

SAN FRANCISCO BAY AREA RAPID TRANSIT DISTRICT

MEMORANDUM

TO: Board of Directors

DATE: May 17, 2024

FROM: General Manager

SUBJECT: Draft FY25 Capital Investment Plan

Attached is the “Draft FY25 Capital Investment Plan” presentation that will be presented at the May 23, 2024 meeting.

Also included in the Board materials is the Draft FY25 Capital Investment Plan (CIP). This draft CIP documents BART’s 10-year capital investment plan of forecast capital needs and funding. The final CIP document will be brought back to the Board for consideration this fall.

If you have any questions about the presentation or the draft CIP document, please contact Pamela Herhold, Assistant General Manager, Performance & Budget, at PHerhol@bart.gov or (510) 464-6168.

DocuSigned by:

Michael Jones

47000790F2D7463...

Robert M. Powers

cc: Board Appointed Officers
Deputy General Manager
Executive Staff



Draft FY25 Capital Investment Plan

10 YEAR PLAN (FY25-FY34)

May 23, 2024



Introduction

The Draft FY25 Capital Investment Plan outlines BART's 10-year plan for delivering needed capital investment, particularly in existing assets to maintain a state of good repair, within a constrained funding plan.

What is a Capital Investment Plan?

The Fiscal Year 2025 (FY25) Capital Investment Plan (CIP) details BART's 10-year capital investment plan based on mid- to long-term capital needs and funding forecasts. The purpose of the CIP is to:

- Provide greater transparency into BART's capital program considerations, constraints and challenges
- Align BART's planned capital investments with BART's goals and priorities
- Inform and support funding advocacy

Guiding Principles

Deliver on BART's Customer Commitment. As the Bay Area emerges from the pandemic, BART faces a fiscal challenge driven by a "new normal" level of ridership. Although riders have returned to BART, the growth in remote and hybrid work has driven a fundamental reduction in total ridership, resulting in a structural operating deficit. Addressing this structural deficit, so BART can continue to provide the quality service our riders require, is BART's primary focus. In support of this, BART has adopted a customer commitment to keep BART safe and clean, while maintaining reliable and quality transit service for riders. Sustaining reliable, flexible service and a positive customer experience requires prudent capital investment.

Prepare BART to serve the Bay Area for the next 50 years. Beyond investments in system reliability, BART also plans to make targeted investments in resiliency, capacity, redundancy, accessibility and sustainability.

Employ strategies to optimize and responsibly manage capital funding. To enable BART to deliver the most value for its capital investment plan, BART leverages its Measure RR and BART funds with external sources and applies innovative funding strategies, tight project controls, and continuous asset assessment to mitigate post-COVID impact on ridership and operating revenue. BART implements robust project controls and a dynamic funding strategy to optimize its capital investment plan.

The CIP is a snapshot in time. To deliver on its customer commitment, BART must continuously assess and review its Capital Program. This process of regular assessment of BART's assets and the identification and prioritization of potential capital projects to address capital needs is further described below. BART's objective is to deliver on capital investment commitments, while executing a nimble funding strategy to address emergent/emergency needs.

Contents

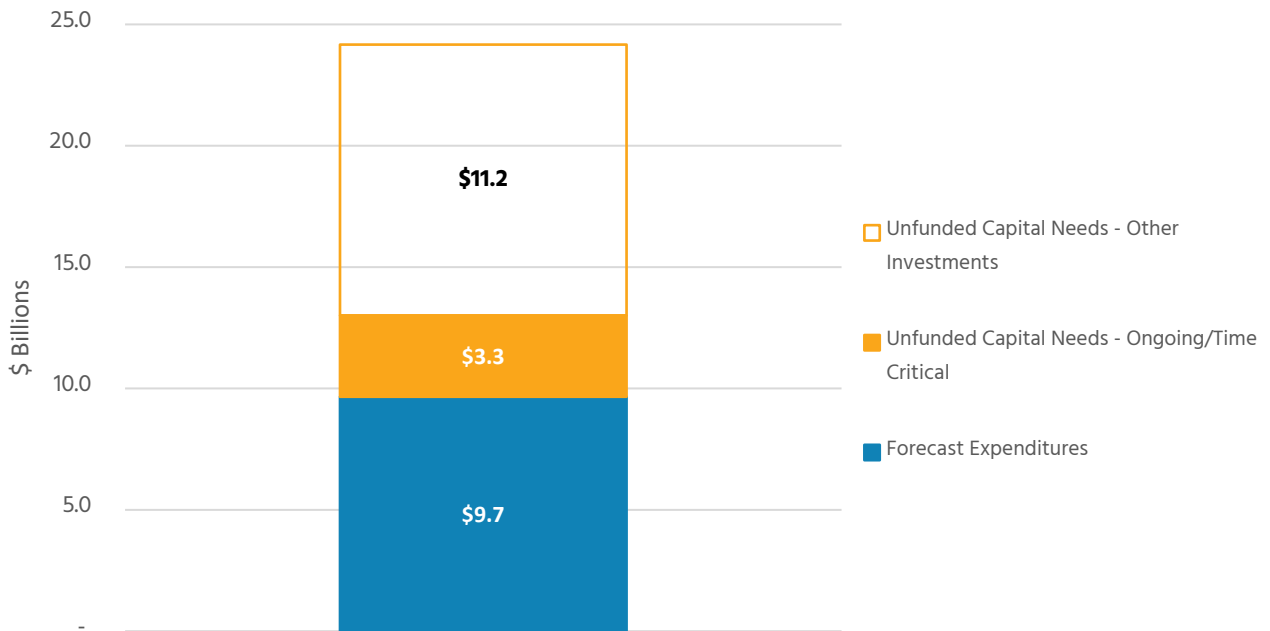
1. Overview.....	3
2. Capital Needs	7
Development of Capital Needs	7
CIP Programs.....	8
Core Capacity Program	13
3. Funding sources.....	13
Summary of Sources	16
4. Appendices	19
Appendix A. FY25-FY34 CIP Summary	20
Appendix B. FY25-FY34 Funding Sources Summary	21

1. Overview

The CIP is summarized into CIP Programs and each Program is further broken out in Subprograms. CIP Programs and Subprograms include asset-based capital projects that are developed through a Districtwide needs assessment grounded in Reliability Centered Maintenance practices. In addition, named Major Projects and Programs, such as Next Generation Fare Gates, are highlighted in their respective CIP Program categories. FY25 and FY26 of the CIP reflects the FY25 & FY26 Preliminary Capital Budget.

As shown in Chart 1, over the coming decade, BART forecasts that critical capital needs total \$13 billion of which 74% is funded; that is, BART forecasts it will invest \$9.7 billion in capital projects. BART's forecast capital expenditures are constrained by funding and system access capacity. The constrained CIP Programs are sized by aligning capital needs and forecast funding based on criticality of need and funding eligibility requirements. Criticality of need is defined as ongoing/committed projects, such as the Core Capacity Program, unfunded future projects that need to initiate planning or design within the CIP horizon and known emergent/emergency needs. The criticality of need evolves with time as assets continually age; as such, the Capital Program relies on a flexible investment strategy and continuous assessment and review of needs. Chart 1 summarizes the total 10-year financially constrained Capital Investment Plan and unfunded capital needs.

Chart 1. FY25-FY34 Capital Needs and Forecast Expenditures



As demonstrated in Chart 2, the FY25 CIP forecasts the highest expenditures over the next 10 years in the Train Control & Communications CIP Program due to BART’s significant investment in Train Control Modernization.

Chart 2. FY25-FY34 CIP – Forecast Expenditures by CIP Program (\$Millions)

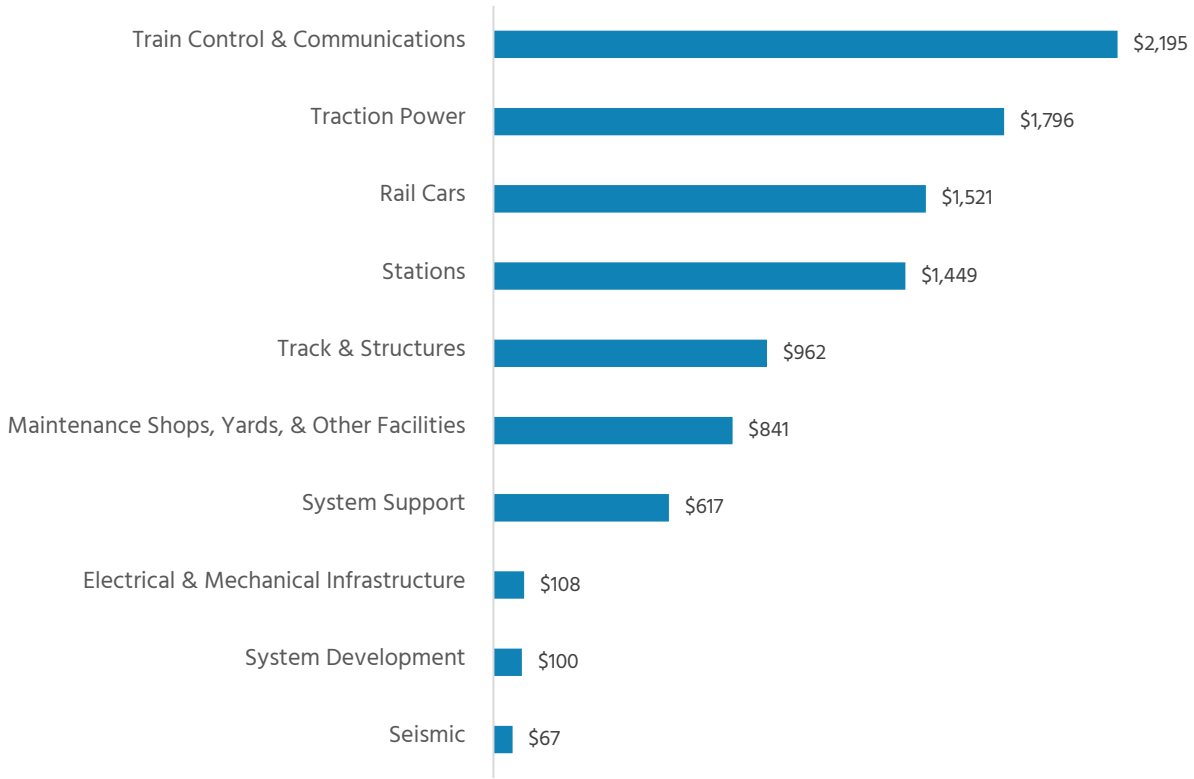


Table 1, below, summarizes the financially constrained CIP and unfunded needs over the 10-year period by CIP Program and Subprogram.

Table 1. Summary of Constrained CIP and Unfunded Capital Needs by CIP Program (\$Millions)

CIP Programs	Constrained Capital Investment Plan			Unfunded Capital Needs		
	Secured	Planned	Total	Ongoing/ Time Critical	Other Investments	Total
Rail Cars	1,304	217	1,521	-	-	-
New Car (775 cars)	308	-	308	-	-	-
New Car Phase 2 (306 cars)	987	45	1,032	-	-	-
New Car Phase 3 (48 BSVII rail cars)	173	-	173	-	-	-
Rail Car Improvements	9	-	9	-	-	-
Track & Structures	818	145	962	44	1,595	1,639
Trackway Rehabilitation	569	-	569	-	987	987
Structures Rehabilitation	190	145	335	3	542	545
Wayside Equipment	44	-	44	40	55	95
Track Capacity Improvements (BART Metro)	15	-	15	-	12	12
Traction Power	1,112	684	1,796	248	10	258
Substation Renovation	502	419	921	114	-	114
34.5KV Cable Replacement	105	-	105	75	-	75
Traction Power Controls	368	225	593	58	10	68
Core Capacity Traction Power Upgrades	137	40	177	2	-	2
Train Control & Communications	1,889	306	2,195	444	658	1,103
Train Control Modernization	1,647	306	1,953	-	-	-
Train Control System Rehabilitation	236	-	236	231	300	531
Communications & Computer Systems Rehabilitation	6	-	6	213	359	572
Stations	817	632	1,449	410	2,605	3,014
Station Enhancement	86	212	297	-	-	-
Escalator/Canopy Installation	149	-	149	8	19	27
Station Access Enhancement	92	170	262	-	68	68
Station Systems Rehabilitation	133	-	133	-	46	46
Station Capacity Improvements (BART Metro)	2	-	2	-	1,000	1,000
Station Buildings & Facilities Rehabilitation	12	-	12	128	153	281
Station Accessibility Improvement	30	-	30	-	4	4
Wayfinding & Customer Experience	30	3	33	53	238	291
Elevator & Escalator Rehabilitation	142	112	253	-	1,077	1,077
Elevator Modernization	79	123	201	221	-	221
Next Generation Fare Gates	63	13	76	-	-	-

CIP Programs	Constrained Capital Investment Plan			Unfunded Capital Needs		
	Secured	Planned	Total	Ongoing/ Time Critical	Other Investments	Total
Maintenance Shops, Yards, & Other Facilities	599	242	841	1,224	647	1,871
Hayward Maintenance Complex Phase 1 (HMC1)	5	-	5	-	-	-
Core Capacity East Storage Yard (HMC2)	242	78	320	548	-	548
Non-Station Buildings & Facilities Rehabilitation	68	-	68	188	358	546
Shop & Yard Equipment	33	-	33	136	272	407
Fleet of the Future Maintenance Facility (FFMF)	112	-	112	302	-	302
Fencing & Security	10	-	10	38	17	55
BPD HQ	26	163	189	-	-	-
OCC Modernization	103	-	103	13	-	13
Electrical & Mechanical Infrastructure	108	-	108	904	1,049	1,953
Mechanical Infrastructure Rehabilitation	58	-	58	417	380	797
Electrical Infrastructure Rehabilitation	25	-	25	365	468	833
Lighting Rehabilitation & Upgrades	25	-	25	122	201	323
Seismic	67	-	67	11	3,000	3,011
Earthquake Safety / TBT Seismic Retrofit	67	-	67	11	-	11
Caldecott BART Tunnel Seismic Retrofit	-	-	-	-	1,000	1,000
A-Line Seismic	-	-	-	-	2,000	2,000
System Development	100	-	100	-	721	721
Link21	75	-	75	-	721	721
Silicon Valley Extensions	10	-	10	-	-	-
System Expansion Planning	0	-	0	-	-	-
SVRT Capital	15	-	15	-	-	-
System Support	436	181	617	63	880	943
Core Capacity Support	213	84	297	-	-	-
Information Technology	61	3	64	-	-	-
Sustainability	62	59	121	-	141	141
Real Estate	22	13	35	49	389	438
BART-to-Oak and eBART Asset Replacement	15	-	15	-	43	43
Climate Adaptation & Resiliency	4	-	4	14	307	321
BART Police Capital	26	22	48	-	-	-
Administration	33	-	33	-	-	-
Total	7,250	2,408	9,657	3,347	11,165	14,512

Notes:

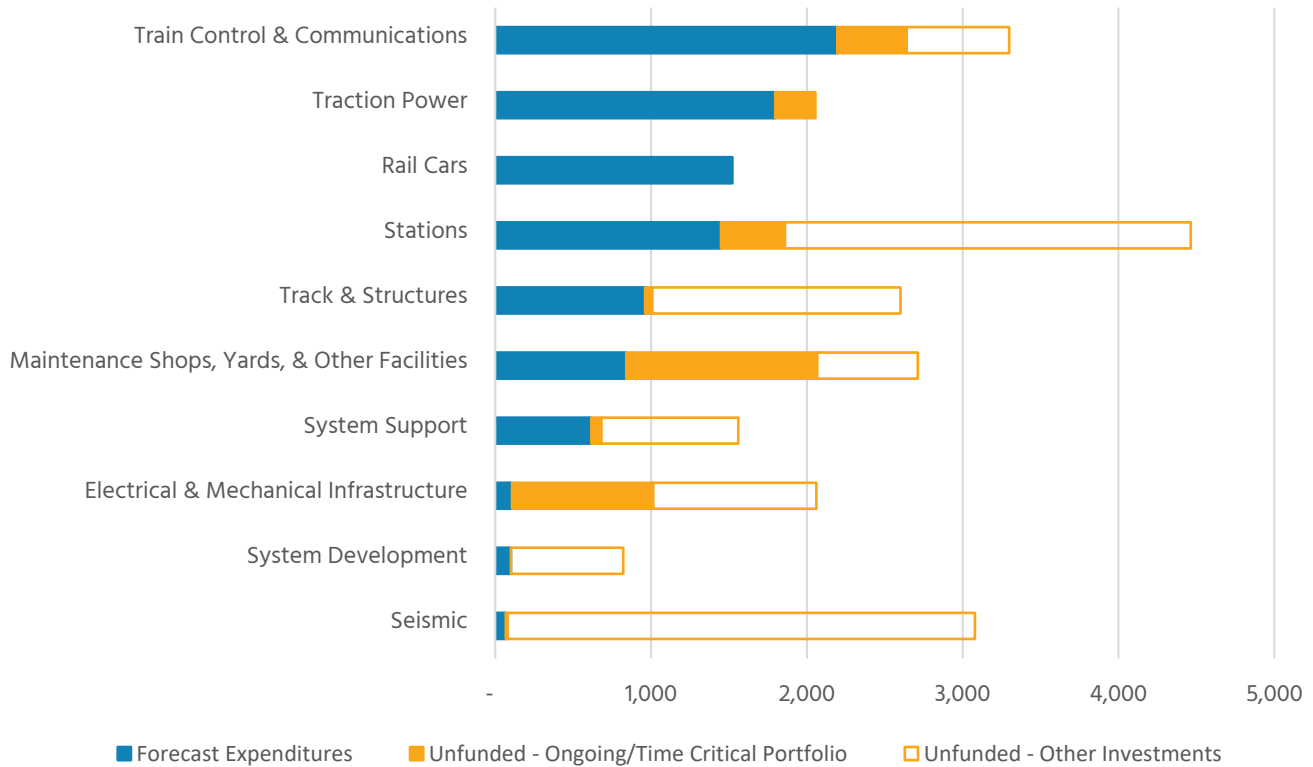
1. Named Major Capital Projects/Programs highlighted in grey

Refer to Appendix A for a detailed summary of the FY25-FY34 CIP Forecast Expenditures by CIP Program and Subprogram, spread by fiscal year. Appendix A also includes the total FY25-FY34 unfunded capital needs by CIP Program and Subprogram.

