

ALAMEDA-CONTRA COSTA TRANSIT DISTRICT



STAFF REPORT

MEETING DATE: 4/9/2025

Staff Report No. 25-248

TO: AC Transit Board of Directors
FROM: Kathleen Kelly, Interim General Manager/Chief Executive Officer
SUBJECT: All-door Boarding on Lines with on-board fare collection systems

BRIEFING ITEM

AGENDA PLANNING REQUEST: ☐

RECOMMENDED ACTION(S):

Consider receiving a report on the performance of All-door Boarding on Lines 6 and 51B with on-board fare collection systems, and provide feedback on strategies for expansion.

Staff Contact:
Ramakrishna Pochiraju, Executive Director of Planning & Engineering

STRATEGIC IMPORTANCE:

Goal - Convenient and Reliable Service
Initiative - Service Quality

All-door boarding reduces interactions with the operator, and can help achieve faster boarding, and more reliable service.

BUDGETARY/FISCAL IMPACT:

There is no budgetary impact associated with this report. It is an update on the performance of All-door Boarding on two local lines and doesn't recommend any policy changes that would result in costs. In the event the Board elects to expand All-door Boarding to other routes, there may be some loss of fare revenue, but it could be minor as shown in staff's analysis.

BACKGROUND/RATIONALE:

AC Transit launched All-door Boarding on lines 6 and 51B on March 1, 2021. Numerous agencies have piloted or implemented All-door Boarding on some or all their fleet including San Francisco Municipal Transportation Agency (SFMTA). All-door Boarding on certain AC Transit service allows customers with Clipper Cards to board through the rear door and tag their card to a Clipper Card reader to pay their fare. The initial launch required the installation of readers on the rear doors of all 25 vehicles operating on lines 6 and 51B.

All-door Boarding can be beneficial to AC Transit in several ways. Since the onset of the pandemic, there have been multiple requests to incorporate rear-door boarding into the District's fare payment policies and procedures. The introduction of All-door Boarding allowed the District to reduce the number of customer

interactions with operators at a critical time, as well as reduce dwell time at the individual passenger level. This reduction in dwell time can lead to quantifiable improvements in speed and reliability for lines and stops where All-door Boarding is in place. Finally, these improvements in operational performance translate directly to tangible improvements in the customer experience. Customers can board more quickly, and the buses will get them to their destinations faster and more reliably.

As a result of AC Transit staff negotiations with the Metropolitan Transportation Commission (MTC) Clipper 2 project team, the two agencies have coordinated to install rear-door Clipper Card Readers on the entire District revenue fleet with the next generation devices, improving data security, processing, and transmission time.

The attached All-door Boarding Performance Report conducted by staff in 2023 features more than two years of the program's performance. Staff collected data from March 2021 to May 2023 to gauge compliance with the District's own Standard Operating Procedures (SOP) for the program as well as the performance of the lines with respect to dwell, reliability, and ridership. In addition, for the first time, the report includes analysis of fare evasion on the lines during that time period.

The attached performance report includes detailed analysis of the program's performance across the following metrics:

- 1) Compliance with Procedures
- 2) Ridership and Revenue
- 3) Reliability and Dwell
- 4) Fare Evasion

Overall, All-door Boarding on these two lines with on-board fare payment systems performed well. The dwell time per passenger was reduced by nearly 2.5 seconds on Line 51B and about 1.5 seconds on Line 6. This significant reduction in dwell means less time spent at each stop and faster travel through the corridor for customers and operators.

The fare evasion figures for these two lines showed little evasion occurring through the rear door during the observation period, meaning All-door Boarding on these lines is not contributing to fare evasion. However, staff cautions that fare evasion could be higher if the program were expanded widely because these two lines have higher Clipper penetration than the system as a whole and have high numbers of UC Berkeley students who have access to heavily discounted, pre-paid EasyPasses.

Expansion

Staff is considering gradual expansion of All-door Boarding to routes with similar or greater Clipper pass volume than lines 6 and 51B (not including E-cash) and high passenger volumes (as measured by total boardings per stop) where the District would realize measurable reductions in dwell time. These routes are also known to have high student ridership.

In addition, while peak Transbay service does not have high Clipper pass volume and ridership compared to local routes, those routes are also good candidates for All-door Boarding expansion due to heavy passenger loads on many trips and boarding occurring all at a single location (the Salesforce Transit Center) on PM eastbound trips.

Lastly, a number of Supplementary Service routes have high Clipper pass rates due to the Alameda County Student Transit Pass Program. Some of these routes also have high ridership and would benefit from lower dwell times and balancing the passenger load on the bus, creating more capacity.

An immediate candidate for expansion is Line 52 which primarily carries students from student housing in UC Village in Albany to campus and has heavy peak-hour passenger volumes on 60-foot articulated buses. All-door Boarding on Line 52 would more evenly distributed passengers loads on the bus allowing for potentially more capacity as passengers are less likely to crowd at the front of the bus and prevent additional boardings. Staff plans to implement All-door Boarding on Line 52 as soon as possible and before the start of the Fall Semester in 2025.

Next Steps

To validate potential expansion beyond lines 6, 51B and 52, staff will tabulate Clipper pass usage by route, trip and stop in addition to ridership and load data. This analysis will take weeks to complete since these numbers are not readily available through Clipper data reports but can be obtained at the Clipper reader level and then associated with routes, trips and stops. Staff intends to bring this information to the Board for review along with a formal recommendation.

ADVANTAGES/DISADVANTAGES:

The primary advantage of expanding All-door Boarding to select routes while maintaining front-door boarding on the rest of the system is to maximize the benefit of the on-board fare collection methodology and limit fare evasion systemwide. Staff is concerned that expanding the system beyond a subset of routes identified above will increase fare evasion.

The primary disadvantage associated with limited expansion is that it could result in increased fare evasion, but staff did not witness that in its observations of lines 6 and 51B. Limited expansion could also create more confusion for riders to understand which routes have All-door Boarding and which do not.

ALTERNATIVES ANALYSIS:

Staff has considered several alternatives: 1) limiting All-door boarding to lines 6 and 51B; 2) piloting off-board fare payment and all-door boarding at select high-volume stops; and 3) returning the entire system, including lines 6 and 51B to front-door boarding only.

Limiting All-door Boarding to lines 6 and 51B is no longer necessary since analysis has shown that there are dwell-time benefits and minimal increased fare evasion compared to the rest of the system. All-door Boarding continues to operate on these two lines today without issue, which further proves that the District can expand the program if the data supports it.

Staff also evaluated an additional pilot wherein the TEMPO fare ambassadors could be repurposed to create a “fare paid zone” at high-volume stops that would allow riders to pay with Clipper before the bus arrives and be allowed through the rear door when it arrived. This approach is an intriguing combination of off-board fare payment and rear-door boarding but is extremely labor intensive (two staffers per stop) with minimal benefit (the dwell reductions would only occur at one or two stops). Plus, the opportunity cost of having these

employees do this in lieu of other key Transportation roles would be high.

Finally, staff evaluated whether lines 6 and 51B should revert to front-door boarding only. Staff determined that forcing all passengers through the front door would add to dwell and runtime on lines that already struggle with insufficient runtime and layover. In addition, riders have grown accustomed to using the rear door and it may cause confusion or fare evasion to eliminate the policy.

PRIOR RELEVANT BOARD ACTION/POLICIES:

SR 20-320 All-Door Boarding Pilot

SR 20-320a All-Door Boarding Pilot Update

SR 22-225 All-Door Boarding Update

ATTACHMENTS:

1. All-door Boarding Performance Report
2. Staff Presentation

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