# TRANSPORTATION IMPROVEMENT PROGRAM (TIP)

2022 - 2026

## FOR THE METROPOLITAN PLANNING ORGANIZATION PIONEER VALLEY REGION, MASSACHUSETTS

Draft April 16, 2021



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 or reflect those of the U. S. Department of Transportation

### **Table of Contents**

Notice of Nondiscrimination Rights and Protections to Beneficiaries	5
PREFACE	7
I.GENERAL SUPPORT INFORMATION	7
FEDERAL AUTHORIZATION	7
CONFORMITY WITH THE REGIONAL TRANSPORTATION PLAN	14
METROPOLITAN PLANNING ORGANIZATION	14
DEVELOPMENT OF THE TIP	15
PROJECT SELECTION AND PROGRAMMING	19
AMENDMENT/ADJUSTMENT OF THE TIP	20
DESCRIPTION OF FUNDING SOURCES	20
TRANSPORTATION SYSTEM OPERATING AND MAINTENANCE COSTS	22
II. PUBLIC PARTICIPATION SUMMARY AND CHANGES	25
III. FEDERAL COMPONENT	27
PIONEER VALLEY MPOENDORSEMENT	29
CERTIFICATION OF THE 3-C PLANNING PROCESS	31
FUNDING INFORMATION	35
THE GEOGRAPHIC DISTRIBUTION OF FEDERAL TARGET FUNDS IN THE METROPOLITAN PLANNING REGION – 2022 TO 2026	
IV. FEDERAL AID REGIONAL PROJECT LISTINGS	43
ORGANIZATION OF PROJECT LISTINGS	43
V. TRANSIT PROJECT LISTING FOR FFY 2022 - 2026	61
VII. PROJECT IMPLEMENTATION	77
VIII. AIR QUALITY CONFORMITY INFORMATION FFY 2022 - 2026	81
IX. GREENHOUSE GAS MONITORING AND EVALUATION	87
APPENDICES	103
APPENDIX A:MassDOT Targets	105

Appendix B: Additional Project Information	107
APPENDIX C: Metropolitan Planning Area (MPA) State and Local Consulted Agencies	112
APPENDIX D: FAST Act Performance Management Information	115
APPENDIX E: Planning Acronyms	117
List of Tables and Figures	
Table 1 Regional Performance Target Status	9
TABLE 2 PERFORMANCE TARGETS FOR THE PIONEER VALLEY MPO	10
TABLE 3 PERFORMANCE MEASURE LINKED INVESTMENTS 2018-2022	11
TABLE 4 TAM INVESTMENTS 2018-2022	13
TEC Scoring Summary	18
Table 5 Transportation Operating and Maintenance Expenditures	
Table 6 Transit Operating Expenditures	22
Table 7 Transit Maintenance Expenditures	23
TABLE 8 COMMENTS RECEIVED DURING PUBLIC REVIEW	26
Table 9 Federal Highway Financial Plan	35
Table 10 Federal Transit Financial Plan	
TABLE 11 PROJECTS PROPOSED TO BE COMPLETED IN THE 2022-2026 TIP BY SUB-REGION	37
TABLE 12 PROJECTS PROPOSED TO BE COMPLETED IN THE 2022-2026 TIP BY MUNICIPALITY	
TABLE 13 DISTRIBUTION OF PROJECTS IN THE RTP TO LOW INCOME POPULATIONS	
TABLE 14 DISTRIBUTION OF PROJECTS IN THE RTP TO MINORITY POPULATIONS	40
FIGURE 1 - PROJECTS PROGRAMMED IN THE TIP	
Table 15 Summary of Programmed Projects Section 1 A Federal Aid Target Projects	
Table 16 Federally Funded Projects Year 2022	
Table 17 Federally Funded Projects Year 2023	49
Table 18: Federally Funded Projects 2024	
Table 19: Federally Funded Projects 2025	
Table 20: Federally Funded Projects Year 2026.	
TABLE 21:UNIVERSE OF PROJECTS AND TEC SCORES.	
Table 22 FFY 2022 Transit Project Information	
Table 23 FFY 2023 Transit Project Information	
Table 24 FFY 2024 Transit Project Information	
Table 24 FFY 2024 Transit Project Information (Continued)	
Table 24 FFY 2024 Transit Project Information (Continued)	
Table 25 FFY 2025 Transit Project Information	
Table 25 FFY 2025 Transit Project Information (Continued)	
Table 25 FFY 2025 Transit Project Information (Continued)	
Table 26 FFY 2026 Transit Project Information	
Table 26 FFY 2026 Transit Project Information (Continued)	75
Table 27 Project Implementation	
Table 28 Greenhouse Gas Summary Tables Tables FFY 2022	
Table 29Transit GHG Summary 2022	
Table 30 Agencies Contacted	
Table 31 Agencies Providing Consultation	113

