

Final CIP SFY 2023-2027 Board Presentation

June 15, 2022

Overview

- **Since last meeting:**
 - Held the public meetings and completed comment period on June 8
 - Completed the equity analysis
 - Updated sources
 - Updated projects / spending
- **Today:**
 - Need feedback on final proposed CIP before consideration for a vote of the MassDOT Board

Public engagement | CIP and STIP

For the CIP:

- Six virtual regional public meetings were held for the CIP starting on May 24 and ending June 2

For the STIP:

- All the 13 MPOs/TPOs continued with virtual meeting platforms throughout the year for hosting their respective meetings to review and build their draft Transportation Improvement Programs (TIPs)
 - Meeting materials and documents were developed and posted for on-line viewing and access
- Each of the MPOs has had a robust public participation process for their TIPs
 - Draft TIPs were released by the MPOs in early April for 21-day public comment period in coordination with the CIP development timeline
 - Draft STIP was released concurrently with draft CIP on May 18 for public comment
- All projects programmed in the draft STIP are incorporated and reflected in the draft CIP that was released for public comment
 - A total of 1266 public comments on the draft TIPs (and STIP) were received during the public comment period on either projects programmed in the draft documents or requested for consideration in future TIPs

Public Engagement and Participation

- The proposed FY23-27 MassDOT CIP public comment period took place from Wednesday, May 18 through Wednesday, June 8
 - Staff hosted 6 virtual regional public meetings across the Commonwealth to provide an overview the CIP and invite feedback from attendees
 - Members of the public could also provide comments via an online comment tool, email or letter
 - Promotion via social media, mass.gov/cip, press release, advertisements in MBTA stations and public transit, highway variable message signs
- MassDOT received a total of 1,440 comments (including TIP/STIP)
 - 174 CIP comments plus 1,266 TIP/STIP comments
- Comments were analyzed as follows:
 - Each unique message received via letter, email or online comment tool or that was shared verbally or via chat during public meeting was considered a separate comment
 - Individual refers to the person(s) sending or co-signing a comment. Some comments consisted of a single letter or message cosigned by more than one individual.
 - Each comment was entered into our databased and tagged to a Division and topic/project



WHAT ARE YOUR TRANSPORTATION PRIORITIES?

The Massachusetts Department of Transportation (MassDOT) is currently developing its annual five-year Capital Investment Plan (CIP), that guides how we prioritize and fund local and statewide transportation projects.

Your input can inform project design and helps MassDOT understand the level of community support for proposed projects, ensuring that MassDOT's investments align with the needs and priorities of all Massachusetts residents. There are several ways to participate:

- Send an email with your comments to: MASSCIP@STATE.MA.US
- Explore projects and provide comments online using our CIP Comment Tool at <http://www.mass.gov/CIP>
- Join us for a Virtual Public Meeting – see dates below and register at <http://www.mass.gov/CIP>
- Send us a letter addressed to: MassDOT Office of Transportation Planning, attn: Director of Capital Planning, 10 Park Plaza, Suite 4150, Boston MA, 02116

Comments must be received by **June 8th, 2022**.

VIRTUAL PUBLIC MEETINGS

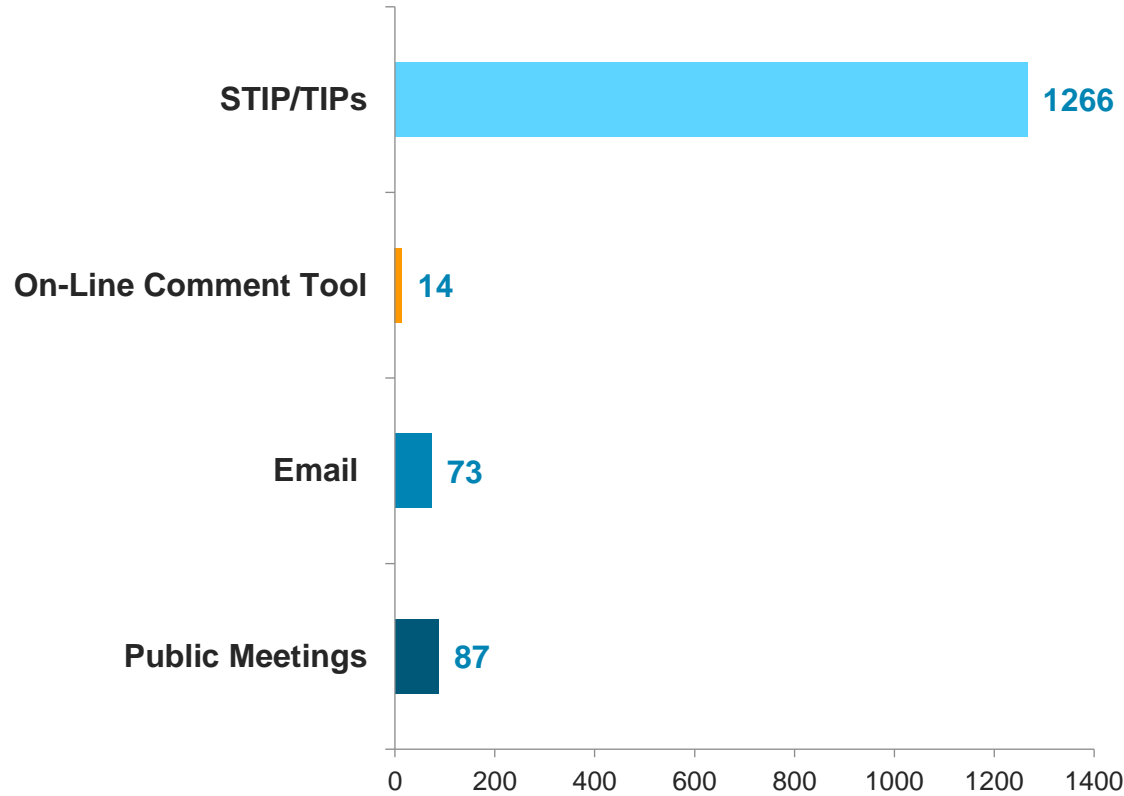
Location	Date & Time	Location	Date & Time
Western Mass.	May 24, 2022 6:00 PM	Boston	May 31, 2022 6:00 PM
Northern Mass. & Merrimack Valley	May 25, 2022 6:00 PM	Southeastern Mass.	June 1, 2022 6:00 PM
Central Mass.	May 26, 2022 6:00 PM	Cape Cod & Islands	June 2, 2022 6:00 PM

