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2017-2021 CIP priorities

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
Within the priorities, each Division has defined a set of programs that guide the formation of project lists

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<th>Priorities</th>
<th>Highway</th>
<th>MBTA</th>
<th>Rail</th>
<th>RTA Transit</th>
<th>Aeronautics</th>
<th>RMV</th>
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<td>2</td>
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<td>RMV customer service modernization</td>
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<td>Intelligent transportation systems</td>
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Note: Planning is not included in the programs listed above
Draft for discussion purposes only – Pre-decisional
Proposed sizes for programs are based on several inputs, and we request the Board’s input as we finalize them.

- DOT priorities: focus on Priority 1
- Historical spending patterns
- Performance projections (PfP tool)
- Internal estimates of need
- Board guidance
- Fiscal constraints

Program sizes
- CIP Process
- Sources and Uses
  - Overview and Highlights
  - Draft Program Sizes
  - Appendix
## Projected Sources FY 2016 FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 Total

### Known Sources

<table>
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<tr>
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1 Preliminary assumption for planning purposes only  | 2 Totals may not add due to rounding  | 3 Anticipated balance as of 6/30/16.  | 4 Subject to FHWA approval  | 5 Estimate based on past events  | 6 Per legislation, 50% will be spent on municipal projects including Complete Streets

Source: DOT internal estimates

Draft for discussion purposes only – Pre-decisional
MassDOT Sources: Assumptions

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<th>Source</th>
<th>Description</th>
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<td>FHWA New Obligation Authority</td>
<td>93% of new FASTAct federal apportionments less GANs debt service</td>
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<td>FHWA Existing</td>
<td>Federal spending on projects already underway (prior federal obligation authority). Amount will increase over the CIP as new obligation authority is used</td>
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<td>FAA Discretionary Grants</td>
<td>Estimate of expected FAA Discretionary Grants for Airport Improvement (AIP funds) and Noise Abatement Project (set asides)</td>
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<td>Federal Transit Funding</td>
<td>FTA funding under FASTAct (primarily for RTAs)</td>
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<td>- Section 5307: Urbanized Area formula funds</td>
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<td>- Section 5310: Mobility Assistance Funds</td>
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<td>- Section 5337: State of Good Repair funds</td>
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<td>- Section 5339: Bus and Bus Facilities funds</td>
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<td>Bond Cap</td>
<td>Assumes $750 million/year for planning purposes with $200 million/year for Chapter 90 program</td>
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<td>Accelerated Bridge Program</td>
<td>Remaining GANs ($260 million) and special obligation bond spending ($90 million) for underway projects</td>
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<td>Toll Revenues and Reserves</td>
<td>Projected annual revenues available for capital for each of the toll facilities plus existing projected reserve balances as of June 30, 2016; assumes Western Turnpike Tolls remain in place</td>
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<td>CA/T Trust and Reserves</td>
<td>Assumes use of $307 million from the CA/T Trust on eligible MHS projects; subject to FHWA approval</td>
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<td>Third Party Funds</td>
<td>Estimated based on historical amounts</td>
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<td>Gaming Revenues</td>
<td>Annual gaming revenues devoted to the Transportation Infrastructure and Development Fund from the Springfield and Everett casinos; estimate provided by A&amp;F</td>
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## Sources: MBTA

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<th>FY 2020</th>
<th>FY 2021</th>
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1 Totals may not add due to rounding. Amounts are based on current project budget as of this date and will change as additional reviews and adjustments to budgets, schedules, and cash flows occur. Actual amount available for new projects and programs is much lower as commitments against these funds have been obligated through past CIPs and the Federal State Transportation Improvement Plan. Timing of some funding, especially REP and Federal (Existing Grants), will shift as project schedules are updated.  
2 Includes carry-over from previous years.  
3 PTC values are under discussion and subject to change based on LOI.

Source: MBTA internal estimates

Draft for discussion purposes only – Pre-decisional
MBTA Sources: Assumptions

- FTA New Obligation Authority (three sections): 93% of new FAST Act federal apportionments
- FTA Existing: Projected drawdowns of federal funds for projects already underway; amounts will increase in out years as new obligation authority is assigned to specific projects
- FFGA (GLX): Amount obligated and projected for the GLX project through the Full Funding Grant Agreement
- Bond Cap – MBTA: Commonwealth general obligation bond proceeds allocated to specific projects; primarily for project operations and other construction support provided to the Highway Division and Rail Division
- ABP – MBTA: Commonwealth special obligation bond proceeds allocated to specific bridge projects; primarily for project operations and other construction support provided to the Highway Division
- Transit SOBS: The Commonwealth Rail Enhancement Program; a dedicated $2.1B program for reliability, modernization and expansion initiatives at the MBTA
- Revenue Bonds: general obligation bonds issued by the MBTA
- Cash on Hand: Also known as the capital maintenance fund; surplus operating funds appropriated to pay-go in the past
- Pay-GO: FY2017 initiative funded through operating budget savings; amounts are allocated to specific reliability and modernization projects
- Excess Debt Service Reserve Funds: Estimated amount (final to be determined) potentially available through improved debt management policies
- Reimbursable: Third party funding for specific initiatives
- TIFIA & RIIF: Estimated amounts being sought from federal loan programs to fund the federally mandated, underway Positive Train Control (PTC) project
Relationship of STIP (Statewide Transportation Improvement Plan) and CIP

• The STIP is a federally required investment program spanning 5 years and listing all federally funded projects in the Commonwealth
• STIP is the combination of all 13 MPO-prioritized investment programs and MassDOT prioritized investments
• CIP reflects execution of MPO investment programs

For example:
- Interstate pavement projects
- Bridge projects
- Mobility projects

$4.8 billion in federal aid FY 17-21*

*Highway and Transit Must be matched with 20% state funds
**MPO spending by priority and program (subset of Highway spending)**

### STIP % of projects by priority

**2017-2019**
(by $ value of highway projects)

- **Priority 1: Reliability** - $601.7 million
  - Priority 1 projects are almost all MassDOT Highway Division advanced projects for federally-aided projects on our Interstates, National Highway System roadways, or bridges that qualify for federal funding

- **Priority 2: Modernization** - $452.1 million
  - 58% of Roadway Reconstruction projects are on municipally owned roadways

- **Priority 3: Expansion** - $141.7 million

### MPO programming of municipal projects:

- On average, MPOs prioritize and program approximately 33% of available highway federal-aid through the annual State Transportation Improvement Program process – for the FFY 2017-2021 STIP this is estimated to be approximately $1.08 billion

- For municipally owned roadways, Chapter 90 is typically used for Priority 1 projects, while federal-aid is used for projects that are too expensive and too difficult to pay for with Chapter 90 funds, often Priority 2 and 3 projects

- MPO prioritized projects generally scored as well as MassDOT projects with score averages of 48 and 52 respectively

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**MPO spending by priority and program (subset of Highway spending)**

- **Interstate pavement** - 19%
- **Non-interstate pavement** - 9%
- **Bridge** - 18%
- **Roadway maintenance** - 1%
- **Routine safety maintenance** - 3%
- **Intersection safety** - 5%
- ** ITS** - 1%
- **ADA retrofits** - 1%
- **Multi-use paths** - 7%
- **Capacity** - 5%
- **Non-interstate pavement** - 9%
- **Roadway reconstruction** - 31%

- **Priority 1: Reliability**
- **Priority 2: Modernization**
- **Priority 3: Expansion**

- Figures represent obligation amounts, not cash flow values based on federal fiscal years
- Figures represent projects not yet underway
Program sizes reflect a strong focus on Priority 1 spending

Draft Plan Spending by Priority

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<th>Priority</th>
<th>Spending (in $)</th>
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<td>Planning &amp; Enterprise Svcs</td>
<td>$210,500,000</td>
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Total 5-year program size: $14.3B

Source: Division program size requests; DOT estimates of funding source amounts and usability to meet program size requests
Draft for discussion purposes only – Pre-decisional
Distribution of draft program spending between Divisions

Source: Division program size requests; DOT estimates of funding source amounts and usability to meet program size requests

Draft for discussion purposes only – Pre-decisional
Overview and Highlights

- CIP Process
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CIP Highlights

Total proposed spending of $14.3 billion could grow even further

- Highway division planned spending does not include spending of all available obligated federal funding in out-years
- MassDOT and MBTA will aggressively pursue discretionary federal funding, public-private partnerships and value-capture funds

60% of spending is for Priority 1 projects

- Highway division focus is on improving pavement and bridge condition

Priority 2 projects will modernize and enhance the existing system

- Funding is provided for mandated safety improvements such as Positive Train Control on the commuter rail system and collision avoidance system on the Green Line
- Accessibility investments are proposed for Highway assets (curb ramps) and MBTA and rail stations
- Modernization projects address critical links in the transportation network for roadways, rail and transit

While spending on Priority 3 expansion projects is limited, funding is included for targeted and strategic expansion of transit, bicycle and pedestrian networks
Priority 1: Maintain and improve the overall condition and reliability of the transportation system

### Highway programs

- **Bridges:** With the high cost mega-projects addressed by the Accelerated Bridge Program, the proposed $2 billion bridge program – if extended for a full decade – would reduce the proportion of bridges that are structurally deficient to under 5%
- **The Municipal Bridge Program** for smaller, municipally-owned bridges is funded at the full $50 million proposed in the Chapter 90 bill
- With the recent asset management report showing that pavement condition on state-owned, non-interstate highways deteriorating badly if current spending continues, this program is proposed to increase by 60% over historic levels to more than $400 million
- **The Pre-Apprenticeship program** pilot, which creates access to construction apprenticeship programs, has been funded at the full $4.6 million recommended by a stakeholder working group so that the program can expand to more parts of the state

