

MBTA Federal Capital Program
FFY 2019 and FFY 2020-2024 TIP - Project List and Descriptions
Presented to the Boston MPO on 3/28/2019 for Informational Purposes

Project Name	FTA Funds	Federal Funds	MBTA Match	Total Funds	Project Description
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5307 Formula Funds (Urbanized Area Formula)

5307 - Revenue Vehicles

Delivery of 460 40 ft Buses - FY 2021 to FY 2025	5307	\$178,351,549	\$44,587,887	\$222,939,436	Procurement of 40-foot electric and hybrid buses for replacement of diesel bus fleet.
DMA Replacement	5307	\$82,690,000	\$20,672,500	\$103,362,500	Procurement of 60-foot Dual Mode Articulated (DMA) buses to replace the existing fleet of 32 Silver Line Bus Rapid Transit buses and to provide for ridership expansion projected as a result of Silver Line service extension to Chelsea.
Green Line Type 10 Light Rail Fleet Replacement	5307	\$165,600,000	\$41,400,000	\$207,000,000	Replacement of Light Rail Vehicles to replace the existing Green Line Type 7 and 8 Fleets.
Locomotive Overhaul	5307	\$43,907,679	\$10,976,920	\$54,884,599	Overhaul of commuter rail locomotives to improve fleet availability and service reliability systemwide.
LoNo Bus Procurement Project	5307	\$2,187,991	\$546,998	\$2,734,989	Supplemental funding for the procurement of Battery Electric 60 ft Articulated Buses for operation on the Silver Line.
MBTA Catamaran Overhauls	5307	\$7,782,682	\$1,945,670	\$9,728,352	Replacement of major systems and refurbishment of seating and other customer facing components on two catamarans (Lightning and Flying Cloud).
Midlife Overhaul of New Flyer Allison Hybrid 60ft Articulated Buses	5307	\$12,702,054	\$3,175,514	\$15,877,568	Overhaul of 25 hybrid buses, brought into service in 2009 and 2010, to enable optimal reliability through the end of their service life.
Option Order Procurement of 194 New Flyer Hybrid 40 ft Buses (5307)	5307	\$96,329,062	\$24,082,266	\$120,411,328	Procurement of 40-foot buses with hybrid propulsion to replace Emission Controlled Diesel (ECD) buses that have reached the end of their service life.
Overhaul of Kawasaki 900 Series Bi-Level Coaches	5307	\$35,360,000	\$8,840,000	\$44,200,000	Overhaul and upgrade of existing systems on commuter rail coaches that were brought into service in 2005 to enable optimal reliability through the end of their service life.
Procurement of Bi-Level Commuter Rail Coaches	5307	\$127,680,000	\$31,920,000	\$159,600,000	Procurement of bi-level commuter rail coaches to replace existing cars that have exceeded their service life.
Procurement of Battery Electric 40 ft Buses and Related infrastructure (5307)	5307	\$24,559,233	\$6,139,808	\$30,699,041	Procurement of Battery Electric 40-ft. buses and supporting infrastructure to serve as a pilot for determining bus propulsion technologies for future procurements.
Red Line No. 3 Car - Targeted Reliability Improv.	5307	\$35,226,739	\$8,806,685	\$44,033,424	Overhaul and upgrade of selected systems on Red Line fleet vehicles to extend service life until planned replacement.
		\$812,376,990	\$203,094,247	\$1,015,471,237	

5307 - Signals and Systems

ATC Implementation on the MBTA North Side Commuter Rail Lines (5307)	5307	\$89,321,990	\$22,330,497	\$111,652,487	Design and install automatic train control systems on all MBTA Commuter Rail North Side Lines. Improvements will include increased train traffic capacity and operational reliability on all lines.
Green Line Track Upgrade	5307	\$73,179,264	\$18,294,816	\$91,474,079	Replacement of select track components on the Green Line to bring them to a state of good repair.
Signal Program - Red/Orange Line (5307)	5307	\$35,738,497	\$8,934,624	\$44,673,121	Various signal upgrades and improvements along both the Red and Orange Lines
		\$198,239,750	\$49,559,937	\$247,799,687	