CAN'T MAKE A MEETING? POST YOUR IDEAS AT WWW.MASS.GOV/CIP OR EMAIL COMMENTS TO MASSCIP@STATE.MA.US

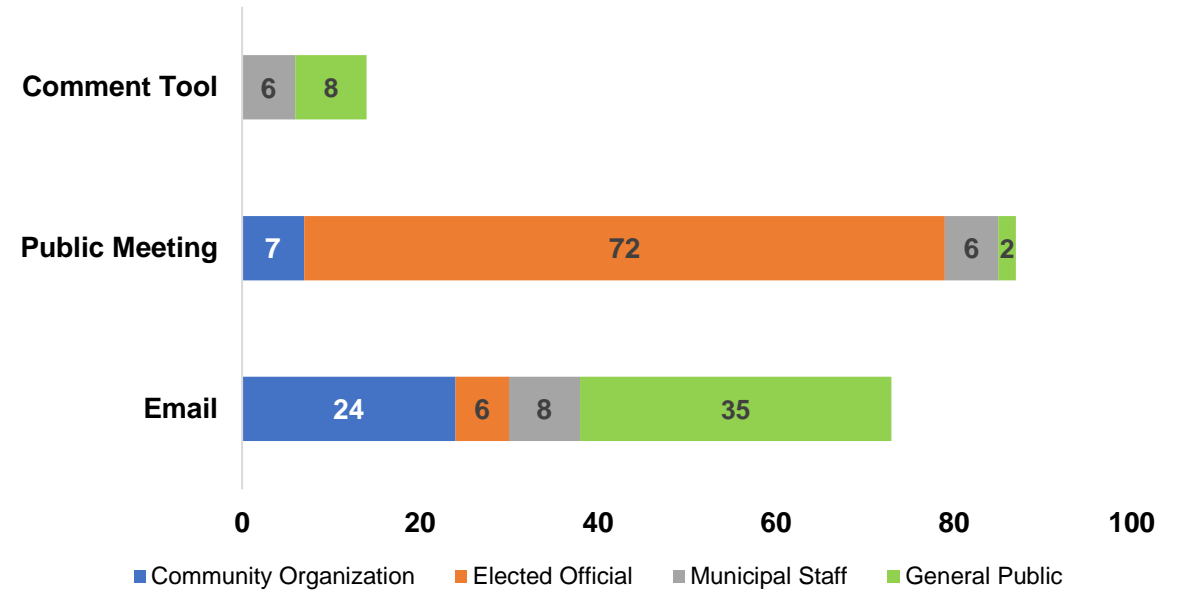
Virtual meetings will be accessible to those with disabilities and with limited English proficiency. Accessibility and language services will be provided free of charge upon request, and as available. Presentation materials will be made available in multiple languages upon request. For more information or to request language services, please contact us one week before the meeting by calling (857) 368-8855 or emailing MASSCIP@STATE.MA.US

Public Engagement | Comments Received

Number of Comments Received^{1,2,3}



CIP Comment Source by Type of Commenter

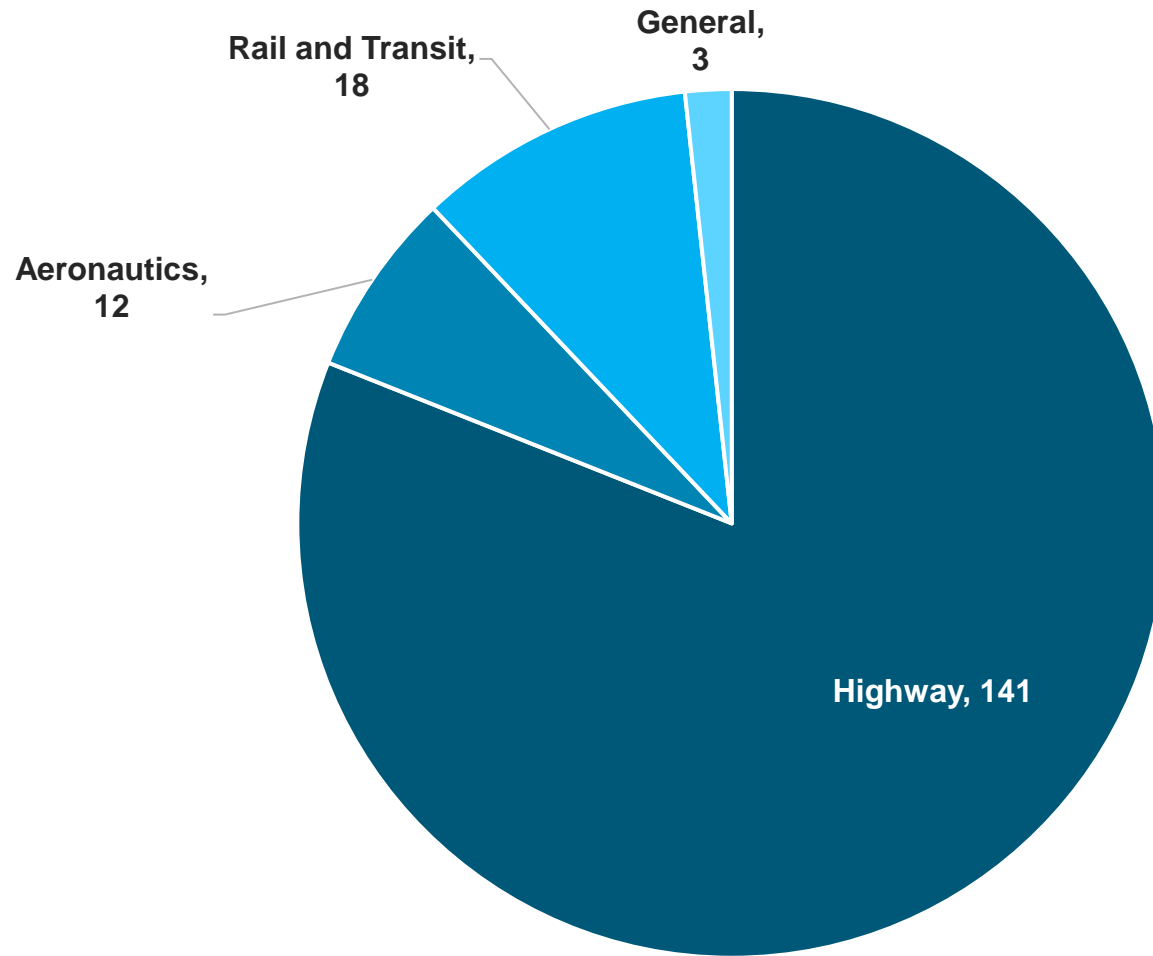


¹ As of June 8th, 2022, a total of 174 comments were received on the CIP plus 1266 on the draft MPO TIPs and STIP

