

# ALAMEDA-CONTRA COSTA TRANSIT DISTRICT



## STAFF REPORT

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**MEETING DATE:** 2/9/2022

**Staff Report No.** 21-016a

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**TO:** AC Transit Board of Directors  
**FROM:** Michael A. Hursh, General Manager  
**SUBJECT:** Contract Award for Automatic Passenger Counters (APC) and Analytics Software

### ACTION ITEM

#### **RECOMMENDED ACTION(S):**

Consider approving the award of a three-year contract with two one-year options to Clever Devices to purchase, install, and support Automatic Passenger Counter (APC) equipment and analytics software.

#### **STRATEGIC IMPORTANCE:**

Goal - Convenient and Reliable Service  
Initiative - Service Quality

This contract of purchasing and installing Automatic Passenger Counter (APC) equipment and analytics software will optimize efficiency, improve security, and enhance resiliency. APCs on the buses are a core technology platform and need to be up and running all the time for 24 hours a day, seven days a week bus operations. Having a fleet that is 100% APC-equipped will provide accurate ridership count passenger load information (PLI) for passengers on all buses, will enhance service quality, and boost passenger confidence in AC Transit services during a pandemic and after.

#### **BUDGETARY/FISCAL IMPACT:**

The total contract cost over the initial three-year term is expected to be less than \$1.7 million. This includes initial capital implementation cost and three years of maintenance and support plus contingency. The first phase of implementation is funded by \$656,000 of approved FY 2021-22 District capital funds. The current approved Capital Improvement Plan (CIP) includes an additional \$437,000 for FY 2022-23 for the second phase of the project, which will be included in the FY 2022-23 capital budget.

Also included in the contract are ongoing hardware maintenance, software support, and hosting cost of \$150,000 per year which will be included in the IT operating budget.

#### **BACKGROUND/RATIONALE:**

Approximately 80% of the District's vehicles are equipped with various APCs, distributed across all four operating divisions. This project aims to install APCs on the remaining 20% of the District's vehicles and upgrade 13% of vehicles with outdated software/firmware equipment. These installations and upgrades will be completed utilizing a two-phase, multi-year process during the initial contract term. Additionally, the

contract will include the entire fleet of APC Hardware support and maintenance and an automated, robust, and scalable ridership data management and analytics software platform. This new system will remove many of the current manual data entry steps, alleviating laborious data crunching activities and data manipulation and automate Federal Transit Administration (FTA) National Transit Database (NTD) and internal ridership reporting.

The District's current COVID-19 onboard safety precautions have created the need to inform AC Transit passengers of the crowding levels. The PLI Platform heavily relies on accurate APC sensor technology, enabling the bus crowding information to appear in the passenger's Real-Time Transit Information applications. This real-time APC information is a critical component of the PLI platform since this real-time data stream is utilized by the District's Operations Control Center (OCC) staff in determining the need for the deployment of shadow buses based on real-time bus crowding information.

In summary, this contract involves the following deliverables during a three-phase, multi-year process:

1. Install new APC equipment on buses
2. Upgrade legacy APC equipment on buses
3. Implement ridership analytics software platform to automate APC data collection, provide Ridership Key Performance Indicators (KPIs), and generate FTA-required National Transit Database reports.

#### **ADVANTAGES/DISADVANTAGES:**

Advantages: Delivering passenger load information to the public will provide a much-needed service to AC Transit passengers by offering tools to help them make informed and safe decisions during the pandemic and beyond. Achieving a 100% APC-equipped fleet is critical to ensure consistency with the data provided to passengers, avoiding scenarios where only some vehicles on a route are reporting occupancy status, confusing passengers. With this tool, a passenger can choose a less crowded vehicle. Automating the FTA required NTD reports, providing greater confidence in the accuracy of the reports and allowing planning and scheduling to more accurately understand passengers' riding habits.

Disadvantages: The disadvantage of proceeding with this contract is the cost, which has already been budgeted.

#### **ALTERNATIVES ANALYSIS:**

The alternative is not to award the contract and remain at only 80% of buses with legacy and outdated APC technology and continue with manual ridership data reporting processes internally and for NTD Reporting.

#### **PRIOR RELEVANT BOARD ACTION/POLICIES:**

Staff Report No. 21-016: RFP for Automatic Passenger Counters (APC) and Analytics Software  
Board Policy No. 465 - Procurement Policy

#### **ATTACHMENTS:**

None

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