



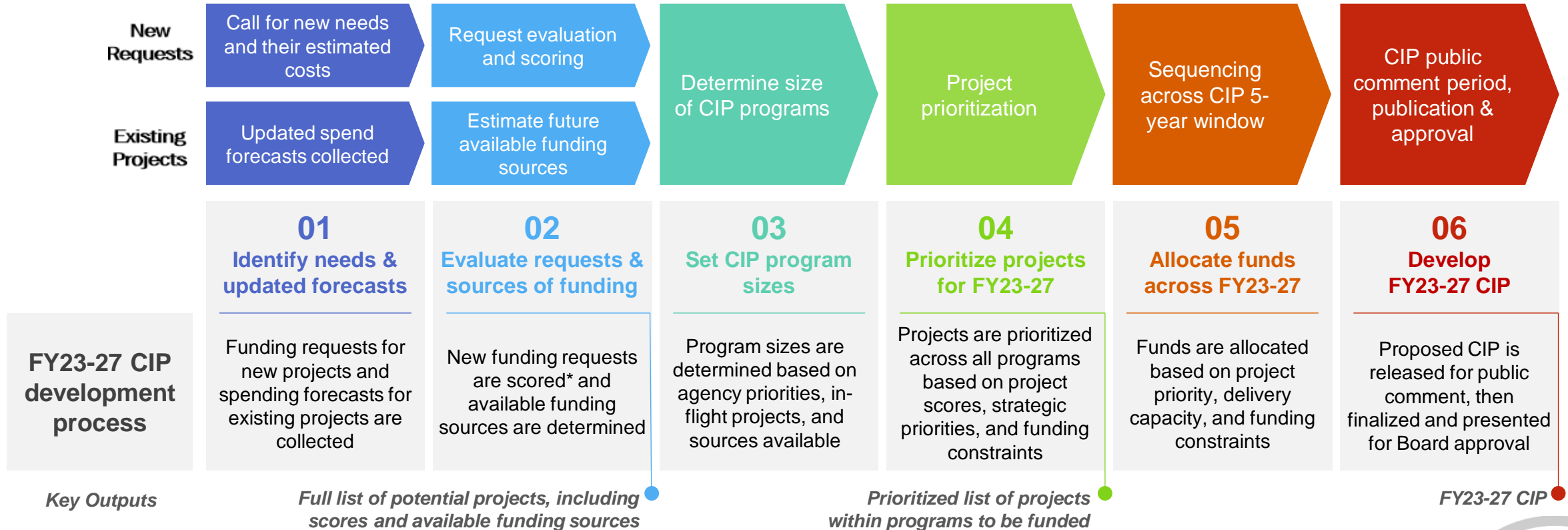
**Massachusetts Bay
Transportation Authority**

Final FY23-27 Capital Investment Plan

MassDOT Board of Directors

May 26, 2022

CIP Development Process



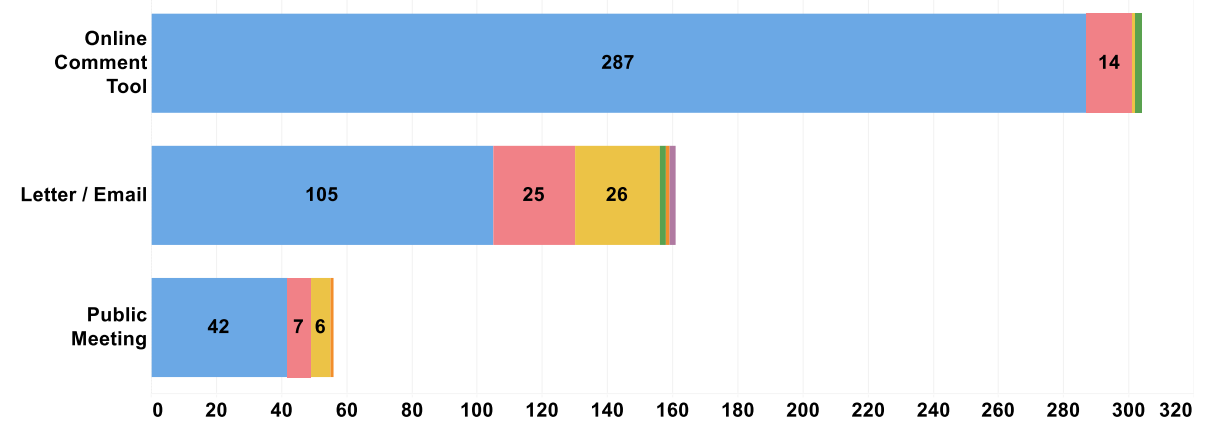
*Requests are evaluated based on system preservation, mobility, cost effectiveness, environmental and health effects, policy support, social equity, economic impact, and safety.



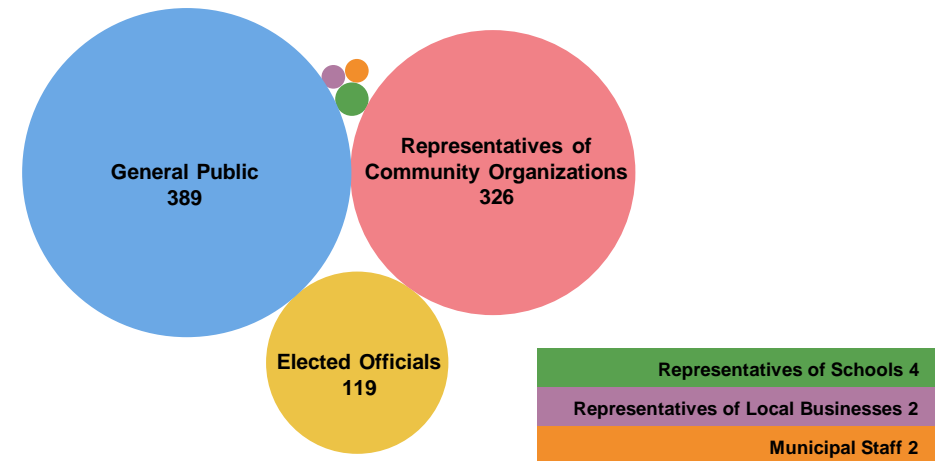
Public Engagement | Participation

- The Proposed FY23-27 MBTA CIP public comment period took place from **Thursday March 24, 2022, to Monday April 25, 2022**
 - Staff hosted 3 **virtual public meetings** to provide an overview of the CIP and invite feedback from attendees
 - Members of the public could also provide comments via an **online comment tool, email, or letter**
 - Promotion via **social media, mbta.com, in-station advertisements, and community stakeholder networks**
- The MBTA received a total of **521** comments from **842** individuals and saw **70+** attendees at each public meeting
- Comments were analyzed as follows:
 - Each unique message received via letter, email, or online comment tool, or that was shared verbally or via chat during a public meeting, is considered a separate **comment**.
 - **Individual** refers to the person(s) sending or co-signing a comment. Some comments consist of a single letter or message cosigned by more than one individual.
 - Each comment is tagged to one or more **mentions** of a particular topic, such as Commuter Rail electrification or Fare Transformation.

