

Appendix B: Investment Programs

This section provides a list of all investment programs contained within this CIP. Each investment program includes a description, details about any relevant performance tracking that informs program size and need, and proposed program spending.

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 & replacement, security & wildlife hazard fencing and gates, navigation aids, fuel farms, hangars, and system planning studies.

Program Plan & Guidance

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

SFY 2024-2028 Projected Spend

\$208.4 million



Chatham FAA-owned Airfield Signage



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 and is necessary to continue safety and maintenance programs at public airports and is required to help keep our airports in compliance with the FAA grant requirements.

Program Plan & 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

SFY 2024-2028 Projected Spend

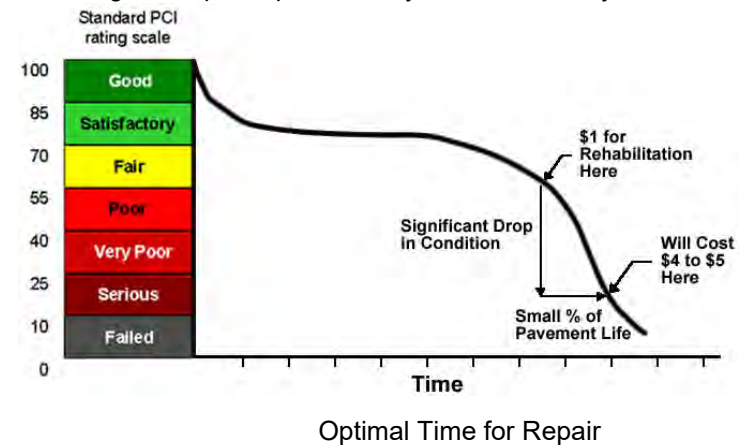
\$264.7 million



Statewide deck sealing & Airfield Marking Projects



Fitchburg Municipal Airport Runway 14-32 & Taxiway 'A' Reconstruction



Reliability: Highway Division

Bridge Program

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

Program Plan & Guidance

MassDOT Transportation Asset Management Plan (TAMP)

Project Selection

Selected through Bridge Prioritization System

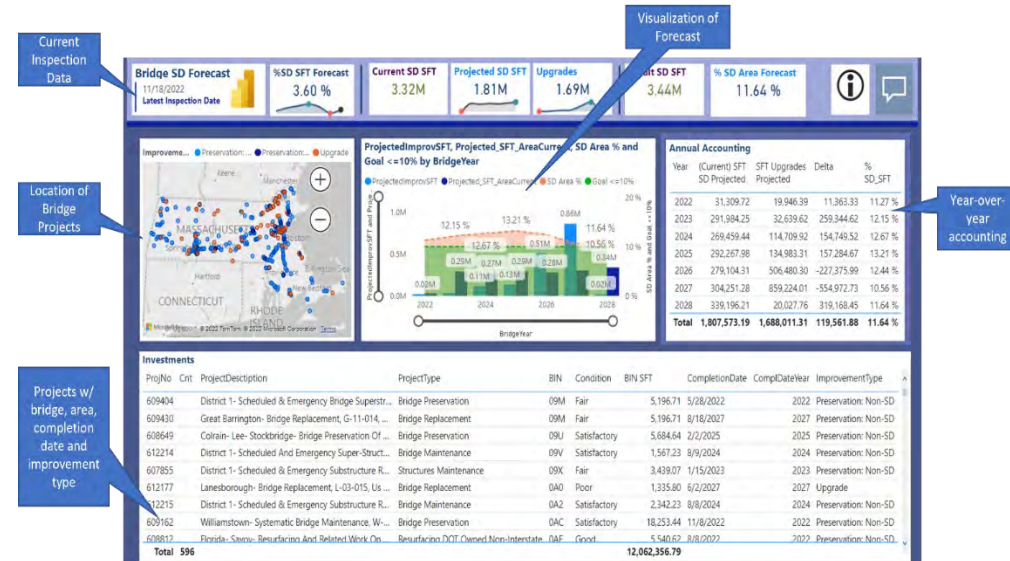
Performance Measure

Bridge condition by count and bridge condition by NHS area

SFY 2024-2028 Projected Spend

\$4,972.3 million

Screenshot from MassDOT Bridge Model



Reliability: Highway Division

Chapter 90 Program

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

Program Plan & Guidance

Chapter 90 legislation & policies

Project Selection

Municipalities propose projects; MassDOT confirms eligibility

Performance Measure

N/A

SFY 2024-2028 Projected Spend

\$1.0 billion



Fiscal Year	Apportionment	Spent*
FY17	\$200.0M	\$230.3M
FY18	\$200.0M	\$196.4M
FY19	\$240.0M	\$211.4M
FY20	\$220.0M	\$213.0M
FY21	\$200.0M	\$210.7M
FY22	\$200.0M	\$166.2M
FY23	\$200.0M	\$ --

*As of March 2023

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 & Guidance

N/A

Project Selection

Prioritized based on operational needs and fleet life cycle

Performance Measure

N/A

SFY 2024-2028 Projected Spend

\$172.5 million



MassDOT 10-wheel dump truck equipped for snow & 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 including but not limited to office buildings, maintenance operations buildings, garages, and salt sheds.

