



# Quarterly Capital Programs & Projects Status Report (CPPSR)

**FY24 Q2 Report (October – December 2023)**

**March 29, 2024**













# District Wide Capital Projects

## Capital Reinvestment Work is Paying Dividends

BART has been hard at work rebuilding the system and investing in capital improvements with the goal of increasing reliability and improving the customer experience. Phase 1 of BART's Fleet of the Future Rail Car Procurement project, which replaces BART's legacy rail car fleet and expands the fleet to enable more frequent and longer trains, is nearing completion, with only new rail cars now in regular service, providing a more reliable and comfortable ride. Investments in traction power and replacement of aging track minimizes service disruptions and increases on time performance. Other key capital projects are well underway, including the replacement of BART's 50-year-old fixed block train control system with a modern, communications-based train control system, which will improve service reliability and enable more frequent trains. The Next Generation Fare Gates Project, which will replace fare gates throughout the system with new gates that are more reliable, easier to maintain and more resistant to fare evasion, successfully completed a pilot deployment at the West Oakland Station and is commencing broader implementation. Notably, BART has now completed its Earthquake Safety Program, funded by Measure A general obligation bonds, with the final improvements to the Transbay Tube now delivered.

### Capital Improvement Program (CIP) Categories

	<b>Electrical and Mechanical</b>		<b>System Development</b>
	<b>Rail Cars</b>		<b>System Support</b>
	<b>Seismic Programs</b>		<b>Track and Structures</b>
	<b>Shops, Yards, and Facilities</b>		<b>Traction Power</b>
	<b>Stations</b>		<b>Train Control and Communications</b>

### Data Reviewed and Updated this Quarter:

- Total Funded Budget
- Spent to Date
- % Complete
- Closeout Date
- Forecasted Budget (2 Years)
- Add/Delete Projects
- FY24 Estimate at Completion

### Planned updates in FY24Q3:

- Total Funded Budget
- Spent to Date
- % Complete
- Closeout Date
- Project Scope Summary

### Fields Definition in the Projects by CIP Category Tables

**Project ID** - A unique identifier for a project or project component defined by BART to track a project

**Project Name** - Descriptor used for the project in PeopleSoft data base

**Project Scope Summary** - Short description of project scope

**Original Estimate at Completion (EAC)** – Initial expectation of total cost at the end of a project

**FY24 Q2 Estimate at Completion (EAC)** - The FY24 Q2 expectation of total cost at the end of a project

**Total Funded Budget** - Allocated budget in BART financial system, excludes secured but not yet allocated funding

**Spent through FY23** - Actual amount spent from project start to the end of FY23: June 30, 2023

**Adopted FY24 Budget** - The adopted cost to perform work on a project in fiscal year 2024

**FY24 Q2 Spent** - Actual amount spent during FY24 Q2: October 1, 2023 – December 31, 2023

**Preliminary FY25 & Forecasted FY26 Budget** - The projected cost to perform work on a project in fiscal years 2025 & 2026

**Spent through FY24 Q2** - Actual amount spent to date (as of the end of FY24 Q2: December 31, 2023)

**% Complete Physical or Cost** - Physical % complete is based on actual work completed. The cost % complete is based on spent to date against project budget.

**Closeout Date** - Projected closing date of the project

# Table of Contents

- 1. Preliminary FY25 Budget Dashboard .....6
- 2. Forecasted FY26 Budget Dashboard.....7
- 3. Major Programs .....8
- 4. Major Program Reports .....9
  - 4.1 Rail Car Procurement Program
  - 4.2 Traction Power
  - 4.3 Core Capacity Program
    - a. Core Capacity Program – Overview
    - b. Core Capacity Program –CBTC
    - c. Core Capacity Program – HMC2
    - d. Core Capacity Program- TPSS
    - e. Core Capacity Rail Cars
  - 4.4 Elevator Modernization
  - 4.5 Fleet of the Future Maintenance Facility
  - 4.6 Fencing and Security
  - 4.7 Operations Control Center (OCC) Related Improvements
  - 4.8 BART Police Department (BPD) HQ
  - 4.9 Link21 Program Development
  - 4.10 Next Generation Fare Gates
- 5. Project Scopes and Budget Summaries by CIP Category.....23
  - 5.1 Rail Cars
  - 5.2 Traction Power
  - 5.3 Train Control and Communications
  - 5.4 Shops, Yards, and Facilities
  - 5.5 Track and Structures
  - 5.6 Stations
  - 5.7 Seismic Programs
  - 5.8 System Development

5.9 Electrical and Mechanical

5.10 System Support

6. Selected Project Summaries .....47

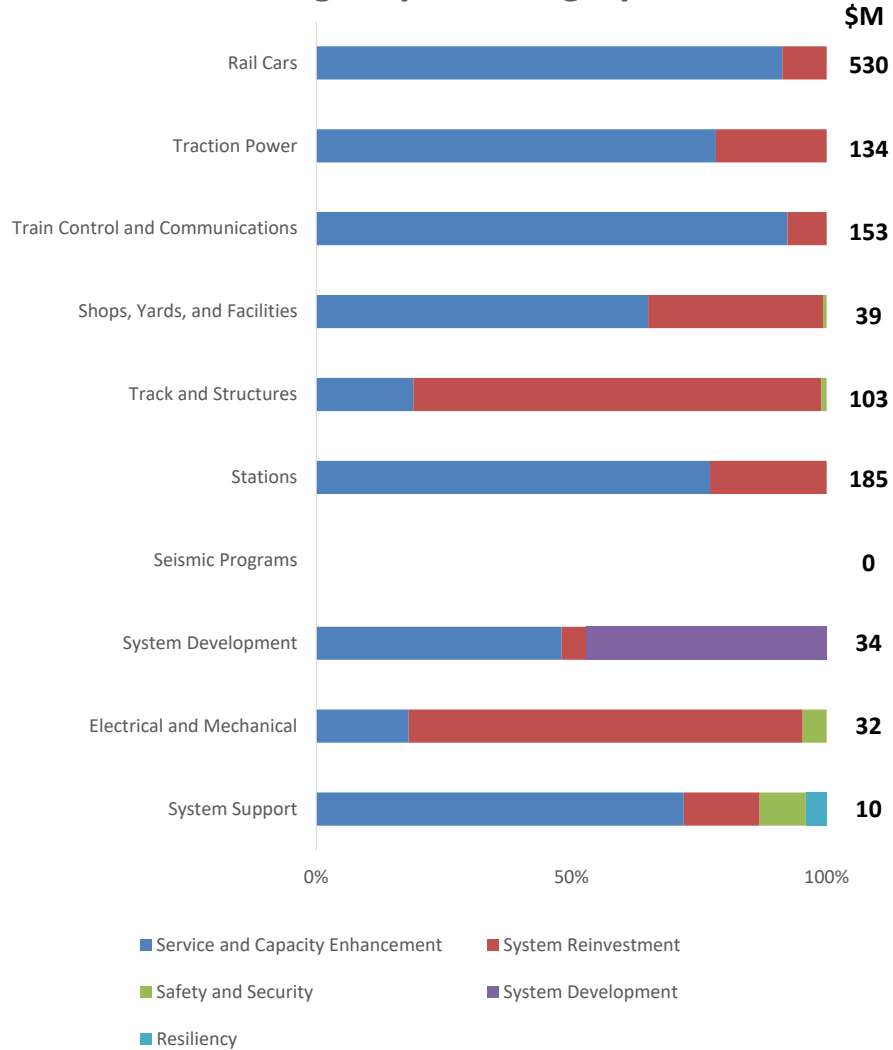
- 6.1 15EIRR1 - CWS High Voltage Transformer Replacement
- 6.2 15EJRRR - 34.5 kV AC Cable Replacement A-Line – RR \*
- 6.3 15EJRRR - 34.5 kV AC Cable Replacement R-Line – RR \*
- 6.4 15EJRRK - 34.5 kV AC Cable Replacement K-Line
- 6.5 15EJRRC - 34.5 kV AC Cable Replacement C-Line – RR \*
- 6.6 15EK601 - East Bay Traction Power Substations - RR – C \*
- 6.7 20AJ003 - Trunked Radio Replacement System Wide \*
- 6.8 15TC004 - Water Intrusion Mitigation in Train Control Rooms
- 6.9 20LN002 – Mux Cable Replacements \*
- 6.10 15CQ007 - Track Renewal Project Oakland Yard – RR \*
- 6.11 15QL004 - Aerial Guideway Sound Wall Repairs, C, R, and L-Lines \*
- 6.12 54RR260 -Fire Services at Hayward Yard - RR \*
- 6.13 54RR510 - HVAC Renovation and LMA
- 6.14 15CQ020 - Track Renewal Project Richmond Yard - RR
- 6.15 03QJ101 - Concord Yard Wheel Truing Machine
- 6.16 15CQ017 - Rail Re-Profiling Services Systemwide
- 6.17 15TC007 - Aerial Fall Protection
- 6.18 15TC013 - Slope Stabilization Systemwide
- 6.19 15CQ008 - Interlocking Replacement at K23, K25, and C15
- 6.20 15IF003 - Powell Street - Gateway Station
- 6.21 11IA002 - New Platform Stairs at Civic Center
- 6.22 15LK001 – Market Street Entry Canopies
- 6.23 15LK002 – Market Street Escalators Project
- 6.24 15NU002 - Accessibility Improvement Program
- 6.25 15NE002 - Public Address System Improvement
- 6.26 09AU000 - Transbay Tube Retrofit #1 (Underwater)

- 6.27 09JA000 - Link 21
- 6.28 15IJ200 - Station Fire Alarm Replacement - 12th, 19th & N. Berkeley
- 6.29 15IJRR1 - Station Fire Alarm Replacement, 3 Stations
- 6.30 15IJRR2 - Station Fire Alarm Replacement, 6 Stations
- 6.31 17HMRR1 - MET-G Generator Replacement

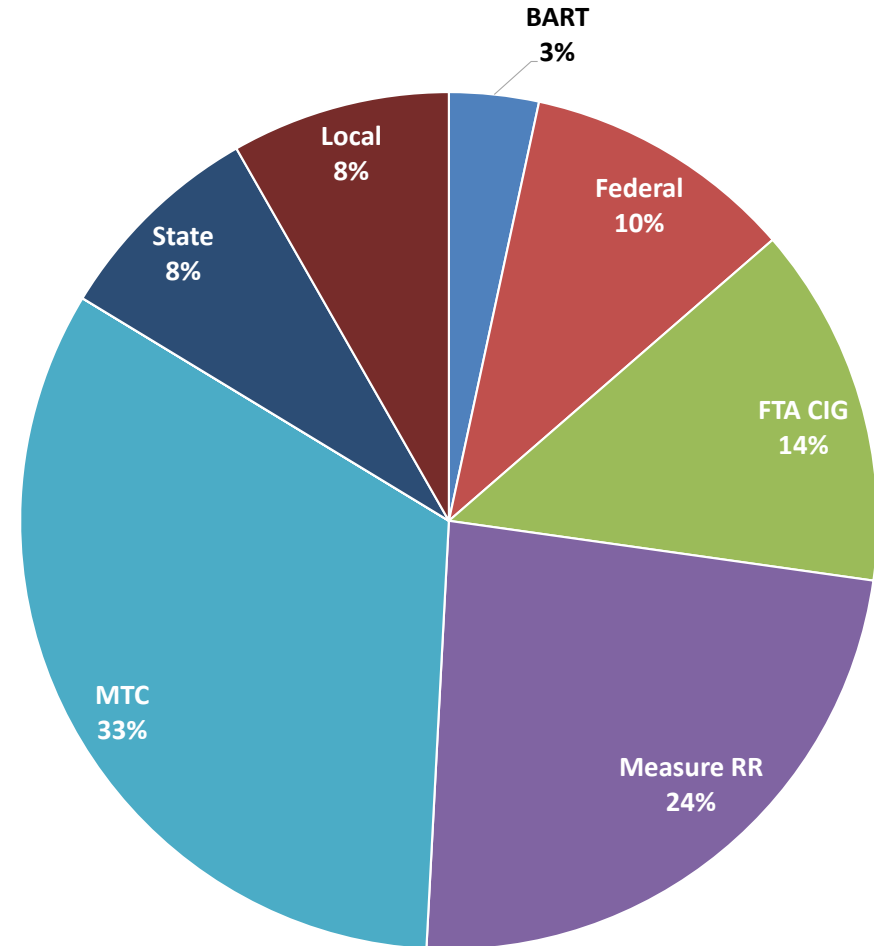
\* Newly Added Project Summaries

## Preliminary FY25 Capital Budget (\$1,220,000,000)

### Budget by CIP Category



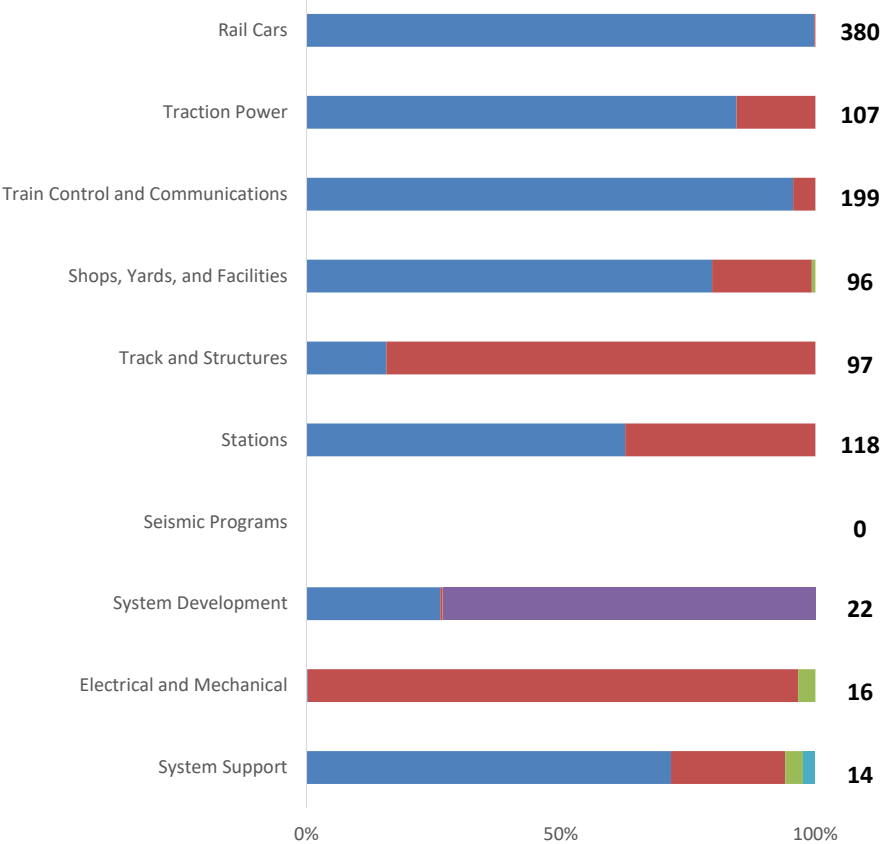
### Budget by Funding Source



Forecast FY26 Capital Budget (\$1,049,000,000)

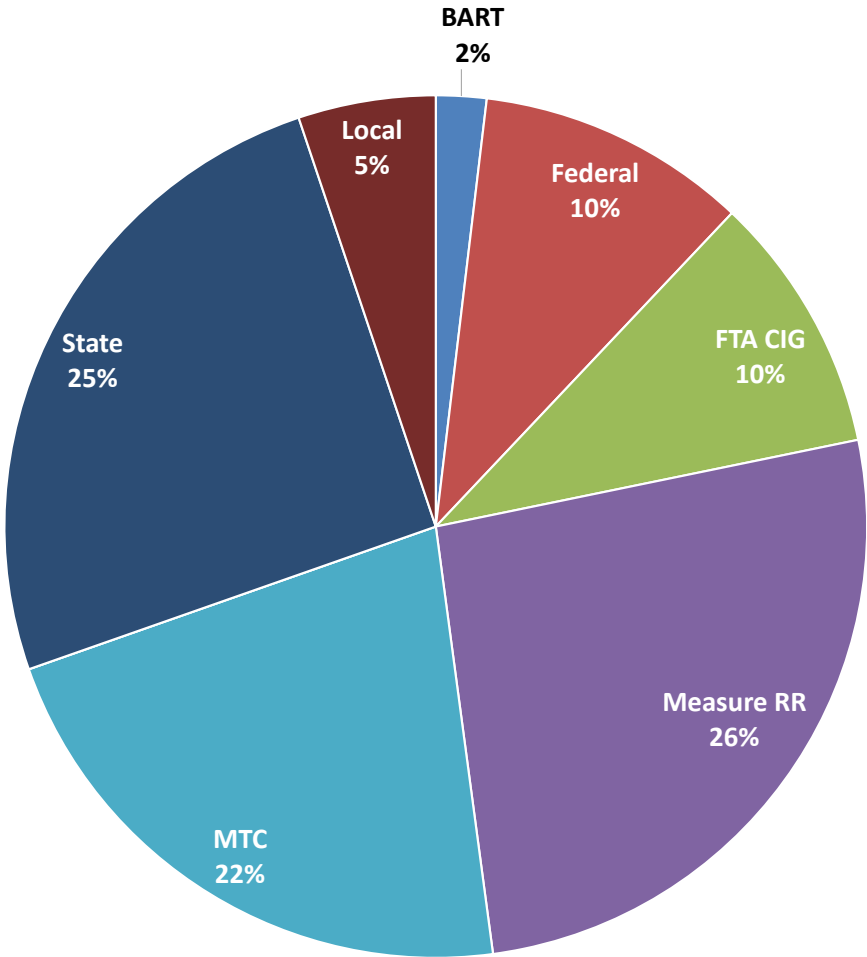
Budget by CIP Category

\$M



■ Service and Capacity Enhancement   ■ System Reinvestment  
■ Safety and Security   ■ System Development  
■ Resiliency

Budget by Funding Source



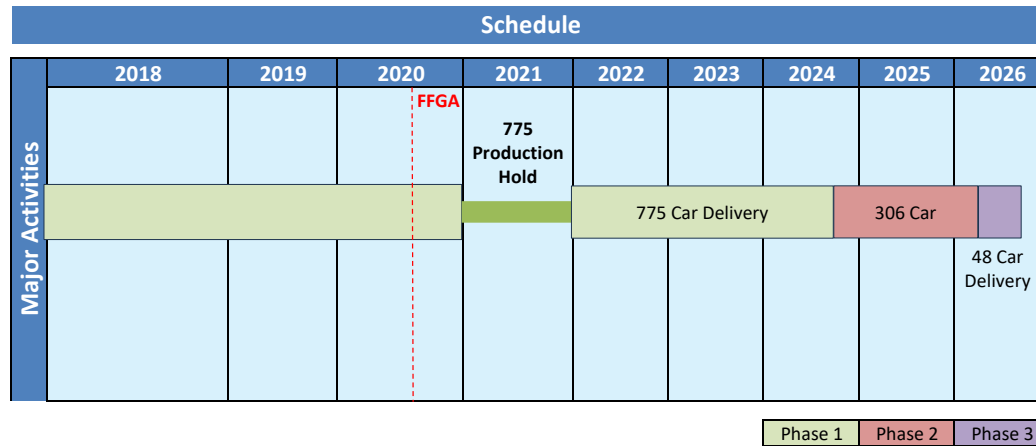
## Major Projects and Programs

Major Program	EAC (\$M)	Spent through FY23 (\$M)	Spent FY24 (Q1+Q2)* (\$M)	Preliminary FY25 Budget (\$M)	Forecast FY26 Budget (\$M)
<b>** Rail Car Procurement Program</b>	\$ 3,383.7	\$ 1,420.7	\$ 231.2	\$ 529.9	\$ 379.8
<b>Traction Power Program</b>	\$ 3,860.4	\$ 452.5	\$ 47.1	\$ 65.8	\$ 68.4
<b>Core Capacity Program</b>	\$ 4,972.9	\$ 437.2	\$ 105.2	\$ 669.9	\$ 604.5
<b>Elevator Modernization</b>	\$ 467.6	\$ 4.0	\$ 0.5	\$ 7.1	\$ 13.4
<b>Fleet of the Future Maintenance Facility</b>	\$ 415.0	\$ 0.1	\$ 0.0	\$ -	\$ -
<b>Fencing &amp; Security</b>	\$ 74.4	\$ 21.7	\$ 2.0	\$ 4.2	\$ 2.1
<b>Operations Control Center related Improvements</b>	\$ 145.8	\$ 28.0	\$ 1.8	\$ 30.7	\$ 32.3
<b>BART Police Department (BPD) HQ</b>	\$ 190.0	\$ -	\$ 0.3	\$ 10.7	\$ 63.0
<b>Link21 Program Development</b>	\$ 910.7	\$ 89.0	\$ 29.1	\$ 15.4	\$ 15.4
<b>Next Generation Fare Gates</b>	\$ 90.0	\$ 3.1	\$ 7.3	\$ 72.0	\$ 4.0
<b>Overlap</b>	\$ (1,199.7)	\$ (57.9)	\$ (0.1)	\$ (476.5)	\$ (378.8)
<b>TOTAL</b>	<b>\$ 13,310.7</b>	<b>\$ 2,398.5</b>	<b>\$ 424.5</b>	<b>\$ 929.2</b>	<b>\$ 804.2</b>

\*This table does not include forecasted spent for FY24 Q3 or FY24 Q4

\*\*Rail Car Program includes the nearly complete Rail Car 1 procurement (775), Core Capacity Rail Cars (309), and BSVII Rail Cars (48)

## 4.1 Rail Car Procurement Program



### Near Term Accomplishments and Milestones

#### Past Accomplishments

- BART had 614 new cars on the property and 596 cars in revenue service
- BART decommissioned 472 legacy vehicles
- Rail Car Procurement Phase 2 option 2 for 54 rail cars

#### Upcoming Milestones

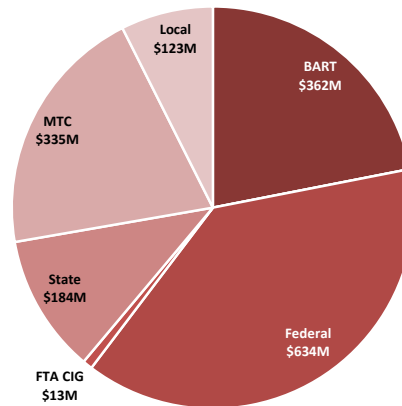
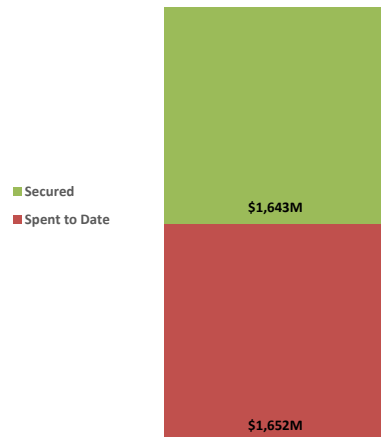
- Continue to accept and release new cars into service

### Expenditure and Forecasted Spending

Estimate at Completion      \$3,337 M

### Spent to Date By Funding Source

Spent To Date      \$1,652 M



### Project Elements

Project ID	Project Name	EAC (\$M)
40FA000	Rail Car Procurement Phase 1 Acquisition Planning	\$ 139.3
40FA001	Rail Car Procurement Phase 1	\$ 2,044.7
40FA002*	Rail Car Procurement Phase 1 Warranty-Reimbursable	\$ -
40FD000**	New Car Phase II - C	\$ 0.8
40FD001**	Rail Car Procurement Phase 2 Contract - C	\$ 1,082.3
40FD002**	Rail Car Procurement Phase 2 - C	\$ 69.6
<b>Total</b>	<b>Rail Car Procurement Program</b>	<b>\$ 3,336.6</b>

\* This covers warranty work, which will be 100% reimbursed by Alstom, hence EAC = \$0

\*\* Core Capacity Program Rail Cars

## 4.2 Traction Power Program

### Schedule

Major Activities	Description	FY 24	FY 25
	34.5 kV AC Cable Projects	Construction	
	CWC Substation	Construction	
	MPS Substation	Procurement	Construction

Procurement Construction

### Near Term Accomplishments and Milestones

#### Past Accomplishments

##### 34.5kV Cable Replacement Projects:

- Energized newly installed 34.5kV cables between El Cerrito Plaza Substation and Richmond Yard Substation

##### Substation Projects:

- Notice to Proceed for Walnut Creek (CWC) Substation construction

#### Upcoming Milestones

##### 34.5kV Cable Replacement Projects:

- Completion of Construction of Cable Segment between West Oakland and Washington St., K-Line 34.5kV Cable Replacement
- Substantial completion of 34.5kV cable replacement in R-line between El Cerrito Plaza and Richmond Yard Substations

##### Substation Projects:

- Delivery of 3 DC Trailers of Portable Traction Power Substation Project
- Notice to Proceed for Powell Street (MPS) Substation

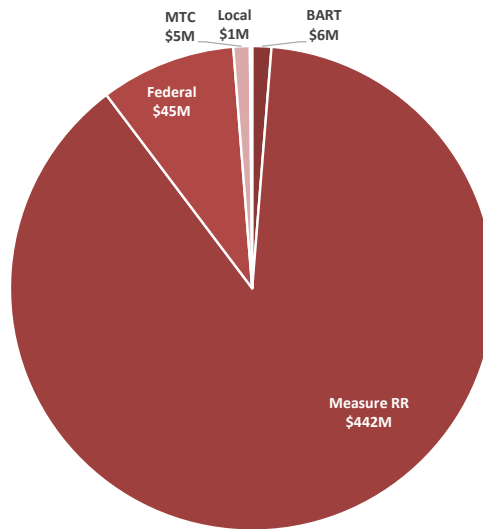
### Expenditure and Forecasted Spending

### Spent to Date By Funding Source

Estimate at Completion \$3,860 M

Spent To Date \$500\* M

■ Unfunded Capital Need  
■ Secured  
■ Spent to Date



\* Program does not include Core Capacity Traction Power Substation Projects

### Project Elements

34.5 kV AC Cable Replacement Projects		
Project ID	Project Name	EAC (\$M)
15EJ450	34.5 kV AC Cable Replacement M-Line - RR	\$ 117.0
15EJRRA	34.5 kV AC Cable Replacement A-Line - RR	\$ 149.4
15EJRRC	34.5 kV AC Cable Replacement C-Line - RR	\$ 98.0
15EJRRK	34.5 kV AC Cable Replacement K-Line - RR	\$ 34.0
15EJRRR	34.5 kV AC Cable Replacement R-Line - RR	\$ 105.0
<b>Total</b>	<b>34.5 kV AC Cable Replacement Projects</b>	<b>\$ 503.4</b>
Substation Projects		
Project ID	Project Name	EAC (\$M)
15EK200	Traction Power Substation Procurement - RR	\$ 34.0
15EK350	Traction Power Substation Installation - RR	\$ 49.2
15EKRR1	Traction Power Substations and Switching Station Replacements - RR	\$ 75.5
15EKRR2	Design and Replacement of DC Switchgear - RR	\$ 13.0
15EKRR5	Replacement of CWC Traction Power Substation, Switching Station and Gap Breakers - RR	\$ 72.3
15EKRR6	Replacement of MPS Traction Power Substation, Switching Station and Gap Breakers - RR	\$ 115.3
<b>Total</b>	<b>Substation Projects</b>	<b>\$ 359.3</b>
Other Traction Power Projects		
Project ID	Project Name	EAC (\$M)
11CS001	Negative Return Mapping	\$ 7.0
15EI800	Retrofit Negative Grounding Devices System Wide	\$ 1.3
Future		\$ 2,989.3
<b>Total</b>	<b>Other Traction Power Projects</b>	<b>\$ 2,997.6</b>
<b>Grand Total</b>	<b>Traction Power*</b>	<b>\$ 3,860.4</b>

# 4.3A Core Capacity Program - Overview

## Schedule

Major Activities	Description	FY 24	FY 25
	CBTC	Complete FDR	Hayward Test Track Testing
	HMC2	Civil Grading Construction	
		Optimization Plan	Finalize Design
	TPSS	West Bay TPSS Construction	Close-out
		East Bay TPSS Design	Procurement
	Vehicles		306 Cars

Stage 1

Stage 2

Stage3

Stage 4

## Near Term Accomplishments and Milestones

### Past Accomplishments

- Communications-based train control(CBTC): Field installation at Hayward Test Track progressed per plan
- Completed project components including storm drain, retaining walls, and bio-retention basin
- Traction power substation (TPSS): Finalizing Phase 2 field acceptance testing at Civic Center. Worked with the Contractor to mitigate testing delays

### Upcoming Milestones

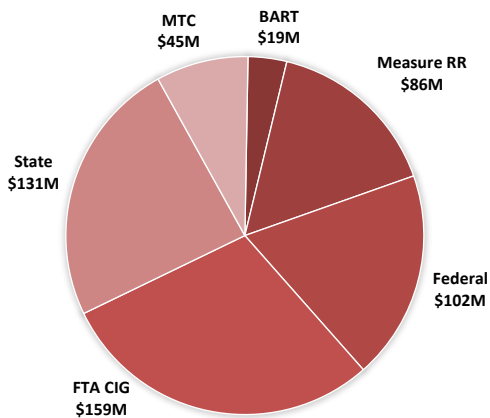
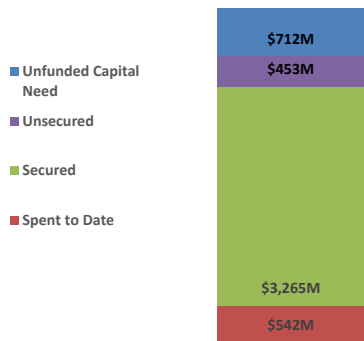
- CBTC: Complete Final Design Review for System Design
- Hayward Maintenance Complex: Continue East Storage Yard optimization plan to evaluate scope, schedule & budget. The main objective is to deliver a functional yard while reducing the overall funding gap.
- TPSS: Begin Phase 3 acceptance testing, connection of 34.5kV cables by BART at Civic Center.
- Vehicles: Anticipate delivery of the first 306 cars in August 2024

## Expenditure and Forecasted Spending

Estimate at Completion \$5,028 M

## Spent to Date By Funding Source

Spent To Date \$542 M



## Project Elements

Project ID	Project Name	EAC (\$M)
	Core Capacity Program - CBTC	\$ 2,346.1
	Core Capacity Program - HMC2	\$ 952.8
	Core Capacity Program- TPSS	\$ 259.8
	Core Capacity Rail Cars	\$ 1,152.7
	Core Capacity Program Management	\$ 86.7
	Core Capacity Unallocated Contingency	\$ 230.0
<b>Total</b>	<b>Core Capacity Program - Overview</b>	<b>\$ 5,028.1</b>

## 4.3B Core Capacity Program - CBTC

### Schedule

Major Activities	Description	FY 24	FY 25
	Design	Complete System level FDR	
		Complete HTT IFC Const Specs	
	Deployment	Field Installation at HTT	HTT Testing

Design Construction Testing

### Near Term Accomplishments and Milestones

#### Past Accomplishments

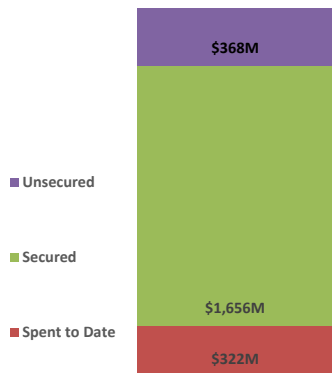
- Field installation at Hayward Test Track progressed per the plan
- Phoenix 1.0 Released (CBTC Software)
- Communications, ATS, SCADA Factory Acceptance Test completed for HTT

#### Upcoming Milestones

- Phoenix Software Release for Hayward Test Track Testing (HTT).
- HTT iXL Factory Test
- Commencement of HTT Integrated Factory Test of the TCH

