



Next Generation Fare Gates Update

July 11, 2024 | BART Board of Directors Meeting





Highlights

- Next Generation Fare Gate Barriers
 - Insights & Findings: The West Oakland Pilot
 - Our Journey Continues
 - Civic Center Deployment
 - Station Sequencing
- Other Types of System Barriers

Insights & Findings: The West Oakland Pilot

- Monitoring Control System (MCS) Software
- Barrier Design
 - Gate Speeds
 - Barrier Alignment
 - Mechanical Locking Mechanism Refinement
 - Metal frame with Polycarbonate Insert (Districtwide)
 - Bidirectional Barriers
- Updated Sensor Functionality for Safe Zone
- Public/Media Feedback

“We were there for nearly two hours. Let’s just say, we’ve never seen so many people buying or adding money to their clipper cards,” ~KGO reports



West Oakland

Our Journey Continues

Ongoing Activities System Wide

- Communication and Outreach
- Site Survey/Engineering/Infrastructure Design
- Deployment Strategies
 - Storage
 - Sequencing Scenarios
 - Delivery
- Ongoing Fabrication and Production
- Training
 - Station Agents
 - Maintenance (AFC)
- Moving Contract – Awarded
- Installation Contract – Active Solicitation



Delivery of Gates at West Oakland



Testing at the Lab



Training for Maintenance Team

Our Journey Continues – Finalizing Design

Vendor Proposed:
Accessible Door
Frameless Laminated Glass Panel

Option 1:
Accessible Door
Polycarbonate Panel

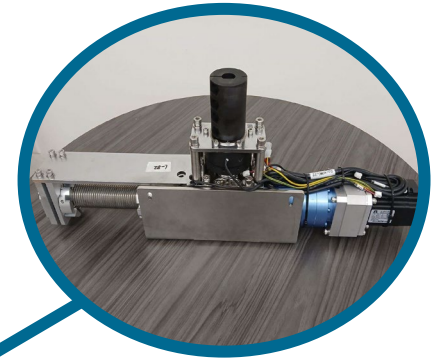
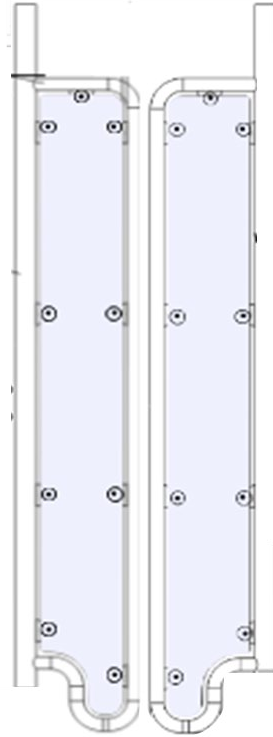
Option 2:
Stainless Steel Frame with
Perforated Metal Panel

Option 3:
Stainless Steel Frame with
Polycarbonate Panel

Barrier Design Decision

Option 3 - Selected:

Stainless Steel Frame with
Polycarbonate Panel



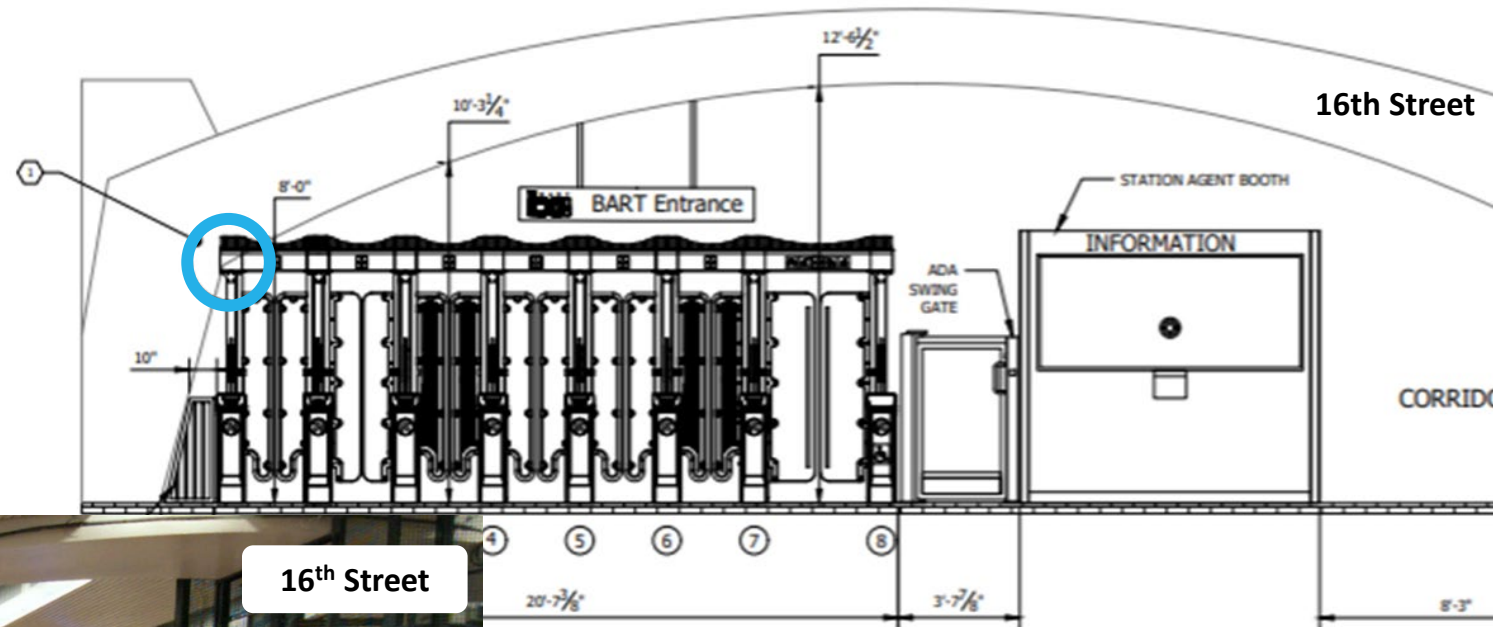
Mechanical Locking
Mechanism

Our Journey Continues

Site Surveys & Observations

Additional considerations for:

- Optimized Passenger Circulation
- Enhanced Visibility
- Improved Safety and Security
- Resolve Structural Conflicts



 Structural conflict with archway



Civic Center Deployment

Platform Elevator

- Installed Civic Center Platform Level Accessible Gate
- Modified Elevator Enclosure
- Worked Performed by BART Forces