Program Plan & Guidance

N/A

Project Selection

Projects drawn from District and Headquarters' (HQ) priorities

Performance Measure

N/A

SFY 2024-2028 Projected Spend

\$196.7 million



MassDOT Research & Materials Lab in Hopkinton, MA

Reliability: Highway Division

Interstate Pavement Program

This program maintains the Interstate Highway system, a central network for MA & New England mobility and commerce, through projects which preserve or rehabilitate pavement and invest in ancillary corridor systems (i.e., Safety, Bridge, Drainage, Bridge, Intelligent Transportation Systems).

Program Plan & Guidance

MassDOT Transportation Asset Management Plan (TAMP)

Project Selection

Projects prioritized through pavement management system

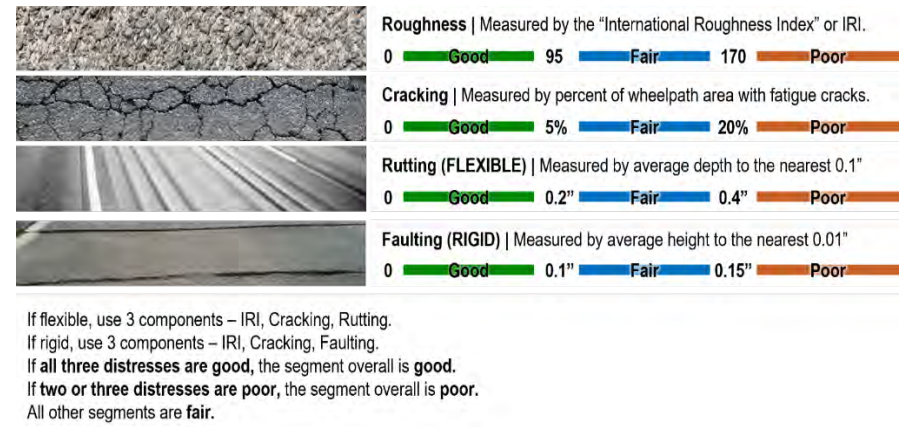
Performance Measure

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

SFY 2024-2028 Projected Spend

\$488.8 million

APPENDIX B: INVESTMENT PROGRAMS



Calculation of FHWA Pavement Condition Measures

Reliability: Highway Division

Non-Interstate Pavement Program

Investments maintain MassDOT-owned non-interstate roadways. This program includes projects on freeways (e.g., Route 24) and local roadways owned by the state. In addition to addressing pavement conditions, these projects also incorporate bicycle and pedestrian facilities where practicable.

Program Plan & Guidance

MassDOT Transportation Asset Management Plan (TAMP)

Project Selection

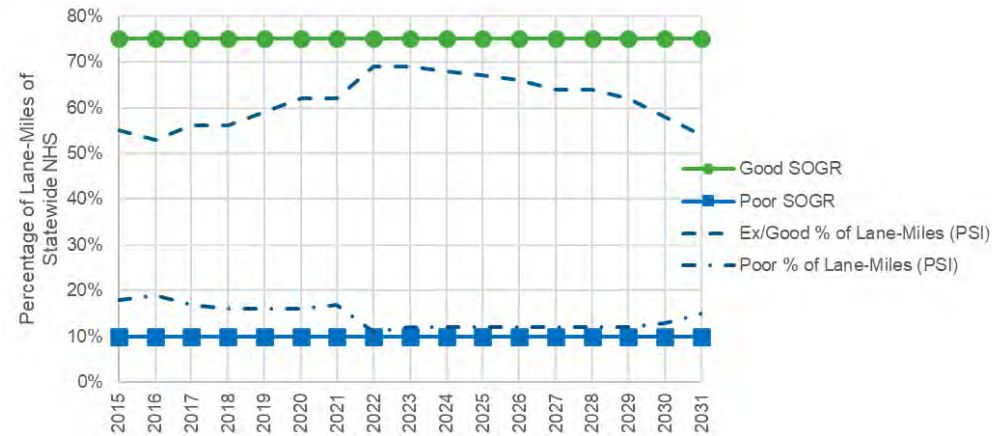
Projects prioritized through pavement management system

Performance Measure

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

SFY 2024-2028 Projected Spend

\$650.5 million



Reliability: Highway Division

Resiliency Improvements Program

This program provides funding over the next five years to help the Commonwealth focus on resilience planning, 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 & Guidance

Bipartisan Infrastructure Law (BIL)