Number of Comments Received, by Comment Format and Type of Commenter



Number of Individuals Submitting Comments, by Type of Commenter



Public Engagement | Key Mentions

Rapid Transit



- Support for **Green Line E Branch accessibility and capacity improvements**
- Support for **Red-Blue Connector** design funding and requests for full construction funding
- Requests for further **extension of the Green Line** south to Hyde Square and north to Rt. 16
- Requests for extension of the **Blue Line to Lynn**
- Requests for funding to address state of good repair at **JFK/UMass and Porter Square**
- Requests for future extension of the **Red and Orange Lines**

Bus



- Support for **bus electrification**
- Support for **Arborway Bus Facility** design and requests for full construction funding
- Support for **bus stop accessibility improvements**
- Support for **transit priority infrastructure** and requests to fund additional projects
- Requests for **increased frequency of bus service**
- Requests for expansion of **Silver Line** service

Commuter Rail



- Support for a **sound study** near Readville station and facility
- Support for **Commuter Rail electrification** and requests for additional funding to accelerate this work
- Requests for full construction funding to rehabilitate **South Attleboro, Lynn, Auburndale, West Newton, and Newtonville** stations
- Requests for **double tracking of the Greenbush Line** to support South Coast Rail service
- Requests for **expansion of service** to Western MA, NH, and Cape Cod

Systemwide / Other



- Support for **increased transparency and engagement** around the capital program and **new format of the MBTA CIP**
- Requests for improved rider communication, including **station wayfinding and rider alerts**
- Requests to accelerate **fare technology upgrades and fare policy changes**
- Requests for **return of Lynn ferry**
- Requests for bus or rail service linking **North and South Stations**
- Requests for rapid transit service between **Salem and Peabody**

Bus and Rail Electrification



Bus Electrification

The CIP supports the MBTA's Bus Electrification Strategy that seeks to achieve full bus electrification in 2040. It includes investments aligned with the 2027 goals of the Bus Electrification Strategy that target:

- Modernization of three bus facilities to provide facility capacity to electrify 30% of our fleet
- On-going conversion of bus fleet to zero emissions technology

The CIP includes projects focused on bus facility modernization and procurement of battery-electric buses (BEBs), including but not limited to:

- Quincy Bus Facility Modernization (P671a)
- Arborway Bus Facility - Design Funding (P0671b)
- North Cambridge Bus Facility Retrofit (P0671c)
- Procurement of 40ft Battery Electric Buses and Related Infrastructure (P0653)



Commuter Rail Electrification

The CIP supports the MBTA's commitment to the first phase of Regional Rail Transformation as defined by the Fiscal Management and Control Board in 2019:

- To deliver electrified service to the Providence/Stoughton, Fairmount lines, and Environmental Justice Corridor (the Boston North Station to Beverly section of the Rockport line).

The FY23-27 CIP includes the following key capital investments:

- Rail Transformation Planning Studies (P0934)
 - Phase 1 Power Study & Battery EMU recommendation complete; Second phase underway to understand new electrification infrastructure needs
- Future Rolling Stock Fleet (P0918)
 - Planning future procurement; RFI released last year; dialogue to develop potential specification is ongoing with a decision to procure late FY23
- Rail Transformation – Early Action Items (P0940)
 - Focus on investments to enable/improve 30-minute Urban Rail service starting with Haverhill Line (to Reading) EJ Corridor (Beverly) and Fairmont Line

Final FY23-27 CIP | Summary

Total Projects

555

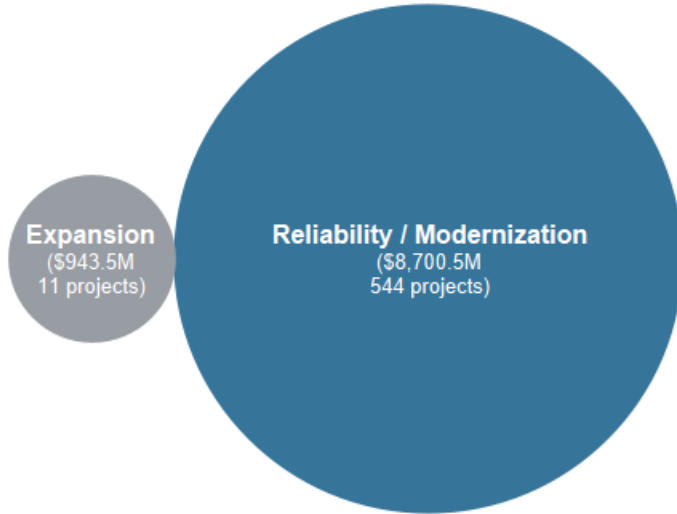
FY23-27 Programmed Spend

\$9,644.1M

Executing Departments

32

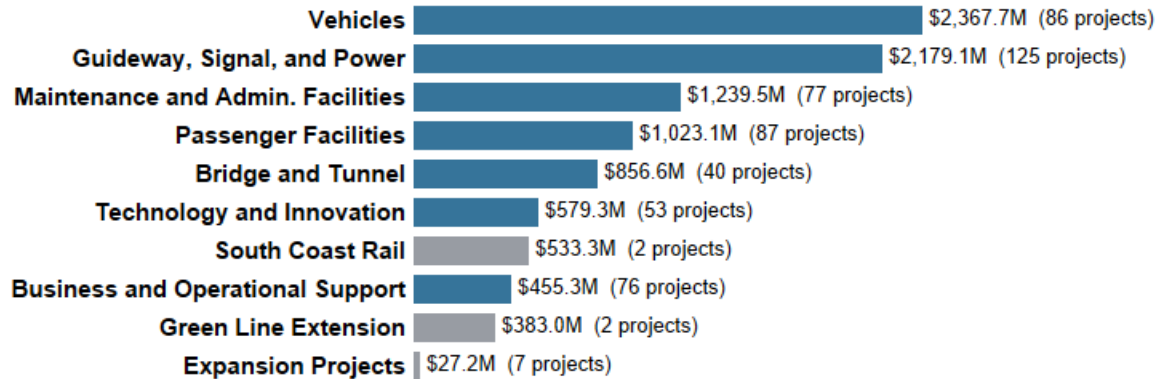
FY23-27 Programmed Spend by CIP Priority



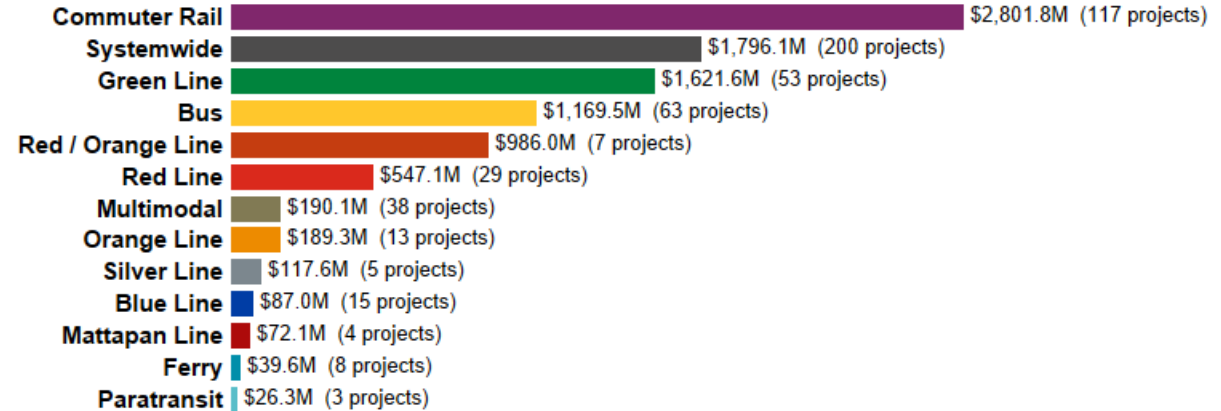
Top 10 Projects, by FY23-27 Programmed Spend

CIP ID	Project Name	CIP Program	FY23-27 Total	Authorized Budget
P0362	Red / Orange Line Vehicles	Vehicles	\$579.0M	\$1,073.5M
P0160	South Coast Rail Expansion	South Coast Rail	\$493.5M	\$920.8M
P0265	Fare Transformation	Technology and Innovation	\$420.1M	\$783.4M
P0095	Green Line Extension	Green Line Extension	\$357.7M	\$2,118.6M
P0618	Procurement of 40ft Enhanced Electric Hybrid Buses	Vehicles	\$350.6M	\$353.9M
P0671a	Quincy Bus Facility Modernization	Maintenance and Admin. Facilities	\$326.6M	\$402.1M
P0369	Green Line Type 10 Vehicle Replacement Program	Vehicles	\$311.2M	\$1,000.0M
P0285	Signal Program - Red/Orange Line	Guideway, Signal, and Power	\$240.5M	\$289.1M
P0551	Longfellow Approach	Bridge and Tunnel	\$185.2M	\$210.0M
P0606	ATC Implementation - North Side Commuter Rail Lines	Guideway, Signal, and Power	\$173.6M	\$416.8M
Grand Total			\$3,437.9M	\$7,568.1M

FY23-27 Programmed Spend by CIP Program



FY23-27 Programmed Spend by Mode



Final FY23-27 CIP | Summary of Project Changes

New Projects - The following new projects or additional sources for existing projects have been incorporated into the final FY23-27 CIP

- Initial funding to support the agency's **Capital Program Safety Assurance (P1164)** program
- Full funding for the **Lynn Station and Parking Garage Improvements Phase II (R0071)** project, which is being advanced with funding support from the Boston MPO
- Additional funding to support the **Forest Hills Improvement Project (P0163)**, as proposed in the Boston MPO FY23-27 draft TIP
- Federal discretionary grant awards to support the **Catamaran Overhauls (P0633)** and **Quincy Bus Facility Modernization (P0671a)** projects
- The **Concord Ave. Transit Signal Priority (P1026)** project which received funding from the Boston Region MPO Community Connections program.

