



# 2017-2021 Capital Investment Plan

# Restoring Reliability



MassDOT/ MBTA  
Capital Investment Plan  
FY2017-2021

Investing in better roads will improve our commutes and travel in general





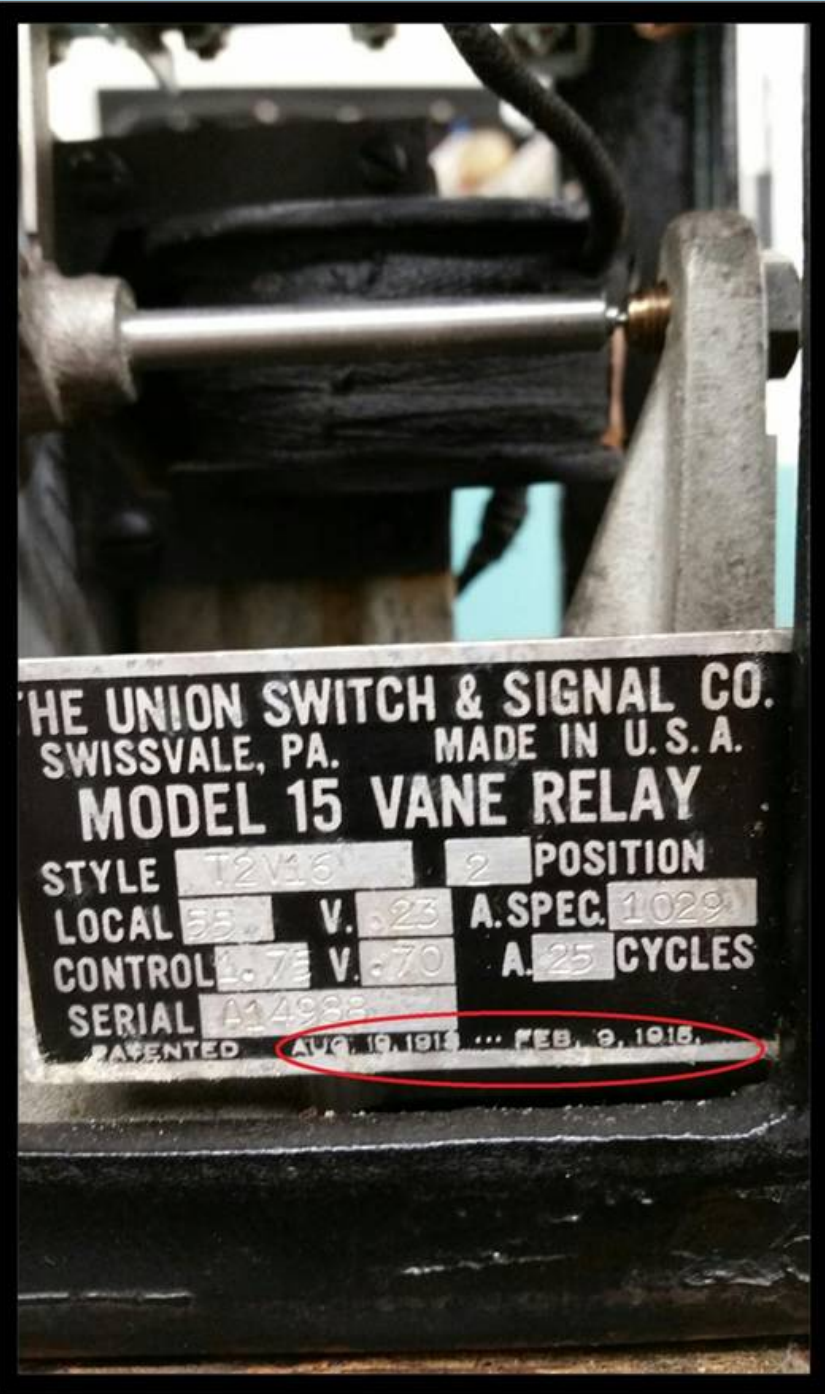
# Massachusetts also needs to invest in repairing structurally deficient bridges



09/25/2009 12:19



# And of course in fixing the MBTA



Old technology = unreliable service

NOW is the time to upgrade 1915 era Green Line relay

# The reward for operating budget discipline is a revenue source for capital investment: Pay-Go



Projected Sources - MBTA	FY 2017 <sup>2</sup>	FY 2018	FY 2019	FY 2020	FY 2021	Total FY 17-21
FTA Funding - MBTA						
Section 5307/5340	\$332,609,078	\$140,202,383	\$142,183,024	\$144,557,710	\$144,557,710	\$904,109,905
Section 5337	\$394,652,098	\$140,394,801	\$142,812,385	\$145,271,551	\$145,271,551	\$968,402,387
Section 5339	\$23,154,989	\$5,555,626	\$5,676,308	\$5,799,449	\$5,799,449	\$45,985,821
Formula Funds Bought and paid for	\$433,624,489	\$153,252,046	\$58,964,212	\$6,222,892	\$0	\$652,063,640
FFGA (GLX)	\$55,000,000	\$150,000,000	\$150,000,000	\$150,000,000	\$150,000,000	\$655,000,000
Subtotal MBTA FTA Funding	\$1,239,040,654	\$589,404,857	\$499,635,928	\$451,851,603	\$445,628,710	\$3,225,561,752
Bond Cap - MBTA	\$26,093,626	\$37,306				\$26,130,932
ABP - MBTA	\$6,798,817	\$2,000,000				\$8,798,817
Transit SOBs	\$249,319,448	\$198,726,397	\$199,319,975	\$224,519,790	\$255,428,159	\$1,127,313,768
Revenue Bonds	\$150,000,000	\$200,000,000	\$200,000,000	\$0	\$200,000,000	\$750,000,000
Cash on hand	\$29,182,675	\$1,571,890	\$0	\$0	\$0	\$30,754,565
<b>Pay-Go</b>	<b>\$100,000,000</b>	<b>\$150,000,000</b>	<b>\$150,000,000</b>	<b>\$150,000,000</b>	<b>\$150,000,000</b>	<b>\$700,000,000</b>
Excess Debt Service Reserve Funds	\$60,000,000	\$0	\$0	\$0	\$0	\$60,000,000
Reimbursables	\$4,600,083	\$0	\$0	\$0	\$0	\$4,600,083
TIFIA <sup>3</sup>	\$0	\$154,535,000	\$0	\$0	\$0	\$154,535,000
RIIF <sup>3</sup>	\$0	\$234,140,000	\$0	\$0	\$0	\$234,140,000
<b>Total MBTA Sources<sup>1</sup></b>	<b>\$1,865,035,303</b>	<b>\$1,530,415,450</b>	<b>\$1,048,955,903</b>	<b>\$826,371,393</b>	<b>\$1,051,056,869</b>	<b>\$6,321,834,918</b>

