

Quarterly Capital Programs & Projects Status Report (CPSR)

FY23 Q3 Report (January – March 2023) May 23, 2023



District Wide Capital Projects

BART's districtwide capital projects represent system expansion and rebuilding in Rolling Stock and Shop, Maintenance, Infrastructure Delivery, Planning and Development, and the District Architect's Office. Between fiscal years 2023 and 2025, the capital projects are forecast to invest \$4.4 billion into BART assets, with funding from Measure RR Bonds, FTA, MTC, and other sources.

Included herein is a summary and statue of BART's districtwide capital projects, including fiscal year capital budget dashboards, major capital program summaries, and capital project summaries including more detailed information for select capital projects. There are 7 new projects added in this quarter. The new projects are italicized.

Capital Improvement Program (CIP) Categories

Shops, Yards, and Facilities

(°0)	
FF	

Electrical and Mechanical

Seismic Programs



System Expansion



System Support



Track and Structures



Traction Power



Stations

Rail Cars



Train Control and Communications

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) - Expectation of total cost at the end of a project

Current Estimate at Completion (EAC) - The current 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

FY23 Budget - The projected cost to perform work on this project in fiscal year 2023

Forecasted FY24 & FY25 Budget - The projected cost to perform work on a project in fiscal years 2024 & 2025

Spent To Date - Actual amount spent to date (as of March 31, 2023)

% Complete Physical or Cost - Physical % complete is based on actual work completed, % complete based on cost, and spent to date against budget

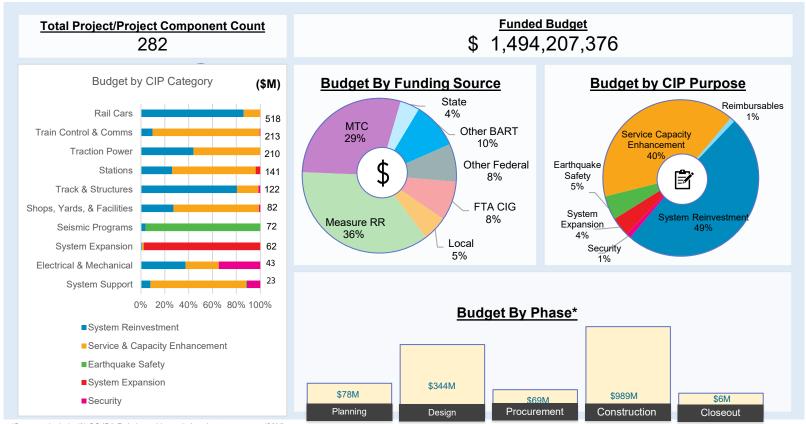
Closeout Date - Projected closing date of the project

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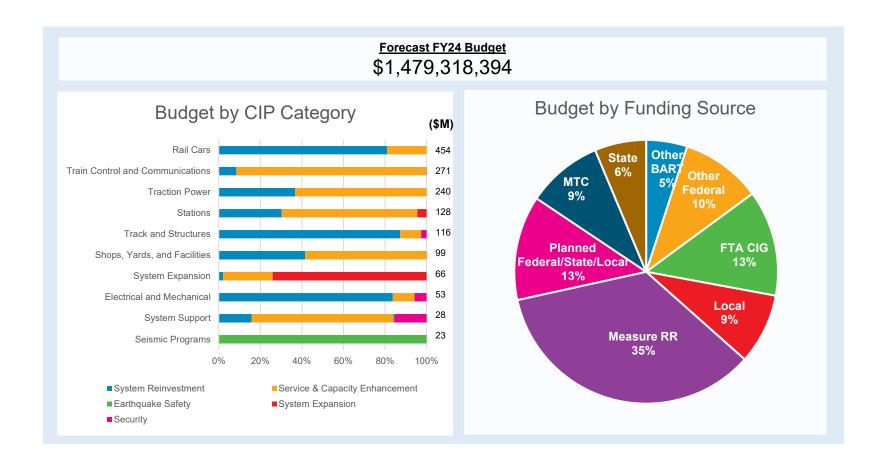
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,	Selected	Project Summaries	43
	7.1	15EIRR1 - CWS High Voltage Transformer	
	7.2	15EJRRK - 34.5 kV AC Cable Replacement-K line	
	7.3	15TC004 - Water Intrusion Mitigation in Train Control Rooms	
	7.4	54RR510 - HVAC Renovation and LMA	
	7.5	03QJ101 - Concord Yard Wheel Truing Machine	
	7.6	15CQ020 - Track Renewal Project Richmond Yard	
	7.7	15CQ017 - Rail Re-Profiling Services Systemwide	
	7.8	15TC007 - Aerial Fall Protection	
	7.9	15TC013 - Slope Stabilization Systemwide	
	7.10	15TC015 - Water Mitigation R Line Tunnel	
	7.11	15CQ008 - Interlocking Replacement at K23, K25, and C15	
	7.12	15IF003 - Powell Street - Gateway Station	
	7.13	11IA002 - New Platform Stairs at Civic Center	
	7.14	15NU002 - Accessibility Improvement Program	
	7.15	15LK001 - Canopy/Escalators Replacement	
	7.16	15NE002 - Public Address System Improvement	
	7.17	15LK002 - San Francisco Escalator Replacement	
	7.18	09AU000 - Transbay Tube Retrofit #1 (Underwater)	
	7.19	09JA000 - Link 21	
	7.20	15IJ200 - Station Fire Alarm Replacement - 12th, 19th & N. Berkeley	
	7.21	15IJRR1 - Station Fire Alarm Replacement, 5 Station Locations	
	7.22	15IJRR2 - Station Fire Alarm Replacement, 6 Stations	
	7.23	17HMRR1 - MET G Generator Replacement	

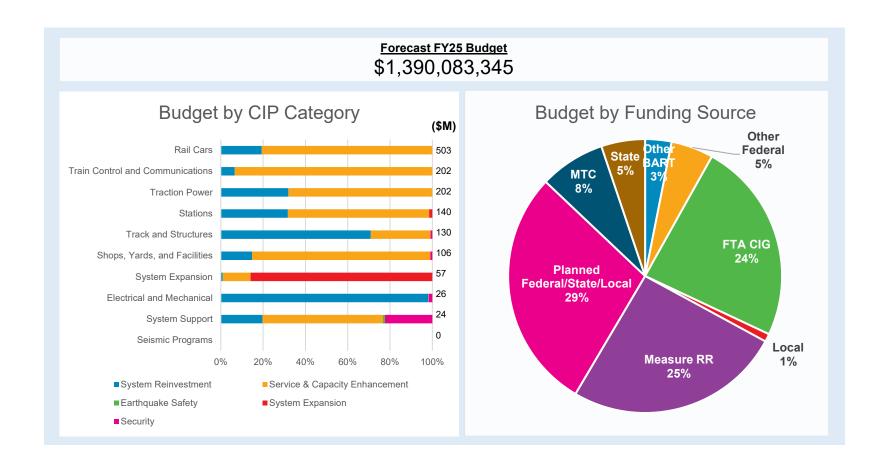
1. FY23 Budget Dashboard



2. Forecasted FY24 Budget Dashboard



3. Forecasted FY25 Budget Dashboard



4. Major Programs

Major Programs	Spent through FY22 (\$M)	FY23 Budget (\$M)	FY24 Budget (\$M)	FY25 Budget (\$M)	Cost to Complete beyond FY25
Rail Car Program**	1,099	516	426	113	852
Measure RR Program***	1,479	425	381	368	1,392
Core Capacity Program	288	274	400	727	2,729
				121	
Earthquake Safety Program	1,330	63	23	-	46
Escalator & Canopy Program	62	39	41	43	80
Elevator Modernization Program	3	6	8	23	365
OCC Related Improvements	18	3	28	13	5
Fencing & Security Program	18	2	5	5	44
Next Generation Fare Gates Program	2	2	23	24	39
Fleet of the Future Maintenance Facility	0	3	-	-	412
Total	4,300	1,333	1,336	1,314	5,965

^{**} Rail Car Program overlap with Core Capacity Program (306 Rail Cars) not shown.

*** Several Priority Programs have Measure RR funds. Overlaps are not shown. Spent through FY22 is as of June 30,2022, and includes all funding expended against capital projects in the Measure RR Program.

5.1 Rail Car Programs

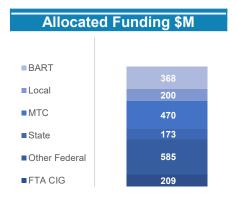
Schedule Summary FFGA 2018 2019 202**0** 2021 2022 2023 2024 2025 2026 2027 775 oductio Hold 775 Car 306 Car 119 Car **Delivery Delivery** Delivery Phase 1 Phase 2 Phase 3 FORECASTED CONSTRUCTION COMPLETION

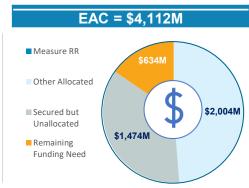


Projects and Status

Project ID	ect ID Project Name		Program
	Rail Car - Phase 1	\$2,584,000,000	
40FA000	Rail Car Procurement Phase 1 Acquisition Planning	\$147,975,000	
40FA001	Rail Car Procurement Phase 1 - Contract	\$2,436,025,000	
40FA002*	Rail Car Procurement Phase 1 Warranty	\$0	
	Rail Car - Phase 2	\$1,105,525,000	
40FD001	Rail Car Procurement Phase 2 - Contract	\$1,035,973,000	Core Capacity
40FD002	Rail Car Procurement Phase 2 - Soft Costs	\$69,552,000	Core Capacity
	Rail Car - Phase 3	\$422,319,000	

^{*} Warranty reimbursement by Alstom





FY24 Milestones FY23 Accomplishments BART has 510 new cars on property and 477 Continue to accept and release new cars into

- cars in revenue service BART has decommissioned 272 legacy vehicles
- Rail Car Procurement Phase 2, Option 1 for 152 rail cars has been executed
- service

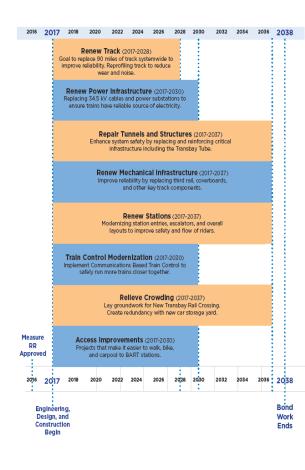
BART

Contracts Awarded		Challenges/Risks/Watchlist
40FA-110	\$1,535,318,124	Delayed Delivery CBTC Integration
6M3223 A.01 40FA	\$17,048,025	Escalation due to current market conditions
6M3224 A.01 40FA	\$2,148,480	
40FD-110	\$630,152,200	
6M3223 A.02 40FD	\$220,000	
6M3224 A.02 40FD	\$87,348	

5.2 Measure RR

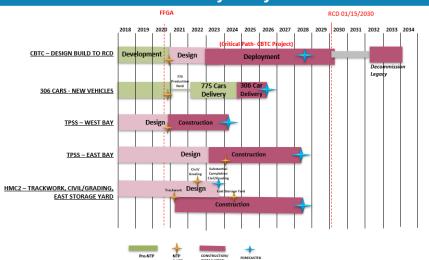






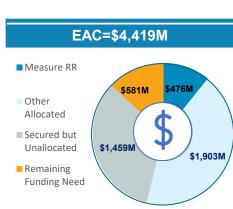
5.3 Core Capacity Program

Schedule Summary – Key Milestones





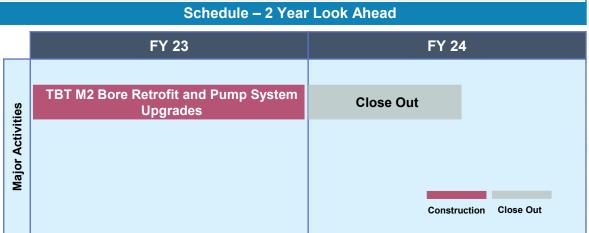




	Top 5 Risks						
#	Risk ID (Legacy ID)	TCCCP Risk	MAR 2023	Ongoing Mitigation			
1	PROG FUND-11 Program Oversight	Because of the effects of the Pendemic, such as inflation, untable supply chains, and limited labor availability, untable supply chains, and limited labor availability cost of construction has increased nationwide, including all parts of Core Capacity.	25	ABAT is actively pursuing additional funding from local, state, and federal sources to cover the estimates at completion for the overall TOCCP. A revised funding plan to support revised cost estimates has been developed. Projects are developing alternatives to facilitate construction while additional funding can be secured.			
2	CBTCI VEH-01 (C120) CBTC	CBTC Integration into 310 D-cars has technical implementation and commercial relationship considerations between Hitachi and Alstom.	25	Work is proceeding and Hitachi is being compensated for direct cost associated with administrative support to bring Alstom in as a subconsultant.			
3	HMC2 CNST-11	ESV is currently designed as one bid package, but now must be phased due to funding limitations. This results in increased cost and time requirements for design to be revised into several smaller package with options that allow award within funding constraints.	25	Team is working on HMC.2 completion plan that includes: 1) Taking preliminary steps to figure out constructability issues related to splitting project into several smaller bid packages. 2) Frepairing 2 of alternatives for different procurement strategies with pricing estimates based on 90% design * ROM premium for sub-packages (both cost and schedule).			
4	TPE MKT-02 (T042) TPSS-East	Because of the specialized nature of TPSS construction as well as escalating construction industry costs in the current market, there is a risk of bid prices exceeding the design estimate.	24	The 100% estimate better assessed market conditions such as using vendor input. One more estimate review and industry outracts survey will be performed as part of IFB. Include bid strategies to ensure that bids received are affordable and can be awarded.			
5	CBTCI STAFF-12	Master Staffing Risk: BART Resources for all required staffing to support CBTC implementation throughout deployment must be retained in time to avoid delay	23	To increase fitment to 14 cars per month from 10, will require more specialized and fully trained staff to successfully implement. 70 cars needed to support phase 2, with the rest to follow in subsequent phases. We have commitment from AGM for support from other departments until new staff are hired.			

Project Progress Status Forecast						
Project Cost Approved Budget		Expenditures Thru Mar 31, 2023	Current Approved Budget	Forecast At Completion		
Program Mgmt	\$27,102,220	\$16,554,647 (61.1%)	\$27,102,220	\$39,702,629		
СВТС	\$1,673,416,724	\$226,812,208 (13.6%)	\$1,673,416,724	\$1,940,898,134		
New Vehicles (306 Cars)	\$1,105,525,224	\$57,853,584 (5.2%)	\$1,105,525,224	\$1,105,525,224		
НМС2	\$344,597,330	\$55,185,027 (16.0%)	\$344,597,330	\$883,085,163		
TPSS	\$136,789,205	\$63,983,469 (38.4%)	\$166,789,381	\$219,588,865		
Unallocated Contingency	\$249,000,000		\$230,000,000	\$230,000,000		
TOTAL	\$3,536,430,703	\$420,388,935 (11.9%)	\$3,547,430,879	\$4,418,800,015		

5.4 Earthquake Safety Program (ESP)





RETROFIT

FY 23 Accomplishments

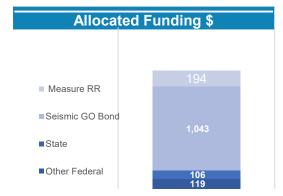
- Completed M2 Bore Retrofit
- · Completed Pump System Upgrades

FY 24 Milestones

- TBT Project Close-out
- ESP Program Close-out

Projects and Status

Project ID	Project Title	EAC	Related Capital Program
09AU000	Transbay Tube Retrofit	\$594,483,000	Measure RR
	Other Completed ESP Projects	\$867,600,000	Measure RR
Total	Earthquake Safety Program*	\$1,462,430,000	



^{*} The Transbay Tube Retrofit Project (Project ID 09AU000) is not federally funded. Other completed projects included in the Earthquake Safety Program were partially funded by Federal funds.

