

M e m o r a n d u m **TAB 63**

To: CHAIR AND COMMISSIONERS
CALIFORNIA TRANSPORTATION COMMISSION

CTC Meeting: August 15-16, 2018

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

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Subject: **ALLOCATION REQUEST FOR PROJECT WITH COSTS THAT EXCEED THE PROGRAMMED AMOUNT BY MORE THAN 20 PERCENT (PPNO 04-8060A/EA 04-4G560 – SOLANO COUNTY) RESOLUTION FP-18-12**

UPDATE: The California Department of Fish and Wildlife issued the Incidental Take Permit (ITP) for the project in June 2018 with the condition of a security deposit as funding assurance to ensure successful completion of mitigation and any follow-up compliance activities. The mitigation also includes 10 years of “off-site” habitat management, monitoring and reporting on the status of compensatory habitat. Caltrans is legally precluded from transferring funds “in trust” to another entity as security. On August 10, 2018, after extensive negotiations with the California Department of Fish and Wildlife, it was agreed that the ITP’s security deposit condition would be satisfied by a separate mitigation “child” project to be split from this “parent” project at the time of allocation.

ISSUE

Should the California Transportation Commission (Commission) approve the California Department of Transportation (Department) allocation request for \$7,458,000 for the State Highway Operation Protection Program (SHOPP) Roadside Safety Improvement project (PPNO 8060A) on State Routes (SR) 12 and 113 in Solano County?

RECOMMENDATION

The Department recommends that the Commission approve an allocation of ~~\$7,458,000~~ **\$7,398,000** for the SHOPP Roadside Safety Improvement project (PPNO 8060A) on SR 12 and SR 113 in Solano County.

Dist-Co-Rte	Construction Component	Programmed Amount	Program Adjustment	Requested Funds	% Over Programmed Amount
04-Sol-12/113	Capital	\$4,671,000	\$1,865,000	\$6,536,000	39.9 %
	Support	\$ 468,000	\$ 454,000 \$ 394,000	\$922,000 — \$862,000	97.0% 84%
Total Allocation Request				\$7,458,000 \$7,398,000	

PROJECT DESCRIPTION

This is a safety project which will reduce the number and severity of collisions at the existing high-speed and high-truck traffic intersection of SR 12 and SR 113 near the city of Rio Vista in Solano County. SR 12 is a major east-west corridor between Interstate 80 and Interstate 5, and intersects with SR 113/Birds Landing Road, forming a four-legged intersection controlled by two-way stop signs.

The project is within an environmentally sensitive area, with creek crossings on both SR 12 and SR 113, requiring an Incidental Take Permit (ITP) for the California Tiger Salamander (CTS) from the California Department of Fish and Wildlife (CDFW).

Both SR 12 and SR 113 belong to the Terminal Access Network, under the Surface Transportation Act of 1982, which is a highway network that accommodates trucks longer than California standard legal length.

SR 12 is also a major Department of Defense truck route that serves as a key corridor for shipments in and out of Travis Air Force Base. SR 12 has an 11 percent truck volume and an Annual Average Daily Traffic (AADT) of 15,000 vehicles, which current traffic data indicates is significantly greater than the statewide average accident rate.

This project features a single-lane roundabout with an approach to splitter islands, center truck apron, aesthetically treated center island, and advance flashing beacons. The Department conducted the Intersection Control Evaluation (ICE) and determined the single-lane roundabout alternative to be more effective operationally than the signalized intersection design for the following reasons:

1. Increased Safety

- Fewer vehicle conflict points.
- Fewer and less severe collisions due to reduced speed differential.
- Less maintenance worker exposure.

2. Operational Performance

- Higher capacity.
- Less delay.

3. Maintenance

- Lower overall life cycle cost.
- Fewer electrical system components (signal heads, controller cabinet, etc.).
- Less operations and maintenance cost without routine inspections.

An independent consultant was hired by the Department to further review the design to ensure the safety of the high-speed traffic of the roundabout. The consultant's recommendation was to modify the design to a larger roundabout utilizing additional safety measures.

REASON FOR INCREASE

The needed construction capital cost increase is due to modifying the initial standard roundabout to a larger roundabout footprint within the existing right-of-way, as recommended by the consultant, and the additional safety traffic design measures associated with the larger roundabout. The needed

construction support cost increase is due to the additional working days needed to accommodate construction staging and to address environmental permit requirements.

