

## MEMORANDUM

To: CHAIR AND COMMISSIONERS  
CALIFORNIA TRANSPORTATION COMMISSION

CTC Meeting: August 16-17, 2023

From: STEVEN KECK, Chief Financial Officer

Reference Number: 2.6g.(8), Action Item

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Division of Local Assistance

Subject: **SUPPLEMENTAL FUNDS ALLOCATION FOR A TRANSIT AND INTERCITY RAIL CAPITAL PROGRAM – (2018:15) DIESEL MULTIPLE UNIT VEHICLE TO ZERO- OR LOW-EMISSION VEHICLE CONVERSION (ZEMU SUPPORTING INFRASTRUCTURE) COMPONENT (PPNO CP034) RESOLUTION TIRCP 2324-12S**

### **ISSUE:**

Should the California Transportation Commission (Commission) approve a request for an additional \$5,131,000 for the Construction (CON) phase of the Transit and Intercity Rail Capital Program (TIRCP) (2018:15) Diesel Multiple Unit Vehicle to Zero- or- Low- Emission Vehicle Conversion (ZEMU Supporting Infrastructure) component (PPNO CP034), in San Bernardino County?

### **RECOMMENDATION:**

The California Department of Transportation recommends that the Commission approve for an additional \$5,131,000 for the CON phase of the TIRCP (2018:15) Diesel Multiple Unit Vehicle to Zero- or- Low- Emission Vehicle Conversion (ZEMU Supporting Infrastructure) component (PPNO CP034), in San Bernardino County.

### **BACKGROUND:**

In October 2021, the Commission approved a total of \$1,800,000 for fueling facilities for the (2018:15) Diesel Multiple Unit Vehicle to Zero- or- Low- Emission Vehicle Conversion (ZEMU Supporting Infrastructure) component (PPNO CP034). The supplemental allocation of \$5,131,000 is to complete construction of the hydrogen fueling station.

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## **PROJECT LOCATION AND DESCRIPTION**

The overall (2018:15) Diesel Multiple Unit Vehicle to Zero- or- Low- Emission Vehicle Conversion (ZEMU Supporting Infrastructure) component (PPNO CP034), is in San Bernardino County. The project component provides for the installation of a hydrogen fueling station. The overall project will advance the technology to transition diesel-powered vehicles to zero- or low-emission vehicles that can run together with locomotive-hauled coaches and freight on existing heavy rail infrastructure. The project promotes clean vehicle technology, reduced greenhouse gas emissions, reduced vehicle miles traveled from automobile trips, and directly benefits priority populations along the service corridor. The San Bernardino County Transportation Authority (SBCTA) selected a Fast Light Rail and Regional Transit H2 vehicle powered by hydrogen fuel cells, featuring onboard hydrogen tanks as the preferred technology.

## **FUNDING STATUS**

This project component currently has \$1,800,000 programmed for its CON phase. However, an additional \$5,131,000 is needed to complete the phase. In 2023, TIRCP Cycle 6 awarded an additional \$15,772,000 from the General Fund for the overall (2018:15) Diesel Multiple Unit Vehicle to Zero- or- Low- Emission Vehicle Conversion project, of which \$5,131,000 is now programmed to the CON phase for the ZEMU Supporting Infrastructure component as part of the TIRCP Allocation Plan Information item presented at the May 2023 commission meeting.

## **REASON FOR COST INCREASE**

The estimated cost for the (2018:15) Diesel Multiple Unit Vehicle to Zero- or- Low- Emission Vehicle Conversion (ZEMU Supporting Infrastructure) component (PPNO CP034), increased based on the unforeseen costs to the hydrogen fueling station.

In 2021, SBCTA did not have defined performance requirements for a hydrogen fueling station to fuel the zero-emission vehicle unit ZEMU vehicle. SBCTA's basis of cost estimates to determine the amount of its initial allocation in October 2021, for the hydrogen fueling station was based on light duty hydrogen fueling stations and other systems which SBCTA scaled to the projected need of fueling one pilot vehicle. Since there is not a single rail hydrogen fueling station application for comparison, the Request for Proposal included the best solution that would possibly meet the required performance and allow for scalability in the future. In August 2022, SBCTA received the proposal for the hydrogen fueling system, with the cost of \$6.5 million, which was three times the initial estimate of 2021. Due to the increase, estimated adjustments were made and it was concluded that additional funding was necessary.

The overall project is of statewide significance for it lays the groundwork for conversion of diesel rail services to zero-emission for commuter and intercity passenger rail services statewide.

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**CONSEQUENCES**

If this allocation request for supplemental funds is not approved, the SBCTA will not be able to complete construction of the hydrogen fueling station and will delay the overall project until additional funding can be secured. At this time, the project component is projected to be completed by March 2025.

**FINANCIAL RESOLUTION:**

Be it Resolved, that an additional \$5,131,000 be allocated from the Budget Act of 2022, Budget Act Item 2660-301-0046R to complete the CON phase of the (2018:15) Diesel Multiple Unit Vehicle to Zero- or- Low- Emission Vehicle Conversion (ZEMU Supporting Infrastructure) component (PPNO CP034), in San Bernardino County.

Attachment

## 2.6 Mass Transportation Financial Matters

Project #	Project Title	PPNO Program Funding Year	State Federal	State Federal	State Federal
Allocation Amount	Location	Item #	Current Amount	Additional	Revised
Recipient	Project Description	Fund Type	by Fund Type	Amount by	Amount by
<u>RTPA/CTC</u>		Program Codes		Fund Type	Fund Type
District-County		Project ID			
		Adv Phase			
<b>Supplemental Allocation - Transit and Intercity Rail Capital Program</b>					
<b>(SB 1 Augmentation for PTA)</b>					
<b>Resolution TIRCP-2324-12S</b>					
<b>2.6g.(8)</b>					
\$5,131,000	<b>(2018:15) Diesel Multiple Unit Vehicle to Zero- or Low-Emission Vehicle Conversion (ZEMU Supporting Infrastructure).</b>	08-CP034			
San Bernardino	Supplemental Allocation for construction of supporting infrastructure (hydrogen fueling facility) for the converted zero-emission vehicles on the Redlands Passenger Rail Corridor.	TIRCP/2020-21			
County	Supplemental funds are needed to complete construction.	CONST			
Transportation		301-0046R	\$798,000		\$798,000
Authority		GGRF			
<u>SBCTA</u>		30.20.301.100			
08-San Bernardino	CEQA - FEIR, 09/02/2021	TIRCP/2020-21			
	Future consideration of funding approved under Resolution E-21-98; October 2021.	CONST			
		101-0046	\$1,002,000		\$1,002,000
		PTA			
		30.10.030.200			
	Total revised amount \$6,931,000	TIRCP/2022-23			
		CONST			
	The initial allocation of \$1,800,000 CON for the ZEMU Supporting Infrastructure was approved under Resolution TIRCP-2122-06; October 2021. Upon approval of this request the total allocation amount for the CON phase of the ZEMU Supporting Infrastructure will be \$6,931,000.	301-0046R		\$5,131,000	\$5,131,000
		GF			
		30.20.301.100			
		0023000211			
		S			
	In January 2023, Project 2018:15 was awarded \$15,772,000 Cycle 6 General Fund Augmentation funding.				