

## Appendix B: Investment Programs

This section provides a list of MassDOT investment programs included in the FY25-29 CIP. Each investment program includes a description, details about any relevant performance tracking that informs program size and need, and proposed program spending. Programs are organized by priority area (reliability, modernization, and expansion) and by Division.

## Reliability: Aeronautics Division

### Airport Capital Improvement Program

This program includes a full range of airport state of good repair projects. Projects may include tree clearing, obstruction removal, sustainable equipment purchases, herbicide treatment, yearly operating plans, vegetation management plans, airport security camera installation and replacement, security and wildlife hazard fencing and gates, navigation aids, fuel farms, hangars, and system planning studies.

#### Program Plan and/or Guidance

Federal Aviation Administration (FAA) Airport Improvement Handbook (FAA Advisory Circular 5100.38)

#### Project Selection

Compliance with FAA airfield compliance standards and FAA National Priority Rating (NPR) System

#### Performance Measure

Annual safety inspections on airport conditions

#### FY25-29 Projected Spend

\$271.0 million



Provincetown approach lighting system

## Reliability: Aeronautics Division

### Airport Pavement Program

This program addresses the quality of all pavements “inside the airport fence” to achieve long term pavement condition goals. Pavement improvements through this program are necessary to continue safety and maintenance programs at public airports and is required to help keep Massachusetts airports in compliance with FAA grant requirements.

#### Program Plan and/or Guidance

FAA Airport Improvement Program Handbook (Table G-2) and MassDOT Airport Pavement System (APMS) Study

#### Project Selection

Compliance with FAA airfield compliance standards and FAA National Priority Rating (NPR) System

#### Performance Measure

Pavement Condition Index (PCI) and FAA Standards

#### FY25-29 Projected Spend

\$290.7 million



Statewide deck sealing and airfield marking projects

## Reliability: Highway Division

### Bridge Program

This program maintains, reconstructs, and replaces state and municipally owned bridges across the Commonwealth.

#### Program Plan and/or Guidance

MassDOT Transportation Asset Management Plan (TAMP)

#### Project Selection

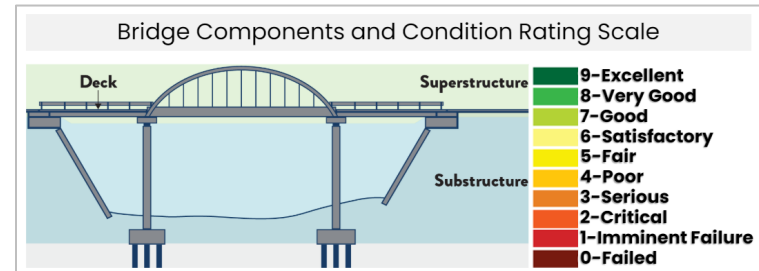
Selected through Bridge Prioritization System

#### Performance Measure

Bridge condition by count and bridge condition by deck area (for National Highway System [NHS] bridges)

#### FY25-29 Projected Spend

\$5,490.7 million



Bridge components and condition rating scale

## Reliability: Highway Division

### Cape Cod Bridges Program

This program supports activities to replace the Sagamore and Bourne bridges that provide vehicular access to Cape Cod. MassDOT's Cape Cod Bridges program will support the safe, efficient, and reliable movement of people, goods, and services across the Cape Cod Canal. Following the completion of the Program, MassDOT will own, maintain, and operate the completed Sagamore and Bourne bridges and the approach roadways.

#### Program Plan and/or Guidance

2024 Memorandum of Understanding between United States Army Corps of Engineers and the Commonwealth of Massachusetts for the Bourne Bridge and the Sagamore Bridge

#### Project Selection

N/A

#### Performance Measure

N/A

#### FY25-29 Projected Spend

\$772.1 million



Bourne Bridge

## Reliability: Highway Division

### Chapter 90 Program

Chapter 90 funds are for local capital improvements such as highway construction, preservation, and improvement projects. These projects create or extend the life of capital facilities.

This Chapter 90 program includes spending for the supplementary Rural Roadway Funding Program, which allocates funding to all Massachusetts municipalities using a formula that accounts for population, road mileage, and whether the municipality is considered rural.

#### Program Plan and/or Guidance

Chapter 90 legislation and policies

#### Project Selection

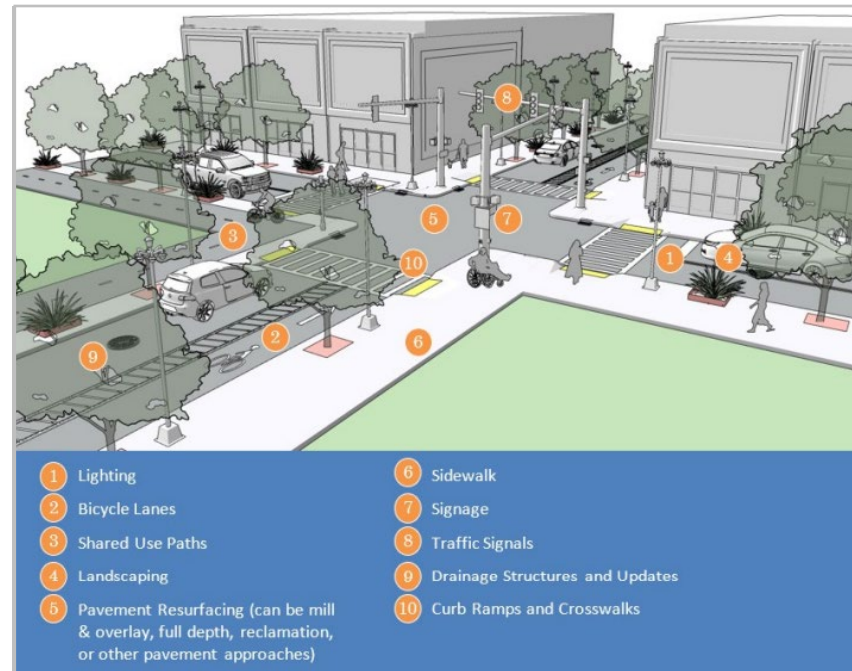
Municipalities propose projects; MassDOT confirms eligibility

#### Performance Measure

N/A

#### FY25–29 Projected Spend

\$1,025 million



Sample Chapter 90–Eligible Project Costs–Urban Intersection

## Reliability: Highway Division

### Equipment Program

The Highway Equipment program makes annual purchases of replacement vehicles, heavy equipment, telecommunications equipment, and various other highway capital assets. The program is essential to conducting highway operations throughout the Commonwealth.

