

FEDERAL FISCAL YEARS 2026-2030

NORTHERN MIDDLESEX TRANSPORTATION IMPROVEMENT PROGRAM

FEDERAL FISCAL YEARS 2026-2030

Endorsed by the Northern Middlesex Metropolitan Planning Organization
May 28, 2025



NMMPO
MOVING THE REGION SINCE 1976

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Northern Middlesex Council of Governments
672 Suffolk Street, Suite 100
Lowell, MA 01854

Phone: (978) 454-8021

Fax: (978) 454-8023

Email: jraitt@nmcog.org

The document is also available for download on our website at www.nmcog.org

If this information is needed in another language, please contact the NMCOG Title VI Specialist at 978-454-8021.

Caso esta informação seja necessária em outro idioma, favor contar o Especialista em Título VI do NMCOG pelo telefone 978-454-8021.

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Si necesita esta información en otro idioma, por favor contacte al especialista de NMCOG del Título VI al 978-454-8021.

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على الرقم 8021-454-978 NMCOC إذا كنت بحاجة إلى هذه المعلومات بلغة أخرى، يرجى الاتصال بأخصائي العنوان السادس لـ

જો આ માહિતી અન્ય ભાષામાં જોઈતી હોય તો, કૃપા કરીને NMCOC ટાઈટલ VI નિષ્ણાતનો સંપર્ક કરો ફોન નંબર 978-454-8021 પર.

Funding disclaimer

This work program was funded in part through grants from the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA), United States Department of Transportation (USDOT). The views and opinions of the Northern Middlesex Metropolitan Planning Commission (NMMPO) expressed herein do not necessarily state or reflect those of the USDOT.

MPO ENDORSEMENT OF THE FFY 2026 – 2030 TRANSPORTATION IMPROVEMENT PROGRAM FOR THE NORTHERN MIDDLESEX REGION

FFY 2026-2030 Northern Middlesex Transportation Program Air Quality Endorsement Statement

This document certifies that the Northern Middlesex Metropolitan Planning Organization hereby endorses the FFY 2026-2030 Transportation Improvement Program for the Northern Middlesex Region. The TIP is being endorsed in accordance with the 3C Transportation Planning Process and complies with the requirements in the Infrastructure Investment and Jobs Act (IIJA), also known as the “Bipartisan Infrastructure Law” (BIL).

Air Quality Conformity

Whereas, the 1990 Clean Air Act Amendments (CAAA) require Metropolitan Planning Organizations within non-attainment areas and/or attainment areas with maintenance plans to perform air quality conformity determinations prior to the approval of transportation plans and transportation improvement programs, and at such other times as required by regulation;

Whereas, the air quality conformity analysis prepared for the FFY 2026-2030 Transportation Improvement Program also demonstrates air quality conformity of the Northern Middlesex Regional Transportation Plan (RTP), and that all regionally significant transportation projects in the FFY 2026-2030 Transportation Improvement Program are contained in the Regional Transportation Plan, and that all regionally significant projects in the 2020 to 2040 timeframe of the Regional Transportation Plan are modeled in the FFY 2026-2030 Transportation Improvement Program's air quality conformity analyses;

Whereas, the NMMPO has completed its review in accordance with Section 176(c) (4) of the Clean Air Act as amended in 1990 [42 U.S.C. 7251 (a)], and hereby certifies that the FFY 2026-2030 TIP is financially constrained and that the implementation of the RTP satisfies the conformity criteria specified in both 40 CFR Part 51 and 93 (8/15/1997) and 310 CMR 60.03 (12/30/1994). Based on the results of the conformity analyses, the RTP and FFY 2026-2030 TIP is consistent with the air quality goals of, and in conformity with, the Massachusetts State Implementation Plan;

Therefore, in accordance with 23 CFR Part 450.326 (Development and content of the Transportation Improvement Program) and the Northern Middlesex MPO Regional Public Participation Plan (23 CFR 450.316), the MPO hereby endorses the FFY 2026-2030 Transportation Improvement Program.

 _____ for

Monica Tibbits-Nutt, Secretary and CEO
Massachusetts Department of Transportation (MassDOT);
Chair, Northern Middlesex Metropolitan Planning Organization (NMMPO)

May 28, 2025

Date

310 CMR 60.05: GLOBAL WARMING SOLUTIONS ACT REQUIREMENTS FOR THE TRANSPORTATION SECTOR AND THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION

Self-Certification Compliance Statement for Metropolitan Planning Organizations

This will certify that the Transportation Improvement Program and Air Quality Conformity Determination for the Northern Middlesex Metropolitan Planning Organization (NMMPO) Transportation Improvement Program is in compliance with all applicable requirements in the State Regulation 310 CMR 60.05: Global Warming Solutions Act Requirements for Transportation. The regulation requires the MPO to:

1. 310 CMR 60.05(5)(a)1.: Evaluate and report the aggregate transportation GHG emissions impacts of MTPs and TIPs;
2. 310 CMR 60.05(5)(a)2.: In consultation with MassDOT, develop and utilize procedures to prioritize and select projects in MTPs and TIPs based on factors that include aggregate transportation GHG emissions impacts;
3. 310 CMR 60.05(5)(a)3.: Quantify net transportation GHG emissions impacts resulting from the projects in MTPs and TIPs and certify in a statement included with MTPs and TIPs pursuant to 23 CFR Part 450 that the MPO has made efforts to minimize aggregate transportation GHG emissions impacts;
4. 310 CMR 60.05(5)(a)4.: Determine in consultation with the RPA that the appropriate planning assumptions used for transportation GHG emissions modeling are consistent with local land use policies, or that local authorities have made documented and credible commitments to establishing such consistency;
5. 310 CMR 60.05(8)(a)2.a.: Develop MTPs and TIPs; 310 CMR 60.05(8)(a)2.b.: Ensure that RPAs are using appropriate planning assumptions;
6. 310 CMR 60.05(8)(a)2.c.: Perform regional aggregate transportation GHG emissions impact analysis of MTPs and TIPs;
7. 310 CMR 60.05(8)(a)2.d.: Calculate aggregate transportation GHG emissions impacts for MTPs and TIPs;
8. 310 CMR 60.05(8)(a)2.e.: Develop public consultation procedures for aggregate transportation GHG emissions impact reporting and related GWSA requirements consistent with current and approved regional public participation plans; 10.
9. 310 CMR 60.05(8)(c): Prior to making final endorsements on the MTPs, TIPs, STIPs, and projects included in these plans, MassDOT and the MPOs shall include the aggregate transportation GHG emission impact assessment in MTPs, TIPs, and STIPs and provide an opportunity for public review and comment on the MTPs, TIPs, and STIPs; and 11.
10. 310 CMR 60.05(8)(a)1.c.: After a final GHG assessment has been made by MassDOT and the MPOs, MassDOT and the MPOs shall submit MPO-endorsed MTPs, TIPs, STIPs or projects within 30 days of endorsement to the Department for review of the GHG assessment.


_____ for
Monica Tibbits-Nutt, Secretary and CEO
Massachusetts Department of Transportation (MassDOT);
Chair, Northern Middlesex Metropolitan Planning Organization (NMMPO)

May 28, 2025
_____ Date

CERTIFICATION OF THE NORTHERN MIDDLESEX MPO TRANSPORTATION PLANNING PROCESS

The Northern Middlesex Metropolitan Planning Organization certifies that its conduct of the metropolitan transportation planning process complies with all applicable requirements, which are listed below, and that this process includes activities to support the development and implementation of the regional Long-Range Transportation Plan and Air Quality Conformity Determination, the Transportation Improvement Program and Air Quality Conformity Determination, and the Unified Planning Work Program.

1. 23 USC 134, 49 USC 5303, and this subpart.
2. Sections 174 and 176 (c) and (d) of the Clean Air Act, as amended (42 USC 7504, 7506 (c) and (d) and 40 CFR part 93 and for applicable State Implementation Plan projects.
3. Title VI of the Civil Rights Act of 1964, as amended (42 USC 2000d-1) and 49 CFR Part 21.
4. 49 USC 5332, prohibiting discrimination on the basis of race, color, creed, national origin, sex, or age in employment or business opportunity.
5. Section 1101 (b) of the Fast Act (Pub. L. 114-357) and 49 CFR Part 26 regarding the involvement of disadvantaged business enterprises in U.S. DOT-funded projects.
6. 23 CFR part 230, regarding implementation of an equal employment opportunity program on Federal and Federal-aid highway construction contracts.
7. The provisions of the US DOT and of the Americans with Disabilities Act of 1990 (42 USC 12101 et seq.) and 49 CFR Parts 27, 37, and 38.
8. The Older Americans Act, as amended (42 USC 6101), prohibiting discrimination on the basis of age in programs or activities receiving federal financial assistance.
9. Section 324 of Title 23 USC regarding the prohibition of discrimination based on gender.
10. Section 504 of the Rehabilitation Act of 1973 (29 USC 794) and 49 CFR Part 27 regarding discrimination against individuals with disabilities.
11. Anti-lobbying restrictions found in 49 CFR Part 20. No appropriated funds may be expended by a recipient to influence or attempt to influence an officer or employee of any agency, or a member of Congress, in connection with the awarding of any federal contract.



for

May 28, 2025

Monica Tibbitts-Nutt, Secretary and CEO
Massachusetts Department of Transportation (MassDOT);
Chair, Northern Middlesex Metropolitan Planning Organization
(NMMPO)

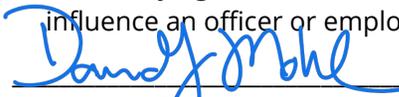
Date

SELF-CERTIFICATION OF THE 3C PLANNING PROCESS

FFY 2026-2030 Northern Middlesex Transportation Program 3C Process Statement

The Northern Middlesex Metropolitan Planning Organization certifies that its conduct of the metropolitan transportation planning process complies with all applicable requirements, which are listed below, and that this process includes activities to support the development and implementation of the regional Long-Range Transportation Plan and Air Quality Conformity Determination, the Transportation Improvement Program and Air Quality Conformity Determination, and the Unified Planning Work Program.

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10. Section 504 of the Rehabilitation Act of 1973 (29 USC 794) and 49 CFR Part 27 regarding discrimination against individuals with disabilities.
11. Anti-lobbying restrictions found in 49 CFR Part 20. No appropriated funds may be expended by a recipient to influence or attempt to influence an officer or employee of any agency, or a member of Congress, in connection with the awarding of any federal contract.



for

May 28, 2025

Monica Tibbits-Nutt, Secretary and CEO
Massachusetts Department of Transportation (MassDOT);
Chair, Northern Middlesex Metropolitan Planning Organization (NMMPO)

Date

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SECTION I: EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

The Transportation Improvement Program (TIP) for Federal Fiscal Years 2026–2030 sets the Northern Middlesex region’s investment strategy for federally funded transportation projects over the next five years. Prepared by the Northern Middlesex Council of Government (NMCOG), providing staffing support to the Northern Middlesex Metropolitan Planning Organization (NMMPO), the TIP translates long-range priorities into targeted improvements in infrastructure, mobility, and safety. It is fiscally constrained and performance-based, aligning with state and federal standards while responding to the region’s evolving transportation needs.

The TIP includes projects funded under Title 23 of the U.S. Code and the Federal Transit Act, as well as those requiring FHWA or FTA approval, even if not directly federally funded. It also documents regionally significant projects funded with state, local, or private funds for informational purposes to reflect the intermodal nature of the regional transportation system.

The TIP serves as the implementation tool for Envision 2050, the region’s Metropolitan Transportation Plan (MTP), which identifies and prioritizes long-term transportation needs over a 20-year planning horizon. Adopted by the NMMPO in August 2023, Envision 2050 outlines strategies for a multimodal network—including walking, biking, transit, and road travel—that supports mobility, safety, and economic development. The TIP aligns with the goals and performance targets in Envision 2050, translating them into actionable capital investments for the five-year programming window.

The NMMPO and Our Region’s TIP Projects

The Northern Middlesex region, also referred to as the Greater Lowell region in some planning contexts, encompasses nine communities: the City of Lowell and the Towns of Billerica, Chelmsford, Dracut, Dunstable, Pepperell, Tewksbury, Tyngsborough, and Westford. With a blend of urban cores, town centers, suburban neighborhoods, and rural areas, the region presents a complex set of transportation challenges and opportunities.

The NMMPO consists of representatives from Massachusetts Department of Transportation (MassDOT), NMCOG, the Lowell Regional Transit Authority (LRTA), the City of Lowell, and Select Board and Advisory Board representatives from other NMCOG communities. In collaboration with the Federal Highway Administration (FHWA), Federal Transit Administration (FTA), and other stakeholders, the MPO allocates funding and advances projects that align with Envision 2050 (the region’s Metropolitan Transportation Plan) and the Greater Lowell Vision Zero Plan. TIP projects are consistent with the goals of the Bipartisan Infrastructure Law (BIL)—also known as the Infrastructure Investment and Jobs Act (IIJA).¹ In support of these goals, the FFY 2026–2030 TIP programs more than \$68 million in federal and state funds across highway, bridge, and multimodal investments as outlined in Table 1 below. It also programs more than \$75 million in federal and state funds across transit projects. See [Section II: Project Programming](#), and [Section III: Financial Plan](#), for a full explanation

¹ The Bipartisan Infrastructure Law (BIL), enacted as the Infrastructure Investment and Jobs Act (IIJA) (Pub. L. No. 117-58) on November 15, 2021, is the federal surface transportation authorization as of the endorsement of this TIP, providing funding and policy guidance for transportation programs through Fiscal Year 2026. More information is available at: <https://www.fhwa.dot.gov/bipartisan-infrastructure-law/>.

of how projects were prioritized, funding for regional projects programmed under this TIP, along with a list of Statewide projects of regional significance and Transit projects funded under this TIP.

TABLE 1: OVERVIEW OF PROJECTS PROGRAMMED ON THE FFY2026-2030 HIGHWAY TIP

Project ID	Community	Description	2026	2027	2028	2029	2030
605966	Lowell	Reconstruction & related work on VFW Highway*	\$8,712,267*				
607401	Chelmsford	Traffic signal installation at Rt-110 & I-495		\$8,656,651			
612609	Tewksbury	Intersection improvements at Main St/Pleasant St & North St/East St		\$4,996,260			
604694	Lowell	Connector Reconstruction - From Thorndike St to Gorham St			\$11,676,259		
612977	Chelmsford	Vinal Square Safety Improvements*			\$2,764,021	\$5,012,581	
610930	Westford	Rt-110 (Littleton Rd), from Powers Rd. to Minots Corner				\$8,467,318	
609317	Chelmsford	Improvements on Rt-110 (Chelmsford St)*				\$852,782	\$8,435,330
613268	Tyngsborough	Culvert Replacement on Westford Rd.					\$2,626,529
613562	Tewksbury	Improvements at Shawsheen St, Foster Rd, Patten Rd, and Beech St					\$3,586,140
*Project received Advanced Construction funding in 2025							

As further described in [Section IV: Public Participation](#), public engagement plays a central role in the development of the Transportation Improvement Program (TIP). In accordance with the 2025 update of the NMMPO’s Public Participation Plan (PPP), NMMPO staff use hybrid meetings, multilingual materials, social media announcements, and digital engagement tools such as surveys and interactive maps to engage the community in transportation planning. These strategies ensure early and meaningful engagement across all member communities. During each TIP cycle, public comments are documented, categorized, and formally responded to before the NMMPO finalizes project programming.

The TIP reflects the NMMPO's commitment to sustainable, safe, and equitable transportation planning—values further elaborated in [Section IV: TIP Project Distribution](#) and [Section VII: Greenhouse Gas and Air Quality Analysis](#). Projects are prioritized using the Transportation Evaluation Criteria (TEC), which incorporates metrics for safety, mobility, access, and environmental impact. The TIP translates the long-range goals of Envision 2050—such as multimodal access, hazard mitigation, and economic opportunity—into near-term investments. It also advances safety goals outlined in the Greater Lowell Vision Zero strategy and aligns with regional development initiatives such as the Comprehensive Economic Development Strategy (CEDS).

Who is Involved in TIP Development?

The NMMPO is an 11-member policy board tasked with carrying out the transportation planning process for the Northern Middlesex Region in accordance with federal and state regulations. Federal regulations require that the NMMPO be designated to carry out a comprehensive, continuing, and cooperative (3-C) transportation planning process. The NMMPO is the federally designated transportation planning and programming agency for the City of Lowell and the Towns of Billerica, Chelmsford, Dracut, Dunstable, Pepperell, Tewksbury, Tyngsborough, and Westford. The NMMPO is staffed by NMCOG, the regional planning agency for the same region, the objective of which is to increase the capacity of municipalities and foster regional cooperation and coordination.

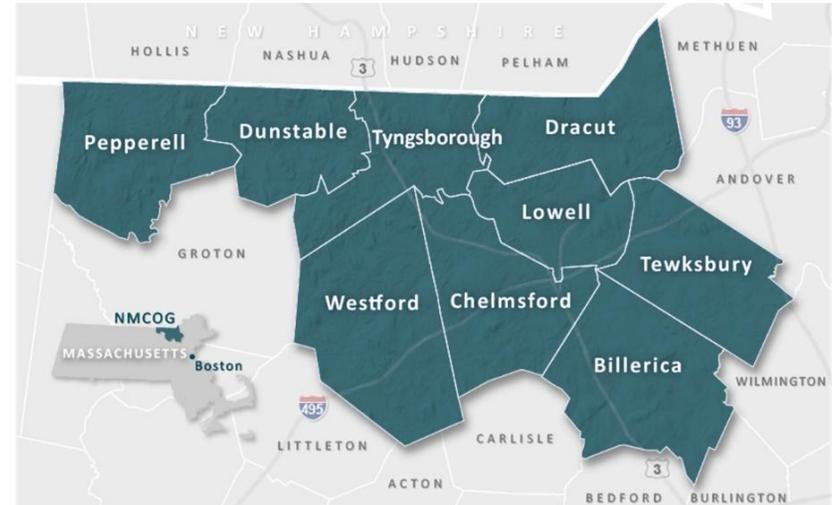


FIGURE 1: THE NMCOG AND NMMPO REGION

MPO Members and Affiliations

The membership of the NMMPO is guided by a 2025 Memorandum of Understanding (MOU) between NMCOG, MassDOT, and the LRTA.

Membership includes representatives from state, regional, and local agencies, as defined in the MOU:²

- MassDOT: Provides statewide oversight and guidance for the transportation planning process through its Office of Transportation Planning and Highway Division.
- NMCOG: Serves as the region's designated planning agency and provides staff support to the NMMPO. NMCOG is responsible for coordinating transportation initiatives and preparing federally required planning documents. The NMCOG Chair serves on the NMMPO.

² NMMPO (2025). *Memorandum of Understanding*. Retrieved from <https://static1.squarespace.com/static/6425d140965f0f4e44fb34a6/t/67eaa9c769b00911bd79a0f8/1743432135725/NMMPO+MOU+2025-2030.pdf>

- LRTA: Represents public transportation interests and participates in planning activities related to fixed-route and paratransit services in the region.
- City of Lowell Representative: The chief elected official from the City of Lowell or their designee.
- Town Representative: A Select Board member from the NMCOG Council, elected by the NMCOG Council to represent the region.
- LRTA Advisory Board Representative: A representative from a community within the NMMPO boundary (excluding Lowell).

In addition to the voting members, the NMMPO includes several non-voting (ex-officio) members:³

- A representative from a smaller community within the region—such as Dunstable, Pepperell, or Tyngsborough—if not already represented as a voting member.
- A representative of an underserved community.
- A representative of active transportation users, including those who bicycle, walk, or roll.
- Representatives from the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA), who provide technical assistance and ensure compliance with federal planning regulations.

Current NMMPO Members (as of April, 2025)

- Monica Tibbits-Nutt, Massachusetts Secretary of Transportation and MassDOT CEO
- Jonathan Gulliver, MassDOT Highway Administrator
- Stephen Themelis, NMCOG Chair
- Pat Wojtas, NMCOG MPO Representative (and Chelmsford Select Board member)
- Tom Bomil, LRTA Board Chair
- Karyn Puleo, LRTA Representative from a community outside Lowell (representing Tyngsborough)
- Wayne Jenness, NMCOG Councilor and MPO Representative from the City of Lowell
- Joi Singh, FHWA Massachusetts Division Administrator (*ex-officio non-voting member*)
- Peter Butler, FTA Region 1 Administrator (*ex-officio non-voting member*)

Partner Agencies

The success of the TIP relies on collaboration between federal, state, and local agencies to secure funding, ensure regulatory compliance, and facilitate project execution. Key partners include:

³ The first three ex-officio categories are to be appointed in September 2025; as these roles did not exist prior to the March 2025 update to the MOU.

Federal Partners

- Federal Highway Administration (FHWA): Provides oversight, funding, and policy guidance to align projects with national transportation goals.
- Federal Transit Administration (FTA): Offers grants and technical assistance to enhance public transportation.

State Partners

- Massachusetts Department of Transportation (MassDOT) – Oversees state highways, bridges, and transit funding distribution.
- Massachusetts Bay Transportation Authority (MBTA) – Provides commuter rail service to parts of the Northern Middlesex region via the Lowell Line, which connects Lowell and North Billerica to Boston.

Local Partners

- Regional Planning Agencies (RPAs) and Metropolitan Planning Organizations (MPOs) – NMCOG collaborates with neighboring RPAs and MPO staff to address regional transportation challenges.
- Local Governments – Ensure TIP projects align with the unique transportation needs of their communities.

SECTION II: PROJECT PROGRAMMING & PRIORITIZATION

About the Project Programming Process

Project prioritization is a performance-driven process, emphasizing investment in transportation projects that align with national and regional goals. TIP-eligible projects demonstrating measurable progress towards these goals are prioritized for funding. MassDOT and MPO partners utilize comprehensive evaluation processes to assess project merits, with MassDOT employing asset management systems and a multimodal evaluation framework established by the Project Selection Advisory Council.

TEC Scoring Update 2025

Historically, MPOs, including the NMMPO, have utilized Transportation Evaluation Criteria (TEC) initially developed for the FFY 2005-2009 TIP by state transportation agencies and the former Office for Commonwealth Development (OCD). The TEC was revised for the FFY 2006-2010 TIP to address geographic distribution and environmental concerns, though substantial updates had not occurred in the subsequent two decades.

In 2025, the NMMPO substantially revised the TEC scoring system to improve its alignment with regional transportation goals outlined in the recently adopted Envision 2050 and the Greater Lowell Vision Zero Plan. Additionally, federal guidance under the Infrastructure Investment and Jobs Act (IIJA) and recommendations from the 2024 Federal Certification Review prompted a comprehensive reevaluation of project prioritization criteria. Key updates include an enhanced emphasis on roadway safety, reflecting Vision Zero priorities to eliminate traffic fatalities, and the introduction of a dedicated Transportation Access Bonus Score designed to elevate access considerations in project evaluations. This new scoring framework prioritizes projects that directly benefit populations with limited transportation choice and addresses significant safety concerns identified through regional planning efforts. By adopting these changes, the NMMPO ensures that its project selection process remains relevant, equitable, and responsive to evolving regional and federal transportation priorities.

How TEC Scoring Works

The TEC is a systematic tool that evaluates transportation projects based on 22 characteristics across six categories:

- **Infrastructure Condition:** Does the project benefit roadway infrastructure conditions?
- **Mobility:** Does the project reduce travel times or have benefits to regional access?
- **Safety:** Does the project reduce the number and rate of crashes for vehicles, bicycles or pedestrians?
- **Community Effects and Support:** Does the project have local support, improve life for residents, and advance regional housing goals?
- **Land Use and Economic Development Impacts:** Does the project impact sustainable development and is it consistent with regional Land Use plans?
- **Environmental Impacts:** Does the project impact air quality, water quality, historical resources, or wildlife?

TEC scores range from -18 for projects with potential adverse impacts to +18 for projects of the highest priority. Each category contains specific criteria reflecting the project's potential to enhance regional transportation goals such as safety, sustainability, and mobility. Project scores for individual categories are calculated and weighted accordingly to produce a comprehensive TEC score, facilitating objective prioritization. Additionally, projects are eligible for a Transportation Access Score based on their proximity to or direct benefits for Regional Priority Communities identified by the Greater Lowell Vision Zero Plan. Eligible projects may receive a bonus score of 0, 1 or 2 points are added to the project's base score. It is not possible to receive a negative Transportation Access Bonus Score. Following endorsement of the new TEC scoring system by the NMMPO in February 2025, NMMPO staff applied the updated TEC scoring methodology to generate new TEC scores for all regional projects programmed in this FFY 2026-2030 TIP.

Staff scored regional projects only, not those projects geographically located within the region but included in MassDOT's Statewide Transportation Improvement Program (STIP), as MassDOT independently prioritizes and selects these projects. The BIL requires that the NMMPO conduct a competitive process for Transportation Alternatives Program (TAP) funding allocation. The TEC addresses this competitive process by focusing the funding on the highest priority projects. The full list of highway projects included in the TIP, with TEC scores, is summarized in Table 2. More in depth TEC Scoring, a Score Card, and methodological details, are included in [Appendix B](#).

TABLE 2: TRANSPORTATION EVALUATION CRITERIA (TEC) SCORING SUMMARY

Project ID	Project Description	Community	Project Cost Estimate (Current Dollars)	Design Status	Proposed TIP Year	TEC Score
605966	Lowell – VFW Highway	Lowell	\$12,157,256	Final Design	2026	N/A
S13318	LRTA Flex Funds – Gallagher Terminal Improvements	Lowell	\$2,687,546	Approved	2026	N/A
607401	Chelmsford – Traffic Signal Installation at Route 110 & Route 495	Chelmsford	\$8,323,703	Approved	2027	11.62
612609	Tewksbury – Intersection Improvements at Main St/Pleasant St & North St/East St	Tewksbury	\$4,775,250	Approved	2027	2.17
604694	Lowell – Connector Reconstruction (Thorndike to Gorham St)	Lowell	\$10,811,351	25% Design	2028	16.61
612977	Chelmsford – Vinal Square Safety Improvements	Chelmsford	\$7,200,557	Approved	2028-2029	13.94
610930	Westford – Route 110 (Littleton Rd) from Powers Rd to Minot's Corner	Westford	\$7,560,105	Approved	2029	13.69
609317	Chelmsford – Improvements on Chelmsford St (Route 110)	Chelmsford	\$8,292,957	Approved	2030	13.77
613562	Tewksbury – Improvements at Shawsheen St, Foster Rd, Patten Rd, & Beech St	Tewksbury	\$3,091,500	Approved	2030	8.5
613268	Tyngsborough – Culvert Replacement on Westford Rd	Tyngsborough	\$1,950,456	Approved	2030	5.33

Following the scoring of each project, staff considered the design status and readiness of each project as part of programming activities. In addition to the application of the evaluation criteria, each project was also screened to ensure it:

- Meets requirements set forth in BIL, the Clean Air Act and Amendments, and the Americans with Disabilities Act;
- Is consistent with local, regional, and state plans; and
- Complies with Title VI requirements.

Transit Projects on the TIP

The FTA provides funding to Massachusetts to develop new transit systems and improve, maintain, and operate existing systems. The Governor has designated MassDOT as the agency of authority, responsible for administering funding received (Title 49 USC). Programming of transit projects in the TIP is a result of consultation between the LRTA and MassDOT Rail and Transit Division. When applying for funding, the LRTA prioritizes projects based on state of good repair, safety, and facility upgrade criteria. MassDOT then reviews each project and applies scoring criteria to prioritize funding allocations to the applicants. The LRTA applies for funding through the Grants Plus program, with MassDOT Rail and Transit distributing the federal apportionment and providing a state match for capital and operating projects. Additionally, NMCOG provides a local match for planning programs and the LRTA provides a local match for operating assistance.

SECTION III: FINANCIAL PLAN

About the Financial Plan

The TIP Financial Plan outlines the anticipated federal and state resources supporting the implementation of highway and transit projects within the NMMPO region. This section demonstrates how the TIP maintains fiscal constraint by ensuring that programmed projects do not exceed available funding in each year. It provides an overview of funding sources and allocations across the TIP's time horizon, includes a detailed list of projects by fiscal year with accompanying descriptions, and highlights the Statewide TIP to ensure consistency and alignment with the Commonwealth's broader transportation investment priorities.

FINANCIAL PLAN AND FISCAL CONSTRAINT

The United States Congress passes a multi-year account that establishes a maximum level of federal transportation funding per federal fiscal year (FFY). The most recent authorization act was the Bipartisan Infrastructure Law (BIL), which was signed into law November 15, 2021 (during the 2022 FFY). The BIL apportioned funds from FFY2022-FFY2026 and governs the development of the FFY2026-2030 TIP by establishing formula funding levels, reauthorizing existing discretionary funding grant programs and creating new ones, and setting policy priorities.

In Massachusetts, MassDOT provides the required 20% match to federal BIL funds. See [Appendix C](#) for a full list of federal highway and transit funding categories typically allocated toward state and regional TIP projects. Table 3 provides an overview of regional target funding available for programming by the NMMPO in the development of the FFY2026-2030.

TABLE 3: FFY 2026-2030 FUNDING FOR REGIONAL PRIORITIES

	2026	2027	2028	2029	2030	Total
Federal Funding for State Planning Regional Priorities	\$233,628,128	\$284,175,435	\$295,483,528	\$293,281,783	\$297,972,003	\$1,404,540,877
Northern Middlesex Federal Aid Appointment*	\$9,119,851	\$11,110,123	\$11,552,224	\$11,466,145	\$11,649,513	\$54,897,856
State Matching Funds	\$2,279,963	\$2,777,531	\$2,888,056	\$2,866,536	\$2,912,378	\$13,724,464
Northern Middlesex Regional Target Funding	\$11,399,813	\$13,887,654	\$14,440,280	\$14,332,681	\$14,561,892	\$68,622,320

*Northern Middlesex receives 3.9096% of Federal Funding for State Planning Regional Priorities

The TIP must be a financially constrained document and must be consistent with the MTP and planning process. Approval responsibility rests with the NMMPO and the Governor. Projections of federal resources are based upon the apportionments of federal authorizations contained in the BIL, as allocated to the region by the State, or as allocated among the various MPOs, according to federal formula or MPO agreement, and adjusted to reflect obligation authority or priority. The projects programmed for this region meet the funding estimates of federal funds available each year as shown in Table 4. These estimates were provided by MassDOT and were refined as part of the State

Transportation Improvement Program development process. Table 5 contains similar information for the transit program of projects and was developed in conjunction with the LRTA's Capital Plan and the MassDOT Rail and Transit Division. Transit year constraint differs from highway in that it includes carryover of FTA 5307 funds from previous Federal fiscal years.