EAC=\$1,462M



Challenges/Risks/Watchlist

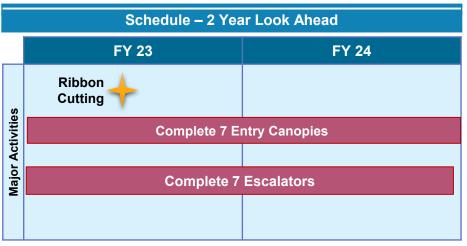
Final Settlement of Contractor's claims caused by:

- · Differing Site Conditions
- Deconfliction with other Projects
- Schedule impacts due to System Access issues

Critical Contracts Awarded

09AU-110, 09AU-120, 09AU-140, 09AU-150	\$356,464,421
6M6145 Gannett Flem WP A.01-01	Not to Exceed \$20,000,000

5.5 Escalator and Canopy Program







BART ESCALATORS & CANOPIES



			Related Capital
ID	Project Title	EAC	Program

Project ID	Project Title	EAC	Program
15LK001	San Francisco Market St. Entry Canopies	\$111,003,000	Measure RR
15LK002	San Francisco Escalator Replacement	\$153,880,000	Measure RR

FY 23 Accomplishments

FY 24 Milestones

- Entry Canopies: Completed construction of the first four canopies
- Escalators: Returned three escalators to public service
- Entry Canopies: Complete additional three canopies and start three more
- Escalators: Return four more escalators back to service for public use and begin four more

Allocated Funding \$M

■Measure RR

■State Funding

■ Local Funding

157

31

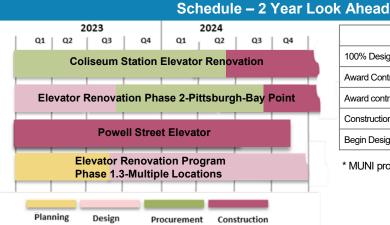
55

EAC=\$264M ■ Measure RR \$25M Other Allocated Secured but \$82M Unallocated \$157M Remaining **Funding Need**

Contracts Awarded			Challenges
15LK-120A Mrkt St Esc Ren	\$96,478,922	•	Cost Impac
45116 440 M 1 1 01		•	Differing sit

5.6 Elevator Modernization





Major Milestones				
100% Design Complete Pittsburgh-Bay Point	FY23 Q4			
Award Contract for Coliseum Elevator	FY24 Q4			
Award contract for Pittsburgh-Bay Point	FY25 Q1			
Construction Complete – Powell St*	FY24 Q3			
Begin Design Phase 1.3	FY23 Q4			

■ Measure RR

■ Secured but

Unallocated

■ Remaining
Funding Need

Other Allocated

Related Capital



\$50M

\$117M



Projects and Status

Project ID	Project Title	EAC	Program
15LK003	Powel Street Elevator Renovation	\$1,590,000	None
15NL004	Elevator Renovation Program Coliseum	\$13,057,000	None
15NL005	Pitts/BP Elevator Renovation	\$10,362,979	None
15NL006	Elevator Renovation Phase 1.3	\$42,889,000	None
Future	Renovate Station Elevators Phase 1 to 6	\$339,241,000	None

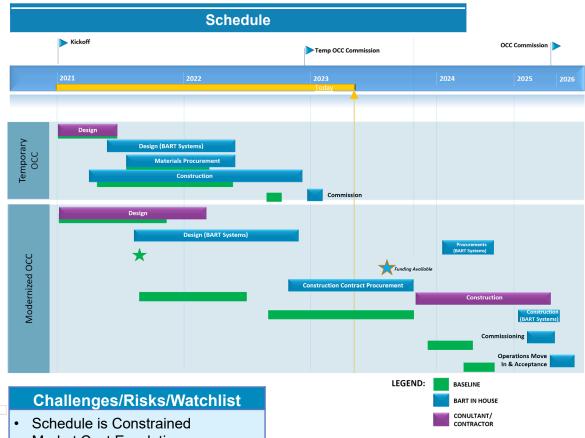
Contracts Awarded	d	Challenges/Risks/Watchlist
6M8145 B.08-02 M&E PMS	\$211,821	Limited Bidders Coordination with Paratransit Services
6M8146 PTG B.05-02 (15NL005)	\$140,791	Increasing Market Cost due to inflation Specialized material delay
6M8146 B.05-03 15NL005 Design	\$337,520	Funding Timing Timeline for approval of new GEC
6M8147 B.09-02 15NL004 Design	\$132,822	agreements SFMTA locating replacement Contractor
6M8146 B.16-01 15NL006 Design	\$896,763	for Powell Street Elevator

Funding Strategies



^{*} MUNI project – BART providing support

5.7 Operations Control Center Related Improvements



- · Market Cost Escalation
- · Delay due to Funding Availability

Projects and Status						
Project ID*	Project Title	EAC	Related Capital Program			
20AJ003	Trunked Radio Replacement	\$13,304,000				
60CC004	Renewal and Upgrade OCC	\$33,860,000	Measure RR			
54RR510	LMA OCC HVAC Renovation	\$19,879,000	Measure RR			

*Note: Partially funded by VTA



BART

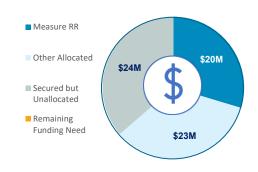
FY 23 Accomplishments

- Completed Construction & Began Operations in Temporary OCC (TOCC)
- Began Partial Operations of new P25 Trunked Radio System

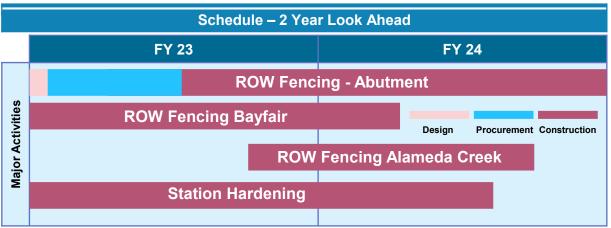
FY 24 Milestones

- Award Contract for Construction of Modernized OCC (MOCC)
- Award Contract for Construction of HVAC Renovation

EAC=\$67M



5.8 Fencing and Security









Projects and Status

			Related Capital
Project ID	Project Title	EAC	Program
15QN000	Safety Barriers Phase 3	\$4,550,000	Measure RR
15QN004	ROW Fencing Replacement	\$3,237,725	
15TC023	Fences Systemwide	\$11,766,000	Measure RR
45GA000	Station Hardening	\$6,366,000	
Future	Upgrade Right Of Way (ROW) Fence for Hayward and Daly City Yards	\$39,756,000	

FY 23 Q3 Accomplishments

- Completion of Elevator Enclosure at Station M40 for Station Hardening project
- Started Financial Closeout of the Safety Barrier Phase 3 Project
- · Completed punch list and final inspection for the Fences Systemwide Project
- Procured materials and equipment for the ROW Fencing replacement at Alameda Creek

FY 24 Milestones

- Installation of the following for the Station Hardening Project:
 - 1. Barriers at Station A80
 - 2. Elevator Enclosures at M30 and C20
 - 3. Buzz Gates at M16, M40, M50, M60 and R20
- Financial Closeout of Safety Barrier Phase 3

	EAC=\$74M
■ Measure RR	
Other Allocated	\$16M
■ Secured but Unallocated	\$40M
Remaining Funding Need	\$19M

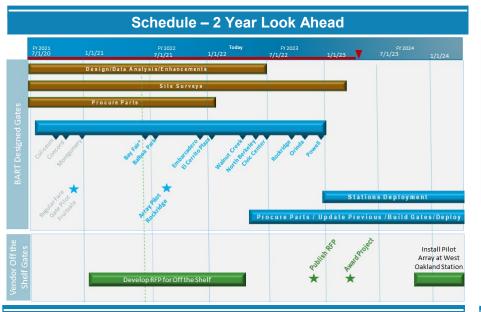
Contracts Awarded		
15TC-123 Fence Construction	\$3,419,104	•
6M8144 B.09-01 Fence Rehab A&R	\$2,162,370	
6M8132 B.22-01, 02, and 03 Construction Management	\$2,191,189	
15QN-110 Safety Barrier Installation	\$899,493	

Challenges/Risks/Watchlist Challenges from Contractor for

 Challenges from Contractor for completion of installation of 900 feet fence from Contract 15TC-123

5.9 Next Generation Fare Gates









Projects and Status

Project ID	Project Title	EAC	Related Capital Program
47CJ012	Next Generation Fare Gate Procurement and	000 000 002	

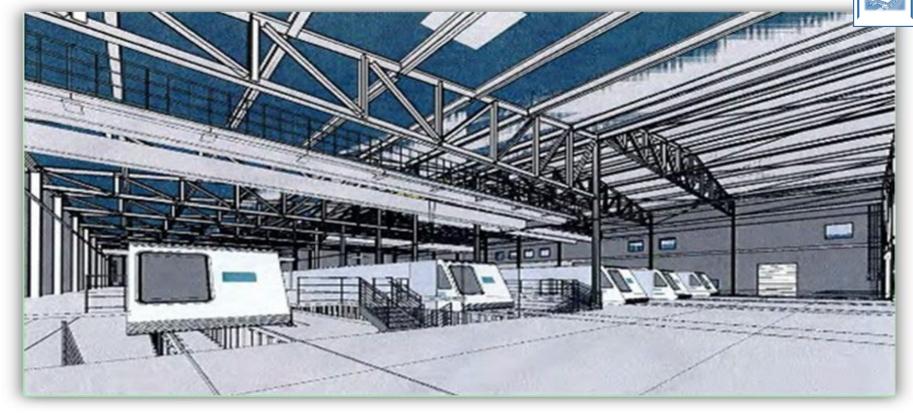
Allocat	ed Funding (\$M) EAC=\$90M
	6	■ Measure RR
Measure RRBART Funding	14	Other Allocated \$16M \$6M \$27M
■ Federal	13	Secured but Unallocated Remaining Funding Need

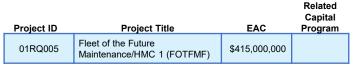
Targeted Funding Plan

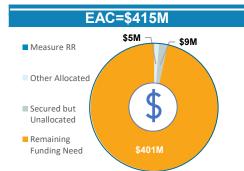
Next Generation Fare Gates Systemwide = \$90M

County/Segment	Total # of Fare Gates	% of Total 1009	Total Cost (\$M) %	Estimated County Contribution (\$M)	Estimated BART Contribution (\$M)
Alameda	277	39%	34.9	19.6	15.3
Contra Costa	117	16%	14.7	7.4	7.4
San Francisco (incl. SFO)	199	28%	25.0	12.5	12.5
San Mateo	82	11%	10.3	10.3	-
Santa Clara	40	6%	5.0	5.0	-
Total	715		\$ 90.0	\$ 54.8	\$ 35.2

5.10 Fleet of the Future Maintenance Facility







FY 23 Deliverables

RAIL CAR MAINTENANCE

Project Planning, Project Cost Estimate, Risk Assessment, Evaluate Delivery Method alternatives, Develop Funding Strategy

Challenges/Risks/Watchlist

Project has an aggressive schedule to meet the needs of Fleet of the Future, with funding currently limited.

6.1 Rail Cars



Project ID	Project Name	Project Scope Summary	Original Estimate at Completion	Current Estimate at Completion	Total Funded Budget	FY23 Budget	Forecasted FY24 Budget	Forecasted FY25 Budget	Spent to Date	% Complete Physical or Cost*	
40FA002	Rail Car Procurement Phase 1 Warranty- Reimbursable	Procure 775 Fleet of the Future rail cars - warranty coordination.	\$6,674,457	\$0**	\$7,174,457	\$12,336,244	\$12,178,440	\$1,088,484	\$6,400,854	89%*	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 for a base order of 260 heavy rail transit vehicles and Options for 515 additional vehicles, ready for revenue service as an integral part of the District's transportation system.	\$130,329,368	\$147,975,050	\$130,319,368	\$12,392,463	\$11,069,592	\$6,586,090	\$109,244,299	84%*	FY31
40FA001	Rail Car Procurement Phase 1	Procure 775 Fleet of the Future rail cars.	\$2,446,996,175	\$2,436,024,950	\$1,477,459,867	\$491,809,436	\$402,926,563	\$105,064,401	\$1,196,807,516	81%*	FY31
40FD001	Rail Car Procurement Phase 2 Contract - C	Procurement of 306 new railcars.	\$907,493,833	\$1,035,972,763	\$361,351,043	\$0	\$27,013,000	\$377,089,887	\$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	\$1,325,716	\$1,032,159	\$12,910,016	\$149,775	0%	FY34

**Note: This covers warranty work, which will be 100% reimbursed by Alstom, hence EAC = \$0Total for CIP Category: Rail Cars \$3,688,729,387 \$3,689,525,224 \$2,004,028,527 \$517,863,859 \$454,219,754 \$502,738,878 \$1,369,706,444

Project Summary Included

* % Complete Based on Cost RR: Measure RR Program Projects

Security Sensitive Projects

C: Core Capacity

R1: 4th Tranche of Measure RR ITALICS: Project Added FY23 Q3

6.2 Traction Power



_	Project ID	Project Name	Project Scope Summary	Original Estimate at Completion	Current Estimate at Completion	Total Funded Budget	FY23 Budget	Forecasted FY24 Budget	Forecasted FY25 Budget	Spent to Date	% Complete Physical or Cost*	Closeout Date
	15EI700	Assessment of Traction Power Equipment Systemwide	This project will perform a system-wide condition assessment of traction power equipment and technology, as well as an obsolescence review of equipment which is not replaced under Measure RR. A study would be performed to assess condition of existing traction power equipment and technology system-wide at an estimated total cost of \$0.5M. The study will determine the level of obsolescence of the existing technology and develop a response plan. Future costs for renovation and replacement of equipment identified in the survey will be requested from FTA grants and/or other fund sources in the future. A system will be developed and maintained to provide maintenance and engineering information.	\$500,000	\$313,159	\$313,159	\$174,343	\$0	\$0	\$313,159	100%*	FY23
	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	\$460,180	\$30,000	\$0	\$33,057,473	99%	FY24
	15EIRR1	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	\$1,250,267	\$1,273,562	\$0	\$11,179,123	98%	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	\$128,877,946	\$120,119,235	\$17,634,190	\$1,805,868	\$0	\$115,082,665	98%	FY24
•	15EK350	Traction Power Substation Installation - RR	Install San Leandro (ASL) and Oakland Transition Structure (KTE) Traction Power substations.	\$43,242,973	\$44,652,224	\$44,652,224	\$7,970,589	\$2,767,356	\$1,000,000	\$39,191,492	90%	FY25
	15EJRR1	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	\$100,473,501	\$100,473,501	\$12,672,567	\$18,099,455	\$29,496,045	\$77,351,451	79%	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	\$29,493,516	\$37,831,779	\$27,965,944	\$106,721,244	75%	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	\$86,000,000	\$86,000,000	\$22,932,230	\$21,356,523	\$9,972,663	\$54,912,729	67%	FY25
	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 EI Cerrito Plaza (RAS-RCP) and by a Contractor from EI 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	\$86,845,260	\$86,845,260	\$34,032,697	\$31,067,426	\$5,098,311	\$50,998,924	57%	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	\$667,407	\$667,407	\$421,758	\$617,992	\$0	\$160,591	53%	FY24
	15EG010	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	\$589,969	\$423,306	\$2,575,252	\$1,048,536	52%	FY25
	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	\$1,000,000	\$1,000,000	\$682,462	\$345,989	\$167,192	\$438,585	50%	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	\$5,576,383	\$5,116,765	\$10,167,900	\$19,601,977	49%	TBD
			Sub-Total	\$728,298,802	\$689,714,414	\$680,955,704	\$133,891,152	\$120,736,021	\$86,443,307	\$510,057,950		