#### Program Plan and/or Guidance

N/A

#### Project Selection

Prioritized based on operational needs and fleet life cycle

#### Performance Measure

N/A

#### FY25-29 Projected Spend

\$169.0 million



MassDOT 10-wheel dump truck equipped for snow and ice with tow plow

## Reliability: Highway Division

### Facilities Program

The Highway Facility Improvement program provides for the design and execution of facility repair and replacement projects. These improvement projects include, but are not limited to, those for office buildings, maintenance operations buildings, garages, and salt sheds.

#### Program Plan and/or Guidance

N/A

#### Project Selection

Projects drawn from District and Headquarters' (HQ) priorities

#### Performance Measure

N/A

#### FY25-29 Projected Spend

\$189.4 million



MassDOT Highway District 3 Office

## Reliability: Highway Division

### Interstate Pavement Program

This program maintains the Interstate Highway system, a central network for Massachusetts and New England mobility and commerce, through projects which preserve or rehabilitate pavement and invest in ancillary corridor systems (such as safety elements, bridge, drainage, and Intelligent Transportation Systems).

#### Program Plan and/or Guidance

MassDOT Transportation Asset Management Plan (TAMP)

#### Project Selection

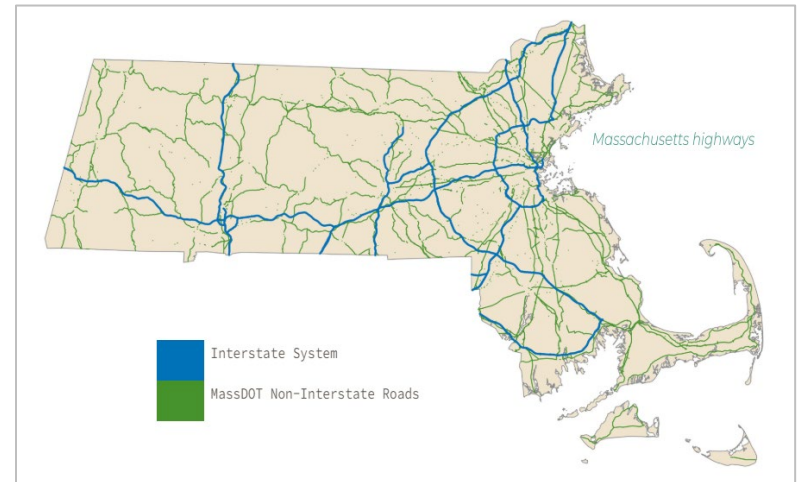
Projects are prioritized through pavement management systems

#### Performance Measure

State Pavement Serviceability Index (PSI) – State & Federal Pavement Condition Measure

#### FY25-29 Projected Spend

\$462.9 million



Massachusetts Interstate and Non-Interstate Highway networks

## Reliability: Highway Division

### Municipal Pavement Program

This program seeks to improve the condition of municipally owned state numbered routes, with an emphasis on National Highway System (NHS) roadways, and to find opportunities to improve safety and accessibility for all modes. It supports the long-term condition of this important roadway network, helps improve NHS pavement performance in Massachusetts, and assists municipalities in the management of local infrastructure.

#### Program Plan and/or Guidance

MassDOT Transportation Asset Management Plan (TAMP)

#### Project Selection

Projects are prioritized for selection using MassDOT pavement management data

#### Performance Measure

State Pavement Serviceability Index (PSI) – State Pavement Condition Measure

#### FY25-29 Projected Spend

\$124.0 million



Paving equipment on local roadway

## Reliability: Highway Division

### Municipal Small Bridge Program

This program provides financial support to cities and towns for the replacement, preservation, and rehabilitation of small bridges. Eligible bridges are those on public ways with spans between 10 feet and 20 feet that are structurally deficient, or load posted.

#### Program Plan and/or Guidance

State Legislation; Program Guidance/Website

#### Project Selection

Municipalities propose projects; MassDOT confirms eligibility and awards grants via competitive selection process

#### Performance Measure

N/A

#### FY25-29 Projected Spend

\$75.0 million



Example of a small bridge

## Reliability: Highway Division

### Non-Interstate Pavement Program

Investments made through this program maintain MassDOT-owned non-interstate roadways. This program includes projects on freeways (such as, Route 24) and local roadways owned by the state. In addition to addressing pavement conditions, these projects also incorporate mobility and safety improvements for existing facilities (such as accessibility improvements and maintenance of existing multimodal facilities).

#### Program Plan and/or Guidance

MassDOT Transportation Asset Management Plan (TAMP)

#### Project Selection

Projects are prioritized for selection using MassDOT pavement management data

#### Performance Measure

State Pavement Serviceability Index (PSI) – State & Federal Pavement Condition Measure

#### FY25-29 Projected Spend

\$569.3 million



Pavement improvements in Great Barrington

## Reliability: Highway Division

### Roadway Improvements Program

This program supports the general state of good repair of MassDOT-owned roadways through drainage, fencing, guardrail, sidewalk repair, and vegetative management projects. It also supports federally funded storm water retrofit projects, which improve the sustainability and resiliency of state-owned drainage systems.

#### Program Plan and/or Guidance

N/A

#### Project Selection

Projects drawn from District and headquarters priorities

#### Performance Measure

N/A

#### FY25-29 Projected Spend

\$368.1 million



Guardrail improvements

## Reliability: Highway Division

### Safety Improvements Program

This program funds the systematic repair and upgrade of safety systems on state-owned roadways through traffic signal, highway lighting, impact attenuators, traffic signs, and pavement markings projects. It supports investments in strategic safety improvements on all roads of the Commonwealth.