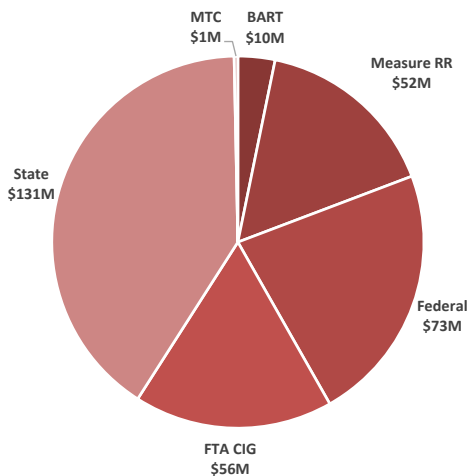
### Expenditure and Forecasted Spending

Estimate at Completion \$2,346 M



### Spent to Date By Funding Source

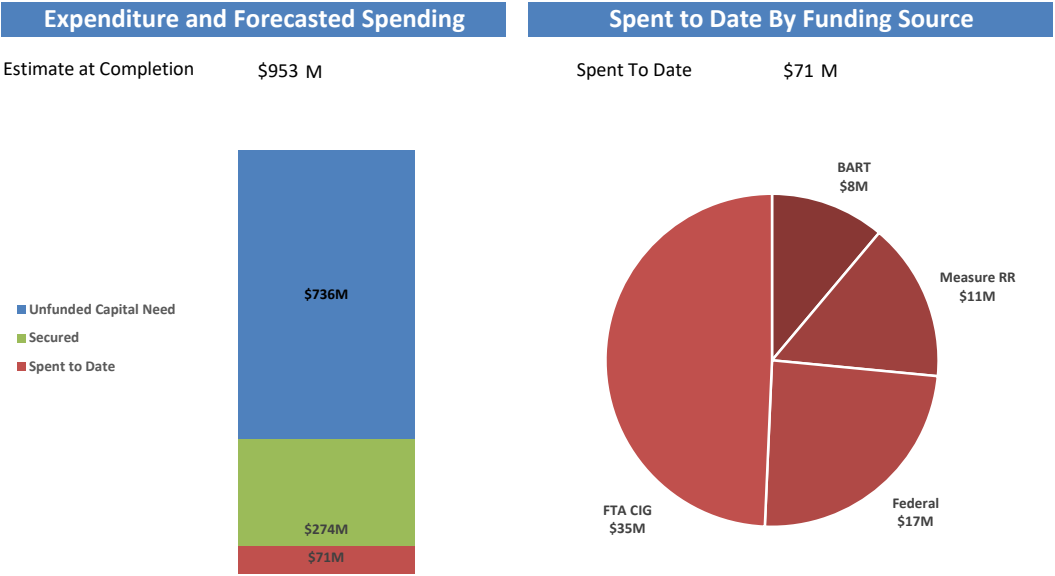
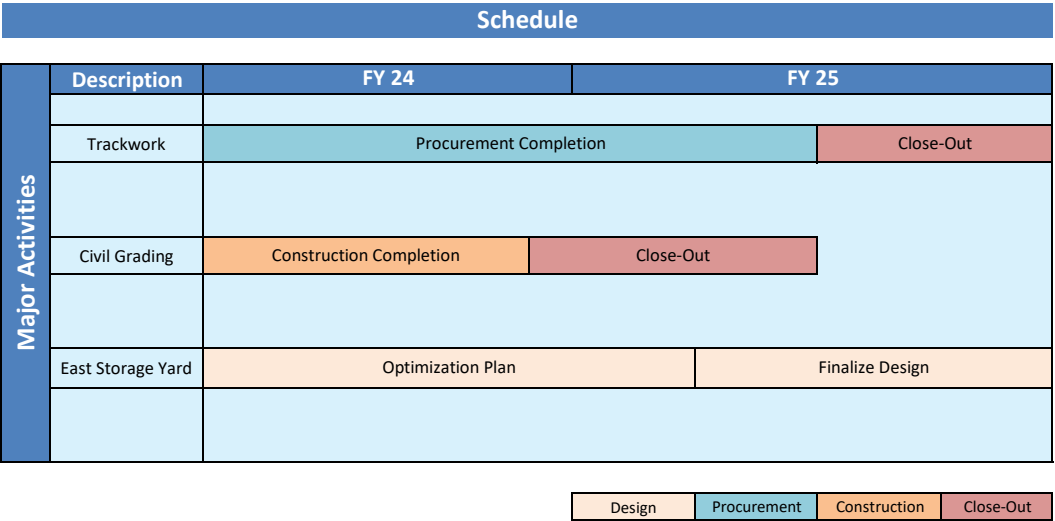
Spent To Date \$322 M



### Project Elements

Project ID	Project Name	EAC (\$M)
49GH000	CBTC Project Development - RR - C	\$ 62.8
49GH001	CBTC Non-Participating - C	\$ 2.2
49GH002	CBTC RR Interlocks - RR - C	\$ 22.3
49GH003	TCMP - Labor - RR - C	\$ 8.3
49GH004	CBTC Hitachi Design Build - RR - C	\$ 1,252.6
49GH005	CBTC Enabling Works 1 - RR - C	\$ 47.5
49GH006	CBTC Enabling Works 2 - RR - C	\$ 94.7
49GH007	CBTC VTA Phase 1	\$ 119.1
49GH008	CBTC Deployment - RR - C	\$ 450.5
	FTA Risk Refresh Unallocated Contingency	\$ 286.1
<b>Total</b>	<b>Core Capacity Program - CBTC</b>	<b>\$ 2,346.1</b>

# 4.3C Core Capacity Program - HMC2



Near Term Accomplishments and Milestones

Past Accomplishments

Trackwork/Civil Grading:

The supplier furnished most of the remaining switch rodding parts. Completed storm drain, retaining walls, and bio-retention basin

East Storage Yard (ESY):

Initiated the optimization plan for East Storage Yard to assess scope, schedule, and budget

Upcoming Milestones

Trackwork/Civil Grading:

Continue receiving standard concrete ties and special trackwork units

Begin receiving: switch machines, derail assemblies, and trackwork spare parts

Submit 401/404/1602 environmental permit applications after workshops with RWQCB

East Storage Yard:

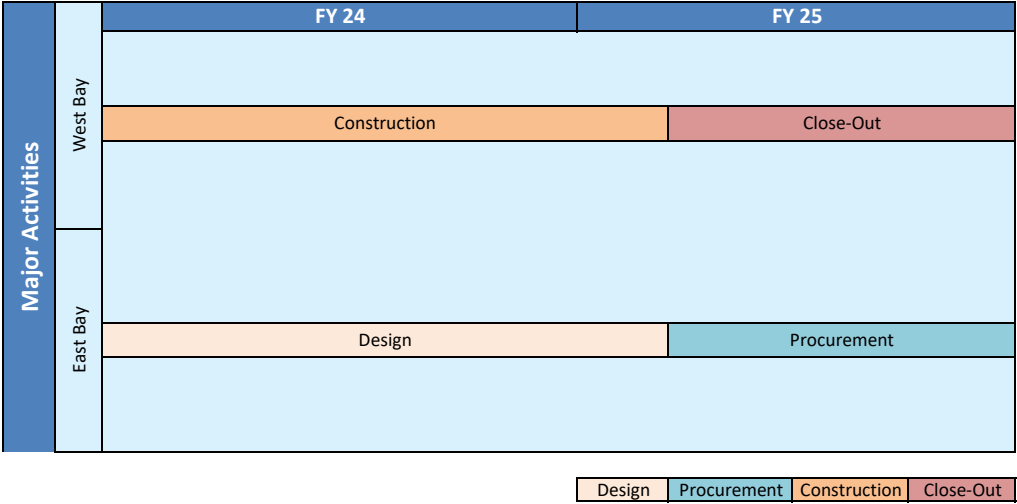
Continue the ESY optimisation plan to evaluate scope, schedule & budget. The main objective is to deliver a functional yard while reducing the overall funding gap

Project Elements

Project ID	Project Name	EAC (\$M)
01RQ100	Hayward Maintenance Complex Phase 2 PE - RR - C	\$ 56.7
01RQ103	HMC Phase 2 East Storage Yard - RR - C	\$ 896.1
Total	Core Capacity Program - HMC2	\$ 952.8

# 4.3D Core Capacity Program - TPSS

## Schedule



## Near Term Accomplishments and Milestones

### Past Accomplishments

#### West Bay Substations:

- Civic Center - Concluded Phase 2 field acceptance testing. Collaborated with the Contractor to address Contractor caused testing delays
- Montgomery - Concluded conduit and cable installation, tile layout, and trim throughout the station

#### East Bay Substations: (Minert Rd., 34th Street, Portola Ave.)

- Reviewed storm drain design with the City of Richmond

### Upcoming Milestones

#### West Bay Substations:

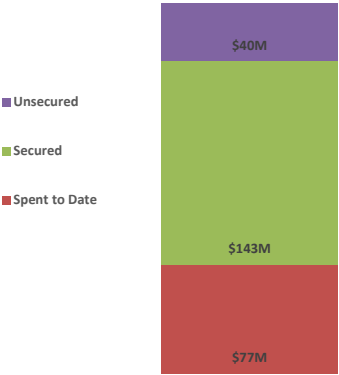
- Civic Center - Begin Phase 3 acceptance testing, the connection of 34.5kV cables by BART
- Montgomery - Installation of fire sprinklers and transformer control conduit

#### East Bay Substations:

- Address review comments and develop final Issue For Bid (IFB) plans and specifications
- Issue for Bid TCCP East Bay: Transbay Corridor Core Capacity East Bay Substation

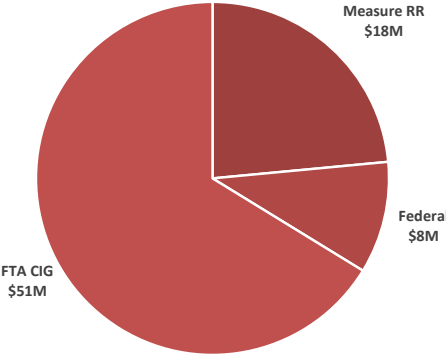
## Expenditure and Forecasted Spending

Estimate at Completion \$260 M



## Spent to Date By Funding Source

Spent To Date \$77 M

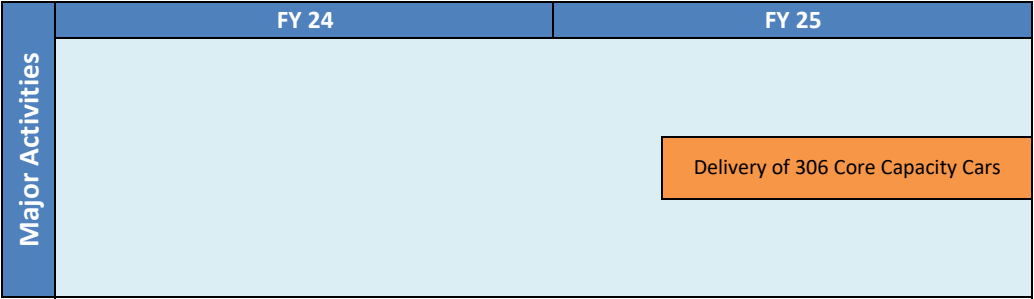


## Project Elements

Project ID	Project Name	EAC (\$M)
15EK600	West Bay Traction Power Substations - RR - C	\$ 91.4
15EK601	East Bay Traction Power Substations - RR - C	\$ 128.2
	FTA Risk Refresh Unallocated Program Contingency	\$ 40.2
Total	Core Capacity Program- TPSS	\$ 259.8

# 4.3E Core Capacity Rail Cars

## Schedule



Manufacturing

## Near Term Accomplishments and Milestones

### Past Accomplishments

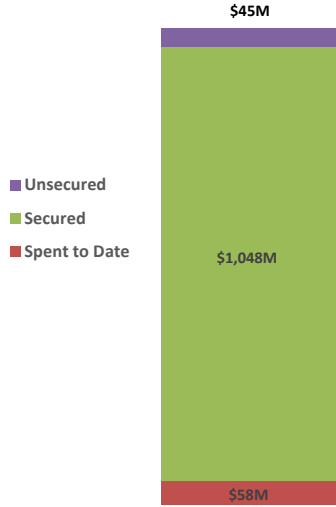
- Executed Option 2 for 54 cars in December 2023. All 306 Core Capacity cars are now on order

### Upcoming Milestones

- Anticipate delivery of the first of the 306 Core Capacity cars in August 2024

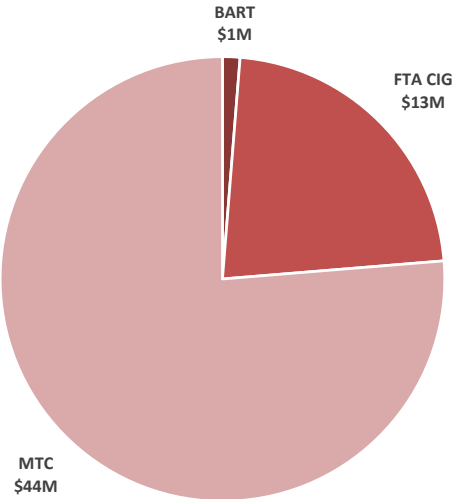
## Expenditure and Forecasted Spending

Estimate at Completion \$1,153 M



## Spent to Date By Funding Source

Spent To Date \$58 M

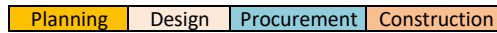
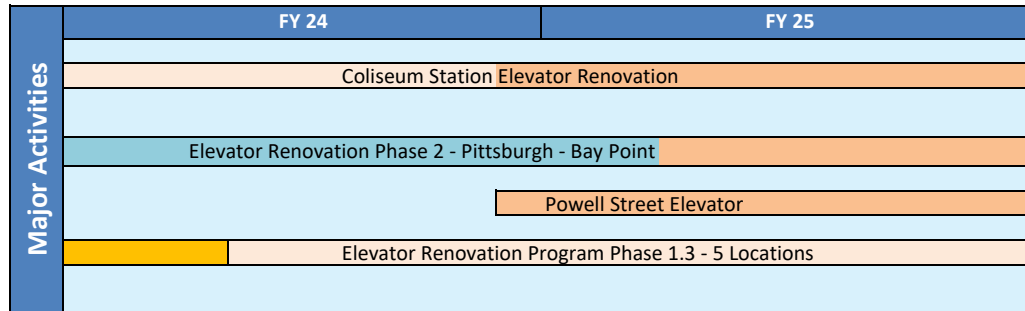


## Project Elements

Project ID	Project Name	EAC (\$M)
40FD000	New Car Phase II	\$ 0.8
40FD001	Rail Car Procurement Phase 2 Contract - C	\$ 1,082.3
40FD002	Rail Car Procurement Phase 2 - C	\$ 69.6
Total	Core Capacity Rail Cars	\$ 1,152.7

## 4.4 Elevator Modernization

### Schedule



### Near Term Accomplishments and Milestones

#### Past Accomplishments

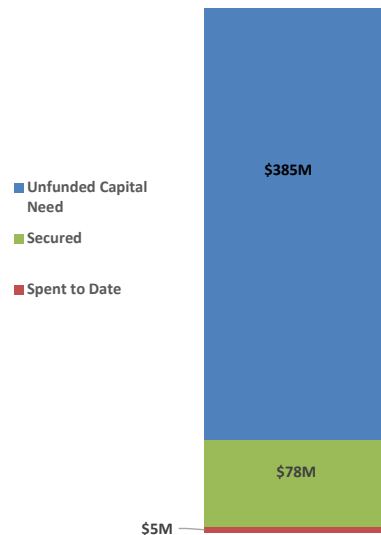
- Construction was completed – Powell St\* (To Be Determined)
- Design Phase 1.3 was initiated for 5 locations (Embarcadero, Montgomery, Powell, Civic Center, Glen Park Stations)
- BART provided support for the MUNI project

#### Upcoming Milestones

- Awarding Contract for Coliseum Elevator Renovation and Pittsburgh-Bay Point Elevator Renovation

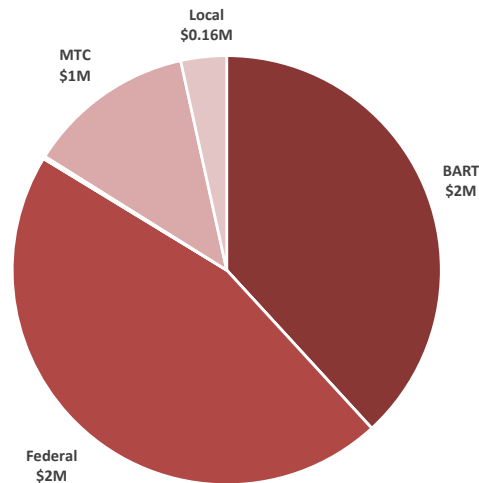
### Expenditure and Forecasted Spending

Estimate at Completion \$468 M



### Spent to Date By Funding Source

Spent To Date \$5 M



### Project Elements

Project ID	Project Name	EAC (\$M)
15LK003	Powell Street Elevator	\$ 1.6
15NL004	Elevator Renovation Program at Coliseum Station (A30)	\$ 13.1
15NL005	Elevator Renovation Program at Pittsburgh-Bay Point (C80)	\$ 12.1
15NL006	Elevator Renovation Phase 1.3 – 5 Locations	\$ 48.9
15NL007	DT Berkeley STN Elevator Reno	\$ 9.4
Future	Renovate Station Elevators Phase 1 to 6	\$ 382.5
<b>Total</b>	<b>Elevator Modernization</b>	<b>\$ 467.6</b>

# 4.5 Fleet of the Future Maintenance Facility

## Schedule

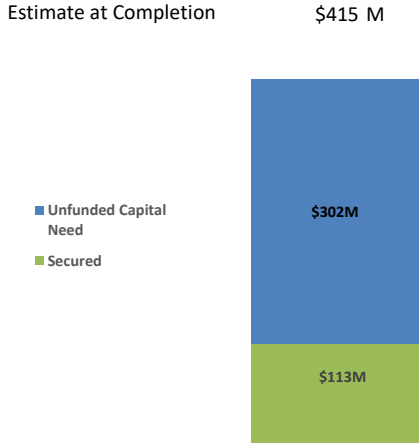
Major Activities	FY 24	FY 25
	Develop Funding Strategy	

Planning

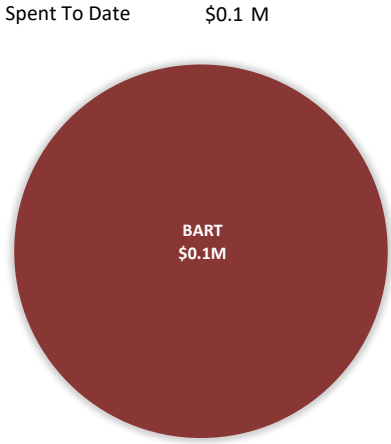
## Near Term Accomplishments and Milestones

- Past Accomplishments**
- Project Planning, Project Cost Estimate, Risk Assessment, Evaluate Delivery Method Alternatives, Develop Funding Strategy
- Upcoming Milestones**
- Develop Funding Strategy

## Expenditure and Forecasted Spending



## Spent to Date By Funding Source

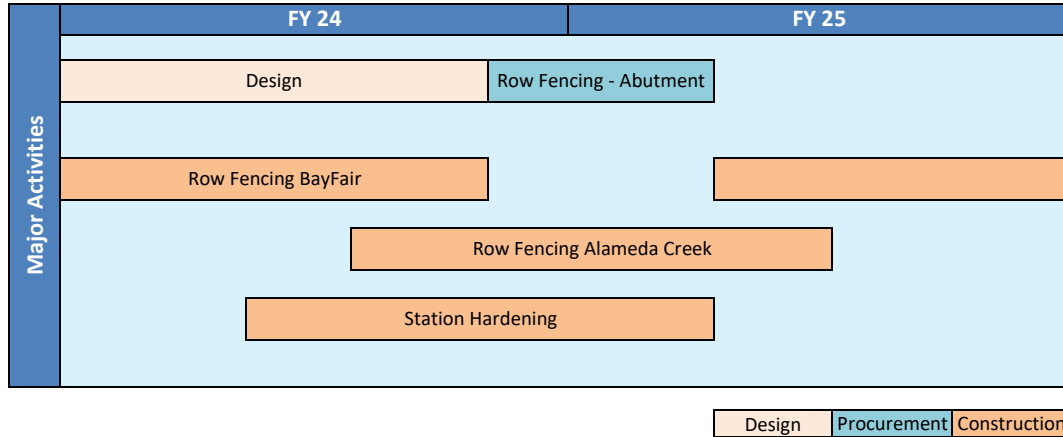


## Project Elements

Project ID	Project Name	EAC (\$M)
01RQ005	Fleet of the Future Maintenance/HMC 1 (FOTFMF)	\$ 415.0
Total	Fleet of the Future Maintenance Facility	\$ 415.0

## 4.6 Fencing and Security

### Schedule



### Near Term Accomplishments and Milestones

#### Past Accomplishments

- Elevator enclosure completed at Powell Street Station (M30), Orinda Station (C20), and raised railings at Union City Station (A80) for the Station Hardening Project
- Ongoing financial closeout for the Safety Barrier Phase 3 Project
- Punch list and final inspection completed for the Richmond Yard Fence Contract
- Materials received for the ROW Fencing replacement at Alameda Creek

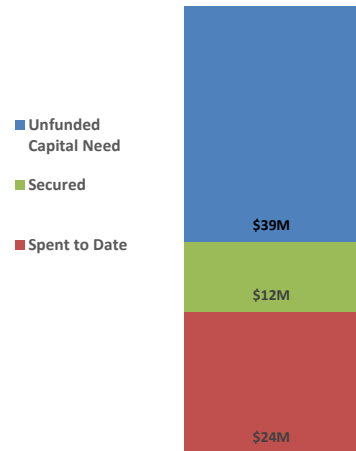
#### Upcoming Milestones

Complete the following for the Station Hardening Project:

- Buzz Gates at Embarcadero (M16), Civic Center (M40), 16th Street (M50), 24th Street (M60) and Downtown Berkeley (R20)

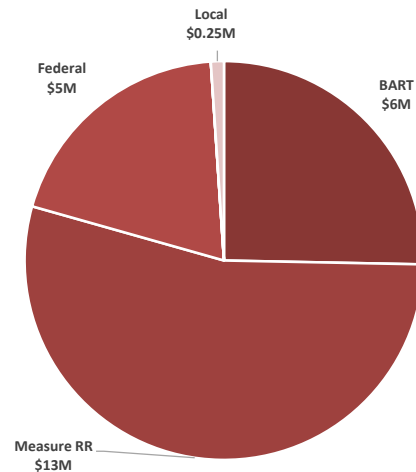
### Expenditure and Forecasted Spending

Estimate at Completion \$74 M



### Spent to Date By Funding Source

Spent To Date \$24 M

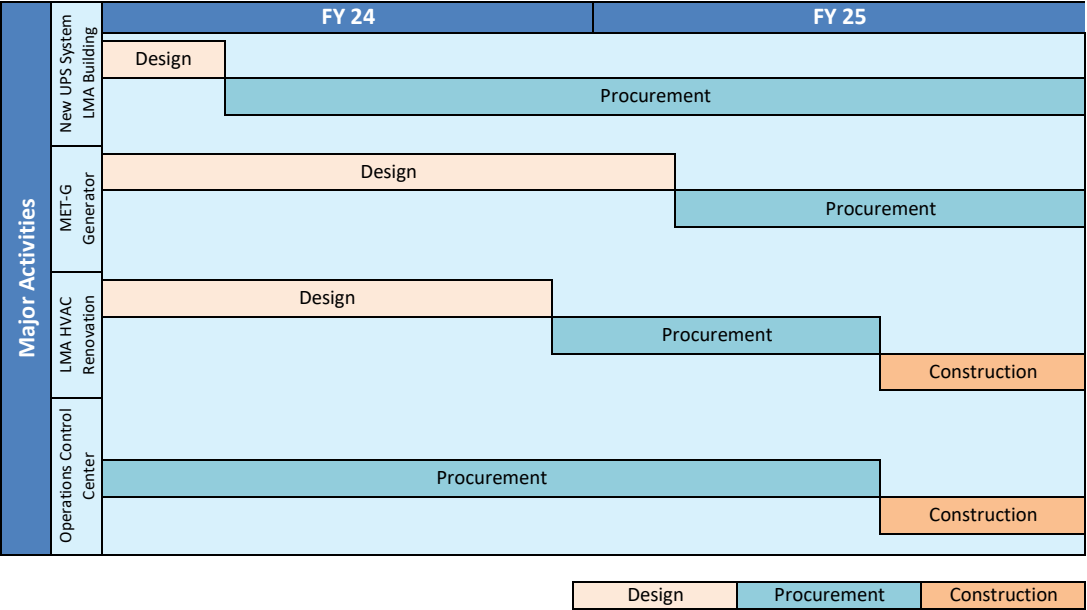


### Project Elements

Project ID	Project Name	EAC (\$M)
15QN000	Safety Barriers at Walnut Creek and Other Locations - RR	\$ 4.6
15QN004	ROW Fencing Rehabilitation	\$ 12.0
15TC023	Fence Rehabilitation Systemwide - RR	\$ 11.8
45GA000	Station Hardening	\$ 6.4
Future		\$ 39.8
<b>Total</b>	<b>Fencing and Security</b>	<b>\$ 74.4</b>

# 4.7 Operations Control Center (OCC) Related Improvements

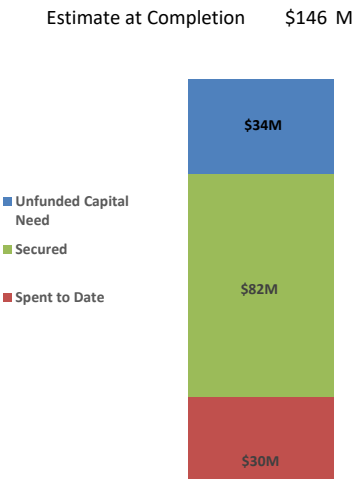
## Schedule



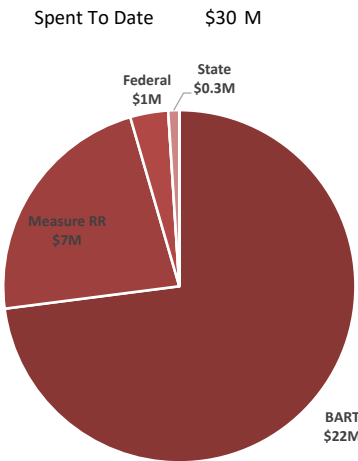
## Near Term Accomplishments and Milestones

- Past Accomplishments**
- The project was stalled pending the receipt of additional funding
  - The agreement for VTA funding was finalized, and the procurement process was initiated
- Upcoming Milestones**
- Issue IFB for Contract for Construction of Modernized OCC (MOCC)
  - Finalize Design for Contract for Construction of HVAC Renovation
  - Receive additional VTA funding for OCC, approximately \$24M

## Expenditure and Forecasted Spending



## Spent to Date By Funding Source

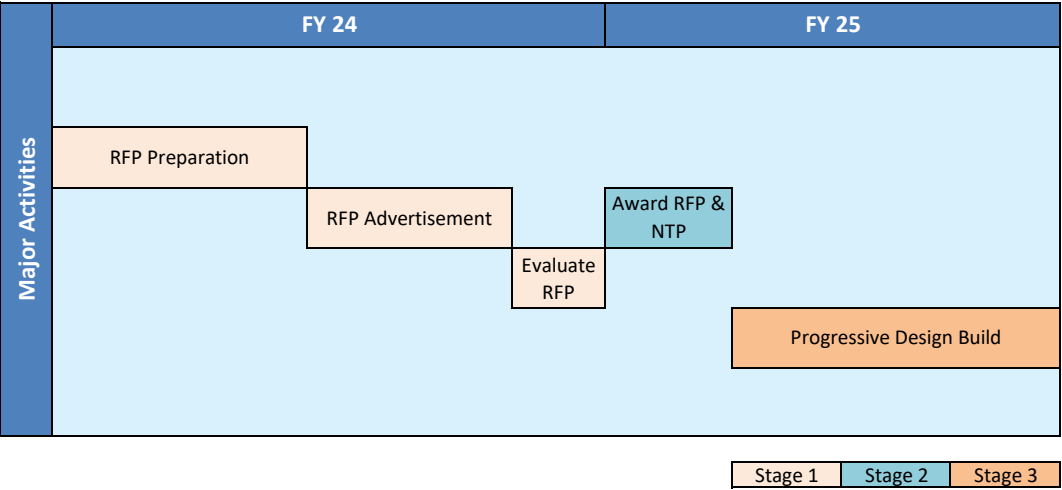


## Project Elements

Project ID	Project Name	EAC (\$M)
17BY001	New UPS System - LMA Building	\$ 31.4
17HMRR1	MET-G Generator Replacement - RR	\$ 21.1
20AJ003	Trunked Radio Replacement System Wide	\$ 14.5
54RR510	HVAC Renovation and LMA - RR	\$ 29.0
54RR550	Replace Fire Suppression System at LMA - RR, Closed	\$ 1.3
60CC004	Renewal and Upgrade OCC	\$ 48.5
<b>Total</b>	<b>Operations Control Center Related Improvements</b>	<b>\$ 145.8</b>

# 4.8 BART Police Department (BPD) HQ

## Schedule



## Near Term Accomplishments and Milestones

### Past Accomplishments

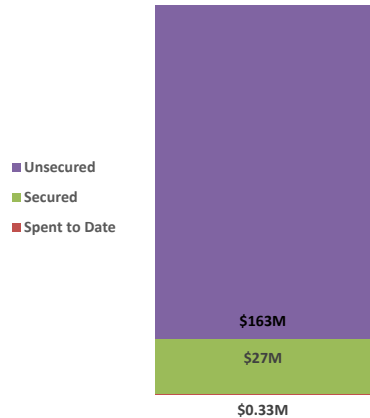
- Planning
- Request for Proposal (RFP) Preparation

### Upcoming Milestones

- RFP Advertisement
- Funds Allocation

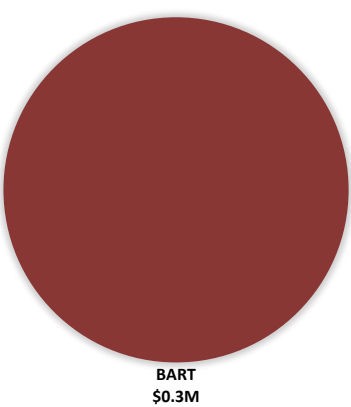
## Expenditure and Forecasted Spending

Estimate at Completion \$190 M



## Spent to Date By Funding Source

Spent To \$0.3 M

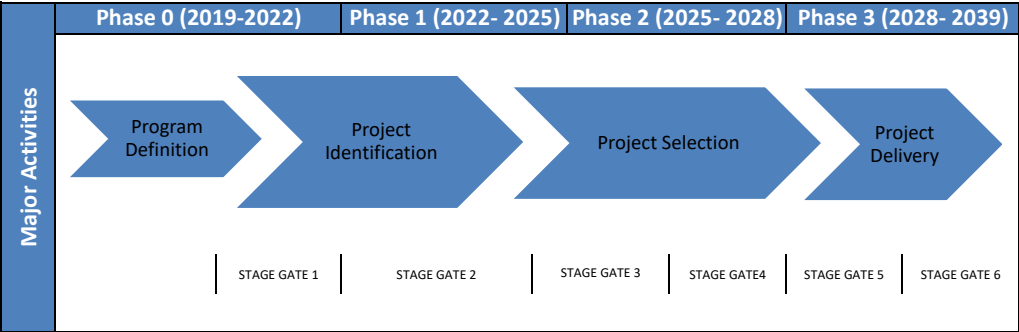


## Project Elements

Project ID	Project Name	EAC (\$M)
17AY001	New BART Police Headquarters	\$ 190.0
Total	BART Police Department (BPD) HQ	\$ 190.0

