Capital Investment Plan Development 2024-2028 MassDOT Board of Directors

March 15, 2023

2024-2028 Capital Investment Plan (CIP)

Agenda

- Overview of CIP
- Approach
- Strategic Goals
- CIP/STIP Development Timeline
- Changes for 2024-2028
- Funding Sources Overview
- CIP/STIP Key Milestones
- MassDOT Board Engagement
- Next Steps



Overview of the MassDOT 2024-2028 Capital Investment Plan (CIP)

What is the CIP?

The proposed 2024-2028 Capital Investment Plan (CIP) for MassDOT is a budget and policy document. It is a financially constrained investment plan that programs state and federal funds to pay for all of our capital expenditures

What is its purpose?

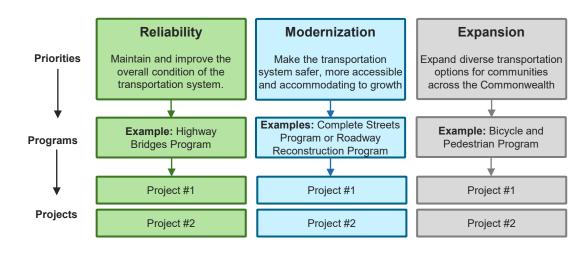
It funds the planning, construction, and capital maintenance of and improvements to the transportation system. It is a rolling five-year plan, updated annually

Funds all investments including roadways, bridges, bicycle and pedestrian facilities, transit investments, aeronautics, rail, and the Registry of Motor Vehicles





How is the CIP built?





2024-2028 CIP Development Approach

Strategic framework

Continues the same strategic framework: priorities→ programs→ projects for this next CIP

Five-year CIP covering 2024-2028

- During 2024-2028 CIP development Divisions are reassessing priorities and investment programs and updating previously planned/programmed investments
- MBTA has developed a standalone CIP for discussion and approval by the MBTA Board of Directors
 - MassDOT's CIP will incorporate the state funding provided to the MBTA

Federal Funding

- STIP¹ and CIP will continue to reflect the federal funding levels authorized in the Bipartisan Infrastructure Law (BIL)
- The 2024-2028 STIP will incorporate the Carbon Reduction, PROTECT² and National Electric Vehicle Charging Infrastructure federal formula funds provided to MassDOT
 - FHWA approved MassDOT's National Electric Vehicle Charging Infrastructure (NEVI) plan in September 2022



¹ State Transportation Improvement Program (STIP

² Promoting Resilient operations for a Transformative, Efficient, Cost-Saving Transportation Program (PROTECT)

Strategic Goals for 2024-2028 CIP

Safety

- Improve safety for all users and adoption of safe system approach
- Develop systematic multimodal safety infrastructure program to address highrisk locations for all roadway users
- Incorporate strategies outlined in Strategic Highway Safety Plan

Climate Stewardship

- Promote investments that support commitment to decarbonizing mobility and adapting transportation infrastructure to meet climate challenges
- Evaluate risk areas and develop strategies to improve the resiliency of transportation assets

Equity

- Promote investments and identify opportunities to expand access to mobility and opportunities for all
- Improve public awareness of planned investments and overall public engagement process

Responsible Asset Management

- Identify and prioritize investments that support the preservation of assets while also modernizing and adapting those assets to meet new needs and challenges
- Strengthen development and tracking of assetbased investment strategies
- Advance goals to achieve desired outcomes and performance metrics and align with multi-modal plans



CIP/STIP Development Timeline for 2024-2028

New Requests

Existing Programs / Projects

Month

FY24-28 CIP/STIP development process Request for new programs/projects and estimated costs

Update spending forecasts

12 Identify needs & update forecasts

Funding requests for new programs and/or projects and spending forecasts for existing projects are updated Preliminary financial guidance developed Evaluate and score new requests

Estimate funding sources and refine CIP program sizes

01
Evaluate requests & sources of funding & set program sizes

New projects are scored & available funding sources estimated; federal formula targets distributed to MPOs CIP programs and

CIP programs and sizes refined based on priorities & performance targets

Readiness Days and project prioritization

02
Readiness Days & draft project selection

Project readiness evaluated Capital sources refined Projects prioritized and draft project selection underway Align CIP / STIP / funding

03 Prioritize projects for FY24-28

CIP programs and sizes finalized
Projects are prioritized across all programs based on project scores, strategic priorities, and funding constraints

Project lists developed (CIP & STIP)

Sequencing across CIP 5-year window

CIP public comment period, publication & approval

04 Sources & Uses analysis / draft CIP

Final QA/QC on sources & uses MPOs release draft TIPs for public comment (21 days) Draft CIP document finalized 05/06 Review / approve FY24-28 CIP

Proposed CIP & STIP are released for public comment CIP is then finalized and presented for MassDOT Board approval

Equity analysis completed and reviewed by Board

Full list of CIP programs and estimate of available funding sources

Prioritized list of projects within programs to be funded



Changes for 2024-2028 CIP

Proposed new CIP investment programs

Aeronautics

 Unmanned Aircraft Systems (UAS) Integration program will fund collection, analysis, and dissemination of imagery data and derive data information using unmanned air systems (UAS or drones).