Project Selection

Project selections are based on addressing known issues; integrating resiliency improvements into existing projects; and identifying new projects based on forthcoming Climate Adaptation Vulnerability Assessment (CAVA) and Resiliency Improvement Plan (RIP)

Performance Measure

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

SFY 2024-2028 Projected Spend

\$23.9 million



Candidate project under development: flood relief on Route 20/ Route 122 interchange, Worcester

Reliability: Highway Division

Roadway Improvements Program

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

Program Plan & Guidance

N/A

Project Selection

Projects drawn from District and HQ priorities

Performance Measure

N/A

SFY 2024-2028 Projected Spend

\$369.0 million



Reliability: Highway Division

Municipal Pavement Program

A program focused on the improvement and preservation of municipally owned State Numbered Routes to support the long-term condition of this important network, contribute to NHS pavement performance, and assist municipalities in the management of local infrastructure.

Program Plan & Guidance

MassDOT Transportation Asset Management Plan (TAMP)

Project Selection

Projects prioritized for selection by MassDOT pavement management data

Performance Measure

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

SFY 2024-2028 Projected Spend

\$125.0 million



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' and 20' that are structurally deficient, or load posted.

Program Plan & Guidance

State Bond Bill Language; Program Guidance/Website

Project Selection

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

Performance Measure

N/A

SFY 2024-2028 Projected Spend

\$75.0 million



Reliability: Highway Division

Safety Improvements Program

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

Program Plan & Guidance

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

Project Selection

Projects drawn from District and HQ priorities

Performance Measure

Reduction in rate of fatalities or serious injuries

SFY 2024-2028 Projected Spend

\$164.5 million



HSIP Projects funded within this program include measures to address:

Impaired driving, intersections, lane departures, occupant protections, speeding and aggressive driving, young drivers, older drivers, pedestrian motorcycles, bicycles, truck/bus involved, RR grade crossings, roadway worker safety, & distracted driving

Reliability: Highway Division

Tunnels Program

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

Program Plan & 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 NCHRP best practices)

Performance Measure

N/A

SFY 2024-2028 Projected Spend

\$501.0 million



MHS Tunnel System

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 & Guidance

EOTSS priorities for Cyber/Information Security

Project Selection

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

Performance Measure

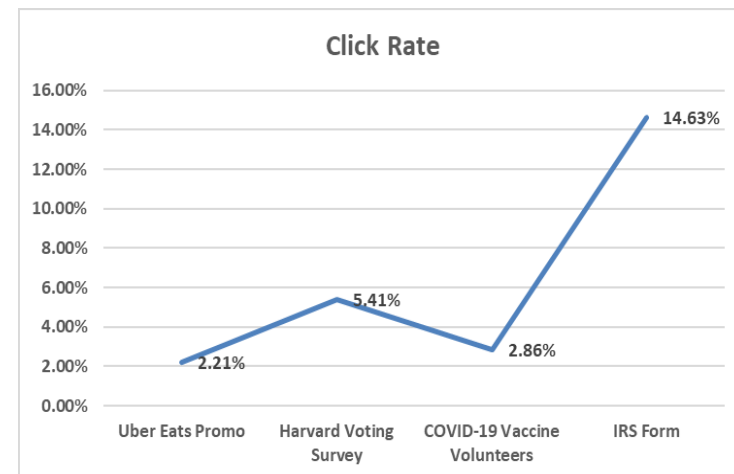
N/A

SFY 2024-2028 Projected Spend

\$27.8 million



MassDOT established a 24/7 IT Security Operations Center in FY 21



Recent phishing scam tests have seen an uptick in employee clicks

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 the core computer, storage, telecommunications, and network infrastructure while maintaining best practices and state of good repair.

Program Plan & Guidance

EOTSS priorities for Digital Infrastructure

Project Selection

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

Performance Measure

N/A

SFY 2024-2028 Projected Spend

\$19.0 million



Pre-Investment 10 Park Plaza Server Room



Post-investment 10 Park Plaza Server Room

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 & Guidance

Rail Asset Management Plan (RAMP), 2021 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; % in state of good repair; weight capacity; reduced operating restrictions

SFY 2024-2028 Projected Spend

\$63.5 million



Middleboro Line, Norton, Massachusetts

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 & 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 & condition assessment

SFY 2024-2028 Projected Spend

\$11.5 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 & Guidance

State Rail Plan, Rail Asset Management Plan, 2021 Tracker

Project Selection

Projects prioritized based on federal guidelines, most recent inspections, type of operations (e.g., passenger, hazardous cargo), traffic levels, and contractual or regulatory requirements

Performance Measure

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

SFY 2024-2028 Projected Spend

\$57.0 million



Foxboro Crossing

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

Program Plan & Guidance

State Rail Plan, Rail Asset Management Plan, 2021 Tracker

Project Selection

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

Performance Measure

% in state of good repair; weight capacity; reduced operating restrictions

SFY 2024-2028 Projected Spend

\$180.4 million



Culvert failure on the Knowledge Corridor in Northampton, MA

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, or support activities to maintain or restore vehicle condition to support reliable ongoing rail operations.