TABLE 4: OVERVIEW OF FFY 2026-2030 TIP HIGHWAY PROGRAMMED FUNDING

	2026	2027	2028	2029	2030	Total
Highway Program Regional Target (Federal & Non-Federal)	\$11,399,814	\$13,887,654	\$14,440,280	\$14,332,681	\$14,561,891	\$68,622,320
Target Funding Programmed (Federal & Non-Federal)	\$8,712,267	\$13,622,911	\$14,440,280	\$14,332,681	\$14,283,999	\$65,392,138
Balance Remaining	\$2,687,547	\$264,743	\$ -	\$ -	\$277,892	\$3,230,182

TABLE 5: FFY 2026-2030 TIP TRANSIT PROGRAMMED FUNDING/CONSTRAINT

Fiscal Year	Federal Apportionment to LRTA (5307)	Other Federal Apportionment*	FTA 5307 Carryover	FTA 5339 Carryover	Other Federal Carryover	Federal Amount Programmed (5307, 5339, 5339b, CARES, ARPA, CRRSA)	Available Funds vs Programmed Amount
Prior years carryover							
2026	\$5,114,227	\$14,840,000	\$23,256,265	\$53,683	\$9,199,741	\$18,223,741	\$34,240,175
2027	\$5,165,211	\$8,640,000	\$19,076,600			\$20,071,918	\$12,809,893
2028	\$5,216,707	\$8,000,000	\$13,337,935			\$17,211,401	\$9,343,241
2029	\$5,268,720		\$9,343,242			\$11,263,555	\$3,348,407
2030	\$5,321,255		\$3,348,407			\$8,669,662	\$0

Note: Other Federal apportionment includes planned discretionary grants not yet awarded.

The TIP is required to be financially constrained by year; it must include a financial plan demonstrating which projects can be implemented using available revenue sources and which projects are to be implemented using proposed revenue sources. Moreover, regulations have further defined financial constraints to exclude a state's unspent federal balances. Projects can only be programmed up to an amount that the Congress is expected to allow the state to spend in any individual fiscal year.

The financial constraint of the total state program is depicted in the FFY 2026-2030 STIP. Funding levels for Fiscal Years 2026-2030 have been developed cooperatively between MassDOT and MPOs across the Commonwealth as part of the TIP development process.

Within the TIP, each year includes both Highway and Transit sections. Each programmed project includes a project description, estimated total cost, Federal funds to be obligated for each program year, sources of Federal and Non-Federal funds, and the fund recipient. For a project to be considered for inclusion on the TIP, a project or program must have an estimated advertising or implementation date within that fiscal year. At the request of the FHWA, the highway project cost estimates reflect a 4% cost increase compounded annually after the first fiscal year to reflect Year of Expenditure (YOE) fiscal constraint. Thus, FFY 2027 projects include a 4% YOE increase, FFY 2028 includes an 8% YOE increase, FFY 2029 projects include a 12% YOE increase, and FFY 2030 projects include a 16% increase from their current cost estimates. Table 6 on the following page displays project costs over the extent of the FFY 2026-2030 TIP, with the YOE fiscal constraints applied.

Three projects—Lowell's VFW Highway and Chelmsford's Vinal Square and Rt-110 Improvements—are programmed as advance construction (AC), meaning the fiscal constraints of the TIP require the NMMPO to fund the project over multiple years. This allows projects to begin even in the absence of sufficient Federal-aid obligation authority to cover the entire project within a single FFY. By ACing the Lowell and Chelmsford projects, the NMMPO can both undertake a greater number of concurrent projects and facilitate the construction of larger projects while still funding smaller projects across the region. The reconstruction on Lowell's VFW Highway was AC'd for 2025-2026, allowing for more projects to be funded in FFY 2025. The ACing of the two Chelmsford projects in 2028-2029 (Vinal Square) and 2029-2030 (Rt-110) provides funding opportunities for regional work in Westford, Tyngsborough, and Tewksbury.

Project Listings

The following project pages describe programmed highway projects across the TIP's five-year funding cycle. Summaries of regional projects follow, beginning with a guide on how to read and understand the project summaries. The summaries include project identification information, greenhouse gas impacts where available, general descriptions for each regional target project, Transportation Evaluation Scores (TEC), and a financial summary of the project's programming.

The project descriptions below describe regionally prioritized projects only; projects listed without a project page are state-prioritized projects, which are outlined following the project pages on the full State Transportation Improvement Program (STIP) Investment Report for the NMMPO region. The STIP includes both regionally prioritized and state-prioritized projects programmed for FFY 2026-2030. The latter are projects that are undertaken by MassDOT within the NMCOG region but are not funded through the NMMPO's regional TIP.

Additionally, the STIP Investment Report details the funds allocated to the Lowell Regional Transit Authority (LRTA) over the course of FFY 2026-2030.

TABLE 6: SUMMARY OF YOE AND FINANCIAL FORECASTS FOR TIP PROJECTS AS OF THE DEVELOPMENT OF TIP FFY 2026-2030.

Project ID	Community	Description	2026	2027	2028	2029	2030
605966	Lowell	Reconstruction & related work on VFW Highway*	\$8,712,267				
607401	Chelmsford	Traffic signal installation at Rt-110 & I-495		\$8,656,651			
612609	Tewksbury	Intersection improvements at Main St/Pleasant St & North St/East St		\$4,996,260			
604694	Lowell	Connector Reconstruction from Thorndike St to Gorham St			\$11,676,259		
612977	Chelmsford	Vinal Square Safety Improvements*			\$2,764,021	\$5,012,581	
610930	Westford	Rt-110 (Littleton Rd), from Powers Rd. to Minots Corner				\$8,467,318	
609317	Chelmsford	Improvements on Rt-110 (Chelmsford St)*				\$852,782	\$8,435,330
613268	Tyngsborough	Culvert Replacement on Westford Rd.					\$2,626,529
613562	Tewksbury	Improvements at Shawsheen St, Foster Rd, Patten Rd, and Beech St					\$3,586,140
		Target	\$11,399,814	\$13,887,654	\$14,440,280	\$14,332,681	\$14,561,891
		Total Programmed	\$8,712,267	\$13,622,911	\$14,440,280	\$14,332,681	\$14,283,999
		Balance	\$2,687,547	\$264,743	\$0	\$0	\$277,892

*Projects with Advanced Construction (AC) costs

Municipality

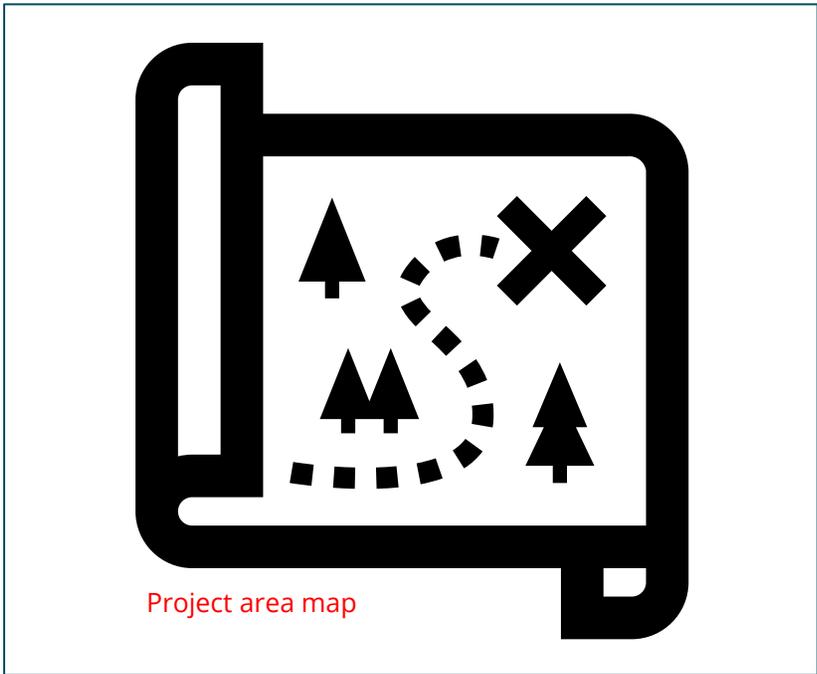
Project name

HOW TO READ THE PROJECT PAGES: AN INTRODUCTION

Project Description

A summary that describes a project's purpose and project scope. This section is informed by the project need form (PNF) and project initiation form (PIF) that are written by the project's proponent when submitted to MassDOT for TIP consideration.

Project ID	State assigned project ID	GHG Analysis	
Proponent	Who proposed the project?	Type	Quantitative or Qualitative
Funding Source	Where does the money come from?	Emissions	Impact type
Cost	Total project cost, even if AC'd over multiple years		



Project Scoring Summary

Category	Condition	Mobility	Safety	Community Effects	Land Use / Econ. Devt.	Environmental Effects	Access Bonus
Score	Scores for each category used to score projects in the TEC						

Total TEC Score (weighted): ## ← Final TEC score after weighting. The closer to 18, the more aligned the project is with regional priorities.

Project Funding Summary

	FFY2026	FFY2027	FFY2028	FFY2029	FFY2030
Federal	-	-	-	-	-
Non-Federal	-	-	-	-	-
Total					

A breakdown of the total cost funding sources. This is summarized per year the given project is programmed on the TIP. For projects AC'd over multiple years, the cost is broken down per year it is programmed.

Other Information

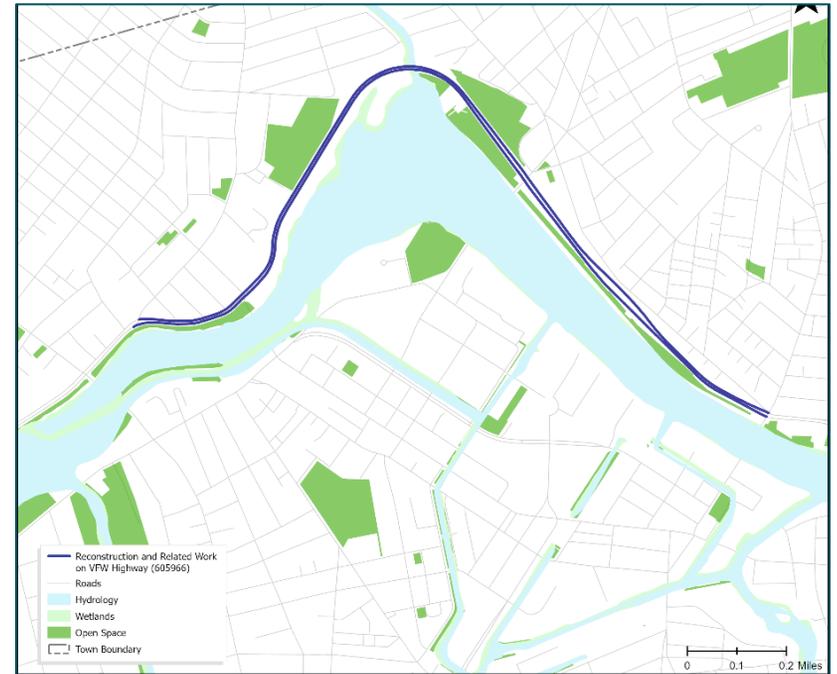
Supplemental project information.

LOWELL: RECONSTRUCTION & RELATED WORK ON VFW HIGHWAY

Project Description

This project includes separating the roadway drainage system from the municipal sewer system, cold planing and resurfacing the roadway, restoring sidewalks, reconstructing wheelchair ramps, installing hook lock inlet grates on catch basins, restoring traffic signal loop detectors, and restoring roadway pavement markings.

The project begins south of the intersection of Varnum Avenue & Pawtucket Boulevard and ends approximately 500' west of the intersection of Bridge Street and VFW Highway. The facility length is 1.5 miles. The project is segmented into four which excludes several locations which have been recently reconstructed.



Project ID	605966	GHG Analysis	
Proponent	MassDOT	Type	Quantitative
Funding Source	Regional Target Funds	Emissions	28,741 kg/yr CO2 reduction
Cost	\$12,157,256		

Project Scoring Summary

Category	Condition	Mobility	Safety	Community Effects	Land Use / Econ. Devt.	Environmental Effects	Access Bonus
Score	-	-	-	-	-	-	-

Project was not scored using the new TEC as FFY2026 as the project was AC'd between FFY2025 and FFY2026.

Project Funding Summary

	FFY2026	FFY2027	FFY2028	FFY2029	FFY2030
Federal	\$6,969,813	-	-	-	-
Non-Federal	\$1,742,453	-	-	-	-
Total	\$8,712,267				

Other Information

The project is AC'd over two years: FFY2025 (past) and FFY2026

CHELMSFORD: TRAFFIC SIGNAL INSTALLATION AT ROUTE 110 & ROUTE 495

Project Description

This intersection improvement project consists of the installation of two traffic signals at the intersection of Route 495 and Route 110 (Exit 34). This also includes the addition of left turn lanes with roadway pavement markings, improvements to pavements and pedestrian and bicycle improvements. The Route 110 corridor from Alpine Lane to Stedman Street/Golden Cove Road is scheduled to be reconstructed in 2025-2026 by the MassDOT Highway Division. Design development for the project is underway. The intersection Route 110 at Stedman Street and Golden Cove Road has been identified as a high crash location within the limits of the proposed reconstruction project.



Project ID	607401	GHG Analysis	
Proponent	MassDOT		
Funding Source	Regional Target Funds		
Cost	\$8,656,651		
		Type	Qualitative
		Emissions	No impact

Project Scoring Summary

Category	Condition	Mobility	Safety	Community Effects	Land Use / Econ. Devt.	Environmental Effects	Access Bonus
Score	1.68	1.68	1.80	1.89	2.31	1.26	1

Total TEC Score (weighted): **11.62**

Project Funding Summary

	FFY2026	FFY2027	FFY2028	FFY2029	FFY2030
Federal	-	\$6,925,321	-	-	-
Non-Federal	-	\$1,731,330	-	-	-
Total		\$8,656,651			

Other Information

Installation at two locations.

TEWKSBURY: INTERSECTION IMPROVEMENTS AT MAIN ST/PLEASANT ST & NORTH ST/EAST ST

Project Description

This project includes designing a new intersection at Main Street (MA Route 38)/Pleasant Street/East Street, North Street/East Street, and Main Street/North Street. The design will assess adding coordinate signalization to the two North Street intersections which are currently unsignalized. The assessment will also consider the addition of turn lanes to better accommodate traffic volumes. The construction of the new intersection design is intended to provide better traffic flow and safety. Improved pedestrian and bicycle accommodations are anticipated to be included in the intersection design.



Project ID	612609	GHG Analysis	
Proponent	Town of Tewksbury	Type	Qualitative
Funding Source	Regional Target Funds	Emissions	No impact
Cost	\$4,966,260		

Project Scoring Summary

Category	Condition	Mobility	Safety	Community Effects	Land Use / Econ. Devt.	Environmental Effects	Access Bonus
Score	0	0.28	0	0.42	0.63	0.84	0

Total TEC Score (weighted): **2.17**

Project Funding Summary

	FFY2026	FFY2027	FFY2028	FFY2029	FFY2030
Federal	-	\$3,973,008	-	-	-
Non-Federal	-	\$993,252	-	-	-
Total		\$4,966,260			

Other Information

N/A

LOWELL: CONNECTOR RECONSTRUCTION

Project Description

This project is to reconstruct the intersection of the Lowell Connector at Route 3A (Gorham Street) and replace the existing traffic signals with a roundabout to slow traffic at the intersection. Improvements as part of this project include improved pedestrian path with new sidewalks and pavement markings. The City of Lowell and MassDOT have been working together to improve intersection safety, relieve congestion through improved signalization and increase capacity using striping, signal, and by merging improvements at the intersection.

Project ID	604694	GHG Analysis	
Proponent	City of Lowell	Type	Qualitative
Funding Source	Regional Target Funds	Emissions	No impact
Cost	\$11,676,259		



Project Scoring Summary

Category	Condition	Mobility	Safety	Community Effects	Land Use / Econ. Devt.	Environmental Effects	Access Bonus
Score	1.68	2.52	4.95	2.31	2.31	0.84	2

Total TEC Score (weighted): **16.21**

Project Funding Summary

	FFY2026	FFY2027	FFY2028	FFY2029	FFY2030
Federal	-	-	\$9,341,007	-	-
Non-Federal	-	-	\$2,335,252	-	-
Total			\$11,676,259		

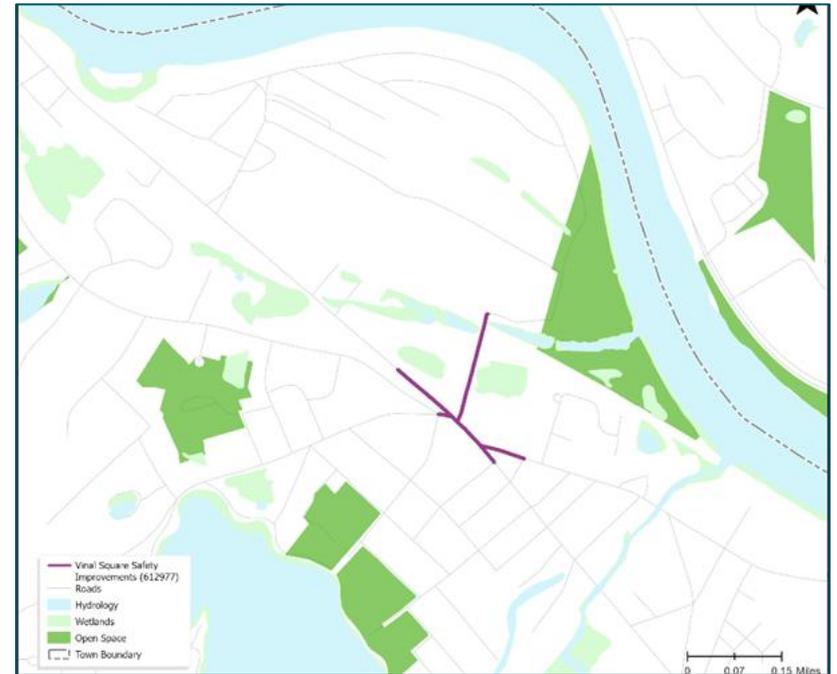
Other Information

N/A

CHELMSFORD: VINAL SQUARE SAFETY IMPROVEMENTS

Project Description

This project includes upgrades to traffic signal, pavement resurfacing, upgraded signs and lines, updated existing sidewalk network to conform to ADA standards, new bike lanes, improved visibility and accessibility to crosswalks using pedestrian activated Rectangular Rapid Flashing Beacons. Project development began in 2016 with the Chelmsford Complete Streets Prioritization Plan. A draft of potential improvements was presented to the Vinal Square Strategic Action Committee, sparking interest in capital improvements in this district. Needs in this area include improved traffic operations and safety, geometric changes, and Complete Streets application throughout. The project was approved through the MassDOT Project Review Committee in 2022. The Town is completing a 25% design process this spring and summer which then will be brought through a MassDOT 25% design public hearing for MassDOT to advance the design and set a target construction timeline.



Project ID	604694	GHG Analysis	
Proponent	Town of Chelmsford	Type	Qualitative
Funding Source	Regional Target Funds	Emissions	No impact
Cost	\$7,776,602		

Project Scoring Summary

Category	Condition	Mobility	Safety	Community Effects	Land Use / Econ. Devt.	Environmental Effects	Access Bonus
Score	2.52	1.96	4.05	1.89	2.10	2.10	1

Total TEC Score (weighted): **13.94**

Project Funding Summary

	FFY2026	FFY2027	FFY2028	FFY2029	FFY2030
Federal	-	-	\$2,211,217	\$4,010,065	-
Non-Federal	-	-	\$552,804	\$1,002,516	-
Total			\$2,764,021	\$5,012,581	

Other Information

Project is AC'd over FFY 2028 and 2029.

WESTFORD: ROUTE 110 (LITTLETON RD) IMPROVEMENTS FROM POWERS RD. TO MINOTS CORNER

Project Description

The proposed project entails the reconstruction of approximately 4,000 feet of the existing two-lane cross section to accommodate a two-way left-turn lane, the addition of a curbed sidewalk on the north side of Littleton Rd., and a shared-use path along the south side. The existing culvert that runs perpendicular to Littleton Rd. at Vine Brook will be replaced to meet stream crossing standards to the maximum extent practical. The existing drainage system will be modified to accommodate the proposed curblin and the existing pavement will be milled and overlaid.



Project ID	610930	GHG Analysis	
Proponent	Town of Westford	Type	Qualitative
Funding Source	Regional Target Funds	Emissions	No impact
Cost	\$8,467,318		

Project Scoring Summary

Category	Condition	Mobility	Safety	Community Effects	Land Use / Econ. Devt.	Environmental Effects	Access Bonus
Score	1.68	1.68	4.5	2.52	1.89	0.42	1

Total TEC Score (weighted): **13.69**

Project Funding Summary

	FFY2026	FFY2027	FFY2028	FFY2029	FFY2030
Federal	-	-	-	\$6,777,854	-
Non-Federal	-	-	-	\$1,693,464	-
Total				\$8,467,318	

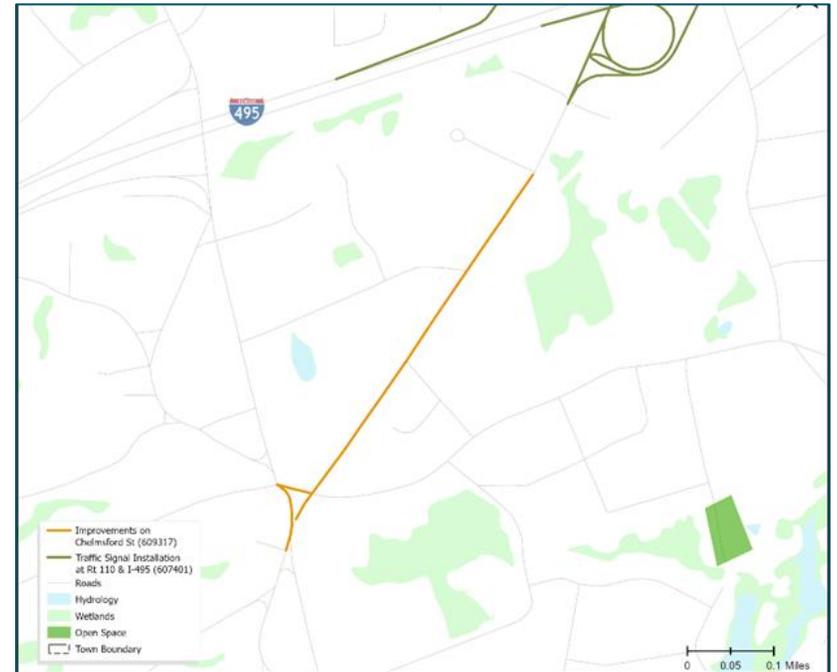
Other Information

N/A

CHELMSFORD: IMPROVEMENTS ON CHELMSFORD STREET (RTE. 110)

Project Description

This project involves improvements along Chelmsford Street including pavement improvements, access management, bicycle lanes, and improved pedestrian facilities. The Town of Chelmsford is advancing a 25% design of roadway improvements and traffic control for Route 110 (Chelmsford Street) in Chelmsford, MA. The project limits are Route 110 (Chelmsford Street) for ±2,400 feet from the intersection of Billerica Rd (Central Square) to the intersection with Alpine Lane. Roadway improvements include both roadway and sidewalk improvements, as well as considerations for bicycle facilities and parking. As the 25% design has been approved by MassDOT, a construction date has been programmed for the outyears of the FFY2026-2030 TIP.



Project ID	609317	GHG Analysis	
Proponent	Town of Chelmsford	Type	Qualitative
Funding Source	Regional Target Funds	Emissions	No impact
Cost	\$9,288,112		

Project Scoring Summary

Category	Condition	Mobility	Safety	Community Effects	Land Use / Econ. Devt.	Environmental Effects	Access Bonus
Score	2.52	1.4	3.6	1.68	2.31	1.26	1

Total TEC Score (weighted): **13.77**

Project Funding Summary

	FFY2026	FFY2027	FFY2028	FFY2029	FFY2030
Federal	-	-	-	\$682,226	\$6,748,264
Non-Federal	-	-	-	\$170,556	\$1,687,066
Total				\$852,782	\$8,435,330

Other Information

The project is AC'd over two years – FFY 2029 and FFY 2030.

TEWKSBURY: IMPROVEMENTS AT SHAWSHEEN ST., FOSTER RD., PATTEN RD., AND BEECH ST.

Project Description

The project aims to make safety improvements at the intersection of Shawsheen St, Patten Rd, Foster Rd, and Beech St. This includes simplifying vehicular movements, providing consistent roadway cross sections, reducing excess pavement, improving pedestrian accessibility, providing multi-modal alternatives for the Heath Brook School, and reducing school-related conflicts. A Road Safety Audit has been performed identifying safety issues and enhancement measures that will be evaluated for inclusion into the project. The proposed project encompasses approximately 1200 feet of Shawsheen St from Patten Rd to Ronald Dr. Improvements are anticipated to include geometric improvements to the intersections, upgrade of pedestrian facilities, addition of bicycle facilities, traffic control modifications, and other safety improvements.



Project ID	613562	GHG Analysis	
Proponent	Town of Tewksbury	Type	Qualitative
Funding Source	Regional Target Funds	Emissions	No impact
Cost	\$3,586,140		

Project Scoring Summary

Category	Condition	Mobility	Safety	Community Effects	Land Use / Econ. Devt.	Environmental Effects	Access Bonus
Score	1.68	1.68	2.25	0.84	0.63	0	1

Total TEC Score (weighted): **8.5**

Project Funding Summary

	FFY2026	FFY2027	FFY2028	FFY2029	FFY2030
Federal	-	-	-	-	\$2,868,912
Non-Federal	-	-	-	-	\$717,228
Total					\$3,586,140

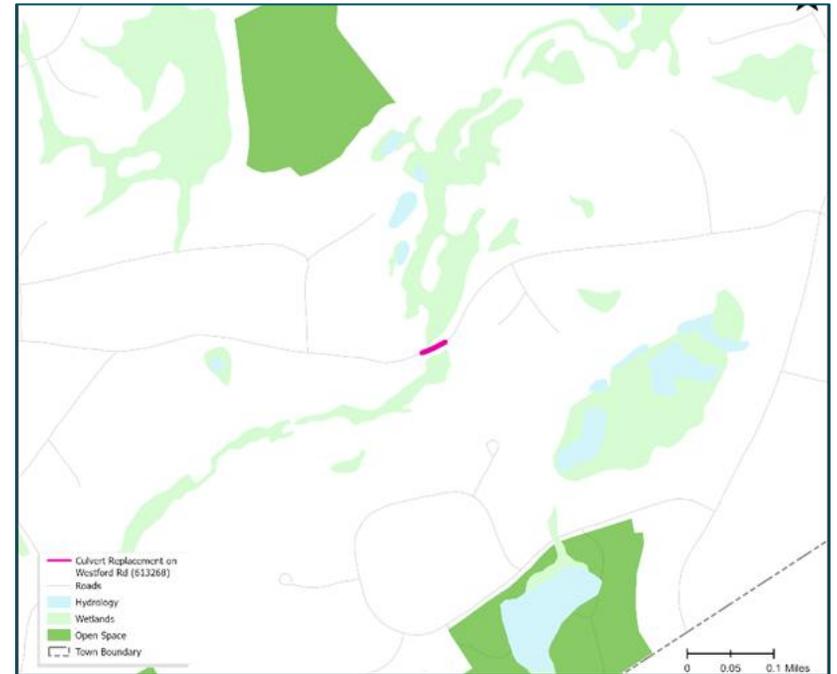
Other Information

This project is new to the TIP.

TYNGSBOROUGH: CULVERT REPLACEMENT ON WESTFORD RD.

Project Description

The project will replace the deteriorated culvert carrying Westford Rd over Bridge Meadow Brook. It is anticipated that the proposed structure will be a 3-sided precast concrete culvert supported on spread footings with adjacent concrete wingwalls at all four corners. There are two subsurface gas lines and a subsurface water main that pass above the existing structure; utilities will be permanently relocated in this project. There will be upgrades to the bridge railing and traffic safety features to bring them up to current standards. The project limits include the culvert and its approaches, totaling ~150 feet. The project includes reconstruction to provide 11' lanes and 1' shoulders, new guardrail, and new drainage structures. The project includes accommodations for future sidewalk construction on the north side of the road by installing 5' minimum from the edge of the road, installing guardrail, and constructing granite curbing and gravel base for future sidewalk.



Project ID	613562	GHG Analysis	
Proponent	Town of Tewksbury	Type	Qualitative
Funding Source	Regional Target Funds	Emissions	No impact
Cost	\$2,262,529		

Project Scoring Summary

Category	Condition	Mobility	Safety	Community Effects	Land Use / Econ. Devt.	Environmental Effects	Access Bonus
Score	2.52	0.28	0.9	0.42	-0.21	0.42	1

Total TEC Score (weighted): **5.33**

Project Funding Summary

	FFY2026	FFY2027	FFY2028	FFY2029	FFY2030
Federal	-	-	-	-	\$1,810,023
Non-Federal	-	-	-	-	\$452,506
Total					\$2,262,529

Other Information

This project is new to the TIP.