#### 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 administrated 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: Casoestainformaçãosejanecessáriaem outro idioma, favor contar o EspecialistaemTítulo VI do PVPC pelotelefone 413-781-6045.

Spanish: Si necesitaestainformaciónenotroidioma, 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: ЕслиВамнеобходимаданнаяинформацияналюбомдругомязыке, пожалуйста, свяжитесьсоспециалистомпоТитулу VI ДепартаментаТранспорташтатаМассачусетс (PVPC) потел:

413-781-6045.

Haitian Creole: Si yon mounvlegenyenenfòmasyonsayo nan yon lòtlang, tanprikontakteEspesyalis PVPC Title VI la nan nimewo 413-781-6045.

Vietnamese: Nếuquývịcầnthông tin nàybằngtiếngkhác, vuilòngliênhệChuyênviênLuật VI của PVPC theosốđiệnthoại 413-781-6045.

French: Si vousavezbesoind'obtenirunecopie de la présentedansuneautre langue, veuillezcontacter le

spécialiste du Titre VI de PVPC encomposant le 413-781-6045.

Italian: Se ha bisogno di riceverequesteinformazioni in un'altra lingua siprega di contattare lo Specialista

PVPC del Titolo VI al numero 413-781-6045.

Khmer: របសិ៊ើនូ័ូ់ននេបេលាក-

អករតវការបកែរបពតមានេនះសមទាកទកអកឯកេទសេលដើពំ្លី់កទ6

របសPVPCតាមរយៈេលខទូរសព័ទ413-781-6045

#### **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 <a href="https://example.com/here">here</a>.

**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**

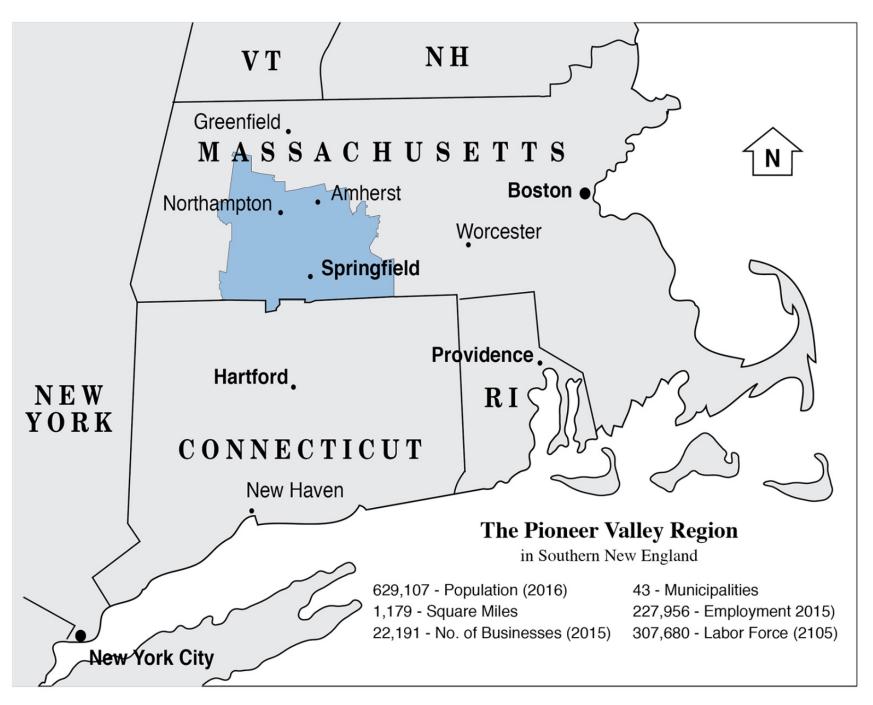
The FFY 2022 - 2026 TIP has been prepared with completely separate components of the document that are subject to federal review and approval and components that are not. This distinction of a "federal component" was the firm position of the Massachusetts Department of Transportation (MassDOT) as a means 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 2022 - 2026 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 2022 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 2022. Funding targets for the Pioneer Valley Region have been issued by MassDOT identifying potential resources for each year of the TIP.