#### Program Plan and/or Guidance

Massachusetts Strategic Highway Safety Plan, life cycle planning of safety systems, FHWA Highway Safety Improvement Program (HSIP)

#### Project Selection

Projects drawn from MassDOT District and Headquarters (HQ) priorities

#### Performance Measure

Reduction in rate of fatalities or serious injuries

#### FY25-29 Projected Spend

\$153.4 million



Principles of the Safe System Approach for improving roadway safety (Source: US DOT)

## Reliability: Highway Division

### Tunnels Program

The Tunnels program provides investment in the tunnels and ancillary systems within the Metropolitan Highway System (MHS). Massachusetts maintains the third largest tunnel system in the United States.

#### Program Plan and/or Guidance

Metropolitan Highway System Triennial Report, National Tunnel Inspection Standards, Central Artery Repair and Maintenance Trust Fund

#### Project Selection

MassDOT Tunnel Project Prioritization Methodology (based on National Highway Cooperative Research Program best practices)

#### Performance Measure

N/A

#### FY25-29 Projected Spend

\$478.2 million



Sumner Tunnel before restoration

## Reliability: Information Technology

### Cyber/Information Security Program

This program keeps Information Technology (IT) infrastructure and software compliant with best practices and digital security standards to protect both agency and customer data. This program is necessary to maintain customer confidence when making secure transactions.

#### Program Plan and/or Guidance

Alignment with Massachusetts Executive Office of Technology Services and Security (EOTSS) priorities for Cyber/Information Security, following general standards in the public sector cybersecurity space as established through the National Institute of Standards and Technology (NIST)

#### Project Selection

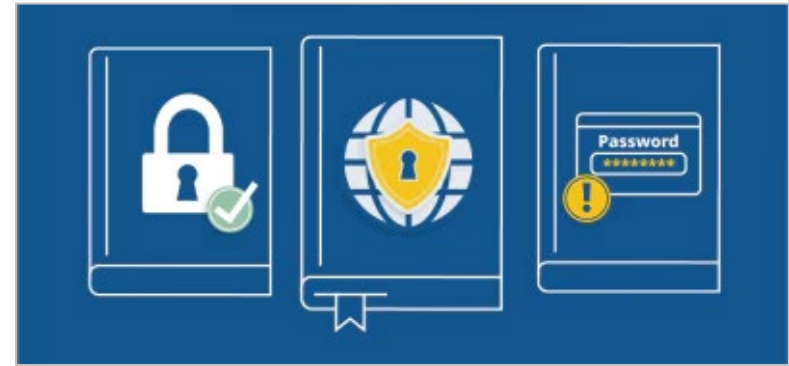
Business value, operational impacts, alignment with IT goals and strategies

#### Performance Measure

N/A

#### FY25-29 Projected Spend

\$25.5 million



Elements of cybersecurity

## Reliability: Information Technology

### Digital Infrastructure Program

This program covers a range of digital infrastructure work, including state of good repair hardware upgrades and support of operations. This program is necessary to meet MassDOT’s technology goals by sustaining core computer, storage, telecommunications, and network infrastructure while maintaining best practices and state of good repair.

#### Program Plan and/or Guidance

EOTSS priorities for digital infrastructure

#### Project Selection

Business value, operational impacts, alignment with IT goals and strategies

#### Performance Measure

N/A

#### FY25-29 Projected Spend

\$20.5 million



State Transportation Building server room after investments

## Reliability: Rail & Transit Division

### Rail Bridges Program

This program repairs or replaces bridges to prevent or address deterioration, keep or restore class of line (federally designated rail track classifications), or maintain the structure's safety and functional utility.

#### Program Plan and/or Guidance

Rail Asset Management Plan (RAMP), 2023 Tracker

#### Project Selection

Projects prioritized based on the most recent inspection, type of operations (e.g., passenger, hazardous cargo), and contractual or regulatory requirements

#### Performance Measure

Bridge condition index; percent in state of good repair; weight capacity; reduced operating restrictions

#### FY25-29 Projected Spend

\$63.1 million



Rail bridge arch deck concrete repair

## Reliability: Rail & Transit Division

### Rail Facilities Program

This program repairs or replaces rail facilities, specifically rail yards and stations, to prevent or address deterioration or maintain the facility's effectiveness.

#### Program Plan and/or Guidance

Rail Asset Management Plan (RAMP)

#### Project Selection

Projects prioritized based on condition reports, type of operations and risks, operational impacts, and contractual or regulatory requirements for action

#### Performance Measure

Annual inspection and condition assessment

#### FY25-29 Projected Spend

\$11.0 million



Maintenance yard for track work in Deerfield, MA

## Reliability: Rail & Transit Division

### Rail Grade Crossings Program

This program repairs or replaces grade crossings to address deterioration, keep or restore class of line, or maintain the safety or functional utility of the crossing. Well-maintained grade crossings are critical to public (motorist, bicyclist, and pedestrian) safety, and are a key component of rail service safety and reliability.

#### Program Plan and/or Guidance

Massachusetts State Rail Plan, Rail Asset Management Plan, 2023 Tracker

#### Project Selection

Prioritization of projects in this program will reflect federal guidelines, most recent inspections, type of operations (e.g., passenger, hazardous cargo) and traffic levels, and contractual or regulatory requirements

#### Performance Measure

Grade crossing condition assessment; percent of crossing in a state of good repair; grade crossing incidents

#### FY25-29 Projected Spend

\$49.0 million



Crossing signal upgrades in Sherborn

## Reliability: Rail & Transit Division

### Rail Track and Right of Way Program

This program strives to keep MassDOT-owned rail lines in a state of good repair and safe and suitable for the intended traffic. This program repairs or replaces assets within the rail right of way (typically ties, rail, ballast, subsurface roadbed, embankments, drainage, culverts, switches, etc.) to address deterioration, keep or restore class of line, improve resiliency and maintain the line's safety and operational integrity. These activities are necessary to maintain a safe and reliable rail system.

#### Program Plan and/or Guidance

State Rail Plan, Rail Asset Management Plan, 2023 Tracker

#### Project Selection

Prioritization will reflect most recent inspections, type of operations (e.g., passenger, hazardous cargo), and contractual or regulatory requirements for action

#### Performance Measure

Percent of track in state of good repair; weight capacity; reduced operating restrictions

#### FY25-29 Projected Spend

\$161.3 million



Ballast regulator operation on rail line

## Reliability: Rail & Transit Division

### Rail Vehicles Program

This program repairs, replaces, or acquires rail equipment (locomotives, coaches, ballast cars, light duty vehicles, etc.) to facilitate reliable service, prevent or address deterioration. It also supports activities to maintain or restore vehicle condition to support reliable ongoing rail operations.