5307 - Stations and Facilities

Charlestown Bus - Seawall Rehab	5307	\$11,228,382	\$2,807,096	\$14,035,478	Rehabilitation of existing seawall to protect bus maintenance facility from future storm and flooding events.
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Elevator Program	5307	\$26,886,141	\$6,721,535	\$33,607,677	Installation of new redundant elevators and the replacement of existing elevators at various stations, in order to mitigate degradation of station elevators and to maintain station accessibility during elevator maintenance.
Harvard Square Busway Repairs	5307	\$14,992,676	\$3,748,169	\$18,740,846	Rehabilitation of roadway, drainage and catenary infrastructure at the Harvard Square Busway.
Hingham Ferry Dock Modification	5307	\$1,200,000	\$300,000	\$1,500,000	Capital improvements and modifications to the existing ferry dock in Hingham.
		\$54,307,200	\$13,576,800	\$67,884,000	

5337 Formula Funds (State of Good Repair)

5337 - Bridge and Tunnel Program

Bridge Bundling Contract (Rehabilitation of 6 Bridges)	5337	\$85,615,086	\$21,403,771	\$107,018,857	Replacement of 6 commuter rail bridges: Lynn Fells Parkway in Melrose (Haverhill Line); Parker Street in Lawrence (Haverhill Line); Commercial Street in Lynn (Newburyport/Rockport Line); Bacon Street in Wellesley (Worcester Line); Intervale Road in Weston (Worcester Line); and High Line Bridge in Somerville (Lowell Line).
Bridges - Design	5337	\$8,000,000	\$2,000,000	\$10,000,000	Design for high priority bridge repairs system wide.
East Cottage Street Bridge	5337	\$12,687,558	\$3,171,889	\$15,859,447	Replacement of East Cottage Street bridge with a new superstructure and substructure to meet design code/standards, as well as MBTA and FTA State of Good Repair requirements.
Emergency Bridge Design / Inspection & Rating	5337	\$8,000,000	\$2,000,000	\$10,000,000	Repairs to bridges system wide, based on asset condition as determined by system wide inspections and ratings.
Emergency Bridge Repair	5337	\$6,400,000	\$1,600,000	\$8,000,000	Repairs to bridges system wide, based on asset condition as determined by system wide inspections.
Inspection and Rating of MBTA Systemwide Bridges	5337	\$4,000,000	\$1,000,000	\$5,000,000	Inspection of bridge assets system wide for determination of asset condition ratings and subsequent prioritization and scoping for repairs to select bridges.
Longfellow Approach	5337	\$44,000,000	\$11,000,000	\$55,000,000	Rehabilitation of the Longfellow Approach Viaduct, Charles/MGH Station platforms, and Span 1 of the Longfellow Bridge.
Norfolk Avenue Bridge	5337	\$11,240,000	\$2,810,000	\$14,050,000	Replacement of bridge carrying the Fairmont (Dorchester) Line Commuter Rail service over Norfolk Avenue in Boston.
Robert Street Bridge	5337	\$12,928,771	\$3,232,193	\$16,160,964	Replacement of bridge carrying the Needham Line Commuter Rail service over Robert Street in Roslindale.
Structural Repairs Systemwide	5337	\$4,000,000	\$1,000,000	\$5,000,000	Repairs to bridge or other structures system wide on an emergency or planned basis.
Tunnel Inspection Systemwide	5337	\$8,600,000	\$2,150,000	\$10,750,000	Inspection to assess condition of transit tunnels system wide.
Tunnel Rehab	5337	\$6,075,792	\$1,518,948	\$7,594,740	Repair and rehabilitation of transit tunnels system wide.
		\$211,547,206	\$52,886,802	\$264,434,008	