2. Capital Needs

This CIP defines \$9.7 billion of planned capital investment for which funding sources have been identified. It delineates another \$3.3 billion of ongoing or time critical capital investment needs for which no funding source has yet been identified. It further identifies another \$11.4 billion of unfunded capital needs. Chart 3 summarizes total investment need, identified funding, and unfunded needs for each of 10 CIP Programs.

Chart 3. FY25-FY34 Total Investment Need by CIP Program



Development of Capital Needs

BART engages in a rigorous process to ensure the most critical projects are prioritized in BART’s pursuit of grant funding and allocation of BART capital funding. The foundation of this process is Reliability Centered Maintenance, where BART maintenance personnel document asset conditions and work performed on assets on a daily & weekly basis, and the Asset Risk Register, where BART maintenance and engineering subject matter experts (SMEs) use asset data to assess the condition of BART assets and their risk to reliable and safe operation of the BART system. The Asset Risk Register is then used by these SMEs to develop a Capital Needs Inventory (CNI), which defines potential capital projects to renovate, replace or upgrade

BART capital assets and scores these capital needs based on several criteria, including safety, risk, compliance and reliability, among others. The CNI also assesses the urgency and criticality of these capital needs, which are integrated in the capital needs’ scores. The capital needs delineated in the CNI are then integrated into the CIP. Capital needs that receive funding become active capital projects. Figure 1 illustrates this cycle.

Figure 1. Capital Planning Cycle



Beyond BART’s capital needs for existing assets, the CIP inventories other capital needs, including investments to strengthen BART’s resilience to natural hazards like earthquakes, extreme weather, fire and flood; to improve access to BART through intermodal, bike and pedestrian improvements; enhance the accessibility of the BART system for riders with disabilities; and support sustainability, such as electric vehicle charging at stations and facilities.

CIP Programs

The CIP is organized into 10 CIP Programs, generally reflecting the type of asset. These CIP Programs are detailed below.

Rail Cars

BART is investing in the replacement and expansion of its legacy rail car fleet. Phase 1 of the Fleet of the Future Rail Car Procurement (Rail Car Phase 1) purchases a total of 775 new rail cars to replace the 669 rail car legacy fleet; provide 60 rail cars for the Silicon Valley Rail Transit Extension, Phase 1, from Warm Springs to Berryessa; and add another 46 rail cars. For Rail Car Phase 1, the final rail car is expected to be delivered in Summer 2024, at which time BART will transition to Phase 2 of the Rail Car Procurement (Rail Car Phase 2). Rail Car Phase 2 will procure an additional 306 expansion rail cars for BART’s Core Capacity Program. Immediately following Rail Car Phase 2, the Rail Car Procurement will enter Phase 3, in which BART will procure an additional 48 rail cars for the Santa Clara Valley Transportation Authority’s (VTA) BART-to-Silicon-Valley Phase II Extension (BSVII), which will extend BART further south from Berryessa to San Jose. Table 2 summarizes the capital investment plan for the Rail Cars Program over the 10-year CIP period.

Table 2. Rail Cars Program Capital Investment Plan (\$Millions)

FY25-FY34 CIP Subprograms	Constrained Forecast Expenditures			Unfunded		
	Secured Funding	Planned Funding	Total	Ongoing/ Time Critical	Other Investments	Total
Rail Cars	1,304	217	1,521	-	-	-
New Car Program (775 cars)	308	-	308	-	-	-
New Car Program Phase 2 (306 cars)	987	45	1,032	-	-	-
New Car Program Phase 3 (48 BSVII rail cars)	173	-	173	-	-	-
Rail Car Improvements	9	-	9	-	-	-

Track and Structures

The Track and Structures Program includes four Subprograms that replace, rehabilitate, and upgrade the BART system’s rail rights-of-way, including trackway infrastructure, tunnels, and aerial structures. Most of these components are original to the system and worn from decades of use. Table 3 summarizes the capital investment plan for the Track and Structures Program over the 10-year CIP period.

Table 3. Track and Structures Program Capital Investment Plan (\$Millions)

FY25-FY34 CIP Subprograms	Constrained Forecast Expenditures			Unfunded		
	Secured Funding	Planned Funding	Total	Ongoing/ Time Critical	Other Investments	Total
Track & Structures	818	145	962	44	1,595	1,639
Trackway Rehabilitation	569	-	569	-	987	987
Structures Rehabilitation	190	145	335	3	542	545
Wayside Equipment	44	-	44	40	55	95
Track Capacity Improvements (BART Metro)	15	-	15	-	12	12

Traction Power

BART trains run on electric power. The infrastructure that distributes electricity throughout the system and propels BART trains by providing electricity to BART's third rail is supported through a set of 118 substations, over 700 high voltage circuit breakers and switchgears, and over 1.5 million linear feet of cabling. Most of this infrastructure is original to the system and requires either replacement or major rehabilitation. This Program includes four Subprograms that will replace, renovate, and upgrade power infrastructure to maintain and improve service reliability. As part of its Core Capacity Program, BART is adding several new expansion traction power substations in the core of the system. Table 4 summarizes the capital investment plan for the Traction Power Program over the 10-year CIP period.

Table 4. Traction Power Program Capital Investment Plan (\$Millions)

FY25-FY34 CIP Subprograms	Constrained Forecast Expenditures			Unfunded		
	Secured Funding	Planned Funding	Total	Ongoing/ Time Critical	Other Investments	Total
Traction Power	1,112	684	1,796	248	10	258
Substation Renovation	502	419	921	114	-	114
34.5KV Cable Replacement	105	-	105	75	-	75
Traction Power Controls	368	225	593	58	10	68
Core Capacity Traction Power Upgrades	137	40	177	2	-	2

Train Control and Communications

BART's train control system consists of both hardware and software that are used to control speed and movement on the rail network, keeping trains running smoothly and eliminating any possibility of a collision. BART's communications systems support train control and other operational functions. They include the Operations Control Center, supporting fiber optic cable network, the trunked radio system, and CCTV cameras.

BART's Train Control and Communications Program includes the replacement of BART's legacy fixed block train control system with a new communications-based train control (CBTC) system, which will improve reliability and enable significantly increased service frequency. Train Control Modernization, which implements CBTC, is the centerpiece of BART's Core Capacity Program.

Also included in the Train Control and Communications Program are two Subprograms –Train Control System Rehabilitation, which invests in BART's existing train control system to maintain its reliability until the new CBTC system is operational, and Communications & Computer Systems Rehabilitation. Table 5 summarizes the capital investment plan for the Train Control and Communications Program over the 10-year CIP period.

Table 5. Train Control and Communications Program Capital Investment Plan (\$Millions)

FY25-FY34 CIP Subprograms	Constrained Forecast Expenditures			Unfunded		
	Secured Funding	Planned Funding	Total	Ongoing/ Time Critical	Other Investments	Total
Train Control & Communications	1,889	306	2,195	444	658	1,103
Train Control Modernization	1,647	306	1,953	-	-	-
Train Control System Rehabilitation	236	-	236	231	300	531
Communications & Computer Systems Rehabilitation	6	-	6	213	359	572

Stations

The Stations Program focuses on reinvestment in station infrastructure with modest access, wayfinding and other improvements. Subprograms in this area will repair and rehabilitate existing station assets; enhancing and expanding station access facilities; improving wayfinding and the customer experience; and improving capacity to accommodate more riders at the system's busiest stations. BART's Escalator and Canopy Installation is well underway, replacing escalators and installing canopies at San Francisco station entrances. BART has also initiated its Next Generation Fare Gate Project with a successful pilot at West Oakland Station; BART will proceed with deployment of these new fare gates throughout the system in FY25. Another major station investment effort is the modernization of elevators throughout the system, which will be implemented as funding is secured. Table 6 summarizes the capital investment plan for the Stations Program over the 10-year CIP period.

Table 6. Stations Program Capital Investment Plan (\$Millions)

FY25-FY34 CIP Subprograms	Constrained Forecast Expenditures			Unfunded		
	Secured Funding	Planned Funding	Total	Ongoing/ Time Critical	Other Investments	Total
Stations	817	632	1,449	410	2,605	3,014
Station Enhancement	86	212	297	-	-	-
Escalator/Canopy Installation	149	-	149	8	19	27
Station Access Enhancement	92	170	262	-	68	68
Station Systems Rehabilitation	133	-	133	-	46	46
Station Capacity Improvements (BART Metro)	2	-	2	-	1,000	1,000
Station Buildings & Facilities Rehabilitation	12	-	12	128	153	281
Station Accessibility Improvement	30	-	30	-	4	4
Wayfinding & Customer Experience	30	3	33	53	238	291
Elevator & Escalator Rehabilitation	142	112	253	-	1,077	1,077
Elevator Modernization	79	123	201	221	-	221
Next Generation Fare Gates	63	13	76	-	-	-

Maintenance Shops, Yards, and Other Facilities

A range of buildings and facilities that are not visible to BART riders support system operations. These include BART's four rail car maintenance facilities in Hayward, Richmond, Concord, and Daly City, and other facilities. Five Subprograms will repair and upgrade these facilities.

In addition to reinvestment in existing facilities, BART is also building additional rail car storage at the Hayward Maintenance Complex (HMC) as part of the Core Capacity Program. BART also plans to construct a new Fleet of the Future Maintenance Facility at HMC to support the ongoing maintenance and overhaul of the new rail car fleet. Further, BART is planning to relocate BART Police Department (BPD) Headquarters from its temporary location on 8th Street, which is slated for Transit-Oriented Development, to 2000 Broadway. This relocation involves the acquisition of an existing building and its upgrade to

meet California Essential Services Facility standards and BPD requirements. Table 7 summarizes the capital investment plan for the Maintenance Shops, Yards, & Other Facilities Program over the 10-year CIP period.

Table 7. Maintenance Shops, Yards, & Other Facilities Program Capital Investment Plan (\$Millions)

FY25-FY34 CIP Subprograms	Constrained Forecast Expenditures			Unfunded		
	Secured Funding	Planned Funding	Total	Ongoing/ Time Critical	Other Investments	Total
Maintenance Shops, Yards, & Other Facilities	599	242	841	1,224	647	1,871
Hayward Maintenance Complex Phase 1 (HMC1)	5	-	5	-	-	-
Core Capacity Program East Storage Yard (HMC2)	242	78	320	548	-	548
Non-Station Buildings & Facilities Rehabilitation	68	-	68	188	358	546
Shop & Yard Equipment	33	-	33	136	272	407
Fleet of the Future Maintenance Facility (FFMF)	112	-	112	302	-	302
Fencing & Security	10	-	10	38	17	55
BPD HQ	26	163	189	-	-	-

Electrical and Mechanical Infrastructure

BART system operations depend on a wide range of electrical and mechanical infrastructure, including backup power supplies, HVAC equipment, fire suppression equipment, water management infrastructure, and many other facilities. This Program includes three Subprograms that will replace, renovate, and upgrade electrical and mechanical infrastructure to maintain safe and reliability operations. Measure RR will provide significant funding for these investments. In addition to renovating and replacing existing traction power infrastructure, BART will build additional traction power substations in the core of the BART system to support the Core Capacity Program and provide additional redundancy, thereby improving service reliability. Table 8 summarizes the capital investment plan for the Electrical and Mechanical Infrastructure Program over the 10-year CIP period.

Table 8. Electrical and Mechanical Infrastructure Program Capital Investment Plan (\$Millions)

FY25-FY34 CIP Subprograms	Constrained Forecast Expenditures			Unfunded		
	Secured Funding	Planned Funding	Total	Ongoing/ Time Critical	Other Investments	Total
Electrical & Mechanical Infrastructure	108	-	108	904	1,049	1,953
Mechanical Infrastructure Rehabilitation	58	-	58	417	380	797
Electrical Infrastructure Rehabilitation	25	-	25	365	468	833
Lighting Rehabilitation & Upgrades	25	-	25	122	201	323

Seismic

In 2004, BART District voters approved Proposition AA, a general obligation bond to fund BART's Earthquake Safety Program (ESP). Since that time, BART has been steadily investing in crucial seismic upgrades to its core infrastructure, including elevated structures, stations, maintenance facilities, and, most recently, the Transbay Tube. These seismic retrofits are now substantially complete.

Moving forward, BART will assess any risks to operations in the Caldecott BART Tunnel resulting from potential incremental movement of the Hayward Fault and develop a capital project to address such risks. Table 9 summarizes the capital investment plan for the Seismic Program over the 10-year CIP period.

Table 9. Seismic Program Capital Investment Plan (\$Millions)

FY25-FY34 CIP Subprograms	Constrained Forecast Expenditures			Unfunded		
	Secured Funding	Planned Funding	Total	Ongoing/ Time Critical	Other Investments	Total
Seismic	67	-	67	11	3,000	3,011
Earthquake Safety Program / TBT Seismic Retrofit	67	-	67	11	-	11
Caldecott BART Tunnel Seismic Retrofit		-	-	-	1,000	1,000
A-Line Seismic		-	-	-	2,000	2,000

System Development

BART supports VTA in the design and implementation of its BSVII Project, which will extend BART from Berryessa to San Jose, and also makes capital investments on behalf of VTA on the BART-to-Silicon-Valley Extension, Phase 1, which opened for service in 2020. BART is also partnering with the Capital Corridor on Link21, with current efforts focused on planning for potential future investments in the transit network, including a second transbay crossing. Table 10 summarizes the capital investment plan for the System Development Program over the 10-year CIP period.

Table 10. System Development Program Capital Investment Plan (\$Millions)

FY25-FY34 CIP Subprograms	Constrained Forecast Expenditures			Unfunded		
	Secured Funding	Planned Funding	Total	Ongoing/ Time Critical	Other Investments	Total
System Development	100	-	100	-	721	721
Link21	75	-	75	-	721	721
Silicon Valley Extensions	10	-	10	-	-	-
System Expansion Planning	0	-	0	-	-	-
SVRT Capital	15	-	15	-	-	-

System Support

System Support Subprograms invest in areas other than mainline railroad and station assets. They support BART District operations and promote strategic plan goals in a variety of areas. Included in this category is Program Management and Contingency for BART's Core Capacity Program, as well as information technology investments. Table 11 summarizes the capital investment plan for the System Support Program over the 10-year CIP period.