#### Program Plan and/or Guidance

Massachusetts State Rail Plan and Freight Plan

#### Project Selection

Prioritized based on project and maintenance needs

#### Performance Measure

N/A

#### FY25-29 Projected Spend

\$4.4 million



Rail vehicles

## Reliability: Rail & Transit Division

### RTA Facility and Vehicle Maintenance Program

This program addresses the maintenance, rehabilitation, and upkeep of existing RTA facilities or vehicles. These investments will help RTAs continue to keep their fleets and facilities in a state of good repair to meet the current and future mobility needs of their regions.

#### Program Plan and/or Guidance

*A Vision for the Future of Massachusetts' Regional Transit Authorities* report; RTA Transit Asset Management Plans (TAMs)

#### Project Selection

RTA asset inventory reports and needs

#### Performance Measure

Facility condition and Vehicle ULB (mean miles between failures)

#### FY25-29 Projected Spend

\$25.7 million



Martha's Vineyard Transit Authority bus

## Reliability: Rail & Transit Division

### RTA Vehicle Replacement Program

This program combines with Federal funds received by various RTAs to keep the RTA fleets in a state of good repair and suitably sized—both in terms of number and type of vehicle—for the RTA's service.

#### Program Plan and/or Guidance

*A Vision for the Future of Massachusetts' Regional Transit Authorities* report; RTA Transit Asset Management Plans (TAM)

#### Project Selection

RTA TAMs and replacement schedules; projects are prioritized to best achieve TAM targets

#### Performance Measure

Vehicle ULB (age and mileage) by type

#### FY25-29 Projected Spend

\$100.1 million



Lowell Regional Transit Authority transit vehicle

## Reliability: Rail & Transit Division

### Transit Mobility Assistance Program

This program purchases vans used to provide transportation for older adults and individuals with disabilities of all ages to improve mobility options across the Commonwealth. This program funds vehicles for municipalities including councils on aging, the Commonwealth’s regional transit authorities (RTA), and non-profit organizations.

#### Program Plan and/or Guidance

*A Vision for the Future of Massachusetts’ Regional Transit Authorities* report; Massachusetts General Laws (MGL), Section 13 of Chapter 637 of the Acts of 1983

#### Project Selection

Competitive application process—each application is evaluated based on vehicle size and age

#### Performance Measure

Vehicle Useful Life Benchmark (ULB)

#### FY25–29 Projected Spend

\$116.3 million



South Shore Community Action Council transit vehicle



## Reliability: Office of Diversity and Civil Rights

### Rights

### Pre-Apprenticeship Program

This program is a collaborative effort between the MassDOT Office of Diversity and Civil Rights, industry stakeholders, labor, FHWA, and Human Resources. It funds industry-focused workforce development and facilitates the introduction of additional pre-apprentices to skilled trades within the various MassDOT divisions. This program provides people in low-income and other disadvantaged communities with access to training and employment opportunities within the construction trades and the transportation sector.

#### Program Plan and/or Guidance

N/A

#### Project Selection

N/A

#### Performance Measure

N/A

#### FY25-29 Projected Spend

\$5.0 million



Fidel Escarela went through the Pre-Apprenticeship program and attended New England Tractor Trailer Training School to prepare for the CDL-B exam. He passed and now has his Commercial Driver's License (CDL).

## Modernization: Aeronautics Division

### Airport Administration Buildings Program

This program builds or renovates airport administration buildings as recommended by the 2010 Statewide Airport System Plan.

#### Program Plan and/or Guidance

2010 Massachusetts Statewide Airport System Plan

#### Project Selection

2010 Massachusetts Statewide Airport System Plan

#### Performance Measure

N/A

#### FY25-29 Projected Spend

\$15.6 million



Statewide Airport Administration Building (SAAB) Prototype

## Modernization: Highway Division

### Accessibility Improvements Program

This program improves the condition and accessibility of pedestrian curb ramps, the existing sidewalk network, and crosswalk infrastructure on state owned roadways. The program is necessary to meet obligations identified under the MassDOT Americans with Disabilities Act (ADA) Transition Plan and to comply with guidelines outlined in the Architectural and Transportation Barriers Compliance Board's Public Right-of-Way Accessibility Guidelines (PROWAG) and 521 Code of Massachusetts Regulations (CMR).

#### Program Plan and/or Guidance

MassDOT ADA Transition Plan, District ADA Prioritization Plans, PROWAG Guidelines

#### Project Selection

Prioritization Plans guided by Safety, Equity, and Sidewalk Network Connectivity. Ramp replacement, intersection retrofit, and sidewalk reconstruction projects are scored using a multi-factor prioritization approach (such as proximity to public buildings, schools, population factors, and other roadways with high potential for everyday walking)



Curb cut improvements

#### Performance Measure

Number of failed or missing curb ramps; number of roadway crosswalks lacking accessible features; and linear miles of non-compliant sidewalk on statewide inventory

#### FY 25-29 Projected Spend

\$41.7 million

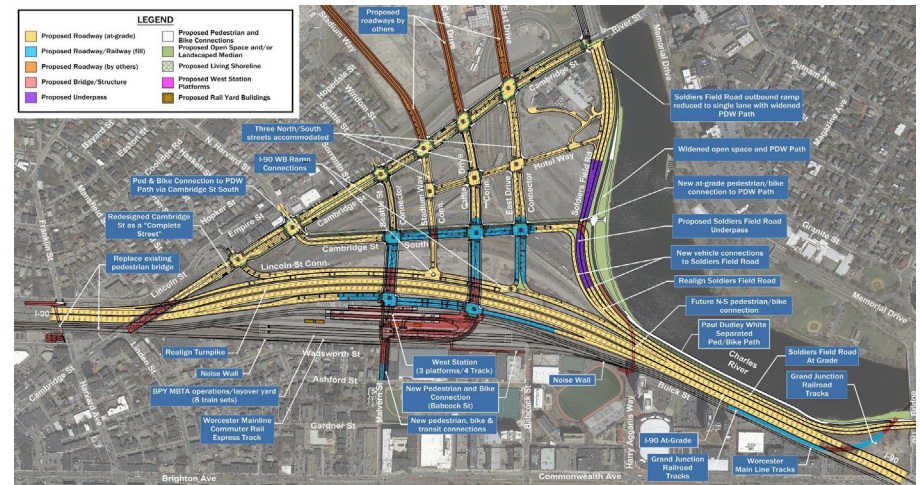
# Modernization: Highway Division

## Allston Multimodal Program

This program reconstructs and realigns the Allston interchange to improve safety for all transportation modes: walking, cycling, driving, transit and to create a vibrant Allston neighborhood reconnecting sections to each other and to the Charles River.