Preface \_\_\_\_\_\_\_\_ 7



**Pretace** 

#### 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 FAST Act, Fixing America's Surface Transportation (Pub. L. No. 114-94) was signed into law on December 4, 2015. Funding surface transportation programs at over \$305 billion for fiscal years (FY) 2016 through 2020, FAST act replaced MAP-21 which was enacted in 2012. Under the FAST Act all Metropolitan Planning Organizations are required to incorporate ten planning factors. A FAST Act Continuing Resolution was signed by the President on October 1, 2020 extending Fast Act funding through December 2021. 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

General Information 7

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.

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

1

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

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 PVTA, 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. PVTA adopted their PTASP at their Advisory Board Meeting on November 18, 2020.

**Table 1 Regional Performance Target Status** 

Final Rule	Effective Date	Status	Updated
Safety Performance Measures (PM1)	April 14, 2016	MPO adopted state targets on February 23, 2020	Annually
Pavement/Bridge Performance Measures (PM2)	May 20, 2017	MPO adopted state targets on October 23, 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 PVTA TAM Plan Targets on March 26, 2019	Every Four Years
Public Transportation Agency Safety Plan (PTASP)	On or before December 31, 2020	MPO adopted PVTA  – 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 PVTA 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** 

Rule	Performance Measure	Target
PM1	Total Number of Fatalities	Reduce Total Number of Fatalities to 339 or less statewide
PM1	Rate of Fatalities per 100 Million Vehicle Miles Traveled (VMT)	Reduce the Rate of Fatalities to 0.55/100 million VMT or less statewide
PM1	Total Number of Incapacitating Injuries	Reduce Total Number of Incapacitating Injuries to 2580 or less statewide
PM1	Rate of Serious Incapacitating per 100 Million VMT	Reduce the Rate of Incapacitating Injuries to 4.23/100 million VMT or less statewide
PM1	Total Number of Combined Incapacitating Injuries and Fatalities for Non-motorized Modes	Do Not Exceed the Current Average of 506 for Combined Incapacitating 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	1622 Kg/day CO 1.4 Kg/day Ozone

	Quality Program (CMAQ) for the Springfield Maintenance Area	
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	Reduce Total Number of Fatalities to 0
PTASP	Rate of Fatalities per 100 Million Vehicle Miles Traveled (VMT)	Reduce the Rate of Fatalities to 0.58/100 million VMT or less statewide
PTASP	Total Number of Incapacitating Injuries	Reduce Total Number of Incapacitating Injuries to 0
PTASP	Rate of Serious Incapacitating per 100 Million VMT	Reduce the Rate of Incapacitating Injuries to 0.437. /100 million VMT or less statewide

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

TIP Year	SID	Municipality	Project Description	Total Programmed	PM Rule
2022	606450	Holyoke	HOLYOKE- TRAFFIC SIGNAL UPGRADES AT 15 INTERSECTIONS ALONG HIGH & MAPLE STREETS	\$ 4,603,777	PM1
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	PM1
2020	607502	Northampton	NORTHAMPTON- INTERSECTION IMPROVEMENTS AT KING STREET, NORTH STREET & SUMMER STREET AND AT KING STREET & FINN STREET	\$4,171,096	PM3
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	PM1
			PM 1 Total (7 Projects)	\$28,655,492	29%
2021	608084	Amherst	AMHERST- IMPROVEMENTS & RELATED WORK ON ROUTES 9 & 116, FROM UNIVERSITY DRIVE TO SOUTH PLEASANT STREET (0.8 MILES)	\$ 5,769,804	PM2

