



# Update on Safety, Reliability, and Traffic Relief Program (Measure RR)

July 11, 2024 | BART Board of Directors Meeting

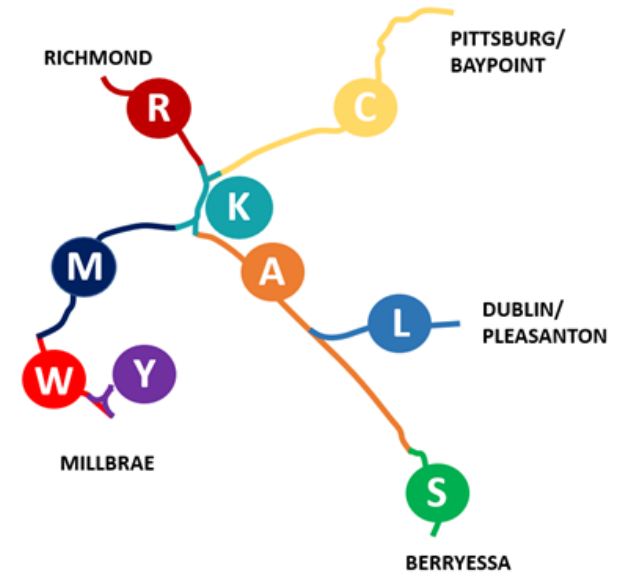


# Bond Oversight Committee Framework

SEPTEMBER Deep Dive	JANUARY The Annual View	APRIL Closing the Loop Meeting	JUNE Annual Year End Review
<p>In-depth view of 8 Programs:</p> <ul style="list-style-type: none"> <li>Financial Outlook, Budget and Schedule Update</li> <li>Program Update                             <ul style="list-style-type: none"> <li>Office of Civil Rights</li> <li>Human Resources/Staffing</li> <li>Project Status and Milestones</li> </ul> </li> </ul>	<p>The Annual-view of:</p> <ul style="list-style-type: none"> <li>Funding, bond, forecasting, context, mixed-funding, etc.</li> <li>Procurement</li> <li>Human Resources/Staffing</li> <li>Small Business Outreach</li> <li>Public Outreach Update</li> <li>Staff Organization Chart</li> </ul>	<ul style="list-style-type: none"> <li>Review of Measure RR Audits in the past year</li> <li>Project Controls Framework</li> <li>Bond Funded Program Watchlist Items Review</li> </ul>	<ul style="list-style-type: none"> <li><b><i>Annual Report Approval</i></b></li> <li><b><i>Measure RR Project Successes for this Year</i></b></li> <li><b><i>Preview of Next Year's Projects by Program</i></b></li> <li><b><i>Subcommittee summaries, discussion, member election</i></b></li> </ul>

# Executive Summary

- Through March 2024, \$1.81B of the Measure RR funds have been invested to complete 58% of the work
- Successes for January – March 2024:
  - Completion of Construction for the following:
    - R-Line 34.5kV Cable Replacement (between El Cerrito Plaza and Richmond Yard Substations)
    - Platform Escalator at Montgomery St. Station
    - Canopy at Embarcadero Station
  - Contract Award for Material Procurement for K-Line Interlocking Replacement and Traction Power Materials



# Projects in Planning	# Projects in Design	# Projects in Bid/Award	# Projects in Construction	# Projects Completed	TOTAL # Projects
5	28 (-1)	14 (-1)	49 (+2)	61	157

+ (Projects added in the phase)  
 - (Projects no longer in the phase)



# Project Progress – Accomplishments (Actual)

Period: April 1, 2023 – March 31, 2024

## Renew Track



- ✓ Completion of Construction of Oakland Yard Tracks



## Repair Tunnels and Structures

- ✓ Completion of Design for Street Grate and Vent Shafts (East Bay)
- ✓ Completion of Design for Systemwide Slope Stabilization Project
- ✓ Completion of Aerial Fall Protection (A-Line) Fruitvale to Bay Fair Station