Changes to the interchange will include flattening the curve of I-90 as it passes through Allston and connecting I-90 to Cambridge Street and Soldiers' Field Road via a new urban street grid. These changes provide MassDOT with the opportunity to enhance parkland along the Charles River; introduce bicycle and pedestrian connections around and through the former Beacon Park Yard (BPY) site; and invest in improved commuter rail through the construction of West Station.

The FY25–29 CIP includes the interim repair and preservation project for the viaduct along with spending for preliminary design and initial spending for the design/build phase for the Allston Multimodal Project. The project is currently engaged in the federal environmental permitting process



Map of Allston Multimodal project elements

### Program Plan and/or Guidance

N/A

### Project Selection

N/A

### Performance Measure

N/A

### FY25–29 Projected Spend

\$305.9 million

## Modernization: Highway Division

### Complete Streets Program

The program provides technical assistance and construction funding to eligible municipalities for the construction of facilities that enhance pedestrian, bicycle, and transit travel for roadway users of all ages and abilities. Currently, over 80 percent of Massachusetts municipalities are involved with the program at some level:

#### Program Plan and/or Guidance

Chapter 220 legislation and Program Guidance Document/Website

#### Project Selection

All communities may receive one Tier 2 grant. For Tier 3 grants, municipalities propose projects and MassDOT awards grants via a competitive selection process.

#### Performance Measure

N/A

#### FY25-29 Projected Spend

\$75.0 million



Complete Streets project in Plymouth

## Modernization: Highway Division

### Freight Program

This program aims to improve the efficient movement of freight on the National Highway Freight Network (NHFN). Projects that address issues within the multimodal freight network include (but are not limited to):

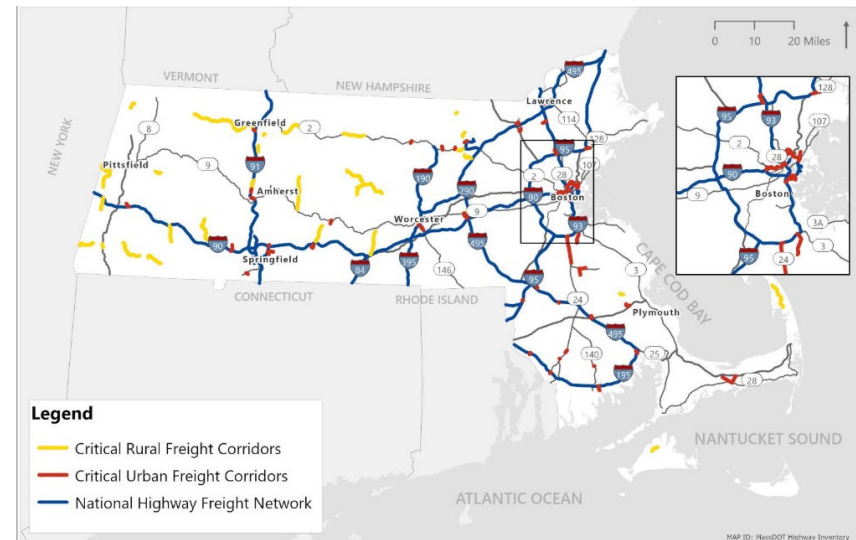
- Geometric improvements to interchanges and ramps
- Railway-highway grade separation
- Highway or bridge projects that improve the flow of freight on the NHFN
- Truck parking facilities

#### Program Plan and/or Guidance

Massachusetts Freight Plan, National Highway Freight Program

#### Project Selection

Project selections are based on addressing known issues and identifying new projects in alignment with the recommendations and strategies included in the 2023 Massachusetts Freight Plan and the goals of the National Highway Freight Program.



Roadway Infrastructure Freight Designations in Massachusetts, 2023 (Source: Federal Highway Administration)

#### Performance Measure

Freight-related performance measures that could be applied to this program are include Table 2.2 of the [2023 Massachusetts Freight Plan](#).

#### FY25-29 Projected Spend

\$13.0 million

## Modernization: Highway Division

### Intelligent Transportation Systems Program

The Highway Intelligent Transportation Systems (ITS) program supports the design and implementation of innovative and new communication equipment and information technology systems. These are designed to provide traffic information to MassDOT projects, residents, and visitors throughout the Commonwealth.

#### Program Plan and/or Guidance

N/A

#### Project Selection

MassDOT ITS Strategic Plan and stakeholder input from MassDOT Headquarters, Districts, MPOs, and State Police

#### Performance Measure

N/A

#### FY25-29 Projected Spend

\$22.3 million



MassDOT Highway Operations Center

## Modernization: Highway Division

### Intersection Improvements Program

This program supports safety at roadway intersections for all users through operational and geometric improvement projects.

#### Program Plan and/or Guidance

Massachusetts Strategic Highway Safety Plan, life-cycle planning of safety systems, FHWA Highway Safety Improvement Program (HSIP), Network Screening (Crash-Based and Risk-Based), Safety Action Plans, Road Safety Audits

#### Project Selection

Top 200 crash locations and vulnerable roadway user clusters

#### Performance Measure

Mitigation of top 200 crash locations; reduction in rate of fatalities or serious injuries at project locations

#### FY25-29 Projected Spend

\$328.0 million



Roundabout on Route 140, Princeton

## Modernization: Highway Division

### Local Bottleneck Reduction Program

This grant program provides funding for municipalities to address congestion bottlenecks at local signalized intersections. It aims to improve traffic flow while addressing safety, bicycle, transit, and pedestrian needs, and gives preference to projects near transit-oriented development and multifamily housing.