*The draft CIP assumes the \$100m in FY17 can be increased to \$150m annually & maintained*

# Flexible funding to spend across MassDOT



Recipient	Bond Cap	Gaming
Aeronautics	\$51,382,925	
Chapter 90	\$1,000,000,000	
Commonwealth	\$120,000,000	
Highway	\$2,043,532,105	\$125,000,000
IT	\$69,050,000	
Rail	\$279,536,446	
RMV	\$120,506,455	
RTA Transit	\$146,927,246	

# How this Capital Investment Plan is different



This CIP is distinguished by its three-step method for identifying capital priorities:

- ▶ Articulate strategic priorities for the maintenance and improvement of the transportation system, with an emphasis on reliability.
- ▶ Set and size funding programs to contain collections of projects with similar purposes or focus
- ▶ Populate these funding programs with high-priority projects that have been scored using established evaluation systems.

Working together, the MassDOT Divisions and the MBTA prioritized the agency's strategic goals, creating a framework that defines all of the decisions reflected in the CIP:

## **1** *Reliability*

**Maintain and improve the overall condition and reliability of the transportation system**

- ▶ Necessary routine and capital maintenance
- ▶ State of Good Repair projects designed primarily to bring asset condition up to an acceptable level
- ▶ Asset management and system preservation projects

## **2** *Modernization*

**Modernize the transportation system to make it safer and more accessible and to accommodate growth**

- ▶ Compliance with federal mandates or other statutory requirements for safety and/or accessibility improvements
- ▶ Projects that go beyond State of Good Repair and substantially modernize existing assets
- ▶ Projects that provide expanded capacity to accommodate current or anticipated demand on existing transportation systems

## **3** *Expansion*

**Expand diverse transportation options for communities throughout the Commonwealth**

- ▶ Projects that expand highway, transit and rail networks and/or services
- ▶ Projects that expand bicycle and pedestrian networks to provide more transportation options and address health and sustainability objectives