# 4.9 Link21 Program Development

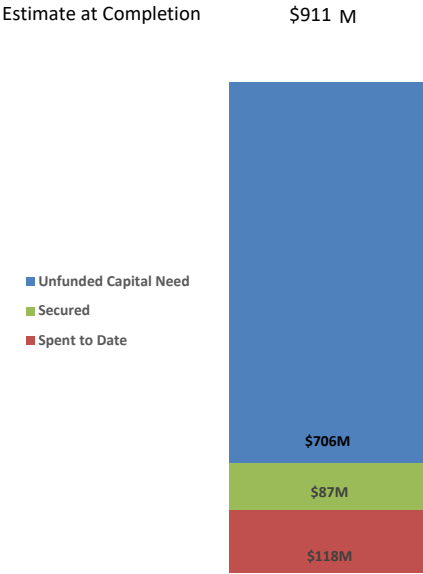
## Schedule



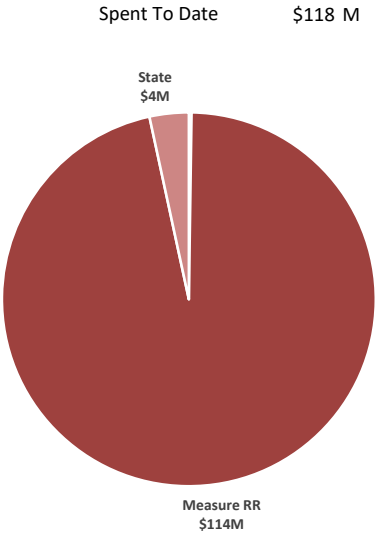
## Near Term Accomplishments and Milestones

- Past Accomplishments**
- Stage Gate 1 Adoption: Program Vision, Goals, and Objectives established
- Upcoming Milestones**
- Preliminary Business Case
  - Stage Gate 2: Technology Recommendation for Adoption
  - Stage Gate 3: Proposed Project for Environmental Review

## Expenditure and Forecasted Spending



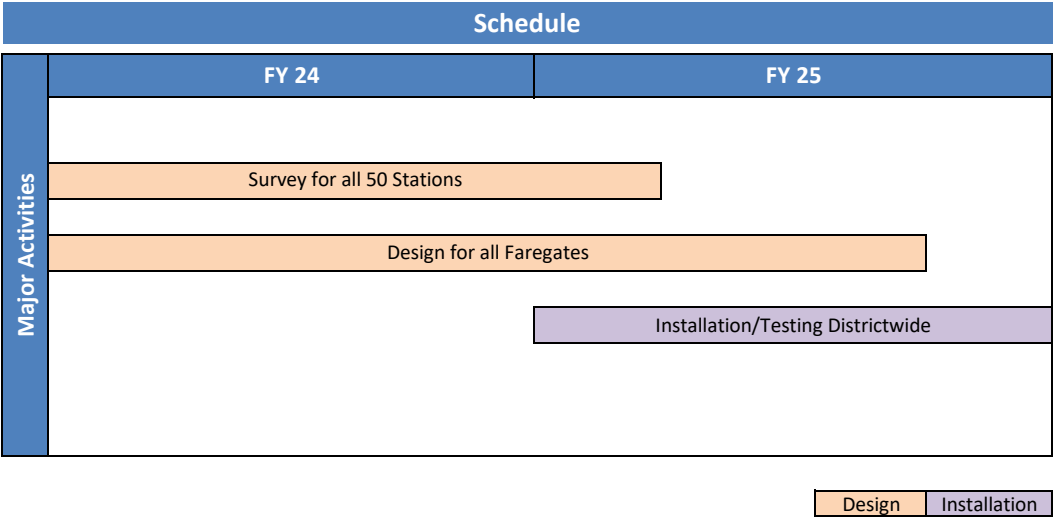
## Spent to Date By Funding Source



## Project Elements

Project ID	Project Name	EAC (\$M)
09JA000	Link 21 - Program Development Costs	\$ 910.7
Total	Link21 Program Development	\$ 910.7

# 4.10 Next Generation Fare Gates



**Near Term Accomplishments and Milestones**

**Past Accomplishments**

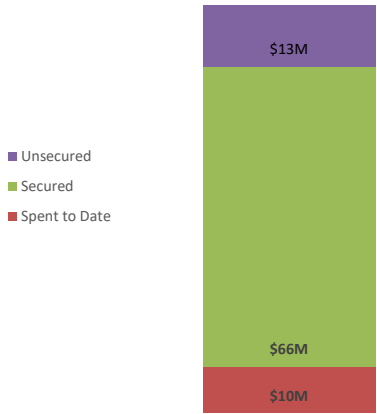
- Successful installation at West Oakland has been completed

**Upcoming Milestones**

- Completion of Survey/Design for the next set of 8-9 stations

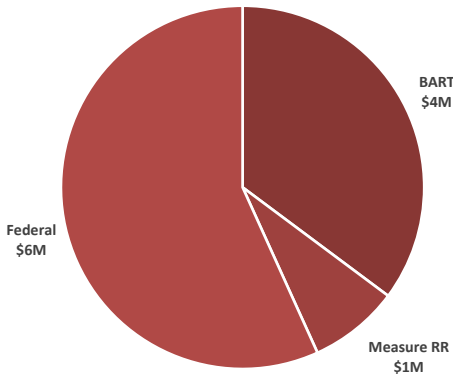
**Expenditure and Forecasted Spending**

Estimate at Completion \$90 M



**Spent to Date By Funding Source**

Spent To Date \$10 M



**Project Elements**

Project ID	Project Name	EAC (\$M)
47CJ012	Next Generation Fare Gate Design - RR	\$ 2.0
47CJ112	Next Generation Fare Gate Procurement and Deployment	\$ 88.0
Total	Next Generation Fare Gates	\$ 90.0

5. Project Scopes and Budget Summaries by CIP Category

5.1 Rail Cars



Project ID	Project Name	Project Scope Summary	Original Estimate at Completion	FY24 Q2 Estimate at Completion	Total Funded Budget	Spent through FY23	Adopted FY24 Budget	FY24 Q2 Spent	Preliminary FY25 Budget	Forecasted FY26 Budget	Spent through FY24 Q2	% Complete Physical or Cost*	Closeout Date
40FA002	Rail Car Procurement Phase 1 Warranty-Reimbursable	Procure 775 Fleet of the Future rail cars - warranty coordination.	\$6,674,457	\$0 <sup>1</sup>	\$9,174,457	\$8,521,342	\$12,178,440	-\$125,243	\$0	\$0	\$9,049,214	99%*	FY26
40FA000	Rail Car Procurement Phase 1 Acquisition Planning	Provide design, engineering, mock-ups, manufacturing, testing, assembly, delivery, warranty, spare parts, tools, test equipment, performance and acceptance testing.	\$130,329,368	\$139,272,552	\$119,179,137	\$111,358,678	\$11,069,592	\$1,881,927	\$8,792,737	\$1,064,108	\$115,258,092	97%*	FY31
40FA001	Rail Car Procurement Phase 1	Procure 775 Fleet of the Future rail cars.	\$2,446,996,175	\$2,044,670,078	\$1,948,303,119	\$1,279,067,789	\$402,926,563	\$89,543,191	\$44,647,962	\$0	\$1,469,710,459	75%*	FY31
40FD001	Rail Car Procurement Phase 2 Contract - C	Procurement of 306 new railcars.	\$907,493,833	\$1,082,349,865	\$396,646,378	\$57,104,000	\$27,013,000	\$0	\$468,491,358	\$357,008,411	\$57,104,000	6%	FY34
40FD002	Rail Car Procurement Phase 2 - C	Soft costs to support procurement of 306 new railcars.	\$197,235,555	\$69,552,461	\$27,723,791	\$165,904	\$1,032,159	\$48,952	\$8,011,227	\$21,777,079	\$241,432	1%	FY34

<sup>1</sup> This covers warranty work, which will be 100% reimbursed by Alstom, hence EAC = \$0

Total for CIP Category: Rail Cars

\$3,688,729,387

\$3,335,844,956

\$2,501,026,883

\$1,456,217,714

\$454,219,754

\$91,348,828

\$529,943,284

\$379,849,599

\$1,651,363,197

*Italics: Notes a change*

Project Summary Included

RR: Measure RR Program Projects

TBD: Project is On Hold

\*\* New Projections not included in adopted FY Budgets

Security Sensitive Projects

C: Core Capacity

\* % Complete Based on Cost

5. Project Scopes and Budget Summaries by CIP Category

5.2 Traction Power



Project ID	Project Name	Project Scope Summary	Original Estimate at Completion	FY24 Q2 Estimate at Completion	Total Funded Budget	Spent through FY23	Adopted FY24 Budget	FY24 Q2 Spent	Preliminary FY25 Budget	Forecasted FY26 Budget	Spent through FY24 Q2	% Complete Physical or Cost*	Closeout Date
15EK200	Traction Power Substation Procurement - RR	Procure equipment for 5 new Traction Power substations (TPSS's).	\$34,311,700	\$33,982,246	\$33,982,246	\$33,351,648	\$30,000	\$7,761	\$0	\$0	\$33,383,444	99%	FY24
15EIRR1	CWS High Voltage Transformer Replacement RR	Bay Point C-Line: Replace existing 115/34.5kV (15/20/25MVA with new 115/34.5 (27/36/45 MVA) transformer at High Voltage Substation at Pittsburg (CWS) with all its accessories. Scope includes substation site improvement (upgrade control and protection systems). Added scope: 1.5 mile fiber cable replacement and a transformer.	\$12,095,708	\$14,102,570	\$14,102,570	\$11,721,140	\$1,273,562	\$38,901	\$0	\$0	\$11,915,473	100%	FY24
15EJ450	34.5 kV AC Cable Replacement M-Line - RR	Replace the existing 34.5kVAC cables (PIPE or PILC) on the M-Line with new EPR jacket medium voltage cable, fiber optic systems and install isolation disconnect (IDS) switches at the substations. The work will be performed by Contractor between the substations at Balboa Park (MBP) to Bay Tube West (MTW), including new isolation disconnect switches, conduit, 350 KCMIL (EPR jacketed) cable, and fiber optic cables. Other services included are: Design Services during Construction (DSDC), Construction Management (CM), Project Management, and Material Procurement.	\$134,000,000	\$116,991,652	\$116,991,652	\$115,405,382	\$1,805,868	\$341,440	\$0	\$0	\$115,886,118	100%	FY24
15EK350	Traction Power Substation Installation - RR	Installation of San Leandro (ASL) and Oakland Transition Structure (KTE) Traction Power substations.	\$43,242,973	\$49,222,455	\$49,222,455	\$41,098,137	\$2,767,356	\$456,556	\$790,127	\$0	\$42,256,874	98%	FY25
15EJRR1	Traction Power Programmatic Support for RR Bonds - RR	Traction Power 34.5kV Cable Program and Project Management and Support (Administrative and Financial Analysis). Construction of the segment between the Oakland Wye to Oakland Shops (KWS-ALM-ANA) with In-house Forces. Equipment/Vehicle Leases to support the work of In-house Forces. Program wide Construction Management Support during Design. Final Designs for the K, C, R, A, and M-Lines. Bulk Material Procurement including Isolation Disconnect Switches, 350mcm cables, and Conduits. Warehouse Leases at Hayward and Concord.	\$132,000,000	\$107,794,501	\$107,794,501	\$79,721,365	\$18,099,455	\$2,336,048	\$3,540,299	\$2,240,299	\$84,268,010	84%	FY28
15EJRRA	34.5 kV AC Cable Replacement A-Line - RR	Replace the existing 34.5kVAC cables (PIPE or PILC) on the A-Line with new EPR jacketed medium voltage cable, fiber optic systems and install isolation disconnect switches (IDS) at the substations. The work will be performed by Contractor. Other services included are: Design Services during Construction (DSDC), Construction Management (CM), Project Management, and Material Procurement.	\$161,000,000	\$149,385,935	\$149,385,935	\$115,981,710	\$37,831,779	\$10,225,667	\$11,436,141	\$1,574,625	\$130,474,603	91%	FY26
15EK600	West Bay Traction Power Substations - RR - C	Design and install two new substations in downtown San Francisco at Civic Center (MCC) and Montgomery Station (MMS).	\$86,000,000	\$91,383,615	\$92,590,395	\$58,885,242	\$21,356,523	\$4,127,414	\$20,258,799	\$30,431	\$68,031,015	83%	FY26
15EJRRR	34.5 kV AC Cable Replacement R-Line - RR	Replace the existing 34.5kVAC cables (PIPE or PILC) on the R-Line with new EPR jacket medium voltage cable, fiber optic systems and install isolation disconnect (IDS) switches at the substations. The work will be performed by BART Construction forces from Ashby to El Cerrito Plaza (RAS-RCP) and by a Contractor from El Cerrito Plaza to Richmond Yard (RCP-RRY). Other services included are: Design Services during Construction (DSDC), Construction Management (CM), Project Management, and Material Procurement.	\$78,597,960	\$105,000,000	\$90,015,260	\$59,938,289	\$31,067,426	\$7,671,430	\$3,810,987	\$3,957,721	\$73,034,511	79%	FY27
15EK700	PG&E Power feed to MXP Gap Breaker - RR	Design, Procure and construct an auxiliary PG&E power feed to MXP Gap Breaker.	\$1,136,293	\$1,340,000	\$667,407	\$167,057	\$617,992	\$3,826	\$277,909	\$207,479	\$182,019	27%	FY27
15EG010	Running Rail Monitoring and Efficiency Improvements	Traction Power - Power Quality and Stray Currents 1. Power systems assessment for power quality, monitoring and assessing the condition of stray currents at select locations, documentation and mapping the system 2. Selection and testing of a continuous stray current monitoring system, various data collection and its evaluation, then development of repairs methodologies 3. Installation of rail monitoring devices and implementation of stray current mitigation techniques.	\$4,000,000	\$4,000,000	\$4,000,000	\$1,082,610	\$423,306	\$36,285	\$1,831,153	\$650,000	\$1,184,842	52%	FY26
15EI800	Retrofit Negative Grounding Devices System Wide	This is a system-wide retrofit of existing negative grounding devices (NGD) at existing substations. Quantity of 50 locations, assumed \$75K per unit. NGDs are a critical safety system which limits voltage on the running rails to protect BART employees and patrons. This will include procurement of spare parts as well.	\$1,000,000	\$1,300,000	\$1,000,000	\$678,520	\$345,989	\$39,120	\$144,508	\$119,154	\$728,942	55%	FY26
15ELRR1	System wide MPR and Rectifier Renovation - RR	Design and installation of Traction Power control and protection system renovation. Upgrades protection systems with multi-function protection relays (MPRs) and rectifier rehabilitation. Design and installation of multi-function protection relays (MPR). Traction rectifier rehabilitation.	\$40,414,168	\$39,414,168	\$39,414,168	\$20,229,928	\$5,116,765	\$379,442	\$0	\$0	\$21,142,566	49%	TBD
Sub-Total			\$727,798,802	\$713,917,141	\$699,166,588	\$538,261,028	\$120,736,021	\$25,663,890	\$42,089,922	\$8,779,709	\$582,488,418		

*Italics: Notes a change*

Project Summary Included

RR: Measure RR Program Projects

TBD: Project is On Hold

\*\* New Projections not included in adopted FY Budgets

Security Sensitive Projects

C: Core Capacity

\* % Complete Based on Cost

5. Project Scopes and Budget Summaries by CIP Category

5.2 Traction Power



Project ID	Project Name	Project Scope Summary	Original Estimate at Completion	FY24 Q2 Estimate at Completion	Total Funded Budget	Spent through FY23	Adopted FY24 Budget	FY24 Q2 Spent	Preliminary FY25 Budget	Forecasted FY26 Budget	Spent through FY24 Q2	% Complete Physical or Cost*	Closeout Date
15ELRR2	High Voltage Blocking Scheme, 13 locations - RR	Design, furnish and install 34.5kV Blocking Scheme, real time Automation Controller, Discrete Programmable Automation Controller and Traction Power Anti-Paralleling (Blocking) system at 13 locations; CCO, CER, CCA, COR, CRO, CWC, KFS, KTE, KWS, MDC, MTW, MVS, and RAS. This Blocking System upgrade will increase the reliability of power by not allowing paralleling of the two sources.	\$9,900,000	\$9,900,000	\$9,900,000	\$4,732,675	\$0	\$263,233	\$0	\$0	\$5,042,396	51%*	TBD
15EKRR1	Traction Power Substations and Switching Station Replacements - RR	<i>This project is only for designing the Powell Street Substation (MPS) and Walnut Creek (CWC) Substations on the M-Line and C-Line respectively.</i>	\$303,152,040	\$75,493,749	\$110,052,040	\$63,954,365	\$3,645,416	\$267,929	\$3,360,588	\$4,533,379	\$64,337,327	92%	FY26
15EJRRK	34.5 kV AC Cable Replacement K-Line - RR	Replace the existing 34.5kVAC cables (PIPE or PILC) on the K-Line with new EPR jacketed medium voltage cable, fiber optic systems and install isolation disconnect switches at the substations. The work will be performed by BART Construction forces. Other services included are: Design Services during Construction (DSDC), Construction Management (CM), Project Management, and Material Procurement.	\$34,000,000	\$34,000,000	\$34,000,000	\$10,805,493	\$7,713,642	\$1,386,796	\$3,668,283	\$3,746,205	\$12,746,955	43%	FY29
15EKZ01	Portable and Mobile High Voltage Traction Power Substations	Procurement of portable substations, including controls and protection, as well as the design and development of the C75 storage area for storing the portable substations. The portable substations will allow BART to provide continuous power for train operations during major rehabilitate or emergency repairs while a substation is out of service.	\$41,127,224	\$31,287,000	\$31,287,000	\$7,079,197	\$18,438,625	\$856,692	\$11,629,639	\$1,401,046	\$8,987,377	38%	FY26
15EIRR2	Cast Coil Transformers Replacement - RR	Furnish and install 24 new oil filled transformers (12 locations) to replace the existing cast coil dry type transformers on the L and C lines.	\$5,500,000	\$5,500,000	\$5,500,000	\$1,669,934	\$2,442,195	\$29,739	\$1,752,748	\$1,908,022	\$1,730,425	43%	FY26
15EK002	Replacement of Traction Power Assets, Relays and Switchgear	Replace and refurbish obsolete Traction Power equipment such as Transformers, Surge Suppressor, (SF6) Breakers, and DC Battery Chargers, systemwide.	\$700,000	\$2,200,000	\$2,200,000	\$558,114	\$994,916	\$260,964	\$9,253	\$0	\$951,872	50%	FY25
15EJRRC	34.5 kV AC Cable Replacement C-Line - RR	Replace the existing 34.5kVAC cables (PIPE or PILC) on the C-Line with new EPR jacketed medium voltage cable, fiber optic systems and install isolation disconnect switches (IDS) at the substations. The work will be performed by BART Construction forces. Other services included are: Design Services during Construction (DSDC), Construction Management (CM), Project Management, and Material Procurement.	\$98,000,000	\$98,000,000	\$59,318,981	\$22,797,949	\$13,195,599	\$753,981	\$11,243,486	\$7,692,547	\$23,837,503	20%	FY33
15EK601	East Bay Traction Power Substations - RR - C	<i>Design, procure and install three new substations - one each on the C, K, and R Lines in Concord, Oakland and Richmond (CMR, KTF, RPA). Additionally design and procure one new substation and two new gap breaker stations for the Hayward Maintenance Complex Phase 2.</i>	\$133,588,865	\$128,205,251	\$74,226,937	\$7,930,560	\$53,792,510	\$166,392	\$29,600,760	\$32,673,743	\$8,507,673	13%	FY28
15EKRR5	Replacement of CWC Traction Power Substation, Switching Station and Gap Breakers - RR	Furnish and install new Traction Power Substations (TPSS), Switching Stations (SS) and Gap Breaker Stations (GBS) at Walnut Creek Station (CWC). This project replaces aging TPSS equipment at the end of its service life with new TPSS equipment to increase system reliability.	\$72,333,888	\$72,333,888	\$64,429,769	\$0	\$18,668,846	\$76,154	\$14,636,385	\$28,704,491	\$82,842	0%	FY28
15EKRR6	Replacement of MPS Traction Power Substation, Switching Station and Gap Breakers - RR	Furnish and install new Traction Power Substations (TPSS), Switching Stations (SS) and Gap Breaker Stations (GBS) at Powell Street Station (MPS). This project replaces aging TPSS equipment at the end of its service life with new TPSS equipment to increase system reliability.	\$115,300,000	\$115,300,000	\$115,300,000	\$0	\$120,000	\$0	\$15,860,884	\$17,540,554	\$0	0%	FY32
15EKRR2	Design and Replacement of DC Switchgear - RR	This project is to design, furnish and install new DC equipment at South Hayward and El Cerrito Plaza Substations and Concord Yard Gap Breaker Station. This project replaces fire damaged Traction Power Substation DC equipment to increase system reliability.	\$13,000,000	\$13,000,000	\$13,000,000	\$0	\$325,000	\$3,762	\$300,000	\$500,000	\$3,762	0%*	FY28
Sub-Total			\$826,602,017	\$585,219,888	\$519,214,727	\$119,528,287	\$119,336,749	\$4,065,643	\$92,062,026	\$98,699,986	\$126,228,133		
Total for CIP Category: Traction Power			\$1,554,400,819	\$1,299,137,029	\$1,218,381,315	\$657,789,315	\$240,072,771	\$29,729,533	\$134,151,948	\$107,479,694	\$708,716,551		

Italics: Notes a change

Project Summary Included

RR: Measure RR Program Projects

TBD: Project is On Hold

\*\* New Projections not included in adopted FY Budgets

Security Sensitive Projects

C: Core Capacity

\* % Complete Based on Cost

5. Project Scopes and Budget Summaries by CIP Category

5.3 Train Control and Communications



Project ID	Project Name	Project Scope Summary	Original Estimate at Completion	FY24 Q2 Estimate at Completion	Total Funded Budget	Spent through FY23	Adopted FY24 Budget	FY24 Q2 Spent	Preliminary FY25 Budget	Forecasted FY26 Budget	Spent through FY24 Q2	% Complete Physical or Cost*	Closeout Date
20AJ002	Adjacent Agency Radio Systems Upgrade - Tunnels	Adapt adjacent public safety agencies' independent regional radio networks for underground coverage in the BART system, to provide full radio coverage for both the BART system and the regional public safety agencies.	\$2,000,000	\$2,040,400	\$2,040,400	\$1,984,448	\$0	\$0	\$0	\$0	\$2,012,283	99%*	FY24
22AB000	Replace and Upgrade Concord Tower Control System (NYMS)	This project is to replace New Yard Management System (NYMS) equipment. Equipment requires replacement every 5 years due to life cycle. Costs include 4 yards every 5 years. Additional yard (HMC) to be added to refresh cycle. Preparation for additional yard with BSV II (Newhall Yard) Project is future replacement (next 30 years) after equipment standardization completed under Capital Needs Inventory (CNI) ID# SY0224.	\$6,205,966	\$6,205,966	\$6,205,966	\$6,140,327	\$0	\$0	\$0	\$0	\$6,140,327	100%	FY24
20LL006	Safety Assessment of Train Control Software	This project will assess the safety of train control software. a. Formalize requirements specifications to enable automated verification of train control software. b. Configure existing interlocking systems through all routes. c. Certification / Formal Proof – validation and systems assurance of existing train control safety systems. d. Automatically validate all new train control software before placed in service or modified. Minimizing testing and code review thus increasing assurance of safe system.	\$1,000,000	\$1,000,000	\$1,000,000	\$664,321	\$4,908	\$0	\$0	\$0	\$678,820	100%	FY24
20LX002	Replace Station Data Monitoring Switch	Implement a variety of systems and process improvements to reduce train delays at prioritized locations per BART maintenance.	\$371,729	\$371,729	\$357,124	\$357,124	\$0	\$0	\$0	\$0	\$357,124	99%	FY24
20LT000	Station Speed Encoding MUX Replacement	Replace the 45 year old core system station MUX equipment with microprocessor controls at all 24 core stations (including the maintenance MUX). Phase 1 - A-Line - Lake Merritt through Union City (A10, A20, A30, A40, A75-A77, A80) - installing all infrastructure for MUX replacement (6 of 24) - by BART forces. Phase 2 & 3 - completion of the remaining 18 locations: M-Line Embarcadero (M10), Montgomery (M20), 24th Street (M60), Balboa Park (M80) Daly City (M90); R-Line Downtown Berkeley (R20), El Cerrito Del Norte (R50) Richmond Yard (R65); C-Line Rockridge to Concord (C10, C20, C30, C40, C50, C55, C60); A-Line Hayward (A60), Fremont (A90); K-Line MacArthur (K30).	\$63,360,865	\$60,686,988	\$60,686,988	\$57,476,337	\$2,405,380	\$411,085	\$743,930	\$61,341	\$58,838,748	99%	FY26
20AJ003	Trunked Radio Replacement System Wide	Design, furnish and install P25 compliant radio network. This project includes fixed equipment, geographically redundant radio cores and partial replacement of the existing ten (10) channels (5 in Phase 1, 5 in Phase 2). The current system is a twenty-year old design at maximum capacity and at end of life. Equipment currently in place is used operationally by police, maintenance, OCC, transportation and shop personnel.	\$10,249,975	\$14,466,064	\$14,466,064	\$11,688,727	\$1,569,847	\$1,017,839	\$1,192,099	\$0	\$12,712,651	91%	FY25
20LT007	NET.COM Maintenance Support	Engage maintenance support services for the Net.com Train Control Network hardware spare parts repair and replacement.	\$850,000	\$1,115,000	\$1,115,000	\$957,710	\$333,903	\$104,547	\$45,000	\$0	\$1,065,352	96%*	FY25
20LL000	Non-Vital Relay Replacement	This project involves replacing mainline interlocking relay logic systems with microprocessor-based systems at 9 mainline stations. An option for additional stations was exercised for a total of 30 stations with 1 Yard.	\$28,127,783	\$33,244,319	\$31,177,783	\$29,352,703	\$2,678,144	\$604,146	\$1,213,471	\$0	\$30,351,418	95%	FY25
49GH002	CBTC RR Interlocks - RR - C	Perform enabling works at select interlock locations undergoing improvements.	\$22,841,774	\$22,256,360	\$20,870,000	\$19,098,816	\$3,688,888	\$8,898	\$0	\$0	\$19,158,140	87%*	FY25
20LT004	#10 Turnout Speed Reduction	This project is to design and implement the #10 turnout speed reduction. The anticipated CPUC mandated that speeds through all #10 turnouts be reduced from 27mph to 18mph. BART committed to CPUC to implement speed reduction.	\$2,460,000	\$2,460,000	\$2,460,000	\$2,192,182	\$1,368	\$38,677	\$56,537	\$0	\$2,234,472	90%	FY25
20AJ001	Phased Radio Replacement	Engineering services for assessing, supporting, and designing the Districtwide Trunk Radio Network replacement. This includes the assessment of radio towers.	\$6,137,288	\$8,000,000	\$5,851,093	\$4,747,206	\$1,677,877	\$226,198	\$538,713	\$0	\$5,276,941	88%	FY25
Sub-Total			\$143,605,380	\$151,846,825	\$146,230,417	\$134,659,901	\$12,360,315	\$2,411,389	\$3,789,750	\$61,341	\$138,826,276		

Italics: Notes a change

Project Summary Included

RR: Measure RR Program Projects

TBD: Project is On Hold

\*\* New Projections not included in adopted FY Budgets

Security Sensitive Projects

C: Core Capacity

\* % Complete Based on Cost

5. Project Scopes and Budget Summaries by CIP Category

5.3 Train Control and Communications



Project ID	Project Name	Project Scope Summary	Original Estimate at Completion	FY24 Q2 Estimate at Completion	Total Funded Budget	Spent through FY23	Adopted FY24 Budget	FY24 Q2 Spent	Preliminary FY25 Budget	Forecasted FY26 Budget	Spent through FY24 Q2	% Complete Physical or Cost*	Closeout Date
20AL000	Integrated Computer System (ICS) Architecture Modularization	Modularize the ICS software used by the Operations Control Center to manage train service by providing redundancy.	\$1,220,000	\$1,316,891	\$1,316,891	\$1,134,645	\$4,940	\$0	\$0	\$0	\$1,134,645	100%	FY24
79LV000	BARTNET/Control Systems Hardening	Districtwide Operational Technology networking Infrastructure (DOTI) system-wide and security systems replacement. Includes switches and routers at 60 locations, plus configurations. Design, furnish, install new system, and annual procurement of software license and support for network equipment. Systems Security Applications and Services harden network and systems to reduce: <ul style="list-style-type: none"><li>• delays in service caused by breaches</li><li>• ensure customer facing data in available</li><li>• increase the safety of passengers in the system</li></ul> The average data breach costs an estimated \$4 million (per Cisco). DOTI provides the operational network for non-vital train control, fare collection, traction power, SCADA, non-vital, and general operation to all locations. Service life of equipment is 5 years then requires refresh, see SY0247 for future replacements. Network is critical for revenue service operation. Service life of Security Systems is 3 years.	\$9,500,000	\$12,238,792	\$9,572,037	\$8,226,001	\$3,191,913	\$106,138	\$790,000	\$0	\$8,778,626	92%*	FY25
20LT005	Train Control Crossover Rehab at C45, C47, C53	This project is to rehabilitate trackside cables for train control interlockings (C45, C47, C53) as they need replacement, including rodent resistant solution, and associated software at stations needs reconfiguration. Includes 100+ item punch list of changes from original installation.	\$3,000,000	\$3,000,000	\$3,000,000	\$2,317,689	\$757,853	\$34,021	\$28,622	\$0	\$2,477,746	87%	FY25
20LT006	NET.COM State of Good Repair	To improve and repair the Net.Com Train Control Network. Net.Com has been installed and deployed for more than 15 years. It is showing signs of deterioration. The inventory of spare parts are declining, and staff with experience and expertise for system trouble-shooting and maintenance are decreasing. BART needs to take measures including: train control network engineers' labor charges and acquire equipment for trouble-shooting; contract a vendor for board repair, maintenance, and training.	\$3,800,000	\$5,209,474	\$2,610,406	\$1,700,151	\$1,569,541	\$292,609	\$737,755	\$890,687	\$2,061,473	47%	FY26
79PD000	Station Closed Circuit Television Upgrades	Replace existing CCTV cameras with high definition digital cameras at one station with design, installation, configuration and cut-over of new core and back-end architecture.	\$7,000,000	\$7,000,000	\$2,403,429	\$2,118,522	\$527,105	\$7,350	\$0	\$0	\$2,129,238	5%	TBD
20AN000	Operations Second Core Network	South San Francisco Station (W20) shall be used as a disaster recovery site to maintain revenue service in case of a major disaster at Lake Merritt. The W20 site was chosen for its central geographical location and having most of the required infrastructure except the electrical power supply for the new equipment. This project shall provide the power upgrade required, supporting some of BART core infrastructure. This project shall install the infrastructure and power supply for BART’s most critical equipment such as BART Communications, Radio equipment, Fare Collection Servers, ICS supporting OCC, BART PD, Radio PA and Emergency Telephone, providing a backup power supply to the existing server racks and new equipment. BART shall contract PG&E for the design and installation of a new 480V utility power supply.	\$1,712,865	\$1,300,000	\$1,300,000	\$358,384	\$223,770**	\$12,923	\$0	\$0	\$397,220	100%	TBD
49GH001	CBTC Non-Participating - C	<i>Perform ultrasonic testing of broken rail systemwide.</i>	\$2,103,313	\$2,245,244	\$2,245,244	\$1,445,989	\$561,385	\$1,480	\$89,304	\$0	\$1,553,160	77%*	FY25
20LK001	Wayside Coverboard Antenna Replacement	Procurement and replacement of coverboard antennas at 49 station platforms.	\$10,987,564	\$8,182,830	\$8,182,830	\$3,891,727	\$2,843,143	\$43,755	\$835,564	\$603,122	\$3,975,797	42%	FY27
20LN001	Wayside Line Replacement Unit	Assessment of power systems for power quality, monitoring and assessing the condition of stray currents at select locations, documentation and mapping the system; selection and testing of a continuous stray current monitoring system, various data collection and its evaluation, then development of repairs methodologies; and installation of rail monitoring devices and implementation of stray current mitigation techniques.	\$4,844,563	\$6,015,549	\$5,515,549	\$3,133,551	\$2,357,555	\$187,582	\$682,712	\$469,841	\$3,415,369	62%*	FY26
60BE000	SCADA - Replace PLC5 Equipment and Update Systems Architecture	Identify new programmable logic controller (PLC) to replace existing obsolete units. Procure, program, and install new PLC at nine stations and one tunnel.	\$13,000,000	\$13,000,000	\$4,060,426	\$1,212,296	\$1,343,432	\$212,081	\$1,348,859	\$1,178,075	\$1,603,988	51%	FY33
20LN004	Wayside MUX Box Reliability Improvement	Enhancement of Wayside MUX Boxes and Junction Boxes to improve reliability within the Train Control areas. This includes the procurement of materials required and work performed for the enhancement, modification, replacement, rehabilitation and installation of lightning arrestors/surge protector boards, paddle strike protection covers, and any conduit, wiring or vent related work on all MUX boxes and/or junction boxes systemwide and replacement of M90 wayside motherboard.	\$3,700,000	\$3,657,500	\$3,457,500	\$1,208,038	\$3,192,007	\$292,421	\$1,000,000	\$500,000	\$1,748,696	17%	FY29
20LN003	Transmission Loop Replacement	Replacement of 35% of the aging transmission (Tx) loops and receiver (Rx) coils system-wide. Will continue replacement as funds are received, replacing 10% of the loops and coils per year.	\$4,588,243	\$4,588,243	\$3,041,164	\$2,502,129	\$742,665	\$134,000	\$350,533	\$407,999	\$2,682,509	78%	FY27
15TC004	Water Intrusion Mitigation in Train Control Rooms - RR	Assessments, rehabilitation designs and repairs to prevent water intrusion at train control (TC) rooms (19) and huts (6).	\$18,348,933	\$19,811,074	\$18,348,933	\$3,430,204	\$2,995,740	\$206,312	\$3,696,329	\$4,744,796	\$3,800,342	26%	FY27
Sub-Total			\$83,805,480	\$87,565,596	\$65,054,409	\$32,679,325	\$20,087,279	\$1,530,673	\$9,559,678	\$8,794,520	\$35,758,810		