## Replace Train Control/ Increase Capacity



- ✓ Completion of CBTC Wayside Installation Final Design Review (FDR) Gate 2



## Station Access

- ✓ Commenced Construction for Accessibility Improvement Project (Phase 1 & 2)
- ✓ Completion of Construction for 12th St. and MacArthur Station Bike Racks

- ✓ Completion of Construction for M-Line and R-Line 34.5kV Cable Replacement (El Cerrito Plaza to Richmond Yard Substations)
- ✓ Completion of Construction for Station Emergency Lighting (11 Locations)



## Renew Mechanical

- ✓ Completion of Construction of Back Flow Preventers (7 Locations)



## Renew Stations

- ✓ Completion of seven canopies at Embarcadero, Montgomery St., Powell St., and Civic Center for Market St. Entry Canopies Project
- ✓ Completion of five escalators at Powell St., Montgomery St., Embarcadero and Civic Center Station for Market St. Escalators Project



## Relieve Crowding

- ✓ Completion of Concrete Retaining Wall for Hayward Maintenance Complex Phase 2: Civil Grading
- ✓ Completion of Construction for Civic Center Platform Stairs



## Renew Power

- ✓ Completion of the Concord Willow Pass Road (CWS) High Voltage Transformer Replacement

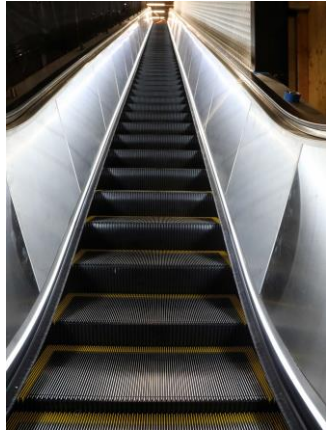
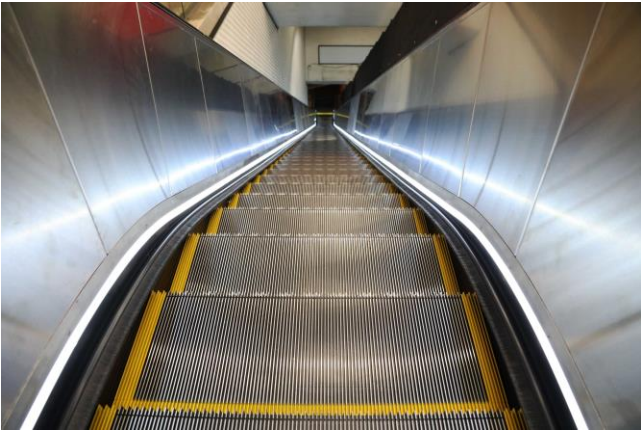