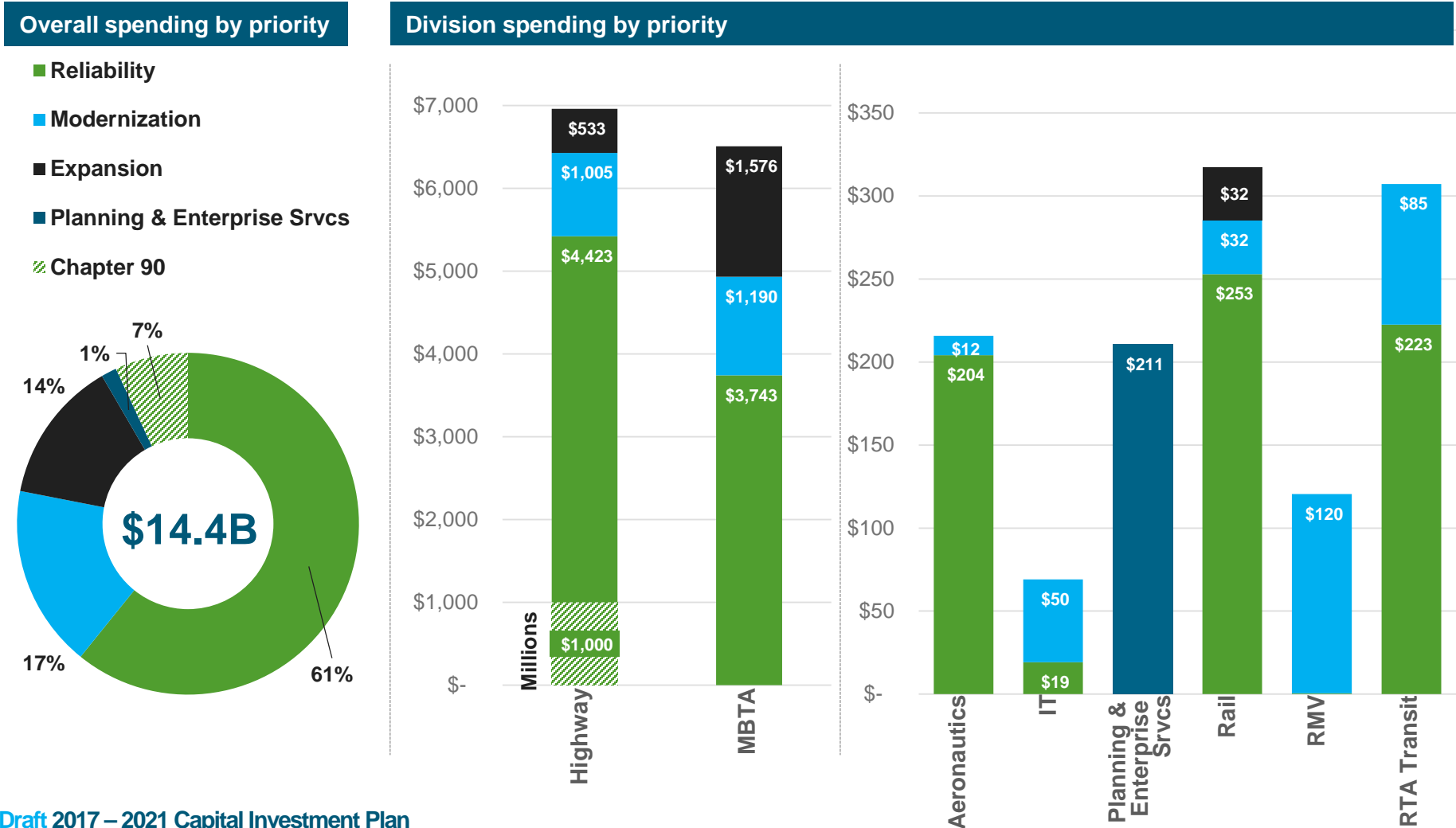


# Implementing the strategy: breakdown by priorities and Division

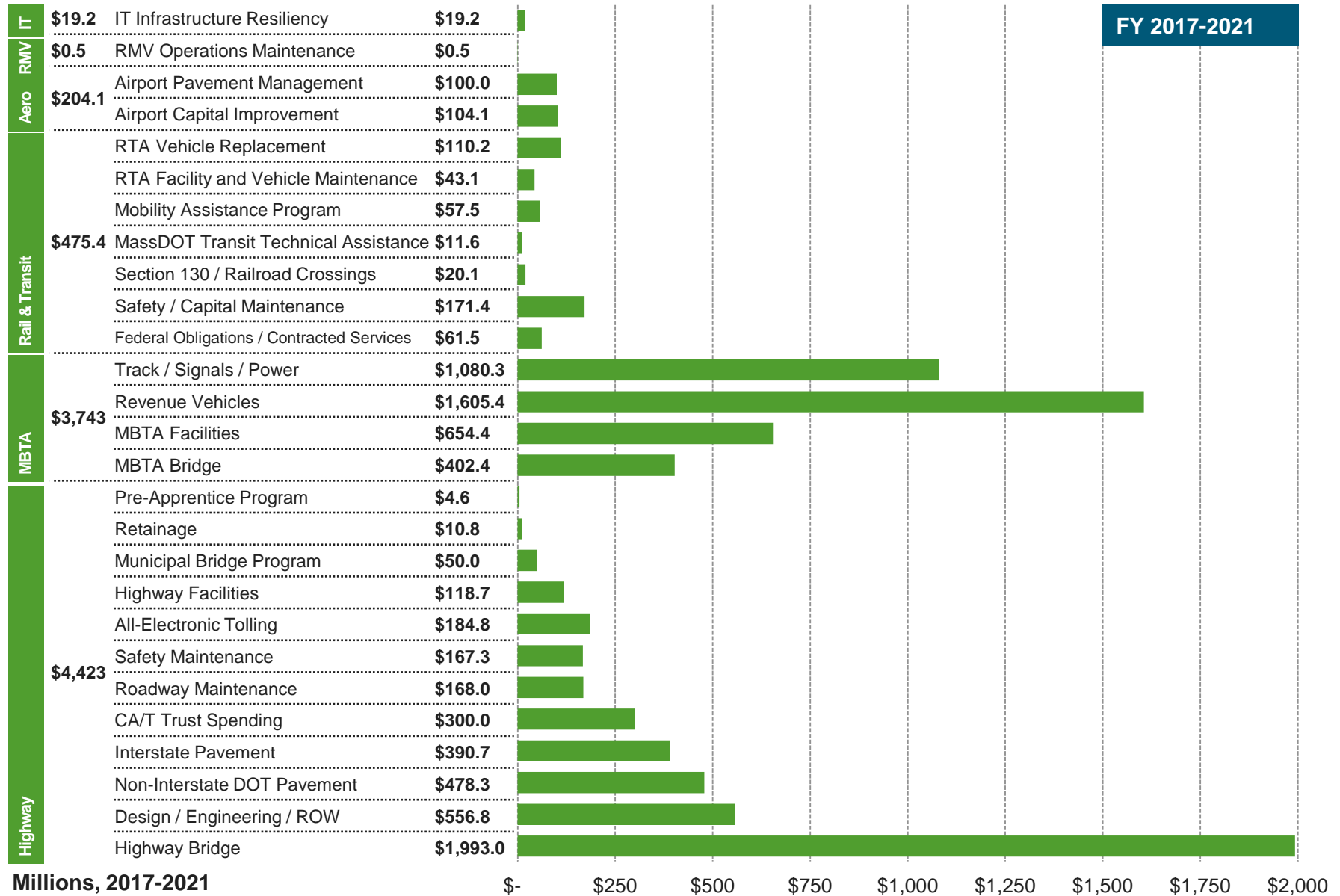


Some projects in this CIP were automatically included based on prior commitments. This subset of projects consists of multiple year projects where a notice to proceed had been issued, procurement had begun, or construction had already started.

The next section shows the total spending by priority for each division, highlights key programs, and illustrates how much money was programmable for new projects in this CIP for those programs. A set of projects for each program is also shown for illustrative purposes. The full list of underway and recommended projects can be found in Part III.