State Funding - The following projects have been included in the final CIP to align with sources included in the State's FY2023-2027 Capital Investment Plan and the Federal COVID-19 Relief Funding Spending Bill

- The project **State Match – BIL Support (P1166)** to align with the Commonwealth's published FY2023-2027 Capital Plan
- The project **Transit Station Economic Development Improvements – Norfolk County (P1165)** to align with funding included in the ARPA appropriations bill



FY23-27 CIP | Safety Spotlight

450+ safety related projects, accounting for roughly \$7.5B of programmed spending are part of the 5-year CIP. This includes but is not limited to:



5 projects currently being executed by the Safety department that comprise:

- Safety management system implementation
- Occupational, personnel, and electrical health and safety
- Infrastructure and PPE improvements



230+ projects to inspect, repair, and upgrade stations, tracks, bridges, tunnels, signals, power, and IT infrastructure and components



100+ projects to modernize maintenance and operation facilities, ensure workforce safety, and prepare for new fleets

You can also visit [mbta.com/safety](https://www.mbta.com/safety) for more information on the MBTA's safety initiatives

Key Safety Projects

Requests for new and existing projects are evaluated using 8 scoring criteria, which include safety

Rapid Transit

- Green Line Train Protection (P0370)
- Blue Line Infrastructure Improvements (P0631)

Commuter Rail

- Commuter Rail Positive Train Control (P0148)
- ATC Implementation – North Side Commuter Rail Lines (P0606)

Bus

- Bus Facility Interim Improvements (P0942)
- Facility Circulation Safety Improvements (P1003)

Systemwide

- OHS Steering Committee – PPE and Infrastructure Improvements (P0646)
- Structural Repairs Systemwide (P0852)

CIP Document | Updated Structure

The Final FY23-27 CIP document is structured around four major components:



1

About the CIP

- What is the CIP?
- Structure of the CIP
- Funding Sources
- Annual Development Process
- Social Equity

2

FY23-27 CIP Summary

- Summary of public engagement process and key “mentions” from public comments
- Summary of FY23-27 investments and overview of safety, accessibility, sustainability and resiliency efforts

3

FY23-27 Investments by Program

- One-page overview for each CIP program summarizing program goals and planned investment levels for FY23-27

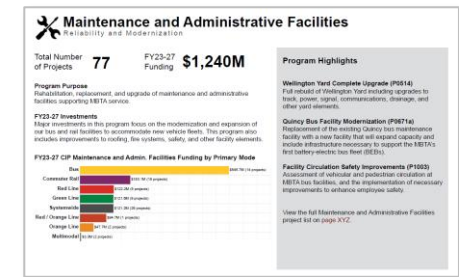
FY23-27 Investments by Mode

- One-page overview of CIP investments by primary mode of the MBTA, highlighting key initiatives planned for FY23-27

4

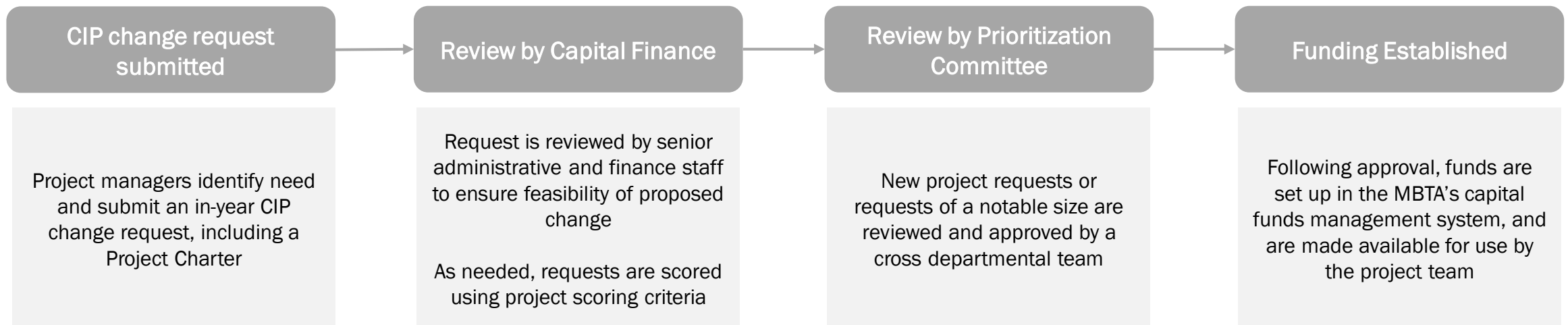
FY23-27 Project List

- Detailed listing of all FY23-27 CIP projects, including description, phase, primary mode, planned five-year spend, and total authorized budget



CIP Change Process | Overview

- To ensure flexibility, consistency and transparency the MBTA uses an in-year CIP change process to review, approve and track project budget or scope changes between annual CIP development cycles
 - In-year changes include funding requests due to cost increases, urgent investment needs or routine administrative changes
 - Costs are primarily off-set using existing funds programmed within the capital program, but depending on the need may tap into surplus/contingency funds or request CMF funding
- Any competitive fund awards received during the fiscal year will be incorporated into Capital Investment Plan through the in-year CIP Change process