Italics: Notes a change

- Project Summary Included
- RR: Measure RR Program Projects
- TBD: Project is On Hold
- \*\* New Projections not included in adopted FY Budgets

Security Sensitive Projects

C: Core Capacity

\* % Complete Based on Cost

5. Project Scopes and Budget Summaries by CIP Category

5.3 Train Control and Communications



Project ID	Project Name	Project Scope Summary	Original Estimate at Completion	FY24 Q2 Estimate at Completion	Total Funded Budget	Spent through FY23	Adopted FY24 Budget	FY24 Q2 Spent	Preliminary FY25 Budget	Forecasted FY26 Budget	Spent through FY24 Q2	% Complete Physical or Cost*	Closeout Date
47CJ011	Bill Handling Unit Replacement	Replacement of the bill acceptor in 416 out of 525 ticket vending machines with new bill recycling units, allowing customers to receive change in bills. Existing equipment is obsolete and spare parts are not available.	\$6,305,113	\$8,747,277	\$8,747,277	\$5,172,698	\$2,807,376	\$30,578	\$764,693	\$600,000	\$5,224,444	83%	FY26
20LN002	MUX Cable Replacement	This project removes 45 year old cable and install new signal cabling between the wayside train control MUX cabinets to its matching Train Control Room MUX equipment. The communication between Train Control Room Systems and the different train control wayside equipment throughout BART system are enabled by system of Multiplex (MUX) equipment that handles and allows simultaneous transmission of several messages and signals through a network of cable connections such as track occupancy and train speed codes.	\$4,259,749	\$7,492,846	\$3,409,749	\$2,142,469	\$598,670	\$315,243	\$350,000	\$327,551	\$2,972,198	64%	FY27
49GH004	CBTC Hitachi Design Build - RR - C	Design and Installation of the Communications-Based Train Control System.	\$1,028,983,942	\$1,252,584,017	\$895,054,008	\$157,626,845	\$153,889,263	\$64,573,005	\$89,808,811	\$123,012,954	\$233,139,466	16%*	FY34
49GH006	CBTC Enabling Works 2 - RR - C	Train Control Room and Switch Machine Power Cabling upgrade.	\$94,827,380	\$94,670,245	\$89,974,000	\$8,797,245	\$21,262,363	\$1,569,610	\$12,514,947	\$18,148,383	\$12,895,770	14%	FY27
49GH005	CBTC Enabling Works 1 - RR - C	K-Line interlock cabling upgrade.	\$47,547,483	\$47,542,036	\$28,776,000	\$945,393	\$13,066,350	\$88,481	\$6,283,860	\$6,283,860	\$1,348,359	4%	FY31
20LL007	Replace Train Control VPI Vital System Equipment	Replacement of train control VPI equipment throughout the District. This will assist maintenance and engineering to provide greater reliability and remote access/data logging capability to train control systems.	\$1,000,000	\$1,000,000	\$1,000,000	\$105,379	\$396,870	\$0	\$0	\$0	\$109,520	0%	FY24
49GH007	CBTC VTA Phase 1	Installation of CBTC from Warm Springs to Berryessa (VTA SVBX).	\$108,517,716	\$119,119,848	\$0	\$0	\$1,000,000	\$0	\$0	\$0	\$0	0%*	FY33
49GH008	CBTC Deployment - RR - C	Deployment of the Communications-Based Train Control System.	\$0	\$450,464,862	\$192,608,233	\$0	\$45,781,610	\$115,291	\$29,936,270	\$41,505,241	\$164,601	0%*	FY34
Sub-Total			\$1,291,441,383	\$1,981,621,131	\$1,219,569,266	\$174,790,028	\$238,802,503	\$66,692,208	\$139,658,582	\$189,877,989	\$255,854,359		
Total for CIP Category: Train Control and Communications			\$1,518,852,243	\$2,221,033,552	\$1,430,854,092	\$342,129,253	\$271,250,096	\$70,634,270	\$153,008,009	\$198,733,849	\$430,439,445		

*Italics: Notes a change*

● Project Summary Included

RR: Measure RR Program Projects

TBD: Project is On Hold

\*\* New Projections not included in adopted FY Budgets

● Security Sensitive Projects

C: Core Capacity

\* % Complete Based on Cost

5. Project Scopes and Budget Summaries by CIP Category

5.4 Shops, Yards, and Facilities



Project ID	Project Name	Project Scope Summary	Original Estimate at Completion	FY24 Q2 Estimate at Completion	Total Funded Budget	Spent through FY23	Adopted FY24 Budget	FY24 Q2 Spent	Preliminary FY25 Budget	Forecasted FY26 Budget	Spent through FY24 Q2	% Complete Physical or Cost*	Closeout Date
54RR270	Fire Services at Richmond Yard - RR	Replace 50-year-old corroded, fire protection water lines, piping and systems control wiring at Richmond Yard. The fire protection piping is at risk and starting to fail due to corrosion at a higher rate than normal.	\$10,593,374	\$9,964,867	\$9,964,867	\$9,964,867	\$0	\$0	\$0	\$0	\$9,964,867	100%	FY24
54AR001	Storm Drain MS4 Compliance - RR	This project will plan, design, and install storm drain line at yards. BART shops are permitted for storm water discharge through an Industrial discharge permit with the Regional Water Quality Control Board (RWQCB). Annual testing of storm water is required. Currently all BART shop areas are exceeding allowable discharge requirements. Modifications to material storage areas and storm drain systems in the shop areas is required to bring the shops into compliance with permit requirements. Due to age storm drain system are in need of repairs/improvements.	\$635,000	\$736,000	\$736,000	\$683,521	\$0	\$22,758	\$0	\$0	\$722,063	100%	FY24
01RQ003	Hayward Maintenance Complex Phase 1a Shops Mod	This project constructs a Component Repair Shop, a Central Warehouse, and a Maintenance & Engineering Shop. The Component Shop will enable BART to optimally maintain and overhaul the new rail cars. The project also includes connecting track, track crossovers and switches, and a backup power substation.	\$133,398,404	\$133,398,404	\$133,398,404	\$132,661,686	\$0	\$20,816	\$599,389	\$0	\$132,699,361	99%*	FY25
54RR330	Vacuum System for Non-Revenue Vehicles - RR	Replace exhaust fans and ducts at the Oakland Non-Revenue Vehicle Shop. The vacuum system removes carbon monoxide from the maintenance vehicle repair shop and provides a safe working environment.	\$1,818,840	\$1,546,957	\$1,546,957	\$1,546,408	\$4,555	\$0	\$0	\$0	\$1,546,957	100%	FY24
54RR610	Facilities HVAC Equipment Replacement System Wide - RR	Address increased heat load from new and added equipment. Will include replacement of battery exhaust fan. Increase HVAC system capacity system-wide: train control rooms, train control bungalows, substations and other facilities. Needs for additional sites are being identified. 54RR610: TC Bungalows (huts) L06, L16, L20.	\$9,992,156	\$9,992,156	\$9,992,156	\$9,235,356	\$26,030	\$1,546	\$0	\$0	\$9,258,528	99%	FY24
54RR350	Turntables Replacement at Concord Yard - RR	Replacement of the turntables at Concord, Richmond (Hayward by PD&C) yards (OCY, ORY, OHY). Transportation requires the use of turntables to turn cars in correct orientation for revenue service on a daily basis. The turntables are past their service life, are failing at a higher historical rate, and need to be replaced. Due to increased revenue service and system expansion, the turntables are being used at a more frequent rate.	\$7,475,436	\$7,975,436	\$7,975,436	\$6,151,937	\$114,155	\$242,566	\$14,803	\$0	\$6,825,166	98%	FY25
17HL102	BART Police MET Expansion	Reconstruction and relocation of BART Police Department (BPD) facilities at Lake Merritt (MET-G), including design, procurement, and construction of (1) a locker room and (2) administrative facilities.	\$2,000,000	\$2,000,069	\$2,000,069	\$1,728,303	\$0	\$74	\$0	\$0	\$1,735,164	100%	FY24
01RQ000	Hayward Maintenance Complex Phase 1a	This project constructs a Component Repair Shop, a Central Warehouse, and a Maintenance & Engineering Shop. The Component Shop will enable BART to optimally maintain and overhaul the new rail cars. The project also includes connecting track, track crossovers and switches, and a backup power substation.	\$207,861,132	\$209,495,685	\$209,451,145	\$206,370,548	\$0	-\$692,339	\$1,144,797	\$0	\$205,736,009	99%	FY25
54RR170	Replacement of Rotoclone - RR	Replace rotoclones replacement (wet dust collectors), 1 per shop.	\$4,078,391	\$4,428,391	\$4,428,391	\$4,239,339	\$111,374	\$6,091	\$1,942	\$0	\$4,337,617	98%	FY25
54RR150	Replace Antiquated Backflow Preventers - RR	Replace 50 year old backflow preventers to comply with new requirements imposed by the water utility (e.g. must be relocated above ground) and replacing old, corroded components. Eliminates possibility of drinking water contamination and water leaks. Replacing 8 backflow systems at 7 locations plus relocating water meters and repairing fire main at Downtown Berkeley (R20).	\$2,385,228	\$2,385,228	\$2,385,228	\$932,929	\$56,659	\$9,633	\$111,568	\$0	\$950,529	98%	FY25
15ER000	Update Book 36 and 400 - Support for State of Good Repair	Updating Book 36 and 400 to reflect all upcoming Traction Power and Electrical projects, replacements, and any other infrastructure modifications, systemwide.	\$700,000	\$1,150,000	\$1,150,000	\$617,185	\$199,750	\$129,093	\$32,780	\$0	\$871,896	77%	FY25
Sub-Total			\$380,937,962	\$383,073,194	\$383,028,654	\$374,132,079	\$512,524	-\$259,762	\$1,905,279	\$0	\$374,648,159		

*Italics: Notes a change*

● Project Summary Included

● Security Sensitive Projects

RR: Measure RR Program Projects

C: Core Capacity

TBD: Project is On Hold

\* % Complete Based on Cost

\*\* New Projections not included in adopted FY Budgets

5. Project Scopes and Budget Summaries by CIP Category

5.4 Shops, Yards, and Facilities



Project ID	Project Name	Project Scope Summary	Original Estimate at Completion	FY24 Q2 Estimate at Completion	Total Funded Budget	Spent through FY23	Adopted FY24 Budget	FY24 Q2 Spent	Preliminary FY25 Budget	Forecasted FY26 Budget	Spent through FY24 Q2	% Complete Physical or Cost*	Closeout Date
15CQ007	Track Renewal Project Oakland Yard - RR	Develop, design, and construct a new spur track in the Oakland Shop Yard (G-Spur). Build a secure facility to house the \$20M track geometry car. Replace water and gas lines, repave and stripe parking area, and saddle construction over drain.	\$11,490,653	\$16,490,653	\$16,490,653	\$12,521,811	\$690,595	\$488,663	\$465,819	\$0	\$13,897,429	92%	FY25
15QL004	Aerial Guideway Sound Wall Repairs, C, R, and L-Lines	Rehabilitation of 150 sound walls locations along C, L and R Lines that have reached the end of their useful lives.	\$16,840,261	\$28,553,707	\$3,200,000	\$1,124,009	\$255,285	\$411,745	\$650,000	\$611,000	\$1,938,252	62%	FY28
54RR230	Fire Hoses and Piping Replacement in Core System Stations - RR	Replace fire hose cabinet and piping system in BART stations and facilities.	\$782,235	\$782,235	\$782,235	\$476,613	\$9,689	\$24,551	\$0	\$0	\$504,377	99%	FY24
54RR260	Fire Services at Hayward Yard - RR	<i>This project involves the replacement of the water distribution infrastructure at the Hayward Yard (OHY), including establish a more efficient fire protection system that aligns with current National Fire Protection Association (NFPA) standards, ultimately reducing maintenance needs. Additionally, the project includes the expansion and repair of several domestic water, sanitary sewer, and industrial waste pipelines at the Yard.</i>	\$10,617,425	\$11,221,425	\$11,221,425	\$7,403,472	\$2,860,287	\$168,571	\$226,847	\$7,438	\$8,929,419	83%	FY26
20GH000	ATO Yard Whistle Stops	Provide safe, efficient yard access from Revenue BART Trains to Hayward and Concord Yards, by adapting ATO Routes and Associated Speed Profiles so trains when approved by OCC can perform automated stops at these yards rather than Operator Controlled Road Manual. This allows trains to perform Automated stops at Yards rather than manual mode, which is the current system in place.	\$2,000,000	\$2,000,000	\$1,333,000	\$1,249,521	\$0	\$17,403	\$0	\$0	\$1,285,686	60%	TBD
20EH000	Train Control Hut Replacement or Improvement	Address increased heat load from new and added equipment. Will include replacement of battery exhaust fan. Increase HVAC system capacity system-wide: train control rooms, train control bungalows, substations and other facilities. Needs for additional sites are being identified. 54RR610: TC Bungalows (huts) L06, L16, L20.	\$3,000,000	\$3,000,000	\$3,000,000	\$1,720,363	\$686,628	\$178,388	\$67,120	\$0	\$2,191,942	84%	FY25
05OH000	Renovation of Control Tower at Richmond and Concord Yard	Perform Fire Safety review, design and construction upgrades for the Control Towers at Richmond Yard (ORY) and Concord Yard (OCY). Ensure a second means of escape is available including additional stairs and doors in the upgrade scope as required.	\$4,655,483	\$4,594,532	\$4,594,532	\$1,712,333	\$1,818,090	\$297,494	\$898,817	\$165,281	\$2,136,604	59%	FY26
54RR110	Sewage Pump Replacement Systemwide - RR	<i>This project will replace 8 station sewage pumps throughout the BART system. A majority of the sewage pumps are the original pumps and are past their expected service life, therefore requiring more unexpected frequent maintenance.</i>	\$14,092,177	\$5,243,491	\$3,742,177	\$1,115,401	\$2,126,616	\$81,802	\$1,012,675	\$825,637	\$1,338,260	47%	FY27
53AC001	Fall Protection Installation on Stations and Facility Buildings - RR	This project will design and install fall protection on station and shop roofs. There is a need to evaluate all roofs and develop a customized plan for fall protection which will allow staff to properly inspect and maintain the asset. Safety railing shall be added at the perimeter of all District roofs that don't currently have fall protection measures.	\$2,240,860	\$2,240,860	\$2,240,860	\$915,878	\$90,486	\$26,440	\$287,474	\$684,979	\$963,831	45%	FY27
15QL003	Rehabilitation of Aerial Walkway at Y-Line	Assess, rehabilitate and repair the Y-Line aerial walkway surfaces and their steel panels over Hwy 101 (MP Y0.32 to Y0.48).	\$1,120,000	\$1,300,000	\$1,300,000	\$569,207	\$265,884	\$11,144	\$0	\$0	\$598,107	95%	FY24
20CE002	Switch Machine Replacement - Model 6	Replacement of switch machines across 2 Yards: 12 machines at Concord and 9 machines at Daly City.	\$2,811,990	\$9,000,000	\$3,390,277	\$2,586,777	\$1,417,197	\$301,008	\$800,000	\$1,083,238	\$3,103,745	42%	FY27
15EP000	System Wide Stations and Facilities Grounding Assessment	This project will assess the current condition of 20 traction power substation grounding systems. The grounding system has reached its expected design life. Grounding system has shown deficiencies.	\$1,000,000	\$1,000,000	\$1,000,000	\$234,801	\$730,176	\$20,697	\$456,125	\$0	\$376,686	24%	FY25
01RQ100	Hayward Maintenance Complex Phase 2 PE - RR - C	<i>Procure Trackwork, Design and Perform Civil Grading of East Storage Yard at Hayward Maintenance Complex.</i>	\$93,241,068	\$56,667,054	\$79,828,069	\$30,009,036	\$21,800,000	\$5,243,238	\$950,000	\$50,000	\$39,973,334	75%	FY26
Sub-Total			\$163,892,152	\$142,093,957	\$132,123,229	\$61,639,223	\$32,750,932	\$7,271,145	\$5,814,877	\$3,427,574	\$77,237,672		

Italics: Notes a change



Project Summary Included



Security Sensitive Projects

RR:

Measure RR Program Projects

C:

Core Capacity

TBD:

Project is On Hold

\*

% Complete Based on Cost

\*\*

New Projections not included in adopted FY Budgets

5. Project Scopes and Budget Summaries by CIP Category

Project ID	Project Name	Project Scope Summary	Original Estimate at Completion	FY24 Q2 Estimate at Completion	Total Funded Budget	Spent through FY23	Adopted FY24 Budget	FY24 Q2 Spent	Preliminary FY25 Budget	Forecasted FY26 Budget	Spent through FY24 Q2	% Complete Physical or Cost*	Closeout Date
54RR310	Replace Hydraulic Lift Cylinders at Hayward and Richmond Shops - RR	This project will replace corroded hydraulic truck lift cylinders at the Richmond, Hayward, Daly City and Concord. The lift cylinders have experienced major failures and temporary repairs on some cylinders have been performed. The repair and maintenance goals for Rolling Stock & Shops (RS&S) can be severely disrupted.	\$366,889	\$366,889	\$366,889	\$218,705	\$0	\$53	\$0	\$0	\$218,758	33%	TBD
15EQ000	Replacing Equipment and Cabling at Yards	Perform the Planning and Design to replace the existing equipment and cabling at Concord, Richmond, Hayward, Daly City and Oakland yards. This includes the 1000V DC power stingers, 4160V and 480V distribution equipment and cabling. Further funding requests and allocations will be used to continue procurement and replacement operations in a phased approach.	\$13,021,577	\$13,000,000	\$2,500,000	\$707,222	\$10,292,345	\$31,524	\$1,215,998	\$444,180	\$839,806	36%	FY27
54RR630	Control Tower HVAC at Concord and Richmond Yard - RR	This project installs a new HVAC system to provide cooling capacity governed by Title 24 to accommodate Transportation Staff in Control Towers and provide climate control. Installation of additional equipment in Control Towers is a result of additional service on the system. The increase in cooling capacity is 100% because there is no existing cooling system in the Control Towers.	\$1,284,773	\$6,000,000	\$1,284,773	\$488,286	\$93,670	\$13,806	\$581,291	\$78,991	\$514,043	20%	FY28
54RR510	HVAC Renovation and LMA - RR	The 50 year old air conditioning unit for computer and BART operation control centers are past their estimated service life and some replacement parts are unavailable for repair. The units are experiencing malfunctions at a higher historical rate. The failure of current HVAC system could severely impact BART operations due to potential for overheating in the computer room.	\$19,879,110	\$29,007,437	\$27,079,110	\$2,577,723	\$10,163,734	\$26,235	\$3,037,678	\$6,791,395	\$2,633,681	13%	FY28
15QJ001	Reroof Facilities Buildings Systemwide	This project is to replace facility roofs on a priority basis to maintain state of good repair system wide. The current funding is for replacing roofs at: Daly City , San Bruno, Bay Fair, Fremont, Glen Park, and South San Francisco locations.	\$42,500,000	\$9,789,235	\$9,789,235	\$1,694,799	\$2,888,478	\$884,875	\$1,004,754	\$3,470,717	\$2,809,731	35%	FY28
03QJ001	Concord Yard Wheel Truing Facility - RR	Design and construction of a wheel truing facility including building and structures, trackwork, traction power tie in, mechanical, electrical and systems, communications, and fire protection systems, architectural finishes, and site work.	\$32,300,000	\$75,000,000	\$25,348,170	\$3,311,041	\$562,586	\$103,349	\$6,595,372	\$10,335,375	\$3,499,285	18%	FY28
01RQ103	HMC Phase 2 East Storage Yard - RR - C	Design & Construct East Storage Yard, including new traction power substation and two gap breaker stations at Hayward Maintenance Complex.	\$331,260,316	\$896,120,692	\$246,829,826	\$26,934,630	\$33,000,000	\$235,164	\$2,070,002	\$1,756,888	\$30,745,823	21%	FY33
15CQ020	Track Renewal Project Richmond Yard - RR	This project will replace yard tracks at Richmond Yard (ORY). Existing yard tracks at ORY have reached the end of their expected design life and must be replaced. Yards were originally designed for 90lb rail, which is no longer in production and does not meet current rail standard specifications. This project will update yard to 119lb rail and switch components, as is required per BFS. The new ties that will also be installed are required to support increased traffic from new revenue vehicles.	\$44,513,864	\$44,513,864	\$44,513,864	\$2,273,149	\$7,939,746	\$265,430	\$4,449,704	\$6,791,834	\$2,842,624	10%	FY30
15HB003	Wheel Truing Machine Overhaul	This project is to overhaul two (2) wheel truing machines. Wheel truing machines must be periodically overhauled to extend the service life. Project will replace existing wheel truing machine controllers and includes purchase of spare parts for the upgraded machines.	\$0	\$999,999	\$1,000,000	\$8,154	\$1,000,000	\$9,071	\$205,490	\$14,616	\$208,296	67%	FY26
03QJ101	Concord Yard Wheel Truing Machine	This project will procure and install a dual-gauge wheel truing machine at the Concord Yard to accommodate the Fleet of the Future which increases the carrying capacity on the System.	\$0	\$4,000,000	\$4,000,000	\$0	\$662,374**	\$0	\$1,483,085	\$0	\$968,811	25%	FY26
17AY001	New BART Police Headquarters	<i>The project includes tenant improvements for all five-stories to include features unique to police such as holding cells, armory, evidence room, etc. Improvements to the plumbing, electrical, HVAC, fire protection systems may be needed as part of the tenant improvement. The project may also include structurally retrofitting the existing building, upgrading the existing perimeter fencing, security gate, and improving the existing parking lot. One floor, or portion thereof, of the building may be utilized by BART staff other than BART Police.</i>	\$0	\$190,000,000	\$5,000,000	\$0	\$0	\$37,237	\$10,650,000	\$63,000,000	\$37,237	1%*	FY27
Sub-Total			\$485,126,530	\$1,268,798,116	\$367,711,868	\$38,213,711	\$65,940,559	\$1,569,508	\$31,293,374	\$92,683,996	\$45,318,094		
Total for CIP Category: Shops, Yards, and Facilities			\$1,029,956,643	\$1,793,965,267	\$882,863,751	\$473,985,013	\$99,204,015	\$8,580,891	\$39,013,530	\$96,111,569	\$497,203,925		

*Italics: Notes a change*

Project Summary Included

RR: Measure RR Program Projects

TBD: Project is On Hold

\*\* New Projections not included in adopted FY Budgets

Security Sensitive Projects

C: Core Capacity

\* % Complete Based on Cost

5. Project Scopes and Budget Summaries by CIP Category

5.5 Track and Structures



Project ID	Project Name	Project Scope Summary	Original Estimate at Completion	FY24 Q2 Estimate at Completion	Total Funded Budget	Spent through FY23	Adopted FY24 Budget	FY24 Q2 Spent	Preliminary FY25 Budget	Forecasted FY26 Budget	Spent through FY24 Q2	% Complete Physical or Cost*	Closeout Date
15CQ011	Interlocking Replacement at A65/A75 - RR	Replacement of the interlocking track at Hayward (A65 - 4 turnouts) and Hayward Yard (A75 - 4 turnouts), includes train control (enabling works) and traction power duct bank work for future expansion.	\$33,700,000	\$24,000,000	\$26,200,000	\$23,880,469	\$5,602	\$9,107	\$0	\$0	\$23,939,773	100%	FY24
15CQ017	Rail Re-Profiling Services Systemwide - RR	This project reprofiles rail in order to accommodate the Fleet of Future cars and associated wheels. The new wheel shape is conical versus the old wheel shape being cylindrical. The new wheel does not ride in the same location as the old wheel, causing a point loading nearer to the gage side of the rail head. This point loading over time causes premature wear of the rail and increased noise. Re-profiling of the rail head will reduce maintenance cost and noise. Noise reduction is a benefit of getting the wheel-rail interface correct. Based on initial studies on actual noise reduction, re-profiling results in 20% noise reduction from the existing noise levels.	\$26,731,856	\$23,000,000	\$25,378,720	\$18,212,238	\$2,524,452	\$55,888	\$0	\$0	\$18,331,858	100%	FY24
54RR450	TransBay Tube Dampers Overhaul - RR	Replacement of the Transbay Tube (TBT) emergency ventilation dampers (upper gallery/bay dampers) that have reached the end of their intended design life. Project includes replacing dampers and emergency hatches.	\$3,131,454	\$3,131,454	\$3,131,454	\$790,381	\$0	\$0	\$0	\$0	\$790,446	100%*	TBD
15CQ012	Interlocking Replacement at A77 - RR	Upgrade the District infrastructure at the Hayward Yard (A77) interlocking (11 turnouts), including track and train control components (enabling works) and traction power.	\$34,338,000	\$34,338,000	\$34,338,000	\$31,088,720	\$802,241	\$225,190	\$520,462	\$0	\$31,529,829	100%	FY25
15TC008	Renew Soundwalls of Guideway (C, R and L-Lines) - RR	Survey, identify and repair (by BART forces) soundwalls on the C and R-Line aerial structures that need bolt repairs. The initial focus will be on the oldest soundwall R-Line structures.	\$1,871,354	\$1,871,354	\$1,871,354	\$1,430,482	\$0	\$2,341	\$0	\$0	\$1,434,577	99%	FY24
15QM000	Fracture Critical Bridge Inspection and Repair	Inspect steel bridges system-wide for fatigue and fracture critical, and repair as needed. Cost estimate is \$1.5M per inspection and \$500K per repair every 2 years. Required FTA inspection every 2-years for next 10 years.	\$3,794,409	\$3,794,409	\$3,794,409	\$2,698,926	\$49,109	\$11,025	\$1,047,157	\$6,554	\$2,739,190	100%	FY26
79HV000	Lake Merritt Tunnel and Station Security Hardening	Installation of CCTV, access control and the fiber (UON) network at Lake Merritt Station Concourse, Platform, Train Control Room and Lake Merritt (MET-G) hallways and tunnels, including the M-Line UON as-built documentation.	\$6,558,127	\$6,423,127	\$6,423,127	\$6,410,730	\$0	\$0	\$0	\$0	\$6,410,730	100%*	FY24
15QN000	Safety Barriers at Walnut Creek and Other Locations - RR	The design and installation of permanent physical barriers to comply with CPUC General Order (GO) 175, of post and rope barriers at 6 locations, and fences and gates at another 6 locations.	\$4,550,000	\$4,550,000	\$4,550,000	\$3,203,458	\$0	\$481	\$0	\$0	\$3,214,679	100%	FY24
Sub-Total			\$114,675,200	\$101,108,344	\$105,687,064	\$87,715,404	\$3,381,404	\$304,034	\$1,567,620	\$6,554	\$88,391,083		

Italics: Notes a change

- Project Summary Included
- RR: Measure RR Program Projects
- TBD: Project is On Hold
- \*\* New Projections not included in adopted FY Budgets