2020	604434	Chicopee	CHICOPEE- RECONSTRUCTION & RELATED WORK ON FULLER ROAD, FROM MEMORIAL DR (RTE 33) TO SHAWINIGAN DR (2.0 MILES)	\$9,735,424	PM2
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	PM2
TIP Year	SID	Municipality	PM 2 Total (3 Projects) Project Description	\$18,127,850 Total Programmed	18% PM Rule
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	PM3
2022	605032	Hadley	HADLEY- RÉCONSTRUCTION ON ROUTE 9, FROM MIDDLE STREET TO MAPLE/SOUTH MAPLE STREET	\$17,486,346	PM3
2021	608782	Springfield	SPRINGFIELD- INTERSECTION IMPROVEMENTS AT COTTAGE STREET, INDUSTRY AVENUE AND ROBBINS ROAD	\$3,135,052	PM3
2021	605032	Hadley	HADLEY- RECONSTRUCTION ON ROUTE 9, FROM MIDDLE STREET TO MAPLE/SOUTH MAPLE STREET	\$8,793,026	PM3
2020	608718	Springfield	SPRINGFIELD- INTERSECTION IMPROVEMENTS AT BERKSHIRE AVENUE, COTTAGE AND HARVEY STREETS	\$3,086,454	PM3
2020	PV0001	Multiple	NORTHAMPTON, AMHERST, CHICOPPE, EASTHAMPTON, HADLEY, HOLYOKE, SOUTH HADLEY, SPRINGFIELD, and WEST SPRINGFIELD: ValleyBike share (phase II)	\$1,200,000	PM3
2020	PV0002	Multiple	P 21 Express Year 3	\$500,000	PM3
2019	PV0001	multiple	P21 Express - Year 2 Operating	\$500,000	PM3
2018	PV0005	Multiple	PVTA P21 Express Service Between Union Station in Springfield and the Holyoke Transportation Center	\$500,000	PM3
2018	608786	Multiple	AMHERST- HADLEY- NORTHAMPTON- TRANSIT SIGNAL PRIORITY UPGRADES AT VARIOUS LOCATIONS	\$1,200,000	PM3
2019	607987	Ware	WARE- INTERSECTION IMPROVEMENTS @ MAIN STREET, WEST STREET, NORTH STREET, SOUTH STREET & CHURCH STREET	\$2,475,087	PM3
2018	604203	Agawam	AGAWAM- INTERSECTION IMPROVEMENTS AT ROUTE 187 & ROUTE 57	\$3,288,000	РМ3
2018	604597	Northampton	NORTHAMPTON- IMPROVEMENTS ON I-91 INTERCHANGE 19 AT ROUTE 9 AND DAMON ROAD	\$7,438,490	PM3
			PM 3 Total (13 Projects)	\$53,227,041	53%
			Total (23 Projects)	\$100,010,383	100%

As can be seen in table 3 PVMPO has invested \$100 million over the past 5 years on projects which will help meet the Performance Measure rules. Of these investments 29% will help achieve PM1, 18% will help achieve PM2, and 53% will help achieve PM3. As more data because available it is anticipated that corresponding PM trends should be seen showing that our regional is meeting or exceeding our PM Rules.

Table 4 TAM Investments 2018-2022

TIP Year	RTA	Capital Project	Total Programmed	PM Rule
2022	PVTA	PVTA - Purchase 40' Replacement Buses (6)	\$3,157,608	TAM
2022	PVTA	PVTA - Replace 35' Buses (6)	\$3,089,428	TAM
2022	PVTA	PVTA - BUY REPLACEMENT 40-FT BUS - Electric (4) (VW Mitigation)	\$3,826,159	TAM
2022	PVTA	PVTA - BUY REPLACEMENT 35-FT BUS - Electric (4) (VW mitigation)	\$3,672,134	TAM
2022	PVTA	PVTA - REHAB-REBUILD 40-FT BUS (6)	\$1,603,599	TAM
2022	PVTA	PVTA - REHAB-REBUILD 35-FT BUS (4)	\$863,066	TAM
2022	PVTA	PVTA - Purchase Replacement Vans (18)- CGP- MAP Funds	\$1,112,400	TAM
2022	PVTA	PVTA - Replace Supervisory Vehicles (2)	\$54,000	TAM
2022	PVTA	PVTA - PREVENTIVE MAINTENANCE - PVTA Faculties State of Good Repair	\$20,000	TAM
2022	PVTA	PVTA - REHAB-RENOVATE - YARDS AND SHOPS - Install new exterior lighting at Northampton Bus Maintenance Facility	\$120,000	TAM
2022	PVTA	PVTA - REHAB-RENOVATE - STORAGE FACILITY - Umass Bus O&M Facility New lighting in Service and Storage	\$120,000	TAM
2022	PVTA	PVTA - REHAB-RENOVATE - MAINTENANCE FACILITY - Northampton Bus Maintenance Facility Generator Replace	\$325,000	TAM
2022	PVTA	PVTA - REHAB-RENOVATE - MAINTENANCE FACILITY Umass O&M Facility Generator replacement cement	\$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