² 1,440 comments in total including those submitted on MPO/TPO TIPs

³ Email tally includes letters (8) received through email

Public Engagement | CIP Comments by Division







■ Highway
 ■ Aeronautics
 ■ Rail and Transit
 ■ General

Key Highway Categories

- Bicycle/Pedestrian (47)
- Bridge (57)
- Roadway/Intersection (28)
- Safety (6)
- Municipal (Chapter 90) (2)
- Other (1)

CIP Public Engagement | Key Mentions for Highway Division

<p>Bicycle / Pedestrian</p> 	<p>Bridge</p> 	<p>Roadway / Intersection</p> 	<p>Safety</p> 
<ul style="list-style-type: none"> • Increased funding and prioritization of Bike/Ped investments • Request to include Bourne Rail Trail Phase IV • Support for Sandwich Road shared use path • Request funding for Connecticut River Rail Trail from Damon Road in Northampton to Elm Court in Hatfield • Support for downtown Complete Streets and Intersection Improvements on Main Street (Route 9) in Northampton 	<ul style="list-style-type: none"> • Support for Cape Cod Bridges replacement • Support for Bowker Overpass over Storrow Drive (606728) • Support for Bowker Overpass over MassPike (606496) • Support for South Street, North Leverett Road And Sixth Street Bridges in Montague 	<ul style="list-style-type: none"> • Support for Rehabilitation of Haydenville Road in Whatley • Support for Intersection Improvements at King Street, North Street & Summer Street in Northampton • Support for Reconstruction of Damon Road from Route 9 to Route 5 (including drainage system repairs & slope stabilization) in Northampton 	<ul style="list-style-type: none"> • Support for SGR and safety investments • Support for Safety Improvement Program • Request funding for pedestrian scale lighting in Northampton • Support for Protective Screening on the French King Bridge in Erving-Gill

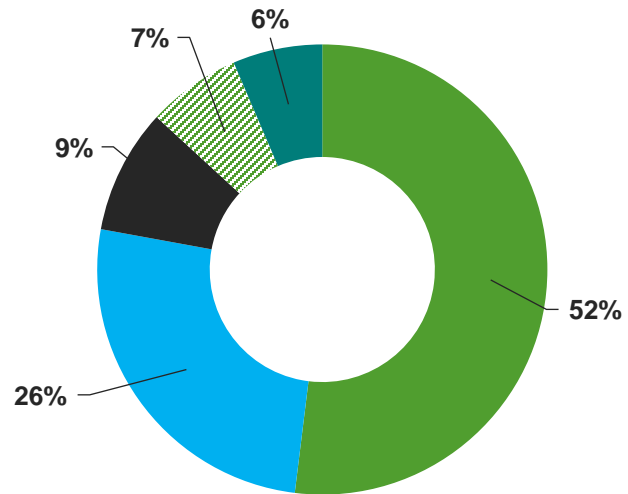
CIP Public Engagement | Key Mentions by Division

- Aeronautics
 - Support for capital investments that improve the pavement condition at the public use airports
 - Support for additional state funded investments at our public use airports in addition to FAA funds (promotes increased economic activity)
 - Support for capital investments in our public use airports which contribute to the economic growth and benefits for the Commonwealth
- Rail & Transit
 - Support for East-West Rail
 - Request funding for Positive Train Control on the Connecticut River Line (Knowledge Corridor)
 - Support for capital investments for the RTAs in of support regional transit
 - Support for the Green Line Extension to Mystic Valley Parkway (GLX Phase 2)
 - Support for advancing Phase 1 of regional rail
 - Support for West Station
- General
 - Support and request for additional Chapter 90 program funding
 - Support for the Bourne and Sagamore Bridge Replacement
 - Encourage MassDOT to aggressively pursue federal grant funding opportunities
- Registry of Motor Vehicles
 - No Comments received

2023-2027 CIP Programmed Investments by Division

Reliability	Aeronautics	Highway	IT	MBTA	Rail	RMV	Transit	OTP	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	OTP	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	IT	MBTA	Rail	RMV	Transit	OTP	Total SFY23-27
	\$ - (millions)	\$699.5	\$ -	\$582.7	\$17.0	\$ -	\$ -	\$33.6	\$1,332.7

Overall spending breakdown*



millions	SFY 2022	SFY 2023	SFY 2023-27
Reliability	\$1,211.7	\$1,248.0	\$7,724.5
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
Total*	\$2,624.0	\$2,754.3	\$14,868.4

*Totals may not add due to rounding

2023-2027 CIP Equity Analysis: Approach

- As part of MassDOT's and MBTA's commitment to civil rights and non-discrimination proposed investments and projects are evaluated annually
 - Analysis done to ensure proposed investments are equitable both geographically and to population groups that benefit
 - All of MBTA's FY23-FY27 projects were included to ensure a comprehensive equity analysis of our transportation investments throughout the Commonwealth
- This year's analysis continues to follow the approach implemented with 2021 CIP process (2014 ACS* survey data)
 - Investments analyzed in the aggregate and by investment category
 - Investments analyzed individually for each mode and investment category to identify particular areas of concern
 - Variable buffering was used to analyze impacts of CIP investments depending upon the location of Highway (rural, suburban, urban); by mode for Transit – RTA/MBTA, Rail; and for Aeronautics
- Chapter 90 program formula is used as a proxy for geographic distribution of transportation investments throughout the Commonwealth
 - Chapter 90 formula considers population (20.83%) employment (20.83%) and lane miles (58.33%) in distributing the annual allocation of local transportation aid (\$200 million) to all 351 cities and towns in the Commonwealth
 - If the ratio of CIP funding allocated to a municipality is the same as the Chapter 90 allocation received this indicates the CIP distribution is equitable

*American Community Survey

Social Equity Analysis: Summary

Minority communities

(Communities with 24% minority or more)

- Overall the analysis of the 2023-2027 proposed investments demonstrates that **per capita spending in minority tracts is more than non-minority tracts**
- Approximately 47.2% more* per capita spending in minority tracts for 2023-2027 than non-minority areas

*7% more in 2022 in minority tracts

Limited English Proficiency (LEP)

(Communities with 6.25% or more of population that are LEP)

- **LEP communities receive approximately 26.4% more* per capita spending** as compared to non-LEP areas *12% less in 2022 in LEP communities

*DI/DB threshold stands for Disparate Impact/Disproportionate Burden Threshold

**Title VI includes minority or LEP communities and EJ includes minority or low-income communities

Low-income

(Median income at or below \$44,100)

- **Low-income communities receive approximately the same*** (less than 1.8% difference) per capita spending investment as compared to non low-income communities for 2023-2027