### MBTA

- The four MBTA Priority 1 programs are sized based on the proportion of those asset categories in the $7.4 billion State of Good Repair backlog, with spending designed to ramp up to the $765 million level recommended by the FMCB by FY18 and then remain at that level
- $1.6 billion is proposed for design and acquisition of new Red, Orange, and Green line vehicles and buses and for capital maintenance of the existing fleet, including $90 million to improve the reliability of commuter rail locomotives and $150 million for commuter rail coaches
- Over $1 billion is proposed for track, signal and power projects on the Red, Orange and Green lines and for commuter rail
MBTA State of Good Repair spending ramps up to $765 million annual spend recommended by Fiscal Management and Control Board as of FY18

Historical State of Good Repair Spending ($$ in mm)

<table>
<thead>
<tr>
<th>Year</th>
<th>FY09</th>
<th>FY10</th>
<th>FY11</th>
<th>FY12</th>
<th>FY13</th>
<th>FY14</th>
<th>FY15</th>
<th>Average</th>
<th>Target</th>
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<tr>
<td></td>
<td>412.9</td>
<td>302.6</td>
<td>357.2</td>
<td>337.1</td>
<td>386.2</td>
<td>479.9</td>
<td>539.5</td>
<td>402.2</td>
<td>765.0</td>
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</tbody>
</table>

SGR Phasing: Ramp up to $765M by FY18 ($$ in mm)

<table>
<thead>
<tr>
<th>Year</th>
<th>Average</th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
<th>FY19</th>
<th>FY20</th>
<th>FY21</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>402.2</td>
<td>600.0</td>
<td>682.5</td>
<td>765.0</td>
<td>765.0</td>
<td>765.0</td>
<td>765.0</td>
</tr>
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</table>
Priority 1: Maintain and improve the overall condition and reliability of the transportation system

MBTA (continued)

- $654 million in proposed investments in MBTA facilities includes major investments in the critical Cabot and Wellington maintenance facilities as well as in Wollaston station on the Red Line and the Winchester commuter rail station
- The proposed $402 million bridge program includes $121 million for the much-needed project to repair Draw 1/Tower A at North Station

Rail

- Due to numerous acquisitions of rail assets in recent years, MassDOT owns almost as many miles of track as the MBTA but has historically budgeted very little to properly maintain its rail assets, so proposed spending on rail maintenance would quintuple from the historic level of $50 million annually to $250 million

Transit

- MassDOT will continue to provide Regional Transit Authorities with $20-25 million/year in capital assistance, with the draft CIP proposing to spend $14 million for vehicle and facility maintenance and $58 million for replacement RTA vehicles (along with an additional $42 million for Priority 2 RTA capital programs)

Aeronautics

- The CIP allocates approximately $200 million for the two Priority 1 programs in Aeronautics, the Airport Capital Improvement Program and the Pavement Management Program, continuing recent funding levels and ensuring that sufficient funding is available to take maximum advantage of available funding from the Federal Aviation Administration
Projects that MassDOT is Legally Required to Deliver

As part of this plan, legal commitments will be funded from before sizing of priorities. These include the below contractual, state, and federal mandates

**MBTA**
- Blue Hill Avenue Station
- Positive Train Control
- Green Line ATP
- Accessibility/ Boston Center for Independent Living
- Green Line Extension

**Highway**
- Greenway Conservancy Maintenance Facility

**Rail**
- Rail Knowledge Corridor MAAB Platforms
- FRA Compliance (Middleboro/Framingham)
- Potential for other legal commitments

**RMV**
- RMV Real ID
- Commercial Driver’s License (CDLIS)
Priority 2: Modernize the transportation system to make it safer and more accessible and to accommodate growth

Critical Linkages

- Projects supported by the 18% of the CIP to be spent on Priority 2 projects, as well as many of the planning initiatives funded by the CIP, focus on critical linkages in the transportation network that need to be re-analyzed, re-designed and re-built; examples include the I-495 interchange on the Mass. Pike as well as the Allston viaduct on the Pike and the reconstruction of Route 79 in Fall River so that the viaduct structure no longer separates the city from its waterfront.

Highway

- The Complete Streets funding program is designed to encourage Massachusetts cities and towns to redesign and modernize key streets to better accommodate all users; with over 200 communities having already taken training programs, the draft CIP funds this program at $50 million or $10 million/year for technical assistance and construction grants.

- Having catalogued and rated the condition of 27,000 curb ramps located along MassDOT’s 1200 linear miles of sidewalks, the CIP proposes to spend $19 million for retrofits to comply with the Americans with Disabilities Act transition plan.

MBTA

- The CIP anticipates the receipt of $154 million in TIFIA and $234 million in RIIF funding to pay for the completion of federally-required Positive Train Control on the commuter rail system.

- Having completed accessibility improvements at designated key stations, the MBTA has launched its Plan for Accessible Transit Infrastructure (PATI) to identify the next generation of accessibility investments and $150 million is proposed to fund both design and construction work at specific stations as the PATI work advances.
Priority 2: Modernize the transportation system to make it safer and more accessible and to accommodate growth

### Rail
- Mandated accessibility improvements for MassDOT-owned rail assets are budgeted at $17 million
- The Industrial Rail Access Program, which supports rail investments that support jobs and economic development, is level funded at $15 million

### Regional Transit Authorities
- $42 million is programmed for three types of funding programs that help RTAs modernize their existing vehicles and facilities

### Aeronautics
- $11.6 million is included in the CIP to continue work on administration buildings at general aviation airports

### Registry of Motor Vehicles
- The RMV modernization program to replace the ALARs system has been re-named ATLAS and $105 million toward the cost of that critical software upgrade is included
- $15 million is budgeted for modernization of RMV facilities to comply with Real ID and provide better customer service

### IT
- Nearly $50 million is proposed to modernize a variety of critical IT systems at MassDOT, the MBTA and the RMV
### Priority 3: Expand diverse transportation options for communities throughout the Commonwealth

<table>
<thead>
<tr>
<th>Targeted and Strategic Expansion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Only 13.5% of the CIP is programmed for Priority 3 programs and projects and $1.1 billion (of the $1.95B total) is set aside for the Green Line extension (GLX) while the MassDOT and MBTA boards consider whether and how to proceed with that project.</td>
</tr>
<tr>
<td>Over 80% of Priority 3 funding is for expanded rail, transit, pedestrian and bicycle capacity rather than roadway capacity.</td>
</tr>
</tbody>
</table>

#### MBTA and Rail

- In this iteration of the CIP, the required state share of $1.1 billion under the GLX Full Funding Grant Agreement remains available for that project (although from a cash flow perspective the CIP does not anticipate that the entire amount would be spent by FY22).
- South Coast Rail is budgeted at $148 million for early action projects, advancing design and beginning permitting; once the project design is more advanced and a permitting timeline is final, a construction budget can be established and funding to finance construction will need to be revisited in one of the annual updates to the CIP.
- $26 million is included to complete Fairmount Corridor stations, including the Blue Hill Avenue station.
- The CIP includes funding to complete Phase 1 of the Silver Line Gateway project in Chelsea and anticipates that MassDOT will seek additional funding to complete Phase 2.
- In addition to funding to close out the Commonwealth’s funding for the Knowledge Corridor, the CIP proposes to invest $32 million to refurbish locomotives and coaches that could then be used for pilot service either on the Knowledge Corridor or for commuter rail pilots.
Priority 3: Expand diverse transportation options for communities throughout the Commonwealth

### Bicycle and Pedestrian Facilities
- One of the transportation networks most in need of added capacity is that for pedestrians and cyclists; with statewide bicycle and pedestrian plans under way, the CIP sets aside $60 million ($15 million annually beginning in FY18) to fund high priority projects identified in those plans.
- An additional $157 million is programmed for multi-use paths (such as the Cochituate Rail Trail in Framingham/Natick, the extension of the Bruce Freeman Rail Trail in Concord, the Columbia Greenway Rail Trail in Westfield, the World War II Veterans Train in Norton/Mansfield and the Ashuwillticook Rail Trail extension in Lanesborough/Pittsfield).
- When these two programs and the Complete Streets program are combined with the tens of millions of dollars spent on pedestrian and bicycle accommodations as part of Highway’s roadway maintenance and roadway reconstruction programs, as much as $400 million in total will be spent in expanding active transportation options under this CIP.

### Highway
- Only a small number of highway capacity projects are included in the CIP, including the completion of underway projects such as the Route 128 add-a-lane project and Phase III of the Middlesex Turnpike Project.
- The reconstruction and widening of Route 18 in Weymouth and Abington is a roadway capacity project included in the CIP that will support continued development of SouthField (the former South Weymouth Naval Air Station).
- One additional highway capacity project in Dartmouth involves the reconstruction of Faunce Corner Road and improvements to I-195 ramps and intersections.