Highway

- Resiliency Improvements program will fund projects or project elements that focus on resilience
 planning and improvements to existing transportation assets and evacuation routes and address highway
 infrastructure that is vulnerable to extreme weather and sea-level rise.
 - The PROTECT formula funds provided under BIL will fund the program
- Safe Routes to School program works to increase safe biking and walking among elementary, middle
 and high school students through two infrastructure grant programs signs and lines and infrastructure
 improvements. SRTS projects were previously included as part of the Highway Roadway Reconstruction
 program in past CIPs.
 - The federal funding for SRTS is usually TAP (Transportation Alternatives Program) or CMAQ (Congestion Mitigation and Air Quality).



Changes for 2024-2028 CIP

Federal Funding

- The 2024-2028 STIP will incorporate the Carbon Reduction (\$93.7 million), PROTECT¹ (\$106.5 million) and National Electric Vehicle Charging Infrastructure (\$63.5 million) federal formula funds provided to MassDOT under BIL
- Carbon Reduction funds are likely to be programmed under CIP programs to support:
 - Investments that promote multimodal projects such as Complete Streets and Safe Routes to School infrastructure
 - Transit infrastructure (e.g., zero emission bus fleets and modernization projects for the MBTA/RTAs
 - National Electric Vehicle Infrastructure (NEVI) plan² implementation
- MassDOT received an additional \$44.1 million of Bridge Replacement and Rehabilitation funding in FFY 23 which will be incorporated into the existing 2023-2027 STIP and carried in the 2024-2028 STIP and CIP
- MassDOT Transit received increased funding under BIL which is programmed to support the Mobility Assistance Program (MAP)
 - \$9.5 million in Section 5310 FTA formula funding for MAP

Toll Revenues (Pay-go capital funds)

- Toll revenues available for capital for 2024-2028 CIP are projected to be approximately \$230 million higher than assumed revenues for the 2023-2027 CIP
- Increase reflects a rebound in traffic on our toll facilities and also incorporates savings realized under a debt refunding executed earlier this year for the Metropolitan Highway System (MHS) bonds
 - ¹ Promoting Resilient Operations for a Transformative, Efficient, Cost-Saving Transportation program
 - ² FHWA approved MassDOT's National Electric Vehicle Charging Infrastructure (NEVI) plan in September 2022



CIP Funding Sources for 2024-2028

The CIP is funded from a mix of federal, state, and local sources. 2024-2028 CIP will reflect federal and state funding made available to MassDOT.



Federal Funding

Formula Funds

- Federal Highway
 Reimbursements
- Federal Transit funds
- Federal Aviation
 Administration funds
- Federal Railroad funds

Discretionary Funds

competitive processes run by federal agencies. Funds included in the CIP after award.



State Funding

Bonds / GANs

- State Bond Cap
- Accelerated Bridge Program Bonds (ABP)
- Grant Anticipation Notes (GANs)
- Rail Enhancement Program (REP) Bonds



MassDOT Sources

Tolls (pay-go capital)

- Metropolitan Highway
 System (MHS) pay-go
- Western Turnpike (WT) pay-go
- Tobin Bridge (Tobin) pay-go



Others

- Municipal and local funds
- Reimbursable and 3rd
 Party funds
- VW Funds
- Other Commonwealth funds
- Central Artery Tunnel Project Repair and Maintenance Trust Fund (CARM)



MassDOT CIP Funding Sources: Base Bond Cap Comparison (2024-2028 vs 2023-2027)

Changes from year to year

- Bond Cap
 - ANF has provided preliminary estimates for our baseline bond cap; Commonwealth capital planning is still under development
 - Requests for state match funds to support new federal formula funding are under development and submitted to MassDOT for funding consideration – all Divisions and Shared Services)
 - Any Divisional requests for state funding for new and/or existing programs will be submitted to ANF for consideration in March
 - Program sizes and available bond cap by fiscal year will be reviewed for fiscal constraint