STIP Investments Report
Northern Middlesex Region



STIP: 2026 - 2030

Year	MassDOT Project ID	MPO	Municipality	MassDOT Project Description	District	Funding Source	Adjusted TFPC	Total Programmed Funds	Federal Funds	Non-Federal Funds
Federal Fiscal Year 2026								\$10,950,719	\$9,208,266	\$1,742,453
Section 1A / Regionally Prioritized Projects								\$8,712,267	\$6,969,814	\$1,742,453
Roadway Reconstruction								\$8,712,267	\$6,969,814	\$1,742,453
2026	605966	Northern Middlesex	Lowell	LOWELL- RECONSTRUCTION & RELATED WORK ON VFW HIGHWAY	4	STBG	\$12,157,256	\$8,231,945	\$6,585,556	\$1,646,389
2026	605966	Northern Middlesex	Lowell	LOWELL- RECONSTRUCTION & RELATED WORK ON VFW HIGHWAY	4	TAP	\$12,157,256	\$480,322	\$384,258	\$96,064
Section 1B / Earmark or Discretionary Grant Funded Projects								\$2,238,452	\$2,238,452	\$0
Bridge Off-system Local NB								\$2,238,452	\$2,238,452	\$0
2026	608861	Northern Middlesex	Westford	WESTFORD- BRIDGE REHABILITATION, W-26-002, STONY BROOK ROAD OVER THE STONY BROOK	3	BROFF	\$2,238,452	\$2,238,452	\$2,238,452	\$0
Federal Fiscal Year 2027								\$25,403,813	\$20,323,050	\$5,080,763
Section 1A / Regionally Prioritized Projects								\$13,622,911	\$10,898,329	\$2,724,582
Intersection Improvements								\$8,656,651	\$6,925,321	\$1,731,330
2027	607401	Northern Middlesex	Chelmsford	CHELMSFORD- TRAFFIC SIGNAL INSTALLATION AT ROUTE 110 & ROUTE 495 (2 LOCATIONS)	4	STBG	\$8,656,651	\$8,656,651	\$6,925,321	\$1,731,330
Roadway Reconstruction								\$4,966,260	\$3,973,008	\$993,252
2027	612609	Northern Middlesex	Tewksbury	TEWKSBURY- INTERSECTION IMPROVEMENTS AT MAIN STREET/PLEASANT STREET & NORTH STREET/EAST STREET	4	STBG	\$4,966,260	\$4,966,260	\$3,973,008	\$993,252
Section 2C / Federal Aid Funded State Prioritized Expansion Projects								\$11,780,902	\$9,424,722	\$2,356,180
Bicycle and Pedestrian								\$11,780,902	\$9,424,722	\$2,356,180
2027	613876	Northern Middlesex	Billerica	BILLERICA- YANKEE DOODLE BIKE PATH CONSTRUCTION (PHASE 2)	4	CMAQ	\$11,780,902	\$11,780,902	\$9,424,722	\$2,356,180
Federal Fiscal Year 2028								\$14,440,280	\$11,552,224	\$2,888,056
Section 1A / Regionally Prioritized Projects								\$14,440,280	\$11,552,224	\$2,888,056
Roadway Reconstruction								\$14,440,280	\$11,552,224	\$2,888,056
2028	604694	Northern Middlesex	Lowell	LOWELL- CONNECTOR RECONSTRUCTION, FROM THORNDIKE STREET TO GORHAM STREET	4	STBG	\$11,676,259	\$11,676,259	\$9,341,007	\$2,335,252
2028	612977	Northern Middlesex	Chelmsford	CHELMSFORD- VINAL SQUARE SAFETY IMPROVEMENTS	4	STBG	\$7,776,602	\$2,764,021	\$2,211,217	\$552,804

STIP Investments Report
Northern Middlesex Region



								STIP: 2026 - 2030		
Federal Fiscal Year 2029								\$47,873,924	\$38,299,139	\$9,574,785
Section 1A / Regionally Prioritized Projects								\$14,332,681	\$11,466,145	\$2,866,536
Roadway Reconstruction								\$14,332,681	\$11,466,145	\$2,866,536
2029	609317	Northern Middlesex	Chelmsford	CHELMSFORD- IMPROVEMENTS ON CHELMSFORD STREET (ROUTE 110)	4	STBG	\$9,288,112	\$852,782	\$682,226	\$170,556
2029	610930	Northern Middlesex	Westford	WESTFORD- ROUTE 110 (LITTLETON ROAD), FROM POWERS ROAD TO MINOT'S CORNER	3	STBG	\$8,467,318	\$8,467,318	\$6,773,854	\$1,693,464
2029	612977	Northern Middlesex	Chelmsford	CHELMSFORD- VINAL SQUARE SAFETY IMPROVEMENTS	4	STBG	\$7,776,602	\$5,012,581	\$4,010,065	\$1,002,516
Section 2A / Federal Aid Funded State Prioritized Reliability Projects								\$29,076,028	\$23,260,822	\$5,815,206
Bridge On-system Non-NHS								\$29,076,028	\$23,260,822	\$5,815,206
2029	613120	Northern Middlesex	Tewksbury	TEWKSBURY- BRIDGE REPLACEMENT, T-03-013, NORTH STREET OVER I-495	4	NHPP	\$36,610,112	\$29,076,028	\$23,260,822	\$5,815,206
Section 2B / Federal Aid Funded State Prioritized Modernization Projects								\$4,465,215	\$3,572,172	\$893,043
Safe Routes to School								\$4,465,215	\$3,572,172	\$893,043
2029	609510	Northern Middlesex	Dracut	DRACUT- IMPROVEMENTS AT GEORGE ENGLSBY ELEMENTARY SCHOOL (SRTS)	4	TAP	\$4,465,215	\$4,465,215	\$3,572,172	\$893,043
Federal Fiscal Year 2030								\$21,818,083	\$17,454,466	\$4,363,617
Section 1A / Regionally Prioritized Projects								\$14,283,999	\$11,427,199	\$2,856,800
Roadway Reconstruction								\$8,435,330	\$6,748,264	\$1,687,066
2030	609317	Northern Middlesex	Chelmsford	CHELMSFORD- IMPROVEMENTS ON CHELMSFORD STREET (ROUTE 110)	4	STBG	\$9,288,112	\$8,435,330	\$6,748,264	\$1,687,066
Roadway Improvements								\$2,262,529	\$1,810,023	\$452,506
2030	613268	Northern Middlesex	Tyngsborough	TYNGSBOROUGH- CULVERT REPLACEMENT ON WESTFORD ROAD	4	STBG	\$2,262,529	\$2,262,529	\$1,810,023	\$452,506
Safety Improvements								\$3,586,140	\$2,868,912	\$717,228
2030	613562	Northern Middlesex	Tewksbury	TEWKSBURY- IMPROVEMENTS AT SHAWSHEEN STREET, FOSTER ROAD, PATTEN ROAD AND BEECH STREET	4	STBG	\$3,586,140	\$3,586,140	\$2,868,912	\$717,228
Section 2A / Federal Aid Funded State Prioritized Reliability Projects								\$7,534,084	\$6,027,267	\$1,506,817
Bridge On-system Non-NHS								\$7,534,084	\$6,027,267	\$1,506,817
2030	613120	Northern Middlesex	Tewksbury	TEWKSBURY- BRIDGE REPLACEMENT, T-03-013, NORTH STREET OVER I-495	4	NHPP	\$36,610,112	\$7,534,084	\$6,027,267	\$1,506,817

STIP Investments Report
 Program Activity: Transit, Lowell Regional Transit Authority



STIP: 2026 - 2030

Year	MassDOT Project ID	Municipality	Program	MassDOT Project Description	Funding Source	Total Project Cost	Total Programmed Funds	Federal Funds	State Funds	Other Funds
Federal Fiscal Year 2026							\$34,352,279	\$18,223,741	\$12,847,638	\$3,280,900
Lowell Regional Transit Authority							\$34,352,279	\$18,223,741	\$12,847,638	\$3,280,900
2026	LRTA011628	Lowell	RTA Facility & Vehicle Maintenance	Lowell - ADA/COMMUTER ACCESS WAY & INTERMODAL UPGRADES (Community Project Funding)	OF	\$4,520,349	\$3,616,279	\$3,616,279		
2026	LRTA011628	Lowell	RTA Facility & Vehicle Maintenance	Lowell - ADA/COMMUTER ACCESS WAY & INTERMODAL UPGRADES (Community Project Funding)	RTACAP	\$4,520,349	\$904,070		\$904,070	
2026	LRTA011629		Operating	LRTA - OPERATING ASSISTANCE (CARES)	OF	\$788,220	\$1,960,178	\$1,960,178		
2026	LRTA011949		Operating	LRTA - OPERATING ASSISTANCE (ARPA)	OF	\$432,954	\$432,954	\$432,954		
2026	LRTA011950		RTA Fleet Upgrades	LRTA - FLEET EXPANSION (5) 35' BUSES FOR FIXED ROUTE	5307	\$4,372,500	\$1,320,000	\$1,320,000		
2026	LRTA011950		RTA Fleet Upgrades	LRTA - FLEET EXPANSION (5) 35' BUSES FOR FIXED ROUTE	RTACAP	\$4,372,500	\$330,000		\$330,000	
2026	LRTA011951		RTA Facility & System Modernization	LRTA - UPGRADE PARATRANSIT SCHEDULING SOFTWARE	5307	\$200,000	\$160,000	\$160,000		
2026	LRTA011951		RTA Facility & System Modernization	LRTA - UPGRADE PARATRANSIT SCHEDULING SOFTWARE	RTACAP	\$200,000	\$40,000		\$40,000	
2026	LRTA011952		RTA Facility & Vehicle Maintenance	Lowell - ADA/COMMUTER ACCESS WAY & INTERMODAL UPGRADES (Flex funding)	OF	\$3,190,330	\$3,190,330	\$3,190,330		
2026	LRTA011952		RTA Facility & Vehicle Maintenance	Lowell - ADA/COMMUTER ACCESS WAY & INTERMODAL UPGRADES (Flex funding)	TDC	\$3,190,330	\$797,582		\$797,582	
2026	RTD0010690		RTA Facility & Vehicle Maintenance	LRTA - FACILITIES AND EQUIPMENT IMPROVEMENTS	5307	\$4,250,000	\$1,200,000	\$1,200,000		
2026	RTD0010690		RTA Facility & Vehicle Maintenance	LRTA - FACILITIES AND EQUIPMENT IMPROVEMENTS	RTACAP	\$4,250,000	\$300,000		\$300,000	
2026	RTD0010703		RTA Vehicle Replacement	LRTA - REVENUE VEHICLE REPLACEMENT (6) - 35' Hybrids (FY23 LOWNO AWARD)	5339D	\$5,850,000	\$6,200,000	\$6,200,000		
2026	RTD0010703		RTA Vehicle Replacement	LRTA - REVENUE VEHICLE REPLACEMENT (6) - 35' Hybrids (FY23 LOWNO AWARD)	TDC	\$5,850,000	\$1,240,000		\$1,240,000	

STIP Investments Report
 Program Activity: Transit, Lowell Regional Transit Authority



STIP: 2026 - 2030

2026	RTD0011237		RTA Vehicle Replacement	LRTA - NONREVENUE VEHICLE REPLACEMENT - ADMINISTRATIVE VEHICLE	5307	\$170,000	\$56,000	\$56,000		
2026	RTD0011237		RTA Vehicle Replacement	LRTA - NONREVENUE VEHICLE REPLACEMENT - ADMINISTRATIVE VEHICLE	RTACAP	\$170,000	\$14,000		\$14,000	
2026	T00043		Operating	LRTA - OPERATING ASSISTANCE	LF	\$79,219,712	\$3,258,900			\$3,258,900
2026	T00043		Operating	LRTA - OPERATING ASSISTANCE	SCA	\$79,219,712	\$9,221,986		\$9,221,986	
2026	T00048		Operating	LRTA - SHORT RANGE TRANSIT PLANNING	5307	\$550,000	\$88,000	\$88,000		
2026	T00048		Operating	LRTA - SHORT RANGE TRANSIT PLANNING	LF	\$550,000	\$22,000			\$22,000
Federal Fiscal Year 2027							\$37,199,437	\$20,071,918	\$13,765,146	\$3,362,373
Lowell Regional Transit Authority							\$37,199,437	\$20,071,918	\$13,765,146	\$3,362,373
2027	LRTA011629		Operating	LRTA - OPERATING ASSISTANCE (CARES)	OF	\$788,220	\$528,042	\$528,042		
2027	LRTA011950		RTA Fleet Upgrades	LRTA - FLEET EXPANSION (5) 35' BUSES FOR FIXED ROUTE	5307	\$4,372,500	\$2,178,000	\$2,178,000		
2027	LRTA011950		RTA Fleet Upgrades	LRTA - FLEET EXPANSION (5) 35' BUSES FOR FIXED ROUTE	RTACAP	\$4,372,500	\$544,500		\$544,500	
2027	LRTA011956		RTA Fleet Upgrades	LRTA - FLEET EXPANSION (1) PARATRANSIT VEHICLE	5307	\$200,000	\$160,000	\$160,000		
2027	LRTA011956		RTA Fleet Upgrades	LRTA - FLEET EXPANSION (1) PARATRANSIT VEHICLE	RTACAP	\$200,000	\$40,000		\$40,000	
2027	LRTA011957		RTA Facility & Vehicle Maintenance	Lowell - ADA/COMMUTER ACCESS WAY & INTERMODAL UPGRADES (PLANNED DISCRETIONARY)	DOF	\$10,800,000	\$8,640,000	\$8,640,000		
2027	LRTA011957		RTA Facility & Vehicle Maintenance	Lowell - ADA/COMMUTER ACCESS WAY & INTERMODAL UPGRADES (PLANNED DISCRETIONARY)	RTACAP	\$10,800,000	\$2,160,000		\$2,160,000	
2027	LRTA011959		RTA Facility & System Modernization	LOWELL - GALLGHER TERMINAL UPGRADES (ZERO EMISSIONS/SOLAR PANELS)	5307	\$500,000	\$400,000	\$400,000		
2027	LRTA011959		RTA Facility & System Modernization	LOWELL - GALLGHER TERMINAL UPGRADES (ZERO EMISSIONS/SOLAR PANELS)	RTACAP	\$500,000	\$100,000		\$100,000	
2027	RTD0010690		RTA Facility & Vehicle Maintenance	LRTA - FACILITIES AND EQUIPMENT IMPROVEMENTS	5307	\$4,250,000	\$400,000	\$400,000		
2027	RTD0010690		RTA Facility & Vehicle Maintenance	LRTA - FACILITIES AND EQUIPMENT IMPROVEMENTS	RTACAP	\$4,250,000	\$100,000		\$100,000	
2027	RTD0011235		RTA Vehicle Replacement	LRTA - REVENUE VEHICLE REPLACEMENT - 35' Hybrids (18)	5307	\$20,121,759	\$5,208,000	\$5,208,000		

STIP Investments Report
 Program Activity: Transit, Lowell Regional Transit Authority



STIP: 2026 - 2030										
2027	RTD0011235		RTA Vehicle Replacement	LRTA - REVENUE VEHICLE REPLACEMENT - 35' Hybrids (18)	RTACAP	\$20,121,759	\$1,302,000		\$1,302,000	
2027	RTD0011237		RTA Vehicle Replacement	LRTA - NONREVENUE VEHICLE REPLACEMENT - ADMINISTRATIVE VEHICLE	5307	\$170,000	\$80,000	\$80,000		
2027	RTD0011237		RTA Vehicle Replacement	LRTA - NONREVENUE VEHICLE REPLACEMENT - ADMINISTRATIVE VEHICLE	RTACAP	\$170,000	\$20,000		\$20,000	
2027	T00043		Operating	LRTA - OPERATING ASSISTANCE	5307	\$79,219,712	\$2,389,876	\$2,389,876		
2027	T00043		Operating	LRTA - OPERATING ASSISTANCE	LF	\$79,219,712	\$3,340,373			\$3,340,373
2027	T00043		Operating	LRTA - OPERATING ASSISTANCE	SCA	\$79,219,712	\$9,498,646		\$9,498,646	
2027	T00048		Operating	LRTA - SHORT RANGE TRANSIT PLANNING	5307	\$550,000	\$88,000	\$88,000		
2027	T00048		Operating	LRTA - SHORT RANGE TRANSIT PLANNING	LF	\$550,000	\$22,000			\$22,000
Federal Fiscal Year 2028							\$33,931,948	\$17,211,401	\$13,274,665	\$3,445,882
Lowell Regional Transit Authority							\$33,931,948	\$17,211,401	\$13,274,665	\$3,445,882
2028	LRTA011958		RTA Facility & System Modernization	ACTON - CONSTRUCT BUS HUB AND MAINTENANCE FACILITY	DOF	\$10,000,000	\$8,000,000	\$8,000,000		
2028	LRTA011958		RTA Facility & System Modernization	ACTON - CONSTRUCT BUS HUB AND MAINTENANCE FACILITY	DRTACAP	\$10,000,000	\$2,000,000		\$2,000,000	
2028	RTD0010690		RTA Facility & Vehicle Maintenance	LRTA - FACILITIES AND EQUIPMENT IMPROVEMENTS	5307	\$4,250,000	\$600,000	\$600,000		
2028	RTD0010690		RTA Facility & Vehicle Maintenance	LRTA - FACILITIES AND EQUIPMENT IMPROVEMENTS	RTACAP	\$4,250,000	\$150,000		\$150,000	
2028	RTD0011235		RTA Vehicle Replacement	LRTA - REVENUE VEHICLE REPLACEMENT - 35' Hybrids (18)	5307	\$20,121,759	\$5,364,240	\$5,364,240		
2028	RTD0011235		RTA Vehicle Replacement	LRTA - REVENUE VEHICLE REPLACEMENT - 35' Hybrids (18)	RTACAP	\$20,121,759	\$1,341,060		\$1,341,060	
2028	T00043		Operating	LRTA - OPERATING ASSISTANCE	5307	\$79,219,712	\$3,159,161	\$3,159,161		
2028	T00043		Operating	LRTA - OPERATING ASSISTANCE	LF	\$79,219,712	\$3,423,882			\$3,423,882
2028	T00043		Operating	LRTA - OPERATING ASSISTANCE	SCA	\$79,219,712	\$9,783,605		\$9,783,605	
2028	T00048		Operating	LRTA - SHORT RANGE TRANSIT PLANNING	5307	\$550,000	\$88,000	\$88,000		
2028	T00048		Operating	LRTA - SHORT RANGE TRANSIT PLANNING	LF	\$550,000	\$22,000			\$22,000
Federal Fiscal Year 2029							\$26,766,439	\$11,263,555	\$11,971,405	\$3,531,479
Lowell Regional Transit Authority							\$26,766,439	\$11,263,555	\$11,971,405	\$3,531,479

STIP Investments Report
 Program Activity: Transit, Lowell Regional Transit Authority



STIP: 2026 - 2030										
2029	LRTA011630		RTA Vehicle Replacement	LRTA - REVENUE VEHICLE REPLACEMENT - <30FT BUS (2)	5307	\$1,815,000	\$1,452,000	\$1,452,000		
2029	LRTA011630		RTA Vehicle Replacement	LRTA - REVENUE VEHICLE REPLACEMENT - <30FT BUS (2)	RTACAP	\$1,815,000	\$363,000		\$363,000	
2029	RTD0010690		RTA Facility & Vehicle Maintenance	LRTA - FACILITIES AND EQUIPMENT IMPROVEMENTS	5307	\$4,250,000	\$600,000	\$600,000		
2029	RTD0010690		RTA Facility & Vehicle Maintenance	LRTA - FACILITIES AND EQUIPMENT IMPROVEMENTS	RTACAP	\$4,250,000	\$150,000		\$150,000	
2029	RTD0011235		RTA Vehicle Replacement	LRTA - REVENUE VEHICLE REPLACEMENT - 35' Hybrids (18)	5307	\$20,121,759	\$5,525,167	\$5,525,167		
2029	RTD0011235		RTA Vehicle Replacement	LRTA - REVENUE VEHICLE REPLACEMENT - 35' Hybrids (18)	RTACAP	\$20,121,759	\$1,381,292		\$1,381,292	
2029	T00043		Operating	LRTA - OPERATING ASSISTANCE	5307	\$79,219,712	\$3,598,388	\$3,598,388		
2029	T00043		Operating	LRTA - OPERATING ASSISTANCE	LF	\$79,219,712	\$3,509,479		\$3,509,479	
2029	T00043		Operating	LRTA - OPERATING ASSISTANCE	SCA	\$79,219,712	\$10,077,113		\$10,077,113	
2029	T00048		Operating	LRTA - SHORT RANGE TRANSIT PLANNING	5307	\$550,000	\$88,000	\$88,000		
2029	T00048		Operating	LRTA - SHORT RANGE TRANSIT PLANNING	LF	\$550,000	\$22,000		\$22,000	
Federal Fiscal Year 2030							\$23,818,304	\$8,669,662	\$11,529,426	\$3,619,216
Lowell Regional Transit Authority							\$23,818,304	\$8,669,662	\$11,529,426	\$3,619,216
2030	RTD0010690		RTA Facility & Vehicle Maintenance	LRTA - FACILITIES AND EQUIPMENT IMPROVEMENTS	5307	\$4,250,000	\$600,000	\$600,000		
2030	RTD0010690		RTA Facility & Vehicle Maintenance	LRTA - FACILITIES AND EQUIPMENT IMPROVEMENTS	RTACAP	\$4,250,000	\$150,000		\$150,000	
2030	T00043		Operating	LRTA - OPERATING ASSISTANCE	5307	\$79,219,712	\$3,981,662	\$3,981,662		
2030	T00043		Operating	LRTA - OPERATING ASSISTANCE	LF	\$79,219,712	\$3,597,216		\$3,597,216	
2030	T00043		Operating	LRTA - OPERATING ASSISTANCE	SCA	\$79,219,712	\$10,379,426		\$10,379,426	
2030	T00047	Lowell	RTA Facility & System Modernization	LRTA - LOWELL - HALE ST SOLAR ROOF REHAB	5307	\$5,000,000	\$4,000,000	\$4,000,000		
2030	T00047	Lowell	RTA Facility & System Modernization	LRTA - LOWELL - HALE ST SOLAR ROOF REHAB	RTACAP	\$5,000,000	\$1,000,000		\$1,000,000	
2030	T00048		Operating	LRTA - SHORT RANGE TRANSIT PLANNING	5307	\$550,000	\$88,000	\$88,000		

STIP Investments Report
 Program Activity: Transit, Lowell Regional Transit Authority



										STIP: 2026 - 2030
2030	T00048		Operating	LRTA - SHORT RANGE TRANSIT PLANNING	LF	\$550,000	\$22,000			\$22,000

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Status of NMMPO TIP Projects

Table 7 provides a description of recently advertised highway projects in the Northern Middlesex Region (as of April 18, 2025). Table 8 describes the status of LRTA projects listed in FFY 2025 of the NMMPO TIP Projects.

TABLE 7: NORTHERN MIDDLESEX HIGHWAY TIP PROJECTS UNDER CONSTRUCTION

Community	MassDOT Project ID	Project Description	Construction Advertisement Date	Total Federal Participating Construction Cost (TFPCC)	Exp. Const. Completion Date
Multiple	613213	Bedford-Billerica-Chelmsford-Tyngsborough – Bridge Preservation of 41 Bridges in Rte 3 Corridor	5/11/2024	\$9,955,776	TBD
Lowell	607887	Lowell-Rourke Bridge Replacement, L-16-088, Wood St Extension over Boston & Maine Railroad and Merrimac River	9/14/2024	\$191,286,418	TBD
Billerica	608227	Billerica-Yankee Doodle Bike Path Construction (Phase I)	8/31/2024	\$17,103,055	TBD
Billerica	609250	Billerica-Intersection Improvements at Boston Rd (Rte 3A), Lexington St, & Glad Valley Rd	4/5/2024	\$7,960,472	TBD
Westford	609035	Westford-Rehabilitation of Boston Rd	9/2/2023	\$14,937,730	TBD
Lowell	605966	Lowell-Reconstruction & Related Work on VFW Highway	11/30/2024	\$12,437,500	TBD
Multiple	608774	Lowell-Tewksbury-Route 38 Intersection Improvements	9/9/2023	\$3,995,284	TBD
Multiple	610704	Burlington-Billerica-Resurfacing and Related Work on Route 3A	9/2/2023	\$7,311,016	11/2/25
Multiple	612047	CHELMSFORD- LOWELL- LAWRENCE- BRIDGE PRESERVATION ALONG I-495	7/22/2023	\$8,474,275	TBD
Multiple	612197	Amesbury-Haverhill-Lowell-Methuen-Bridge Preservation Bundle Along I-495	4/30/2022	\$7,845,545	TBD
Multiple	608816	Lowell-Dracut-Methuen – Resurfacing and Related Work on Rte 110	5/4/2024	\$16,369,909	TBD
Multiple	610719	Burlington to Tyngsborough-Pavement Preservation on Rte 3	11/30/2024	\$14,960,010	TBD
Westford	612096	Westford-Interstate Maintenance and Related Work on I-495	4/5/2025	\$5,016,000	TBD
Chelmsford	612631	Chelmsford-Bridge Replacement, C-08-039, Gorham St over I-495 and Replacement of C-08-036, Westford St over I-495 (DB)	2/3/2024	\$42,127,192	TBD
Westford	612656	Westford-Bridge Preservation, W-26-018, W-26-019, I-495 (NB/SB) over Concord and Boston Road	4/1/2023	\$2,874,768	3/24/25
Tewksbury	612658	Tewksbury-Bridge Preservation of T-03-014, I-495 over Route 133, and T-03-015, I-495 over Route 38	6/17/2023	\$6,246,871	11/30/25

TABLE 8: STATUS OF NMMPO TRANSIT TIP PROJECTS

FFY	Description	Funding Category	Federal Amount	Total Amount	Status Update
2025	Operating Assistance (ARPA)	Other Federal	\$850,821	\$850,821	Ongoing
2025	Short Range Transit Planning	5307	\$88,000	\$110,000	Ongoing
2025	Purchase Capital Spare Parts	5307	\$80,000	\$100,000	Ongoing
2025	Terminal & Building Equipment and Maintenance	5307	\$720,000	\$900,000	Ongoing
2025	Mobility Outreach Coordinator	5310	\$56,950	\$71,200	Ongoing
2025	Operating Assistance (CARES ACT)	OF	\$1,700,000	\$1,700,000	Ongoing
2025	Lowell - ADA/Commuter Access Way & Intermodal Upgrades	DOF	\$5,760,000	\$7,200,000	Ongoing
2025	IT Equipment and Maintenance	5307	\$8,000	\$10,000	Ongoing
2025	LRTA Facilities Improvements	5307	\$2,000,000	\$2,400,000	Ongoing
2025	Operating Assistance	5307	\$2,933,697	\$11,091,081	Ongoing

SECTION IV: TIP PROJECT DISTRIBUTION

About TIP Project Distribution

This section explores project distribution within the TIP, focusing on ensuring a fair distribution of funding across the Northern Middlesex region. It includes analyses of TIP funding and geographic distribution, emphasizing support for communities that currently have limited transportation choice to promote balanced regional growth and accessibility.

The NMMPO is committed to its goal of providing fair transportation access and service quality for all communities, as outlined in the strategic vision of Envision 2050. This commitment is central to the NMMPO's operations, including the TIP. This section describes a distribution analysis that evaluates the geographic distribution of transportation resources funded by the TIP. Recognizing the need for continual improvement in advancing user access in transportation projects, this analysis is an integral step toward enhancing NMMPO's transparency and understanding of its progress in achieving this crucial goal.

Methods

The methodology applied here aligns with the Title VI guidelines described in the FTA Circular 4702.1B. For consistency with other NMMPO analyses, the Commonwealth's definition of low-income populations was used. Accordingly, low-income households are identified as those earning 65% or less than the statewide median household income, translating to an annual income threshold of \$55,247 or less.

The analysis encompassed a comprehensive review of NMMPO's internal TIP projects database. This database includes detailed information on 30 projects programmed from FY 2016 to 2025 and eight planned projects scheduled for 2024 to 2028 in the most recent TIP for FY 2026-2030. In this context, "TIP funding" refers to the total cost of each project. Demographic data, including race and household income figures at the block group level, is sourced from the 2020 US Decennial Census.

A critical step in this analysis involved mapping the demographics of each TIP project. This was achieved by creating a quarter-mile buffer around the center of each project and examining the demographic overlap with the surrounding block groups. The level of overlap determined the allocation of population figures to each TIP project. For example, if a block group with a composition of 100 minority and 200 non-minority individuals overlapped by 50% with a TIP project buffer, 50 minority and 100 non-minority individuals were allocated to that project. Subsequently, project dollars were proportionally allocated based on these demographic compositions. For example, a hypothetical \$1 million project that is 50% minority and 50% non-minority would result in \$500,000 allocated to each group.

The final stage of this analysis focused on assessing the geographic distribution of TIP funding. The ratio of TIP funding received by minority and low-income populations was calculated against their respective proportions in the NMMPO Region. These ratios were then categorized ratios to reflect three possible scenarios:

- Ratio less than 1: Decline of accessible transportation distribution. The proportion of TIP funding is less than the proportion of the total population.
- Ratio of 1: No change in accessible transportation distribution. The proportion of TIP funding is the same as the proportion of the total population.
- Ratio greater than 1: Improvement in accessible transportation distribution. The proportion of TIP funding is greater than the proportion of the total population.

Results

Table 9 provides a detailed analysis of the distribution of TIP funding among demographic groups for two consecutive periods: FY 2016-2025 and FY 2026-2030. During the period of 2016-2025, a total of \$341,869,888 in TIP funding was allocated, with 40.9% (\$139,758,160) directed towards minority populations and 33.9% (\$115,887,597) to low-income groups. However, the subsequent period of 2026-2030 shows a shift in allocation, with a total of \$64,163,135, of which minority populations received 31.9% (\$20,440,029), and low-income populations received 36.9% (\$23,682,516).

This current period's allocation reflects mixed outcomes. The 31.9% of funds directed to minority populations remains above their 29.4% regional population share, signifying continued improvement in transportation access. However, compared to the previous decade's allocation of 40.9%, this indicates a slower rate of progress towards transportation access. In contrast, funding for low-income populations has risen slightly to 36.9% from 33.9%, representing enhanced attention to low-income community transportation needs in the current TIP.

TABLE 9: DISTRIBUTION OF TIP FUNDING BY DEMOGRAPHIC GROUP (2016-2025 AND 2026-2030)

Population	Proportion of Population in NMMPO Region	TIP Funding 2016-2025	Proportion of TIP Funding 2016-2025	TIP Funding 2026-2030	Proportion of TIP Funding 2026-2030
Minority	29.4%	\$139,758,160	40.9%	\$20,440,029	31.9%
Non-minority	70.6%	\$202,111,728	59.1%	\$43,723,106	68.1%
Low income	31.1%	\$115,887,597	33.9%	\$23,682,516	36.9%
Non-low income	68.9%	\$225,982,290	66.1%	\$40,480,619	63.1%

Table 10 highlights these trends more explicitly through funding-to-population ratios. For minority populations, the funding ratio decreased from 1.39 in the 2016-2025 period to 1.09 in the current 2026-2030 period. Although still above the desired threshold of 1.0, this reduction indicates a deceleration in the rate of access improvements relative to prior years. Conversely, the ratio for low-income populations has improved from 1.09 to 1.19, signaling a meaningful increase in transportation investment relative to their proportion of the regional population.

The primary factor influencing these shifts continues to be the inclusion of the Rourke Bridge project, a major investment situated in a part of Lowell with higher-than-average concentrations of minority and low-income residents. The substantial scale of this single infrastructure project significantly impacts the overall TIP funding results for improving transportation access. Moving forward, the MPO should carefully

consider introducing additional substantial projects or multiple smaller initiatives within certain communities to sustain and further enhance transportation access outcomes in subsequent TIP cycles.

TABLE 10: RATIOS OF TIP FUNDING TO POPULATION STATISTICS

Population	TIP Funding to Population Ratio 2016-2025	TIP Funding to Population Ratio 2026-2030
Demographics	1.39	1.09
Low-income	1.09	1.19

Regional Distribution

A geographic distribution analysis of TIP-funded projects has been conducted to assess whether projects have been allocated fairly across the region in the transportation planning process. TIP projects were mapped based on population demographics and income. This analysis includes previously funded TIP projects (FFY 2016-2025) and programmed projects in this TIP (FFY 2026-2030).

Table 11 illustrates the distribution of transportation projects and funding by municipality, covering all past and current TIP projects between FFY 2016 and 2030 covering 15 years of TIP projects. Forty-one (41) projects have been funded since 2016 or are programmed in this TIP. The City of Lowell continues to lead with the highest total funding of \$217,683,321 and eight projects, resulting in a funding per capita of \$1,884. Chelmsford follows closely with seven projects and total funding of \$77,504,156, marking the highest per capita funding at \$2,184. In contrast, Pepperell remains without a TIP project, and Tyngsborough has received funding for only one project, totaling \$1,950,456 and resulting in a low per capita funding of \$158.