Before



Installation



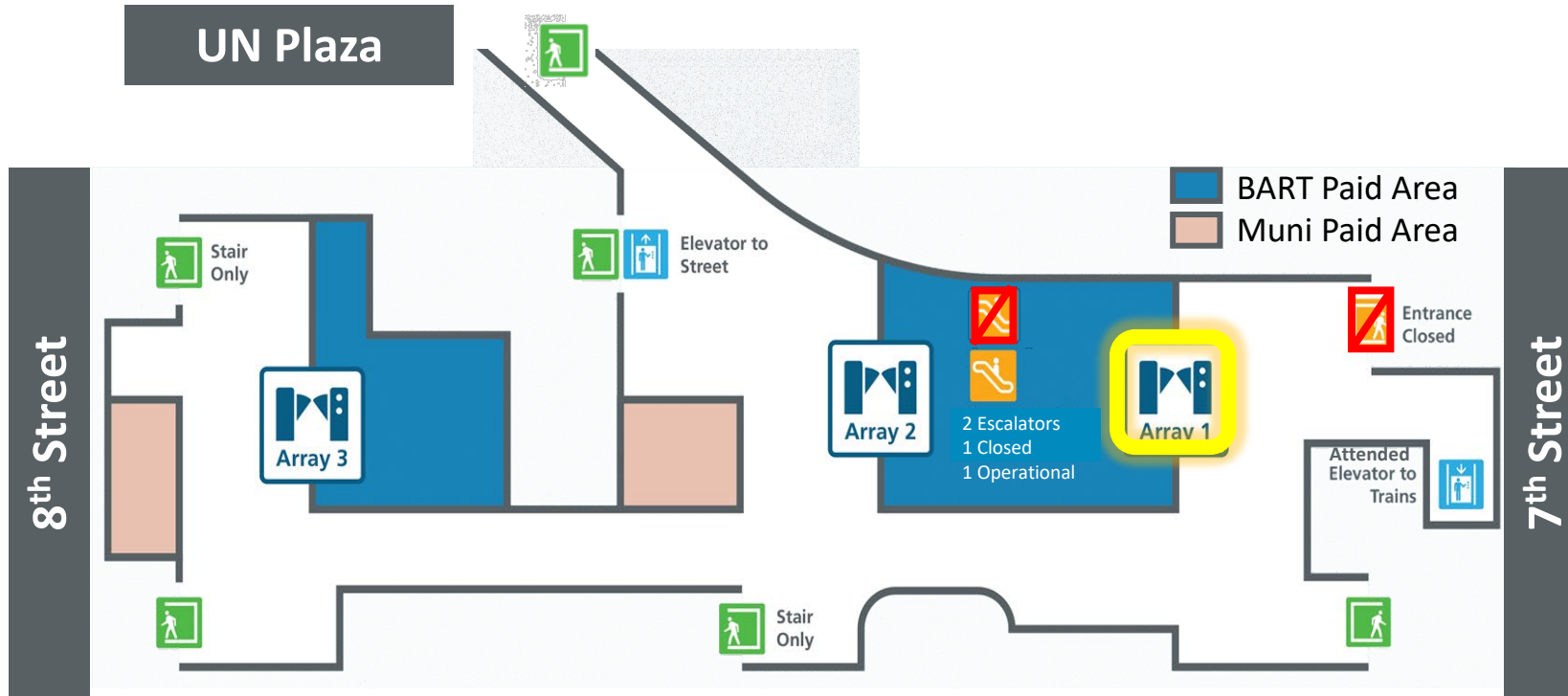
Gate Delivery



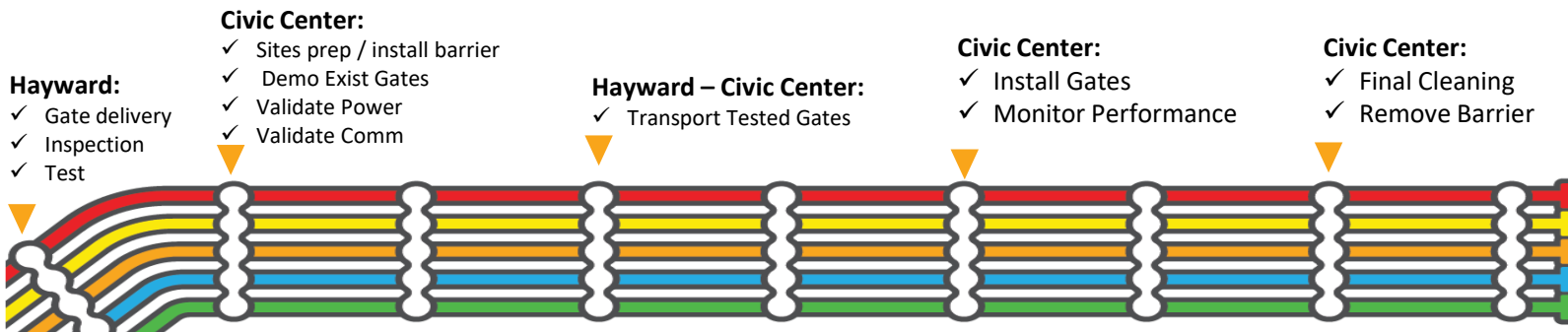
After

Civic Center Deployment













Concourse Level











- 7th Street entrance (North end)
 - 1 Accessible Fare Gate (AFG)
 - 4 Standard Fare Gates
- Work performed by BART forces
- Array Sequence
 - Array 1
 - Array 2
 - Array 3



Next 12 Stations

 Civic Center	 Fruitvale	 24 th Street	 Richmond
 SFO	 Antioch	 Powell Street	 Montgomery
 12 th St	 16 th St	 Coliseum	 Warm Springs

Next 8 Stations as shown Jan 11th, 2024

 Civic Center	 Montgomery	 Powell Street	 24 th Street
 SFO	 Fruitvale	 Richmond	 Antioch
Alternate Stations 16 th Street 12 th Street Downtown Berkeley Coliseum Embarcadero Rockridge Dublin/Pleasanton Warm Springs			



- 12 Starting this Calendar Year
- First 4 Sequence confirmed
 - Civic Center
 - Fruitvale
 - 24th St
 - Richmond



Other Types of System Barriers

Platform Screen Doors (PSD)

BART has, and continues to, evaluate

- Industry Review
- Feasibility Study
- Proof-of-Concept Design at 12th Street Station
- On going discussions with agencies around the world
- Continual review of advancement in technologies
- Maintenance Impacts
- Structural Infrastructure Impacts



Tokyo, Japan



Paris, France

Platform Screen Doors

Technology is Rapidly Advancing

- Door Operation Concepts
- Full Height and Partial Height
- Green Field vs Brown Field

Construction / Engineering Considerations

- Funding
- Supervisory Control and Data Acquisition (SCADA)
- Communication Based Train Control (CBTC)
- Ventilation Strategies
- Constructability within an operating environment



Paris, France



Elizabeth Line, London, England

Thank You