Security Sensitive Projects

C: Core Capacity

\* % Complete Based on Cost

5. Project Scopes and Budget Summaries by CIP Category

5.5 Track and Structures



Project ID	Project Name	Project Scope Summary	Original Estimate at Completion	FY24 Q2 Estimate at Completion	Total Funded Budget	Spent through FY23	Adopted FY24 Budget	FY24 Q2 Spent	Preliminary FY25 Budget	Forecasted FY26 Budget	Spent through FY24 Q2	% Complete Physical or Cost*	Closeout Date
15TC020	Assessment of Expansion Joints at Bridge Abutments - RR	Assessment of abutment expansion joints and designing repairs to prevent leaks. Condition assessment was performed systemwide for 104 embankment slopes, and based on the recommendations from the report, thirty-four (34) abutment locations were selected for the water intrusion and structural assessment.	\$3,148,505	\$1,094,263	\$1,094,263	\$1,093,222	\$30,935	\$0	\$0	\$0	\$1,094,263	100%	FY24
15TC007	Aerial Fall Protection - RR	This project is to design and install aerial structure fall protection system-wide (segment of M-Line is designed and shovel ready). The lack of existing fall protection on aerial structures requires use of district resources to install and uninstall temporary fall protection before any track work can be done. This is an inefficient use of valuable resources and track time.	\$31,129,441	\$31,129,441	\$31,129,441	\$27,431,592	\$2,034,413	\$17,616	\$70,729	\$0	\$27,472,613	99%	FY25
15CQ003	Replace Rails, Ties, Fasteners on Y-Line	Replace Restraining rail and running rail on the Y-Line, W-line and S-Line	\$3,097,000	\$5,247,000	\$5,247,000	\$2,897,095	\$1,002,766	\$26,153	\$1,033,491	\$313,648	\$2,941,196	63%	FY28
15CQ018	Rail Relay Replacement in Core System - RR	Material procurement and replacement of 52 miles of rail in legacy system. Thermite welding of rail to create CWR.	\$57,000,000	\$62,425,270	\$62,425,270	\$52,470,254	\$3,583,444	\$1,826,209	\$2,912,668	\$0	\$57,233,307	96%	FY25
15TC023	Fence Rehabilitation Systemwide - RR	<i>This project upgrades current fencing with enhancements that provide increased safety and security to the system and incorporates BART Operational Standards including added height to fencing, increased foundation size, new anti-climb/anti-cut features to fencing, and a smaller mesh size (1 inch mesh vs 2 inch mesh). In addition, upgrades to current fencing reduces train delays and decreases the need for BART Police Department interference. 40% of the scope is dedicated to these improvements. Also, the scope of Richmond Yard Carwash redesign is added to the project.</i>	\$17,150,000	\$11,765,693	\$11,765,693	\$8,637,724	\$2,581,488	\$348,229	\$1,649,234	\$0	\$9,825,172	89%	FY25
15CQ002	Track Programmatic Support for RR Bonds - RR	Track Programmatic shared support costs and Program Management including: priority Interlockings, Running Rail Renewal and Direct Fixation Pads.	\$177,210,190	\$179,078,997	\$179,078,997	\$145,870,639	\$9,541,553	\$2,191,127	\$9,422,511	\$11,052,511	\$150,388,859	88%	FY28
15TC019	Track Bearing Pads Study - RR	This study to be performed and findings will be used to assess replacement need. Many of the existing elastomeric bearing pads on the aerial structures have deteriorated and have reached end of life cycle.	\$3,500,000	\$2,508,750	\$2,508,750	\$1,022,426	\$391,514	\$8,668	\$0	\$0	\$1,037,358	92%	TBD
15CQ019	Frog Capital Maintenance - RR	This project will implement Phase 1 for Conformal Frog. New conical wheel profiles damage existing frogs and new frogs will match the new wheel profile. This will reduce the impact on the frogs from .6 to .08 g-force, reduce maintenance, noise reduction. New frog life expectancy is 8 years. There are 346 mainline frogs. All stock frogs in Hayward will need to be modified in Phase 1.	\$4,600,000	\$4,600,000	\$4,600,000	\$3,299,381	\$819,059	\$47,260	\$679,754	\$69,193	\$3,398,236	82%	FY26
15TD000	Non-Revenue Vehicle Equipment Procurement (Grinders, Geocar, and Wayside Equipment)	Procure equipment for various wayside rehabilitation projects.	\$79,057,443	\$74,324,955	\$74,324,955	\$69,018,846	\$4,938,883	\$825,318	\$378,522	\$2,635,082	\$70,986,509	97%	FY27
15CQ021	Replacement of Switch Point Components in Yards - RR	Procurement and installation of components to support the replacement of interlockings including switch plate packages, lag screw hole, etc.	\$3,225,000	\$5,000,000	\$5,000,000	\$3,831,855	\$599,037	-\$351,010	\$214,884	\$9,957	\$3,647,056	69%	FY28
15TC014	Cross Passage Doors and Hardware Upgrade RR	Assess the condition of 148 cross passage doors (99 hinged and 60 sliding) systemwide, and design for upgrades on locations on C-Line, M-Line, R-Line, L-Line, and Oakland Wye. Scope also includes upgrading the Transbay Tube (TBT) door hardware design, pilot installation on 2 doors for validation, and the installation of these hardware upgrades to all the 120 TBT Cross-Passage Doors.	\$5,400,000	\$3,891,517	\$3,891,517	\$1,826,649	\$1,989,406	\$17,130	\$363,950	\$1,592,758	\$1,868,081	90%	FY26
15TF003	Support Fire Life Safety for State of Good Repair	This project will support the District’s efforts to meet state and federal code requirements for Fire Life Safety infrastructure. This includes both the installation of new infrastructure as well as for ongoing maintenance as part of BART’s state of good repair program. Perform condition assessments and replace/repair equipment as applicable systemwide thereby improving asset reliability during an emergency.	\$866,000	\$916,000	\$916,000	\$388,030	\$4,940	\$150,301	\$371,019	\$0	\$540,072	97%	FY25
15TG001	M87 Spur Track Extension	65% Design only for extending the existing Daly City (M87) spur track by an additional 350-ft. This will allow storage for an 800-ft rail train and one prime mover locomotive.	\$1,862,790	\$2,095,718	\$1,925,000	\$1,057,875	\$475,565	\$28,477	\$24,150	\$0	\$1,161,341	66%	FY25
Sub-Total			\$387,246,369	\$384,077,604	\$383,906,886	\$318,845,588	\$27,993,003	\$5,135,478	\$17,120,911	\$15,673,149	\$331,594,063		

- Italics: Notes a change*
- Project Summary Included

RR: Measure RR Program Projects

TBD: Project is On Hold

\*\* New Projections not included in adopted FY Budgets
- Security Sensitive Projects
- C: Core Capacity
- \* % Complete Based on Cost

5. Project Scopes and Budget Summaries by CIP Category

5.5 Track and Structures



Project ID	Project Name	Project Scope Summary	Original Estimate at Completion	FY24 Q2 Estimate at Completion	Total Funded Budget	Spent through FY23	Adopted FY24 Budget	FY24 Q2 Spent	Preliminary FY25 Budget	Forecasted FY26 Budget	Spent through FY24 Q2	% Complete Physical or Cost*	Closeout Date
15CR001	Track Alignment Survey and Documentation Update	Installation of permanent survey monuments on all lines of the BART system. Phase 2 scope will include Lidar survey mapping of existing assets and structures within the Right of Way.	\$3,100,000	\$3,100,000	\$3,100,000	\$1,831,926	\$388,352	\$13,801	\$518,411	\$0	\$2,409,609	97%	FY25
15CS001	Preventative Maintenance Procedures Improvement	Review Preventative Maintenance requirements for all Maintenance and Engineering assets for code compliance and safety requirements.	\$5,340,000	\$6,258,000	\$6,258,000	\$4,001,884	\$1,474,367	\$316,570	\$765,124	\$16,624	\$4,676,331	76%	FY28
15TQ000	Post-Earthquake Inspection Program Improvement	Support the annual ERT training for the Engineering group in 2023 and 2024, focusing on ways to improve current inspection procedures, post emergency safety assessments, and to update its training program to improve asset reliability and maintain the system's State of Good Repair. The scope also include structural assessment of BART ventilation structures. From the assessment, the fragility data of ventilation structure will be determined. A shakeCast instance with these fragility data will be delivered by the consultant and installed into BART ShakeCast system.	\$2,100,000	\$2,100,000	\$2,100,000	\$713,335	\$352,400	\$115,139	\$608,243	\$280,524	\$874,519	54%	FY28
15CQ016	Direct Fixation Pads Replacement Systemwide - RR	Procure and install direct fixation pads in legacy system area.	\$16,508,390	\$16,756,311	\$16,756,311	\$10,265,080	\$1,706,168	\$477,713	\$957,669	\$2,633,115	\$10,783,762	69%	FY28
15QN003	Water Mitigation W-Line Tunnel	Mitigate the water intrusion and repair the deteriorated tunnel infrastructure between Colma and Millbrae Stations in San Mateo County.	\$6,542,000	\$6,542,000	\$6,542,000	\$3,637,318	\$1,005,305	\$156,114	\$948,989	\$950,388	\$4,031,548	72%	FY26
15TC002	Tunnel and Structure Programmatic Support for RR Bonds - RR	Civil and Structural programs, project management and support (administrative and financial analysis) to: (1) repair soundwalls, wayside regulatory signage, and water mitigation in M and R-Line tunnels with in-house forces; (2) obtain equipment and vehicle leases to support work with in-house forces; (3) provide program-wide construction management support during design, final design, and bulk material procurement; (4) warehouse leases (Hayward and Concord Warehouses).	\$160,262,156	\$165,000,000	\$167,549,894	\$46,543,860	\$9,786,509	\$1,727,751	\$6,789,780	\$6,962,854	\$50,396,176	67%	FY28
91HG000	Design Quality Process Improvement	Engineering support to improve strategic design quality practices, including formalizing and documenting policies, procedures, work instructions to gain Quality Management Systems (QMS - ISO 9001) design practices certification.	\$500,000	\$1,760,000	\$1,760,000	\$1,066,720	\$92,810	\$65,792	\$301,533	\$0	\$1,289,219	71%	FY25
15TC016	Seal And Secure Substation Roofs - RR	The repair of substation roofs at 82 locations by BART forces. The repairs include coating roofs with high-end polyurethane coating (Armor Thane).	\$5,157,393	\$5,157,214	\$5,157,214	\$1,531,915	\$1,492,864	\$14,246	\$1,226,437	\$905,997	\$1,556,021	52%	FY27
15TC009	Wayside Signage - Inspection and Inventory - RR	Replace all missing or substandard wayside signs and install new 10-car platform stop signs on all stations in Measure RR Counties. The estimated number of signs to be installed or replaced is 1250.	\$2,207,290	\$2,207,290	\$2,207,290	\$985,791	\$409,372	\$12,374	\$476,007	\$303,318	\$1,051,781	52%	FY26
15QN004	ROW Fencing Rehabilitation	Fence Replacement at the following critical locations: between Daly City Station to Millbrae Station to address homeless encampment encroachments.	\$12,000,000	\$12,000,000	\$12,000,000	\$4,870,151	\$1,829,378	\$58,942	\$2,207,601	\$2,142,944	\$5,028,481	49%	FY28
15TP000	Repair of Prestressed Tendon near Concord Station	Design and construction of the repair for the aerial concrete girder with exposed prestressed tendons near Concord Station.	\$600,000	\$600,000	\$600,000	\$267,829	\$0	\$0	\$0	\$0	\$275,376	99%	FY24
15TC013	Slope Stabilization Systemwide - RR	Assessment of 104 eroded slopes systemwide. Then prioritization, completion of repairs or rehabilitations of the slopes, and addressing storm water drainage issues within the right-of-way. 25 sites, including 7 locations from Project 15TC020, have been selected for final design, procurement, and construction. There are three contracts for the project. First contract is for 21 sites located on the A & C Lines, with construction work to be performed by BART forces. For the remaining 4 sites located on the L & M Lines, construction work is split into two contracts, slopes rehabilitation is by a general contractor under contract 2 and abutment expansion joints restoration work is by BART forces under contract 3.	\$13,670,061	\$14,000,000	\$11,132,042	\$2,648,475	\$8,592,287	\$129,774	\$1,596,681	\$4,661,806	\$2,902,329	30%	FY27
15TQ001	Assess and Repair Steel Bridges at A-Line	Repair the Washington Ave steel bridge based on the inspection performed in the previous biennial bridge inspection.	\$2,467,673	\$1,400,000	\$1,400,000	\$283,151	\$969,242	\$111,147	\$441,185	\$103,845	\$429,984	50%	FY26
Sub-Total			\$230,454,963	\$236,880,815	\$236,562,750	\$78,647,436	\$28,099,054	\$3,199,360	\$16,837,659	\$18,961,415	\$85,705,135		

Italics: Notes a change

● Project Summary Included

RR: Measure RR Program Projects

TBD: Project is On Hold

✱✱ New Projections not included in adopted FY Budgets

● Security Sensitive Projects

C: Core Capacity

✱ % Complete Based on Cost

5. Project Scopes and Budget Summaries by CIP Category

5.5 Track and Structures



Project ID	Project Name	Project Scope Summary	Original Estimate at Completion	FY24 Q2 Estimate at Completion	Total Funded Budget	Spent through FY23	Adopted FY24 Budget	FY24 Q2 Spent	Preliminary FY25 Budget	Forecasted FY26 Budget	Spent through FY24 Q2	% Complete Physical or Cost*	Closeout Date
15TD003	Non-Revenue Vehicle Procurement (Locomotives and Wayside Equipment)	Procure new fixed rail, hi-rail vehicles, and heavy rail equipment to maintain the District in a state of good repair through projects and maintenance work around the District. The procurement of additional locomotives will improve the availability of the current fleet.	\$28,505,869	\$31,444,642	\$31,444,642	\$9,121,714	\$1,497,557	\$80,155	\$1,747,218	\$1,639,167	\$9,291,409	40%	FY28
15TC018	Aerial Catwalk Renewal - RR	Assessment and replacement of hanger rods for Catwalk as necessary on A Line, and procurement of materials for C, M, and R Lines.	\$9,086,388	\$9,086,374	\$9,086,374	\$2,048,109	\$1,882,059	\$160,929	\$1,838,680	\$2,252,458	\$2,495,603	41%	FY27
15TD004	Non-Revenue Vehicle Procurement (Ultrasonic Test Truck and Wayside Equipment)	This project is to procure 8 flatbed rail cars. There are 3 flatbeds currently existing and are 50 years old. They have recently been renovated to give an additional 15 years of working life. Additional units are required to enable BART to work on the number of increasing planned Capital projects. It is recommended that flatbed rail cars are procured with ballast cars for contract efficiency and price savings. BART has unusual wide gauge rail width, which makes procurement of these vehicles custom. Quantities are therefore required to make contract values cheaper per unit, and more acceptable for OEMs to manufacture.	\$3,350,000	\$4,850,000	\$4,850,000	\$639,268	\$270,000	\$103,938	\$3,168,102	\$205,281	\$784,265	23%	FY27
15TC012	Stabilize MW-12 Slope - RR	Investigate the root cause of erosion of MW-12 north slope and the south slope adjacent to Camino Diablo Rd in the City of Walnut Creek. Design permanent slope protection measures to stabilize both slopes.	\$12,349,714	\$12,052,170	\$12,052,170	\$1,883,372	\$2,059,468	\$48,460	\$4,009,208	\$5,820,656	\$1,983,245	22%	FY27
15CH001	Tail Track Extensions	Design and construction of upgrading the existing tail tracks at the Millbrae extension to go from a 8-car train storage capacity to a 10-car train storage capacity.	\$18,459,057	\$18,459,057	\$18,459,057	\$3,458,164	\$2,812,015	\$4,240	\$4,823,738	\$7,364,141	\$3,497,643	19%*	FY27
15TC015	Water Mitigation Oakland Wye Tunnel - RR	Mitigate water intrusion along Oakland Wye and Embarcadero approach section of M Line Steel Tunnel. About 2250 feet of whole steel tunnel, 820 feet of steel tunnel along sidewalk, and 655 feet of steel tunnel along third rail side will be repaired. Steel lined tunnel will be repaired by Contractor.	\$8,548,049	\$11,766,000	\$11,766,000	\$1,709,499	\$7,102,601	\$30,528	\$0	\$0	\$1,779,235	17%	TBD
15CQ008	Interlocking Replacement at K23, K25, and C15 - RR	Upgrade the District infrastructure on the K Line and C Line, at the K23, K25, C15 interlockings, including track components (replace 20 turnouts). This project will replace wooden ties with precast concrete ties at switches to extend the asset life.	\$130,000,000	\$132,175,087	\$132,175,087	\$19,723,870	\$15,983,916	\$1,312,885	\$33,446,347	\$28,118,949	\$24,350,565	26%	FY26
15CQ015	Interlocking Replacement at A85 - RR	This project will upgrade the district infrastructure at the Fremont (A85) interlocking (8 turnouts), including track and train control components.	\$13,626,906	\$15,000,000	\$13,652,006	\$1,071,869	\$11,149,131	\$639,892	\$11,638	\$11,988	\$2,532,868	16%	FY26
15TD005	Non-Revenue Vehicle Procurement (Miscellaneous Tools and Wayside Equipment)	Procure new fixed rail, hi-rail vehicles, and heavy rail equipment to maintain the District in a state of good repair through projects and maintenance work around the District. Procurement includes but is not limited to a re-railer jack, welding trucks, re-rail trucks, stakebed truck, and tools.	\$10,503,365	\$10,733,365	\$10,733,365	\$1,266,251	\$2,474,997	\$355,857	\$4,869,819	\$1,750,126	\$1,875,579	13%	FY26
15TH002	Water Mitigation A and S-Line Tunnels	Assessment of water intrusion in the A and S Line tunnels.	\$500,000	\$500,000	\$500,000	\$196,750	\$166,480	\$35,370	\$0	\$0	\$433,698	90%	FY24
15TC010	Water Mitigation M-Line Tunnel - RR	The scope of this project is to repair the steel tunnel linings to mitigate water intrusion along M-Line, which includes design, investigation and construction. Steel Tunnel Remediation (by a Contractor) is planned to include 7605 feet of all the lining circumference, 4920 feet of lining along the safe walking platform side, and 2425 feet of lining adjacent to the third rail.	\$38,484,606	\$38,223,471	\$38,223,471	\$2,280,963	\$7,604,502	\$44,032	\$8,446,732	\$11,341,082	\$2,375,296	12%	FY30
15TC006	Rehab Street Grates - RR	Inspect, repair and replace street grates in San Francisco, Oakland and Berkeley at high priority locations: - 7 street grates in San Francisco along Market St. from 5th St. to 8th St. - 2 street grates in Berkeley from North Berkeley Station to Ashby Station. - 8 street grates in Oakland from 19th St. Station to Lake Merritt Station	\$21,027,852	\$21,027,852	\$21,027,852	\$1,034,831	\$1,669,972	\$21,163	\$2,382,493	\$3,046,713	\$1,093,110	6%	FY29
15CQ022	Procurement of Direct Fixation Fasteners	This project will procure DF Pads for use by BART maintenance. This is a material procurement project only, installation of DF pads will be completed under different project(s).	\$3,304,051	\$3,304,165	\$3,304,165	\$0	\$1,986,077	\$6,503	\$2,953,468	\$335,545	\$6,503	0%	FY26
Sub-Total			\$297,745,856	\$308,622,183	\$307,274,189	\$44,434,661	\$56,658,775	\$2,843,951	\$67,697,443	\$61,886,104	\$52,499,019		
Total for CIP Category: Track and Structures			\$1,030,122,389	\$1,030,688,946	\$1,033,430,889	\$529,643,089	\$116,132,236	\$11,482,823	\$103,223,632	\$96,527,222	\$558,189,300		

Italics: Notes a change



Project Summary Included



Security Sensitive Projects

RR:

Measure RR Program Projects

C:

Core Capacity

TBD:

Project is On Hold

\*

% Complete Based on Cost



New Projections not included in adopted FY Budgets

5. Project Scopes and Budget Summaries by CIP Category

Project ID	Project Name	Project Scope Summary	Original Estimate at Completion	FY24 Q2 Estimate at Completion	Total Funded Budget	Spent through FY23	Adopted FY24 Budget	FY24 Q2 Spent	Preliminary FY25 Budget	Forecasted FY26 Budget	Spent through FY24 Q2	% Complete Physical or Cost*	Closeout Date
05HA001	El Cerrito Del Norte Gateway - RR	This project is part of a modernization program to enhance customer circulation, safety and placemaking. This project expands the paid area, constructs two new elevators, two new stairs, creates new public restrooms, upgrades station lighting, installs new ceiling and flooring inside the new paid area, improves wayfinding and installs new public art. Additionally this project relocates the passenger drop off area, enhances the Ohlone Greenway/bicycle path/hardscape, upgrades flooring outside the paid area and provides new bus shelters.	\$71,736,659	\$61,286,659	\$61,286,659	\$58,006,620	\$200,000	\$3,868	\$250,000	\$0	\$58,077,687	100%	FY25
15TC011	Platform Edge Structural Rehab Limited Locations - RR	Replace the platform structural edge, the truncated dome tiles, the first thirty door tiles, and door markers for two-door cars and three-door cars. Phase 1 includes seven stations (Rockridge, Orinda, Pleasant Hill, Concord, Richmond, MacArthur, and Hayward). Phase 2 includes nine stations (North Berkeley, El Cerrito Plaza, El Cerrito del Norte, North Concord, Dublin/Pleasanton, West Dublin, Lake Merritt, Pittsburg, Walnut Creek). Phase 3 includes seven stations (Fruitvale, Coliseum, Bay Fair, South Hayward, Warm Springs, San Leandro, and West Oakland). Office of District Architect (ODA) project includes two stations (Lafayette and Castro Valley).	\$5,400,000	\$5,400,000	\$5,400,000	\$5,043,151	\$0	\$46,883	\$0	\$0	\$5,113,007	100%	FY24
47CJ017	Automatic Fare Collection Equipment Obsolescence and Upgrade	The current Single Board Computer (SBC) requires upgrade to support updated operating system, windows 7 is end of life in 2020. This equipment upgrade is required for the transition to the Clipper 2 system and for Cubic Transportation (CTS) manufactured components and PCI compliance.	\$4,647,998	\$6,047,954	\$6,172,349	\$4,725,966	\$801,250	\$8,680	\$486,898	\$0	\$4,740,306	88%	FY25
15QH000	Repair Sidewalks SWD - RR	Improve station accessibility by repairing damaged concrete sidewalks and walkways (rigid pavement only). All work and design support is performed by BART Forces. Repair work has been completed on the A and C-Lines, and is now being performed on the R-Line.	\$21,007,377	\$21,479,668	\$21,479,668	\$21,155,558	\$0	\$10,413	\$0	\$0	\$21,174,289	99%*	FY24
15IF003	Powell Street - Gateway Station - RR	The Powell Street Station Modernization Phase I project continues the work that was completed for the station modernization Design Guidelines. The scope advances the design of eighteen (base plus options) items onto final design, engineering, and construction. The project will primarily consist of relocating TVMs, upgrading platform lighting, flooring, and seating, relocating or adding wayfinding, replacing existing fare evasion barriers with higher barriers, and reconfiguring the entrances at Halladie Plaza. Options included are for replacement of the Platform paving, reconfigure toilet and ADA ramp at the entrance at Halladie Plaza.	\$27,074,885	\$26,558,488	\$26,558,488	\$22,972,847	\$4,585,071	\$544,626	\$5,625	\$0	\$23,690,938	99%	FY25
01VM001	Union City Intermodal Station - RR	Phase 2A expands the vertical circulation elements on the east side of the Union City Station, specifically adding one additional stairway, two new escalators and retrofitting one existing stairway.	\$24,952,552	\$24,951,551	\$24,951,551	\$22,962,097	\$500,000	\$3,718	\$0	\$0	\$22,974,657	98%	TBD
07EA011	Station Modernization at 19th St. Station - RR	Installation of new infrastructure/ fixtures at 19th St. Station. Renovation of Existing Restrooms: Upgrade of fixtures to be ADA-compliant and of lighting to energy efficient LED-lighting; considered 100% enhancement; Stair Repair: Upgrade of stairs to be ADA-compliant, including new stair nosings, new handrails, and installation of slip resistant materials; Flooring Repair: Limited Terazo flooring replacement as a result of enhancement work (e.g., replacing Terazo flooring around new fare barriers, fare gates, bicycle infrastructure/parking); and Tile Repair: Limited blue tile replacement located near stair cases and seating areas.	\$61,139,950	\$61,194,236	\$61,194,236	\$51,645,983	\$500,000	\$61,946	\$100,000	\$0	\$51,974,573	99%	FY25
47CC004	Fare Collection Systems Back Office Server/Disaster Recovery	This project is for the replacement of AFC back office server equipment and provide additional back-up (DAS Server) for disaster recovery and geographic redundancy. The project includes purchase and installation of server equipment, and license renewal. Equipment and software is obsolete, refresh is required every 3 to 5 years. Last refresh was 2020.	\$3,140,000	\$3,640,000	\$3,640,000	\$3,084,590	\$218,586	\$12,882	\$19,771	\$0	\$3,101,961	89%	FY25
15LN000	Escalator Reliability Improvement	Procure and install new controllers and limited rehabilitation for twelve escalators in downtown San Francisco. Montgomery Street-S3, Embarcadero-S6, Embarcadero-S1, 16th Street/Mission-S3, 16th Street/Mission-S2, 24th Street/Mission-S2, and 24th Street/Mission-S3 escalators to be rehabilitated.	\$10,440,570	\$10,064,025	\$10,064,025	\$9,650,838	\$100,000	\$8,820	\$0	\$0	\$9,672,786	94% *	FY24
15TC005	Water Mitigation Escalator and Elevator Machine Rooms - RR	This project is to seal escalator and elevator pits, and machine rooms. Water intrusion mitigation is a yearly need to keep assets functioning and adhere BART safety standards. Grouting to the outside of the station structure is one solution to prevent ground water intrusion, artesian pressure water intrusion, variable high tide water intrusion and rain storm water that exceeds station drainage capacity.	\$1,425,662	\$1,615,750	\$1,615,750	\$1,090,078	\$175,664	\$1,502	\$0	\$0	\$1,098,075	100%	FY24
11IA002	New Platform Stairs at Civic Center - RR	This project is for design, procurement, and construction of two additional stairs adjacent to the existing stairs at each end of the platform of Civic Center Station (M40). This will reduce BART Platform exiting times and bring within current NFPA requirements.	\$11,200,000	\$13,650,000	\$13,650,000	\$10,660,435	\$733,140	\$106,774	\$306,019	\$0	\$10,942,060	97%	FY25
Sub-Total			\$242,165,653	\$235,888,331	\$236,012,726	\$210,998,163	\$7,813,711	\$810,111	\$1,168,312	\$0	\$212,560,338		

*Italics: Notes a change*

Project Summary Included

RR: Measure RR Program Projects

TBD: Project is On Hold

\*\* New Projections not included in adopted FY Budgets

Security Sensitive Projects

C: Core Capacity

\* % Complete Based on Cost

5. Project Scopes and Budget Summaries by CIP Category

Project ID	Project Name	Project Scope Summary	Original Estimate at Completion	FY24 Q2 Estimate at Completion	Total Funded Budget	Spent through FY23	Adopted FY24 Budget	FY24 Q2 Spent	Preliminary FY25 Budget	Forecasted FY26 Budget	Spent through FY24 Q2	% Complete Physical or Cost*	Closeout Date
03SO003	Concord Station Modernization - RR	Phase 1 - Install a new elevator in the paid area, reconfiguring the faregate arrays and TVMs, and relocate the station agent booth, along with associated changes in signage and wayfinding and upgraded public restrooms. The current funded budget is for Design only.	\$70,000,000	\$3,300,000	\$3,058,069	\$3,058,069	\$0	\$0	\$300,000	\$0	\$3,058,069	90%	FY25
02DD000	WSX Irvington Station Design	Design (only funded phase at present) of Irvington Infill Station.	\$18,450,000	\$21,210,000	\$18,450,000	\$15,915,522	\$5,720,000	\$8,469	\$0	\$0	\$15,938,069	86%*	TBD
15RR001	Station Stair Tread and Nosings Replacement	Replacement of stair treads and nosings after systemwide assessment and prioritization. Begin replacements at two stairs at the Hayward Station, two stairs at the Daly City Station, one stair at the Balboa Park Station and one at Rockridge Station	\$432,017	\$432,017	\$432,017	\$350,141	\$37,402	\$3,517	\$0	\$0	\$406,186	94%*	FY24
64ND000	Asset Management Data and Modeling Support	Continue to develop the initial Maintenance and Reliability Application (SEAMS) with a wider dataset including the Critical Needs Inventory (CNI), Risk Register (RR), Master Capital Project List (MCPL), and other data sources to better model asset risk and state of good repair. The application includes alternative calculation methods of 'Probability of Failure' and 'Asset Criticality' beyond those initially implemented, and these will be investigated to further understand the sensitivity of optimal project prioritization and funding allocations. Develop recommendations for improvements to asset data maturity for better model performance and results.	\$291,052	\$291,052	\$291,052	\$238,563	\$0	\$0	\$0	\$0	\$238,563	98%	FY24
47CJ014	Fare Gate Renovation and Rehabilitation	Upgrade existing fare gates to be retrofitted and mechanically refurbished to make it more difficult for patrons to evade fares. Projects include increasing air pressure 'cinching', conversion of ADA gates and 5 stations with electric gates to pneumatic (AFV) paddle gates. Detering of fare evasion and entry of non paying passengers into the system increases safety and quality of life of BART patrons.	\$21,137,630	\$18,900,136	\$18,900,136	\$17,345,833	\$254,993	\$117,297	\$0	\$0	\$17,531,544	100%	FY24
47CC003	Support for Europay MasterCard Visa (EMV) Credit Cards	This project modifies existing BART ticket vending machine hardware and software in the following ways: (1) upgrade existing pin pad hardware, (2) upgrade to accommodate Europay Mastercard Visa.	\$8,662,414	\$9,406,932	\$8,836,932	\$7,510,443	\$788,245**	\$45,088	\$906,298	\$0	\$7,594,011	86%*	FY25
45GA000	Station Hardening	Replace the existing unlocked Station service gates with automatically locking buzz gates. Eliminate unlocked or unused service gates that allow for uncontrolled access between station paid and free areas. Raise the barriers surrounding paid areas to five feet. For all the FY21 and FY22 designated stations, the barrier will be six feet tall. Fence off areas that allow patrons to enter a paid area from a free area. This situation is common where the elevators at concourse and street level allow unimpeded access to paid areas on station platforms.	\$7,044,926	\$6,366,105	\$6,366,105	\$5,225,704	\$836,877	\$99,704	\$303,523	\$0	\$5,609,319	94%	FY25
17AL000	AC Transit Restrooms at District Stations	Provide interim restroom facilities for use by Alameda County (AC) Transit drivers at 8 District Stations by modifying existing buildings or constructing new buildings.	\$1,600,000	\$2,534,066	\$1,280,790	\$1,134,684	\$496,372	-\$16,111	\$500,000	\$1,000,000	\$1,159,781	92%*	FY26
47CC005	BART Only Smart Card (BOSC) System Replacement	This project will replace BART Only Smart Cards (BOSC) and implement support at BART fare gates. The existing smart cards used by District employees, dependents, retirees and contractors are obsolete. Existing card manufacturer no longer supplies cards.	\$2,000,000	\$2,320,000	\$2,320,000	\$1,819,507	\$25,138	\$248,009	\$0	\$0	\$2,276,210	100%	FY24
47CJ002	Bill to Bill Changer Upgrade Kits	This project is for the refurbishment of Bill to Bill Changers includes all components. Equipment is obsolete, has reached end of life cycle. Requires replacement every 5 years.	\$2,197,000	\$2,348,000	\$2,348,000	\$2,073,036	\$129,639	\$1,609	\$44,343	\$0	\$2,077,995	89%*	FY25
44AD008	Station Agent Booth Equipment Obsolescence Upgrade	Upgrade and/or replace obsolete Station Agent Terminal Computer Systems in all passenger stations, including PCs, LCDs and Printers. PCs are used by Station Agents to view elevator status sign, input Requests for Maintenance (RFMs), parking validation, station inspection report, payroll, timesheets.	\$906,366	\$1,145,360	\$906,366	\$609,915	\$434,572	\$21,575	\$24,073	\$0	\$652,781	74%	FY25
20LB001	Program Stop ID and Cradle Upgrade	Design, configuration and tuning of the Train Program Stop ID functionality for the train cars side door open signaling system.	\$3,074,280	\$3,707,434	\$1,250,000	\$850,426	\$0	\$93,025	\$532,796	\$33,068	\$1,044,136	35%	FY26
15LK003	Powell Street Elevator	Design and construction of a new elevator at Powell Street Station allowing access to both MUNI and BART platforms. The project is being designed and constructed by SFMTA in conjunction with the MUNI Central Subway. BART has an agreement with SFMTA for cost sharing of design and construction.	\$1,590,000	\$1,590,000	\$1,590,000	\$566,493	\$613,517	\$7,652	\$226,442	\$183,548	\$578,286	70%	FY26
Sub-Total			\$137,385,685	\$73,551,102	\$66,029,466	\$56,698,336	\$8,548,510	\$629,833	\$2,837,475	\$1,216,616	\$58,164,949		

*Italics: Notes a change*

- Project Summary Included
- RR: Measure RR Program Projects
- TBD: Project is On Hold
- \*\* New Projections not included in adopted FY Budgets