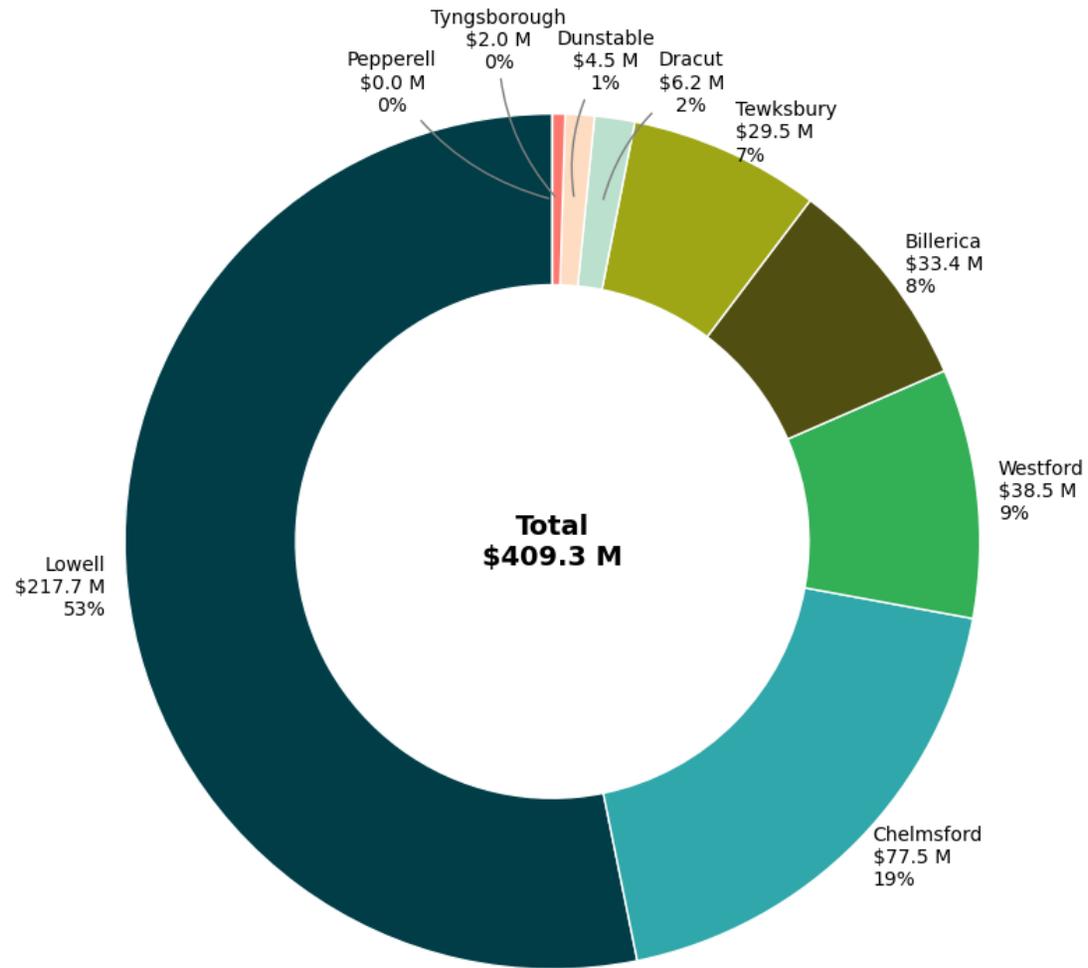
Dracut, Tyngsborough, and Pepperell have the lowest per capita funding among municipalities, highlighting an important area for improvement. The NMMPO encourages these communities to work closely with NMMPO staff and MassDOT to identify and submit more TIP-ready projects. This variation underscores persistent disparities in funding allocation across municipalities, highlighting the ongoing challenge of achieving regional access. The NMMPO remains committed to addressing these disparities through continued collaboration with community stakeholders.

TABLE 11: SUMMARY OF TIP FUNDING PER CAPITA BY COMMUNITY (2016-2030)

Community	2020 Census Population	# of TIP Projects 2016-2030	Total Project funding	TIP Funding per capita
Billerica	42,119	5	\$33,399,814	\$793
Chelmsford	35,488	7	\$77,504,156	\$2,184
Dracut	32,617	2	\$6,205,496	\$190
Dunstable	3,358	1	\$4,500,531	\$1,340
Lowell	115,554	8	\$217,683,321	\$1,884
Pepperell	11,604	0	\$0	\$0
Tewksbury	31,342	8	\$29,517,760	\$942
Tyngsborough	12,380	1	\$1,950,456	\$158
Westford	24,643	9	\$38,546,709	\$1,564
Total	309,105	41	\$409,308,243	\$1,324

Figure 2 shows the distribution of NMMPO TIP funding by community for the period from 2016 to 2030. The City of Lowell receives the highest percentage of TIP funds, accounting for approximately 53% of programming. The Town of Chelmsford follows as the second highest recipient with 19%. The Towns of Westford (9%), Billerica (8%), and Tewksbury (7%) each receive substantial portions of the remaining funds. Dracut receives 2%, while Dunstable and Tyngsborough each receive around 1%. Pepperell does not receive funding during this period. The NMMPO will continue to engage with each community to ensure that TIP funding for future projects is fairly distributed across the region.

FIGURE 2: PROPORTION OF TIP FUNDING BY COMMUNITY (2016-2030)



SECTION V: PUBLIC PARTICIPATION

About Public Participation

Public involvement is a key part of the TIP process, as mandated by federal regulations (23 CFR 450.316), which require early and ongoing engagement with stakeholders, including local governments, transit agencies, community groups, and the public.

PUBLIC PARTICIPATION IN THE 2026-2030 TIP

Public participation in TIP development follows the NMMPO's Public Participation Plan (PPP), updated in 2025. The PPP sets forth policies to engage all community members fairly, ensuring a transparent process, incorporating updated engagement strategies that prioritize outreach to Limited English Proficiency (LEP) residents and other historically disadvantaged communities. Engagement strategies include holding hybrid public meetings, using digital engagement tools, and building partnerships with community-based organizations. NMMPO staff ensure compliance with Title VI of the Civil Rights Act, Executive Order 12898, and Executive Order 13166. Public meeting notices, TIP documents, and comment opportunities are disseminated via NMCOG websites and social media (www.nmcog.org, Facebook, Instagram and Twitter/X), and local newspapers to ensure broad accessibility.

TIP Public Engagement and Public Comment Period

NMMPO staff structure community engagement for the TIP development process to ensure that public input informs transportation planning and project selection. Following the PPP, staff employ a range of outreach methods to solicit, document, and respond to community feedback. These efforts target LEP communities, transit-dependent populations, and groups with fewer transportation choices.

Opportunities for Public Engagement in TIP Development

Endorsement of the FFY 2026-2030 Northern Middlesex TIP follows a specific schedule. Development consists of public outreach to the communities and presentation of TIP information to the NMMPO and NMCOG Council throughout the process. All NMCOG and NMMPO meetings are publicly accessible, conducted in a hybrid format, and reasonable accommodations are provided upon request. Below are key meeting dates where staff provided updates on the development of the FFY2026-2030 TIP and invited public input.

- January 22, 2025: Staff presented the TIP development schedule to the NMMPO.
- January 23, 2025: NMMPO staff met with State and Federal partners to discuss funding the TIP.
- February 5, 2025: NMMPO staff met with MassDOT partners to discuss readiness and potential programming of TIP Projects.
- February 26, 2025: Staff presented TIP funding information and TIP readiness day recommendations to the NMMPO.
- March 26, 2025: Staff presented multiple TIP funding scenarios; the NMMPO voted on their preferred TIP programming scenarios.
- April 23, 2025: Staff presented the draft FFY 2026-2030 TIP to the NMMPO; NMMPO voted to release the document for a 21-day public comment period.
- May 7, 2025: Staff hosted a public meeting to hear comments on the draft FFY 2026-2030 TIP.
- May 21, 2025: Staff presented comments received on the draft TIP; the NMMPO voted to endorse the document.
- June 1, 2025: The NMMPO-endorsed TIP is finalized and submitted for FHWA, FTA, and MassDOT approval.
- October 1, 2025: The NMMPO FFY 2026-2030 TIP goes into effect on the first day of the new Federal Fiscal Year.

Notice of Public Comment Period Availability for the TIP

A 21-day public comment period begins once the NMMPO votes to release the draft TIP for public comment. During this period, at least one public meeting is held to hear input from members of the community. Comments may also be submitted via email, mail, or by phone.

Notice of the availability of the 2026-2030 TIP and opportunities for public comment are published in The Lowell Sun. Notices are also posted at Town and City Clerk offices, as well as on the NMCOG website (www.nmcog.org). To maximize outreach, announcements are shared through NMCOG's social media platforms and emailed to the NMMPO public outreach list, which includes municipal staff, community organizations, and other stakeholders. Copies of the draft TIP documents report are distributed to NMMPO members, municipal contacts, regional stakeholders, and interested parties and available online on NMCOG's website.

Following the close of the comment period, NMMPO staff review and evaluate all feedback, revising the TIP report as appropriate. A summary of comments, agency responses, and actions taken is included in the final TIP report and presented to the NMMPO. Upon endorsement by the NMMPO, the final TIP report is published on the NMCOG website, distributed to state and federal partners, and shared broadly through email and public outreach channels.

Public Outreach Tools

Multiple public outreach tools are used to communicate with the public and allow for general input into the development of the TIP. These tools are also utilized to provide information on the progress of the TIP and include the following:

- NMCOG website: <https://www.nmcog.org/>;
- NMCOG social media: Facebook, Instagram, Twitter/X;
- NMCOG and NMMPO meetings;
- Electronic mailings;
- Newspaper articles and advertisements; and
- Virtual public meetings.

Documentation of Public Comments and Agency Responses

NMMPO staff employ a structured process for documenting and responding to public input received during the public comment period:

- Categorizing comments: Public feedback is categorized by theme and project impact, ensuring all voices are acknowledged.
- Response process: NMCOG staff provide formal responses to comments, explaining how concerns were addressed in the TIP development process.
- Public comment summary: A comment-response matrix is included in the final TIP document, improving transparency and accountability.

TIP Amendments and Adjustments: Public Engagement in Future Changes to the TIP

All federally certified documents endorsed by the NMMPO adhere to established amendment and administrative adjustment procedures, as defined in 23 CFR 450.104 and 23 CFR 450.218(n) and further outlined in the PPP. TIP amendments require formal endorsement by the NMMPO following a public review and comment period. Administrative adjustments do not necessitate a public comment period, however the NMMPO retains the discretion to release an administrative adjustment for public review if it determines that doing so would serve the public interest and enhance the transparency of the transportation planning process. For definitions regarding TIP Amendments and Adjustments, see [Section VII: Procedural Elements](#).

SECTION VI: PERFORMANCE BASED PLANNING

About Performance Based Planning

This section explains how the region uses data to track safety, reliability, and infrastructure conditions across the transportation system. It shows how performance measures help guide investments toward projects that improve outcomes and meet federal and regional goals set through our long-range transportation plan.

The IJJA/BIL continues to focus on performance-based and outcome-based programs to address the challenges facing the U.S. transportation system. Performance-based planning and programming (PBPP) applies performance management principles and regional data to inform transportation decision-making. The objective of these PBPPs is to invest resources in projects that collectively advance the achievement of national goals.

The USDOT continues to develop performance goals for each emphasis area. MassDOT and the NMMPO have adopted performance measures and targets to include in project evaluation and prioritization. The TIP development process considers these performance measures in making transportation investment decisions that address the achievement of such performance goals. The following are national goal areas as set by the IJJA/BIL:

- Safety (PM1)
- Infrastructure condition (PM2)
- Congestion reduction (PM3)
- System reliability (PM2)
- Freight movement and economic vitality (PM2)
- Environmental sustainability (PM3)
- Accelerated project delivery

PBPP activities include the following:

- Setting goals and objectives for the NMMPO's transportation system
- Selecting performance measures and setting performance targets based on the previously established goal areas
- Gathering data and information to monitor and analyze trends
- Using performance measures and data to make investment decisions
- Monitoring, analyzing, and reporting performance outcomes

NMMPO's PBPP process is shaped by both federal transportation performance requirements and the region's goals and objectives, which are established as part of Envision 2050. This section discusses how PBPP shapes the TIP development process and describes the NMMPO's current performance measures and targets. It also explains how the NMMPO anticipates the projects funded in the FFY2026-2030 TIP will support improvements in various performance areas and make progress toward performance targets.

Federal Performance Management Requirements

FHWA released Final Rules establishing performance measures regarding safety, pavement condition, bridge condition, the National Highway System (NHS), freight movement, congestion, and the Congestion Mitigation Air Quality (CMAQ) Improvement Program. Once the

rules became effective, the MassDOT worked with the NMMPO and regional partners to establish targets. MassDOT monitors and summarizes overall performance on an annual basis through the Department's [Tracker Report](#). An overview of the rules and their performance management measures can be found in Table 11.

TABLE 12: FEDERAL TRANSPORTATION PERFORMANCE MEASURES

Rule	PM	Description
National Performance Management Measures to Assess Safety		
CFR 490.207	1:23	Number of fatalities
		Rate of fatalities per 100 million vehicle miles traveled (VMT)
		Number of serious injuries
		Rate of serious injuries per 100 million VMT
		Number of nonmotorized facilities and serious injuries
National Performance Management Measures to Assess Pavement Management		
CFR 490.307	2:23	Percentage of pavement of the interstate system in good condition
		Percentage of pavement of the interstate system in poor condition
		Percentage of pavement of the non-interstate system NHS in good condition
		Percentage of pavement of the non-interstate system NHS in poor condition
National Performance Management Measures to Assess Bridge Condition		
CFR 490.407	2:23	Percentage of NHS bridges classified as being in good condition
		Percentage of NHS bridges classified as being in poor condition
Performance of the National Highway System		
CFR 490.507	2:23	<i>Interstate travel time reliability measure</i> : percent of person-miles traveled on interstate that are reliable
		<i>Non-interstate travel time reliability measure</i> : percent of person-miles traveled on the non-interstate NHS that are reliable
		<i>Greenhouse Gas measure</i> : percent change in tailpipe CO ₂ emission on the NHS compared to the 2017 calendar year level
Freight Movement on the Interstate System		
CFR 490.607	2:23	<i>Freight reliability measure</i> : Truck travel time reliability (TTTR) Index
Measures to Assess the CMAQ Improvement Program		
TraWc Congestion		
CFR 490.707	3:23	Peak hour excessive delay (PHED) measure: annual hours of PHED per capita
		Percent of non-single occupancy vehicle (SOV) travel

On-Road Mobile Source Emissions

CFR 490.807 3:23 Total emissions reduction

For the purposes of Federal Performance Measurement Requirements, a reliable system is one that provides users with a consistent range of predictable travel times. Reliability as defined does not necessarily mean uncongested.

Before the national rulemaking was established, MassDOT worked with the NMMPO on performance management activities. The Unified Planning Work Program (UPWP) includes an ongoing task on developing and assessing performance measures. Additionally, a system performance report is included in Envision 2050, highlighting the region's progress toward targets. The LRTA monitors transit safety and asset management on an ongoing basis as part of their annual work program.

Safety Measures and Targets (PMI)

The NMMPO has adopted the statewide safety performance measure targets set by MassDOT for Calendar Year (CY) 2025. In setting these targets, MassDOT has followed FHWA guidelines by using statewide crash data and Highway Performance Monitoring System (HPMS) data for Vehicle Miles Traveled (VMT) to calculate five-year, rolling average trend lines for all FHWA-defined safety measures.

Total Fatalities

Per FHWA guidance, the CY 2025 five-year rolling average (2021-2025) target setting process began with a trend line projection based on the most recent available data. Due to higher rates of speeding caused by decreased VMT amid pandemic shutdowns in 2020 and the lingering impacts in 2021 and 2022, roadway fatalities were increasing relative to previous years. However, Massachusetts began to see this trend reverse in 2023. As stated in the IJJA, performance targets must demonstrate constant or improved performance. In addition, similar to last year, MassDOT also developed a 2023-2027 projection to forecast current trends further into the future.

To estimate 2024 fatalities, MassDOT compared data from 2015-2023 to the data available at the time of target setting in July 2024. On average, 55% of annual fatalities occurred between January 1 – July 30 of each year. Therefore, to estimate 2024 fatalities MassDOT divided the number to date by 55%. A 3% annual reduction in fatalities was then assumed to obtain an estimate for 2025, which brings the 2021-2025 5-year rolling average to 365. If this 3% decrease in annual fatalities continues, MassDOT projects the 2023-2027 five-year average to be 315.

As always, although numeric targets have been established following federal guidelines, MassDOT’s overarching goal is zero deaths and this goal will be pursued by implementing strategies from the Strategic Highway Safety Plan (SHSP). The Massachusetts SHSP and Vulnerable Road User Safety Assessment were both updated and finalized in 2023 and provide details on how the state will drive down fatalities and serious injuries.

Fatality Rate

The fatality rate represents five-year average fatalities divided by five-year average VMTs. The COVID-19 pandemic greatly impacted VMT, causing fatality rates to spike in 2020 with significantly lower VMT and slightly higher fatalities. However, VMT in Massachusetts is returning to pre-pandemic levels and annual projections for 2024 are nearly in line with 2019, while 2025 projections are slightly higher.

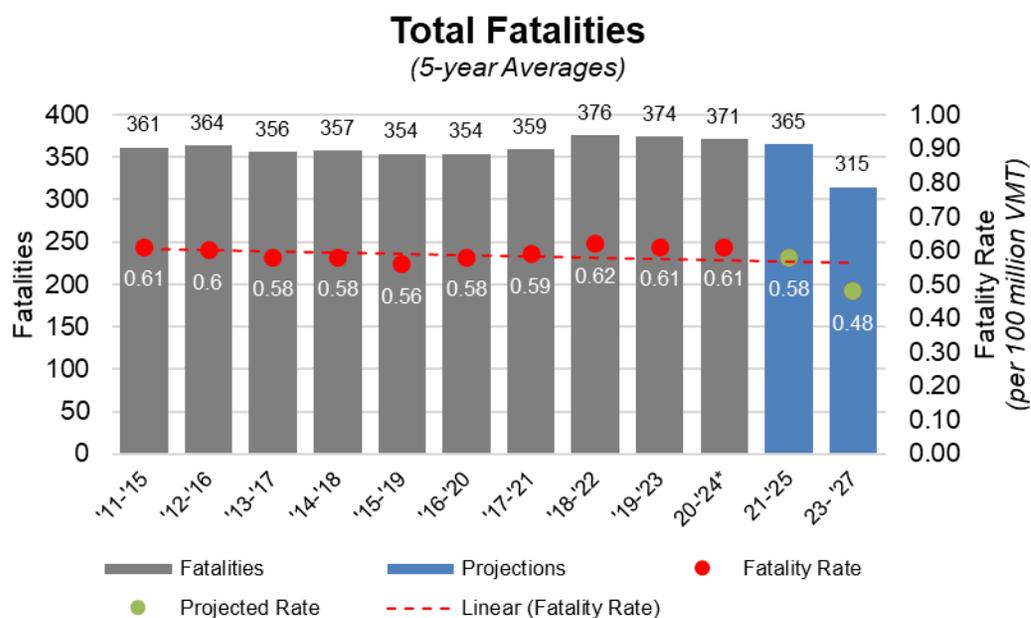


FIGURE 3: TOTAL FATALITIES (5-YEAR AVERAGES); DATA AS OF JULY 30, 2024

Consequently, the five-year average fatality rate is estimated to be 0.58 fatalities per 100 million VMT for 2021-2025. If this trend continues, MassDOT projects a decrease to 0.48 fatalities per 100 million VMT for 2023-2027.

Total Serious Injuries

The target setting process began with a trend line projection based on the most recent available data. The 2022 and 2023 serious injury data were not finalized in the statewide crash system during this process, so it is possible these figures will change once that data becomes final.

Due to higher rates of speeding caused by decreased VMT amid pandemic shutdowns in 2020 and the lingering impacts in 2021 and 2022, serious injuries increased relative to previous years. However, Massachusetts began to see this trend reverse in 2023. To estimate 2024 serious injuries, MassDOT compared data from 2015-2023 to the data available at the time of target setting. Serious injuries from 2024 to date were divided by 55%, the average of serious injuries that occur between January 1 – July 30 each year. A 3% annual reduction in serious injuries was then assumed to obtain an estimate for 2025, which brings the 2021-2025 five-year rolling average to 2,622. If this 3% annual decrease continues, the 2023-2027 five-year average of serious injuries will be 2,258.

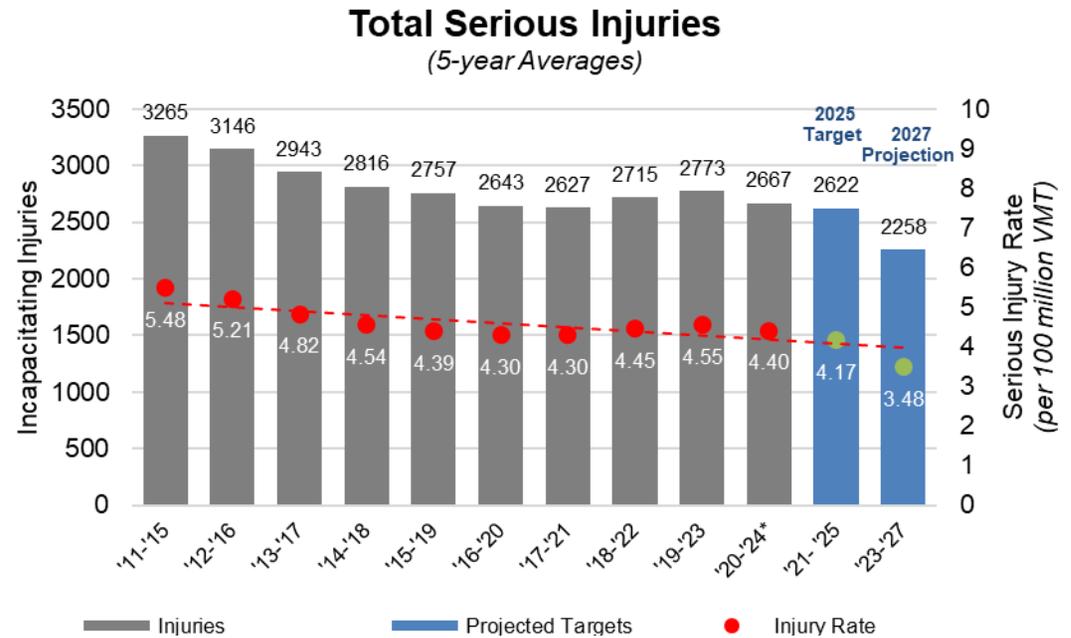


FIGURE 4: TOTAL SERIOUS INJURIES (5-YEAR AVERAGES); DATA AS OF JULY 30, 2024

Serious Injuries Rate

Similar to the fatality rate, the rate of serious injuries is trending toward pre-pandemic levels. Following the same methods to derive the five-year average fatality rate, the five-year average serious injuries rate is estimated to be 4.17 serious injuries per 100 million VMT for 2021-2025. If this trend continues, MassDOT projects a decrease to 3.48 serious injuries per 100 million VMT for 2023-2027.

Total Number of Non-Motorized Fatalities and Serious Injuries

The number of non-motorized fatalities and serious injuries has fluctuated greatly in recent years. Non-motorist fatalities, specifically, increased through 2022 and then dropped precipitously, while serious injuries appear to have peaked in 2023 and show signs of decreasing in 2024. On average, 54% of annual non-motorist fatalities and serious injuries occur between January 1 – July 30. Therefore, to estimate 2024 fatalities MassDOT divided the number to date by 54%. Based on the state’s increased work and emphasis to protect road users with a higher risk of injury, a 5% annual reduction in non-motorized fatalities and serious injuries was then assumed to obtain an estimate for 2025, which brings the 2021-2025 five-year rolling average to 497. If this 5% annual decrease continues, MassDOT projects the 2023-2027 five-year average to be 445.

The targets were developed in coordination with the Executive Office of Public Safety and Security (EOPSS), the Highway Safety Division (HSD), and other sections within MassDOT. Although MassDOT emphasizes that the state’s goal is zero fatalities and serious injuries, the state targets presented here are not “goals” but realistic targets considering the events of the last 4+ years. The Secretary of Transportation and Highway Division Administrator for MassDOT approved the targets recognizing that MassDOT must demonstrate short term incremental steps in order to achieve the Commonwealth’s goal.

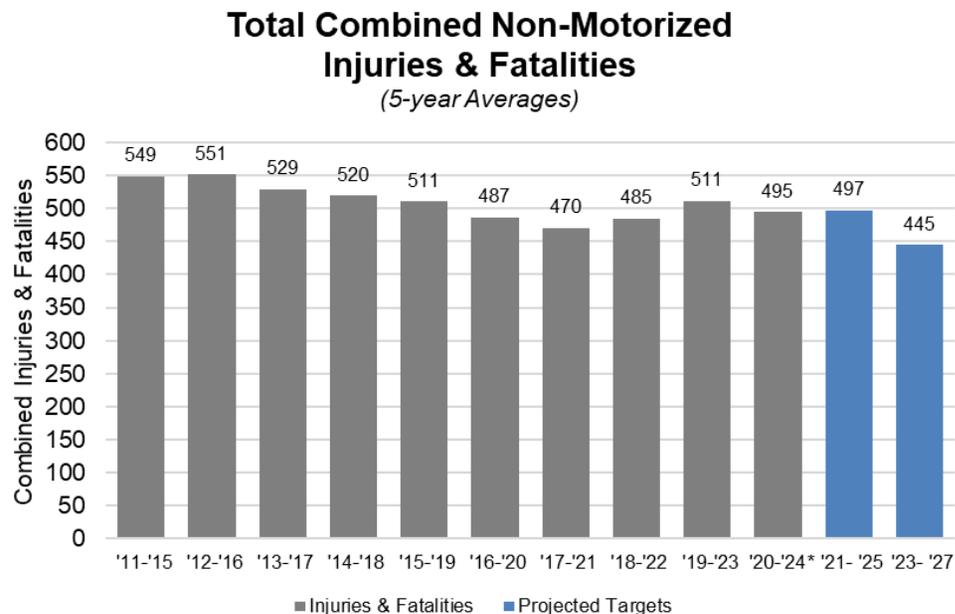


FIGURE 5: TOTAL COMBINED NON-MOTORIZED INJURIES AND FATALITIES (5-YEAR AVERAGES); DATA AS OF JULY 30, 2024

Bridge and Pavement Performance Measures (PM2)

The NMMPO has adopted the two-year (2024) and four-year (2026) statewide bridge and pavement performance targets set by MassDOT. In setting these targets, MassDOT and the NMMPO have followed FHWA guidelines by measuring bridges and pavement condition using the nine-point National Bridge Inventory Standards (NBIS), the International Roughness Index (IRI), the presence of pavement rutting, and the presence of pavement cracking. The two-year and four-year targets were set for six individual performance measures: percent of bridges in good condition; percent of bridges in poor condition; percent of interstate pavement in good condition; percent of interstate in poor condition; percent of non-interstate pavement in good condition; and percent of non-interstate pavement in poor condition. All of these performance measures are tracked in greater detail in [MassDOT's Transport Asset Management Plan \(TAMP\)](#).

Targets for bridge-related performance measures were determined by identifying which bridge projects are programmed and projecting at what rate bridge conditions deteriorate. The bridge-related performance measures measure the percent of deck area, rather than the total number of bridges. The four-year measures were revisited at the mid-performance period in 2024, as seen in the table below. The findings of this revisit found that condition returns are not yet showing increased investment from the IJJA/BIL. MassDOT expects investment to manifest in the next performance period (2026) through reductions in poor performance percentage due to completion of replacement projects. Additionally, increased preservation will likely show in subsequent periods.

TABLE 13: BRIDGE TIP TARGETS AND PERFORMANCE

Measure	Desired Trend	Period 1				Period 2			
		2019		2021		2023		2025	
		Target	Actual	Target	Actual	Target	Actual	Target	Actual
Percent of NHS Bridges by Deck Area in Good Condition	Up	15%	15.6%	16%	16.0%	16%	15.7%	16%	TBD
Percent of NHS Bridges by Deck Area in Poor Condition	Down	13%	13.5%	12%	12.2%	12%	12.5%	12%	TBD

Performance targets for pavement-related performance measures were based on a single year of data collection and thus were set to remain steady under the guidance of the FHWA. These measures are to be revisited at the two-year mark (2024), with targets and actual conditions seen in the table below, and once three years of data are available, for a more informed target setting. MassDOT continues to measure pavement quality and to set statewide short-term and long-term targets in the MassDOT Performance Management Tracker using the Pavement Serviceability Index (PSI), which differs from the IRI. Similarly to bridge-related performance measures, mid-term results

lagged long-term targets. MassDOT concluded that rising construction costs are diminishing returns from program investment and are currently evaluating program size to focus on controlling the scope of planned projects.

TABLE 14: PAVEMENT TIP TARGETS AND PERFORMANCE

Measure	Desired Trend	Period 1				Period 2			
		2019		2021		2023		2025	
		Target	Actual	Target	Actual	Target	Actual	Target	Actual
Percent of Interstate in Good Condition	Up	NA	72.3	70	71.8	70	67.3	70	TBD
Percent of Interstate in Poor Condition	Down	NA	0	4	0	2	2	2	TBD
Percent of non-Interstate NHS in Good Condition ₁	Up	30	35.4	30	41.5	30	28.6	30	TBD
Percent of non-Interstate NHS in Poor Condition ₁	Down	30	30.9	30	24.8	5	6.9	5	TBD

Reliability, Congestion & Emissions Performance Measures (PM3)

As part of the Federal PBPP, the FWHA passed a systems performance measure rule aimed at improving the efficiency of the system and freight movement, reducing traffic congestion and reducing emissions. These measures are as follows:

- **Level of Travel Time Reliability (LOTTR):** the consistency or dependability in travel times, as measured from day to day and/or across different times of the day. LOTTR is based on the amount of time it takes to drive the length of a road segment and is the percentage of person-miles traveled that are reliable. LOTTR is calculated by dividing the 80th/50th percentile travel time. If it falls below 1.50, the segment is reliable. The percentage of road segments that are reliable is used as the target.
- **Level of Truck Travel Time Reliability (TTTR):** the consistency or dependability in truck travel times, as measured from day to day and/or across different times of the day. TTTR is based on the amount of time it takes trucks to drive the length of a road segment and is an index of 50th/95th percentile travel times. The TTTR index is reported as a weighted average of the largest period for each segment.

LOTTR is calculated for both interstate and non-interstate roadways. In 2024, summaries of travel time reliability measures for LOTTR and TTTR were calculated for the Commonwealth of Massachusetts by MassDOT. The findings concluded that two-year targets were achieved for each measure. Table 14 illustrates TTTR and LOTTR with historical data for reference to analyze how the metrics have changed pre and post COVID-19 pandemic.

TABLE 15: LEVEL OF TRUCK TRAVEL TIME RELIABILITY AND LEVEL OF TRAVEL TIME RELIABILITY

PM3 Measure Year	Interstate Travel Time Reliability	Non-Interstate Travel Time Reliability	Truck Travel Time Reliability
2018	69.8%	80.4%	1.88
2019	69.0%	82.7%	1.84
2020	94.4%	91.3%	1.44
2021	84.2%	87.9%	1.61
2022	78.4%	87.0%	1.71
2022 Target	> 68.0%	> 80.0%	< 1.85
2023	75.0%	86.1%	1.75
2024 YTD	74.0%	85.7%	1.76
2024 Target	> 74.0%	> 85.0%	< 1.80
	Meets target	Meets target	Meets target

The NMMPO planning area includes communities in the Boston Urbanized Area (UZA), and as a signatory to the 2018 Boston UZA Memorandum of Understanding (Boston UZA MOU), the NMMPO adopted two-year (2024) and four-year (2026) Boston UZA-wide performance measure targets. These performance measures are the percent of non-single occupancy vehicle (SOV) travel and the Peak Hour Excessive Delay (PHED). Targets were developed in coordination with multiple state DOTs and neighboring MPOs with planning responsibility for portions of the Boston UZA.