Table 11. System Support Program Capital Investment Plan (\$Millions)

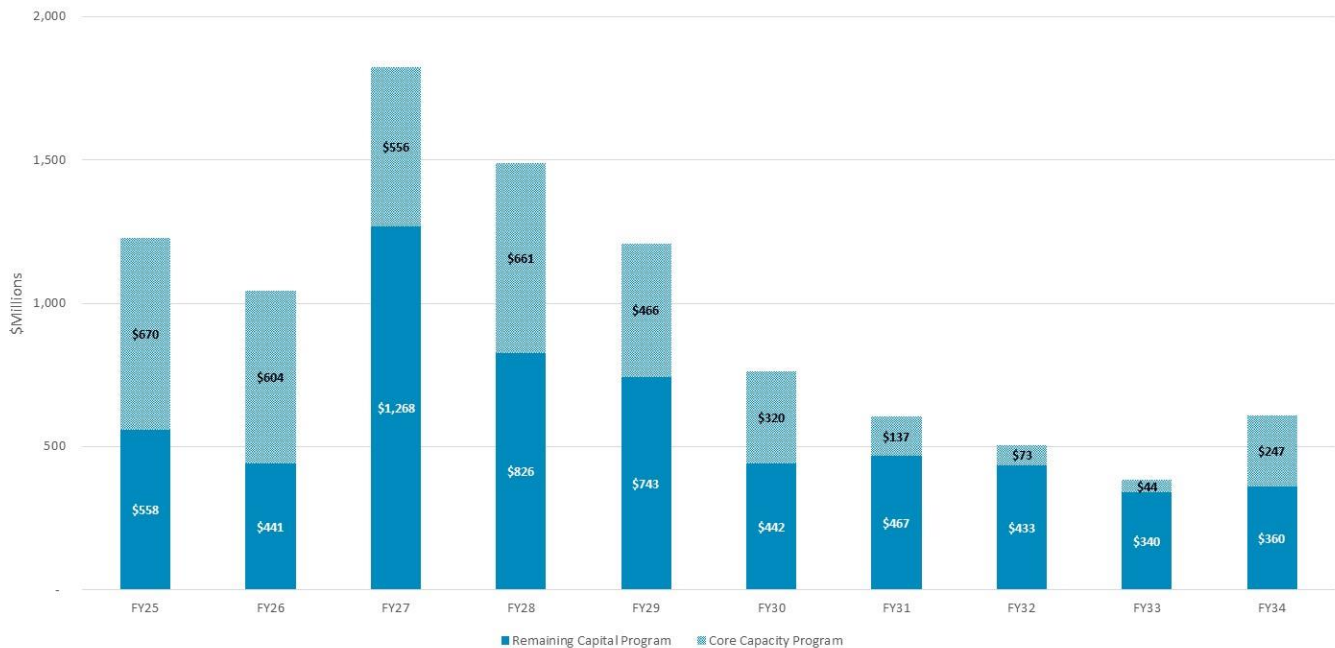
FY25-FY34 CIP Subprograms	Constrained Forecast Expenditures			Unfunded		
	Secured Funding	Planned Funding	Total	Ongoing/ Time Critical	Other Investments	Total
System Support	436	181	617	63	880	943
Core Capacity Support	213	84	297	-	-	-
Information Technology	61	3	64	-	-	-
Sustainability	62	59	121	-	141	141
Real Estate	22	13	35	49	389	438
BART-to-Oak and eBART Asset Replacement	15	-	15	-	43	43
Climate Adaptation & Resiliency	4	-	4	14	307	321
BART Police Capital	26	22	48	-	-	-
Administration	33	-	33	-	-	-

Core Capacity Program

BART has embarked on a major initiative to expand the capacity of the core of the system. This Core Capacity Program (CCP), which crosses multiple CIP Programs, will enable BART to run longer trains at higher frequency for an aggregate forecast capacity increase of up to 40%. The cornerstone of the CCP is Train Control Modernization, which will replace BART's legacy fixed block train control system with a modern communications-based train control system. In addition, the CCP is expanding BART's rail car fleet with an additional 306 rail cars, constructing new traction power substations in the core of the system, and adding rail car storage.

The Core Capacity Program, which is funded by a Federal Capital Investment Grant, State SB1 grants, Regional Measure 3 Bridge Tolls, contributions from County Transportation Authorities, BART Measure RR general obligation bond proceeds and BART operating-to-capital allocations, comprises over 40% of BART's 10-year CIP, as shown in Chart 4.

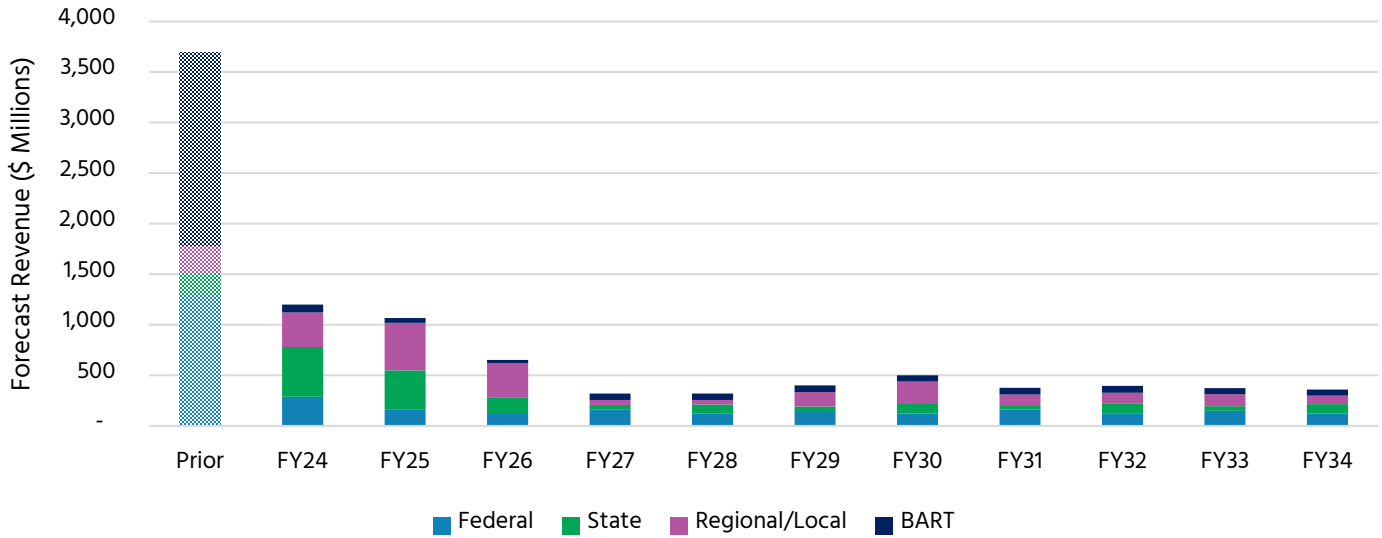
Chart 4. Core Capacity Program as Share of Capital Investment Plan



3. Funding sources

The CIP forecasts \$9.7 billion of capital funding over the 10-year period. Of this amount, \$3.7 billion was allocated in prior years and \$6 billion is forecast new funding, either planned or secured but not yet allocated, as depicted in Chart 5 below. The forecast new funding is based on industry best practices, past trends, and BART experience. The forecast also reflects regional planning efforts, especially MTC's Plan Bay Area (PBA) 2050+ update, in which MTC is forecasting roughly half the capital funding sources they projected in PBA 2050. Chart 5 shows the funding forecast by fiscal year and funding source. Finally, the CIP includes two significant capital investment initiatives, the \$3.5 billion Measure RR general obligation bond program, which focuses on the renovation and replacement of existing infrastructure and which is expected to be substantially expended within the first five years of the CIP, and the \$5 billion Core Capacity Program, for which BART has secured about \$4 billion to date, including a \$1.2 billion federal Capital Investment Grant and over \$1 billion in secured and planned State SB1 funds. The CIP does not forecast another BART general obligation bond measure. It also does not anticipate another major program that will compete as effectively for the SB1 grants as has the Core Capacity Program, given the greenhouse gas emissions savings requirements of those grant programs.

Chart 5. FY25-FY34 CIP – Funding Forecast



Note: The chart presents the year in which sources are committed and become available, not necessarily the year in which these funds are expended

Table 12 further summarizes the funding forecast by status of the forecast funding. As shown, 90% of the funding forecast reflects high probability funding and almost 75% of the funding forecast represents secured sources.

Table 12. Funding Forecast by Source and Status (\$Millions)

	Federal	State	Regional/ Local	BART	Total
High Probability Funding	2,640	1,479	2,068	2,481	8,668
Secured	2,478	681	1,600	2,402	7,161
Planned	162	798	468	79	1,507
Lower Probability Funding	323	331	223	112	989
Secured	-	-	-	-	-
Planned	323	331	223	112	989
Total Forecast Sources	2,963	1,810	2,291	2,593	9,657

To fund its capital program, BART receives funding from the federal government, the State of California, and from local and regional sources. In addition, BART contributes to its capital program through general obligation bonds and BART operating revenue. Generally, external funding sources are secured for a specific project and cannot be used flexibly. Table 13 below summarizes key funding sources.

Table 13. Capital Funding Sources Summary

Funding Type/ Category	Funding Source		Limited to Specific Projects	Assumptions that Drive Available Amount Per Year	Funding Source Behavior: Available vs. Programmed
Federal	Formula		Yes, once obligated	Established in Federal legislation and MTC Programming Policy. Escalation assumption of 2% based on Plan Bay Area 2050.	Funds available in the Federal Fiscal Year they are apportioned by FTA and programmed by MTC. Funds are then expended over multiplied subsequent years.
	Discretionary		Yes, once awarded	Aligns with awarded competitive funding grants; future amounts based on prior experience and success rates and pipeline of eligible/competitive projects	After award, programmed to align with project cashflows
State	SB1 and Cap & Trade Funds		Yes, once awarded	Established in State Statute and Program Guidelines; future amounts based on prior experience and success rates and pipeline of eligible/competitive projects	After award, programmed to align with project cashflows
	STA/TDA		Yes, once awarded	Established in State Statute and MTC Programming Policy; Formulaic Programs with some competitive elements	After award, programmed to align with project cashflows
	Earmarks		Yes, once awarded	Established in State Legislation; future amounts based on prior experience and success rates and pipeline of eligible/competitive projects	After award, programmed to align with project cashflows
Regional/Local	Bridge Tolls		Yes	Established in expenditure plan	Aligned with project cashflows
	County Sales Tax	Programmed	Yes	Named projects and categories established in expenditure plan	Aligned with project cashflows
		Discretionary	Yes, once awarded	Competitive project categories established in expenditure plan	After award, programmed to align with project cashflows
	Other/Reimbursable		Yes	Based on agreements with outside entities	Programmed based on agreements and aligned with project cashflows
BART	Measure RR		Yes	Established in expenditure plan	Aligned with project cashflows
	Capital Allocations	Priority	Yes	Commitments to specific projects	Funds are programmed in the year they are made available, but roll over if not spent in that year
		Baseline	No	Based on committed operating budget transfers	Funds are programmed in the year they are made available, but roll over if not spent in that year

Summary of Sources

BART's primary capital funding sources are summarized below. Appendix B reflects the FY25-FY34 funding forecast by fiscal year and funding source.

Federal funds fall into two categories: Federal formula funds and federal discretionary funds. Federal formula funds automatically flow from the federal government to the Metropolitan Transportation Commission (MTC), the Bay Area's Metropolitan Planning Organization (MPO), which then allocates the money to the Bay Area's many transportation operators based on variables like population and population density. Federal discretionary funds are awarded through a competitive application process.

Federal Transit Administration (FTA) Formula Funds

Section 5307 Urbanized Area Formula: These funds are apportioned to urbanized areas (UZA) by FTA based on population and service factors for the six large UZAs of San Francisco-Oakland, San Jose, Concord, Antioch, Santa Rosa, and Livermore-Pleasanton-Dublin, and population factors for the six small UZAs of Vallejo, Fairfield, Vacaville, Napa, Gilroy-Morgan Hill, and Petaluma. These funds have broad eligibility for transit uses, and programming authority is delegated by FTA to Designated Recipients for each UZA. MTC is the Designated Recipient for the large UZAs and Caltrans is for the small UZAs, though Caltrans has delegated programming responsibility to MTC by agreement.

Section 5337 State of Good Repair: FTA Section 5337 is a formula funding program for the replacement and rehabilitation of fixed guideway assets including railcars, ferry vessels, buses operating in HOV lanes, and related infrastructure. Projects are limited to replacement and rehabilitation, or capital projects required to maintain public transportation systems in a state of good repair. The funds are apportioned by FTA to the six large urbanized areas of San Francisco-Oakland, San Jose, Concord, Antioch, Santa Rosa, and Livermore-Pleasanton-Dublin based on service factors. Similar to the Section 5307 formula funds, MTC is the Designated Recipient of these funds and programs these funds for the region.

As Designated Recipient with programming authority for the above funds, MTC has created the Transit Capital Priorities (TCP) Program, which establishes policies to distribute the limited funding available to the region among the many eligible operators and their capital rehabilitation and replacement needs. Periodically, MTC holds a call for projects during which transit operators submit projects for MTC programming consideration. The TCP Program highly favors replacement and rehabilitation of rolling stock and fixed guideway assets. At BART, these funds are exclusively used for capital projects such as our traction power or train control rehabilitation projects and railcar replacement project.

Federal Discretionary Funds

The Bipartisan Infrastructure Law significantly increased the amount of federal discretionary funds available. It has done so by increasing the amount available in existing discretionary pots and by adding new competitive grant programs. BART's grant and funding advocacy team is hard at work at identifying and applying for these opportunities.

Section 5309 Capital Investment Grants (CIG): The FTA CIG program is a nationally competitive program and is used to fund new and expanded fixed guideway systems. This program includes New Starts, Small Starts, and Core Capacity funding programs. In 2020, FTA awarded BART nearly \$1.2 billion of Core Capacity CIG funding for BART's Core Capacity Program.

Federal Credit Assistance: The Transportation Infrastructure Finance and Innovation Act (TIFIA) and Railroad Rehabilitation & Improvement Financing (RRIF) provide Federal credit assistance to finance surface transportation projects. BART is

pursuing a loan from one or both of these programs. TIFIA can be used to finance up to 49% of a project, while RRIF can finance 100%.

Surface Transportation Block Grant Program (STP): Federal transportation legislation authorizes the State of California to distribute regional STP funds to areas within the State based on urbanized population shares. MTC directs the STP funds coming to the San Francisco Bay Area into a comprehensive and multi-modal program within the region. MTC, in cooperation with its transportation partners, developed a variety of regional and local programs through the One Bay Area Grant (OBAG) program. Eligible projects at BART include public transit capital improvements, pedestrian and bicycle facilities and programs, transit safety projects, transportation demand management, and transportation planning activities.

Congestion Mitigation and Air Quality Improvement Program (CMAQ): California distributes CMAQ funds to the metropolitan planning organizations (MPOs) based on population and the severity of nonattainment of air quality standards in a particular air basin using various weighting factors. MTC directs the CMAQ funds coming to the San Francisco Bay Area into the OBAG program. The CMAQ portion of OBAG program funds projects and programs that reduce mobile emissions and support Plan Bay Area's climate initiatives.

Rebuilding American Infrastructure with Sustainability and Equity (RAISE): Formerly known as the Transportation Investment Generating Economic Recovery (TIGER) program and then the Better Utilizing Investments to Leverage Development (BUILD), RAISE grants are national infrastructure investments awarded on a competitive basis for projects that will have a significant impact on the nation, a metropolitan area, or a region. Since the TIGER/BUILD/RAISE program was first created in 2009, over \$14 billion has been appropriated and/or awarded for nationally for capital investments in surface transportation infrastructure over fifteen rounds of competitive grants.

Other: Other Federal discretionary funds that BART receives include grants from the Federal Emergency Management Agency (FEMA) and other opportunities from the DOT that are not listed above.

State Programs

State Transportation Improvement Program (STIP): The California Transportation Commission (CTC) is required to biennially adopt a STIP. The STIP is a comprehensive listing of all major projects to be funded from specified state funding programs and certain federal funds that flow directly to the state. The STIP is funded in large part by the state excise tax on gasoline, which reset to 17.3 cents per gallon in 2019 and escalates annually thereafter.

Active Transportation Program (ATP): The ATP combines multiple federal and state bicycle and pedestrian fund sources and programs into a consolidated state program. ATP includes federal funding sources such as the Transportation Alternatives Program (TAP), and state funding such as the Bicycle Transportation Account (BTA), Safe Routes to Schools (SR2S), and Senate Bill 1 (SB1).

