



# Transportation Improvement Program

Pioneer Valley Metropolitan  
Planning Organization



**DRAFT**

**FY 2023-2027 METROPOLITAN PLANNING ORGANIZATION  
PIONEER VALLEY REGION, MASSACHUSETTS**

**April 2022**

This document was prepared under contract with the Massachusetts Department of Transportation. This report was funded in part through grant(s) from the Federal Highway Administration (and Federal Transit Administration), U.S. Department of Transportation. The views and opinions of the authors (or agency) expressed herein do not necessarily state those or reflect those of the U.S. Transportation.



# TRANSPORTATION IMPROVEMENT PROGRAM (TIP)

2023 - 2027

FOR THE  
METROPOLITAN PLANNING ORGANIZATION  
PIONEER VALLEY REGION,  
MASSACHUSETTS

**Draft April 26, 2022**



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## **Notice of Nondiscrimination Rights and Protections to Beneficiaries**

### **Federal Title VI/Nondiscrimination Protections**

The Metropolitan Planning Organization (MPO) operates its programs, services, and activities in compliance with federal nondiscrimination laws including Title VI of the Civil Rights Act of 1964 (Title VI), the Civil Rights Restoration Act of 1987, and related statutes and regulations. Title VI prohibits discrimination in federally assisted programs and requires that no person in the United States of America shall, on the grounds of race, color, or national origin (including limited English proficiency), be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination under any program or activity that receives federal assistance. Related federal nondiscrimination laws administered by the Federal Highway Administration (FHWA), Federal Transit Administration (FTA), or both, prohibit discrimination on the basis of age, sex, and disability. The Pioneer Valley Region MPO considers these protected populations in its Title VI Programs, consistent with federal interpretation and administration. In addition, the Pioneer Valley Region MPO provides meaningful access to its programs, services, and activities to individuals with limited English proficiency, in compliance with U.S. Department of Transportation policy and guidance on federal Executive Order 13166.

### **State Nondiscrimination Protections**

The Pioneer Valley Region MPO also complies with the Massachusetts Public Accommodation Law, M.G.L. c 272 §§ 92a, 98, 98a, which prohibits making any distinction, discrimination, or restriction in admission to, or treatment in a place of public accommodation based on race, color, religious creed, national origin, sex, sexual orientation, disability, or ancestry. Likewise, the Pioneer Valley Region MPO complies with the Governor's Executive Order 526, section 4, which requires that all programs, activities, and services provided, performed, licensed, chartered, funded, regulated, or contracted for by the state shall be conducted without unlawful discrimination based on race, color, age, gender, ethnicity, sexual orientation, gender identity or expression, religion, creed, ancestry, national origin, disability, veteran's status (including Vietnam-era veterans), or background.

English: If this information is needed in another language, please contact the PVPC Title VI Specialist at 413-781-6045.

Portuguese: Caso esta informação seja necessária em outro idioma, favor contar o Especialista em Título VI do PVPC pelo telefone 413-781-6045.

Spanish: Si necesita esta información en otro idioma, por favor contacte al especialista de PVPC del Título VI al 413-781-6045.

Chinese Simplified: (mainland & Singapore): 如果需要使用其它语言了解信息, 请联系马萨诸塞州交通部 (PVPC) 《民权法案》第六章专员, 电话413-781-6045。

Chinese Traditional: (Hong Kong & Taiwan): 如果需要使用其它語言了解信息, 請聯繫馬薩諸塞州交通部 (PVPC) 《民權法案》第六章專員, 電話413-781-6045。

Russian: Если Вам необходимо данная информация на любом другом языке, пожалуйста, свяжитесь со специалистом по Титулу VI Департамента Транспорта штата Массачусетс (PVPC) по тел: 413-781-6045.



Haitian Creole: Si yon moun vle genyen enfòmasyon sayo nan yon lòt lang, tanpri kontakte Espesyalis PVPC Title VI la nan nimewo 413-781-6045.

Vietnamese: Nếu quý vị cần thông tin này bằng tiếng khác, vui lòng liên hệ Chuyên viên Luật VI của PVPC theo số điện thoại 413-781-6045.

French: Si vous avez besoin d'obtenir une copie de la présente dans une autre langue, veuillez contacter le spécialiste du Titre VI de PVPC en composant le 413-781-6045.

Italian: Se ha bisogno di ricevere queste informazioni in un'altra lingua si prega di contattare lo Specialista PVPC del Titolo VI al numero 413-781-6045.

Khmer: របស់វីទី៦នៃបេណក-

អភិវឌ្ឍន៍ការបកប្រែព័ត៌មាននេះសម្រាប់អ្នកដែលមិនស្រួលនឹងភាសាខ្មែរ

របស់PVPCតាមរយៈលេខទូរស័ព្ទ413-781-6045

## Programs to Support Civil Rights

The MPO administers several programs to ensure that protected populations have equal access to the benefits of, and participation in, the MPO's transportation-planning process, free from discrimination.

**MPO Title VI Program:** Develops strategies, actions, and analyses needed to comply with FTA Title VI and FHWA Title VI/nondiscrimination requirements. The MPO reports its actions to comply with FTA requirements every three years; while FHWA requires compliance updates annually. The most recent triennial report can be found [here](#).

**Transportation Equity Program:** Identifies the transportation needs of protected populations through outreach and data collection, ensures that these needs are considered in the MPO's activities, and evaluates the extent to which the MPO meets the needs of these protected populations.

**Public Participation Program:** Provides avenues through which all residents, including protected populations, can participate in the MPO's transportation-planning and decision-making process.

## Complaint Filing

Complaints filed under a federal law or policy (based on race, color, national origin [including limited English proficiency] sex, age, or disability) must be filed no later than 180 calendar days after the date the person believes the discrimination occurred. Complaints filed under a Massachusetts Public Accommodation Law (based on race, color, religious creed, national origin, sex, sexual orientation, disability, or ancestry) or Governor's Executive Order 526, section 4 (based on race, color, age, gender, ethnicity, sexual orientation, gender identity or expression, religion, creed, ancestry, national origin, disability, veteran's status [including Vietnam-era veterans], or background) must be filed no later than 300 calendar days after the date the person believes the discrimination occurred. The full complaint procedures are described in the document below:



# **PREFACE**

## **The Pioneer Valley Region**

The Pioneer Valley Region is comprised of 43 cities and towns covering approximately 1,180 square miles. Home to over 626,000 residents, the Pioneer Valley is the fourth largest metropolitan area in New England. The map on the following page references the Pioneer Valley Region.

## **TIP Format and MPO Endorsement**

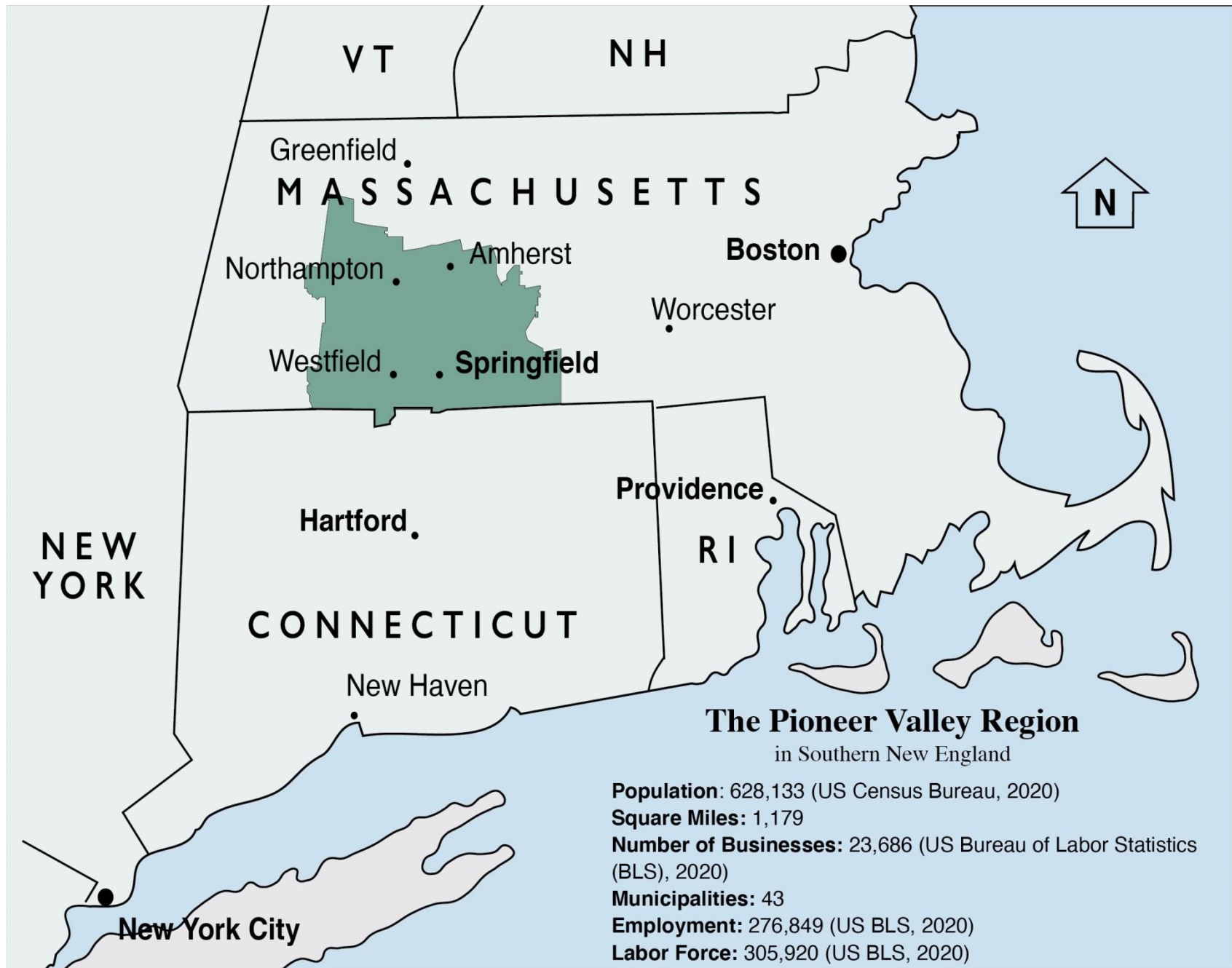
The FFY 2023 - 2027 TIP has been prepared with completely separate components of the document that are subject to federal review and approval and components that are not. This distinction of a “federal component” was the firm position of the Massachusetts Department of Transportation (MassDOT) as a means to avoid potential problems with adequately satisfying federal financial constraint requirements with the non-federal aid component of the TIP. Although a non-federal component of the TIP is represented, it is understood that this component is not subject to Metropolitan Planning Final Rule 23 CMR 450 section 324, therefore federal review and approval is not required.

The non-federal component is provided for the benefit of the MPO and the constituent communities as a representation of an agreed upon listing of improvement projects to be undertaken entirely with state provided resources. All projects included in the Non Federal Aid (NFA) section of the TIP must be eligible to receive federal funds and be located on a functionally classified road. The separation of federal aid projects from non-federal aid projects by no means represents a lack of commitment by the state to fund all projects specifically programmed in the document. Assuming that adequate funds are available from federal and/or state sources, it can be fully expected that the following project listings can and will be implemented over the FFY 2023 - 2027 time frame. Pending federal guidance approving the inclusion of non-federal aid projects without secured bonded resources in each year, the TIP will be amended to reinstate all non-federal aid projects into the document endorsed for federal review and approval.

## **MassDOT Commitment to Funding all Designed and Permitted Projects**

The MassDOT has committed to funding all transportation improvement projects that will be ready for advertisement in FFY 2023 and beyond. In response to this commitment, Pioneer Valley local officials in cooperation with regional and state officials from MassDOT have made a concerted effort to develop a TIP project listing that is truly representative of the projects that will realistically be ready for advertisement in FFY 2023 and beyond. Funding targets for the Pioneer Valley Region have been issued by MassDOT identifying potential resources for each year of the TIP.







# I.GENERAL SUPPORT INFORMATION

## INTRODUCTION

The Transportation Improvement Program (TIP) is a requirement of the Metropolitan Transportation Planning Process as described in the Metropolitan Planning Final Rule 23 CFR 450 section 324. This regulation developed by the Federal Department of Transportation defines the Transportation Improvement Program as:

*“A staged, multiyear, intermodal program of transportation projects which is consistent with the metropolitan transportation plan.”*

The Pioneer Valley TIP is a five-year schedule of priority highway, bridge, transit, and multimodal projects identified by year and location complete with funding source and cost. The TIP is developed annually and is available for amendment and adjustment at any time. Each program year of the TIP coincides with the Federal Fiscal Year calendar, October 1 through September 30. All TIPs and amendments are consistent with the goals and objectives of the Regional Transportation Plan for the Pioneer Valley region. This TIP is financially constrained.

## FEDERAL AUTHORIZATION

The Bipartisan Infrastructure Law (BIL), was signed into law on November 15, 2021. With \$567 Billion in funding (2022-2026) the objective of BIL is not only to invest in infrastructure but also to grow the economy and make the USA more competitive on a global scale. BIL replaces The FAST Act, Fixing America's Surface Transportation signed into law on December 4, 2015. which funded surface transportation programs at over \$305 billion for fiscal years (FY) 2016 through 2020 (Continuing resolution thru December 2021). At the time of the endorsement of this documents, the 10 FAST Act planning factors were still current in US DOT regulations.

The ten planning factors are as follows

1. Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.
2. Increase the safety of the transportation system for motorized and non-motorized users.
3. Increase the security of the transportation system for motorized and non-motorized users.
4. Increase the accessibility and mobility of people and for freight.
5. Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns.
6. Enhance the integration and connectivity of the transportation system, across and between modes, people and freight.
7. Promote efficient system management and operation.
8. Emphasize the preservation of the existing transportation system.
9. Improve the resiliency and reliability of the transportation system and reduce or mitigate storm water impacts of surface transportation.
10. Enhancing travel and tourism.



The Moving Ahead for Progress in the 21st Century Act (MAP-21), enacted in 2012, included provisions to make the Federal surface transportation more streamlined, performance-based, and multimodal, and to address challenges facing the U.S. transportation system, including improving safety, maintaining infrastructure condition, reducing traffic congestion, improving efficiency of the system and freight movement, protecting the environment, and reducing delays in project delivery. The FAST Act builds on the changes made by MAP-21.<sup>1</sup>

The FAST Act specifically addresses all modes of transportation and enhances many of the existing provisions and programs defined in past transportation legislation.

National goal areas continue to be a priority under the FAST Act and address the following areas:

**Safety**—To achieve a significant reduction in traffic fatalities and serious injuries on all public roads.

**Infrastructure condition**—To maintain the highway infrastructure asset system in a state of good repair.

**Congestion reduction**—To achieve a significant reduction in congestion on the NHS.

**System reliability**—To improve the efficiency of the surface transportation system.

**Freight movement and economic vitality**—To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.

**Environmental sustainability**—To enhance the performance of the transportation system while protecting and enhancing the natural environment.

**Reduced project delivery delays**—To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices

#### ***PERFORMANCE BASED PLANNING AND PROGRAMMING***

The FAST Act requires MPOs, in collaboration with the state DOT and transit agencies, to formally establish targets for performance measures aligned with the national goals. Performance Based Planning and Programming (PBPP) refer to the application of performance management within the parameters of the FAST Act to achieve desired outcomes for the multimodal transportation system. It is intended advance transportation investments based on their ability to meet established goals. This includes setting targets for the performance measures identified in the FAST Act.

Performance measures are intended to monitor and track performance over time and assess the effectiveness of projects and strategies in meeting the national goal areas. In the Pioneer Valley region, performance based planning methods have been used in the development of the Transportation Evaluation Criteria to program projects as part of the Regional Transportation Improvement Program for many years.

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<sup>1</sup><https://www.fhwa.dot.gov/fastact/summary.cfm>



USDOT implemented the federal PBPP requirements through a series of phased rulemakings. At the conclusion of this rulemaking process, the Commonwealth of Massachusetts has twelve months to establish statewide performance targets for each required federal performance measure. The Pioneer Valley MPO has 180 days from the date of Commonwealth's adoption of the statewide performance targets to either adopt the statewide targets or establish their own regional performance targets.

The Federal Transit Administration has finalized a rule to define requirements for transit asset management. This rule requires public transportation providers to develop and implement transit asset management (TAM) plans. TAM plans must include an asset inventory, condition assessments of inventoried assets, and a prioritized list of investments to improve the state of good repair of capital assets. This rule also establishes state of good repair standards and four state of good repair performance measures.

Public Transportation Agency Safety Plans (PTASP) were authorized by the MAP-21 legislation. Under this rule, operators of public transportation systems that receive Federal financial assistance under 49 U.S.C. Chapter 53 such as the PVRTA, must develop and implement a PTASP to help ensure that public transportation systems are safe nationwide. The PTASP must include four main elements: (1) Safety Management Policy, (2) Safety Risk Management, (3) Safety Assurance, and (4) Safety Promotion. PVRTA adopted their PTASP at their Advisory Board Meeting on November 18, 2020.

**Table 1 Regional Performance Target Status**

<b>Final Rule</b>	<b>Effective Date</b>	<b>Status</b>	<b>Updated</b>
Safety Performance Measures (PM1)	April 14, 2016	MPO adopted state targets on January 25, 2022	Annually
Pavement/Bridge Performance Measures (PM2)	May 20, 2017	MPO adopted state targets on October 1, 2018	Every Two Years
System Performance Measures (PM3)	May 20, 2017	MPO adopted state targets on October 1, 2020	Every Two Years
Transit Asset Management Plan (TAM)	July 26, 2016	MPO adopted PVRTA TAM Plan Targets on March 26, 2019	Every Four Years
Public Transportation Agency Safety Plan (PTASP)	November 18, 2020	MPO adopted PVRTA – PTASP on 11/24/2020	Annually

As can be seen from the above table, the Pioneer Valley MPO has elected to adopt the State performance targets for PM1, PM2 and PM3. The MPO will continue to work in close collaboration with the PVRTA to incorporate their TAM and PTASP performance targets



into the regional transportation planning process. The UPWP includes specific tasks to support the performance based planning and programming for the Pioneer Valley MPO. The latest performance targets for each adopted performance measure are presented in the following table.

**Table 2 Performance Targets for the Pioneer Valley MPO**

<b>Rule</b>	<b>Performance Measure</b>	<b>Target</b>
PM1	Total Number of Fatalities	Reduce Total Number of Fatalities to 3409 or less statewide with an overarching goal of zero fatalities
PM1	Rate of Fatalities per 100 Million Vehicle Miles Traveled (VMT)	Reduce the Rate of Fatalities to 0.56/100 million VMT or less statewide with an overarching goal of zero fatalities/100 million VMT
PM1	Total Number of serious Injuries	Reduce Total Number of serious Injuries to 2504 or less statewide
PM1	Rate of Serious Injuries per 100 Million VMT	Reduce the Rate of serious Injuries to 4.11/100 million VMT or less statewide
PM1	Total Number of Serious Injuries and Fatalities for Non-motorized Modes	Do Not Exceed 471 for total number of Serious Injuries and Fatalities for Non-motorized Modes
PM2	Percentage of pavement of the Interstate System in Good condition	Maintain a condition of 70% or better for 2020 and 2022
PM2	Percentage of pavement of the Interstate System in Poor condition	Maintain a condition of 4% or better for 2020 and 2022
PM2	Percentage of pavement of the non-Interstate NHS in Good condition	Maintain a condition of 30% or better for 2020 and 2022
PM2	Percentage of pavement of the non-Interstate NHS in Poor condition	Maintain a condition of 30% or better for 2020 and 2022
PM2	Percentage of NHS bridges classified in Good condition	Maintain a condition of 15% or better for 2020 and 16% or better for 2022
PM2	Percentage of NHS bridges classifies in Poor condition	Maintain a condition of 13% or better for 2020 and 12% or better for 2022
PM3	Level of Travel Time Reliability (LOTTR) on the Interstate System	Maintain a LOTTR at or above 68% statewide for the Interstate System
PM3	Level of Travel Time Reliability (LOTTR) on non-Interstate NHS	Maintain a LOTTR at or above 80% statewide for the non-Interstate NHS
PM3	Level of Truck Travel Time Reliability (TTTR)	Maintain a TTTR of 1.85 or better statewide for the Interstate System.



PM3	Total reduction of on-road mobile source emissions from projects funded under the Congestion Mitigation and Air Quality Program (CMAQ) for the Springfield Maintenance Area	0.599(VOC), 1.71(NOx) and 6.53(CO) Kg/day
TAM	Percent of revenue vehicles by asset class that have met or exceeded their Useful Life Benchmark (ULB)	Articulated Bus = 0%, Bus = 20%, Minibus = 100%, Cutaway Bus = 25%, Minivan = 30%, Trolleybus = 100%
TAM	Percent of vehicles that have met or exceeded their Useful Life Benchmark (ULB)	Automobiles = 25% Trucks and other Rubber Tire Vehicles = 25%
TAM	Percent of facilities with a condition rating below 3.0 on the FTA Transit Economic Requirements Model (TERM) Scale	Administrative and Maintenance = 25% Passenger and Parking = 0%
PTASP	Total Number of Fatalities	Target of 0 Fatalities
PTASP	Rate of Fatalities per Million Vehicle Miles Traveled (VMT)	Reduce the Rate of Fatalities to 0.58/ million VMT or less statewide
PTASP	Total Number of serious Injuries	Target of 0 Serious Injuries
PTASP	Rate of Serious Incapacitating per Million VMT	Target Rate of Serious Injuries to 0.437. / million VMT or less statewide
PTASP	Fixed Route miles between breakdowns	Target of 20,000 miles
PTASP	Paratransit miles between breakdowns	Target of 24,500 miles
PTASP	Fixed Route preventable accidents/100,000 miles	Target of 2.0
PTASP	Paratransit preventable accidents/100,000	Target of 0.8

As can be seen in table 3 PVMPO has invested \$143 million over the past 5 years on projects which will help meet the Performance Measure rules. PVPC staffed used project information to identify the percentage of each project that contributes to each of the performance measures (PM1, PM2 and PM3) Of these investments 26% (\$36,770,608) will help achieve PM1, 40% (\$57,264,456) will help achieve PM2, and 34% (\$48,929,554) will help achieve PM3. As more data became available it is anticipated that corresponding PM trends should be seen showing that our region is meeting or exceeding our PM Rules.



**Table 3 Performance Measure Linked Investments 2018-2022**

TIP Year	SID	Municipality	Project Description	Total Programmed	PM 1	PM 2	PM 3
2019	600513	Agawam	AGAWAM- RECONSTRUCTION OF ROUTE 187 FROM 425 FT. SOUTH OF S. WESTFIELD STREET TO ROUTE 57 (0.3 MILES - PHASE I)	\$2,622,622	5%	80%	15%
			Project Investment by Performance Measure		\$ 131,131	\$ 2,098,098	\$ 393,393
2019	608412	Belchertown	BELCHERTOWN- IMPROVEMENTS & RELATED WORK ON ROUTES 202 & 21, FROM TURKEY HILL ROAD TO SOUTH MAIN STREET (1.2 MILES)	\$5,143,503	5%	80%	15%
			Project Investment by Performance Measure		\$ 257,175	\$ 4,114,802	\$ 771,525
2019	608411	Springfield	SPRINGFIELD- INTERSECTION IMPROVEMENTS AT BAY STREET AND BERKSHIRE AVENUE	\$1,886,880	50%	5%	45%
			Project Investment by Performance Measure		\$ 943,440	\$ 94,344	\$ 849,096
2019	PV0001	Multiple	P21 Express - Year 2 Operating	\$500,000	0%	0%	100%
			Project Investment by Performance Measure		\$ -	\$ -	\$ 500,000
2019	607987	Ware	WARE- INTERSECTION IMPROVEMENTS @ MAIN STREET, WEST STREET, NORTH STREET, SOUTH STREET & CHURCH STREET	\$2,475,087	45%	10%	45%
			Project Investment by Performance Measure		\$ 1,113,789	\$ 247,509	\$ 1,113,789
2019	604962	Holland	HOLLAND- RESURFACING & RELATED WORK ON BRIMFIELD ROAD, FROM THE BRIMFIELD/HOLLAND T.L. TO WALES ROAD (1.4 MILES - PHASE I)	\$2,919,446	10%	85%	5%
			Project Investment by Performance Measure		\$ 291,945	\$ 2,481,529	\$ 145,972
2019	606912	Worthington	WORTHINGTON- RECONSTRUCTION & RELATED WORK ON ROUTE 143 (PHASE I) COLD STREET TO CHESTERFIELD TOWN LINE	\$8,900,000	5%	90%	5%
			Project Investment by Performance Measure		\$ 445,000	\$ 8,010,000	\$ 445,000
2020	604434	Chicopee	CHICOPEE- RECONSTRUCTION & RELATED WORK ON FULLER ROAD, FROM MEMORIAL DR (RTE 33) TO SHAWINIGAN DR (2.0 MILES)	\$9,735,424	25%	50%	25%
			Project Investment by Performance Measure		\$ 2,433,856	\$ 4,867,712	\$ 2,433,856
2020	PV0001	Multiple	NORTHAMPTON, AMHERST, CHICOPPE, EASTHAMPTON, HADLEY, HOLYOKE, SOUTH HADLEY, SPRINGFIELD, and WEST SPRINGFIELD: ValleyBike share (phase II)	\$1,200,000	0%	0%	100%
			Project Investment by Performance Measure		\$ -	\$ -	\$ 1,200,000
2020	PV0002	Multiple	P 21 Express Year 3	\$500,000	0%	0%	100%
			Project Investment by Performance Measure		\$ -	\$ -	\$ 500,000



**Table 4 Performance Measure Linked Investments 2018-2022 (continued)**

TIP Year	SID	Municipality	Project Description	Total Programmed	PM 1	PM 2	PM 3
2020	607502	Northampton	NORTHAMPTON- INTERSECTION IMPROVEMENTS AT KING STREET, NORTH STREET & SUMMER STREET AND AT KING STREET & FINN STREET	\$4,171,096	50%	25%	25%
Project Investment by Performance Measure					\$ 2,085,548	\$ 1,042,774	\$ 1,042,774
2020	608718	Springfield	SPRINGFIELD- INTERSECTION IMPROVEMENTS AT BERKSHIRE AVENUE, COTTAGE AND HARVEY STREETS	\$3,086,454	35%	5%	60%
Project Investment by Performance Measure					\$ 1,080,259	\$ 154,323	\$ 1,851,872
2020	608236	Northampton	NORTHAMPTON- RECONSTRUCTION OF DAMON ROAD, FROM ROUTE 9 TO ROUTE 5, INCLUDES DRAINAGE SYSTEM REPAIRS & SLOPE STABILIZATION AT THE NORWOTTUCK	\$11,274,259	35%	32%	33%
Project Investment by Performance Measure					\$ 3,945,991	\$ 3,607,763	\$ 3,720,505
2021	608084	Amherst	AMHERST- IMPROVEMENTS & RELATED WORK ON ROUTES 9 & 116, FROM UNIVERSITY DRIVE TO SOUTH PLEASANT STREET (0.8 MILES)	\$ 5,769,804	30%	50%	20%
Project Investment by Performance Measure					\$ 1,730,941	\$ 2,884,902	\$ 1,153,961
2021	605032	Hadley	HADLEY- RECONSTRUCTION ON ROUTE 9, FROM MIDDLE STREET TO MAPLE/SOUTH MAPLE STREET	\$8,793,026	20%	30%	50%
Project Investment by Performance Measure					\$ 1,758,605	\$ 2,637,908	\$ 4,396,513
2021	607773	Westfield	WESTFIELD- IMPROVEMENTS & RELATED WORK ON ROUTE 20, COURT STEET & WESTERN AVENUE, LLOYDS HILL ROAD TO HIGH STREET/MILL STREET INTERSECTION (PHASE II)	\$ 8,606,351	35%	60%	5%
Project Investment by Performance Measure					\$3,012,222.85	\$ 5,163,811	\$ 430,318
2021	608782	Springfield	SPRINGFIELD- INTERSECTION IMPROVEMENTS AT COTTAGE STREET, INDUSTRY AVENUE AND ROBBINS ROAD	\$3,135,052	35%	5%	60%
Project Investment by Performance Measure					\$1,097,268.20	\$ 156,753	\$ 1,881,031
2022	608577	Easthampton	EASTHAMPTON- IMPROVEMENTS AND RELATED WORK ON UNION STREET (ROUTE 141) FROM PAYSON AVENUE TO HIGH STREET (0.36 MILES)	\$3,624,561	40%	20%	40%
Project Investment by Performance Measure					\$1,449,824.40	\$ 724,912	\$ 1,449,824



**Table 5 Performance Measure Linked Investments 2018-2022 (continued)**

TIP Year	SID	Municipality	Project Description	Total Programmed	PM 1	PM 2	PM 3
2022	605032	Hadley	HADLEY- RECONSTRUCTION ON ROUTE 9, FROM MIDDLE STREET TO MAPLE/SOUTH MAPLE STREET	\$17,486,346	20%	30%	50%
Project Investment by Performance Measure					\$3,497,269.20	\$ 5,245,904	\$ 8,743,173
2022	606450	Holyoke	HOLYOKE- TRAFFIC SIGNAL UPGRADES AT 15	\$ 4,603,777	40%	50%	10%
Project Investment by Performance Measure					\$ 1,841,511	\$ 2,301,889	\$ 460,378
2023	606797	Cummington	CUMMINGTON- RETAINING WALL REPLACEMENT ON ROUTE 9 ADJACENT TO SWIFT RIVER	\$4,500,000	0%	100%	0%
Project Investment by Performance Measure					\$ -	\$ 4,500,000	\$ -
2023	606895	Granby	GRANBY- IMPROVEMENTS AT 2 LOCATIONS ON ROUTE 202: SCHOOL STREET & FIVE CORNERS	\$3,658,698	85%	0%	15%
Project Investment by Performance Measure					\$ 3,109,893	\$ -	\$ 548,805
2023	608374	West Springfield	WEST SPRINGFIELD- RECONSTRUCTION OF MEMORIAL AVENUE (ROUTE 147), FROM COLONY ROAD TO THE MEMORIAL AVENUE ROTARY (1.4 MILES)	\$16,175,169	33%	33%	33%
Project Investment by Performance Measure					\$ 5,391,184	\$ 5,391,184	\$ 5,392,801
2023	S12686	Multiple	Valley Bike Share Expansion (Phase 3)	\$1,458,684	0%	0%	100%
Project Investment by Performance Measure					\$ -	\$ -	\$ 1,458,684
2023	604209	Multiple	HOLYOKE- WEST SPRINGFIELD- REHABILITATION OF ROUTE 5 (RIVERDALE ROAD), FROM I-91 (INTERCHANGE 13) TO MAIN STREET IN HOLYOKE & FROM ELM STREET TO NORTH ELM STREET IN WEST SPRINGFIELD (3.2 MILES)	\$3,845,852	30%	40%	30%
Project Investment by Performance Measure					\$ 1,153,756	\$ 1,538,341	\$ 1,153,756
2023	608073	Multiple	West River Levee Multi-Use Path	\$5,392,527	0%	0%	100%
Project Investment by Performance Measure					\$ -	\$ -	\$ 5,392,527
2023	S12718	Multiple	PVTA Bus Purchases and Training	\$1,500,000	0%	0%	100%
Project Investment by Performance Measure					\$ -	\$ -	\$ 1,500,000
<b>Total Investment by Performance Measure (23 Projects)</b>				<b>\$142,964,618</b>	<b>\$36,770,608</b>	<b>\$57,264,456</b>	<b>\$48,929,554</b>



Table 4 shows PVRTA capital investment in which will help our region meet the TAM rule. Over the past 5 years PVRTA has \$52 million on buses, vans, mini buses, and facility maintenance. PVRTA spends roughly 30% of their yearly capital budget on fleet replace in order to meet the TAM rule. PTAS targets were approved by the MPO in November of 2020, projects will be evaluated as more data becomes available to measure PTASP effectiveness.