*23.7% less in 2022 in low-income areas

Overall

(Combined social equity analysis)

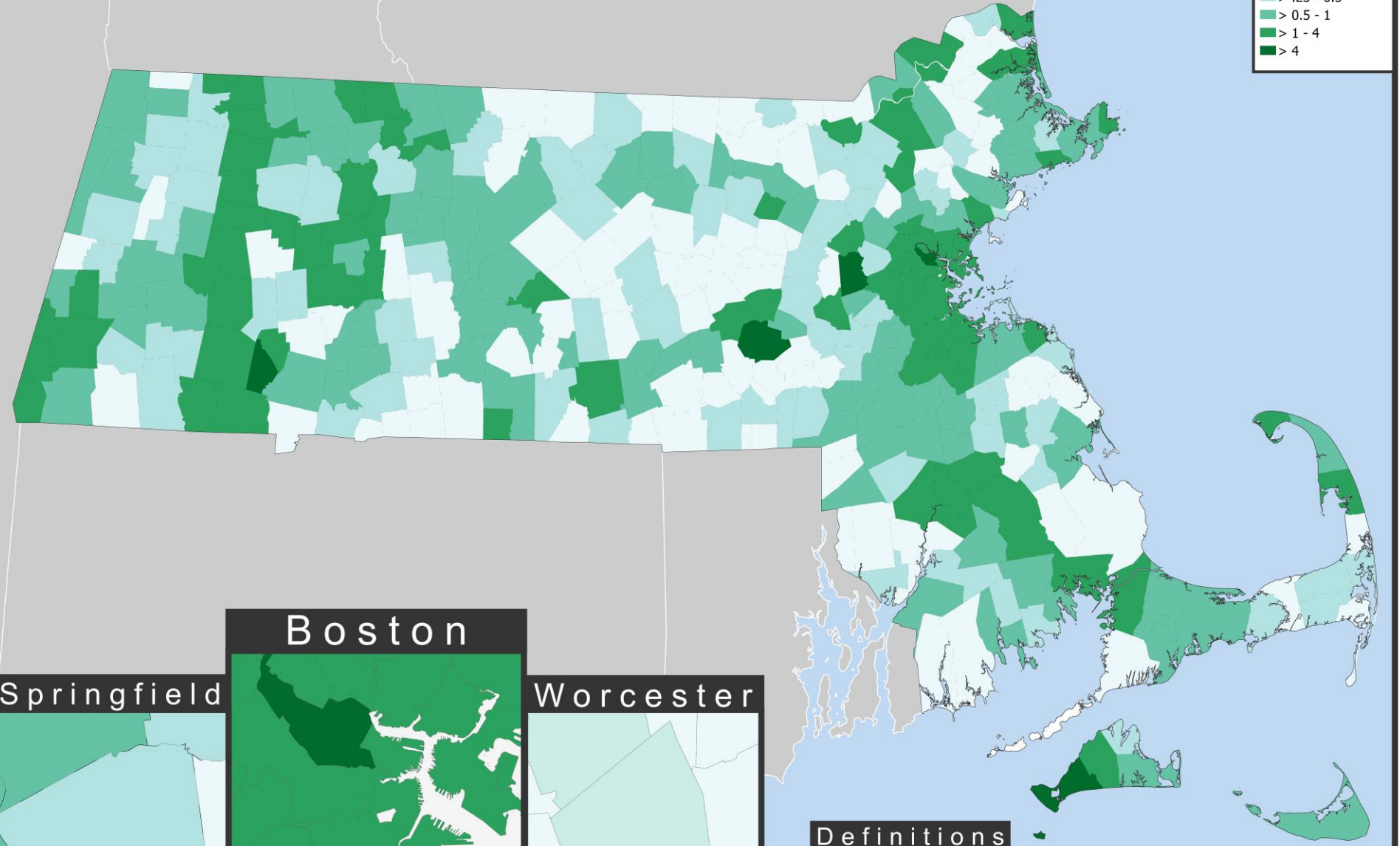
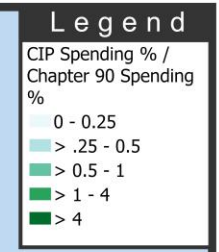
- Analysis of all programmed investments for 2023-27 **does not indicate any significant social equity concerns** and demonstrates a reasonably equitable distribution of proposed investments for 2023-2027
- Title VI** or EJ investments represent 32.6% more per capita spending as compared to total per capita spending
- The difference overall is well within the 20% threshold for Disparate Impact/Disproportionate Burden (DI/DB) impacts

2023-2027 CIP Equity Analysis: Conclusions

- Overall, the projected investments for 2023-2027 appear to be equitable
 - No evidence of significant disparate impacts/burdens on vulnerable populations
- The totality of investments appear to distribute funding in a manner that effectively benefits the diverse populations of the Commonwealth
- At the modal and project category levels of analysis, there are examples of investments that benefit Title VI and EJ communities as well as those that benefit non-Title VI and non-EJ communities, suggesting overall equity in the capital investment strategy
- Over a five-year period MassDOT/MBTA uses a 20% DI/DB threshold to compare per capita spending for protected populations (Title VI and Environmental Justice communities) vs. non-protected population

Geographic Equity by Towns

FY2023-2027

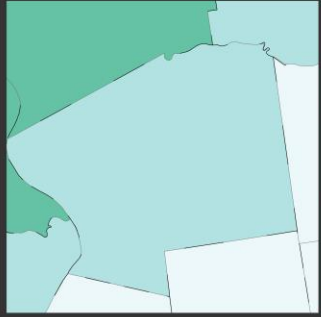


CIP Spending % / Chapter 90 Spending %

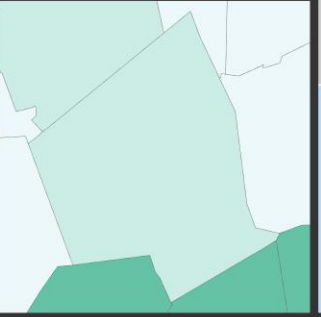
Boston



Springfield



Worcester



Definitions

Environmental Justice Tract (EJ): A tract is identified as EJ if the tract surpasses either the low income and/or minority statewide average population.

