



Fare Gate Enhancements & Station Hardening Update

July 9, 2026 | BART Board of Directors Meeting



Agenda



Overview

Fare Gate Enhancements

Station Hardening

Overview



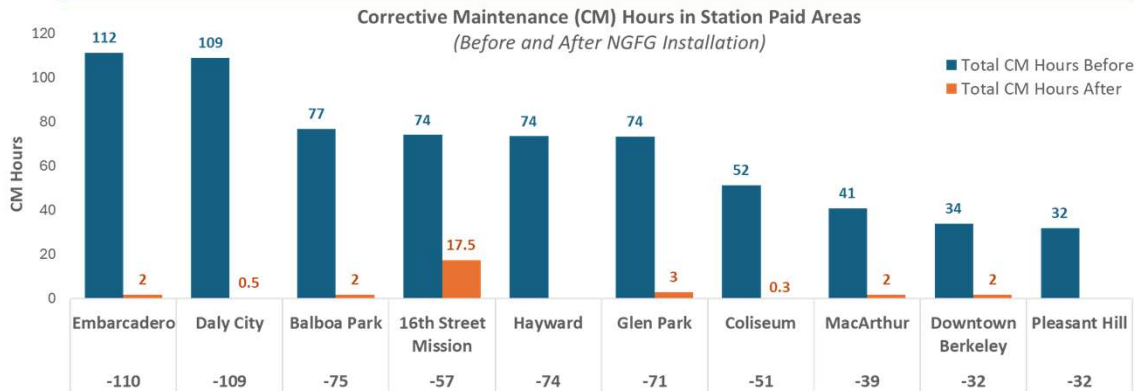
Riders report that they have witnessed fare evasion drop by more than 50% compared to pre-installation levels.

Early forecast indicators suggest an estimated \$10 million annual increase in fare revenue through reduced fare evasion.

Corrective maintenance hours decreased by 961 hours in the first six months after installation (approximately one full-time employee).

A new standard in fare gate design contributing to more modern and polished station environments.

Systemwide Improvement: 961-hour reduction in 6 months post installation



Fare Gate Enhancements & Station Hardening


- Fare gates secure entry
- Station hardening closes bypass points

Together, they strengthen safety, security, and fare compliance.

Top Industry Awards

The Next Generation Fare Gates project has received multiple top industry awards, recognized for excellence in public infrastructure, collaboration, innovation, and execution.

 **2026 Public Works Project**
Honors from the American Public Works Association Northern California Chapter

 **2026 Collaborative Project of the Year**
International Partnering Institute (IPC)

 **2026 East Bay Innovation Legacy Award**
East Bay Economic Development Alliance

 **2026 Project Achievement Award - Infrastructure**
Construction Management Association of America – Northern California

 **2026 Rail SECURE Gold Award**
American Public Transportation Association (APTA)



Fare Gate Advertising Revenue

- Efforts to monetize the fare gates began in April 2026 with testing of fare gate wrap materials in BART's lab
 - Testing included evaluation of material sizing and positioning, and 3 different adhesive backed materials
- A pilot of the fare gate wraps began in June 2026 at 7 stations
 - 19th Street, Downtown Berkeley, Dublin/Pleasanton, Concord, Fremont, 16th Street, and Daly City
- Tap & Ride information wraps were also installed on fare gates at SFO and the Oakland Airport Connector ahead of the FIFA World Cup



