

Memorandum

To: CHAIR AND COMMISSIONERS

CTC Meeting: July 25-26, 2007

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

From: CINDY McKIM
Chief Financial Officer

Prepared by: Rachel Falsetti
Acting Division Chief
Transportation Programming

Subject: **ALLOCATION FOR SUPPLEMENTAL FUNDS FOR PREVIOUSLY VOTED PROJECTS
RESOLUTION FA-07-01**

RECOMMENDATION:

The Department of Transportation (Department) recommends that the California Transportation Commission (Commission) approve Resolution FA-07-01 allocating an additional \$2,300,000 for two State Transportation Improvement Program (STIP) projects identified below. The Department further recommends the Commission approve the allocations contingent upon passage of the FY 2007-08 Budget Act.

ISSUE:

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

RESOLUTION:

Resolved, that \$2,300,000 be allocated from Non-Budget Act Item 2660-801-3008 to provide additional funds for the projects identified below, contingent upon passage of the FY 2007-08 Budget Act.

<u>Project</u>	<u>Dist-Co-Rte</u>	<u>Original Vote/G11 Amount</u>	<u>Original Award Amount</u>	<u>Current Allocation</u>	<u>Allocation Adjustment</u>	<u>Revised Allocation</u>	<u>% Increase Above Current Allocation</u>
1	03-Pla-49	\$5,360,000	\$5,535,000	\$6,096,000	\$1,100,000	\$7,196,000	18%
2	04-CC-80	\$19,000,000	\$21,070,000	\$21,070,000	\$1,200,000	\$22,270,000	5.7%

PROJECT DESCRIPTION:

The project is located on Route 49 in Auburn, from Route 80 to Dry Creek Road. This project provides operational improvements at various intersections and along a stretch of roadway bordered by commercial development and many public and private road connections. The route has a long history as a corridor for utilities in addition to its transportation uses. On-going planned underground utility relocations taking place as a result of the project, as well as project construction activities, have revealed unclaimed or abandoned utilities with no records of their location or ownership. The project has been complicated by the discovery that some of the known utilities on record do not match expected field conditions. In addition, project excavation activities have revealed contamination from abandoned underground fuel tanks and other toxic substances. These items have presented challenges during construction to positively identify existing utilities, develop and implement relocation plans, determine actual extent of hazardous waste contamination, and develop mitigation strategies.

FUNDING STATUS:

The project was voted in September 2005 for \$5,260,000 in RIP funds and \$100,000 in Transportation Enhancement (TE) funds. It was awarded in November 2006 for \$5,535,000 using supplemental G-12 funds. A cooperative agreement is in place with the County of Placer for a \$608,000 contribution in construction funding from both county and city sources. A supplemental G-12 amount of \$561,000 was granted in April 2007 to minimize immediate adverse project impacts. That amount paid for additional utility and hazardous waste investigation work at the site, aerially deposited lead and other contaminated material removal, changes to the project due to additional utility conflicts, and right of way delay payments to the contractor due to these issues. The project is approximately 20 percent complete. An additional \$1,100,000 in supplemental funds is needed to complete the on-going construction contract and results in an overall increase of 18 percent over the current allocation. In addition, Placer County Board of Supervisors passed a resolution on June 26, 2007, allocating \$196,000 in local funds to provide additional funds for the project.

REASONS FOR COST INCREASE:

The reasons for the cost increase are rooted in hazardous waste issues and utility conflicts. These items have resulted in cost increases in the form of hazardous waste investigation and remediation, right of way delay, contractor overhead, contractor inefficiencies, miscellaneous contract change orders, and contingency re-establishment.

The magnitude of unknown hazardous waste issues in the field are higher than what was anticipated based on the information available during the project design phases. Hazardous materials found at the site include aerially deposited lead (from vehicle emissions), petroleum based contamination, and naturally occurring asbestos. Several of the petroleum based hazardous waste locations are abandoned and no records of their existence or ownership were available to identify issues until discovered during construction activities. The cost of investigation and handling hazardous waste materials is above the exhausted contingency funds and G-12 funds originally available for the project.