### Planning
- MassDOT planning is in progress on a number of corridor- and site-specific plans in order to enhance our ability to intelligently expand in the future.
Planning investments: Statewide plans

There are a number of statewide modal plans that are already, or will soon be underway:

**Focus40 (underway)**
- 20-year capital investment strategy for the FMCB
- State of the System reports summarize existing conditions on www.mass.gov/massdot/focus40
- Major public launch event to discuss future trends being planned for Spring 2016

**Statewide Modal Plans**
- Rail Plan (underway) – Satisfies the federal requirement for a statewide rail plan to be updated every five years; will look at rail freight assets and plans statewide, and passenger rail assets not included in the MBTA network.
- Pedestrian Plan (underway) – Although the Commonwealth oversees a relatively small share of physical pedestrian assets, this Plan will establish policies and goals for both state and municipal investments in walking
- Bicycle Plan (in development) – Update of the 2008 Statewide Bicycle Plan, and the first statewide plan issued in an era when bicycling has become an increasingly viable and popular form of transportation for short trips
- Freight Plan (in development) – Examines the condition of the Commonwealth’s multimodal freight system and satisfies the FAST Act requirement for a state to be eligible for new federal freight funding
Planning investments: Illustrative corridor plans

**North South Rail Link Feasibility Reassessment** (scope being finalized):
- Identify right of way needs
- Update cost and ridership estimates to the extent possible using a limited design
- Examine potential service plan and fleet needs
- Assess potential transportation system benefits and challenges

**Route 3 South Study** (scope being finalized)
- MassDOT studied improvements to Route 3, focused on the addition of a new high-occupancy toll (HOT) lane, to be procured as a public-private partnership to be procured in 2014-15
- After determining that the revenues from a HOT lane would be insufficient to fund the full costs of improvements, MassDOT has decided to proceed with a full corridor study which will consider a more comprehensive range of improvements to Route 3

**Everett Transit Needs Study** (final report anticipated Summer 2016)
- Evaluation of potential strategies for improving transit service in the City of Everett—both in the densely populated northern half and the industrial areas targeted for redevelopment in the south.

**Route 107 Corridor Study – Salem and Lynn** (study completion expected Summer 2016)
- Study area is Route 107 between Boston Street in Salem and Chestnut Street in Lynn
- Intent is to develop and analyze a range of operational and geometric improvements to address existing issues and mitigate impacts from new retail development

**Arsenal Street Corridor Transportation Study** (study completion expected Spring 2017)
- Study corridor is primarily Arsenal Street from Watertown Square to Leo Birmingham Parkway in Boston
- Purpose is to evaluate existing and future multimodal conditions along the corridor, develop and analyze alternatives, with a primary focus on identifying ways to improve the MBTA 70/70A bus service
- CIP Process
- Sources and Uses
- Overview and Highlights
- **Draft Program Sizes**
- Appendix
Division Program Sizes

- The following slides highlight key programs and illustrative projects within each division
- Complete set of project lists by priority and programs are still under development and will be distributed by the end of the month
**Division highlights - Highway**

**Priority 1: Reliability - $4.38 billion**
- Bridges: With the high cost mega-projects addressed by the Accelerated Bridge Program, the proposed $2 billion bridge program – if extended for a full decade – would reduce the proportion of bridges that are structurally deficient to under 5%.
- The Municipal Bridge Program for smaller, municipally-owned bridges is funded at the full $50 million proposed in the Chapter 90 bill.
- With the recent asset management report showing that pavement condition on state-owned, non-interstate highways deteriorating badly if current spending continues, this program is proposed to increase by 60% over historic levels to more than $400 million.
- The Pre-Apprenticeship program pilot, which trains a diverse group of access construction apprenticeship programs, has been funded at the full $4.6 million recommended by a stakeholder working group so that the program can expand to more parts of the state.

**Priority 2: Modernization – $1.05 billion**
- The Complete Streets funding program is designed to encourage cities and towns to redesign and modernize streets to better accommodate all users; with over 200 communities having already taken training programs, the draft CIP funds this program at $10 million/year for technical assistance and construction grants.
- Having catalogued and rated the condition of 27,000 curb ramps located along MassDOT’s 1,200 linear miles of sidewalks, the CIP proposes to spend $19 million for retrofits to comply with the Americans with Disabilities Act transition plan.
• **Priority 3: Expansion - $533.2 million**

  - One of the transportation networks most in need of added capacity is that for pedestrians and cyclists; with statewide bicycle and pedestrian plans under way, the CIP sets aside $60 million ($15 million annually beginning in FY18) to fund high priority projects identified in those plans.
  
  - An additional $157 million is programmed for multi-use paths (such as the Cochituate Rail Trail in Framingham/Natick, the extension of the Bruce Freeman Rail Trail in Concord, the Columbia Greenway Rail Trail in Westfield, the World War II Veterans Train in Norton/Mansfield and the Ashuwillticook Rail Trail extension in Lanesborough/Pittsfield).
  
  - When these two programs and the Complete Streets program are combined with the tens of millions of dollars spent on pedestrian and bicycle accommodations as part of Highway’s roadway maintenance and roadway reconstruction programs, as much as $400 million in total will be spent in expanding active transportation options under this CIP.
  
  - Only a small number of highway capacity projects are included in the CIP, including the completion of underway projects such as the Route 128 add-a-lane project and Phase III of the Middlesex Turnpike.
  
  - The reconstruction and widening of Route 18 in Weymouth and Abington is a roadway capacity project included in the CIP that will support continued development of South Field (the former South Weymouth Naval Air Station).
  
  - One additional highway capacity project in Dartmouth involves the reconstruction of Faunce Corner Road and improvements to I-195 ramps and intersections.

1 % = Intelligent Transportation Systems
Municipal Bridge Program
Bike and Pedestrian

0.5% = ADA Retrofit Program
Pre-Apprenticeship Program
Retainage

1 % = Intelligent Transportation Systems
9% = Highway continued
8% = Interstate Pavement
7% = Non Interstate DOT Pavement
6% = Design, Engineering, ROW, Etc
5% = CAT Trust Spending
3% = Roadway Maintenance
3% = Safety Maintenance
2% = ITS
2% = Intersection Safety
3% = Roadway Reconstruction
1% = Municipal Bridge Program
1% = AET (Electronic Tolling)
2% = Facilities
5% = CAT Trust Spending
3% = Complete Streets
1% = Bike+Pedestrian
1% = Priority 3: Expansion
34% = Bridge
5% = Priority 1: Reliability
1% = Priority 2: Modernization

## Highway draft program sizes

<table>
<thead>
<tr>
<th>Priority</th>
<th>Program</th>
<th>Program Size Request</th>
<th>Historical Program Size</th>
<th>Free Bond Cap Used</th>
<th>Draft Program Size</th>
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<td>Municipal Bridge Program</td>
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<td>Priority 1 Total</td>
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<td>Roadway Reconstruction</td>
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<td>Complete Streets</td>
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<td></td>
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<td>Bike+Pedestrian</td>
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<td>$60,000,000</td>
<td>$60,000,000</td>
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<td>Priority 3 Total</td>
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<td>$60,000,000</td>
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<td>$698,060,941</td>
<td>$5,922,271,038</td>
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Source: Division program size requests; DOT estimates of funding source amounts and usability to meet program size requests; staff input
Draft for discussion purposes only – Pre-decisional
FY2017 – FY2021 Priority 1 Bridge $2 Billion Target; Illustrative list of projects for the available programmable amount

Total amount available to program: $2 Billion

Illustrative List of Projects:

• $220M for Routine Structural Maintenance
• $122M for Boston – North Washington Street over Boston Inner Harbor
• $46M for Lynn/Saugus – Route 107 over the Saugus River
• $30M for Raynham - Route 44 over Route 24
• $22M for Agawam/West Springfield Route 147 over the Westfield River
• $9M for Boston – Massachusetts Ave. over Commonwealth Ave.
• $9M for Hopkinton/Westborough - Fruit Street over CSX and Sudbury River
• $3M for Pittsfield – Lakeway Drive over Onoto Lake
• $2M for West Brookfield – Wickaboag Valley Road over Sucker Brook

SOURCE: DOT and MBTA internal estimates of available sources and applicable uses; Division initial estimates of program sizes
Draft for discussion purposes only – Pre-decisional
FY2017 – FY2021 Priority 1 Facilities $118M Target; Illustrative list of projects for the available programmable amount.

Total amount available to program: $92 Million

Illustrative List of Projects:

- $37M for Worcester – Construction and Relocation of District 3 Administration Building
- $21M for Milton – Construction of MassDOT Central Maintenance Facility and Highway Operations Center
- $1M for Huntington – Construction of Pre-Engineered Storage Facility at MassDOT Depot
- Greenway Maintenance Facility
FY2017 – FY2021 Priority 1 Interstate Pavement $390M Target; Illustrative list of projects for the available programmable amount.

Total amount available to program: $390 Million

Illustrative List of Projects:

- $25M for Quincy/Milton/Boston - Resurfacing and Related Work on a Section of I-93
- $17M for Littleton/Westford – Resurfacing and Related Work on a Section of I-495
- $11M for Andover Methuen – Resurfacing and Related Work on a Section of I-93
- $11M for Natick/Wayland/Weston – Resurfacing and Related Work on a Section of I-90
- $5M for Brimfield Palmer – Resurfacing and Related Work on a Section of I-90

SOURCE: DOT and MBTA internal estimates of available sources and applicable uses; Division initial estimates of program sizes
Draft for discussion purposes only – Pre-decisional
FY2017 – FY2021 Priority 1 Non-Interstate Pavement $478M Target; Illustrative list of projects for the available programmable amount.

Total amount available to program: $478 Million

Illustrative List of Projects:

- $106M for Routine Pavement Maintenance
- $9M for Foxborough/Walpole – Resurfacing and Related Work on Route 1
- $8M for Lynnfield/Peabody – Resurfacing and Related Work on Route 1
- $4M for Goshen – Resurfacing and Related Work on Route 9
- $2M for Templeton - Resurfacing and Related Work on Route 68
- $2M for Dedham - Resurfacing and Related Work on Route 109
- $2M for Granby - Resurfacing and Related Work on Route 202
FY2017 – FY2021 Priority 1 Roadway Maintenance $167M Target; Illustrative list of projects for the available programmable amount.

