



# 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

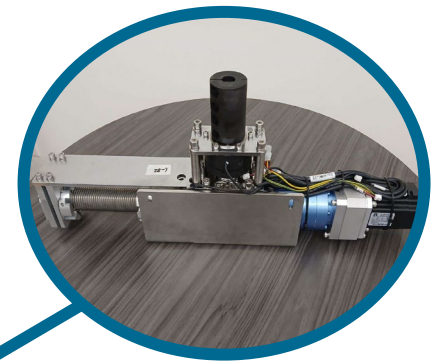
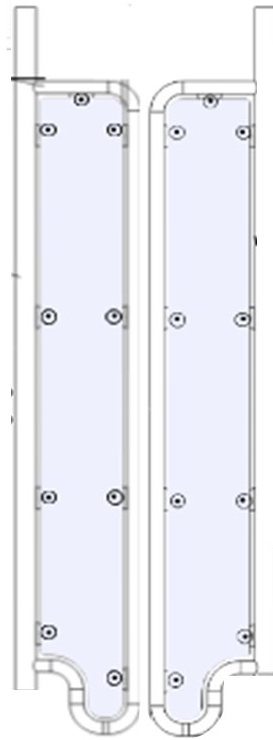
Option 2:  
Stainless Steel Frame with  
Perforated Metal Panel