Senate Bill 1 (SB1): SB1 increases certain transportation taxes and fees to generate revenue for existing and new transportation programs. Many existing programs that receive enhanced funding include STIP and ATP. Additional competitive programs include the Solutions for Congested Corridors (SCC) Program, Trade Corridor Enhancement Program (TCEP), Local Partnership Program (LPP) competitive share, Transit and Intercity Rail Capital Program (TIRCP, which also includes funding from cap and trade).

Low Carbon Transit Operations Program (LCTOP): The Low Carbon Transit Operations Program provides operating and capital assistance for transit agencies to reduce greenhouse gas emission and improve mobility, with a priority on serving disadvantaged communities.

Affordable Housing and Sustainable Communities (AHSC): AHSC provides funding for affordable housing development or housing related infrastructure near a transit stop. As BART continues to pursue an ambitious transit-oriented development

policy, it has worked with housing developers to secure AHSC funds that support both housing development and transportation project, such as Next Generation Fare Gates and new rail cars.

Transportation Development Act (TDA) and State Transit Assistance (STA) Funds: TDA revenues are derived from a state sales tax of one-quarter of one percent on all retail sales in each county, used to finance transit operations, and bus and rail projects as well as special paratransit services for disabled passengers, and bicycle and pedestrian projects. STA funds are generated from the state sales tax on diesel fuel. These funds can be used for both transit capital and operating projects and are distributed 50% to the Population-Based program and 50% to the Revenue-Based program.

Regional, and Local Programs

Bridge Tolls: Regional Measure 2 (RM2), Regional Measure 3 (RM3) and previous bridge toll measures authorized incremental tolls on the seven state-owned toll bridges in the Bay Area. Revenues from RM2 and RM3 fund a variety of BART capital projects.

Proceeds from county transportation sales taxes: Voters in Alameda, San Francisco, Contra Costa and San Mateo have approved sales tax measures to fund transportation projects in their counties. Some of these dollars are programmed in an expenditure plan for named BART capital projects, while BART competes for funding from discretionary expenditure plan categories.

Santa Clara Valley Transportation Authority (VTA) Contribution: In 2020, VTA opened the first phase of its extension of the BART system into Silicon Valley. VTA is currently planning the second phase if this extension from Berryessa to San Jose. VTA is financially responsible for the construction of the extension, as well as operating, maintenance and capital investment costs in connection with the extension and its assets. VTA also contributes to capital projects on the BART core system.

San Francisco Municipal Transportation Agency (SFMTA) Joint Maintenance Agreement: Embarcadero, Montgomery Street, Powell Street, and Civic Center/UN Plaza stations are used by both BART and SFMTA. BART maintains and makes capital investment in the shared use areas of all four stations for which SFMTA reimburses BART for its share of the cost under the terms of a Joint Maintenance Agreement between the two agencies.

BART Funds

Operating to Capital Allocations: Since 1976, BART has allocated operating funds to capital projects to support critical capital projects that might not be eligible for grant funding or to provide a local match to external funding sources. In addition to baseline capital allocations, BART has committed to priority capital allocations for named capital projects, including the Fleet of the Future Rail Car Procurement and the Core Capacity Program. The future availability of operating funds, even those identified as Secure, are not certain. Actual amounts will depend on numerous factors that will affect BART's operating budget, including actual ridership, fare revenue, sales tax revenue, and operating costs.

Measure RR: Approved by voters in the BART district in November 2016, this general obligation bond measure authorizes BART to issue \$3.5 billion of general obligation bonds to rebuild BART's aging infrastructure through eight major project categories: Renew Track, Renew Power Infrastructure, Repair Tunnels and Structures, Renew Mechanical Infrastructure, Renew Stations, Train Control Modernization, Relieve Crowding, and Access Improvements.

4. Appendices

Appendix A. FY25-FY34 CIP Summary

§ Millions	Constrained Capital Investment Plan											Unfunded Capital Need		
	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	Total	Ongoing/ Time Critical	Other Investments	Total
SOURCES														
Track 1 (High Probability Funding)	5,852	595	247	262	337	441	252	261	214	207	8,669			
Track 2 (Lower Probability Funding)	104	57	74	58	64	59	124	136	159	152	988			
Total Forecast Sources	5,956	652	321	320	402	501	376	396	374	360	9,657			
CONSTRAINED NEEDS														
Rail Cars	530	380	217	26	257	108	1	1	1	-	1,521	-	-	-
New Car (775 cars)	53	1	23	2	228	-	-	-	-	-	308	-	-	-
New Car Phase 2 (306 cars)	477	379	35	22	28	92	-	-	-	-	1,032	-	-	-
New Car Phase 3 (48 BSVII rail cars)	-	-	158	-	-	15	-	-	-	-	173	-	-	-
Rail Car Improvements	-	-	1	1	1	1	1	1	1	1	9	-	-	-
Track & Structures	99	94	199	266	62	37	65	39	60	40	962	44	1,595	1,639
Trackway Rehabilitation	65	63	77	162	32	33	33	34	35	35	569	-	987	987
Structures Rehabilitation	19	20	94	100	29	5	32	5	26	5	335	3	542	545
Wayside Equipment	10	4	26	4	-	-	-	-	-	-	44	40	55	95
Track Capacity Improvements (BART Metro)	5	7	2	1	-	-	-	-	-	-	15	-	12	12
Traction Power	132	107	175	296	301	237	179	156	85	130	1,796	248	10	258
Substation Renovation	43	48	93	119	134	135	141	89	55	62	921	114	-	114
34.5KV Cable Replacement	34	19	16	13	21	2	-	-	-	-	105	75	-	75
Traction Power Controls	6	7	32	132	120	95	38	67	30	68	593	58	10	68
Core Capacity Traction Power Upgrades	50	33	33	31	25	5	-	-	-	-	177	2	-	2
Train Control & Communications	152	199	515	432	373	226	140	77	58	23	2,195	444	658	1,103
Train Control Modernization	139	189	434	413	354	206	120	57	38	2	1,953	-	-	-
Train Control System Rehabilitation	12	10	76	19	19	19	20	20	20	21	236	231	300	531
Communications & Computer Systems Rehabilitation	1	-	5	-	-	-	-	-	-	-	6	213	359	572
Stations	175	106	286	110	100	87	115	166	148	156	1,449	410	2,605	3,014
Station Enhancement	6	13	36	1	7	6	59	56	57	57	297	-	-	-
Escalator/Canopy Installation	53	50	10	10	10	10	4	-	-	-	149	8	19	27
Station Access Enhancement	17	22	52	55	46	22	12	12	12	12	262	-	68	68
Station Systems Rehabilitation	8	0	12	13	11	13	13	36	14	13	133	-	46	46
Station Capacity Improvements (BART Metro)	-	-	2	-	-	-	-	-	-	-	2	-	1,000	1,000
Station Buildings & Facilities Rehabilitation	3	2	6	-	-	-	-	-	-	-	12	128	153	281
Station Accessibility Improvement	5	1	4	4	4	4	4	4	-	-	30	-	4	4
Wayfinding & Customer Experience	4	1	26	-	-	-	2	-	-	-	33	53	238	291
Elevator & Escalator Rehabilitation	-	-	47	13	13	13	13	40	56	57	253	-	1,077	1,077
Elevator Modernization	7	13	90	13	8	18	8	18	8	18	201	221	-	221
Next Generation Fare Gates	72	4	-	-	-	-	-	-	-	-	76	-	-	-
Maintenance Shops, Yards, & Other Facilities	71	123	210	278	62	20	50	26	1	1	841	1,224	647	1,871
Hayward Maintenance Complex Phase 1 (HMC1)	2	-	1	1	0	0	0	0	0	-	5	-	-	-
Core Capacity East Storage Yard (HMC2)	3	2	50	187	51	9	9	9	-	-	320	548	-	548
Non-Station Buildings & Facilities Rehabilitation	11	13	44	-	-	-	-	-	-	-	68	188	358	546
Shop & Yard Equipment	10	11	9	1	1	1	1	1	1	1	33	136	272	407
Fleet of the Future Maintenance Facility (FFMF)	-	-	-	36	10	10	40	16	-	-	112	302	-	302
Fencing & Security	4	2	4	-	-	-	-	-	-	-	10	38	17	55
BPD HQ	11	63	75	40	-	-	-	-	-	-	189	-	-	-
OCC Modernization	31	32	27	13	-	-	-	-	-	-	103	13	-	13
Electrical & Mechanical Infrastructure	33	16	59	-	-	-	-	-	-	-	108	904	1,049	1,953
Mechanical Infrastructure Rehabilitation	20	12	25	-	-	-	-	-	-	-	58	417	380	797
Electrical Infrastructure Rehabilitation	12	3	11	-	-	-	-	-	-	-	25	365	468	833
Lighting Rehabilitation & Upgrades	1	0	23	-	-	-	-	-	-	-	25	122	201	323
Seismic	12	-	9	9	9	9	9	8	-	-	67	11	3,000	3,011
Earthquake Safety / TBT Seismic Retrofit	12	-	9	9	9	9	9	8	-	-	67	11	-	11
Caldecott BART Tunnel Seismic Retrofit	-	-	-	-	-	-	-	-	-	-	-	-	1,000	1,000
A-Line Seismic	-	-	-	-	-	-	-	-	-	-	-	-	2,000	2,000
System Development	16	16	48	3	3	3	3	3	3	1	100	-	721	721
Link21	15	15	44	-	-	-	-	-	-	-	75	-	721	721
Silicon Valley Extensions	1	1	1	1	1	1	1	1	1	1	10	-	-	-
System Expansion Planning	-	-	0	0	0	0	0	-	-	-	0	-	-	-
SVRT Capital	-	-	2	2	2	2	2	2	2	-	15	-	-	-
System Support	8	4	107	67	41	34	41	30	28	258	617	63	880	943
Core Capacity Support	2	2	4	8	8	8	7	7	6	245	297	-	-	-
Information Technology	3	1	18	16	4	4	4	4	4	4	64	-	-	-
Sustainability	1	1	34	22	17	9	17	9	10	2	121	-	141	141
Real Estate	0	-	27	1	1	1	1	1	1	1	35	49	389	438
BART-to-Oak and eBART Asset Replacement	0	-	9	6	-	-	-	-	-	-	15	-	43	43
Climate Adaptation & Resiliency	1	1	1	-	-	-	-	-	-	-	4	14	307	321
BART Police Capital	-	-	8	8	7	7	6	6	3	3	48	-	-	-
Administration	-	-	5	5	5	5	5	4	3	3	33	-	-	-
Total Forecast Needs	1,227	1,045	1,824	1,487	1,209	762	604	506	384	608	9,657	3,347	11,165	14,512

Appendix B. FY25-FY34 Funding Sources Summary (\$Millions)

Fund Sources	Prior Allocated	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	Total
Secured	3,688	904	505	467	211	203	243	320	197	177	186	148	7,250
BART	1,902	77	47	32	65	64	25	25	65	41	18	18	2,381
BART - Earthquake Safety Program Bond	0	-	-	-	-	-	-	-	-	-	-	-	0
BART - Measure RR Bond	1,662	5	-	8	-	-	-	-	-	-	-	-	1,675
BART - Other	7	-	-	-	-	-	-	-	-	-	-	-	7
BART Operating Allocations to Capital	232	72	39	34	65	64	25	25	65	41	18	18	699
Measure RR Interest Earnings	-	-	21	-	-	-	-	-	-	-	-	-	21
Federal	1,304	260	101	97	99	101	102	104	106	107	102	104	2,587
CIG	973	45	-	-	-	-	-	-	-	-	-	-	1,018
FTA 5337 State of Good Repair	187	87	89	88	99	101	102	104	106	107	102	104	1,276
MTC Financing	127	83	-	-	-	-	-	-	-	-	-	-	210
Other Federal	-	1	-	-	-	-	-	-	-	-	-	-	1
Other Federal (Direct FTA, FHWA, and other)	18	43	-	-	-	-	-	-	-	-	-	-	61
Regional/Local	265	157	304	337	46	38	115	191	26	28	66	26	1,600
Alameda County	4	28	-	46	10	10	10	75	-	-	-	-	184
Contra Costa County	4	-	-	-	-	-	-	-	-	-	-	-	4
MTC Exchange Account	77	-	-	-	-	-	-	-	-	-	-	-	77
Other Local Government & Private	8	0	-	-	-	-	-	-	-	-	-	-	9
Regional - Bridge Tolls	4	50	-	-	-	-	-	-	-	-	-	-	54
Regional Measure 3	-	-	250	250	-	-	-	-	-	-	-	-	500
San Francisco County	124	3	-	-	-	-	6	71	6	6	6	6	227
Santa Clara County	-	70	23	25	19	10	81	27	1	3	40	-	299
Santa Clara VTA	42	-	-	-	-	-	-	-	-	-	-	-	42
VTA O&M	2	5	32	17	17	18	18	18	19	19	20	21	205
State	217	411	52	0	-	0	-	0	-	0	-	0	681
AHSC	7	1	50	-	-	-	-	-	-	-	-	-	58
Low Carbon Transit Operations Program (LCTOP)	-	-	-	-	-	-	-	-	-	-	-	-	-
SB1	199	373	2	0	-	0	-	0	-	0	-	0	575
State - Other	12	36	-	-	-	-	-	-	-	-	-	-	48
Unsecured	-	296	562	185	110	117	159	180	179	220	187	211	2,408
BART	-	-	-	-	-	-	42	37	-	27	43	43	191
BART Operating Allocations to Capital	-	-	-	-	-	-	42	37	-	27	43	43	191
Federal	-	29	63	20	61	20	45	19	56	19	48	19	398
Other Federal (Direct FTA, FHWA, and other)	-	29	63	20	61	20	45	19	56	19	48	19	398
Regional/Local	-	186	166	5	2	6	27	31	79	81	52	56	691
Alameda County	-	-	-	4	-	5	-	5	-	5	-	5	25
Financing Reimbursement	-	-	163	-	-	-	-	-	-	-	-	-	163
Contra Costa County	-	-	1	-	-	1	25	25	76	75	50	51	303
Other Local Government & Private	-	3	0	-	0	-	0	-	1	-	0	-	4
San Francisco County	-	-	2	-	2	-	2	-	2	-	2	-	8
San Mateo County	-	10	1	1	1	1	1	1	1	1	1	1	15
Santa Clara County	-	173	-	-	-	-	-	-	-	-	-	-	173
State	-	81	333	161	48	91	45	94	45	93	45	94	1,128
AHSC	-	-	8	5	5	5	3	3	3	3	3	3	38
Other Federal (Direct FTA, FHWA, and other)	-	4	4	4	4	4	4	4	4	4	4	4	41
SB1	-	75	314	142	31	75	31	75	31	75	31	75	956
State - Other	-	2	7	10	8	7	7	12	7	12	7	12	93
Total	3,688	1,200	1,067	652	321	320	402	501	376	396	374	360	9,657



▶ Draft FY25 Capital Investment Plan
10 YEAR PLAN (FY25-FY34)

May 23, 2024



What is the Capital Investment plan (CIP)?