FY23 Capital Spend Target

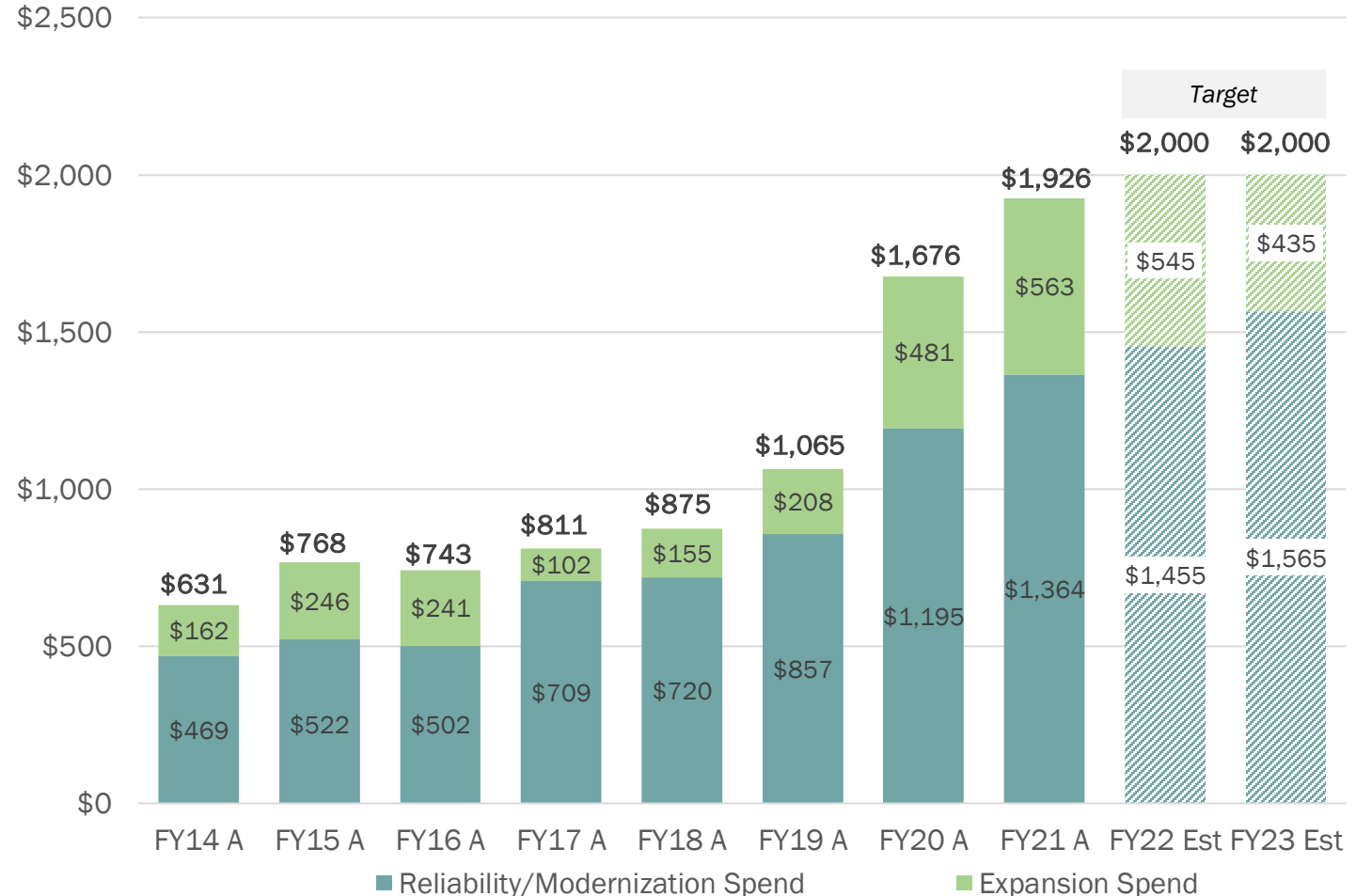
The MBTA has significantly increased capital investments and in FY21 achieved a record \$1.9 billion in capital spending.

The MBTA continues to sustain an unprecedented level of investment focused on the safety and reliability of our system, the modernization of our assets and the strategic expansion of our network.

For FY23 the MBTA has once again set an ambitious spending goal of \$2B:

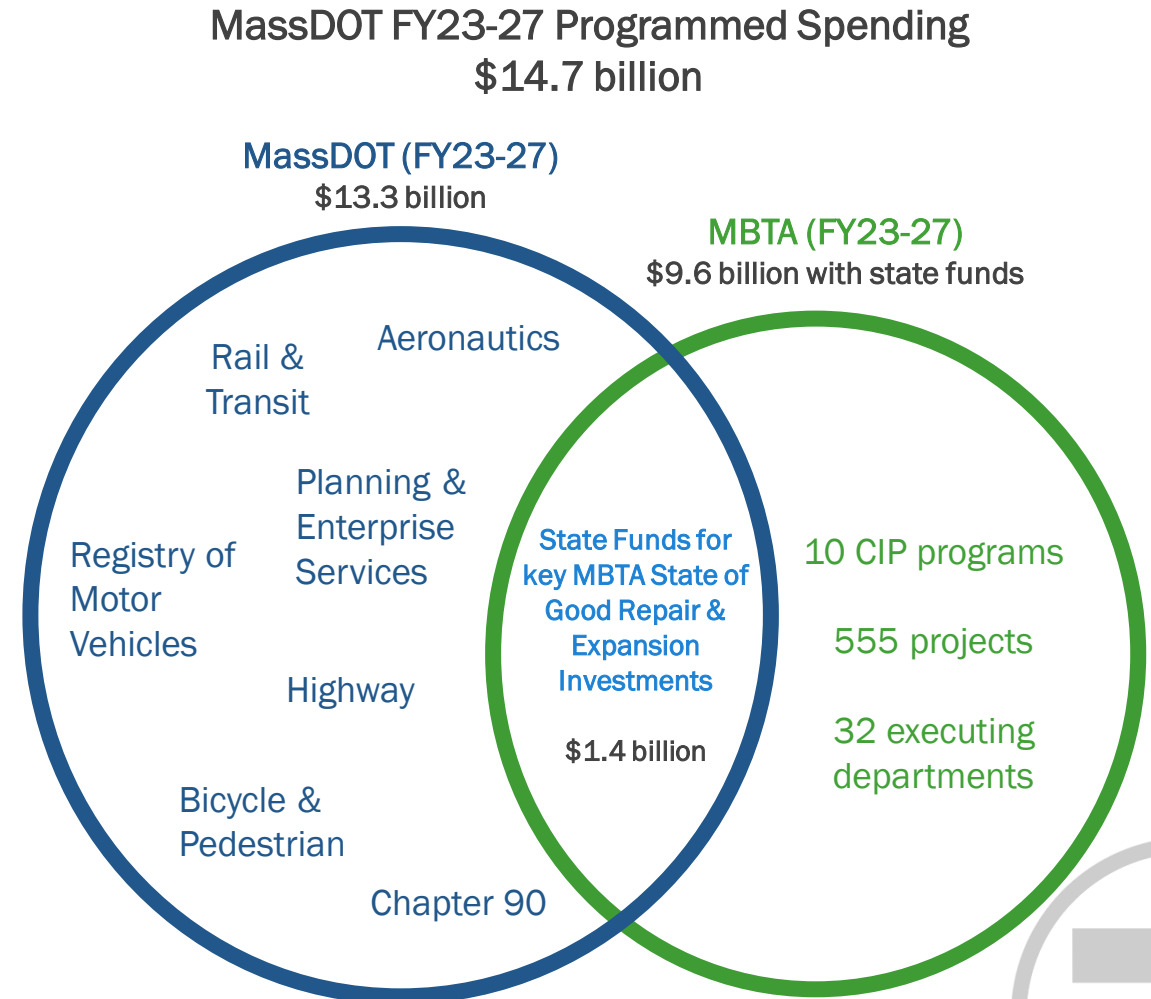
- \$1,565M in Reliability/Modernization
- \$435M in Expansion

MBTA Capital Investment by Fiscal Year (\$M)



Next Steps

- MBTA’s Final FY23-27 CIP will be finalized and published after Board approval
- The MBTA’s state-funded CIP investments continue to be incorporated into MassDOT’s Statewide CIP, which is expected to be released for public comment in May and approved in June
- General responses to public comments will be posted on the MBTA website by the end of the fiscal year



Board Vote

VOTED:

To approve the Fiscal Year 2023-2027 Capital Investment Program (“CIP”), as presented at the May 26, 2022 meeting of the MBTA Board of Directors and as attached hereto as Appendix A, and to authorize the General Manager, in the name of and on behalf of the Massachusetts Bay Transportation Authority, to take any steps he deems necessary and appropriate to provide notice to the Legislature and the public of the CIP, pursuant to M.G.L. c. 161A, §5.