Option 3:  
Stainless Steel Frame with  
Polycarbonate Panel

## Barrier Design Decision

### Option 3 - Selected:

Stainless Steel Frame with  
Polycarbonate Panel



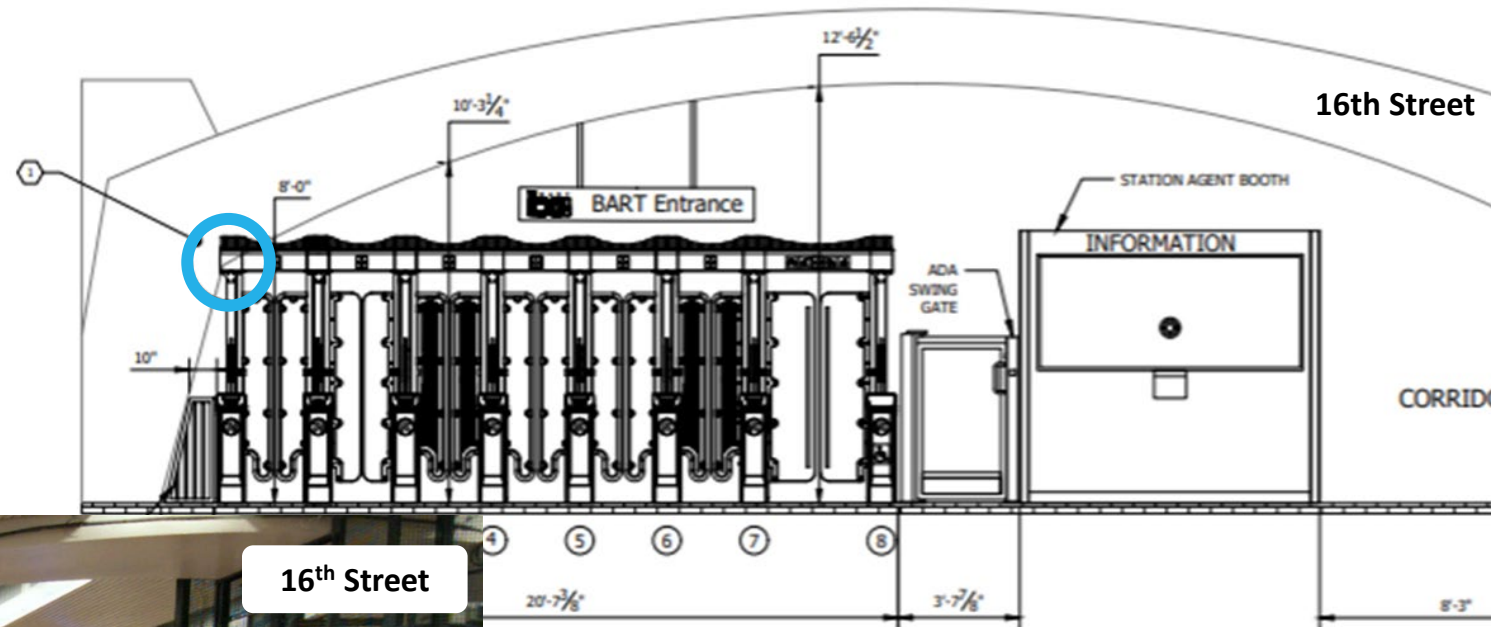
Mechanical Locking  
Mechanism

# 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



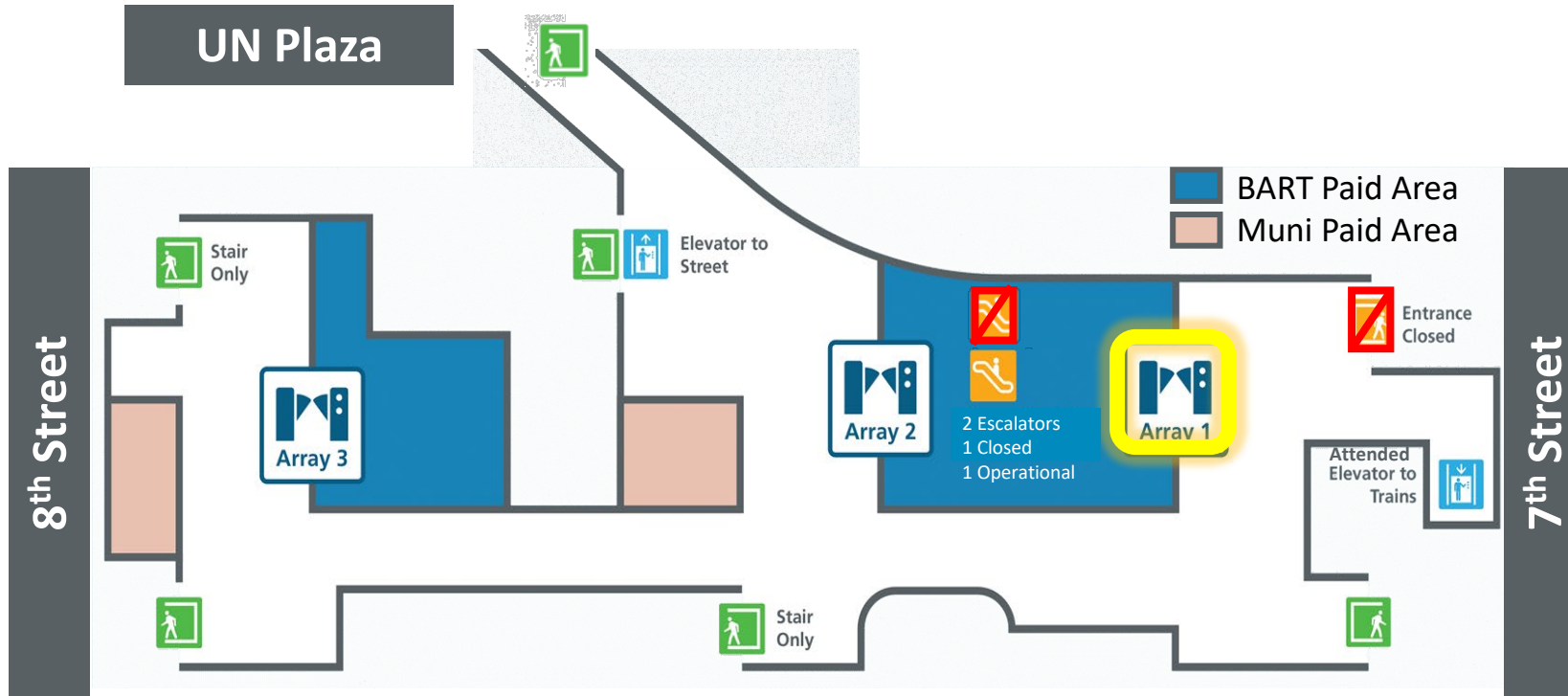
Gate Delivery



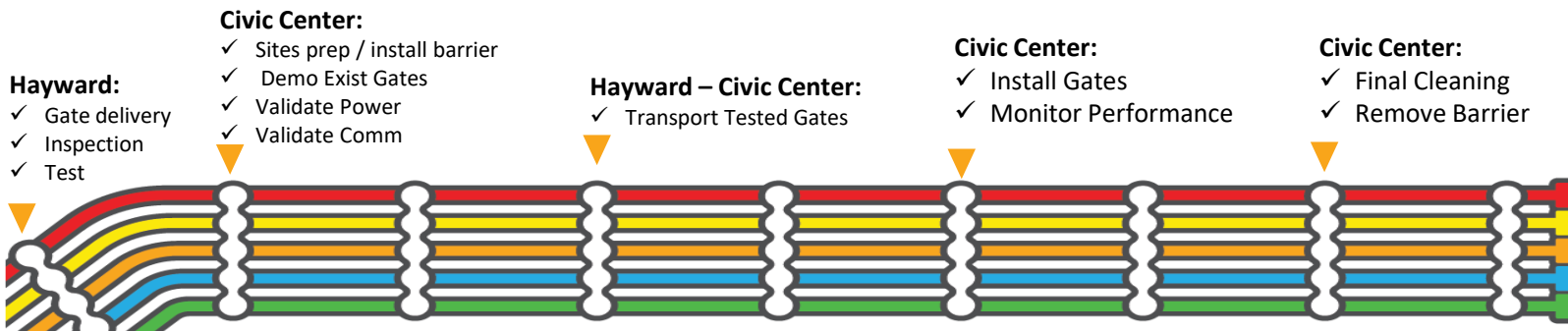
After

# Civic Center Deployment

## Concourse Level



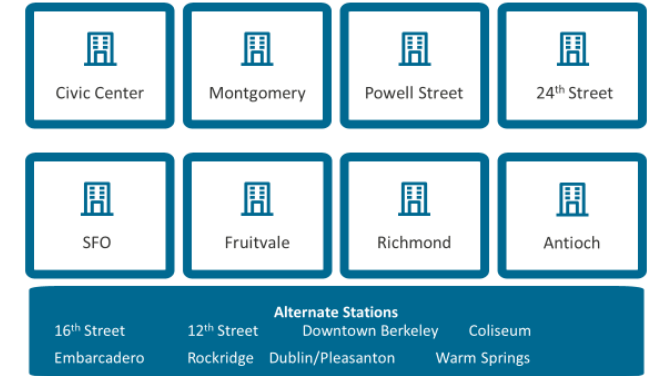