- Details BART's 10-year capital investment plan based on mid- to long-term capital needs and funding forecasts
- Provides greater transparency into BART's capital program considerations, constraints and challenges
- Aligns BART's planned capital investments with BART's goals and priorities
- Informs and supports funding advocacy



Capital Program Planning Overview

The **2-Year Capital Budget** provides an estimate of the work planned to be completed in the coming two fiscal years

- Presented the FY25 & FY26 Preliminary Capital Budget in April
- Capital Budget is fully funded with grants awarded and funds programmed in prior fiscal years
- **FY25 & 26 Final Capital Budget** will be before the Board in June for adoption alongside the Operating Budget
- **Quarterly Capital Programs and Projects Status Report (CPPSR)** details spend and project status for all projects in the 2-Year Capital Budget
- FY25 & FY26 Final Capital Budget will include updates from the FY24Q3 CPPSR

The **10-Year CIP** is a constrained long-term forecast of capital uses and sources

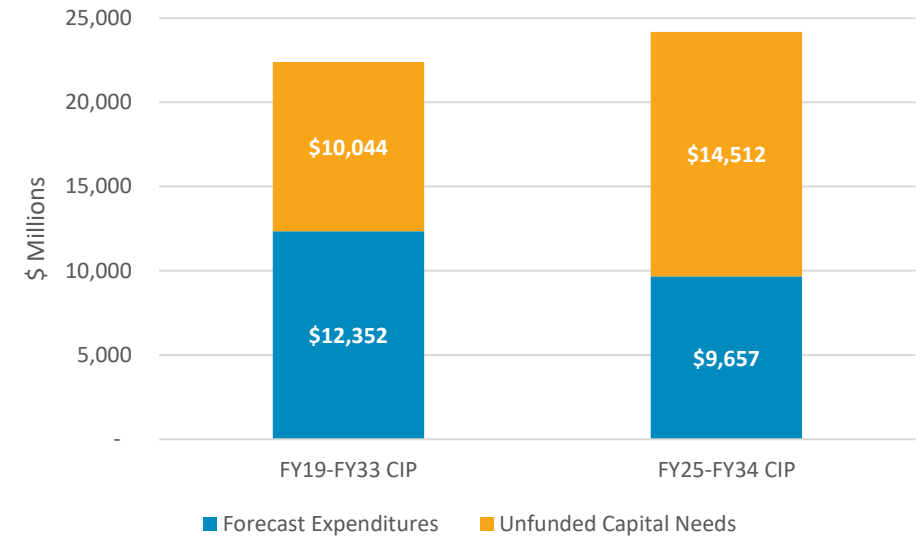
- 2-Year Capital Budget represents year 1 and year 2 in the CIP
- CIP includes sources secured in prior fiscal years to fund expenditures during the 10-year period
- Includes forecast of total unfunded capital costs (capital needs) for the 10-year period

Guiding Principles

- Customer commitment is primary focus of the CIP
 - Capital investments to support operations, keep BART safe and clean and maintain reliable service
- Where prudent, CIP plans additional investments to prepare BART to serve the Bay Area for the next 50 years
 - Targeted investments in resiliency, capacity, redundancy, accessibility, sustainability
- Strategies to optimize and responsibly manage capital funding underpin the CIP
 - Leveraging Measure RR and BART funds with external sources
 - Employing innovative funding strategies and applying tight project controls
- The CIP is a snapshot in time
 - Capital Program relies on flexible CIP and continuous assessment and review
 - Balancing delivering on commitments and executing nimble funding strategy to address emergent/emergency needs

Looking Back | FY19-FY33 CIP

- FY25-FY34 CIP transition back to 10-year horizon
 - FY19-FY33 CIP 15-year horizon to align with Measure RR Program
- Capital Cost refinement
 - Enhanced needs assessment forecast grounded in Reliability Centered Maintenance practices
 - Improvement in capital cost estimating including appropriate contingency
 - Capital costs have significantly increased due to inflation and increase in labor/materials costs
 - 45% increase in construction cost between 2019 and 2024¹
- Funding Forecast refresh
 - Spend-down of major sources (Measure RR, ESP Bond, Rail Car Procurement funding)
 - Pandemic reset on funding forecast
 - Increase in State SB1 funding awards and forecasts



Funding Category	FY19-FY33 CIP	FY25-FY34 CIP	% Difference
Federal	3,591	2,963	-17%
State	740	1,810	145%
Regional/Local	2,633	2,291	-13%
BART	5,389	2,593	-52%
Total	12,352	9,657	-22%

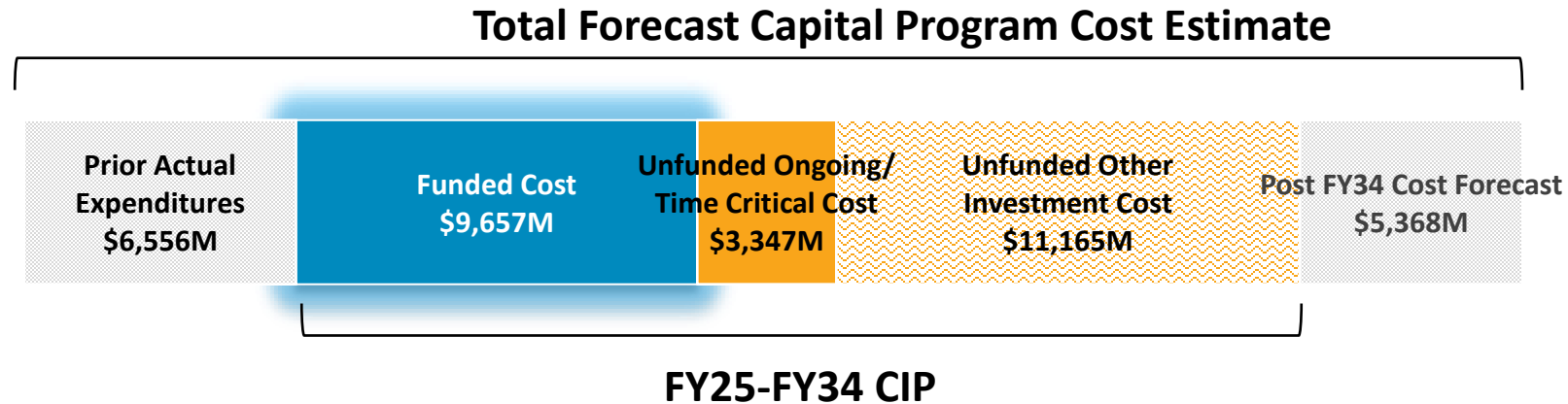
in \$millions

¹ Source: California Construction Cost Index



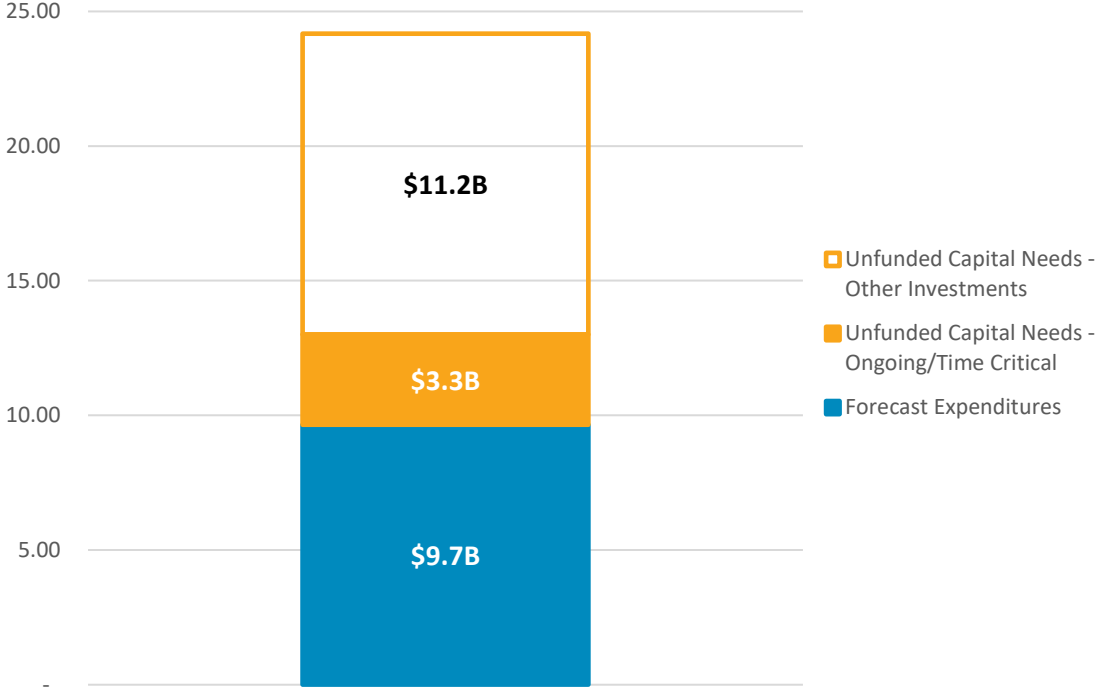
Total Project Cost Lifecycle

- The forecast cost estimate for all ongoing and forecast capital projects totals \$36B
- 67% of the total forecast cost estimate is within the 10-year CIP period

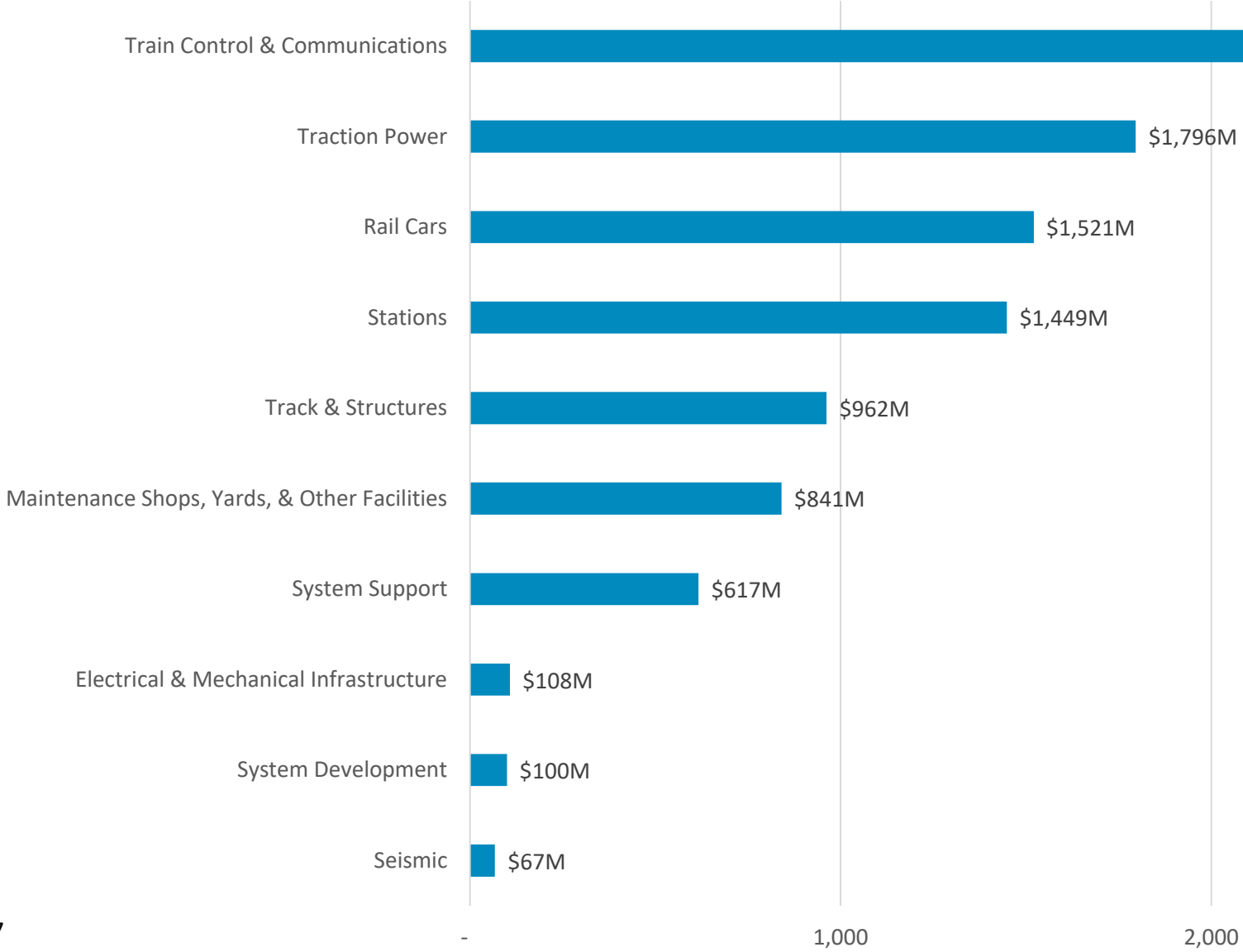


Capital Program Challenges

- CIP constrained by funding and system access capacity
 - MTC forecasting drop in revenues for the region in Plan Bay Area 2050+
- Large capital program and growing capital needs
 - Large Ongoing Capital Investment Portfolio
 - Significant and continuous State of Good Repair needs



Draft FY25-FY34 CIP | Forecast Expenditures by CIP Program



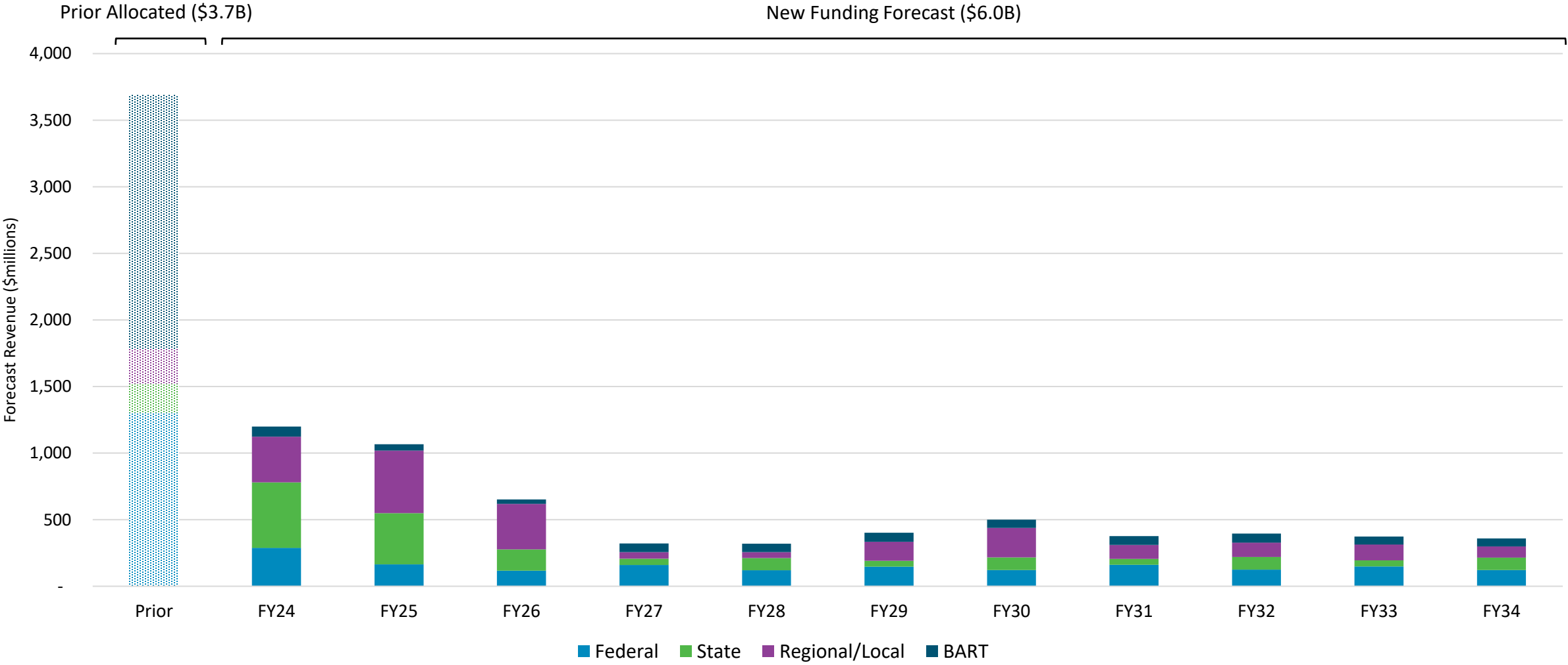
- The CIP has forecast expenditures of \$9.7B over the next 10 years
- Train Control & Communications Program has the highest forecast expenditures, primarily to fund the Core Capacity Program CBTC project
- Projects within the Traction Power Program have been identified as a critical need
- The Stations Program includes significant investments in the Elevator Modernization Program and Escalator/Elevator Rehabilitation



Draft FY25-FY34 CIP | Constrained Expenditures by Fiscal Year

\$ Millions	FY25-FY34 Constrained Capital Investment Plan											Unfunded Capital Need		
	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	10 Year Total	Ongoing/ Time Critical Portfolio	Other Investments	Total Unfunded Capital Need
SOURCES														
High Probability Funding (Track 1)	5,852	595	247	262	337	441	252	261	214	207	8,669			
Lower Probability Funding (Track 2)	104	57	74	58	64	59	124	136	159	152	988			
Total Forecast Sources	5,956	652	321	320	402	501	376	396	374	360	9,657			
CONSTRAINED NEEDS														
Rail Cars	530	380	217	26	257	108	1	1	1	-	1,521	-	-	-
Track & Structures	99	94	199	266	62	37	65	39	60	40	962	44	1,595	1,639
Traction Power	132	107	175	296	301	237	179	156	85	130	1,796	248	10	258
Train Control & Communications	152	199	515	432	373	226	140	77	58	23	2,195	444	658	1,103
Stations	175	106	286	110	100	87	115	166	148	156	1,449	410	2,605	3,014
Maintenance Shops, Yards, & Other Facilities	71	123	210	278	62	20	50	26	1	1	841	1,224	647	1,871
Seismic	12	-	9	9	9	9	9	8	-	-	67	11	3,000	3,011
System Development	16	16	48	3	3	3	3	3	3	1	100	-	721	721
Electrical & Mechanical Infrastructure	33	16	59	-	-	-	-	-	-	-	108	904	1,049	1,953
System Support	8	4	107	67	41	34	41	30	28	258	617	63	880	943
Total Forecast Constrained CIP	1,227	1,045	1,824	1,487	1,209	762	604	506	384	608	9,657	3,347	11,165	14,512