Security Sensitive Projects

C: Core Capacity

\* % Complete Based on Cost

5. Project Scopes and Budget Summaries by CIP Category

5.6 Stations



Project ID	Project Name	Project Scope Summary	Original Estimate at Completion	FY24 Q2 Estimate at Completion	Total Funded Budget	Spent through FY23	Adopted FY24 Budget	FY24 Q2 Spent	Preliminary FY25 Budget	Forecasted FY26 Budget	Spent through FY24 Q2	% Complete Physical or Cost*	Closeout Date
15TK001	Station Agent Booth Dutch Doors	Replace existing station agent’s booth doors with Dutch doors. 44 doors at 34 stations have already been replaced as part of Phase 1 and 2. Current phase (Phase 3) includes replacement of 16 station agent booth doors at 12 stations including bullet-resistant glass at one door.	\$4,000,000	\$3,519,750	\$3,519,750	\$2,419,336	\$318,496	\$141,143	\$7,623	\$0	\$3,283,120	99%	FY25
15IM000	DSS Pilot Project	<i>Replace the existing unreadable destination signs with new retrofit units at 16 underground stations.</i>	\$14,500,000	\$14,500,000	\$3,411,427	\$2,307,643	\$1,448,428	\$99,914	\$432,809	\$419,048	\$2,559,468	72%	FY30
15QL002	R-Line Station Parking Lot Improvement	This project will replace/repair highest risk pavement (with Pavement Condition Index (PCI) < 50) over the next 5 years. When PCI > 50 throughout the system, replace/repair pavement as needed to maintain a state of good repair. 2017 system-wide assessment revealed 22% of BART paving assets are in poor or failed state (PCI<50). BART currently owns/maintains 12.8 M SF of pavement assets system-wide. Lack of maintenance creates trip/fall hazards, vehicle damage, unpleasant customer interactions.	\$64,700	\$64,700	\$64,700	\$41,972	\$0	\$0	\$0	\$0	\$41,972	65%*	TBD
91BZ000	Systemwide Historic Resource Assessment	The original 1972 BART system is approaching 50 years of age, the threshold for consideration as a potentially eligible historic resource under state and federal law. This effort seeks to identify and describe potentially significant elements of the original system and create a defined process for project managers to follow should a project involve work at or on a potentially historic element of the system.	\$264,905	\$264,905	\$264,905	\$176,513	\$48,588	\$3,745	\$22,752	\$17,051	\$189,066	71%*	FY26
59DE001	Access Facility Reconfiguration	Implement signage and striping changes to support implementation of access programs.	\$250,000	\$376,864	\$376,864	\$158,596	\$20,000	\$20,955	\$100,000	\$96,000	\$179,551	48%	FY30
15OB001	Landscape Improvements Systemwide	<i>The Landscaping and Vegetation Management Project is to improve the condition of the landscape and irrigation assets Districtwide. Project includes Rockridge Station Tree Planting as well as ongoing professional services contract for systemwide hazardous tree assessment.</i>	\$357,030	\$1,707,322	\$1,538,030	\$456,606	\$224,471	\$39,893	\$327,910	\$559,570	\$506,288	33%	FY28
59CR001	Station Wayfinding and Signage	BART is updating its signage and wayfinding design standards for all station access facilities to improve the experience of those traveling to and from BART stations via all access modes. This project includes review, refinement, and finalization of concept signage designs, development of signage specifications and guidelines, development of updated parking program signage and high level cost estimates, and a signage plan for one station including signage placement and wayfinding graphics. This project will provide the needed information to update the BART Facilities Standards.	\$250,000	\$250,000	\$250,000	\$127,232	\$45,000	\$0	\$122,768	\$0	\$127,232	60%	FY25
47CC006	Software Application Mod.FCE	Perform design and procure software to develop the Transportation Intranet (TSI) Application. The Java Applet tech in TSI application is obsolete and upgrade to the system is essential to improve cyber security.	\$0	\$1,000,000	\$1,000,000	\$107,356	\$352,224	\$15,990	\$27,596	\$0	\$141,148	90%	FY25
15QQ000	Parking Program Modernization	Integrate parking payments into the BART mobile app; implement automated enforcement.	\$2,890,977	\$2,890,977	\$2,890,977	\$1,794,507	\$694,000	\$298,963	\$302,470	\$100,000	\$2,101,916	72%	FY26
91AB001	Art - Station Modernization	This project created an Art in Transit policy for BART offering a comprehensive vision for arts implementation to enhance placemaking and wayfinding, ridership, and community partnerships. The project now includes launching the Art in Transit program through an Arts Master Plan, Call for Artists for Station Modernization, and pilot projects in the first year of the program that are relevant to the goals of Station Modernization and set the program on track to success in the long term.	\$714,100	\$809,402	\$809,402	\$401,642	\$150,000	\$0	\$150,000	\$107,760	\$401,642	57%	FY26
11OG002	Balboa Park - Upper Plaza / Passenger Drop Off Area Upgrade - RR	The project consists of connecting the newly added Eastside entrance plaza with the addition of a new MUNI platform on the east side of the BART Balboa Park Station to suit its new role as a major gateway to the BART system through the addition of improved lighting, signage, and access to the station concourse.	\$2,050,000	\$3,359,860	\$3,359,860	\$1,852,353	\$750,000	\$86,306	\$590,443	\$0	\$2,056,440	99%	FY25
17BY001	New UPS System - LMA Building	Design and construct a new Uninterruptible Power Supply (UPS) System at the Lake Merritt Administration (LMA) Building for the Operations Control Center (OCC) and other critical infrastructures supporting revenue operations. This UPS will replace the existing one located in the Metro Center (MET) Building which will transition to the Transit Oriented Development (TOD) around Lake Merritt Station.	\$17,000,000	\$31,416,889	\$1,852,500	\$1,121,409	\$4,472,461	\$74,383	\$7,419,721	\$9,599,537	\$1,295,209	70%*	FY27
15LK001	Market Street Entry Canopies - RR	This program will install 19 canopies at the four downtown San Francisco stations, which don’t currently exist, over street openings for patron safety as well as to meet code requirements for weather protection for any escalators being installed or renovated.	\$104,477,000	\$113,923,952	\$113,923,952	\$57,129,684	\$14,800,000	\$4,664,299	\$17,117,582	\$15,260,786	\$66,260,856	58%*	FY31
Sub-Total			\$146,818,713	\$174,084,621	\$133,262,367	\$68,094,847	\$23,323,668	\$5,445,592	\$26,621,673	\$26,159,752	\$79,143,907		

*Italics: Notes a change*



Project Summary Included



Security Sensitive Projects

**RR:** Measure RR Program Projects

**C:** Core Capacity

**TBD:** Project is On Hold

**\*** % Complete Based on Cost

**\*\*** New Projections not included in adopted FY Budgets

5. Project Scopes and Budget Summaries by CIP Category

5.6 Stations



Project ID	Project Name (with tags)	Project Scope Summary	Original Estimate at Completion	FY24 Q2 Estimate at Completion	Total Funded Budget	Spent through FY23	Adopted FY24 Budget	FY24 Q2 Spent	Preliminary FY25 Budget	Forecasted FY26 Budget	Spent through FY24 Q2	% Complete Physical or Cost*	Closeout Date
59CT002	Wayfinding Improvements at Various Stations - RR	BART Wayfinding Improvements Phase IV at 14 stations located in Alameda, San Francisco, and San Mateo counties. Work includes fabrication and installation of illuminated wayfinding signs, custom design cases, station ID pylons, kiosks, and real-time displays. Existing wayfinding directional and transit information signage and displays will be replaced to improve and enhance the transit wayfinding experience of transit users. The new signs and information displays will provide consistent and understandable information with use of less written messages and more pictograms, graphic symbols, and operator logos. Complete design to 35% at 14 stations, of which for the two stations, MacArthur and Ashby stations there will be complete design and construction.	\$5,089,909	\$8,012,569	\$8,012,569	\$2,894,610	\$2,500,000	\$848,938	\$115,329	\$0	\$4,272,725	68%*	FY25
59EP001	Real-Time Display Life Cycle Replacement Project	This project will start with the design and implementation of a pilot installation of up to six displays at Civic Center station. After installation of the pilot displays at Civic Center, intercept surveys and focus group studies will be conducted to evaluate usage and effectiveness of the displays. Based on the pilot, the project will initiate design and implementation of the RTDs at the key intermodal BART stations in Oakland and San Francisco.	\$840,000	\$840,000	\$836,049	\$618,996	\$0	\$181,822	\$0	\$0	\$815,902	100%*	FY24
17BJ001	Lake Merritt Plaza Design - RR	Conceptual design of upgrading the Lake Merritt Plaza including full waterproofing membrane replacement, new paving, new landscaping/irrigation, new lighting, new canopy, new seating, new wayfinding, new bike station, and art.	\$30,000,000	\$7,610,000	\$7,610,000	\$2,559,320	\$50,000	\$7,206	\$0	\$0	\$2,586,107	34%*	TBD
15JA003	Sustainability Project – Operations	Asset management for existing on-site solar projects, placeholder for EV charging, sustainable station LED lighting project.	\$1,400,000	\$3,300,000	\$1,455,000	\$707,601	\$1,540,000	\$327,590	\$175,000	\$135,000	\$1,129,488	78%*	FY30
57RR204	North Berkeley Station Access Improvement RR	Project will improve bicycle and pedestrian access to the North Berkeley BART station. The scope of work includes a road diet on the two north-south station area roads (conversion from two-way operation on both roads to a one-way couplet); 0.5 mile of separated two-way cycle tracks on station area roads; widening/upgrading of the Ohlone Greenway adjacent to BART parking lots from the existing 10'-wide multi-use trail to an 18'-wide facility with dedicated two-way cycle track and pedestrian sidewalk (plus lighting and landscaping); pedestrian-scale lighting; raised crosswalks; upgraded directional curb ramps; sidewalk bulbouts to reduce pedestrian crossing distances; improved lighting at crosswalks; a bus bulbout; additional secure bicycle parking for ~120 bikes; wayfinding; landscaping and storm water management; and art elements.	\$11,568,153	\$11,694,300	\$11,694,300	\$4,287,321	\$3,500,000	\$552,415	\$800,000	\$0	\$5,395,184	51%	FY25
03SO004	Concord Station Lighting Modernization and UPS Project - RR	The objective of this project is to upgrade the Station's complete existing lighting systems, lighting control system and install a new Uninterruptible Power Supply (UPS) system.	\$5,033,000	\$9,106,002	\$9,106,002	\$543,466	\$354,179**	\$27,328	\$3,458,615	\$4,749,742	\$617,788	40%	FY26
15LK002	Market Street Escalators Project - RR	This program will replace 41 existing street and platform escalators in the 4 SF downtown stations. The escalators are at the end of their useful life and are regularly out of service.	\$150,757,731	\$153,880,000	\$154,274,815	\$41,867,545	\$26,500,000	\$3,876,629	\$35,415,006	\$35,068,364	\$46,086,895	39%	FY29
57RR206	19th Street/Oakland Active Access Improvements - RR	Project will construct an attended bike station on a BART-owned parcel 300 feet north of the 19th St/Oakland BART Station with space for 400 securely parked bicycles. It will enhance and expand the existing bike station, which is in a rented storefront space and only has room for 130 bikes.	\$6,887,668	\$6,887,668	\$6,387,668	\$1,777,275	\$576,299**	\$18,726	\$1,842,361	\$2,211,833	\$1,803,769	28%*	FY31
47CJ016	Clipper C2 Integration and Security Upgrade	Upgrade BART fare collection systems to be compatible with the new, Metropolitan Transportation Commission (MTC) /Cubic, Clipper 2.0 system, while maintaining compatibility with other BART systems (such as EZ Rider parking applications). Scope includes upgrades to security and network equipment for faregates, vending and fare collection machines while keeping BART functional and compliant throughout the new system integration.	\$22,000,000	\$29,318,872	\$26,410,667	\$11,642,012	\$6,709,123	\$1,977,989	\$6,470,097	\$125,910	\$16,814,946	52%	FY25
15QL001	A-Line Station Parking Lot Improvement	This project will replace/repair highest risk pavement (with Pavement Condition Index (PCI) < 50) over the next 5 years. When PCI > 50 throughout the system, replace/repair pavement as needed to maintain a state of good repair. 2017 system-wide assessment revealed 22% of BART paving assets are in poor or failed state (PCI<50). BART currently owns/maintains 12.8 M SF of pavement assets system-wide. Lack of maintenance creates trip/fall hazards, vehicle damage, unpleasant customer interactions.	\$2,200,000	\$2,200,000	\$1,445,876	\$245,118	\$1,234,436	\$27,500	\$1,940	\$0	\$306,409	30%	FY26
15NU002	Accessibility Improvement Program - RR	In a 2011 assessment, FTA identified improvements needed to meet ADA-regulations. Based on this assessment, BART conducted an evaluation of stations system-wide and identified improvements and upgrades to meet federal ADA regulations and California Building Code. This scope and all components herein represent resulting improvements from a 10-year Scope of Work developed by BART to meet all State and Federal code.	\$73,770,000	\$40,431,489	\$40,431,489	\$8,873,369	\$4,900,000	\$1,096,768	\$5,263,663	\$650,420	\$10,072,417	25%*	FY31
15NE002	Public Address System Improvement - RR	Installation of a new public address system, including electrical, communications, equipment installation, testing, and commissioning at Lafayette (C30) and Powell (M30) Stations	\$10,812,933	\$9,109,683	\$9,181,554	\$2,071,805	\$2,500,000	\$3,362	\$3,804,245	\$687,387	\$2,095,457	23%*	FY31
11FE001	Embarcadero Platform Elevator - RR	Renovate/modernize the existing hydraulic elevator #63. Relocate the existing hydraulic elevator #63 machine room. Renovate the South Stairs, increasing the stair width from 36" to 44" to comply with egress requirement	\$0	\$24,183,050	\$19,828,582	\$3,039,385	\$0	\$9,857	\$979,653	\$6,656,696	\$3,059,427	21%	FY29
57RR209	MacArthur Station Active Access Improvements - RR	Lighting improvement in the underpass at 40th St adjacent to the plaza at MacArthur Station, with a goal to improve pedestrian safety and security while creating a sense of place.	\$6,884,642	\$6,884,642	\$3,884,642	\$610,499	\$125,000	\$91,495	\$1,994,043	\$1,000,714	\$802,741	21%*	FY26
Sub-Total			\$327,244,036	\$313,458,275	\$300,559,214	\$81,738,320	\$49,558,559	\$9,047,622	\$60,319,952	\$51,286,066	\$95,859,254		

Italics: Notes a change



Project Summary Included



RR: Measure RR Program Projects



TBD: Project is On Hold



\*\* New Projections not included in adopted FY Budgets



Security Sensitive Projects



C: Core Capacity



\* % Complete Based on Cost

5. Project Scopes and Budget Summaries by CIP Category

5.6 Stations



Project ID	Project Name	Project Scope Summary	Original Estimate at Completion	FY24 Q2 Estimate at Completion	Total Funded Budget	Spent through FY23	Adopted FY24 Budget	FY24 Q2 Spent	Preliminary FY25 Budget	Forecasted FY26 Budget	Spent through FY24 Q2	% Complete Physical or Cost*	Closeout Date
57RR211	Civic Center Active Access Improvements - RR	Project consists of a new traffic signal and other pedestrian and bicycle improvements (wayfinding, striping) at the intersection of Hyde St, Grove St, 8th St and Market St in San Francisco to improve pedestrian access to Civic Center Station following the closure of the two stair entrances at this location.	\$1,400,000	\$1,400,000	\$1,400,000	\$254,964	\$200,000	\$0	\$687,340	\$0	\$255,289	18%*	FY25
57RR301	Pittsburg/Baypoint Station Shared Mobility Improvements - RR	The portion of the project that includes roadway repaving is considered replacement and represents about 31% of the total scope. The remaining scope of the project includes reconfiguring drop-off/pick-up area and striping changes to incorporate enhanced pedestrian and cycling facilities.	\$2,500,000	\$3,810,000	\$3,810,000	\$413,371	\$150,000	\$487	\$1,585,818	\$471,358	\$417,821	11%*	FY28
15NL005	Elevator Renovation Program at Pittsburg-Bay Point (C80)	Renovation of the two hydraulic elevators at Pittsburgh-Bay Point (C80 on the C-Line) for reliability, function (code compliance), cosmetic upgrades, and remote monitoring improvements.	\$10,250,419	\$12,122,635	\$8,262,378	\$1,167,524	\$1,563,129	\$15,616	\$1,748,423	\$5,072,917	\$1,350,863	14%	FY28
15NL004	Elevator Renovation Program at Coliseum Station (A30)	Renovation of the two hydraulic elevators at Coliseum (A30 on the A-Line) for reliability, function (code compliance) and cosmetic upgrades as well as remote monitoring improvements.	\$10,507,950	\$13,057,205	\$13,057,205	\$1,699,458	\$4,322,496	\$19,667	\$2,000,000	\$4,960,720	\$1,740,348	16%	FY28
91GL029	A-Line Jobs Attraction Strategy	The A-line connects Oakland to the Silicon Valley via central and south Alameda County. The project includes 9 stations: Fruitvale, Coliseum, San Leandro, Bay Fair, Hayward, S. Hayward, Union City, Fremont, and Warm Springs/S. Fremont. Previous work has shown that this corridor has competitive development sites, market potential and the local support needed to attract major employers to future TOD. This project will build on robust TOD planning efforts in this corridor, identify what employers are seeking in new locations, and create a strategy to bring jobs to the A-line. It also builds on upcoming work by the East Bay Economic Development Alliance on COVID-19 economic recovery.	\$437,500	\$437,500	\$437,500	\$80,293	\$203,350	\$1,863	\$153,856	\$0	\$229,952	53%*	FY25
57RR207	Bicycle Stair Channels - RR	Final design and construction of new bicycle stair channels at seven stations.	\$992,772	\$1,503,772	\$1,503,772	\$234,655	\$634,559**	\$36,395	\$707,752	\$0	\$323,879	39%	FY25
27AG000	Emergency Phone VOIP Upgrade	Upgrade VoIP equipment to current BFS, by BART Maintenance. This project will replace (furnish, and install) circuit-based system District-wide with VoIP based telephone system and revamp voicemail system. Existing system has reached end of life cycle (5 years).	\$800,000	\$800,000	\$800,000	\$111,447	\$602,802	\$10,409	\$605,766	\$0	\$148,651	19%*	FY24
57RR212	Ashby Bicycle Access Improvements - RR	Improve bicycle access to and through Ashby station the station area by building a bicycle connector between Adeline St. and MLK Jr Way.	\$973,747	\$973,747	\$973,747	\$97,193	\$0	\$162	\$501,416	\$0	\$104,977	11%*	FY26
57RR202	Dublin/Pleasanton Station Active Access Improvements - RR	Project will improve bicycle and pedestrian access to the Dublin/Pleasanton BART station by closing a gap between two existing segments of the Iron Horse Trail in Dublin (to the north) and in Pleasanton (to the south). The scope of work includes a two-way cycle track and a separated paved pedestrian path, both separated from vehicle traffic; pedestrian-scale lighting; improved lighting under the freeway and aerial BART structures at the station entrance; additional secure bicycle parking; wayfinding; landscaping and storm water management; a small plaza/gateway treatment at the transition to the Iron Horse Trail to the north; and art elements.	\$15,614,483	\$17,255,075	\$15,617,887	\$1,474,133	\$150,000	\$18,958	\$2,609,732	\$8,790,608	\$1,516,689	10%*	FY28
47CJ012	Next Generation Fare Gate Design - RR	Develop the engineering report for the conceptual design for the next generation fare gate. Detailed analysis, options evaluation, and generation of the business requirements for the RFEI/RFP to select the station fare gate vendor and equipment.	\$9,752,463	\$1,964,841	\$1,964,841	\$1,897,182	\$13,900**	\$13,901	\$0	\$0	\$1,964,841	100%	FY24
15NL006	Elevator Renovation Phase 1.3	Phase 1 of Station Elevator Renovation program that have reached end of design life. Renovated components include: Controllers, sensors, operating fixtures, machinery and conveyance components, car and hoist way doors and surface coatings, RFM and displays. Elevators require periodic renovation to maintain reliability. Phase 1 of station elevator renovation program prioritizes: A30-3, A30-30: funded thru MTC (AC) & BART Operating C80-93, C80-94: funded thru MTC (CCC) & BART match M16-63: renovated via PD&C M16-62, M20-52, M20-53, M30-54, M30-55, M40-56, M40-57 & M70-37 (partially funded thru RM2, Prop K, & FTA) Parking garage at R50	\$22,124,553	\$48,898,655	\$27,164,553	\$634,162	\$1,199,935	\$125,252	\$3,159,884	\$3,166,538	\$867,489	3%*	FY32
54RR240	Upgrade Fire Suppression System - RR	Assessment and design of replacement for all fire protection system sprinkler heads that have reached 50 years of age (mainly in Core stations, 40).	\$2,181,000	\$5,805,000	\$5,805,000	\$432,372	\$2,146,465	\$118,616	\$1,252,418	\$1,973,712	\$653,421	10%	FY29
57RR101	Safe Routes to BART Grant Program - RR	The SR2B grants will assist local jurisdictions and partner agencies with the implementation of active transportation capital projects off BART property to support BART's Station Access Policy goals, expand station access choices and to improve overall rider access to the BART system.	\$25,000,000	\$25,000,000	\$25,000,000	\$2,009,061	\$3,600,000	\$160,591	\$6,305,000	\$10,617,000	\$2,301,888	9%*	FY29
15JA004	Electric Vehicle Charging Stat	RFP development for both customer and NRVE EV charging and pilot chargers for NRVE.	\$0	\$2,000,000	\$2,000,000	\$3,188	\$750,000	\$1,340	\$550,000	\$550,000	\$16,851	5%	FY28
47CJ112	Next Generation Fare Gate Procurement and Deployment	Procurement and installation of over 700 Fare Gates Systemwide.	\$80,247,537	\$88,035,159	\$30,613,410	\$1,629,854	\$23,479,525	\$5,266,917	\$72,000,000	\$4,000,000	\$8,429,930	28%*	FY26

Sub-Total	\$182,782,424	\$223,063,589	\$138,410,293	\$12,138,856	\$38,367,702	\$5,790,174	\$93,867,405	\$39,602,853	\$20,322,890
Total for CIP Category: Stations	\$1,036,396,511	\$1,020,045,918	\$874,274,067	\$429,668,522	\$127,612,150	\$21,723,332	\$184,814,817	\$118,265,287	\$466,051,337

- Italics: Notes a change
- Project Summary Included

RR: Measure RR Program Projects


TBD: Project is On Hold

\*\* New Projections not included in adopted FY Budgets
- Security Sensitive Projects
- C: Core Capacity
- \* % Complete Based on Cost

5. Project Scopes and Budget Summaries by CIP Category

Project ID	Project Name	Project Scope Summary	Original Estimate at Completion	FY24 Q2 Estimate at Completion	Total Funded Budget	Spent through FY23	Adopted FY24 Budget	FY24 Q2 Spent	Preliminary FY25 Budget	Forecasted FY26 Budget	Spent through FY24 Q2	% Complete Physical or Cost*	Closeout Date
09AU000	Transbay Tube Retrofit #1 (Underwater) - RR	Install, anchor and weld arch, walkaway, wall plating and reconstruct the trackway invert in Zones 4 of M1/M2 bore and installation of a new lighting system. Includes grouting behind plates. Install, anchor and weld lower and upper gallery plating in Zone 4 of the Tube. Includes grouting behind plates and installation of a new lighting system. Install, commission and test the new pumping system and dedicated electrical substations. Install two new 4160 k power cables and transfer them both to BART service. Includes transferring all existing electrical substations on to the new 4160V transmission cables.	\$594,482,881	\$594,482,881	\$589,482,881	\$509,486,131	\$23,382,000	\$2,632,638	\$0	\$0	\$519,205,357	99%	FY24
Total for CIP Category: Seismic Programs			\$594,482,881	\$594,482,881	\$589,482,881	\$509,486,131	\$23,382,000	\$2,632,638	\$0	\$0	\$519,205,357		


*Italics: Notes a change*

 Project Summary Included

**RR:** Measure RR Program Projects

**TBD:** Project is On Hold

**\*\*** New Projections not included in adopted FY Budgets

 Security Sensitive Projects

**C:** Core Capacity

**\*** % Complete Based on Cost

5. Project Scopes and Budget Summaries by CIP Category

Project ID	Project Name	Project Scope Summary	Original Estimate at Completion	FY24 Q2 Estimate at Completion	Total Funded Budget	Spent through FY23	Adopted FY24 Budget	FY24 Q2 Spent	Preliminary FY25 Budget	Forecasted FY26 Budget	Spent through FY24 Q2	% Complete Physical or Cost*	Closeout Date
04SD000	eBART Right-of-Way (ROW) Acquisition	The eBART project is in the median of State Route 4 between BART’s Pittsburg/Bay Point Station and the vicinity of Hillcrest Avenue interchange in the City of Antioch. The 10-mile corridor includes a Transfer Platform East of BART’s Pittsburg/Bay Point Station, a station named Pittsburg Center Station in the City of Pittsburg at the intersection of State Route 4 and Railroad Avenue, and a Terminus Station in Antioch east of Hillcrest Avenue.	\$15,793,958	\$16,053,958	\$16,053,958	\$15,550,125	\$30,000**	\$0	\$10,217	\$0	\$15,550,125	98%	FY25
02HB001	FY22 BSV2 Project Support: IL45	VTA program to build six-mile and four stations and a yard from Berryessa to Santa Clara. For FY23, BART provides support to VTA including review and comment on design submittals, design criteria and any other documents requested by VTA.	\$8,800,000	\$8,700,000	\$8,700,000	\$6,824,122	\$0	\$2,643	\$0	\$0	\$6,818,368	100%	FY24
91BI001	Valley Link	In May 2018, the BART Board of Directors certified the Final Project EIR for the BART to Livermore extension, and directed staff not to advance a specific project in the Tri-Valley. Pursuant to AB 758 (Eggman), the Tri-Valley-San Joaquin Valley Regional Rail Authority (TVSJVRRA) at that point assumed responsibility to advance a rail project in the corridor. Since then, BART staff have been engaged with the TVSJVRRA throughout project feasibility and initial design and environmental assessments of the proposed Valley Link Rail project, and this coordination is ongoing.	\$1,175,000	\$1,175,000	\$1,175,000	\$724,072	\$0	\$0	\$0	\$0	\$724,072	62%*	TBD
09JA000	Link 21 - RR	BART's original transbay tube connecting San Francisco and the East Bay has exceeded its capacity and will require significant rehabilitation. At the same time, the traditional nine-county Bay Area is evolving into a much larger megaregion, stretching from Monterey/Salinas to the northern San Joaquin Valley to Placer County northeast of Sacramento. This 21-county megaregion supports the fifth largest economy in the world, and is increasingly tied to a fairly extensive and expanding rail network and the BART Transbay Tube. To meet the needs of the public we serve, BART and our rail partners are pursuing a new Transbay Rail crossing within the context of the larger rail network. This project is currently in Planning.	\$910,712,908	\$910,712,908	\$154,954,386	\$97,038,336	\$48,000,000	\$10,287,525	\$15,449,843	\$15,449,843	\$118,116,446	76%*	FY41
02HB002	BART Silicon Valley Phase 2 Ex	VTA program to build six-mile and four stations and a yard from Berryessa to Santa Clara. For FY24, BART provides support to VTA including review and comment on design submittals, design criteria and any other documents requested by VTA.	\$0	\$4,525,000	\$4,525,000	\$3,416,174	\$0	\$122,857	\$0	\$0	\$4,133,298	91%*	FY24
02GT000	Silicon Valley Berryessa Extension Seismic Assessment	Phase 2 of this project will update SVBX 1 Extension to comply with seismic standards. SVBX1 Extension is new construction, but some structures including: Milpitas Station, Sierra Lundy Tunnel (700' long), mechanically stabilized earth wall, Berryessa aerial structure and station need to be updated for compliance with project design criteria. The structures need to be assessed for need of retrofit, followed by design and implementation where applicable.	\$3,185,000	\$3,085,000	\$3,085,000	\$886,248	\$759,498	\$134,897	\$703,673	\$702,443	\$1,048,287	44%	FY26
91HB001	Yard Training Simulator	Develop and configure a New Yard Management System (NYMS) isolated simulator to train yard personnel on dispatcher duties, to gain experience for Qualification and Certification for Yard Operations Control.	\$108,290	\$100,000	\$100,000	\$31,350	\$29,199	\$295	\$0	\$0	\$32,125	32%*	FY24
02GQ001	Isolation Transformer Installation	BART to install one isolation transformer at Traction Power Substation(TPSS) on SVBX alignment (south of Warm Springs to Berryessa) to protect the Automatic Transfer Switch(ATS) at the TPSS. Total is six transformers for six TPSS.	\$1,275,000	\$1,275,000	\$1,275,000	\$524,580	\$275,000	\$158,222	\$0	\$0	\$1,197,782	94%*	FY24
60CC004	Renewal and Upgrade OCC	The Operations Control Center (OCC) at Lake Merritt is beyond its useful life. To allow demolition and reconstruction of the facility, a temporary OCC will be built and commissioned at Lake Merritt (MET-G Building). The new OCC will be designed for services required to run all the current and future systems needed for the control of BART operations.	\$35,563,097	\$48,507,828	\$10,360,334	\$8,900,028	\$15,775,494	\$63,794	\$16,519,581	\$5,799,636	\$9,012,793	29%	FY26
15AX001	Facilities HVAC Equipment Replacement Ph.2	Address increased heat load from new and added equipment. Will include replacement of battery exhaust fan. Increase HVAC system capacity system-wide: train control rooms, train control bungalows, substations and other facilities. Needs for additional sites will also be identified.	\$3,600,000	\$25,958,761	\$6,300,000	\$131,734	\$1,356,823	\$66,551	\$1,680,683	\$100,695	\$254,159	4%*	FY27
Total for CIP Category: System Development			\$980,213,253	\$1,020,093,455	\$206,528,679	\$134,026,769	\$66,196,014	\$10,836,784	\$34,363,997	\$22,052,616	\$156,887,455		