# 1 Reliability programs funding overview

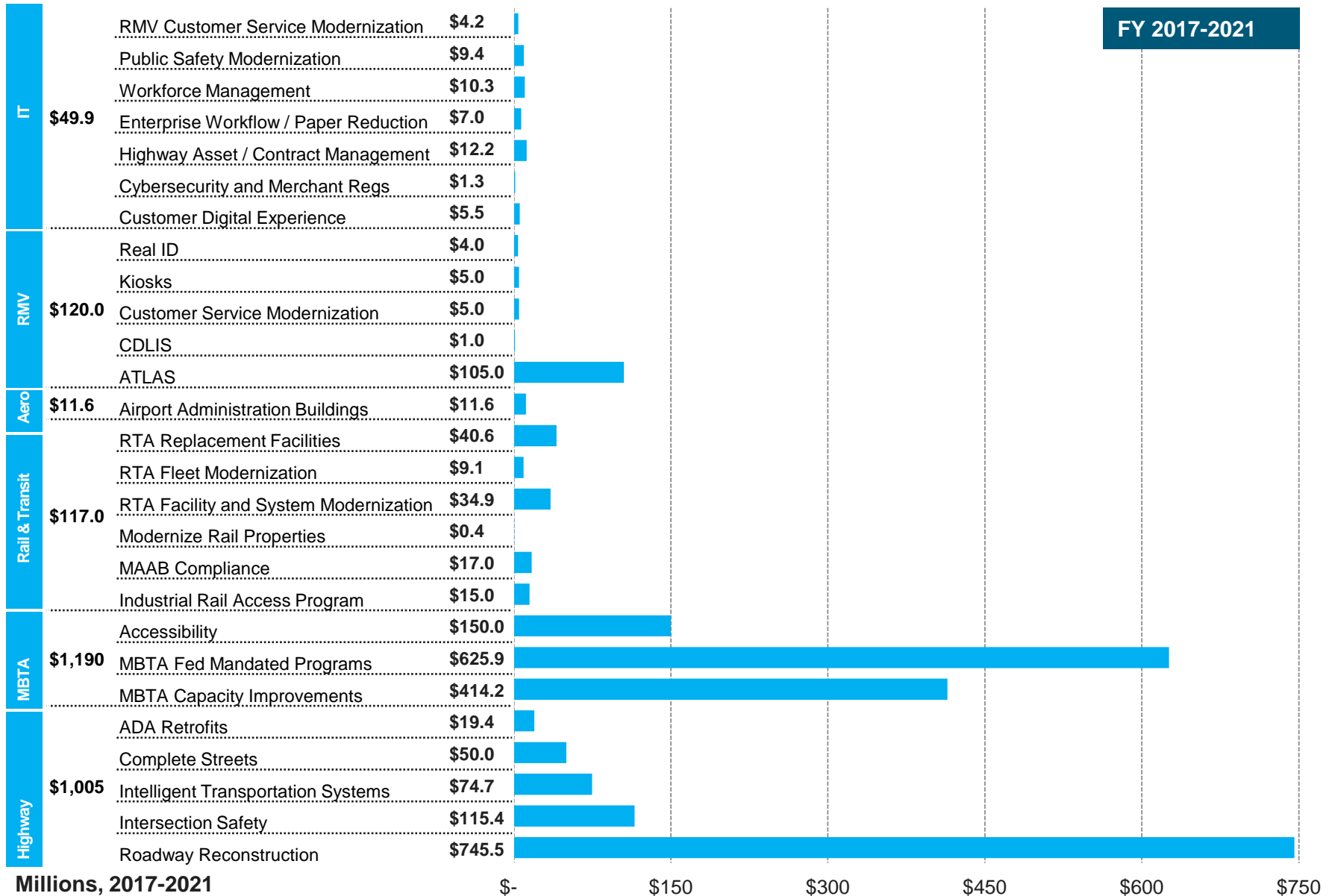


# 2

## Modernization programs funding overview

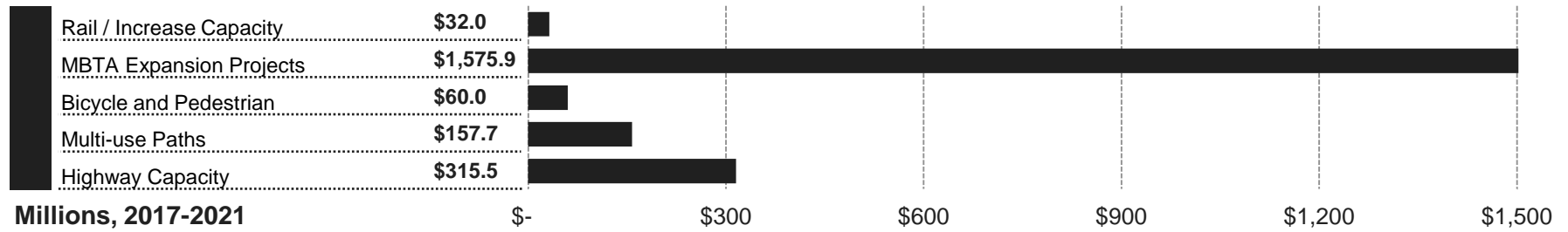


FY 2017-2021





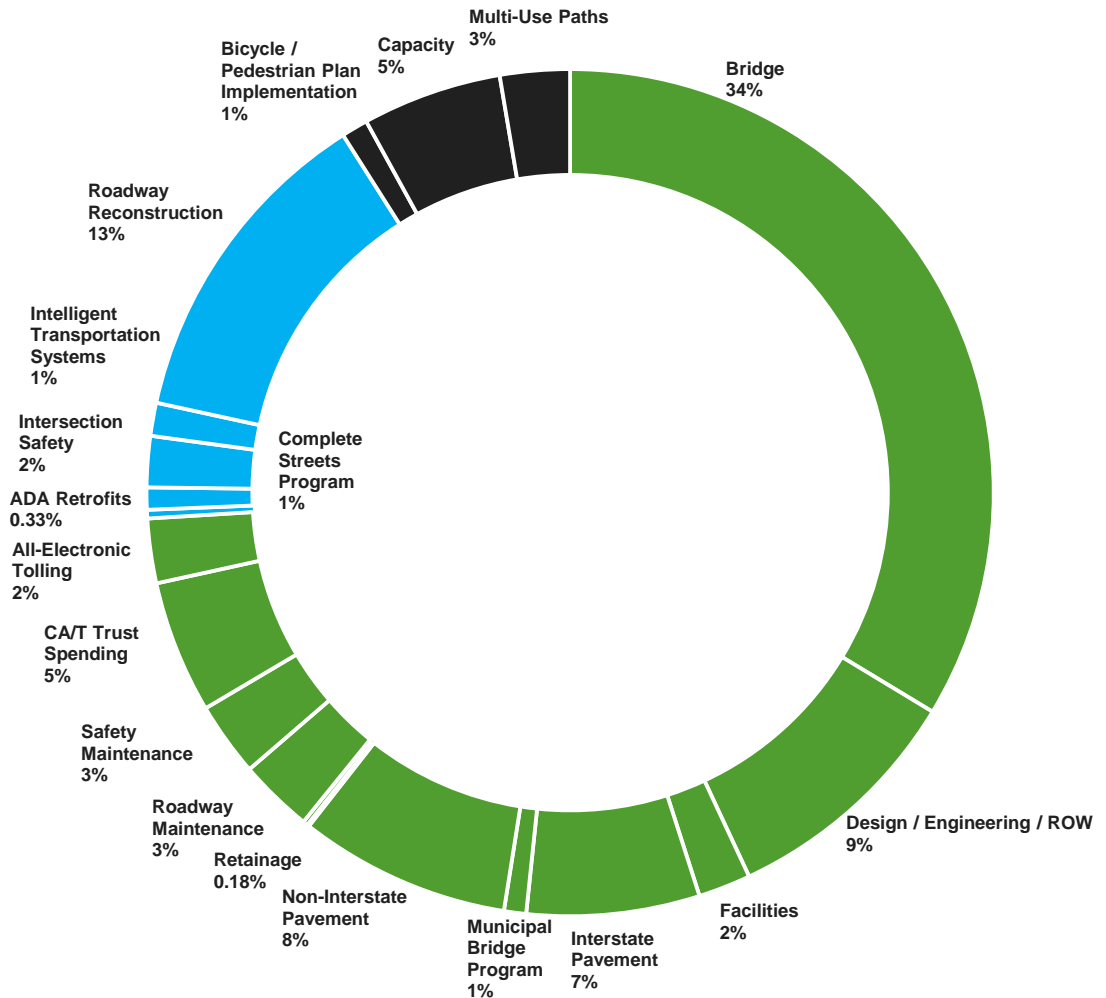
# 3 Expansion programs funding overview



# Highway programs overview

## Spending by priority and program

- 1** Reliability **74%**  
\$4.4 billion
- 2** Modernization **17%**  
\$1.0 billion
- 3** Expansion **9%**  
