



Alameda-Contra Costa Transit District

STAFF REPORT

TO: AC Transit Board of Directors
FROM: Michael A. Hursh, General Manager
SUBJECT: Application for FY 2017 FTA Low-No Funds

ACTION ITEM

RECOMMENDED ACTION(S):

Consider authorizing the General Manager or his designee to file and execute applications and funding agreements with the Federal Transit Administration (FTA) for FY 2017 Low or No Emission Bus Discretionary Grant Program for the purchase of five battery electric buses.

BACKGROUND/RATIONALE:

The FTA issued a Solicitation of Project Proposals for \$55 million of FY 2017 Low or No Emission Program (Low-No) funds on April 27, 2017, with applications due on June 26, 2017. The main purpose of the Low-No Program is to support the transition of the nation's transit fleet to the lowest polluting and most energy efficient transit vehicles. The Low-No Program provides funding to State and local governmental authorities for the purchase or lease of zero-emission and low-emission transit buses, including acquisition, construction, and leasing of required supporting facilities.

The District is considering the expansion of the zero-emission bus fleet in preparation of the pending California Air Resources Board (CARB) transit fleet regulations under the proposed Advanced Clean Transit Regulations. CARB has proposed a target of having all transit buses in the state be zero-emission by 2040, which would mean all bus purchases by 2028 need to be zero-emission.

The District plans to partner with the Center for Transportation and the Environment (CTE) and Gillig for this application. CTE is a 501(c)(3) non-profit, member-based organization that advances clean, sustainable, innovative transportation and energy technologies for the grant application. CTE will provide the technical expertise for the application and procurement, and provide assistance with grant management and reporting. The advantages of partnering with Gillig include:

- Teaming up with the only local, heavy-duty transit bus manufacturer in the Bay Area for expansion of the District's zero emission bus fleet.
- Expanding the development of battery electric buses to another high-volume transit bus manufacturer.

- Expanding the current zero emission bus analysis to a third technical platform, so that the District would have ten New Flyer fuel cell buses, five New Flyer battery electric buses, and five Gillig battery electric buses.
- Collaborating with a local transit bus manufacturer in developing advanced technical training for zero emission bus maintenance.
- Timely technical and parts related support for any warranty issues encountered on the battery electric buses, since Gillig will be producing these buses right outside of our service area.

The District is applying for \$2,330,000 to purchase five battery electric buses with 200 mile range of operations, along with purchase and installation of charging units for these buses. The buses will be depot-charged as opposed to en-route, with charging occurring nightly at one of the District's maintenance divisions.

BUDGETARY/FISCAL IMPACT:

If the project is awarded, the District will have to provide up to \$1,370,000 in District and other local or regional funds for the Low-No funding match requirement. The bus purchase will have an additional local match of \$370,000 that is related to the other grants funding the base bus cost, but this match portion is required for the District to purchase buses regardless of the Low-No grant.

ADVANTAGES/DISADVANTAGES:

Staff cannot identify any disadvantages to applying for the funds. Not applying would cause the District to forgo the opportunity of competing for FTA funds to expand the zero-emission bus fleet, and to evaluate various battery electric buses alongside fuel cell buses.

ALTERNATIVES ANALYSIS:

Staff considered the following alternatives to the recommendation to partner with Gillig on the production of five battery electric buses:

- The District could partner with New Flyer on the purchase of five fuel cell buses with a 300 mile range. New Flyer will be manufacturing ten fuel cell buses and five battery electric buses for delivery to the District in 2018, and continuing to partner with New Flyer would provide for a consistent fleet of buses for the zero emission bus analysis along with replacement parts compatibility. Staff decided against recommending this alternative since the current hydrogen fueling infrastructure is designed for 12 buses per division (24 total buses), and the District will be operating a fleet of thirteen Van Hool, ten New Flyer 40 foot, and one New Flyer 60 foot fuel cell buses by the end of 2018.
- The District could partner with Proterra on the purchase of five depot charge battery electric buses with a reported 350 mile range. Proterra battery electric buses have been deployed at several transit agencies across the country, and the reported 350 mile range would ensure the buses are able to operate the entire day on any of the routes in the District service area. Staff decided against recommending this alternative since the

expansion of the battery electric technology to another major, heavy-duty bus manufacturer, such as Gillig, would likely receive a higher rating and have a higher potential for approval by the FTA, rather than proposing the further expansion of an existing battery electric bus manufacturer bus fleet.

- The District could partner with BYD on the purchase of five depot charge battery electric buses with a 200 mile range. Staff decided against recommending this alternative since the expansion of the battery electric technology to another major, heavy-duty bus manufacturer, such as Gillig, would likely receive a higher rating and have a higher potential for approval by the Federal Transit Administration, rather than proposing the further expansion of an existing battery electric bus manufacturer bus fleet.

PRIOR RELEVANT BOARD ACTION/POLICIES:

SR 15-277 CARB Zero Emission Truck and Bus Pilot Commercial Deployment and FTA Low or No Vehicle Emission Deployment Program Grant Applications.

ATTACHMENTS:

None

Approved by: Claudia L. Allen, Chief Financial Officer

Reviewed by: Denise C. Standridge, General Counsel
James Pachan, Chief Operating Officer
Chris Andrichak, Director of Management and Budget

Prepared by: Evelyn Ng, Senior Capital Planning and Grants Specialist