# Market Street – Entry Canopies & Escalators

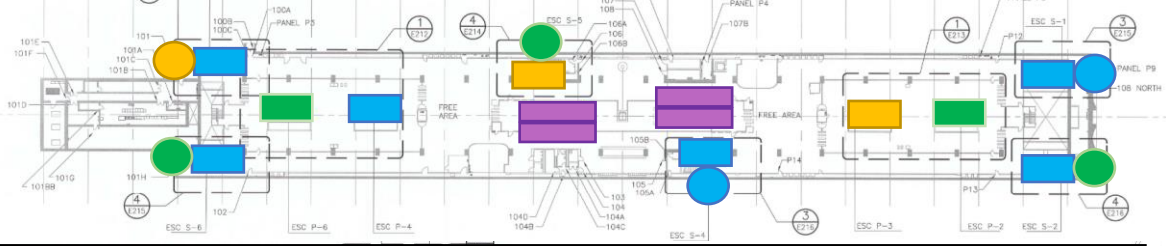
## Entry Canopies Project



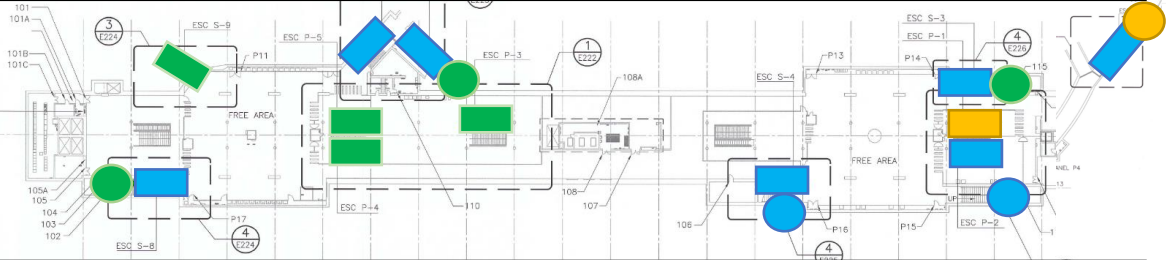
## Escalators Project



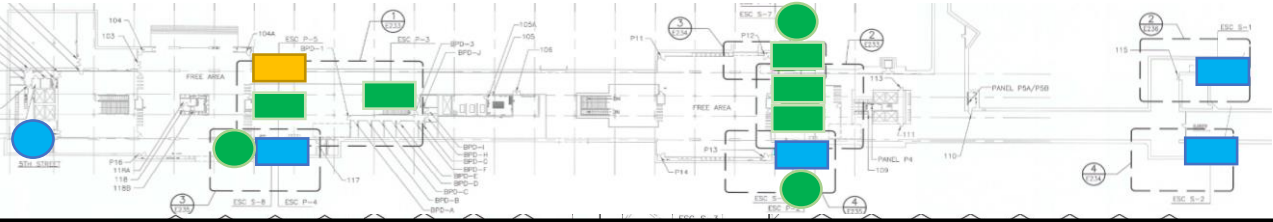
Embarcadero



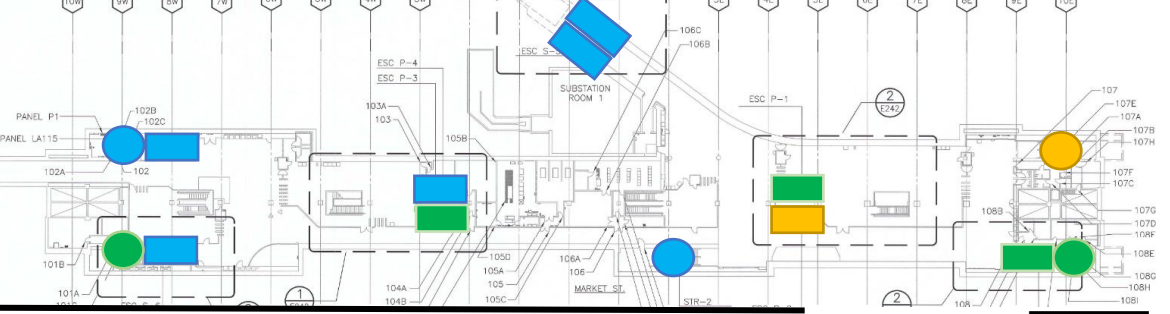
Montgomery



Powell



Civic Center



- Canopies
- ◻ Escalators
- ▶ Complete
- ▶ Under Construction
- ▶ Future Construction
- ▶ MUNI



# Market Street – Entry Canopies & Escalators

## Entry Canopies Project

<b>Scope</b>	Construct 21 canopies (2 pilot)
<b>Schedule</b>	12 Years
<b>Budget</b>	\$114M