Appendix – CIP Program Summary Slides



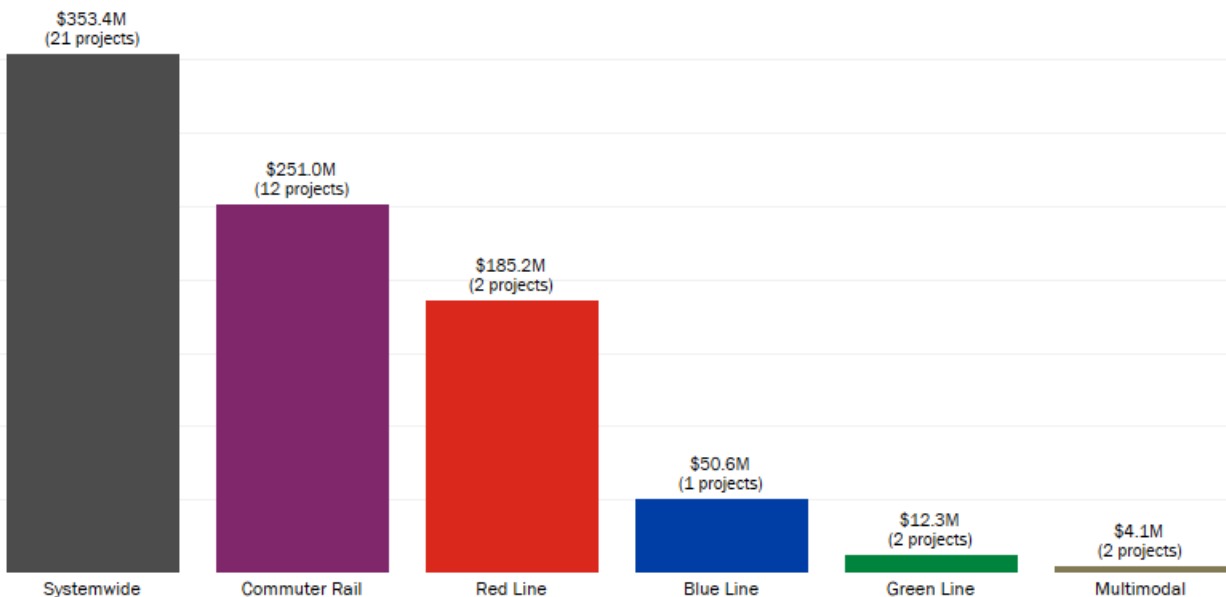
Program Summary | Bridge and Tunnel

Program Purpose

Repairs, reconstructs, and replaces Commuter Rail and transit bridges, tunnels, culverts, and dams

Total Projects	FY23-27 Programmed Spend	Executing Departments
40	\$856.6M	4

FY23-27 Programmed Spend by Primary Mode



Top 15 Bridge and Tunnel Projects by FY23-27 Programmed Spend

CIP ID	Project Name	Primary Mode	FY23-27 Total	Authorized Budget
P0551	Longfellow Approach	Red Line	\$185.2M	\$210.0M
P0018	North Station Draw 1 Bridge Replacement	Commuter Rail	\$157.4M	\$573.8M
P0495	Bridge Bundling Contract	Systemwide	\$65.3M	\$132.2M
P0627	Systemwide Bridge Inspection and Rating	Systemwide	\$61.3M	\$103.9M
P0912	Systemwide Tunnel Flood Mitigation Program	Systemwide	\$54.5M	\$149.3M
P0631	Blue Line Infrastructure Improvements	Blue Line	\$50.6M	\$73.7M
P0852	Structural Repairs Systemwide	Systemwide	\$27.4M	\$30.1M
P0552	Dorchester Avenue Bridge	Systemwide	\$27.3M	\$37.1M
P1107	Bridge Program Pipeline - Rehabilitation, Repair and Replacement	Systemwide	\$20.0M	\$20.0M
P0907	East Street Bridge Replacement (Dedham)	Commuter Rail	\$18.0M	\$18.0M
R0074	Tunnel Inspection Systemwide	Systemwide	\$17.1M	\$30.6M
P0006	Gloucester Drawbridge Replacement	Commuter Rail	\$16.7M	\$100.4M
P1115	South Elm Street Bridge Replacement	Commuter Rail	\$15.2M	\$15.2M
P0466	Tunnel Repairs (On-Call)	Systemwide	\$14.6M	\$28.6M
P0851	Norfolk Ave and East Cottage St Bridges	Commuter Rail	\$13.8M	\$22.1M

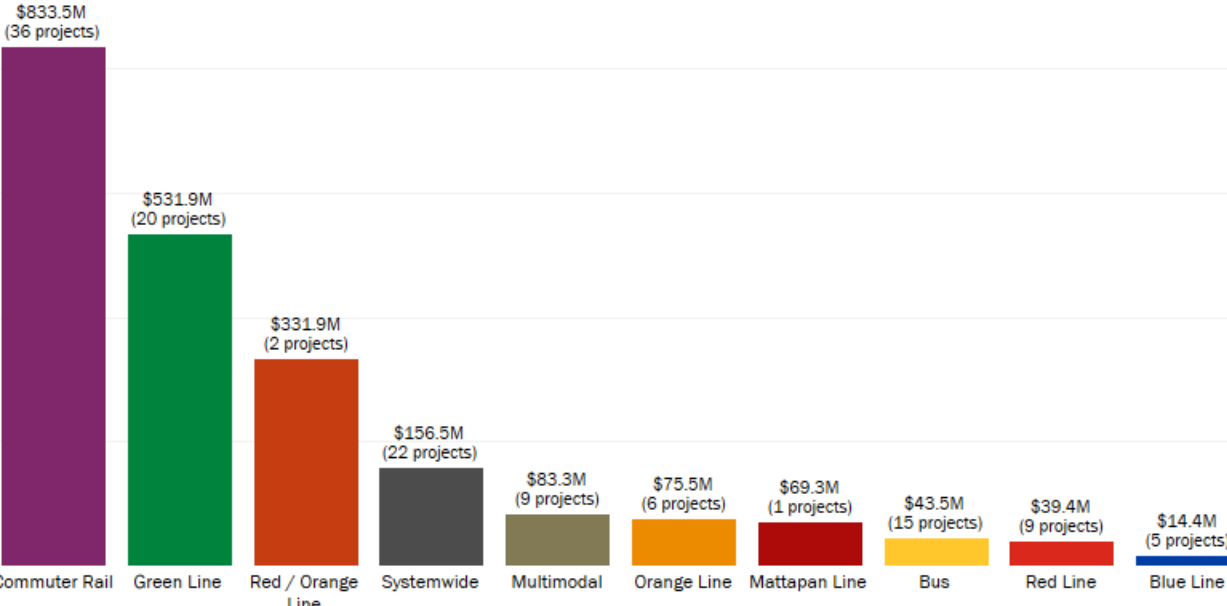
Program Summary | Guideway, Signal, and Power

Program Purpose

Rehabilitates, replaces, and upgrades guideway, signal, and power assets across Commuter Rail, transit, and bus

Total Projects	FY23-27 Programmed Spend	Executing Departments
125	\$2,179.1M	11

FY23-27 Programmed Spend by Primary Mode



Top 15 Guideway, Signal, and Power Projects by FY23-27 Programmed Spend

CIP ID	Project Name	Primary Mode	FY23-27 Total	Authorized Budget
P0285	Signal Program - Red/Orange Line	Red / Orange Line	\$240.5M	\$289.1M
P0606	ATC Implementation - North Side Commuter Rail Lines	Commuter Rail	\$173.6M	\$416.8M
P0370	Green Line Train Protection	Green Line	\$168.4M	\$212.9M
P0591	Green Line Central Tunnel Track and Signal Replacement	Green Line	\$116.0M	\$120.0M
P0692	PRIIA-NEC Baseline Capital Charges	Commuter Rail	\$96.1M	\$153.6M
P0553	Keolis Capitalization Initiatives and Extra Work	Commuter Rail	\$95.0M	\$172.4M
P0612	Bury 100 Miles of Fiber Annually - Strategic Locations	Commuter Rail	\$94.8M	\$102.1M
P0157	Red Line / Orange Line Infrastructure Improvements	Red / Orange Line	\$91.3M	\$470.4M
P0923	E Branch Accessibility & Capacity Improvements	Green Line	\$85.7M	\$85.9M
P0889	Tower 1 Interlocking Early Action Project	Commuter Rail	\$71.1M	\$89.8M
P0857	Mattapan HSL Transformation	Mattapan Line	\$69.3M	\$114.5M
P0924	B Branch Accessibility & Capacity Improvements	Green Line	\$66.3M	\$220.9M
P0516	On-Call Track III	Multimodal	\$65.2M	\$69.6M
P0148	Commuter Rail Positive Train Control	Commuter Rail	\$45.1M	\$444.2M
P1145	Keolis Mechanical Parts	Commuter Rail	\$32.1M	\$32.1M