**Table 6 TAM Investments 2018-2022**

TIP Year	RTA	Capital Project	Total Programmed	PM Rule
2023	PVRTA	PVRTA Buses 40' Replacement - 11	\$5,846,040	TAM
2023	PVRTA	PVRTA Buses 40' Replacement - Electric - 4	\$3,797,482	TAM
2023	PVRTA	PVRTA Buses 35' Replacement - 11	\$5,729,613	TAM
2023	PVRTA	PVRTA Buses 35' Replacement - Electric - 4	\$3,602,907	TAM
2023	PVRTA	PVRTA Buses 60' Rebuilt - 2	\$824,000	TAM
2023	PVRTA	PVRTA Shuttle Bus Type D - 2	\$333,123	TAM
2023	PVRTA	PVRTA Paratransit Vans -10-14 Passenger - 20	\$1,414,456	TAM
2023	PVRTA	PVRTA Support Vehicles - 2	\$59,780	TAM
2023	PVRTA	PVRTA Supervisory Vehicles - 2	\$74,263	TAM
2023	PVRTA	PVRTA Facility State of Good Repair	\$20,000	TAM
2023	PVRTA	Northampton Bus Facility Site Access Control Improvements and Pavement Repair	\$450,000	TAM
2023	PVRTA	UMASS O&M - Replace Bus Bay Doors	\$280,000	TAM
2023	PVRTA	UMASS O&M -Expand Bus Storage Four Bay Lateral Expansion	\$1,200,000	TAM
2023	PVRTA	Main Street O&M - Fuel and Fluids UST and AST Rem	\$270,000	TAM
2023	PVRTA	Main Street O&M - Paint Interior Structural Steel & I	\$450,000	TAM
2022	PVRTA	PVRTA - Purchase 40' Replacement Buses (6)	\$3,157,608	TAM
2022	PVRTA	PVRTA - Replace 35' Buses (6)	\$3,089,428	TAM
2022	PVRTA	PVRTA - BUY REPLACEMENT 40-FT BUS - Electric (4) (VW Mitigation)	\$3,826,159	TAM
2022	PVRTA	PVRTA - BUY REPLACEMENT 35-FT BUS - Electric (4) (VW mitigation)	\$3,672,134	TAM
2022	PVRTA	PVRTA - REHAB-REBUILD 40-FT BUS (6)	\$1,603,599	TAM
2022	PVRTA	PVRTA - REHAB-REBUILD 35-FT BUS (4)	\$863,066	TAM
2022	PVRTA	PVRTA - Purchase Replacement Vans (18)- CGP-MAP Funds	\$1,112,400	TAM
2022	PVRTA	PVRTA - Replace Supervisory Vehicles (2)	\$54,000	TAM
2022	PVRTA	PVRTA - PREVENTIVE MAINTENANCE - PVRTA Facilities State of Good Repair	\$20,000	TAM
2022	PVRTA	PVRTA - REHAB-RENOVATE - YARDS AND SHOPS - Install new exterior lighting at Northampton Bus Maintenance Facility	\$120,000	TAM
2022	PVRTA	PVRTA - REHAB-RENOVATE - STORAGE FACILITY - UMass Bus O&M Facility New lighting in Service and Storage	\$120,000	TAM
2022	PVRTA	PVRTA - REHAB-RENOVATE - MAINTENANCE FACILITY - Northampton Bus Maintenance Facility Generator Replace	\$325,000	TAM



**Table 7 TAM Investments 2018-2022 (continued)**

<b>TIP Year</b>	<b>RTA</b>	<b>Capital Project</b>	<b>Total Programmed</b>	<b>PM Rule</b>
2022	PVTA	PVTA - REHAB-RENOVATE - MAINTENANCE FACILITY UMass O&M Facility Generator replacement	\$375,000	TAM
2021	PVTA	Buy Replacement 35-FT Buses (5)	\$1,800,000	TAM
2021	PVTA	REHAB/REBUILD 35-FT BUS (6)	\$1,500,000	TAM
2021	PVTA	REHAB/REBUILD 40-FT BUS (9)	\$2,925,000	TAM
2021	PVTA	Buy Replacement 40-FT Buses	\$5,587,595	TAM
2021	PVTA	BUY REPLACEMENT 40-FT BUS - Electric (6) (VW Mitigation)	\$3,000,000	TAM
2021	PVTA	BUY REPLACEMENT 35-FT BUS - Electric (6) (VW mitigation)	\$2,700,000	TAM
2020	PVTA	Buy Replacement 40' Diesel Bus (16)	\$5,684,136	TAM
2020	PVTA	Buy Replacement 35" Bus (17)	\$4,074,004	TAM
2019	PVTA	Buy Replacement 40' Diesel Bus (4)	\$2,226,480	TAM
2019	PVTA	Buy Replacement 35" Bus (4)	\$2,203,970	TAM
2019	PVTA	Purchase Replacement Vans (27)	\$1,836,620	TAM
			<b>\$51,876,199</b>	

## CONFORMITY WITH THE REGIONAL TRANSPORTATION PLAN

All projects in the TIP come from the 2020 Regional Transportation Plan (RTP). All regionally significant projects included in the TIP were previously included in the air quality analysis completed for the conforming RTP. Because projects in the TIP come from the conforming RTP and all regionally significant RTP projects for 2023 through 2027 (both Federal and Non-Federal Aid) are programmed in the TIP, the same air quality analysis utilized for the RTP can be used for the TIP. Since most all of Massachusetts (with limited exceptions) was designated on 5/21/12 by the United States Environmental Protection Agency as “unclassifiable/attainment” for the latest ozone standard, a conformity determination for the Pioneer Valley 2023 - 2027 TIP is only required for carbon monoxide. Further details and background information are provided in Chapter VII (page 81) of this document and in Chapter 16 of the RTP ([Click here to view](#)).

## METROPOLITAN PLANNING ORGANIZATION

The Pioneer Valley Metropolitan Planning Organization (MPO) is responsible for developing the TIP. The MPO is comprised of ten members including four independently operating agencies and six locally elected officials:

### Nomination and Election Process for the Six Locally Elected MPO Members

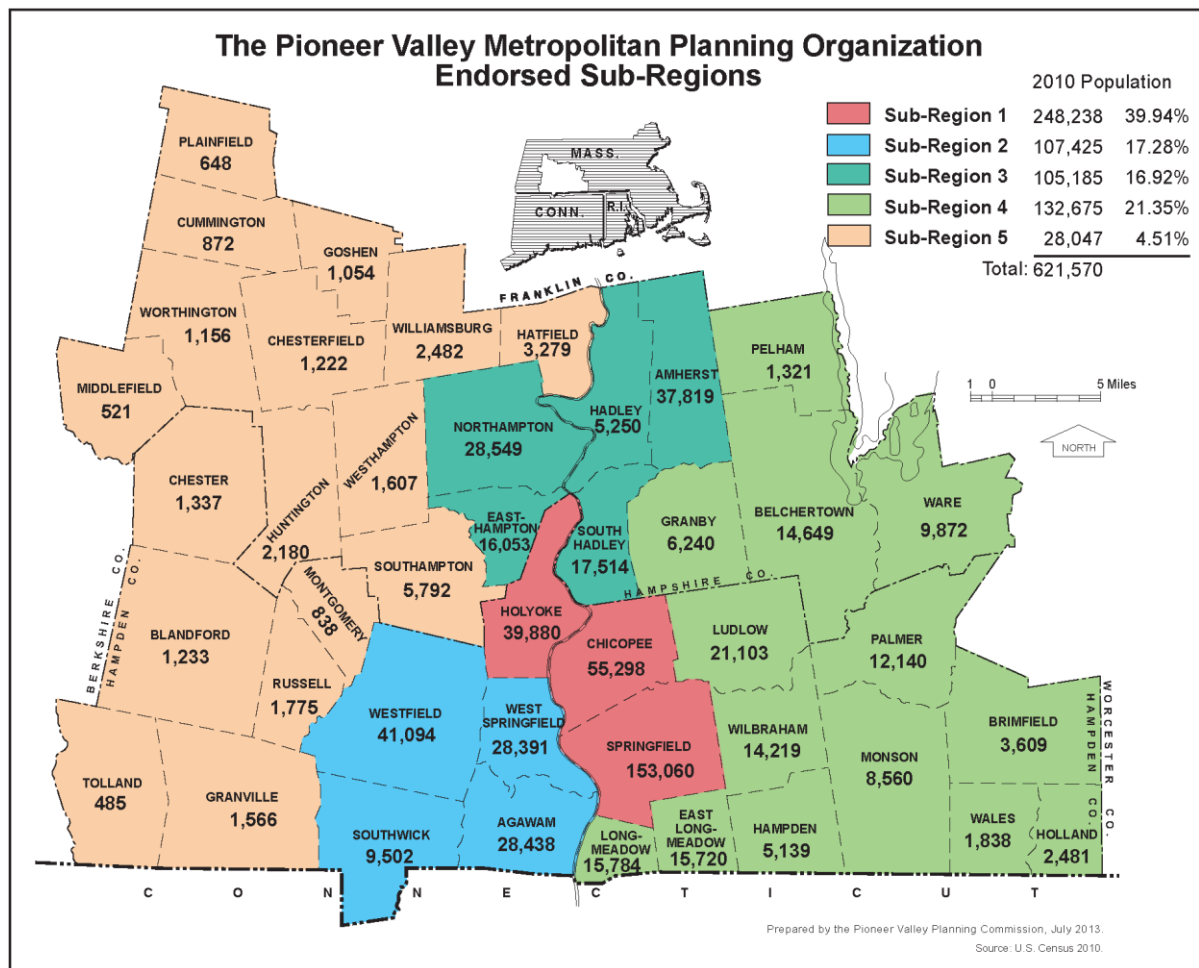
The six locally elected MPO member’s shall be elected to the MPO by the Pioneer Valley Planning (PVPC) Commission at a full Commission meeting. The electoral process shall be conducted using a regional caucus approach for each of the five local officials. PVPC will host meetings in each MPO tier to identify and recommend local officials interested in participating on the MPO. The term of office for each community representative to the Pioneer Valley MPO shall be for two years. At the first election, two Selectmen shall be elected for a one-year term, and two for a full two-year term. In the event that a current MPO member from one of the local tiers chooses not to



run for reelection or is not reelected to office, the alternate member shall automatically assume the duties of the member. The PVPC will seek to fill any vacant alternate MPO member slot(s) through a search process carried out in consultation with the Joint Transportation Committee (JTC) and ultimately confirmed by an affirmative vote of the Commission. Once the Commission has successfully completed the election process, the proposed new municipal MPO member or members will be brought before the MPO for acceptance by an affirmative vote of a majority of its members.

<b>Name</b>	<b>Title</b>
Jamey Tesler	Secretary and CEO of the Massachusetts Department of Transportation
Jonathan L. Gulliver	Administrator of the Massachusetts Department of Transportation Highway Division
Walter Gunn	Chairman of the Pioneer Valley Executive Committee
Doug Slaughter	Chairman of the Pioneer Valley Transit Authority Advisory Board
Mayor John Vieau	City of Chicopee (Sub-Region 1)
Mayor Domenic Sarno	City of Springfield (Sub-Region 1)
Mayor William C. Reichelt	City of West Springfield (Sub-Region 2)
Mayor Nicole LaChapelle	Mayor of Easthampton (Sub-Region 3)
James Barry	Belchertown Selectboard (Sub-Region 4)
Roger Fuller	Chesterfield Selectboard (Sub-Region 5)
Rick Sullivan	Economic Development Council of Western Massachusetts
<b>Alternates</b>	
Joshua A. Garcia	Mayor of Holyoke (Sub-Region 1)
Mayor William Sapelli	Mayor of Agawam (Sub-Region 2)
Vacant	Sub Region 3
Mark Gold	Longmeadow Selectboard (Sub-Region 4)
Vacant	(Sub-Region 5)
<b>Ex-Officio (Non-Voting)</b>	
Jeff McEwen	Federal Highway Administration
Peter Butler	Federal Transit Administration
Sandra Sheehan	Pioneer Valley Transit Authority Administrator
Tina Cote	Franklin Region Transit Authority Administrator
Vacant	Chairman – Pioneer Valley Joint Transportation Committee





## DEVELOPMENT OF THE TIP

As the lead planning agency for the MPO, the PVPC accepts the responsibility for developing the TIP in a cooperative process with members of the MPO and the general public. The final TIP is voted on for endorsement at a formal meeting of the MPO. The endorsed TIP project listing is included in the State Transportation Improvement Program (STIP) verbatim and requires endorsement by the Governor.

The MPO relies on a transportation advisory committee, the Joint Transportation Committee (JTC) to carry out the cooperative process during TIP development. The JTC is a group of community appointed officials, MPO member representatives, public and private transportation providers, citizens, and special interest groups and agencies. The JTC establishes and recommends to the MPO procedures for submitting, prioritizing and selecting projects for the TIP. PVPC staff provides the technical support to conduct the TIP development activities for the JTC.

Below is a general outline of steps taken during the TIP development process.



- Project proponents (communities, MPO members, agencies) submit projects through the process outlined in Chapter 2 of the Massachusetts Project Development & Design Guidebook (2006)
- Projects are prioritized based on evaluation criteria by MPO staff, JTC representatives, and MassDOT Highway Division staff, and MassDOT staff at a posted meeting open to all.
- The State (thru MassDOT) provides funding targets for all 13 Regional Planning Agencies in Massachusetts.
- JTC reviews and recommends projects by Transportation Evaluation Criteria (TEC) and readiness to the MPO.
- Draft TIP project listings are prepared by the MPO staff and distributed for review and comment to MPO members.
- MPO meets to make final decisions on the composition of the TIP and to recommend the Draft TIP for general public release as required by the MPO Public Participation Plan for the Pioneer Valley Region.
- Final Draft TIP is distributed for review, consultation and comment in accordance with the adopted MPO Public Participation Plan.
- Public meetings and news releases are conducted to promote public involvement and consultation.
- Comments are compiled and addressed where appropriate.
- Final TIP developed for the JTC's consideration and their recommendation to MPO.
- MPO meets to vote on final adjustments and endorsement of the TIP.
- Endorsed Regional TIPs are compiled by MassDOT to create the STIP.
- Secretary and CEO of MassDOT endorses the STIP (on behalf of the Governor) and submits the STIP to federal agencies for review and approval.
- Federally approved STIP is ready for state implementation (project advertisement).

Amendments and adjustments to the TIP are made on an as needed basis with the additional public review and input for formal amendments only.

### **CONGESTION MANAGEMENT PROCESS (CMP)**

Congestion Management Process means a systematic approach required in transportation management areas (TMAs) that provides for effective management and operation, based on a cooperatively developed and implemented metropolitan-wide strategy, of new and existing transportation facilities eligible for funding under title 23 U.S.C., and title 49 U.S.C., through the use of travel demand reduction and operational management strategies.

In the Pioneer Valley Region, the CMP is a vital tool used in identifying project needs as well as the merits of projects in the development process. The CMP is also used to identify the effectiveness of project implementation as well as a tool to monitor our performance measures.



## **701 CMR 7.00 USE OF ROAD FLAGGERS AND POLICE DETAILS ON PUBLIC WORKS PROJECTS**

The goal of 701 CMR 7.00 is to ensure the safety all modes of transportation as well as workers in the vicinity of public works projects. Additionally 701 CMR 7.00 provides flexibility on certain types of projects to reduce the overall project cost through different types of traffic control strategies including Road Flagger and/or Police details.

701 CMR 7.00 (the Regulation) was promulgated and became law on October 3, 2008. Under this Regulation, the CMR is applicable to any public works project that is performed within the limits of, or that impact traffic on, any public road. The Municipal Limitation referenced in this Regulation is applicable only to projects where the Municipality is the Awarding Authority.

For all projects contained in the TIP, the Commonwealth is the Awarding Authority. Therefore, all projects must be considered and implemented in accordance with 701 CMR 7.00, and the Road Flagger and Police Detail Guidelines.

By placing a project on the TIP, the Municipality acknowledges that 701 CMR 7.00 is applicable to its project and design and construction will be fully compliant with this Regulation.

This information and additional information relative to guidance and implementation of the Regulation can be found at the following link on the MassDOT Highway Division website:

<http://www.MassDOT.state.ma.us/Highway/flaggers/main.aspx>

The Performance-Based Planning and Programming Rulemaking passed by the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) required the development of a memorandum of understanding (MOU) between MassDOT and all Metropolitan Planning Organizations (MPOs) and Regional Transit Authorities (RTAs) within Massachusetts. This MOU, which was endorsed by all parties in April of 2019, established specific written procedures for information sharing related to transportation performance data, the selection of both highway and transit performance targets, and the tracking of progress toward achieving these targets.

### **23 CFR 450.314(h) COOPERATIVELY SHARE PERFORMANCE DATA**

The MPO(s), State(s), and the providers of public transportation shall jointly agree upon and develop specific written provisions for cooperatively developing and sharing information related to transportation performance data, the selection of performance targets, the reporting of performance targets, the reporting of performance to be used in tracking progress toward attainment of critical outcomes for the region of the MPO (see § 450.306(d)), and the collection of data for the State asset management plan for the NHS for each of the following circumstances:

- (i) When one MPO serves an urbanized area,
  - (ii) When more than one MPO serves an urbanized area, and
  - (iii) When an urbanized area that has been designated as a TMA overlaps into an adjacent MPA serving an urbanized area that is not a TMA.
- (2) These provisions shall be documented either:
- (i) As part of the metropolitan planning agreements required under (a), (e), and (g) of this section, or
  - (ii) Documented in some other means outside of the metropolitan planning agreements as determined cooperatively by the MPO(s), State(s), and providers of public transportation.



## **PROJECT PRIORITY CRITERIA AND SELECTION**

In 2014 PVPC with the assistance of the JTC completed a comprehensive update to the TEC for the PVMPO. The purpose of the update was to bring the TEC up to the current standards set forth by MAP -21. In 2018 and 2020 PVPC staff with the assistance of the JTC reviewed the effectiveness of the TEC to ensure the criteria was working as anticipated and met the requirements of the FAST act. In the Fall on 2021 slight modifications where made to the TEC to ensure all criteria was relevant. Those changes have been update in the TEC Scoring Summary found on the following page. All projects included in the TIP have been evaluated and assigned a priority value or rating. This process is used as a management tool to identify projects of regional priority and program them accordingly in the TIP.



## TEC SCORING SUMMARY

System Preservation, Modernization and Efficiency	Livability	Mobility	Smart Growth and Economic Development	Safety and Security	Environment and Climate Change	Quality of Life	Environmental Justice and Title VI
Improves Substandard Pavement	Design is consistent with Complete Streets policies	Improves efficiency, reliability and attractiveness of public transit	Encourages development around existing infrastructure	Reduces number and severity of collisions	Preserves floodplains and wetlands	Enhances or preserves greenways and blueways	Reduces and limits disproportionate impacts on an EJ community
8	3	4	2	7	1	1	0.5
Improves Intersection Operations	Provides multi-modal access to a downtown, village center, or employment center	Improves existing peak hour LOS	Prioritizes transportation investments that support land use and economic development goals	Promotes safe and accessible pedestrian and bike environment	Promotes green infrastructure and low impact development to reduce stormwater impacts	Improves access to parks, open lands and open space	Reduces and limits disproportionate impacts on Title VI community
6	2	6	1	5	2	1	0.5
In a Congestion Management Process Area	Reduces auto-dependency	Reduces traffic congestion	Provides services to a TOD, TND or cluster development district	Improves emergency response	Reduced impervious surfaces	Improves access to jobs	Improves transit for EJ populations
5	2	7	0.5	4	0.5	2	1
	Project serves a targeted development site		Supports mixed-use downtowns and village centers		Protects or enhances environmental assets	Preserves historical and cultural resources	Improves transit for Title VI populations
	2		0.5		0.5	0.5	1
	Completes off-road bike and ped network		Improves Intermodal Connections		Supports Brownfield redevelopment	Preserves prime agricultural land	Creates an EJ Burden
	3		4		0.5	0.5	-5
			Reduces congestion on freight routes		Improves air quality	Provides safe and reliable access to education	Creates an Title VI Burden
			2		1	0.5	-5
					Reduces CO2 emissions	Supports designated scenic byways	
					1	0.5	
					Promotes mode shift	Implements ITS Strategies	
					1	2	
					Improves fish and wildlife passage	Improves Network Wayfinding	
					1	1	
					Supports Green Communities	Access to Sensitive Receptors	
					0.5	1	
					Improves storm resilience	Length of Time Project has been in queue for TIP funding	
					3	1	
<b>Maximum Score</b>							
19	12	17	10	16	12	11	3



## **PROJECT INITATION**

In the fall of 2017 MassDOT rolled out their new project development tool, the MassDOT Project Intake Tool (MaPIT). MaPIT has integrated the entire project initiation process into an online portal which both streamlines and modernizes the project development process. The steps listed below are the same for the project development process; however these steps are now completed online instead of on paper.

The Project Needs Form (PNF) is the first document completed at the start of the project development process. The PNF provides sufficient material to understand the transportation need(s), and results in one of the following three outcomes:

- Verification of the problem, need, or opportunity to enable it to move forward into design;
- Determination of the level of further project planning warranted; or,
- Dismissal of a project from further consideration.

The next step in the project development process involves summarizing the findings and direction defined in the Project Scope (PS) used by the Project Review Committee (PRC) and the MPO for project review and evaluation. The PS will include the following information to be documented by the proponent:

- Project Type and Description, including locus map
- Summary of Project Planning Process
- Preliminary identification of the Project Category for review and programming purposes
- Definition of the proposed project management responsibility
- Definition of an interagency (including local boards) coordination plan
- Definition of a public outreach plan for the design process
- Project Need Form or Project Planning Report as an attachment
- Transportation Evaluation Criteria as an attachment

The project intake tool (MaPIT) can be found at <http://massdot.maps.arcgis.com/home/index.html>

## **PROJECT SELECTION AND PROGRAMMING**

The project priority ratings were applied in conjunction with a project's anticipated advertisement schedule. The funding targets provided by the MassDOT to develop the five-year program of the TIP were applied for each year in order to develop this fiscally constrained document. A project was not considered for scheduling in a year earlier than its anticipated schedule regardless of the priority rating. For projects that are expected to be ready to go in the first year of the TIP the top priority projects for that year were funded under the federal aid categories, since these funds are most secure. Once the federal aid funds were completely programmed, non-federal aid funds were programmed to priority projects. This initial assignment procedure was applied to each year of the TIP and is subject to change as the TIP is developed and refined by members of the MPO and the JTC.



## AMENDMENT/ADJUSTMENT OF THE TIP

Amendment means a revision to a long-range statewide or metropolitan transportation plan, TIP, or STIP that involves a major change to a project included in a metropolitan transportation plan, TIP, or STIP, including the addition or deletion of a project or a major change in project cost (\$500,000 for projects under \$5,000,000 and 10% for projects exceeding \$5,000,000), project/project phase initiation dates, or a major change in design concept or design scope (e.g., changing project termini or the number of through traffic lanes or changing the number of stations in the case of fixed guideway transit projects). Changes to projects that are included only for illustrative purposes do not require an amendment. An amendment is a revision that requires public review and comment and a re-demonstration of fiscal constraint. If an amendment involves “non-exempt” projects in nonattainment and maintenance areas, a conformity determination is required.

Amendments require formal MPO action, and must follow the requirements outlined in the Pioneer Valley Public Participation Plan (PPP). Additional information regarding the PPP can be found at <http://www.pvpc.org/content/pioneer-valley-public-participation-plan>

Program adjustments can be conducted without formal MPO action in order to minimize constraints on programming projects. Minor adjustments could include such actions as moving projects between Year 1 and Year 2, and minor fluctuations in project description, costs and funding source. This action can be accomplished through an agreed upon administrative action.

### Summary of TIP Revisions

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	The “increase” or “decrease” in cost is relative to the Total Federal Participating Cost (TFPC) of a project.
Project Description Change	Change in the description of the project as it is listed in the STIP.	Adjustment	Project description changes are treated as Adjustments 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	Major scope change will require the initiation of a new project through MaPIT, and review/approval by PRC.



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	Project additions are treated as amendments if the project 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 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 "Additional Information" column of the STIP not covered in any other item listed here (e.g. earmark details, project proponent, etc.)	Adjustment	Additional Information including: Total cost, AC, Year-of-expenditure, TEC scores - can be updated without formal approval of the MPO.
Change in Year of Programming	Moving a currently programmed project earlier or later than an originally programmed year.	Adjustment	Changes to a project delivery schedule (advancement or delay) can be handled as an adjustment when time limitations prevent the revision from being released for public review. Staff will make every effort to handle this type of revision as an amendment when possible.

The MassDOT process used to make amendment/adjustment to the STIP can be found [here](#).

## DESCRIPTION OF FUNDING SOURCES

**Interstate Maintenance (IM)** - Resurfacing, restoration and rehabilitation are eligible activities for maintaining Interstate facilities. Reconstruction is also eligible if it does not add capacity. However, high-occupancy-vehicle (HOV) and auxiliary lanes can be added. Funding: federal - 90 %, state - 10 %.

**Surface Transportation Block Grant Program (STBG)** - This program formerly the Surface Transportation Program (STP) is a flexible funding program that can be used for projects that preserve and improve the conditions and performance on any Federal-aid highway, bridge and tunnel projects on any public road, pedestrian and bicycle infrastructure, and transit capital projects, including intercity bus terminals. Funding: federal - 80%, state - 20%.



**Transportation Alternatives Program (TAP)** - The TAP provides funding for programs and projects defined as transportation alternatives, including on- and off-road pedestrian and bicycle facilities, infrastructure projects for improving non-driver access to public transportation and enhanced mobility, community improvement activities, and environmental mitigation; recreational trail program projects; safe routes to school projects; and projects for planning, designing, or constructing boulevards and other roadways largely in the right-of-way of former Interstate System routes or other divided highways. Funding: federal - 80%, state - 20%

**Congestion Mitigation and Air Quality Improvement Program (CMAQ)** - These funds are directed towards transportation projects and programs which reduce transportation-related emissions. These funds are to assist areas designated as nonattainment and maintenance under the Clean Air Act Amendments of 1990. These projects will contribute to meeting the attainment of National Ambient Air Quality Standards (NAAQS). Funding: federal - 80%, state - 20%.

**Highway Safety Improvement Program (HSIP)**—The HSIP requires a data-driven, strategic approach to improving highway safety on all public roads that focuses on performance. The goal of HSIP is to achieve a significant reduction in traffic fatalities and serious injuries on all public roads, including non-State-owned public roads and roads on tribal lands. Funding: federal - 80%, state - 20%. HSIP federal – 90%, state – 10%.

**Bridges (BR)** - Funds the replacement or repair of structurally deficient or unsafe bridges in urban and rural areas. All bridges, both on and off the federal aid roadway system are eligible for funding. Funding: federal - 80%, state - 20%.

**National Highway Performance Program (NHPP)** - The NHPP provides support for the condition and performance of the National Highway System (NHS), for the construction of new facilities on the NHS, and to ensure that investments of Federal-aid funds in highway construction are directed to support progress toward the achievement of performance targets established in a State's asset management plan for the NHS. NHPP projects must be on an eligible facility and support progress toward achievement of national performance goals for improving infrastructure condition, safety, mobility, or freight movement on the NHS, and be consistent with Metropolitan and Statewide planning requirements. Funding: federal - 80%, state - 20%.

**National Highway Freight Program (NHFP)** - The purpose, among other goals, of the National Highway Freight Program (NHFP) is to improve efficient movement of freight on the National Highway Freight Network (NHFN). Funding: federal - 80%, state - 20%.

**High Priority Projects (HPP)** High Priority Projects are congressionally earmarked projects that have been deemed as a high priority for the state where the project is located. Funding: federal - 80%, state – 20%

**Section 115 Funds** Included in the Transportation bill as congressional earmarks, each year the earmarks are given a designated funding category. In FFY2005 the funding designation for these projects was Section 115 Funds. Funding: federal – 100%, state – 0%

**Section 117 Funds** Included in the Transportation bill as congressional earmarks, each year the earmarks are given a designated funding category. In FFY2006 the funding designation for these projects was Section 117 Funds. Funding: federal – 100%, state – 0%

**Section 129 Funds** Congressional Earmarks for FFY 2008. Funding: federal – 100%, state – 0%

**Section 125 Funds** Congressional Earmarks for FFY 2009. Funding: federal – 100%, state – 0%



**Non-Federal Aid (NFA)** - This funding category contains all those projects not receiving federal funds. Various categories of state funding are included in this group including bikeways, State Aid (Chapter 90), and highway construction and maintenance (Chapter 497). This category is included in the TIP for informational purposes only. Funding: federal - 0 %, state - 100 %.

**Section 5339 Bus and Bus Facilities**– (5309 SAFETEA-LU) Program provides capital funding to replace, rehabilitate, and purchases buses and related equipment and to construct bus related facilities. Funding: Federal - 80%, State - 20%

**Section 5307 Capital**- This program provides grants to Urbanized Areas<sup>1</sup> (UZA) for public transportation capital, planning, job access and reverse commute projects, as well as operating expenses in certain circumstances. These funds constitute a core investment in the enhancement and revitalization of public transportation systems in the nation's urbanized areas, which depend on public transportation to improve mobility and reduce congestion. Federal Share is 80% for Capital Assistance, 50% for Operating Assistance, and 80% for Americans with Disabilities Act (ADA) no-fixed-route paratransit service, using up to 10% of a recipient's apportionment.

**Section 5310** - Section 10 pertains to transportation facilities meeting special needs of the elderly and disabled. Funds allocated under Section 16(b) (2) provide private non-profit corporations and associations with grants and loans to improve the mobility of the elderly and disabled. In Massachusetts, 16(b) (2) funds are administered at the state level by the MASSDOT. These funds typically are used for the purchase of capital items, including lift-equipped vans. Mobility Assistance Program (MAP) funds are intended for use by public agencies, such as municipal councils on aging and the Pioneer Valley Transit Authority (PVTa) to provide van service to elderly and/or disabled persons.

**Section 5311** - These funds are made available exclusively for public transportation projects outside the urbanized areas. Both capital and operating expenses are eligible.

## **TRANSPORTATION SYSTEM OPERATING AND MAINTENANCE COSTS**

The FFY 2022- 2026 TIP is consistent with the Regional Transportation Plan (RTP) for the Pioneer Valley Region. Tables 5, 6 and 7 presents the estimates outlined in the RTP of annual expenditures associated with operating and maintaining the transportation system. These estimates represent past expenditures and do not reflect costs associated with maintaining a constant level of system performance.

**Table 8 Transportation Operating and Maintenance Expenditures**

<b>Year</b>	<b>Target</b>	<b>Other Statewide</b>	<b>Non Interstate</b>	<b>NFA Bridge</b>	<b>Interstate</b>	<b>Total All Funding</b>
	<b>10.8099%</b>	<b>10.8099%</b>	<b>13.0542%</b>	<b>10.8099%</b>	<b>8.4544%</b>	
<b>2020- 2024</b>	\$134,136,806	\$121,332,223	\$47,144,718	\$54,049,500	\$13,381,407	<b>\$370,044,654</b>
<b>2025- 2029</b>	\$153,789,263	\$136,359,264	\$56,120,172	\$55,238,590	\$16,897,096	<b>\$418,404,385</b>
<b>2030- 2034</b>	\$188,833,297	\$167,431,514	\$68,908,303	\$56,453,840	\$20,747,444	<b>\$502,374,398</b>
<b>2035- 2039</b>	\$209,293,530	\$185,572,848	\$76,374,571	\$57,695,820	\$22,995,446	<b>\$551,932,215</b>



<b>2040</b>	\$44,516,326	\$39,470,984	\$16,244,722	\$11,793,026	\$4,891,087	<b>\$116,916,145</b>
<b>Totals</b>	<b>\$730,569,222</b>	<b>\$650,166,833</b>	<b>\$264,792,486</b>	<b>\$235,230,776</b>	<b>\$78,912,480</b>	<b>\$1,959,671,797</b>

Source: Regional Transportation Plan, updated 2020

**Table 9 Transit Operating Expenditures**

<b>Year</b>	<b>5307</b>	<b>5310</b>	<b>5339</b>	<b>RTACAP</b>	<b>Total</b>
2020-2024	\$68,180,385	\$2,933,482	\$7,224,890	\$36,688,650	\$115,027,407
2025-2029	\$75,572,320	\$3,253,115	\$8,718,575	\$40,357,515	\$127,901,525
2030-2034	\$83,765,669	\$3,607,577	\$10,521,068	\$44,393,267	\$142,287,581
2035-2039	\$92,847,318	\$4,000,659	\$12,696,208	\$48,832,593	\$158,376,778
2040	\$19,744,098	\$850,992	\$2,838,307	\$10,743,170	\$34,176,567
<b>Total</b>	<b>\$340,109,790</b>	<b>\$14,645,825</b>	<b>\$41,999,048</b>	<b>\$181,015,195</b>	<b>\$577,769,858</b>

**Table 10 Transit Maintenance Expenditures**

	<b>2020-2024</b>	<b>2025-2029</b>	<b>2030-2034</b>	<b>2035-2039</b>	<b>2040</b>	<b>Grand Total</b>
Local Assessments	\$49,372,389	\$55,860,326	\$63,200,831	\$71,505,940	\$15,445,284	\$255,384,770
5307 Federal Urbanized Formula	\$58,635,131	\$64,992,195	\$72,038,475	\$79,848,693	\$16,979,925	\$292,494,419
5339 Federal	\$7,224,890	\$8,718,575	\$10,521,068	\$12,696,208	\$2,838,307	\$41,999,048
5310 Federal Elderly and Disabled	\$2,933,482	\$3,253,115	\$3,607,577	\$4,000,659	\$850,992	\$14,645,825
Fare box	\$45,399,763	\$50,125,006	\$55,342,057	\$61,102,103	\$13,198,054	\$225,166,983
Advertising, other revenue	\$3,255,020	\$3,593,805	\$3,967,851	\$4,380,829	\$946,259	\$16,143,764
<b>Operating Funds for Programming in the RTP</b>	<b>\$166,820,675</b>	<b>\$186,543,022</b>	<b>\$208,677,859</b>	<b>\$233,534,432</b>	<b>\$50,258,821</b>	<b>\$845,834,809</b>

Source: Regional Transportation Plan, updated 2020



## II. PUBLIC PARTICIPATION SUMMARY AND CHANGES

In accordance with 23 CFR 450.316(a)) The MPO shall develop and use a documented participation plan that defines a process for providing individuals, affected public agencies, representatives of public transportation employees, public ports, freight shippers, providers of freight transportation services, private providers of transportation (including intercity bus operators, employer-based commuting programs, such as carpool program, vanpool program, transit benefit program, parking cash-out program, shuttle program, or telework program), representatives of users of public transportation, representatives of users of pedestrian walkways and bicycle transportation facilities, representatives of the disabled, and other interested parties with reasonable opportunities to be involved in the metropolitan transportation planning process.

And 23 CFR 450.316(b) In developing metropolitan transportation plans and TIPs, the MPO should consult with agencies and officials responsible for other planning activities within the MPA that are affected by transportation (including State and local planned growth, economic development, tourism, natural disaster risk reduction, environmental protection, airport operations, or freight movements) or coordinate its planning process (to the maximum extent practicable) with such planning activities. In addition, the MPO shall develop the metropolitan transportation plans and TIPs with due consideration of other related planning activities within the metropolitan area, and the process shall provide for the design and delivery of transportation services within the area that are provided by:

The DRAFT FFY 2023 - 2027 TIP underwent a public review and comment period consistent with the Pioneer Valley Metropolitan Planning Organizations Public Participation Process. This began April 27, 2022 and continued until May 17, 2022. During this time, comments were received from (insert list of comments).A public hearing was held on May 11, 2022 as part of the JTC meeting. Below is a summary of the comments received during the public review and comment period.



### **Table 11 Comments Received During Public Review**

In addition to the above changes, the Pioneer Valley Transit Authority requested that the following be included: The Pioneer Valley Transit Authority, the FTA Section 5307(c) applicant, has consulted with the Pioneer Valley Planning Commission and concurs that the TIP satisfies the public hearing requirements that pertain to the development of the Program of Projects for regular Section 5307, Urbanized Area Formula Program, grant application including the provision for public notice and the time established for public review and comment.

For FTA projects that are not routine; i.e. Section 5307 applications that required environmental assessment or an environmental impact statement, the public involvement provided herein for TIP review is not sufficient. Additional public involvement will be required by FTA prior to grant approval, as presented in the joint FHWA/FTR environmental regulations, 23 CFR-Part 771.

The Federal Aid (FA) and Non-Federal Aid (NFA) elements were separated into two components. The FA component of the TIP was endorsed by the MPO and the NFA component is included in the main body of the TIP, however, is not subject to federal planning rules.

