TIP Project Name	Project Description
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5307 - Revenue Vehicle Program

Commuter Rail Locomotive Reliability Program	This program will restore coaches and locomotives, beyond their useful life, to a state of good repair to support service and winter resilliency efforts
DMA Bus Replacement	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 Light Rail Fleet Replacement - Design	Development of technical specifications for the procurement of light rail vehicles to replace the existing fleet that is approaching the end of its service life.
Locomotive Overhaul	Overhaul of locomotives in operation on commuter rail lines systemwide in order to improve reliability.
MBTA Catamaran Overhaul	Replacement of major systems and refurbishment of seating and other customer facing components on two catamarans (Lightning and Flying Cloud).
Midlife Overhaul of 25 New Flyer Allison Hybrid 60 ft Articulated Buses	Overhaul of 25 hybrid buses, brought into service in 2009 and 2010, to enable optimal reliability through the end of their service life.
Overhaul of 32 Neoplan 60' DMA Buses (5307)	Overhaul of the Neoplan 60' Dual Mode Articulated buses that operate on the MBTA Silver Line Bus Rapid Transit routes.
Overhaul of 33 Kawasaki 900 Series Bi-Level Coaches	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	Procurement of bi-level commuter rail coaches to replace existing cars that have exceeded their service life.
Procurement of 194 New Flyer Hybrid 40 ft Buses	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 Battery Electric 40 ft Buses and Related infrastructure (5307)	Procurement of up to 35 Battery Electric 40-ft. buses and supporting infrastructure to replace the existing electric trolley bus fleet and to serve as a pilot for determining bus propulsion technologies for future procurements. (Funded from both 5307 and 5339.)
Procurement of 40 ft Buses	Procurement of 40-foot electric and hybrid buses for replacement of diesel bus fleet.
Red Line No. 3 Car - Targeted Reliability Improvements	Overhaul and upgrade of selected systems on Red Line fleet vehicles to extend service life until planned replacement.

5307 - Elevator & Escalator Program

Flourator Dragger DCII	Elevator improvements at various stations including Alewife, Harvard, Central, Park, Quincy
Elevator Program - BCIL	Adams, Tufts, Andrew and Downtown Crossing.

5307 - Stations and Facilities Program

Bus Route Safety and Service Improvements	To address accessibility, safety and operational deficiencies at select bus stops systemwide.
ICharlestown Bus - Seawall Rehab	Rehabilitation of existing seawall to protect bus maintenance facility from future storm and flooding events.
Iron Horse Operations Control Center	Construction of Iron Horse Park Operations Control Center building to provide an updated dispatch facility for Commuter Rail North (CRN) and Pan Am freight and to house the back-up Positive Train Control (PTC) data center.

TIP Project Name	Project Description
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5307 - Signals/Systems Upgrade Program

Green Line - Central Tunnel Interlocking Signals	To provide for the removal and the replacement of the existing 25 cycle signal system and associated wayside equipment at Government Center, Copley and Park Street Interlockings.
Green Line Riverside to Reservoir - Signal & Track Work	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.
Systemwide Radio - Public Safety Improvements	To replace existing radio system which provides critical two-way communications for the MBTA Transit Police, through a secure and advanced Public Safety - P25 Interoperable Radio System.

5337 - Revenue Vehicle Program

	Procurement and installation of on-board and wayside equipment for a train monitoring
Green Line Train Protection	system to determine allowable train separation, based on speed and location, and to prevent
	vehicles from passing a red signal.