Percentage of Non-Single Occupancy Vehicle (SOV) Travel

The metric is based on the percentage of people commuting to work using a mode other than an SOV (e.g.: carpool, van, public transit, walking, biking, or telecommuting). These targets are determined from available Census journey to work data in the Boston UZA, where the proportion of non-SOV travel has been steadily increasing and is projected to continue rising at a rate of 0.32% annually. Table 15 shows the non-SOV travel over time in the Boston UZA.

TABLE 16: NON-SOV TRAVEL IN THE BOSTON UZA

	2021 Baseline	2-Year Target	4-Year Target	Mid-Performance Value	Adjusted 4-Year Target
Boston UZA Non-SOV Travel	36.9%	38.8%	39.8%	41.36%	42.6%

Peak Hour Excessive Delay (PHED)

A measurement of annual hours of excessive delay per capita on the National Highway System (NHS) between 6am and 10am, and 3pm and 7pm, divided by the total UZA population. For the original target setting, only one year of data was available, and the performance targets had been set flat. Data informed targets were set in 2024 and are summarized in the table below.

Emissions Reductions

The on-road mobile source emissions measure is calculated by summing the two- and four- year totals of emissions reductions in kilograms per day. Emissions reduction targets are measured as the sum total of all emissions reductions anticipated through CMAQ-funded projects in non-attainment or air quality maintenance areas. Lowell reached the end of its air quality maintenance period in October 2023 and is in attainment.

MassDOT's long-term goal is to enhance travel time reliability and system efficiency on all roadways. As part of MassDOT's ongoing development of its 2050 Statewide Long-Range Transportation Plan (SLRTP), travel time reliability is continuing to emerge as an important theme during public outreach and other analyses. As such, reliability will be articulated as one of MassDOT's priority areas through the SLRTP and progress toward improving system reliability will be continually tracked. As part of SLRTP development and the federal Transportation Performance Management (TPM) process, MassDOT will set targets in reliability and identify the locations that are most in need of improvements in this area. Following on those analyses, the SLRTP, the STIP, and the NMMPO TIP articulate strategies for program and project development that address these locations with the larger goal of enhancing system reliability. Table 16 summarizes the emissions measures adopted by the NMMPO.

TABLE 16: PM3 EMISSIONS MEASURES ADOPTED BY THE NMMPO

Measure	Baseline	2-Year Target	4-Year Target	Mid-Performance Value
LOTTR Interstate	84.2%	74%	76%	74%
LOTTR non-Interstate	87.2%	85%	87%	85.7%
TTTR	1.61	1.80	1.75	1.76
PHED	18.0	24	22	20.22
Non-SOV	36.9%	38.8%	39.8%	41.4%

Public Transportation Agency Safety Plan

On July 19, 2018, FTA published the [Public Transportation Agency Safety Plan](#) (PTASP) Final Rule (49 CFR Part 673), which requires certain operators of public transportation systems that receive federal funds under FTA's Urbanized Area Formula Grants to develop safety plans that include the processes and procedures to implement Safety Management Systems (SMS). The LRTA developed a plan outlining the agency's existing safety practices and best practices to be implemented to meet Federal regulations.

The LRTA advisory board adopted an updated PTASP on January 23, 2025, following the publication of a new plan in September 2024, amended in December 2024. This version reflects updated safety performance measures, including the incorporation of new metrics related to assaults on transit workers, consistent with FTA General Directive 24-1, issued on September 25, 2024. The directive requires transit agencies to assess the safety risk associated with such assaults and report risk mitigation strategies through their Safety Management Systems. LRTA's updated plan includes the number and rate of assaults on transit workers as safety performance measures.

The NMMPO reviewed and approved the amended plan, including the updated safety targets, at its February 26, 2025, meeting. The plan can be accessed on the NMCOG website [here](#). The safety performance targets for LRTA's 2025 PTASP are presented below in Table XX. As required under federal regulations, LRTA reports major safety events, injuries, and fatalities to the National Transit Database (NTD). This data is publicly available in the "Safety & Security Time Series (Threshold Adjusted)" dataset published by FTA. According to the most recent NTD data available for calendar year 2024, LRTA reported zero major events, fatalities, or injuries on its demand response system which are well

below all established targets. On the fixed route system, LRTA reported one major safety event categorized as “Not Otherwise Classified” (NOC), with no fatalities and one injury. The injury involved an individual who was either waiting for or leaving a transit vehicle.

While the performance targets listed in Table 17 apply to 2025, they provide a useful point of reference when considering LRTA’s actual safety outcomes from calendar year 2024. Compared to the safety performance targets in Table 17—3.7 major events and 2.7 injuries for fixed route service—LRTA’s actual 2024 performance remained below all thresholds. While the PTASP itself is not required to include these reported values, the available data suggests that LRTA’s safety outcomes are well within the bounds of its adopted targets.

TABLE 17: NMMPO ADOPTED LRTA PTASP PERFORMANCE MEASURES AND TARGETS

Safety Performance Measure	Description	Fixed Route	Demand Response
Major Events*	Major safety and security events as defined by the NTD.	3.7	0.3
Major Events Rate*	All major safety and security events, divided by VRM.	3.8	0.6
Collisions*	All collisions reported to the NTD.	32.0	4.7
Collision Rate*	All collisions reported to the NTD, divided by VRM.	33.0	8.3
Pedestrian Collision Rate	All collisions “with a person,” as defined by the NTD, divided by VRM.	1.4	0.0
Vehicular Collision Rate	All collisions “with a motor vehicle,” as defined by the NTD, divided by VRM.	20.0	5.3
Fatalities	All fatalities as defined by the NTD	0	0
Fatality Rate	All fatalities as defined by the NTD, divided by VRM	0	0
Transit Worker Fatality Rate	All transit worker fatalities as defined by the NTD, including the categories “Transit Employee/Contractor,” “Transit Vehicle Operator,” “Other Transit Staff,” divided by VRM	0	0
Injuries*	All injuries as defined by the NTD.	2.7	0.3
Injury Rate*	All injuries as defined by the NTD, divided by VRM.	2.8	0.6
Transit Worker Injury Rate	All transit worker injuries as defined by the NTD, including the categories “Transit Employee/Contractor,” “Transit Vehicle Operator,” and “Other Transit Staff,” divided by VRM.	1.7	0
Assaults on Transit Workers*	All assaults on transit workers as defined by the NTD.	1.5	0
Rate of Assaults on Transit Workers*	All assaults on transit workers as defined by the NTD, divided by VRM.	1.0	0.0
System Reliability	Major Mechanical System failures as defined by the NTD.	121,000	153,079

* Rates are per 1,000,000 vehicle revenue miles (VRM)

Transit Asset Management

The Federal Transit Administration’s (FTA) Final rule (49 CFR Part 625) outlined a requirement for transit providers to implement performance management through [Transit Asset Management \(TAM\) Plans](#). LRTA, as a Tier II Provider⁴, adopted their respective TAM Plan on October 1, 2022, and revised on November 8, 2022. The NMMPO reviewed and adopted updated performance measures outlined in the Plan on November 30, 2022. The TAM Plan covers the horizon period of Federal Fiscal Years 2023-2027. The purpose of the plan is to:

- Provide implementation actions that offer enabling support and direction for the management of transit assets and
- Provide direction and expectations for asset class owners and department managers regarding lifecycle management planning and processes.

The TAM Plan uses transit asset conditions to guide the management of capital assets and prioritization of funding to improve/maintain a State of Good Repair (SGR). SGR performance measures and targets for rolling stock, equipment, and facilities were set. On December 4, 2024, the NMMPO voted to adopt updated TAM performance measures and targets, as outlined in Table 18.

TABLE 19: LRTA TAM PLAN PERFORMANCE MEASURES AND TARGETS

ASSET CATEGORY - PERFORMANCE MEASURE		ASSET CLASS	2024 TARGET	FY 2024 PERF.	TARGET MET	2025 TARGET
REVENUE VEHICLES						
Age -% of revenue vehicles within a particular asset class that have met or exceeded their Useful Life Benchmark	Bus		0%	0%	Yes	0%
	Cutaway Bus (CU)		50.06%	50.00%	Yes	39.58%
	Minivan		100%	50.00%	Yes	50%
EQUIPMENT						
Age -% of vehicles that have met or exceeded their Useful Life Benchmark	Non-Revenue/Service Automobile		50%	50.00%	Yes	50%
	Trucks and other Rubber Tire Vehicles		50%	22.22%	Yes	22.22%
FACILITIES						
Condition -% of facilities with a condition rating below 3.0 on the FTA Transit Economic Requirements Model (TERM) Scale	Administration/ Maintenance		0%	0.00%	Yes	0%
	Passenger Facilities/ Parking Structures		0%	0.00%	Yes	0%

⁴ Tier II Provider: 100 or fewer vehicles across all fixed routes.

SECTION VII: GREENHOUSE GAS AND AIR QUALITY ANALYSIS

About Greenhouse Gas and Air Quality Analysis

This section explains how transportation projects in our region are evaluated for their impact on air pollution and climate. It outlines how we meet federal clean air requirements, monitor local pollutants, and support state climate goals by prioritizing projects that reduce emissions and improve air quality for our communities.

This section documents the latest air quality conformity determination for the 1997 ozone National Ambient Air Quality Standards (NAAQS) in the Commonwealth of Massachusetts. It covers the applicable conformity requirements according to the latest regulations, regional designation status, legal considerations, and federal guidance. Further details and background information are provided below:

Introduction

The 1990 Clean Air Act Amendments (CAAA) require metropolitan planning organizations within nonattainment and maintenance areas to perform air quality conformity determinations prior to the approval of Long-Range Transportation Plans (MTPMTPs) and Transportation Improvement Programs (TIPs), and at such other times as required by regulation. Clean Air Act (CAA) section 176(c) (42 U.S.C. 7506(c)) requires that federally funded or approved highway and transit activities are consistent with (“conform to”) the purpose of the State Implementation Plan (SIP). Conformity to the purpose of the SIP means that means Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) funding and approvals are given to highway and transit activities that will not cause or contribute to new air quality violations, worsen existing violations, or delay timely attainment of the relevant NAAQS or any interim milestones (42 U.S.C. 7506(c)(1)). EPA’s transportation conformity rules establish the criteria and procedures for determining whether metropolitan transportation plans, transportation improvement programs (TIPs), and federally supported highway and transit projects conform to the SIP (40 CFR Parts 51.390 and 93).

A nonattainment area is one that the U.S. Environmental Protection Agency (EPA) has designated as not meeting certain air quality standards. A maintenance area is a nonattainment area that now meets the standards and has been re-designated as maintaining the standard. A conformity determination is a demonstration that plans, programs, and projects are consistent with the State Implementation Plan (SIP) for attaining the air quality standards. The CAAA requirement to perform a conformity determination ensures that federal approval and funding go to transportation activities that are consistent with air quality goals.

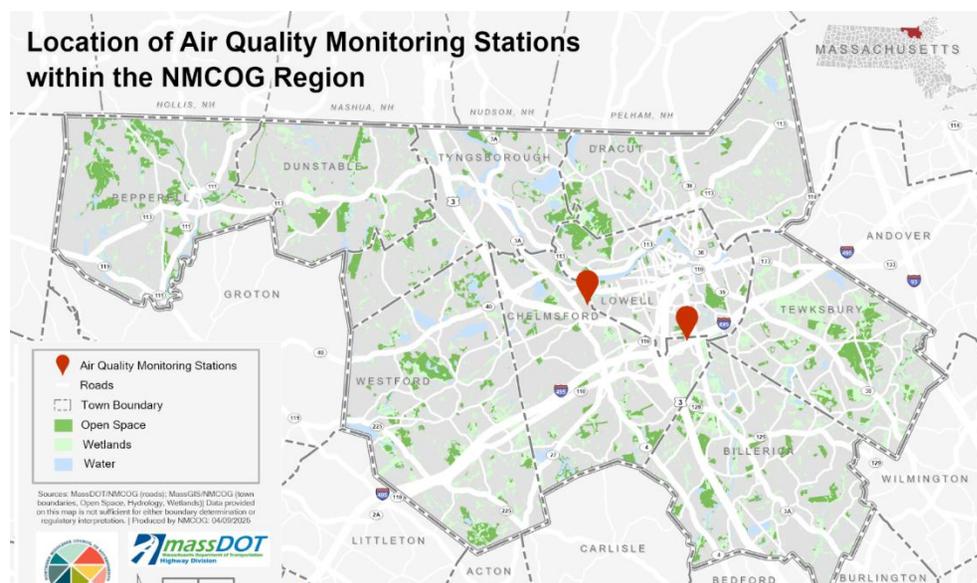


FIGURE 6: LOCATION OF AIR QUALITY MONITORING STATIONS WITHIN THE NMCOG REGION

Legislative and Regulatory Background

The entire Commonwealth of Massachusetts was previously classified as nonattainment for ozone, and was divided into two nonattainment areas. The Eastern Massachusetts ozone nonattainment area included Barnstable, Bristol, Dukes, Essex, Middlesex,

Nantucket, Norfolk, Plymouth, Suffolk, and Worcester counties. Berkshire, Franklin, Hampden, and Hampshire counties comprised the Western Massachusetts ozone nonattainment area. With these classifications, the 1990 Clean Air Act Amendments (CAAA) required the Commonwealth to reduce its emissions of volatile organic compounds (VOCs) and nitrogen oxides (NO_x), the two major precursors to ozone formation to achieve attainment of the ozone standard.

The 1970 Clean Air Act defined a one-hour national ambient air quality standard (NAAQS) for ground-level ozone. The 1990 CAAA further classified degrees of nonattainment of the one-hour standard based on the severity of the monitored levels of the pollutant. The entire commonwealth of Massachusetts was classified as being in serious nonattainment for the one-hour ozone standard, with a required attainment date of 1999. The attainment date was later extended, first to 2003 and a second time to 2007.

In 1997, the EPA proposed a new, eight-hour ozone standard that replaced the one-hour standard, effective June 15, 2005. Scientific information had shown that ozone could affect human health at lower levels, and over longer exposure times than one hour. The new standard was challenged in court, and after a lengthy legal battle, the courts upheld it. It was finalized in June 2004. The eight-hour standard is 0.08 parts per million, averaged over eight hours and not to be exceeded more than once per year. Nonattainment areas were again further classified based on the severity of the eight-hour values. Massachusetts as a whole was classified as being in moderate nonattainment for the eight-hour standard, and was separated into two nonattainment areas—Eastern Massachusetts and Western Massachusetts.

In March 2008, EPA published revisions to the eight-hour ozone NAAQS establishing a level of 0.075 ppm, (March 27, 2008; 73 FR 16483). In 2009, EPA announced it would reconsider this standard because it fell outside of the range recommended by the Clean Air Scientific Advisory Committee. However, EPA did not take final action on the reconsideration so the standard would remain at 0.075 ppm.

After reviewing data from Massachusetts monitoring stations, EPA sent a letter on December 16, 2011, proposing that only Dukes County would be designated as nonattainment for the new proposed 0.075 ozone standard. Massachusetts concurred with these findings.

On May 21, 2012, (77 FR 30088), the final rule was published in the Federal Register, defining the 2008 NAAQS at 0.075 ppm, the standard that was promulgated in March 2008. A second rule published on May 21, 2012 (77 FR 30160), revoked the 1997 ozone NAAQS to occur one year after the July 20, 2012 effective date of the 2008 NAAQS.

Also on May 21, 2012, the air quality designations areas for the 2008 NAAQS were published in the Federal Register. In this Federal Register, the only area in Massachusetts that was designated as nonattainment is Dukes County. All other Massachusetts counties were designated as attainment/unclassified for the 2008 standard. On March 6, 2015, (80 FR 12264, effective April 6, 2015) EPA published the Final Rulemaking, "Implementation of the 2008 National Ambient Air Quality Standards (NAAQS) for Ozone: State Implementation Plan Requirements; Final Rule." This rulemaking confirmed the removal of transportation conformity to the 1997 Ozone NAAQS and the

replacement with the 2008 Ozone NAAQS, which (with actually a stricter level of allowable ozone concentration than the 1997 standards) classified Massachusetts as “Attainment/unclassifiable” (except for Dukes County).

However, on February 16, 2018, the United States Court of Appeals for the District of Columbia Circuit in *South Coast Air Quality Mgmt. District v. EPA* (“*South Coast II*,” 882 F.3d 1138) held that transportation conformity determinations must be made in areas that were either nonattainment or maintenance for the 1997 ozone NAAQS and attainment for the 2008 ozone NAAQS when the 1997 ozone NAAQS was revoked. Conformity determinations are required in these areas after February 16, 2019. On November 29, 2018, EPA issued *Transportation Conformity Guidance for the South Coast II Court Decision* (EPA-420-B-18-050, November 2018) that addresses how transportation conformity determinations can be made in these areas. According to the guidance, both Eastern and Western Massachusetts, along with several other areas across the country, are now defined as “orphan nonattainment areas” – areas that were designated as nonattainment for the 1997 ozone NAAQS at the time of its revocation (80 FR 12264, March 6, 2015) and were designated attainment for the 2008 ozone NAAQS in EPA’s original designations rule for this NAAQS (77 FR 30160, May 21, 2012).

Current Conformity Determination

After 2/16/19, as a result of the court ruling and the subsequent federal guidance, transportation conformity for the 1997 NAAQS – intended as an “anti-backsliding” measure – now applies to both of Massachusetts’ orphan areas. Therefore, a conformity determination was made for the 1997 ozone NAAQS on the 2020-2040 Regional Transportation Plans. This conformity determination was finalized in July 2019 following each MPO’s previous endorsement of their regional transportation plan, and approved by the Massachusetts Divisions of FHWA and FTA on October 13, 2023. This conformity determination continues to be valid for the FFY 2025 - 2029 State Transportation Improvement Program and each MPOs’ FFY 2025 – 2029 Transportation Improvement Program, as each is developed from the conforming 2024-2050 Regional Transportation Plans.

The transportation conformity regulation at 40 CFR 93.109 sets forth the criteria and procedures for determining conformity. The conformity criteria for TIPs and MTPs include: latest planning assumptions (93.110), latest emissions model (93.111), consultation (93.112), transportation control measures (93.113(b) and (c), and emissions budget and/or interim emissions (93.118 and/or 93.119).

For the 1997 ozone NAAQS areas, transportation conformity for TIPs and MTPs for the 1997 ozone NAAQS can be demonstrated without a regional emissions analysis, per 40 CFR 93.109(c). This provision states that the regional emissions analysis requirement applies one year after the effective date of EPA’s nonattainment designation for a NAAQS and until the effective date of revocation of such NAAQS for an area. The 1997 ozone NAAQS revocation was effective on April 6, 2015, and the *South Coast II* court upheld the revocation. As no regional emission analysis is required for this conformity determination, there is no requirement to use the latest emissions model, or budget or interim emissions tests.

Therefore, transportation conformity for the 1997 ozone NAAQS for the FFY 2025-2029 State Transportation Improvement Program, Transportation Improvement Programs, and 2024-2050 Regional Transportation Plans can be demonstrated by showing that remaining requirements in Table 1 in 40 CFR 93.109 have been met. These requirements, which are laid out in Section 2.4 of EPA's guidance and addressed below, include:

- Latest planning assumptions (93.110)
- Consultation (93.112)
- Transportation Control Measures (93.113)
- Fiscal Constraint (93.108)

Latest Planning Assumptions:

The use of latest planning assumptions in 40 CFR 93.110 of the conformity rule generally apply to regional emissions analysis. In the 1997 ozone NAAQS areas, the use of latest planning assumptions requirement applies to assumptions about transportation control measures (TCMs) in an approved SIP (See following section on Timely Implementation of TCMs).

Consultation:

The consultation requirements in 40 CFR 93.112 were addressed both for interagency consultation and public consultation. Interagency consultation was conducted with FHWA, FTA, US EPA Region 1, MassDEP, and the Massachusetts MPOs on March 6, 2019 to discuss the latest conformity-related court rulings and resulting federal guidance. Regular and recurring interagency consultations have been held since on an (at least) annual schedule, with the most recent conformity consultation held on September 13, 2023. This ongoing consultation is conducted in accordance with the following:

- Massachusetts' Air Pollution Control Regulations 310 CMR 60.03 "Conformity to the State Implementation Plan of Transportation Plans, Programs, and Projects Developed, Funded or Approved Under Title 23 USC or the Federal Transit Act"
- The Commonwealth of Massachusetts Memorandum of Understanding among the Massachusetts Department of Transportation, Massachusetts Department of Environmental Protection, Massachusetts Metropolitan Planning Organizations, and Regional Transit Authorities, titled The Conduct of Air Quality Planning and Coordination for Transportation Conformity (dated September 16, 2019)

Public consultation was conducted consistent with planning rule requirements in 23 CFR 450.

Title 23 CFR Section 450.324 and 310 CMR 60.03(6)(h) requires that the development of the TIP, MTP, and related certification documents provide an adequate opportunity for public review and comment. Section 450.316(b) also establishes the outline for MPO public participation programs. Each MPO's Public Participation Plan ensures that the public will have access to the TIP/MTP and all supporting documentation,

provides for public notification of the availability of the TIP/MTP and the public's right to review the document and comment thereon, and provides a 21-day public review and comment period prior to the adoption of the TIP/MTP and related certification documents.

Timely Implementation of Transportation Control Measures:

Transportation Control Measures (TCMs) have been required in the SIP in revisions submitted to EPA in 1979 and 1982. All SIP TCMs have been accomplished through construction or through implementation of ongoing programs. All of the projects have been included in the Region's Transportation Plan (present or past) as recommended projects or projects requiring further study.

Fiscal Constraint:

Transportation conformity requirements in 40 CFR 93.108 state that TIPs and transportation plans must be fiscally constrained consistent with DOT's regional planning regulations at 23 CFR part 450. The 2025-2029 State Transportation Improvement Program and 2024-2050 Regional Transportation Plans are fiscally constrained, as demonstrated in this document.

In summary and based upon the entire process described above, the Commonwealth has prepared this conformity determination for the 1997 Ozone NAAQS in accordance with EPA's and Massachusetts' latest conformity regulations and guidance. This conformity determination process demonstrates that the FFY 2025-2029 State Transportation Improvement Program and the 2024-2050 Regional Transportation Plans meet the Clean Air Act and Transportation Conformity Rule requirements for the 1997 Ozone NAAQS, and have been prepared following all the guidelines and requirements of these rules during this time period.

Therefore, the implementation of the MPO's FFY 2025-2029 State Transportation Improvement Program and the 2024-2050 Regional Transportation Plans are consistent with the air quality goals of, and in conformity with, the Massachusetts State Implementation Plan.

Environmental Planning

In August 2008, the Global Warming Solutions Act (GWSA) was signed into law, making the Commonwealth of Massachusetts a leader in setting enforceable greenhouse gas (GHG) reduction targets. To achieve these targets, the Massachusetts Executive Office of Energy and Environmental Affairs (EOEEA), released the Massachusetts Clean Energy and Climate Plan for 2020 in December 2010. Following the release of this plan, the MA Department of Environmental Protection issued new regulations that require MPOs to quantify impacts from project investments, track progress toward reductions, and consider impacts in the prioritization of project investments.

Overall statewide targets for GHG emissions are a 25% reduction below statewide 1990 GHG emission levels by 2020 and an 80% reduction below 1990 GHG emission levels by 2050.

Regional Efforts

The Commonwealth's MPOs are integrally involved in supporting GHG reductions mandated under the 2008 GWSA. MPOs help their regions achieve the GHG emissions reductions through the promotion of healthy transportation modes – prioritizing and programming an appropriate balance of roadway, transit, bicycle, and pedestrian investments. Creating a balanced multi-modal transportation system is realized through the transportation goals, policies, and projects outlined in Envision 2050 and a mix of new projects programmed through the TIP. GHG tracking and evaluation processes enable the NMMPO to identify anticipated GHG impacts of programmed projects and to use GHG impacts as a criterion in prioritizing future work.

At the regional level, MassDOT coordinates with NMCOG on the implementation of GHG tracking and evaluation in the development of the region's MTP and TIP. GHG tracking and evaluation have been part of the TIP process since the development of the FFY2013-2017 TIP. A 2017 amendment to the GWSA reinforced the GHG assessment and reporting from MassDOT and the Commonwealth's MPOs. The amendment addresses the transition to MassDOT's e-STIP application for highway project selection and strengthening GHG reporting guidance.

For statewide GHG reduction targets, please refer to the [Massachusetts Clean Energy and Climate Plan for 2025 and 2030](#) as well as the [Massachusetts Clean Energy and Climate Plan for 2050](#). It is at the discretion of the NMMPO to adopt voluntary regional GHG reduction efforts in meeting goals for PM1, PM2, PM3, and TAM related projects on the FY2026-2030 TIP.

GHG Assessments

A GHG assessment is conducted for each TIP project. When the project is in an early stage (prior to 25% design), the project's impact on GHG is reported as an expected impact. As design develops, a qualitative or quantitative assessment is performed based on the project type. A quantitative assessment is performed on projects whose main purpose is to facilitate multimodal transportation in the region and is defined by NMCOG and MassDOT's ability to calculate its impact on reducing GHG emissions. Projects that are not able to be quantified undergo a qualitative assessment, which estimates the impact of GHG emissions for a given project. The results are reported as an increase, decrease, or no impact on GHG emissions.

Once a project has been determined to be quantified, MassDOT and NMCOG calculate GHG emissions through a Congestion Mitigation and Air Quality (CMAQ) spreadsheet. The CMAQ spreadsheet is an interactive calculation tool that calculates GHG emissions of the following project types: alternative fuel vehicles, anti-idling, bike sharing, bike and pedestrian facilities, bus replacement, complete streets, induced travel, intersection & traffic flow improvements, new bus or shuttle service, park and ride lots, speed reduction, transit signal priority, and truck stop electrification. Projects that have quantifiable GHG reduction impacts are eligible for CMAQ funding throughout the state.

Greenhouse gas impact tables for FFY2026-2030 TIP

Information regarding the calculated quantitative and assumed qualitative impacts of the projects included in the FFY 2026-2030 TIP are included in the individual project summaries in [Section III, Financial Plan](#).

SECTION VIII: PROCEDURAL ELEMENTS

TIP Amendments and Adjustments

This section outlines the procedures for amending or adjusting the TIP, detailing the criteria used to distinguish between amendments and administrative adjustments. It also describes the approval process, timelines, and requirements for public review and comment, ensuring transparency and consistency in how changes to the TIP are made.

TIP AMENDMENT AND ADJUSTMENTS PROCEDURES

All Federal certification documents endorsed by the NMMPO follow standardized procedures regarding amendments and/or administrative adjustments as directed in 23 CFR 450.104 and 23 CFR 450.218(n) and outlined in the NMMPO Public Participation Plan (PPP). The NMMPO endorsed their current PPP, available on the NMCOG website, on March 26, 2025. Amendments to the TIP require an endorsement by the NMMPO members after a public review and comment period. Administrative adjustments to the TIP can be made without formal NMMPO action and do not require a public comment period. However, the NMMPO can vote to release the adjustment for a public comment period if it agrees it is in the best interest of the NMMPO and the transportation planning process. Tables 20 and 21 provide an overview of what constitutes an administrative adjustment versus an amendment to the TIP for both highway and transit projects.

TABLE 20: TIP ADMINISTRATIVE ADJUSTMENT/AMENDMENT SCENARIOS - HIGHWAY PROJECTS

Highway Project TIP Revision Definitions and Procedures

Type of Revision	Definition	Procedure	Notes
Major Project Cost Change	Increase or decrease of \$500,000 or greater for projects programmed under \$5,000,000 and greater than 10% of the total cost for projects programmed over \$5,000,000.	Amendment	The “increase” or “decrease” in cost is relative to the Total Federal Participating Cost (TFPC) of a project.
Minor Project Cost Change	Increase or decrease of \$499,999 or less for projects programmed under \$5,000,000 and less than 10% of the total cost for projects programmed over \$5,000,000.	Adjustment	See above.
Project Description Change	Change in the description of the project as it is listed in the STIP.	Adjustment	Project description changes are treated as administrative modifications for minor changes (e.g. spelling errors, more detailed descriptions, adding mile-markers, etc.).
Major Project Scope Change	A revision to the project scope large enough to necessitate an additional review by MassDOT’s Project Review Committee (PRC) – typically accompanied by major project cost change.	Amendment	In some cases, a major scope change will require the initiation of a new project through MassDOT’s Project Initiation Form (PIF), and review/approval by PRC. This would require deactivation and removal of the currently programmed project.

Highway Project TIP Revision Definitions and Procedures

Type of Revision	Definition	Procedure	Notes
Minor Project Scope Change	A minor revision to the project scope that does not significantly alter the original PRC approved scope of work.	Adjustment	In many cases, changes in this category will also include a minor cost change.
Project Addition	The programming of a new project in any federal fiscal year of the active TIP.	Amendment or Adjustment	Project additions are treated as amendments if the project was not part of any previously approved STIP that has been vetted through the public process.
Project Removal	The removal of a project in any federal fiscal year of the active TIP.	Amendment	Exception: if a project is removed from an active TIP or the STIP due to it being previously advanced/ advertised, or is moved to the statewide list from a regional TIP, the action would be considered an adjustment.
Change in Funding Source	A change in the project's funding source, including federal and non-federal sources which fall within the project cost change revisions listed above.	Adjustment	Changes in funding sources for projects are permissible for advertisement purposes if the FHWA Division Office has been consulted.
Change in Additional Information	A change in any item listed in the "addition Information" column of the TIP not covered in any other item listed here (e.g. earmark details, project proponent, etc.).	Adjustment	N/A
Change in Year of Programming	Moving a currently programmed project earlier or later than an originally programmed year.	Amendment	Changes to a project delivery schedule (advancement or delay) requires an amendment for the change in programmed FFY.

TABLE 21: TIP ADMINISTRATIVE ADJUSTMENT/AMENDMENT SCENARIOS - TRANSIT PROJECTS

Transit Project TIP Revision Definitions and Procedures

Type of Revision	Definition	Procedure	Notes
Major Project Cost Change	Increase or decrease of \$500,000 or greater for projects under \$5,000,000 and greater than 10% of the total cost for projects exceeding \$5,000,000.	Amendment	The "increase" or "decrease" in cost is relative to the combined federal and nonfederal aid participating cost of the project.
Minor Project Cost Change	Increase or decrease of \$499,999 or less for projects under \$5,000,000 and less than 10% of the total cost for projects exceeding \$5,000,000.	Adjustment	See above.
Project Description Change	Change in the description of the project as it is listed in the STIP.	Adjustment	Project description changes are treated as administrative modifications for minor changes (e.g. spelling errors, more detailed descriptions, etc.).
Major Project Scope Change	A revision to the project scope deemed large enough to require public review and comment (e.g. changing the number of stations).	Amendment	In many cases, changes will also include a major cost change.
Minor Project Scope Change	A minor revision to the project scope that does not significantly alter the original scope of work (e.g. changes to the bus model for vehicle replacement projects).	Adjustment	In many cases, changes will also include a minor cost change.
Project Addition	The programming of a new project in any federal fiscal year of the current TIP.	Amendment or Adjustment	Project additions are treated as amendments if the project was not part of any previously approved TIP that has been vetted through the public process.
Project Removal	The removal of a project in any federal fiscal year of the current TIP.	Amendment	Exception: if a project is removed from a TIP or the STIP due to it being previously advanced/advertised or is moved to the statewide list from a regional TIP, the action would be considered an adjustment.