Fare Gate Enhancements



Fare Gate Enhancements



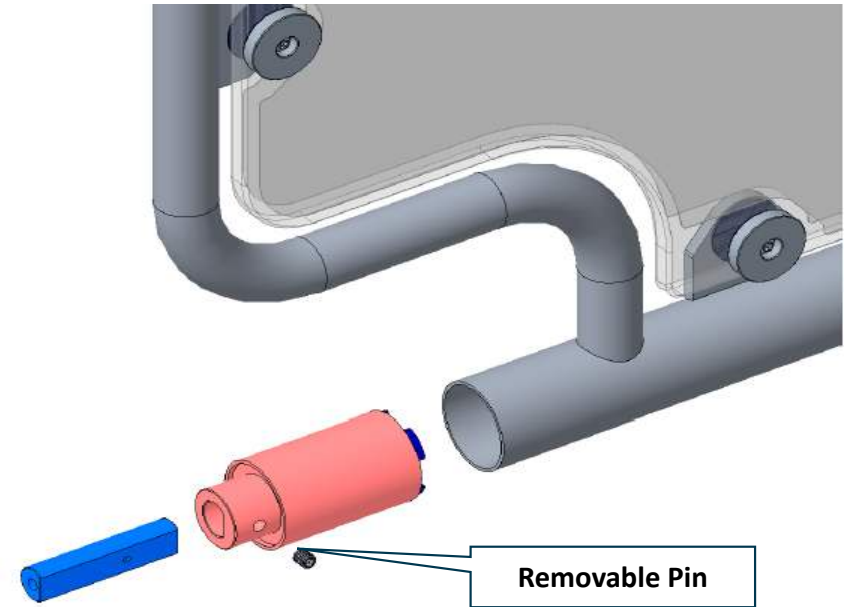
Fare Gate Strengthening



Mechanical Locks Implemented across all 715 Gates



Detachable D Shaped Inserts Improve Maintainability without full Faregate Replacement or Repair



Both Doors		Left Door		Right Door
Pittsburg Center	12 th Street	San Bruno	Richmond	Union City
Coliseum	San Leandro	MacArthur	Rockridge	
Balboa Park	Rockridge	Walnut Creek		
Bay Fair	Civic Center			



Fare Gate Strengthening



Enhanced Motor Gear System – Improves Load Capacity and Impact Resistance
Ongoing Pilot at Coliseum & Pittsburg Center

Current Worm Gear Box-3

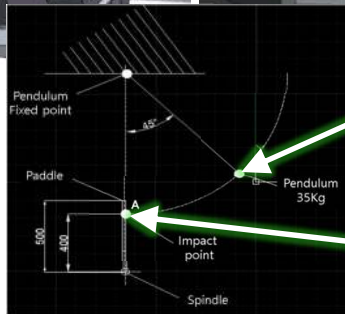
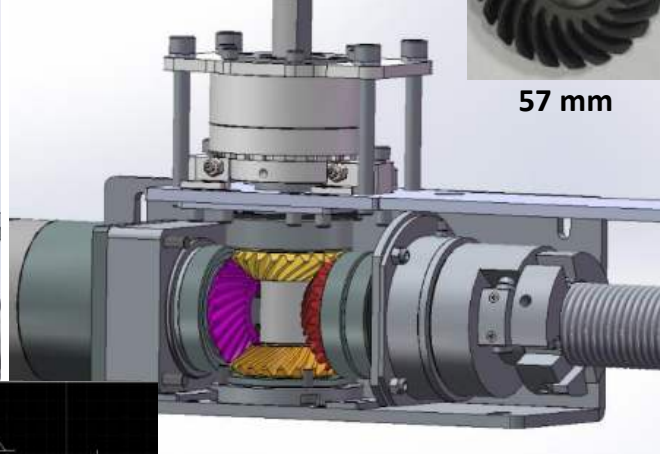
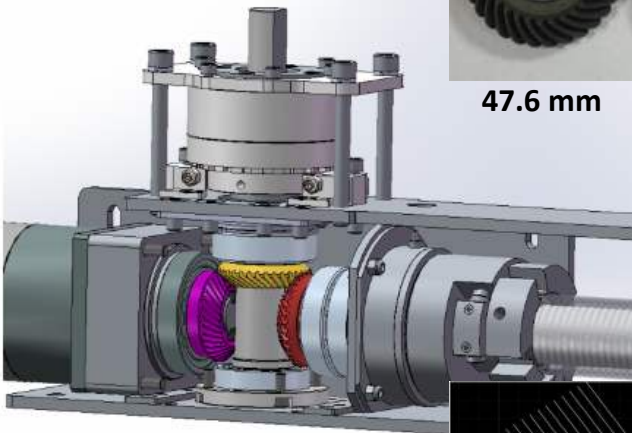