Draft FY25-FY34 CIP | Funding Forecast

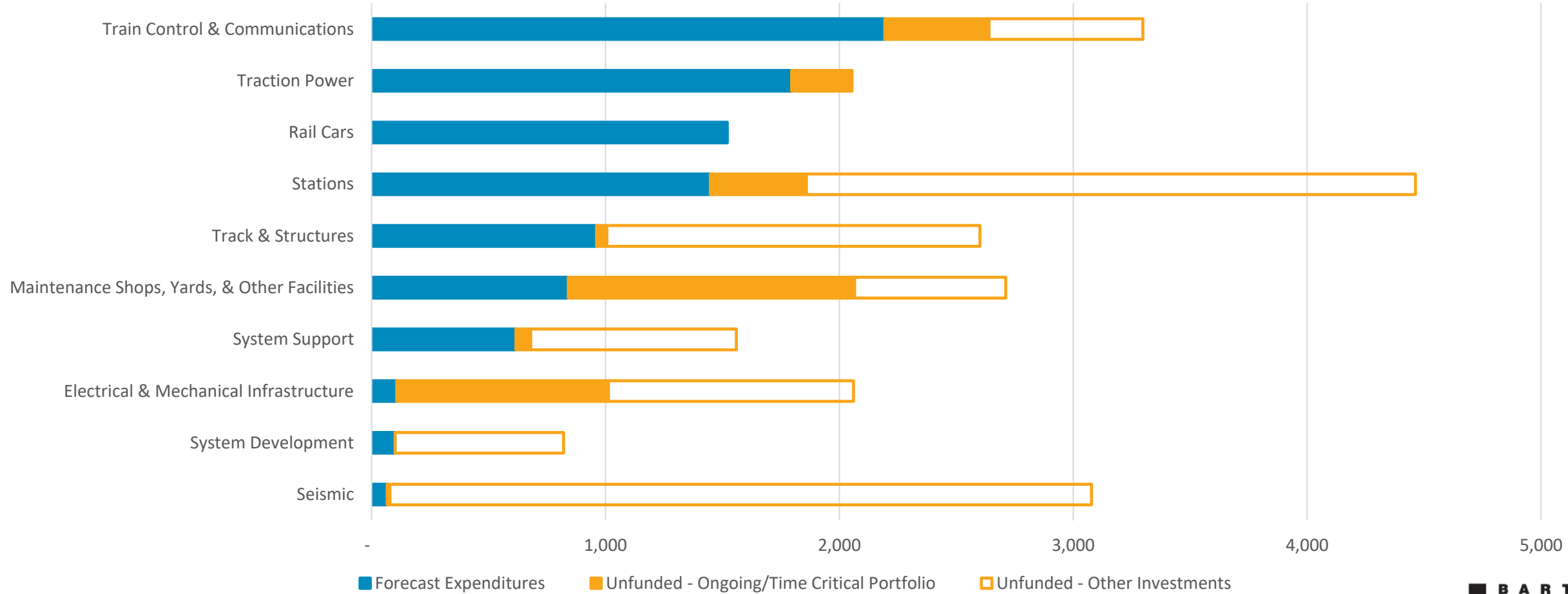


Note: The chart presents the year in which sources are committed and become available, not necessarily the year in which these funds are expended



Draft FY25-FY34 CIP | Unconstrained Capital Needs

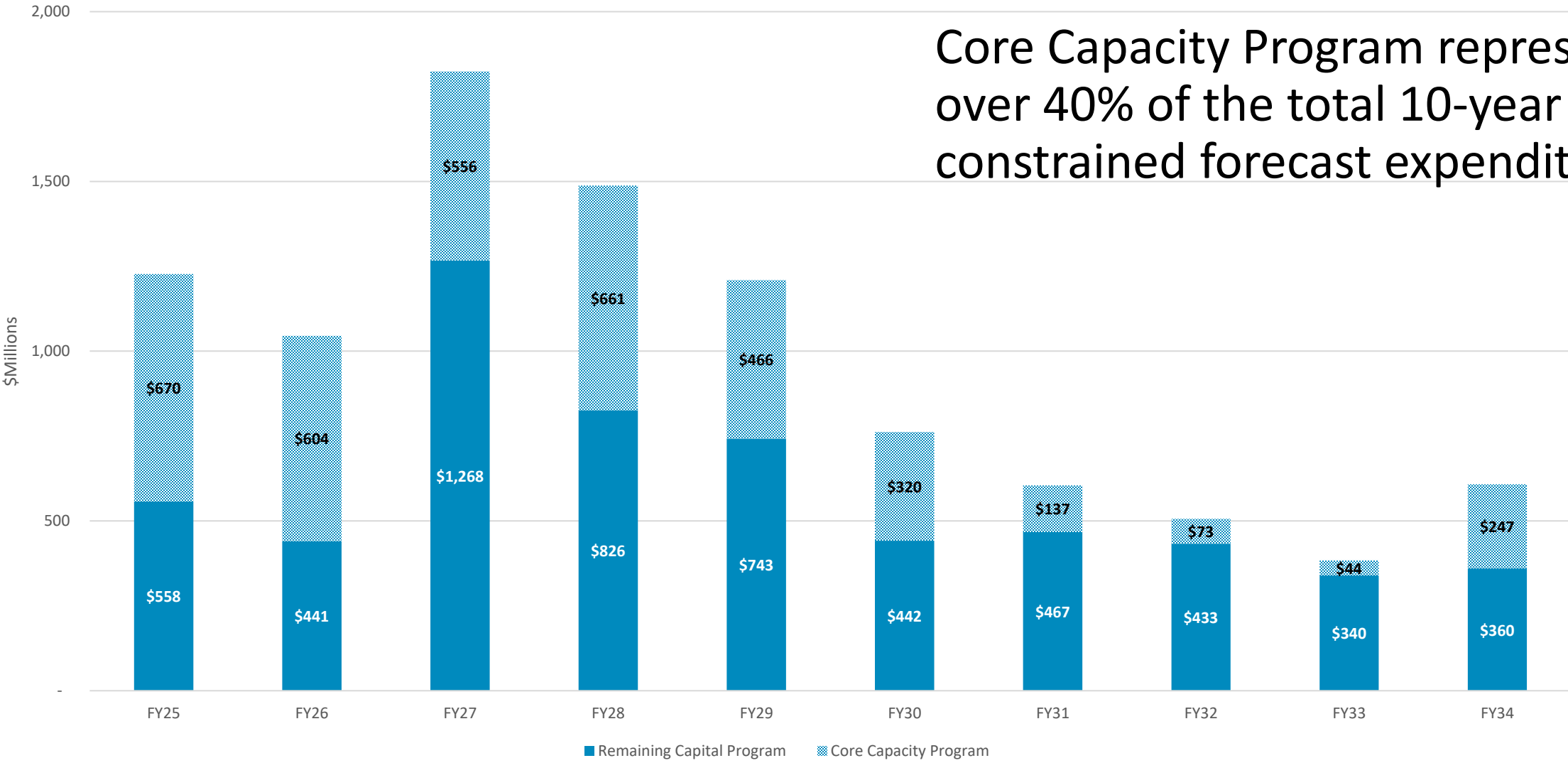
FY25-FY34 Unconstrained CIP(\$Millions)



FY25-FY34 CIP Uses

FY25-FY34 CIP | Annual Overview

Core Capacity Program represents over 40% of the total 10-year constrained forecast expenditures



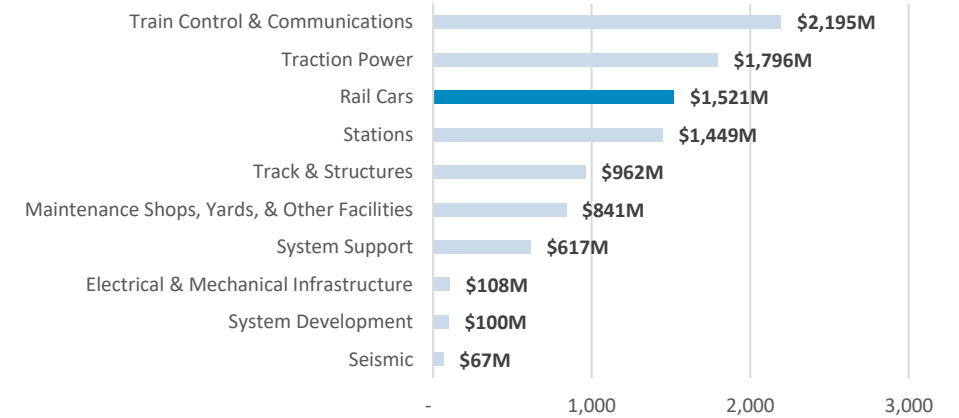
FY25-FY34 CIP | Rail Cars

- FY25-FY34 Forecast

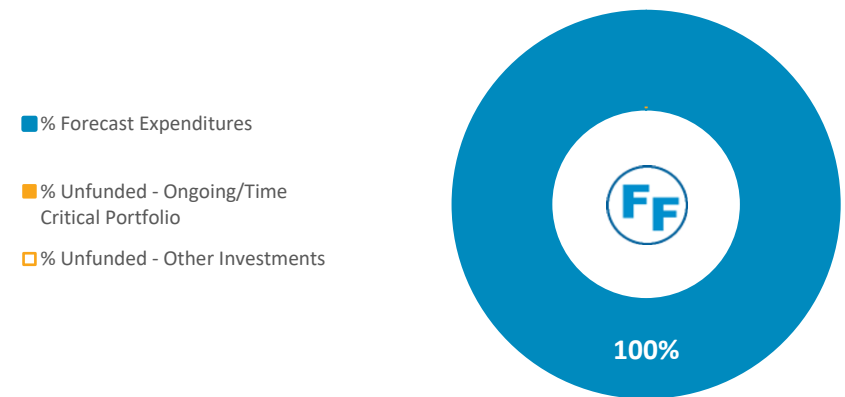
- Constrained Forecast Expenditures = \$1.5B
- Total Forecast Costs = \$1.5B

FY25-FY34 CIP Subprograms	Constrained Forecast Expenditures			Unfunded		
	Secured Funding	Planned Funding	Total	Ongoing/Time Critical	Other Investments	Total
Rail Cars	1,304	217	1,521	-	-	-
New Car Program (775 cars)	308	-	308	-	-	-
New Car Program Phase 2 (306 cars)	987	45	1,032	-	-	-
New Car Program Phase 3 (48 BSVII rail cars)	173	-	173	-	-	-
Rail Car Improvements	9	-	9	-	-	-

FY25-FY34 Constrained Capital Investment Plan (\$Millions)



Rail Cars (\$1.5B)



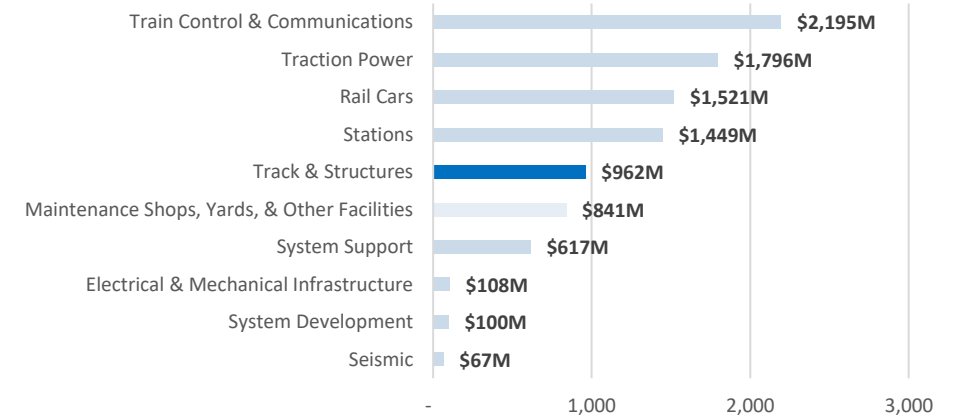
FY25-FY34 CIP | Track & Structures

- FY25-FY34 Forecast

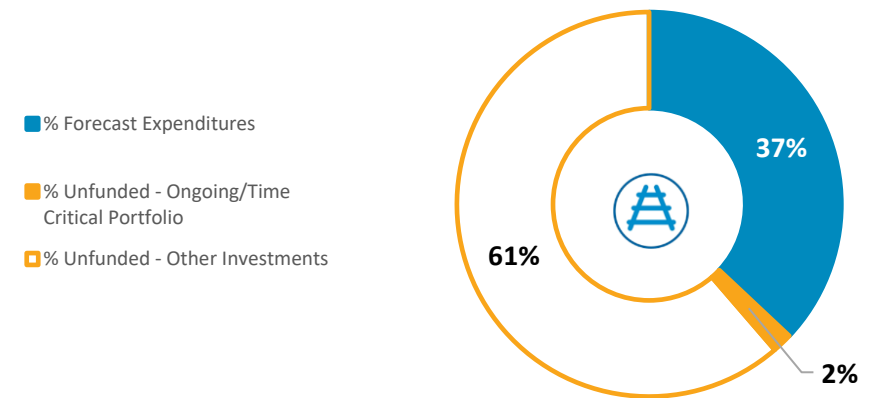
- Constrained Forecast Expenditures = \$0.9B
- Total Forecast Costs = \$2.6B

FY25-FY34 CIP Subprograms	Constrained Forecast Expenditures			Unfunded		
	Secured Funding	Planned Funding	Total	Ongoing/Time Critical	Other Investments	Total
Track & Structures	818	145	962	44	1,595	1,639
Trackway Rehabilitation	569	-	569	-	987	987
Structures Rehabilitation	190	145	335	3	542	545
Wayside Equipment	44	-	44	40	55	95
Track Capacity Improvements (BART Metro)	15	-	15	-	12	12

FY25-FY34 Constrained Capital Investment Plan (\$Millions)



Track & Structures (\$2.6B)



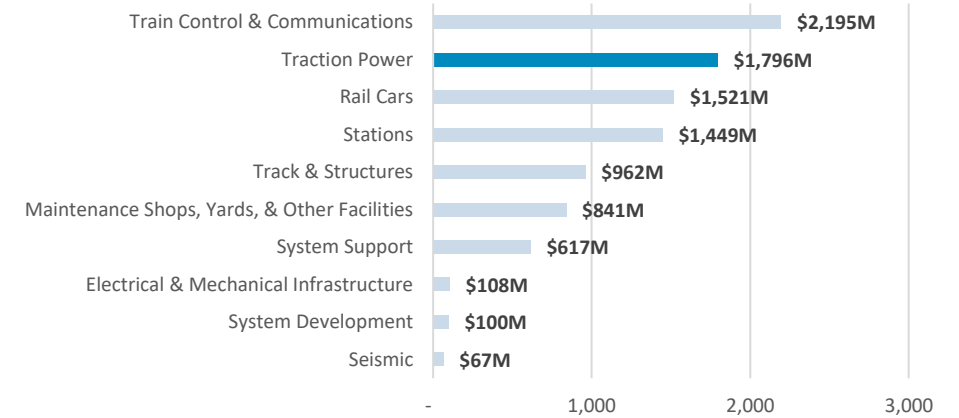
FY25-FY34 CIP | Traction Power

- FY25-FY34 Forecast

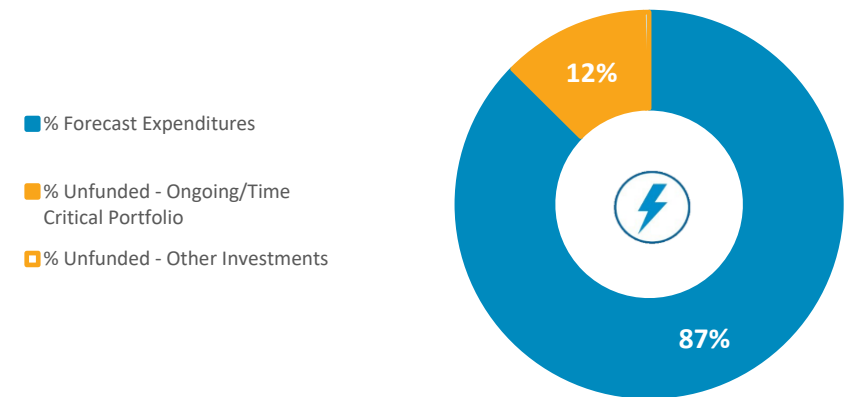
- Constrained Forecast Expenditures = \$1.8B
- Total Forecast Costs = \$2.1B