## Escalators Project

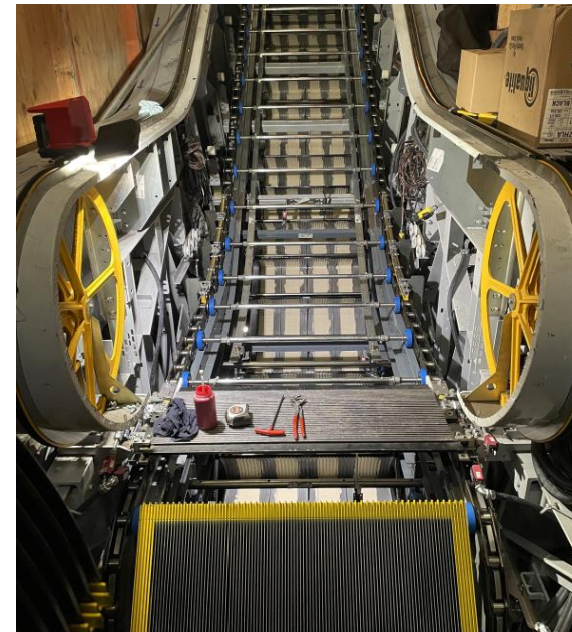
<b>Scope</b>	Procure and install 41 escalators
<b>Schedule</b>	12 years
<b>Budget</b>	\$154M