FY2024-2028 impacts on sources

- State bond cap match funds needed to support program management/program development costs to support Highway Federal-Aid program projects not provided in base; MassDOT Highway developing estimate of additional funding needed
- Cap to support new programs/policy initiatives not guaranteed
- Discussion will occur on program sizes and budgets by FY within context of funds available (i.e., bond cap targets) and additional funds needed
- Commonwealth providing REP funds for MBTA South Coast Rail program; no bond cap allotted

Year to year comparison – MassDOT Preliminary Base Bond Cap

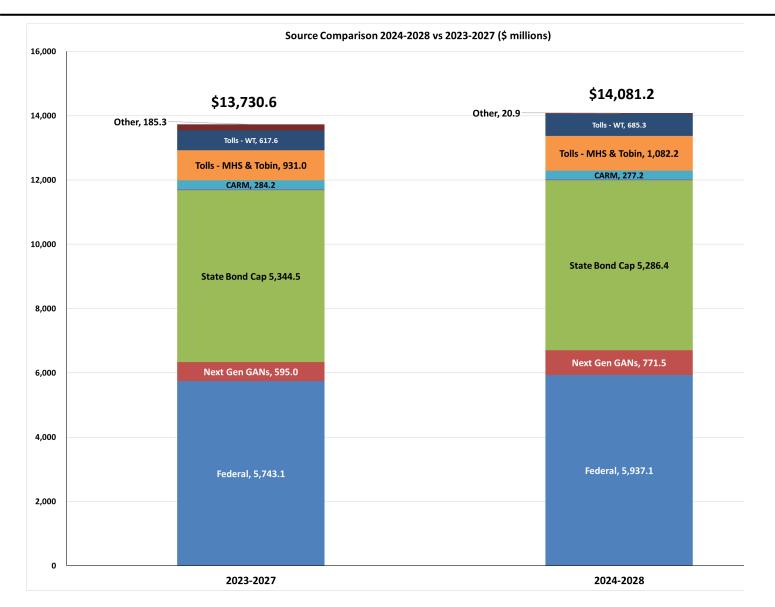


Overall impacts on 2024-2028 update

- Amounts in 2024–2028 are level with last year's bond cap allotted to MassDOT
- SCR funding assumed to be REP funding; no state bond cap funding provided
- \$200 million/year included for Chapter 90 (Governor filed legislation to fund Chapter 90 at \$200 million for both FY 24 and FY 25)
- Approximately \$20-\$25 million/year is estimated in additional state bond cap (over 5 years) to be needed to support federal aid highway program development/management costs over the current bond cap allotted to MassDOT
 - Last year's CIP programmed surplus operating funds (\$30 million/year over 2023-2027) to support these costs based on the legislation filled by the Governor
 - Supplemental funding legislation was not enacted; no surplus operating funds were available and are thus not assumed for the 2024-2028 CIP



MassDOT Preliminary Estimated Sources (\$ millions)



Source highlights:

Federal funds continue to be the most significant funding source for the MassDOT capital plan

- Assumes BIL formula funding levels through 2026 with 2% escalation for 2027 and 2028; reflects anticipated federal reimbursements
- Incorporates BUILD grant for I-495/I-90
- Includes FRA grant for NECR project
- Includes \$150.8 million in CRRSAA funds
- Includes Highway Bridge Formula Funds (HIP)
- Includes any federal Discretionary Grants awarded to MassDOT
- Includes increase in FTA Section 5310 formula funds

State Bond Cap is one of our largest funding sources and estimates are based on initial guidance from ANF and include additional funds to support increased federal formula funds authorized under BIL

Next Generation Bridge funds

 GANs funding authorized in TBB in support of the Highway Bridge Program

Rail Enhancement Program (REP) funds a portion of the Taunton Rt. 24/Rt.140 project that intersects with SCR and culvert/specialized track work

Toll pay-go capital funds based on projected revenues/expenses (tied to FY 24 operating budget) and available reserves

Other funding sources include local and private (railroads) and public use airport contributions, and VW settlement funds (from the Commonwealth) for RTA electric bus procure means D