### **INSERT TABLE OF COMMENTS RECEIVED DURING PUBLIC REVIEW**



### III. FEDERAL COMPONENT



## **PIONEER VALLEY MPO ENDORSEMENT**



ENDORSMENT TO BE ADDED



## **CERTIFICATION OF THE 3-C PLANNING PROCESS**

In accordance with the Metropolitan Planning Final Rule, the Pioneer Valley MPO has completed its review and hereby certifies that the conduct of the 3-C (Continuing, Cooperative and Comprehensive) Transportation Planning Process complies with the requirements of CFR 450.334 and includes activities to support the development and implementation of this TIP, the Regional Transportation Plan, and subsequent project development activities, as necessary and to the degree appropriate.

To reinforce this self-certification, the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) conducted a certification review of the Pioneer Valley MPO planning process in 2019. The two day on-site review was preceded by a desk audit of the major planning documents completed as part of the planning process. Based on the certification review, the transportation planning process for the Pioneer Valley region was found to substantially meet the requirements of 23 CFR 450 Subpart C and 49 CFR 613.



## PIONEER VALLEY MPO ENDORSEMENT SHEET

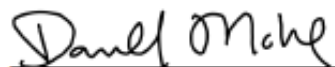
The signatures below signify that all members of the Pioneer Valley Region's Transportation Planning Organization, or their designees, have met on May 25, 2021 and discussed the following item for endorsement:

### CERTIFICATION OF THE 3C PLANNING PROCESS

Concurrent with the submittal of the proposed TIP to the FHWA and the FTA, the MPO 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 U.S.C. 134, 49 U.S.C. 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 for applicable State Implementation Plan projects;
3. Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d-1) and 49 CFR part 21;
4. 49 U.S.C. 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. 114-94) and 49 CFR part 26 regarding the involvement of disadvantaged business enterprises in USDOT 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 US DOT and of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) and 49 CFR parts 27, 37, and 38;
8. The Older Americans Act, as amended (42 U.S.C. 6101), prohibiting discrimination on the basis of age in programs or activities receiving federal financial assistance;
9. Section 324 of title 23 U.S.C. regarding the prohibition of discrimination based on gender;
10. Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794) and 49 CFR part 27 regarding discrimination against individuals with disabilities;
11. Anti-lobbying restrictions found in 49 USC 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.

May 25, 2021



Jamey Tesler, Acting Secretary and Chief Executive Officer  
Massachusetts Department of Transportation  
Chair, Pioneer Valley MPO



## **310 CMR 60.05: GLOBAL WARMING SOLUTIONS ACT REQUIREMENTS - ENDORSEMENT**

### **PIONEER VALLEY MPO ENDORSEMENT SHEET**

The signatures below signify that all members of the Pioneer Valley Region's Metropolitan Planning Organization, or their designees, have met on May 26, 2020 and discussed the following item for endorsement:

This will certify that the Long-Range Transportation Plan and Air Quality Conformity Determination for The Pioneer Valley Region's MPO is in compliance with all applicable requirements in the State Regulation 310 CMR 60.05: Global Warming Solutions Act Requirements for the Transportation Sector and the Massachusetts Department of Transportation. The regulation requires the Metropolitan Planning Organization (MPO) to:

1. 310 CMR 60.05, 5(a)(1): Evaluate and track the GHG emissions and impacts of RTPs and TIPs;
2. 310 CMR 60.05, 5(a)(2): In consultation with MassDOT, develop and utilize procedures to prioritize and select projects in RTPs, TIPs, and STIPs based on factors that include GHG emissions and impacts;
3. 310 CMR 60.05, 5(a)(3): Quantify net GHG emissions and impacts resulting from the projects in RTPs and TIPs and have made efforts to minimize GHG emissions and impacts;
4. 310 CMR 60.05, 5(a)(4): Determine in consultation with the RPA that the appropriate planning assumptions used for 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 RTPs and TIPs;
6. 310 CMR 60.05, 8(a)(2)(b): Ensure that RPAs are using appropriate planning assumptions;
7. 310 CMR 60.05, 8(a)(2)(c): Perform regional GHG emissions analysis of RTPs and TIPs;
8. 310 CMR 60.05, 8(a)(2)(d): Calculate GHG emissions for RTPs and TIPs;
9. 310 CMR 60.05, 8(a)(2)(e): Develop public consultation procedures for GHG reporting and related GWSA requirements consistent with current and approved regional public participation plans;
10. 310 CMR 60.05, 8(c): Prior to making final endorsements on the RTPs, TIPs, STIPs, and projects included in these plans, MassDOT and the MPOs shall include the GHG Assessment and information on related GWSA activities in RTPs, TIPs, and STIPs and provide an opportunity for public review and comment on the RTPs, TIPs, and STIPs.
11. 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 RTPs, TIPs or projects within 30 days of endorsement to the Department for review of the GHG assessment.



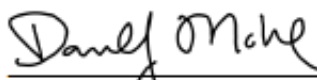
## PIONEER VALLEY MPO ENDORSEMENT SHEET

The signatures below signify that all members of the Pioneer Valley Region's Transportation Planning Organization, or their designees, have met on May 25, 2021 and discussed the following item for endorsement:

This will certify that the Long-Range Transportation Plan and Air Quality Conformity Determination for The Pioneer Valley Region's MPO is in compliance with all applicable requirements in the State Regulation 310 CMR 60.05: Global Warming Solutions Act Requirements for the Transportation Sector and the Massachusetts Department of Transportation. The regulation requires the Metropolitan Planning Organization (MPO) to:

1. 310 CMR 60.05, 5(a)(1): Evaluate and track the GHG emissions and impacts of RTPs and TIPs;
2. 310 CMR 60.05, 5(a)(2): In consultation with MassDOT, develop and utilize procedures to prioritize and select projects in RTPs, TIPs, and STIPs based on factors that include GHG emissions and impacts;
3. 310 CMR 60.05, 5(a)(3): Quantify net GHG emissions and impacts resulting from the projects in RTPs and TIPs and have made efforts to minimize GHG emissions and impacts;
4. 310 CMR 60.05, 5(a)(4): Determine in consultation with the RPA that the appropriate planning assumptions used for 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 RTPs and TIPs;
6. 310 CMR 60.05, 8(a)(2)(b): Ensure that RPAs are using appropriate planning assumptions;
7. 310 CMR 60.05, 8(a)(2)(c): Perform regional GHG emissions analysis of RTPs and TIPs;
8. 310 CMR 60.05, 8(a)(2)(d): Calculate GHG emissions for RTPs and TIPs;
9. 310 CMR 60.05, 8(a)(2)(e): Develop public consultation procedures for GHG reporting and related GWSA requirements consistent with current and approved regional public participation plans;
10. 310 CMR 60.05, 8(c): Prior to making final endorsements on the RTPs, TIPs, STIPs, and projects included in these plans, MassDOT and the MPOs shall include the GHG Assessment and information on related GWSA activities in RTPs, TIPs, and STIPs and provide an opportunity for public review and comment on the RTPs, TIPs, and STIPs.
11. 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 RTPs, TIPs or projects within 30 days of endorsement to the Department for review of the GHG assessment.

May 25, 2021



Jamey Tesler, Acting Secretary and Chief Executive Officer  
Massachusetts Department of Transportation  
Chair, Pioneer Valley MPO



## FUNDING INFORMATION

### FEDERAL AID TARGETS

The MassDOT provided the revised PVPC federal aid highway funding targets for the region On January 27, 2022. The targets are provided for FFYs 2023 through 2027 and represent both the federal aid portion and respective state match. (See Appendix A for additional information).

During the development of the TIP PVPC staff worked with MassDOT, PVTA, Municipalities with active projects, and project designers to develop current year project cost estimates and design status. Once the draft TIP was programmed, Highway projects funded with regional target funds are inflated four percent per year starting in FFY2024 in order to reflect year of expenditure (YOE).

Federal financial resources for transit are projected using appropriated amounts provided by the FTA for the funding categories of Sections 5307 and 5311. Section 5309 funds are based on estimates of what will be reasonably available. Due to the discretionary nature of these categories, project line items are maintained in the fourth year of the TIP until an actual grant award is tendered. Section 5310 is programmed through the state and is awarded on a discretionary basis. Projections are based on past experience and the funding level provided by the State.

### FEDERAL AID FINANCIAL CONSTRAINT

The federal aid element of the TIP is financially constrained according to the definition in Federal Register 23 CFR Part 450.324. The federal aid projects programmed for this region reasonably meet the federal aid funding targets provided for the region. Only projects for which funds can reasonably be expected have been included. Table 9 (highway) and Table 10 (transit) shows both these target amounts and the amounts programmed for highway and transit projects during fiscal years 2023 – 2027, target funds and programmed amounts represent year of expenditure. Projects that are not charged against the funding targets are not presented in the tables. These projects include: Statewide items; and special funding projects.

**Table 12 Federal Highway Financial Plan**

	2023	2024	2025	2026	2027	GRAND TOTAL
<b>Total Target Funds</b>	\$32,442,273	\$32,869,221	\$32,310,845	\$31,520,356	\$33,220,988	<b>\$162,363,683</b>
<b>Total of Programmed</b>	<b>\$32,336,534</b>	<b>\$32,183,914</b>	<b>\$28,640,169</b>	<b>\$30,625,645</b>	<b>\$31,480,980</b>	<b>\$155,267,242</b>
<b>Programmed STBG</b>	\$19,927,320	\$30,683,914	\$28,640,169	\$30,625,645	\$31,480,980	<b>\$141,358,028</b>
<b>Programmed HSIP</b>	\$1,711,913	\$1,000,000	\$0	\$0	\$0	<b>\$2,711,913</b>
<b>Programmed CMAQ</b>	\$10,197,063	\$0	\$0	\$0	\$0	<b>\$10,197,063</b>
<b>Programmed TAP</b>	\$500,238	\$500,000	\$0	\$0	\$0	<b>\$1,000,238</b>
<b>Difference</b>	<b>\$105,739</b>	<b>\$685,307</b>	<b>\$3,670,676</b>	<b>\$894,711</b>	<b>\$1,740,008</b>	<b>\$7,096,441</b>

The funding targets were programmed to projects according to project priority rating. Projects were programmed slightly beyond the program target with the understanding that the targets are not earmarks and program levels are expected to fluctuate.

The TIP reflects an emphasis on the maintenance and operation of the current transportation system with the ability to provide capital improvements. The federal aid program for each year consists of almost entirely of maintenance projects for the present transportation system.



The transit program outlined in Table 10 represents both apportioned items as well as discretionary items. The total programmed amount represents both the federal, state and local contributions.

**Table 13 Federal Transit Financial Plan**

<b>Transit</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>GRAND TOTAL</b>
<b>Transit Capital Investment</b>	\$31,524,973	\$32,359,989	\$30,293,622	\$29,086,155	\$32,581,187	<b>\$155,845,926</b>
5307	\$16,708,082	\$19,598,190	\$20,437,515	\$20,445,121	\$21,562,322	<b>\$98,751,230</b>
5309						<b>\$0</b>
5310						<b>\$0</b>
5311						<b>\$0</b>
5337						<b>\$0</b>
5339	\$1,286,222	\$1,495,607	\$1,527,727	\$1,568,780	\$1,602,082	<b>\$7,480,418</b>
5320						<b>\$0</b>
Other Federal						<b>\$0</b>
Other Non Federal	\$8,287,102	\$5,793,727	\$3,943,038	\$2,508,768	\$4,560,676	<b>\$25,093,311</b>
State Bond Cap	\$5,243,567	\$5,472,465	\$4,385,342	\$4,563,486	\$4,856,107	<b>\$24,520,967</b>
Difference	\$0	\$0	\$0	\$0	\$0	<b>\$0</b>

The transit projects programmed focus on maintaining and operating the present system.

#### **THE GEOGRAPHIC DISTRIBUTION OF FEDERAL TARGET FUNDS IN THE PIONEER VALLEY METROPOLITAN PLANNING REGION – 2022 TO 2026**

PVPC staff reviewed project programming for the TIP in order to show the geographic distribution of Federal Target funds in the Pioneer Valley Metropolitan Planning Organization (MPO) region. PVPC staff reviewed year 1 section 1A (Federal Aid Target Projects) for the next 5 years (2023 through 2027) TIP. Table 11 provides the results of this analysis broken out by MPO sub-region while Table 12 provides the results broken out by municipality. Please see page 3 for MPO region map and additional information regarding the composition of the MPO.

As can be seen in Tables 11 and 12 the PVMPO has successfully programmed 20 projects in 15 communities over the next 5 years. The total funding commitment for these projects is \$154.9 million. The average investment per project is \$7.7 million (increase from \$6.4 million in FFY 2021) or 4 projects per year on average (equal to the average of 4 in FFY 2022).



**Table 14 Projects Proposed to be Completed in the 2022-2026 TIP by Sub-Region**

	2023	2024	2025	2026	2027	Total	Total Funds	% Funds	% Population	Average Median Income	Average Median Below Poverty	Population
Sub Region 1	2.5	1	1	1		5.5	\$31,316,685	20%	40%	\$39,186	24.37%	248,238
Sub Region 2	1.5				1	2.5	\$28,907,096	19%	17%	\$64,795	8.53%	107,425
Sub Region 3	1		1	1		3	\$23,029,423	15%	17%	\$61,037	14.68%	105,185
Sub Region 4	1	1	1		2	5	\$31,552,264	20%	21%	\$73,499	6.84%	132,675
Sub Region 5	1	1		1	1	4	\$40,062,592	26%	4%	\$68,342	6.52%	28,047
	7	3	3	3	4	20	\$154,868,060	100%		\$61,372	12.19%	621,570

Source: PVPC TIP

As can be seen in Table 11, sub-region 1 (40% of PV population) will see 5.5 projects worth \$31 million (20% of the available funding) over the next 5 years. Sub-region 5 which makes up 4% on the regional population is anticipated to receive 26% of the available funding over the next 5 years. This is due in large to the difficulties in bringing rural roads up to current state and federal standards. The PVMPO is committed to funding transportation improvement projects across the entire region. The community data provided in Table 12 shows the extent to which this has been proposed over the next 5 years. With the implementation of the new Transportation Evaluation Criteria (TEC) as well as other regional and state initiatives, the PVMPO is positioned to be able to continue to make decisions that will be equitable for the entire region.



**Table 15 Projects Proposed to be Completed in the 2022-2026 TIP by Municipality**

	2023	2024	2025	2026	2027	Total	Total Funds	% Funds	% Population	Median Household Income	Below Poverty Level	Population
Agawam								0%	4.6%	\$63,561	9.3%	28,705
<b>Amherst</b>								0%	6.2%	\$52,537	33.8%	38,919
Belchertown								0%	2.4%	\$74,221	7.8%	14,735
Blandford								0%	0.2%	\$72,361	5.6%	1,246
Brimfield								0%	0.6%	\$82,365	3.0%	3,708
Chester								0%	0.2%	\$65,648	9.2%	1,360
Chesterfield					1		\$6,875,223	4%	0.2%	\$63,594	7.3%	1,239
<b>Chicopee</b>				1			\$9,910,762	6%	8.9%	\$47,276	12.9%	55,717
Cummington	1						\$4,500,000	3%	0.1%	\$50,521	6.4%	867
East Longmeadow					1		\$10,043,570	6%	2.6%	\$84,173	5.1%	16,022
Easthampton								0%	2.5%	\$56,927	8.3%	15,971
Goshen								0%	0.2%	\$69,219	2.8%	1,058
Granby	1				1		\$8,210,844	5%	1.0%	\$78,261	5.8%	6,290
Granville								0%	0.3%	\$75,208	7.1%	1,612
Hadley								0%	0.8%	\$74,737	7.5%	5,271
Hampden								0%	0.8%	\$78,722	4.2%	5,179
Hatfield								0%	0.5%	\$60,033	11.1%	3,282
Holland								0%	0.4%	\$64,868	9.4%	2,495
<b>Holyoke</b>	0.5		1				\$7,435,384	5%	6.4%	\$35,550	30.1%	40,249
Huntington								0%	0.3%	\$52,275	9.8%	2,168
Longmeadow			1				\$7,641,744	5%	2.5%	\$108,835	5.3%	15,882
Ludlow								0%	3.4%	\$61,410	5.9%	21,451
Middlefield								0%	0.1%	\$78,214	5.3%	528
Monson								0%	1.4%	\$66,389	8.2%	8,722
Montgomery								0%	0.1%	\$78,333	2.0%	862
Northampton	1		1				\$16,944,651	11%	4.5%	\$58,179	14.6%	28,495
Palmer								0%	1.9%	\$51,846	10.3%	12,157
Pelham								0%	0.2%	\$88,462	5.7%	1,319
Plainfield								0%	0.1%	\$57,188	9.3%	650
Russell								0%	0.3%	\$68,750	2.1%	1,789
South Hadley				1			\$6,084,772	4%	2.8%	\$62,803	9.2%	17,740
Southampton								0%	1.0%	\$68,693	4.9%	5,984
Southwick								0%	1.5%	\$81,967	2.9%	9,634
<b>Springfield</b>	1	1					\$13,970,539	9%	24.5%	\$34,731	30.1%	153,703
Tolland								0%	0.1%	\$85,750	7.9%	483
Wales		1					\$5,656,106	4%	0.3%	\$52,500	5.3%	1,875
Ware								0%	1.6%	\$49,630	14.9%	9,844
West Springfield	1.5						\$13,504,528	9%	4.6%	\$52,806	11.0%	28,684
Westfield	1				1		\$15,402,568	10%	6.6%	\$60,845	10.9%	41,301
Westhampton								0%	0.3%	\$79,583	5.2%	1,603
Wilbraham								0%	2.3%	\$87,303	4.8%	14,477
Williamsburg				1			\$14,630,100	9%	0.4%	\$65,147	10.2%	2,466
Worthington		1					\$14,057,269	9%	0.2%	\$71,300	4.6%	1,167
Hampden County	4	2	2	2	2	12	\$58,119,063	38%	74.5%	\$50,036	17.7%	467,313
Hampshire County	2	1	1	1	2	7	\$49,797,536	32%	25.5%	\$61,460	13.9%	159,596
PVMPO Region	7	3	3	3	4	20	\$ 154,868,060	100%	100.0%	\$ 52,108	16.6%	626,909



**Bold indicates communities that have a higher probability of requiring translation of documents into a language other than English. For additional information on the Language Access Plan (LAP) please refer to Chapter 4 page 56 ([Click Here](#))**

*Source: PVPC TIP*

## **EQUITY ASSESSMENT MEASURES**

### **EQUITY ASSESSMENT STRATEGIES**

Title VI and the executive orders of Environmental Justice call for programs that quantify the benefits and burdens of the transportation investments and evaluate the impacts for different socio-economic groups. To accomplish this task PVPC worked with the JTC to establish measures of effectiveness that would reflect quantifiable transportation expenditures in the Region. These measures were used to evaluate capital expenditures in the Regional Transportation Plan and Transportation Improvement Program and to evaluate transit service. The evaluations provide a barometer of the distribution of resources and also assist decision-makers in achieving an equitable balance of in future years.

### **EQUITY DISTRIBUTION ANALYSIS**

PVPC conducted an equity assessment on the transportation planning tasks completed as part of previous UPWP's this assessment process has previously been used on the Regional TIP and identifies how regional transportation improvement projects have potential impacted defined minority and low-income block groups in the region. The following demographic map (figure 1) displays an overlay of federally funded projects from the Transportation Improvement Program (TIP) to minority and low income census block groups

2023 to 2027 TIP funding allocations were calculated for defined low income and minority populations. PVPC completed an inventory of projects included on the TIP and mapped these projects. GIS tools were used to determine the amount of transportation funds (including bridge projects) allocated to each population group and also compared these values to regional average allocations using census block group data. This analysis is also conducted the Regional Transportation Plan (RTP). PVPC is also working to conduct analysis on other Title VI protected classes. The TIP analysis is presented in Tables 13 and 14.



**Table 16 Distribution of Projects in the TIP to Low Income Populations**

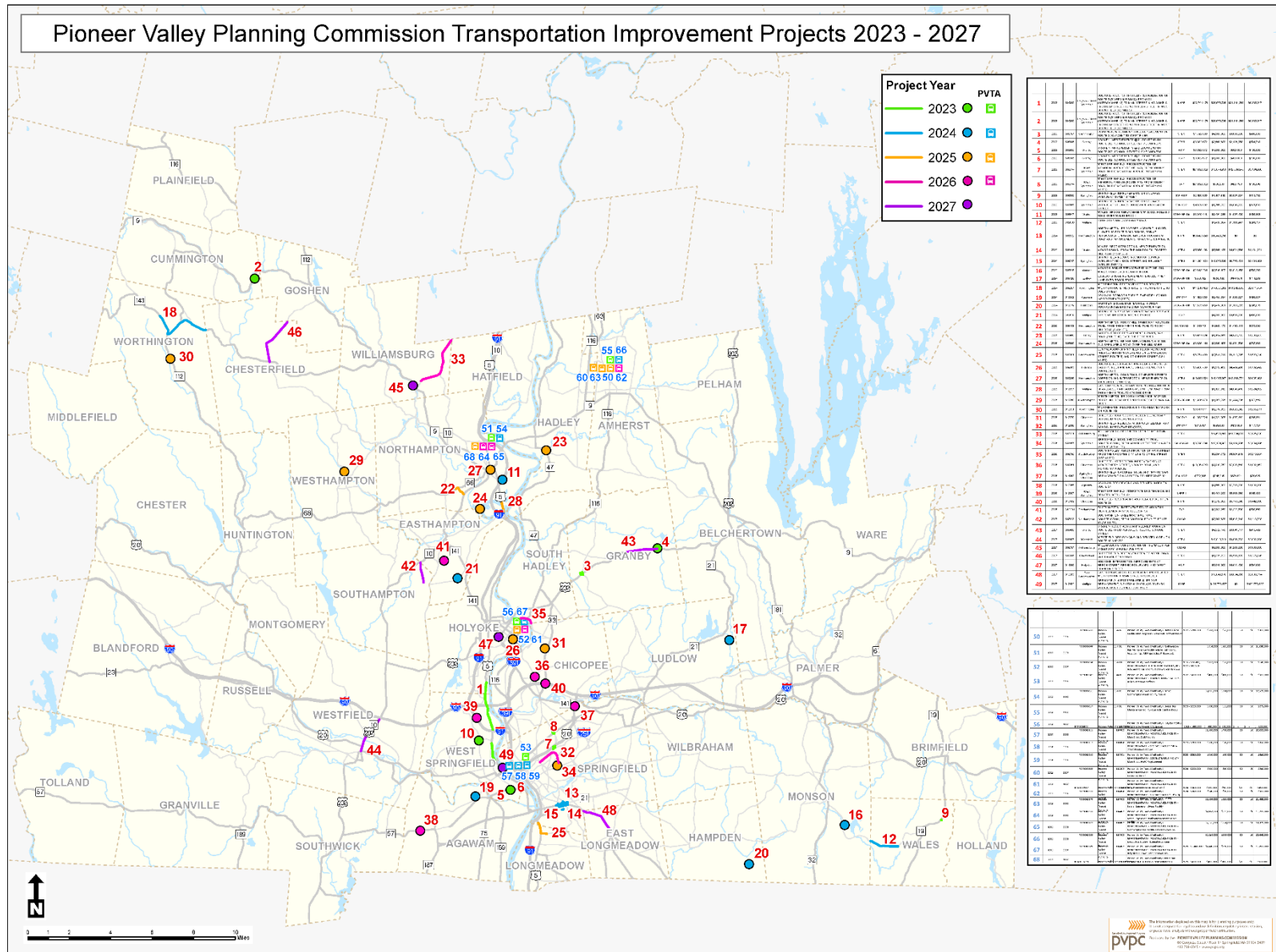
	PVPC Total	Low Income Block Groups	Other Block Groups	% PVPC Total in <u>Low Income</u> Block Groups	% PVPC Total in Other Block Groups
Transportation Analysis Zones (Block Groups)	442	158	284	35.75%	64.25%
Population	621570	207727	413843	33.42%	66.58%
Minority Population	171475	110607	60868	64.50%	35.50%
Number of Projects	49	15	34	30.61%	69.39%
Projects not Funded	\$0.00	\$0.00	\$0.00		
Projects	\$477,314,455	\$222,808,215	\$254,506,240	46.68%	53.32%
Total Project Dollars per Capita	\$768	\$1,073	\$615		

**Table 17 Distribution of Projects in the TIP to Minority Populations**

	PVPC Total	Minority Block Groups	Other Block Groups	% PVPC Total in Minority Block Groups	% PVPC Total in Other Block Groups
Transportation Analysis Zones (Block Groups)	442	163	279	36.88%	63.12%
Population	621570	212230	409340	34.14%	65.86%
Minority Population	171475	130808	40667	76.28%	23.72%
Number of Projects	49	19	30	55.56%	61.22%
Projects not Funded	0	0	0		
Projects	\$477,314,455	\$233,777,172	\$243,537,283	48.98%	51.02%
Total Project Dollars per Capita	\$458	\$969	\$595		



### Figure 1 - Projects Programmed in the TIP



A more detailed version of this map can be viewed [HERE](#)



## IV. FEDERAL AID REGIONAL PROJECT LISTINGS

The following is a complete listing of the Pioneer Valley Federally Funded Transportation Improvement Projects for Fiscal Years 2023 - 2027.

### ORGANIZATION OF PROJECT LISTINGS

Each project in the TIP contains the following information:

**MassDOT Project ID** - Project identification numbers given by the Massachusetts Highway Department.

**MassDOT Project Description** – Includes Town or city in which a project is located, and a description of work to be funded under the project.

**MassDOT District** – The MassDOT sub-Region where the project is located, for PVMPO projects will be in either District 1 or District 2.

**Funding Source** - The funding category from which funding is expected.

**Total Programmed Funds** - The total funding for the project under the specified funding source.

**Federal Funds** - The amount of federal dollars allocated for project construction.

**Non-Federal Funds** - The amount of non-federal dollars allocated to the project.

**Additional Information** – Provides additional project information including design status, Transportation Evaluation Criteria (TEC) Score, and YOE Cost.

**Regional Target** - The total combined Federal and State dollar amount provided for project funding.

**TEC Score** – This score is based on criteria developed rank the regional significance of each eligible TIP project



**Table 18 Summary of Programmed Projects Section 1 A Federal Aid Target Projects**

Project in table 15 are listed to provide a quick summary of those projects the MPO selected to be funded with Regional Target Funds. The complete listing of approved projects funded in FFY 2023 – 2027 can be found in Tables 16-20.

FFY Year	MassDOT Project ID	Municipality	MassDOT Project Description	District	Funding Source	Total Programmed Funds	Federal Funds	Non-Federal Funds
2023	606797	Cummington	CUMMINGTON- RETAINING WALL REPLACEMENT ON ROUTE 9 ADJACENT TO SWIFT RIVER	1	STBG	\$4,504,910	\$3,600,000	\$900,000
2023	606895	Granby	GRANBY- IMPROVEMENTS AT 2 LOCATIONS ON ROUTE 202: SCHOOL STREET & FIVE CORNERS	2	HSIP	\$1,711,913	\$900,000	\$100,000
2023	606895	Granby	GRANBY- IMPROVEMENTS AT 2 LOCATIONS ON ROUTE 202: SCHOOL STREET & FIVE CORNERS	2	STBG	\$2,841,046	\$2,126,958	\$531,740
2023	608374	West Springfield	WEST SPRINGFIELD- RECONSTRUCTION OF MEMORIAL AVENUE (ROUTE 147), FROM COLONY ROAD TO THE MEMORIAL AVENUE ROTARY (1.4 MILES)	2	STBG	\$11,081,364	\$12,539,945	\$3,134,986
2023	608374	West Springfield	WEST SPRINGFIELD- RECONSTRUCTION OF MEMORIAL AVENUE (ROUTE 147), FROM COLONY ROAD TO THE MEMORIAL AVENUE ROTARY (1.4 MILES)	2	TAP	\$500,238	\$400,190	\$100,048
2023	S12686	Multiple	Valley Bike Share Expansion (Phase 3)	2	STBG	\$1,458,684	\$1,166,947	\$291,737
		Multiple	PVTA Bus Purchases and Training		CMAQ	\$1,500,000	\$1,500,000	\$1,200,000
	608073	Westfield	West River Levee Multi-Use Path		CMAQ	\$5,392,527	\$5,392,527	\$4,314,022
	604209	Holyoke / West Springfield	HOLYOKE- WEST SPRINGFIELD- REHABILITATION OF ROUTE 5 (RIVERDALE ROAD), FROM I-91 (INTERCHANGE 13) TO MAIN STREET IN HOLYOKE & FROM ELM STREET TO NORTH ELM STREET IN WEST SPRINGFIELD (3.2 MILES)		CMAQ	\$3,345,852	\$3,345,852	\$2,676,682
<b>7 Projects</b>						<b>\$32,336,534</b>	<b>\$30,972,420</b>	<b>\$13,249,213</b>



**Table 19 Summary of Programmed Projects Section 1 A Federal Aid Target Projects (Continued)**

FFY Year	MassDOT Project ID	Municipality	MassDOT Project Description	District	Funding Source	Total Programmed Funds	Federal Funds	Non-Federal Funds
2024	608163	Wales	WALES- RECONSTRUCTION & IMPROVEMENTS ON MONSON ROAD, FROM THE MONSON T.L. TO REED HILL ROAD (1.5 MILES)	2	STBG	\$5,656,106	\$4,524,885	\$1,131,221
2024	608717	Springfield	SPRINGFIELD- RECONSTRUCTION OF SUMNER AVENUE AT DICKINSON STREET AND BELMONT AVENUE (THE "X")	2	HSIP	\$1,000,000	\$900,000	\$100,000
2024	608717	Springfield	SPRINGFIELD- RECONSTRUCTION OF SUMNER AVENUE AT DICKINSON STREET AND BELMONT AVENUE (THE "X")	2	STBG	\$10,970,539	\$8,776,431	\$2,194,108
2024	608717	Springfield	SPRINGFIELD- RECONSTRUCTION OF SUMNER AVENUE AT DICKINSON STREET AND BELMONT AVENUE (THE "X")	2	TAP	\$500,000	\$400,000	\$100,000
2024	609287	Worthington	WORTHINGTON- RECONSTRUCTION & RELATED WORK ON ROUTE 143 (PHASE II), FROM PERU T.L. TO COLD STREET	1	STBG	\$14,057,269	\$11,245,815	\$2,811,454
<b>3 Projects</b>						<b>\$32,183,914</b>	<b>\$25,847,131</b>	<b>\$6,336,783</b>
FFY Year	MassDOT Project ID	Municipality	MassDOT Project Description	District	Funding Source	Total Programmed Funds	Federal Funds	Non-Federal Funds
2025	608881	Longmeadow	LONGMEADOW- SPRINGFIELD- RESURFACING AND INTERSECTION IMPROVEMENTS ON LONGMEADOW STREET (ROUTE 5) AND CONVERSE STREET (0.84 MILES)	2	STBG	\$7,641,744	\$6,113,395	\$1,528,349
2025	609065	Holyoke	HOLYOKE- RESURFACING AND RELATED WORK ON CABOT STREET AND RACE STREET (CENTER CITY CONNECTOR)	2	STBG	\$5,512,458	\$4,409,966	\$1,102,492
2025	609286	Northampton	NORTHAMPTON- DOWNTOWN COMPLETE STREETS CORRIDOR AND INTERSECTION IMPROVEMENTS ON MAIN STREET (ROUTE 9)	2	STBG	\$15,485,967	\$12,388,774	\$3,097,193
<b>3 Projects</b>						<b>\$28,640,169</b>	<b>\$22,912,135</b>	<b>\$5,728,034</b>



FFY Year	MassDOT Project ID	Municipality	MassDOT Project Description	District	Funding Source	Total Programmed Funds	Federal Funds	Non-Federal Funds
2026	607231	Williamsburg	WILLIAMSBURG- RECONSTRUCTION OF MOUNTAIN STREET	1	STBG	\$14,630,100	\$11,704,080	\$2,926,020
2026	608785	South Hadley	SOUTH HADLEY- RECONSTRUCTION OF MAIN STREET FROM THE CHICOPEE CITY LINE TO CANAL STREET (0.67 MILES)	2	STBG	\$6,084,772	\$4,867,818	\$1,216,954
2026	609061	Chicopee	CHICOPEE- INTERSECTION IMPROVEMENTS AT MONTGOMERY STREET, GRANBY ROAD, AND MCKINSTRY AVENUE	2	STBG	\$9,910,762	\$7,928,610	\$1,982,152
<b>3 Projects</b>						<b>\$30,625,634</b>	<b>\$24,500,507</b>	<b>\$6,125,127</b>
FFY Year	MassDOT Project ID	Municipality	MassDOT Project Description	District	Funding Source	Total Programmed Funds	Federal Funds	Non-Federal Funds
2027	608466	Granby	GRANBY- RESURFACING AND RELATED WORK ON ROUTE 202 FROM KENDALL STREET TO SCHOOL STREET	2	STBG	\$4,552,146	\$3,641,717	\$910,429
2027	608487	Westfield	WESTFIELD- RESURFACING AND RELATED WORK ON ROUTE 10 AND 202	2	STBG	\$10,010,041	\$8,008,033	\$2,002,008
2027	608886	Chesterfield	CHESTERFIELD- RECONSTRUCTION OF NORTH ROAD AND DAMON POND ROAD	1	STBG	\$6,875,223	\$5,500,178	\$1,375,045
2027	612265	East Longmeadow	EAST LONGMEADOW- RESURFACING AND RELATED WORK ON NORTH MAIN STREET (ROUTE 83)	2	STBG	\$10,043,570	\$8,034,856	\$2,008,714
<b>4 Projects</b>						<b>\$31,480,980</b>	<b>\$25,184,784</b>	<b>\$6,296,196</b>
<b>17 Total Project</b>						<b>\$154,872,970</b>	<b>\$129,916,977</b>	<b>\$38,135,353</b>