Program Plan & Guidance

State Rail Plan and Freight Plan

Project Selection

Prioritized based on project and maintenance needs

Performance Measure

N/A

SFY 2024-2028 Projected Spend

\$4.8 million



Reliability: Rail & Transit Division

Transit Mobility Assistance Program

In an effort to improve mobility options for all riders across the Commonwealth, this program purchases vans and related equipment used to provide transportation for the elderly and individuals with disabilities of all ages. This program uses funds from Councils on Aging, the RTAs, and non-profit organizations. Rural and suburban transit agencies need to find ways to meet their riders where they are, and this funding will help RTAs provide more service for elderly riders and for paratransit service.

Program Plan & Guidance

Vision for the Future of RTAs report; M.G.L. section 13 of chapter 637 of the acts of 1983

Project Selection

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

Performance Measure

Useful Life Benchmark (ULB)

SFY 2024-2028 Projected Spend

\$103.4 million



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 region.

Program Plan & Guidance

Vision for the Future of RTAs 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)

SFY 2024-2028 Projected Spend

\$23.5 million



Reliability: Rail & Transit Division

Transit Technical Assistance Program

This program is used to provide technical assistance to support the transit program (grants management systems, vehicle inspections). MassDOT is committed to providing technical assistance to help the RTAs with a wide variety of initiatives, including transportation planning, data analysis of best practices and performance standards, route and service planning, and implementing supportive technology.

Program Plan & Guidance

Vision for the Future of RTAs report

Project Selection

Comprehensive regional transit plans and RTA Taskforce Report

Performance Measure

Technology-driven data analyses

SFY 2024-2028 Projected Spend

\$10.0 million



A Vision for the Future of Massachusetts' Regional Transit Authorities

Report of the Task Force on Regional Transit Authority
Performance and Funding

April 5, 2019

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 & Guidance

Vision for the Future of RTAs report; RTA Transit Asset Management Plans (TAMs)

Project Selection

RTA asset management plans and replacement schedules; projects prioritized to best achieve TAM targets

Performance Measure

Vehicle ULB (age and mileage) by type

SFY 2024-2028 Projected Spend

\$73.2 million



Reliability: Registry of Motor Vehicles

Capital Maintenance Program

This program maintains and improves existing operating systems that support service delivery, application platforms, and electronic records retention, and that maintain the condition of the RMV leased or owned facilities.

Program Plan & Guidance

N/A

Project Selection

Facility and system condition

Performance Measure

N/A

SFY 2024-2028 Projected Spend

\$1.0 million



Reliability: Office of Diversity and Civil Rights

Pre-Apprenticeship Program

This program, for which MassDOT is partnering with a number of stakeholders (industry, labor, FHWA, MassDOT, Office of Diversity and Civil Rights, and Human Resources), will fund an industry-focused workforce development program. The program will also facilitate the introduction of additional pre-apprentices to skilled trades within the various MassDOT divisions. This program provides low-income and other disadvantaged communities with access to training and employment opportunities within the construction trades and the transportation sector.

Program Plan & Guidance

N/A

Project Selection

N/A

Performance Measure

N/A

SFY 2024-2028 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 & Guidance

2010 Massachusetts Statewide Airport System Plan

Project Selection

2010 Massachusetts Statewide Airport System Plan

Performance Measure

N/A

SFY 2024-2028 Projected Spend

\$7.0 million



Statewide Airport Administration Building (SAAB) Prototype

Modernization: Highway Division

ADA Retrofits Program

This program improves the condition and accessibility of state-owned sidewalks and is necessary to meet obligations identified under the MassDOT ADA Transition Plan.

Program Plan & Guidance

MassDOT ADA Transition Plan

Project Selection

Ramp replacement follows multi-factor prioritization (i.e., proximity to public buildings, schools, and population factors)

Performance Measure

Number of failed or missing curb ramps on statewide inventory

SFY 2024-2028 Projected Spend

\$48.6 million



	FY17	FY18	FY19	FY20
Failed or missing curb ramps	5,200	5,097	4,684	4,106
<i>Reduction from 2017</i>		<i>-1.98%</i>	<i>-10.12%</i>	<i>-21.04%</i>

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, 80% of communities are involved with the program at some level:

Registered Communities: 283
 Complete Streets Policies Passed: 257
 Prioritization Plans Adopted: 228
 Construction Projects Built: 230

Program Plan & 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

SFY 2024-2028 Projected Spend

\$75.0 million



Complete Streets Awards since 2016

Grant Type	Number of Awards	Funds Awarded
Technical Assistance (Tier 2)	220	\$8.2M
Construction (Tier 3)	230	\$75.5M
Total	450	\$83.7M

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 designed to provide real traffic information to MassDOT projects, residents, and visitors throughout the Commonwealth.