5337 - Bridge and Tunnel Program

Bridge Bundling Contract (6 Bridges)	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).
Bridge Design / Inspection & Rating Program	Inspection of bridge assets systemwide for determination of asset condition ratings and subsequent prioritization and scoping for repairs to select bridges.
Bridge Repair Program	Repairs to bridges systemwide, based on asset condition as determined by systemwide inspections.
North Station Draw 1 Bridge Replacement	Replacement of the North Station commuter rail drawbridge (Draw 1). Funding source under review.
Tunnel Rehabilitation Program	Repair and rehabilitation of transit tunnels systemwide

5337 - Stations and Facilities Program

Braintree and Quincy Adams Garage Rehabilitation	The full repair and rehabilitation of the Red Line's Quincy Adams Station and Braintree Station parking garages
Newton Commuter Rail Stations Study	For a conceptual design and operational analysis study of the Newton commuter rail stations, with additional funding for various accessibility and infrastructure improvements
Commonwealth Ave Stations Access	Addressing accessibility issues along the B branch of the Green Line along Commonwealth Avenue
Downtown Crossing Vertical Transportation Improvements Phase 2	Construction of two new redundant elevators, in order to improve accessibility and to provide for future elevator maintenance without rendering the station temporarily inaccessible.
Forest Hills Improvement Project	Improvements at Forest Hills Station on the Orange Line and Needham Commuter Rail Line to comply with ADA and Massachusetts Architectural Access Board (MAAB) accessibility standards. Work will also include infrastructure and other improvements (e.g., wayfinding signage, installation of tactile platform edges).

TIP Project Name	Project Description
Harvard Square Busway Repairs (5337)	Rehabilitation of roadway, drainage and catenary infrastructure at the Harvard Square Busway.
Hingham Ferry Dock Modification	Construction of a new, full accessible ferry dock at the Hingham Ferry Terminal located at Hewitts Cove in the Weymouth Back River in Hingham, MA
Natick Center Station Accessibility Project	Accessibility improvements at the Natick Center commuter rail station on the Framingham/Worcester Line.
Newton Highlands Green Line Station Accessibility Project	Improvements at Newton Highlands station on the D branch of the Green Line to comply with ADA and Massachusetts Architectural Access Board (MAAB) accessibility standards.
Oak Grove Station Vertical Transportation Improvements	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	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	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 - Accessibility (Design)	Design for future accessibility improvements at Ruggles Station.
Savin Hill Underpass	Work at the Savin Hill Underpass (located between Savin Hill Station and Field Corner Station carrying Ashmont train service) in order to fill and decommission structure and minimize service disruptions.
Silver Line Gateway - Phase 2	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	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	Upgrades to the existing Symphony Station on the Green Line in order to provide a modern, accessible, code-compliant facility
Winchester Center Station	Renovation and accessibility improvements to Winchester Center Station on the Lowell and Haverhill commuter rail lines.

5337 - Elevator and Escalator Program

Elevator Program Multiple Location Design	Design for the installation of new redundant elevators and the replacement of existing elevators systemwide.
Priority Replacement and Redundant Elevator Program	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 accessbility during elevator maintenance.

5337 - Signals/Systems Upgrade Program

145 High Street - Data Center Ungrades	Includes new fire suppression/alarm system as well as power, fiber, HVAC and other data center improvements at the MBTA operations center at 45 High Street, Boston.
I(areen Line (Non-GLX) (arade (rossings	Replacement of existing at-grade crossings at various locations on the B and C branches of the Green Line along Commonwealth Avenue and Beacon Street.

TIP Project Name	Project Description
Infrastructure Asset Management Program Phase 1	Collection of infrastructure based asset data in order to update the SGR Database and manage asset and life cycle/risk management practices.
	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.
Signal Program - Red/Orange Line	Various signal upgrades and improvements along both the Red and Orange Lines

5339 - Bus Program

Harvard Square Busway Repairs (5339)	Rehabilitation of roadway, drainage and catenary infrastructure at the Harvard Square Busway.
Overhaul of 32 Neoplan 60' DMA Buses (5339)	Overhaul of the Neoplan 60' Dual Mode Articulated buses that operate on the MBTA Silver Line Bus Rapid Transit routes.
Procurement of Battery Electric 40 ft Buses and Related infrastructure (5339)	Procurement of up to 35 Battery Electric 40-ft. buses and supporting infrastructure to replace the existing electric trolley bus fleet and to serve as a pilot for determining bus propulsion technologies for future procurements. (Funded from both 5307 and 5339.)

Note: Project descriptions are preliminary only and are provided for informational purposes. In many cases, the scopes of work will become more fully developed as the design process proceeds and is completed.