Table 20 Federally Funded Projects Year 2023

Program	MassDOT Project ID	MPO	Municipality	MassDOT Project Description	District	Funding Source	Total Programmed Funds	Federal Funds	Non-Federal Funds
Federal Fiscal Year 2023									
Section 1A / Regionally Prioritized Projects							\$32,336,534	\$26,040,419	\$6,296,116
Non-Interstate Pavement	604209	Pioneer Valley	Multiple	HOLYOKE- WEST SPRINGFIELD- REHABILITATION OF ROUTE 5 (RIVERDALE ROAD), FROM I-91 (INTERCHANGE 13) TO MAIN STREET IN HOLYOKE & FROM ELM STREET TO NORTH ELM STREET IN WEST SPRINGFIELD (3.2 MILES)	2	CMAQ	\$3,345,852	\$2,676,682	\$669,170
Roadway Reconstruction	606797	Pioneer Valley	Cummington	CUMMINGTON- RETAINING WALL REPLACEMENT ON ROUTE 9 ADJACENT TO SWIFT RIVER	1	STBG	\$4,504,910	\$3,603,928	\$900,982
Intersection Improvements	606895	Pioneer Valley	Granby	GRANBY- IMPROVEMENTS AT 2 LOCATIONS ON ROUTE 202: SCHOOL STREET & FIVE CORNERS	2	HSIP	\$1,711,913	\$1,540,722	\$171,191
Intersection Improvements	606895	Pioneer Valley	Granby	GRANBY- IMPROVEMENTS AT 2 LOCATIONS ON ROUTE 202: SCHOOL STREET & FIVE CORNERS	2	STBG	\$2,841,046	\$2,272,837	\$568,209
Bicycle and Pedestrian	608073	Pioneer Valley	Westfield	WESTFIELD- WESTFIELD RIVER LEVEE MULTI-USE PATH CONSTRUCTION, FROM ELLSWORTH STREET TO WILLIAMS RIDING WAY (NEAR MEADOW STREET) (2 MILES)	2	CMAQ	\$5,392,527	\$4,314,022	\$1,078,505
Roadway Reconstruction	608374	Pioneer Valley	West Springfield	WEST SPRINGFIELD- RECONSTRUCTION OF MEMORIAL AVENUE (ROUTE 147), FROM COLONY ROAD TO THE MEMORIAL AVENUE ROTARY (1.4 MILES)	2	STBG	\$11,081,364	\$8,865,091	\$2,216,273
Roadway Reconstruction	608374	Pioneer Valley	West Springfield	WEST SPRINGFIELD- RECONSTRUCTION OF MEMORIAL AVENUE (ROUTE 147), FROM COLONY ROAD TO THE MEMORIAL AVENUE ROTARY (1.4 MILES)	2	TAP	\$500,238	\$400,190	\$100,048
Bicycle and Pedestrian	S12686	Pioneer Valley	Multiple	Valley Bike Share Expansion (Phase 3)	2	CMAQ	\$1,458,684	\$1,166,947	\$291,737
Flex to FTA	S12718	Pioneer Valley		PVTA - Purchase of Electric bus and support training		STBG	\$1,500,000	\$1,200,000	\$300,000
CMAQ Programmed							\$10,197,063	\$8,157,650	\$2,039,413
HSIP Programmed							\$1,711,913	\$1,540,722	\$171,191
STBG Programmed							\$19,927,320	\$15,941,856	\$3,985,464
TAP Programmed							\$500,238	\$400,190	\$100,048
Total Programmed for Pioneer Valley Region Projects*							\$32,336,534	\$26,040,419	\$6,296,116
Program Target for Pioneer Valley Region Projects							\$32,442,273	\$25,953,818	\$6,488,455
Target Funds Available for Pioneer Valley Region Projects							\$105,739	-\$86,600	\$192,340



Table 16: Federally Funded Projects Year 2023 (Continued)

Section 2A / State Prioritized Reliability Projects							\$25,815,172	\$20,652,138	\$5,163,034
Bridge Off-system	608847	Pioneer Valley	Wales	WALES- BRIDGE REPLACEMENT, W-02-002, HOLLAND ROAD OVER WALES BROOK	2	STBG-BR-Off	\$2,484,288	\$1,987,430	\$496,858
Non-Interstate Pavement	604209	Pioneer Valley	Multiple	HOLYOKE- WEST SPRINGFIELD- REHABILITATION OF ROUTE 5 (RIVERDALE ROAD), FROM I-91 (INTERCHANGE 13) TO MAIN STREET IN HOLYOKE & FROM ELM STREET TO NORTH ELM STREET IN WEST SPRINGFIELD (3.2 MILES)	2	NHPP	\$23,330,884	\$18,664,707	\$4,666,177
Section 2B / State Prioritized Modernization Projects							\$11,198,339	\$10,046,123	\$1,152,216
Roadway Reconstruction	609517	Pioneer Valley	Longmeadow	LONGMEADOW- BLUEBERRY HILL ELEMENTARY SCHOOL IMPROVEMENTS (SRTS)	2	TAP	\$323,821	\$259,057	\$64,764
Intersection Improvements	608560	Pioneer Valley	Springfield	SPRINGFIELD- IMPROVEMENTS ON ST. JAMES AVENUE AT TAPLEY STREET	2	HSIP	\$4,107,816	\$3,697,034	\$410,782
Intersection Improvements	608565	Pioneer Valley	Springfield	SPRINGFIELD- IMPROVEMENTS ON ST. JAMES AVENUE AT ST. JAMES BOULEVARD AND CAREW STREET	2	HSIP	\$6,766,702	\$6,090,032	\$676,670



Table 21 Federally Funded Projects Year 2024

Program	MassDOT Project ID	MPO	Municipality	MassDOT Project Description	District	Funding Source	Total Programmed	Federal Funds	Non-Federal Funds
Federal Fiscal Year 2024									
Section 1A / Regionally Prioritized Projects							\$32,183,914	\$25,847,131	\$6,336,783
Roadway Reconstruction	608163	Pioneer Valley	Wales	WALES- RECONSTRUCTION & IMPROVEMENTS ON MONSON ROAD, FROM THE MONSON T.L. TO REED HILL ROAD (1.5 MILES)	2	STBG	\$5,656,106	\$4,524,885	\$1,131,221
Roadway Reconstruction	608717	Pioneer Valley	Springfield	SPRINGFIELD- RECONSTRUCTION OF SUMNER AVENUE AT DICKINSON STREET AND BELMONT AVENUE (THE "X")	2	HSIP	\$1,000,000	\$900,000	\$100,000
Roadway Reconstruction	608717	Pioneer Valley	Springfield	SPRINGFIELD- RECONSTRUCTION OF SUMNER AVENUE AT DICKINSON STREET AND BELMONT AVENUE (THE "X")	2	STBG	\$10,970,539	\$8,776,431	\$2,194,108
Roadway Reconstruction	608717	Pioneer Valley	Springfield	SPRINGFIELD- RECONSTRUCTION OF SUMNER AVENUE AT DICKINSON STREET AND BELMONT AVENUE (THE "X")	2	TAP	\$500,000	\$400,000	\$100,000
Roadway Reconstruction	609287	Pioneer Valley	Worthington	WORTHINGTON- RECONSTRUCTION & RELATED WORK ON ROUTE 143 (PHASE II), FROM PERU T.L. TO COLD STREET	1	STBG	\$14,057,269	\$11,245,815	\$2,811,454
HSIP Programmed							\$1,000,000	\$900,000	\$100,000
STBG Programmed							\$30,683,914	\$24,547,131	\$6,136,783
TAP Programmed							\$500,000	\$400,000	\$100,000
Total Programmed for Pioneer Valley Region Projects*							\$32,183,914	\$25,847,131	\$6,336,783
Program Target for Pioneer Valley Region Projects							\$32,869,221	\$26,295,377	\$6,573,844
Target Funds Available for Pioneer Valley Region Projects							\$685,307	\$448,246	\$237,061



Table 17: Federally Funded Projects Year 2024 (Continued)

Section 2A / State Prioritized Reliability Projects							\$27,458,053	\$7,241,376	\$20,216,677
Bridge Off-system	609120	Pioneer Valley	Ludlow	LUDLOW- BRIDGE REPLACEMENT, L-16-026, PINEY LANE OVER BROAD BROOK	2	STBG-BR-Off	\$556,192	\$444,954	\$111,238
Bridge Off-system	608846	Pioneer Valley	Monson	MONSON- BRIDGE REPLACEMENT, M-27-015, OLD WALES ROAD OVER CONANT BROOK	2	STBG-BR-Off	\$2,516,447	\$2,013,158	\$503,289
Bridge Off-system	610779	Pioneer Valley	Hampden	HAMPDEN- BRIDGE MAINTENANCE, H-04-004, ROCKADUNDEE BRIDGE OVER SCANTIC RIVER	2	STBG-BR-Off	\$1,479,081	\$1,183,265	\$295,816
Bridge On-system Non-NHS	600935	Pioneer Valley	Holyoke	HOLYOKE- BRIDGE REPLACEMENTS, H-21-014, ROUTE 141 (APPLETON STREET) OVER SECOND LEVEL CANAL & H-21-020 OVER FIRST LEVEL CANAL	2	NGBP	\$9,926,800	\$0	\$9,926,800
Bridge On-system Non-NHS	607675	Pioneer Valley	Williamsburg	WILLIAMSBURG- BRIDGE REPLACEMENT, W-36-011 & W-36-017, BRIDGE STREET OVER THE MILL RIVER AND SOUTH MAIN STREET OVER THE MILL RIVER	1	NGBP	\$8,979,533	\$0	\$8,979,533
Safety Improvements	S12637	Pioneer Valley		SPRINGFIELD- SYSTEMIC COUNTERMEASURES/SAFE SYSTEMS IMPLEMENTATION CITY-WIDE		HSIP	\$4,000,000	\$3,600,000	\$400,000
Section 2B / State Prioritized Modernization Projects							\$2,495,034	\$1,996,027	\$499,007
Roadway Reconstruction	610652	Pioneer Valley	Agawam	AGAWAM- ROBINSON PARK ELEMENTARY SCHOOL IMPROVEMENTS (SRTS)	2	TAP	\$2,495,034	\$1,996,027	\$499,007



Table 22: Federally Funded Projects 2025

Program	MassDOT Project ID	MPO	Municipality	MassDOT Project Description	District	Funding Source	Total Programmed	Federal Funds	Non-Federal Funds
Federal Fiscal Year 2025									
Section 1A / Regionally Prioritized Projects							\$28,640,169	\$22,912,135	\$5,728,034
Roadway Reconstruction	608881	Pioneer Valley	Longmeadow	LONGMEADOW- SPRINGFIELD- RESURFACING AND INTERSECTION IMPROVEMENTS ON LONGMEADOW STREET (ROUTE 5) AND CONVERSE STREET (0.84 MILES)	2	STBG	\$7,641,744	\$6,113,395	\$1,528,349
Roadway Reconstruction	609065	Pioneer Valley	Holyoke	HOLYOKE- RESURFACING AND RELATED WORK ON CABOT STREET AND RACE STREET (CENTER CITY CONNECTOR)	2	STBG	\$5,512,458	\$4,409,966	\$1,102,492
Roadway Reconstruction	609286	Pioneer Valley	Northampton	NORTHAMPTON- DOWNTOWN COMPLETE STREETS CORRIDOR AND INTERSECTION IMPROVEMENTS ON MAIN STREET (ROUTE 9)	2	STBG	\$15,485,967	\$12,388,774	\$3,097,193
STBG Programmed							\$28,640,169	\$22,912,135	\$5,728,034
Total Programmed for Pioneer Valley Region Projects*							\$28,640,169	\$22,912,135	\$5,728,034
Program Target for Pioneer Valley Region Projects							\$32,310,845	\$25,848,676	\$6,462,169
Target Funds Available for Pioneer Valley Region Projects							\$3,670,676	\$2,936,541	\$734,135



**Table 18: Federally Funded Projects Year 2025 (Continued)**

Section 2A / State Prioritized Reliability Projects							\$17,991,008	\$14,392,806	\$3,598,202
Bridge Off-system	608869	Pioneer Valley	Northampton	NORTHAMPTON- BRIDGE REPLACEMENT, N-19-068, OLD SPRINGFIELD ROAD OVER THE MILL RIVER	2	STBG-BR-Off	\$3,689,495	\$2,951,596	\$737,899
Bridge Off-system	610768	Pioneer Valley	Westhampton	WESTHAMPTON- BRIDGE MAINTENANCE, W-27-028, PERRY HILL ROAD OVER NORTH BROOK OF MANHAN RIVER	2	STBG-BR-Off	\$1,867,795	\$1,494,236	\$373,559
Bridge On-system NHS	608460	Pioneer Valley	Hadley	HADLEY- BRIDGE REPLACEMENT, H-01-005, BAY ROAD (ROUTE 47) OVER THE FORT RIVER	2	NHPP	\$6,154,665	\$4,923,732	\$1,230,933
Non-Interstate Pavement	612031	Pioneer Valley	Worthington	WORTHINGTON- RESURFACING AND RELATED WORK ON ROUTE 112	1	NHPP	\$6,279,053	\$5,023,242	\$1,255,811
Section 2B / State Prioritized Modernization Projects							\$1,922,941	\$1,538,353	\$384,588
Roadway Reconstruction	612079	Pioneer Valley	Chicopee	CHICOPEE- HUGH SCOTT STREIBER ELEMENTARY SCHOOL IMPROVEMENTS (SRTS)	2	TAP	\$1,334,305	\$1,067,444	\$266,861
Roadway Reconstruction	612080	Pioneer Valley	Springfield	SPRINGFIELD- REBECCA M. JOHNSON ELEMENTARY SCHOOL IMPROVEMENTS (SRTS)	2	TAP	\$588,636	\$470,909	\$117,727
Section 2C / State Prioritized Expansion Projects							\$7,973,188	\$6,378,550	\$1,594,638
Bicycle and Pedestrian	610657	Pioneer Valley	Multiple	EASTHAMPTON- NORTHAMPTON- INSTALLATION OF A SHARED-USE PATH ALONG MOUNT TOM ROAD FROM THE MANHAN TRAIL TO ATWOOD DRIVE	2	STBG	\$6,123,012	\$4,898,410	\$1,224,602
Bicycle and Pedestrian	608413	Pioneer Valley	Northampton	NORTHAMPTON- ROCKY HILL GREENWAY MULTI-USE TRAIL, FROM THE MANHAN RAIL TRAIL TO ROCKY HILL ROAD (0.4 MILES)	2	CMAQ	\$1,850,176	\$1,480,141	\$370,035



Table 23: Federally Funded Projects 2026

Program	MassDOT Project ID	MPO	Municipality	MassDOT Project Description	District	Funding Source	Total Programmed	Federal Funds	Non-Federal Funds
Federal Fiscal Year 2026									
Section 1A / Regionally Prioritized Projects							\$30,625,634	\$24,500,507	\$6,125,127
Roadway Reconstruction	607231	Pioneer Valley	Williamsburg	WILLIAMSBURG- RECONSTRUCTION OF MOUNTAIN STREET	1	STBG	\$14,630,100	\$11,704,080	\$2,926,020
Roadway Reconstruction	608785	Pioneer Valley	South Hadley	SOUTH HADLEY- RECONSTRUCTION OF MAIN STREET FROM THE CHICOPEE CITY LINE TO CANAL STREET (0.67 MILES)	2	STBG	\$6,084,772	\$4,867,818	\$1,216,954
Roadway Reconstruction	609061	Pioneer Valley	Chicopee	CHICOPEE- INTERSECTION IMPROVEMENTS AT MONTGOMERY STREET, GRANBY ROAD, AND MCKINSTRY AVENUE	2	STBG	\$9,910,762	\$7,928,610	\$1,982,152
STBG Programmed							\$30,625,634	\$24,500,507	\$6,125,127
Total Programmed for Pioneer Valley Region Projects*							\$30,625,634	\$24,500,507	\$6,125,127
Program Target for Pioneer Valley Region Projects							\$31,520,356	\$25,216,285	\$6,304,071
Target Funds Available for Pioneer Valley Region Projects							\$894,722	\$715,778	\$178,944



Table 19: Federally Funded Projects Year 2026 (Continued)

Section 2A / State Prioritized Reliability Projects							\$24,070,245	\$19,975,941	\$4,094,305
Safety Improvements	611953	Pioneer Valley	Multiple	SPRINGFIELD- CHICOPEE- GUIDE AND TRAFFIC SIGN REPLACEMENT ON A SECTION OF INTERSTATE 291	2	HSIP	\$746,245	\$671,621	\$74,625
Interstate Pavement	612097	Pioneer Valley	West Springfield	WEST SPRINGFIELD- INTERSTATE MAINTENANCE AND RELATED WORK ON I-91	2	NHPP-I	\$6,451,200	\$5,806,080	\$645,120
Non-Interstate Pavement	612065	Pioneer Valley	Agawam	AGAWAM- RESURFACING AND RELATED WORK ON ROUTE 57	2	NHPP	\$9,660,000	\$7,728,000	\$1,932,000
Non-Interstate Pavement	612109	Pioneer Valley	Chicopee	CHICOPEE- RESURFACING AND RELATED WORK ON ROUTE 33	2	NHPP	\$7,212,800	\$5,770,240	\$1,442,560
Section 2B / State Prioritized Modernization Projects							\$2,903,250	\$2,322,600	\$580,650
Roadway Reconstruction	S12204	Pioneer Valley	Easthampton	EASTHAMPTON - IMPROVEMENTS AT MOUNTAIN VIEW ELEMENTARY SCHOOL (SRTS)	2	TAP	\$2,903,250	\$2,322,600	\$580,650
Section 2C / State Prioritized Expansion Projects							\$10,174,982	\$8,139,986	\$2,034,996
Bicycle and Pedestrian	608157	Pioneer Valley	Springfield	SPRINGFIELD- MCKNIGHT COMMUNITY TRAIL CONSTRUCTION, FROM ARMORY STREET TO HAYDEN AVENUE (1.5 MILES)	2	CMAQ	\$10,174,982	\$8,139,986	\$2,034,996



**Table 24: Federally Funded Projects Year 2027**

Program	MassDOT Project ID	MPO	Municipality	MassDOT Project Description	District	Funding Source	Total Programmed	Federal Funds	Non-Federal Funds
Federal Fiscal Year 2027									
Section 1A / Regionally Prioritized Projects							\$31,480,980	\$25,184,784	\$6,296,196
Non-Interstate Pavement	608466	Pioneer Valley	Granby	GRANBY- RESURFACING AND RELATED WORK ON ROUTE 202 FROM KENDALL STREET TO SCHOOL STREET	2	STBG	\$4,552,146	\$3,641,717	\$910,429
Non-Interstate Pavement	608487	Pioneer Valley	Westfield	WESTFIELD- RESURFACING AND RELATED WORK ON ROUTE 10 AND 202	2	STBG	\$10,010,041	\$8,008,033	\$2,002,008
Roadway Reconstruction	608886	Pioneer Valley	Chesterfield	CHESTERFIELD- RECONSTRUCTION OF NORTH ROAD AND DAMON POND ROAD	1	STBG	\$6,875,223	\$5,500,178	\$1,375,045
Non-Interstate Pavement	612265	Pioneer Valley	East Longmeadow	EAST LONGMEADOW- RESURFACING AND RELATED WORK ON NORTH MAIN STREET (ROUTE 83)	2	STBG	\$10,043,570	\$8,034,856	\$2,008,714
STBG Programmed							\$31,480,980	\$25,184,784	\$6,296,196
Total Programmed for Pioneer Valley Region Projects*							\$31,480,980	\$25,184,784	\$6,296,196
Program Target for Pioneer Valley Region Projects							\$33,220,989	\$26,576,791	\$6,644,198
Target Funds Available for Pioneer Valley Region Projects							\$1,740,009	\$1,392,007	\$348,002
Section 2A / State Prioritized Reliability Projects							\$104,773,627	\$0	\$104,773,627
Bridge On-system NHS	612494	Pioneer Valley	Multiple	SPRINGFIELD- WEST SPRINGFIELD- BRIDGE REPLACEMENT, S-24-003=W-21-002, (US-20) PARK AVENUE OVER CONNECTICUT RIVER	2	NGBP	\$104,773,627	\$0	\$104,773,627
Section 2B / State Prioritized Modernization Projects							\$5,046,000	\$4,541,400	\$504,600
Intersection Improvements	611965	Pioneer Valley	Holyoke	HOLYOKE- INTERSECTION IMPROVEMENTS AT BEECH STREET, RESNIC BOULEVARD, AND WEST FRANKLIN STREET	2	HSIP	\$5,046,000	\$4,541,400	\$504,600
Section 2C / State Prioritized Expansion Projects							\$16,053,638	\$12,842,910	\$3,210,728
Bicycle and Pedestrian	607823	Pioneer Valley	Southampton	SOUTHAMPTON- GREENWAY RAIL TRAIL CONSTRUCTION, FROM COLEMAN ROAD TO ROUTE 10 (3.5 MILES)	2	CMAQ	\$7,053,638	\$5,642,910	\$1,410,728
Bicycle and Pedestrian	608787	Pioneer Valley	Williamsburg	WILLIAMSBURG- CONSTRUCTION OF THE "MILL RIVER GREENWAY" SHARED USE PATH	1	CMAQ	\$9,000,000	\$7,200,000	\$1,800,000
Pioneer Valley Region Total Program Summary							\$391,038,244	\$231,923,490	\$159,114,754



**Table 25: Universe of Projects and TEC Scores**

2023-2027	Municipality	SID	Project Name and Description	Design	TEC Score	TEC Rank	New Cost Estimate (in CY Dollars)
2022/2023/2024	West Springfield	608374	RECONSTRUCTION OF MEMORIAL AVENUE (ROUTE 147), FROM COLONY ROAD TO THE MEMORIAL AVENUE ROTARY (1.4 MILES)	PS&E	73.5	2	\$ 21,807,794
2023 SW/ CMAQ	Holyoke / West Springfield	604209	REHABILITATION OF ROUTE 5 (RIVERDALE ROAD), FROM I-91 (INTERCHANGE 13) TO MAIN STREET IN HOLYOKE & FROM ELM STREET TO NORTH ELM STREET IN WEST SPRINGFIELD (3.2 MILES)	100	59.0	6	\$ 26,676,736
2024	Springfield	608717	SPRINGFIELD- RECONSTRUCTION OF SUMNER AVENUE AT DICKINSON STREET AND BELMONT AVENUE (THE "X")	75	70.5	3	\$ 11,990,903
2025	Longmeadow / Springfield	608881	RESURFACING AND INTERSECTION IMPROVEMENTS ON LONGMEADOW STREET (ROUTE 5) AND CONVERSE STREET (0.84 MILES)	75	59.5	5	\$ 7,075,689
2023	Granby	606895	GRANBY- IMPROVEMENTS at 2 LOCATIONS ON ROUTE 202: SCHOOL STREET & FIVE CORNERS	75	43.0	12	\$ 3,658,698
2024	Wales	608163	WALES- RECONSTRUCTION & IMPROVEMENTS ON MONSON ROAD, FROM THE MONSON T.L. TO REED HILL ROAD (1.5 MILES)	75	39.5	15	\$ 5,656,106
2024	Worthington	609287	ROUTE 143 RECONSTRUCTION (PHASE II) PERU TOWN LINE TO COLD STREET	75	38.0	18	\$ 13,516,605
2023 SW	Springfield	608565	IMPROVEMENTS ON ST. JAMES AVENUE AT ST. JAMES BOULEVARD AND CAREW STREET	75	NA	NA	\$ 6,766,702
2025	Northampton	609286	NORTHAMPTON- DOWNTOWN COMPLETE STREETS CORRIDOR AND INTERSECTION IMPROVEMENTS ON MAIN STREET (ROUTE 9)	25	80.5	1	\$ 16,132,450
	Holyoke	606450	HOLYOKE- TRAFFIC SIGNAL UPGRADES AT 15 INTERSECTIONS ALONG HIGH & MAPLE STREETS	25	66.0	4	Unknown
2026	Holyoke	609065	HOLYOKE- RESURFACING AND RELATED WORK ON CABOT STREET AND RACE STREET (CENTER CITY CONNECTOR)	25	56.5	7	\$ 5,920,788
2026	Chicopee	609061	CHICOPEE - INTERSECTION RECONSTRUCTION, MONTGOMERY ROAD AT GRANBY ROAD AND MCKINSTRY AVENUE, AND MONTGOMERY ROAD AT TURNPIKE ACCESS ROAD	25	54.5	9	\$ 8,848,895
2025 SW	Easthampton / Northampton	610657	EASTHAMPTON- NORTHAMPTON- INSTALLATION OF A SHARED-USE PATH ALONG MOUNT TOM ROAD FROM THE MANHAN TRAIL TO ATWOOD DRIVE	25	44.0	11	\$ 5,669,456



**Table 21: Universe of Projects and TEC Scores (Continued)**

	Wilbraham	608489	WILBRAHAM- RESURFACING AND RELATED WORK ON ROUTE 20	25	42.5	13	\$	30,972,519
2026	South Hadley	608785	SOUTH HADLEY- RECONSTRUCTION OF MAIN STREET FROM THE CHICOPEE CITY LINE TO CANAL STREET (0.67 MILES)	25	39.0	16	\$	5,876,151
2026	Williamsburg	607231	RECONSTRUCTION OF MOUNTAIN STREET	25	33.0	22	\$	13,062,590
2027	Westfield	608487	WESTFIELD- RESURFACING AND RELATED WORK ON ROUTE 10 AND 202	25	31.5	24	\$	8,629,346
2027	Granby	608466	GRANBY- RESURFACING AND RELATED WORK ON ROUTE 202 FROM KENDALL STREET TO SCHOOL STREET	25	30.0	25	\$	3,924,264
2027	Chesterfield	608886	RECONSTRUCTION OF NORTH ROAD AND DAMON POND ROAD	25	18.0	32	\$	5,926,915
2023 SW	Springfield	608560	SPRINGFIELD- IMPROVEMENTS ON ST. JAMES AVENUE AT TAPLEY STREET	25	NA	NA	\$	4,107,816
	Easthampton	612258	EASTHAMPTON- DOWNTOWN COMPLETE STREETS IMPROVEMENTS ON MAIN AND NORTHAMPTON STREETS (ROUTE 10)	0	56.5	8	\$	13,947,910
2027 SW	Holyoke	611965	HOLYOKE- INTERSECTION IMPROVEMENTS AT BEECH STREET, RESNIC BOULEVARD, AND WEST FRANKLIN STREET	0	53.0	10	\$	4,350,000
2027	East Longmeadow	612265	EAST LONGMEADOW- RESURFACING AND RELATED WORK ON NORTH MAIN STREET (ROUTE 83)	0	42.5	13	\$	8,658,250
	Longmeadow	612257	LONGMEADOW- RESURFACING AND RELATED WORK ON LONGMEADOW STREET (ROUTE 5) (PHASE 1)	0	42.5	13	\$	11,403,155
	Westfield	612600	WESTFIELD- INTERSECTION IMPROVEMENTS AT SOUTHAMPTON ROAD (ROUTE 10/202), SERVISTAR INDUSTRIAL WAY AND BARNES AIRPORT DRIVE	0	34.5	21	\$	4,350,000
	Springfield	610664	SPRINGFIELD- RECONSTRUCTION OF BIRNIE AVENUE AT GERENA SCHOOL PEDESTRIAN TUNNEL (Total Project Cost \$2+ million, City to cover remaining balance)	0	33.0	22	\$	1,304,785
	Amherst / Pelham	609051	RESURFACING AND RELATED WORK ON BELCHERTOWN ROAD (ROUTE 9) FROM SOUTH EAST STREET TO THE BELCHERTOWN T.L. (2.1 MILES)	0	31.5	24	\$	7,936,622
	Southampton	604653	REHABILITATION OF EAST STREET - FROM COLLEGE HIGHWAY EASTERLY TO COUNTY ROAD (2.6 MILES)	0	31.5	24	\$	6,271,174
	Easthampton	608423	EASTHAMPTON- IMPROVEMENTS AND RELATED WORK ON ROUTE 10, FROM WEST STREET TO THE NORTHAMPTON TOWN LINE	0	29.5	26	\$	5,758,750
	Holland	608727	HOLLAND- RESURFACING & RELATED WORK ON BRIMFIELD ROAD, FROM WALES ROAD TO STURBRIDGE STREET (0.9 MILES - PHASE II)	0	27.5	27	\$	1,432,795



**Table 21: Universe of Projects and TEC Scores (Continued)**

	Belchertown	612264	BELCHERTOWN- RESURFACING AND RELATED WORK ON MAIN STREET AND NORTH MAIN STREET (ROUTE 202)	0	27.0	28	\$	5,589,210
	Goshen	602888	ROUTE 9 RECONSTRUCTION	0	25.0	29	\$	7,500,000
	Palmer	601504	RECONSTRUCTION OF ROUTE 32, FROM 765 FT. SOUTH OF STIMSON STREET TO 1/2 MILES SOUTH OF RIVER STREET (PHASE I) (1.63 MILES)	0	23.0	30	\$	6,134,080
	Southwick	604155	SOUTHWICK- RESURFACING & RELATED WORK ON ROUTE 10/202, COLLEGE HIGHWAY (NORTHERLY SECTION) FROM THE WESTFIELD T.L. TO TANNERY ROAD (1.33 MILES)	0	19.5	31	\$	5,500,000
2023	Cummington	606797	ROUTE 9 RETAINING WALL	0	8.0	33	\$	4,000,000
	Springfield	611963	SPRINGFIELD- INTERSECTION AND SAFETY IMPROVEMENTS AT ARMORY CIRCLE	0	New	NA	\$	6,089,400
	Springfield	611964	SPRINGFIELD- INTERSECTION IMPROVEMENTS AT CAREW STREET AND DWIGHT STREET	0	New	NA	\$	7,840,105
								<b>37 Projects</b>
								<b>\$ 325,042,060</b>
								<b>9 Bicycle / Pedestrian Projects</b>
								<b>\$ 67,037,133</b>
								<b>45 Projects</b>
								<b>\$ 392,079,193</b>
								<b>17 Projects Funded in the 22-26 TIP</b>
								<b>\$ 149,137,584</b>
								<b>Projects Funded in the 23-27 TIP</b>



**Table 21: Universe of Projects and TEC Scores – Bicycle and Pedestrian Projects**

2023-2027	Municipality	SID	Project Name and Description	Design	TEC Score	TEC Rank	New Cost Estimate (in CY Dollars)
	Northampton	X00001	Valley Bike Share - Phase 3	PSE	40.5	14	\$ 1,458,684
2025 SW	Northampton	608413	NORTHAMPTON- ROCKY HILL GREENWAY MULTI-USE TRAIL, FROM THE MANHAN RAIL TRAIL TO ROCKY HILL ROAD (0.4 MILES)	100	38.5	17	\$ 1,713,126
2023	Westfield	608073	WESTFIELD- WESTFIELD RIVER LEVEE MULTI-USE PATH CONSTRUCTION, FROM CONGRESS STREET TO WILLIAMS RIDING WAY (NEAR MEADOW STREET) (2 MILES)	75	36.5	19	\$ 5,392,527
	Westfield	610536	WESTFIELD- PEDESTRIAN AND BICYCLE IMPROVEMENTS ON MAIN STREET (ROUTE 20)	25	44.0	11	\$ 3,305,811
2025 SW	Springfield	608157	SPRINGFIELD- MCKNIGHT COMMUNITY TRAIL CONSTRUCTION, FROM ARMORY STREET TO HAYDEN AVENUE (1.5 MILES)	25	42.5	13	\$ 9,084,805
	Chicopee	602912	Chicopee River Riverwalk Multi-Use Path Construction	25	35.5	20	
	Belchertown	612245	BELCHERTOWN- MASS CENTRAL RAIL TRAIL (MCRT, SECTION 1C)	0	32.0	23	\$ 8,480,365
2027 SW	Williamsburg	608787	WILLIAMSBURG- CONSTRUCTION OF THE "MILL RIVER GREENWAY" SHARED USE PATH	0	32.0	23	\$ 25,600,000
2027 SW	Southampton	607823	SOUTHAMPTON- GREENWAY RAIL TRAIL CONSTRUCTION, FROM COLEMAN ROAD TO ROUTE 10 (3.5 MILES)	0	19.5	31	\$ 8,001,815
<b>9 Bicycle / Pedestrian Projects</b>							<b>\$ 67,037,133</b>
<b>2 Projects funded in 2022-2026 TIP</b>							<b>\$ 10,797,931</b>
<b>4 Projects Funded in 2023-2027 TIP</b>							<b>\$ 27,799,746</b>

Projects listed in the Universe of Projects but not programmed in the TIP are shown for informational purposes. If additional funds become available unprogrammed projects from this list could be added, if the selected project would be ready for advertisement in that program year



## **V. Transit Project Listing for FFY 2023 - 2027**

The following is a complete listing of programmed transit projects for FFY 2023 - 2027