Project Summary Included

* % Complete Based on Cost

C: Core Capacity RR: Measure RR Program Projects

R1: 4th Tranche of Measure RR ITALICS: Project Added FY23 Q3

Security Sensitive Projects

TBD: Project is On Hold

6.2 Traction Power



Project ID	Project Name	Project Scope Summary	Original Estimate at Completion	Current Estimate at Completion	Total Funded Budget	FY23 Budget	Forecasted FY24 Budget	Forecasted FY25 Budget	Spent to Date	% 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	\$2,914,611	\$0	\$0	\$4,732,675	48%*	TBD
15EKRR1	Traction Power Substations and Switching Station Replacements - RR	This project is for designing the Powell Street Substation (MPS) and Walnut Creek (CWC) Substations on the M-Line and C-Line respectively.	\$303,152,040	\$123,052,040	\$123,052,040	\$30,580,899	\$3,970,416	\$3,411,223	\$63,432,981	35%	TBD
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	\$4,526,192	\$7,713,642	\$3,527,032	\$10,431,303	32%	FY29
15EK201	Portable and Mobile High Voltage Traction Power Substations	This project will procure portable substations, including controls and protection. Portable substations 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	\$16,370,622	\$18,438,625	\$1,236,069	\$7,010,512	27%	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	\$456,280	\$2,442,195	\$165,451	\$1,645,635	25%	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	\$2,050,000	\$2,050,000	\$559,845	\$994,916	\$0	\$468,923	23%*	FY24
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	\$68,309,981	\$68,309,981	\$13,102,865	\$13,195,599	\$16,876,779	\$21,793,645	19%	FY33
15EK601	East Bay Traction Power Substations - RR - C	Design, procure and install three new substations - one each on the C, K, and R-Lines in Moraga, Oakland and Richmond (CMR, KTF, RPA). Additionally design and procure one new substation (TPSS) and three new Gap Breaker Stations (GBS) for the Hayward Maintenance Complex.	\$133,588,865	\$133,588,865	\$80,817,332	\$7,991,874	\$53,792,510	\$53,169,600	\$7,488,437	7%	FY28
15EKRR5	Replacement of CWC Traction Power Substation, Switching Station and Gap Breakers - RR	Design, 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	\$66,300,000	\$120,000	\$18,668,846	\$17,103,074	\$0	0%*	FY28
15EKRR6	Replacement of MPS Traction Power Substation, Switching Station and Gap Breakers - RR	Design, furnish and install new Traction Power Substations (TPSS), Switching Stations (SS) and Gap Breaker Stations (GBS) at Civic Center 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	\$19,797,818	\$0	0%*	FY32
		Sub-Total	\$813,602,017	\$595,321,774	\$536,516,353	\$76,623,188	\$119,336,749	\$115,287,046	\$117,004,109		
		Total for CIP Category: Traction Power	\$1,541,900,819	\$1,285,036,188	\$1,217,472,057	\$210,514,340	\$240,072,771	\$201,730,353	\$627,062,060		

Project Summary Included

* % Complete Based on Cost

RR: Measure RR Program Projects
TBD: Project is On Hold

Security Sensitive Projects

C: Core Capacity

R1: 4th Tranche of Measure RR

ITALICS: Project Added FY23 Q3

6.3 Train Control and Communications



Project ID	Project Name	Project Scope Summary	Original Estimate at Completion	Current Estimate at Completion	Total Funded Budget	FY23 Budget	Forecasted FY24 Budget	Forecasted FY25 Budget	Spent to Date	% Complete Physical or Cost*	Closeout Date
20AK100	Track Circuit Monitoring Phase II	Implement tools to improve monitoring of critical wayside field devices. The initial project focus will be on network enhancements to improve Rolling Stock and Shops (RS&S), Maintenance and Engineering (M&E) and Operations Control Center (OCC) view into critical infrastructure, including the Fleet of the Future (FOTF). This is an extension of the federally-funded 20AK000 project.	\$3,000,246	\$2,961,860	\$2,961,860	\$83,057	\$0	\$0	\$2,961,860	100%	FY23
47CJ009	Clipper Card Dispensing BART TVM	Modify selected revenue ticket vending machines to dispense Clipper cards at all stations (including eBART), with installation by BART forces.	\$4,572,041	\$4,461,598	\$4,461,598	\$1,217	\$0	\$0	\$4,461,598	100%*	FY23
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	\$2,000,000	\$2,000,000	\$38,718	\$0	\$0	\$1,975,198	99%	FY23
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. Prep for additional yard with BSV II (Newhall Yard) Project is future replacement (next 30 years) after equipment standardization completed in SY0224.	\$6,205,966	\$6,205,966	\$6,205,966	\$24,398	\$0	\$0	\$6,140,219	99%	FY23
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	\$515,651	\$4,908	\$0	\$626,391	99%	FY24
20LX002	Replace Station Data Monitoring Switch	Implement a variety of systems and process improvements to reduce train delays.	\$371,729	\$371,729	\$371,729	\$406	\$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	\$60,153,488	\$60,153,488	\$3,991,811	\$2,405,380	\$1,649,880	\$56,871,921	98%	FY25
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	\$13,303,965	\$13,303,965	\$541,388	\$1,569,847	\$0	\$8,631,431	97%	FY24
20LT007	NET.COM Maintenance Support	Engage maintenance support services for the Net.com Train Control Network hardware spare parts repair and replacement.	\$850,000	\$1,015,000	\$1,015,000	\$551,563	\$333,903	\$239,259	\$955,761	94%*	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	\$31,177,783	\$31,177,783	\$1,920,496	\$2,678,144	\$403,233	\$28,556,273	93%	FY25
49GH002	CBTC RR Interlocks - RR - C	Perform enabling works at select interlock locations undergoing improvements.	\$22,841,774	\$20,870,000	\$20,870,000	\$1,098,291	\$3,688,888	\$2,826,500	\$19,008,877	91%*	FY34
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	\$222,672	\$1,368	\$0	\$2,157,570	90%	FY24
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	\$5,571,093	\$5,571,093	\$997,702	\$1,677,877	\$0	\$4,312,979	90%	FY24
		Sub-Total	\$151,177,667	\$151,552,481	\$151,552,481	\$9,987,371	\$12,360,315	\$5,118,872	\$137,017,202		

Project Summary Included

* % Complete Based on Cost

RR: Measure RR Program Projects

Security Sensitive Projects

C: Core Capacity

R1: 4th Tranche of Measure RR

TBD: Project is On Hold *ITALICS*: Project Added FY23 Q3

6.3 Train Control and Communications



Project ID	Project Name	Project Scope Summary	Original Estimate at Completion	Current Estimate at Completion	Total Funded Budget	FY23 Budget	Forecasted FY24 Budget	Forecasted FY25 Budget	Spent to Date	% 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	\$141,184	\$4,940	\$0	\$1,102,245	86%	FY24
79LV000	BARTNET/Control Systems Hardening	Districtwide Operational Technology networking Infrastructure (DOTI) system-wide and security systems replacement. 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: • delays in service caused by breaches • ensure customer facing data in available • increase the safety of passengers in the system 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	\$9,072,037	\$1,716,766	\$3,191,913	\$519,299	\$7,674,911	85%*	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	\$1,511,221	\$757,853	\$0	\$2,228,312	78%	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	\$2,568,995	\$2,568,995	\$1,062,766	\$1,569,541	\$888,609	\$1,642,185	76%	FY26
79PD000	Station Closed Circuit Television Upgrades	Replace existing CCTV cameras with high definition digital cameras systemwide (a BART Board Initiative) with design, installation, configuration and cut- over of new core and back-end architecture. Initial plans are to upgrade station CCTV cameras at 14 stations, with current funding supporting design and material procurement for the first 5 stations.	\$7,000,000	\$2,813,829	\$2,813,829	\$970,068	\$527,105	\$0	\$2,115,537	75%	FY24
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	\$144,114	\$0	\$0	\$284,665	70%	FY23
49GH001	CBTC Non-Participating - C	Implement the Train Control Modernization Program for the design, procurement, and installation of a communication-based train control system to replace BART's fixed-block train control system.	\$2,103,313	\$2,245,244	\$2,245,244	\$193,000	\$561,385	\$200,000	\$1,329,057	64%	FY25
20LK001	Wayside Coverboard Antenna Replacement	Procurement and replacement of coverboard antennas at all station platforms, implemented in 3 phases at 44 stations. Phase 1: 4 Platforms, Phase 2: 23 Platforms, Phase 3: 64 Platforms.	\$10,987,564	\$8,182,830	\$8,182,830	\$1,199,258	\$2,843,143	\$990,793	\$3,851,810	61%	FY27
20LN001	Wayside Line Replacement Unit	Development and delivery of prototype transmit (TX) and receive (RX) line replacement units (LRU) to replace the wayside legacy MUX units. They will adapt old circuits/electronics into a design suitable for future software and modern communication upgrades. They will be programmable, able to communicate, and replaceable in the field for faster return to service.	\$4,844,563	\$6,015,549	\$6,015,549	\$203,686	\$2,357,555	\$76,185	\$3,011,817	50%*	FY26
60BE000	SCADA - Replace PLC5 Equipment and Update Systems Architecture	Multi-phase project to architect, design, furnish, install, and configure new supervisory control and data acquisition (SCADA) system units to replace the old, end of life, programmable logic controller (PLC5) equipment that has no further vendor support and few spares available. Scope only covers 1st phase of architectural design and initial pilot deployment.	\$13,000,000	\$13,000,000	\$2,460,426	\$923,916	\$1,343,432	\$918,368	\$1,078,953	49%	FY29
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	\$3,657,500	\$888,266	\$3,192,007	\$2,382,873	\$1,098,315	33%	FY29
20LN003	Transmission Loop Replacement	This project will replace 10% of the aging transmission (Tx) loops and receiver (Rx) coils system-wide per year. Procure and install replacement transmission (Tx) loops and receiver (Rx) coils. Replacement required due to end of life cycle. Maintenance has determined locations for replacement.	\$4,588,243	\$4,588,243	\$3,041,164	\$573,730	\$742,665	\$1,085,865	\$2,475,221	29%	FY27
15TC004	Water Intrusion Mitigation in Train Control Rooms, R1 - RR	Assessments, rehabilitation designs and repairs to prevent water intrusion at train control (TC) rooms (17) and huts (6).	\$18,348,933	\$18,348,933	\$18,348,933	\$2,207,849	\$2,995,740	\$6,604,625	\$3,160,730	27%	FY27
		Sub-Total	\$83,805,480	\$79,276,805	\$64,023,397	\$11,735,824	\$20,087,279	\$13,666,617	\$31,053,759		

Project Summary Included

Security Sensitive Projects

* % Complete Based on Cost

C: Core Capacity
R1: 4th Tranche of Measure RR

RR: Measure RR Program Projects R1: 4th Tranche of Measure TBD: Project is On Hold ITALICS: Project Added FY23 Q3

6.3 Train Control and Communications

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	Project ID	Project Name	Project Scope Summary	Original Estimate at Completion	Current Estimate at Completion	Total Funded Budget	FY23 Budget	Forecasted FY24 Budget	Forecasted FY25 Budget	Spent to Date	% Complete Physical or Cost*	Closeout Date
	47CJ011	Bill Handling Unit Replacement	This project is to purchase and install bill recyclers in TVM and AFM. It will involve engineering design, purchase, and installation. BNR can use paid money for change, currently only coins can be given as change inconveniencing customers. The equipment is obsolete, and spare parts are unavailable. Although many payments are changing to credit card cash payments are still a significant percentage and are anticipated to continue.	\$6,305,113	\$7,147,277	\$7,147,277	\$6,067,755	\$2,807,376	\$621,837	\$1,143,396	19%	FY25
	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	\$3,409,749	\$3,409,749	\$951,410	\$598,670	\$639,683	\$1,879,097	14%	FY27
•	49GH004	CBTC Hitachi Design Build - RR - C	Design and Installation of the Communications-Based Train Control System.	\$1,028,983,942	\$1,720,698,069	\$1,087,662,240	\$160,257,046	\$199,670,873	\$144,341,713	\$141,615,838	11%	FY34
•	49GH006	CBTC Enabling Works 2 - RR - C	Train Control Room and Switch Machine Power Cabling upgrade.	\$94,827,380	\$101,990,000	\$101,990,000	\$17,191,483	\$21,262,363	\$21,193,094	\$7,198,625	8%	FY27
•	49GH005	CBTC Enabling Works 1 - RR - C	K-Line interlock cabling upgrade.	\$47,547,483	\$47,547,483	\$16,760,000	\$4,857,084	\$13,066,350	\$15,215,278	\$855,940	5%*	FY31
	20LL007	Replace Train Control VPI Vital System Equipment	This will standardize all VPI locations to be at the newer level of product 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	\$1,233,163	\$396,870	\$571,832	\$7,824	1%*	FY26
•	49GH007	CBTC VTA Phase 1	Installation of CBTC from Warm Springs to Berryessa (VTA SVBX).	\$108,517,716	\$121,276,266	\$200,000	\$200,000	\$1,000,000	\$1,000,000	\$0	0%	FY33
_			Sub-Total	\$1,291,441,383	\$2,003,068,844	\$1,218,169,266	\$190,757,941	\$238,802,503	\$183,583,437	\$152,700,721		
			Total for CIP Category: Train Control and Communications	\$1,526,424,530	\$2,233,898,131	\$1,433,745,145	\$212,481,136	\$271,250,096	\$202,368,925	\$320,771,682		

Project Summary Included

* % Complete Based on Cost

RR: Measure RR Program Projects
TBD: Project is On Hold

Security Sensitive Projects

C: Core Capacity

R1: 4th Tranche of Measure RR

ITALICS: Project Added FY23 Q3

6.4 Shops, Yards, and Facilities



Project ID	Project Name	Project Scope Summary	Original Estimate at Completion	Current Estimate at Completion	Total Funded Budget	FY23 Budget	Forecasted FY24 Budget	Forecasted FY25 Budget	Spent to Date	% Complete Physical or Cost*	Closeout Date
54RR250	Fire Services at Concord Yard - RR	Replace 50-year-old corroded, fire protection water lines, piping and systems control wiring at Concord Yard. The fire protection piping is at risk and starting to fail due to corrosion at a higher rate than normal.	\$7,848,091	\$7,462,119	\$7,462,119	\$235,027	\$0	\$0	\$7,462,119	100%	FY23
54RR270	Fire Services at Richmond Yard - RR	This project is to replace overhead doors at the end of their intended design life.	\$10,593,374	\$10,593,374	\$9,964,867	\$277,005	\$0	\$0	\$9,964,867	100%	FY23
54RR550	Replace Fire Suppression System at LMA - RR	Replace the existing fire protection system with a modern protection system (that uses environmentally friendly chemicals) in the operations control center (OCC), and the communications equipment rooms located at the Lake Merritt Annex facility (LMA).	\$2,733,767	\$2,733,767	\$1,251,907	\$101,346	\$0	\$0	\$1,251,907	100%	FY23
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 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	\$681,000	\$681,000	\$25,000	\$0	\$0	\$672,978	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	\$60,538	\$0	\$0	\$132,658,108	99%	FY23
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	\$1,818,840	\$1,818,840	\$5,000	\$4,555	\$0	\$1,534,539	99%	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	\$197,002	\$26,030	\$0	\$9,144,152	99%	FY24
54RR350	Turntables Replacement at Concord Yard - RR	This project will replace 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	\$7,475,436	\$7,475,436	\$2,619,206	\$114,155	\$0	\$5,638,772	98%	FY24
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	\$875,722	\$0	\$0	\$1,693,833	98%	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	\$209,487,311	\$60,538	\$0	\$0	\$206,301,357	98%*	FY23
54RR170	Replacement of Rotoclone - RR	Replace rotoclones replacement (wet dust collectors), 1 per shop.	\$4,078,391	\$4,428,391	\$4,428,391	\$65,773	\$111,374	\$0	\$4,217,665	95%	FY24
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 R20.	\$2,385,228	\$2,385,228	\$2,385,228	\$650,719	\$56,659	\$0	\$893,115	94%	FY24
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	\$200,609	\$199,750	\$250,000	\$564,067	93%	FY27
		Sub-Total	\$391,519,819	\$393,614,470	\$391,495,729	\$5,373,486	\$512,524	\$250,000	\$381,997,479		