\$533 million



# Highway Division Highlights



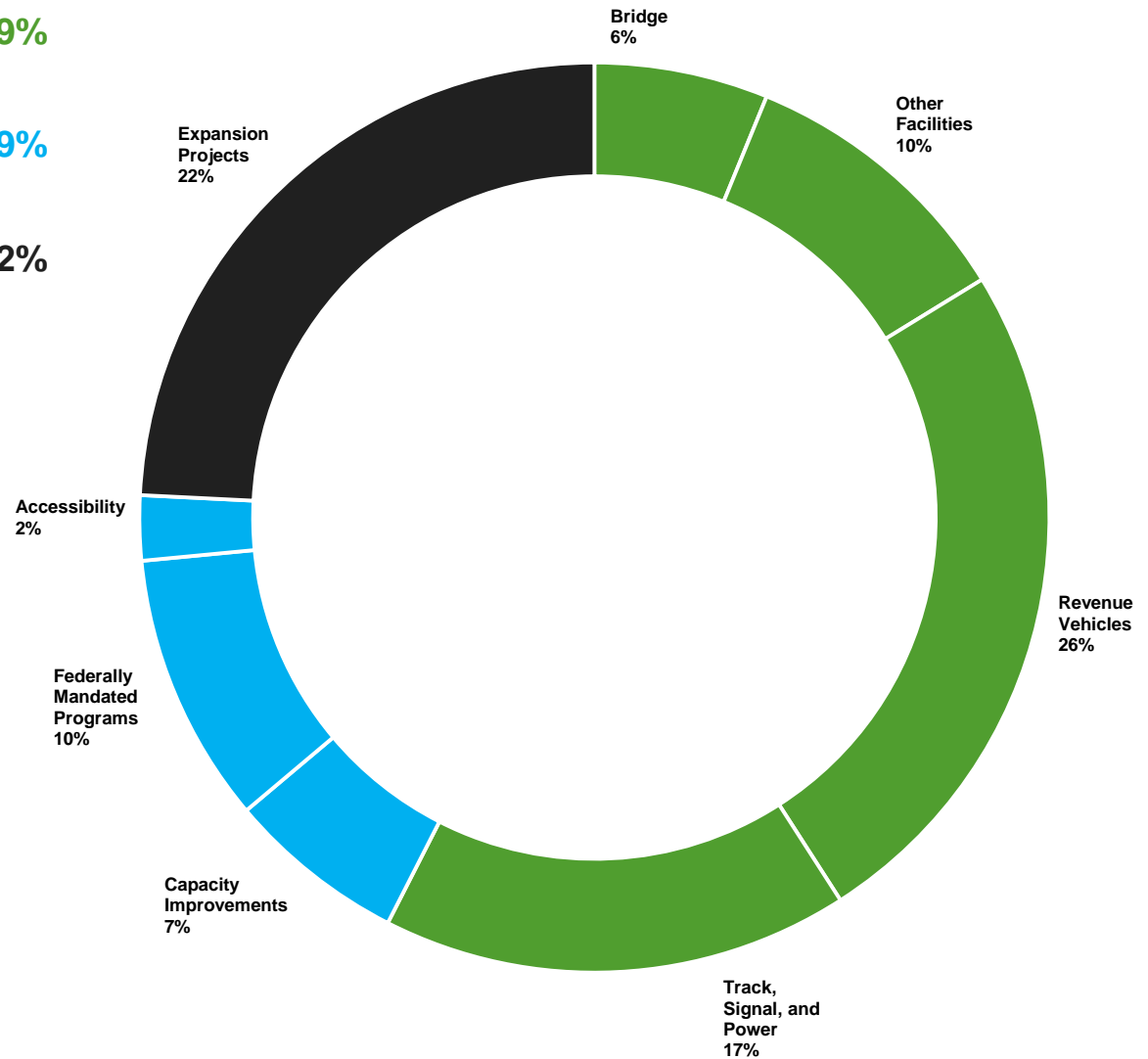
- ▶ \$2 billion bridge program that will reduce the proportion of bridges that are structurally deficient to under 5%
- ▶ \$50 million Municipal Bridge Program
- ▶ 60% increase in spending on non-interstate highway pavement in response to recent asset management report.
- ▶ \$60 million to fund high priority projects from upcoming bicycle and pedestrian modal plans.