Total amount available to program: $167 Million

Illustrative List of Projects:

- $3.3M for Worcester – Stormwater Improvements along I-290 and 122A
- $1.1M for District 1 – Roadway Repairs and Slope Stabilization at Various Locations
- $0.5M for Chelmsford/Concord/Lowell/Peabody – Stormwater Improvements along Route 2/Route 2A, Route 128 and Route 3/3A
- $0.5M for District 6 - Roadside Barrier Reconstruction and Repair at Various Locations
FY2017 – FY2021 Priority 1 Safety Maintenance $167M Target; Illustrative list of projects for the available programmable amount.

Total amount available to program: $167 Million

Illustrative List of Projects:

- $9.7M for Arlington/Belmont - Highway Lighting Repair and Maintenance on Route 2
- $5.5M for Auburn/Worcester – Guide and Traffic Sign Replacement on a Section of I-290
- $5.1M for Attleboro to Norwood - Guide and Traffic Sign Replacement on a Section of I-95
- $0.6M for Sturbridge – Sign and Pavement Marking Installation and Upgrades on Brookfield Road (Route 148)
- $0.5M for District 1 – Application of Reflectorized Pavement Markings at Various Locations
- $0.4M for District 3 – Refurbishment of Crash Cushion Systems at Various Locations

SOURCE: DOT and MBTA internal estimates of available sources and applicable uses; Division initial estimates of program sizes
Draft for discussion purposes only – Pre-decisional
FY2017 – FY2021 Capacity $315.5M Target; Illustrative list of projects for the available programmable amount.

Total amount available to program: $315.5 Million

Illustrative List of Projects:

- $59M for Weymouth/Abington – Reconstruction and Widening of Route 18
- $38M for Bedford/Billerica – Reconstruction and Widening of Middlesex Turnpike
- $8M for Quincy – Construction of New Bridge form Burgin Parkway over MBTA
- $5M for Springfield – North End Pedestrian Underpass
- $4M for Dartmouth – Realignment of Tucker Road to Route 6 and Hathaway Road

SOURCE: DOT and MBTA internal estimates of available sources and applicable uses; Division initial estimates of program sizes
Draft for discussion purposes only – Pre-decisional
FY2017 – FY2021 Multi – Use Path $157.7M Target; Illustrative list of projects for the available programmable amount.

Total amount available to program: $157.7 Million

Illustrative List of Projects:

- $8M for Framingham/Natick – Cochituate Rail Trail Including Pedestrian Bridge Over Route 9
- $7M for Concord – Bruce Freeman Rail Trail – From Commonwealth Ave. to Powder Mill Road
- $7M for Westfield – Columbia Greenway Rail Trail From East Silver Street to Cowles Court includes 6 Bridges
- $4M for Norton/Mansfield – World War II Veterans Trail
- $3M for Lanesborough/Pittsfield – Ashuwillticook Rail Trail Extension to Crane Ave
FY2017 – FY2021 ADA Retrofit $19.4M Target; Illustrative list of projects for the available programmable amount.

Total amount available to program: $19.4 Million

Illustrative List of Projects:

- $2.0M for ADA Retrofits at Various Locations
- $1.3M for ADA Retrofits at Various Locations
- $0.3M for ADA Retrofits at Various Locations
FY2017 – FY2021 Intersection Safety $115M Target; Illustrative list of projects for the available programmable amount.

Total amount available to program: $115 Million

Illustrative List of Projects:

- $3.5M for Holyoke – Traffic Signal Upgrades at 15 Intersections along High and Maple Streets
- $2.8M for Lowell – Improvements on Route 38 at Four Intersections
- $2.0M for Pittsfield – Traffic Signal and Intersection Improvements at Center Street and West Housatonic Street
- $1.1M for Northampton – Intersection Improvements at Elm Street, Main Street, State Street and New South Street
- $0.5M for Gardner/Leominster/Sterling Intersection Improvements at 3 Locations

Draft for discussion purposes only – Pre-decisional
FY2017 – FY2021 ITS $74.7M; Illustrative list of projects for the available programmable amount.

Total amount available to program: $74.7 Million

Illustrative List of Projects:

- $7.2M for District 5/District6 – ITS Construction on I-95 From Canton to Attleboro
- $3.9M for District 3 – Installation of CCTV Cameras and VMS on I290 Between I-495 and I-90
- $2.4M for Statewide – Expansion of CCTV, VMS and the Traffic Sensor Network
FY2017 – FY2021 $745 Million Roadway Reconstruction Target; I lustrative list of projects for the available programmable amount.

Total amount available to program: $745 Million

Illustrative List of Projects:

- $49.7M for Charlton/Oxford – Reconstruction on Route 20
- $14.6M Needham/Newton – Reconstruction of Highland Avenue and Needham Street including the Bridge over the Charles River
- $9.3M for Leominster – Reconstruction/Rehabilitation on Central Street including Rehabilitation of the Bridge Carrying Central Street over Fall Brook
- $7.7M for Everett – Reconstruction of Ferry Street, South Ferry Street and a Portion of Elm Street
- $4.7M for Holyoke/West Springfield – Rehabilitation of Riverdale Road
- $4.6M for Brockton – Corridor Improvements on Belmont Street
- $2.6M for Williamstown – Reconstruction and Related Work on Water Street (Route 43)
Division highlights – MBTA

Spending by priority and program

- **Priority 1: Reliability - $3.74 billion**
  - $654 million in proposed investments in MBTA facilities includes major investments in the critical Cabot and Wellington maintenance facilities as well as in Wollaston station on the Red Line and the Winchester commuter rail station.
  - The proposed $402 million bridge program includes $121 million for the much-needed project to repair Draw 1/Tower A at North Station.

- **Priority 2: Modernization - $1.19 billion**
  - The CIP anticipates the receipt of $154 million in TIFIA and $234 million in RIIF funding to pay for the completion of federally-required Positive Train Control on the commuter rail system.
  - Having completed accessibility improvements at designated key stations, the MBTA has launched its Plan for Accessible Transit Infrastructure (PATI) to identify the next generation of accessibility investments and $150 million is proposed to fund both design and construction work at specific stations as the PATI work advances.
• **Priority 3: Expansion - $1.39 billion**
  
  • In this iteration of the CIP, the required state share of $1.1 billion under the GLX Full Funding Grant Agreement remains available for that project (although from a cash flow perspective the CIP does not anticipate that the entire amount would be spent by FY22)
  
  • $35 million is included to complete Fairmount Corridor stations, including the Blue Hill Avenue station
  
  • The CIP includes funding to complete Phase 1 of the Silver Line Gateway project in Chelsea and anticipates that MassDOT will seek additional funding to complete Phase 2
  
  • South Coast Rail is budgeted at $148 million for early action projects, advancing design and beginning permitting; once the project design is more advanced and a permitting timeline is final, a construction budget can be established and funding to finance construction will need to be revisited in one of the annual updates to the CIP
## MBTA draft program sizes

<table>
<thead>
<tr>
<th>Priority Number</th>
<th>Program</th>
<th>Historical Program Size</th>
<th>Division Program Size Request</th>
<th>Filled with additional free bond cap</th>
<th>Draft Total Program Size</th>
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Source: Division program size requests; DOT estimates of funding source amounts and usability to meet program size requests; staff input
Draft for discussion purposes only – Pre-decisional
FY2017 – FY2021 Revenue Vehicle $1.605B Target; Illustrative list of projects for the available programmable amount

Total amount available to program: $579M

Illustrative List of Projects:

- $204M for Red Line #3 fleet mid-life overhaul
- $150M for Commuter Rail coach procurement
- $90M for Commuter Rail locomotive reliability
- $45M for purchase of 60 forty (40) foot buses
- $42M for New Flyer bus overhaul
- $28M for Green Line #8 reliability program
- $9M for design and reliability of PCC fleet
- $5M for design of new Green Line Light Rail fleet
- $5M for design of replacement DMA/Sliver Line fleet

Source: MBTA Internal Projections
Draft for discussion purposes only – Pre-decisional
FY2017 – FY2021 $402M Bridge Target; Illustrative list of projects for the available programmable amount

Total amount available to program: $201M

Illustrative List of Projects:

- $121M for Draw 1/Tower A at North Station
- $17M for East Street Bridge
- $15M for High Line Bridge
- $12M for Bacon Street Bridge
- $11M for Lynn Fells Parkway Bridge
- $7M for Commercial Street Bridge
- $6M for Emergency Bridge Repairs program
- $5M for Red Line Bridge Repairs
- $4M for Shawsheen River Bridge
- $3M for Neponset River Lower Mills Bridge

Source: MBTA Internal Projections
Draft for discussion purposes only – Pre-decisional
FY2017 – FY2021 Track, Signals and Power $1.080B Target; Illustrative list of projects for the available programmable amount

Total amount available to program: $839.8M

Illustrative List of Projects:

- $553M for Red, Orange and Green Line signal improvements
  - Green Line Reservoir Interlocking
  - Green Line Reservoir to Riverside
  - Green Line Govt. Center, Copley and Park Street
  - Green Line Beacon Junction (Kenmore Square C&D Split)
  - Orange Line digital track circuit
  - Orange Line 60Hz track circuit upgrade to 100Hz
  - Orange Line Southwest Corridor (Back Bay to Forest Hills)
  - Orange Line headway improvement signals project
  - Red Line 60 Hz track circuit updated to 100Hz
  - Red Line digital Ashmont signals
  - Red Line headway improvement signals project
  - Red Line Columbia Junction (JFK/Braintree/Ashmont)

- $200M for Commuter Rail track and signal improvements

- $50M for Red and Orange Line track reliability

- $36M for Cabot and Wellington improvements

Red, Orange, Green and Commuter Rail signal improvements are recommended for Pay-Go funding.