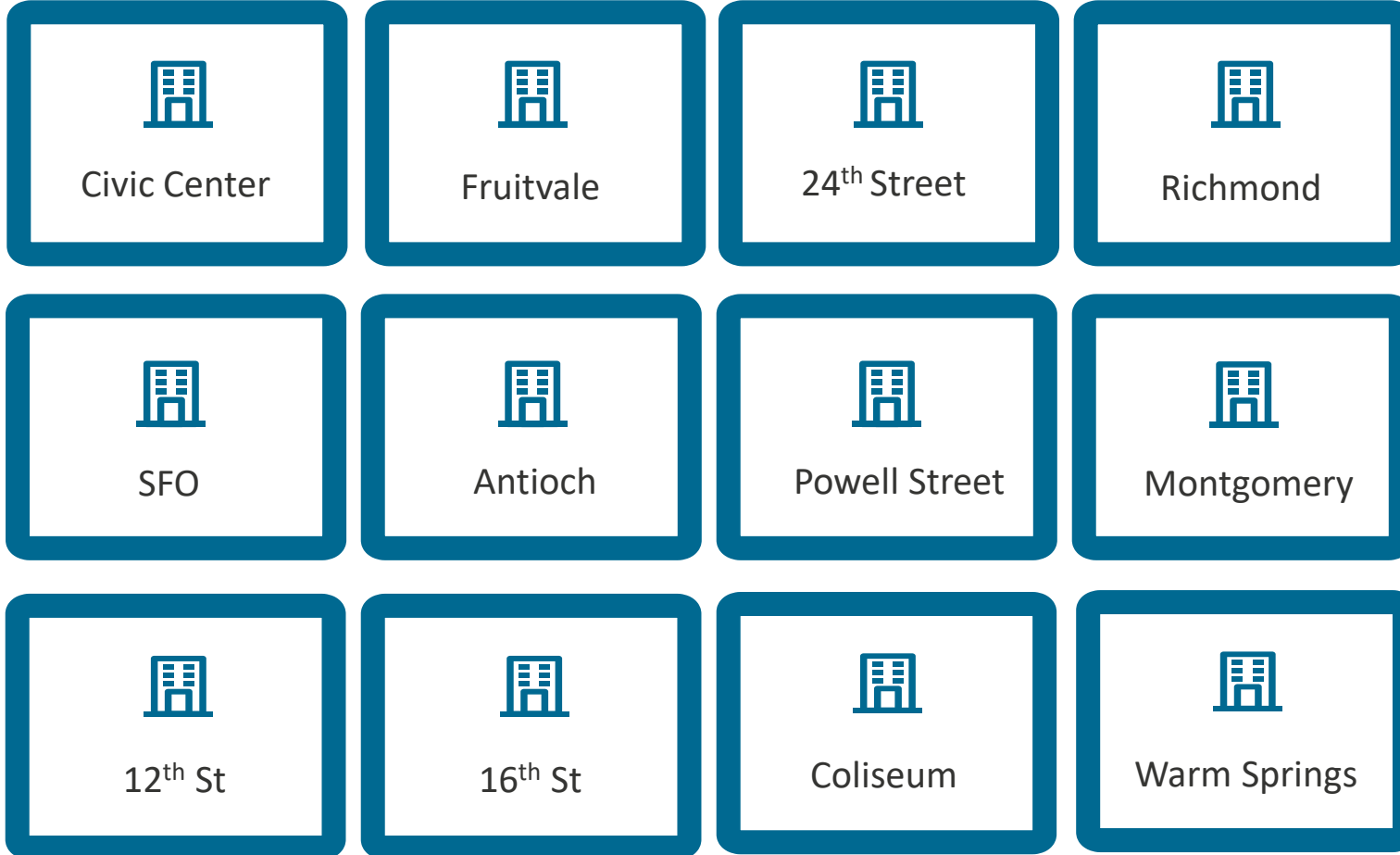
- 7th Street entrance (North end)
  - 1 Accessible Fare Gate (AFG)
  - 4 Standard Fare Gates
- Work performed by BART forces
- Array Sequence
  - Array 1
  - Array 2
  - Array 3





# Next 12 Stations

Next 8 Stations as shown Jan 11<sup>th</sup>, 2024



- 12 Starting this Calendar Year
- First 4 Sequence confirmed
  - Civic Center
  - Fruitvale
  - 24<sup>th</sup> 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 12<sup>th</sup> 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