5337 - Signals and Systems

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Alewife Crossing Improvements	5337	\$10,073,531	\$2,518,383	\$12,591,914	As part of the Red/Orange Line Infrastructure Improvement Program, this project will involve the upgrade of track switches at Alewife Station and associated retrofits to accommodate these new components.
ATC Implementation on the MBTA North Side Commuter Rail Lines (5337)	5337	\$98,678,010	\$24,669,503	\$123,347,513	Design and install automatic train control systems on all MBTA Commuter Rail North Side Lines. Improvements will include increased train traffic capacity and operational reliability on all lines.
Green Line Central Tunnel Track and Signal Replacement	5337	\$96,000,000	\$24,000,000	\$120,000,000	Replacement of the existing 25 cycle signal system and associated wayside equipment at Government Center, Copley and Park Street Interlockings, and related track work.
Green Line D Branch Track and Signal Replacement	5337	\$81,280,362	\$20,320,091	\$101,600,453	Replacement of track and signal system components on the Highland Branch of the Green Line from Reservoir to Riverside Stations, including replacement of obsolete 25 Hz track circuits with modern solid-state 100 Hz track circuits.
Infrastructure Asset Management Program Phase 1	5337	\$17,129,197	\$4,282,299	\$21,411,496	Collection of infrastructure based asset data in order to update MBTA asset management databases, and manage asset and life cycle/risk management practices.
MCRS2 v17 and Business Process Update	5337	\$4,160,000	\$1,040,000	\$5,200,000	Updates and improvements to MBTA asset management systems and business processes.
North Station Terminal Signal	5337	\$34,275,128	\$8,568,782	\$42,843,910	Upgrades to the commuter rail signal/communication system in the North Station area required for more efficient phasing of future track alignments, including support for the future Draw 1 Bridge Replacement Project.
Power Systems Resiliency Program	5337	\$17,600,000	\$4,400,000	\$22,000,000	Installation of nine new duct bank systems to replace damaged power infrastructure at West Fourth Street, Dudley Square, Arlington Street, Causeway Street, two locations on Commonwealth Ave and three locations on Beacon Street.
Red Line Interlock Upgrades	5337	\$9,600,000	\$2,400,000	\$12,000,000	Replacement of existing interlocking signal components on the Red Line to bring the assets to a state of good repair.
Signal Program - Red/Orange Line (5337)	5337	\$157,245,759	\$39,311,440	\$196,557,199	Various signal upgrades and improvements along both the Red and Orange Lines
System-Wide Radio	5337	\$55,440,000	\$13,860,000	\$69,300,000	Replacement of existing radio system for MBTA Police to support critical two-way communication for MBTA Transit Police and to support a secure and Interoperable Radio System.
Worcester Line Track Improvements Incl. 3rd Track Feasibility Study	5337	\$1,001,643	\$250,411	\$1,252,054	Design Phase Services for the proposed Framingham/Worcester Line third track. It will include assessments of proposed operation, alternatives analysis and design plans.
		\$582,483,630	\$145,620,908	\$728,104,538	

5337 - Stations and Facilities

Codman Yard Expansion and Improvements	5337	\$26,280,432	\$6,570,108	\$32,850,540	Infrastructure improvements to Codman Yard, an additional Red Line storage facility, to accommodate the new vehicle fleet.
Commonwealth Ave Stations Access	5337	\$23,463,054	\$5,865,764	\$29,328,818	Addressing accessibility issues along the B branch of the Green Line along Commonwealth Avenue
Downtown Crossing Vertical Transportation Improvements Phase 2	5337	\$5,926,390	\$1,481,598	\$7,407,988	Construction of two new redundant elevators, in order to improve accessibility and to provide for future elevator maintenance without rendering the station temporarily inaccessible.
Elevator Program Multiple Location Design	5337	\$38,978,268	\$9,744,567	\$48,722,835	Design for the installation of new redundant elevators and the replacement of existing elevators system wide.