**Table 26 FFY 2023 Transit Project Information**

UPIN	Project Title	Total	Bond Cap   State   100% State	Bond Cap   Match   Federal Transit Discretionary Grant	Federal   FTA   Section 5307	Federal   FTA   Section 5337	Federal   FTA   Section 5339 Non-Competitive	Federal   FTA   Other Federal Transit	Federal   FTA   Federal Transit Discretionary Grant	Operating   Additional State Assistance   State Contract Assistance	Other   Municipal and Local   Transit	Other   VW Settlement Funds   Transit
BCG0009839	REHAB/RENOVATE - Environmental Compliance	\$40,000	\$8,000	\$0	\$32,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
BCG0009841	shelters and buses	\$7,000	\$1,400	\$0	\$5,600	\$0	\$0	\$0	\$0	\$0	\$0	\$0
BCG0010350	PVTA - BUY REPLACEMENT 35-FT BUS (11)	\$803,889	\$160,778	\$0	\$0	\$0	\$643,111	\$0	\$0	\$0	\$0	\$0
BCG0010897	\$197274 CARES	\$5,042,151	\$1,052,650	\$0	\$3,989,501	\$0	\$0	\$0	\$0	\$0	\$0	\$0
BCG0010898	\$197,274 CARES	\$4,925,724	\$1,724,537	\$0	\$3,201,187	\$0	\$0	\$0	\$0	\$0	\$0	\$0
BCG0010899	receptacles,etc.	\$58,753	\$11,751	\$0	\$47,002	\$0	\$0	\$0	\$0	\$0	\$0	\$0
BCG0010900	PVTA - Purchase & Replace signage and lighting	\$15,000	\$3,000	\$0	\$12,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
BCG0010901	\$496,000 CARES	\$2,779,710	\$1,077,692	\$0	\$1,702,018	\$0	\$0	\$0	\$0	\$0	\$0	\$0
BCG0010902	PVTA - Northampton Bus Maintenance Facility rehabs: Site Access Control and Pavement Repair	\$450,000	\$90,000	\$0	\$360,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
BCG0010903	PVTA - Transporation planning	\$245,000	\$0	\$0	\$196,000	\$0	\$0	\$0	\$0	\$49,000	\$0	\$0
BCG0010904	PVTA - Partransit ADA service subsidy	\$946,616	\$0	\$0	\$757,293	\$0	\$0	\$0	\$0	\$189,323	\$0	\$0
BCG0010905	PVTA - Preventive Maintenance	\$3,241,952	\$0	\$0	\$2,593,562	\$0	\$0	\$0	\$0	\$648,390	\$0	\$0
BCG0010916	PVTA - BUY REPLACEMENT 40-FT BUS - Electric (4) (LOCAL should be VW Mitigation)	\$3,797,482	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,797,482
BCG0010917	PVTA - BUY REPLACEMENT 35-FT BUS - Electric (4) (LOCAL should be VW Mitigation)	\$3,602,907	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,602,907
BCG0010919	Main Street Fuel and fluid UST and AST Removal and Structural Steel Paint	\$666,506	\$133,301	\$0	\$533,205	\$0	\$0	\$0	\$0	\$0	\$0	\$0
BCG0010920	PVTA - REHAB/RENOVATE - SHOP EQUIPMENT	\$150,000	\$30,000	\$0	\$120,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
BCG0010936	lateral expansion	\$1,480,000	\$296,000	\$0	\$1,184,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
BCG0010937	Included \$35, 868 CARES	\$824,000	\$164,800	0	\$659,200	\$0	\$0	\$0	\$0	\$0	\$0	\$0
BCG0010938	PVTA - ACQUIRE - Supervisory VEHICLES (2)	\$74,263	\$14,853	\$0	\$59,410	\$0	\$0	\$0	\$0	\$0	\$0	\$0
BCG0010939	buses	\$333,123	\$66,625	\$0	\$266,498	\$0	\$0	\$0	\$0	\$0	\$0	\$0



Table 22 FFY 2023 Transit Project Information (Continued)

BCG0010940	PVTA - ACQUIRE - SUPPORT VEHICLES (2)	\$59,780	\$11,956	\$0	\$47,824	\$0	\$0	\$0	\$0	\$0	\$0	\$0
BCG0010941	PVTA - PREVENTIVE MAINTENANCE - State of Good Repair	\$20,000	\$4,000	\$0	\$16,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
BCG0010943	PVTA - ENGINEERING & DESIGN - Robbins Road Construction Administration	\$40,000	\$8,000	\$0	\$32,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
BCG0010981	BUY REPLACEMENT 40-FT BUS	\$803,889	\$160,778	\$0	\$0	\$0	\$643,111	\$0	\$0	\$0	\$0	\$0
BCG0011368	FACILITY - HVAC	\$120,000	\$24,000	\$0	\$96,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
BCG0011369	PVTA - REHAB/RENOVATE - Cottage St ADMIN/MAINT FACILITY - Electric Bus Charging Expansion and Upgrades	\$290,000	\$58,000	\$0	\$232,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TBD	PVTA - Paratransit Vans -10-14 Passenger	707,225	\$141,446	\$0	\$565,782	\$0	\$0	\$0	\$0	\$0	\$0	\$0
		\$31,524,970	\$5,243,567	\$0	\$16,708,082	\$0	\$1,286,222	\$0	\$0	\$886,713	\$0	\$7,400,389



**Table 27 FFY 2024 Transit Project Information**

UPIN	Project Title	Total	Bond Cap   State   100% State	Federal   FTA   Section 5307	Federal   FTA   Section 5339 Non-Competitive	Operating   Additional State Assistance   State Contract Assistance	Other   Municipal and Local   Transit
BCG000878	PVTA - Paratransit Vans -10-14 Passenger	728,445	\$145,689	\$582,756	\$0	\$0	\$0
BCG000986	PVTA - Environmental Compliance	\$30,000	\$6,000	\$24,000	\$0	\$0	\$0
BCG000987	PVTA - REHAB/RENOVATE - ADMINISTRATIVE FACILITY - Cottage St Site Access Improvements	\$180,000	\$36,000	\$144,000	\$0	\$0	\$0
BCG001024	PVTA - BUY REPLACEMENT 40-FT Hybrid BUS (5)	\$1,869,607	\$374,000	\$0	\$1,495,607	\$0	\$0
BCG001090	PVTA - Replacement 40' Hybrid Bus (15) - Includes \$270,000 CARES	\$10,288,314	\$2,003,584	\$8,284,730	\$0	\$0	\$0
BCG001090	PVTA - PURCHASE BUS SHELTERS	\$27,457	\$5,457	\$22,000	\$0	\$0	\$0
BCG001090	PVTA - Signage and Lighting	\$94,288	\$18,858	\$75,430	\$0	\$0	\$0
BCG001090	PVTA - Bike access Equipment	\$21,000	\$4,200	\$16,800	\$0	\$0	\$0
BCG001091	PVTA - Information Technology Systems	\$3,134,736	\$1,567,368	\$1,567,368	\$0	\$0	\$0
BCG001091	PVTA - Umass Bus Maintenance Facility - Upgrade Bus Bay Lateral Expansion	\$3,900,000	\$780,000	\$3,120,000	\$0	\$0	\$0
BCG001091	PVTA - Purchase Shop Equipment - All Garages	\$150,000	\$30,000	\$120,000	\$0	\$0	\$0
BCG001091	PVTA - ADA Operating Assistance	\$965,548	\$0	\$772,438	\$0	\$193,110	\$0
BCG001094	Pioneer Valley Planning Commission / BUY REPLACEMENT 40-FT BUS (5) - Electric Buses with VW Mitigation Funds	\$4,889,259	\$0	\$0	\$0	\$0	\$4,889,259
BCG001094	PVTA - BUY REPLACEMENT 35-FT BUS (1) Electric bus - Includes \$18,000 CARES	\$927,749	\$181,950	\$745,799	\$0	\$0	\$0
BCG001094	PVTA - BUY REPLACEMENT <30 FT BUS (3) Type D Shuttle Bus	\$514,674	\$102,935	\$411,739	\$0	\$0	\$0
BCG001094	PVTA - ACQUIRE - SUPPORT VEHICLES (3)	\$114,736	\$22,947	\$91,789	\$0	\$0	\$0
BCG001095	PVTA - ACQUIRE - SUPPORT VEHICLES (4) Supervisory Vehicle	\$122,385	\$24,477	\$97,908	\$0	\$0	\$0
BCG001095	PVTA - PREVENTIVE MAINTENANCE - State of Good Repair	\$25,000	\$5,000	\$20,000	\$0	\$0	\$0
BCG001095	PVTA - REHAB/RENOVATE - ADMINISTRATIVE FACILITY Main Street Masonry Repairs	\$350,000	\$70,000	\$280,000	\$0	\$0	\$0
BCG001095	PVTA - SHORT RANGE TRANSIT PLANNING	\$250,000	\$0	\$200,000	\$0	\$50,000	\$0
BCG001095	PVTA - PREVENTIVE MAINTENANCE	\$3,306,791	\$0	\$2,645,433	\$0	\$661,358	\$0
BCG001091	PVTA - Rehab Northampton Maint Facility, Year 4	\$470,000	\$94,000	\$376,000	\$0	\$0	\$0
		32,359,989	5,472,465	19,598,190	1,495,607	904,468	4,889,259



**Table 28 FFY 2025 Transit Project Information**

UPIN	Project Title	Total	Bond Cap   State   100% State	Federal   FTA   Section 5307	Federal   FTA   Section 5339 Non-Competitive	Operating   Additional State Assistance   State Contract Assistance	Other   Municipal and Local   Transit
BCG001092	PVTA - REHAB/RENOVATE - SHOP EQUIPMENT	\$150,000	\$30,000	\$120,000	\$0	\$0	\$0
BCG001092	PVTA - REHAB/RENOVATE - MAINTENANCE FACILITY - Environmental Compliance	\$5,000	\$1,000	\$4,000	\$0	\$0	\$0
BCG001092	PVTA - REHAB/RENOV SIGNAGE	\$20,000	\$4,000	\$16,000	\$0	\$0	\$0
BCG001092	PVTA - REHAB/RENOV BICYCLE ACCESS, FACIL & EQUIP ON BUSES	\$13,000	\$2,600	\$10,400	\$0	\$0	\$0
BCG001092	PVTA - BUS SHELTERS	\$75,000	\$15,000	\$60,000	\$0	\$0	\$0
BCG001092	PVTA - REHAB/RENOVATE - MAINTENANCE FACILITY - Main St O&M Renovate Office	\$1,400,000	\$280,000	\$1,120,000	\$0	\$0	\$0
BCG001093	PVTA - PLANNING	\$250,000	\$0	\$200,000	\$0	\$50,000	\$0
BCG001093	PVTA - ADA OPERATING ASSISTANCE	\$984,459	\$0	\$787,567	\$0	\$196,892	\$0
BCG001093	PVTA - PREVENTIVE MAINTENANCE	\$3,372,927	\$0	\$2,698,342	\$0	\$674,585	\$0
BCG001093	PVTA - PURCHASE COMMUNICATIONS SYSTEM - ITS	\$2,661,983	\$532,397	\$2,129,586	\$0	\$0	\$0
BCG001093	PVTA - BUY REPLACEMENT 40-FT BUS (5) - includes \$90,000 CARES	\$2,819,120	\$473,824	\$2,345,296	\$0	\$0	\$0
BCG001095	PVTA - BUY REPLACEMENT 40-FT BUS (6) - Electric (Local =VW Mitigation Funds) includes \$108,000 CARES	\$4,133,428	\$200,774	\$911,093	\$0	\$0	\$3,021,561
BCG001095	Pioneer Transit Authority / ACQUIRE - SUPPORT VEHICLES (2)	\$78,785	\$15,757	\$63,028	\$0	\$0	\$0
BCG001095	PVTA - ACQUIRE - Supervisory VEHICLES (3)	\$94,543	\$18,909	\$75,634	\$0	\$0	\$0
BCG001096	PVTA - PREVENTIVE MAINTENANCE - State of Good Repair	\$15,000	\$3,000	\$12,000	\$0	\$0	\$0
BCG001096	PVTA - REHAB/RENOVATE - Holyoke ITC Bus Bay and Pavement Upgrades	\$750,000	\$150,000	\$600,000	\$0	\$0	\$0
BCG001096	PVTA - REHAB/RENOVATE - MAINTENANCE FACILITY - Lateral Expansion Umass Facility	\$3,900,000	\$780,000	\$3,120,000	\$0	\$0	\$0
BCG001096	PVTA - REHAB/RENOVATE - Renovation and Lateral Expansion Northampton Maintenance Facility	\$3,630,000	\$726,000	\$2,904,000	\$0	\$0	\$0
BCG001098	BUY REPLACEMENT 40-FT BUS - Electric Buses (6)	\$1,909,696	\$381,939	\$0	\$1,527,757	\$0	\$0
BCG001137	PVTA - BUY REPL 60 ft ARTICULATED BUS (2)- includes \$36,000 CARES	\$2,000,000	\$364,000	\$1,636,000	\$0	\$0	\$0
BCG001137	PVTA - BUY REPLACEMENT VAN (20)	\$1,500,596	\$300,119	\$1,200,477	\$0	\$0	\$0
BCG001137	PVTA - BUY REPLACEMENT <30 FT BUS Type D (3)	\$530,115	\$106,023	\$424,092	\$0	\$0	\$0
		\$30,293,652	\$4,385,342	\$20,437,515	\$1,527,757	\$921,477	\$3,021,561



**Table 29 FFY 2026 Transit Project Information**

UPIN	Project Title	Total	Bond Cap   State   100% State	Federal   FTA   Section 5307	Federal   FTA   Section 5339 Non-Competitive	Operating   Additional State Assistance   State Contract Assistance
BCG001096	PVTA - BUY REPLACEMENT 40-FT Hybrid BUS (4)	\$2,482,254	\$496,450	\$1,985,804	\$0	\$0
BCG001096	PVTA - BUY REPLACEMENT 35-FT Hybrid BUS (3)	\$1,599,180	\$319,836	\$1,279,344	\$0	\$0
BCG001096	PVTA - REHAB/RENOVATE - SHOP EQUIPMENT	\$150,000	\$30,000	\$120,000	\$0	\$0
BCG001096	PVTA - PREVENTIVE MAINTENANCE - State of Good Repair	\$25,000	\$5,000	\$20,000	\$0	\$0
BCG001096	PVTA REHAB/REBUild Environmental Compliance	\$5,000	\$1,000	\$4,000	\$0	\$0
BCG001097	PVTA - BUS SHELTERS	\$75,000	\$15,000	\$60,000	\$0	\$0
BCG001097	PVTA - REHAB/RENOV SIGNAGE	\$20,000	\$4,000	\$16,000	\$0	\$0
BCG001097	PVTA - REHAB/RENOV BICYCLE ACCESS, FACIL & EQUIP ON BUSES	\$13,000	\$2,600	\$10,400	\$0	\$0
BCG001097	PVTA - REHAB/RENOVATE - MAINTENANCE FACILITY - Northampton Bus Facility Lateral Expansion	\$3,000,000	\$600,000	\$2,400,000	\$0	\$0
BCG001097	PVTA - REHAB/RENOVATE - MAINTENANCE FACILITY - Umass Bus Facility - AC MAINTENANCE AND RESTROOM UPGRADES	\$340,000	\$68,000	\$272,000	\$0	\$0
BCG001097	PVTA - REHAB/RENOVATE - MAINTENANCE FACILITY - Holyoke ITC Lower Level Renovations and Paratransit Offices	\$1,850,000	\$370,000	\$1,480,000	\$0	\$0
BCG001097	PVTA - SHORT RANGE TRANSIT PLANNING	\$255,000	\$0	\$204,000	\$0	\$51,000
BCG001097	PVTA - NON FIXED ROUTE ADA PARA SERV	\$1,004,557	\$0	\$803,646	\$0	\$200,911
BCG001097	PVTA - PREVENTIVE MAINTENANCE	\$3,440,385	\$0	\$2,752,308	\$0	\$688,077
BCG001098	PVTA - PURCHASE ITS	\$2,640,306	\$528,061	\$2,112,245	\$0	\$0
BCG001098	PVTA - BUY REPLACEMENT 35-FT Hybrid BUS (3)	\$980,488	\$196,098	\$0	\$784,390	\$0
BCG001137	PVTA BUY REPLACEMENT 40-FT Electric BUS	\$4,149,612	\$829,922	\$3,319,690	\$0	\$0
BCG001137	PVTA - BUY REPLACEMENT 35-FT Electric BUS (2)	\$1,968,497	\$393,699	\$1,574,798	\$0	\$0
BCG001137	PVTA - BUY REPLACEMENT 40-FT Hybrid BUS (4)	\$980,488	\$196,098	\$0	\$784,390	\$0
BCG001137	PVTA - BUY REPLACEMENT <30 FT BUS Shuttle Type D (1)	\$182,006	\$36,401	\$145,605	\$0	\$0
BCG001137	PVTA - BUY REPLACEMENT VAN (20)	\$1,545,614	\$309,123	\$1,236,491	\$0	\$0
BCG001137	PVTA - ACQUIRE - SUPPORT VEHICLES (2)	\$81,149	\$16,230	\$64,919	\$0	\$0
BCG001138	PVTA - ACQUIRE - Supervisory VEHICLES (4)	\$129,839	\$25,968	\$103,871	\$0	\$0
BCG001138	PVTA - REHAB/RENOVATE - ADMIN/MAINT FACILITY - Main St O&M Roof	\$600,000	\$120,000	\$480,000	\$0	\$0
		\$27,517,375	\$4,563,486	\$20,445,121	\$1,568,780	\$939,988



Table 30 FFY 2027 Transit Project Information

UPIN	Project Title	Total	Bond Cap   State   100% State	Federal   FTA   Section 5307	Federal   FTA   Section 5339 Non-Competitive	Operating   Additional State Assistance   State Contract Assistance	Other   VW Settlement Funds   Transit
BCG001138	PVTA - BUY REPLACEMENT 40-FT BUS	\$4,844,739	\$968,948	\$3,875,791	\$0	\$0	\$0
BCG001138	PVTA - BUY REPLACEMENT 35-FT BUS	\$4,728,312	\$945,663	\$3,782,649	\$0	\$0	\$0
BCG001138	PVTA - REPLACEMENT 40-FT BUS - Electric	\$3,797,482	\$759,496	\$3,037,986	\$0	\$0	\$0
BCG001138	PVTA - BUY REPLACEMENT 30-FT BUS (3) electric buses	\$3,602,907	\$0	\$0	\$0	\$0	\$3,602,907
BCG001138	PVTA - REHAB/REBUILD ARTICULATED BUS (2) 60 ft	\$824,000	\$164,800	\$659,200	\$0	\$0	\$0
BCG001138	PVTA - BUY REPLACEMENT <30 FT BUS Type D Shuttle (1)	\$333,123	\$66,625	\$266,498	\$0	\$0	\$0
BCG001138	PVTA - BUY REPLACEMENT VAN (20)	\$1,414,455	\$282,891	\$1,131,564	\$0	\$0	\$0
BCG001138	PVTA - ACQUIRE - Supervisory VEHICLES (4)	\$74,263	\$14,853	\$59,410	\$0	\$0	\$0
BCG001139	PVTA - ACQUIRE - SHOP EQUIPMENT	\$150,000	\$30,000	\$120,000	\$0	\$0	\$0
BCG001139	PVTA - State of Good Repair	\$20,000	\$4,000	\$16,000	\$0	\$0	\$0
BCG001139	PVTA - Environmental Compliance	\$40,000	\$8,000	\$32,000	\$0	\$0	\$0
BCG001139	PVTA - Signage and Lighting	\$15,000	\$3,000	\$12,000	\$0	\$0	\$0
BCG001139	PVTA - PURCHASE BICYCLE ACCESS, FACIL & EQUIP ON BUSES	\$7,000	\$1,400	\$5,600	\$0	\$0	\$0
BCG001139	PVTA - ITS	\$2,779,710	\$555,942	\$2,223,768	\$0	\$0	\$0
BCG001139	PVTA - Northampton Bus Maintenance Facility Site Access Control and Pavement Repair	\$450,000	\$108,218	\$341,782	\$0	\$0	\$0
BCG001139	PVTA - REHAB/RENOVATE - MAINTENANCE FACILITY - Umass Lateral Expansion	\$1,480,000	\$296,000	\$1,184,000	\$0	\$0	\$0
BCG001140	PVTA - REHAB/RENOVATE - ADMIN/MAINT FACILITY Main St Paratransit O&M - Fuel UST and AST and Steel Painting	\$720,000	\$144,000	\$576,000	\$0	\$0	\$0
BCG001140	PVTA - REHAB/RENOVATE - ADMIN/MAINT FACILITY Cottage St Electric Bus Charging	\$290,000	\$58,000	\$232,000	\$0	\$0	\$0
BCG001140	PVTA - REHAB/RENOVATE - ADMIN/MAINT FACILITY HVAC	\$120,000	\$24,000	\$96,000	\$0	\$0	\$0
BCG001140	PVTA - REHAB/RENOVATE BUS SUPPORT FACIL/EQUIP Cottage St / Robbins Rd Admin	\$40,000	\$8,000	\$32,000	\$0	\$0	\$0
BCG001140	PVTA - SHORT RANGE TRANSIT PLANNING - PVPC	\$255,000	\$0	\$204,000	\$0	\$51,000	\$0
BCG001140	PVTA - NON FIXED ROUTE ADA PARA SERV	\$1,024,648	\$0	\$819,718	\$0	\$204,930	\$0
BCG001140	PVTA - PREVENTIVE MAINTENANCE	\$3,509,193	\$0	\$2,807,354	\$0	\$701,839	\$0
BCG001140	PVTA - BUY REPLACEMENT 40-FT BUS (5)	\$1,001,301	\$200,260	\$0	\$801,041	\$0	\$0
BCG001140	PVTA - BUY REPLACEMENT 35-FT BUS	\$1,001,301	\$200,260	\$0	\$801,041	\$0	\$0
BCG001141	PVTA - CONSTRUCTION - BUS SHELTERS	\$58,753	\$11,751	\$47,002	\$0	\$0	\$0
		\$32,581,187	\$4,856,107	\$21,562,322	\$1,602,082	\$957,769	\$3,602,907



## **VI. PROJECT IMPLEMENTATION**

The TIP is also used as a management tool for monitoring the progress and implementation of the RTP and previous TIP's. The award status of FFY 2021-2022TIP projects are identified in Table 27.



**Table 31 Project Implementation**

Program	SID	Project Description	Funding Source	Programmed Funds	Status	Add	Letting
2021	605032	HADLEY- RECONSTRUCTION ON ROUTE 9, FROM MIDDLE STREET TO MAPLE/SOUTH MAPLE STREET	STBG	\$8,793,026	Construction	\$ 44,450	12/19/2021
2021	607773	WESTFIELD- IMPROVEMENTS & RELATED WORK ON ROUTE 20, COURT STEET & WESTERN AVENUE, LLOYDS HILL ROAD TO HIGH STREET/MILL STREET INTERSECTION (PHASE II)	STBG, HSIP, TAP	\$8,657,958	Construction	3/20/2021	5/4/2021
2021	608084	AMHERST- IMPROVEMENTS & RELATED WORK ON ROUTES 9 & 116, FROM UNIVERSITY DRIVE TO SOUTH PLEASANT STREET (0.8 MILES)	STBG, TAP	\$5,963,144	Construction	4/24/2021	6/8/2021
2021	608782	SPRINGFIELD- INTERSECTION IMPROVEMENTS AT COTTAGE STREET, INDUSTRY AVENUE AND ROBBINS ROAD	STBG, CMAQ	\$3,268,656	Construction	3/27/2021	5/11/2021
2021	606552	NORTHAMPTON- BRIDGE REPLACEMENT, N-19-059, I-91 OVER US ROUTE 5 AND B&MRR, BRIDGE REPLACEMENT, N-19-060, I-91 OVER HOCKANUM ROAD AND IMPROVEMENTS TO I-91/INTERCHANGE 18	NHPP	\$21,605,777	Construction	FFY 2020 TIP	A/C Funds
2022	608473	SOUTH HADLEY- RESURFACING AND RELATED WORK ON ROUTE 116	NHPP	\$7,855,761	Awarded	12/11/2021	1/19/2022
2022	608577	EASTHAMPTON- IMPROVEMENTS AND RELATED WORK ON UNION STREET (ROUTE 141) FROM PAYSON AVENUE TO HIGH STREET (0.36 MILES)	STBG	\$3,624,561	Final Design	3/12/2022	4/20/2022
2022	608837	CHICOPEE- HOLYOKE- BRIDGE PRESERVATION ALONG I-391	NHPP	\$8,835,544	100% Design	4/30/2022	Not Advertised
2022	608374	WEST SPRINGFIELD- RECONSTRUCTION OF MEMORIAL AVENUE (ROUTE 147), FROM COLONY ROAD TO THE MEMORIAL AVENUE ROTARY (1.4 MILES)	STBS	\$21,692,328	100% Design	6/4/2022	Not Advertised
2022	609515	NORTHAMPTON- BRIDGE STREET ELEMENTARY SCHOOL IMPROVEMENTS (SRTS)	SRTS	\$863,004	Final Design	7/23/2022	Not Advertised
2022	608719	AMHERST- BELCHERTOWN- NORWOTTUCK RAIL TRAIL RESURFACING, FROM STATION ROAD IN AMHERST TO WARREN WRIGHT ROAD IN BELCHERTOWN (1.5 MILES)	SRTS	\$1,479,773	100% Design	8/6/2022	Not Advertised
2022	605126	WARE- BRIDGE REPLACEMENT, W-05-015, ROUTE 32 (PALMER ROAD) OVER THE WARE RIVER	Bridge Off-system	\$9,266,026	100% Design	8/13/2022	Not Advertised



**Table 32 Project Implementation (Continued) ( - Transit Projects**

**Project List (FFY2021)**

FTA Program	Project Number	Project Description	Carryover (unobligated)	Federal Funds	State Funds	Total Cost	Amount Obligated as of 11/30/2021
<b>5307</b>							
	5307 RTD0008737	Bus Shelters, Benches, Trash Receptacles		\$78,584	\$19,646	\$98,230	\$ -
	5307 RTD0008757	Buy Replacement 35-FT Buses (5)	2019 - \$752,000	\$1,440,000	\$360,000	\$1,800,000	\$ 1,479,053.00
		Rehab of UMTS Maintenance Facility,					
	5307 RTD0006092	Year 2 - Drainage and Electrical		\$1,424,000	\$356,000	\$1,780,000	\$ 1,000,076.00
		Administration Building - Slate Roof					
	5307 RTD0008777	Restoration		\$40,000	\$10,000	\$50,000	\$ 15,621.00
	5307 RTD0008740	Information Technology Systems		\$1,188,187	\$1,188,187	\$2,376,374	\$ 2,376,207.00
	5307 RTD0008743	PREVENTIVE MAINTENANCE		\$4,409,697	\$1,102,424	\$5,512,121	\$ -
	5307 RTD0009136	REHAB/REBUILD 35-FT BUS (6)		\$1,200,000	\$300,000	\$1,500,000	\$ 790,785.00
	5307 RTD0008741	PLANNING		\$192,000	\$48,000	\$240,000	\$ 240,000.00
	5307 RTD0008778	Robbins Road Intersection Design - Yr 3		\$176,000	\$44,000	\$220,000	\$ 24,930.00
	5307 RTD0008738	Bus Stop Signage and Lighting	2020 - \$16,000	\$16,000	\$4,000	\$20,000	\$ -
		Replace Northampton Maintenance					
	5307 RTD0008776	Facility Bus Wash System, Year 2		\$88,000	\$22,000	\$110,000	\$ 110,000.00
	5307 RTD0008736	Purchase/Replace Shop Equipment		\$120,000	\$30,000	\$150,000	\$ 143,384.00
		Bicycle access equipment for buses and					
	5307 RTD0008739	shelters		\$5,600	\$1,400	\$7,000	\$ -
	5307 RTD0008742	ADA OPERATING ASSISTANCE		\$1,287,796	\$321,949	\$1,609,745	\$ -
	5307 RTD0007834	Environmental Compliance		\$40,000	\$10,000	\$50,000	\$ 1,761.00
	5307 RTD0009135	REHAB/REBUILD 40-FT BUS (9)		\$2,340,000	\$585,000	\$2,925,000	\$ 570,763.00
		Subtotal		\$14,045,864	\$4,402,606	\$18,448,470	
<b>5309</b>							
		Subtotal		\$0	\$0	\$0	
<b>5310</b>							
		Subtotal		\$0	\$0	\$0	
<b>5311</b>							
		Subtotal		\$0	\$0	\$0	
<b>5337</b>							
		Subtotal		\$0	\$0	\$0	
<b>5339</b>							
			2018 -				
	5339 RTD0008769	Buy Replacement 40-FT Buses (11)	\$1,061,845; 2018 -	\$2,028,204	\$1,218,575	\$5,587,595	\$ 1,818,231.00
	5339 RTD0009465	ACQUIRE - MOBILE FARE COLL EQUIP		\$617,000	\$0	\$793,000	\$ 89,812.00
		ACQUISITION OF BUS SUPPORT					
	5339 RTD0009464	EQUIP/FACILITIES		\$1,536,000	\$0	\$1,536,000	\$ 97,252.00
		Subtotal		\$4,181,204	\$1,218,575	\$7,916,595	
<b>5320</b>							
		Subtotal		\$0	\$0	\$0	
<b>Other Federal</b>							
Other		SHORT RANGE TRANSIT PLANNING					
Federal	RTD0010076	(HOPE)		\$680,000	\$0	\$774,000	\$ -
		Subtotal		\$680,000	\$0	\$774,000	
<b>Other Non-Federal</b>							
Other		BUY REPLACEMENT 40-FT BUS - Electric					
Non-	RTD0009133	(6) (VW Mitigation)		\$0	\$0	\$3,000,000	\$ 3,000,000.00
Other		BUY REPLACEMENT 35-FT BUS - Electric					
Non-	RTD0009134	(6) (VW mitigation)		\$0	\$0	\$2,700,000	\$ 2,700,000.00
Other		REHAB/RENOVATE - MAINTENANCE					
Non-		FACILITY - Northampton Bus Facility					
Federal	RTD0009137	electric upgrades for electric buses		\$0	\$500,000	\$500,000	\$ 500,000.00
		Subtotal		\$0	\$500,000	\$6,200,000	
		Total		\$18,907,068	\$6,121,181	\$33,339,065	\$ 14,957,875.00



## VII. Air Quality Conformity Information FFY 2023 - 2027

This section documents the latest air quality conformity determination for the 1997 ozone National Ambient Air Quality Standards (NAAQS) in the PVMPO Region. 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 (LRTPs) 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.

### 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 (NOx), 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 15, 2019. This conformity determination continues to be valid for the PVMPO FFY 2023-2027 Transportation Improvement Program, and Massachusetts’ FFY 2023-2027 STIP, as each is developed from the conforming 2020-2040 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 RTPs 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 RTPs 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 PVMPO FFY 2023-2027 Transportation Improvement Program and 2020-2040 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 JApril 27, 2022. 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, RTP, 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. The Pioneer Valley MPO's [Public Participation Plan](#) was formally adopted in 2016. The Public Participation Plan ensures that the public will have access to the TIP/RTP and all supporting documentation, provides for public notification of the availability of the TIP/RTP 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/RTP and related certification documents.

The public comment period for this conformity determination commenced on April 27, 2022. During the 21-day public comment period, any comments received were incorporated into this Plan. This allowed ample opportunity for public comment and MPO review of the draft document. The public comment period will close on May 17, 2022 and subsequently, the PVMPO [is expected to endorse] this air quality conformity determination on May 24, 2022. These procedures comply with the associated federal requirements.

### *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 and must be fiscally constrained consistent with DOT's metropolitan planning regulations at 23 CFR part 450. The PVMPO2023-2027 Transportation Improvement Program and 2020-2040 Regional Transportation Plan are fiscally constrained, as demonstrated in this document.

The requirement to perform a conformity determination for carbon monoxide (CO) for the city of Springfield has expired. On April 22, 2002, the EPA classified Springfield as being in attainment (in compliance) for CO emissions. Subsequently, a EPA-approved CO limited maintenance plan was set up through the Massachusetts SIP to ensure that emission levels did not increase. While the maintenance plan was in effect, past TIPs and RTPs included an air quality conformity determination against a "budget test" (using "hot spot" analyses as needed at the project level) for Springfield. As of April 22, 2022, however, the 20-year maintenance period for this CO area expired and transportation conformity is no longer required for this pollutant in this municipality. This ruling is documented in a letter from EPA dated April 26, 2022.

In summary and based upon the entire process described above, the PVMPO 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 2023-2027 Transportation Improvement Program and the 2020-2040 Regional Transportation Plan 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 PVMPO's FFY 2023-2027 Transportation Improvement Program and the 2020-2040 Regional Transportation Plan are consistent with the air quality goals of, and in conformity with, the Massachusetts State Implementation Plan.



## VIII. Greenhouse Gas Monitoring and Evaluation

### Introduction

This section summarizes the greenhouse gas (GHG) impacts that are anticipated to result from the projects that are included in this FFY 2022 – 2026 Transportation Improvement Program (TIP). It includes a summary of the state laws and policies that call for reducing greenhouse gas in order to mitigate global climate change, actions that are being to respond to these state laws and policies, the role of regional planning and TIP development in reducing GHG emission and tracking these reductions, and the projected GHG emission impacts from the projects programmed in the TIP.

### State Policy Context

The Global Warming Solutions Act (GWSA), which was signed into law in August 2008, makes Massachusetts a leader in setting aggressive and enforceable GHG reduction targets, and implementing policies and initiatives to achieve these targets. In keeping with the law, on December 29, 2010 the Massachusetts Executive Office of Energy and Environmental Affairs (EOEEA), in consultation with other state agencies and the public, released the Massachusetts *Clean Energy and Climate Plan for 2020*. In December 2014 the Department of Environmental Protection issued new regulations that require Metropolitan Planning Organizations to quantify impacts from project investments, track progress towards reductions, and consider impacts in the prioritization of GHG impacts from project investments. The targets for overall statewide GHG emissions are:



### GreenDOT Policy

The transportation sector is the single largest emitter of greenhouse gases, accounting for over a third of GHG emissions, and therefore the transportation sector is a key focus of the *Clean Energy and Climate Plan*. MassDOT's approach to supporting the implementation of the plan is set forth in its GreenDOT Policy Directive, a comprehensive sustainability initiative that sets three principal objectives:

- **Reduce greenhouse gas (GHG) emissions.** MassDOT will achieve this by taking GHG emissions into account in all of its responsibilities, from strategic planning to project design and construction and system operations.
- **Promote the healthy transportation modes of walking, bicycling, and public transit.** MassDOT will achieve this by pursuing multi-modal, "complete streets" design standards; providing choice in transportation services; and by working with MPOs and other partners to prioritize and program a balance of projects that serve drivers, pedestrians, bicyclists, and public transit riders.



- **To support smart growth development.** MassDOT will achieve this by working with MPOs and other partners to make transportation investments that enable denser, smart growth development patterns that support reduced GHG emissions.

## **Regional GHG Tracking and Evaluation in RTPs**

MassDOT coordinated with MPOs and regional planning agency (RPA) staffs on the implementation of GHG tracking and evaluation in development of each MPO's 2040 RTPs, which were adopted in September 2011. This collaboration has continued for the MPO's 2040 RTPs and 2019-22 TIPs.

Working together, MassDOT and the MPOs have attained the following milestones: Modeling and long-range statewide projections for GHG emissions resulting from the transportation sector. Using the Boston MPO's regional model and the statewide travel demand model for the remainder of the state, GHG emissions were projected for 2020 no-build and build conditions, and for 2040 no-build and build conditions.

All of the MPOs included these GHG emission projections in their RTPs, along with a discussion of climate change and a statement of MPO support for reducing GHG emissions as a regional goal.

## **Project-Level GHG Tracking and Evaluation in the Transportation Improvement Program**

It is also important to monitor and evaluate the GHG impacts of the transportation projects that are programmed in the MPO Transportation Improvement Programs (TIP). The TIP includes both the larger, regionally-significant projects from the RTPs, which have already had their aggregate GHG impacts calculated and reported in the RTP, as well as smaller projects that are not included in the RTP but that may nevertheless have impacts on GHG emissions. The principal objective of this tracking is to enable the MPOs to evaluate expected GHG impacts of different projects and to use this information as a criterion for prioritizing and programming projects in future TIPs.