Program Plan & Guidance

N/A

Project Selection

MassDOT ITS Strategic Plan & stakeholder input from MassDOT HQ, Districts, MPO's, and State Police

Performance Measure

N/A

SFY 2024-2028 Projected Spend

\$62.9 million



Modernization: Highway Division

Intersection Improvements Program

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

Program Plan & Guidance

FHWA Highway Safety Improvement Program, statewide crash analysis, road safety audits

Project Selection

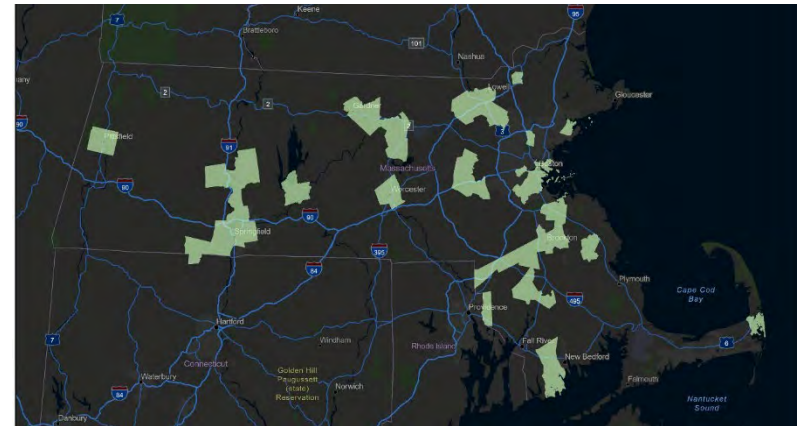
Projects drawn from HQ priorities

Performance Measure

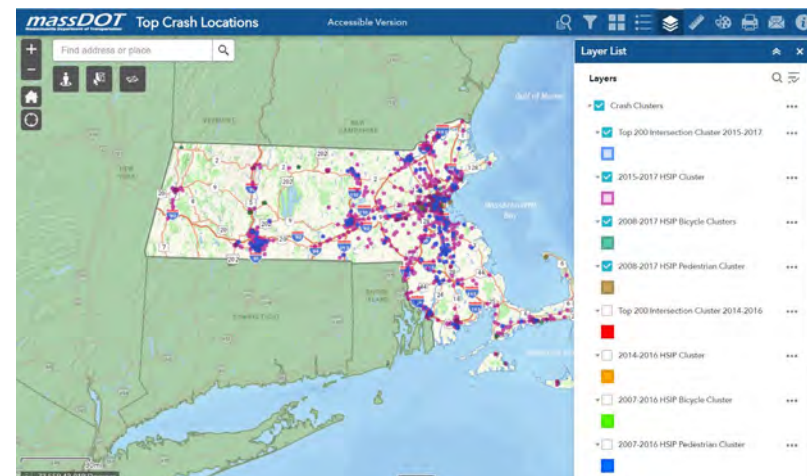
Mitigation of top 200 crash locations; reduction in rate of fatalities or serious injuries

SFY 2024-2028 Projected Spend

\$297.5 million



Intersection Improvement Project Locations since 2017



MassDOT High Crash Interactive Map

Modernization: Highway Division

Municipal/RTA Electric Vehicle Fleets Program

This proposed new grant program would provide grant funding to municipalities and regional transit authorities (RTAs) for the integration of electric vehicles (EV) and EV equipment in communities. Eligible costs include the purchase of electric vehicles for municipal or RTA vehicle fleets, electric vehicle charging stations, and related trainings, as well as studies and plans for the integration of EVs.

Program Plan & Guidance

2021 Transportation Bond Bill

Project Selection

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

Performance Measure

N/A

SFY 2024-2028 Projected Spend

\$25.0 million



Modernization: Highway Division

Local Bottleneck Reduction Program

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

Program Plan & Guidance

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

Project Selection

Municipalities propose projects; MassDOT confirms eligibility and awards grants via a competitive selection process based on delay and congestion metrics using RITIS data

Performance Measure

N/A

SFY 2024-2028 Projected Spend

\$25.0 million



Modernization: Highway Division

National Electric Vehicle Charging Infrastructure Program

This program funds deployment of electric vehicle (EV) charging infrastructure and establishment of an interconnected network to facilitate data collection, access, and reliability. Eligible uses 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 & Guidance

EV Infrastructure Charging Plan for use of funds developed by MassDOT and approved by USDOT in September 2022

Project Selection

TBD

Performance Measure

N/A

SFY 2024-2028 Projected Spend

\$108.0 million



Modernization: Highway Division

Roadway Reconstruction Program

This program adapts existing roadway designs to contemporary needs. Nearly all of the projects in this program include improvements to bicycle and pedestrian user spaces.