Construction Capital

Since SR12 is a legislatively designated Safety Corridor with high truck volumes, the Department convened a special peer review process which included outside experts, who recommended modifying the initial design to a larger roundabout footprint to ensure safer operations for high truck volumes and the high-speed approaches to the SR 12 and SR 113 junction.

1: Enlarge Facility (\$590,000)

- Increase the splitter islands to 200 feet longer and 15 feet wider to reduce approach speeds to operationally safe range.
- Increase the circulatory lane width to 20 feet to better accommodate truck turning movements of oversized trucks.

2: Enhance Safety Visual Contrast (\$590,000)

- Install special rock-scape treatment for all four approach splitter islands and a center Island to provide visual contrast to alert motorists of an approaching roundabout and the need to slow down.
- Minimize maintenance with high functional, sustainable design.

3: Add Advance Traffic Warning and Attenuation Devices (\$385,000)

- Install additional warning beacons at greater distances in advance of the roundabout to provide more time for motorists to react and reduce speeds.
- Install special attenuation end treatments for bridge rails at two creek crossings within the approaches to the roundabout.

4: Provide 10 Percent Contingency (\$300,000)

- Address any potential hazardous materials and buried objects associated with excavations.
- Provide for additional traffic control measures and construction zone enhanced enforcement to address high traffic conditions and extended construction staging.

Construction Support

Additional construction support funding is needed due to expanded work footprint, longer staging, and compliance with environmental permits.

CONSEQUENCES

The Department has determined that if this allocation request for ~~\$7,458,000~~ **\$7,398,000** is not approved, the safety improvements will be delayed and the Department would have to reprogram this SHOPP Safety Improvement Project. Reprogramming would likely occur at higher cost due to the additional support needs and escalation based on the new construction schedule in future years.

RESOLUTION

Resolved, that \$6,536,000 in Construction Capital be allocated from the Budget Act of 2018, Budget Act Items 2660-302-0890 and 2660-302-0042 and ~~\$922,000~~ **\$862,000** in Construction Support to provide funds to advertise the following project.

Attachment

2.5 Highway Financial Matters

TAB 63 - REVISED

Project No.	Location	PPNO Program/Year Phase	Budget Year	Amount by Fund Type
Allocation Amount	Project Description	Prgm'd Amount	Item # Fund Type	
County	Project Support Expenditures	Project ID	Program Code	
Dist-Co-Rte		Adv Phase		
Postmile		EA		
2.5d.(1) Allocations for Projects with Cost Increase Greater than 20 Percent				
Resolution FP-18-12				
1	Near Rio Vista, at the intersection of Route 12 and	04-8060A	001-0042 SHA	\$86,000
\$7,398,000	Route 113; also, on Route 113 from PM 0.0/0.2.	SHOPP/17-18	001-0890 FTF	<u>\$776,000</u>
	<u>Outcome/Output:</u> Improve safety and operations by	CON ENG	20.10.201.010	\$862,000
Solano	constructing a single lane roundabout. This project will	\$468,000		
04-Sol-12	reduce the number and severity of collisions.	CONST	2018-19	
19.2/19.4		\$4,671,000	302-0042 SHA	\$654,000
	<u>Performance Measure:</u>	0412000504	302-0890 FTF	<u>\$5,882,000</u>
	Planned: 9, Actual: 9 Collision(s) reduced	4	20.20.201.010	\$6,536,000
		4G560		
	Preliminary			
	<u>Engineering</u>	<u>Budget</u>	<u>Expended</u>	
	PA&ED	\$1,359,000	\$1,267,281	
	PS&E	\$1,100,000	\$899,476	
	R/W Sup	\$100,000	\$14,965	
	(CEQA - MND, 1/12/2017; Re-validation 6/29/2018)			
	(NEPA - CE, 12/26/2016; Re-validation 6/29/2018)			
	(Future consideration of funding approved under			
	Resolution E-17-22; May 2017.)			
	<u>Program "child" project (mitigation) in construction</u>			
	<u>support in FY 19-20 by splitting \$60,000 from</u>			
	<u>construction support from "parent" project</u>			
	<u>EA 04-4G560/PPNO 8060A.</u>			