In order to monitor and evaluate the GHG impacts of TIP projects, MassDOT and the MPOs have developed the following approach for identifying anticipated GHG impacts and quantifying GHG impacts of projects, when appropriate, through the TIP. Different types of projects will have different anticipated GHG emissions impacts. The different project categories are outlined on the next two pages with this region's project tracking sheet on the third page.

## **Calculation of GHG Impacts for TIP Projects**

The Office of Transportation Planning at MassDOT provided the spreadsheets that are used for determining Congestion Management and Air Quality Improvement (CMAQ) eligibility. These spreadsheets require the same inputs as the CMAQ calculations, and have been adapted to provide CO<sub>2</sub> impacts. The data and analysis required for these calculations is available from functional design reports that should be submitted for projects that would produce a measurable GHG impact.

## **Projects with Quantified Impacts**

RTP Projects - Major capacity expansion projects would be expected to have a significant impact on GHG emissions. However, these projects are included in the RTPs and analyzed using the



statewide model or Boston regional model, which would reflect their GHG impacts. Therefore, no independent TIP calculations are required.

- **Quantified Decrease in Emissions** - Projects that would be expected to produce a measurable decrease in emissions. The approach for calculating these impacts is described below. These projects should be categorized in the following manner:
- **Quantified Decrease in Emissions from Traffic Operational Improvement** - An intersection reconstruction or signalization project that is projected to reduce delay and congestion.
- **Quantified Decrease in Emissions from Pedestrian and Bicycle Infrastructure** - A shared-use path that would enable increased walking and biking and decreased vehicle-miles traveled (VMT).
- **Quantified Decrease in Emissions from New/Additional Transit Service** - A bus or shuttle service that would enable increased transit ridership and decreased VMT
- **Quantified Decrease in Emissions from a Park and Ride Lot** A park-and-ride lot that would enable increased transit ridership/ increased ridesharing and decreased VMT
- **Quantified Decrease in Emissions from Bus Replacement**  
A bus replacement that would directly reduce GHG emissions generated by that bus service.
- **Quantified Decrease in Emissions from Complete Streets Improvements**  
Improvements to roadway networks that include the addition of bicycle and pedestrian accommodations where none were present before.
- **Quantified Decrease in Emissions from Other Improvement**

**Quantified Increase in Emissions** – Projects that would be expected to produce a measurable increase in emissions

### **Projects with Assumed Impact**

**No Assumed Impact/Negligible Impact on Emission** - Projects that do not change the capacity or use of a facility (e.g. a resurfacing project that restores a roadway to its previous condition, or a bridge rehabilitation/replacement that restores the bridge to its previous condition) would be assumed to have no GHG impact.

**Assumed Nominal Decrease in Emissions** - Projects that would be expected to produce a minor decrease in emissions that cannot be calculated with any precision. Examples of such projects include roadway repaving or reconstruction projects that add a new sidewalk or new bike lanes. Such a project would enable increased travel by walking or bicycling, but there may be not data or analysis to support any projections of GHG impacts. These projects should be categorized as a Qualitative Decrease in Emissions.

**Assumed Nominal Increase in Emissions** -Projects that would be expected to produce a minor increase in emissions that cannot be calculated with any precision. The projects should be categorized as a Qualitative Increase in Emissions.

### **Regional Greenhouse Gas Impact Summary Tables for FFY 2022 – 2026 TIP**

The following tables (table 28 and table 29) summarize the calculated quantitative and assumed qualitative impacts of the projects included in the regional FFY 2022 – 2026 TIP.



**Table 33 Greenhouse Gas Summary Tables FFY 2023**

MassDot Project ID	MassDOT Project Description	GHG Analysis Type	GHG Impact Description	GHG CO2 Impact (kg/yr)	Additional Information
Federal Fiscal Year 2023					
Pioneer Valley					
604209	HOLYOKE- WEST SPRINGFIELD- REHABILITATION OF ROUTE 5 (RIVERDALE ROAD), FROM I-91 (INTERCHANGE 13) TO MAIN STREET IN HOLYOKE & FROM ELM STREET TO NORTH ELM STREET IN WEST SPRINGFIELD (3.2 MILES)	Quantified	Quantified Decrease in Emissions from Complete Streets Project	-18,770	Analysis includes two intersections : Route 5 at Highland and Marion and Route 5 at East Elm, as well as complete streets analysis
606797	CUMMINGTON- RETAINING WALL REPLACEMENT ON ROUTE 9 ADJACENT TO SWIFT RIVER	Qualitative	No assumed impact/negligible impact on emissions	0	
606895	GRANBY- IMPROVEMENTS AT 2 LOCATIONS ON ROUTE 202: SCHOOL STREET & FIVE CORNERS	Quantified	Quantified Decrease in Emissions from Complete Streets Project	-273	
608073	WESTFIELD- WESTFIELD RIVER LEVEE MULTI-USE PATH CONSTRUCTION, FROM ELLSWORTH STREET TO WILLIAMS RIDING WAY (NEAR MEADOW STREET) (2 MILES)	Quantified	Quantified Decrease in Emissions from Bicycle and Pedestrian Infrastructure	-663,022	
608374	WEST SPRINGFIELD- RECONSTRUCTION OF MEMORIAL AVENUE (ROUTE 147), FROM COLONY ROAD TO THE MEMORIAL AVENUE ROTARY (1.4 MILES)	Quantified	Quantified Decrease in Emissions from Complete Streets Project	-8,434	All CO2 emissions reductions are included within the last year of advanced construction (FFY 2024)
608560	SPRINGFIELD- IMPROVEMENTS ON ST. JAMES AVENUE AT TAPLEY STREET		No assumed impact/negligible impact on emissions	0	
608565	SPRINGFIELD- IMPROVEMENTS ON ST. JAMES AVENUE AT ST. JAMES BOULEVARD AND CAREW STREET		No assumed impact/negligible impact on emissions	0	
608847	WALES- BRIDGE REPLACEMENT, W-02-002, HOLLAND ROAD OVER WALES BROOK		No assumed impact/negligible impact on emissions	0	
609517	LONGMEADOW- BLUEBERRY HILL ELEMENTARY SCHOOL IMPROVEMENTS (SRTS)		No assumed impact/negligible impact on emissions	0	
S12686	Valley Bike Share Expansion (Phase 3)	Quantified	Quantified Decrease in Emissions from Bicycle and Pedestrian Infrastructure	-31,248	
S12718	PVTA - Purchase of Electric bus and support training	Quantified	Quantified Decrease in Emissions from Bus Replacement	-1,980,401	
Pioneer Valley			Total GHG Increase (kg/year)	0	
			Total GHG Reduction (kg/year)	-2,702,148	
			Total GHG Difference (kg/year)	-2,702,148	
2023			Total GHG Increase (kg/year)	0	
			Total GHG Reduction (kg/year)	-2,702,148	
			Total GHG Difference (kg/year)	-2,702,148	



**Table 28 Greenhouse Gas Summary Tables FFY 2024**

MassDot Project ID	MassDOT Project Description	GHG Analysis Type	GHG Impact Description	GHG CO2 Impact (kg/yr)	Additional Information
Federal Fiscal Year 2024					
Pioneer Valley					
600935	HOLYOKE- BRIDGE REPLACEMENTS, H-21-014, ROUTE 141 (APPLETON STREET) OVER SECOND LEVEL CANAL & H-21-020 OVER FIRST LEVEL CANAL		No assumed impact/negligible impact on emissions	0	
607675	WILLIAMSBURG- BRIDGE REPLACEMENT, W-36-011 & W-36-017, BRIDGE STREET OVER THE MILL RIVER AND SOUTH MAIN STREET OVER THE MILL RIVER		No assumed impact/negligible impact on emissions	0	
608163	WALES- RECONSTRUCTION & IMPROVEMENTS ON MONSON ROAD, FROM THE MONSON T.L. TO REED HILL ROAD (1.5 MILES)	Quantified	Quantified Decrease in Emissions from Complete Streets Project	324	
608717	SPRINGFIELD- RECONSTRUCTION OF SUMNER AVENUE AT DICKINSON STREET AND BELMONT AVENUE (THE "X")	Quantified	Quantified Decrease in Emissions from Complete Streets Project	-39,183	
608846	MONSON- BRIDGE REPLACEMENT, M-27-015, OLD WALES ROAD OVER CONANT BROOK		No assumed impact/negligible impact on emissions	0	
609120	LUDLOW- BRIDGE REPLACEMENT, L-16-026, PINEY LANE OVER BROAD BROOK		No assumed impact/negligible impact on emissions	0	
609287	WORTHINGTON- RECONSTRUCTION & RELATED WORK ON ROUTE 143 (PHASE II), FROM PERU T.L. TO COLD STREET	Quantified	Quantified Decrease in Emissions from Complete Streets Project	-220	
610652	AGAWAM- ROBINSON PARK ELEMENTARY SCHOOL IMPROVEMENTS (SRTS)		No assumed impact/negligible impact on emissions	0	
610779	HAMPDEN- BRIDGE MAINTENANCE, H-04-004, ROCKADUNDEE BRIDGE OVER SCANTIC RIVER		No assumed impact/negligible impact on emissions	0	
S12637	SPRINGFIELD- SYSTEMIC COUNTERMEASURES/SAFE SYSTEMS IMPLEMENTATION CITY-WIDE		No assumed impact/negligible impact on emissions	0	
Pioneer Valley			Total GHG Increase (kg/year)	324	
			Total GHG Reduction (kg/year)	-39,403	
			Total GHG Difference (kg/year)	-39,079	
2024			Total GHG Increase (kg/year)	324	
			Total GHG Reduction (kg/year)	-39,403	
			Total GHG Difference (kg/year)	-39,079	



**Table 28 Greenhouse Gas Summary Tables FFY 2025**

MassDot Project ID	MassDOT Project Description	GHG Analysis Type	GHG Impact Description	GHG CO2 Impact (kg/yr)	Additional Information
Federal Fiscal Year 2025					
Pioneer Valley					
604136	MONSON- PALMER- BRIDGE REPLACEMENT, M-27-007=P-01-007, STATE AVENUE OVER THE QUABOAG RIVER		No assumed impact/negligible impact on emissions	0	
608413	NORTHAMPTON- ROCKY HILL GREENWAY MULTI-USE TRAIL, FROM THE MANHAN RAIL TRAIL TO ROCKY HILL ROAD (0.4 MILES)	Quantified	Quantified Decrease in Emissions from Bicycle and Pedestrian Infrastructure	316	
608460	HADLEY- BRIDGE REPLACEMENT, H-01-005, BAY ROAD (ROUTE 47) OVER THE FORT RIVER		No assumed impact/negligible impact on emissions	0	
608869	NORTHAMPTON- BRIDGE REPLACEMENT, N-19-068, OLD SPRINGFIELD ROAD OVER THE MILL RIVER		No assumed impact/negligible impact on emissions	0	
608881	LONGMEADOW- SPRINGFIELD- RESURFACING AND INTERSECTION IMPROVEMENTS ON LONGMEADOW STREET (ROUTE 5) AND CONVERSE STREET (0.84 MILES)	Quantified	Quantified Decrease in Emissions from Complete Streets Project	-3,410	
609065	HOLYOKE- RESURFACING AND RELATED WORK ON CABOT STREET AND RACE STREET (CENTER CITY CONNECTOR)	Quantified	Quantified Decrease in Emissions from Complete Streets Project	-7,078	
609286	NORTHAMPTON- DOWNTOWN COMPLETE STREETS CORRIDOR AND INTERSECTION IMPROVEMENTS ON MAIN STREET (ROUTE 9)	Quantified	Quantified Decrease in Emissions from Complete Streets Project	4,733	Does not include Intersection LOS analysis
609409	SPRINGFIELD- BRIDGE REPLACEMENT, S-24-016, ARMORY STREET OVER CSX MAINLINE & S-24-026, ARMORY STREET OVER ABANDONED CSX		No assumed impact/negligible impact on emissions	0	
610657	EASTHAMPTON- NORTHAMPTON- INSTALLATION OF A SHARED-USE PATH ALONG MOUNT TOM ROAD FROM THE MANHAN TRAIL TO ATWOOD DRIVE	Qualitative	No assumed impact/negligible impact on emissions	0	
610768	WESTHAMPTON- BRIDGE MAINTENANCE, W-27-028, PERRY HILL ROAD OVER NORTH BROOK OF MANHAN RIVER		No assumed impact/negligible impact on emissions	0	
612031	WORTHINGTON- RESURFACING AND RELATED WORK ON ROUTE 112		No assumed impact/negligible impact on emissions	0	
612079	CHICOPEE- HUGH SCOTT STREIBER ELEMENTARY SCHOOL IMPROVEMENTS (SRTS)		No assumed impact/negligible impact on emissions	0	
612080	SPRINGFIELD- REBECCA M. JOHNSON ELEMENTARY SCHOOL IMPROVEMENTS (SRTS)		No assumed impact/negligible impact on emissions	0	
612160	MONSON- PALMER- BRIDGE REPLACEMENT, M-27-008=P-01-008, ROUTE 32 OVER QUABOAG RIVER		No assumed impact/negligible impact on emissions	0	
612175	RUSSELL- BRIDGE REPLACEMENT, R-13-004, BLANDFORD STAGE RD OVER STAGE BROOK		No assumed impact/negligible impact on emissions	0	
612176	HUNTINGTON- BRIDGE REPLACEMENT, H-27-008, ST 112 WORTHINGTON ROAD OVER WATER POND BROOK		No assumed impact/negligible impact on emissions	0	
612187	CHICOPEE- BRIDGE PRESERVATION, C-13-038, I-391 OVER (ST 116) CHICOPEE STREET		No assumed impact/negligible impact on emissions	0	
Pioneer Valley			Total GHG Increase (kg/year)	5,049	
			Total GHG Reduction (kg/year)	-10,488	
			Total GHG Difference (kg/year)	-5,439	
2025			Total GHG Increase (kg/year)	5,049	
			Total GHG Reduction (kg/year)	-10,488	
			Total GHG Difference (kg/year)	-5,439	



**Table 28 Greenhouse Gas Summary Tables FFY 2026**

MassDot Project ID	MassDOT Project Description	GHG Analysis Type	GHG Impact Description	GHG CO2 Impact (kg/yr)	Additional Information
Federal Fiscal Year 2026					
Pioneer Valley					
607231	WILLIAMSBURG- RECONSTRUCTION OF MOUNTAIN STREET	Quantified	Quantified Decrease in Emissions from Complete Streets Project	-1,020	
608157	SPRINGFIELD- MCKNIGHT COMMUNITY TRAIL CONSTRUCTION, FROM ARMORY STREET TO HAYDEN AVENUE (1.5 MILES)	Qualitative	No assumed impact/negligible impact on emissions	0	
608785	SOUTH HADLEY- RECONSTRUCTION OF MAIN STREET FROM THE CHICOPEE CITY LINE TO CANAL STREET (0.67 MILES)	Qualitative	Qualitative Decrease in Emissions	0	To be Quantified for intersection LOS
609061	CHICOPEE- INTERSECTION IMPROVEMENTS AT MONTGOMERY STREET, GRANBY ROAD, AND MCKINSTRY AVENUE	Qualitative	Qualitative Decrease in Emissions	0	To be quantified for Intersection LOS
611953	SPRINGFIELD- CHICOPEE- GUIDE AND TRAFFIC SIGN REPLACEMENT ON A SECTION OF INTERSTATE 291		No assumed impact/negligible impact on emissions	0	
612065	AGAWAM- RESURFACING AND RELATED WORK ON ROUTE 57		No assumed impact/negligible impact on emissions	0	
612097	WEST SPRINGFIELD- INTERSTATE MAINTENANCE AND RELATED WORK ON I- 91		No assumed impact/negligible impact on emissions	0	
612109	CHICOPEE- RESURFACING AND RELATED WORK ON ROUTE 33		No assumed impact/negligible impact on emissions	0	
S12204	EASTHAMPTON - IMPROVEMENTS AT MOUNTAIN VIEW ELEMENTARY SCHOOL (SRTS)	Qualitative	Qualitative Decrease in Emissions	0	
Pioneer Valley			Total GHG Increase (kg/year)	0	
			Total GHG Reduction (kg/year)	-1,020	
			Total GHG Difference (kg/year)	-1,020	
2026			Total GHG Increase (kg/year)	0	
			Total GHG Reduction (kg/year)	-1,020	
			Total GHG Difference (kg/year)	-1,020	



**Table 28 Greenhouse Gas Summary Tables FFY 2027**

MassDot Project ID	MassDOT Project Description	GHG Analysis Type	GHG Impact Description	GHG CO2 Impact (kg/yr)	Additional Information
Federal Fiscal Year 2027					
Pioneer Valley					
605340	SPRINGFIELD- BRIDGE RECONSTRUCTION/REHAB, S-24-028, ST. JAMES AVENUE OVER CONRAIL RAILROAD (ABANDONED)		No assumed impact/negligible impact on emissions	0	
607823	SOUTHAMPTON- GREENWAY RAIL TRAIL CONSTRUCTION, FROM COLEMAN ROAD TO ROUTE 10 (3.5 MILES)	Qualitative	No assumed impact/negligible impact on emissions	0	
608466	GRANBY- RESURFACING AND RELATED WORK ON ROUTE 202 FROM KENDALL STREET TO SCHOOL STREET	Quantified	Quantified Decrease in Emissions from Complete Streets Project	461	
608487	WESTFIELD- RESURFACING AND RELATED WORK ON ROUTE 10 AND 202	Quantified	Quantified Decrease in Emissions from Complete Streets Project	-1,639	
608787	WILLIAMSBURG- CONSTRUCTION OF THE "MILL RIVER GREENWAY" SHARED USE PATH	Qualitative	No assumed impact/negligible impact on emissions	0	
608886	CHESTERFIELD- RECONSTRUCTION OF NORTH ROAD AND DAMON POND ROAD	Quantified	Quantified Decrease in Emissions from Complete Streets Project	184	
611965	HOLYOKE- INTERSECTION IMPROVEMENTS AT BEECH STREET, RESNIC BOULEVARD, AND WEST FRANKLIN STREET		No assumed impact/negligible impact on emissions	0	
612167	SPRINGFIELD- BRIDGE REPLACEMENT, S-24-017, ST. JAMES AVENUE OVER CSX & S-24-071, ST. JAMES AVENUE OVER I-291		No assumed impact/negligible impact on emissions	0	
612265	EAST LONGMEADOW- RESURFACING AND RELATED WORK ON NORTH MAIN STREET (ROUTE 83)	Qualitative	Qualitative Decrease in Emissions	0	to be quantified
612494	SPRINGFIELD- WEST SPRINGFIELD- BRIDGE REPLACEMENT, S-24-003=W-21-002, (US-20) PARK AVENUE OVER CONNECTICUT RIVER		No assumed impact/negligible impact on emissions	0	
612497	RUSSELL- BRIDGE REPLACEMENT, R-13-002, BRIDGE STREET OVER WESTFIELD RIVER		No assumed impact/negligible impact on emissions	0	
612514	CUMMINGTON- BRIDGE REHABILITATION, C-21-002, ROUTE 9 OVER WESTFIELD RIVER		No assumed impact/negligible impact on emissions	0	
Pioneer Valley			Total GHG Increase (kg/year)	645	
			Total GHG Reduction (kg/year)	-1,639	
			Total GHG Difference (kg/year)	-994	
2027			Total GHG Increase (kg/year)	645	
			Total GHG Reduction (kg/year)	-1,639	
			Total GHG Difference (kg/year)	-994	
2023 - 2027			Total GHG Increase (kg/year)	6,018	
			Total GHG Reduction (kg/year)	-2,754,697	
			Total GHG Difference (kg/year)	-2,748,679	



**Table 34 Transit GHG Summary 2023**

MassDOT/FTA Project ID ▼	MassDOT/FTA Project Description ▼	Total Programmed Funds ▼	GHG Analysis Type ▼	GHG CO <sub>2</sub> Impact (kg/yr) ▼	GHG Impact Description ▼	Total Cost ▼	Additional Information ▼
BCG0010897	PVTA - Purchase 40' Replacement Buses (11) - Includes \$197,274 CARES	\$5,846,040	Quantified	-1434131.039	Quantified Decrease in Emissions from Bu	\$ 5,846,040	130375.549 kg per bus (11) per year
BCG0010898	PVTA - Purchase 35' Replacement Buses (11) - Includes \$197,274 CARES	\$5,729,613	Quantified	-1558531.898	Quantified Decrease in Emissions from Bu	\$ 5,729,613	141684.718 kg per year per bus (11) buses
BCG0010916	PVTA - BUY REPLACEMENT 40-FT BUS - Electric (4) (LOCAL should be VW Mitigation)	\$3,797,482	Quantified	-7921604	Quantified Decrease in Emissions from Bu	\$ 3,797,482	1980401 kg per bus per year
BCG0010917	PVTA - BUY REPLACEMENT 35-FT BUS - Electric (4) (LOCAL should be VW Mitigation)	\$3,602,907	Quantified	-7921604	Quantified Decrease in Emissions from Bu	\$ 3,602,907	1980401 kg per bus per year
BCG0010937	PVTA - REHAB/REBUILD 60' ARTICULATED BUS (2) - Included \$35,868 CARES	\$824,000	Qualitative	0	No assumed impact/negligible impact on	\$ 824,000	
BCG0010939	PVTA - BUY REPLACEMENT <30 FT BUS (2) Type D Shuttle buses	\$333,123	Quantified	-520363.626	Quantified Decrease in Emissions from Bu	\$ 333,123	260181.813 kg per year per van (2)



**Table 29 Transit GHG Summary 2024**

MassDOT/FTA Project ID ▼	MassDOT/FTA Project Description ▼	Total Programmed Funds ▼	GHG Analysis Type ▼	GHG CO <sub>2</sub> Impact (kg/yr) ▼	GHG Impact Description ▼	Total Cost ▼	Additional Information ▼
BCG0008781	PVTA - Paratransit Vans - 10-14 Passenger	728,445	Quantified	2601818.12	Quantified Decrease in Emissions from Bus Replacement	\$ 728,445	260181.812 kg/yr per van
BCG0010945	PVTA / BUY REPLACEMENT 40-FT BUS (5) - Electric Buses with VW Mitigation Funds	\$4,889,259	Quantified	9902005	Quantified Decrease in Emissions from Bus Replacement	\$ 4,889,259	1980401kg/yr per bus
BCG0010946	PVTA - BUY REPLACEMENT 35-FT BUS (1) Electric bus - Includes \$18,000 CARES	\$927,749	Quantified	1980401	Quantified Decrease in Emissions from Bus Replacement	\$ 927,749	1980401kg/yr per bus
BCG0010948	PVTA - BUY REPLACEMENT <30 FT BUS (3) Type D Shuttle Bus	\$514,674	Quantified	780545.439	Quantified Decrease in Emissions from Bus Replacement	\$ 514,674	



**Table 29 Transit GHG Summary 2025**

MassDOT/FTA Project ID ▼	MassDOT/FTA Project Description ▼	Total Programmed Funds ▼	GHG Analysis Type ▼	GHG CO <sub>2</sub> Impact (kg/yr) ▼	GHG Impact Description ▼	Total Cost ▼	Additional Information ▼
BCG0010935	PVTA - BUY REPLACEMENT 40-FT BUS (5) - includes \$90,000 CARES	\$2,819,120	Quantified	651877.745	Quantified Decrease in Emissions from Bus Replacement	\$ 2,819,120	
BCG0010957	PVTA - BUY REPLACEMENT 40-FT BUS (6) - Electric (Local =VW Mitigation Funds) includes \$108,000 CARES	\$4,133,428	Quantified	11882406	Quantified Decrease in Emissions from Bus Replacement	\$ 4,133,428	
BCG0010982	BUY REPLACEMENT 40-FT BUS - Electric Buses (6)	\$1,909,696	Quantified		Quantified Decrease in Emissions from Bus Replacement	\$ 1,909,696	Included in BCG0010957
BCG0011371	PVTA - BUY REPL 60 ft ARTICULATED BUS (2)- includes \$36,000 CARES	\$2,000,000	Qualitative		Qualitative Decrease in Emissions	\$ 2,000,000	
BCG0011372	PVTA - BUY REPLACEMENT VAN (20)	\$1,500,596	Quantified	5203636.24	Quantified Decrease in Emissions from Bus Replacement	\$ 1,500,596	
BCG0011373	PVTA - BUY REPLACEMENT <30 FT BUS Type D (3)	\$530,115	Quantified	780545.439	Quantified Decrease in Emissions from Bus Replacement	\$ 530,115	



**Table 29 Transit GHG Summary 2026**

MassDOT/FTA Project ID ▼	MassDOT/FTA Project Description ▼	Total Programmed Funds ▼	GHG Analysis Type ▼	GHG CO <sub>2</sub> Impact (kg/yr) ▼	GHG Impact Description ▼	Total Cost ▼	Additional Information ▼
BCG0010965	PVTA - BUY REPLACEMENT 40-FT Hybrid BUS (4)	\$2,482,254	Qualitative		Qualitative Decrease in Emissions	\$ 2,482,254	
BCG0010966	PVTA - BUY REPLACEMENT 35-FT Hybrid BUS (3)	\$1,599,180	Qualitative		Qualitative Decrease in Emissions	\$ 1,599,180	
BCG0010983	PVTA - BUY REPLACEMENT 35-FT Hybrid BUS (3)	\$980,488	Qualitative		Qualitative Decrease in Emissions	\$ 980,488	
BCG0011374	PVTA BUY REPLACEMENT 40-FT Electric BUS	\$4,149,612	Quantified	651877.745	Quantified Decrease in Emissions from Bus Replacement	\$ 4,149,612	
BCG0011375	PVTA - BUY REPLACEMENT 35-FT Electric BUS (2)	\$1,968,497	Quantified	3960802	Quantified Decrease in Emissions from Bus Replacement	\$ 1,968,497	
BCG0011376	PVTA - BUY REPLACEMENT 40-FT Hybrid BUS (4)	\$980,488	Qualitative		Qualitative Decrease in Emissions	\$ 980,488	
BCG0011377	PVTA - BUY REPLACEMENT <30 FT BUS Shuttle Type D (1)	\$182,006	Quantified		Quantified Decrease in Emissions from Bus Replacement	\$ 182,006	
BCG0011378	PVTA - BUY REPLACEMENT VAN (20)	\$1,545,614	Quantified		Quantified Decrease in Emissions from Bus Replacement	\$ 1,545,614	



**Table 29 Transit GHG Summary 2027**

MassDOT/FTA Project ID ▼	MassDOT/FTA Project Description ▼	Total Programmed Funds ▼	GHG Analysis Type ▼	GHG CO <sub>2</sub> Impact (kg/yr) ▼	GHG Description ▼	Impact	Total Cost ▼	Additional Information ▼
BCG0011382	PVTA - BUY REPLACEMENT 40-FT BUS	\$4,844,739	Quantified	1043004.392	Quantified Decrease in Emissions from Bus Replacement		\$ 4,844,739	
BCG0011383	PVTA - BUY REPLACEMENT 35-FT BUS	\$4,728,312	Quantified	1173379.941	Quantified Decrease in Emissions from Bus Replacement		\$ 4,728,312	
BCG0011384	PVTA - REPLACEMENT 40-FT BUS - Electric	\$3,797,482	Quantified	7921604	Quantified Decrease in Emissions from Bus Replacement		\$ 3,797,482	
BCG0011385	PVTA - BUY REPLACEMENT 30-FT BUS (3) electric buses	\$3,602,907	Quantified	5941203	Quantified Decrease in Emissions from Bus Replacement		\$ 3,602,907	
BCG0011386	PVTA - REHAB/REBUILD ARTICULATED BUS (2) 60 ft	\$824,000	Qualitative		No assumed impact/negligible impact on emissions		\$ 824,000	
BCG0011387	PVTA - BUY REPLACEMENT <30 FT BUS Type D Shuttle (1)	\$333,123	Quantified	260181.813	Quantified Decrease in Emissions from Bus Replacement		\$ 333,123	
BCG0011388	PVTA - BUY REPLACEMENT VAN (20)	\$1,414,455	Quantified	5203636.24	Quantified Decrease in Emissions from Bus Replacement		\$ 1,414,455	
BCG0011408	PVTA - BUY REPLACEMENT 40-FT BUS (5)	\$1,001,301	Quantified		Quantified Decrease in Emissions from Bus Replacement		\$ 1,001,301	Included in BCG0011382
BCG0011409	PVTA - BUY REPLACEMENT 35-FT BUS	\$1,001,301	Quantified		Quantified Decrease in Emissions from Bus Replacement		\$ 1,001,301	Included in BCG0011383



# APPENDICES



# APPENDIX A: MassDOT Targets



Statewide Transportation Improvement Program (STIP) Program Targets

Federal Fiscal Year 2023									
	Current Obligation Authority (Federal aid only)	Proposed Obligation Authority (00%*, BIL)	Matching Funds	Proposed Matching Funds	FFY 2023 (Current Targets (Federal aid + match))	FFY 2023 - BIL (Proposed) (Fed Aid + Match)	FFY 2023 Programmed (Current)	Programmed vs. FFY 2023 Proposed Targets	
Balance Obligation Authority	\$630,537,333	\$738,636,044		\$108,096,711					
Planned Redistribution Request	\$50,000,000	\$50,000,000							
Total Non-earmarked Funding Available	\$680,537,333	\$788,636,044	\$226,645,718	\$155,592,717	\$907,383,111	\$942,228,761	\$148,410,780	\$22,737,190	
Planning/Adjustments/Pass-throughs									
ABP GAN's Repayment	\$68,510,000	\$69,510,000	\$0	\$0	\$69,510,000	\$69,510,000	\$89,510,000	\$-	
Award Adjustments, Change Orders, etc.	\$12,383,178	\$27,019,379	\$2,938,744	\$8,412,171	\$45,321,820	\$33,481,560	\$16,321,920	\$18,109,630	
Metropolitan Planning	\$10,008,878	\$10,886,010	\$2,502,219	\$2,721,503	\$12,397,095	\$13,007,513	\$12,511,086	\$1,096,418	
State Planning & Research	\$20,431,055	\$22,865,893	\$5,107,684	\$6,738,973	\$25,538,819	\$28,884,866	\$25,638,819	\$3,156,047	
Recreational Trails	\$1,188,729	\$1,188,729	\$296,682	\$206,682	\$1,483,411	\$1,483,411	\$1,483,411	\$0	
Railroad Grade Crossings	\$2,000,000	\$2,371,909	\$222,222	\$0	\$2,222,222	\$2,371,909	\$2,222,222	\$149,777	
SRTS Education	\$1,458,834	\$1,638,890	\$364,859	\$400,722	\$1,823,293	\$2,048,612	\$1,823,293	\$225,319	
Transit Grant Program	\$1,479,955	\$0	\$369,988	\$0	\$1,849,444	\$0	\$0	\$-	
Flex to FTA	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$-	
Regional Priorities									
Regional Share (%)									
MPO									
3.5996 Berkshire Region	\$402,968,036	\$240,090,826	\$50,742,009	\$50,022,706	\$253,710,045	\$300,113,552	\$245,857,642	\$54,455,890	
42.9871 Boston Region	\$7,224,850	\$8,548,273	\$1,806,213	\$2,138,568	\$9,681,063	\$10,882,841	\$9,768,098	\$3,147,483	
4.5851 Cape Cod	\$87,209,479	\$103,160,066	\$21,802,370	\$25,790,016	\$109,011,849	\$128,960,081	\$108,908,329	\$20,041,752	
8.6601 Central Mass	\$9,306,287	\$11,008,404	\$2,326,572	\$2,752,101	\$11,832,859	\$13,780,506	\$11,209,113	\$2,551,393	
2.5397 Franklin Region	\$17,638,125	\$20,864,133	\$4,409,531	\$5,216,033	\$22,047,657	\$26,060,166	\$22,015,408	\$4,064,738	
0.3100 Martha's Vineyard	\$5,154,779	\$6,097,587	\$1,288,895	\$1,524,397	\$6,443,474	\$7,621,983	\$6,443,474	\$1,178,509	
4.4280 Merrimack Valley	\$8,990,672	\$10,636,063	\$2,247,668	\$2,668,766	\$11,238,340	\$13,283,829	\$11,238,340	\$2,055,489	
4.4690 Montachusett	\$9,051,583	\$10,707,090	\$2,262,891	\$2,678,773	\$11,314,453	\$13,383,863	\$10,961,234	\$2,422,629	
0.2200 Nantucket	\$446,530	\$528,200	\$111,632	\$132,050	\$558,162	\$660,250	\$0	\$660,250	
3.9098 Northern Middlesex	\$7,835,238	\$9,386,591	\$1,983,810	\$2,346,648	\$9,919,048	\$11,733,239	\$9,524,030	\$2,209,209	
4.5895 Old Colony	\$9,254,328	\$10,946,941	\$2,313,582	\$2,738,735	\$11,367,910	\$13,883,876	\$11,567,910	\$2,115,766	
10.8100 Pioneer Valley	\$21,940,845	\$26,865,818	\$5,485,211	\$6,498,465	\$27,426,056	\$32,442,273	\$27,208,514	\$5,233,759	
8.9801 Southeastern Mass	\$18,188,139	\$21,512,378	\$4,546,535	\$5,378,095	\$22,732,674	\$26,880,473	\$19,813,192	\$7,077,281	
Highway**	\$339,110,972	\$392,978,320	\$77,990,959	\$77,990,959	\$417,091,831	\$470,957,279	\$445,282,003	\$55,675,276	
Grand Total (Formula Programs Only)	\$680,537,333	\$788,636,044	\$140,535,247	\$153,582,717	\$827,072,560	\$942,228,761	\$808,360,405	\$132,868,356	
Difference from Funds Available	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	

\*FFY 2023-2027 Development STIP assumes 90% obligation limitation based on average of previous 5 years.