# MBTA programs overview

## Spending by priority and program

- 1** Reliability \$3.7 billion 59%
- 2** Modernization \$1.19 billion 19%
- 3** Expansion \$1.58 billion 22%



# MBTA Highlights

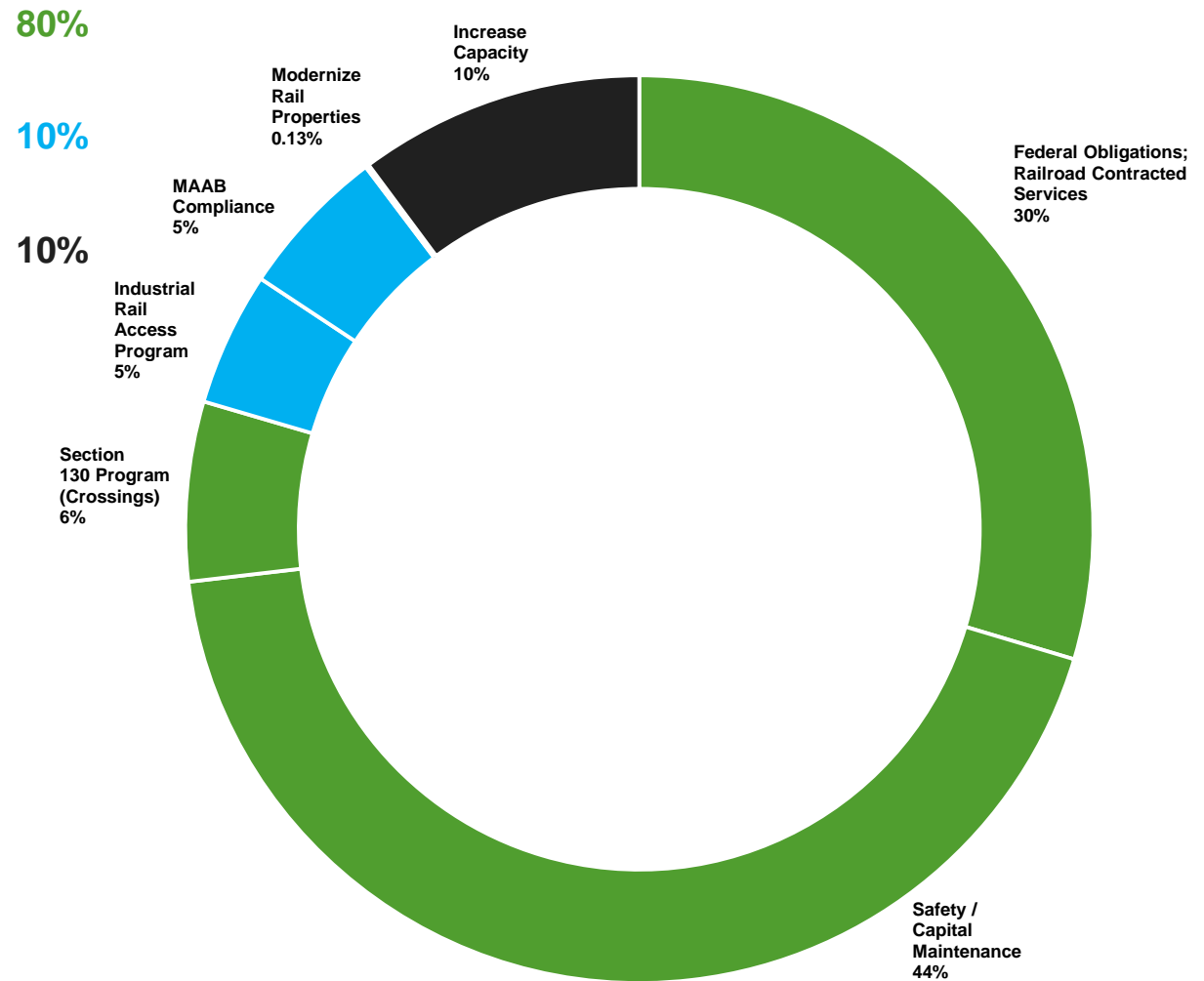


- ▶ Reliability programs sized to ramp up to \$765 million spending per year as recommended by FMCB.
- ▶ Programs funding to complete federally-required Positive Train Control on commuter rail system.
- ▶ \$150 million to fund the next set of accessibility investments developed through the Plan for Accessible Transit Infrastructure (PATI)
- ▶ Programs the funding needed for the state share of the GLX Full Funding Grant Agreement.
- ▶ Funds the continuance of South Coast Rail early action projects, advancing design , and beginning permitting.

# Rail programs overview

## Spending by priority and program

- 1** Reliability  
\$253 million
- 2** Modernization  
\$32.4 million
- 3** Expansion  
\$32.0 million





# Rail Highlights



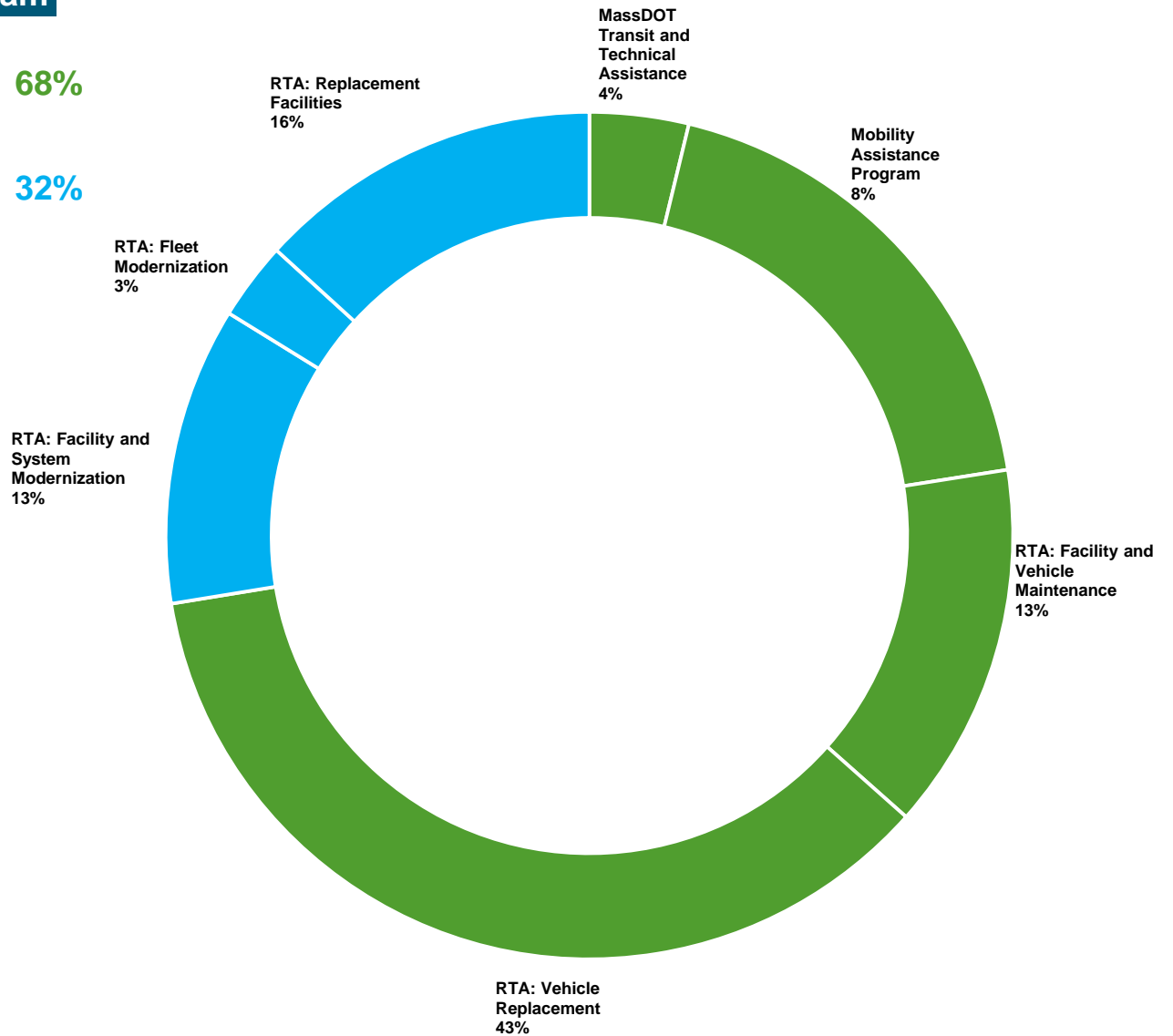
- ▶ Provides \$250 million for rail maintenance over the five years of this CIP.
- ▶ Programs \$15 million for the continuation of the Industrial Rail Access Program.