47.6 mm

New Worm Gear Box-4



57 mm

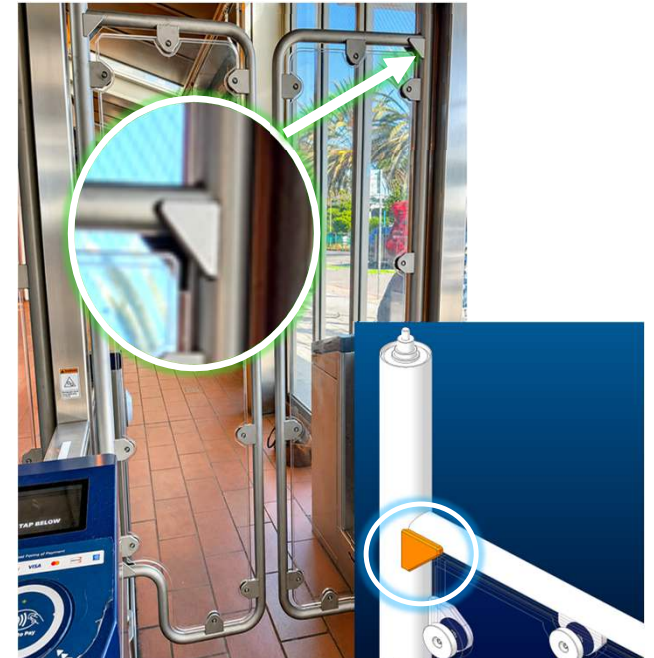


Pendulum ~77lb

Impact Point
Impact Magnitude ~926 lb
10,000 Repeated Impacts

Gusset Additions

Modified barrier w/ gusset additions at 10 stations



Gussets make doors stronger at joints and better at staying square and aligned

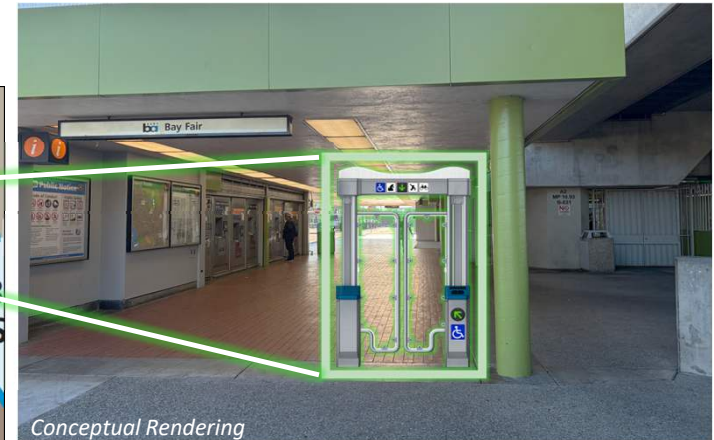
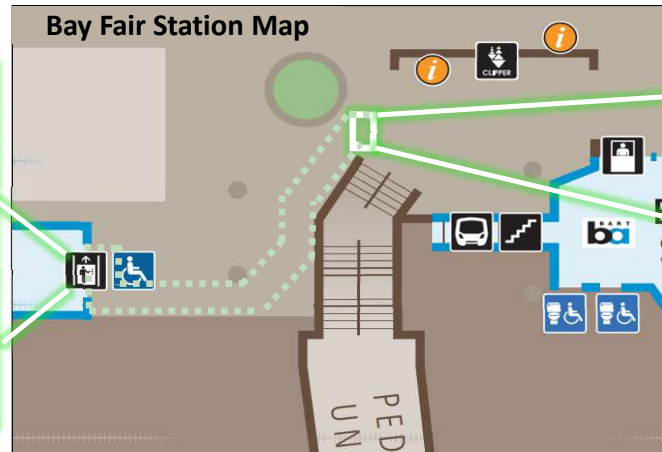
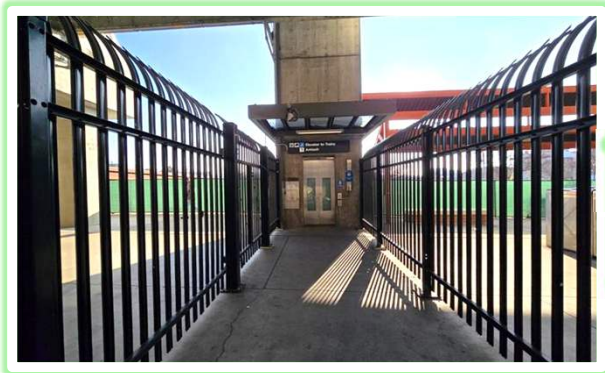