Program Plan & Guidance

State Transportation Improvement Program, Long Range Transportation Plans

Project Selection

Projects scored by RPAs/MPOs & MassDOT (using Project Selection Advisory Council recommended scoring elements)

Performance Measure

N/A

SFY 2024-2028 Projected Spend

\$2,159.9 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. SRTS utilizes the six E's to implement its program: Education, Encouragement, Engagement, Evaluation, Engineering, and Equity.

Program Plan & Guidance

Program guidance/website

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 (including the Project Management, Highway Design, Right-of-Way, Municipal Grants and Traffic Sections, among others) to evaluate and select projects that align with SRTS priorities and ensure equitable distribution of investments.

Performance Measure

N/A

SFY 2024-2028 Projected Spend

\$39.0 million



Modernization: Information Technology

Workforce Productivity Program

This program seeks to optimize and enhance business processes through implementation of software tools that benefit process timelines, reduce paperwork, and contribute to efficiency.

Program Plan & Guidance

Division-specific projects or Enterprise initiatives for workforce productivity

Project Selection

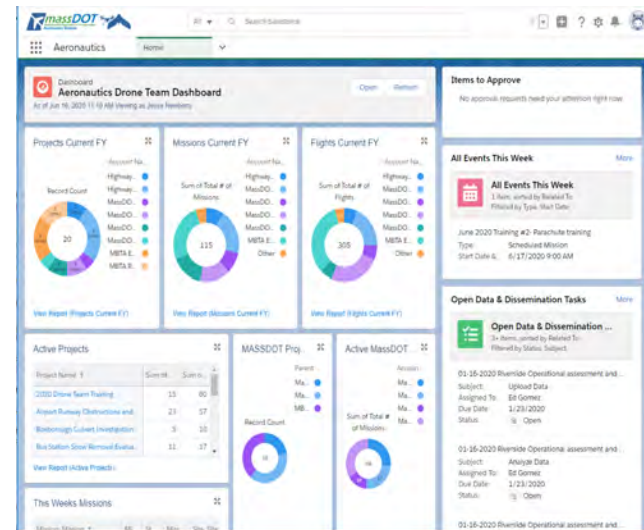
Division-specific projects or Enterprise initiatives

Performance Measure

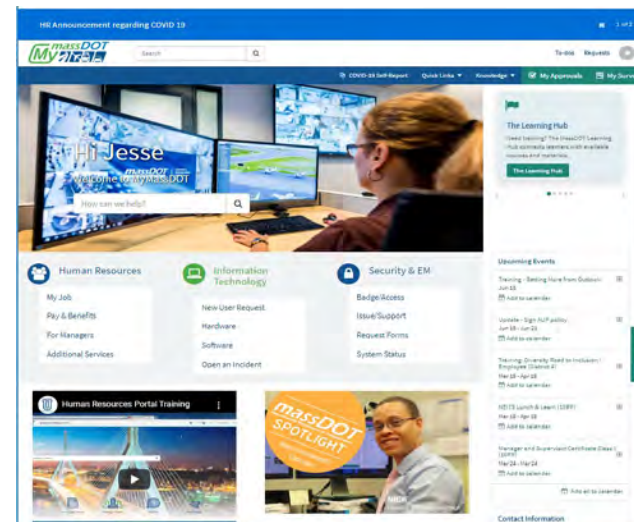
N/A

SFY 2024-2028 Projected Spend

\$64.3 million



Enterprise systems configured using platforms



Employee services through MyMassDOT

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

State Rail and Freight Plans

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

Improvement to facility capacity and/or rail services and operations

SFY 2024-2028 Projected Spend

\$0.6 million



East Deerfield Engine House

Modernization: Rail & Transit Division

Industrial Rail Access Program

This program makes investments in private sector rail lines to leverage private investment that will increase freight rail usage or modernize an active line to increase the utility to customers.

Program Plan & Guidance

N/A

Project Selection

Grant project selection criteria

Performance Measure

N/A

SFY 2024-2028 Projected Spend

\$15.0 million



Old Boston Road Recycling

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.) to meet current industry standards or otherwise achieve an improved condition with associated operational results.

Program Plan & Guidance

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

SFY 2024-2028 Projected Spend

\$10.5 million



Berkshire Line

Modernization: Rail & Transit Division

RTA Facility and System Modernization Program

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

Program Plan & Guidance

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

Project Selection

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

Performance Measure

Age and facility condition

SFY 2024-2028 Projected Spend

\$43.4 million



Modernization: Rail & Transit Division

RTA Fleet Upgrades Program

This program improves or modernizes or expands 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 & Guidance

Comprehensive Regional Transit Plan (CRTP) and RTA-conducted facility-specific studies; Battery Electric Bus Assessment Phases 1 and 2

Project Selection

RTA asset management plans and replacement schedules

Performance Measure

Age and facility condition

SFY 2024-2028 Projected Spend

\$52.8 million

Modernization: Registry of Motor Vehicles

ATLAS Program

This program improves RMV service delivery options. The program funded the replacement of the 30-year-old+ ALARS system with a new state of the art system that can handle a variety of transactions and customer service needs and support the issuance of federally required Real IDs (for travel). This program was instrumental in improving business process efficiency through greater efficiencies, accountability for process, and tracking of transactions and license/registration data.