FY25-FY34 CIP Subprograms	Constrained Forecast Expenditures			Unfunded		
	Secured Funding	Planned Funding	Total	Ongoing/Time Critical	Other Investments	Total
Traction Power	1,112	684	1,796	248	10	258
Substation Renovation	502	419	921	114	-	114
34.5KV Cable Replacement	105	-	105	75	-	75
Traction Power Controls	368	225	593	58	10	68
Core Capacity Traction Power Upgrades	137	40	177	2	-	2

FY25-FY34 Constrained Capital Investment Plan (\$Millions)



Traction Power (\$2.1B)



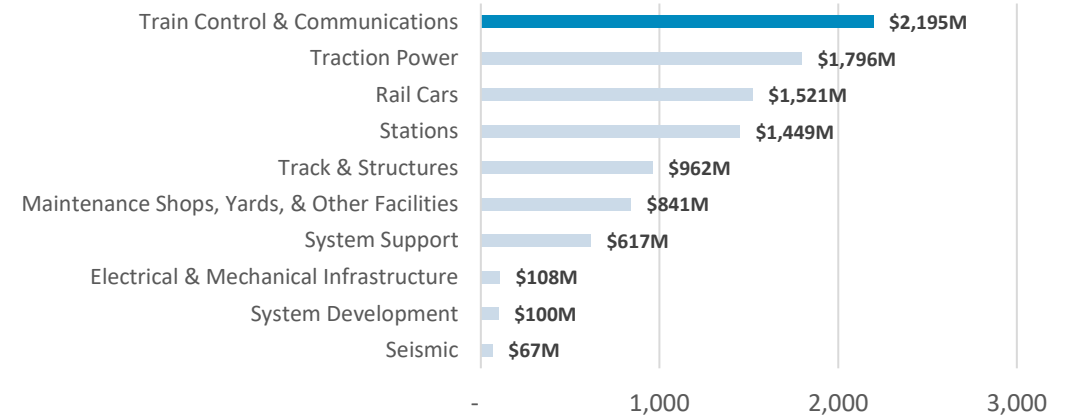
FY25-FY34 CIP | Train Control & Communications

- FY25-FY34 Forecast

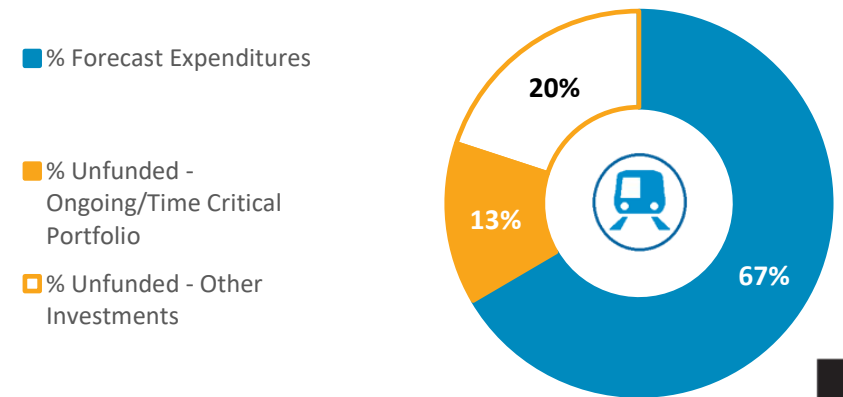
- Constrained Forecast Expenditures = \$2.2B
- Total Forecast Costs = \$3.3B

FY25-FY34 CIP Subprograms	Constrained Forecast Expenditures			Unfunded		
	Secured Funding	Planned Funding	Total	Ongoing/Time Critical	Other Investments	Total
Train Control & Communications	1,889	306	2,195	444	658	1,103
Train Control Modernization	1,647	306	1,953	-	-	-
Train Control System Rehabilitation	236	-	236	231	300	531
Communications & Computer Systems Rehabilitation	6	-	6	213	359	572

FY25-FY34 Constrained Capital Investment Plan (\$Millions)



Train Control & Communications (\$3.3B)



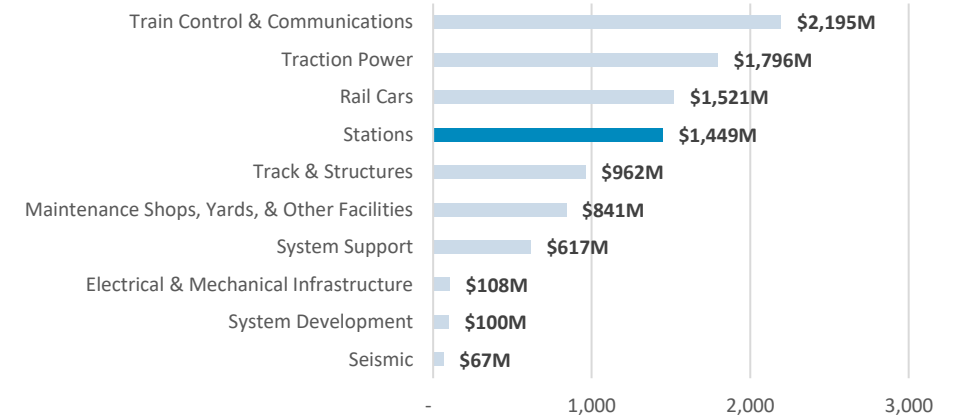
FY25-FY34 CIP | Stations

- FY25-FY34 Forecast

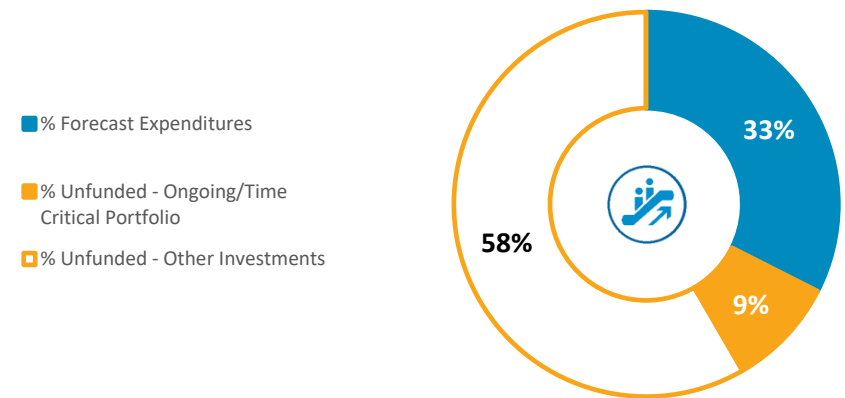
- Constrained Forecast Expenditures = \$1.5B
- Total Forecast Costs = \$4.5B

FY25-FY34 CIP Subprograms	\$Millions Constrained Forecast Expenditures			Unfunded		
	Secured Funding	Planned Funding	Total	Ongoing/Time Critical	Other Investments	Total
Stations	817	632	1,449	410	2,605	3,014
Station Enhancement	86	212	297	-	-	-
Escalator/Canopy Installation	149	-	149	8	19	27
Station Access Enhancement	92	170	262	-	68	68
Station Systems Rehabilitation	133	-	133	-	46	46
Station Capacity (BART Metro)	2	-	2	-	1,000	1,000
Station Buildings & Fac. Rehab.	12	-	12	128	153	281
Station Accessibility Imp.	30	-	30	-	4	4
Wayfinding & Customer Exp.	30	3	33	53	238	291
Elevator & Escalator Rehab.	142	112	253	-	1,077	1,077
Elevator Modernization	79	123	201	221	-	221
Next Generation Fare Gates	63	13	76	-	-	-

FY25-FY34 Constrained Capital Investment Plan (\$Millions)



Stations (\$4.5B)



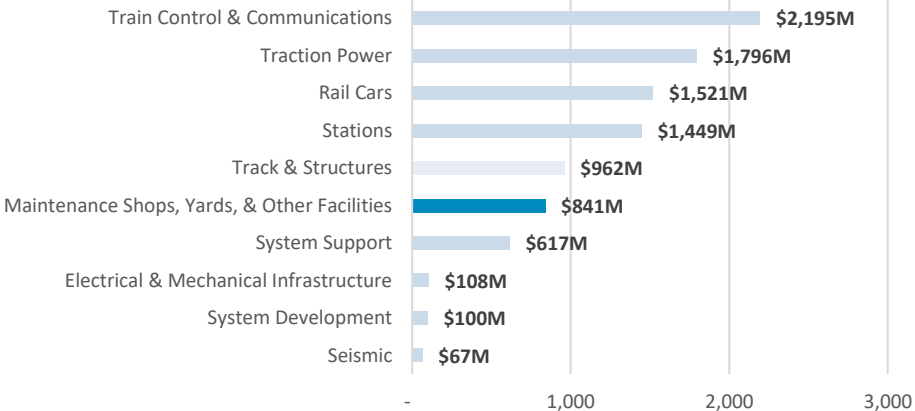
FY25-FY34 CIP | Maintenance Shops, Yards & Other Facilities

- FY25-FY34 Forecast

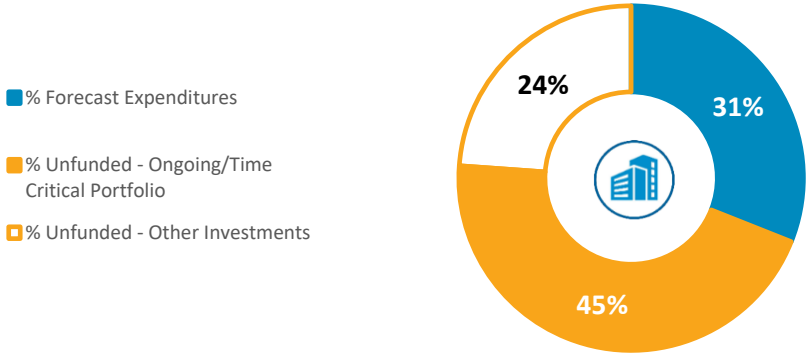
- Constrained Forecast Expenditures = \$0.8B
- Total Forecast Costs = \$2.7B

FY25-FY34 CIP Subprograms	Constrained Forecast Expenditures			Unfunded		
	Secured Funding	Planned Funding	Total	Ongoing/Time Critical	Other Investments	Total
Maintenance Shops, Yards, & Other Facilities	599	242	841	1,224	647	1,871
Hayward Maintenance Complex Phase 1 (HMC1)	5	-	5	-	-	-
Core Capacity Program East Storage Yard (HMC2)	242	78	320	548	-	548
Non-Station Buildings & Facilities Rehabilitation	68	-	68	188	358	546
Shop & Yard Equipment	33	-	33	136	272	407
Fleet of the Future Maintenance Facility (FFMF)	112	-	112	302	-	302
Fencing & Security	10	-	10	38	17	55
BPD HQ	26	163	189	-	-	-

FY25-FY34 Constrained Capital Investment Plan (\$Millions)



Maintenance Shops, Yards, & Other Facilities (\$2.7B)



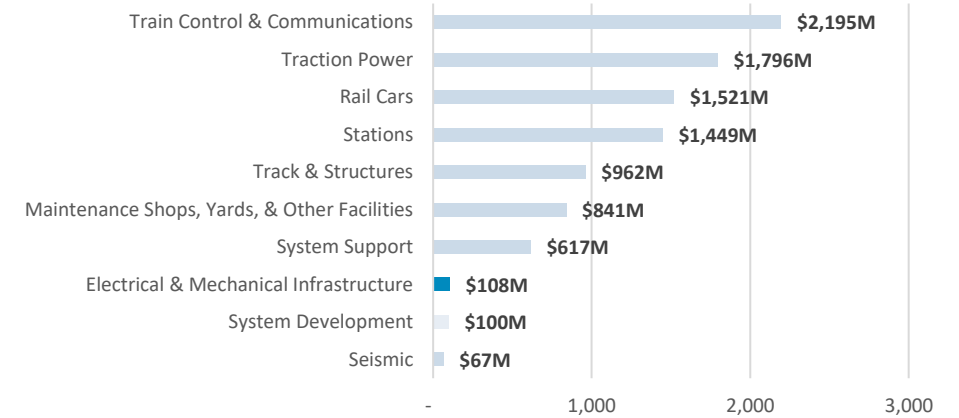
FY25-FY34 CIP | Electrical & Mechanical Infrastructure

- FY25-FY34 Forecast

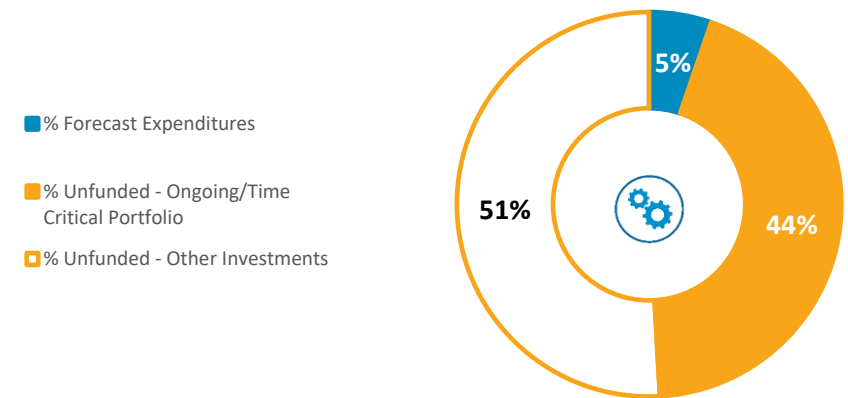
- Constrained Forecast Expenditures = \$0.1B
- Total Forecast Costs = \$2.0B

FY25-FY34 CIP Subprograms	Constrained Forecast Expenditures			Unfunded		
	Secured Funding	Planned Funding	Total	Ongoing/Time Critical	Other Investments	Total
Electrical & Mechanical Infrastructure	108	-	108	904	1,049	1,953
Mechanical Infrastructure Rehabilitation	58	-	58	417	380	797
Electrical Infrastructure Rehabilitation	25	-	25	365	468	833
Lighting Rehabilitation & Upgrades	25	-	25	122	201	323

FY25-FY34 Constrained Capital Investment Plan (\$Millions)



Electrical & Mechanical Infrastructure (\$2.0B)



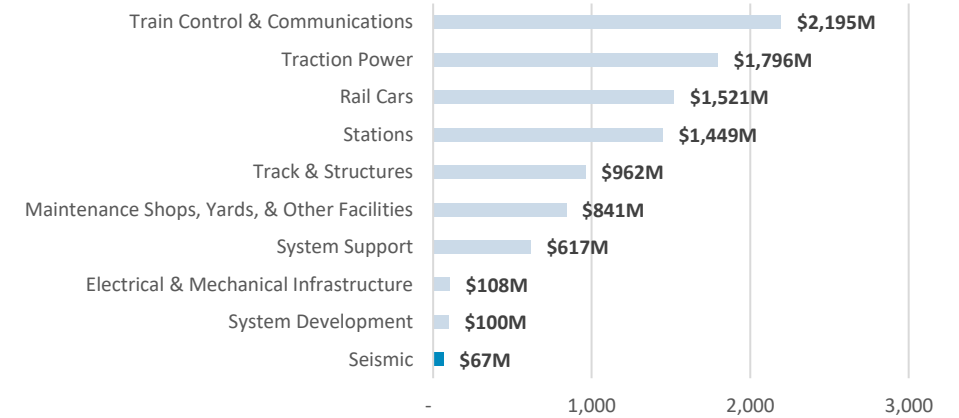
FY25-FY34 CIP | Seismic

- FY25-FY34 Forecast

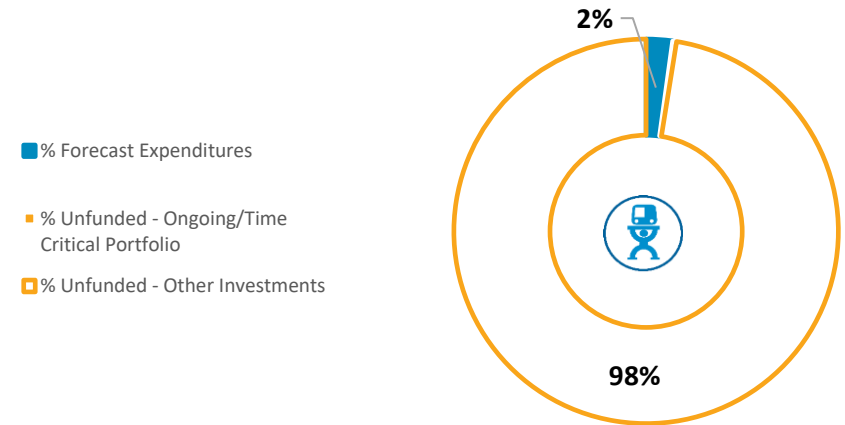
- Constrained Forecast Expenditures = \$0.07B
- Total Forecast Costs = \$3.1B