\*\*Highway Program uses subject to change following 2022 TIP Readiness Days Review

Reported Date:





Statewide Transportation Improvement Program (STIP) Program Targets

Federal Fiscal Year 2024	Current Obligation Authority (FY 2024)	Proposed Obligation Authority (FY 2024)	Proposed Matching Funds	FY 2024 Current Targets (Current + FY 2024)	FY 2024 - BIL (Proposed - Federal + BIL)	FY 2024 Programmed (Current)	Programmed FY 2024 Proposed Target
	Balance Obligation Authority Request	\$143,050,020					
	Planned Redistributed Funding Available	\$20,000,000					
	Total Non-earmarked Funding Available	\$163,050,020					
	Planned Adjustments (PMT) through						
	ABPGMS Reimbursement	\$143,050,020	\$0	\$15,852,461	\$68,342,146	\$15,852,461	\$21,352,278
	Award Adjustments Change Order & etc.	\$2,353,174	\$2,353,174	\$5,461,594	\$30,969,230	\$30,969,230	\$18,387,310
	Metropolitan Planning	\$10,008,874	\$11,103,130	\$2,775,933	\$13,879,653	\$12,511,095	\$1,368,558
	State Planning & Research	\$20,457,055	\$22,594,239	\$5,707,764	\$28,667,813	\$25,536,819	\$3,130,994
	Recreational Trails	\$7,150,720	\$7,150,720	\$204,002	\$1,483,411	\$1,483,411	\$0
	Railroad Grade Crossing	\$2,000,000	\$2,371,999	\$22,222	\$2,371,999	\$2,222,222	\$145,777
	SRTS Budget	\$1,400,000	\$1,682,206	\$174,040	\$2,102,758	\$1,873,245	\$229,513
	Transit Grant Program	\$1,480,354	\$0	\$370,180	\$1,850,443	\$1,850,443	(\$1,850,443)
	Flex to FTA	\$0	\$0	\$0	\$0	\$0	\$0
	Regional Priorities						
	Regional Share (%)	\$20,528,284	\$2,425,477	\$17,407,071	\$60,812,181	\$24,063,096	\$24,196,969
	3.55% Berkshire Region	\$7,310,544	\$8,653,714	\$1,343,170	\$10,823,130	\$2,804,198	\$2,019,232
	42.96% Boston Region	\$88,352,910	\$104,517,676	\$22,088,126	\$26,123,419	\$110,440,538	\$20,206,457
	4.55% Cape Cod	\$4,423,202	\$11,153,278	\$4,357,000	\$17,765,319	\$11,786,328	\$2,156,269
	8.69% Central Mass	\$17,890,303	\$21,193,710	\$4,497,320	\$22,331,020	\$26,423,387	\$4,330,179
	2.53% Franklin Region	\$5,222,342	\$6,177,832	\$1,344,589	\$10,527,028	\$4,591,249	\$3,131,041
	0.31% Hartford Vineyard	\$837,448	\$54,016	\$188,519	\$942,596	\$96,810	\$145,788
	4.42% Merrimack Valley	\$8,108,910	\$10,715,023	\$2,277,135	\$13,353,039	\$13,386,638	\$2,083,141
	4.45% Northeast	\$4,702,700	\$10,847,596	\$2,202,550	\$17,407,740	\$13,559,956	\$2,185,956
	0.22% North West	\$452,382	\$635,151	\$173,000	\$603,478	\$0	\$683,939
	3.50% Northern Middlesex	\$8,030,243	\$9,510,121	\$2,377,530	\$10,040,054	\$11,887,651	\$2,838,111
	4.55% Old Colony	\$8,375,022	\$11,021,006	\$2,772,751	\$17,791,528	\$13,863,357	\$7,191,491
	10.81% Pioneer Valley	\$22,238,477	\$26,295,377	\$5,557,104	\$27,755,521	\$21,202,550	\$5,966,671
	0.56% Southeastern Mass	\$16,434,300	\$21,795,436	\$4,000,125	\$23,000,025	\$27,244,558	\$4,140,819
	Highway	\$345,054,459	\$39,887,609	\$78,481,507	\$424,440,282	\$413,784,289	\$64,314,327
	Grand Total	\$63,050,020	\$107,405,885	\$144,892,461	\$539,272,200	\$545,342,146	\$144,874,235

FY 2023-2027 Development STIP assumes 90% obligation limitation based on average of previous 5 years.

\*\* Highway Program sizes subject to change following 2022 TIP Readiness Days Review





Statewide Transportation Improvement Program (STIP) Program Targets

Federal Fiscal Year 2025		Current Obligation Authority (Current)	Proposed Obligation Authority (Proposed)	Net Excess Funds	Proposed Matching Funds	FFY 2025 Current Targets (Federal + State)	FFY 2025 - 8 IL Programmed (Proposed + FFY 2025)	FFY 2025 Programmed (Current)	Programmed in FFY 2025 Proposed Targets
Balance Obligation Authority		\$65,710,754	\$65,710,754						
Planned Reduction Request		\$50,000,000	\$50,000,000						
Total Non-exempted Funding Available		\$15,710,754	\$15,710,754						
Planning/Adjustments/PA through		\$17,174,165	\$17,174,165	\$17,174,165	\$17,174,165	\$17,174,165	\$17,174,165	\$17,174,165	\$17,174,165
APPG/ANR/Repayment		\$12,185,000	\$12,185,000	\$12,185,000	\$12,185,000	\$12,185,000	\$12,185,000	\$12,185,000	\$12,185,000
Award Solicitation Charge Order, etc.		\$12,383,170	\$12,383,170	\$12,383,170	\$12,383,170	\$12,383,170	\$12,383,170	\$12,383,170	\$12,383,170
Metropolitan Planning		\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000
State Planning & Research		\$2,437,065	\$2,437,065	\$2,437,065	\$2,437,065	\$2,437,065	\$2,437,065	\$2,437,065	\$2,437,065
Recreational Trails		\$1,186,729	\$1,186,729	\$1,186,729	\$1,186,729	\$1,186,729	\$1,186,729	\$1,186,729	\$1,186,729
Railroad Grade Crossing		\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000
SRTS Encatch		\$1,300,340	\$1,300,340	\$1,300,340	\$1,300,340	\$1,300,340	\$1,300,340	\$1,300,340	\$1,300,340
Transit Grant Program		\$1,580,000	\$1,580,000	\$1,580,000	\$1,580,000	\$1,580,000	\$1,580,000	\$1,580,000	\$1,580,000
Flex to FTA		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Regional Priorities									
Regional Share (%)									
3.5596 Berkshire Region		\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000
4.25611 Boston Region		\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000
4.3551 Cape Cod		\$4,000,000	\$4,000,000	\$4,000,000	\$4,000,000	\$4,000,000	\$4,000,000	\$4,000,000	\$4,000,000
8.5501 Central Mass		\$7,432,742	\$7,432,742	\$7,432,742	\$7,432,742	\$7,432,742	\$7,432,742	\$7,432,742	\$7,432,742
2.5597 Franklin Region		\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000
0.3100 Hampshire/Vermont		\$22,500	\$22,500	\$22,500	\$22,500	\$22,500	\$22,500	\$22,500	\$22,500
4.4256 Merrimack Valley		\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000
4.4596 Northeast		\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000
0.2200 Northwick		\$447,827	\$447,827	\$447,827	\$447,827	\$447,827	\$447,827	\$447,827	\$447,827
3.5596 Northern Middlesex		\$7,000,000	\$7,000,000	\$7,000,000	\$7,000,000	\$7,000,000	\$7,000,000	\$7,000,000	\$7,000,000
4.5596 Old Colony		\$1,500,000	\$1,500,000	\$1,500,000	\$1,500,000	\$1,500,000	\$1,500,000	\$1,500,000	\$1,500,000
10.5100 Plymouth Valley		\$2,700,000	\$2,700,000	\$2,700,000	\$2,700,000	\$2,700,000	\$2,700,000	\$2,700,000	\$2,700,000
8.5501 Southwestern Mass		\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000
Highway		\$35,700,753	\$35,700,753	\$35,700,753	\$35,700,753	\$35,700,753	\$35,700,753	\$35,700,753	\$35,700,753
Grand Total		\$707,770,753	\$707,770,753	\$707,770,753	\$707,770,753	\$707,770,753	\$707,770,753	\$707,770,753	\$707,770,753

\*FFY 2023-2027 Development STIP assumes 90% obligation limitation based on average of previous 5 years.

\*\* Highway Program metrics subject to change following 2022 TIP Readiness Days Review



TTT Highway Program sizes subject to change following 2022 TIP. Readiness Days Review





Statewide Transportation Improvement Program (STIP) Program Targets

Fiscal Year 2027	Assumed Obligator Authority (Federal only)	Q-A - BIL (Federal only)	Matching Funds BIL	FFY 2027 Proposed (Federal + Match)	FFY 2027 - BIL (Proposed)	Programmed w. FFY 2027 Proposed Target
	Balance Obligator Authority	\$799,527,245				
	Planned Reduction Request	\$50,000,000				
	Total Non-estimated Funding Available	\$31,230,619	\$19,527,245	\$15,703,374	\$15,703,374	\$15,703,374
Planning and Inventory		\$185,251,368	\$19,527,245	\$167,778,613	\$167,778,613	\$167,778,613
AP/GANS Repayment		\$130,202,400	\$0	\$130,202,400	\$130,202,400	\$130,202,400
Award Adjustments, Change Orders, etc.		\$12,000,000	\$2,430,744	\$14,430,744	\$14,430,744	\$14,430,744
Metropolitan Planning		\$10,200,000	\$2,502,210	\$12,702,210	\$12,702,210	\$12,702,210
State Planning and Research		\$20,000,000	\$5,107,704	\$25,107,704	\$25,107,704	\$25,107,704
Research and Training		\$1,200,000	\$222,222	\$1,422,222	\$1,422,222	\$1,422,222
Railroad Grade Crossings		\$2,000,000	\$0	\$2,000,000	\$2,000,000	\$2,000,000
SRFS Education		\$1,427,330	\$364,050	\$1,791,380	\$1,791,380	\$1,791,380
Transit Grant Program		\$1,011,000	\$0	\$1,011,000	\$1,011,000	\$1,011,000
Federal FTA		\$0	\$0	\$0	\$0	\$0
Regional Priorities						
Regional State (%)		\$244,343,752	\$11,483,433	\$255,827,185	\$255,827,185	\$255,827,185
3.5596 Berkshire Region		\$7,102,202	\$1,740,730	\$8,842,932	\$8,842,932	\$8,842,932
42.9671 Boston Region		\$85,730,702	\$2,012,200	\$87,742,902	\$87,742,902	\$87,742,902
4.5951 Cape Cod		\$0,148,424	\$2,242,200	\$2,390,624	\$2,390,624	\$2,390,624
8.5301 Central Mass		\$17,338,021	\$5,240,730	\$22,578,751	\$22,578,751	\$22,578,751
2.5297 Franklin Region		\$5,007,337	\$1,247,004	\$6,254,341	\$6,254,341	\$6,254,341
0.3100 Martha's Vineyard		\$0,000,000	\$0	\$0	\$0	\$0
4.4296 Middlesex Valley		\$6,838,750	\$2,700,210	\$9,538,960	\$9,538,960	\$9,538,960
4.4596 Mount Wachusett		\$6,808,017	\$2,741,023	\$9,549,040	\$9,549,040	\$9,549,040
0.2200 Nantucket		\$438,055	\$107,557	\$545,612	\$545,612	\$545,612
3.9296 Northern Middlesex		\$1,600,000	\$3,011,830	\$4,611,830	\$4,611,830	\$4,611,830
4.5595 Old Colony		\$0,007,342	\$2,220,747	\$2,228,089	\$2,228,089	\$2,228,089
10.8100 Pioneer Valley		\$27,505,052	\$6,644,198	\$34,149,250	\$34,149,250	\$34,149,250
8.5601 Southwestern Mass		\$17,877,030	\$5,507,166	\$23,384,196	\$23,384,196	\$23,384,196
Highway		\$340,444,458	\$101,346,619	\$441,791,077	\$441,791,077	\$441,791,077
Grand Total		\$734,237,619	\$159,410,225	\$893,647,844	\$893,647,844	\$893,647,844

\*FFY 2027 Totals are based on increasing program based on current FY 2026 Program inflated 2%.

\*\*FFY 2023-2027 Development STIP assumes 90% obligation limitation based on average of previous 5 years.

\*\*\*Highway Program sites subject to change following 2022 TIP Readiness Data Review



Appendix B: Additional Project Information

Year	MassDOT Project ID	MPO	Municipality	MassDOT Project Description	District	Funding Source	Adjusted TFPC	Total Programmed Funds	Federal Funds	Non-Federal Funds	MPO Project Score	Entity Receiving Transfer	PSAC Score	Earmark Details	Proponent	Other Information
Federal Fiscal Year 2023								\$72,301,636	\$59,028,761	\$13,272,875						
Section 1A / Regionally Prioritized Projects								\$31,942,273	\$25,653,818	\$6,288,455						
Non-Interstate Pavement								\$3,845,852	\$3,076,682	\$769,170						
2023	604209	Pioneer Valley	Multiple	HOLYOKE- WEST SPRINGFIELD- REHABILITATION OF ROUTE 5 (RIVERDALE ROAD), FROM I-91 (INTERCHANGE 13) TO MAIN STREET IN HOLYOKE & FROM ELM STREET TO NORTH ELM STREET IN WEST SPRINGFIELD (3.2 MILES)	2	CMAQ	\$26,676,736	\$3,845,852	\$3,076,682	\$769,170						
Roadway Reconstruction								\$16,086,512	\$12,869,210	\$3,217,302						
2023	606797	Pioneer Valley	Cummington	CUMMINGTON- RETAINING WALL REPLACEMENT ON ROUTE 9 ADJACENT TO SWIFT RIVER	1	STBG	\$4,504,910	\$4,504,910	\$3,603,928	\$900,982	8		34			Construction / (YOE \$4,500,000 / 8 TEC / Pre 25% / STBG / 25% due Spring 2022
2023	608374	Pioneer Valley	West Springfield	WEST SPRINGFIELD- RECONSTRUCTION OF MEMORIAL AVENUE (ROUTE 147), FROM COLONY ROAD TO THE MEMORIAL AVENUE ROTARY (1.4 MILES)	2	STBG	\$22,016,765	\$11,081,364	\$8,865,091	\$2,216,273	72.5		69		West Springfield	Construction / (YOE \$21,692,328) 3 years of AC funding FFY 2022 \$1, 125,167 FFY2023 \$18,169,736 FFY2024 \$2,397,425 / 72.5 TEC / 75% / STBG 100% due June 21
2023	608374	Pioneer Valley	West Springfield	WEST SPRINGFIELD- RECONSTRUCTION OF MEMORIAL AVENUE (ROUTE 147), FROM COLONY ROAD TO THE MEMORIAL AVENUE ROTARY (1.4 MILES)	2	TAP	\$22,016,765	\$500,238	\$400,190	\$100,048	72.5		69		West Springfield	Construction / (YOE \$21,692,328) 3 years of AC funding FFY 2022 \$1, 125,167 FFY2023 \$18,169,736 FFY2024 \$2,397,425 / 72.5 TEC / 75% / STBG 100% due June 21
Intersection Improvements								\$3,658,698	\$3,026,958	\$631,740						
2023	606895	Pioneer Valley	Granby	GRANBY- IMPROVEMENTS AT 2 LOCATIONS ON ROUTE 202: SCHOOL STREET & FIVE CORNERS	2	HSIP	\$3,252,569	\$1,000,000	\$900,000	\$100,000	43		62.5			CoConstruction / (YOE \$3,382,672) / 43 TEC / 75% STBG, HSIP
2023	606895	Pioneer Valley	Granby	GRANBY- IMPROVEMENTS AT 2 LOCATIONS ON ROUTE 202: SCHOOL STREET & FIVE CORNERS	2	STBG	\$3,252,569	\$2,658,698	\$2,126,958	\$531,740	43		62.5			CoConstruction / (YOE \$3,382,672) / 43 TEC / 75% STBG, HSIP
Bicycle and Pedestrian								\$6,851,211	\$5,480,969	\$1,370,242						
2023	608073	Pioneer Valley	Westfield	WESTFIELD- WESTFIELD RIVER LEVEE MULTI-USE PATH CONSTRUCTION, FROM ELLSWORTH STREET TO WILLIAMS RIDING WAY (NEAR MEADOW STREET) (2 MILES)	2	CMAQ	\$5,185,122	\$5,392,527	\$4,314,022	\$1,078,505						
2023	S12686	Pioneer Valley	Multiple	Valley Bike Share Expansion (Phase 3)	2	CMAQ	\$1,458,684	\$1,458,684	\$1,166,947	\$291,737	40.5				Northampton	ValleyBike Share- serving 11 communities
Flex to FTA								\$1,500,000	\$1,200,000	\$300,000						
2023	S12718	Pioneer Valley		PVTA - Purchase of Electric bus and support training		STBG	\$1,500,000	\$1,500,000	\$1,200,000	\$300,000						
Section 2A / State Prioritized Reliability Projects								\$29,161,024	\$23,328,819	\$5,832,205						
Non-Interstate Pavement								\$26,676,736	\$21,341,389	\$5,335,347						
2023	604209	Pioneer Valley	Multiple	HOLYOKE- WEST SPRINGFIELD- REHABILITATION OF ROUTE 5 (RIVERDALE ROAD), FROM I-91 (INTERCHANGE 13) TO MAIN STREET IN HOLYOKE & FROM ELM STREET TO NORTH ELM STREET IN WEST SPRINGFIELD (3.2 MILES)	2	NHPP	\$26,676,736	\$26,676,736	\$21,341,389	\$5,335,347						
Bridge Off-system								\$2,484,288	\$1,987,430	\$496,858						
2023	608847	Pioneer Valley	Wales	WALES- BRIDGE REPLACEMENT, W-02-002, HOLLAND ROAD OVER WALES BROOK	2	STBG-BR-Off	\$2,484,288	\$2,484,288	\$1,987,430	\$496,858						
Section 2B / State Prioritized Modernization Projects								\$11,198,339	\$10,046,123	\$1,152,216						
Intersection Improvements								\$10,874,518	\$9,787,066	\$1,087,452						
2023	608560	Pioneer Valley	Springfield	SPRINGFIELD- IMPROVEMENTS ON ST. JAMES AVENUE AT TAPLEY STREET	2	HSIP	\$4,107,816	\$4,107,816	\$3,697,034	\$410,782						
2023	608565	Pioneer Valley	Springfield	SPRINGFIELD- IMPROVEMENTS ON ST. JAMES AVENUE AT ST. JAMES BOULEVARD AND CAREW STREET	2	HSIP	\$6,766,702	\$6,766,702	\$6,090,032	\$676,670						
Roadway Reconstruction								\$323,821	\$259,057	\$64,764						
2023	609517	Pioneer Valley	Longmeadow	LONGMEADOW- BLUEBERRY HILL ELEMENTARY SCHOOL IMPROVEMENTS (SRTS)	2	TAP	\$323,821	\$323,821	\$259,057	\$64,764						



Year	MassDOT Project ID	MPO	Municipality	MassDOT Project Description	District	Funding Source	Adjusted TFPC	Total Programmed Funds	Federal Funds	Non-Federal Funds	MPO Project Score	Entity Receiving Transfer	PSAC Score	Earmark Details	Proponent	Other Information
Federal Fiscal Year 2024								\$81,043,334	\$35,084,534	\$45,958,800						
Section 1A / Regionally Prioritized Projects								\$32,183,914	\$25,847,131	\$6,336,783						
Roadway Reconstruction								\$32,183,914	\$25,847,131	\$6,336,783						
2024	608163	Pioneer Valley	Wales	WALES- RECONSTRUCTION & IMPROVEMENTS ON MONSON ROAD, FROM THE MONSON T.L. TO REED HILL ROAD (1.5 MILES)	2	STBG	\$5,656,106	\$5,656,106	\$4,524,885	\$1,131,221	39.5					Construction / YOE \$5,656,106 / 39.5 TEC / 75% STBG
2024	608374	Pioneer Valley	West Springfield	WEST SPRINGFIELD- RECONSTRUCTION OF MEMORIAL AVENUE (ROUTE 147), FROM COLONY ROAD TO THE MEMORIAL AVENUE ROTARY (1.4 MILES)	2	STBG	\$22,016,765	\$0	\$0	\$0	72.5		69		West Springfield	Construction / (YOE \$21,692,328) 3 years of AC funding FFY 2022 \$1, 125,167 FFY2023 \$18,169,736 FFY2024 \$2,397,425 / 72.5 TEC / 75% / STBG 100% due June 21
2024	608717	Pioneer Valley	Springfield	SPRINGFIELD- RECONSTRUCTION OF SUMNER AVENUE AT DICKINSON STREET AND BELMONT AVENUE (THE "X")	2	HSIP	\$12,470,539	\$1,000,000	\$900,000	\$100,000	70.5		77.5			Construction / YOE \$11,990,903) 70.5 TEC / 75% STBG, HSIP, TAP
2024	608717	Pioneer Valley	Springfield	SPRINGFIELD- RECONSTRUCTION OF SUMNER AVENUE AT DICKINSON STREET AND BELMONT AVENUE (THE "X")	2	STBG	\$12,470,539	\$10,970,539	\$8,776,431	\$2,194,108	70.5		77.5			Construction / YOE \$11,990,903) 70.5 TEC / 75% STBG, HSIP, TAP
2024	608717	Pioneer Valley	Springfield	SPRINGFIELD- RECONSTRUCTION OF SUMNER AVENUE AT DICKINSON STREET AND BELMONT AVENUE (THE "X")	2	TAP	\$12,470,539	\$500,000	\$400,000	\$100,000	70.5		77.5			Construction / YOE \$11,990,903) 70.5 TEC / 75% STBG, HSIP, TAP
2024	609286	Pioneer Valley	Northampton	NORTHAMPTON- DOWNTOWN COMPLETE STREETS CORRIDOR AND INTERSECTION IMPROVEMENTS ON MAIN STREET (ROUTE 9)	2	STBG	\$15,485,967	\$0	\$0	\$0	80.5		71.5			Construction (YOE \$15,485,967) 80.5 TEC / 25% / STBG
2024	609287	Pioneer Valley	Worthington	WORTHINGTON- RECONSTRUCTION & RELATED WORK ON ROUTE 143 (PHASE II), FROM PERU T.L. TO COLD STREET	1	STBG	\$14,057,269	\$14,057,269	\$11,245,815	\$2,811,454	38		26.5			Construction / (YOE \$14,597,933) / 38 TEC / 75% Project Phase I funded in FFY 2019 / STBG
Section 2A / State Prioritized Reliability Projects								\$27,458,053	\$7,241,376	\$20,216,677						
Bridge On-system Non-NHS								\$18,906,333	\$0	\$18,906,333						
2024	600935	Pioneer Valley	Holyoke	HOLYOKE- BRIDGE REPLACEMENTS, H-21-014, ROUTE 141 (APPLETON STREET) OVER SECOND LEVEL CANAL & H-21-020 OVER FIRST LEVEL CANAL	2	NGBP	\$9,926,800	\$9,926,800	\$0	\$9,926,800						
2024	607675	Pioneer Valley	Williamsburg	WILLIAMSBURG- BRIDGE REPLACEMENT, W-36-011 & W-36-017, BRIDGE STREET OVER THE MILL RIVER AND SOUTH MAIN STREET OVER THE MILL RIVER	1	NGBP	\$10,739,522	\$8,979,533	\$0	\$8,979,533						
Bridge Off-system								\$4,551,720	\$3,641,376	\$910,344						
2024	608846	Pioneer Valley	Monson	MONSON- BRIDGE REPLACEMENT, M-27-015, OLD WALES ROAD OVER CONANT BROOK	2	STBG-BR-Off	\$3,071,193	\$2,516,447	\$2,013,158	\$503,289						
2024	609120	Pioneer Valley	Ludlow	LUDLOW- BRIDGE REPLACEMENT, L-16-026, PINEY LANE OVER BROAD BROOK	2	STBG-BR-Off	\$3,463,893	\$556,192	\$444,954	\$111,238						
2024	610779	Pioneer Valley	Hampden	HAMPDEN- BRIDGE MAINTENANCE, H-04-004, ROCKADUNDEE BRIDGE OVER SCANTIC RIVER	2	STBG-BR-Off	\$1,479,081	\$1,479,081	\$1,183,265	\$295,816						
Safety Improvements								\$4,000,000	\$3,600,000	\$400,000						
2024	S12637	Pioneer Valley		SPRINGFIELD- SYSTEMIC COUNTERMEASURES/SAFE SYSTEMS IMPLEMENTATION CITY-WIDE		HSIP	\$4,000,000	\$4,000,000	\$3,600,000	\$400,000						
Section 2B / State Prioritized Modernization Projects								\$2,495,034	\$1,996,027	\$499,007						
Roadway Reconstruction								\$2,495,034	\$1,996,027	\$499,007						
2024	610652	Pioneer Valley	Agawam	AGAWAM- ROBINSON PARK ELEMENTARY SCHOOL IMPROVEMENTS (SRTS)	2	TAP	\$2,495,034	\$2,495,034	\$1,996,027	\$499,007						
Section 2C / State Prioritized Expansion Projects								\$0	\$0	\$0						
Bicycle and Pedestrian								\$0	\$0	\$0						
2024	610657	Pioneer Valley	Multiple	EASTHAMPTON- NORTHAMPTON- INSTALLATION OF A SHARED-USE PATH ALONG MOUNT TOM ROAD FROM THE MANHAN TRAIL TO ATWOOD DRIVE	2	STBG	\$6,123,012	\$0	\$0	\$0						
Section 3B / Non-Federal Aid Funded								\$18,906,333	\$0	\$18,906,333						
Bridge On-system Non-NHS								\$18,906,333	\$0	\$18,906,333						
2024	600935	Pioneer Valley	Holyoke	HOLYOKE- BRIDGE REPLACEMENTS, H-21-014, ROUTE 141 (APPLETON STREET) OVER SECOND LEVEL CANAL & H-21-020 OVER FIRST LEVEL CANAL	2	NGBP	\$9,926,800	\$9,926,800	\$0	\$9,926,800						
2024	607675	Pioneer Valley	Williamsburg	WILLIAMSBURG- BRIDGE REPLACEMENT, W-36-011 & W-36-017, BRIDGE STREET OVER THE MILL RIVER AND SOUTH MAIN STREET OVER THE MILL RIVER	1	NGBP	\$10,739,522	\$8,979,533	\$0	\$8,979,533						



Year	MassDOT Project ID	MPO	Municipality	MassDOT Project Description	District	Funding Source	Adjusted TFPC	Total Programmed Funds	Federal Funds	Non-Federal Funds	MPO Project Score	Entity Receiving Transfer	PSAC Score	Earmark Details	Proponent	Other Information
Federal Fiscal Year 2025								\$212,533,710	\$86,616,459	\$125,917,251						
Section 1A / Regionally Prioritized Projects								\$28,640,169	\$22,912,135	\$5,728,034						
Roadway Reconstruction								\$28,640,169	\$22,912,135	\$5,728,034						
2025	608881	Pioneer Valley	Longmeadow	LONGMEADOW- SPRINGFIELD- RESURFACING AND INTERSECTION IMPROVEMENTS ON LONGMEADOW STREET (ROUTE 5) AND CONVERSE STREET (0.84 MILES)	2	STBG	\$7,641,744	\$7,641,744	\$6,113,395	\$1,528,349	59.5		57.5			Construction (YOE \$7,641,744 / 59.5 TEC / 75% / STBG
2025	609065	Pioneer Valley	Holyoke	HOLYOKE- RESURFACING AND RELATED WORK ON CABOT STREET AND RACE STREET (CENTER CITY CONNECTOR)	2	STBG	\$5,512,458	\$5,512,458	\$4,409,966	\$1,102,492	56.5		68			Construction (YOE \$5,512,458) TEC 56.5 / 25%
2025	609286	Pioneer Valley	Northampton	NORTHAMPTON- DOWNTOWN COMPLETE STREETS CORRIDOR AND INTERSECTION IMPROVEMENTS ON MAIN STREET (ROUTE 9)	2	STBG	\$15,485,967	\$15,485,967	\$12,388,774	\$3,097,193	80.5		71.5			Construction (YOE \$15,485,967) 80.5 TEC / 25% / STBG
Section 1B / Earmark or Discretionary Grant Funded Projects								\$51,743,268	\$41,394,614	\$10,348,654						
Bridge On-system Non-NHS NB								\$11,894,148	\$9,515,318	\$2,378,830						
2025	604136	Pioneer Valley	Multiple	MONSON- PALMER- BRIDGE REPLACEMENT, M-27-007=P-01-007, STATE AVENUE OVER THE QUABOAG RIVER	2	HIP-BR	\$11,894,148	\$11,894,148	\$9,515,318	\$2,378,830						
Bridge On-System NHS NB								\$39,849,120	\$31,879,296	\$7,969,824						
2025	609409	Pioneer Valley	Springfield	SPRINGFIELD- BRIDGE REPLACEMENT, S-24-016, ARMORY STREET OVER CSX MAINLINE & S-24-026, ARMORY STREET OVER ABANDONED CSX	2	HIP-BR	\$39,849,120	\$39,849,120	\$31,879,296	\$7,969,824						
Section 2A / State Prioritized Reliability Projects								\$70,122,576	\$14,392,806	\$55,729,770						
Bridge On-system NHS								\$56,434,619	\$4,923,732	\$51,510,887						
2025	608460	Pioneer Valley	Hadley	HADLEY- BRIDGE REPLACEMENT, H-01-005, BAY ROAD (ROUTE 47) OVER THE FORT RIVER	2	NHPP	\$6,154,665	\$6,154,665	\$4,923,732	\$1,230,933						
2025	612160	Pioneer Valley	Multiple	MONSON- PALMER- BRIDGE REPLACEMENT, M-27-008=P-01-008, ROUTE 32 OVER QUABOAG RIVER	2	NGBP	\$7,079,698	\$7,079,698	\$0	\$7,079,698						
2025	612176	Pioneer Valley	Huntington	HUNTINGTON- BRIDGE REPLACEMENT, H-27-008, ST 112 WORTHINGTON ROAD OVER WATER POND BROOK	1	NGBP	\$5,097,856	\$5,097,856	\$0	\$5,097,856						
2025	612187	Pioneer Valley	Chicopee	CHICOPEE- BRIDGE PRESERVATION, C-13-038, I-391 OVER (ST 116) CHICOPEE STREET	2	NGBP	\$38,102,400	\$38,102,400	\$0	\$38,102,400						
Bridge Off-system								\$5,557,290	\$4,445,832	\$1,111,458						
2025	608869	Pioneer Valley	Northampton	NORTHAMPTON- BRIDGE REPLACEMENT, N-19-068, OLD SPRINGFIELD ROAD OVER THE MILL RIVER	2	STBG-BR-Off	\$3,689,496	\$3,689,495	\$2,951,596	\$737,899						
2025	610768	Pioneer Valley	Westhampton	WESTHAMPTON- BRIDGE MAINTENANCE, W-27-028, PERRY HILL ROAD OVER NORTH BROOK OF MANHAN RIVER	2	STBG-BR-Off	\$1,867,795	\$1,867,795	\$1,494,236	\$373,559						
Non-Interstate Pavement								\$6,279,053	\$5,023,242	\$1,255,811						
2025	612031	Pioneer Valley	Worthington	WORTHINGTON- RESURFACING AND RELATED WORK ON ROUTE 112	1	NHPP	\$6,279,053	\$6,279,053	\$5,023,242	\$1,255,811						
Bridge On-system Non-NHS								\$1,851,614	\$0	\$1,851,614						
2025	612175	Pioneer Valley	Russell	RUSSELL- BRIDGE REPLACEMENT, R-13-004, BLANDFORD STAGE RD OVER STAGE BROOK	1	NGBP	\$1,851,614	\$1,851,614	\$0	\$1,851,614						
Section 2B / State Prioritized Modernization Projects								\$1,922,941	\$1,538,353	\$384,588						
Roadway Reconstruction								\$1,922,941	\$1,538,353	\$384,588						
2025	612079	Pioneer Valley	Chicopee	CHICOPEE- HUGH SCOTT STREIBER ELEMENTARY SCHOOL IMPROVEMENTS (SRTS)	2	TAP	\$1,334,305	\$1,334,305	\$1,067,444	\$266,861						
2025	612080	Pioneer Valley	Springfield	SPRINGFIELD- REBECCA M. JOHNSON ELEMENTARY SCHOOL IMPROVEMENTS (SRTS)	2	TAP	\$588,636	\$588,636	\$470,909	\$117,727						
Section 2C / State Prioritized Expansion Projects								\$7,973,188	\$6,378,550	\$1,594,638						
Bicycle and Pedestrian								\$7,973,188	\$6,378,550	\$1,594,638						
2025	608413	Pioneer Valley	Northampton	NORTHAMPTON- ROCKY HILL GREENWAY MULTI-USE TRAIL, FROM THE MANHAN RAIL TRAIL TO ROCKY HILL ROAD (0.4 MILES)	2	CMAQ	\$1,850,176	\$1,850,176	\$1,480,141	\$370,035						
2025	610657	Pioneer Valley	Multiple	EASTHAMPTON- NORTHAMPTON- INSTALLATION OF A SHARED-USE PATH ALONG MOUNT TOM ROAD FROM THE MANHAN TRAIL TO ATWOOD DRIVE	2	STBG	\$6,123,012	\$6,123,012	\$4,898,410	\$1,224,602						
Section 3B / Non-Federal Aid Funded								\$52,131,568	\$0	\$52,131,568						
Bridge On-system NHS								\$50,279,954	\$0	\$50,279,954						
2025	612160	Pioneer Valley	Multiple	MONSON- PALMER- BRIDGE REPLACEMENT, M-27-008=P-01-008, ROUTE 32 OVER QUABOAG RIVER	2	NGBP	\$7,079,698	\$7,079,698	\$0	\$7,079,698						
2025	612176	Pioneer Valley	Huntington	HUNTINGTON- BRIDGE REPLACEMENT, H-27-008, ST 112 WORTHINGTON ROAD OVER WATER POND BROOK	1	NGBP	\$5,097,856	\$5,097,856	\$0	\$5,097,856						
2025	612187	Pioneer Valley	Chicopee	CHICOPEE- BRIDGE PRESERVATION, C-13-038, I-391 OVER (ST 116) CHICOPEE STREET	2	NGBP	\$38,102,400	\$38,102,400	\$0	\$38,102,400						
Bridge On-system Non-NHS								\$1,851,614	\$0	\$1,851,614						
2025	612175	Pioneer Valley	Russell	RUSSELL- BRIDGE REPLACEMENT, R-13-004, BLANDFORD STAGE RD OVER STAGE BROOK	1	NGBP	\$1,851,614	\$1,851,614	\$0	\$1,851,614						