Program Plan & Guidance

N/A

Project Selection

Division-specific projects or Enterprise initiatives; workforce productivity

Performance Measure

Project specific milestones

SFY 2024-2028 Projected Spend

Spending for additional enhancements included under Information Technology

Modernization: Registry of Motor Vehicles

Customer Service Modernization Program

This program includes updating and upgrading leased branch locations to accommodate the new dual line queuing model, signage, furniture, and fixtures.

Program Plan & Guidance

2020 Tracker

Project Selection

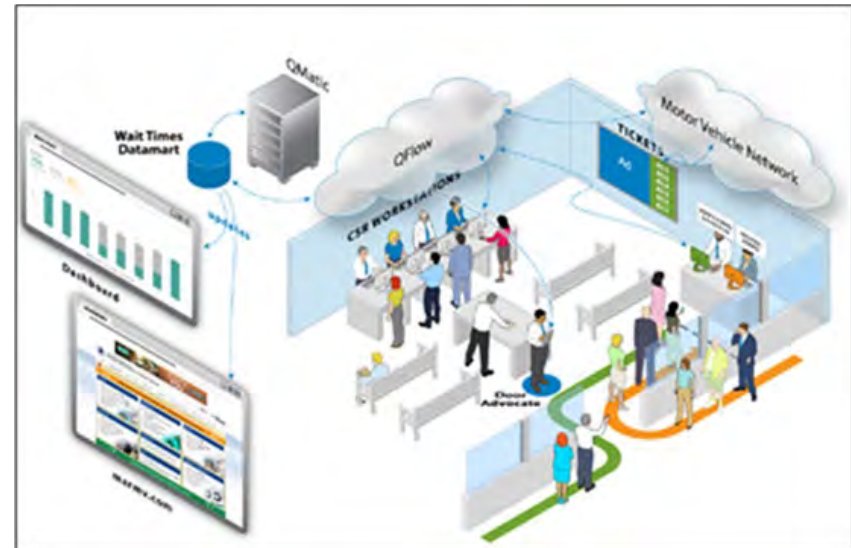
N/A

Performance Measure

Contact Center Wait Time (average speed of answer)

SFY 2024-2028 Projected Spend

\$14.5 million



Modernization: Registry of Motor Vehicles

Alternative Service Channels Program

This program funds customer service improvements through installation of self-service kiosks and third-party service channels including AAA locations. This program is necessary to improve customer experience.

Program Plan & Guidance

2021 Tracker

Project Selection

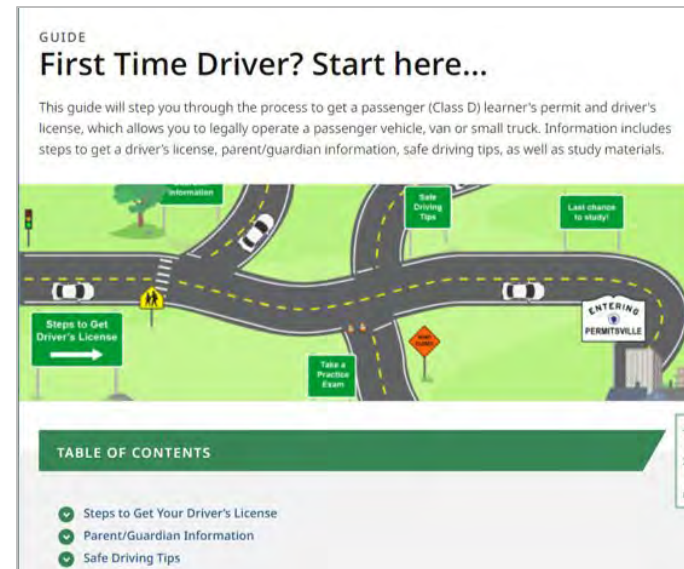
N/A

Performance Measure

% of system-wide licenses & registrations done online

SFY 2024-2028 Projected Spend

\$1.25 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 & Guidance

State Transportation Improvement Program, Long Range Transportation Plans

Project Selection

Projects scored by RPAs/MPOs & MassDOT (Using Project Selection Advisory Council recommended scoring elements)

Performance Measure

N/A

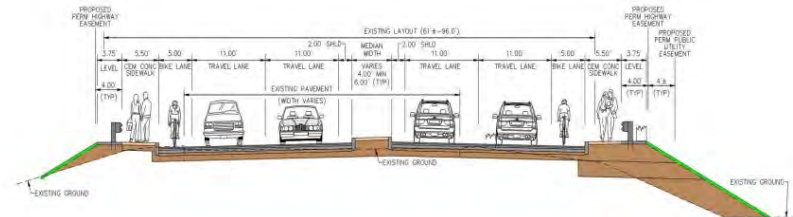
SFY 2024-2028 Projected Spend

\$309.0 million



Route 18 Weymouth

Middlesex Turnpike Typical Section



Expansion: Highway Division

Shared Use Paths / 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 and support active transportation, recreation, and reduce dependency on driving. State funds have been recently introduced to the program to fund bicycle and pedestrian improvements on state owned roads.