Transit Project TIP Revision Definitions and Procedures

Type of Revision	Definition	Procedure	Notes
Change in Funding Source	Change in the funding source, including federal and non-federal sources that fall within project cost change revisions listed in the first two rows.	Adjustment	Changes in funding sources for projects are permissible for obligation purposes with written notice from the FTA region office.
Change in Year of Programming	Moving a currently programmed project earlier or later than the originally programmed year.	Amendment or Adjustment	Note: Federal funds shall be programmed in the federal fiscal year in which the award will occur. Changes in year of programming are only treated as adjustments if they involve advancing federal funds to align with the year of the grant award.

Exceptions

Although the NMMPO typically holds a 21-day public comment period for amendments, in the event of extenuating circumstances beyond the agency’s control, the comment period may be shortened or waived in consultation with FHWA Division Office and/or FTA Regional Office. Additionally, the NMMPO may make exceptions to the procedures outlined above and treat amendments as administrative adjustments, but these exceptions will also require coordination with and concurrence by federal partners and MassDOT. All actions on the TIP must be taken in accordance with the region’s [public participation plan](#).

APPENDICES

APPENDIX A GLOSSARY OF ACRONYMS

Abbreviation	Term	Abbreviation	Term
3C	Continuing, Cooperative, Comprehensive	EJ	Environmental Justice
ADA	Americans with Disabilities Act	EOHED	Executive Office of Housing and Economic Development
ARPA	American Rescue Plan Act	EPA	Environmental Protection Agency
BIL	Bipartisan Infrastructure Law	FAST	Fixing America's Surface Transportation Act
CAA	Clean Air Act	FFY	Federal Fiscal Year (October 1 through September 30)
CAAA	Clean Air Act Amendments	FHWA	Federal Highway Administration
CAP	Capital Assistance Program	FTA	Federal Transit Administration
CARES Act	Coronavirus Aid, Relief, and Economic Stimulus Act	GHG	Greenhouse Gas
CBA	Coalition for a Better Acre	GLWIB	Greater Lowell Workforce Investment Board
CEDS	Comprehensive Economic Development Strategy	GWSA	Global Warming Solutions Act
CFR	Code of Federal Regulations	HPMS	Highway Performance Monitoring System
CGI	Common Ground Inc.	HSIP	Highway Safety Improvement Program
CHSTP	Coordinated Human Services Transit Plan	IJA	infrastructure Investment and Jobs Act
CIP	Capital Investment Plan	IRI	International Roughness Index
CMAQ	Congestion Mitigation Air Quality	LDFC	Lowell Development and Financial Corporation
CMR	Code of Massachusetts Regulations	LEP	Limited English Proficiency
CRP	Carbon Reduction Program	LNHP	Lowell National Historic Park
CTI	Community Teamwork, Inc.	LOTTR	Level of Travel Time Reliability
CU	Cutaway Bus	LRTA	Lowell Regional Transit Authority
DLTA	District Local Technical Assistance	MCAD	Massachusetts Commission Against Discrimination
EDA	Economic Development Administration	MAP-21	Moving Ahead for Progress in the 21st Century Act
EDSAT	Economic Development Self-Assessment Tool	MAP	Mobility Assistance Program

MassDOT	Massachusetts Department of Transportation	PTASP	Public Transportation Agency Safety Plan
MEPA	Massachusetts Environmental Protection Agency	RFP	Request for Proposal
MOBD	Massachusetts Office of Business Development	RPA	Regional Planning Agency
MOU	Memorandum of Understanding	RSA	Road Safety Audit
MPO	Metropolitan Planning Organization	RTA	Regional Transit Authority
MTP	Metropolitan Transportation Plan	SAFETEA-LU	Safe Accountable Flexible Efficient Transportation Equity Act – A Legacy for Users
NAAQS	National Ambient Air Quality Standard	SFY	State Fiscal Year
NBIS	National Bridge Inventory Standards	SGR	State of Good Repair
NFA	Non-Federal Aid	SIP	State Implementation Plan
NGBP	Next Generation Bridge Program	SMS	Safety Management Systems
NHFP	National Highway Freight Program	SRTS	Safe Routes to School
NHPP	National Highway Performance Program	STBG	Surface Transportation Block Grant
NHS	National Highway System	STIP	Statewide Transportation Improvement Program
NMCOG	Northern Middlesex Council of Governments	SOV	Single Occupancy Vehicle
NMMPO	Northern Middlesex Metropolitan Planning Organization	TAMP	Transportation Asset Management Plan
NTD	National Transit Database	TA/TAP	Transportation Alternatives/Transportation Alternatives Program
OCD	Office for Commonwealth Development	TCM	Transportation Control Measures
OTP	Office of Transportation Planning	TEC	Transportation Evaluation Criteria
PHED	Peak Hour Excessive Delay	TERM	Transit Economic Requirements Model
PIF	Project Initiation Form	TFPC	Total Federal Participating Cost
PL	Planning (Funds)	TFPCC	Total Federal Participating Construction Cost
PM	Performance Management Measures Final Rules	TIP	Transportation Improvement Program
PPP	Public Participation Plan	TMA	Transportation Management Association
PRC	Project Review Committee	TTTR	Truck Travel Time Reliability
PSI	Pavement Serviceability Index		

UMASS University of Massachusetts
UPWP Unified Planning Work Program
USDOT United States Department of Transportation
UZA Urbanized Area

VMT Vehicle Miles Traveled
VOC Volatile Organic Compounds
YOE Year of Expenditure

APPENDIX B TRANSPORTATION EVALUATION CRITERIA SCORING

Table 22 shows the TEC Scoring Summary prepared by NMCOG staff for the NMMPO. Each category evaluated is scored between -3 and 3, depending on impact. Each category is weighted and summed to determine total TEC score. The highest score possible is 18. (*No updated TEC score as project received advance construction funds split between FFY 2025 and FFY 2026).

TABLE 22: TRANSPORTATION EVALUATION CRITERIA SUMMARY FOR FFY 2026-2030 NORTHERN MIDDLESEX TIP

Transportation Evaluation Criteria Scoring Summary*												
Project ID	Project Description	Community	Cost	Design Status	Condition	Mobility	Safety	Comm. Effects & Support	Land Use & Econ. Dvt.	Env. Effects	Access Bonus	Total TEC Score
604694	CONNECTOR RECONSTRUCTION - FROM THORNDIKE ST TO GORHAM ST	Lowell	\$11,676,259	25% design	1.68	2.52	4.95	2.31	2.31	0.84	2.00	16.21
605966	RECONSTRUCTION AND RELATED WORK ON VFW HIGHWAY*	Lowell	\$12,157,256	Final design	-	-	-	-	-	-	-	-
607401	TRAFFIC SIGNAL INSTALLATION AT ROUTE 110 AND I-495, TWO LOCATIONS	Chelmsford	\$8,656,651	Approved	1.68	1.68	1.80	1.89	2.31	1.26	1.00	11.62
609317	IMPROVEMENTS ON ROUTE 110 (CHELMSFORD ST)	Chelmsford	\$9,288,112	Approved	2.52	1.40	3.60	1.68	2.31	1.26	1.00	13.77
610930	ROUTE 110 (LITTLETON RD) IMPROVEMENTS FROM POWERS RD TO MINOTS CORNER	Westford	\$8,467,318	Approved	1.68	1.68	4.50	2.52	1.89	0.42	1.00	13.69
612609	INTERSECTION IMPROVEMENTS AT MAIN ST/PLEASANT ST AND NORTH ST/EAST ST	Tewksbury	\$4,966,260	Approved	0.00	0.28	0.00	0.42	0.63	0.84	0.00	2.17
612977	VINAL SQUARE SAFETY IMPROVEMENTS	Chelmsford	\$7,776,602	Approved	2.52	1.96	4.05	1.89	2.10	2.10	1.00	13.94
613268	CULVERT REPLACEMENT ON WESTFORD RD	Tyngsborough	\$2,262,529	Approved	2.52	0.28	0.90	0.42	-0.21	0.42	1.00	5.33
613562	IMPROVEMENTS AT SHAWSHEEN ST, FOSTER RD, PATTEN RD, AND BEECH ST	Tewksbury	\$3,586,140	Approved	1.68	1.68	2.25	0.84	0.63	0.00	1.00	8.50

Project ID	Project Description	Community	Transportation Evaluation Criteria Scoring Summary																												
			Condition			Mobility			Safety				Community Effects and Support				Land Use & Economic Dvt				Environmental Effects				Total TEC Score						
			Magnitude of Pavement Improvement	Magnitude of Improvement of other Infrastructure elements	Subtotal	Effect on magnitude and duration of congestion	Effect on travel time and connectivity/access	Effect on regional and local traffic	Subtotal	Effect on the safety of the High-Injury Network	Effect on the safety of the High-Risk Network	Effect on bicycle safety	Effect on pedestrian safety	Subtotal	Residential neighborhood noise, aesthetics, cut-through traffic, stress, and quality of life	Public, local government, legislative, and regional support	Effect on development and redevelopment of housing stock	Advances goals and strategies in local, regional, and/or state housing plans	Subtotal	Business effects: access, noise, traffic, parking, freight access other	Sustainable Development Effects	Advances goals and strategies in local, regional, and/or state land-use and economic development plans	Effect on job creation.	Subtotal		Air Quality/ Climate effects	Water quality/ supply effects; wetlands effects	Historic and cultural resource effects	Effect on wildlife and endangered species	Transportation Access Bonus Score	Subtotal
612609	TEWKSBURY-INTERSECTION IMPROVEMENTS AT MAIN STREET/PLEASANT STREET & NORTH STREET/EAST STREET	Tewksbury	0	n/a	0	1	-3	3	1	0	1	0	-1	0	1	1	0	0	2	1	1	0	1	3.0		0	0	2	0	0	2.00
612977	CHELMSFORD-VINAL SQUARE SAFETY IMPROVEMENTS	Chelmsford	3	n/a	3.00	2	3	2	7.00	3	2	2	2	9.00	2	3	1	3	9.00	2	3	3	2	10.00	1	0	1	0	1	3.00	13.94
610930	WESTFORD - ROUTE 110 (LITTLETON RD) FROM POWERS ROAD TO MINOT'S CORNER	Westford	2	n/a	2.00	1	3	2	6.00	2	3	2	3	10.00	3	3	3	3	12.00	3	2	3	1	9.00	0	1	0	1	1	3.00	13.69
604694	LOWELL- CONNECTOR RECONSTRUCTION, FROM THORNDIKE STREET TO	Lowell	2	n/a	2.00	3	3	3	9.00	3	3	2	3	11.00	3	2	3	3	11.00	3	3	3	2	11.00	1	0	2	0	2	5.00	16.61
607401	CHELMSFORD- TRAFFIC SIGNAL INSTALLATION AT ROUTE 110 & ROUTE 495 (2 LOCATIONS)	Chelmsford	2	n/a	2.00	2	1	3	6.00	1	1	1	1	4.00	2	3	1	3	9.00	3	3	3	2	11.00	1	0	3	0	1	5.00	11.62
609317	CHELMSFORD-IMPROVEMENTS ON CHELMSFORD STREET (ROUTE 110)	Chelmsford	3	n/a	3.00	0	3	2	5.00	2	2	2	2	8.00	1	3	1	3	8.00	3	3	3	2	11.00	1	2	3	0	1	7.00	13.77
613562	TEWKSBURY SHAWSHEEN STREET, FOSTER RD, PATTEN ROAD	Tewksbury	2	n/a	2.00	2	2	2	6.00	0	1	2	2	5.00	3	3	0	0	6.00	1	1	1	0	3.00	1	1	0	0	1	3.00	8.50
613268	TYNGSBOROUGH CULVERT WESTFORD RD	Tyngsborough		3		0	0	1	1.00	0	1	0	1	2.00	1	0	1	0	2.00	0	0	-1	0	-1.00	0	2	0	1	1	4.00	5.33

APPENDIX C FEDERAL HIGHWAY AND TRANSIT FUNDING CATEGORIES

Highway funding categories

For additional information about statewide funding sources and categories, please refer to [MassDOT's STIP for FFY 2025-2029, Highway Funding Programs](#).

Bridge Formula Program (BFP): Formerly known as the Highway Infrastructure Program (HIP), these funds are federal highway apportionments distributed to the Commonwealth from FFY 2022-2026. The purpose of this program is to replace, rehabilitate, preserve, protect, and construct bridges on public roads.

- 15% of BFP funds are reserved for off-system bridges.
- A match of 10% for projects is required on Interstate.
- A match of 20% is required for on-system National Highway System (NHS) projects, or for off-system bridges not owned by a local agency.
- No match is required for locally owned off-system bridges.

Carbon Reduction Program (CRP): This program provides funding for projects that reduce transportation emissions or the development of carbon reduction strategies. In consultation with MPOs, states are required to develop and update a carbon reduction strategy every four years and submit it to FHWA for approval.

- 65% of a state's CRP funds are allocated to areas based on population, with the remainder to be used in any area of the state.
- A match of 10% is required for projects on Interstate; a match of 20% is required for all other projects.
- [MA carbon reduction strategy](#).

Congestion Mitigation Air Quality (CMAQ) Improvement Program: CMAQ provides a flexible funding source for transportation investments to help meet the requirements of the federal Clean Air Act. Funding is available to help reduce congestion and improve air quality for areas that do not meet the National Ambient Air Quality Standards (NAAQS) for ozone, carbon monoxide, or particulate matter (nonattainment areas) and for former nonattainment areas that are now in compliance (maintenance areas). See [Section VI](#) on Air Quality and CMAQ for more details on NMCOG communities. The BIL expanded CMAQ, adding eligibility for the following projects: shared micro mobility, purchase of diesel replacements; purchase of medium/heavy-duty zero emission vehicles and related charging equipment; and modernization/rehabilitation of a lock and dam or a marine highway corridor, connector, or crossing, if certain criteria are met ($\leq 10\%$ of CMAQ funds).

- Two percent of this program is set aside for State Planning and Research.

- A match of 10% is required for projects on Interstate; a match of 20% is required for all other projects.
- In circumstances where CMAQ funding is being used for bikeway wayfinding signage projects, FHWA provides 100% federal aid match. As such, these project(s) are tagged as "CMAQ100" in the [Massachusetts STIP](#).

[Highway Safety Improvement Program \(HSIP\)](#): HSIP funds safety improvements to reduce the number and severity of crashes at dangerous locations. A highway safety improvement investment is any strategy, activity, or project on a public road that is consistent with each state's data-driven [State Highway Strategic Safety Plan \(SHSP\)](#) and corrects or improves a hazardous road location or addresses a highway safety problem.

- BIL adds eligibility ($\leq 10\%$ of HSIP funds) for specified safety projects (including non-infrastructure safety projects related to education, research, enforcement, emergency services, and safe routes to school) and modifies the HSIP definition of highway safety improvement projects by adding or clarifying some project types.
- BIL also requires states to complete vulnerable road user (VRU) safety assessments and adds a new special rule for states with annual VRU fatalities comprising $\geq 15\%$ of total annual crash fatalities.
- Two percent of this program is set aside for State Planning and Research.
- A state match of 10% is required for HSIP projects.

[Metropolitan Planning Program \(MPP\)](#): This program establishes a cooperative, continuous, and comprehensive framework for making transportation investment decisions in metropolitan areas, including the Greater Lowell Region.

- MassDOT is required to suballocate funds to MPOs and transportation planning organizations (TPOs).

[National Highway Freight Program \(NHFP\)](#): This program was established in December 2015 through the FAST Act to improve the efficient movement of freight on the National Highway Freight Network (NHFN). The NHFP allows for investment in infrastructure and operational improvements that strengthen economic competitiveness, reduce congestion, reduce the cost of freight transportation, improve reliability, and increase productivity.

- Two percent of this program is set aside for state planning and research.
- The BIL allows states to use $\leq 30\%$ of NHFP funding on freight intermodal or rail projects – subject to certain restrictions.
- Adds eligibility for modernization/rehabilitation of a lock and dam or mine highway corridor, connector, or crossing that are functionally connected to the NHFN and likely to reduce on-road mobile source emissions.
- A match of 10% is required for projects on Interstate; a match of 20% is required for all other projects.

[National Electric Vehicle Infrastructure \(NEVI\) Formula Program](#): This program provides funding to strategically deploy electric vehicle (EV) charging infrastructure, and to establish an interconnected network to facilitate data collection, access, and reliability.

- Funded projects must be located along designated alternative fuel corridors and the state must submit a plan to FHWA describing the planned use of funds.
- Ten percent of funding is set aside for discretionary grants to state and local governments that require additional assistance to strategically deploy EV charging infrastructure.
- A state match of 20% is required for this program.

National Highway Performance Program (NHPP): This funding provides support for the condition and performance of the National Highway System (NHS), including interstate and non-interstate routes and bridges. These investments ensure that federal aid funds in highway construction are directed to support progress toward the achievement of performance targets established in Massachusetts' asset management plan for the NHS (see [Section V](#) on Performance-Based Planning).

- A state match of 10% is required for NHPP funded projects on Interstate.
- A state match of 20% is required for NHPP funded non-Interstate projects.

Non-Federal Aid (NFA): Funds that are typically state monies derived from various resources, including the Transportation Bond Bill.

Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation (PROTECT) Formula Program: This program provides funding for resiliency improvements; community resilience and evacuation routes; and at-risk coastal infrastructure. Highway, transit, and certain port projects are also eligible. PROTECT was established in 2021 as part of the BIL.

- The state may use up to 40% of PROTECT funds on new capacity projects and up to 10% on development phase activities.
- A state match of 20% is required with up to an additional 10% points reduction if the state prioritized projects on a Resilience Improvement Plan (RIP) and incorporated the plan with metropolitan transportation plan or the statewide long-range transportation plan.

Railway-Highway Crossings

- *Hazard Elimination (RHCP)*: This program provides funds for safety improvements to reduce the number of fatalities, injuries, and crashes at public railway-highway grade crossings. Safety improvements include the separation or protection of grades at crossings, the reconstruction of existing structures, the relocation of highways to eliminate grade crossings, and projects at grade crossings to eliminate hazards posed by blocked grade crossings due to idling trains. The RHCP is a set-aside from the HSIP and requires no matches.
- *Protective Devices (RHCP)*: This program provides funds for safety improvements to reduce the number of fatalities, injuries, and crashes at public railway-highway grade crossings. The safety improvements are subject to Hazard Elimination RHCP requirements. The Protective Devices RHCP is a set-aside from the HSIP and does not require a match.

Recreational Trails Program (RTP): Provides funds to develop and maintain recreational trails and trail-related facilities for both non-motorized and motorized recreational trail use. These uses include but are not limited to hiking, cycling, in-line skating, equestrian use, cross-country skiing, snowmobiling, offroad motorcycling, all-terrain vehicle riding, four-wheel driving, or using other off-road motorized vehicles.

- A state match of 20% is required.

Statewide Planning: The funding source for State Planning and Research is a 2% set-aside from the state's NHPP, STBG, HSIP, and CMAQ apportionments. State Planning and Research provides funding for the state to conduct transportation planning, perform studies on various aspects of surface transportation systems, and research topics relating to engineering standards and construction materials for transportation.

- A match of 20% is required.

Surface Transportation Block Grant Program (STBG): Provides flexible funding for projects to preserve and improve conditions on the performance of any federal-aid highway, bridge, tunnel, or project on any public road (minus local roads and rural minor collectors).

- Fifty-five percent of a state's STBG funds are to be distributed to areas based on population, with the remaining 45% to be used in any part of the state.
- A match of 10% is required for projects on Interstate; a match of 20% is required for all other projects.
- *Bridge-Off System (STBG-BR-Off)* is the funding for off-system bridges, coming from an STBG set aside. Funding is available for bridges and low water crossings on public roads other than on Federal-aid highways. These funds are 80% federally funded with a 20% state match.

Transportation Alternatives (TA/TAP): This program supports smaller scale transportation projects, such as pedestrian and bicycle facilities, recreational trails, safe routes to school projects, community improvements, and environmental mitigation.

- MassDOT prioritizes these funds for Safe Routes to School (SRTS) investments.
- Fifty-nine percent of the fund is suballocated to areas of the state based on population, with the remainder to be used in any area of the state.
- A state match of 20% is required.

Transit Funding Categories

[Section 5303 / Metropolitan Planning:](#) Used by MPO staff for transit planning as part of the [Unified Planning Work Program](#) developed each year. Funds are apportioned to the state, which then suballocates them to MPOs.

- A state match of 20% is required.

[Section 5307 / Urbanized Area Formula Grants:](#) These program funds are used for public transportation capital and operating assistance and for transportation-related planning. Section 5307 is funded by Urbanized Area Formula Grants. Eligible activities include planning, engineering design, capital investments in bus/bus-related activities, crime prevention and security equipment, construction and maintenance of passenger facilities, and capital investments in new and existing guideway systems.

- A state match of 20% is required.

[Section 5309 / Fixed Guideway Capital Investment Grants:](#) This program provides grants for new and expanded rail, bus rapid transit, and ferry systems that reflect local priorities to improve transportation options in key corridors using Capital Investment Grants funds. This program includes a category known as core capacity projects, which expand capacity by at least 10% in existing fixed-guideway transit corridors that are already at or above capacity today or are expected to be at or above capacity within five years.

- A match of 40% is required for projects on the design and construction of new fixed guideways or extensions to fixed guideways.
- A match of 20% is required for other projects.

[Section 5310 / Mobility Assistance Program \(MAP\):](#) These funds are used to improve mobility for seniors and individuals with disabilities. FTA provides financial assistance for transportation services that are planned, designed, and carried out to meet the special transportation needs of elderly individuals and individuals with disabilities in all areas—urban, small urban, and rural.

- A match of 50% is required for operating assistance.
- No match is required for administrative costs.
- A match of 20% is required for other projects.

[Section 311 / Rural Area Formula Grant:](#) These program funds are used to enhance access for people in nonurbanized areas to health care, shopping, education, employment, public services, and recreation. The program is also used to assist in the maintenance, development, improvement, and use of public transportation systems in nonurbanized areas.

- A match of 20% is required for capital projects and Americans with Disabilities Act (ADA) non-fixed route paratransit service.
- A match of 50% is for operating assistance.

Section 5337 / State of Good Repair: A formula-based State of Good Repair program dedicated to repairing and upgrading the nation's rail transit systems along with high- intensity motor bus systems that use high occupancy vehicle lanes, including bus rapid transit (BRT).

- A match of 20% is required.

Section 5339 / Bus and Bus Facilities: These funds are used to rehabilitate, replace, and purchase buses and related equipment as well as construction of bus-related facilities.

- A match of 20% is required.

APPENDIX D SYSTEM PRESERVATION, OPERATIONS AND MAINTENANCE

The numbers in Table 23 below represent the operations and maintenance budget approved by the LRTA Advisory Board, and projections for the outyears as used in the Program Preview meetings based on State Fiscal Year (SFY). This data projects that revenues will meet the operating needs of the LRTA.

TABLE 23: LRTA OPERATIONS AND MAINTENANCE BUDGET

Operating Revenue	SFY 2026	SFY 2027	SFY 2028	SFY 2029	SFY 2030
Farebox	\$0	\$0	\$0	\$0	\$0
Section 5307	\$672,307	\$2,812,010	\$3,626,509	\$4,133,294	\$4,674,732
CMAQ/TDM	\$0	\$0	\$0	\$0	\$0
CARES/ARPA Act	\$2,393,132	\$528,042	\$0	\$0	\$0
Advertising	\$70,000	\$73,500	\$77,175	\$81,034	\$85,085
Interest Income	\$140,000	\$144,200	\$148,526	\$152,982	\$157,571
Parking Revenue	\$646,260	\$710,886	\$781,975	\$805,434	\$829,597
State Contract Assistance**	\$9,221,986	\$9,498,646	\$9,783,605	\$10,077,113	\$10,379,426
Try Transit Assistance	\$1,170,257	\$1,205,365	\$1,241,526	\$1,278,771	\$1,317,135
Local Assessment	\$3,258,900	\$3,340,373	\$3,423,882	\$3,509,479	\$3,597,216
Other: sale of used equipment and other miscellaneous revenues	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000
TOTAL	\$17,587,842	\$18,328,021	\$19,098,198	\$20,053,108	\$21,055,763
Operating Expenses***	SFY 2026	SFY 2027	SFY 2028	SFY 2029	SFY 2030
TOTAL (see description below)	\$17,587,842	\$18,328,021	\$19,098,198	\$20,053,108	\$21,055,763

Source: LRTA

** Operating assistance provided by the State

*** Description of Operating Expenses: Salaries and wages; fringe benefits; legal, accounting and professional services; promotion/marketing; insurance; equipment leases and rentals; real property leases and rentals; non-capitalized maintenance/repair; fuel costs; tire costs; office supplies and equipment; interest expense; utilities; management fees; travel and training; and other miscellaneous expense items.

Operating and Maintenance Expenditures as of April 2025
Statewide and District Contracts plus Expenditures within MPO boundaries

Program Group/Sub Group	Est SFY 2025 Spending	Est SFY 2026 Spending	Est SFY 2027 Spending	Est SFY 2028 Spending	Est SFY 2029 Spending
Part 1: Non-Federal Aid					
Section I - Non Federal Aid Maintenance Projects					
01 - ADA Retrofits					
Accessibility Improvements	\$ -	\$ -	\$ -	\$ -	\$ -
Sidewalk Construction	\$ 2,635,859	\$ 643,820	\$ 1,645,058	\$ -	\$ -
02 - Bicycles and pedestrians program					
Bike Facility Construction	\$ -	\$ -	\$ -	\$ -	\$ -
Shared Use Path Modernization	\$ -	\$ -	\$ -	\$ -	\$ -
03 - Bridge					
Bridge Maintenance	\$ 53,514,391	\$ 47,541,972	\$ 20,310,774	\$ 1,043,287	\$ -
Bridge Maintenance - Deck Repairs	\$ 16,640,117	\$ 11,887,273	\$ 4,500,535	\$ 794,058	\$ -
Bridge Maintenance - Joints	\$ 3,962,774	\$ 582,139	\$ -	\$ -	\$ -
Bridge Preservation	\$ 10,487,877	\$ 9,720,455	\$ 3,305,597	\$ 1,069,091	\$ -
Bridge Rehabilitation	\$ -	\$ -	\$ -	\$ -	\$ -
Bridge Replacement	\$ 20,000	\$ 1,150,000	\$ 1,676,000	\$ 388,112	\$ -
Drawbridge Maintenance	\$ 10,813,975	\$ 8,623,532	\$ 4,651,663	\$ -	\$ -
Marine Construction	\$ -	\$ -	\$ -	\$ -	\$ -
New Bridge	\$ -	\$ -	\$ -	\$ -	\$ -
Painting - Structural	\$ 1,126,940	\$ 1,150,000	\$ -	\$ -	\$ -
Structures Maintenance	\$ -	\$ -	\$ -	\$ -	\$ -
04 - Capacity					
Hwy Reconst - Major Widening	\$ -	\$ -	\$ -	\$ -	\$ -
New Road	\$ -	\$ -	\$ -	\$ -	\$ -
Roadway Additional Capacity	\$ -	\$ -	\$ -	\$ -	\$ -
05 - Facilities					
Equipment	\$ -	\$ -	\$ -	\$ -	\$ -
Vertical Construction (Ch 149)	\$ 11,494,409	\$ 4,679,989	\$ 2,297,901	\$ 43,813	\$ -
07 - Intersection Improvements					
Intersection Reconstruction	\$ -	\$ -	\$ -	\$ -	\$ -
Targeted Modernization - Multiple Locations	\$ -	\$ -	\$ -	\$ -	\$ -
Traffic Signal Upgrades	\$ 3,313,980	\$ 3,692,584	\$ 457,167	\$ -	\$ -
08 - Interstate Pavement					
Resurfacing Interstate	\$ -	\$ -	\$ -	\$ -	\$ -
09 - Intelligent Transportation Systems Program					
Intelligent Transportation Sys	\$ -	\$ -	\$ -	\$ -	\$ -
10 - Non-interstate DOT Pavement Program					
Limited Access Pavement Preservation	\$ -	\$ -	\$ -	\$ -	\$ -
Milling and Cold Planing	\$ 219,070	\$ -	\$ -	\$ -	\$ -
Pavement Maintenance	\$ -	\$ 6,595,431	\$ 8,418,972	\$ 1,700,174	\$ -
Pavement Preservation	\$ -	\$ -	\$ -	\$ -	\$ -
Pavement Rehabilitation	\$ -	\$ -	\$ -	\$ -	\$ -
Resurfacing	\$ 34,060,696	\$ 10,914,346	\$ 3,484,486	\$ -	\$ -
Resurfacing DOT Owned Non-Interstate	\$ 9,432,088	\$ 4,692,287	\$ 491,286	\$ -	\$ -
11 - Roadway Improvements					
Asbestos Removal	\$ -	\$ -	\$ -	\$ -	\$ -
Catch Basin Cleaning	\$ 2,020,954	\$ 2,142,615	\$ 997,382	\$ -	\$ -
Contract Highway Maintenance	\$ 18,268,215	\$ 14,771,000	\$ 8,308,789	\$ 2,868,613	\$ -
Crack Sealing	\$ 801,099	\$ 1,255,202	\$ 307,826	\$ 128,261	\$ -
Culvert Replacement	\$ -	\$ -	\$ -	\$ -	\$ -
Drainage	\$ 9,772,823	\$ 8,173,545	\$ 4,120,375	\$ -	\$ -
Embankment and Ledge Stabilization	\$ -	\$ 328,087	\$ 562,435	\$ 187,478	\$ -
Guard Rail & Fencing	\$ 7,346,081	\$ 5,546,171	\$ 2,018,851	\$ -	\$ -
Habitat Enhancement	\$ -	\$ -	\$ -	\$ -	\$ -
Highway Sweeping	\$ 1,634,705	\$ 1,428,520	\$ 419,697	\$ -	\$ -
Landscaping	\$ 1,102,285	\$ 800,761	\$ 128,348	\$ 32,087	\$ -
Mowing and Spraying	\$ 2,693,644	\$ 1,778,078	\$ 1,675,502	\$ 210,948	\$ -
Process/Recycle/Trnsprt Soils	\$ -	\$ -	\$ -	\$ -	\$ -
Tree Trimming	\$ 5,543,210	\$ 3,597,779	\$ 629,925	\$ -	\$ -
12 - Roadway Reconstruction					
Hwy Reconst - Restr and Rehab	\$ 858,715	\$ 590	\$ -	\$ -	\$ -
Reclamation	\$ -	\$ -	\$ -	\$ -	\$ -
Roadway - Reconst - Sidewalks and Curbing	\$ 16	\$ -	\$ -	\$ -	\$ -
Roadway Minor Widening	\$ -	\$ -	\$ -	\$ -	\$ -
Roadway Modernization	\$ -	\$ -	\$ -	\$ -	\$ -
Tunnels	\$ -	\$ -	\$ -	\$ -	\$ -
13 - Safety Improvements					
Electrical	\$ -	\$ -	\$ -	\$ -	\$ -
Impact Attenuators	\$ 1,248,562	\$ 643,234	\$ 294,479	\$ -	\$ -
Lighting	\$ 3,112,382	\$ 2,479,541	\$ -	\$ -	\$ -
Pavement Marking	\$ 4,186,950	\$ 3,099,569	\$ 1,250,833	\$ 66,336	\$ -
Safety Improvements	\$ -	\$ -	\$ -	\$ -	\$ -
Sign Installation/Upgrading	\$ 2,023,526	\$ 1,504,922	\$ 374,510	\$ -	\$ -
Structural Signing	\$ 285,381	\$ -	\$ -	\$ -	\$ -
Targeted Modernization - Multiple Locations	\$ -	\$ -	\$ -	\$ -	\$ -
Section I Total:	\$ 218,620,725	\$ 159,423,441	\$ 72,328,389	\$ 8,532,257	\$ -
Section II - Non Federal Aid Highway Operations - State Operating Budget					
Snow and Ice Operations & Materials					
	\$ 100,700,000	\$ 80,000,000	\$ 80,000,000	\$ 80,000,000	\$ 80,000,000
District Maintenance Payroll					
Mowing, Litter Mgmt, Sight Distance Clearing, Etc.	\$ 38,630,000	\$ 39,790,000	\$ 40,990,000	\$ 42,220,000	\$ 43,490,000
Section II Total:	\$ 139,330,000	\$ 119,790,000	\$ 120,990,000	\$ 122,220,000	\$ 123,490,000
Grand Total NFA:	\$ 357,950,725	\$ 279,213,441	\$ 193,318,389	\$ 130,752,257	\$ 123,490,000

