ALAMEDA-CONTRA COSTA TRANSIT DISTRICT

STAFF REPORT

MEETING DATE: 1/13/2021 **Staff Report No.** 21-016

TO: **AC Transit Board of Directors**

FROM: **Michael A. Hursh, General Manager**

SUBJECT: **RFP for Automatic Passenger Counters (APC) and Analytics Software**

ACTION ITEM

RECOMMENDED ACTION(S):

Consider authorizing the issuance of a Request for Proposals (RFP) for the purchase and installation of Automatic Passenger Counter (APC) equipment and automated analytics software.

STRATEGIC IMPORTANCE:

Goal - Safe and Secure Operations
Initiative - Service Quality

The COVID-19 Pandemic created an urgent need for AC Transit passengers to be kept informed of passenger occupancy information before boarding a District vehicle. The Department of Innovation and Technology has developed a real-time Passenger Load Information (PLI) data platform that will display bus crowding information to AC Transit passengers using their choice of online tools and mobile apps. This new PLI platform will empower passengers to make decisions regarding whether they want to board the current bus or a subsequent bus based on occupancy and the ability to social distance. This initiative will provide critical occupancy information to passengers, enhance service quality, and boost passenger confidence in AC Transit Services, and would continue to provide a beneficial service to passengers post-pandemic.

BUDGETARY/FISCAL IMPACT:

Issuing an RFP does not have any fiscal impact. Staff is working on assembling funding for this project and may include changes in the mid-year budget for at least partial funding. Staff has also applied for federal grant funds for the project. Cost estimates are not included in this report to ensure RFP responses are competitive.

BACKGROUND/RATIONALE:

Approximately 80% of the District's vehicles are currently equipped with various types of APCs and are distributed across all four (4) operating divisions. The goal of this project is to install APCs in the remaining 20% of the District's vehicles and upgrade 13% of vehicles which have outdated software/firmware equipment. Additionally, the solicitation will include an automated, robust, and scalable ridership data management and analytics software platform. This new PLI system will remove many of the current manual data entry steps, alleviating laborious data crunching activities and data manipulation.

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 key 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 procurement activity involves the following three (3) deliverables:

1. Install New Automatic Passenger Counter (APC) equipment on District vehicles that have never been outfitted with APCs.
2. Upgrade Automatic Passenger Counter (APC) hardware/software/firmware equipment for District vehicles outfitted with outdated APCs.
3. Implement ridership analytics software platform to automate APC data collection, provide Ridership Key Performance Indicators (KPIs), and generate FTA-required National Transit Database (NTD) reports.

ADVANTAGES/DISADVANTAGES:

Advantages: Delivering passenger load information to the public will provide a much-needed service to AC Transit passengers by providing tools to help them make informed and safe decisions. Achieving a 100% APC equipped fleet is critical to ensure consistency with the data provided to our passengers, avoiding scenarios where only some vehicles on a route are reporting occupancy status, causing confusion for our passengers.

With this tool, a passenger has the option of choosing a less crowded vehicle, with more ability to maintain social distancing.

Disadvantages: The disadvantages of not proceeding with this project is that it may delay passengers returning to public transportation due to fears of overcrowding.

ALTERNATIVES ANALYSIS:

District's staff conducted a proof of concept for vehicles operating on the new TEMPO line with the current APC and CAD/AVL vendors and the results led to a determination that an open and competitive procurement is best suited to meet the District's objective.

PRIOR RELEVANT BOARD ACTION/POLICIES:

Board Policy No. 465 - Procurement Policy

ATTACHMENTS:

None

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