Source: MBTA Internal Projections
Draft for discussion purposes only – Pre-decisional
FY2017 – FY2021 All other facilities (assets) $654M target:
Recommended projects for the available programmable amount

Total amount available to program: $654M

Illustrative List of Projects:

- $100M for Cabot and Wellington improvements
- $70M for System wide radio network upgrades
- $51M for Wollaston Station improvements
- $45M for South Shore garages improvements
- $33M for Winchester Station improvements
- $15M for Hynes Station
- $14M for Hingham Ferry dock repairs
- $4M for 45 High Street fire protection project

Source: MBTA Internal Projections
Draft for discussion purposes only – Pre-decisional
FY2017 – FY2021 Accessibility Program: Illustrative list of projects for the available programmable amount

Total amount available to program: $150M

Illustrative List of Projects:

- $20M for Green Line street level / path of travel program
- $20M for Ruggles Station phase II
- $18M for Oak Grove elevators and path of travel
- $13M for Study of remaining inaccessible stations
- $13M for Comm Ave access Improvements
- $15M for Elevator accessibility improvements
- $10M for Symphony Station comprehensive design
- $10M for Downtown Crossing comprehensive design
- $7M for Mansfield accessibility improvements
- $6M for Auburndale Station improvements
- $5M for Bus route accessibility improvements
- $5M for Forest Hills accessibility improvements
- $4M for Natick Center comprehensive design
- $4M for South Attleboro comprehensive design

Wollaston Station improvements are included within the Facilities program.

Source: MBTA Internal Projections
Draft for discussion purposes only – Pre-decisional
FY2017 – FY2021 Expansion Projects

Ongoing expansion projects over the next five years:

- $1,110B for Green Line Extension
- $148M for South Coast Rail design and permitting
- $26M for Fairmount Corridor stations
- Chelsea Silver Line Gateway
- Knowledge Corridor

Source: MBTA Internal Projections
Draft for discussion purposes only – Pre-decisional
Division highlights – Rail

Spending by priority and program

- **Priority 1: Reliability - $250.4 million**
  - Due to numerous acquisitions of rail assets in recent years, MassDOT owns almost as many miles of track as the MBTA but has historically budgeted very little to properly maintain its rail assets, so proposed spending on rail maintenance would shift from acquisition to maintenance and increase to $250 million over 5 years. This funding will also be used to implement the improvements that the Commonwealth agreed to make when it acquired these lines.

- **Priority 2: Modernization - $32.4 million**
  - Mandated accessibility improvements for MassDOT-owned rail assets are budgeted at $17 million
  - The Industrial Rail Access Program, which supports rail investments that support jobs and economic development, is level funded at $15 million

- **Priority 3: Expansion - $32.0 million**
  - In addition to funding to close out the Commonwealth’s funding for the Knowledge Corridor, the CIP proposes to invest $32 million to refurbish locomotives and coaches that could then be used for pilot service either on the Knowledge Corridor or for commuter rail pilots
# Rail draft program sizes

<table>
<thead>
<tr>
<th>Priority Number</th>
<th>Program</th>
<th>Total Division Request</th>
<th>Historical Program Size</th>
<th>Filled with free bond cap</th>
<th>Draft Total Program Size</th>
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Source: Division program size requests; DOT estimates of funding source amounts and usability to meet program size requests; staff input
Draft for discussion purposes only – Pre-decisional
FY2017 – FY2021 Railroad Grade Crossings: Section 130 Program
$20.1M target; Illustrative list of projects for the available programmable amount

Total amount available to program: $20.1M

Illustrative List of Projects:
• $20.1M Projects selected per federal regulations

Source: MassDOT Internal Projections
Draft for discussion purposes only – Pre-decisional
FY2017 – FY2021 Federal Obligations: Railroad Contracted Services $93.3M target; Illustrative list of projects for the available programmable amount

Total amount available to program: $93.3M

Illustrative List of Projects:

- $25m PRIIA 209
- $3.8m for Conn River/Knowledge Corridor
- $2m for Framingham Secondary
- $1.6m for Middleboro Secondary

Source: MassDOT Internal Projections
Draft for discussion purposes only – Pre-decisional
FY2017 – FY2021 Safety/Capital Maintenance $137M target; Illustrative list of projects for the available programmable amount

Illustrative List of Projects:

- $58M for track and ROW including ties, ballast, rail, and station repairs on MassDOT owned lines
- $53M for bridges, culverts and other structures on MassDOT owned lines
- $10M for signals, interlockings, yard tracks and other repairs/Improvements to MassDOT owned lines
Spending by priority and program

- **Priority 1: Reliability - $104.2 million**
  - MassDOT will continue to provide Regional Transit Authorities with $20-25 million/year in capital assistance, with the draft CIP proposing to spend $14 million for vehicle and facility maintenance and $58 million for replacement RTA vehicles (along with an additional $42 million for Priority 2 RTA capital programs)
  - Through the Mobility Assistance program MassDOT will provide $16 million to help communities purchase vans for elderly and disabled transportation.

- **Priority 2: Modernization – $42.7 million**
  - $42.7 million is programmed for three funding programs that help RTAs modernize their existing vehicles and facilities
# RTA Transit draft program sizes

<table>
<thead>
<tr>
<th>Priority Number</th>
<th>Program</th>
<th>Total Division Request</th>
<th>Historical Program Size</th>
<th>Filled with free bond cap</th>
<th>Draft Total Program Size</th>
</tr>
</thead>
<tbody>
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Source: Division program size requests; DOT estimates of funding source amounts and usability to meet program size requests; staff input
Draft for discussion purposes only – Pre-decisional
FY2017 – FY2021 MassDOT / RTA Projects - Priority 1 Combined Programs $104.2M Target; Illustrative list of projects for the available programmable amount

Total amount available to program: $104.2M

Illustrative List of Projects:

- **Mobility Assistance Program** – Purchase 125 vehicles per year for RTA/Municipality/For-Profit Organizations
- **RTA Maintenance, Administration and Operations Facility Improvements**
  - Northampton Maintenance Facility
  - SATCO Main Street O&M Facility
  - PVTA UMass Bus O&M Facility
  - Gallagher Garage Facility
- **RTA Vehicle Overhauls**
- **Acquire and Replacement of RTA Rolling Stock**
  - Articulated Buses
  - Hybrid 35-40FT Buses
  - 18 passenger Mini-Buses
  - Trolley Buses
  - 10-14 Passenger Vans
  - Support and Supervisory Vehicles

Source: Division program size requests; DOT estimates of funding source amounts and usability to meet program size requests; staff input

Draft for discussion purposes only – Pre-decisional
Division highlights - Aeronautics

Spending by priority and program

- **Priority 1: Reliability** - $204.1 million
  - The CIP allocates approximately $200 million for the two Priority 1 programs in Aeronautics, the Airport Capital Improvement Program and the Pavement Management Program, continuing recent funding levels and ensuring that sufficient funding is available to take maximum advantage of available funding from the Federal Aviation Administration.

- **Priority 2: Modernization** - $11.6 million
  - $11.6 million is included in the CIP to continue work on administration buildings at general aviation airports.

- **Priority 3: Expansion**
## Aeronautics draft program sizes

<table>
<thead>
<tr>
<th>Priority Number</th>
<th>Program</th>
<th>Total Division Request</th>
<th>Historical Program Size</th>
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<th>Draft Total Program Size</th>
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Source: Division program size requests; DOT estimates of funding source amounts and usability to meet program size requests; staff input

Draft for discussion purposes only – Pre-decisional
FY2017 – FY2021 $104M Airport Capital Improvement Program: Illustrative list of projects for the available programmable amount

Total amount available to program: $59.3M

Illustrative projects:
- $9.0M – FAA AIP & ASMP Projects– Southbridge Apron
- $1.0M – Security Cameras-New Bedford, Hyannis, Nantucket
- $750K – Pavement Management System Update
- $600K – Fencing and Gates-Orange, Pittsfield
- $400K – Vegetation Management-Stow, Taunton, Lawrence
- $105K – Crack Sealing-Pittsfield, New Bedford, Chatham
- $90K – Pavement Markings-Beverly, Fitchburg, Westfield
- $50K – NAVAID Maintenance-Plymouth, Southbridge, Stow

Source: Aeronautics Internal Projections
Draft for discussion purposes only – Pre-decisional – Confidential and Proprietary
FY2017 – FY2021 $100M Pavement Management System Program: Illustrative list of projects for the available programmable amount

Total amount available to program: **$77.2M**

Illustrative projects:
- $6.7M – Hyannis Barnstable Runway
- $1.8M – Chatham Parallel Taxiway
- $5.7M – Nantucket Taxiway E Rehab, Relocate Taxiway D
- $4.9M – Orange Runway Reconstruct
- $4.8M – Pittsfield Taxiway A Realign & Reconstruct
- $3.0M – New Bedford Taxiway B North Relocation
- $2.7M – Plymouth Runway Reconstruct
- $902.5K – Beverly Runway
- $332.5K – Martha’s Vineyard Apron Design

Source: Aeronautics Internal Projections

Draft for discussion purposes only – Pre-decisional – Confidential and Proprietary
FY2017 – FY2021 $11M Statewide Airport Administration Building Program: Illustrative list of projects for the available programmable amount

Total amount available to program: $11.0M

Illustrative projects:
- $4.6M – Taunton
- $4.4M – Plymouth
- $4.1M – Harriman & West (North Adams)

Source: Aeronautics Internal Projections
Division highlights – IT

Spending by priority and program

Priority 1: Reliability - $19.2 million
Priority 2: Modernization - $49.9 million

- Nearly $50 million is proposed to modernize a variety of critical IT systems at MassDOT, the MBTA and the RMV.
## IT draft program sizes