Fare Gate Strengthening



Bay Fair Station Elevator Accessible Fare Gate Relocation

- Relocate the platform AFG to the station entrance for better visibility
- Reduce the risk of vandalism and fare evasion
- Install a 7-foot security fence to protect the route from the elevator to the new fare gates
- Ongoing work



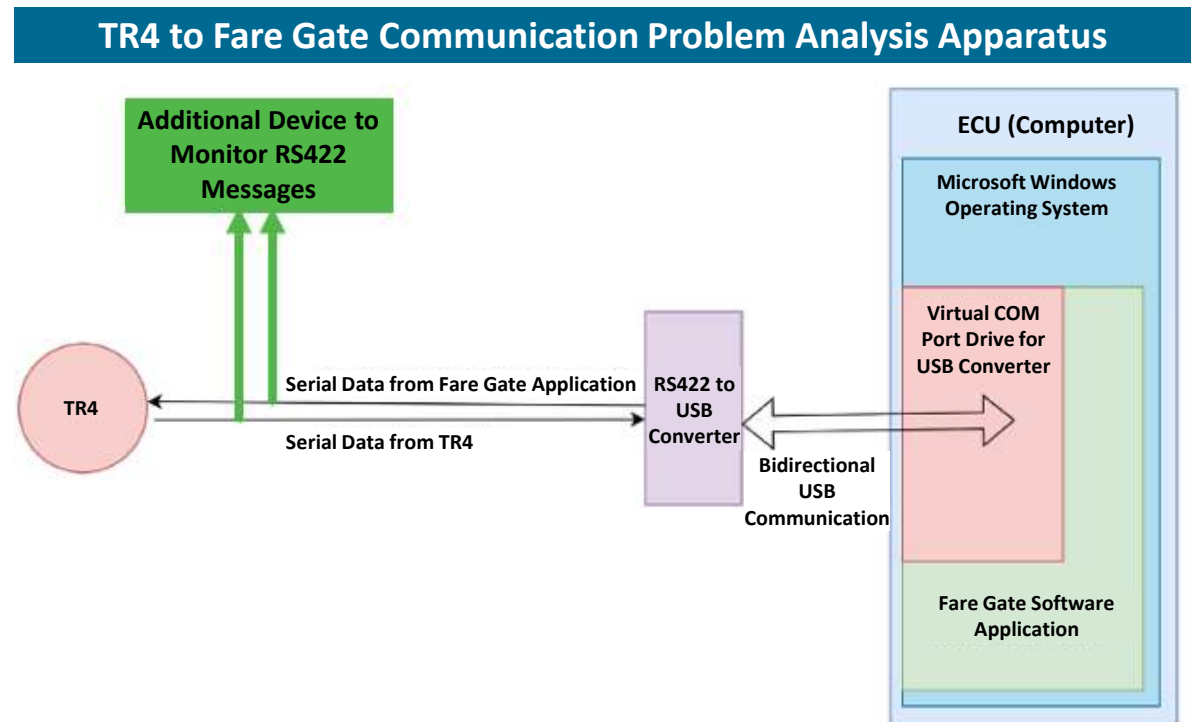
Conceptual Rendering

New AFG location

Data Communication Software



- A compact computer-based monitoring system was deployed
- Captured two-way communication between fare gate software/hardware and TR4
- Provided detailed data logs to support analysis and troubleshooting
- **Revised Version of Fare Gates Software was released on March 31, 2026**