#### Program Plan and/or Guidance

*Congestion in the Commonwealth* 2019 Report to the Governor; Program Guidance/Website

#### Project Selection

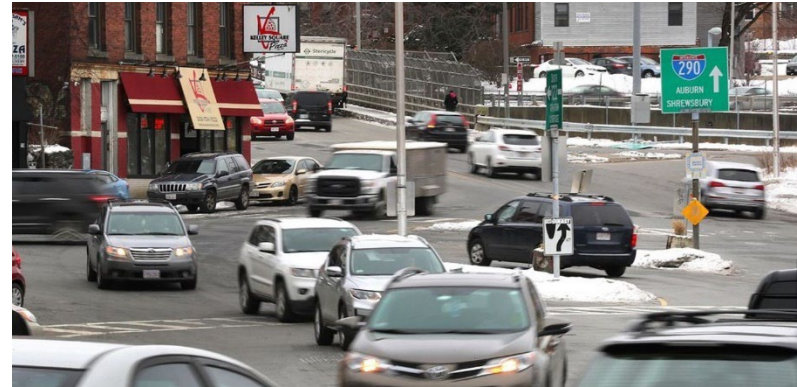
Municipalities propose projects and MassDOT confirms eligibility and awards grants via a competitive selection process based on delay and congestion metrics using Regional Integrated Transportation Information System (RITIS) data.

#### Performance Measure

N/A

#### SFY 2025-2029 Projected Spend

\$27.0 million



Kelley Square in Worcester

## Modernization: Highway Division

### National Electric Vehicle Charging Infrastructure Program

This program funds deployment of electric vehicle (EV) charging infrastructure and the establishment of an interconnected network to facilitate data collection, access, and reliability. Eligible uses of funding from this program include acquisition and installation of EV charging infrastructure, operations and maintenance costs related to EV infrastructure, and data sharing about the EV infrastructure.

#### Program Plan and/or Guidance

Massachusetts Electric Vehicle Infrastructure Deployment Plan

#### Project Selection

Locations are selected to ensure charging stations are within 50 miles along Alternative Fuel Corridors and provide the best value to users and MassDOT.

#### Performance Measure

N/A

#### FY25-29 Projected Spend

\$88.7 million



Massachusetts electric vehicle license plate

## Modernization: Highway Division

### Resiliency Improvements Program

This program provides funding for making resilience improvements to existing transportation assets and evacuation routes, and addressing highway infrastructure that is vulnerable to extreme weather and sea-level rise.

#### Program Plan and/or Guidance

Bipartisan Infrastructure Law (BIL) and MassDOT Resilience Improvement Plan

#### Project Selection

Project selections are based on addressing known issues; integrating resiliency improvements into existing projects; and identifying new projects based on flood risk assessment results and Resilience Improvement Plan (RIP).

#### Performance Measure

Measures are in development, and may include the number of modernized structures (bridges/culverts) and roadway segments where risks posed by extreme weather or climate related vulnerability have been mitigated or eliminated



Resilience project location —Route 20/ Route 122 interchange, Worcester

#### FY25-29 Projected Spend

\$83.2 million

## Modernization: Highway Division

### Roadway Reconstruction Program

This program adapts existing roadway designs to meet contemporary needs, including for both limited access and non-limited access roadways. The projects funded by this program include safety, mobility and resiliency modernization components. This program also addresses major regional bottlenecks and hazardous/high crash locations on the Interstate and limited access highway system.

#### Program Plan and/or Guidance

Beyond Mobility Long Range Transportation Plan (LRTP), Regional/MPO LRTPs, regional planning and corridor Studies; Massachusetts Bicycle and Pedestrian Transportation plans; MassDOT-identified High Crash locations and network screening tools; and *Congestion in the Commonwealth: Report to the Governor* (2019)

#### Project Selection

Project scoring by regional planning agencies/ MPOs, and MassDOT; Roadway Improvement Program Needs Assessment.



Roadway paving equipment

#### Performance Measure

Projects work to meet agency performance measures around mobility, safety, resiliency, and equity.

#### FY25-29 Projected Spend

\$2,144.0 million

## Modernization: Highway Division

### Safe Routes to School Program

This program works to increase safe biking and walking among elementary, middle, and high school students by using a collaborative, community-focused approach that bridges the gap between health and transportation. The Safe Routes to School (SRTS) Signs and Lines and Infrastructure programs fund projects on municipal roadways that create safe and comfortable walking and bicycling facilities.

#### Program Plan and/or Guidance

Safe Routes to School Program guidance

#### Project Selection

For both the SRTS Signs and Lines and Infrastructure grant Programs, MassDOT convenes a project selection committee comprised of stakeholders from MassDOT's Office of Transportation Planning and Highway Division. This committee evaluates and selects projects that align with SRTS priorities and ensure equitable distribution of investments. Project rubrics are developed and updated every year and posted on the program website.

#### Performance Measure

Increase in walking and bicycle facilities at schools across Massachusetts



Massachusetts Safe Routes to School Program

#### FY25-29 Projected Spend

\$57.0 million

# Modernization: Information Technology

## Workforce Productivity Program

This program seeks to optimize and enhance business processes by implementing software tools that benefit employee productivity, contribute to efficiency, and provide better tools and information to the general public.