<table>
<thead>
<tr>
<th>Priority</th>
<th>Program</th>
<th>Division Program Size Request</th>
<th>Filled with Free Bond Cap</th>
<th>Draft Total Program Size</th>
</tr>
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<td>Customer Digital Experience</td>
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<td>Cybersecurity and Merchant Regulations (PCI)</td>
<td>$1,300,000</td>
<td>$1,300,000</td>
<td>$1,300,000</td>
</tr>
<tr>
<td></td>
<td>Highway Asset/Contract Management</td>
<td>$12,150,000</td>
<td>$1,321,691</td>
<td>$12,150,000</td>
</tr>
<tr>
<td></td>
<td>MassDOT/MBTA Enterprise Workflow/Paper Reduction</td>
<td>$7,000,000</td>
<td>$761,468</td>
<td>$7,000,000</td>
</tr>
<tr>
<td></td>
<td>MassDOT/MBTA Workforce Management</td>
<td>$10,300,000</td>
<td>$10,032,634</td>
<td>$10,300,000</td>
</tr>
<tr>
<td></td>
<td>Public Safety Modernization</td>
<td>$9,400,000</td>
<td>$6,000,000</td>
<td>$9,400,000</td>
</tr>
<tr>
<td></td>
<td>RMV Customer Service Model Modernization</td>
<td>$4,200,000</td>
<td>$1,348,100</td>
<td>$4,200,000</td>
</tr>
<tr>
<td>Priority 2 Total</td>
<td></td>
<td>$49,850,000</td>
<td>$22,699,017</td>
<td>$49,850,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$69,050,000</td>
<td>$31,650,000</td>
<td>$69,050,000</td>
</tr>
</tbody>
</table>

Source: Division program size requests; DOT estimates of funding source amounts and usability to meet program size requests; staff input
Draft for discussion purposes only – Pre-decisional
Total amount available to program: $19.2M

Illustrative Projects:

- $11.5M for MBTA SGR Infrastructure Projects
- $3.5M for ITS SGR Infrastructure Network Projects
- $2.75M for HWY SGR Infrastructure Desktop Projects
- $1.45M for RMV SGR Infrastructure Desktop Projects

Source: MassDOT IT Internal Projections
Total amount available to program: $5.5M

Illustrative Projects:

- $2.0M for Increase RMV Online Transactions
- $1.5M for MBTA Website Redesign
- $1.5M for MBTA 360 Dashboard Data Warehouse
- $0.5M for New Aeronautics Security Identification System

Source: MassDOT IT Internal Projections
Total amount available to program: $1.3M

Illustrative Projects:

- $1.3M for DOT IT Security Automation Projects
FY2017 – FY2021 Highway Asset/Contract Management Program
$12.15M Target: Illustrative projects for the available programmable amount

Total amount available to program: $12.15M

Illustrative Projects:

- $8.0M for Transportation Asset Management Application Rationalization
- $3.25M for Document Management and Workflow Solutions
- $0.9M for Transportation Asset Management Working Group Initiatives

Source: MassDOT IT Internal Projections
Total amount available to program: $7.0M

Illustrative Projects:

- $7.0M for MBTA Financial System Upgrade (eProcurement/eSupplier)

Source: MassDOT IT Internal Projections
Total amount available to program: $10.3M

Illustrative Projects:

- $10.0M for MBTA Workforce HR System
- $0.3M for HR Time & Attendance Modernization
FY2017 – FY2021 Public Safety Modernization Program

$9.4M Target: Illustrative projects for the available programmable amount

Total amount available to program: $9.4M

Illustrative Projects:

- $3.5M for Backup Highway Operations Center
- $2.9M for State Highway Permits System
- $2.5M for Integrated Traffic Management System Services
- $0.5M for Occupational Health & Safety Management System Upgrades

Source: MassDOT IT Internal Projections
Total amount available to program: $4.2M

Illustrative Projects:

- $2.0M for Customer Queuing System
- $1.2M for RMV Driver Licensing Program
- $1.0M for Crash System Replacement/Enhancement Program

Source: MassDOT IT Internal Projections
Division highlights – RMV

Spending by priority and program

- **Priority 1: Reliability - $0.5 million**
  - Funds budgeted to improve select RMV facilities

- **Priority 2: Modernization - $120.0 million**
  - The RMV modernization program to replace the ALARS system has been re-named ATLAS and $105 million toward the cost of that critical hardware and software upgrade is included
  - $15 million is budgeted for modernization of RMV facilities and systems to provide better customer service and to comply with Real ID and ensure the Commercial Driver’s License (CDL) Program meets all federal mandates
# RMV draft program sizes

<table>
<thead>
<tr>
<th>Priority</th>
<th>Program</th>
<th>Division Program Size Request</th>
<th>Historical Size</th>
<th>Filled with Free Bond Cap</th>
<th>Draft Total Program Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority 1</td>
<td>Operations Maintenance</td>
<td>$1,000,000</td>
<td>$506,455</td>
<td>$506,455</td>
<td>$506,455</td>
</tr>
<tr>
<td>Priority 1 Total</td>
<td></td>
<td>$1,000,000</td>
<td>$506,455</td>
<td>$506,455</td>
<td>$506,455</td>
</tr>
<tr>
<td>Priority 2</td>
<td>ATLAS</td>
<td>$105,000,000</td>
<td>$105,000,000</td>
<td>$105,000,000</td>
<td>$105,000,000</td>
</tr>
<tr>
<td>Priority 2</td>
<td>CDLIS</td>
<td>$1,000,000</td>
<td>$0</td>
<td>$1,000,000</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>Priority 2</td>
<td>Customer Service Modernization</td>
<td>$7,605,000</td>
<td>$1,395,000</td>
<td>$5,000,000</td>
<td>$5,000,000</td>
</tr>
<tr>
<td>Priority 2</td>
<td>Kiosks</td>
<td>$5,000,000</td>
<td>$0</td>
<td>$5,000,000</td>
<td>$5,000,000</td>
</tr>
<tr>
<td>Priority 2</td>
<td>Real ID</td>
<td>$4,000,000</td>
<td>$0</td>
<td>$4,000,000</td>
<td>$4,000,000</td>
</tr>
<tr>
<td>Priority 2 Total</td>
<td></td>
<td>$122,605,000</td>
<td>$106,395,000</td>
<td>$120,000,000</td>
<td>$120,000,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$123,605,000</td>
<td>$106,901,455</td>
<td>$120,506,455</td>
<td>$120,506,455</td>
</tr>
</tbody>
</table>

Source: Division program size requests; DOT estimates of funding source amounts and usability to meet program size requests; staff input

Draft for discussion purposes only – Pre-decisional
FY2017 – FY2021 $120.5 Million RMV Program; Illustrative list of projects for the available programmable amount.

Total amount available to program: $111.9 Million

Illustrative List of Projects:

- $105M for ALARS/ATLAS Project – Replacement of Core License, Registration and Revenue Collection System
- $1.4M for various Customer Service Branch Modifications to implement new service delivery model
- $5M for new RMV Self-Service Kiosks

Already underway projects:

- $1M for Commercial Driver’s License System (CDLIS) federally mandated updates
- $4M for Real ID federal compliance

Source: Division program size requests; DOT estimates of funding source amounts and usability to meet program size requests; staff input

Draft for discussion purposes only – Pre-decisional
### Planning and Enterprise Services

#### draft program sizes

<table>
<thead>
<tr>
<th>Program</th>
<th>Total Division Request</th>
<th>Sum of Historical Program Size</th>
<th>Filled with free bond cap</th>
<th>Draft Total Program Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning &amp; Enterprise Svcs</td>
<td>$210,500,000</td>
<td></td>
<td>$0</td>
<td>$210,500,000</td>
</tr>
</tbody>
</table>

#### Planning and Enterprise Services Funding Detail

<table>
<thead>
<tr>
<th>Funding Detail</th>
<th>Total Cost</th>
<th>Funding Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facilities</td>
<td>$25,000,000</td>
<td>Bond Cap</td>
</tr>
<tr>
<td>ISA Spending</td>
<td>$19,500,000</td>
<td>Bond Cap</td>
</tr>
<tr>
<td>Office of Security &amp; Emergency Management</td>
<td>$13,500,000</td>
<td>Bond Cap</td>
</tr>
<tr>
<td>Office of Transportation Planning and MPOs</td>
<td>$122,000,000</td>
<td>FHWA</td>
</tr>
<tr>
<td>Office of Transportation Planning and MPOs</td>
<td>$30,500,000</td>
<td>Bond Cap</td>
</tr>
</tbody>
</table>

Source: Division program size requests; DOT estimates of funding source amounts and usability to meet program size requests; staff input
Draft for discussion purposes only – Pre-decisional
FY2017 – FY2021 $152.5M Planning Program; Illustrative list of projects for the available programmable amount.

Total program size: $152.5M

Illustrative List of Projects:

- **MPOs**
  - MPOs receive Metropolitan Planning (PL) funds apportioned by FHWA. These are pass through funds with a 20% match. Over five-years it is estimated that they will receive $52.0 million (federal aid and match).

- **Sample 2017 projects funded with State Planning and Research funds (federally aided with 20% state match):**
  - $1.88M Corridor Planning
    - Cape Cod Canal Transportation Study
    - I-91 Viaduct Transportation Study
    - Arsenal Street Corridor Study
    - Route 107 Transportation Study
  - $2.7M Long Range Planning
    - Focus40
    - Pedestrian Plan
    - Bicycle Plan
    - Rail Plan
    - Capital Planning
    - Freight Plan
    - Kendall Mobility Task Force
    - Everett Transit Study
  - $0.48M Sustainable Transportation
  - $1.6M GIS Support/Inventory Data
  - $4.6M Research

SOURCE: DOT and MBTA internal estimates of available sources and applicable uses; Division initial estimates of program sizes
Planning and enterprise services

Although there is limited funding allocated in this CIP to Priority 3 Capacity investments, the Office of Transportation Planning is undertaking a variety of planning efforts to look into long-term capacity needs and potential investment opportunities – across all modes. Recommendations from these plans may feed future CIPs.