Key Milestones for CIP/STIP Development

December	 Review and update of program sizes Programs' definitions (purpose and need) submitted for review Preliminary financial guidance (FHWA, FTA), ANF
January	 Develop/update CIP program sizes Project scoring Initial estimates of capital funding sources Federal OA/Targets (MARPA) distributed to MPOs & Highway Division
February	 Readiness Days (Highway and Planning; other Divisions) Refine source estimates Prioritization of projects and draft project selection underway by Divisions
March	 Fiscal constraint analysis CIP programs/sizes finalized; draft project lists compiled MPO development scenarios/preferred projects selected Assess proposed program sizes and project lists within context of fiscal constraints and any source adjustments Initiate draft CIP document development
April	 QA/QC on sources & uses Final fiscal constraint analysis MPOs release draft 5-year TIPs for 21-day public comment Finalize draft CIP document
May	 Draft project list mapped for comment tool Finalize draft CIP and present to MassDOT Board; Vote to release draft CIP for public comment Public & Stakeholder engagement on draft MassDOT CIP TIPs are endorsed by MPOs
June	 Equity Analysis completed MassDOT Board reviews and approves final CIP; final changes submitted to ANF STIP is endorsed after public comment period Final STIP sent to FHWA, FTA, DEP and EPA
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MassDOT Board Touchpoints for CIP Development

MassDOT Board					
December					
January					
February					
March	CIP/strategic framework / CIP timeline /discussion on CIP programs, sizes / changes / preliminary estimated sources				
April	Final draft sources and uses; initial project lists and project changes from the 2023- 2027 CIP / MPOs release draft 5-year TIPs for 21-day public comment period				
May	Draft CIP update including any updates to sources & uses / MassDOT Board vote to release for public comment / STIP released for public comment				
June	Final CIP update / public outreach analysis / equity analysis / MassDOT Board vote to approve CIP / Final 5-year STIP submitted to FTA, FHWA, DEP & EPA at end of June				



Next Steps

- Discussions with Secretary and individual Divisions to review programs, sizes and requests for additional funds (within reasonable financial constraint)
- Project readiness and spending analysis
- Submit programs and estimated spending to Executive Office for Administration and Finance (ANF) in March
- Secretary to Secretary discussion of goals, priorities, and funding needs scheduled in late March
- Iterate based on available/confirmed sources
- March and April Board meetings
 - Discuss program sizes, project readiness, initial project list, updated sources and fiscal constraint analysis
 - Anticipated stakeholder engagement



Appendix

- 2023-2027 Programmed Spending by Priority and Division
- MassDOT Programmed Spending (2023-2027) with MBTA Spending
- MassDOT Funding Sources details
- CIP/STIP Alignment



FY 2023 – 2027 Final CIP Programmed Spending by Priority*

Reliability	Aeronautics	Highway	IT	MBTA	Rail	RMV	Transit	ОТР	Total SFY23-27
	\$323.3 (millions)	\$6,694.4	\$45.8	\$169.5	\$341.1	\$1.1	\$149.4	\$ -	\$7,724.5
Modernization	Aeronautics	Highway	IT	MBTA	Rail	RMV	Transit	ОТР	Total SFY23-27
	\$10.3 (millions)	\$2,917.7	\$74.3	\$673.7	\$50.6	\$13.3	\$88.9	\$25.0	\$3,853.8
Expansion	Aeronautics	Highway	ΙΤ	MBTA	Rail	RMV	Transit	Highway / OTP	Total SFY23-27
	\$ - (millions)	\$699.5	\$ -	\$582.7	\$17.0	\$ -	\$ -	\$33.6	\$1,332.7

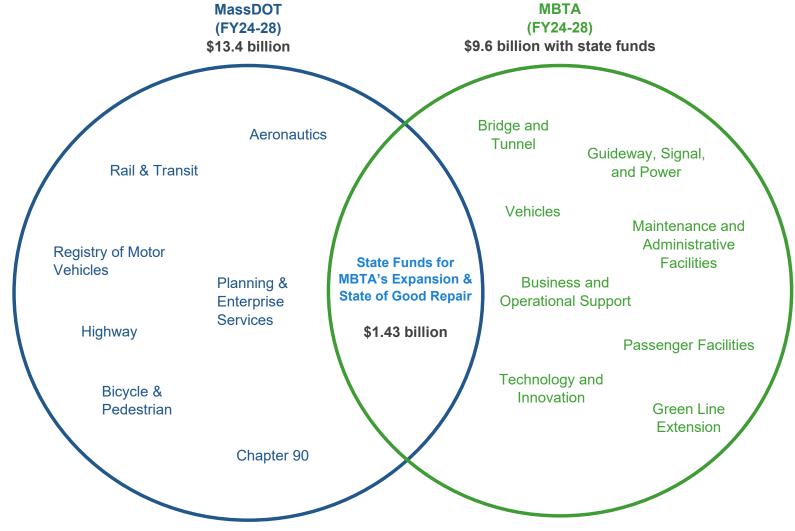
Overall spending breakdown* 7% 6% 9% 26%

millions	SFY 2022	SFY 2023	SFY2023-27
Reliability	\$1,211.7	\$1,248.0	\$7,724.5.3
Modernization	\$501.8	\$665.1	\$3,853.8
Expansion	\$502.7	\$490.4	\$1,332.7
Chapter 90	\$200.0	\$200.0	\$1,000.0
Planning, Enterprises Services, & Other	\$201.8	\$149.4	\$957.3
one year & five – year totals	\$2,624.0	\$2,754.3	\$14,868.4