Project Summary Included

* % Complete Based on Cost

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Security Sensitive Projects

C: Core Capacity

R1: 4th Tranche of Measure RR

ITALICS: Project Added FY23 Q3

6.4 Shops, Yards, and Facilities



Project ID	Project Name	Project Scope Summary	Original Estimate at Completion	Current Estimate at Completion	Total Funded Budget	FY23 Budget	Forecasted FY24 Budget	Forecasted FY25 Budget	Spent to Date	% 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	\$13,990,653	\$13,990,653	\$1,914,509	\$690,595	\$0	\$11,452,479	92%	FY24
15QL004	Aerial Guideway Sound Wall Repairs, C, R, and L-Lines	This project is for the renewal of sound walls and guideways along C, L and R Lines, as the supporting connections for the existing sound walls along the Lines are at the end of their useful lives and need to be redesigned and replaced. Sound wall panels are at risk of falling into the trackway or onto the roadway below.	\$16,840,261	\$17,000,000	\$3,200,000	\$1,061,720	\$255,285	\$0	\$977,634	90%	FY30
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	\$297,983	\$9,689	\$0	\$470,196	87%	FY24
54RR260	Fire Services at Hayward Yard - RR	This project is for the installation of a wet standpipe on the Dublin line tunnel section to enhance fire life safety. The Dublin line tunnel section is a 700 foot tunnel transition section between the Alameda line to Dublin line.	\$10,617,425	\$10,617,425	\$10,617,425	\$6,163,220	\$2,860,287	\$35,224	\$6,087,521	85%	FY25
20GH000		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	\$2,000,000	\$649,327	\$0	\$0	\$1,240,674	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	\$1,653,866	\$686,628	\$0	\$1,490,424	55%	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	\$885,371	\$1,818,090	\$1,123,687	\$1,673,231	46%	FY26
54RR110	Sewage Pump Replacement Systemwide - RR	This project will replace 32 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.	\$14,092,177	\$11,842,177	\$11,842,177	\$328,748	\$2,126,616	\$193,849	\$1,046,087	44%	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. Needs shovel-ready design.	\$2,240,860	\$2,240,860	\$2,240,860	\$683,751	\$90,486	\$1,020,162	\$886,052	43%	FY26
15QL003	Rehabilitation of Aerial Walkway at Y-Line	This project will rehabilitate, by assessing the condition and replace as required the walking surfaces on the Y-line aerial walkway. Specifically, the project will replace the steel walkway panels over HWY 101.	\$1,120,000	\$1,300,000	\$1,300,000	\$563,255	\$265,884	\$0	\$542,806	42%*	FY24
20CE002	Switch Machine Replacement - Model 6	This project is to replace Speed Frater with Model 6 Trailing Arm Switch Machines in local control areas. They are past end of life cycle. Failure of speed fraters limits revenue vehicle movement in the yards, and can impact revenue service due to delays.	\$2,811,990	\$2,556,777	\$2,556,777	\$17,745	\$1,417,197	\$1,467,484	\$2,344,813	38%	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	\$204,209	\$730,176	\$76,338	\$191,677	37%	FY25
01RQ100	Hayward Maintenance Complex Phase 2 PE - RR - C	The Hayward Maintenance Complex (HMC) Phase 2 project will construct an East Storage Yard designed to house BART revenue cars and provide a northern and southern link to the BART main lines, A1 and A2, and the Hayward Test Track (HTT) and thereby support the activities of the Core Capacity Program. The Project includes the construction of a train control facility, traction power sub-station, a pedestrian/cart bridge and numerous retaining walls. The project will be sub-divided into three contracts to include rail and special trackwork procurement, civil grading and leveling of the property, and track and utility placement for the storage yard which includes the train control and traction power systems.	\$93,241,068	\$181,748,752	\$181,748,752	\$30,711,522	\$21,800,000	\$456,000	\$26,310,203	33%	FY25
		Sub-Total	\$163,892,152	\$252,673,412	\$238,873,412	\$45,135,227	\$32,750,932	\$4,372,744	\$54,713,798		

Project Summary Included

* % Complete Based on Cost

RR: Measure RR Program Projects

Security Sensitive Projects

C: Core Capacity

R1: 4th Tranche of Measure RR

ITALICS: Project Added FY23 Q3

6.4 Shops, Yards, and Facilities

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Project ID	Project Name	Project Scope Summary	Original Estimate at Completion	Current Estimate at Completion	Total Funded Budget	FY23 Budget	Forecasted FY24 Budget	Forecasted FY25 Budget	Spent to Date	% 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 (By PD&C), 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	\$43,583	\$0	\$0	\$218,705	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	\$1,411,664	\$10,292,345	\$0	\$683,204	27%*	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	\$1,284,773	\$1,284,773	\$127,507	\$93,670	\$0	\$441,856	19%	FY27
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	\$19,879,110	\$19,879,110	\$1,691,105	\$10,163,734	\$5,427,732	\$2,560,826	16%	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.	\$42,500,000	\$9,789,235	\$9,789,235	\$3,367,421	\$2,888,478	\$778,299	\$1,515,646	15%*	FY27
03QJ001	Concord Yard Wheel Truing Facility - RR	Work consists of design and construction of a wheel truing facility including building and structures, mechanical, electrical, communications, and fire protection systems, architectural finishes, site work, asphalt paving, jack and bore utility installations, ballasted and embedded trackwork, special trackwork installation, traction power tie in and third rail installation, electrical and systems work, bridge crane procurement, installation, testing, and commissioning, wheel truing equipment coordination; equipment pit and foundation construction, facility equipment procurement and installation.	\$32,300,000	\$67,785,373	\$25,348,170	\$980,527	\$562,586	\$990,158	\$3,148,753	15%	FY27
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	\$803,843,285	\$144,909,143	\$23,418,193	\$33,000,000	\$86,000,000	\$24,935,904	15%	FY28
15CQ020	Track Renewal Project Richmond Yard, R1 - 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	\$365,822	\$7,939,746	\$6,944,412	\$2,246,495	8%	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.	-	\$999,999	\$1,000,000	-	\$1,000,000	\$1,000,000	\$269	1%	FY26
03QJ101	Concord Yard Wheel Truing Machine - RR	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	\$1,350,503	\$0	\$0	\$0	0%*	FY27
		Sub-Total	\$485,126,530	\$965,462,529	\$253,591,184	\$32,756,326	\$65,940,559	\$101,140,601	\$35,751,660		
		Total for CIP Category: Shops, Yards, and Facilities	\$1,040,538,501	\$1,611,750,410	\$883,960,326	\$83,265,039	\$99,204,015	\$105,763,346	\$472,462,937		

Project Summary Included

* % Complete Based on Cost

RR: Measure RR Program Projects
TBD: Project is On Hold

Security Sensitive Projects

C: Core Capacity

R1: 4th Tranche of Measure RR

6.5 Track and Structures



Project ID	Project Name	Project Scope Summary	Original Estimate at Completion	Current Estimate at Completion	Total Funded Budget	FY23 Budget	Forecasted FY24 Budget	Forecasted FY25 Budget	Spent to Date	% Complete Physical or Cost*	Closeout Date
15CQ001	Rail, Ties, and Fasteners Renew and Replace - RR	On-going rehabilitation of track components and materials. Project received Federal funds and addresses work that is not eligible for Bond funding under 15CQ002.	\$40,217,385	\$39,969,350	\$39,969,350	\$16,403	\$0	\$0	\$39,969,350	100%	FY23
15CQ009	System Joint Elimination - RR	Flash butt welding in the Richmond Yard.	\$5,278,024	\$1,955,891	\$1,955,476	\$429,222	\$0	\$0	\$1,955,476	100%*	FY23
15CQ011	Interlocking Replacement at A65/A75 - RR	This project will remove the existing jointed rail connections and replace them with welded connections.	\$33,700,000	\$28,700,000	\$28,700,000	\$707,910	\$5,602	\$0	\$23,862,383	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	\$26,731,856	\$26,731,856	\$4,146,392	\$2,524,452	\$0	\$17,955,870	100%	FY24
15TC017	Substation Walls Renewal - RR	Repair rusted and cracked walls at 18 substations using BART forces. All metal surfaces with signs of oxidation and rust will be treated (with SSPC-3), by power tool cleaning the metal surface, applying a coat of rust prohibitive epoxy paint and thirdly a marine grade polyurethane finish coat for weather protection.	\$536,800	\$536,800	\$515,737	\$1,831	\$0	\$0	\$515,737	100%	FY23
15TC021	Water Mitigation at Station and Platform Joints (C and R-Line) - RR	This project will be a complete design and construction of trackway and six station platforms for water intrusion on the C&R Lines. Design package for mitigation will be prepared based on assessment and repairs to be outsourced.	\$1,753,581	\$1,753,581	\$1,753,581	\$10,000	\$0	\$0	\$1,081,307	100%	FY23
15TC022	Water Mitigation at Station and Platform Joints (A-Line) - RR	This project is for the complete design and construction of trackway and eight station platforms for water intrusion on the A Line. Design package for mitigation will be prepared based on assessment and repairs to be outsourced. Design is partially complete.	\$1,637,383	\$1,637,383	\$1,637,383	\$10,000	\$0	\$0	\$893,884	100%	FY23
54RR450	TransBay Tube Dampers Overhaul - RR	This project will replace 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. Seismic retrofit brought up several ventilation leakage concerns.	\$3,131,454	\$3,131,454	\$3,131,454	\$45,972	\$0	\$0	\$790,381	100%	TBD
15CQ012	Interlocking Replacement at A77 - RR	This project upgrades the existing wood ties to concrete ties at switches. The useful life of concrete ties is 50 years versus the predicted useful life of wood ties which is 36 years. The predicted useful life of wood ties is based on traffic volume, decay rate of wood, and curvature as specified in Tie Report #1 published by the Railroad Tie Association. Further, the required track maintenance to maintain a State of Good Repair such as track surfacing, tie replacement, fastener replacement, and track re-gauging on concrete ties is expected to be notably less compared to a wood tie turnout.	\$34,338,000	\$34,338,000	\$34,338,000	\$12,441,578	\$802,241	\$0	\$30,057,226	99%	FY24
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	\$24,434	\$0	\$0	\$1,430,482	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	\$367,433	\$49,109	\$0	\$2,086,388	99%	FY24
79HV000	Lake Merritt Tunnel and Station Security Hardening	CCTV, access control and the fiber (UON) network installation at Lake Merritt Station Concourse, Platform, Train Control Room and Lake Merritt (METG) hallways and tunnels, including the M-Line UON as-built documentation.	\$6,558,127	\$6,558,127	\$6,423,127	\$1,831	\$0	\$0	\$6,410,730	99%	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	\$106,349	\$0	\$0	\$3,200,697	98%	FY23
		Sub-Total	\$164,098,374	\$155,528,204	\$155,371,726	\$18,309,355	\$3,381,404	\$0	\$130,209,910		

Project Summary Included

* % Complete Based on Cost

RR: Measure RR Program Projects R:

Security Sensitive Projects

C: Core Capacity

R1: 4th Tranche of Measure RR

ITALICS: Project Added FY23 Q3

6.5 Track and Structures



Project ID	Project Name	Project Scope Summary	Original Estimate at Completion	Current Estimate at Completion	Total Funded Budget	FY23 Budget	Forecasted FY24 Budget	Forecasted FY25 Budget	Spent to Date	% Complete Physical or Cost*	Closeout Date
15TC020	Assessment of Expansion Joints at Bridge Abutments - RR	The general scope of this project consists of assessing abutment expansion joints and repairing 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	\$3,148,505	\$1,295,099	\$153,539	\$30,935	\$0	\$1,092,336	98%	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	\$973,767	\$2,034,413	\$4,661	\$27,376,323	96%	FY25
15CQ003	Replace Rails, Ties, Fasteners on Y-Line	Replace Restraining rail and running rail on the Y-Line, W-line and S-Line Repair	\$3,097,000	\$5,247,000	\$5,247,000	\$755	\$1,002,766	\$962,140	\$2,882,432	93%	FY25
15CQ018	Rail Relay Replacement in Core System - RR	Replace 90 miles of rail in legacy system.	\$57,000,000	\$60,322,134	\$60,322,134	\$7,993,591	\$3,583,444	\$913,428	\$51,542,855	90%	FY25
15TC023	Fence Rehabilitation Systemwide - RR	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.	\$17,150,000	\$11,765,693	\$11,765,693	\$436,062	\$2,581,488	\$1,194,646	\$8,092,038	84%	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	\$177,211,155	\$177,211,155	\$12,928,961	\$9,541,553	\$9,688,015	\$142,786,892	83%	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	\$217,081	\$391,514	\$0	\$929,011	82%	FY24
15CQ019	Frog Capital Maintenance, R1 - 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	\$1,022,831	\$819,059	\$91,165	\$3,266,855	81%	FY25
15TD000	Non-Revenue Vehicle Equipment Procurement (Grinders, Geocar, and Wayside Equipment)	Procure equipment for various wayside rehabilitation projects.	\$79,057,443	\$81,055,362	\$81,055,362	\$2,363,012	\$4,938,883	\$0	\$65,078,827	81%	FY27
15CQ021	Replacement of Switch Point Components in Yards, R1 - 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	\$66,928	\$599,037	\$626,998	\$3,613,816	79%	FY28
15TC014	Cross Passage Doors and Hardware Upgrade - RR	Assessing cross passage doors systemwide and repair or replace as needed on C, L, R, L Lines and Oakland Wye. The doors are an enhancement to the current system because of their fire rating label, self closing- equipped with tandem closers, three point latching system and in the BHT the new doors are wider.	\$5,400,000	\$3,891,517	\$3,891,517	\$296,449	\$1,989,406	\$0	\$1,778,246	79%	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	\$494,571	\$4,940	\$525,649	\$387,008	78%	FY25
15TG001	M87 Spur Track Extension	Extend the existing Daly City (M87) spur track by an additional 350'. This will allow enough room to store an 800' rail train, plus one prime mover locomotive. The current length of the track does not allow for this storage option.	\$1,862,790	\$1,925,000	\$1,925,000	\$178,005	\$475,565	\$0	\$992,553	75%	FY24
		Sub-Total	\$387,246,369	\$388,720,558	\$386,867,152	\$27,125,553	\$27,993,003	\$14,006,702	\$309,819,191		

