

SB 1 (Chapter 5, Statutes of 2017) State of Good Repair Program Proposed Project Descriptions

Hydrogen Fueling Station at the Garden Grove Bus Base

Since the Orange County Transportation Authority's (OCTA) pilot program to test zero-emission bus (ZEB) technology in early 2020, the pilot was expanded in 2023 with the introduction of ten battery-electric buses operating from the Garden Grove Bus Base. OCTA is now underway with expanding the ZEB fleet with the addition of 40 new fuel-cell electric buses (FCEB) along with the installation of a hydrogen fueling station at the Garden Grove Bus Base. The project will install a liquid hydrogen fueling station, FCEB de-fueling appurtenances, hydrogen detection in bus maintenance facilities, metered electrical infrastructure, standby power generator, FCEB maintenance platform, and related work. The proposed updated funding plan based on bids received for this work is provided in the table below:

Existing Funding (\$000s)	LCTOP	TIRCP	FY25/26 SGR	FY26/27 SGR	SB 125 Accrued Interest	Estimated Total
CON	\$8,914	\$3,086	\$4,505	\$3,651	\$424	\$20,580
CON CM	\$750	\$750	-	-	-	\$1,500
Total	\$9,664	\$3,836	\$4,505	\$3,651	\$424	\$22,080

CM – Construction Management

CON – Construction

FY – Fiscal Year

LCTOP - Low Carbon Transit Operations Program

SGR – SB 1 State of Good Repair Program

SB 125 – SB 125 (Chapter 54, Statutes of 2023) Transit Program

TIRCP – Transit and Intercity Rail Capital Program

Santa Ana Bus Base Hydrogen Fueling Replacement and Capacity Expansion

The Santa Ana Bus Base Hydrogen Fueling Replacement and Capacity Expansion Project will modernize the existing hydrogen fueling system at the Santa Ana Bus Base, located at 4301 W. MacArthur Boulevard in the City of Santa Ana, to support OCTA's growing fleet of zero-emission hydrogen fuel-cell electric buses. The project includes replacement of the existing fueling system with new hydrogen storage, compression, vaporization, dispensing, hydrogen detection, emergency shutdown, and supporting facility infrastructure.

The upgraded fueling station will increase capacity to support 40 additional hydrogen fuel-cell electric buses currently on order, expanding the fleet from ten to 50 buses. The project will improve fueling reliability, reduce hydrogen fuel losses, enhance operational efficiency, and strengthen the safety and reliability of the bus base. It also supports OCTA's goal of transitioning to a 100 percent zero-emission bus fleet by 2040, while reducing greenhouse gas emissions and improving air quality throughout Orange County.

The proposed updated funding plan, based on the bids received for this work, is provided in the table below:

Proposed Funding (\$000s)	FY26/27 SGR	FY27/28 SGR	Pending Discretionary and Formula Grants	Estimated Total
CON	\$3,469	\$4,701	\$10,833	\$19,003