FY25-FY34 CIP Subprograms	Constrained Forecast Expenditures			Unfunded		
	Secured Funding	Planned Funding	Total	Ongoing/Time Critical	Other Investments	Total
Seismic	67	-	67	11	3,000	3,011
Earthquake Safety Program / TBT Seismic Retrofit	67	-	67	11	-	11
Caldecott BART Tunnel Seismic Retrofit			-	-	1,000	1,000
A-Line Seismic			-	-	2,000	2,000

FY25-FY34 Constrained Capital Investment Plan (\$Millions)



Seismic (\$3.1B)

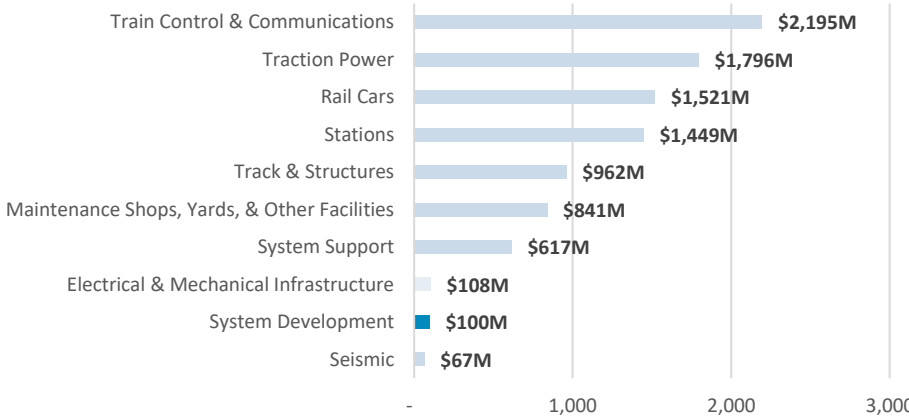


FY25-FY34 CIP | System Development

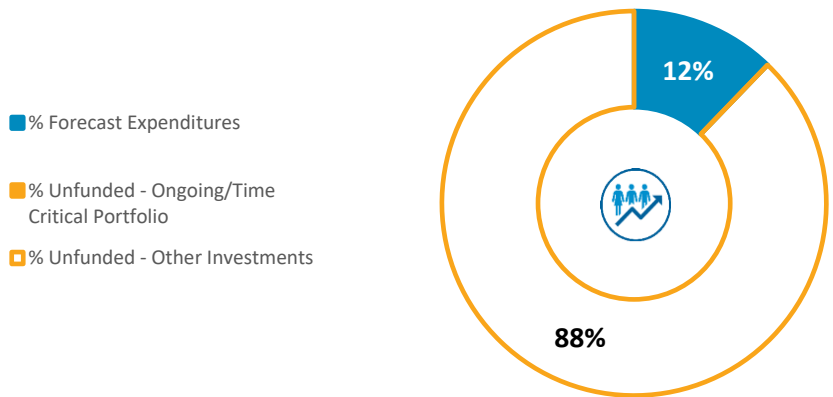
- FY25-FY34 Forecast
 - Constrained Forecast Expenditures = \$0.1B
 - Total Forecast Costs = \$0.9B

FY25-FY34 CIP Subprograms	Constrained Forecast Expenditures			Unfunded		
	Secured Funding	Planned Funding	Total	Ongoing/Time Critical	Other Investments	Total
System Development	100	-	100	-	721	721
Link21	75	-	75	-	721	721
Silicon Valley Extensions	10	-	10	-	-	-
System Expansion Planning	0	-	0	-	-	-
SVRT Capital	15	-	15	-	-	-

FY25-FY34 Constrained Capital Investment Plan (\$Millions)



System Development (\$0.9B)



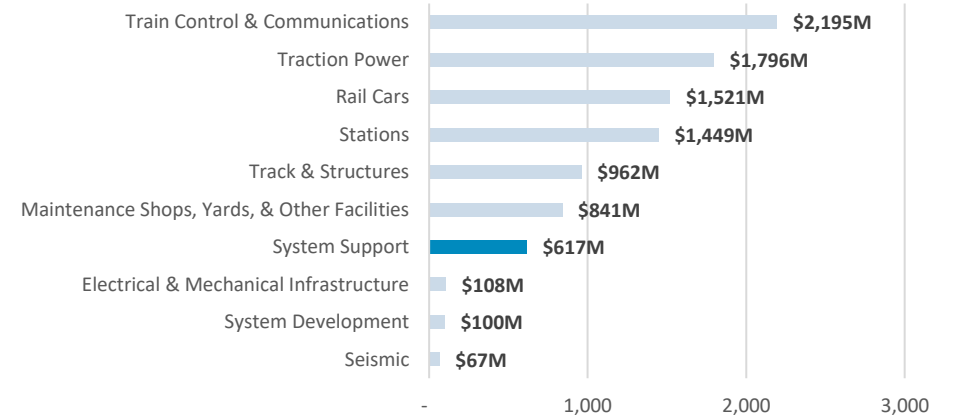
FY25-FY34 CIP | System Support

- FY25-FY34 Forecast

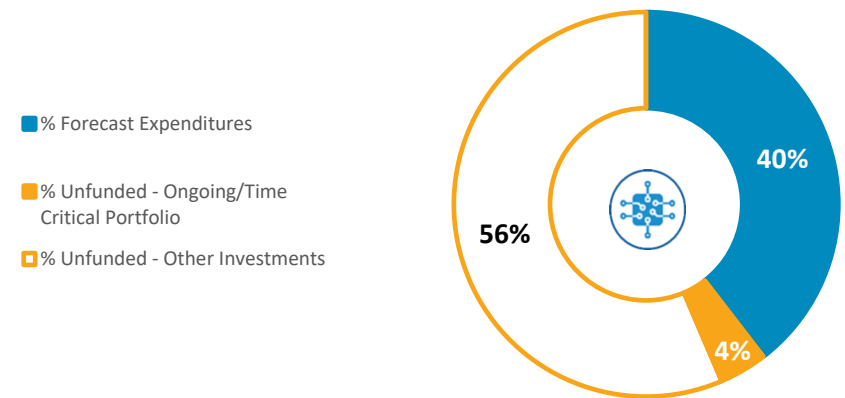
- Constrained Forecast Expenditures = \$0.6B
- Total Forecast Costs = \$1.6B

FY25-FY34 CIP Subprograms	Constrained Forecast Expenditures			Unfunded		
	Secured Funding	Planned Funding	Total	Ongoing/Time Critical	Other Investments	Total
System Support	436	181	617	63	880	943
Core Capacity Support	213	84	297	-	-	-
Information Technology	61	3	64	-	-	-
Sustainability	62	59	121	-	141	141
Real Estate	22	13	35	49	389	438
BART-to-OAK and eBART Asset Replacement	15	-	15	-	43	43
Climate Adaptation & Resiliency	4	-	4	14	307	321
BART Police Capital	26	22	48	-	-	-
Administration	33	-	33	-	-	-

FY25-FY34 Constrained Capital Investment Plan (\$Millions)



System Support (\$1.6B)



FY25-FY34 CIP Sources

Forecast Sources | Assumptions

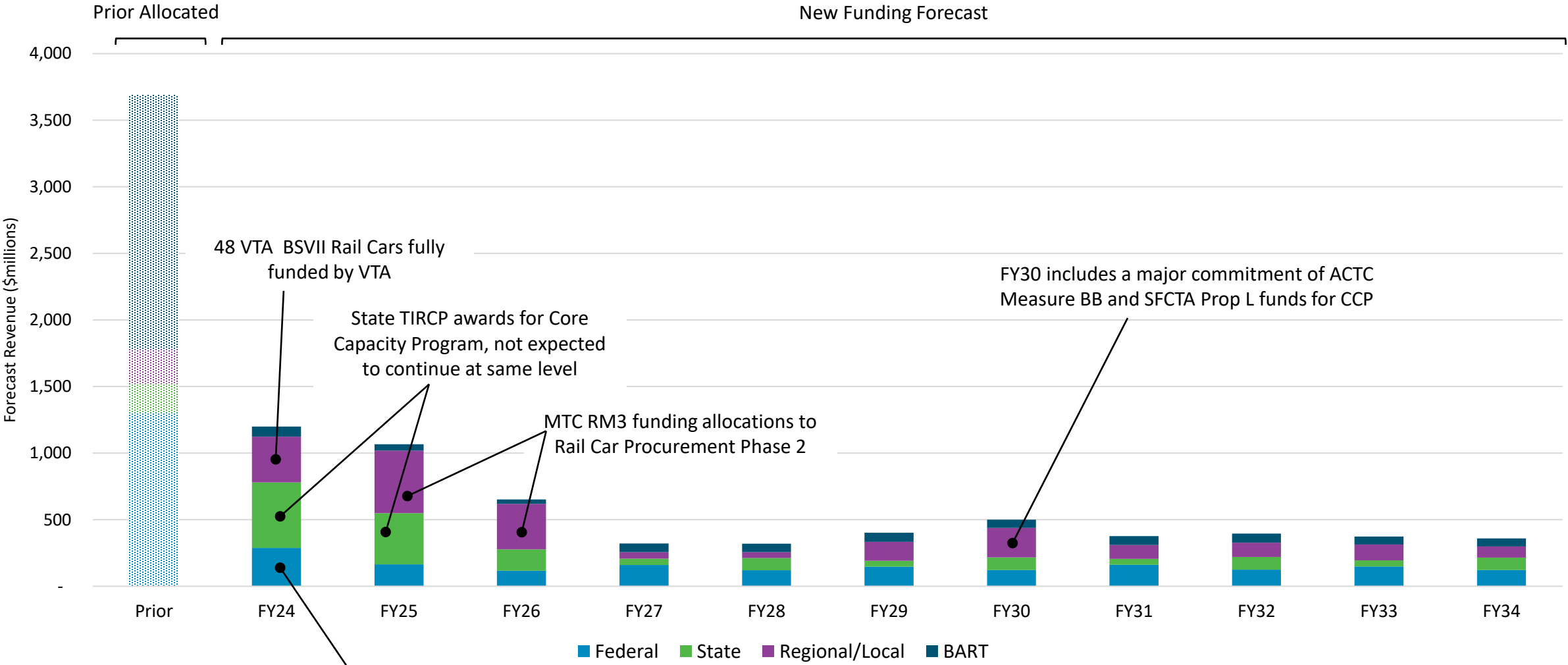
- In Plan Bay Area (PBA) 2050+ update, MTC is forecasting roughly half the capital funding sources they projected in PBA 2050
- Funding forecast based on industry best practices, past trends, and BART experience
- Key assumptions:
 - External Sources
 - Bridge Tolls & Programmed County Sales Tax: expenditure plans program specific amounts for BART
 - Formulaic programs: statute, programming policies, and escalation
 - Discretionary programs: statute & grant guidelines, pipeline of eligible and competitive projects
 - Internal Sources
 - Operating-to-Capital Allocations includes Board commitments to Priority Capital
 - Remaining Measure RR proceeds are committed based on project cashflow needs

Characteristics of Fund Sources

Funding Type/ Category	Funding Source		Limited to Specific Projects	Assumptions that Drive Available Amount Per Year	Funding Source Behavior: Available vs. Programmed
Federal	Formula		Yes, once obligated	Established in Federal legislation and MTC Programming Policy. Escalation assumption of 2% based on Plan Bay Area 2050.	Funds available in the Federal Fiscal Year they are apportioned by FTA and programmed by MTC. Funds are then expended over multiplied subsequent years.
	Discretionary		Yes, once awarded	Aligns with awarded competitive funding grants; future amounts based on prior experience and success rates and pipeline of eligible/competitive projects	After award, programmed to align with project cashflows
State	SB1 and Cap & Trade Funds		Yes, once awarded	Established in State Statute and Program Guidelines; future amounts based on prior experience and success rates and pipeline of eligible/competitive projects	After award, programmed to align with project cashflows
	STA/TDA		Yes, once awarded	Established in State Statute and MTC Programming Policy; Formulaic Programs with some competitive elements	After award, programmed to align with project cashflows
	Earmarks		Yes, once awarded	Established in State Legislation; future amounts based on prior experience and success rates and pipeline of eligible/competitive projects	After award, programmed to align with project cashflows
Regional/Local	Bridge Tolls		Yes	Established in expenditure plan	Aligned with project cashflows
	County Sales Tax	Programmed	Yes	Named projects and categories established in expenditure plan	Aligned with project cashflows
		Discretionary	Yes, once awarded	Competitive project categories established in expenditure plan	After award, programmed to align with project cashflows
	Other/Reimbursable		Yes	Based on agreements with outside entities	Programmed based on agreements and aligned with project cashflows
BART	Measure RR		Yes	Established in expenditure plan	Aligned with project cashflows
	Capital Allocations	Priority	Yes	Commitments to specific projects	Funds are programmed in the year they are made available, but roll over if not spent in that year
		Baseline	No	Based on committed operating budget transfers	Funds are programmed in the year they are made available, but roll over if not spent in that year



Funding Forecast Overview



MTC Financing for Rail Car Procurement Phase 1

Note: The chart presents the year in which sources are committed and become available, not necessarily the year in which these funds are expended

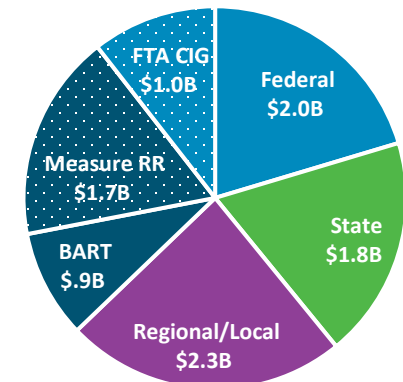


Funding Forecast | Sources Overview

- 90% of the funding forecast reflects high probability funding and almost 75% of the funding forecast represents secured sources
- Lower probability funding assumes CCTA New Revenue Measure (\$200M), additional State SB1 (\$413M), and other sources less likely to secure
- More than 25% of funding forecast sunsets within the 10-year period (FTA CIG and Measure RR)

	Federal	State	Regional/ Local	BART	Total
High Probability Funding (Track 1)	2,640	1,479	2,068	2,481	8,668
Secured	2,478	681	1,600	2,402	7,161
Planned	162	798	468	79	1,507
Lower Probability Funding (Track 2)	323	331	223	112	989
Secured	-	-	-	-	-
Planned	323	331	223	112	989
Total Forecast Sources	2,963	1,810	2,291	2,593	9,657

\$9.7B Forecast Funding by Source



Draft FY25-FY34 CIP | Document Structure

- Overview
 - FY25-FY34 CIP by Fiscal Year and CIP Programs and Subprograms
- Capital Needs
 - CIP Program and Subprogram summary
 - Annual Summary
- Funding Sources
 - High probability and lower probably forecast sources
 - Summary of sources



Timeline and Next Steps



March

April

May 9

May 23

June 13

September 12

March 31
FY25 & FY26
Preliminary Budget
Memo (PBM)
released

April 11
FY25 & FY26
Preliminary Budget
Overview

April 25
FY25 & FY26
Capital Budget
Overview

Rail Service Plan
FY25 & FY26 Sources
& Uses

FY24 Q3 Financial
Report

Public Hearing on
FY25 & FY26
Budget

Draft Capital
Investment Plan

Prop 4/Gann
Amendment

FY25 & FY26
Budget
Adoption

Final Capital
Investment
Plan

