Next Generation Fare Gates Update
Agenda

Swinging Forward!

- From RFEI to RFP
- Building the RFP
- Fare Gate Evolution
- Funding Updates
- Next Steps
Evolution of the RFP

**FY 21**
- **Q4**: BART Board Update on RFEI

**FY 22**
- **Q1**: Engage Consultant
- **Q2**: Draft RFP Documents
  - 3 Volumes
  - 500 Requirements
- **Q3**: Board Approval for Competitive Negotiation Procurement
- **Q4**: Advertise RFP
  - Evaluate Proposals
RFP Workshops

Develop Scope of Work

Gather Standards & Requirements

Industry Engagement through RFEI

BART Stakeholder Workshops

Finalize Technical Requirements
RFP Building Blocks

Determine Procurement Strategy
- Determine Contract Type – Competitive
- Determine Contract Approach - RFP
- Develop Bid Strategy – Phases with Options
- Determine DBE & SBE Goals

Identify Risk & Liability Coverage
- Insurance & Bond Requirements
- General Conditions for Procurement
- Supplemental Conditions
BART's Commitment to DBEs

• Reviewed scope of work to identify opportunities for working with DBEs
• Identify appropriate North American Industry Classification System (NAICS) codes for contracting plan
• Outreach

Evaluate > 200 NAICS Codes
The RFP

1 Volume
- Invitation to proposer
- Evaluation criteria
- Supplementary conditions

2 Volume
- Scope of Work
- Technical Specifications

3 Volume
- Exhibits
- Reference documents
- Drawings
Hybrid Approach

Vendor Supplied Off the Shelf Gate Path (from June 2021)

1. Develop Best Value RFP for Off the Shelf Gate
2. Evaluate Submittals
   1. Deter Fare Evasion
   2. Maintainability
   3. Aesthetics
3. Procure Off the Shelf Gates
4. Deploy/Install

- Publish RFP
  - 2022
  - 2023-2026

BART Designed Gate Path

1. AFG Pilot/Data Analysis
2. RFG Pilot/Data Analysis
3. Array Pilot/Data Analysis
4. Finalize Design
5. Manufacture Components
6. Build Gates By BART Forces
7. Deploy Install
FARE GATE EVOLUTION

- **Cinch Mod**
- **Pneumatic AFG**
- **Double Stack Barriers**
- **Popup Barrier**
- **Dual Swing Barrier AFG**
- **Advanced Software Controls**
- **Single Swing Barrier AFG**
Leaf Evolution

Gap Fillers

Strengthening Bars
Lock Evolution
Original Bolt Lock

Innovative Leaf Lock

New Lock
Double Barrier to Single Barrier Evolution

10 Inch Gap

Extra Parts

Lock

Removed Parts

Lock

8 Inch Gap
Software Evolution

Faregate Controller

Fare Gate Software Optimized:
- Soft Landing
- Barrier Positioning
- Increased Barrier Speed

Neural Network
Console Mate Evolution

Modified Vendor Dummy Console  Internal Console Mate

Combatted Supply Chain Issue and Saved Money!!!
Paper Ticket to Clipper

No Ticket = Thinner Console
New Embarcadero Fare Gate

- Speeds Up Transfer to Muni
- Improves Accessibility
- Reduces Fare Evasion
Platform Elevator Enclosure Accessible Gates

EMBARCADERO (Completed Dec 2021)

MONTGOMERY (Completed Dec 2020)

BALBOA PARK (Completed Aug 2021)

BAY FAIR (Completed Jul 2021)
Concourse Accessible Gates

CONCORD (Completed Oct 2020)

ROCKRIDGE ARRAY 1 (Completed Aug 2021)

COLISEUM (Completed Aug 2020)
Fare Gates Completed and Planned

Completed Enclosure and Elevator AFG Installation
- Coliseum
- Concord
- Montgomery
- Bay Fair
- Balboa Park
- Embarcadero