Operating and Maintenance Expenditures as of April 2025
Statewide and District Contracts plus Expenditures within MPO boundaries

Program Group/Sub Group	Est SFY 2025 Spending	Est SFY 2026 Spending	Est SFY 2027 Spending	Est SFY 2028 Spending	Est SFY 2029 Spending
Part 2: Federal Aid					
Section I - Non Federal Aid Maintenance Projects					
01 - ADA Retrofits					
Accessibility Improvements	\$ -	\$ -	\$ -	\$ -	\$ -
Sidewalk Construction	\$ 342,933	\$ -	\$ -	\$ -	\$ -
02 - Bicycles and pedestrians program					
Bike Facility Construction	\$ -	\$ -	\$ -	\$ -	\$ -
Shared Use Path Modernization	\$ -	\$ -	\$ -	\$ -	\$ -
03 - Bridge					
Bridge Maintenance	\$ 2,036,049	\$ -	\$ 6,476,891	\$ 9,473,709	\$ -
Bridge Maintenance - Deck Repairs	\$ -	\$ -	\$ -	\$ -	\$ -
Bridge Maintenance - Joints	\$ -	\$ -	\$ -	\$ -	\$ -
Bridge Preservation	\$ 91,407,725	\$ 115,229,190	\$ 185,135,765	\$ 271,477,861	\$ 321,861,813
Bridge Rehabilitation	\$ -	\$ -	\$ -	\$ -	\$ -
Bridge Replacement	\$ -	\$ -	\$ -	\$ -	\$ -
Drawbridge Maintenance	\$ -	\$ -	\$ -	\$ -	\$ -
Marine Construction	\$ -	\$ -	\$ -	\$ -	\$ -
New Bridge	\$ -	\$ -	\$ -	\$ -	\$ -
Painting - Structural	\$ 244,704	\$ -	\$ 932,351	\$ 3,729,405	\$ 1,243,135
Structures Maintenance	\$ -	\$ -	\$ -	\$ 515,948	\$ 6,191,374
04 - Capacity					
Hwy Reconstr - Major Widening	\$ -	\$ -	\$ -	\$ -	\$ -
New Road	\$ -	\$ -	\$ -	\$ -	\$ -
Roadway Additional Capacity	\$ -	\$ -	\$ -	\$ -	\$ -
05 - Facilities					
Equipment	\$ -	\$ -	\$ -	\$ -	\$ -
Vertical Construction (Ch 149)	\$ -	\$ -	\$ -	\$ -	\$ -
07 - Intersection Improvements					
Intersection Reconstruction	\$ -	\$ -	\$ -	\$ -	\$ -
Targeted Modernization - Multiple Locations	\$ -	\$ -	\$ -	\$ -	\$ -
Traffic Signal Upgrades	\$ -	\$ -	\$ -	\$ -	\$ -
08 - Interstate Pavement					
Resurfacing Interstate	\$ -	\$ -	\$ -	\$ -	\$ -
09 - Intelligent Transportation Systems Program					
Intelligent Transportation Sys	\$ -	\$ -	\$ -	\$ -	\$ -
10 - Non-interstate DOT Pavement Program					
Limited Access Pavement Preservation	\$ -	\$ 29,136,624	\$ 51,743,618	\$ 67,584,782	\$ 100,092,348
Milling and Cold Planing	\$ -	\$ -	\$ -	\$ -	\$ -
Pavement Maintenance	\$ -	\$ -	\$ -	\$ -	\$ -
Pavement Preservation	\$ -	\$ -	\$ 6,823,352	\$ 19,761,341	\$ 37,361,057
Pavement Rehabilitation	\$ -	\$ -	\$ -	\$ -	\$ -
Resurfacing	\$ -	\$ -	\$ -	\$ -	\$ -
Resurfacing DOT Owned Non-Interstate	\$ -	\$ -	\$ -	\$ -	\$ -
11 - Roadway Improvements					
Asbestos Removal	\$ -	\$ -	\$ -	\$ -	\$ -
Catch Basin Cleaning	\$ -	\$ -	\$ -	\$ -	\$ -
Contract Highway Maintenance	\$ 190,125	\$ -	\$ -	\$ -	\$ -
Crack Sealing	\$ -	\$ -	\$ -	\$ -	\$ -
Culvert Replacement	\$ -	\$ -	\$ -	\$ -	\$ -
Drainage	\$ -	\$ -	\$ -	\$ -	\$ -
Embankment and Ledge Stabilization	\$ -	\$ -	\$ -	\$ -	\$ -
Guard Rail & Fencing	\$ -	\$ -	\$ -	\$ -	\$ -
Habitat Enhancement	\$ -	\$ -	\$ -	\$ -	\$ -
Highway Sweeping	\$ -	\$ -	\$ -	\$ -	\$ -
Landscaping	\$ -	\$ -	\$ -	\$ -	\$ -
Mowing and Spraying	\$ -	\$ -	\$ -	\$ -	\$ -
Process/Recycle/Trnsprt Soils	\$ -	\$ -	\$ -	\$ -	\$ -
Tree Trimming	\$ -	\$ -	\$ -	\$ -	\$ -
12 - Roadway Reconstruction					
Hwy Reconstr - Restr and Rehab	\$ -	\$ -	\$ -	\$ -	\$ -
Reclamation	\$ -	\$ -	\$ -	\$ -	\$ -
Roadway - Reconstr - Sidewalks and Curbing	\$ -	\$ -	\$ -	\$ -	\$ -
Roadway Minor Widening	\$ -	\$ -	\$ -	\$ -	\$ -
Roadway Modernization	\$ -	\$ -	\$ -	\$ -	\$ -
Tunnels	\$ -	\$ -	\$ -	\$ -	\$ -
13 - Safety Improvements					
Electrical	\$ -	\$ -	\$ -	\$ -	\$ -
Impact Attenuators	\$ -	\$ -	\$ -	\$ -	\$ -
Lighting	\$ 289,151	\$ -	\$ -	\$ -	\$ -
Pavement Marking	\$ -	\$ -	\$ -	\$ -	\$ -
Safety Improvements	\$ -	\$ -	\$ -	\$ -	\$ -
Sign Installation/Upgrading	\$ -	\$ -	\$ -	\$ -	\$ -
Structural Signing	\$ 8,159	\$ -	\$ -	\$ -	\$ -
Targeted Modernization - Multiple Locations	\$ -	\$ -	\$ -	\$ -	\$ -
Section I Total:	\$ 94,518,845	\$ 144,365,814	\$ 251,111,978	\$ 372,543,046	\$ 466,749,727
Grand Total Federal Aid:	\$ 94,518,845	\$ 144,365,814	\$ 251,111,978	\$ 372,543,046	\$ 466,749,727

Operating and Maintenance Expenditures as of April 2025

Statewide and District Contracts

Program Group/Sub Group	Est SFY 2025 Spending	Est SFY 2026 Spending	Est SFY 2027 Spending	Est SFY 2028 Spending	Est SFY 2029 Spending
Part 1: Non-Federal Aid					
Section I - Non Federal Aid Maintenance Projects					
01 - ADA Retrofits					
Accessibility Improvements	\$ -	\$ -	\$ -	\$ -	\$ -
Sidewalk Construction	\$ 2,635,859	\$ 643,820	\$ 1,645,058	\$ -	\$ -
02 - Bicycles and pedestrians program					
Bike Facility Construction	\$ -	\$ -	\$ -	\$ -	\$ -
Shared Use Path Modernization	\$ -	\$ -	\$ -	\$ -	\$ -
03 - Bridge					
Bridge Maintenance	\$ 47,402,577	\$ 44,250,595	\$ 19,830,947	\$ 1,043,287	\$ -
Bridge Maintenance - Deck Repairs	\$ 16,640,117	\$ 11,887,273	\$ 4,500,535	\$ 794,058	\$ -
Bridge Maintenance - Joints	\$ 3,962,774	\$ 582,139	\$ -	\$ -	\$ -
Bridge Preservation	\$ 4,555,744	\$ 4,376,728	\$ 1,167,415	\$ -	\$ -
Bridge Rehabilitation	\$ -	\$ -	\$ -	\$ -	\$ -
Bridge Replacement	\$ -	\$ -	\$ -	\$ -	\$ -
Drawbridge Maintenance	\$ 10,813,975	\$ 8,623,532	\$ 4,651,663	\$ -	\$ -
Marine Construction	\$ -	\$ -	\$ -	\$ -	\$ -
New Bridge	\$ -	\$ -	\$ -	\$ -	\$ -
Painting - Structural	\$ 426,940	\$ -	\$ -	\$ -	\$ -
Structures Maintenance	\$ -	\$ -	\$ -	\$ -	\$ -
04 - Capacity					
Hwy Reconstr - Major Widening	\$ -	\$ -	\$ -	\$ -	\$ -
New Road	\$ -	\$ -	\$ -	\$ -	\$ -
Roadway Additional Capacity	\$ -	\$ -	\$ -	\$ -	\$ -
05 - Facilities					
Equipment	\$ -	\$ -	\$ -	\$ -	\$ -
Vertical Construction (Ch 149)	\$ 7,745,322	\$ 4,679,989	\$ 2,297,901	\$ 43,813	\$ -
07 - Intersection Improvements					
Intersection Reconstruction	\$ -	\$ -	\$ -	\$ -	\$ -
Targeted Modernization - Multiple Locations	\$ -	\$ -	\$ -	\$ -	\$ -
Traffic Signal Upgrades	\$ 3,313,980	\$ 3,692,584	\$ 457,167	\$ -	\$ -
08 - Interstate Pavement					
Resurfacing Interstate	\$ -	\$ -	\$ -	\$ -	\$ -
09 - Intelligent Transportation Systems Program					
Intelligent Transportation Sys	\$ -	\$ -	\$ -	\$ -	\$ -
10 - Non-interstate DOT Pavement Program					
Limited Access Pavement Preservation	\$ -	\$ -	\$ -	\$ -	\$ -
Milling and Cold Planing	\$ 219,070	\$ -	\$ -	\$ -	\$ -
Pavement Maintenance	\$ -	\$ 6,595,431	\$ 8,418,972	\$ 1,700,174	\$ -
Pavement Preservation	\$ -	\$ -	\$ -	\$ -	\$ -
Pavement Rehabilitation	\$ -	\$ -	\$ -	\$ -	\$ -
Resurfacing	\$ 34,060,696	\$ 10,914,346	\$ 3,484,486	\$ -	\$ -
Resurfacing DOT Owned Non-Interstate	\$ 9,432,088	\$ 4,692,287	\$ 491,286	\$ -	\$ -
11 - Roadway Improvements					
Asbestos Removal	\$ -	\$ -	\$ -	\$ -	\$ -
Catch Basin Cleaning	\$ 2,020,954	\$ 2,142,615	\$ 997,382	\$ -	\$ -
Contract Highway Maintenance	\$ 18,268,215	\$ 14,771,000	\$ 8,308,789	\$ 2,868,613	\$ -
Crack Sealing	\$ 801,099	\$ 1,255,202	\$ 307,826	\$ 128,261	\$ -
Culvert Replacement	\$ -	\$ -	\$ -	\$ -	\$ -
Drainage	\$ 9,763,811	\$ 8,173,545	\$ 4,120,375	\$ -	\$ -
Embankment and Ledge Stabilization	\$ -	\$ 328,087	\$ 562,435	\$ 187,478	\$ -
Guard Rail & Fencing	\$ 7,346,081	\$ 5,546,171	\$ 2,018,851	\$ -	\$ -
Habitat Enhancement	\$ -	\$ -	\$ -	\$ -	\$ -
Highway Sweeping	\$ 1,634,705	\$ 1,428,520	\$ 419,697	\$ -	\$ -
Landscaping	\$ 1,102,285	\$ 800,761	\$ 128,348	\$ 32,087	\$ -
Mowing and Spraying	\$ 2,384,606	\$ 1,378,078	\$ 1,311,266	\$ 210,948	\$ -
Process/Recycle/Tmsprt Soils	\$ -	\$ -	\$ -	\$ -	\$ -
Tree Trimming	\$ 5,543,210	\$ 3,597,779	\$ 629,925	\$ -	\$ -
12 - Roadway Reconstruction					
Hwy Reconstr - Restr and Rehab	\$ 858,715	\$ 590	\$ -	\$ -	\$ -
Reclamation	\$ -	\$ -	\$ -	\$ -	\$ -
Roadway - Reconstr - Sidewalks and Curbing	\$ 16	\$ -	\$ -	\$ -	\$ -
Roadway Minor Widening	\$ -	\$ -	\$ -	\$ -	\$ -
Roadway Modernization	\$ -	\$ -	\$ -	\$ -	\$ -
Tunnels	\$ -	\$ -	\$ -	\$ -	\$ -
13 - Safety Improvements					
Electrical	\$ -	\$ -	\$ -	\$ -	\$ -
Impact Attenuators	\$ 1,248,562	\$ 643,234	\$ 294,479	\$ -	\$ -
Lighting	\$ 3,112,382	\$ 2,479,541	\$ -	\$ -	\$ -
Pavement Marking	\$ 4,186,950	\$ 3,099,569	\$ 1,250,833	\$ 66,336	\$ -
Safety Improvements	\$ -	\$ -	\$ -	\$ -	\$ -
Sign Installation/Upgrading	\$ 2,023,526	\$ 1,504,922	\$ 374,510	\$ -	\$ -
Structural Signing	\$ 285,381	\$ -	\$ -	\$ -	\$ -
Targeted Modernization - Multiple Locations	\$ -	\$ -	\$ -	\$ -	\$ -
Section I Total:	\$ 201,789,641	\$ 148,088,337	\$ 67,670,145	\$ 7,075,054	\$ -
Section II - Non Federal Aid Highway Operations - State Operating Budget					
Snow and Ice Operations & Materials					
	\$ 100,700,000	\$ 80,000,000	\$ 80,000,000	\$ 80,000,000	\$ 80,000,000
District Maintenance Payroll					
Mowing, Litter Mgmt, Sight Distance Clearing, Etc.	\$ 38,630,000	\$ 39,790,000	\$ 40,990,000	\$ 42,220,000	\$ 43,490,000
Section II Total:	\$ 139,330,000	\$ 119,790,000	\$ 120,990,000	\$ 122,220,000	\$ 123,490,000
Grand Total NFA:	\$ 341,119,641	\$ 267,878,337	\$ 188,660,145	\$ 129,295,054	\$ 123,490,000

Operating and Maintenance Expenditures as of April 2025

Statewide and District Contracts

Program Group/Sub Group	Est SFY 2025 Spending	Est SFY 2026 Spending	Est SFY 2027 Spending	Est SFY 2028 Spending	Est SFY 2029 Spending
Part 2: Federal Aid					
Section I - Non Federal Aid Maintenance Projects					
01 - ADA Retrofits					
Accessibility Improvements	\$ -	\$ -	\$ -	\$ -	\$ -
Sidewalk Construction	\$ 342,933	\$ -	\$ -	\$ -	\$ -
02 - Bicycles and pedestrians program					
Bike Facility Construction	\$ -	\$ -	\$ -	\$ -	\$ -
Shared Use Path Modernization	\$ -	\$ -	\$ -	\$ -	\$ -
03 - Bridge					
Bridge Maintenance	\$ -	\$ -	\$ -	\$ -	\$ -
Bridge Maintenance - Deck Repairs	\$ -	\$ -	\$ -	\$ -	\$ -
Bridge Maintenance - Joints	\$ -	\$ -	\$ -	\$ -	\$ -
Bridge Preservation	\$ 40,162,453	\$ 40,253,004	\$ 17,250,308	\$ 20,975,660	\$ 25,822,097
Bridge Rehabilitation	\$ -	\$ -	\$ -	\$ -	\$ -
Bridge Replacement	\$ -	\$ -	\$ -	\$ -	\$ -
Drawbridge Maintenance	\$ -	\$ -	\$ -	\$ -	\$ -
Marine Construction	\$ -	\$ -	\$ -	\$ -	\$ -
New Bridge	\$ -	\$ -	\$ -	\$ -	\$ -
Painting - Structural	\$ 9	\$ -	\$ -	\$ -	\$ -
Structures Maintenance	\$ -	\$ -	\$ -	\$ -	\$ -
04 - Capacity					
Hwy Reconstr - Major Widening	\$ -	\$ -	\$ -	\$ -	\$ -
New Road	\$ -	\$ -	\$ -	\$ -	\$ -
Roadway Additional Capacity	\$ -	\$ -	\$ -	\$ -	\$ -
05 - Facilities					
Equipment	\$ -	\$ -	\$ -	\$ -	\$ -
Vertical Construction (Ch 149)	\$ -	\$ -	\$ -	\$ -	\$ -
07 - Intersection Improvements					
Intersection Reconstruction	\$ -	\$ -	\$ -	\$ -	\$ -
Targeted Modernization - Multiple Locations	\$ -	\$ -	\$ -	\$ -	\$ -
Traffic Signal Upgrades	\$ -	\$ -	\$ -	\$ -	\$ -
08 - Interstate Pavement					
Resurfacing Interstate	\$ -	\$ -	\$ -	\$ -	\$ -
09 - Intelligent Transportation Systems Program					
Intelligent Transportation Sys	\$ -	\$ -	\$ -	\$ -	\$ -
10 - Non-interstate DOT Pavement Program					
Limited Access Pavement Preservation	\$ -	\$ 11,164,493	\$ 19,794,412	\$ 9,010,293	\$ -
Milling and Cold Planing	\$ -	\$ -	\$ -	\$ -	\$ -
Pavement Maintenance	\$ -	\$ -	\$ -	\$ -	\$ -
Pavement Preservation	\$ -	\$ -	\$ -	\$ -	\$ -
Pavement Rehabilitation	\$ -	\$ -	\$ -	\$ -	\$ -
Resurfacing	\$ -	\$ -	\$ -	\$ -	\$ -
Resurfacing DOT Owned Non-Interstate	\$ -	\$ -	\$ -	\$ -	\$ -
11 - Roadway Improvements					
Asbestos Removal	\$ -	\$ -	\$ -	\$ -	\$ -
Catch Basin Cleaning	\$ -	\$ -	\$ -	\$ -	\$ -
Contract Highway Maintenance	\$ -	\$ -	\$ -	\$ -	\$ -
Crack Sealing	\$ -	\$ -	\$ -	\$ -	\$ -
Culvert Replacement	\$ -	\$ -	\$ -	\$ -	\$ -
Drainage	\$ -	\$ -	\$ -	\$ -	\$ -
Embankment and Ledge Stabilization	\$ -	\$ -	\$ -	\$ -	\$ -
Guard Rail & Fencing	\$ -	\$ -	\$ -	\$ -	\$ -
Habitat Enhancement	\$ -	\$ -	\$ -	\$ -	\$ -
Highway Sweeping	\$ -	\$ -	\$ -	\$ -	\$ -
Landscaping	\$ -	\$ -	\$ -	\$ -	\$ -
Mowing and Spraying	\$ -	\$ -	\$ -	\$ -	\$ -
Process/Recycle/Trnsprt Soils	\$ -	\$ -	\$ -	\$ -	\$ -
Tree Trimming	\$ -	\$ -	\$ -	\$ -	\$ -
12 - Roadway Reconstruction					
Hwy Reconstr - Restr and Rehab	\$ -	\$ -	\$ -	\$ -	\$ -
Reclamation	\$ -	\$ -	\$ -	\$ -	\$ -
Roadway - Reconstr - Sidewalks and Curbing	\$ -	\$ -	\$ -	\$ -	\$ -
Roadway Minor Widening	\$ -	\$ -	\$ -	\$ -	\$ -
Roadway Modernization	\$ -	\$ -	\$ -	\$ -	\$ -
Tunnels	\$ -	\$ -	\$ -	\$ -	\$ -
13 - Safety Improvements					
Electrical	\$ -	\$ -	\$ -	\$ -	\$ -
Impact Attenuators	\$ -	\$ -	\$ -	\$ -	\$ -
Lighting	\$ -	\$ -	\$ -	\$ -	\$ -
Pavement Marking	\$ -	\$ -	\$ -	\$ -	\$ -
Safety Improvements	\$ -	\$ -	\$ -	\$ -	\$ -
Sign Installation/Upgrading	\$ -	\$ -	\$ -	\$ -	\$ -
Structural Signing	\$ 8,159	\$ -	\$ -	\$ -	\$ -
Targeted Modernization - Multiple Locations	\$ -	\$ -	\$ -	\$ -	\$ -
Section I Total:	\$ 40,513,554	\$ 51,417,497	\$ 37,044,721	\$ 29,985,953	\$ 25,822,097
Grand Total Federal Aid:	\$ 40,513,554	\$ 51,417,497	\$ 37,044,721	\$ 29,985,953	\$ 25,822,097

Operating and Maintenance Expenditures as of April 2025

Northern Middlesex

Program Group/Sub Group	Est SFY 2025 Spending	Est SFY 2026 Spending	Est SFY 2027 Spending	Est SFY 2028 Spending	Est SFY 2029 Spending
Part 1: Non-Federal Aid					
Section I - Non Federal Aid Maintenance Projects					
01 - ADA Retrofits					
Accessibility Improvements	\$ -	\$ -	\$ -	\$ -	\$ -
Sidewalk Construction	\$ -	\$ -	\$ -	\$ -	\$ -
02 - Bicycles and pedestrians program					
Bike Facility Construction	\$ -	\$ -	\$ -	\$ -	\$ -
Shared Use Path Modernization	\$ -	\$ -	\$ -	\$ -	\$ -
03 - Bridge					
Bridge Maintenance	\$ -	\$ -	\$ -	\$ -	\$ -
Bridge Maintenance - Deck Repairs	\$ -	\$ -	\$ -	\$ -	\$ -
Bridge Maintenance - Joints	\$ -	\$ -	\$ -	\$ -	\$ -
Bridge Preservation	\$ -	\$ -	\$ -	\$ -	\$ -
Bridge Rehabilitation	\$ -	\$ -	\$ -	\$ -	\$ -
Bridge Replacement	\$ -	\$ -	\$ -	\$ -	\$ -
Drawbridge Maintenance	\$ -	\$ -	\$ -	\$ -	\$ -
Marine Construction	\$ -	\$ -	\$ -	\$ -	\$ -
New Bridge	\$ -	\$ -	\$ -	\$ -	\$ -
Painting - Structural	\$ -	\$ -	\$ -	\$ -	\$ -
Structures Maintenance	\$ -	\$ -	\$ -	\$ -	\$ -
04 - Capacity					
Hwy Reconstr - Major Widening	\$ -	\$ -	\$ -	\$ -	\$ -
New Road	\$ -	\$ -	\$ -	\$ -	\$ -
Roadway Additional Capacity	\$ -	\$ -	\$ -	\$ -	\$ -
05 - Facilities					
Equipment	\$ -	\$ -	\$ -	\$ -	\$ -
Vertical Construction (Ch 149)	\$ -	\$ -	\$ -	\$ -	\$ -
07 - Intersection Improvements					
Intersection Reconstruction	\$ -	\$ -	\$ -	\$ -	\$ -
Targeted Modernization - Multiple Locations	\$ -	\$ -	\$ -	\$ -	\$ -
Traffic Signal Upgrades	\$ -	\$ -	\$ -	\$ -	\$ -
08 - Interstate Pavement					
Resurfacing Interstate	\$ -	\$ -	\$ -	\$ -	\$ -
09 - Intelligent Transportation Systems Program					
Intelligent Transportation Sys	\$ -	\$ -	\$ -	\$ -	\$ -
10 - Non-interstate DOT Pavement Program					
Limited Access Pavement Preservation	\$ -	\$ -	\$ -	\$ -	\$ -
Milling and Cold Planing	\$ -	\$ -	\$ -	\$ -	\$ -
Pavement Maintenance	\$ -	\$ -	\$ -	\$ -	\$ -
Pavement Preservation	\$ -	\$ -	\$ -	\$ -	\$ -
Pavement Rehabilitation	\$ -	\$ -	\$ -	\$ -	\$ -
Resurfacing	\$ -	\$ -	\$ -	\$ -	\$ -
Resurfacing DOT Owned Non-Interstate	\$ -	\$ -	\$ -	\$ -	\$ -
11 - Roadway Improvements					
Asbestos Removal	\$ -	\$ -	\$ -	\$ -	\$ -
Catch Basin Cleaning	\$ -	\$ -	\$ -	\$ -	\$ -
Contract Highway Maintenance	\$ -	\$ -	\$ -	\$ -	\$ -
Crack Sealing	\$ -	\$ -	\$ -	\$ -	\$ -
Culvert Replacement	\$ -	\$ -	\$ -	\$ -	\$ -
Drainage	\$ -	\$ -	\$ -	\$ -	\$ -
Embankment and Ledge Stabilization	\$ -	\$ -	\$ -	\$ -	\$ -
Guard Rail & Fencing	\$ -	\$ -	\$ -	\$ -	\$ -
Habitat Enhancement	\$ -	\$ -	\$ -	\$ -	\$ -
Highway Sweeping	\$ -	\$ -	\$ -	\$ -	\$ -
Landscaping	\$ -	\$ -	\$ -	\$ -	\$ -
Mowing and Spraying	\$ -	\$ -	\$ -	\$ -	\$ -
Process/Recycle/Trnsprt Soils	\$ -	\$ -	\$ -	\$ -	\$ -
Tree Trimming	\$ -	\$ -	\$ -	\$ -	\$ -
12 - Roadway Reconstruction					
Hwy Reconstr - Restr and Rehab	\$ -	\$ -	\$ -	\$ -	\$ -
Reclamation	\$ -	\$ -	\$ -	\$ -	\$ -
Roadway - Reconstr - Sidewalks and Curbing	\$ -	\$ -	\$ -	\$ -	\$ -
Roadway Minor Widening	\$ -	\$ -	\$ -	\$ -	\$ -
Roadway Modernization	\$ -	\$ -	\$ -	\$ -	\$ -
Tunnels	\$ -	\$ -	\$ -	\$ -	\$ -
13 - Safety Improvements					
Electrical	\$ -	\$ -	\$ -	\$ -	\$ -
Impact Attenuators	\$ -	\$ -	\$ -	\$ -	\$ -
Lighting	\$ -	\$ -	\$ -	\$ -	\$ -
Pavement Marking	\$ -	\$ -	\$ -	\$ -	\$ -
Safety Improvements	\$ -	\$ -	\$ -	\$ -	\$ -
Sign Installation/Upgrading	\$ -	\$ -	\$ -	\$ -	\$ -
Structural Signing	\$ -	\$ -	\$ -	\$ -	\$ -
Targeted Modernization - Multiple Locations	\$ -	\$ -	\$ -	\$ -	\$ -
Section I Total:	\$	\$	\$	\$	\$
Section II - Non Federal Aid Highway Operations - State Operating Budget Funding					
Snow and Ice Operations & Materials					
	\$ -	\$ -	\$ -	\$ -	\$ -
District Maintenance Payroll					
Mowing, Litter Mgmt, Sight Distance Clearing, Etc.	\$ -	\$ -	\$ -	\$ -	\$ -
Section II Total:	\$	\$	\$	\$	\$
Grand Total NFA:	\$	\$	\$	\$	\$