### Program Plan and/or Guidance

Division-specific projects or agency-wide initiatives for workforce productivity

### Project Selection

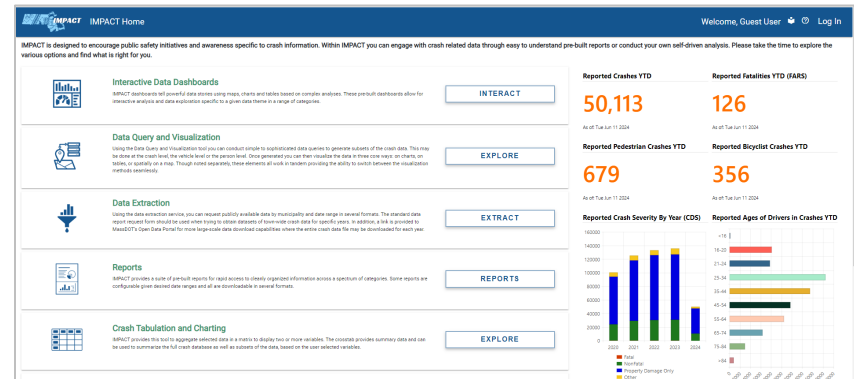
Project selection and approval is coordinated through a committee that includes representatives from each MassDOT Division

### Performance Measure

N/A

### FY25–29 Projected Spend

\$65.9 million



MassDOT IMPACT Crash Reporting Tool

## Modernization: Rail & Transit Division

### Industrial Rail Access Program

Through this program, MassDOT provides grants to industry rail shippers and freight railroads to invest in private sector rail lines. This funding supports the leveraging of private investment that will increase freight rail usage or to modernize an active line to increase the utility to customers.

#### Program Plan and/or Guidance

N/A

#### Project Selection

Grant project selection criteria

#### Performance Measure

N/A

#### FY25-29 Projected Spend

\$15.0 million



Pioneer Valley Railroad, Easthampton Yard track

## Modernization: Rail & Transit Division

### Rail Facility Modernization Program

This program repairs or replaces rail facilities, specifically rail yards and stations, to upgrade them to current industry standards or otherwise maintain or improve the facility's utility. Facility modernization investments enhance the rail system's capacity and reliability and improve the state's economic competitiveness.

#### Program Plan & Guidance

Massachusetts State Rail Plan and Massachusetts Freight Plan

#### Project Selection

Prioritization of projects in this program will reflect transportation or other public benefits (including economic development) associated with the improvement and related operational outcomes; facility condition reports; type of operations and risks/opportunities; contractual or regulatory requirements; and consistency with the State Rail Plan.

#### Performance Measure

Improvements to facility capacity and/or rail services and operations



East Deerfield Engine House

#### FY25-29 Projected Spend

\$4.4 million

## Modernization: Rail & Transit Division

### Rail Track and ROW Modernization Program

This program repairs or replaces assets within the rail right-of-way (typically ties, rail, ballast, subgrade, culverts, switches, etc.) to an increased standard to improve track class or capacity (i.e., increasing weight capacity to 286,000 lbs. (“286K”); double-stack clearance; installation of continuous welded rail; etc.). These improvements support meeting current industry standards or otherwise achieving an improved condition with associated operational results.

#### Program Plan & Guidance

Massachusetts State Rail Plan

#### Project Selection

Prioritization of projects in this program will reflect operational and economic opportunities; most recent inspections; type of operation (e.g., passenger, hazardous cargo, heavier / standard car weights); contractual or regulatory requirements, and consistency with the State Rail Plan or other emergency policy goals.

#### Performance Measure

Condition improvements; service improvements; weight capacity



Berkshire Line

#### FY25-29 Projected Spend

\$14.3 million

## Modernization: Rail & Transit Division

### RTA Facility and System Modernization Program

This program improves, modernizes, or technologically upgrades existing regional transit authority (RTA) facilities, systems, or equipment, including automated fare collection and electrification of the bus fleet.

#### Program Plan and/or Guidance

RTA Comprehensive Regional Transit Plans (CRTP), RTA transit asset management plans, and RTA-conducted facility-specific studies

#### Project Selection

Project evaluation and prioritization is based on RTA individual asset management plans and replacement schedules

#### Performance Measure

Age and facility condition

#### FY25-29 Projected Spend

\$65.2 million



Union Station Bus Transfer Facility in Worcester

## Modernization: Rail & Transit Division

### RTA Fleet Upgrades Program

This program improves, modernizes, or expands regional transit authority (RTA) revenue vehicle fleets and associated infrastructure. This program includes investments in fleet electrification through the acquisition of battery electric vehicles, as well as charging, energy storage and other associated infrastructure.

#### Program Plan and/or Guidance

RTA Comprehensive Regional Transit Plans (CRTP); RTA transit asset management plans, RTA-conducted facility-specific studies; Battery Electric Bus Assessment Phases 1 and 2

#### Project Selection

RTA transit asset management plans and replacement schedules

#### Performance Measure

Age and facility condition

#### FY25-29 Projected Spend

\$36.7 million



Pioneer Valley Transit Authority—Electric Bus  
(Photo Source: Pioneer Valley Transit Authority)

## Modernization: Rail & Transit Division

### RTA Replacement Facilities

This program constructs modernized regional Transit Authority (RTA) maintenance, administrative, operations, or intermodal facilities.

#### Program Plan & Guidance

RTA Comprehensive Regional Transit Plan (CRTP) and RTA-conducted facility-specific studies

#### Project Selection

Division specific projects or enterprise initiatives

#### Performance Measure

N/A

#### FY25-29 Projected Spend

\$1.0 million



Pioneer Valley Transit Authority Maintenance Facility

## Modernization: Rail & Transit Division

### Transportation Management Association (TMA) Program

This program will fund TMA projects to reduce single-occupancy vehicle trips and reduce greenhouse gas emissions, facilitate mode shift, and expand mobility. Examples of eligible project types include new or expanded shuttle, bus, or transit service, vehicle purchases, and service planning, among others. Funding is awarded to eligible TMAs via a competitive process.

#### Program Plan and/or Guidance

The MasSTRAC bond bill (Chapter 176 of the Acts of 2022) included funding for grants to transportation management associations (TMAs)

#### Project Selection

Applications will be scored by a review committee. Scoring criteria include project need, measurement of success, deliverability, and commitment and coordination.

#### Performance Measure

Key performance indicators (KPI) vary by project type. Examples include "GHG reductions resulting from the proposed project: or "number of riders or users served that do not have access to a personal vehicle."



Transportation Management Association Vehicle  
Photo Source: Neponset Valley TMA

#### FY25-29 Projected Spend

\$16 million

## Modernization: Registry of Motor Vehicles

### Customer Service Modernization Program

This program supports updates and upgrades to leased branch locations to accommodate the new dual line queuing model, signage, furniture, and fixtures.