*Italics: Notes a change*

Project Summary Included

RR: Measure RR Program Projects

TBD: Project is On Hold

\*\* New Projections not included in adopted FY Budgets

Security Sensitive Projects

C: Core Capacity

\* % Complete Based on Cost

5. Project Scopes and Budget Summaries by CIP Category

5.9 Electrical and Mechanical



Project ID	Project Name	Project Scope Summary	Original Estimate at Completion	FY24 Q2 Estimate at Completion	Total Funded Budget	Spent through FY23	Adopted FY24 Budget	FY24 Q2 Spent	Preliminary FY25 Budget	Forecasted FY26 Budget	Spent through FY24 Q2	% Complete Physical or Cost*	Closeout Date
15AA001	Tunnel Lighting Replacement - RR	Program Management support costs for Electrical Engineering for the Feasibility study for structural engineering assets, transformer projects and radio purchases.	\$4,069,820	\$4,069,378	\$4,069,378	\$4,033,962	\$0	\$0	\$0	\$0	\$4,062,960	100%	FY24
79NK100	Train Control Room UPS Replacement at Y and W-Line	Ongoing replacement project for UPS / inverters on the W-Line and Y-Line. Related project, 79NKRR1: UPS / inverters elsewhere.	\$9,150,000	\$9,470,000	\$9,466,450	\$9,467,327	\$0	\$0	\$0	\$0	\$9,466,032	100%	FY24
15AARR1	Tunnel Lighting Replacement on M-Line - RR	This project upgrades and installs new tunnel lighting fixtures, increase lighting range on M-Line in order to meet foot candle requirement in accordance with National Fire Protection Association (NFPA) 101 Standard Code.	\$18,263,607	\$18,263,607	\$17,020,024	\$6,245,593	\$0	\$0	\$0	\$0	\$6,245,593	19%	TBD
15AARR2	Tunnel LED Lighting in TBT - RR	Upgrade and installation of new tunnel lighting fixtures in Transbay Tube, increasing the lighting range in order to meet foot candle requirement in accordance with National Fire Protection Association (NFPA) 101 Standard Code.	\$15,000,000	\$15,000,000	\$7,154,162	\$1,035,674	\$0	\$3,011	\$0	\$0	\$1,041,426	5%	TBD
09DJ004	Repair and Maintenance of Cathodic Protection	This project will perform an Ultrasonic Thickness (UT) Measurement Testing of the TBT Steel skin and implementation of recommendations to improve conditions. Provide a report with all data, photographs and conclusions. This should reoccur every 2 years. Approx. cost estimate of \$80,000 per year, for 10 years.	\$1,549,688	\$1,549,688	\$1,549,688	\$1,536,091	\$0	\$0	\$0	\$0	\$1,536,091	99%*	FY24
15IJ200	Station Fire Alarm Replacement - 12th, 19th and N. Berkeley	Furnish, install, test and commission the fire alarm systems for Oakland 12th St (K10), 19th St (K20), and North Berkeley (R30) stations.	\$11,396,853	\$11,396,853	\$11,390,404	\$9,365,984	\$1,920,091	\$54,171	\$0	\$0	\$9,575,613	99%	FY24
09EK300	Transbay Tube 480V Switchgear Replacement, XF Pads - RR	Improve reliability of power for life safety during emergencies for all 480V substations in the Transbay tube. TBT OTS and SFTS Utility Substation Upgrade (Transformer, Switchgear, Transfer Switch, Panels).	\$61,941,828	\$66,041,445	\$66,041,445	\$56,985,907	\$3,104,188	\$739,990	\$4,976,461	\$0	\$58,758,008	96%	FY25
15BN300	MP-3000 Replacement at W-Line Vent Structures	This project will upgrade the vent structures on the W-Line, as the existing controllers are obsolete. Tunnel ventilation is required to be operable to run trains.	\$1,773,780	\$1,750,000	\$1,750,000	\$527,641	\$3,788	\$24,290	\$795,737	\$0	\$572,786	94%	FY25
11TJ001	HVAC Replacement Daly City Shop and Civic Center	Replace HVAC equipment at Daly City Shops and Civic Center BART Police Station.	\$1,544,900	\$1,544,900	\$1,540,900	\$1,276,988	\$257,303	\$4,476	\$0	\$0	\$1,361,404	92%	FY24
54RR004	Mechanical Programmatic Support for RR Bonds - RR	Renovate or replace mainline components including Transbay Tube (TBT) dampers, coverboards (C and L-Lines) and contact rail.	\$21,615,935	\$24,114,440	\$24,208,284	\$16,674,187	\$2,377,884	\$141,860	\$2,144,492	\$1,062,538	\$17,226,515	86%	FY26
15EK750	Mobile Generator for Emergency Power Enhancements	This project will procure and install temporary portable generators in preparation for PG&E fire danger public safety power shutoff (PSPS) shutdowns, at 16 identified facilities. Generator Counts Remaining: 200 kW - 6 each; 100 kW - 5 each.	\$2,185,908	\$2,185,908	\$2,185,908	\$1,481,911	\$2,865	\$28,140	\$0	\$0	\$1,566,109	100%	FY24
15IIR1	Station Emergency Lighting, Alameda County Stations - RR	Existing emergency lighting assets are DBUs, this project upgrades emergency lighting assets with UPS and remote monitoring system. In addition, this project creates dedicated circuits to 1/3 of lighting in the event of a power outage.	\$30,010,696	\$32,510,696	\$32,510,696	\$24,000,084	\$2,323,219	\$1,749,059	\$116,472	\$0	\$27,488,094	99%	FY25
15II002	Station Emergency Lighting, San Francisco County Stations	Design and installation of dedicated circuit for the emergency lighting system including UPS and battery system at 5 locations: West Oakland (M10), Embarcadero (M16), Montgomery St. (M20), Glan Park (M70), Balboa Park (M80). Emergency back-up system has reached end of life cycle. Upgrading emergency lighting systems to comply with latest emergency lighting codes.	\$950,000	\$1,124,821	\$1,124,821	\$912,112	\$0	\$0	\$0	\$0	\$912,112	76%	TBD
15AARR3	Tunnel Lighting Replacement, Walnut Creek Tunnel - RR	This project is to upgrade tunnel lighting at Walnut Creek tunnel which includes replacing obsolete T12 lamps with LED for safety, energy savings, and reduced lamp spacing (doubling number of lights) in tunnels. This will provide code compliant light levels in tunnels and lower maintenance cost.	\$1,002,948	\$1,002,948	\$1,002,948	\$712,855	\$0	\$0	\$0	\$0	\$728,959	63%	TBD
Sub-Total			\$180,455,962	\$190,024,683	\$181,015,106	\$134,256,316	\$9,989,337	\$2,744,998	\$8,033,163	\$1,062,538	\$140,541,703		

Italics: Notes a change

Project Summary Included

RR: Measure RR Program Projects

TBD: Project is On Hold

\*\* New Projections not included in adopted FY Budgets

Security Sensitive Projects

C: Core Capacity

\* % Complete Based on Cost

5. Project Scopes and Budget Summaries by CIP Category

5.9 Electrical and Mechanical													
Project ID	Project Name	Project Scope Summary	Original Estimate at Completion	FY24 Q2 Estimate at Completion	Total Funded Budget	Spent through FY23	Adopted FY24 Budget	FY24 Q2 Spent	Preliminary FY25 Budget	Forecasted FY26 Budget	Spent through FY24 Q2	% Complete Physical or Cost*	Closeout Date
20LZ100	Battery Replacement for Train Control Rooms - RR	Ongoing system-wide battery replacement project. Total of 54 locations will be completed in 3 Phases. Phase 1 (18), and Phase 2 (16) are completed. Phase 3 (20) battery replacement is currently in construction; approximately 50% of Phase 3 construction is completed at this time.	\$12,076,230	\$14,576,230	\$14,576,230	\$8,818,093	\$4,756,296	\$839,868	\$946,880	\$54,960	\$10,546,508	85%	FY26
79NKRR1	Train Control Room UPS Replacement, 45 locations - RR	This project is for UPS / inverters replacement for a total of 45 locations including the A-Line, C-Line, K-Line, L-Line, M-Line, and R-Line. 79NK100 is for UPS / inverters on the W-Line and Y-Line.	\$11,981,630	\$18,500,000	\$11,981,630	\$6,949,766	\$3,638,454	\$361,775	\$1,952,499	\$2,046,495	\$7,715,340	78%	FY29
11VA000	Pipe/Structure Repair to MW-21	Replacement of drainage pipes and repair of the retaining wall structure near MW-21, which was damaged by a fire.	\$0	\$1,390,000	\$1,390,000	\$719,794	\$507,187	\$26,997	\$457,130	\$0	\$775,639	67%	FY25
15TN000	BHT Power Distribution Replacement	Berkely Hills Tunnel (BHT) life-safety ventilation systems power distribution equipment replacement design. The current system has exceeded its service life and has reduced reliability. Assessment and design of the two (2) 225 kVA utility transformers, switchboard, automatic transfer switch (ATS), 4160V distribution system, Motor Control Center (MCC) line fan starters and associated controls, lighting panel boards, and 7 miles of 5kV cables in C-Line Track (C1 and C2). The current funding is for design only.	\$15,000,000	\$15,000,000	\$1,186,842	\$429,417	\$14,481,714	\$32,126	\$450,757	\$99,000	\$637,085	66%	FY28
09EK350	SFTS Transformer Upgrade - RR	This project will improve reliability of power for life safety during emergencies for all 480V substations in the Transbay tube. TBT OTS and SFTS Utility Substation Upgrade (Transformer, Switchgear, Transfer Switch, Panels).	\$1,500,000	\$1,500,000	\$1,500,000	\$691,977	\$1,067,625	\$8,064	\$749,677	\$33,143	\$707,137	39%	FY27
09DJ006	TBT Cathodic Protection Upgrade/Replacement	Annual CP Survey for Transbay Tube (TBT) and includes performing measurements, submitting a written report which documents the data and recommendations.	\$15,000,000	\$14,194,647	\$14,194,647	\$6,011,358	\$3,821,748	\$56,143	\$3,748,094	\$613,447	\$6,120,257	43%*	FY26
15EG001	Emergent R/R-Critical Electrical Components	Investigate, repair or replace any emergent and immediate critical electrical component issues systemwide to avoid or reduce revenue service delays (including Generator Automatic transfer switches (ATS), Breakers, Emergency Lighting Uninterruptable Power Supplies (UPS) and Batteries, Generator plugs, and lighting at stations and parking lots).	\$950,000	\$950,000	\$950,000	\$521,999	\$323,839	\$30,147	\$0	\$0	\$561,591	59%*	FY24
09DJ008	SFTS Cathodic Protection Survey and Assessment	Assessment for the repair or replacement of the San Francisco Transition Structure (SFTS) Cathodic Protection (CP) system. Annual CP Survey for SFTS includes performing measurements, submitting a written report which documents the data and recommendations.	\$300,000	\$300,000	\$300,000	\$118,300	\$67,237	\$9,546	\$1,271	\$0	\$130,508	44%*	FY25
09DJ007	TBT Cathodic Protection Survey and Assessment	This project is for the survey and assessment of the Cathodic Protection (CP) system for Transbay Tube, San Francisco and Oakland Transition Structures. The CP Survey will include performing measurements, a written report which documents the data and future recommendations (1) for Repair or Replacement of anodes and cables, (2) Troubleshooting of CP Power Supply Units, (3) Repair or replacement of CP Monitoring equipment as required and (4) Assessment and testing of stray current for CP system.	\$950,000	\$950,000	\$950,000	\$357,381	\$167,827	\$115,647	\$201,458	\$0	\$488,938	51%*	FY25
15AARR5	Tunnel Lighting Replacement, R-Line and Berkeley Hills Tunnel - RR	Replace and upgrade the tunnel lighting in the Berkeley Hills Tunnel changing obsolete fluorescent (T12) lamps to LED light fixtures for safety and energy savings (approximately 700 light fixtures) matching the unit current spacing. Tunnel lighting from Ashby Station to North Berkeley Station not in scope.	\$7,000,000	\$3,185,000	\$3,185,000	\$1,327,846	\$1,317,930**	\$33,158	\$964,178	\$96,774	\$1,395,100	21%	FY28
15IJRR1	Station Fire Alarm Replacement, 3 Stations - RR	Furnish, install, test and commission the station fire alarm replacements at the following locations: Phase 4 - Bay Fair (A50), South Hayward (A70), Rockridge (C10).	\$17,378,947	\$17,378,947	\$17,378,947	\$1,660,295	\$6,527,614	\$69,862	\$6,002,804	\$3,188,234	\$1,756,123	11%	FY27
15IJRR2	Station Fire Alarm Replacement, 6 Stations - RR	Furnish, install, test and commission the station fire alarm replacements at the following locations: Phase 3 - Berkeley (R20), Montgomery (M20), Lake Merritt (A10), Coliseum (A30), San Leandro (A40), Walnut Creek (C40).	\$24,600,000	\$29,388,998	\$29,388,998	\$1,644,861	\$7,682,667	\$1,310,749	\$8,137,141	\$8,340,196	\$3,277,556	21%	FY27
52RR000	Renew Electrical Power - RR	Program management office support services for Renew Power Program.	\$10,119,616	\$10,119,616	\$10,119,616	\$0	\$0	\$0	\$0	\$0	\$0	0%*	FY27
Sub-Total			\$116,856,423	\$127,433,438	\$107,101,910	\$29,251,088	\$43,042,208	\$2,894,081	\$23,611,888	\$14,472,248	\$34,111,783		
Total for CIP Category: Electrical and Mechanical			\$297,312,385	\$317,458,121	\$288,117,017	\$163,507,404	\$53,031,546	\$5,639,079	\$31,645,051	\$15,534,786	\$174,653,485		

*Italics: Notes a change*

● Project Summary Included

RR: Measure RR Program Projects

TBD: Project is On Hold

\*\* New Projections not included in adopted FY Budgets


● Security Sensitive Projects

C: Core Capacity

\* % Complete Based on Cost

5. Project Scopes and Budget Summaries by CIP Category

5.10 System Support



Project ID	Project Name	Project Scope Summary	Original Estimate at Completion	FY24 Q2 Estimate at Completion	Total Funded Budget	Spent through FY23	Adopted FY24 Budget	FY24 Q2 Spent	Preliminary FY25 Budget	Forecasted FY26 Budget	Spent through FY24 Q2	% Complete Physical or Cost*	Closeout Date
79PA000	CCTV at West Oakland	Design, purchasing, and installation of approximately 70 state-of-the-art CCTV cameras, power distribution systems, signal converter cabinets including POE Media converters, 49,000 LF of security Fiber/Cat 6 wiring, network equipment including optical switches, SAN Disks, network servers, network switches, software licenses and associated equipment for protection of the station and adjacent tunnels.	\$3,533,017	\$3,385,636	\$3,385,636	\$3,385,636	\$0	\$0	\$0	\$0	\$3,385,636	100%*	FY24
17HN000	BART Headquarters - 2150 Webster	Build-out new BART headquarters at 2150 Webster. Scope increased to include multipurpose room and a wall on the 10th floor.	\$227,755,000	\$229,055,000	\$229,055,000	\$226,094,276	\$0	\$44,705	\$482,623	\$0	\$226,161,640	99%*	FY25
04SF190	eBART Additional Parking Lot (Antioch Station) - RR	Construction of approximately 850 parking spaces at the Antioch Station on a BART-owned parcel located between the current station parking lot and the eBART Maintenance Facility. It also enhances the existing parking lot and access at the Antioch Station, and will install motorized gates for emergency vehicle access from the BART Maintenance of Way to the Transfer Platform. The Contract also contains Option 1 for the relocation of the on-street bike lane within Slatten Ranch Road to an off-street multi-use path within the Caltrans Right-of-Way (ROW) and includes striping and signal modifications within the City of Antioch and Caltrans ROW.	\$16,828,582	\$16,963,441	\$16,647,627	\$16,609,609	\$20,000**	-\$7,737	\$0	\$0	\$16,647,627	100%*	FY24
91AA012	Assembly Bill (AB) 2923 Year 1 Implementation	This project is supporting BART’s implementation of state law changes made in Assembly Bill 2923 (2018), which sets requirements for BART and local jurisdictions regarding the zoning of certain BART-owned property in Alameda, Contra Costa, and San Francisco Counties. Funds are being expended to meet legal requirements and support local jurisdiction efforts to rezone BART property. The project includes funding for consultant time as well as support for the costs of two FTEs to implement the changes to the law.	\$2,350,000	\$2,350,000	\$2,350,000	\$2,263,568	\$81,535**	\$5,565	\$0	\$0	\$2,274,030	97%*	FY24
15EN000	Incident Energy Analysis (Arc Flash Study)	Perform arc flash studies or incident energy analyses as required by the National Fire Protection Association (NFPA) 70E1, systemwide. The order of studies by locations are: A-Line; L and R-Lines; C-Line; M, W and Y-Lines; W-Line Vents; Shops & Yards; San Francisco Transition Structure (SFTS); and Transbay Tube (TBT).	\$15,000,000	\$15,000,000	\$5,450,000	\$3,291,474	\$4,390,556	\$83,392	\$908,000	\$523,000	\$3,463,436	93%	FY27
15JA002	Sustainability Annual Report	Report on CY23 sustainability accomplishments, publishing results on the BART website, and create the BART’s Sustainability Action Plan for 2025.	\$683,750	\$1,283,750	\$1,283,750	\$761,950	\$650,000	\$46,406	\$300,000	\$125,000	\$857,747	78%	FY30
11CS001	Negative Return Mapping	The lack of documentation of the existing negative return system hampers maintenance and troubleshooting efforts which results in degrading BART’s train operations. This project is to provide a mapping for train control/negative return rail system and includes a stray current study for PM0357 (Phase 2). The survey includes mapping of different types of equipment (tracks, train control, traction power, and negative return cables) positioned with respect to each other. Priority locations for mapping are: - 12th St. Sta. to Daly City Sta. - Richmond Yard [PG&E Gas Line Adjacent] - W-Y Line - 12th St. Sta. to MacArthur Sta. - Lake Merritt Sta. to Fremont Sta. - Castro Valley Sta. to Dublin/Pleasanton Sta.	\$7,000,000	\$7,000,000	\$4,279,106	\$2,480,484	\$1,440,550	\$148,821	\$574,299	\$0	\$2,833,719	76%	FY25
79PB000	Converting to Digital CCTV - SF Stations	Upgrades to existing analog cameras with digital high-definition cameras, and installation of additional digital high-definition cameras at SF Stations to increase functionality.	\$4,116,300	\$4,116,300	\$4,416,300	\$3,940,454	\$0	\$51,403	\$0	\$0	\$4,147,705	94%*	TBD
59AF001	Trash/Recycling Pilot	Launch of a new employee recycling/ composting program in line with BART policy.	\$768,000	\$1,118,000	\$1,118,000	\$700,176	\$340,000	\$16,603	\$257,000	\$120,000	\$740,387	66%*	FY30
96DARR1	Program Management - RR - C	Program management office support services for Core Capacity Project.	\$39,702,629	\$86,737,491	\$201,487,050	\$14,721,829	\$3,774,125	\$171,389	\$1,840,810	\$2,220,364	\$15,368,499	61%	FY34
15JA000	Station Sustainability - RR	Sustainability Program "other" projects including, AV, on-site solar, station lighting, station composting, BART-owned real estate recycle/composting program.	\$5,228,964	\$8,450,000	\$6,549,089	\$4,300,881	\$870,000	\$303,207	\$315,000	\$330,000	\$4,691,148	72%*	FY26
Sub-Total			\$322,966,242	\$375,459,618	\$476,021,557	\$278,550,336	\$11,465,230	\$863,755	\$4,677,732	\$3,318,364	\$280,571,573		

Project Summary Included

RR:

Measure RR Program Projects

TBD:

Project is On Hold

\*\*

New Projections not included in adopted FY Budgets

Italics:

Notes a change

Security Sensitive Projects

C:

Core Capacity

\*

% Complete Based on Cost

FY24 Q2 CPPSR Report 45

FY24 Q2 Quarterly Programs & Projects Status Report 20240329

5. Project Scopes and Budget Summaries by CIP Category

Project ID	Project Name	Project Scope Summary	Original Estimate at Completion	FY24 Q2 Estimate at Completion	Total Funded Budget	Spent through FY23	Adopted FY24 Budget	FY24 Q2 Spent	Preliminary FY25 Budget	Forecasted FY26 Budget	Spent through FY24 Q2	% Complete Physical or Cost*	Closeout Date
15SY100	ShakeCAST Mainline Extension	This project is to Shake CAST software and Earthquake Early Detection system will help BART Operations to return to service sooner and reduce the risk from earthquake events. In order to make this happen: 1. Complete inventory of structural fragilities to use with the Shake CAST software for predicting structural damage from earthquakes in addition to ESP's work in 2002. Develop fragilities for the East Bay, West Bay, and Silicon Valley extensions and incorporate them into our Shake CAST model. 2. Develop the inventory of fragilities for non-structural components to use with the Shake CAST software for predicting the damages from earthquakes and implement the Shake CAST module. 3. Revisit the current thresholds of warning from Earthquake Early Detection to minimize the train delays due to false alarms as well as to catch all significant earthquake events.	\$1,094,974	\$1,077,108	\$1,077,108	\$628,748	\$179,743	\$14,558	\$171,704	\$0	\$808,301	75%*	FY25
15JA001	Garage Lighting Upgrade to LED	The driver of this project is energy efficiency and compliance with BART Standards and Policies. This project upgrades all existing lighting fixtures and installs additional lighting fixtures in order to enable remote monitoring and advanced lighting controls.	\$17,750,000	\$17,950,000	\$18,600,000	\$11,544,551	\$9,920,000	\$59,429	\$0	\$0	\$13,616,841	73%*	FY24
15SY000	Shake Alert-Earthquake Updates	<i>Updates to Shake CAST software and Earthquake Early Detection system, which will help BART Operations to return to service sooner and reduce the risk from earthquake events. Updates will include completing inventory of structural fragilities, develop fragilities for the East Bay, West Bay, and Silicon Valley extensions and incorporate them into our Shake CAST model, develop the inventory of fragilities for non-structural components. The scope also includes assesment from experimental study for the current thresholds of warning from Earthquake Early Detection to minimize the train delays due to false alarms as well as to catch all significant earthquake events.</i>	\$800,000	\$1,109,480	\$959,480	\$138,830	\$223,125	\$735	\$409,955	\$337,568	\$139,860	15%*	FY27
65BF001	Digital Transformation at OCC	Digital transformation implementation (Data governance tools, Data Analytics and IOT devices, DevOps, QA/System Integration, CAS, MOC/NOC) to improve safety and increase wayside wrench time, control center technology, and maintenance efficiency. Also includes installation of TCR's Environment Monitoring - esp. remote temperature data at 10 Locations, as well as REMS.	\$1,361,951	\$2,500,000	\$2,038,386	\$919,782	\$372,868**	\$115,451	\$601,792	\$290,000	\$1,144,046	56%*	FY26
65HF001	PPMS Implementation	Phase 2 of configuration and Implementation of a software program for Project Portfolio Management System (PPMS) to establish a centralized location for all project related documentations, reporting, budgeting, forecasting, and funding information. Six modules will be configured including Contract Management, Budget & Finance, Schedule Management, Document Management & Construction Management, Demand Management, Analytics & Reporting including all integration, roll-out to end users and training. Phase 1 had initiated configuration of the Contract Management and Budget & Finance, which Phase 2 will complete.	\$0	\$3,500,000	\$3,500,000	\$564,134	\$1,611,500	\$18,172	\$1,165,907	\$97,159	\$661,002	26%	FY25
17HMRR1	MET-G Generator Replacement - RR	Furnish, install, test, and commission a 1250 kW Generator (with associated infrastructure) at Lake Merritt (LMA) street level, to replace the existing 400 kW Met Building (MET-G) rooftop generator. Infrastructure and services includes electrical, mechanical, architectural, structural, civil, systems, control and communications components.	\$19,000,000	\$21,107,077	\$15,436,088	\$2,549,787	\$2,033,091	\$154,418	\$2,488,437	\$10,134,629	\$2,813,022	18%	FY28
79LV003	Cybersecurity Firewall Hardening	Updating and replacing the most critical layers of the District's operations (DOTI) Network Core, Distribution and Edge Switches and Routers, Operating Systems (iOS) and their respective firewalls to greatly enhance network security.	\$2,864,256	\$3,087,242	\$2,778,847	\$2,551,712	\$2,363,124	\$36,480	\$116,556	\$0	\$2,640,426	95%*	FY25
91HD001	Establishment of Database for Existing Utilities at Yards	Locate underground utilities in yards and shops and create a database of these Services.	\$1,500,000	\$1,500,000	\$1,500,000	\$58,656	\$421,998	\$196,537	\$387,196	\$277,606	\$425,801	44%	FY26
Sub-Total			\$44,371,181	\$51,830,907	\$45,889,910	\$18,956,200	\$16,752,581	\$595,781	\$5,341,547	\$11,136,961	\$22,249,298		
Total for CIP Category: System Support			\$367,337,423	\$427,290,525	\$521,911,467	\$297,506,536	\$28,217,812	\$1,459,536	\$10,019,279	\$14,455,325	\$302,820,871		
Grand Total for all CIP Categories: All Pages			\$12,097,803,934	\$13,060,040,651	\$9,546,871,039	\$4,993,959,747	\$1,479,318,394	\$254,067,713	\$1,220,183,548	\$1,049,009,948	\$5,465,530,922		

*Italics: Notes a change*

Project Summary Included

RR: Measure RR Program Projects

TBD: Project is On Hold

\*\* New Projections not included in adopted FY Budgets

Security Sensitive Projects

C: Core Capacity

\* % Complete Based on Cost

## 6.1 15EIRR1 | CWS High Voltage Transformer Replacement - RR | Traction Power

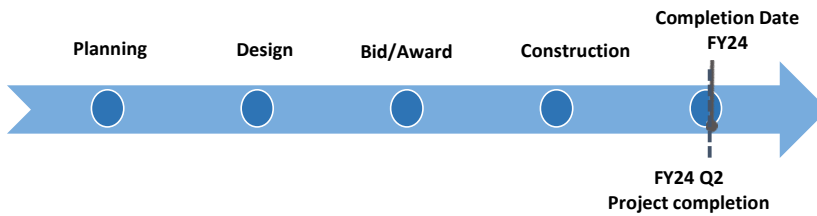


### Project Summary

Bay Point C-Line: Replace existing 115/34.5kV (15/20/25MVA with new 115/34.5 (27/36/45 MVA) transformer at High Voltage Substation at Pittsburg (CWS) with all its accessories. Scope includes substation site improvement (upgrade control and protection systems). Added scope: 1.5 mile fiber cable replacement and a transformer.



### Timeline



### Challenges

None

### FY24 Q2 Accomplishments

Project Completion

### FY24 Q3 Planned Activity

Project Completion

## 6.2 15EJRRR | 34.5 kV AC Cable Replacement A-Line - RR | Traction Power

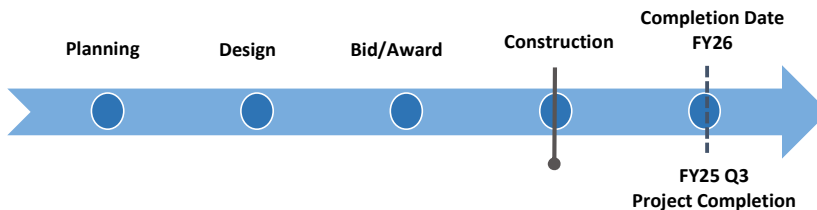


### Project Summary

Replace the existing 34.5kVAC cables (PIPE or PILC) on the A-Line with new EPR jacketed medium voltage cable, fiber optic systems and install isolation disconnect switches (IDS) at the substations. The work will be performed by Contractor. Other services included are: Design Services during Construction (DSDC), Construction Management (CM), Project Management, and Material Procurement.



### Timeline



### Challenges

None

### FY24 Q2 Accomplishments

1.5 miles of 34.5kV cable and associated infrastructure installed between South Hayward Substation and Hayward Yard

### FY24 Q3 Planned Activity

Issue Change Order drawings for updated IDS installation.

### 6.3 15EJRRR | 34.5 kV AC Cable Replacement R-Line - RR | Traction Power

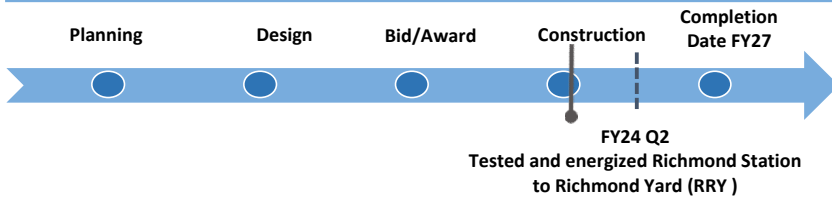


#### Project Summary

Replace the existing 34.5kVAC cables (PIPE or PILC) on the R-Line with new EPR jacket medium voltage cable, fiber optic systems and install isolation disconnect (IDS) switches at the substations. The work will be performed by BART Construction forces from Ashby to El Cerrito Plaza (RAS-RCP) and by a Contractor from El Cerrito Plaza to Richmond Yard (RCP-RRY). Other services included are: Design Services during Construction (DSDC), Construction Management (CM), Project Management, and Material Procurement.



#### Timeline



#### Challenges

None

#### FY24 Q2 Accomplishments

Tested and energized Richmond Station to Richmond Yard left and right cables.

#### FY24 Q3 Planned Activity

El Cerrito Plaza to Richmond yard DMZ substantial completion.

### 6.4 15EJRRK | 34.5 kV AC Cable Replacement K-Line - RR | Traction Power

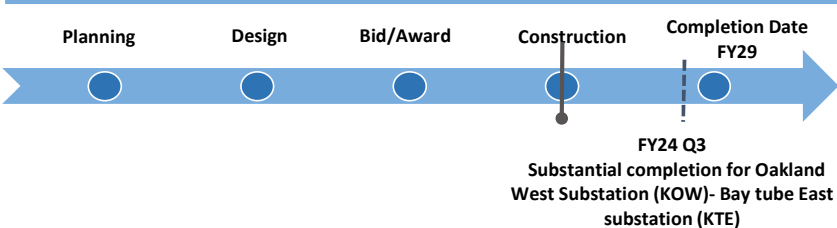


#### Project Summary

Replace the existing 34.5kVAC cables (PIPE or PILC) on the K-Line with new EPR jacketed medium voltage cable, fiber optic systems and install isolation disconnect switches at the substations. The work will be performed by BART Construction forces. Other services included are: Design Services during Construction (DSDC), Construction Management (CM), Project Management, and Material Procurement.



#### Timeline



#### Challenges

BART Maintenance resource constraint.

#### FY24 Q2 Accomplishments

None

#### FY24 Q3 Planned Activity

Continue Cable and Conduit installation.

## 6.5 15EJRRC | 34.5 kV AC Cable Replacement C-Line - RR | Traction Power

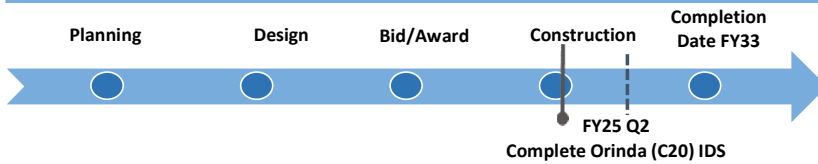


### Project Summary

Replace the existing 34.5kVAC cables (PIPE or PILC) on the C-Line with new EPR jacketed medium voltage cable, fiber optic systems and install isolation disconnect switches (IDS) at the substations. The work will be performed by BART Construction forces. Other services included are: Design Services during Construction (DSDC), Construction Management (CM), Project Management, and Material Procurement.



### Timeline



### Challenges

Limited in-house construction forces working on other higher priority projects.

### FY24 Q2 Accomplishments

New IDS installation complete at C-line Walnut Creek Substation.

### FY24 Q3 Planned Activity

None



## 6.6 15EK601 | East Bay Traction Power Substations - RR - C | Traction Power

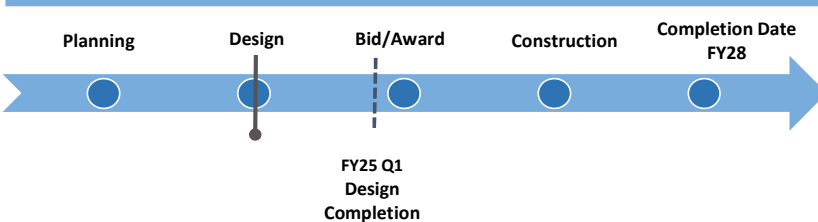


### Project Summary

Design, procure and install three new substations - one each on the C, K, and R Lines in Concord, Oakland and Richmond (CMR, KTF, RPA). Additionally design and procure one new substation and two new gap breaker stations for the Hayward Maintenance Complex Phase 2.



### Timeline



### Challenges

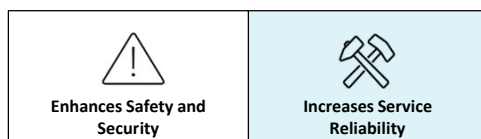
BART General Engineering Contracts (GEC) resource constraint.

### FY24 Q2 Accomplishments

None

### FY24 Q3 Planned Activity

Onboard designer and work on resolving design comments.



## 6.7 20AJ003 | Trunked Radio Replacement System Wide | Train Control and Communications



### Project Summary

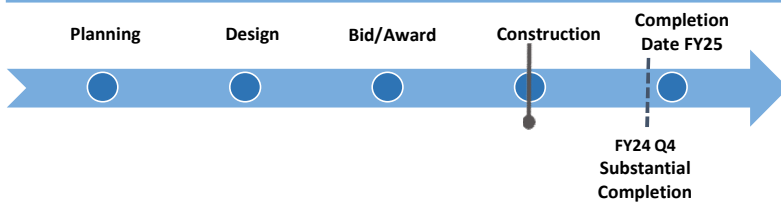
Design, furnish and install P25 compliant radio network. This project includes fixed equipment, geographically redundant radio cores and partial replacement of the existing ten (10) channels (5 in Phase 1, 5 in Phase 2).

The current system is a twenty-year old design at maximum capacity and at end of life.

Equipment currently in place is used operationally by police, maintenance, OCC, transportation and shop personnel.



### Timeline



 Increases Service Reliability	 Enhances Safety and Security	 Promotes Sustainability
-----------------------------------	----------------------------------	-----------------------------

### Challenges

Additional scope required to complete Radio System installation. Project facing delays due to pending decision on execution of additional scope should be by Change Order or by separate Service Agreement.