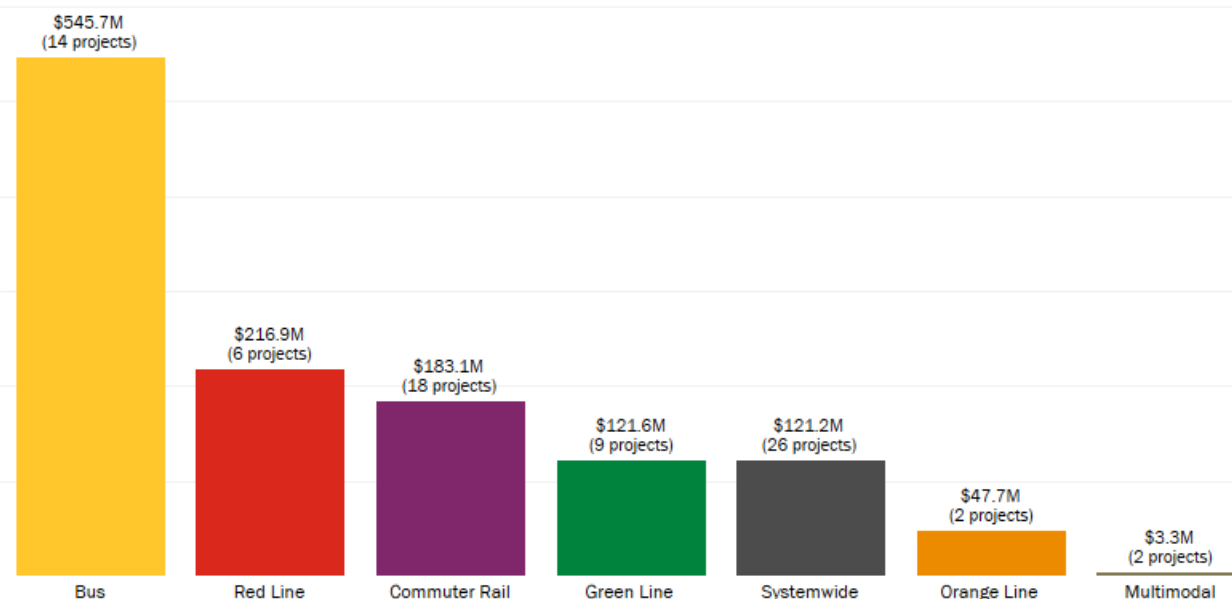
Program Summary | Maintenance and Administrative Facilities

Program Purpose

Rehabilitates and upgrades maintenance and administrative facilities that support operations

Total Projects	FY23-27 Programmed Spend	Executing Departments
77	\$1,239.5M	10

FY23-27 Programmed Spend by Primary Mode



Top 15 Maintenance and Admin. Facilities Projects by FY23-27 Programmed Spend

CIP ID	Project Name	Primary Mode	FY23-27 Total	Authorized Budget
P0671a	Quincy Bus Facility Modernization	Bus	\$326.6M	\$402.1M
P0512	Cabot Yard Complete Upgrade	Red Line	\$116.5M	\$162.2M
P0679	Codman Yard Expansion and Improvements	Red Line	\$94.7M	\$98.7M
P1144	Commuter Rail Facilities State of Good Repair	Commuter Rail	\$78.7M	\$78.7M
P0952	Future Regional Rail Layover Planning	Commuter Rail	\$69.5M	\$70.3M
P0942	Bus Facility Interim Improvements	Bus	\$65.3M	\$81.5M
P0671	Bus Facility Modernization Program	Bus	\$62.9M	\$96.4M
P1010	Riverside Vehicle Maintenance Facility Modifications & Upgrades	Green Line	\$49.4M	\$49.4M
P0514	Wellington Yard Complete Upgrade	Orange Line	\$46.5M	\$96.1M
P0671b	Arborway Bus Facility - Design Funding	Bus	\$36.0M	\$36.0M
P0126	Facility Roof Replacement	Systemwide	\$31.6M	\$52.5M
P1103	Reservoir Yard and Non-Revenue Track Optimization and Reconfiguration	Green Line	\$28.8M	\$30.5M
P0671c	North Cambridge Bus Facility Retrofit	Bus	\$25.0M	\$25.0M
P0925	Green Line Yards - Track Upgrades	Green Line	\$15.0M	\$15.0M
P0564	Sprinkler & Fire Life Safety Systems - Transit Facilities	Systemwide	\$14.8M	\$21.0M

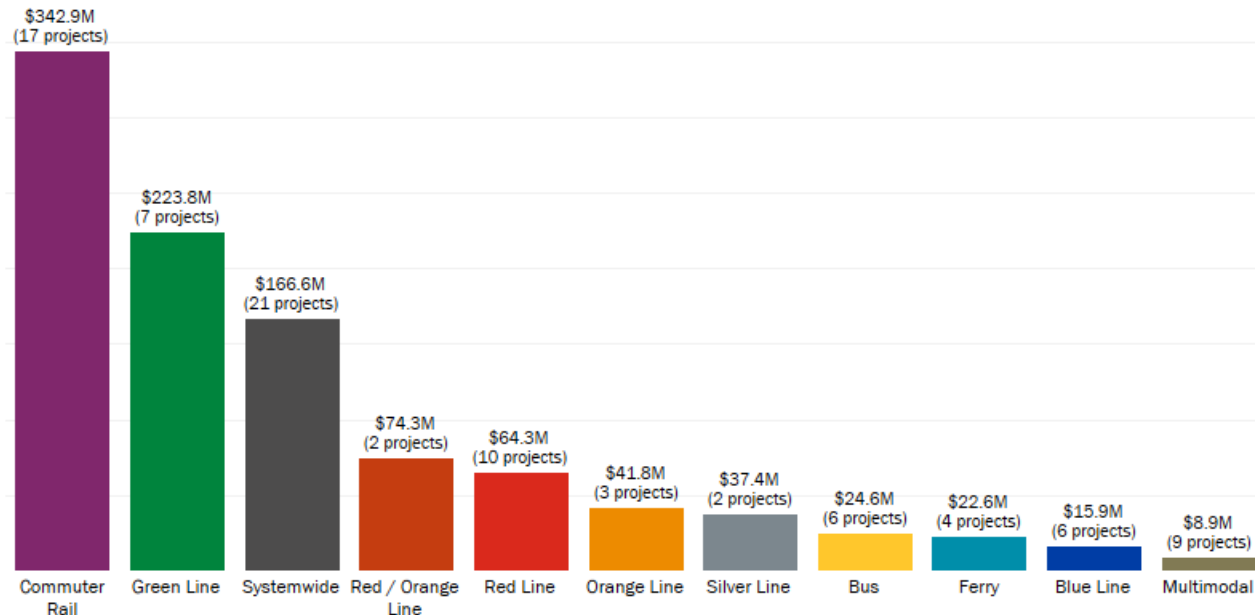
Program Summary | Passenger Facilities

Program Purpose

Rehabilitates and upgrades stations, stops and parking facilities to improve accessibility and the customer experience