#### Program Plan and/or Guidance

MassDOT Tracker

#### Project Selection

N/A

#### Performance Measure

Contact center wait time (average speed of answer)

#### FY 25-29 Projected Spend

\$17.3 million



Queues at RMV service center

## Expansion: Highway Division

### Bicycle and Pedestrian Modal Implementation Program

This program is focused on increasing the accessibility of walking and biking on roadways by constructing or upgrading biking and walking facilities to create a high comfort network. Work includes filling network gaps; increasing network access to shared use paths; constructing new or enhanced crossings; improving sidewalk conditions and accessibility; and adding separated bicycle lanes.

#### Program Plan and/or Guidance

Massachusetts Statewide Bicycle Plan, Massachusetts Statewide Pedestrian Plan, Pedestrian Plans, *Beyond Mobility* long-range transportation plan

#### Project Selection

Refinements to the potential for everyday walking and biking methodology combined with facility inventory, safety, equity, and mobility data have been included in the District-wide Needs Assessment, Next Generation Vision Map and the Sidewalk Condition Assessment that will inform project prioritization.



Example: High comfort separated bike lane and intersection

#### Performance Measure

Outputs: Walking and biking infrastructure network and access to that network

Outcomes: Increase in percentage of short trips made by walking and biking; decrease in serious injuries and fatalities

#### FY25-29 Projected Spend

\$65.1 million

## Expansion: Highway Division

### Capacity Program

This program adds new connections or expands the existing transportation network. Examples include the provision of additional lanes, new highway connections, or new roadways.

#### Program Plan and/or Guidance

Massachusetts State Transportation Improvement Program and Long-Range Transportation Plan

#### Project Selection

Projects scored by regional planning agencies/metropolitan planning organizations) and MassDOT (using Project Selection Advisory Council-recommended scoring elements)

#### Performance Measure

N/A

#### FY 25-29 Projected Spend

\$163.2 million



Improvements to Route 18 Weymouth

## Expansion: Highway Division

### Shared Streets and Spaces Program

This program provides grants to municipalities and regional transit authorities to expand or repurpose sidewalks, curbs, streets, and on-street and off-street parking in support of public health, safe mobility, and renewed commerce. Projects may focus on pedestrian and bicyclist improvements, outdoor dining or programming, and transit-related improvements.

#### Program Plan and/or Guidance

Shared Streets and Spaces Program guidance

#### Project Selection

Municipalities propose projects; MassDOT confirms eligibility and awards grants via a competitive selection process

#### Performance Measure

N/A

#### FY25-29 Projected Spend

\$32.5 million



Shared Streets and Spaces bike lane project

## Expansion: Highway Division

### Shared Use Path / Bicycle and Pedestrian Program

This program utilizes federal funds for the construction of new shared use paths (also known as multi-use trails) to expand and connect the Commonwealth's network of paths. These investments support active transportation, recreation, and reduced dependency on driving. Additionally, the program supports trail maintenance projects that focus on state of good repair and modernization related to trail safety and amenities to increase utility for users.

#### Program Plan & Guidance

Priority Trail Vision map and regional plans, Trail Condition Study

#### Project Selection

Projects are selected by regional planning agencies and metropolitan planning organizations and state Trails Team.

#### Performance Measure

Increased percentage of people who have access to shared use path network



Shining Tides Rail Trail Extension in Mattapoisett

#### FY25-29 Projected Spend

\$325.9 million

## Expansion: MBTA

### Water Transportation Pilot Program

This program will provide funding to the MBTA to implement a pilot program that would expand the current MBTA ferry system and to ensure equitable and broad access to and from Boston and other coastal cities and townships.

#### Program Plan and/or Guidance

The 2022 Massachusetts Transportation Bond Bill (Chapter 176 of the Acts of 2022) requires MassDOT to conduct a study to support water transportation on the Massachusetts coast. It also authorized \$28 million in spending for the planning, design, construction, acquisition, operation, and maintenance of infrastructure and vessels necessary for the operation of an intracoastal water-based transportation pilot program. The water transportation study will include planning and engineering components that will inform an investment strategy for this pilot program. It will recommend routes, terminals, and facilities locations in the cities—including but not limited to— of Gloucester, Salem, Lynn, Winthrop and Quincy, and the East Boston, North End and South Boston waterfront sections of the city of Boston.



MBTA ferry Service

#### Project Selection

Selected investments will be guided by recommendations from the Water Transportation Study.

#### Performance Measure

N/A

#### SFY 2024-2028 Projected Spend

\$28 million

## Expansion: Rail & Transit Division

### Rail Track and ROW Expansion Program

This program repairs or replaces assets within the rail right of way (typically ties, rail, ballast, switches, etc.) or constructs new assets (line extensions, etc.) to expand existing rail services, including the addition of new or expansion of existing passenger or freight rail service. This program provides initial funding for project development efforts (including planning studies and/or initial pilots) to support future passenger rail service.

#### Program Plan and/or Guidance

Massachusetts State Rail Plan, MassDOT plans and feasibility studies (i.e., East West Rail Feasibility Study)

#### Project Selection

Prioritization of projects in the program will reflect economic or other public benefits associated with the new or expanded service; consistency with the Massachusetts State Rail Plan or Massachusetts Freight Plan; and any contractual or regulatory requirements for action.

#### Performance Measure

Ridership, freight capacity loading



Hyannis Yard on the Cape Main Line

#### FY25-29 Projected Spend

\$111.1 million

## Expansion: Rail & Transit Division

### Rail Vehicles Expansion Program

This program acquires, repairs, or replaces rail equipment (locomotives, coaches, ballast cars, light duty vehicles, etc.) to expand existing or support new rail services, including the addition of new or expanded passenger rail or freight rail service.

#### Program Plan & Guidance

Massachusetts State Rail Plan, Rail Asset Management Plan

#### Project Selection

Prioritization will reflect economic or other benefits associated with the use of the new or improved vehicles in expanded service, consistency with the State Rail Plan, and any contractual or regulatory requirements for action.

#### Performance Measure

N/A

#### SFY 2025-2029 Projected Spend

\$7.2 million



Berkshire Flyer at Pittsfield Station