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Feasibility Study of Remaining Inaccessible Stations - Green Line	5337	\$9,120,000	\$2,280,000	\$11,400,000	Feasibility study and preliminary design for inaccessible Green Line stations
Forest Hills Improvement Project	5337	\$26,089,763	\$6,522,441	\$32,612,204	Improvements at Forest Hills Station on the Orange Line and Needham Commuter Rail Line to comply with ADA accessibility standards. Work will also include infrastructure and other improvements.
Lynn Station & Parking Garage Improvements Phase II	5337	\$26,461,132	\$6,615,283	\$33,076,415	Extensive rehabilitation efforts include reconstruction of the existing commuter rail platform, upgrade of mechanical and electrical systems at the station, and structural repairs and code compliance retrofits to the garage.
Natick Center Station Accessibility Project	5337	\$33,822,690	\$8,455,673	\$42,278,363	Accessibility improvements at the Natick Center commuter rail station on the Framingham/Worcester Line.
Newton Commuter Rail Stations	5337	\$16,511,947	\$4,127,987	\$20,639,934	For a conceptual design and operational analysis study of the Newton commuter rail stations, with additional funding for various accessibility and infrastructure improvements.
Newton Highlands Green Line Station Accessibility Project	5337	\$18,375,284	\$4,593,821	\$22,969,104	Improvements at Newton Highlands station on the D branch of the Green Line to comply with ADA accessibility standards.
Oak Grove Station Vertical Transportation Improvements	5337	\$28,232,567	\$7,058,142	\$35,290,708	Retrofit of the existing Oak Grove station on the Orange Line to bring it into full compliance with ADA standards, including the replacement of existing elevators, construction of two new elevators, various parking and path of travel upgrades.
Old South Meeting House Leak Repairs	5337	\$1,083,719	\$270,930	\$1,354,648	Remediation of leaks along the wall of the Old South Meeting House resulting from the construction of an entrance to State Street Station
Park Street Station Wayfinding Improvements Construction	5337	\$14,903,910	\$3,725,977	\$18,629,887	Replacement of existing signage with updated ADA-compliant standard graphics at the lobby, Green Line platform, Red Line platform and Winter Street concourse as well as related architecture improvements such as lighting and illuminated exit signs.
Ruggles Station Upgrade	5337	\$2,599,003	\$649,751	\$3,248,754	Design for state of good repair improvements to Ruggles Station on the Orange Line.
Silver Line Gateway - Phase 2	5337	\$27,856,962	\$6,964,241	\$34,821,203	Includes the building of a new commuter rail station adjacent to the new Chelsea Bus Rapid Transit (BRT) Station located at the Mystic Mall, as well as decommissioning of the existing Chelsea Commuter Rail Station and signal prioritization.
South Attleboro Station Improvements	5337	\$3,580,654	\$895,164	\$4,475,818	Needs assessment and design services associated with accessibility, structural, parking and multi-modal facility improvements for the South Attleboro commuter rail station.
Symphony Station Improvements	5337	\$33,416,159	\$8,354,040	\$41,770,199	Upgrades to the existing Symphony Station on the Green Line in order to provide a modern, accessible, code-compliant facility.
Winchester Center Station	5337	\$32,196,321	\$8,049,080	\$40,245,401	Renovation and accessibility improvements to Winchester Center Station on the Lowell and Haverhill commuter rail lines.
		\$368,898,256	\$92,224,564	\$461,122,820	

5339 Formula Funds (Bus and Bus Facility)

5339 - Bus and Bus Facility

60' New Flyer Bus Overhaul	5339	\$22,938,000	\$5,734,500	\$28,672,500	Midlife overhaul of 60 forty-foot BAE Hybrid buses delivered in 2014 - 2015 from New Flyer to ensure continued reliable operations and to meet expected useful life.
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Option Order Procurement of 194 New Flyer Hybrid 40 ft Buses (5339)	5339	\$6,537,703	\$1,634,426	\$8,172,129	Procurement of 40-foot buses with hybrid propulsion to replace Emission Controlled Diesel (ECD) buses that have reached the end of their service life.
Procurement of 35 Battery Electric 40ft Buses and Related infrastructure (5339)	5339	\$17,772,004	\$4,443,001	\$22,215,005	Procurement of Battery Electric 40-ft. buses and supporting infrastructure to serve as a pilot for determining bus propulsion technologies for future procurements.
		\$47,247,707	\$11,811,927	\$59,059,634	

Note: Project descriptions and dollar amounts are preliminary only and are provided for informational purposes. In many cases, the scopes of work and project budgets will become more fully developed as the design process proceeds and is completed. The MBTA may also opt to fund a project from a different FTA funding source based on the timing of projects and the availability of FTA funds.