Utility relocation work has led to extensive delays to the contract work. The utility companies doing the relocation work planned to be clear of the project area in time for a March 2007 construction contract start date. However, limited utility company resources and new conflicts with unknown utilities delayed relocation completion. Due to physical constraints, relocation of a majority of these utilities is also dependent upon one another. In the meantime, the contractor has been delayed from

completing the controlling items of work, resulting in increased contractor overhead costs and right of way delay costs to the Department.

The contractor has been forced to work in a piecemeal fashion at available work areas. Delays from utility relocation, identification of previously unknown utilities, and handling of discovered hazardous waste issues have not allowed the contractor to perform work according to planned operations and sequence. The resident engineer has also suspended work in areas of the project until decisions can be made regarding the scope of work to be completed based on the available funding. These delays have resulted in inefficiencies to the contractor by moving planned activities from one location to another, constructing smaller pieces of work, and double handling of materials. These actions are expected to continue for the remainder of the project as a result of the piecemeal work that has occurred to date.

New utility conflicts or unknown utility relocations have resulted in contract change orders for several project features. These contract change orders have been issued at additional cost. Among these are changes to drainage systems, electrical revisions, and sidewalk modifications. These changes have resulted in costs beyond the exhausted contingencies and supplemental G-12 funds originally available for the project.

The utility work impacting and controlling the contractor's operations has been completed. With most of the initial ground work completed, the changes to the project have already been identified. However, the potential for additional change orders throughout the rest of construction calls for the re-establishment of a five percent contingency amount for the project to handle unforeseen future necessary changes.

FUNDING OPTIONS

OPTION A: Approve this request for supplemental funds, as presented above, for \$1,100,000 to complete the project as currently scoped.

OPTION B: Deny this request, direct the Department to revise the project to remain within the allocated amount and remove elements from the scope of work. 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.

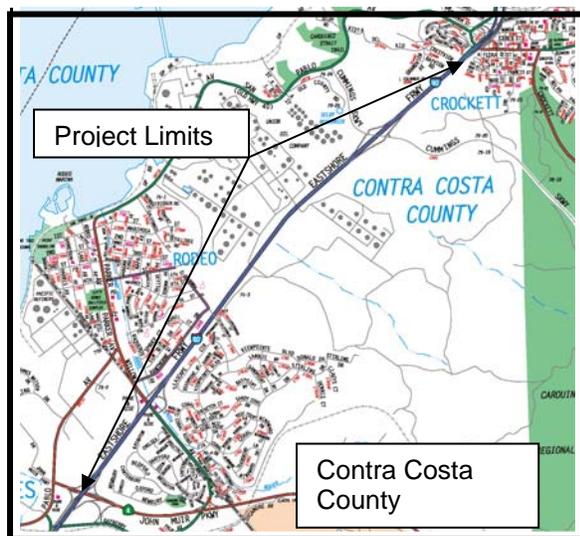
RECOMMENDED OPTION

The Department recommends that this request of \$1,100,000, as presented in Option A above, be approved to allow the Department to complete construction of this project.

Project # Allocation Amount Recipient County Dist-Co-Rte Postmile	Location Project Description Reason for Supplemental Funds	EA PPNO Program Year Budget Year Prgm Codes Program	State Federal Current Budget Amount	State Federal Additional Allocation	State Federal Revised Total Amount
2.5e.(1) Supplemental Funds for Previously Voted Projects					Resolution FA-07-01
2 \$1,200,000 Department of Transportation MTC Contra Costa 04N-CC-80 10.0/12.7 (16.1/20.4)	From SR 4 to Carquinez Bridge. Additional lanes for HOV to link westbound HOV lane west of Route 4 with the westbound HOV lane included in the Carquinez Bridge. Supplemental Funds are needed to complete construction.	263701 04-0261F RIP / 05-06 2004-05 301-0042 301-0890 20.20.075.600	\$630,000 \$4,010,000		\$630,000 \$4,010,000
	Original Allocation: RIP \$ 4,180,000 IIP \$14,820,000	IIP / 05-06 2004-05 301-0042 301-0890 20.20.025.700	\$2,220,000 \$14,210,000		\$2,220,000 \$14,210,000
	G-12 to Award: RIP \$ 460,000 IIP \$ 1,610,000	RIP / 05-06 2007-08 801-3008 20.20.075.600		\$264,000	\$216,000
	Total: \$21,070,000	IIP / 05-06 2007-08 801-3008 20.20.025.700		\$936,000	\$984,000
	Contingent upon passage of the FY 2007-08 Budget Act.		\$21,070,000	\$1,200,000	\$22,270,000