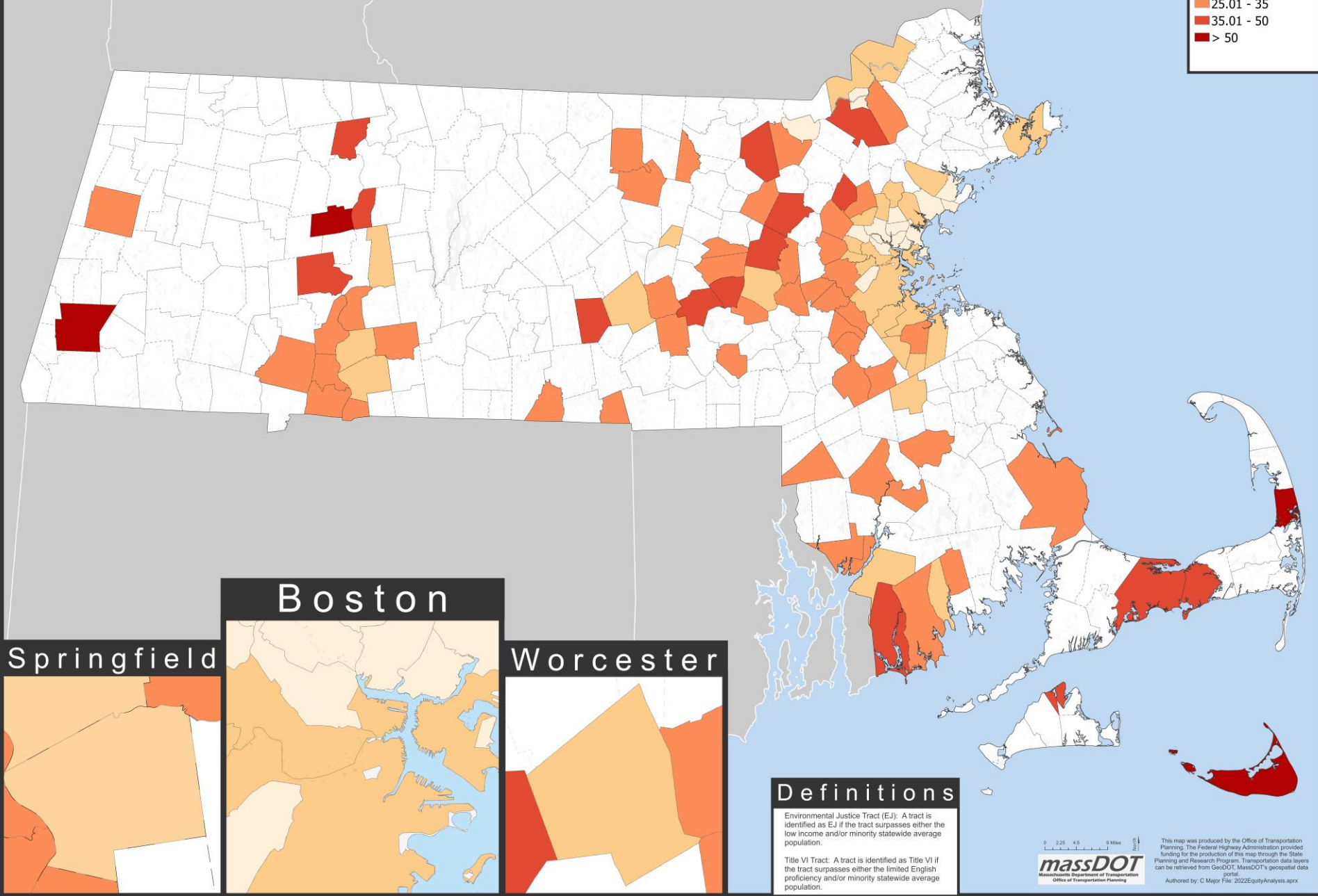
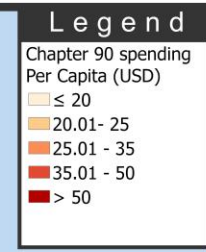
Title VI Tract: A tract is identified as Title VI if the tract surpasses either the limited English proficiency and/or minority statewide average population.



This map was produced by the Office of Transportation Planning. The Federal Highway Administration provided funding for the production of this map through the State Planning and Research Program. Transportation data layers can be retrieved from GeoDOT, MassDOT's geospatial data portal.
Authored by: C Major File: 2022EquityAnalysis.aprx



Projected FY23 Chapter 90 Spending for EJ and/or Title VI Towns



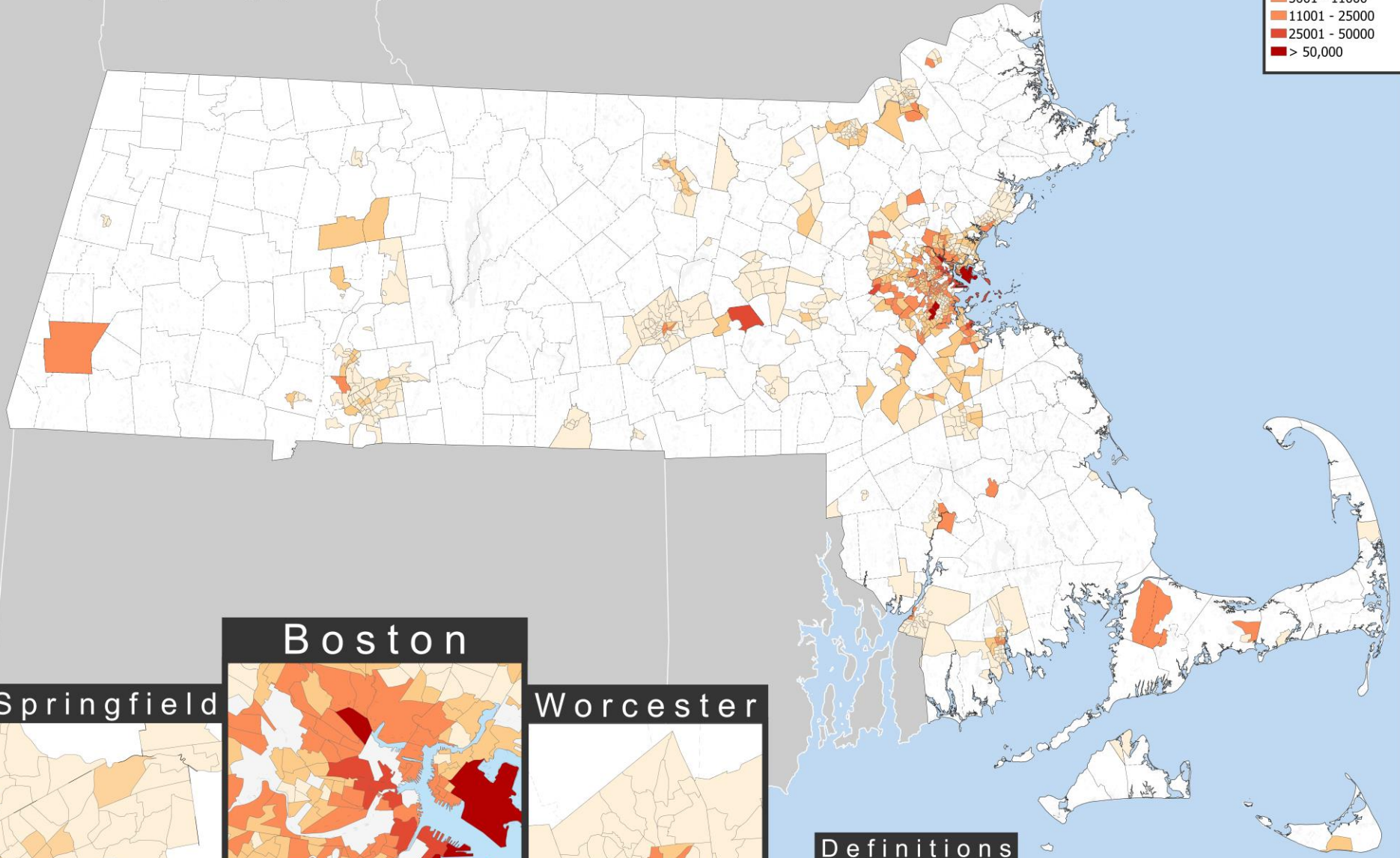
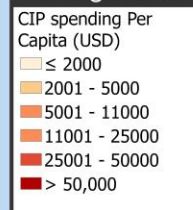
Environmental Justice
(EJ)