Year	MassDOT Project ID	MPO	Municipality	MassDOT Project Description	District	Funding Source	Adjusted TFPC	Total Programmed Funds	Federal Funds	Non-Federal Funds	MPO Project Score	Entity Receiving Transfer	PSAC Score	Earmark Details	Proponent	Other Information
Federal Fiscal Year 2026								\$67,774,111	\$54,939,033	\$12,835,078						
Section 1A / Regionally Prioritized Projects								\$30,625,634	\$24,500,507	\$6,125,127						
Roadway Reconstruction								\$30,625,634	\$24,500,507	\$6,125,127						
2026	607231	Pioneer Valley	Williamsburg	WILLIAMSBURG- RECONSTRUCTION OF MOUNTAIN STREET	1	STBG	\$14,630,100	\$14,630,100	\$11,704,080	\$2,926,020	33					Construction (YOE \$13,997,241) TEC 33 / 25%
2026	608785	Pioneer Valley	South Hadley	SOUTH HADLEY- RECONSTRUCTION OF MAIN STREET FROM THE CHICOPEE CITY LINE TO CANAL STREET (0.67 MILES)	2	STBG	\$6,084,772	\$6,084,772	\$4,867,818	\$1,216,954	39		45.5			Construction (YOE \$6,084,772) TEC 39 / 25%
2026	609061	Pioneer Valley	Chicopee	CHICOPEE- INTERSECTION IMPROVEMENTS AT MONTGOMERY STREET, GRANBY ROAD, AND MCKINSTRY AVENUE	2	STBG	\$9,910,762	\$9,910,762	\$7,928,610	\$1,982,152	54.5		56			Construction (YOE \$9,910,762) TEC 54.5 / 25%
Section 2A / State Prioritized Reliability Projects								\$24,070,245	\$19,975,941	\$4,094,305						
Bridge Off-system								\$0	\$0	\$0						
2026	608869	Pioneer Valley	Northampton	NORTHAMPTON- BRIDGE REPLACEMENT, N-19-068, OLD SPRINGFIELD ROAD OVER THE MILL RIVER	2	STBG-BR-Off	\$3,689,496	\$0	\$0	\$0						
Safety Improvements								\$746,245	\$671,621	\$74,625						
2026	611953	Pioneer Valley	Multiple	SPRINGFIELD- CHICOPEE- GUIDE AND TRAFFIC SIGN REPLACEMENT ON A SECTION OF INTERSTATE 291	2	HSIP	\$746,245	\$746,245	\$671,621	\$74,625						
Non-Interstate Pavement								\$16,872,800	\$13,498,240	\$3,374,560						
2026	612065	Pioneer Valley	Agawam	AGAWAM- RESURFACING AND RELATED WORK ON ROUTE 57	2	NHPP	\$9,660,000	\$9,660,000	\$7,728,000	\$1,932,000						
2026	612109	Pioneer Valley	Chicopee	CHICOPEE- RESURFACING AND RELATED WORK ON ROUTE 33	2	NHPP	\$7,212,800	\$7,212,800	\$5,770,240	\$1,442,560						
Interstate Pavement								\$6,451,200	\$5,806,080	\$645,120						
2026	612097	Pioneer Valley	West Springfield	WEST SPRINGFIELD- INTERSTATE MAINTENANCE AND RELATED WORK ON I-91	2	NHPP-I	\$6,451,200	\$6,451,200	\$5,806,080	\$645,120						
Section 2B / State Prioritized Modernization Projects								\$2,903,250	\$2,322,600	\$580,650						
Roadway Reconstruction								\$2,903,250	\$2,322,600	\$580,650						
2026	S12204	Pioneer Valley	Easthampton	EASTHAMPTON - IMPROVEMENTS AT MOUNTAIN VIEW ELEMENTARY SCHOOL (SRTS)	2	TAP	\$2,592,188	\$2,903,250	\$2,322,600	\$580,650						SRTS infrastructure project awarded in 2022. To be updated with project ID once approved by PRC. 12% inflation applied for FFY 2026.
Section 2C / State Prioritized Expansion Projects								\$10,174,982	\$8,139,986	\$2,034,996						
Bicycle and Pedestrian								\$10,174,982	\$8,139,986	\$2,034,996						
2026	608157	Pioneer Valley	Springfield	SPRINGFIELD- MCKNIGHT COMMUNITY TRAIL CONSTRUCTION, FROM ARMORY STREET TO HAYDEN AVENUE (1.5 MILES)	2	CMAQ	\$10,174,982	\$10,174,982	\$8,139,986	\$2,034,996						



Year	MassDOT Project ID	MPO	Municipality	MassDOT Project Description	District	Funding Source	Adjusted TFPC	Total Programmed Funds	Federal Funds	Non-Federal Funds	MPO Project Score	Entity Receiving Transfer	PSAC Score	Earmark Details	Proponent	Other Information
Federal Fiscal Year 2027								\$472,296,595	\$75,789,918	\$396,506,677						
Section 1A / Regionally Prioritized Projects								\$31,480,980	\$25,184,784	\$6,296,196						
Non-Interstate Pavement								\$24,605,757	\$19,684,606	\$4,921,151						
2027	608466	Pioneer Valley	Granby	GRANBY- RESURFACING AND RELATED WORK ON ROUTE 202 FROM KENDALL STREET TO SCHOOL STREET	2	STBG	\$4,552,146	\$4,552,146	\$3,641,717	\$910,429	30					Construction - (YOE \$4,552,146) 30 TEC / 25%
2027	608487	Pioneer Valley	Westfield	WESTFIELD- RESURFACING AND RELATED WORK ON ROUTE 10 AND 202	2	STBG	\$10,010,041	\$10,010,041	\$8,008,033	\$2,002,008	31.5					Construction - (YOE \$9,831,126) 31.5 TEC / 25%
2027	612265	Pioneer Valley	East Longmeadow	EAST LONGMEADOW- RESURFACING AND RELATED WORK ON NORTH MAIN STREET (ROUTE 83)	2	STBG	\$10,043,570	\$10,043,570	\$8,034,856	\$2,008,714						
Roadway Reconstruction								\$6,875,223	\$5,500,178	\$1,375,045						
2027	608886	Pioneer Valley	Chesterfield	CHESTERFIELD- RECONSTRUCTION OF NORTH ROAD AND DAMON POND ROAD	1	STBG	\$6,875,223	\$6,875,223	\$5,500,178	\$1,375,045	18					Construction - (YOE \$6,875,221) 18 TEC / 25%
Section 1B / Earmark or Discretionary Grant Funded Projects								\$34,699,261	\$33,220,823	\$1,478,438						
Bridge Off-system NB								\$27,307,073	\$27,307,073	\$0						
2027	612497	Pioneer Valley	Russell	RUSSELL- BRIDGE REPLACEMENT, R-13-002, BRIDGE STREET OVER WESTFIELD RIVER	1	BROFF	\$27,307,073	\$27,307,073	\$27,307,073	\$0						
Bridge On-System NHS NB								\$7,392,188	\$5,913,750	\$1,478,438						
2027	612514	Pioneer Valley	Cummington	CUMMINGTON- BRIDGE REHABILITATION, C-21-002, ROUTE 9 OVER WESTFIELD RIVER	1	HIP-BR	\$7,392,188	\$7,392,188	\$5,913,750	\$1,478,438						
Section 2A / State Prioritized Reliability Projects								\$192,508,358	\$0	\$192,508,358						
Bridge On-system Non-NHS								\$87,734,731	\$0	\$87,734,731						
2027	605340	Pioneer Valley	Springfield	SPRINGFIELD- BRIDGE RECONSTRUCTION/REHAB, S-24-028, ST. JAMES AVENUE OVER CONRAIL RAILROAD (ABANDONED)	2	NGBP	\$4,454,400	\$4,454,400	\$0	\$4,454,400						
2027	612167	Pioneer Valley	Springfield	SPRINGFIELD- BRIDGE REPLACEMENT, S-24-017, ST. JAMES AVENUE OVER CSX & S-24-071, ST. JAMES AVENUE OVER I-291	2	NGBP	\$83,280,331	\$83,280,331	\$0	\$83,280,331						
Bridge On-system NHS								\$104,773,627	\$0	\$104,773,627						
2027	612494	Pioneer Valley	Multiple	SPRINGFIELD- WEST SPRINGFIELD- BRIDGE REPLACEMENT, S-24-003=W-21-002, (US-20) PARK AVENUE OVER CONNECTICUT RIVER	2	NGBP	\$104,773,627	\$104,773,627	\$0	\$104,773,627						
Section 2B / State Prioritized Modernization Projects								\$5,046,000	\$4,541,400	\$504,600						
Intersection Improvements								\$5,046,000	\$4,541,400	\$504,600						
2027	611965	Pioneer Valley	Holyoke	HOLYOKE- INTERSECTION IMPROVEMENTS AT BEECH STREET, RESNIC BOULEVARD, AND WEST FRANKLIN STREET	2	HSIP	\$5,046,000	\$5,046,000	\$4,541,400	\$504,600						
Section 2C / State Prioritized Expansion Projects								\$16,053,638	\$12,842,910	\$3,210,728						
Bicycle and Pedestrian								\$16,053,638	\$12,842,910	\$3,210,728						
2027	607823	Pioneer Valley	Southampton	SOUTHAMPTON- GREENWAY RAIL TRAIL CONSTRUCTION, FROM COLEMAN ROAD TO ROUTE 10 (3.5 MILES)	2	CMAQ	\$7,053,638	\$7,053,638	\$5,642,910	\$1,410,728						
2027	608787	Pioneer Valley	Williamsburg	WILLIAMSBURG- CONSTRUCTION OF THE "MILL RIVER GREENWAY" SHARED USE PATH	1	CMAQ	\$44,010,400	\$9,000,000	\$7,200,000	\$1,800,000						
Section 3B / Non-Federal Aid Funded								\$192,508,358	\$0	\$192,508,358						
Bridge On-system Non-NHS								\$87,734,731	\$0	\$87,734,731						
2027	605340	Pioneer Valley	Springfield	SPRINGFIELD- BRIDGE RECONSTRUCTION/REHAB, S-24-028, ST. JAMES AVENUE OVER CONRAIL RAILROAD (ABANDONED)	2	NGBP	\$4,454,400	\$4,454,400	\$0	\$4,454,400						
2027	612167	Pioneer Valley	Springfield	SPRINGFIELD- BRIDGE REPLACEMENT, S-24-017, ST. JAMES AVENUE OVER CSX & S-24-071, ST. JAMES AVENUE OVER I-291	2	NGBP	\$83,280,331	\$83,280,331	\$0	\$83,280,331						
Bridge On-system NHS								\$104,773,627	\$0	\$104,773,627						
2027	612494	Pioneer Valley	Multiple	SPRINGFIELD- WEST SPRINGFIELD- BRIDGE REPLACEMENT, S-24-003=W-21-002, (US-20) PARK AVENUE OVER CONNECTICUT RIVER	2	NGBP	\$104,773,627	\$104,773,627	\$0	\$104,773,627						



APPENDIX C: Operating and Maintenance Expenditures 2023-2027

Operating and Maintenance Expenditures as of March 2022						
Statewide and District Contracts plus Expenditures within MPO boundaries						
Program Group/Sub Group	Est SFY 2022 Spending	Est SFY 2023 Spending	Est SFY 2024 Spending	Est SFY 2025 Spending	Est SFY 2026 Spending	
Part 1: Non-Federal Aid						
Section I - Non Federal Aid Maintenance Projects - State Bondfunds						
01 - ADA Retrofits						
Sidewalk Construction and Repairs	\$ 78,719	\$ 114,000	\$ 52,000	\$ -	\$ -	
02 - Bicycles and pedestrians program						
Bikeway/Bike Path Construction	\$ -	\$ -	\$ -	\$ -	\$ -	
03 - Bridge						
Bridge Maintenance	\$ 47,360,434	\$ 22,008,112	\$ 7,019,328	\$ 345,318	\$ -	
Bridge Maintenance - Deck Repairs	\$ 13,072,586	\$ 8,334,358	\$ 5,311,045	\$ 443,585	\$ -	
Bridge Maintenance - Joints	\$ 3,793,035	\$ 2,804,206	\$ 1,208,481	\$ 68,432	\$ -	
Bridge Preservation	\$ 2,882,033	\$ 11,816,698	\$ 4,974,667	\$ 317,981	\$ -	
Drawbridge Maintenance	\$ 5,575,223	\$ 2,560,174	\$ -	\$ -	\$ -	
Painting - Structural	\$ 6,162,363	\$ 1,605,861	\$ -	\$ -	\$ -	
Structures Maintenance	\$ 284,948	\$ 142,680	\$ -	\$ -	\$ -	
04 - Capacity						
Highway Relocation	\$ -	\$ -	\$ -	\$ -	\$ -	
Highway Reconstruction - Added Capacity	\$ -	\$ -	\$ -	\$ -	\$ -	
Highway Reconstruction - Major Widening	\$ -	\$ -	\$ -	\$ -	\$ -	
05 - Facilities						
Vertical Construction (Ch 149)	\$ 6,669,216	\$ 5,718,204	\$ 1,651,487	\$ 114,754	\$ -	
07 - Intersection Improvements						
Traffic Signals	\$ 3,488,759	\$ 2,224,126	\$ 1,914,764	\$ 94,957	\$ -	
08 - Interstate Pavement						
Resurfacing Interstate	\$ -	\$ -	\$ -	\$ -	\$ -	
09 - Intelligent Transportation Systems Program						
Intelligent Transportation System	\$ -	\$ -	\$ -	\$ -	\$ -	
10 - Non-interstate DOT Pavement Program						
Milling and Cold Planing	\$ 625,000	\$ 695,000	\$ 65,316	\$ -	\$ -	
Resurfacing	\$ 6,415,673	\$ 4,437,466	\$ 3,658,730	\$ 956,730	\$ -	
Resurfacing DOT Owned Non-Interstate	\$ 5,222,136	\$ 3,704,756	\$ 1,345,715	\$ 178,272	\$ -	
11 - Roadway Improvements						
Asbestos Removal	\$ -	\$ -	\$ -	\$ -	\$ -	
Catch Basin Cleaning	\$ 1,966,347	\$ 1,455,089	\$ 310,866	\$ -	\$ -	
Contract Highway Maintenance	\$ 3,190,450	\$ 3,000,531	\$ 1,668,618	\$ 100,901	\$ -	
Crack Sealing	\$ 1,672,864	\$ 1,194,760	\$ 706,377	\$ 109,600	\$ -	
Culvert Maintenance	\$ -	\$ -	\$ -	\$ -	\$ -	
Culvert Reconstruction/Rehab	\$ -	\$ -	\$ -	\$ -	\$ -	
Drainage	\$ 7,341,532	\$ 6,292,153	\$ 1,154,896	\$ 103,925	\$ -	
Dredging	\$ -	\$ -	\$ -	\$ -	\$ -	
Guard Rail & Fencing	\$ 3,429,456	\$ 4,146,615	\$ 1,845,428	\$ 278,197	\$ -	
Highway Sweeping	\$ 963,234	\$ 1,007,278	\$ 141,245	\$ -	\$ -	
Landscaping	\$ 233,427	\$ 600,000	\$ 244,014	\$ -	\$ -	
Mowing and Spraying	\$ 2,002,002	\$ 1,038,229	\$ 357,576	\$ 29,565	\$ -	
Sewer and Water	\$ 3,904	\$ 20,843	\$ 10,580	\$ -	\$ -	
Tree Trimming	\$ 3,939,855	\$ 2,625,059	\$ 722,777	\$ -	\$ -	



<b>12 - Roadway Reconstruction</b>						
Hwy Reconstr - No Added Capacity	\$	6,001	\$	-	\$	-
Hwy Reconstr - Restr and Rehab	\$	646,014	\$	109,047	\$	177,113
Roadway - Reconstr - Sidewalks and Curbing	\$	1,879,857	\$	748,676	\$	-
<b>13 - Safety Improvements</b>						
Electrical	\$	398,549	\$	-	\$	-
Impact Attenuators	\$	1,068,681	\$	911,141	\$	129,196
Lighting	\$	3,735,830	\$	2,267,423	\$	116,870
Pavement Marking	\$	3,332,465	\$	3,166,821	\$	343,891
Safety Improvements	\$	227,620	\$	33,595	\$	-
Sign Installation/Upgrading	\$	545,832	\$	833,711	\$	65,739
Structural Signing	\$	359,312	\$	129,607	\$	-
<b>Section I Total:</b>	<b>\$</b>	<b>138,573,354</b>	<b>\$</b>	<b>95,746,219</b>	<b>\$</b>	<b>3,975,025</b>
<b>Section II - Non Federal Aid Highway Operations - State Operating Budget Funding</b>						
<b>Snow and Ice Operations &amp; Materials</b>						
	\$	83,800,000	\$	95,000,000	\$	95,000,000
<b>District Maintenance Payroll</b>						
Mowing, Litter Mgmt, Sight Distance Clearing, Etc.	\$	34,400,000	\$	35,440,000	\$	37,610,000
<b>Section II Total:</b>	<b>\$</b>	<b>118,200,000</b>	<b>\$</b>	<b>130,440,000</b>	<b>\$</b>	<b>133,740,000</b>
<b>Grand Total NFA:</b>	<b>\$</b>	<b>256,773,354</b>	<b>\$</b>	<b>226,186,219</b>	<b>\$</b>	<b>136,585,025</b>
Operating and Maintenance Expenditures as of March 2022						

Statewide and District Contracts plus Expenditures within MPO boundaries

Program Group/Sub Group	Est SFY 2022 Spending	Est SFY 2023 Spending	Est SFY 2024 Spending	Est SFY 2025 Spending	Est SFY 2026 Spending
<b>Part 2: Federal Aid</b>					
<b>Section I - Federal Aid Maintenance Projects</b>					
<b>01 - ADA Retrofits</b>					
Sidewalk Construction and Repairs	\$	-	\$	-	\$
<b>02 - Bicycles and pedestrians program</b>					
Bikeway/Bike Path Construction	\$	-	\$	-	\$
<b>03 - Bridge</b>					
Bridge Maintenance	\$	3,805,564	\$	502,504	\$
Bridge Maintenance - Deck Repairs	\$	-	\$	-	\$
Bridge Maintenance - Joints	\$	-	\$	-	\$
Bridge Preservation	\$	-	\$	-	\$
Bridge Reconstruction/Rehab	\$	-	\$	-	\$
Draw bridge Maintenance	\$	-	\$	-	\$
Painting - Structural	\$	3,401,816	\$	378,207	\$
Structures Maintenance	\$	238,348	\$	2,860,181	\$
<b>04 - Capacity</b>					
Hwy Reconstr - Added Capacity	\$	-	\$	-	\$
<b>05 - Facilities</b>					
Vertical Construction (Ch 149)	\$	-	\$	-	\$
<b>07 - Intersection Improvements</b>					
Traffic Signals	\$	-	\$	-	\$
<b>08 - Interstate Pavement</b>					
Resurfacing Interstate	\$	-	\$	-	\$
<b>09 - Intelligent Transportation Systems Program</b>					
Intelligent Transportation System	\$	-	\$	-	\$
<b>10 - Non-interstate DOT Pavement Program</b>					



10 - Non-interstate DOT Pavement Program						
Milling and Cold Planing	\$	-	\$	-	\$	-
Resurfacing	\$	-	\$	-	\$	-
Resurfacing DOT Ow ned Non-Interstate	\$	-	\$	-	\$	-
11 - Roadway Improvements						
Asbestos Removal	\$	-	\$	-	\$	-
Catch Basin Cleaning	\$	-	\$	-	\$	-
Contract Highw ay Maintenance	\$	-	\$	-	\$	-
Crack Sealing	\$	-	\$	-	\$	-
Culvert Maintenance	\$	-	\$	-	\$	-
Culvert Reconstruction/Rehab	\$	-	\$	-	\$	-
Drainage	\$	-	\$	-	\$	-
Guard Rail & Fencing	\$	-	\$	-	\$	-
Highw ay Sw eeping	\$	-	\$	-	\$	-
Landscaping	\$	-	\$	-	\$	-
Mow ing and Spraying	\$	-	\$	-	\$	-
Sewer and Water	\$	-	\$	-	\$	-
Tree Trimming	\$	-	\$	-	\$	-
12 - Roadway Reconstruction						
Hw y Reconstr - Restr and Rehab	\$	-	\$	-	\$	-
13 - Safety Improvements						
Electrical	\$	-	\$	-	\$	-
Impact Attenuators	\$	-	\$	-	\$	-
Lighting	\$	5,557,056	\$	9,931	\$	978,483
Pavement Marking	\$	-	\$	-	\$	-
Safety Improvements	\$	-	\$	-	\$	-
Sign Installation/Upgrading	\$	-	\$	-	\$	-
Structural Signing	\$	583,693	\$	99,450	\$	-
Section I Total:	\$	13,586,477	\$	3,850,272	\$	5,804,478
					\$	952,198
					\$	-

Grand Total Federal Aid:	\$	13,586,477	\$	3,850,272	\$	5,804,478	\$	952,198	\$	-
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Pioneer Valley										
Program Group/Sub Group	Est SFY 2022 Spending		Est SFY 2023 Spending		Est SFY 2024 Spending		Est SFY 2025 Spending		Est SFY 2026 Spending	
Part 1: Non-Federal Aid										
10 - Non-interstate DOT Pavement Program										
Milling and Cold Planing	\$	-	\$	-	\$	-	\$	-	\$	-
Resurfacing	\$	-	\$	-	\$	-	\$	-	\$	-
Resurfacing DOT Ow ned Non-Interstate	\$	18,209	\$	-	\$	-	\$	-	\$	-
11 - Roadway Im prove ments										



Figure 2 FFY 2023-2027 Estimated Transit Operations and Maintenance Expenditures

Operating Revenue	Fiscal Year 2023	Fiscal Year 2024	Fiscal Year 2025	Fiscal Year 2026	Fiscal Year 2027
Farebox	\$6,089,493	\$7,626,668	\$7,779,201	\$7,934,785	\$8,093,481
Section 5307 CARES	\$5,133,049	\$5,235,710	\$0	\$0	\$0
Advertisin Interest Income	\$413,000	\$417,130	\$421,301	\$425,514	\$429,769
State Contract Assistance	\$26,111,551	\$26,894,898	\$27,701,744	\$28,532,797	\$29,388,781
Local Assessment	\$9,876,792	\$10,123,712	\$10,376,805	\$10,636,225	\$10,902,130
Other - ARPA	\$6,817,164.00	\$5,653,047.00	\$0.00	\$0.00	\$0.00
Other - Grants	\$492,073.00	\$501,914.46	\$511,952.75	\$522,191.80	\$532,635.64
Total Operating Expenses	\$54,933,122	\$55,951,164	\$46,279,052	\$47,529,321	\$48,814,162
These are draft budget numbers for FY22 and projections for the following years.					



## **APPENDIX D Metropolitan Planning Area (MPA) State and Local Consulted Agencies**

*As required in MAP-21, the Moving Ahead for Progress in the 21st Century Act (P.L. 112-141)* consulted with agencies and officials responsible for other planning activities within the MPA (metropolitan planning area) that are affected by transportation (including State and local planned growth, economic development, environmental protection, airport operations, or freight movements) or coordinate its planning process (to the maximum extent practicable) with such planning activities

PVMPO fulfilled these requirements through the processes tied to the Joint Transportation Committee (JTC). Listed below are two tables, table 25 list agencies with transportation interest in the Metropolitan Planning Area (MPA) that were contacted for the purpose of consultation while developing the TIP. Table 31 lists the agencies from table 30 which responded and coordinated meetings were held during TIP development.

**Table 35 Agencies Contacted**

<b>Agency</b>	<b>Agency Location</b>
<b>US Fish and Wildlife Service</b>	<b>Hadley</b>
<b>MassDOT - Office of Transportation Planning</b>	<b>Boston</b>
<b>FEDERAL HIGHWAY ADMIN</b>	<b>Cambridge</b>
<b>US EPA</b>	<b>Boston</b>
<b>US Army Corp of Engineers</b>	<b>Concord</b>
<b>Westfield River Wild and Scenic Advisory Committee</b>	<b>Haydenville</b>
<b>AIR QUALITY CONTROL (DEP)</b>	<b>Boston</b>
<b>FEDERAL TRANSIT ADMIN</b>	<b>Cambridge</b>
<b>MassDOT Highway Division District 1&amp; 2</b>	<b>Northampton/Lenox</b>
<b>Economic Development Council of Western Mass</b>	<b>Springfield</b>
<b>PETER PAN BUS LINES, INC.</b>	<b>Springfield</b>
<b>Pioneer Valley Transit Authority (PVRTA)</b>	<b>Springfield</b>
<b>BARNES AIRPORT</b>	<b>Westfield</b>
<b>Pioneer Valley RR</b>	<b>Westfield</b>
<b>Bike/Ped Community (MassBike)</b>	<b>Boston</b>
<b>UMASS Transit</b>	<b>Amherst</b>
<b>Columbia Greenway Rail Trail Committee</b>	<b>Westfield</b>
<b>Stockbridge Munsee Community</b>	<b>Williamstown</b>
<b>New Haven to Northampton Canal Greenway Committee</b>	<b>Multiple</b>

These agencies are solicited to comment and provide relevant information during TIP development and are invited to attend all meetings and workshop involving project evaluation. Agendas and information in regards the TIP and its development are distributed by mail prior to meetings as outlined in the Public Participation Plan for the Pioneer Valley.



**Table 36 Agencies Providing Consultation**

<b>Agency</b>	<b>Agency Location</b>



## APPENDIX D: FAST Act Performance Management Information

The FHWA and FTA are jointly issuing this final rule to update the regulations governing the development of metropolitan transportation plans (MTP) and programs for urbanized areas, long-range statewide transportation plans and programs, and the congestion management process as well as revisions related to the use of and reliance on planning products developed during the planning process for project development and the environmental review process. The changes reflect the passage of the Moving Ahead for Progress in the 21st Century Act (MAP-21) and the Fixing America's Surface Transportation (FAST) Act. The MAP-21 continues many provisions related to transportation planning from prior laws; however, it introduces transformational changes and adds some new provisions. The FAST Act makes minor edits to existing provisions. The changes make the regulations consistent with current statutory requirements and implement the following: A new mandate for State departments of transportation (hereafter referred to simply as "States") and metropolitan planning organizations (MPO) to take a performance-based approach to planning and programming; a new emphasis on the nonmetropolitan transportation planning process, by requiring States to have a higher level of involvement with nonmetropolitan local officials and providing a process for the creation of regional transportation planning organizations (RTPO); a structural change to the membership of the larger MPOs; a new framework for voluntary scenario planning; new authority for the integration of the planning and environmental review processes; and a process for programmatic mitigation plans.<sup>2</sup>

PVPC accomplished the MTP requirements of FAST Act through the recent update to the Transportation Evaluation Criteria (TEC) for the Pioneer Valley MPO. The table below shows the relationship between FAST act planning factors and our TEC.

Fast Act Planning Factors Relationship to the Transportation Evaluation Criteria (TEC)

Factor	Fast Act 10 Planning Factors Description	TEC Scoring Criteria
1	Support the economic vitality of the metropolitan areas, especially by enabling global competitiveness, productivity, and efficiency.	Smart Growth and Economic Development, System Preservation, Modernization and Efficiency
2	Increase the safety of the transportation system for motorized and non-motorized users.	Safety and Security, Quality of Life
3	Increase the security of the transportation system for motorized and non-motorized users.	Safety and Security, Quality of Life
4	Increase the accessibility and mobility of people and for freight.	Mobility, Smart Growth and Economic Development
5	Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns.	Environment and Climate Change, Quality of Life, Livability, Smart Growth and Economic Development
6	Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.	Smart Growth and Economic Development, Mobility
7	Promote efficient system management and operation.	System Preservation, Modernization and Efficiency, Mobility

<sup>2</sup><https://www.federalregister.gov/articles/2016/05/27/2016-11964/statewide-and-nonmetropolitan-transportation-planning-metropolitan-transportation-planning#h-9>



8	Emphasize the preservation of the existing transportation system.	System Preservation, Modernization and Efficiency
9	Improve the resiliency and reliability of the transportation system and reduce or mitigate storm water impacts of surface transportation.	Environment and Climate Change
10	Enhancing travel and tourism.	Mobility, Quality of Life



## APPENDIX E: Planning Acronyms



**3C** - Continuing, Comprehensive, and Cooperative Planning Process  
**AADT** - Average Annual Daily Traffic  
**AASHTO** - American Association of State Highway and Transportation Officials  
**ADA** - Americans with Disabilities Act (1990)  
**ADT** - Average Daily Traffic  
**AFV** - Alternative Fuel Vehicles  
**ATR** - Automatic Traffic Recorder  
**AVR** - Average Vehicle Ridership  
**BAPAC** - Barnes Aquifer Protection Advisory Committee  
**BID** - Business Improvement District  
**BLOS** - Bicycle Level of Service  
**BMP** - Best Management Practice  
**BMS** - Bridge Management System  
**CAAA** - Clean Air Act Amendments of 1990  
**CBD** - Central Business District  
**CDBG** - Community Development Block Grant  
**CDC** - Centers for Disease Control  
**CEDS** - Comprehensive Economic Development Strategy  
**CIP** - Capital Improvements Plan (or Program)  
**CMAQ** - Congestion Mitigation and Air Quality Improvement Program  
**CMP** - Congestion Management Process  
**CNG** - Compressed Natural Gas  
**CO** - Carbon Monoxide  
**COG** - Council of Governments  
**CommPASS** - Commonwealth Procurement Access and Solicitation System  
**CPA** - Community Preservation Act  
**CPTC** - Citizen Planner Training Collaborative  
**CRCOG** - Capitol Region Council of Governments  
**CSO** - Combined Sewer Overflow  
**DCR** - Department of Conservation and Recreation  
**DEP** - Department of Environmental Protection  
**DHCD** - Department of Housing and Community Development  
**DLTA** - Direct Local Technical Assistance  
**DOT** - Department of Transportation  
**DPW** - Department of Public Works  
**E.O.** - Executive Order  
**EDC** - Economic Development Council  
**EIR** - Environmental Impact Report  
**EIS** - Environmental Impact Statement  
**EJ** - Environmental Justice  
**ENF** - Environmental Notification Form  
**EOA** - Economic Opportunity Area  
**EOEEA** - Executive Office of Energy and Environmental Affairs  
**EPA** - Environmental Protection Agency  
**FA** - Federal Aid  
**FAST** - Fixing America's Surface Transportation Act  
**FC** - Functional Classification (of roadways)  
**FHA** - Federal Housing Administration  
**FHWA** - Federal Highway Administration  
**FRCOG** - Franklin Regional Council of Governments  
**FRTA** - Franklin Regional Transit Authority  
**FTA** - Federal Transit Administration  
**GHG** - Greenhouse Gas  
**GIS** - Geographic Information System  
**GPS** - Global Positioning System  
**HOV** - High Occupancy Vehicle



**HUD** - U.S. Department of Housing and Urban Development  
**ISTEA** - Intermodal Surface Transportation Efficiency Act of 1991  
**ITS** - Intelligent Transportation Systems  
**JARC** - Job Access and Reverse Commute  
**JLSB** - Jacob's Ladder Scenic Byway  
**JLT** - Jacob's Ladder Trail  
**JTC** - Joint Transportation Committee  
**LEP** - Limited English Proficiency  
**LOS** - Level of Service  
**LPMS** - Local Pavement Management System  
**LRV** - Light Rail Vehicle  
**LTA** - Local Technical Assistance  
**M.G.L.** - Massachusetts General Laws  
**MAP 21** - Moving Ahead for Progress in the 21st Century  
**MARPA** - Massachusetts Association of Regional Planning Agencies  
**MassDOT** - Massachusetts Department of Transportation  
**MassGIS** - Massachusetts Geographic Information System  
**MEPA** - Massachusetts Environmental Policy Act  
**MMA** - Massachusetts Municipal Association  
**MOA** - Memorandum of Agreement  
**MOU** - Memorandum of Understanding  
**MPO** - Metropolitan Planning Organization  
**MUTCD** - Manual of Uniform Traffic Control Devices  
**NFA** - Non-Federal Aid  
**NHS** - National Highway System  
**NHTSA** - National Highway Traffic Safety Administration  
**NOx** - Nitrogen Oxide  
**NTSB** - National Transportation Safety Board  
**OCI** - Overall Condition Index (Pavement)  
**PCI** - Pavement Condition Index  
**PL** - [Metropolitan] Planning Funds  
**PMS** - Pavement Management System  
**PMUG** - Pavement Management Users Group  
**PPP** - Public Participation Process  
**PVTA** - Pioneer Valley Transit Authority  
**QVCDG** - Quaboag Valley Community Development Corp.  
**REB** - Regional Employment Board  
**RIF** - Roadway Inventory Files  
**RPA** - Regional Planning Agency  
**RTA** - Regional Transit Authority  
**RTP** - Regional Transportation Plan  
**SAFETEA-LU** - Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users  
**SBA** - Small Business Administration  
**SIP** - State Implementation Plan (for air quality)  
**SKC** - Sustainable Knowledge Corridor  
**SOV** - Single Occupancy Vehicle  
**SPR** - Statewide Planning and Research Funds  
**STIP** - Statewide Transportation Improvement Program  
**STP** - Surface Transportation Program  
**TCSP** - Transportation and Community System Preservation [Pilot Program]  
**TDM** - Transportation Demand Management  
**TEA-21** - Transportation Equity Act for the 21st Century  
**TIP** - Transportation Improvement Program  
**TMC** - Turning Movement Count  
**TND** - Traditional Neighborhood District  
**TOD** - Transit Oriented Design (or Development)



**TRB** - Transportation Research Board  
**TRO** - Trip Reduction Ordinance  
**TSM** - Transportation Systems Management  
**UMass** - University of Massachusetts  
**UPWP** - Unified Planning Work Program  
**VMT** - Vehicle Miles Traveled  
**VOC** - Volatile Organic Compound  
**VOR** - Vehicle Occupancy Rate  
**WBE** - Women-owned Business Enterprises  
**WRWA** - Westfield River Watershed Association  
**WRWSAC** - Westfield River Wild & Scenic Advisory Committee  
**ZBA** - Zoning Board of Adjustment (or Appeals)