

SAN FRANCISCO BAY AREA RAPID TRANSIT DISTRICT

MEMORANDUM

TO: Board of Directors **DATE:** October 23, 2025

FROM: Sylvia Lamb, Assistant General Manager, Infrastructure Delivery

SUBJECT: Next Generation Fare Gate Sensor Modification Pilot

To further strengthen BART's Next Generation Fare Gate performance and enhance the overall customer experience, the project team is advancing a pilot to adjust fare gate sensors at the Antioch and Concord Stations. This adjustment is expected to reduce piggybacking and tailgating. Working collaboratively with STraffic, the fare gate technology vendor, staff have explored optimizing the Occupant Detection Zone Sensors and Barrier Closure Time parameters on both Regular Fare Gates (RFG) and Accessible Fare Gates (AFG).

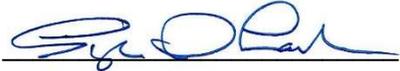
These sensors continuously monitor the aisle area to confirm it's clear before the barrier closes. If movement or an obstruction—human or otherwise—is detected within this zone, the barriers remain open until the space is verified as clear. STraffic has proposed a reduced Occupant Detection Zone to allow the barrier to close earlier after the paying patron exits the aisle, reducing the opportunity for tailgating.

Monitoring and additional testing will be performed by BART staff to evaluate the reduced zone performance with non-human obstacles such as luggage, or strollers.

Further opportunity exists to enhance fare gate performance by reducing Barrier Closure Time (i.e., increasing closure speed) while maintaining safe operation for patrons.

BART is proceeding with a pilot deployment at both Concord and Antioch Stations tomorrow, October 24, 2025 for field validation. Results from this pilot will inform the final system-wide deployment recommendation.

Please feel free to contact me at (510) 421-6475 with any questions.


Sylvia I. Lamb



Next Generation Fare Gate Refinements and Performance Data

Fare Gate Refinement Initiatives

Barrier Strengthening to Prevent Vandalism

1. Barrier design change to improve Locking Mechanism and Swing Module Connection part for better fare gate reliability and maintenance Part – in progress
2. Added gussets in the design to reinforce the welds on door – in progress

Faregate Integration With TR4

Investigation on TR4 latency by third party is ongoing

Station Hardening

1. Interim hardening after installation of Next Generation Fare Gates – in progress
2. Design for permanent hardening – in progress
 - Permanently close gaps between existing barriers and new fare gates gates
 - Raising of emergency swing gates

Installation of Additional Fare Gates

Elevator accessible fare gate on concourse level at Civic Center BART Station – electrical and communications infrastructure work is ongoing; ETC is on 12/5/2025

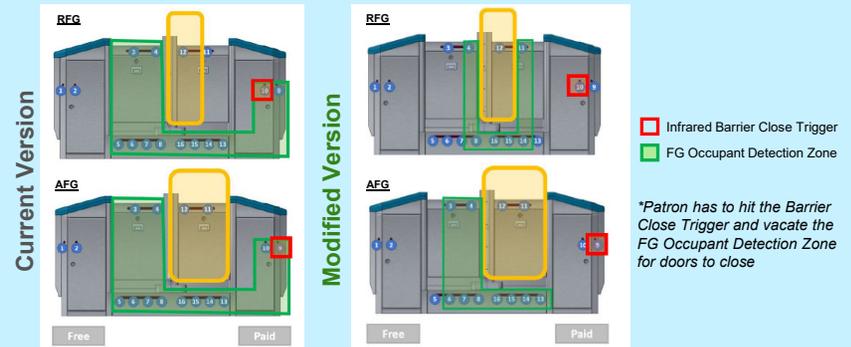
Monitoring Use of Fare Gates

Use AI camera to capture incidents of fare evasion such as piggybacking and tailgating
Track how patrons use fare gates to help determine improvements that will impact patron experience – in progress

Prevent Fare Evasion

Fare Gate Occupant Detection Zone Modification

Pilot at Concord Station on Gate Array #2 and Antioch Station on Gate Array #1 commenced on 10/24/2025.



Fare Gate Availability (%)

<u>Period</u>	<u>RFG</u>	<u>AFG</u>
10/20/2025-10/26/2025	97.97%	97.74%
10/27/2025-11/02/2025	97.18%	96.74%
11/03/2025-11/09/2025	98.00%	94.12%
11/10/2025-11/16/2025	97.78%	85.72%