Operating and Maintenance Expenditures as of April 2025

Northern Middlesex

Program Group/Sub Group	Est SFY 2025 Spending	Est SFY 2026 Spending	Est SFY 2027 Spending	Est SFY 2028 Spending	Est SFY 2029 Spending
Part 2: Federal Aid					
Section I - Non Federal Aid Maintenance Projects					
01 - ADA Retrofits					
Accessibility Improvements	\$ -	\$ -	\$ -	\$ -	\$ -
Sidewalk Construction	\$ -	\$ -	\$ -	\$ -	\$ -
02 - Bicycles and pedestrians program					
Bike Facility Construction	\$ -	\$ -	\$ -	\$ -	\$ -
Shared Use Path Modernization	\$ -	\$ -	\$ -	\$ -	\$ -
03 - Bridge					
Bridge Maintenance	\$ -	\$ -	\$ -	\$ -	\$ -
Bridge Maintenance - Deck Repairs	\$ -	\$ -	\$ -	\$ -	\$ -
Bridge Maintenance - Joints	\$ -	\$ -	\$ -	\$ -	\$ -
Bridge Preservation	\$ 4,464,049	\$ 4,116,935	\$ 1,257,659	\$ 7,545,956	\$ 5,659,467
Bridge Rehabilitation	\$ -	\$ -	\$ -	\$ -	\$ -
Bridge Replacement	\$ -	\$ -	\$ -	\$ -	\$ -
Drawbridge Maintenance	\$ -	\$ -	\$ -	\$ -	\$ -
Marine Construction	\$ -	\$ -	\$ -	\$ -	\$ -
New Bridge	\$ -	\$ -	\$ -	\$ -	\$ -
Painting - Structural	\$ -	\$ -	\$ -	\$ -	\$ -
Structures Maintenance	\$ -	\$ -	\$ -	\$ -	\$ -
04 - Capacity					
Hwy Reconstr - Major Widening	\$ -	\$ -	\$ -	\$ -	\$ -
New Road	\$ -	\$ -	\$ -	\$ -	\$ -
Roadway Additional Capacity	\$ -	\$ -	\$ -	\$ -	\$ -
05 - Facilities					
Equipment	\$ -	\$ -	\$ -	\$ -	\$ -
Vertical Construction (Ch 149)	\$ -	\$ -	\$ -	\$ -	\$ -
07 - Intersection Improvements					
Intersection Reconstruction	\$ -	\$ -	\$ -	\$ -	\$ -
Targeted Modernization - Multiple Locations	\$ -	\$ -	\$ -	\$ -	\$ -
Traffic Signal Upgrades	\$ -	\$ -	\$ -	\$ -	\$ -
08 - Interstate Pavement					
Resurfacing Interstate	\$ -	\$ -	\$ -	\$ -	\$ -
09 - Intelligent Transportation Systems Program					
Intelligent Transportation Sys	\$ -	\$ -	\$ -	\$ -	\$ -
10 - Non-interstate DOT Pavement Program					
Limited Access Pavement Preservation	\$ -	\$ -	\$ -	\$ -	\$ -
Milling and Cold Planing	\$ -	\$ -	\$ -	\$ -	\$ -
Pavement Maintenance	\$ -	\$ -	\$ -	\$ -	\$ -
Pavement Preservation	\$ -	\$ -	\$ -	\$ -	\$ -
Pavement Rehabilitation	\$ -	\$ -	\$ -	\$ -	\$ -
Resurfacing	\$ -	\$ -	\$ -	\$ -	\$ -
Resurfacing DOT Owned Non-Interstate	\$ -	\$ -	\$ -	\$ -	\$ -
11 - Roadway Improvements					
Asbestos Removal	\$ -	\$ -	\$ -	\$ -	\$ -
Catch Basin Cleaning	\$ -	\$ -	\$ -	\$ -	\$ -
Contract Highway Maintenance	\$ -	\$ -	\$ -	\$ -	\$ -
Crack Sealing	\$ -	\$ -	\$ -	\$ -	\$ -
Culvert Replacement	\$ -	\$ -	\$ -	\$ -	\$ -
Drainage	\$ -	\$ -	\$ -	\$ -	\$ -
Embankment and Ledge Stabilization	\$ -	\$ -	\$ -	\$ -	\$ -
Guard Rail & Fencing	\$ -	\$ -	\$ -	\$ -	\$ -
Habitat Enhancement	\$ -	\$ -	\$ -	\$ -	\$ -
Highway Sweeping	\$ -	\$ -	\$ -	\$ -	\$ -
Landscaping	\$ -	\$ -	\$ -	\$ -	\$ -
Mowing and Spraying	\$ -	\$ -	\$ -	\$ -	\$ -
Process/Recycle/Trnsprt Soils	\$ -	\$ -	\$ -	\$ -	\$ -
Tree Trimming	\$ -	\$ -	\$ -	\$ -	\$ -
12 - Roadway Reconstruction					
Hwy Reconstr - Restr and Rehab	\$ -	\$ -	\$ -	\$ -	\$ -
Reclamation	\$ -	\$ -	\$ -	\$ -	\$ -
Roadway - Reconstr - Sidewalks and Curbing	\$ -	\$ -	\$ -	\$ -	\$ -
Roadway Minor Widening	\$ -	\$ -	\$ -	\$ -	\$ -
Roadway Modernization	\$ -	\$ -	\$ -	\$ -	\$ -
Tunnels	\$ -	\$ -	\$ -	\$ -	\$ -
13 - Safety Improvements					
Electrical	\$ -	\$ -	\$ -	\$ -	\$ -
Impact Attenuators	\$ -	\$ -	\$ -	\$ -	\$ -
Lighting	\$ -	\$ -	\$ -	\$ -	\$ -
Pavement Marking	\$ -	\$ -	\$ -	\$ -	\$ -
Safety Improvements	\$ -	\$ -	\$ -	\$ -	\$ -
Sign Installation/Upgrading	\$ -	\$ -	\$ -	\$ -	\$ -
Structural Signing	\$ -	\$ -	\$ -	\$ -	\$ -
Targeted Modernization - Multiple Locations	\$ -	\$ -	\$ -	\$ -	\$ -
Section I Total:	\$ 4,464,049	\$ 4,116,935	\$ 1,257,659	\$ 7,545,956	\$ 5,659,467
Grand Total NFA:	\$ 4,464,049	\$ 4,116,935	\$ 1,257,659	\$ 7,545,956	\$ 5,659,467

APPENDIX E
MBTA STIP INVESTMENTS REPORT



STIP Investments Report

Program Activity: Transit, Massachusetts Bay Transportation Authority

STIP: 2026 - 2030 (D)

Year	MassDOT Project ID	Municipality	Program	MassDOT Project Description	Funding Source	Total Project Cost	Total Programmed Funds	Federal Funds	State Funds	Other Funds	Project Score	FTA Line Item	Other Information
Federal Fiscal Year 2026							\$4,761,914,109	\$2,539,357,020		\$2,222,557,089			
Massachusetts Bay Transportation Authority							\$4,761,914,109	\$2,539,357,020		\$2,222,557,089			
2026	MBTA012042		Stations and Facilities Program (MBTA)	Green Line CIG-Core Capacity (Proposed Funding)	LF	\$3,800,580,887	\$1,900,290,444			\$1,900,290,444		12.23.03	
2026	MBTA012042		Stations and Facilities Program (MBTA)	Green Line CIG-Core Capacity (Proposed Funding)	OF	\$3,800,580,887	\$1,900,290,443	\$1,900,290,443				12.23.03	
2026	MBTA012043		Bridge & Tunnel Program	North Station Draw 1 Bridge Repl. (FFY26 MEGA)	LF	\$236,330,911	\$47,266,182			\$47,266,182		12.23.05	
2026	MBTA012043		Bridge & Tunnel Program	North Station Draw 1 Bridge Repl. (FFY26 MEGA)	OF	\$236,330,911	\$189,064,729	\$189,064,729				12.23.05	
2026	MBTA012044		Stations and Facilities Program (MBTA)	Fairmount Line Decarbonization (CRP)	LF	\$8,710,079	\$1,742,016			\$1,742,016		12.23.03	
2026	MBTA012044		Stations and Facilities Program (MBTA)	Fairmount Line Decarbonization (CRP)	OF	\$8,710,079	\$6,968,063	\$6,968,063				12.23.03	
2026	MBTA041		Revenue Vehicle Program	Revenue Vehicle Program	5307	\$28,126,400	\$22,501,120	\$22,501,120				12.12.01	
2026	MBTA041		Revenue Vehicle Program	Revenue Vehicle Program	LF	\$28,126,400	\$5,625,280			\$5,625,280		12.12.01	
2026	MBTA042		Signals/Systems Upgrade Program	5307 Signals/Systems Upgrade Program	5307	\$171,698,046	\$137,358,437	\$137,358,437				12.62.01	
2026	MBTA042		Signals/Systems Upgrade Program	5307 Signals/Systems Upgrade Program	LF	\$171,698,046	\$34,339,609			\$34,339,609		12.62.01	
2026	MBTA043		Stations and Facilities Program (MBTA)	Stations and Facilities Program	5307	\$45,737,783	\$36,590,226	\$36,590,226				12.34.03	
2026	MBTA043		Stations and Facilities Program (MBTA)	Stations and Facilities Program	LF	\$45,737,783	\$9,147,557			\$9,147,557		12.34.03	
2026	MBTA044		Bridge & Tunnel Program	5337 Bridge & Tunnel Program	5337	\$12,098,103	\$9,678,482	\$9,678,482				12.24.05	
2026	MBTA044		Bridge & Tunnel Program	5337 Bridge & Tunnel Program	LF	\$12,098,103	\$2,419,621			\$2,419,621		12.24.05	
2026	MBTA045		Revenue Vehicle Program	Revenue Vehicle Program	5337	\$95,273,420	\$76,218,736	\$76,218,736				12.12.01	
2026	MBTA045		Revenue Vehicle Program	Revenue Vehicle Program	LF	\$95,273,420	\$19,054,684			\$19,054,684		12.12.01	
2026	MBTA046		Signals/Systems Upgrade Program	5337 Signals/Systems Upgrade Program	5337	\$105,992,336	\$84,793,869	\$84,793,869				12.62.01	



STIP Investments Report

Program Activity: Transit, Massachusetts Bay Transportation Authority

STIP: 2026 - 2030 (D)

Year	MassDOT Project ID	Municipality	Program	MassDOT Project Description	Funding Source	Total Project Cost	Total Programmed Funds	Federal Funds	State Funds	Other Funds	Project Score	FTA Line Item	Other Information
2026	MBTA046		Signals/Systems Upgrade Program	5337 Signals/Systems Upgrade Program	LF	\$105,992,336	\$21,198,467			\$21,198,467		12.62.01	
2026	MBTA047		Stations and Facilities Program (MBTA)	Stations and Facilities Program	5337	\$86,805,489	\$69,444,391	\$69,444,391				12.34.03	
2026	MBTA047		Stations and Facilities Program (MBTA)	Stations and Facilities Program	LF	\$86,805,489	\$17,361,098			\$17,361,098		12.34.03	
2026	MBTA048		Bus Program	5339 Bus Program	5339	\$8,060,655	\$6,448,524	\$6,448,524				11.12.01	
2026	MBTA048		Bus Program	5339 Bus Program	LF	\$8,060,655	\$1,612,131			\$1,612,131		11.12.01	
2026	MBTA050		RRIF/TIFIA Financing Program	RRIF/TIFIA Financing Program	ONF	\$162,500,000	\$162,500,000			\$162,500,000		12.24.05	



STIP Investments Report

Program Activity: Transit, Massachusetts Bay Transportation Authority

STIP: 2026 - 2030 (D)

Year	MassDOT Project ID	Municipality	Program	MassDOT Project Description	Funding Source	Total Project Cost	Total Programmed Funds	Federal Funds	State Funds	Other Funds	Project Score	FTA Line Item	Other Information
Federal Fiscal Year 2027							\$716,292,234	\$605,533,786		\$110,758,448			
Massachusetts Bay Transportation Authority							\$716,292,234	\$605,533,786			\$110,758,448		
2027	MBTA053		Bridge & Tunnel Program	5307 Bridge & Tunnel Program	5307	\$9,750,000	\$7,800,000	\$7,800,000				12.24.05	
2027	MBTA053		Bridge & Tunnel Program	5307 Bridge & Tunnel Program	LF	\$9,750,000	\$1,950,000			\$1,950,000		12.24.05	
2027	MBTA054		Revenue Vehicle Program	Revenue Vehicle Program	5307	\$94,004,028	\$75,203,222	\$75,203,222				12.12.01	
2027	MBTA054		Revenue Vehicle Program	Revenue Vehicle Program	LF	\$94,004,028	\$18,800,806			\$18,800,806		12.12.01	
2027	MBTA055		Signals/Systems Upgrade Program	5307 Signals/Systems Upgrade Program	5307	\$55,908,240	\$44,726,592	\$44,726,592				12.62.01	
2027	MBTA055		Signals/Systems Upgrade Program	5307 Signals/Systems Upgrade Program	LF	\$55,908,240	\$11,181,648			\$11,181,648		12.62.01	
2027	MBTA056		Stations and Facilities Program (MBTA)	Stations and Facilities Program	5307	\$85,899,963	\$68,719,970	\$68,719,970				12.34.03	
2027	MBTA056		Stations and Facilities Program (MBTA)	Stations and Facilities Program	LF	\$85,899,963	\$17,179,993			\$17,179,993		12.34.03	
2027	MBTA057		Bridge & Tunnel Program	5337 Bridge & Tunnel Program	5337	\$98,377,833	\$78,702,266	\$78,702,266				12.24.05	
2027	MBTA057		Bridge & Tunnel Program	5337 Bridge & Tunnel Program	LF	\$98,377,833	\$19,675,567			\$19,675,567		12.24.05	
2027	MBTA058		Revenue Vehicle Program	Revenue Vehicle Program	5337	\$123,551,996	\$98,841,597	\$98,841,597				12.12.01	
2027	MBTA058		Revenue Vehicle Program	Revenue Vehicle Program	LF	\$123,551,996	\$24,710,399			\$24,710,399		12.12.01	
2027	MBTA059		Signals/Systems Upgrade Program	5337 Signals/Systems Upgrade Program	5337	\$48,805,154	\$39,044,123	\$39,044,123				12.62.01	
2027	MBTA059		Signals/Systems Upgrade Program	5337 Signals/Systems Upgrade Program	LF	\$48,805,154	\$9,761,031			\$9,761,031		12.62.01	
2027	MBTA060		Stations and Facilities Program (MBTA)	Stations and Facilities Program	5337	\$29,434,365	\$23,547,492	\$23,547,492				12.34.03	
2027	MBTA060		Stations and Facilities Program (MBTA)	Stations and Facilities Program	LF	\$29,434,365	\$5,886,873			\$5,886,873		12.34.03	
2027	MBTA061		Bus Program	5339 Bus Program	5339	\$8,060,655	\$6,448,524	\$6,448,524				11.12.01	
2027	MBTA061		Bus Program	5339 Bus Program	LF	\$8,060,655	\$1,612,131			\$1,612,131		11.12.01	
2027	MBTA063		RRIF/TIFIA Financing Program	RRIF/TIFIA Financing Program	OF	\$162,500,000	\$162,500,000	\$162,500,000				12.24.05	



STIP Investments Report

Program Activity: Transit, Massachusetts Bay Transportation Authority

STIP: 2026 - 2030 (D)

Year	MassDOT Project ID	Municipality	Program	MassDOT Project Description	Funding Source	Total Project Cost	Total Programmed Funds	Federal Funds	State Funds	Other Funds	Project Score	FTA Line Item	Other Information
Federal Fiscal Year 2028							\$716,292,234	\$605,533,786		\$110,758,448			
Massachusetts Bay Transportation Authority							\$716,292,234	\$605,533,786			\$110,758,448		
2028	MBTA011475		Bridge & Tunnel Program	5307 Bridge & Tunnel Program	5307	\$9,750,000	\$7,800,000	\$7,800,000				12.24.05	
2028	MBTA011475		Bridge & Tunnel Program	5307 Bridge & Tunnel Program	LF	\$9,750,000	\$1,950,000			\$1,950,000		12.24.05	
2028	MBTA011476		Revenue Vehicle Program	5307 Revenue Vehicle Program	5307	\$94,004,028	\$75,203,222	\$75,203,222				12.12.01	
2028	MBTA011476		Revenue Vehicle Program	5307 Revenue Vehicle Program	LF	\$94,004,028	\$18,800,806			\$18,800,806		12.12.01	
2028	MBTA011478		Signals/Systems Upgrade Program	5307 Signals/Systems Upgrade Program	5307	\$55,908,240	\$44,726,592	\$44,726,592				12.62.01	
2028	MBTA011478		Signals/Systems Upgrade Program	5307 Signals/Systems Upgrade Program	LF	\$55,908,240	\$11,181,648			\$11,181,648		12.62.01	
2028	MBTA011481		Bridge & Tunnel Program	5337 Bridge & Tunnel Program	5337	\$98,377,833	\$78,702,266	\$78,702,266				12.24.05	
2028	MBTA011481		Bridge & Tunnel Program	5337 Bridge & Tunnel Program	LF	\$98,377,833	\$19,675,567			\$19,675,567		12.24.05	
2028	MBTA011484		Stations and Facilities Program (MBTA)	5307 Stations and Facilities Program	5307	\$85,899,963	\$68,719,970	\$68,719,970				12.34.03	
2028	MBTA011484		Stations and Facilities Program (MBTA)	5307 Stations and Facilities Program	LF	\$85,899,963	\$17,179,993			\$17,179,993		12.34.03	
2028	MBTA011486		Revenue Vehicle Program	5337 Revenue Vehicle Program	5337	\$123,551,996	\$98,841,597	\$98,841,597				12.12.01	
2028	MBTA011486		Revenue Vehicle Program	5337 Revenue Vehicle Program	LF	\$123,551,996	\$24,710,399			\$24,710,399		12.12.01	
2028	MBTA011487		Signals/Systems Upgrade Program	5337 Signals/Systems Upgrade Program	5337	\$48,805,154	\$39,044,123	\$39,044,123				11.62.01	
2028	MBTA011487		Signals/Systems Upgrade Program	5337 Signals/Systems Upgrade Program	LF	\$48,805,154	\$9,761,031			\$9,761,031		11.62.01	
2028	MBTA011488		Stations and Facilities Program (MBTA)	5337 Stations and Facilities Program	5337	\$29,434,365	\$23,547,492	\$23,547,492				12.34.03	
2028	MBTA011488		Stations and Facilities Program (MBTA)	5337 Stations and Facilities Program	LF	\$29,434,365	\$5,886,873			\$5,886,873		12.34.03	
2028	MBTA011489		Bus Program	5339 Bus Program	5339	\$8,060,655	\$6,448,524	\$6,448,524				11.12.01	
2028	MBTA011489		Bus Program	5339 Bus Program	LF	\$8,060,655	\$1,612,131			\$1,612,131		11.12.01	
2028	MBTA011490		RRIF/TIFIA Financing Program	RRIF/TIFIA Financing Program	OF	\$162,500,000	\$162,500,000	\$162,500,000				12.24.05	



STIP Investments Report

Program Activity: Transit, Massachusetts Bay Transportation Authority

STIP: 2026 - 2030 (D)

Year	MassDOT Project ID	Municipality	Program	MassDOT Project Description	Funding Source	Total Project Cost	Total Programmed Funds	Federal Funds	State Funds	Other Funds	Project Score	FTA Line Item	Other Information
Federal Fiscal Year 2029							\$716,292,230	\$605,533,784		\$110,758,446			
Massachusetts Bay Transportation Authority							\$716,292,230	\$605,533,784			\$110,758,446		
2029	MBTA011826		Bridge & Tunnel Program	5307 Bridge & Tunnel Program	5307	\$9,750,000	\$7,800,000	\$7,800,000				12.24.05	
2029	MBTA011826		Bridge & Tunnel Program	5307 Bridge & Tunnel Program	LF	\$9,750,000	\$1,950,000			\$1,950,000		12.24.05	
2029	MBTA011827		Revenue Vehicle Program	5307 Revenue Vehicle Program	5307	\$94,004,026	\$75,203,221	\$75,203,221				12.12.01	
2029	MBTA011827		Revenue Vehicle Program	5307 Revenue Vehicle Program	LF	\$94,004,026	\$18,800,805			\$18,800,805		12.12.01	
2029	MBTA011828		Signals/Systems Upgrade Program	5307 Signals/Systems Upgrade Program	5307	\$55,908,239	\$44,726,591	\$44,726,591				12.63.01	
2029	MBTA011828		Signals/Systems Upgrade Program	5307 Signals/Systems Upgrade Program	LF	\$55,908,239	\$11,181,648			\$11,181,648		12.63.01	
2029	MBTA011829		Bridge & Tunnel Program	5307 Stations and Facilities Program	5307	\$85,899,961	\$68,719,969	\$68,719,969				12.34.01	
2029	MBTA011829		Stations and Facilities Program (MBTA)	5307 Stations and Facilities Program	LF	\$85,899,961	\$17,179,992			\$17,179,992		12.34.01	
2029	MBTA011830		Bridge & Tunnel Program	5337 Bridge & Tunnel Program	5337	\$98,377,833	\$78,702,266	\$78,702,266				12.24.05	
2029	MBTA011830		Bridge & Tunnel Program	5337 Bridge & Tunnel Program	LF	\$98,377,833	\$19,675,567			\$19,675,567		12.24.05	
2029	MBTA011831		Revenue Vehicle Program	5337 Revenue Vehicle Program	5337	\$123,551,996	\$98,841,597	\$98,841,597				12.12.01	
2029	MBTA011831		Revenue Vehicle Program	5337 Revenue Vehicle Program	LF	\$123,551,996	\$24,710,399			\$24,710,399		12.12.01	
2029	MBTA011832		Signals/Systems Upgrade Program	5337 Signals/Systems Upgrade Program	5337	\$48,805,154	\$39,044,123	\$39,044,123				12.63.01	
2029	MBTA011832		Signals/Systems Upgrade Program	5337 Signals/Systems Upgrade Program	LF	\$48,805,154	\$9,761,031			\$9,761,031		12.63.01	
2029	MBTA011834		Bus Program	5339 Bus Program	5339	\$8,060,656	\$6,448,525	\$6,448,525				11.14.01	
2029	MBTA011834		Bus Program	5339 Bus Program	LF	\$8,060,656	\$1,612,131			\$1,612,131		11.14.01	



STIP Investments Report

Program Activity: Transit, Massachusetts Bay Transportation Authority

STIP: 2026 - 2030 (D)

Year	MassDOT Project ID	Municipality	Program	MassDOT Project Description	Funding Source	Total Project Cost	Total Programmed Funds	Federal Funds	State Funds	Other Funds	Project Score	FTA Line Item	Other Information
2029	MBTA011836		Stations and Facilities Program (MBTA)	5337 Stations and Facilities Program	5337	\$29,434,365	\$23,547,492	\$23,547,492				12.34.01	
2029	MBTA011836		Stations and Facilities Program (MBTA)	5337 Stations and Facilities Program	LF	\$29,434,365	\$5,886,873			\$5,886,873		12.34.01	
2029	MBTA011837		RRIF/TIFIA Financing Program	RRIF/TIFIA Financing Program	OF	\$162,500,000	\$162,500,000	\$162,500,000				12.24.05	



STIP Investments Report

Program Activity: Transit, Massachusetts Bay Transportation Authority

STIP: 2026 - 2030 (D)

Year	MassDOT Project ID	Municipality	Program	MassDOT Project Description	Funding Source	Total Project Cost	Total Programmed Funds	Federal Funds	State Funds	Other Funds	Project Score	FTA Line Item	Other Information
Federal Fiscal Year 2030							\$701,292,232	\$590,533,785		\$110,758,447			
Massachusetts Bay Transportation Authority							\$701,292,232	\$590,533,785			\$110,758,447		
2030	MBTA012045		Bridge & Tunnel Program	5307 Bridge & Tunnel Program	5307	\$9,750,000	\$7,800,000	\$7,800,000				12.24.05	
2030	MBTA012045		Bridge & Tunnel Program	5307 Bridge & Tunnel Program	LF	\$9,750,000	\$1,950,000			\$1,950,000		12.24.05	
2030	MBTA012046		Revenue Vehicle Program	5307 Revenue Vehicle Program	5307	\$94,004,028	\$75,203,222	\$75,203,222				12.12.01	
2030	MBTA012046		Revenue Vehicle Program	5307 Revenue Vehicle Program	LF	\$94,004,028	\$18,800,806			\$18,800,806		12.12.01	
2030	MBTA012047		Signals/Systems Upgrade Program	5307 Signals/Systems Upgrade Program	5307	\$55,908,240	\$44,726,592	\$44,726,592				12.63.01	
2030	MBTA012047		Signals/Systems Upgrade Program	5307 Signals/Systems Upgrade Program	LF	\$55,908,240	\$11,181,648			\$11,181,648		12.63.01	
2030	MBTA012048		Stations and Facilities Program (MBTA)	5307 Stations and Facilities Program	5307	\$85,899,961	\$68,719,969	\$68,719,969				12.34.01	
2030	MBTA012048		Stations and Facilities Program (MBTA)	5307 Stations and Facilities Program	LF	\$85,899,961	\$17,179,992			\$17,179,992		12.34.01	
2030	MBTA012049		Bridge & Tunnel Program	5337 Bridge & Tunnel Program	5337	\$98,377,833	\$78,702,266	\$78,702,266				12.24.05	
2030	MBTA012049		Bridge & Tunnel Program	5337 Bridge & Tunnel Program	LF	\$98,377,833	\$19,675,567			\$19,675,567		12.24.05	
2030	MBTA012050		Revenue Vehicle Program	5337 Revenue Vehicle Program	5337	\$123,551,996	\$98,841,597	\$98,841,597				12.12.01	
2030	MBTA012050		Revenue Vehicle Program	5337 Revenue Vehicle Program	LF	\$123,551,996	\$24,710,399			\$24,710,399		12.12.01	
2030	MBTA012051		Signals/Systems Upgrade Program	5337 Signals/Systems Upgrade Program	5337	\$48,805,154	\$39,044,123	\$39,044,123				12.63.01	
2030	MBTA012051		Signals/Systems Upgrade Program	5337 Signals/Systems Upgrade Program	LF	\$48,805,154	\$9,761,031			\$9,761,031		12.63.01	
2030	MBTA012052		Stations and Facilities Program (MBTA)	5337 Stations and Facilities Program	5337	\$29,434,365	\$23,547,492	\$23,547,492				12.34.01	
2030	MBTA012052		Stations and Facilities Program (MBTA)	5337 Stations and Facilities Program	LF	\$29,434,365	\$5,886,873			\$5,886,873		12.34.01	



STIP Investments Report

Program Activity: Transit, Massachusetts Bay Transportation Authority

STIP: 2026 - 2030 (D)

Year	MassDOT Project ID	Municipality	Program	MassDOT Project Description	Funding Source	Total Project Cost	Total Programmed Funds	Federal Funds	State Funds	Other Funds	Project Score	FTA Line Item	Other Information
2030	MBTA012053		Bus Program	5339 Bus Program	5339	\$8,060,655	\$6,448,524	\$6,448,524				11.14.01	
2030	MBTA012053		Bus Program	5339 Bus Program	LF	\$8,060,655	\$1,612,131			\$1,612,131		11.14.01	
2030	MBTA012054		RRIF/TIFIA Financing Program	RRIF/TIFIA Financing Program (Potential)	OF	\$147,500,000	\$147,500,000	\$147,500,000				12.24.05	

APPENDIX F PUBLIC COMMENTS

Public Comment Summary FFY 2026-2030 Transportation Improvement Program

Comment Period: April 23 – May 14, 2025

Public Meeting

A virtual public meeting was held on May 7, 2025, however no members of the public attended.

Comments Received Via Email

No comments were received via email from members of the public. A comment document was received from MassDOT Office of Transportation planning; a copy is on the following page.

MPO Liaison TIP Review Checklist

Completeness

ID	Review Item	Comments	Reference
A1	✓ * Table of Contents is accurate and internally-linked.	Numbering of sections is off, please update	✓ -- for use in column B
A2	✓ * Document has no broken links.		✗ -- for use in column B
A3	✓ * MPO self certification statement is included.		
A4	✓ * GHG certification is included.		
A5	✓ * Air Quality Conformity statement is included.		
A6	✓ * Document has no text or image placeholders.		
A7	✗ * Charts, tables, and maps are legible and properly annotated.	Please include O&M tables from OTP (sent on 4/23/25)	
A8	✓ * Document passes an accessible check.	Please make sure to run an accesibility check before finalizing	
A9	✓ * Document is available in relevant languages per the MPO's Title VI Plan.		
A10	✓ * List of MPO members is current.		
A11	✓ * Signatory sheet is included and accurate. Update Monica Tibbits-Nutt as Secretary/CEO of MassDOT.		
A12	✓ * Acronyms and partner agency lists are up to date.		
A13	✗ * Dates listed w/in TIP reflect FFY 2026–2030.	Years need to be update on (PDF) pages: 5,7,44	

Narrative

ID	Review Item	Comments	Reference
B1	✓ * TIP outlines MPO institutional organization.		
B2	✓ * TIP links back to national planning factors.		
B3	✓ * TIP references the RTP and the UPWP.		
B4	✓ * TIP narrative is concise and reader-friendly.		
B5	✓ * TIP discusses evaluation scoring.		
B6	✓ * TIP includes project scoring table.		
B7	✓ * TIP describes public participation process.		
B8	✓ * TIP includes procedures for adjustments and amendments, including any deviations from MassDOT guidelines.		
B9	✓ * TIP describes funding sources accurately.		https://www.mass.gov/service-details/state-transportation-improvement-program-stip

Performance Measures

ID	Review Item	Comments	Reference
C1	✓ * TIP includes discussion of target-setting process.		
C2	✓ * TIP references relevant Transit Asset Management (TAM) Plans and includes all TAM Plan targets.		https://www.transit.dot.gov/TAM/TAMPlans
C3	✓ * TIP references relevant Public Transportation Agency Safety Plans (PTASPs) and includes all PTASP targets		https://www.transit.dot.gov/PTASP

C4	✓	* TIP includes current adopted performance targets.		PM1, PM2, PM3, TAM, and any regionally-derived targets. Please consider including a reference to the Statewide GHG Redcution Target, and language regarding MPO discretion to adopt their own voluntary target.
C5	✓	* TIP discusses relationship between performance targets and project selection.		
C6	✓	Discussion on performance measures compares regional data to statewide data where available.		

Project Listing

ID	Review Item	Comments	Reference
D1	✓ * Financial projections align with MassDOT guidance.		
D2	✓ * TIP template is formatted correctly.		
D3	✓ * Projects use MassDOT ProjectInfo TFPCs.		
D4	✓ * assumptions.		2027: 4%; 2028: 8%; 2029: 12%; 2030: 16%
D5	✓ * Projects use MassDOT ProjectInfo description.		
D6	✓ * Additional comment field contains all necessary info.		Total cost, AC, Year-of-expenditure, TEC scores, funding sources
D7	✓ * MassDOT projects are (accurately) included into regional template.		
D8	✓ * Regional target projects adhere to Readiness Days feedback.		
D9	✓ * List includes all projects, including FLAP, FLTP, and Tribal projects.		
D10	✓ * Transit TIP is formatted properly.		Should be unchanged from Transit eSTIP
D11	✓ * Document includes Statewide Highway Projects List and MBTA* Projects list as appendices (*only necessary for regions with MBTA commuter/ferry service).		

Impact Analysis

ID	Review Item	Comments	Reference
E1	✓ * TIP includes GHG certification.		
E2	✓ * GHG analysis is available for all (and only) funded projects.		
E3	✓ * All projects are appropriately labeled as qualitative or quantitative.		Please make sure to select a 'GHG Analysis Type' regardless of impact type. If the impact is qualified, please provide information that demonstrates as such.
E4	✓ * Transit projects have been analyzed for GHG.		

E5	✓	* Past and current TIP projects have been analyzed for geographic distribution, including a relevant table of programming by municipality and maps of future and past programmed projects.		
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* indicates required by state or federal regulation.

APPENDIX G NMCOG STAFF AND CREDENTIALS

- Jennifer Raitt, Executive Director
- Kelly Lynema, AICP, Deputy Director
- Blake Acton, Regional Transit Planner II
- Carlin Andrus, GISP, GIS and Data Program Manager
- Michael Asciola, AICP, Senior Planner, Housing and Land Use
- Christian D'Emilia, Regional Housing Coordinator
- Isabel Emmet, AICP, Regional Land Use Planner II
- Apple Gould-Schultz, Transportation Planner I
- Christopher Glenn Hayes, AICP, Housing and Economic Development Manager
- Amanuel Regassa, Transportation Planner II
- Sara Schreiber, Finance and Benefits Manager
- Meghan Tenhoff, ENVSP, Principal Planner -- Sustainability
- Donna Vieweg, Executive Assistant
- Michelle Zelenka, Regional Energy Manager

NORTHERN MIDDLESEX TRANSPORTATION PLANNING STAFF

- Kelly Lynema, AICP, Deputy Director
- Blake Acton, Regional Transit Planner II
- Carlin Andrus, GISP, GIS and Data Program Manager
- Apple Gould-Schultz, Transportation Planner I
- Amanuel Regassa, Transportation Planner II