Project Summary Included

* % Complete Based on Cost

RR: Measure RR Program Projects

Security Sensitive Projects

C: Core Capacity

R1: 4th Tranche of Measure RR

6.5 Track and Structures



Project I	Project Name	Project Scope Summary	Original Estimate at Completion	Current Estimate at Completion	Total Funded Budget	FY23 Budget	Forecasted FY24 Budget	Forecasted FY25 Budget	Spent to Date	% Complete Physical or Cost*	Closeout Date
15CR00	Track Alignment Survey and Documentation Update	The project will update BART's track alignment survey and documentation required to support track maintenance, interlocking replacements, GeoCar baseline, and CBTC implementation. The project will include the mapping of existing assets and structures within the Right of Way.	\$3,100,000	\$4,900,000	\$3,100,000	\$2,379,609	\$388,352	\$472,595	\$1,728,113	75%	FY25
15CS00	Preventative Maintenance Procedures Improvement	Review Preventative Maintenance requirements for all M&E assets for code compliance and safety requirements.	\$5,340,000	\$6,170,000	\$6,170,000	\$2,505,079	\$1,474,367	\$445,520	\$3,639,716	71%	FY25
15TQ00	Post-Earthquake Inspection Program Improvement	This project will facilitate the review and updating of BART's maintenance strategies 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.	\$2,100,000	\$2,100,000	\$2,100,000	\$679,594	\$352,400	\$838,196	\$663,528	70%	FY25
15CQ01	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	\$2,632,354	\$1,706,168	\$2,358,814	\$10,252,316	69%	FY28
15QN00	Water Mitigation W-Line Tunnel	This project is a structural assessment of tunnels on W Line to determine existing conditions. Concrete cut-and-cover tunnels on W Line do not have adequate safeguards against water intrusion. Water leaks are corroding all metal components in tunnel including track, traction power and train control facilities which could lead to service interruptions. Infrastructure is deteriorating rapidly.	\$6,542,000	\$6,542,000	\$6,542,000	\$1,907,403	\$1,005,305	\$971,833	\$3,476,069	66%	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, rand 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	\$160,284,121	\$160,284,121	\$10,783,057	\$9,786,509	\$9,671,443	\$44,490,923	60%	FY28
91HG00	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	\$1,645,000	\$1,645,000	\$186,173	\$92,810	\$0	\$797,761	48%*	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	\$1,025,512	\$1,492,864	\$1,446,267	\$1,507,986	46%	FY26
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 initial estimated number of signs to be installed or replaced is 1200.	\$2,207,290	\$2,207,290	\$2,207,290	\$494,491	\$409,372	\$388,749	\$857,020	45%	FY26
15QN00	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	\$1,157,865	\$1,829,378	\$3,688,787	\$4,705,120	43%	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	\$148,792	\$0	\$0	\$259,595	43%*	FY24
15TC01:	Slope Stabilization Systemwide, R1 - RR	Assessment of 104 eroded slopes locations 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. 4 critical slopes repairs on the L and M-Line will be performed by Contractors, while stabilization and remediation of the remaining 21 slopes on A and C-Lines will be performed by BART forces.	\$13,670,061	\$14,000,000	\$10,931,205	\$2,674,621	\$8,592,287	\$2,307,650	\$2,394,873	40%	FY27
15TQ00	Assess and Repair Steel Bridges at A-Line	Repair the Washington Ave steel bridge based on the inspection performed in the previous bi-annual bridge inspection.	\$2,467,673	\$2,467,673	\$1,400,000	\$108,769	\$969,242	\$0	\$242,871	40%	FY26

\$230,454,963

Sub-Total

\$234,829,608

\$228,893,141

\$26,683,319

Project Summary Included

\$22,589,854

\$75,015,892

* % Complete Based on Cost

RR: Measure RR Program Projects
TBD: Project is On Hold

\$28,099,054

Security Sensitive Projects

C: Core Capacity

R1: 4th Tranche of Measure RR

ITALICS: Project Added FY23 Q3

6.5 Track and Structures

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	Project ID	Project Name	Project Scope Summary	Original Estimate at Completion	Current Estimate at Completion	Total Funded Budget	FY23 Budget	Forecasted FY24 Budget	Forecasted FY25 Budget	Spent to Date	% 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 availably of the current fleet.	\$28,505,869	\$26,389,236	\$26,389,236	\$7,900,408	\$1,497,557	\$14,937,090	\$9,121,714	35%*	FY28
	15TC018	Aerial Catwalk Renewal - RR	This project will rehabilitate or replace handrails and walking surfaces, as required. There are hazards to employees and patrons (during emergency egress situation) associated with deteriorated handrails, uneven walking surfaces or obstructions in the walkway which need to be addressed. Replace and install ground connections to handrails. Relocate obstructions. \$5M per year, in house performed.	\$9,086,388	\$9,086,374	\$9,086,374	\$1,379,364	\$1,882,059	\$1,997,408	\$1,873,531	23%	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	\$3,350,000	\$3,350,000	\$215,349	\$270,000	\$1,907,534	\$506,829	19%	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	\$2,879,267	\$2,059,468	\$267,205	\$1,873,188	19%	FY27
	15CH001	Tail Track Extensions	This project upgrades existing tail tracks at the Millbrae and Dublin-Pleasanton stations that currently have an 8-car train storage capacity to a 10-car storage capacity. These improvements are essential to increase systemwide operational capacity to accommodate the SVRT Extension.	\$18,459,057	\$18,459,057	\$18,459,057	\$8,828,711	\$2,812,015	\$8,008,989	\$3,361,184	18%	FY25
	15TC015	Water Mitigation R-Line Tunnel - RR	Mitigate water intrusion in the Oakland Wye and section of M-Line Steel Tunnel. Repairs (by a Contractor) are planned to include 2250 feet of tunnel circumference, 820 feet of lining along the safe walking platform side, and 655 feet of lining adjacent to the third rail.	\$8,548,049	\$11,766,000	\$11,766,000	\$243,784	\$7,102,601	\$1,214,733	\$1,631,459	16%	FY27
	15CQ008	Interlocking Replacement at K23, K25, and C15 - RR	Upgrade the District infrastructure on the K Line and C Line, at the K23, K25, K35, C15 interlockings, including track components (replace 32 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	\$15,571,354	\$15,983,916	\$37,619,990	\$14,507,916	14%	FY26
	15CQ015	Interlocking Replacement at A85, R1 - RR	This project will upgrade the district infrastructure at the Fremont (A85) interlocking, including track and train control components.	\$13,626,906	\$13,627,006	\$13,627,006	\$3,924,324	\$11,149,131	\$774,255	\$524,423	10%	FY25
	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	\$1,266,703	\$2,474,997	\$6,669,662	\$1,011,168	9%*	FY26
	15TH002	Water Mitigation A and S-Line Tunnels	This project will waterproof tunnel and facilities on W Line. Project will complete design and repairs for locations determined by Phase 1 (WF0407). Concrete cut-and-cover tunnels on W and S Line do not have adequate safeguards against water intrusion. Water leaks are corroding all metal components in tunnel including track, traction power and train control facilities which could lead to service interruptions. Infrastructure is deteriorating rapidly.	\$500,000	\$500,000	\$500,000	\$248,603	\$166,480	\$0	\$45,432	9%*	FY24
	15TC010	Water Mitigation M-Line Tunnel, R1 - 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	\$501,134	\$7,604,502	\$18,081,649	\$2,236,043	6%*	FY29
	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	\$2,629,125	\$1,669,972	\$389,326	\$989,856	5%*	FY30
	15CQ022	Procurement of Direct Fixation Fasteners	Procure and install direct fixation pads in the legacy system area. This includes material procurement, project management, and engineering support. These new pads replace the existing dilapidated pads with multiple bolts and screws attaching the assemblies in place.	\$3,304,051	\$3,304,165	\$3,304,165	\$1,995,340	\$1,986,077	\$1,149,317	\$0	0%	FY25
_			Sub-Total	\$297,745,856	\$300,693,783	\$300,693,783	\$47,583,466	\$56,658,775	\$93,017,157	\$37,682,742		
			Total for CIP Category: Track and Structures	\$1,079,545,563	\$1,079,772,153	\$1,071,825,801	\$119,701,693	\$116,132,236	\$129,613,714	\$552,727,736		

Project Summary Included

* % Complete Based on Cost

C: Core Capacity RR: Measure RR Program Projects

TBD: Project is On Hold

R1: 4th Tranche of Measure RR ITALICS: Project Added FY23 Q3

Security Sensitive Projects

6.6 Stations



Proj	ect ID	Project Name	Project Scope Summary	Original Estimate at Completion	Current Estimate at Completion	Total Funded Budget	FY23 Budget	Forecasted FY24 Budget	Forecasted FY25 Budget	Spent to Date	% Complete Physical or Cost*	Closeout Date
05H	A001	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	\$71,736,658	\$61,286,659	\$4,740,785	\$200,000	\$250,000	\$57,952,503	100%	FY25/26
15T	C011	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	\$37,850	\$0	\$0	\$5,024,047	100%	FY23
470	J013	UPS for Automatic Fare Collection System	This project will renew UPS and modify Automatic Fare Collection (AFC) equipment software to monitor the status of Uninterruptible Power Supply (UPS). Monitoring ensures that the equipment operate properly in a power loss condition, including proper shutdown, open barrier for emergency egress and alarm monitoring.	\$866,472	\$866,472	\$232,396	\$272,795	\$0	\$0	\$232,396	100%*	FY24
470	J017	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	\$5,760,000	\$5,760,000	\$633,651	\$801,250	\$466,412	\$4,697,130	99%	FY25
15Q	H000	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	\$21,784,668	\$21,784,668	\$50,000	\$0	\$0	\$21,145,709	98%	FY24
151	F003	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	\$27,127,113	\$27,127,113	\$11,824,856	\$4,585,071	\$0	\$22,159,995	98%	FY24/25
01V	И001	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	\$452,626	\$500,000	\$600,000	\$22,943,563	98%	FY27
07E	A011	Station Modernization at 19th St. Station - RR	Installation of new infrastructure/fixtures 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) Tile Repair: Limited blue tile replacement located near stair cases and seating areas.	\$61,139,950	\$65,887,685	\$61,194,236	\$12,273,635	\$500,000	\$0	\$51,076,932	98%	FY25
47C	C004	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	\$3,140,000	\$3,140,000	\$393,724	\$218,586	\$0	\$3,063,419	97%	FY24
15L	N000	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	\$10,440,570	\$10,320,570	\$5,000	\$100,000	\$0	\$9,649,258	93%*	FY24
15T	0005	Water Mitigation Escalator and Elevator Machine Rooms, R1 - 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	\$124,576	\$175,664	\$0	\$1,032,711	93%	FY24
91A	3005	San Bruno Art Exhibit Fabrication	Art Exhibit and installation at San Bruno BART station to replace prior exhibit.	\$184,412	\$194,412	\$194,412	\$79,141	\$0	\$0	\$178,219	92%*	FY23
111.	\002	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	\$11,600,000	\$11,600,000	\$124,026	\$733,140	\$752	\$10,277,195	92%	FY25
			Sub-Total	\$243,216,537	\$250,504,879	\$234,607,355	\$31,012,665	\$7,813,711	\$1,317,164	\$209,433,077		

Project Summary Included

* % Complete Based on Cost

RR: Measure RR Program Projects R1: 4th T

TBD: Project is On Hold

Security Sensitive ProjectsC: Core Capacity

R1: 4th Tranche of Measure RR

ITALICS: Project Added FY23 Q3

6.6 Stations

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Project ID	Project Name	Project Scope Summary	Original Estimate at Completion	Current Estimate at Completion	Total Funded Budget	FY23 Budget	Forecasted FY24 Budget	Forecasted FY25 Budget	Spent to Date	% 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.	\$70,000,000	\$3,300,000	\$3,058,069	\$840,240	\$0	\$0	\$3,058,069	90%	TBD
02DD000	WSX Irvington Station Design	Design (only funded phase at present) of Irvington Infill Station.	\$18,450,000	\$21,210,000	\$18,450,000	\$5,293,225	\$5,720,000	\$2,100,000	\$15,908,053	86%*	FY25
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	\$78,675	\$37,402	\$0	\$348,409	85%	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	\$2,435	\$0	\$0	\$238,563	82%*	FY23
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. Deterring of fare evasion and entry of non paying passengers into the system increases safety and quality of life of BART patrons.	\$21,137,630	\$21,137,630	\$21,137,630	\$4,228,242	\$254,993	\$0	\$17,103,158	81%*	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	\$9,086,932	\$35,306	\$0	\$0	\$7,489,717	81%	FY23
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	\$1,911,450	\$836,877	\$0	\$4,782,625	81%	FY24
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	\$1,280,840	\$1,280,790	\$171,588	\$496,372	\$0	\$1,038,867	81%*	FY24
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	\$338,551	\$25,138	\$0	\$1,732,574	78%	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	\$2,197,000	\$2,197,000	\$87,903	\$129,639	\$0	\$2,064,971	75%	FY24
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	\$906,366	\$906,366	\$565,211	\$434,572	\$0	\$507,294	74%	FY24
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	\$1,000,000	\$1,000,000	\$909,441	\$0	\$0	\$725,938	73%*	FY24
15LK003	Powell Street Elevator Renovation	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	\$509,691	\$613,517	\$36,489	\$563,037	70%	FY25
		Sub-Total Sub-Total	\$137.385.685	\$71.437.942	\$68.115.960	\$14.971.956	\$8.548.510	\$2.136.489	\$55.561.274		

Project Summary Included

* % Complete Based on Cost

RR: Measure RR Program Projects
TBD: Project is On Hold

Security Sensitive Projects

C: Core Capacity

R1: 4th Tranche of Measure RR

6.6 Stations



Project ID	Project Name	Project Scope Summary	Original Estimate at Completion	Current Estimate at Completion	Total Funded Budget	FY23 Budget	Forecasted FY24 Budget	Forecasted FY25 Budget	Spent to Date	% 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	\$3,414,750	\$3,414,750	\$1,138,455	\$318,496	\$0	\$2,371,132	69%*	FY25
15IM000	DSS Pilot Project	This project will design, furnish, install, and configure replacement destination sign units. Rewrite the software to communicate with the new sign technology. Multi-phase project. Replace all platform destination signs (total of 466 signs) and 10% spares. Current signs are end of life and are becoming unreadable at many locations. Maintenance costs are increasing. No spare parts available and are no longer manufactured by the vendor. New full color signs would improve the customer experience, such as 3rd door on new train cars. There are significant potential revenue opportunities through advertisements. Need a shovel ready design and project plan to address known issues.	\$14,500,000	\$14,500,000	\$3,371,427	\$1,514,226	\$1,448,428	\$3,491,435	\$1,962,235	65%	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	\$1,831	\$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	\$36,748	\$48,588	\$0	\$169,012	64%*	FY26
59DE001	Access Facility Reconfiguration	Implement signage and striping changes to support implementation of access programs.	\$250,000	\$250,000	\$250,000	\$20,000	\$20,000	\$20,000	\$155,162	62%*	FY30
15OB001	Landscape Improvements Systemwide	Landscape improvements and vegetation management, district-wide.	\$357,030	\$557,030	\$557,030	\$64,184	\$224,471	\$155,331	\$346,423	61%	FY26
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	\$192,967	\$45,000	\$45,000	\$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.	-	\$1,000,000	\$1,000,000	-	\$352,224	\$0	\$56,475	60%	FY24
15QQ000	Parking Program Modernization	Integrate parking payments into the BART mobile app; implement automated enforcement.	\$2,890,977	\$2,890,977	\$2,890,977	\$1,320,688	\$694,000	\$202,000	\$1,745,611	60%*	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	\$800,688	\$800,688	\$105,257	\$150,000	\$200,000	\$401,642	57%	FY30
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	\$752,494	\$750,000	\$503,592	\$1,647,726	53%	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	\$1,852,500	\$1,852,500	\$846,884	\$4,472,461	\$10,679,678	\$1,075,881	49%	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	\$17,468,651	\$14,800,000	\$14,500,000	\$52,124,545	46%*	FY31