Program Plan & Guidance

Massachusetts Statewide Bicycle and Pedestrian Plans;
MassTrails—Inter-Agency Trails Team

Project Selection

Projects scored by MassDOT (Project Selection Advisory Council-recommended scoring elements)

Performance Measure

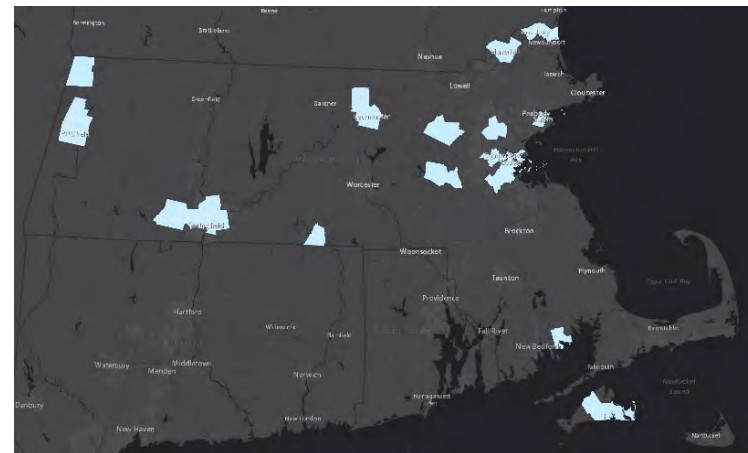
N/A

SFY 2024-2028 Projected Spend

\$335.3 million



Constructing future crossing of Bruce Freeman rail trail over Route 2 in Concord, MA



Expansion: Highway Division

Bicycle and Pedestrian Modal Implementation Program

This program is focused on expanding walking and biking on roadways by filling sidewalk and bicycle facility network gaps, constructing new or enhanced crossings, improving sidewalk conditions and accessibility, slowing vehicular speeds, improving access to transit, and making complete streets enhancements.

Program Plan & Guidance

Massachusetts Statewide Bicycle and Pedestrian Plans

Project Selection

Projects that fill in gaps in infrastructure or increase access to transit/walking/biking

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

SFY 2024-2028 Projected Spend

\$61.1 million



Illustrative example: high comfort separate bike lane and intersection



Site of future new sidewalks to close gap in network and address crash locations



Addition of and upgrades to bike parking at MBTA transit stops

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 & Guidance

Program Guidance/Website

Project Selection

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

Performance Measure

N/A

SFY 2024-2028 Projected Spend

\$34.5 million



Expansion: MBTA

Green Line Extension Program

The Green Line Extension (GLX) program includes the vehicles, stations, and infrastructure to extend the Green Line from a relocated Lechmere Station in East Cambridge to Union Square in Somerville and College Avenue in Medford. The project's six new stations will put 80 percent of all Somerville residents within walking distance of rapid transit. GLX opened for service in two phases.

Program Plan & Guidance

Focus40

Project Selection

N/A

Performance Measure

GLX Project Milestones

SFY 2024-2028 Projected Spend

\$6.0 million (state-funded portion only)



A Green Line train breaks a ribbon at the Union Branch opening (March 2022)



A Green Line train approaches Lechmere during the Union Branch opening (March 2022)

Expansion: MBTA

South Coast Rail Program

The South Coast Rail (SCR) program will restore commuter rail service between Boston and southeastern Massachusetts.

Program Plan & Guidance

Focus40

Project Selection

N/A

Performance Measure

SCR Project Milestones

SFY 2024-2028 Projected Spend

\$305.4 million



A Commuter Rail coach at Freetown Station during the ribbon-cutting celebrating the substantial completion of the Fall River Secondary Line contract (December 2022)

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 rail or freight rail service. Program provides initial funding for project development efforts (including planning studies and/or initial pilots) to support future passenger rail service.

Program Plan & Guidance

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 State Rail Plan or State Freight Plan, and any contractual or regulatory requirements for action.

Performance Measure

Ridership, freight capacity loading

SFY 2024-2028 Projected Spend

\$2.8 million



Hyannis Yard on the Cape Main Line

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

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 2024-2028 Projected Spend

\$11.5 million