*Charts will be updated for 2024-2028 for discussion in April/May



MassDOT 2023-2027 CIP Programmed Spending (\$14.9 Billion)*





MassDOT CIP Funding Sources: Overview

Federal Funding - Formula

Federal Highway Administration (FHWA)

• FHWA reimbursements represent the cash flows (spending) for projects programmed in the State Transportation Improvement Program (STIP) with FHWA apportionments; assumes FHWA apportionment levels for Massachusetts reflected in the Bipartisan Infrastructure Law (BIL); reimbursements include Highway Infrastructure Program (HIP) funding and Coronavirus Response and Relief Supplemental Appropriations Act of 2021 (CRRSAA) funding

Federal Transit Administration (FTA)

- Represents Section 5310 grants awarded to support the enhanced mobility of seniors and individuals with disabilities
- MassDOT obligates available FTA funds every federal fiscal year. The funds do not include FTA funds available to Regional Transit Authority partners which flow directly to the RTAs
- Section 5339 grants awarded to MassDOT Transit to support vehicle replacement programs and fleet electrification efforts

Federal Aviation Administration (FAA)

MassDOT's Aeronautics Division applies for Federal Aviation Administration grants every federal fiscal year to support eligible airport pavement and capital
improvement projects for the Commonwealth's public use airports (not controlled by Massport) and draws down on those approved grants to support the project
spending.

Federal Railroad Administration (FRA)

· MassDOT's Rail Group applies for FRA grants to support eligible rail projects and draws down on those approved grants to support the planned project spending.

Toll Revenues: Pay-Go Capital

Metropolitan Highway System (MHS)

• Projected annual revenues available for capital for the toll facilities east of I-95 plus any existing projected reserve balances

Western Turnpike (WT)

• Projected annual revenues available for capital for the toll facilities west of I-95 plus any existing projected reserve balances

Tobin Bridge (Tobin)

• Projected annual revenues available for capital for this toll facility plus existing projected reserve balances



MassDOT CIP Funding Sources: Overview

State Funding

State General Obligation Bonds (bond cap)

Commonwealth general obligation bond (GO bond) proceeds allocated to specific projects; primarily for project design, management, capital maintenance
and other construction support provided to the Aeronautics, Highway, IT, Rail and Transit, RMV, and Planning & Enterprise Services; funding allotted to
MassDOT through the Commonwealth's annual capital plan development

Rail Enhancement Program (REP) Bonds

REP bonds are for specific project spending that involve an MBTA project; REP primarily supports the MBTA's expansion projects such as South Coast Rail program

Accelerated Bridge Program Bonds and Next Generation Bridge Bonds

• Commonwealth special obligation bond proceeds allocated to specific bridge projects to fund the state match required for the Grant Anticipation Notes (GANs)

Next Generation Bridge Grant Anticipation Notes (GANs)

- Grant anticipation notes (GANs) are notes issued by the Commonwealth and repaid with future federal highway obligation authority. Funds will be used to improve the condition of the Commonwealth's bridges
- State match for the GANs funded as Commonwealth special obligation bonds (SOBs)

Other

Municipal and Local Funds

• Funds provided by municipalities to match federal-aid sources or to pay for construction bid items

Reimbursable and Third Party

• Third party funding for specific initiatives related primarily to real estate development projects

Other State Funds

• Additional funds provided by the Commonwealth to MassDOT to be used for clean transit vehicles and transportation improvements in the Seaport District, e.g., VW funds, Housing & Economic Development bond cap (HED funds)



CIP and the State Transportation Improvement Program (STIP)

Concurrent with the development of the CIP, MassDOT is developing the five-year 2024-2028 STIP

The STIP is the federally-required plan for highway and transit projects

The CIP identifies all of the sources and uses of transportation funding available to Massachusetts and funds projects advanced by

- Rail and Transit Division
- Aeronautics Division
- Information Technology and Planning & Enterprise Services
- Registry of Motor Vehicles

The 2023-2027 STIP programmed approximately \$7.2 billion in federal funds and state matching funds

