

ALAMEDA-CONTRA COSTA TRANSIT DISTRICT



STAFF REPORT

MEETING DATE: 6/28/2023

Staff Report No. 23-316

TO: AC Transit Board of Directors
FROM: Michael A. Hursh, General Manager/Chief Executive Officer
SUBJECT: Zero Emission Bus Program Capital and Operating Report

BRIEFING ITEM

AGENDA PLANNING REQUEST:

RECOMMENDED ACTION(S):

Consider receiving a report on AC Transit's Zero Emission Bus Program covering capital investments and operational performance for the 2022 calendar year review period.

Staff Contact:

Ramakrishna Pochiraju, Executive Director of Planning & Engineering
Salvador Llamas, Chief Operating Officer

STRATEGIC IMPORTANCE:

Goal - Environmental Improvement

Initiative - Zero Emission Programs

AC Transit's Capital and Operating Progress report on its Zero Emission Bus (ZEB) Program guides the District's transition to 100% Zero Emission Bus (ZEB) fleet by 2040.

BUDGETARY/FISCAL IMPACT:

There are no budgetary or fiscal impacts directly related to this report.

BACKGROUND/RATIONALE:

AC Transit is committed to transition its bus fleet to 100% zero emissions by 2040. In order to effectively deliver on that goal, a comprehensive analysis of the commercially available ZEB technologies is needed to help assess which technologies can best meet the operational requirements of the District while being financially efficient and sustainable. AC Transit has made significant investments by being a leader in the early adoption of ZEB technology, which created a distinct advantage for the District. As a result, AC Transit emerged as a vanguard in both testing and comparing the costs and results of various conventional and ZEB technologies in a public transit environment. To date, the ZEB Program has yielded significant accomplishments, workforce training delivered over 26 thousand hours of ZEB specific curriculum, the ZEB fleet traveled over 5.6 million zero emission miles and eliminated over 14 thousand metric tons of Carbon Dioxide (CO₂).

This report is the second phase of reporting based off the 2-year Zero Emission Transit Bus Technology Analysis (ZETBTA) that was launched in 2020. The Capital and Operating Progress Report (Attachment 1) expands the evaluation of the ZEB technologies beyond the initial 5X5 control fleet and includes the District's ZEB Program capital investment since inception. The financial forecast needed to deliver the full fleet transition supports the following guiding principles in the AC Transit Board adopted ZEB Transition Plan:

1. Replace the fleet per Federal Transit Administration (FTA) mandated Transit Asset Management (TAM) Plan Performance Targets
2. Prioritize ZEB deployment per the AC Transit Board adopted Clean Corridors Plan
3. Procure ZEB's based on vehicle and infrastructure technology capabilities to meet service requirements
4. Deploy ZEB technology that is most efficient and sustainable to operate
5. Meet the 2040 ICT Goal

Currently, the ZEB program has a \$1.9 billion estimated cost to transition 100% of the fleet and meet the 2040 goal. Included in the report is an integrated master schedule that incorporates existing projects from the District's Capital Improvement Program (CIP) and the Transit Asset Management (TAM) Plan. Both, the TAM Plan and CIP, support prioritization and programming of future projects and align with the District's Strategic Plan Goals and Objectives.

ADVANTAGES/DISADVANTAGES:

The advantage of the Capital and Operating Progress report is that it provides a thorough evaluation of the financial and operational impacts of various ZEB technologies to help inform AC Transit decision making on how to deliver an effective ZEB Transition Plan.

There are no disadvantages to receiving this report.

ALTERNATIVES ANALYSIS:

Staff found no practical alternatives to the course of action recommended in this report.

PRIOR RELEVANT BOARD ACTION/POLICIES:

Staff Report 22-319: Zero Emission Bus Transition Plan

Staff Report 22-570: Zero Emission Transit Bus Technology Analysis Volume 4

ATTACHMENTS:

1. AC Transit ZEB Program Capital and Operating Progress Report

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