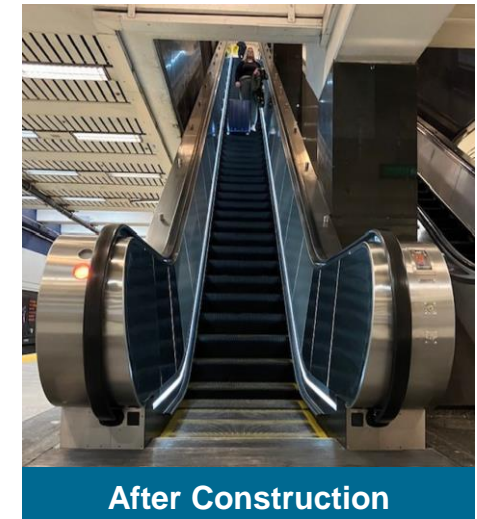
Metal Deck Installation



Canopy Artwork



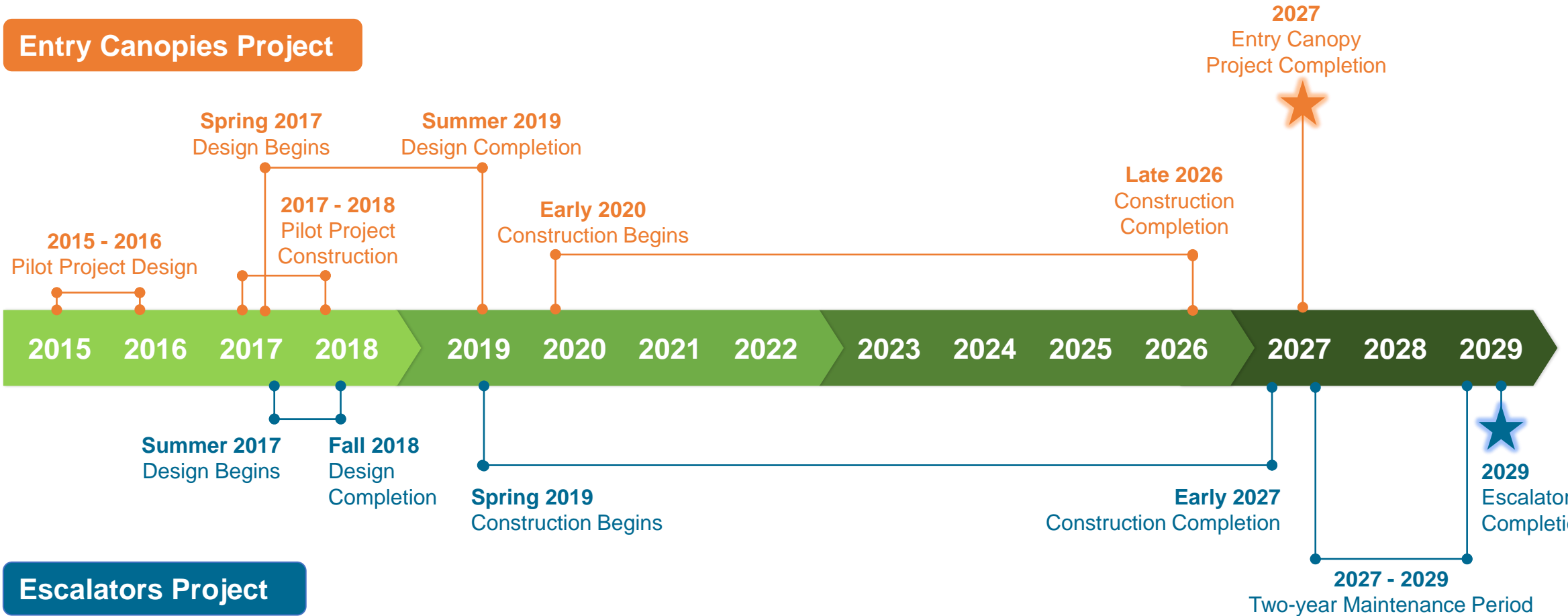
During Construction



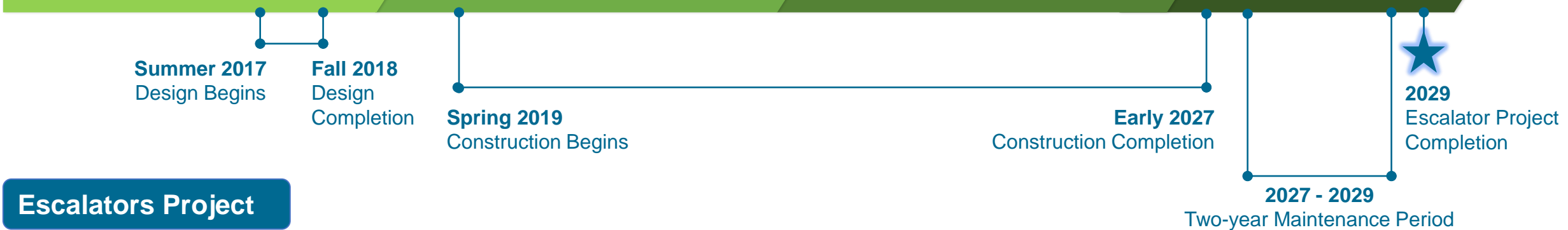
After Construction

# Project Timelines – Entry Canopies & Escalators

## Entry Canopies Project



## Escalators Project



# Project Accomplishments & Forecast – Entry Canopies & Escalators

## Entry Canopies Project

Accomplishment Period: April 1, 2023 – March 31, 2024

7 Entry Canopies Installed  
Total of 11 Installed To-Date

Embarcadero



Powell St.

Civic Center



Forecast Period: April 1, 2024 – March 31, 2025

5 Additional Entry Canopies To Be Installed

## Escalators Project

Accomplishment Period: April 1, 2023 – March 31, 2024

5 Escalators Installed  
Total of 13 Installed To-Date

Montgomery St.



Civic Center



Embarcadero



Forecast Period: April 1, 2024 – March 31, 2025

8 Additional Escalators To Be Installed





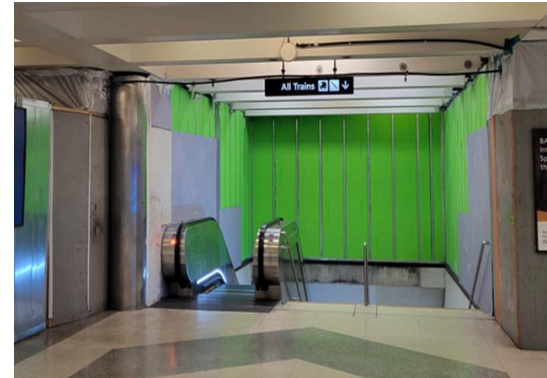
# Challenges – Entry Canopies & Escalators