\$146,818,713

\$143,129,362

\$132,000,789

\$23,462,386

Project Summary Included

\$23,323,668

* % Complete Based on Cost

RR: Measure RR Program Projects

R1: 4th Tranche of Measure RR **TBD:** Project is On Hold

\$29,797,036

\$62,225,048

ITALICS: Project Added FY23 Q3

Security Sensitive Projects

C: Core Capacity

6.6 Stations



	Project ID	Project Name	Project Scope Summary	Original Estimate at Completion	Current Estimate at Completion	Total Funded Budget	FY23 Budget	Forecasted FY24 Budget	Forecasted FY25 Budget	Spent to Date	% 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.	\$5,089,909	\$7,815,447	\$7,815,447	\$1,037,444	\$2,500,000	\$2,000,000	\$2,416,695	43%	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	\$470,065	\$0	\$0	\$348,479	42%*	FY23
	17BJ001	Lake Merritt Plaza Design - RR	Fully upgrade 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	\$389,076	\$50,000	\$0	\$2,509,152	33%*	FY31
	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	\$5,345,445	\$1,540,000	\$1,650,000	\$473,661	33%*	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	\$6,445,023	\$3,500,000	\$800,000	\$3,702,431	32%*	FY31
	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. The current funded budget is for Design only.	\$5,033,000	\$1,606,002	\$1,606,002	\$0	\$0	\$0	\$491,715	31%	TBD
	15LK002	Market Street Escalators Renovation 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	\$128,757,731	\$22,078,862	\$26,500,000	\$28,000,000	\$36,245,834	29%	FY31
	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	\$1,072,805	\$0	\$0	\$1,754,853	27%*	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	\$16,636,250	\$16,636,250	\$8,255,493	\$6,709,123	\$23,977	\$9,694,405	25%	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	\$21,976	\$1,234,436	\$319,686	\$228,432	25%	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	\$2,426,690	\$4,900,000	\$7,800,000	\$8,744,263	22%*	FY31
	15NE002	Public Address System Improvement - RR	Installation of a new public address system, including electrical, communications, equipment installation, testing, and commissioning at Lafayette, Powell, and Richmond Stations.	\$10,812,933	\$9,109,683	\$9,109,683	\$810,589	\$2,500,000	\$2,000,000	\$2,038,164	22%*	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	-	\$24,107,936	\$14,812,698	-	\$0	\$5,000,000	\$3,029,686	20%*	FY28
	57RR209	MacArthur Station Active Access Improvements - RR	Project will improve the lighting 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	\$3,094,642	\$350,307	\$125,000	\$3,500,000	\$605,936	20%*	FY31
			Sub-Total	\$327,244,036	\$293,003,417	\$251,692,834	\$48,703,772	\$49,558,559	\$51,093,663	\$72,283,707		

Project Summary Included

Security Sensitive Projects

* % Complete Based on Cost

C: Core Capacity

RR: Measure RR Program Projects R1: 4
TBD: Project is On Hold ITALICS: F

R1: 4th Tranche of Measure RR

ITALICS: Project Added FY23 Q3

6.6 Stations



Project ID	Project Name	Project Scope Summary	Original Estimate at Completion	Current Estimate at Completion	Total Funded Budget	FY23 Budget	Forecasted FY24 Budget	Forecasted FY25 Budget	Spent to Date	% 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	\$473,528	\$200,000	\$200,000	\$252,400	18%*	FY31
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	\$1,822,773	\$150,000	\$1,546,732	\$409,081	17%	FY31
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	\$8,262,378	\$8,262,378	\$1,533,247	\$1,563,129	\$4,791,309	\$958,273	17%	FY27
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	\$2,616,165	\$4,322,496	\$6,624,462	\$1,666,371	16%	FY27
91GL029	A-Line Jobs Attraction Strate	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	\$203,350	\$203,350	\$0	\$68,691	16%*	FY24
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	\$209,972	\$0	\$0	\$225,450	15%*	FY25
27AG000	Emergency Phone VOIP Upgrade	This project is to upgrade VoIP equipment, Maintenance to complete upgrade to current BFS. 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	\$766,616	\$602,802	\$0	\$104,272	13%*	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	\$702,103	\$0	\$786,000	\$93,600	10%*	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	\$15,614,483	\$15,614,483	\$200,326	\$150,000	\$0	\$1,461,372	9%*	FY31
47CJ012	Next Generation Fare Gate Procurement and Deployment - 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.	\$90,000,000	\$90,000,000	\$32,878,250	\$1,791,178	\$23,479,525	\$23,666,713	\$2,761,532	8%*	FY27
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	\$42,888,707	\$27,164,553	\$1,616,498	\$1,199,935	\$11,178,271	\$565,092	8%	FY29
54RR240	Upgrade Fire Suppression System, R1 - RR	This project is to replace all fire protection system sprinkler heads that reach 50 years of age (mainly in Core stations, 40). Requires funding for execution. Fire protection system sprinkler heads require replacement after 50 years per NFPA 25 5.3.1.1.1.	\$2,181,000	\$5,805,000	\$5,805,000	\$1,024,049	\$2,146,465	\$2,152,119	\$372,713	6%*	FY28
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	\$3,684,179	\$3,600,000	\$3,600,000	\$1,580,182	6%*	FY31
15JA004	Electric Vehicle Charging Stat	Grant cost estimates, procurement support, design and construction for EV charging stations for passengers and at shops and yards for NRVE.	-	\$2,000,000	\$2,000,000	-	\$750,000	\$1,250,000	\$0	5%	FY28
		Sub-Total	\$182,782,424	\$211,552,792	\$138,706,888	\$16,643,983	\$38,367,702	\$55,795,606	\$10,519,029		
		Total for CIP Category: Stations	\$1,037,447,394	\$969,628,392	\$825,123,827	\$134,794,763	\$127,612,151	\$140,139,958	\$410,022,134		

Project Summary Included

Security Sensitive Projects

* % Complete Based on Cost

RR: Measure RR Program Projects

R1: 4th Tranche of Measure RR

ITALICS: Project Added FY23 Q3

TBD: Project is On Hold

C: Core Capacity

6.7 Seismic Programs



	Project ID	Project Name	Project Scope Summary	Original Estimate at Completion	Current Estimate at Completion	Total Funded Budget	FY23 Budget	Forecasted FY24 Budget	Forecasted FY25 Budget	Spent to Date	% 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 Zones 1, 2, 3, and 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	\$594,482,881	\$69,252,367	\$23,382,000	\$0	\$498,988,931	95%	FY24
			Total for CID Category: Seismic Programs	\$59 <i>4 4</i> 82 881	\$59 <i>4 4</i> 82 881	\$594.482.881	\$69 252 367	\$23 382 000	\$0	\$498 988 931		

Project Summary Included

* % Complete Based on Cost RR: Measure RR Program Projects

Security Sensitive Projects

C: Core Capacity

R1: 4th Tranche of Measure RR ITALICS: Project Added FY23 Q3

6.8 System Expansion



Project II	Project Name	Project Scope Summary	Original Estimate at Completion	Current Estimate at Completion	Total Funded Budget	FY23 Budget	Forecasted FY24 Budget	Forecasted FY25 Budget	Spent to Date	% Complete Physical or Cost*	Closeout Date
0480000	eBART - Pre Revenue	eBART pre-revenue operational services review and certification activities.	\$14,960,596	\$14,938,112	\$14,938,112	\$1,831	\$0	\$0	\$14,898,820	100%*	FY23
91BX002	BART Metro 2030 and Beyond	This project will re-examine the BART Metro Concept (identified in the 2013 Sustainable Communities Operations Analysis Study (SCOA)) and revise it so that it can be implemented in conjunction with Core Capacity investments and other capacity changes. Additionally, the study will account for changing travel demand patterns driven by revised land use assumptions developed as part of BART's AB 2923 planning and regionally adopted land use plans from Plan Bay Area.	\$554,559	\$584,559	\$584,559	\$157,784	\$0	\$0	\$578,682	100%	FY23
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	\$72,200	\$0	\$0	\$15,550,125	98%	FY23
02HB00°	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	\$10,191,015	\$0	\$0	\$6,824,122	78%*	FY23
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	\$215,190	\$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	\$153,954,386	\$47,950,799	\$48,000,000	\$48,000,000	\$87,048,861	57%*	FY31
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.	-	\$4,525,000	\$4,525,000	-	\$0	\$0	\$2,468,279	55%*	N/A
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 were applicable.	\$3,185,000	\$3,185,000	\$3,185,000	\$1,185,308	\$759,498	\$1,009,218	\$854,503	41%	FY25
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	\$28,661	\$29,199	\$0	\$30,479	30%*	FY24
02GQ00	Isolation Transformer Installation	BART to install one isolation transformer at traction power substation on SVBX alignment (south of Warm Springs to Berryessa) to protect the ATS at the TPSS. Total is six transformers for six TPSS.	\$1,275,000	\$1,275,000	\$1,275,000	\$500,204	\$275,000	\$0	\$388,051	30%*	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	\$33,860,334	\$9,460,334	\$660,882	\$15,775,494	\$7,526,177	\$8,685,014	28%	FY26
15AX00 ²	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 are being identified. 54RR610: TC Bungalows (huts) L06, L16, L20.	\$3,600,000	\$4,550,000	\$4,550,000	\$614,264	\$1,356,823	\$529,861	\$93,107	2%*	FY27
		Total for CIP Category: System Expansion	\$995,728,408	\$999,659,872	\$218,501,350	\$61,578,138	\$66,196,014	\$57,065,256	\$138,144,115		

Project Summary Included

* % Complete Based on Cost

RR: Measure RR Program Projects

TBD: Project is On Hold

Security Sensitive Projects

C: Core Capacity

R1: 4th Tranche of Measure RR

ITALICS: Project Added FY23 Q3

6.9 Electrical and Mechanical



Project ID	Project Name	Project Scope Summary	Original Estimate at Completion	Current Estimate at Completion	Total Funded Budget	FY23 Budget	Forecasted FY24 Budget	Forecasted FY25 Budget	Spent to Date	% 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	\$2,435	\$0	\$0	\$4,024,074	100%	FY23
79NK100	Train Control Room UPS Replacement at Y and W-Line	This is an ongoing system-wide replacement project for UPS / inverters on the W-Line and Y-Line. Total of 60 locations completed in 3 Phases. Phase 1 (18) and Phase 2 (21) are completed. Phase 3 battery replacement is in design (remaining 21 locations). 79NKRR1 is for UPS / inverters.	\$9,150,000	\$9,470,000	\$9,470,000	\$37,527	\$0	\$0	\$9,470,000	100%	FY23
15AARR1	Tunnel Lighting Replacement on M-Line - RR	This project upgrades and installs new tunnel lighting fixtures, increase lighting range in order to meet foot candle requirement in accordance with Standard NFPA 101.	\$18,263,607	\$18,263,607	\$17,013,607	\$2,352,724	\$0	\$0	\$6,245,593	100%	TBD
15AARR2	Tunnel LED Lighting in TBT - RR	This project upgrades and installs new tunnel lighting fixtures, increase lighting range in order to meet foot candle requirement in accordance with Standard NFPA 101.	\$15,000,000	\$15,000,000	\$13,750,000	\$2,518,142	\$0	\$0	\$1,033,361	100%	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	\$3,500	\$0	\$0	\$1,536,091	99%*	FY23
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	\$11,396,853	\$86,118	\$1,920,091	\$0	\$9,294,542	98%	FY24
09EK300	Transbay Tube 480V Switchgear Replacement, XF Pads - 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).	\$61,941,828	\$61,941,828	\$61,941,828	\$6,527,620	\$3,104,188	\$0	\$55,469,584	95%	FY24
15BN300	MP-3000 Replacement at W-Line Vent Structures	This project will upgrade the vent structures on the W-Line. Spare parts are not available from manufacturer, controllers are obsolete. Tunnel ventilation is required to be operable to run trains.	\$1,773,780	\$1,750,000	\$1,750,000	\$90,813	\$3,788	\$0	\$494,585	94%	FY24
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	\$1,544,900	\$909	\$257,303	\$0	\$1,276,569	83%*	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	\$24,114,440	\$1,244,161	\$2,377,884	\$2,364,144	\$16,254,184	82%	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	\$414,457	\$2,865	\$0	\$1,136,734	78%	FY23
15IIRR1	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	\$30,010,696	\$30,010,696	\$11,047,458	\$2,323,219	\$0	\$21,131,701	77%	FY24
1511002	Station Emergency Lighting, San Francisco County Stations	This project will design and install dedicated circuit for the emergency lighting system including UPS and battery system. 5 Locations: M10, M16, M20, M70, 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	\$38,747	\$0	\$0	\$887,915	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	\$265,331	\$0	\$0	\$661,215	66%*	TBD
		Sub-Total	\$180,455,962	\$183,425,065	\$180,925,065	\$24,629,942	\$9,989,337	\$2,364,144	\$128,916,147		

Project Summary Included

* % Complete Based on Cost

RR: Measure RR Program Projects
TBD: Project is On Hold

Security Sensitive Projects

C: Core Capacity

R1: 4th Tranche of Measure RR

6.9 Electrical and Mechanical



Project ID	Project Name	Project Scope Summary	Original Estimate at Completion	Current Estimate at Completion	Total Funded Budget	FY23 Budget	Forecasted FY24 Budget	Forecasted FY25 Budget	Spent to Date	% Complete Physical or Cost*	Closeout Date
20LZ100	Battery Replacement for Train Control Rooms - RR	This is an ongoing system-wide battery replacement project. Total of 60 locations completed in 3 Phases. Phase 1 (18) and Phase 2 (21) are completed. Phase 3 battery replacement is in design (remaining 21 locations). 79NKRR1 is for UPS / inverters. 79NK100 is for UPS / inverters on W-Line and Y-Line.	\$12,076,230	\$14,576,230	\$14,576,230	\$3,838,062	\$4,756,296	\$97,494	\$7,252,937	65%	FY24
79NKRR1	Train Control Room UPS Replacement, 45 locations - RR	This project is for UPS / inverters replacement systemwide. 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	\$1,794,600	\$3,638,454	\$2,105,390	\$6,592,651	62%	FY29
11VA000	Pipe/Structure Repair to MW-21	A fire near to MW-21 damaged the drainage pipes and the structure nearby. This project is to perform replacement of drainage pipes and repair of the retaining wall structure.	-	\$1,389,868	\$1,390,000	-	\$507,187	\$50,187	\$666,394	61%	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	\$743,358	\$14,481,714	\$94,510	\$347,561	56%	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	\$786,655	\$1,067,625	\$0	\$681,063	46%	FY24
09DJ006	TBT Cathodic Protection Upgrade/Replacement	This is an annual CP Survey for Transbay Tube (TBT) and includes performing measurements, submitting a written report which documents the data and recommendations. Subsequent work may include: 1) Repair or Replacement of anodes and cables. 2) Troubleshooting of CP Power Supply Units. 3) Repair or replace CP Monitoring equipment as required. This should reoccur every year. Dollar value represents 3.75 million per year.	\$15,000,000	\$14,194,647	\$14,194,647	\$2,327,898	\$3,821,748	\$4,651,466	\$6,002,051	42%	FY25
15EG001	Emergent R/R-Critical Electrical Components	To 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	\$325,945	\$323,839	\$0	\$461,946	37%	FY24
09DJ008	SFTS Cathodic Protection Survey and Assessment	This project is to repair or replace 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. Subsequent work may include: 1) Repair or Replacement of anodes and cables. 2) Troubleshooting of CP Power Supply Units. 3) Repair or replace CP Monitoring equipment as required. After 2019. This should reoccur every year for 10 years. Dollar value represents \$50,000 per year for the first 5 years. After 5 years, dollar value will increase gradually. Asset life of 20 years.	\$300,000	\$300,000	\$300,000	\$143,531	\$67,237	\$0	\$113,482	35%	FY24
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	\$335,135	\$167,827	\$0	\$325,175	31%	FY24
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	\$1,126,428	\$0	\$0	\$877,054	28%*	TBD
15IJRR1	Station Fire Alarm Replacement, 5 Station Locations - 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	\$1,664,178	\$6,527,614	\$5,924,062	\$1,616,351	13%	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	\$27,871,800	\$27,871,800	\$5,676,068	\$7,682,667	\$10,972,904	\$1,503,636	8%	FY27
52RR000	Renew Electrical Power, R1 - RR	Program management office support services for Renew Power Program.	\$10,119,616	\$10,119,616	\$10,119,616	\$9,647,936	\$0	\$0	\$0	0%*	FY27
		Sub-Total	\$116,856,423	\$125,916,108	\$105,584,713	\$28,409,793	\$43,042,208	\$23,896,013	\$26,440,302		
		Total for CIP Category: Electrical and Mechanical	\$297,312,385	\$309,341,174	\$286,509,778	\$53,039,735	\$53,031,546	\$26,260,157	\$155,356,449		