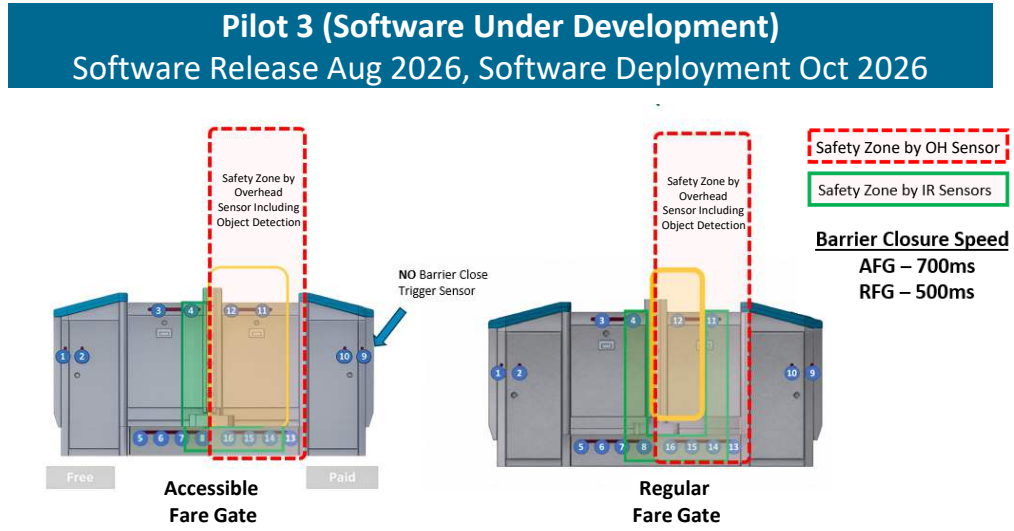
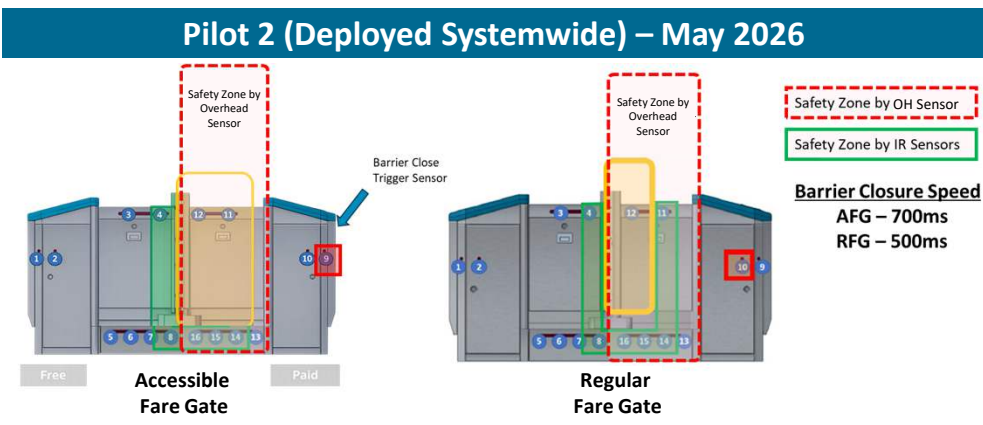
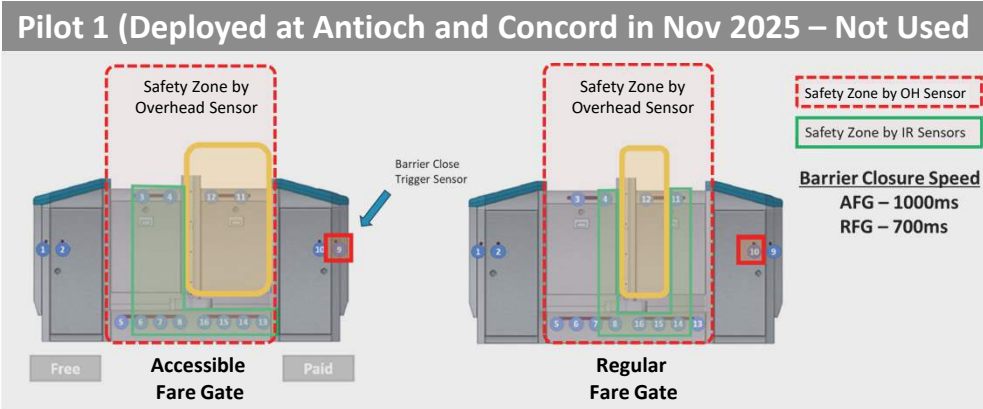


