

To: Operations & Scheduling Committee

Date: 5/29/2025

From: J. Scott Mitchell, Chief Operating Officer

Reviewed by: WC.

SUBJECT: Fuel Cell Project

Background:

Contra Costa Transportation Authority (CCTA) applied on March 3, 2022, as part of I-680 Express Bus Program for a TIRCP Cycle 5 (Transit and Intercity Rail Capital Program). It was awarded in July of 2022. CalSTA provided Federal Money (FHWA to FTA Transfer) for \$13,182,500 to LAVTA and County Connection, split equally, for Hydrogen Fueling Infrastructure.

County Connection's portion of funds are \$6,591,250. Staff planned to procure and install a temporary hydrogen fueling station at the Concord yard to support three (3) hydrogen fuel cell buses to provide express bus service between the Martinez Amtrak station and the Dublin BART station.

Issues:

1. There is currently only one bus manufacturer building fuel cell buses which will limit options for competitive pricing for the vehicles. Current cost for a 40-foot fuel cell bus is \$1.6 million each.
2. Performance of fuel cell buses for the service may be problematic. Because of the uphill grade from Dublin to Martinez, the buses cannot maintain a speed of 65 miles per hour for the entire distance.
3. The current cost of hydrogen is approximately four times the cost of renewable diesel and there are a limited number of vendors to supply the fuel. Some agencies are leasing a fuel station, but that requires them to purchase fuel through one vendor regardless of fuel price cost.
4. Fuel Station: Because of the small number of buses County Connection will be fueling, the station will be venting between 30 to 50 percent of the fuel that is purchased, increasing the fuel cost per mile by that percentage. The fuel station will require more space than staff had anticipated. The new location will add to the cost of the project.
5. Staff Training: Fuel cell buses require meticulous maintenance because of the high pressure that hydrogen needs to be stored at. There are no adequate training resources available, at this time, for the maintenance staff to be able to maintain these buses.
6. The Maintenance Facility will require upgrades to be able to safely maintain buses that use high pressure lighter than air fuel.
7. County Connection received Grants to build the fuel station and buy the buses. There are not any additional funds identified to cover the increased costs to operate these buses.

Financial Implications:

None at this time.

Recommendation:

This item is for information only to begin discussion with the Board of Directors on how to move forward on the Fuel Cell Project.

Action Requested:

None, for information only.

Attachments:

None