PPNO Program Funding Year Item # Fund Type Program Codes Project ID Adv Phase EA	State Federal Current Amount by Fund Type	State Federal Additional Amount by Fund Type	State Federal Revised Amount by Fund Type
2.5e.(1) Supplemental Funds for Previously Voted Projects					**Resolution FA-13-07**
1 $1,470,000 Department of Transportation SANBAG San Bernardino 08-SBd-62 142.2/142.9	In Earp, at the Colorado River Bridge (No. 54-1000). Outcome/Output: Replace one bridge to maintain the structural integrity. Supplemental funds needed to complete construction. Total Revised Amount: ~~$14,208,000~~ **$14,478,000**	08-0227F SHOPP 2008-09 302-0042 SHA 302-0890 FTF 20.20.201.111	$304,000 $12,704,000		$304,000 $12,704,000
		SHOPP 2012-13 302-0042 SHA 302-0890 FTF 20.20.201.111 0800000637 4 378704		$29,000 $1,441,000	$29,000 $1,441,000

PROJECT LOCATION:



PROJECT DESCRIPTION:

This project is located at the Colorado River Bridge (Bridge No. 54-1000) on Route 62 in San Bernardino County, California and La Paz County, Arizona. The bridge crosses the Arizona state line at mid-river. The project limits extend from Parker Dam Road in Earp, California to 3rd Street in Parker, Arizona. The project replaces the existing bridge due to bridge foundation scour and streambed degradation. Since the original construction of the bridge, the existing river streambed has dropped approximately 20 feet. This change in channel grade has resulted in a loss of lateral support and embedment for the existing bridge foundation piles.

FUNDING STATUS:

This project was voted in April 2010, for $12,047,000 and includes equal funding, by cooperative agreement, from the State of Arizona. The project was awarded February 15, 2011, for $26,016,000. The current $13,008,000 allotment of California SHOPP funds includes a $961,000 G-12 allocation adjustment at time of award. An additional $1,470,000 for California's share of supplemental funds are needed to complete construction. This results in an overall increase of 11.3 percent over the current SHOPP allocation. The cost increase has been discussed with the Arizona Department of Transportation (ADOT), and ADOT has agreed to proceed to completion with their 50 percent share. The project is approximately 85 percent complete, with half-width of the new structure complete and open to temporary staged traffic. Full construction completion is anticipated in February 2014.

Several Notice of Potential Claims have been filed by the contractor, but the final amount of these claims has not been determined. All claims will go through the Dispute Resolution Board (DRB) process; however, if rulings by the DRB are not in favor of the Department, additional supplemental funds might be required to close-out the contract.

REASONS FOR COST INCREASE:

An additional $1,470,000 for California's share of the project is needed to complete the construction contract. Several contract change orders (CCO's) as described below require additional funds for the project to complete construction.

The first is due to differing site conditions encountered during removal of the existing bridge piers within the river waterway. The alignment of the existing bridge overlaps that of the new bridge requiring its removal before the second half of the new structure can be built. However, removal of the existing bridge piers could not be done as planned because previously unknown concrete over-pour areas and rock rip-rap prevented coffer dam installations. These differing site conditions were the result of emergency repair work conducted in 1992 on the original structure foundations, but not clearly documented in the final as-built plans. This change added an additional $650,000 to the state's cost of this project.

The second CCO is a change to the pile design at one bridge abutment. The original design called for cast-in-drilled-hole type piles at both abutments, but soil caving of the drilled holes at one abutment prevented this operation from successfully proceeding. A change, at additional cost, to cast-in-steel-shell type piles allowed pile shells to be successfully driven through the soil instead. This change added an additional $300,000 to the state's cost of this project.

The third CCO is a result of the need to maintain pedestrian access across the river during construction. The existing structure did not have formal sidewalks, but pedestrians used a narrow raised curb that was part of the bridge barrier rail. The final configuration for the new structure includes a sidewalk; however, the contract staging plans did not permit pedestrians in the interim. After construction started, it was recognized that a number of pedestrians were regularly crossing the river. A CCO was required to cantilever pedestrian walkways off the temporary bridge false work to safely accommodate these users. This change added an additional $220,000 to the state's cost of this project.

In addition, CCOs are anticipated for changes to reinforcing steel in a retaining wall, removal of rock rip-rap, and for time related overhead. These changes added an additional $300,000 to the state's cost of this project.

As a result of the contract changes and over-runs, the Department has implemented modifications to its current practices. Future investigations will include hydrographic surveying within the waterways for bridge elements that are covered by water. The Department could then better ensure plans are accurately depicting existing contours and clearly state, in the contract specifications, what subsurface conditions may be encountered. Underwater surveying technology continues to develop and is monitored by the Department for potential use on future projects. Furthermore, continued emphasis will be placed on as-built documentation of field changes and conditions, and accommodating pedestrians within projects will also continue to be emphasized.

FUNDING OPTIONS:

OPTION A: Approve this request as presented above for $1,470,000 to allow this project to complete construction.

OPTION B: Deny this request and direct the Department to revise the scope to stay within the allocated budget amount. The Department 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 of $1,470,000, as presented in Option A above, be approved to complete construction of the project.