2018	PVTA	Replacement Vans (4)	\$283,795	TAM
2018	PVTA	Replace Mini Buses for Shuttles (3)	\$270,000	TAM
2018	PVTA	Replacement 40' Buses (4)	\$2,161,631	TAM
			\$54,591,625	

Table 4 shows PVTA capital investment in which will help our region meet the TAM rule. Over the past 5 years PVTA has \$54.6 million on buses, vans, mini buses, and facility maintenance. PVTA spends roughly 30% of their yearly capital budget on fleet replace in order to meet the TAM rule. PTAS targets where approved by the MPO in November of 2020, projects will be evaluated in the next TIP cycle for their PTASP effectiveness.

#### 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 2022 through 2026 (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 2022 - 2026 TIP is only required for carbon monoxide. Further details and background information are provided 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 MPP member's s shall be elected to the MPO by the Pioneer Valley Planning 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.

Name Title

Stephanie Pollack 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

Mayor David Narkewicz Chairman of the Pioneer Valley Transit Authority Advisory Board

Mayor John Vieaus City of Chicopee
Mayor Domenic Sarno City of Springfield
Mayor William C. City of West Springfield

Reichelt

Mayor Nicole LaChapelle Mayor of Easthampton

Vacant Eastern Tier

Roger Fuller Chesterfield Board of Selectmen

Rick Sullivan Economic Development Council of Western Massachusetts

Alternates

Mayor of Holyoke

John Martin Southampton Board of Selectmen

Ex-Officio (Non-Voting)

Jeff McEwen Federal Highway Administration
Peter Butler Federal Transit Administration

Sandra Sheehan Pioneer Valley Transit Authority Administrator
Tina Cote Franklin Regional Transit Authority Administrator

JTC Chair 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 Score (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 used in identifying project needs as well as the merits of projects in the development process. The CMP is also used at to identify the effectiveness of project implementation as well as a tool to monitor our performance measures.

## 701 CMR 7.00 USE OF ROAD FLAGGERSAND POLICEDETAILS ON PUBLIC WORKS PROJECTS

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

#### 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 and 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. 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	Health Impact Assessment	
					0.5	1	
						Length of Time Project has	
					Improves storm resilience	been in queue for TIP	
						funding	
					3	1	
Maximum Score							_
19	12	17	10	16	12	11	3

#### PROJECT INITATION

In the fall of 2017 MassDOT rolled out their new project intake tool 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 a Project Initiation Form (PIF) used by the Project Review Committee (PRC) and the MPO for project review and evaluation. The PIF 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 <a href="http://massdot.maps.arcgis.com/home/index.html">http://massdot.maps.arcgis.com/home/index.html</a>

#### 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 <a href="http://www.pvpc.org/content/pioneer-valley-public-participation-plan">http://www.pvpc.org/content/pioneer-valley-public-participation-plan</a>

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.

