# **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 2023-2027 Projected Spend

\$139.5 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 2023-2027 Projected Spend

\$183.8 million



Statewide deck sealing & Airfield Marking Projects



Fitchburg Municipal Airport Runway 14-32 & Taxiway 'A' Reconstruction Standard PCI rating scale



Optimal Time for Repair



# **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

#### **Project Selection**

Selected through Bridge Prioritization System

#### **Performance Measure**

Bridge condition by count and bridge condition by NHS area

#### SFY 2023-2027 Projected Spend

\$4,031.8 million



Calendar Year



# **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 2023-2027 Projected Spend

\$1.0 billion



Fiscal Year	Apportionment	Spent*
FY17	\$200M	\$200.0M
FY18	\$200M	\$196.5M
FY19	\$240M	\$211.4M
FY20	\$220M	\$213.0M
FY21	\$200M	\$178.6M
FY22	\$200M	\$120.0M

\*As of 4/15/22



# **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 2023-2027 Projected Spend

\$151.0 million



# **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 2023-2027 Projected Spend

\$192.4 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 2023-2027 Projected Spend

\$410.7 million





# **Reliability: Highway Division**

### Non-Interstate Pavement Program

Investments maintain MassDOT-owned non-interstate roadways. 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 2023-2027 Projected Spend

\$599.3 million





# **Reliability: Highway Division**

### **Roadway Improvements Program**

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

#### **Program Plan & Guidance**

N/A

#### **Project Selection**

Projects drawn from District and HQ priorities

**Performance Measure** 

N/A

SFY 2023-2027 Projected Spend

\$343.6 million





# **Reliability: Highway Division**

### **Municipal Pavement Program**

A program focused on the improvement and preservation of municipally owned State Numbered Routes to support the longterm 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 2023-2027 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 submit application, MassDOT confirms eligibility and awards grants via competitive selection process

#### **Performance Measure**

N/A

SFY 2023-2027 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

#### **Project Selection**

Projects drawn from District and HQ priorities

**Performance Measure** 

Reduction in rate of fatalities or serious injuries

SFY 2023-2027 Projected Spend

\$135.6 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 2023-2027 Projected Spend

\$625.1 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 2023-2027 Projected Spend

\$32.0 million







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 2023-2027 Projected Spend

\$13.8 million



Pre-Investment 10 Park Plaza Server Room



Post-investment 10 PP 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 2023-2027 Projected Spend

\$60.6 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 2023-2027 Projected Spend

\$12.1 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 2023-2027 Projected Spend

\$51.1 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 maintaining 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**

% Of state of good repair, weight capacity; reduced operating restrictions

#### SFY 2023-2027 Projected Spend

\$214.0 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 2023-2027 Projected Spend

\$3.3 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 2023-2027 Projected Spend

\$56.9 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; RTAs Transit Asset Management Plans (TAMs)

#### **Project Selection**

RTAs asset inventory reports and needs

#### **Performance Measure**

Facility condition and Vehicle ULB (mean miles between failures)

#### SFY 2023-2027 Projected Spend

\$13.7 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 2023-2027 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; RTAs 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 2023-2027 Projected Spend

\$68.7 million







# **Reliability: Registry of Motor Vehicles**

### **Capital Maintenance Program**

This program maintains and improves existing operating systems that support service delivery, application platforms, electronic records retention, and maintains 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 2023-2027 Projected Spend

\$1.1 million







2023-2027 CAPITAL INVESTMENT PLAN

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# 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.



Fidel Escarela went through the Pre-Apprenticeship 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)

#### **Program Plan & Guidance**

N/A

**Project Selection** 

TBD

#### **Performance Measure**

TBD

SFY 2023-2027 Projected Spend

\$5.0 million



#### 2023-2027 CAPITAL INVESTMENT PLAN

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# **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 2023-2027 Projected Spend

\$10.3 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 2023-2027 Projected Spend

\$43.7 million



	FY17	FY18	FY19	FY20
Failed or missing curb ramps	5,200	5,097	4,684	4,106
Reduction f	rom 2017	-1.98%	-8.10%	-12.34%



# **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.

#### **Program Plan & Guidance**

Chapter 220 legislation and policies

#### **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 2023-2027 Projected Spend

\$75.0 million



#### **Complete Streets Awards since 2016**

Grant Type	Number of Awards	Funds Awarded	
Technical Assistance (Tier 2)	204	\$7.9M	
Construction (Tier 3)	214	69.5M	
Total	418	\$77.4M	



# **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 2023-2027 Projected Spend

\$67.7 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 fatalities or serious injuries

#### SFY 2023-2027 Projected Spend

\$282.7 million



Intersection Improvement Project Locations since 2017



MassDOT High Crash Interactive Map



# **Modernization: Highway Division**

### Municipal Electric Vehicle & Charging Infrastructure 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, 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 2023-2027 Projected Spend

\$25.0 million







# **Modernization: Highway Division**

### Local Bottleneck Reduction Program

This grant program provides funding for municipalities to address congestion bottlenecks at signalized intersections to improve traffic flow while addressing safety, bicycle, transit, and pedestrian needs with preference to projects near transitoriented 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 competitive selection process based on delay and congestion metrics via RITIS data.