Statewide Plans

A number of statewide modal plans that are already or will soon be underway include:

**Focus40** (underway)
- 20-year plan for the FMCB
- State of the System reports summarize existing conditions on www.mass.gov/massdot/focus40.
- Major public launch event to discuss future trends is being planned for Spring 2016.

**Statewide Modal Plans**
- Rail Plan (underway) – Satisfies the federal requirement for a statewide rail plan to be updated every five years; will look at rail freight assets and plans statewide, and passenger rail assets not included in the MBTA network.
- Pedestrian Plan (underway) – Although the Commonwealth oversees a relatively small share of physical pedestrian assets, this Plan will establish policies and goals for both state and municipal investments in walking.
- Bicycle Plan (in development) – Update of the 2008 Statewide Bicycle Plan, and the first statewide plan issued in an era when bicycling has become an increasingly viable and popular form of transportation for short trips.
- Freight Plan (in development) – Examines the condition of the Commonwealth’s multimodal freight system and satisfies the FAST Act requirement for a state to be eligible for new federal freight funding.

Source: Division descriptions
Corridor-Specific Planning Efforts

A number of corridor-specific planning initiatives that are already or will soon be underway include:

**North South Rail Link Feasibility Reassessment** (scope being finalized):
- Identify right of way needs
- Update cost and ridership estimates to the extent possible using a limited design
- Examine potential service plan and fleet needs
- Assess potential transportation system benefits and challenges

**Route 3 South Study** (scope being finalized)
- MassDOT studied improvements to Route 3, focused on the addition of a new high-occupancy toll (HOT) lane, to be procured as a public-private partnership to be procured in 2014-15
- After determining that the revenues from a HOT lane would be insufficient to fund the full costs of improvements, MassDOT has decided to proceed with a full corridor study which will consider a more comprehensive range of improvements to Route 3

**Everett Transit Needs Study** (final report anticipated Summer 2016)
- Evaluation of potential strategies for improving transit service in the City of Everett—both in the densely populated northern half and the industrial areas targeted for redevelopment in the south.
### Corridor-Specific Planning Efforts Continued

**Route 107 Corridor Study – Salem and Lynn** (study completion expected Summer 2016)
- Study area is Route 107 between Boston Street in Salem and Chestnut Street in Lynn
- Intent is to develop and analyze a range of operational and geometric improvements to address existing issues and mitigate impacts from new retail development

**Arsenal Street Corridor Transportation Study** (study completion expected Spring 2017)
- Study corridor is primarily Arsenal Street from Watertown Square to Leo Birmingham Parkway in Boston
- Purpose is to evaluate existing and future multimodal conditions along the corridor, develop and analyze alternatives, with a primary focus on identifying ways to improve the MBTA 70/70A bus service

**Sullivan Square Regional Working Group**
- Led by MassDOT with the purpose of assessing and developing long-term transportation improvements that can support sustainable redevelopment and economic growth in and around Sullivan Square.

**MBTA Rapid Transit Corridor Planning**
- The MBTA is working to assess the performance and level of service of the rapid transit lines.
- In January 2015, the MBTA released the Red Line Heavy Rail State of the Service report.
- The end result of this effort will be corridor specific recommendations that will feed the Focus40 plan.
- CIP Process
- Sources and Uses
- Overview and Highlights
- Draft Program Sizes

- Appendix
Highway programs are described as follows (1 of 2)

<table>
<thead>
<tr>
<th>Priorities</th>
<th>Program descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Interstate Pavement</strong></td>
</tr>
<tr>
<td></td>
<td>This program uses federal funds to perform resurfacing and related work on the interstate system. The primary objective of these projects is to improve pavement condition.</td>
</tr>
<tr>
<td></td>
<td><strong>Non-Interstate DOT Pavement</strong></td>
</tr>
<tr>
<td></td>
<td>This program uses federal funds to perform resurfacing and related work on non-interstate DOT owned roadways. In addition to the site specific federal aid projects, state funded maintenance contracts are also used to improve pavement condition.</td>
</tr>
<tr>
<td></td>
<td><strong>Bridge</strong></td>
</tr>
<tr>
<td></td>
<td>This program includes the federal aid replacement and rehabilitation projects as well as the state funded routine structures maintenance contracts.</td>
</tr>
<tr>
<td></td>
<td><strong>Roadway Maintenance</strong></td>
</tr>
<tr>
<td></td>
<td>This program consists of state funded routine maintenance contracts that are used to repair drainage systems, sidewalks, fencing, guardrail and vegetation management. These investments maximize the potential of our assets and increase the useful life. This program also includes the federal aid stormwater retrofit contracts.</td>
</tr>
<tr>
<td></td>
<td><strong>Safety Maintenance</strong></td>
</tr>
<tr>
<td></td>
<td>This program consists of state and federal funded maintenance contracts that are used to repair traffic signals, highway lighting systems, impact attenuators, traffic signs and pavement markers. These investments are essential to providing a safe roadway network for our customers.</td>
</tr>
<tr>
<td></td>
<td><strong>Facilities</strong></td>
</tr>
<tr>
<td></td>
<td>This program is used to maintain, repair and replace buildings that are owned by the Highway Division. This investment provides the infrastructure to enable Highway Division staff to fulfill organizational goals.</td>
</tr>
<tr>
<td></td>
<td><strong>Municipal Bridge</strong></td>
</tr>
<tr>
<td></td>
<td>This program will assist municipalities in repairing and replacing town owned bridges with a span length of less than 20 feet.</td>
</tr>
<tr>
<td></td>
<td><strong>AET (Electronic Tolling)</strong></td>
</tr>
<tr>
<td></td>
<td>Implementation of cashless electronic tolling on the Western Turnpike and Metropolitan Highway System</td>
</tr>
<tr>
<td></td>
<td><strong>CA/T Trust</strong></td>
</tr>
<tr>
<td></td>
<td>Funds restricted for the purpose of repairs associated with defects in the development and construction of the CA/T Third Harbor Tunnel project. Funds can only be used in agreement with FHWA.</td>
</tr>
</tbody>
</table>

Source: Division descriptions
Draft for discussion purposes only – Pre-decisional
## Program descriptions

<table>
<thead>
<tr>
<th>Priorities</th>
<th>Program descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td><strong>Roadway Reconstruction</strong>&lt;br&gt;This program includes projects that are typically federal aid roadway reconstruction projects. Many are municipally proposed projects involving municipally owned facilities. Nearly all of these projects include improvements to bicycle and pedestrian accommodations.</td>
</tr>
<tr>
<td></td>
<td><strong>Intersection Safety</strong>&lt;br&gt;This program includes traffic signal upgrades and intersection improvement projects. These projects provide valuable safety improvements. All new traffic signal installations include Accessible Pedestrian Signals (APS).</td>
</tr>
<tr>
<td></td>
<td><strong>ADA Retrofits</strong>&lt;br&gt;This program consists of projects that are specifically designed to improve the accessibility of state owned sidewalks. Locations will be identified utilizing information collected as part of MassDOT’s ADA Transition Plan. A prioritization methodology that was developed in cooperation with the Massachusetts Office on Disabilities will be implemented for future projects.</td>
</tr>
<tr>
<td></td>
<td><strong>ITS</strong>&lt;br&gt;Projects in this program typically involve the installation of cameras message, signs and communication equipment designed to provide real time traffic information to roadway users. This information allows drivers to make better informed decisions regarding their travel options.</td>
</tr>
<tr>
<td>3</td>
<td><strong>Complete Streets Program</strong>&lt;br&gt;This program rewards communities that demonstrate a commitment to embedding Complete Streets in their policies and practices by providing technical assistance and funding.</td>
</tr>
<tr>
<td></td>
<td><strong>Multi Use Path</strong>&lt;br&gt;Projects in this program typically involve the construction of multi-use paths on alignments that are independent from the roadway network.</td>
</tr>
<tr>
<td></td>
<td><strong>Capacity</strong>&lt;br&gt;This program includes projects that add new connections to or expand the existing transportation network.</td>
</tr>
<tr>
<td></td>
<td><strong>Bicycle and Pedestrian Plan Implementation</strong>&lt;br&gt;This program will fund future projects in accordance with statewide bicycle and pedestrian implementation plans.</td>
</tr>
</tbody>
</table>

Source: Division descriptions

Draft for discussion purposes only – Pre-decisional
### MBTA programs are described as follows (1 of 2)

<table>
<thead>
<tr>
<th>Priorities</th>
<th>Program descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong></td>
<td><strong>Revenue vehicles</strong></td>
</tr>
<tr>
<td></td>
<td>In the FY17-21 CIP, the State of Good Repair target was allocated based on each individual asset class’ percentage of the total backlog ($7.3B). This will establish the program funding programs by asset class for the next five years. Based on available funding, directorates will recommend projects within these categories to return assets to acceptable condition.</td>
</tr>
<tr>
<td></td>
<td><strong>Track, signals, and power</strong></td>
</tr>
<tr>
<td></td>
<td>Revenue vehicle program includes acquisition of new rolling stock as well as mid-life overhauls. Track, signals and power includes a variety of investments designed to improve the reliability of those assets. Bridges and Facilities will follow a similar approach, focusing funding on critical needs in all these two categories.</td>
</tr>
<tr>
<td></td>
<td><strong>Bridges</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Facilities</strong></td>
</tr>
<tr>
<td><strong>2</strong></td>
<td><strong>Capacity improvements</strong></td>
</tr>
<tr>
<td></td>
<td>Investments to track, infrastructure, and car houses designed to ensure that the vehicles scheduled for delivery in FY2019 will operate as intended. This program includes a mix of state of good repair investments and additional improvements designed to modernize the system. Examples include Red and Orange Line infrastructure.</td>
</tr>
<tr>
<td><strong>3</strong></td>
<td><strong>Federally mandated safety programs and accessibility</strong></td>
</tr>
<tr>
<td></td>
<td>To meet federally mandated safety requirements for the commuter rail system. Contracts to complete the work were approved by the Board of Directors; however, the FY17 – FY21 CIP will detail the finance plan necessary to pay for this mandated program. Examples include Positive Train Control, Green Line Automatic Train Protection, and other investments identified through PATI and BCIL.</td>
</tr>
</tbody>
</table>