The MassDOT STIP amendment/adjustment process differs from the PVMPO process, information of the STIP amendment/adjustment process 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** (STBGP) - 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 were 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 Areas1 (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 5 Transportation Operating and Maintenance Expenditures** 

Year	Target	Other Statewide	Non Interstate	NFA Bridge	Interstate	Total All Funding
	10.8099%	10.8099%	13.0542%	10.8099%	8.4544%	
2020- 2024	\$134,136,806	\$121,332,223	\$47,144,718	\$54,049,500	\$13,381,407	\$370,044,654
2025- 2029	\$153,789,263	\$136,359,264	\$56,120,172	\$55,238,590	\$16,897,096	\$418,404,385
2030- 2034	\$188,833,297	\$167,431,514	\$68,908,303	\$56,453,840	\$20,747,444	\$502,374,398
2035- 2039	\$209,293,530	\$185,572,848	\$76,374,571	\$57,695,820	\$22,995,446	\$551,932,215
2040	\$44,516,326	\$39,470,984	\$16,244,722	\$11,793,026	\$4,891,087	\$116,916,145
Totals	\$730,569,222	\$650,166,833	\$264,792,486	\$235,230,776	\$78,912,480	\$1,959,671,797

Source: Regional Transportation Plan, updated 2020

**Table 6 Transit Operating Expenditures** 

Year	5307	5310	5339	RTACAP	Total
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

Total	\$340,109,790	\$14,645,825	\$41,999,048	\$181,015,195	\$577,769,858
2040	\$19,744,098	\$850,992	\$2,838,307	\$10,743,170	\$34,176,567
2035-2039	\$92,847,318	\$4,000,659	\$12,696,208	\$48,832,593	\$158,376,778
2030-2034	\$83,765,669	\$3,607,577	\$10,521,068	\$44,393,267	\$142,287,581

**Table 7 Transit Maintenance Expenditures** 

	2020-2024	2025-2029	2030-2034	2035-2039	2040	<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
Operating						
Funds for						
Programming						
in the RTP	\$166,820,675	\$186,543,022	\$208,677,859	\$233,534,432	\$50,258,821	\$845,834,809

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 2022 - 2026 TIP underwent a public review and comment period consistent with the Pioneer Valley Metropolitan Planning Organizations Public Participation Process. This began April 28, 2021 and continued until May 18, 2021. During this time, comments were received from (insert list of comments). A public hearing was held on May 12, 2021 as part of the JTC meeting. Below is a summary of the comments received during the public review and comment period.

Public Participation 25

#### **Table 8 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 Comments** 

## **III. FEDERAL COMPONENT**

#### PIONEER VALLEY MPOENDORSEMENT

#### **INSERT ENDORSEMENT**

#### **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 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.

#### Insert 3C Endorsement

### 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.

# Insert Endorsement

#### **FUNDING INFORMATION**

### **FEDERAL AID TARGETS**

The MassDOT provided the revised PVPC federal aid highway funding targets for the region in January 26, 2021. The targets are provided for FFYs 2022 through 2026 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 FFY2023 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 5 (highway) and Table 6 (transit) shows both these target amounts and the amounts programmed for highway projects during fiscal years 2022 - 2026. Projects that are not charged against the funding targets are not presented in the table. These projects include: Statewide items; and special funding projects. Table 6 shows the projected transit funds for FFY 2022– 2026.

Table 9 F	ederal	Highway	Financial	Plan
-----------	--------	---------	-----------	------

	2022	2023	2024	2025	2026	GRAND TOTAL
<b>Total Target Funds</b>	\$26,839,851	\$27,426,056	\$27,785,521	\$27,136,864	\$26,432,171	\$135,620,463
Total of Programmed	\$26,839,851	\$27,208,514	\$27,202,550	\$23,991,612	\$22,487,591	\$127,730,118
Programmed STBG	\$26,839,851	\$25,708,276	\$25,702,550	\$23,991,612	\$22,487,591	\$124,729,880
Programmed HSIP	\$0	\$1,000,000	\$1,000,000	\$0	\$0	\$2,000,000
Programmed CMAQ	\$0	\$0	\$0	\$0	\$0	\$0
Programmed TAP	\$0	\$500,238	\$500,000	\$0	\$0	\$1,000,238
Difference	\$0	\$217,542	\$582,971	\$3,145,252	\$3,944,580	\$7,890,345

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 10 Federal Transit Financial Plan** 