# RTA Transit programs overview



## Spending by priority and program

- 1 Reliability**  
\$222.5 million
- 2 Modernization**  
\$84.7 million



# RTA Transit Highlights



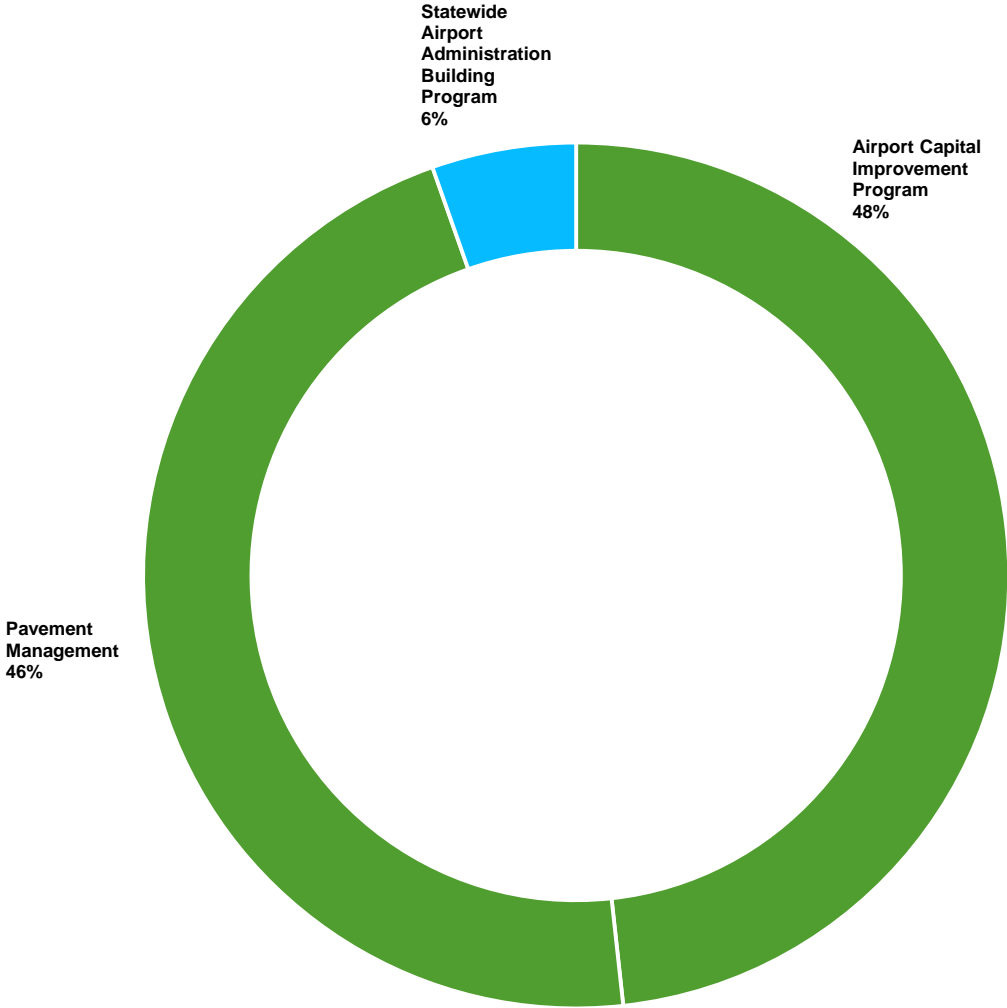
- ▶ Programs \$110 million for replacement vehicles.
- ▶ Provides \$40.6 million for replacement facilities.