Total Projects	FY23-27 Programmed Spend	Executing Departments
87	\$1,023.1M	12

FY23-27 Programmed Spend by Primary Mode



Top 15 Passenger Facilities Projects by FY23-27 Programmed Spend

CIP ID	Project Name	Primary Mode	FY23-27 Total	Authorized Budget
P0168	Symphony Station Improvements	Green Line	\$83.2M	\$91.4M
P0074	Downtown Crossing Vertical Transportation Improvements Phase 2	Red / Orange Line	\$73.7M	\$77.8M
P0856	Ruggles Station Improvements Phase 2	Commuter Rail	\$72.9M	\$93.0M
R0071	Lynn Station and Parking Garage Improvements Phase II	Commuter Rail	\$72.5M	\$74.3M
P0395	Worcester Union Station Accessibility and Infrastructure Improvements	Commuter Rail	\$59.0M	\$70.6M
P1009	Short Term Accessibility Improvements - FTA Compliance Actions	Green Line	\$56.5M	\$57.5M
P0179	Winchester Center Station	Commuter Rail	\$52.1M	\$60.9M
P1165	Transit Station Economic Development Improvements - Norfolk County	Systemwide	\$50.0M	\$50.0M
P0075	Elevator Program Multiple Location Design	Systemwide	\$41.5M	\$54.7M
P0626	Hynes Convention Center Station	Green Line	\$40.1M	\$45.7M
P0163	Forest Hills Improvement Project	Orange Line	\$35.4M	\$39.0M
P0605	Alewife Garage Rehabilitation	Red Line	\$32.6M	\$79.0M
P0108	Back Bay Station Ventilation	Commuter Rail	\$31.2M	\$43.1M
P0174	Natick Center Station Accessibility Project	Commuter Rail	\$29.8M	\$49.6M
P0129	Newton Highlands Green Line Station Accessibility Project	Green Line	\$28.6M	\$32.2M

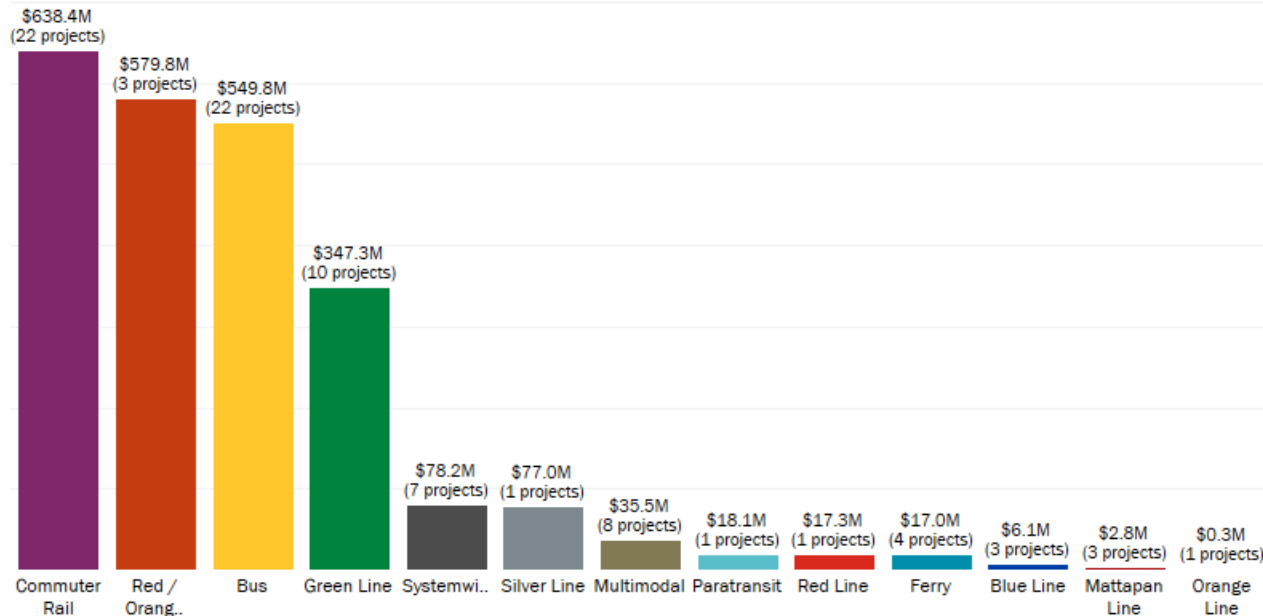
Program Summary | Vehicles

Program Purpose

Rehabilitates and replaces revenue fleets and non-revenue vehicle equipment for reliable and safe operations

Total Projects	FY23-27 Programmed Spend	Executing Departments
86	\$2,367.7M	7

FY23-27 Programmed Spend by Primary Mode



Top 15 Vehicles Projects by FY23-27 Programmed Spend

CIP ID	Project Name	Primary Mode	FY23-27 Total	Authorized Budget
P0362	Red / Orange Line Vehicles	Red / Orange Line	\$579.0M	\$1,073.5M
P0618	Procurement of 40ft Enhanced Electric Hybrid Buses	Bus	\$350.6M	\$353.9M
P0369	Green Line Type 10 Vehicle Replacement Program	Green Line	\$311.2M	\$1,000.0M
P0927	Rolling Stock - Locomotive and Coach State of Good Repair and Resiliency	Commuter Rail	\$173.1M	\$174.1M
P1152	Procurement of Hyundai Rotem Bi-Level Coaches - Option	Commuter Rail	\$147.7M	\$160.9M
P0893	Procurement of 67 Bi-Level Commuter Rail Coaches	Commuter Rail	\$147.3M	\$276.1M
P0653	Procurement of 40ft Battery Electric Buses and Related Infrastructure	Bus	\$100.8M	\$101.2M
P0619	Procurement of 60ft Enhanced Electric Hybrid Buses	Silver Line	\$77.0M	\$89.4M
P0547	Work Car Procurement	Systemwide	\$57.4M	\$63.9M
P0239	F40 Commuter Rail Locomotive Overhaul	Commuter Rail	\$53.6M	\$126.2M
P0918	Future Rolling Stock Fleet	Commuter Rail	\$50.0M	\$50.0M
P0652	Procurement of 100 Bi-Level Commuter Rail Coaches	Commuter Rail	\$42.5M	\$43.8M
P0860	Hybrid Bus Overhaul (New Flyer XDE40 - SR 1881)	Bus	\$38.9M	\$41.7M
P0349	Green Line Type 8 Reliability Improvements	Green Line	\$26.6M	\$66.5M
P0911	Hybrid and CNG Bus Overhaul	Bus	\$26.0M	\$26.0M

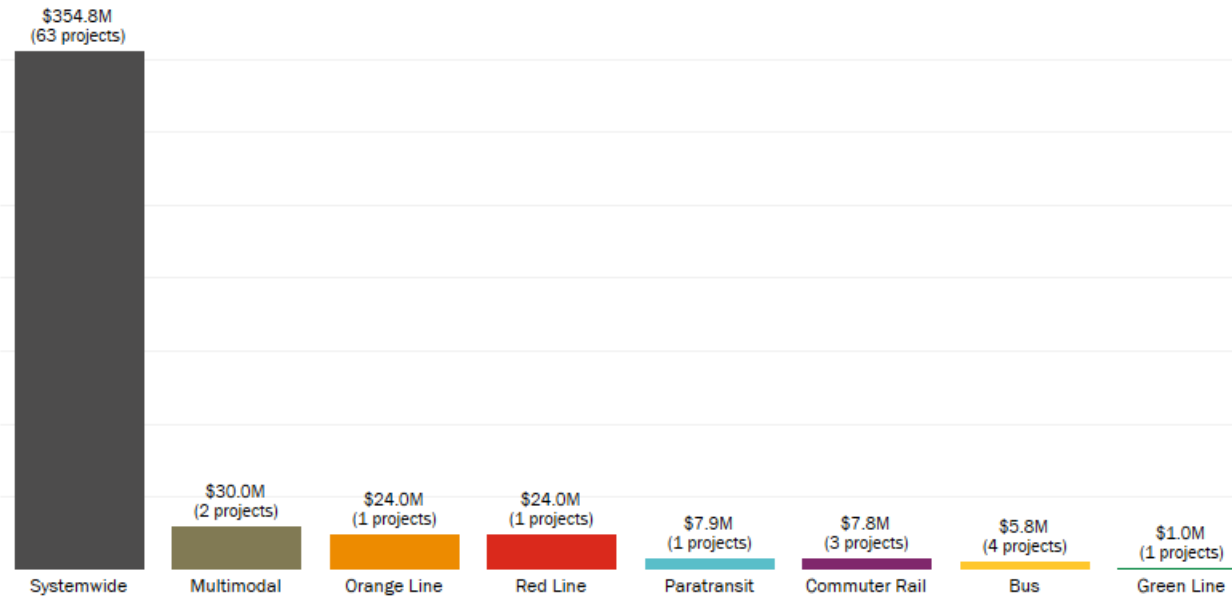
Program Summary | Business and Operational Support