#### **Performance Measure**

N/A

SFY 2023-2027 Projected Spend

\$32.0 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 to be developed by MassDOT and submitted to USDOT

**Project Selection** 

TBD

**Performance Measure** 

N/A

SFY 2023-2027 Projected Spend

\$47.0 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 2023-2027 Projected Spend

\$2,228.5 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 2023-2027 Projected Spend

\$74.3 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 maintains 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 2023-2027 Projected Spend

\$0.5 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 2023-2027 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-ofway (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"); doublestack 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 2023-2027 Projected Spend

\$35.1 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 RTAconducted 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 2023-2027 Projected Spend

\$54.9 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 RTAconducted 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 2023-2027 Projected Spend

\$29.5 million



# **Modernization: Rail & Transit Division**

# **RTA Replacement Facilities Program**

This program constructs and modernizes RTA maintenance, administrative, operations, or intermodal facilities.

## **Program Plan & Guidance**

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

#### **Project Selection**

Division specific projects or Enterprise initiatives; workforce productivity

#### **Performance Measure**

N/A

SFY 2023-2027 Projected Spend

\$4.5 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, customer services needs and support the issuance of federally-required Real IDs (for travel). This program was instrumental in improving business process efficiency through greater efficiencies and accountability for process and tracking 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 2023-2027 Projected Spend

\$7.0 million



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# 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 2023-2027 Projected Spend

\$4.8 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 2023-2027 Projected Spend

\$1.6 million

# First Time Driver? Start here...

This guide will step you through the process to get a passenger (Class D) learner's permit and driver's license, which allows you to legally operate a passenger vehicle, van or small truck. Information includes steps to get a driver's license, parent/guardian information, safe driving tips, as well as study materials.



**Q** What would you like to do?

#### myRMV Online Service Center





#### 2023-2027 CAPITAL INVESTMENT PLAN

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# Modernization: Office of the Secretary/OTP

## **Transit Infrastructure Partnership Program**

This program funds transit-supportive infrastructure, such as dedicated bus lanes, signal prioritization for buses, bus shelters, lighting, signage, improved bike/ped access to stations, improved connectivity to other sustainable modes of travel, repairs, and other improvements, with preference for those producing transit-oriented housing.

#### **Program Plan & Guidance**

Report to the Governor on Congestion in the Commonwealth 2019 and Focus40: The 2040 Investment Plan for the MBTA

#### **Project Selection**

Two-part: (1) internal selection of a portfolio of relevant and high-quality MBTA projects and (2) competitive grant-making through the existing Shared Streets and Spaces Program for municipalities and Regional Transit Authorities.

#### **Performance Measure**

N/A

SFY 2023-2027 Projected Spend

\$25.0 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 Plan

#### **Project Selection**

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

#### **Performance Measure**

N/A

#### SFY 2023-2027 Projected Spend

\$335.1 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 2023-2027 Projected Spend

\$288.0 million





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



# Expansion: Secretary/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 missing 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 2023-2027 Projected Spend

\$60.0 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: Secretary / Highway Division

# **Shared Streets and Spaces Program**

This program provides \$5,000 to \$500,000 grants for cities and towns to quickly launch or expand improvements to sidewalks, curbs, streets, on-street and off-street parking in support of public health, safe mobility, and renewed commerce in their communities.

## **Program Plan & Guidance**

N/A

## **Project Selection**

Municipalities submit application; MassDOT confirms eligibility and awards grants via competitive selection process

## Performance Measure

N/A

#### SFY 2023-2027 Projected Spend

\$29.0 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.

## **Program Plan & Guidance**

Focus40

#### **Project Selection**

N/A

#### **Performance Measure**

**GLX Project Milestones** 

#### SFY 2023-2027 Projected Spend

\$40.2 million (state-funded portion only)



Final steel structure for GLX viaduct being installed (Oct. 2020)



Project's Multi-Purpose Machine delivering railbed material to the narrow corridor (Jan. 2020)



# **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 2023-2027 Projected Spend

\$533.3 million







New Culvert in Freetown, MA



#### APPENDIX B: INVESTMENT PROGRAMS

# **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 2023-2027 Projected Spend

\$6.9 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 2023-2027 Projected Spend

\$10.1 million