# Aeronautics programs overview



## Spending by priority and program

- 1** Reliability \$204.1 million 94%
- 2** Modernization \$11.6 million 6%

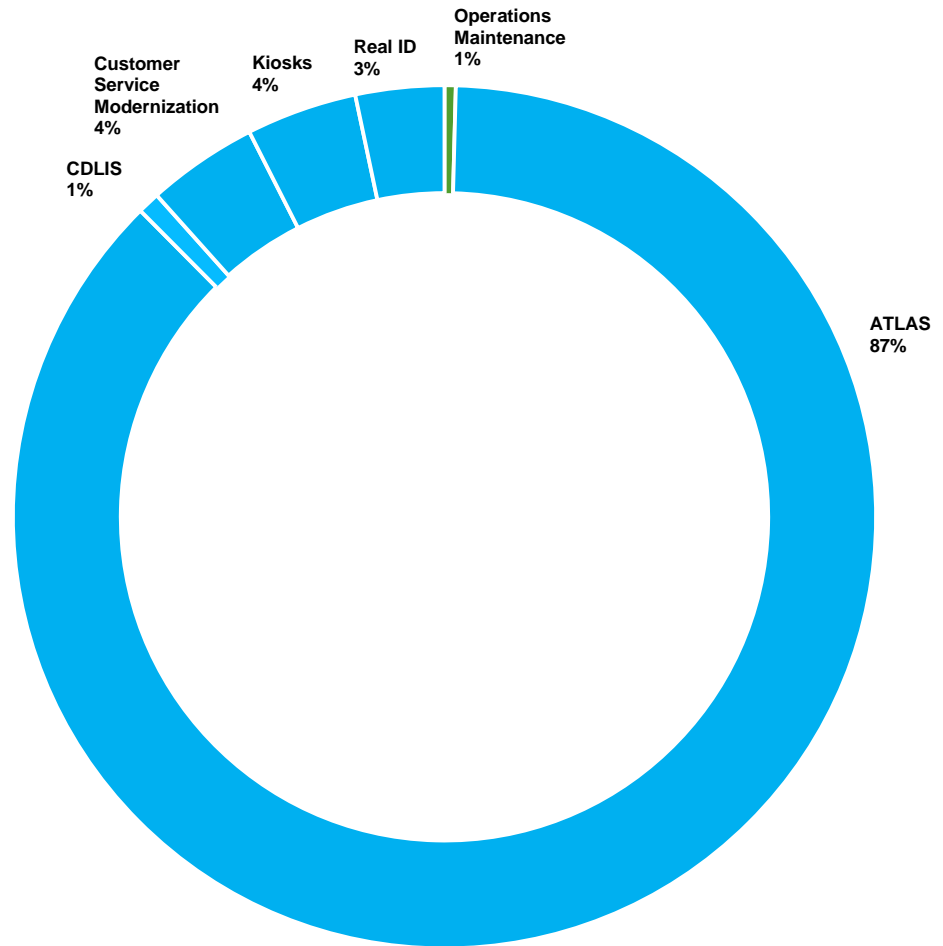


# RMV programs overview



## Spending by priority and program

<b>1</b>	<b>Reliability</b> \$506,455	<b>1%</b>
<b>2</b>	<b>Modernization</b> \$120 million	<b>99%</b>



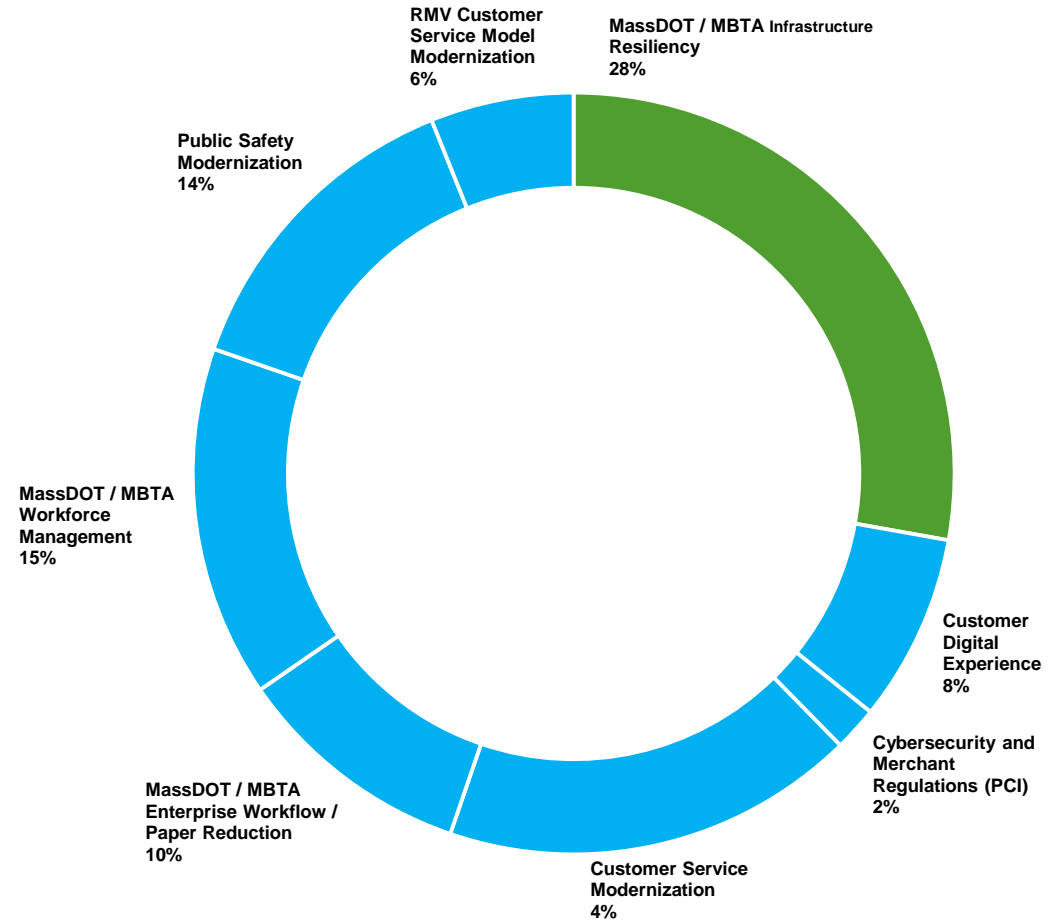


# IT programs overview



## Spending by priority and program

- 1** Reliability **28%**  
\$19.2 million
- 2** Modernization **72%**  
\$49.9 million



## Other MassDOT Division Highlights



- ▶ Programs \$105 million for the RMV to make critical software upgrades.
- ▶ Funds \$307.2 million to support the Commonwealth's RTAs.
- ▶ Invests in over \$200 million in reliability improvements at the Commonwealth's municipal airports.
- ▶ Provides \$250 million in rail maintenance spending over the life of this CIP.
- ▶ Proposes approximately \$50 million in IT systems at MassDOT, the MBTA , and the RMV.