Chime Tone



- Original tone was built with the fare gate software, implemented in December 2023
 - Hard to hear and could only beep
- In March 2026 BART implemented the new bell “chime” tone to help visually impaired riders know when a fare gate is open.
 - Tone is flexible and changeable
 - Ascending tone for entry, descending for exit
 - Easier to hear above station noise
- Plays when riders hold their fare media (Clipper card, contactless bank card, or mobile payments) on the reader for an additional second
- An ascending chime plays on entering and a descending chime plays on exiting.

Piggybacking & Tailgating



- Usage of **Overhead (OH)** fare gate sensor analytics with **Infrared (IR)** sensors
- Enabling object detection feature for Overhead fare gate sensor

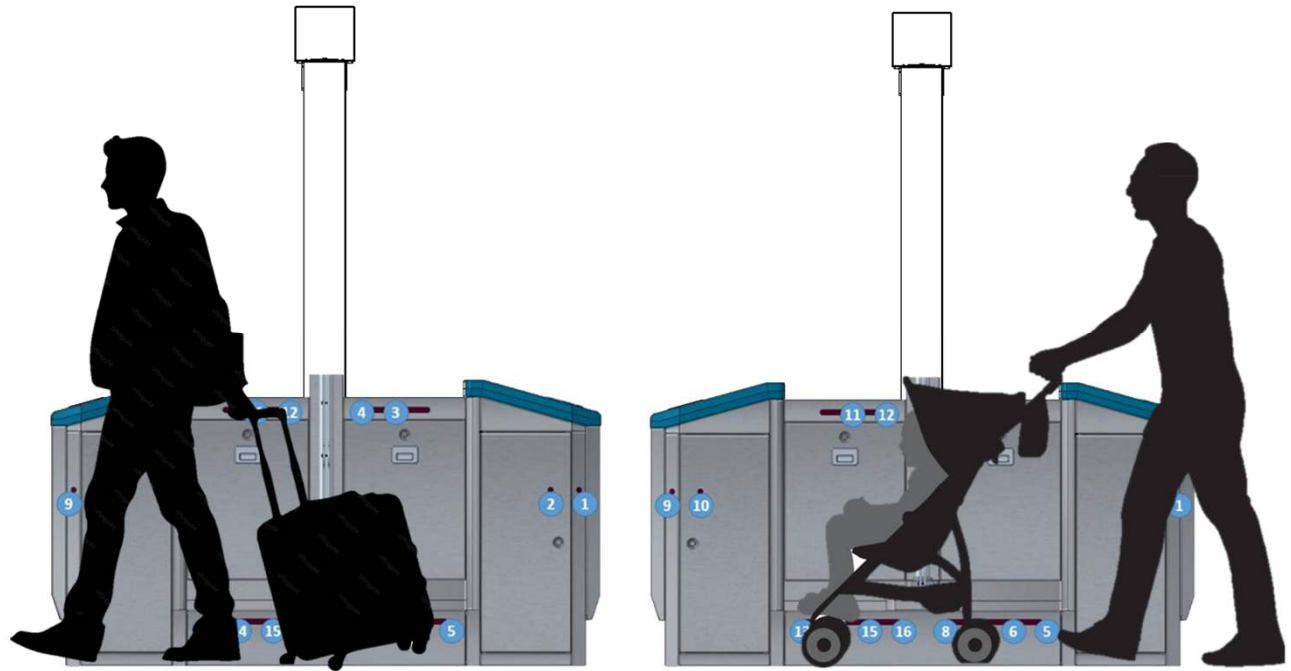
12 *Implementation depends on software development and testing