RECOMMENDATION:

The Department recommends that this request for \$1,200,000 be approved to allow the Department to complete construction of this project.



PROJECT DESCRIPTION:

The project will extend the westbound Route 80 High Occupancy Vehicle (HOV) lane from Cummings Skyway to the Route 4/80 interchange in Contra Costa County. This project will close an existing HOV lane gap by providing a continuous HOV facility from the Carquinez Bridge to the San Francisco-Oakland Bay Bridge. The project scope includes westbound widening for HOV lane, resurfacing existing lanes, replacing one bridge, widening one bridge, and constructing a retaining wall.

FUNDING STATUS:

The project was programmed in the 2004 STIP for \$24,189,000. It was voted for \$19,000,000 in July 2005, for a savings of \$5,189,000 below the programmed amount. The project was awarded January 2006 for \$21,070,000 using supplemental G-12 funds. An additional \$1,200,000 in supplemental funds is needed to complete construction. This request for supplemental funds results in an overall increase of 5.7 percent over the current allocation. Construction is scheduled to be completed by the end of October 2007.

REASONS FOR COST INCREASE:

The project cost increase is due to unanticipated hard rock material first encountered while constructing a 433-foot long, soil nail retaining wall located between Willow Avenue and State Route 4. The soil in this area was characterized in the contract plans by several test borings (5 total) evenly spaced along the planned face of the retaining wall. However, once excavation began, the native material excavated was found to have compressive strength 6 to 12 times greater than that indicated in the log of test borings. The seams of nearly vertical hard-rock material have been discovered to occur between the boring locations. Specialized equipment was necessary to work within the harder material. Work within the hard-rock has been completed at the retaining wall location, at the slope excavation location, and at the roadway widening area.

The Department realized some item savings by decreasing the retaining wall height and changing the wall aesthetic treatment; however, impact to project time was still significant. Delays were attributed to: 1) the need to develop and approve a new work plan for the wall construction after the new conditions were encountered; 2) changes required to the stage construction drawings; 3) the need to mobilize specialized hard rock equipment; and 4) work within the harder material progressed at a slower rate resulting in added time to the original assumptions.

Delays in completion of the retaining wall pushed some on-ramp and off-ramp work into the winter season. As a result, the Department directed the contractor to delay work on these ramps until the spring season. The concern was that wet and cold weather would slow construction activities and result in greater impacts to the traveling public because of extended ramp closures. Winter weather slows operations by saturating sub-grades and creates unacceptable conditions for paving and striping operations. The decision to delay the ramp work has prevented the contractor from doing this work concurrently with other ongoing operations. This has led to a direct increase in the length of the project construction period and contractor overhead expenses.

In total, construction completion has been delayed approximately nine months. Besides the direct project cost for additional equipment and labor to work within the hard-rock material, the delays have led to increased contractor overhead expenses, reduced work efficiency, and cost escalation claims. Anticipated cost escalation claims are expected for asphalt concrete price index fluctuation, material

escalation, increased overhead, and labor rate escalation after July 2007. Additional costs have been incurred by performing portions of this work one year beyond what was anticipated.

FUNDING OPTIONS

OPTION A: Approve this request for supplemental funds, as presented above, for \$1,200,000 to complete the project as currently scoped.

OPTION B: Deny this request, direct the Department to revise the project to remain within the allocated amount and remove elements from the scope of work. 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 of \$1,200,000, as presented in Option A above, be approved to allow this project to complete construction.