### FY24 Q2 Accomplishments

BPD and BART Training Group transitioned to new radios; acquired additional project funding for upcoming change orders.

### FY24 Q3 Planned Activity

Complete Transition to P25 radios Districtwide for all radios.

## 6.8 15TC004 | Water Intrusion Mitigation in Train Control Rooms - RR | Train Control and Communications

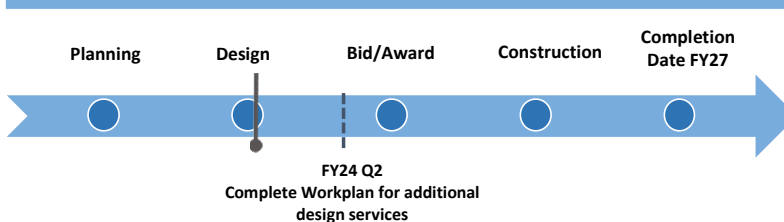


### Project Summary

Assessments, rehabilitation designs and repairs to prevent water intrusion at train control (TC) rooms (19) and huts (6).



### Timeline



 Increases Service Reliability	 Enhances Safety and Security	 Promotes Sustainability
-----------------------------------	----------------------------------	-----------------------------

### Challenges

Change in scope; removing Montgomery St (M20) & Powell St (M30) from Package 2. Consultant Work Plan extension is delayed.

### FY24 Q2 Accomplishments

Completed installation and testing for temporary repair at Montgomery St (M20) TCR. Completed WP for additional design services. Investigated potential scope change at Hayward (A60) TCR.

### FY24 Q3 Planned Activity

Revise IFB package after scope reduction for M20 and M30 location, and continue with procurement.

## 6.9 20LN002 | MUX Cable Replacement | Train Control and Communications



### Project Summary

This project removes 45 year old cable and install new signal cabling between the wayside train control MUX cabinets to its matching Train Control Room MUX equipment. The communication between Train Control Room Systems and the different train control wayside equipment throughout BART system are enabled by system of Multiplex (MUX) equipment that handles and allows simultaneous transmission of several messages and signals through a network of cable connections such as track occupancy and train speed codes.



### Timeline



### Challenges

Weekday blanket not enough time to replace a junction box.

### FY24 Q2 Accomplishments

Replaced 5,200 feet of cable near Concord and Glenn Park

### FY24 Q3 Planned Activity

Replace 5,000 feet cable between MacArthur and Rockridge stations

		
Improves Safe Working Conditions	Enhances Safety and Security	Increases Service Reliability

## 6.10 15CQ007 | Track Renewal Project Oakland Yard - RR | Shops, Yards, and Facilities

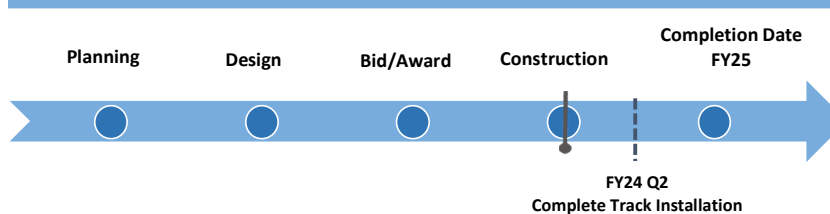


### Project Summary

Develop, design, and construct a new spur track in the Oakland Shop Yard (G-Spur). Build a secure facility to house the \$20M track geometry car. Replace water and gas lines, repave and stripe parking area, and saddle construction over drain.



### Timeline



### Challenges

Resource availability

### FY24 Q2 Accomplishments

Complete Track Installation

### FY24 Q3 Planned Activity

OSA Slab Installation Complete

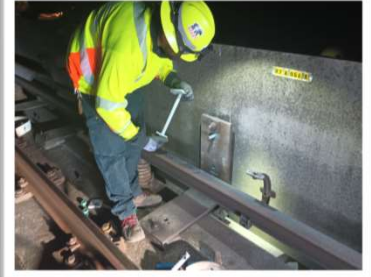
		
Increases Service Reliability	Enhances Safety and Security	Promotes Sustainability

## 6.11 15QL004 | Aerial Guideway Sound Wall Repairs, C, R, and L-Lines | Shops, Yards, and Facilities

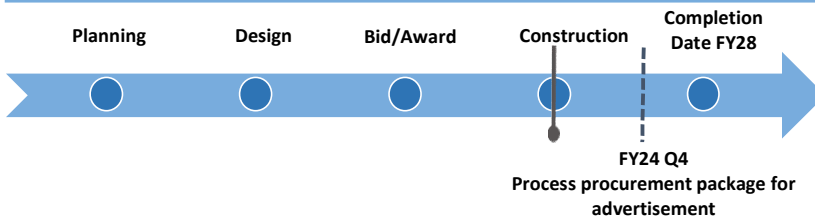


### Project Summary

Rehabilitation of 150 sound walls locations along C, L and R Lines that have reached the end of their useful lives.



### Timeline



 Improves Safe Working Conditions	 Enhances Safety and Security	 Increases Service Reliability
--------------------------------------	----------------------------------	-----------------------------------

### Challenges

Scheduling constraints and availability of maintenance crew.  
Shorter blanket hours will slow down progress of construction activities.

### FY24 Q2 Accomplishments

Completed repair work on 40 panels in the Cities of Oakland/ Berkeley section of R line.

### FY24 Q3 Planned Activity

Continue repair work Cities of Oakland/ Berkeley section of R line and start repair work along Concord City section of C line.

## 6.12 54RR260 | Fire Services at Hayward Yard - RR | Shops, Yards, and Facilities

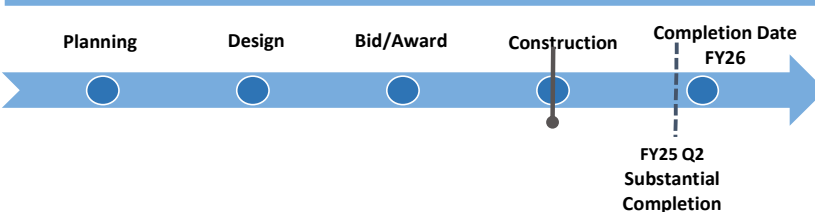


### Project Summary

This project involves the replacement of the water distribution infrastructure at the Hayward Yard (OHY), including establish a more efficient fire protection system that aligns with current National Fire Protection Association (NFPA) standards, ultimately reducing maintenance needs. Additionally, the project includes the expansion and repair of several domestic water, sanitary sewer, and industrial waste pipelines at the Yard.



### Timeline



 Increases Service Reliability	 Enhances Safety and Security	 Promotes Sustainability
-----------------------------------	----------------------------------	-----------------------------

### Challenges

Secure additional funding to support Construction Management services extension

### FY24 Q2 Accomplishments

None

### FY24 Q3 Planned Activity

Secure BART Board approval for change order to the existing contract services

### 6.13 54RR510 | HVAC Renovation and LMA - RR | Shops, Yards, and Facilities

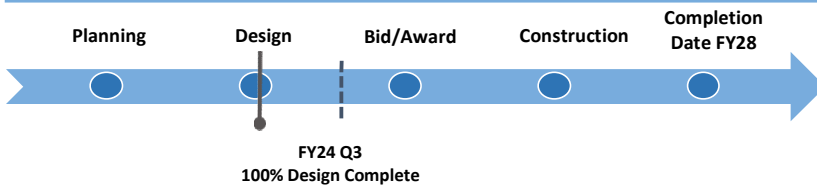


#### Project Summary

The 50 year old air conditioning unit for computer and BART operation control centers are past their estimated service life and some replacement parts are unavailable for repair. The units are experiencing malfunctions at a higher historical rate. The failure of current HVAC system could severely impact BART operations due to potential for overheating in the computer room.



#### Timeline



#### Challenges

BART General Engineering Contracts (GEC) resource constraint.

#### FY24 Q2 Accomplishments

None

#### FY24 Q3 Planned Activity

Complete 100% Design



### 6.14 15CQ020 | Track Renewal Project Richmond Yard - RR | Shops, Yards, and Facilities

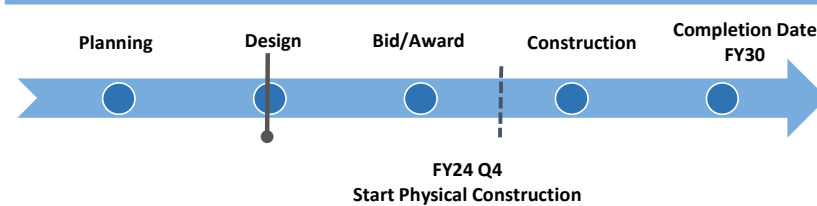


#### Project Summary

This project will replace yard tracks at Richmond Yard (ORY). Existing yard tracks at ORY have reached the end of their expected design life and must be replaced. Yards were originally designed for 90lb rail, which is no longer in production and does not meet current rail standard specifications. This project will update yard to 119lb rail and switch components, as is required per BFS. The new ties that will also be installed are required to support increased traffic from new revenue vehicles.



#### Timeline



#### Challenges

Train Storage during yard construction.

#### FY24 Q2 Accomplishments

Site visit to coordinate construction means and methods. Crane procurement for Yard Lead Turnouts

#### FY24 Q3 Planned Activity

Yard lead turnout replacement



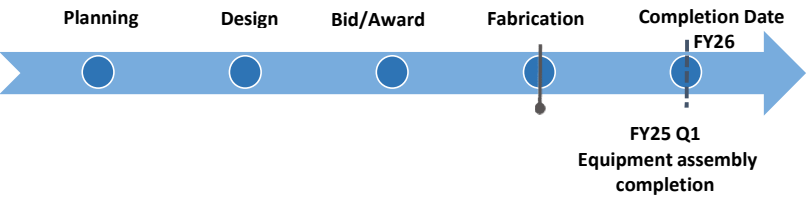


**Project Summary**

This project will procure and install a dual-gauge wheel truing machine at the Concord Yard to accommodate the Fleet of the Future which increases the carrying capacity on the System.



**Timeline**



 Increases Service Reliability	 Enhances Safety and Security	 Promotes Sustainability
-----------------------------------	----------------------------------	-----------------------------

**Challenges**

None

**FY24 Q2 Accomplishments**

Completed Equipment Design Submittals Review

**FY24 Q3 Planned Activity**

Continue with fabrication

## 6.16 15CQ017 | Rail Re-Profiling Services Systemwide - RR | Track and Structures

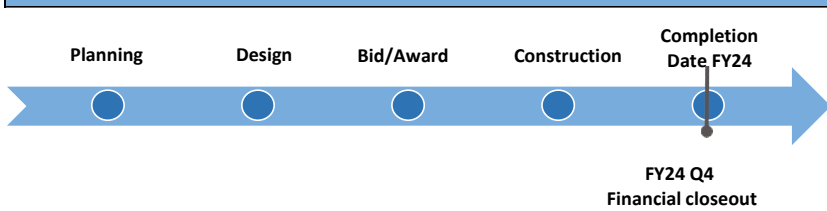


### Project Summary

This project reprofiles rail in order to accommodate the Fleet of Future cars and associated wheels. The new wheel shape is conical versus the old wheel shape being cylindrical. The new wheel does not ride in the same location as the old wheel, causing a point loading nearer to the gage side of the rail head. This point loading over time causes premature wear of the rail and increased noise. Re-profiling of the rail head will reduce maintenance cost and noise. Noise reduction is a benefit of getting the wheel-rail interface correct. Based on initial studies on actual noise reduction, re-profiling results in 20% noise reduction from the existing noise levels.



### Timeline



### Challenges

None

### FY24 Q2 Accomplishments

Continue financial closeout

### FY24 Q3 Planned Activity

Continue financial closeout

## 6.17 15TC007 | Aerial Fall Protection - RR | Track and Structures

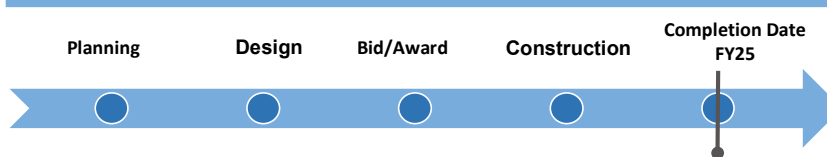


### Project Summary

This project is to design and install aerial structure fall protection system-wide (segment of M-Line is designed and shovel ready). The lack of existing fall protection on aerial structures requires use of district resources to install and uninstall temporary fall protection before any track work can be done. This is an inefficient use of valuable resources and track time.



### Timeline



### Challenges

None

### FY24 Q2 Accomplishments

Updated BART documents through BART Engineering Change Order (BECO)

### FY24 Q3 Planned Activity

Financial closeout. Update BART documents through BECO.

## 6.18 15TC013 | Slope Stabilization Systemwide - RR | Track and Structures

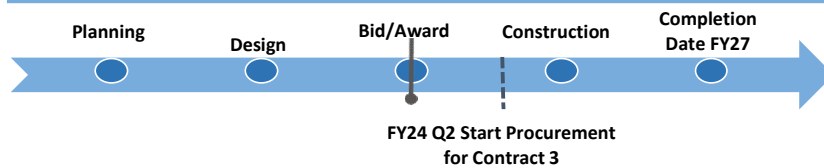


### Project Summary

Assessment of 104 eroded slopes systemwide. Then prioritization, completion of repairs or rehabilitations of the slopes, and addressing storm water drainage issues within the right-of-way. 25 sites, including 7 locations from Project 15TC020, have been selected for final design, procurement, and construction. There are three contracts for the project. First contract is for 21 sites located on the A & C Lines, with construction work to be performed by BART forces. For the remaining 4 sites located on the L & M Lines, construction work is split into two contracts, slopes rehabilitation is by a general contractor under contract 2 and abutment expansion joints restoration work is by BART forces under contract 3.



### Timeline



### Challenges

Keep project active while waiting on funding from CalOES

### FY24 Q2 Accomplishments

Begin Procurement for Contract 3

### FY24 Q3 Planned Activity

Continue With Procurement



## 6.19 15CQ008 | Interlocking Replacement at K23, K25, and C15 - RR | Track and Structures

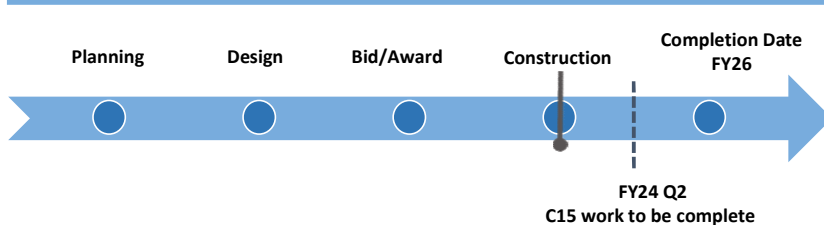


### Project Summary

Assessment of 104 eroded slopes systemwide. Then prioritization, completion of repairs or rehabilitations of the slopes, and addressing storm water drainage issues within the right-of-way. 25 sites, including 7 locations from Project 15TC020, have been selected for final design, procurement, and construction. There are three contracts for the project. First contract is for 21 sites located on the A & C Lines, with construction work to be performed by BART forces. For the remaining 4 sites located on the L & M Lines, construction work is split into two contracts, slopes rehabilitation is by a



### Timeline



### Challenges

Bus bridges will be difficult to plan and execute with K25 work adjacent to MacArthur Station and intersection of K, C, and R lines.

### FY24 Q2 Accomplishments

Procurement continued for K Line.

### FY24 Q3 Planned Activity

Finalize traffic control procurement.



6.20 15IF003 | Powell Street - Gateway Station | Stations



Project Summary

The Powell Street Station Modernization Phase I project continues the work that was completed for the station modernization Design Guidelines. The scope advances the design of eighteen (base plus options) items onto final design, engineering, and construction. The project will primarily consist of relocating TVMs, upgrading platform lighting, flooring, and seating, relocating or adding wayfinding, replacing existing fare evasion barriers with higher barriers, and reconfiguring the entrances at Halladie Plaza. Options included are for replacement of the Platform paving, reconfigure toilet and ADA ramp at the entrance at Halladie Plaza.



Increases Service Reliability

Enhances Safety and Security

Promotes Sustainability

Challenges

None

FY24 Q2 Accomplishments

Finalized remaining punch list items.

FY24 Q3 Planned Activity

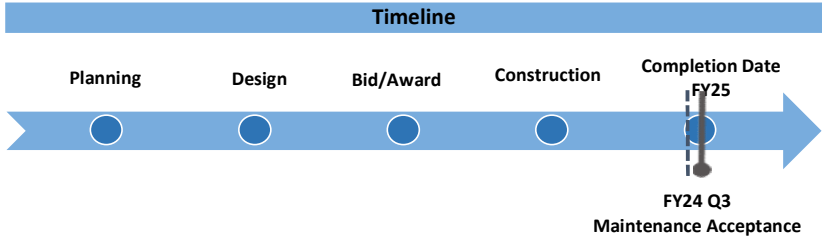
Complete outstanding Change orders

6.21 11IA002 | New Platform Stairs at Civic Center - RR | Stations



Project Summary

This project is for design, procurement, and construction of two additional stairs adjacent to the existing stairs at each end of the platform of Civic Center Station (M40). This will reduce BART Platform exiting times and bring within current NFPA requirements.



Increases Service Reliability

Enhances Safety and Security

Promotes Sustainability

Challenges

Contractor has submitted a \$3M claim with limited merit.

FY24 Q2 Accomplishments

Successfully settled all existing contractor claims

FY24 Q3 Planned Activity

Secure BART Board approval for change order to the existing contract services

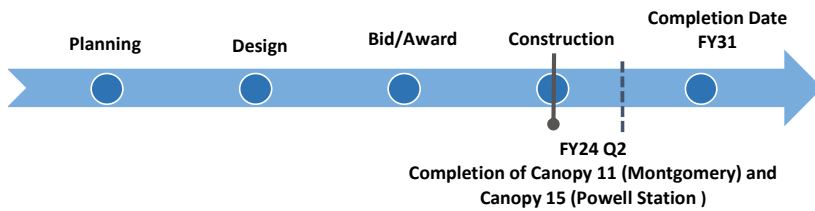
## 6.22 15LK001 | Market Street Entry Canopies - RR | Stations



### Project Summary

This program will install 19 canopies at the four downtown San Francisco stations, which don't currently exist, over street openings for patron safety as well as to meet code requirements for weather protection for any escalators being installed or renovated.

### Timeline



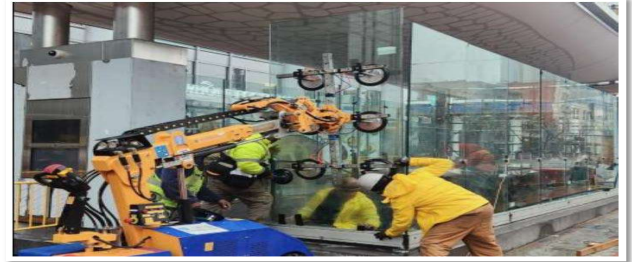
Improves Safe Working Conditions



Enhances Safety and Security



Increases Service Reliability



### Challenges

Orpheum Theatre concerned about Canopy 21 that is to be built in front of the theatre.

Conflicting projects at Canopies 4 and 10.

Differing Site Condition.

Glass subcontractor experiencing financial difficulties.

### FY24 Q2 Accomplishments

A total of 6 out of 19 canopies have been completed. 3 additional canopies will be completed approximately every 225 days.

### FY24 Q3 Planned Activity

Complete 1 additional canopy, bringing the total completed to 7.

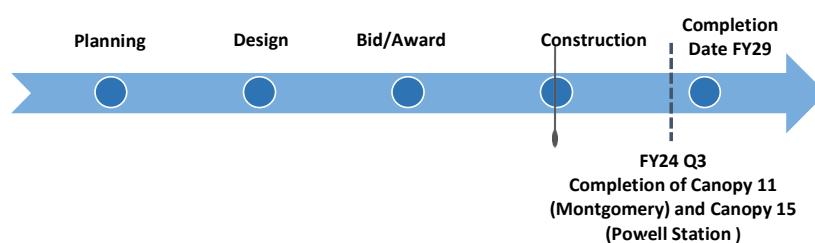
## 6.23 15LK002 | Market Street Escalators Project - RR | Stations



### Project Summary

This program will replace 41 existing street and platform escalators in the 4 SF downtown stations. The escalators are at the end of their useful life and are regularly out of service.

### Timeline



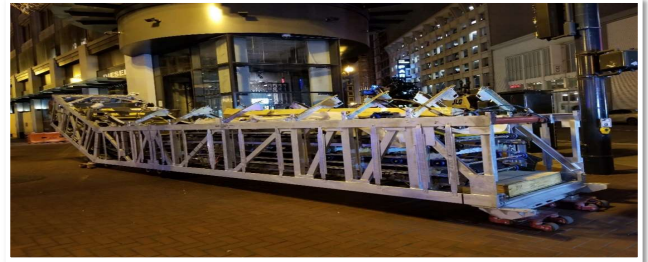
Increases Service Reliability



Enhances Safety and Security



Promotes Sustainability



### Challenges

Contract requires canopies be installed prior to installation of street level escalators, requiring special attention to prevent delays to canopy construction, and close coordination of escalator installations.

### FY24 Q2 Accomplishments

10 of 41 escalators completed.

### FY24 Q3 Planned Activity

Complete 12 of 41 escalators.

## 6.24 15NU002 | Accessibility Improvement Program - RR | Stations

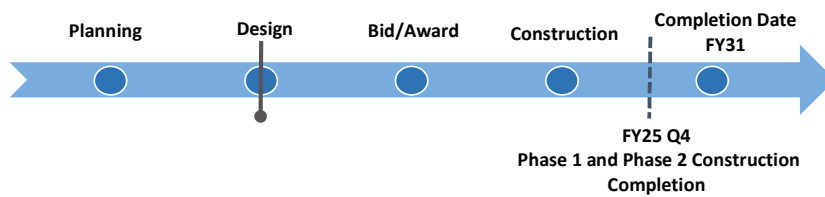


### Project Summary

In a 2011 assessment, FTA identified improvements needed to meet ADA-regulations. Based on this assessment, BART conducted an evaluation of stations system-wide and identified improvements and upgrades to meet federal ADA regulations and California Building Code. This scope and all components herein represent resulting improvements from a 10-year Scope of Work developed by BART to meet all State and Federal code.



### Timeline



Improves Safe Working  
Conditions



Enhances Safety and Security



Increases Service Reliability

### Challenges

Coordination with other Transportation Agencies

### FY24 Q2 Accomplishments

Mobilized and started Construction for Phase 1 and 2 at Bay Fair and Fremont Stations.

### FY24 Q3 Planned Activity

Continue Working on ADA corrections at Fremont(A90) and Bay Fair Stations(A50) on the inside. Start on Exterior work at Hayward (A60) and Castro valley (L10).

## 6.25 15NE002 | Public Address System Improvement - RR | Stations

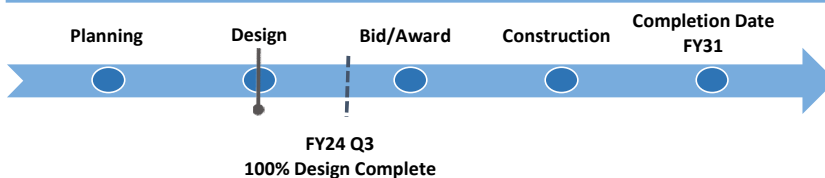


### Project Summary

Installation of a new public address system, including electrical, communications, equipment installation, testing, and commissioning at Lafayette (C30) and Powell (M30) Stations



### Timeline



Increases Service  
Reliability



Enhances Safety and Security



Promotes  
Sustainability

### Challenges

Coordination with other Transportation Agencies

### FY24 Q2 Accomplishments

Mobilized and started Construction for Phase 1 and 2 at Bay Fair and Fremont Stations.

### FY24 Q3 Planned Activity

Continue Working on ADA corrections at Fremont(A90) and Bay Fair Stations(A50) on the inside. Start on Exterior work at Hayward (A60) and Castro valley (L10).

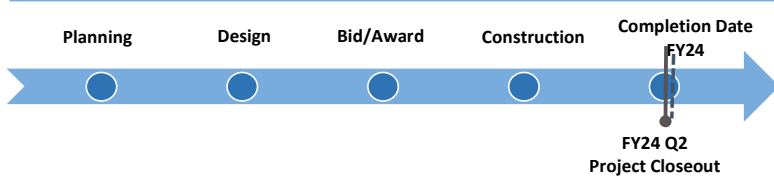
## 6.26 09AU000 | Transbay Tube Retrofit #1 (Underwater) - RR | Seismic Programs



### Project Summary

Install, anchor and weld arch, walkaway, wall plating and reconstruct the trackway invert in Zones 4 of M1/M2 bore and installation of a new lighting system. Includes grouting behind plates. Install, anchor and weld lower and upper gallery plating in Zone 4 of the Tube. Includes grouting behind plates and installation of a new lighting system. Install, commission and test the new pumping system and dedicated electrical substations. Install two new 4160 k power cables and transfer them both to BART service. Includes transferring all existing electrical substations on to the new 4160V transmission cables.

### Timeline



 Improves Safe Working Conditions	 Enhances Safety and Security	 Increases Service Reliability
--------------------------------------	----------------------------------	-----------------------------------



### Challenges

Final Settlement of Contractor's claims caused by: Differing Site Conditions, Coordination of Site Access with other District Projects, Schedule impacts due to System Access issues

### FY24 Q2 Accomplishments

None

### FY24 Q3 Planned Activity

Continue negotiation with Contractor on outstanding requests for additional compensation and Notice of Potential Claims.

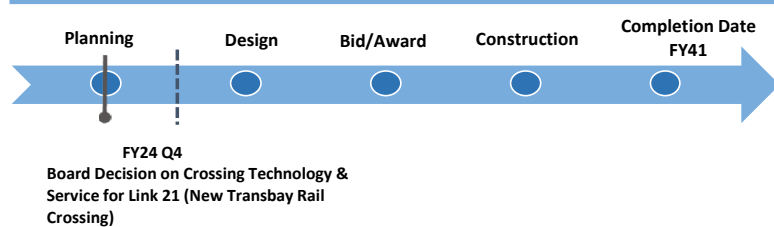
## 6.27 09JA000 | Link 21 - RR | System Expansion



### Project Summary

BART's original transbay tube connecting San Francisco and the East Bay has exceeded its capacity and will require significant rehabilitation. At the same time, the traditional nine-county Bay Area is evolving into a much larger megaregion, stretching from Monterey/Salinas to the northern San Joaquin Valley to Placer County northeast of Sacramento. This 21-county megaregion supports the fifth largest economy in the world, and is increasingly tied to a fairly extensive and expanding rail network and the BART Transbay Tube. To meet the needs of the public we serve, BART and our rail partners are pursuing a new Transbay Rail crossing within the context of the larger rail network. This project is currently in Planning.

### Timeline



 Increases Service Reliability	 Enhances Safety and Security	 Promotes Sustainability
-----------------------------------	----------------------------------	-----------------------------



### Challenges

Identifying future funding to leverage local investment

### FY24 Q2 Accomplishments

Public Outreach Concept Refinement completed

### FY24 Q3 Planned Activity

None

## 6.28 15IJ200 | Station Fire Alarm Replacement - 12th, 19th and N. Berkeley | Electrical and Mechanical

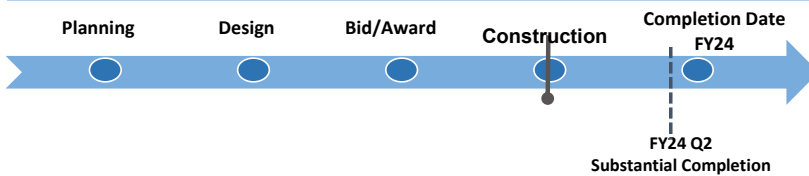


### Project Summary

Furnish, install, test and commission the fire alarm systems for Oakland 12th St (K10), 19th St (K20), and North Berkeley (R30) stations.



### Timeline



### Challenges

Settlement reached with the Contractor. Working with legal to draft paper work.

### FY24 Q2 Accomplishments

Contractor has been issued Project substantial completion acknowledgement by BART

### FY24 Q3 Planned Activity

Update BART Asset management records that the project has furnished and installed successfully

## 6.29 15IJRR1 | Station Fire Alarm Replacement, 3 Stations - RR | Electrical and Mechanical

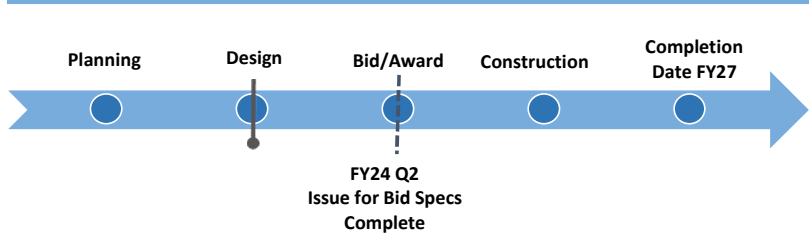


### Project Summary

Furnish, install, test and commission the station fire alarm replacements at the following locations: Phase 4 - Bay Fair (A50), South Hayward (A70), Rockridge (C10).



### Timeline



### Challenges

None

### FY24 Q2 Accomplishments

Completed BART contracting plan per procurement requirements in preparation of advertisement for bids

### FY24 Q3 Planned Activity

Advertise to seek competing bids for BART contract services

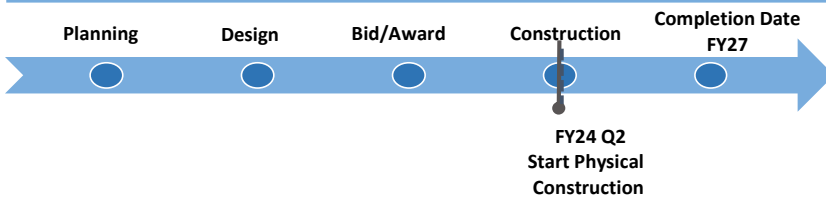
### 6.30 15IJRR2 | Station Fire Alarm Replacement, 6 Stations - RR | Electrical and Mechanical



#### Project Summary

Furnish, install, test and commission the station fire alarm replacements at the following locations: Phase 3 - Berkeley (R20), Montgomery (M20), Lake Merritt (A10), Coliseum (A30), San Leandro (A40), Walnut Creek (C40).

#### Timeline



Increases Service Reliability



Enhances Safety and Security



Promotes Sustainability



#### Challenges

None

#### FY24 Q2 Accomplishments

Start Physical Construction.

#### FY24 Q3 Planned Activity

Continue Construction.

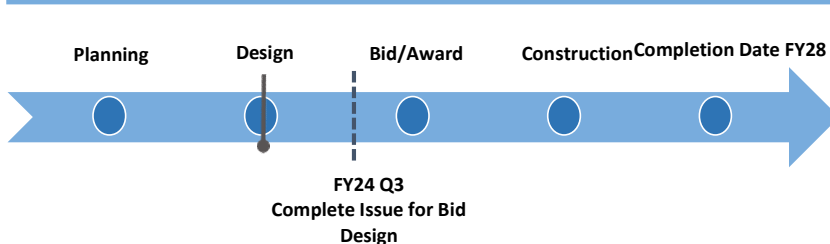
### 6.31 17HMRR1 | MET-G Generator Replacement - RR | System Support



#### Project Summary

Furnish, install, test, and commission a 1250 kW Generator (with associated infrastructure) at Lake Merritt (LMA) street level, to replace the existing 400 kW Met Building (MET-G) rooftop generator. Infrastructure and services includes electrical, mechanical, architectural, structural, civil, systems, control and communications components.

#### Timeline



Increases Service Reliability



Enhances Safety and Security



Promotes Sustainability



#### Challenges

None

#### FY24 Q2 Accomplishments

Develop IFB Design.

#### FY24 Q3 Planned Activity

Complete IFB Design and submit to Procurement for advertisement