Object Detection

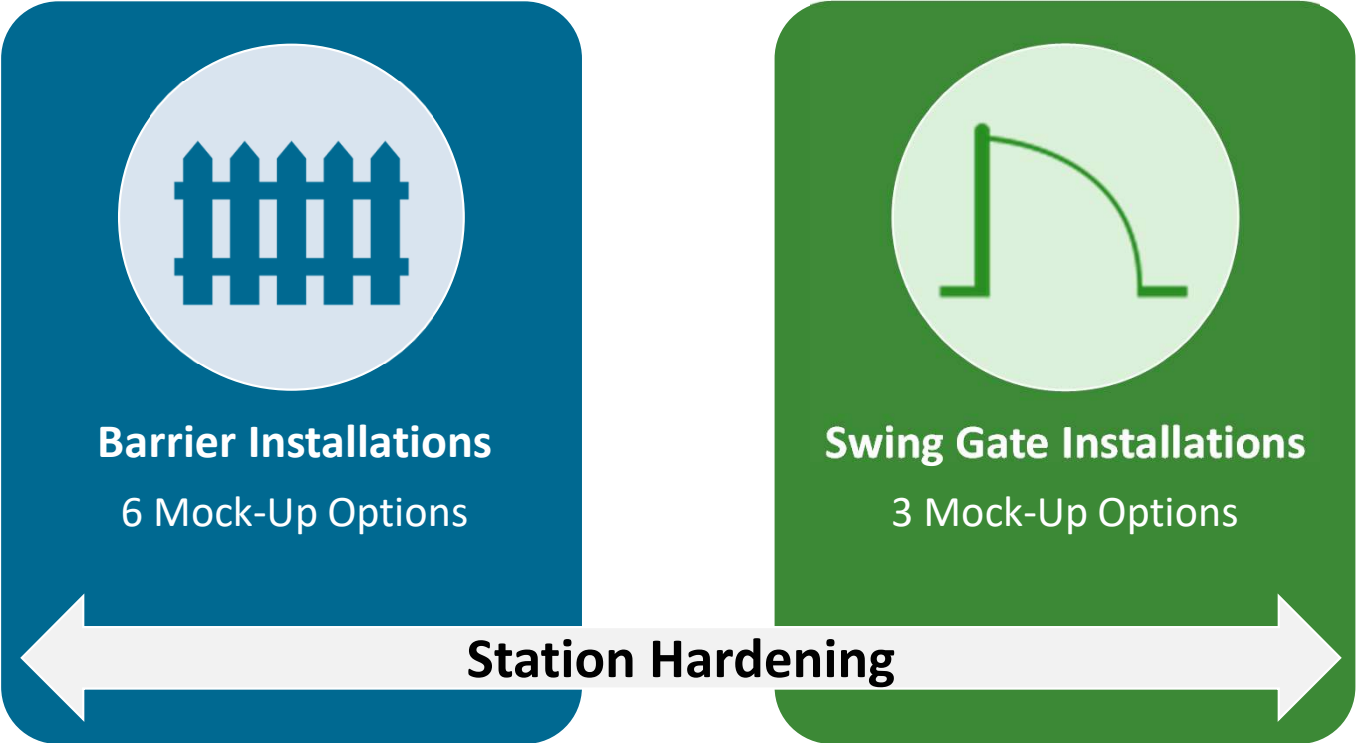


- Overhead fare gate sensors update every 50 milliseconds, to accurately determine, based on the predefined threshold, whether the aisle is occupied or empty.
- Overhead fare gate sensors are capable of detecting **very** small and **very** large objects, which is beneficial in the extremely rare cases that the infrared sensor may not.



Station Hardening

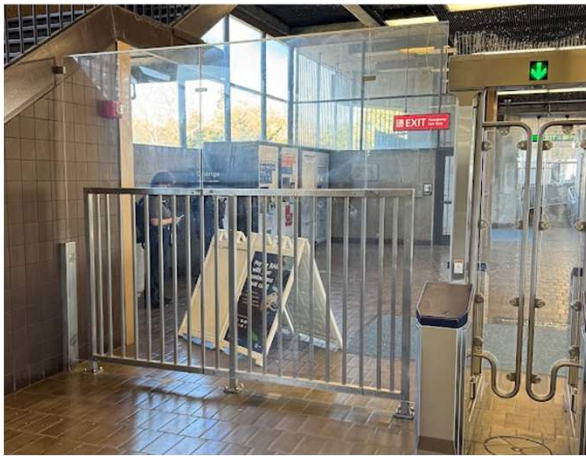
Station Hardening



Barrier Installation Options



Mock-Up Options 1 – 3 (of 6)