FY2023-2027 Spending Per Capita for EJ and/or Title VI Tracts

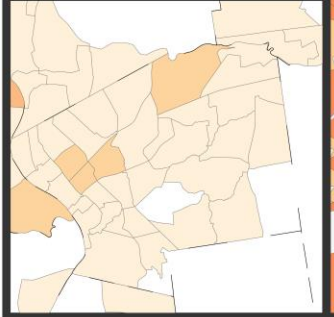
Per Capita Spending by Census Tract

Legend

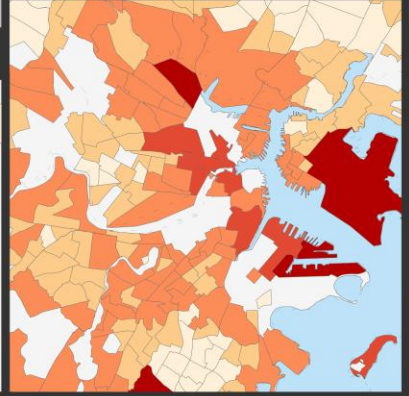


Environmental Justice (EJ)

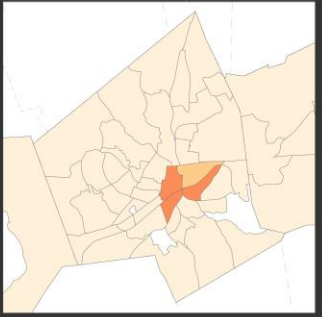
Springfield



Boston



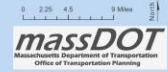
Worcester



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Authored by: C Major File: 2022EquityAnalysis.aprx



Sources and Spending Update

Sources

- MassDOT pay-go capital funds for 2023-2027
 - Minor changes to assumptions for available pay-go capital funds have been made to align with MassDOT FY 23 operating budget assumptions for the toll facilities
 - Reserve assumptions for Tobin have been increased from \$90 million to \$118 million
- MassDOT state funds
 - No current changes in assumptions
 - If MassTRAC is enacted, CIP sources be updated to incorporate the state matching funds for the federal Discretionary Grant funds that the Commonwealth may receive

Spending

- Spending has been updated to reflect adjustments in federal-aid projects, MHS and WT projects
- Rail spending has been updated to reflect award of a CRISI grant (\$1.75 million) which replaces programmed state bond funds
- CIP will be revised to incorporate any significant federal Discretionary Grant awards along with the corresponding state match
- Any revised CIP will be reviewed and discussed with CPC and the MassDOT Board

Project Updates

- **Aeronautics Division** – no changes
- **Highway Division**
 - MPOs have endorsed all TIPs and they are reflected in the final CIP for discussion at CPC and the MassDOT Board on June 15
 - Some spending has shifted within FY 23-27 based on revised project status
 - Costs updated for North Washington Bridge Replacement (604173 - increased \$6.7 million) and Sumner Tunnel (606476 - decreased \$1.5 million) to reflect current estimates
 - Two I-90 lighting projects were combined into a new project to reflect the anticipated scope of work (609318 and 609343 were deleted; new project is 612681)
 - Additional projects were identified as part of the Bicycle and Pedestrian Modal Implementation program
 - Pedestrian and Bicycle Improvements projects at various locations were programmed for each of the six Highway districts
 - New project added for WT Bridge Maintenance (\$80 million); specific projects will be identified as part of next five-year CIP
- **IT** – no changes
- **MBTA** – no changes
- **Rail and Transit Division**
 - \$1.75 million CRISI* discretionary grant awarded for Springfield Area Track Reconfiguration; replaces \$1.75 million in programmed state bond cap; \$3.5 million total project cost
- **RMV** – no changes
- **Office of the Secretary**
 - Adjustment in spending for the Bicycle and Pedestrian Modal Implementation program shifted to specific projects under Highway

*Consolidated Rail Infrastructure and Safety Improvements program

Project Additions / Deletions

- **Highway Division - additions**

- Plug-27 – WT Bridge Maintenance (placeholder) - \$80 million for FY23-FY27
- 612681 – Boston – Tunnel Lighting Replacement on I-90 (CRC 17H & CRAC 17I) - \$111.5 million (\$66.0 million MHS and \$45.5 million CARM)
- 612637 – District 1 – Pedestrian and Bicycle Improvements at Various Locations - \$2.5 million (state bond cap)
- 612638 – District 2 – Pedestrian and Bicycle Improvements at Various Locations - \$2.5 million (state bond cap)
- 612639 – District 6 – Pedestrian and Bicycle Improvements at Various Locations - \$1.2 million (state bond cap)
- 612640 – District 5 – Pedestrian and Bicycle Improvements at Various Locations - \$5.2 million (state bond cap)
- 612641 – District 3 – Pedestrian and Bicycle Improvements at Various Locations - \$1.3 million (state bond cap)
- 612642 – District 4 – Pedestrian and Bicycle Improvements at Various Locations - \$4.5 million (state bond cap)

- **Highway Division - deletions**

- 609318 & 609343 – Boston – Tunnel Lighting Replacement on I-90 (CRC 17H) - \$120.4 million (\$71.2 million MHS and \$49.2 million CARM)