**Project Schedule & Sequencing**  
Escalator Construction after Canopy Completion



**Differing Site Conditions**  
Existing Escalator Truss Supports and Utilities



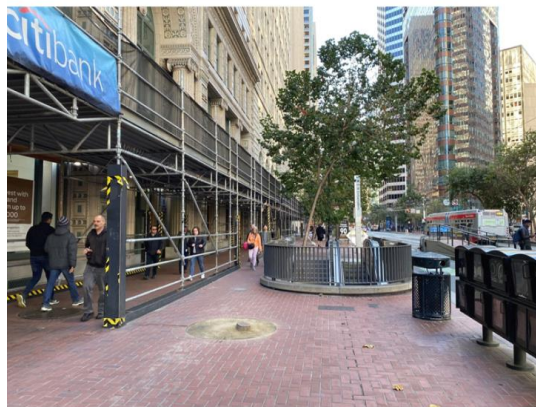
**Coordination with BART Projects**  
Substation Project Coordination at Montgomery St. Station



**Holiday Moratoriums**  
Limited Work Hours  
(end of November through January from 7am – 10pm)



**Tree Removal**  
Tree Conflict with Entry Canopy



**Coordination with Stakeholders**  
Scaffolding Conflict with Entry Canopy



**Vandalism, Property Theft & Bio-hazards**  
Street Entrance of Civic Center Station

# Operational Benefits – Entry Canopies & Escalators

## Entry Canopies Project



Provides Weather Protection



Enhanced Security



Provides Real-Time Display Information



Environmentally Friendly



Meets Code Requirements

## Escalators Project



Tougher But Lighter - Design



More Energy Efficient



Increased Reliability with Shorter Downtime



Environmentally Friendly



Brighter/Newer Lighting System

# Project Progress – Forecasted Milestones

Period: April 1, 2024 – March 31, 2025



## Renew Track

- ✓ Completion of 7 out of 21 weekend shutdowns for K-Line Interlocking Replacement



## Repair Tunnels and Structures

- ✓ Issue for Bid Tunnel Waterproofing at M-Line
- ✓ Completion of Design-Water Intrusion at Train Control Rooms (Package 2, 4 Locations) and (Package 3, 6 Locations)



## Replace Train Control/ Increase Capacity

- ✓ Completion of Installation of CBTC equipment in the existing Hayward Test Track (HTT) Train Control House



## Station Access

- ✓ Completion of Design for the 19th St. Access Improvement Project



## Renew Power

- ✓ Completion of Construction for Oakland Transition Structure (KTE) Traction Power Substation Replacement
- ✓ Completion of Construction for the Civic Center (MCC) and Montgomery St. (MMS) Substations
- ✓ Issue for Bid for TCCCP East Bay: Transbay Corridor Core Capacity East Bay Substation



## Renew Mechanical

- ✓ Issue for Bid Fire Suppression Systems Upgrade (11 Locations)
- ✓ Completion of Design for Sewage Pumps Replacement



## Renew Stations

- ✓ Completion of Construction of five canopies at Embarcadero, Montgomery St. and Civic Center Station for Market St. Entry Canopies Project
- ✓ Completion of Construction of eight escalators at Embarcadero, Montgomery St., Powell St. and Civic Center Station for Market St. Escalators Project



## Relieve Crowding\*

- ✓ Completion of Preliminary Business Case for Link21
- ✓ Completion of Public Outreach for Evaluation Findings for Link21

*\*Full Title: Design and Engineer Future Projects to Relieve Crowding, Increase System Redundancy, and Reduce Traffic Congestion*



# Thank You