Source: Division descriptions

Draft for discussion purposes only – Pre-decisional
## MBTA programs are described as follows (2 of 2)

<table>
<thead>
<tr>
<th>Priorities</th>
<th>Program descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>3</strong></td>
<td><strong>Expansion projects</strong></td>
</tr>
</tbody>
</table>

Targeted expansion investments designed to improve access to transit and statewide rail. Examples could include Green Line Extension, South Coast Rail, and Silver Line to Chelsea.
## Programs are described as follows: Rail

<table>
<thead>
<tr>
<th>Priorities</th>
<th>Program descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Safety/Capital...</td>
</tr>
<tr>
<td></td>
<td>Covers cost to maintain MassDOT-owned track and right of way to a minimal classification (Class 1) condition inclusive of structures such as bridges, culverts and grade crossings. Includes FRA compliance inspections.</td>
</tr>
<tr>
<td>2</td>
<td>Federal Obligations / Railroad Contracted Services</td>
</tr>
<tr>
<td></td>
<td>Covers costs for PRIIA (Passenger Rail Investment and Improvement Act) 209 and 212, includes Framingham Secondary, Middleboro Secondary, and Knowledge Corridor Grade Crossing (Section 130 Program)</td>
</tr>
<tr>
<td>3</td>
<td>Grade Crossing (Section 130 Program)</td>
</tr>
<tr>
<td></td>
<td>Repair of grade crossings owned by MassDOT and provide technical support. Cost primarily with federal funds (90% of the cost)</td>
</tr>
<tr>
<td>4</td>
<td>MAAB Compliance</td>
</tr>
<tr>
<td></td>
<td>Compliance with the requirements of MAAB (Massachusetts Architectural Access Board) when significant investments made to assets (e.g. Knowledge Corridor, Springfield Union Station)</td>
</tr>
<tr>
<td>5</td>
<td>Modernize Rail Properties</td>
</tr>
<tr>
<td></td>
<td>Modernization of MassDOT lines to be used for projects such as a storage facility or MassDOT maintenance equipment.</td>
</tr>
<tr>
<td>6</td>
<td>Industrial Rail Access Program</td>
</tr>
<tr>
<td></td>
<td>Investment in private sector rail lines to leverage private investment and increase freight rail usage or to modernize an active line to increase the utility to customer.</td>
</tr>
<tr>
<td>7</td>
<td>Increase Capacity</td>
</tr>
<tr>
<td></td>
<td>Supports Falmouth’s reuse of the Falmouth Depot, and rehabilitation of surplus MBTA equipment (pilot project), and Housatonic Berkshire</td>
</tr>
</tbody>
</table>

Source: Division descriptions

Draft for discussion purposes only – Pre-decisional
## Programs are described as follows: Transit

<table>
<thead>
<tr>
<th>Priorities</th>
<th>Program descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong></td>
<td><strong>MassDOT Mobility Programs: Vehicle Replacement</strong></td>
</tr>
<tr>
<td></td>
<td>The Mobility Assistance Program funds the purchase of vans and related equipment used to provide transportation for the elderly and disabled by Councils on Aging, RTAs, and non-profits.</td>
</tr>
<tr>
<td><strong>1</strong></td>
<td><strong>RTA: Facility and Vehicle Maintenance</strong></td>
</tr>
<tr>
<td></td>
<td>Maintenance of the 15 Regional Transit Authorities’ Facilities and Vehicles in or close to a State of Good Repair (SGR).</td>
</tr>
<tr>
<td></td>
<td><strong>Transit Support</strong></td>
</tr>
<tr>
<td></td>
<td>Funds IT support for the Federal Grants program and technical assistance for the rural transit providers; Funds one year of BusPlus support for the intercity bus program</td>
</tr>
<tr>
<td></td>
<td><strong>Transit and Technical Assistance</strong></td>
</tr>
<tr>
<td></td>
<td>Technical assistance (IT grants management) to rural RTAs in capital project development</td>
</tr>
<tr>
<td><strong>2</strong></td>
<td><strong>RTA: Fleet Expansion</strong></td>
</tr>
<tr>
<td></td>
<td>Construction of new Regional Transit Authority Maintenance, Operations, or Intermodal Transit Facilities such as garages and bus stations. Fleet growth to meet service needs.</td>
</tr>
<tr>
<td><strong>2</strong></td>
<td><strong>RTA: Facility and System Modernization</strong></td>
</tr>
<tr>
<td></td>
<td>Modernization of Regional Transit Authority Facilities and Systems</td>
</tr>
<tr>
<td><strong>2</strong></td>
<td><strong>RTA: Replacement Facilities</strong></td>
</tr>
<tr>
<td></td>
<td>Replacing outdated RTA facilities with modern buildings</td>
</tr>
<tr>
<td><strong>3</strong></td>
<td><strong>No Priority 3 programs</strong></td>
</tr>
</tbody>
</table>

Source: Division descriptions
Draft for discussion purposes only – Pre-decisional

DRAFT FOR BOARD INPUT; NOT FINAL
Programs are described as follows: Aeronautics

<table>
<thead>
<tr>
<th>Priorities</th>
<th>Program descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Airport Pavement Management System</td>
</tr>
<tr>
<td>2</td>
<td>Airport Capital Improvement Program</td>
</tr>
<tr>
<td>3</td>
<td>Statewide Airport Administration and Terminal Building Program</td>
</tr>
<tr>
<td>3</td>
<td>No Priority 3 programs</td>
</tr>
</tbody>
</table>

Source: Division descriptions  
Draft for discussion purposes only – Pre-decisional
Programs are described as follows: RMV

<table>
<thead>
<tr>
<th>Priorities</th>
<th>Program descriptions</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>RMV operations maintenance</td>
<td>Maintain and improve existing operating systems to support service delivery; application platforms, electronic records retention systems</td>
</tr>
</tbody>
</table>
| 2          | ATLAS                        | ▪ Improve RMV service delivery options by replacing the ALARS system  
  ▪ Increase business process efficiency through reduced wait times  
  ▪ Increase the number of transactions done via alternative customer service channels  
  ▪ Increase the capacity of third parties dependent on RMV data |
| 3          | RMV Customer Service Modernization | ▪ Service delivery target of serving 80% of all customers in branches in under 30 minutes and all branch customers in under 1 hour.  
  ▪ Strategy includes updating and upgrading leased branch locations to include the new dual line queuing model, signage, furniture and fixtures |
|            | Kiosks                       | ▪ Branch improvements through installing kiosks to improve customer experience                                                                                                                             |
|            | No Priority 3 programs       |                                                                                                                                                                                                          |

Source: Division descriptions
Draft for discussion purposes only – Pre-decisional
# Programs are described as follows: IT

<table>
<thead>
<tr>
<th>Priorities</th>
<th>Program descriptions</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MassDOT / MBTA Infrastructure Resiliency</td>
<td>Efforts to keep critical Information Technology infrastructure operational and secure. Backup and disaster recovery projects are also included here since they are central to maintaining business continuity in the case of primary system outages and other incidents.</td>
</tr>
<tr>
<td></td>
<td>MassDOT/MBTA Workforce Management</td>
<td>Projects in this category include efforts adjust the ways that MassDOT/MBTA manages workforce productivity and time reporting through implementation of software solutions.</td>
</tr>
<tr>
<td></td>
<td>MassDOT/MBTA Enterprise Workflow/Paper Reduction</td>
<td>Projects in this category utilize technology to improve business processes through automated workflows and other electronic means. Projects that can make improvements in reducing process timelines and contribute to doing more with less also fit into this category.</td>
</tr>
<tr>
<td>2</td>
<td>Highway Asset/Contract Management</td>
<td>Efforts to help the Highway Division track and maintain records for infrastructure assets across the Commonwealth. Through a series of application enhancements and re-platforming, updated business processes will be enforced electronically resulting in better data collection and leading to efficient data driven decisions.</td>
</tr>
<tr>
<td></td>
<td>Customer Digital Experience</td>
<td>Projects in this category directly impact how transportation system users interact with various MassDOT public websites. As the agency’s public face, MassDOT and MBTA websites must be capable of presenting clear, concise, and timely information to the citizens of the Commonwealth 24/7.</td>
</tr>
<tr>
<td></td>
<td>Public Safety Modernization</td>
<td>Safety is the top priority at MassDOT and Information Technology projects in this category play a key role in providing systems to keep customers safe and secure and address transportation network security threats.</td>
</tr>
<tr>
<td></td>
<td>RMV Customer Service Model Modernization</td>
<td>Projects in this category contribute to service delivery at RMV branches on the MassDOT website by streamlining information systems and making data more accessible to employees and customers.</td>
</tr>
<tr>
<td>3</td>
<td>Cybersecurity and Merchant Regulations (PCI)</td>
<td>Projects in this category contribute to keeping IT infrastructure and software compliant with modern digital security standards to protect both agency and citizen data. Keeping ahead in this area and adopting industry best practices is imperative to customer confidence in making secure transactions.</td>
</tr>
</tbody>
</table>

No Priority 3 programs

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