- 1 Polycarbonate on Steel Barrier**
- Gaps Systemwide
 - Already Installed during Next Generation Fare Gate Project



- 2 Polycarbonate on Existing Wall**
- 16th Street & 24th Street
 - Installed November 2024



- 3 Steel Metal Mesh Fence on Existing Wall**
- 24th Street
 - Installed April 2025

Barrier Installation Options



Mock-Up Options 4 - 6



4 Polycarbonate on Top of Existing Barrier

- Montgomery
- April 2025



5 Polycarbonate on Steel Posts

- Initially Embarcadero & MacArthur, then Gaps Systemwide
- September 2025



6 Wire Mesh on Steel Posts

- MacArthur
- November 2025

San Leandro & Hayward – Mesh Barrier Installation

Pilot Installation

- Hayward – 2 Barriers
- San Leandro – 1 Barrier
- 7-ft 4-in barrier height
- Matches faregate height



Thank You to our Labor Partners



Swing Gate Installations



Mock-Up Options 1 - 3



1 Polycarbonate to Existing Gate

- Fruitvale
- Installed August 2024



2 Door-only Modification

- West Oakland
- Installed April 2025

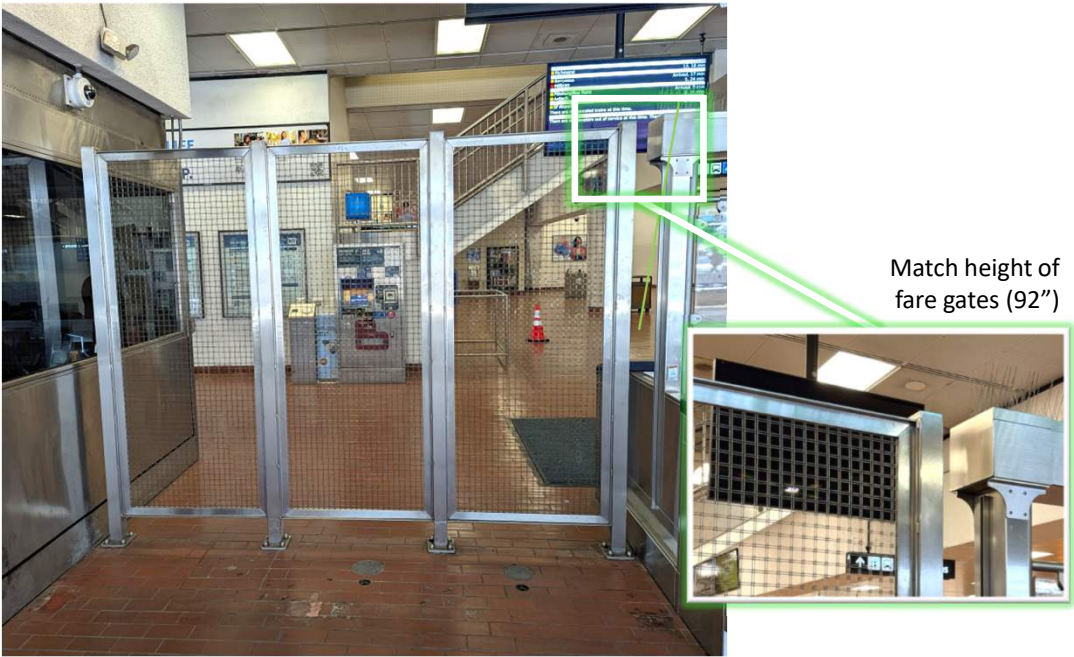


3 Door & Frame Modification

- MacArthur
- Installed May 2026

MacArthur Station – Proof of Concept

Mock-up of Barrier Panel Design
Installed on November 5, 2025



Mock-up of Swing Gate
Installed on May 20, 2026



Thank You to our Labor Partners



Thank You