Completed Array Retrofit
- Rockridge - Array #1

Full Hardened Testing
- Rockridge

Planned Enclosure and Elevator AFG Installation
- El Cerrito
- Rockridge
- Walnut Creek
- North Berkeley
- Civic Center
- Orinda
- Powell
Funding
**Funding Forecast**

**PROJECT TIMELINE**

- **2020**
  - Develop/Publish RFEI
  - Staff Review/Decision
  - Field Test - Richmond
- **2021**
  - Install Gates
  - Installation - Coliseum & Concord
  - Design/Build Prototype
  - Monitor Prototype
- **2022**
  - Continue Installation at High Priority Stations
- **2023**
  - Install/Field Test
  - AFG
  - RFG
- **2024**
  - Staff Review/Decision
  - RFEI Responses
- **2025-2026**
  - Award / Install Gates System Wide

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**Funding Timeline as Presented to the Board December 2020**

Phased installation based on availability of funding.

**FUNDING TIMELINE**

**TOTAL FUNDING NEED**

- **$90M**

**FY 2021**

- BART, $1M
- RR, $10M
- 5307, $8M
- **$19M**

**FY 2022**

- BART, $7M
- Counties, $16M
- **$23M**

**FY 2023**

- BART, $6M
- Counties, $33M
- **$39M**

**FY 2024**

- BART, $3M
- Counties, $6M
- **$9M**

Fully funded by 2024

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**% of $90M, by year**

- **2021**: 21%
- **2022**: 26%
- **2023**: 43%
- **2024**: 10%

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% and $ breakdown by funding source:

- BART: $10M
- Counties: $16M
- $33M
- $6M

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20
### Target Funding Plan

**Next Generation Fare Gates Systemwide = $90M**

<table>
<thead>
<tr>
<th>County/Segment</th>
<th>Total # of Fare Gates</th>
<th>% of Total</th>
<th>Total Cost ($M)</th>
<th>Estimated County Contribution ($M)</th>
<th>Estimated BART Contribution ($M)</th>
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<tbody>
<tr>
<td>Alameda</td>
<td>277</td>
<td>39%</td>
<td>34.9</td>
<td>19.6</td>
<td>15.3</td>
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<tr>
<td>Contra Costa</td>
<td>117</td>
<td>16%</td>
<td>14.7</td>
<td>7.4</td>
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<tr>
<td>San Francisco (incl. SFO)</td>
<td>199</td>
<td>28%</td>
<td>25.0</td>
<td>12.5</td>
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<tr>
<td>San Mateo</td>
<td>82</td>
<td>11%</td>
<td>10.3</td>
<td>10.3</td>
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<tr>
<td>Santa Clara</td>
<td>40</td>
<td>6%</td>
<td>5.0</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>715</strong></td>
<td><strong>90.0</strong></td>
<td><strong>$90.0</strong></td>
<td><strong>$54.8</strong></td>
<td><strong>$35.2</strong></td>
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Secured Funding – $47.2 million

BART

<table>
<thead>
<tr>
<th>Source</th>
<th>Amount ($M)</th>
<th>Notes</th>
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<tbody>
<tr>
<td>FTA Section 5307/5337</td>
<td>18.0</td>
<td>MTC - administered TCP Program</td>
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<tr>
<td>FY22 Federal Appropriations Earmark</td>
<td>2.0</td>
<td>Member Request Senator Feinstein</td>
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<tr>
<td>Affordable Housing &amp; Sustainable Communities</td>
<td>4.5</td>
<td>Awarded February 2022</td>
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<tr>
<td>Measure RR</td>
<td>10.0</td>
<td>Access Program Funds</td>
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<tr>
<td>Capital Allocations/Other Grants</td>
<td>7.2</td>
<td>Future Year Funds</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>41.7</strong></td>
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County