Project Summary Included

Security Sensitive Projects

* % Complete Based on Cost RR: Measure RR Program Projects

R1: 4th Tranche of Measure RR

TBD: Project is On Hold

ITALICS: Project Added FY23 Q3

C: Core Capacity

6.10 System Support



Project ID	Project Name	Project Scope Summary	Original Estimate at Completion	Current Estimate at Completion	Total Funded Budget	FY23 Budget	Forecasted FY24 Budget	Forecasted FY25 Budget	Spent to Date	% Complete Physical or Cost*	Closeout Date
59AF002	Garbage Truck Procurement (3/ea.)	This project is for the procurement new, non-replacement revenue vehicles: three (3/ea.) garbage trucks. One (1/ea.) 20-Yard garbage truck (requires CDL-A license) and two (2/ea.) smaller 9-Yard garbage trucks (does not require CDL license). The garbage trucks will be used to safely clean up homeless encampments throughout the District. Grounds personnel will only have to lift trash 24 -30 inches into the compacting area of the garbage trucks.	\$692,000	\$692,000	\$558,633	\$690,075	\$0	\$0	\$558,633	100%*	FY23
79LV001	BARTNET/Control Systems Hardening	To improve and harden (supplemental to project 79LV000) the Districtwide Operating Technology Networking Infrastructure (DOTI) network and system resiliency against threats. Reducing security risks will lessen delays to train services caused by breaches, ensure customer facing data and information is available, and increase the safety of passengers in the system. It includes immediate diagnostic engineering and BARTnet fix initiatives to be performed before the DOTI system upgrades to best practice architecture, design, IP structure, and security are implemented.	\$2,650,613	\$2,650,613	\$2,650,613	\$1,831	\$0	\$0	\$2,645,992	100%*	FY23
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	\$3,661	\$0	\$0	\$3,385,636	100%*	FY24
17HN000	BART Headquarters - 2150 Webster	Build-out new BART headquarters at 2150 Webster.	\$227,755,000	\$227,755,000	\$227,755,000	\$1,652,437	\$0	\$0	\$225,454,193	99%*	FY23
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	\$16,963,441	\$1,414,229	\$0	\$0	\$16,558,226	98%*	FY23
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	\$328,346	\$0	\$0	\$2,253,658	96%*	FY23
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	\$1,911,282	\$4,390,556	\$5,461,125	\$3,252,755	94%	FY27
15JA002	Sustainability Annual Report	Per BART's Sustainability Action Plan, approved by the Board in 2017, BART will report on its sustainability accomplishments annually and publish the results on its website.	\$683,750	\$1,033,750	\$1,033,750	\$246,227	\$650,000	\$360,000	\$708,432	69%*	FY26
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	\$1,344,231	\$1,440,550	\$1,368,229	\$2,445,804	68%	FY27
79PB000	Converting to Digital CCTV - SF Stations	This project upgrades existing analog cameras with digital high-definition cameras, and installs additional digital high-definition cameras. The existing analog cameras are still functioning; however, BART is upgrading to digital high-definition cameras to benefit from additional functionality.	\$4,116,300	\$4,116,300	\$4,116,300	\$604,231	\$0	\$0	\$2,638,127	64%*	FY24
59AF001	Trash/Recycling Pilot	The project launches a new employee recycling/composting program in line with BART policy.	\$768,000	\$1,118,000	\$1,118,000	\$448,018	\$340,000	\$120,000	\$685,420	61%*	FY25
96DARR1	Program Management - RR - C	Program management office support services for Core Capacity Project.	\$39,702,629	\$37,445,744	\$24,845,335	\$4,159,110	\$3,774,125	\$3,840,634	\$14,238,910	56%	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	\$8,449,089	\$1,138,712	\$870,000	\$590,000	\$4,071,341	48%*	FY26

\$326,308,856

Sub-Total

\$327,960,485

\$302,954,903

\$13,942,390

Project Summary Included

\$11,465,230

Security Sensitive Projects

* % Complete Based on Cost

\$11,739,988

\$278,897,126

C: Core Capacity

RR: Measure RR Program Projects
TBD: Project is On Hold

R1: 4th Tranche of Measure RR

ITALICS: Project Added FY23 Q3

6.10 System Support



Project ID	Project Name	Project Scope Summary	Original Estimate at Completion	Current Estimate at Completion	Total Funded Budget	FY23 Budget	Forecasted FY24 Budget	Forecasted FY25 Budget	Spent to Date	% 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	\$155,375	\$179,743	\$44,940	\$508,653	47%*	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	\$17,950,000	\$5,360,141	\$9,920,000	\$0	\$8,326,429	46%*	FY24
15SY000	Shake Alert-Earthquake Updates	This project is to provide updates 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.	\$800,000	\$800,000	\$342,000	\$178,432	\$223,125	\$224,850	\$138,290	40%	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	\$905,185	\$0	\$0	\$747,377	37%*	FY26
65HF001	PPMS Implementation	This is a 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. This scope delivers the six modules of 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 in addition to the rest of the modules.	-	\$3,500,000	\$3,500,000	-	\$1,611,500	\$1,204,437	\$427,280	20%	FY24
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 (METG) rooftop generator. Infrastructure and services includes electrical, mechanical, architectural, structural, civil, systems, control and communications components.	\$19,000,000	\$15,436,088	\$15,436,088	\$955,631	\$2,033,091	\$10,748,466	\$2,410,876	17%	FY26
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	\$2,778,847	\$2,778,847	\$143,091	\$2,363,124	\$0	\$365,432	13%*	FY24
91HD001	Establishment of Database for Existing Utilities at Yards	t Locate underground utilities in yards and shops and create a database of these Services.	\$1,500,000	\$1,500,000	\$1,500,000	\$941,560	\$421,998	\$440,078	\$44,959	6%	FY26
		Sub-Total	\$44,371,181	\$45,542,043	\$44,622,430	\$8,639,415	\$16,752,581	\$12,662,771	\$12,969,294		
		Total for CIP Category: System Support	\$370,680,036	\$373,502,528	\$347,577,333	\$22,581,806	\$28,217,812	\$24,402,758	\$291,866,420		
		Grand Total for all CIP Categories: All Pages	\$12,172,789,905	\$13,146,596,953	\$8,883,227,025	\$1,485,072,877	\$1,479,318,394	\$1,390,083,345	\$4,837,108,909		

Project Summary Included

* % Complete Based on Cost

RR: Measure RR Program Projects

Security Sensitive Projects

C: Core Capacity

R1: 4th Tranche of Measure RR

TBD: Project is On Hold *ITALICS*: Project Added FY23 Q3

7.1 15EIRR1 | CWS High Voltage Transformer Replacement | Traction Power

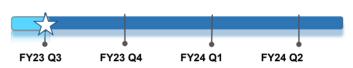


Project Summary

On the C-Line near Pittsburg /Bay Point, replace the existing transformer with a new (115/34.5kV 27/36/45 MVA) one at the High Voltage Pittsburg (CWS) Substation including all of its accessories and upgrade of the control and protection systems.







Substantial Construction Completion







Issues/Areas of Concern

None

Accomplishments

Received project as-builts.

Budget/Forecast (Millions)						
Funded Budget	\$14					
Unfunded Need	-					
Unallocated Secured Fund	-					
Estimation at Completion (EAC) \$14						

Update from Previous Quarterly Report

All the punch list items are addressed.

Funding Sources (Millions)						
BART	-					
Federal	-					
State	-					
Local	-					
Measure RR	\$14					
Other	-					
Total	\$14					

7.2 15EJRRK | 34.5 kV AC Cable Replacement K-Line | 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.









Issues/Areas of Concern

Limited in-house construction resources have been pulled to other highpriority projects which has negatively impacted the project construction progress.

Accomplishments

Mobilization for installation between Oakland West Substation (KOW) to Baytube East Substation (KTE) has begun.

Update from Previous Quarterly Report

The K-line conduit support installation is completed between Oakland West SubStation (KOW) to Baytube East Substation (KTE).





Budget/Forecast (Millions)					
Funded Budget	\$34				
Unfunded Need	-				
Unallocated Secured Fund	-				
Estimation at Completion (EAC)	\$34				

Funding Sources (Millions)						
BART	-					
Federal	-					
State	-					
Local	-					
Measure RR	\$34					
Other	-					
Total	\$34					

7.3 15TC004 | Water Intrusion Mitigation in Train Control Rooms | Train Control & Comm



Project Summary

Assessments, rehabilitation designs and repairs to prevent water intrusion at train control (TC) rooms (17) and huts (6).



Issues/Areas of Concern

Project cost increases due to inflation; resource availability (welders).



Budget/Forecast (Millions)					
Funded Budget	\$18				
Unfunded Need	-				
Unallocated Secured Fund	-				
Estimation at Completion (EAC) \$18					

Funding Sources (Millions)							
BART	-						
Federal	-						
State	-						
Local	-						
Measure RR	\$18						
Other	-						
Total	\$18						

Accomplishments

Package 2: Issue for Bid(IFB) Design under review

Package 3: 100% Design Completed

Update from Previous Quarterly Report

100% Design Complete

7.4 54RR510 | HVAC Renovation and LMA | Shops, Yards, and Facilities



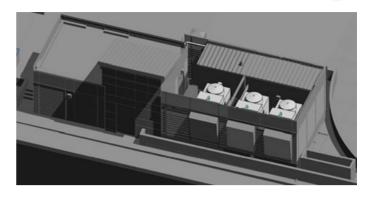
Completion

Date

FY28

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/Milestones

Bid/Award Construction



Increases Service Reliability



Enhances Safety and Security



Planning

Design

Promotes Sustainability

Issues/Areas of Concern

Project cost increases due to inflation. Multiple projects require field construction at Lake Merritt(LMA) during 2023-2026 timeframe and may cause interruption/delay due to conflicting access issues.



Accomplishments

100% Design & Specs have been submitted and currently under review.

Budget/Forecast (Milli	ons)
Funding Budget	\$20
Unfunded Need -	
Unallocated Secured Fund -	
Estimation at Completion (EAC) \$20	

Update from Previous Quarterly Report

Funding Sou	rces (Millions)
BART	-
Federal	-
State	-
Local	-
Measure RR	\$20
Other	· -
Total	\$20

7.5 03QJ101 | Concord Yard Wheel Truing Machine | Shops, Yards, and Facilities



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.

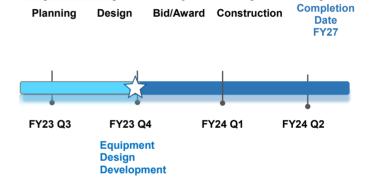


Timeline/Milestones



Issues/Areas of Concern

Ensure fabrication schedule intergrates with facility construction schedule



Accomplishments

Procurement contract has been awarded.

Budget/Forecast (Millio	ons)
Funded Budget	\$4
Unfunded Need -	
Unallocated Secured Fund -	
Estimation at Completion (EAC) \$4	

Update from Previous Quarterly Report

Funding Sou	rces (Millions)
BART	\$0
Federal	\$4
State	-
Local	-
Measure RR	-
Other	
Total	\$4

7.6 15CQ020 | Track Renewal Project Richmond Yard | Shops, Yards, and Facilities



Project Summary

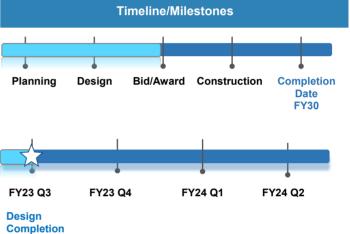
This project will replace yard tracks at Richmond Yard (ORY). Existing yard tracks at ORY have reached the end of their expected design life and must be replaced. Yards were originally designed for 90lb rail, which is no longer in production and does not meet current rail standard specifications. This project will update yard to 119lb rail and switch components, as is required per BART Facility Standards (BFS).





Issues/Areas of Concern

Construction phase coordination with train operations. Procurement schedule. Train Storage. Resource availability.



Accomplishments

Three yard throat swtich procurement Executive Decision Document (EDD) routed for April Board meeting.

Budget/Forecast (Millio	ons)
Funded Budget	\$45
Unfunded Need -	
Unallocated Secured Fund -	
Estimation at Completion (EAC) \$45	

Update from Previous Quarterly Report

The Contract Package review is complete.

Funding Co.	urana (Milliana)
Fullding Soc	ırces (Millions)
BART	-
Federal	-
State	-
Local	-
Measure RR	\$45
Other	· -
Total	\$45

7.7 15CQ017 | Rail Re-Profiling Services Systemwide | Track and Structures



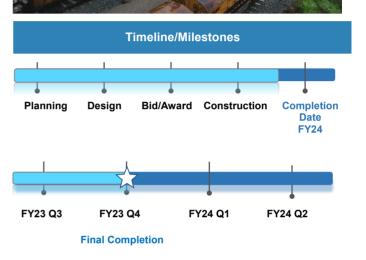
Project Summary

This project reprofiles rail in order to accommodate the Fleet of Future cars and associated wheels. The new wheel causes loading nearer to the gage side of the rail head which causes premature wear of the rail and increased noise. Re-profiling reduces maintenance cost and noise.



Issues/Areas of Concern

None



	Accomplishments
Contract Closeout Started	

Update from Previous Quarterly Report

Contract close out has started

Budget/Forecast (Million	s)
Funding Budget	\$27
Unfunded Need	-
Unallocated Secured Fund -	
Estimation at Completion (EAC) \$27	

Funding S	ources (Millions)
BART	-
Federal	-
State	-
Local	-
Measure RR	\$27
Other	-
Total	\$27

7.8 15TC007 | Aerial Fall Protection | 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.



Issues/Areas of Concern

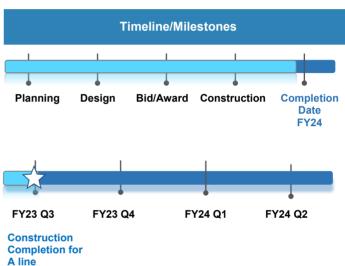
None

Accomplishments

Project concluded 62 days ahead of schedule.

Update from Previous Quarterly Report





Budget/Forecast (Millio	ons)
Funding Budget	\$31
Unfunded Need -	
Unallocated Secured Fund -	
Estimation at Completion (EAC) \$31	

	Funding Sources (Millions)
BART	-
Federal	-
State	-
Local	-
Measure RR	\$31
Other	-
Total	\$31

7.9 15TC013 | Slope Stabilization Systemwide | Track and Structures

Promotes

Sustainability



Project Summary

Assessment of 104 eroded slopes locations 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. 4 critical slopes repairs on the L and M-Line will be performed by Contractors, while stabilization and remediation of the remaining 21 slopes on A and C-Lines will be performed by BART forces.









Issues/Areas of Concern

BART resources availability may impact the schedule. Material procurement delays.

Accomplishments

Completed Information for Bid (IFB) design.