Next Steps and Discussion

- Incorporate input from the MassDOT Board for final CIP
- Finalize content in online CIP for publication

Today:

- Request approval from the MassDOT Board on proposed 2023-2027 Capital Investment Plan

Proposed Board Vote

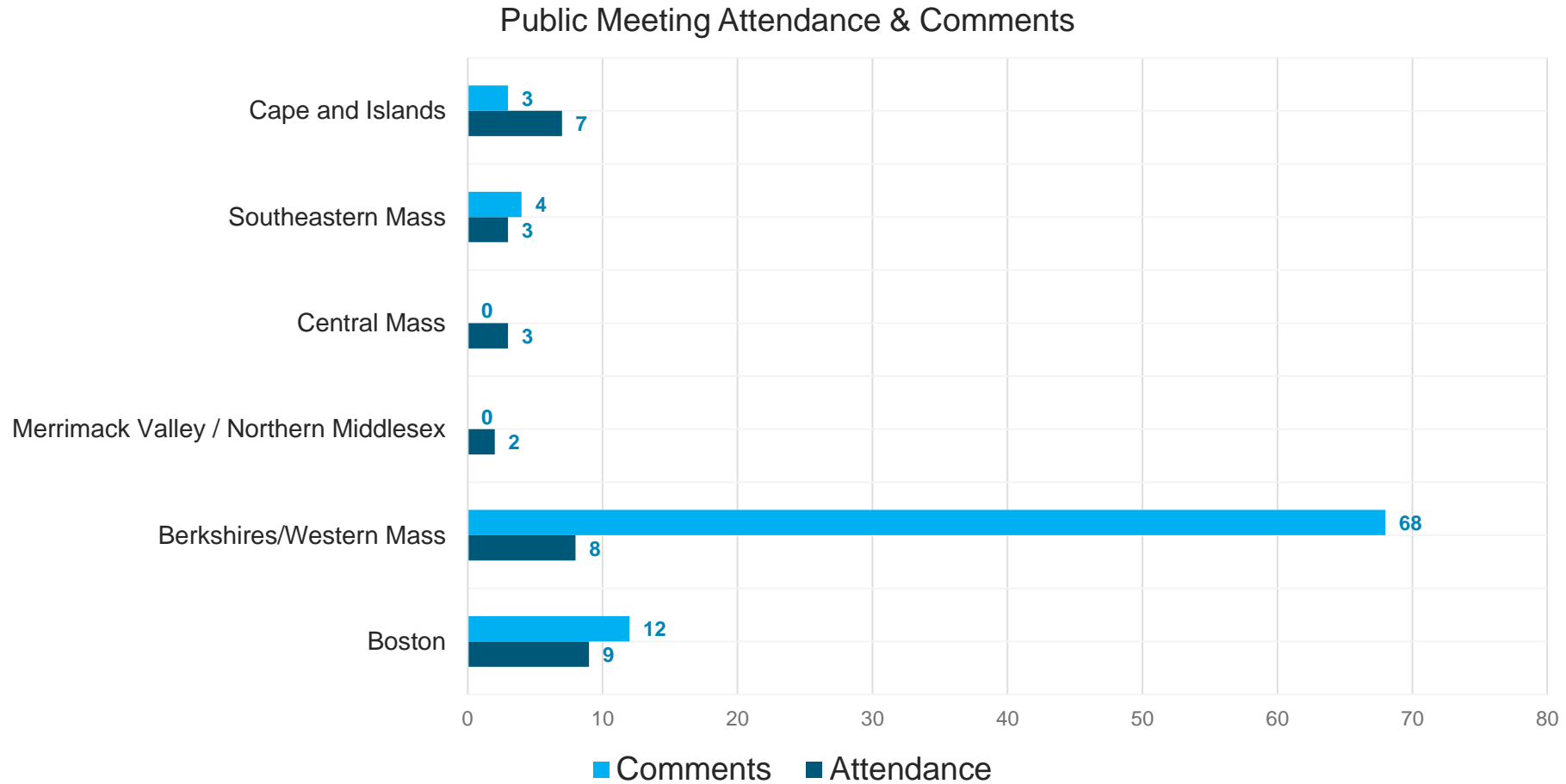
VOTED:

To approve the Fiscal Year 2023-2027 Capital Investment Plan (“CIP”) as presented at the June 15, 2022 meeting of the Massachusetts Department of Transportation Board of Directors and as attached hereto as Appendix A, and to authorize the Secretary/CEO, in the name of and on behalf of the Massachusetts Department of Transportation, to take any steps deemed necessary and appropriate to provide notice to the Legislature and public of the CIP.

Appendix

- CIP Public Meetings – attendance and recap of comments
- Recap of TIP public comments and key mentions
- Future process improvements for equity analysis
- Spending by Source comparison May vs June
- Final CIP Document Structure

Public Meeting Attendance & Comments*



*Reflects comments received at the public meetings only (not the full tally of comments); public comment period does not close until COB June 8