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<tr>
<th>Source</th>
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<th>Notes</th>
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<tr>
<td>Subregional Transportation Mitigation Program</td>
<td>0.5</td>
<td>WCCTAC-Administered Program</td>
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<tr>
<td>Santa Clara VTA</td>
<td>5.0</td>
<td>SVRT O&amp;M Agreement</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>5.5</strong></td>
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</tbody>
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- Funding ahead of schedule – had forecast to secure $42M by end of FY22
- Since prior update, secured:
  - $2M earmark in FY22 Federal Appropriations bill
  - $4.5M across four AHSC grants
Pending Funding – $13.4M

Submitted NGFG for additional funding opportunities, including:
- $2M STIP funds for Contra Costa County
- $7.9M across four FY23 State Budget requests to State Legislative Members
- $3.5M CCTA Measure J funds
- Will continue to pursue funding opportunities as they arise

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<thead>
<tr>
<th>Source</th>
<th>Amount ($M)</th>
<th>Notes</th>
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<tr>
<td>State Transportation Improvement Program</td>
<td>2.0</td>
<td>Pending CTC approval March 16-17</td>
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<td>FY23 State Budget Request</td>
<td>7.9</td>
<td>4 Member Budget Requests submitted March</td>
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<td>CCTA Measure J</td>
<td>3.5</td>
<td>Pending CCTA approval</td>
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<td><strong>Total</strong></td>
<td><strong>13.4</strong></td>
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Planned & Identified Sources – $43.8M

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<th>BART District Counties</th>
<th>Source</th>
<th>Amount ($M)</th>
<th>Notes</th>
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<tr>
<td></td>
<td>Alameda County</td>
<td></td>
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<tr>
<td></td>
<td>Measure BB</td>
<td>19.6</td>
<td>Subject to ACTC Approval</td>
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<td></td>
<td>Total - Alameda County</td>
<td>19.6</td>
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<td></td>
<td>Contra Costa County</td>
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<tr>
<td></td>
<td>OBAG3/Future Sales Tax Measure</td>
<td>1.4</td>
<td>Subject to CCTA approval</td>
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<td></td>
<td>Total - Contra Costa County</td>
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<tr>
<td></td>
<td>San Francisco County</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>New Transportation Sales Tax Measure</td>
<td>12.5</td>
<td>SFCTA Bd approved Exp Plan 3/8; 11/22 ballot</td>
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<tr>
<td></td>
<td>Total - San Francisco County</td>
<td>12.5</td>
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<tr>
<td></td>
<td>Total - Three BART District Counties</td>
<td>33.5</td>
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<tr>
<td></td>
<td>San Mateo County - Measure W</td>
<td>10.3</td>
<td>Call for projects deferred to time TBD</td>
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<tr>
<td></td>
<td>Total - San Mateo County</td>
<td>10.3</td>
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<tr>
<td></td>
<td>Total Counties</td>
<td>43.8</td>
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- Discussions continuing to advance with three BART county CTAs regarding balance of funding for county share
Project 2 Year Look Ahead

<table>
<thead>
<tr>
<th>FY 2021</th>
<th>FY 2022</th>
<th>FY 2023</th>
<th>FY 2024</th>
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<tbody>
<tr>
<td>7/1/20</td>
<td>7/1/21</td>
<td>7/1/22</td>
<td>7/1/23</td>
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**BART Designed Gates**

- **Design/Data Analysis/Enhancements**
- **Site Surveys**
- **Procure Parts**

**Vendor Off the Shelf Gates**

- **Develop RFP for Off the Shelf**
- **Award Project / Receive Off the Shelf Gates / Install**

**Stations Deployment**

- Coliseum
- Concord
- Montgomery
- Regular Fare
- Gate Pilot
- Fruitvale
- Bay Fair
- Balboa Park
- Embarcadero
- El Cerrito Plaza
- Walnut Creek
- North Berkeley
- Civic Center
- Rockridge
- Orinda
- Powell

- **Today**
- **Award Project / Receive Off the Shelf Gates / Install**
Thank You!
Thank you