Budget/Forecast (Milli	ons)	
Funded Budget	\$11	
Unfunded Need	\$3	
Unallocated Secured Fund -		
Estimation at Completion (EAC) \$14		

Update from Previous Quarterly Report

Environmental clearance has been completed.

Funding Sources (Millions)	
BART	-
Federal	\$1
State	-
Local	-
Measure RR	\$10
Other	
Total	\$11

7.10 15TC015 | Water Mitigation R-Line Tunnel | Track and Structures

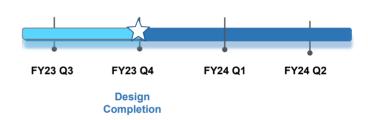


Project Summary

Mitigate water intrusion in the Oakland Wye and section of M-Line Steel Tunnel. Repairs (by a Contractor) are planned to include 2250 ft of tunnel circumference, 820 ft of lining along the safe walking platform side, and 655 ft of lining adjacent to the third rail.













Issues/Areas of Concern

Construction coordination with K-line interlocking project

	Accomplishments
None	

Budget/Forecast (Milli	ons)
Funded Budget	\$12
Unfunded Need	-
Unallocated Secured Fund	-
Estimation at Completion (EAC)	\$12

Update t	from Pre	evious Qu	uarterly	Report

Completed 100% design.

Funding Sources (Millions)	
BART	-
Federal	\$1
State	-
Local	-
Measure RR	\$11
Other	-
Total	\$12

7.11 15CQ008 | Interlocking Replacement at K23, K25, and C15 | Track and Structures

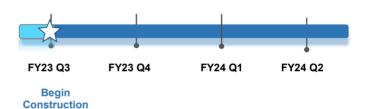


Project Summary

Upgrade the District infrastructure on the K Line and C Line, at the K23, K25, K35, C15 interlockings, including track components (replace 32 turnouts). This project will replace wooden ties with precast concrete ties at switches to extend the asset life.







Increases Service Reliability

Enhances Safety and Security

Promotes Sustainability

Issues/Areas of Concern

Unforeseen underground conditions of BART infrastructure. Availability of construction equipment due to age and reliability.

Accomplishments

Construction completed on two switches at C15 during two successful weekend shutdowns.

Budget/Forecast (Millions)		
Funding Budget	\$132	
Unfunded Need -		
Unallocated Secured Fund -		
Estimation at Completion (EAC) \$132		

Update from Previous Quarterly Report

Notice of Award for Oakland (K23/K25) Interlockings special trackwork issued.

Funding Sources (Millions)	
BART	-
Federal	-
State	-
Local	-
Measure RR	\$132
Other	- -
Total	\$132

7.12 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.







Issues/Areas of Concern

Two of the Prime's Small Bussiness Enterprise subcontractors are going through rework, resulting in Contractor-owned schdule delays

FY23 Q3 FY23 Q4 FY24 Q1 FY24 Q2 Close out

Accomplishments

Issued Partial Substantial Completion at Sector 2,3,4 and 6. Initiated punchlist work at new completed areas and continues on list from previous locations to finalize

Budget/Forecast (Millions)		
Funded Budget	\$27	
Unfunded Need	-	
Unallocated Secured Fund -		
Estimation at Completion (EAC) \$27		

Update from Previous Quarterly Report

Issued Partial Substantial Completion at Sector 2,3,4 and 6. Initiated punchlist work

Funding Sources (Millions)	
BART	\$0
Federal	-
State	\$10
Local	\$8
Measure RR	\$8
Other	-
Total	\$27

7.13 11IA002 | New Platform Stairs at Civic Center | Stations



Project Summary

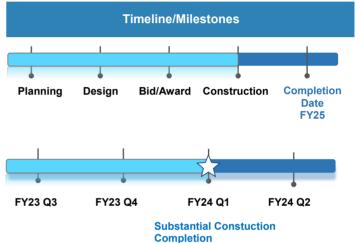
This project is for design, procurement, and construction of two additional stairs adjacent to the existing stairs at each end of the platform of Civic Center Station (M40). This will reduce BART Platform exiting times and bring within current NFPA requirements.





Issues/Areas of Concern

SFMTA trailer not available for project use. Changes made to project scope during Site Specific Work Plan process. Contractor delay claim.



Accomplishments

Stainless steel cladding is complete. Stairs to open in April 2023

Budget/Forecast (Millions)		
Funding Budget	\$12	
Unfunded Need	-	
Unallocated Secured Fund -		
Estimation at Completion (EAC) \$12		

Update from Previous Quarterly Report

Funding Sources (Millions)	
BART	-
Federal	-
State	-
Local	-
Measure RR	\$12
Other	-
Total	\$12

7.14 15NU002 | Accessibility Improvement Program | 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.





Issues/Areas of Concern

Accessibility Improvement Program package-1 received only 1 non responsive bid, need to re-advertise which had schedule impact.

Planning Design Bid/Award Construction Completion Date FY31 FY23 Q3 FY23 Q4 FY24 Q1 FY24 Q2

Design Completion

Timeline/Milestones

Accomplishments

By repackaging, better outreach, and implementing an much more detailed and effective Pre-Bid meeting, BART saved over \$4.6 Million on the initial contract and severely lowered the projected costs for the remaining AIP phase 3 through 6.

Budget/Forecast (Millions)	
Funded Budget	\$40
Unfunded Need	-
Unallocated Secured Fund	\$14
Estimation at Completion (EAC)	\$54

Update from Previous Quarterly Report

Funding Sources (Millions)	
BART	\$3
Federal	\$15
State	-
Local	\$0
Measure RR	\$22
Other	-
Total	\$40

7.15 15LK001 | Canopy/Escalators Replacement | Stations



Project Summary

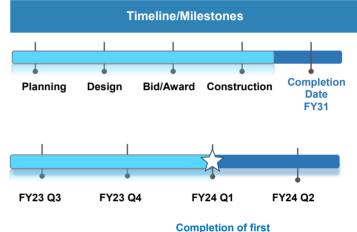
This program will install 19 canopies at the four downtown San Francisco stations, which don't currently exist, over street openings for patron safety as well as to meet code requirements for weather protection for any escalators being installed or renovated.





Issues/Areas of Concern

Construction is currently behind schedule, but the Contractor is looking for ways to mitigate the delay.



Accomplishments

Construction for Canopy #12 (Embercadero), #16 (Montgomery), & #22 (Powell) are completed on 4/17/23, 4/24/23, & 4/27/23 respectively and opened for revenue service. Canopy #3 (Civic Center) is anticipated to complete in July 2023.

Budget/Forecast (Millions)	
Funded Budget	\$114
Unfunded Need	-
Unallocated Secured Fund	-
Estimation at Completion (EAC)	\$114

four canopies

Update from Previous Quarterly Report

Schedule delay for completion of Canopy #12 (Embercadero), #16 (Montgomery) and #22 (Powell) mainly due to COVID delays, material shortage, and unforeseen differing site conditions

Funding Sources (Millions)	
BART	-
Federal	-
State	\$29
Local	\$46
Measure RR	\$39
Other	-
Total	\$114

7.16 15NE002 | Public Address System Improvement | Stations



Project Summary

Installation of a new public address system, including electrical, communications, equipment installation, testing, and commissioning at Lafayette, Powell, and Richmond Stations.



Issues/Areas of Concern

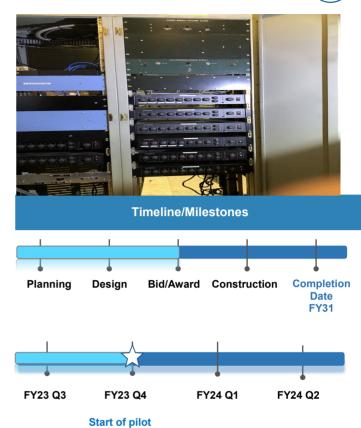
Single bid received in Dec. 2022 was deemed non-responsive by Office of Civil Rights (OCR). Project team exploring options for redesign/ readvertising.

Accomplishments

Revision of Information for Bid (IFB) Design package for possible readvertising.

Update from Previous Quarterly Report

Not Applicable



Budget/Forecast (Millions)	
Funded Budget	\$9
Unfunded Need	-
Unallocated Secured Fund	-
Estimation at Completion (EAC)	\$9

Construction

Funding Sources (Millions)	
BART	\$2
Federal	\$5
State	-
Local	\$1
Measure RR	\$2
Other	-
Total	\$9

7.17 15LK002 | San Francisco Escalator Replacement | Stations



Project Summary

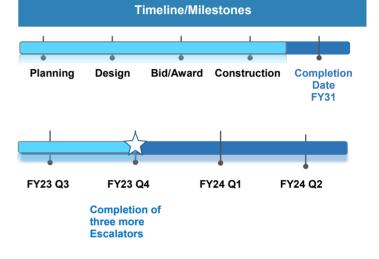
This program will replace 41 existing street and platform escalators in the 4 SF downtown stations. The escalators are at the end of their useful life and are regularly out of service.





Issues/Areas of Concern

Construction is currently behind schedule, but the Contractor is looking for ways to mitigate the delay.



Accomplishments

Six escalators have been renovated and returned to service. Three more escalators are expected to complete in 5/23 and 6/23.

Budget/Forecast (Millions)	
Funded Budget	\$129
Unfunded Need	-
Unallocated Secured Fund	\$25
Estimation at Completion (EAC) \$154	

Update from Previous Quarterly Report

Escalators EP2 and MP4 are not completed as scheduled last quarter.

Funding Sources (Millions)		
BART	-	
Federal	-	
State	\$2	
Local	\$9	
Measure RR	\$118	
Other	-	
Total	\$129	

7.18 09AU000 | Transbay Tube Retrofit #1 (Underwater) | Seismic Programs



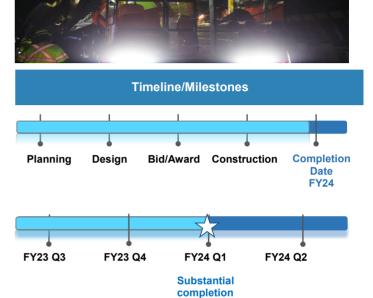
Project Summary

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 Zones 1, 2, 3, and 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.



Issues/Areas of Concern

Resolution of outstanding requests for Additional Compensation from Contractor. Includes request for Time Related Overhead due to exceeding Contract Time.



Accomplishments

Completed Testing and Commissioning of all Pump System Work.

Budget/Forecast (Millions)	
Funded Budget	\$594
Unfunded Need	-
Unallocated Secured Fund	-
Estimation at Completion (EAC)	\$594

Update from Previous Quarterly Report

Funding Sources (Millions)	
BART	\$0
Federal	-
State	-
Local	\$0
Measure RR	\$188
Other	\$406
Total	\$594

^{*} Seismic Go Bond is major funding category for this project

7.19 09JA000 | Link 21 | 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.



Issues/Areas of Concern

Future schedule is impacted by availability of funding for overall program development.

Accomplishments

Prepared cost estimates for 6 Rail crossing routes over the transbay concepts.

Update from Previous Quarterly Report





Round 2 working draft of Business Case methodology

Budget/Forecast (Millions)	
Funded Budget	\$154
Unfunded Need	\$707
Unallocated Secured Fund	\$50
Estimation at Completion (EAC)	\$911

Funding Sources (Millions)	
BART	\$1
Federal	-
State	-
Local	\$3
Measure RR	\$150
Other	-
Total	\$154

7.20 15IJ200 | Station Fire Alarm Replacement - 12th, 19th & N. Berkeley | Elec & Mech



Project Summary

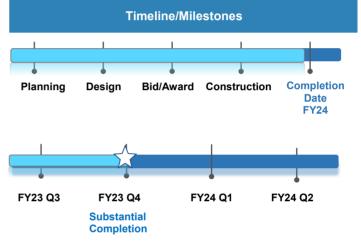
Furnish, install, test and commission the fire alarm systems for Oakland 12th St (K10), 19th St (K20), and North Berkeley (R30) stations.





Issues/Areas of Concern

None



Accomplishments

Design and Procurement completed. Project is almost complete with substantial completion is projected for FY23 Q4

Budget/Forecast (Milli	ons)
Funded Budget	\$11
Unfunded Need	-
Unallocated Secured Fund -	
Estimation at Completion (EAC)	\$11

Update from Previous Quarterly Report

Funding Sources (Millions)	
BART	\$5
Federal	\$6
State	-
Local	-
Measure RR	-
Other	-
Total	\$11

7.21 15IJRR1 | Station Fire Alarm Replacement, 5 Station Locations | Elec & Mech



Project Summary

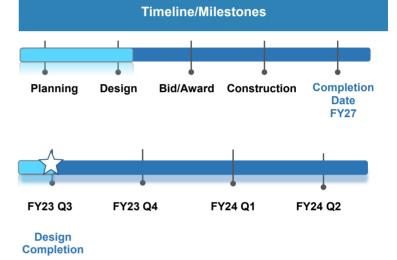
Furnish, install, test and commission the station fire alarm replacements at the following 3 locations: Phase 4 - Bay Fair (A50), South Hayward (A70), and Rockridge (C10).





Issues/Areas of Concern

Limited Space avaiblity at stations that impedes routing new conduits to the new fire detection/suppression devices.



Accomplishments

100% Design Completed.

Budget/Forecast (Millio	ons)
Funded Budget	\$17
Unfunded Need	-
Unallocated Secured Fund -	
Estimation at Completion (EAC) \$17	

Update from Previous Quarterly Report

Funding Sources (Millions)	
BART	-
Federal	-
State	-
Local	-
Measure RR	\$17
Other	-
Total	\$17

7.22 15IJRR2 | Station Fire Alarm Replacement, 6 Stations | 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), Fruitvale (A20), Coliseum (A30), San Leandro (A40), Walnut Creek (C40) And includes Hayward garage (A60) and Walnut Creek garage (C40)

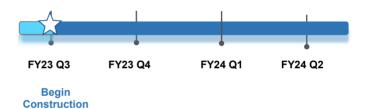






Issues/Areas of Concern

Differing requirements from various city Fire Marshalls can lead to delays because the contractor may be unable to get resolution and acceptance from all Fire Marshals in the planned duration.



Accomplishments

Design and Procurement completed. Construction has started.

Budget/Forecast (Milli	ons)
Funded Budget	\$28
Unfunded Need	\$0
Unallocated Secured Fund	-
Estimation at Completion (EAC) \$28	

Update from Previous Quarterly Report

Funding Sources (Millions)	
BART	-
Federal	-
State	-
Local	\$3
Measure RR	\$25
Other	-
Total	\$28

7.23 17HMRR1 | Met G Generator Replacement | System Support



Project Summary

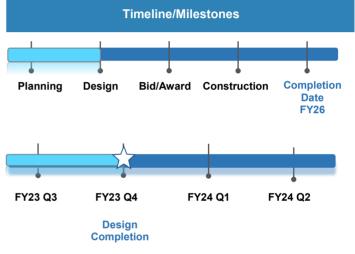
Furnish, install, test, and commission a 1250 kW Generator (with associated infrastructure) at Lake Merritt (LMA) street level, to replace the existing 400 kW Met Building (METG) rooftop generator. Infrastructure and services includes electrical, mechanical, architectural, structural, civil, systems,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





Issues/Areas of Concern

Current market condition may result higher lead time for generator delivery



Accomplishments

95% Design complete. Working towards 100% design completion.

Budget/Forecast (Millions)	
Funding Budget	\$15
Unfunded Need	-
Unallocated Secured Fund -	
Estimation at Completion (EAC) \$15	

Update from Previous Quarterly Report

Funding Sources (Millions)	
BART	-
Federal	-
State	-
Local	-
Measure RR	\$15
Other	· <u>-</u>
Total	\$15