Program Purpose

Investments in asset management, safety and security, communications, and other systems supporting operations

Total Projects	FY23-27 Programmed Spend	Executing Departments
76	\$455.3M	20

FY23-27 Programmed Spend by Primary Mode



Top 15 Business and Operational Support Projects by FY23-27 Programmed Spend

CIP ID	Project Name	Primary Mode	FY23-27 Total	Authorized Budget
P1166	State Match - BIL Support	Systemwide	\$145.0M	\$145.0M
P1014	Near-Term Transformational Investments	Multimodal	\$30.0M	\$30.0M
P1012r	Red Line - PM/CM Professional Services	Red Line	\$24.0M	\$25.1M
P1012o	Orange Line - PM/CM Professional Services	Orange Line	\$24.0M	\$25.1M
P0886	Capital Program Support	Systemwide	\$20.7M	\$24.5M
P0683	Project Connect - Financial Systems Transformation	Systemwide	\$15.7M	\$28.8M
P0645	OHS Program Development and Implementation	Systemwide	\$14.6M	\$22.3M
P0932	Electrical Safety - Incident Energy Analysis and System Upgrades	Systemwide	\$14.0M	\$16.2M
R0128	Workforce Modernization Program - HASTUS	Systemwide	\$12.5M	\$40.5M
P1139	Systemwide Asset Management Program Phase 4	Systemwide	\$12.0M	\$12.0M
P0931	Safety Management System (SMS) Implementation	Systemwide	\$10.1M	\$11.3M
P0321	Bond Costs / SOMWBA	Systemwide	\$10.0M	\$48.6M
P0690	Design Standards and Guidelines	Systemwide	\$9.4M	\$10.9M
P0676	Systemwide Security Upgrades	Systemwide	\$9.3M	\$20.7M
P0904	Systemwide Asset Management Program Phase 3	Systemwide	\$8.0M	\$11.5M

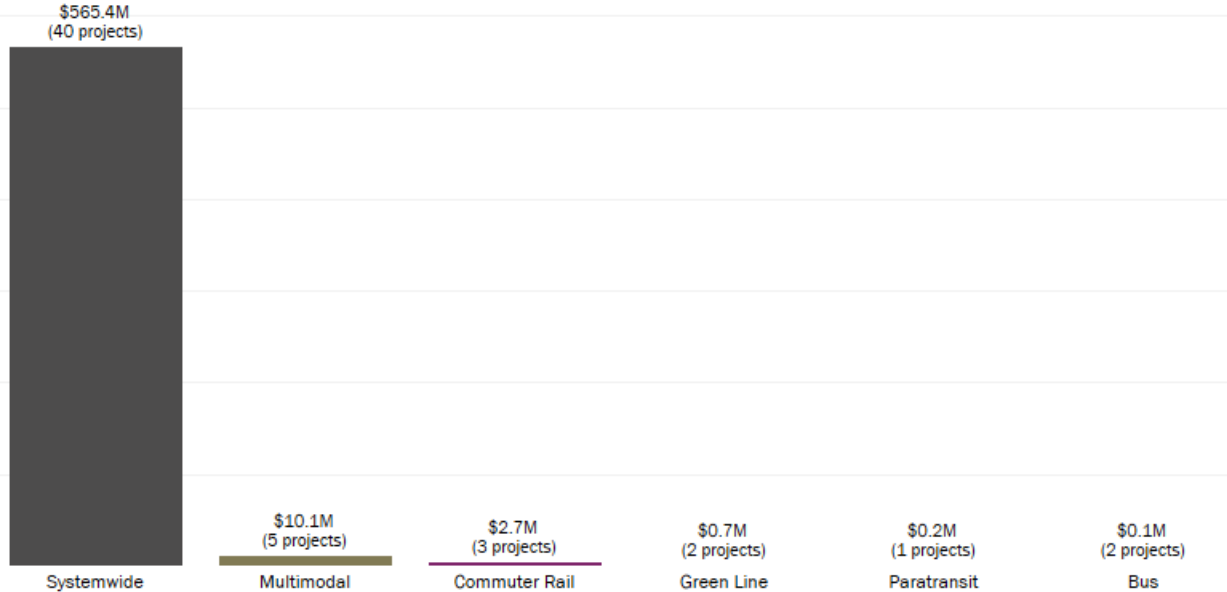
Program Summary | Technology and Innovation

Program Purpose

Investments in technology to enhance productivity, modernize the system, and improve the quality of service

Total Projects	FY23-27 Programmed Spend	Executing Departments
53	\$579.3M	15

FY23-27 Programmed Spend by Primary Mode



Top 15 Technology and Innovation Projects by FY23-27 Programmed Spend

CIP ID	Project Name	Primary Mode	FY23-27 Total	Authorized Budget
P0265	Fare Transformation	Systemwide	\$420.1M	\$783.4M
P0301	Systemwide Radio	Systemwide	\$73.3M	\$81.2M
P0946	ACE Network	Systemwide	\$13.7M	\$15.0M
P0972	PA/ESS Critical Upgrades	Systemwide	\$8.6M	\$9.4M
P1122	Safety Dispatch Technology and Data Modernization for Light Rail and Bus	Multimodal	\$8.2M	\$8.2M
P0908	Communications Rooms Remediation	Systemwide	\$7.6M	\$9.6M
P0945	IT Disaster Recovery Plan	Systemwide	\$7.1M	\$7.9M
P0265a	Accessible Fare Gate Opener	Systemwide	\$6.9M	\$9.0M
P0635	IT Security Modernization	Systemwide	\$4.9M	\$17.9M
P0491a	Customer Technology Access Initiatives	Systemwide	\$4.0M	\$4.3M
P06890	Rider Service Alerts Resiliency & Improvements	Systemwide	\$3.5M	\$3.9M
P0944	IT Infrastructure State of Good Repair	Systemwide	\$3.1M	\$4.9M
P0434	Energy Management System	Systemwide	\$2.7M	\$3.5M
P0693	Automated Passenger Counters	Commuter Rail	\$2.2M	\$15.0M
P0948	Performance Data Modernization	Systemwide	\$2.1M	\$2.3M

Program Summary | Expansion

South Coast Rail, GLX, and Expansion Projects

Program Purpose

South Coast Rail: Extension of Commuter Rail service to Fall River and New Bedford on the South Coast of Massachusetts

Green Line Extension: Extension of Green Line service from Lechmere to Somerville and Medford

Expansion Projects: Planning and design of targeted expansion projects identified as next priorities

Total Projects	FY23-27 Programmed Spend	Executing Departments
11	\$943.5M	7

Top 7 South Coast Rail, Green Line Extension, and Expansion Projects, by FY23-27 Programmed Spend

CIP ID	Project Name	Primary Mode	FY23-27 Total	Authorized Budget
P0160	South Coast Rail Expansion	Commuter Rail	\$493.5M	\$920.8M
P0095	Green Line Extension	Green Line	\$357.7M	\$2,118.6M
P0160a	South Coast Rail - Coach Procurement	Commuter Rail	\$39.9M	\$69.0M
P0095a	Green Line Extension - Vehicles	Green Line	\$25.3M	\$170.0M
P0866	Red-Blue Connector - Planning	Multimodal	\$14.9M	\$15.0M
P0100	Knowledge Corridor	Commuter Rail	\$9.0M	\$122.6M
P0496	Silver Line Gateway - Phase 2	Silver Line	\$3.3M	\$40.6M

FY23-27 Programmed Spend by Primary Mode