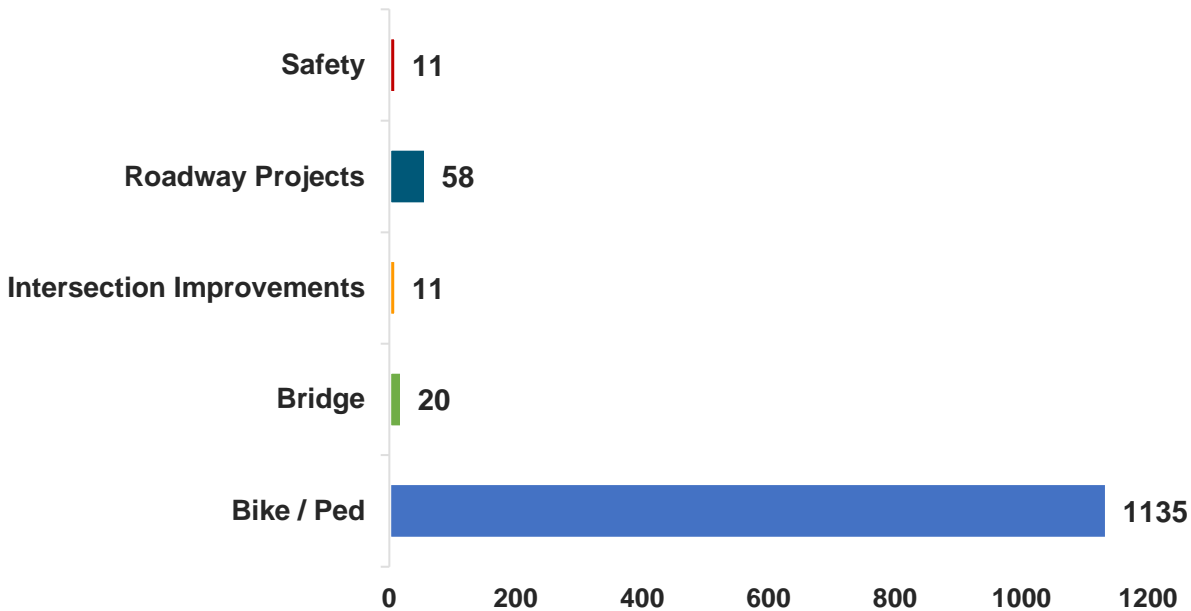
Public Meetings Recap

Public Meeting	# of Attendees	# of Comments	Key Mentions
Berkshires / Western Mass	8	68	<ul style="list-style-type: none"> • Importance of additional support from Commonwealth for local projects (municipal CIP programs) • Support and request for additional investments in bicycle / pedestrian infrastructure to improve safety and connectivity • Support for multiple roadway reconstruction / improvement projects as well as bridge projects in region • Support for investments that improve condition of infrastructure to maintain safety for all road users • Support for projects that will improve economic activity and resiliency • Request consideration of PTC implementation for Knowledge Corridor
Merrimack Valley / Northern Middlesex	2	0	<ul style="list-style-type: none"> • No comments
Central Mass	3	0	<ul style="list-style-type: none"> • No comments
Southeastern Mass	3	4	<ul style="list-style-type: none"> • Support for investments in CIP for New Bedford • Support for Chapter 90 and request for increased funding • Support for two projects in Boston – Bowker Overpass over Storrow Drive (606728) and Bowker Overpass over MassPike (606496) which will provide additional bike/pedestrian access and connectivity

Public Meetings Recap

Public Meeting	# of Attendees	# of Comments	Key Mentions
Boston	9	12	<ul style="list-style-type: none"> • Support for Bowker Overpass project over MassPike • Support for Bowker Overpass project over Storrow Drive which improves parkland and provides bike/pedestrian access and connectivity • Concern about pollution to Charles River due to Storrow Drive alignment • Consideration for additional parkland as part of Bowker Overpass project over Storrow Drive • Support for capital improvement investments at our public use airports such as crack sealing, runway/pavement resurfacing, among others • Support additional state-funded investments that are not eligible for FAA grants
Cape and Islands	7	3	<ul style="list-style-type: none"> • Support for Sandwich Road shared use path • Support for connection between Sandwich Rd. shared use path and Cape Cod canal path • Support for shared use path connections for entire Cape network

Public Engagement | TIP Comments by Topic & Key Mentions



- **Belmont Community Path** (#609204) (component of Mass Central Rail Trail) – support of project for connectivity benefiting cyclists & pedestrians and opposition due cost, abutter concerns and lack of phase 2 details
- **Swampscott Rail Trail** (#610666) – support for connectivity and recreational value and opposition due to abutter concerns
- **Reconstruction of Route 30** (Weston) (#608954) – concerns over safety for cyclists and lack of community support
- **Mass Central Rail Trail** (Sudbury and Wayland) (#610660) – concerns over right of way and design issues
- **Cape Cod Rail Trail** - support for additional extensions and other shared use path connections to complete network (bike/ped)
- **Bourne Rail Trail** – support for Phase IV
- **Eastham** – support for Route 6 improvements study
- **Provincetown** – support for Shank Painter Road project
- **Barnstable** – support for Route 6A bicycle/pedestrian improvements
- **General** - support for additional bicycle/pedestrian projects (shared use paths)

Transit

- Support for expanded transit services
- Support for microtransit services
- Support for fleet electrification
- Support for expanded service to Outer Cape (CCRTA)



2023-2027 CIP Equity Analysis: Process Improvements for Future Analyses

- The new Municipal portal has been launched; portal will eventually enable analysis of individual investments (projects) made under the Chapter 90, Complete Streets program, Municipal Small Bridge program, Safe Routes to School, Municipal Pavement program, Shared Streets and Spaces, and Local Bottleneck Reduction program
 - Investments made under these programs at the municipal level will then be captured as part of the equity analysis
 - An analysis will occur to capture the universe of eligible funding at the municipal level
- Total universe of assets will be analyzed and compared to proposed investments

MassDOT Spending by Source (Draft vs. Final)

Projected spending (in millions)	Draft FY 23-27	Final FY 23-27	Delta
Federal spending by source			
Federal Highway (FHWA) reimbursements	\$5,499.4	\$5,528.9	\$ 29.5
Federal Transit (FTA) reimbursements**	33.7	33.7	\$ -
Federal Aviation (FAA) reimbursements and grant draws	251.7	251.7	\$ -
Federal Rail (FRA) reimbursements and grant draws	8.8	8.8	\$ -
Subtotal federal spending*	\$5,793.6	\$5,823.1	\$29.5
Bond cap	\$5,344.5	\$5,344.5	\$ -
Grant Anticipation Notes (GANs)	595.0	595.0	\$ -
Accelerated Bridge bonds	8.8	8.7	\$ -
Rail Enhancement bonds	1,280.1	1,280.2	\$0.1
CARM	139.6	133.0	(\$6.6)
Metropolitan Highway system (MHS) pay-go	770.3	792.8	\$22.5
Tobin Bridge (Tobin) pay-go	138.0	139.0	\$1.0
Western Turnpike (WT) pay-go	420.1	505.4	\$85.3
Municipal, reimbursable and local funds	19.5	19.5	\$ -
Other State Funds***	225.4	225.4	\$ -
Subtotal of non-federal spending*	\$8,941.2	\$9,043.6	\$102.4
Total spending*	\$14,734.8	\$14,866.6	\$131.8

* Totals may not add due to rounding | ** FTA reimbursements for MassDOT projects only; RTA federal funds are not included | *** New funding sources made available to MassDOT.

CIP Document - Structure

The Final FY23-27 CIP document is structured around three major components:



2023-2027 Capital Investment Plan

- 1 Overview of the CIP**
 - Introduction and Key changes
 - Programmed Spending
 - CIP Approach and Structure
 - Development Process
 - Funding Sources
 - Selected Major Investments
 - Public Engagement
- 2 Appendix A: FY23-27 Project List**
 - Detailed listing of all capital projects by Division and location included in the CIP
 - Includes project ID, name, priority, CIP investment program, total cost, FY 23 spending, FY24-27 spending and post FY27 spending, if applicable
- 3 Appendix B: FY23-27 CIP Investment Programs**
 - One page description of all CIP investment programs by Priority and Division summarizing program goals and programmed spending for FY23-27