	2022	2023	2024	2025	2026	GRAND TOTAL
Available Funds	\$25,770,768	\$27,160,305	\$30,516,886	\$24,751,604	\$24,299,150	\$132,498,713
Transit Capitol Investment	\$25,770,768	\$27,160,305	\$30,516,886	\$24,751,604	\$24,299,150	\$132,498,713
5307	\$17,100,325	\$17,770,989	\$17,916,544	\$17,680,300	\$16,819,645	\$87,287,803
5309						\$0
5310						\$0
5311						\$0
5337						\$0
5339	\$1,172,150	\$1,666,075	\$4,520,000	\$3,935,594	\$7,479,505	\$18,773,324
5320						\$0
Other Federal						\$0
Other Non- Federal	\$7,498,293	\$7,723,241	\$8,080,342	\$3,135,710		\$26,437,586
State Bond Cap	\$4,172,350	\$4,950,401	\$5,675,211	\$5,159,699	\$5,501,129	\$25,458,790
Difference	\$0	\$0	\$0	\$0	\$0	\$0

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 (2022 through 2026) 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 14 communities over the next 5 years. The total funding commitment for these projects is \$127.7 million. The average investment per project is \$6.4 million (decrease from \$8.5 million in FFY 2021) or 4 projects per year on average (up from 3.6 in FFY 2021).

Table 11 Projects Proposed to be Completed in the 2022-2026 TIP by Sub-Region

	2022	2023	2024	2025	2026	Total	Total Funds	0/ Funds	%	Average Median	Average Median Below	Donulation
	2022	2023	2024	2025	2026	Total					Poverty	Population
Sub Region 1	1		1		2	4	\$32,591,174	26%	40%	\$39,186	24.37%	248,238
Sub Region 2	1	3	1			5	\$21,692,328	17%	17%	\$64,795	8.53%	107,425
Sub Region 3	2			1	1	4	\$43,472,513	34%	17%	\$61,037	14.68%	105,185
Sub Region 4		3		2		5	\$16,970,869	13%	21%	\$73,499	6.84%	132,675
Sub Region 5			2			2	\$13,003,234	10%	4%	\$68,342	6.52%	28,047
	4	6	4	3	3	20	\$127,730,118	100%		\$61,372	12.19%	621,570

Source: PVPC TIP

As can be seen in Table 11, sub-region 1 will see (20%) of the projects, but only about 26% of the available funding over the next 5 years. Sub-region 3 is anticipated to receive 8% more funding than population over the next 5 years. This is due in large to the MPO's commitment to fund a \$17.5 million project in Hadley in 2022 and a \$16 million project in Northampton in 2025. 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 12 Projects Proposed to be Completed in the 2022-2026 TIP by Municipality

										Median	Below	
	2022	2023	2024	2025	2026	Total	Total Funds	% Funds	% Population	Household Income	Poverty Level	Population
Agawam	LULL	2023	2024	2023	2020	Total	Total Fullus	0%	4.6%	\$63,561	9.3%	28,705
Amherst								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
								0%	0.0%	\$65,648	9.2%	-
Chester										. ,		1,360
Chesterfield					4	1	\$40.2C4.740	0%	0.2%	\$63,594	7.3%	1,239
Chicopee					1	1	\$10,264,718		8.9%	\$47,276	12.9%	55,717
Cummington			1			1	\$1,792,800		0.1%	\$50,521	6.4%	867
East Longmeadow	_						4	0%	2.6%	\$84,173	5.1%	16,022
Easthampton	1					1	\$3,624,561	3%	2.5%	\$56,927	8.3%	15,971
Goshen								0%	0.2%	\$69,219	2.8%	1,058
Granby		2				2	\$3,382,672	3%	1.0%	\$78,261	5.8%	6,290
Granville								0%	0.3%	\$75,208	7.1%	1,612
Hadley	1					1	\$17,486,346		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				1		1	\$1,177,653	1%	0.4%	\$64,868	9.4%	2,495
Holyoke	1				1	2	\$10,524,565	8%	6.4%	\$35,550	30.1%	40,249
Huntington								0%	0.3%	\$52,275	9.8%	2,168
Longmeadow				1		1	\$6,754,438	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	\$16,059,521	13%	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	1	\$6,302,085	5%	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
Springfield			1			1	\$11,801,891	9%	24.5%	\$34,731	30.1%	153,703
Tolland							,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0%	0.1%	\$85,750	7.9%	483
Wales		1				1	\$5,656,106		0.3%	\$52,500	5.3%	1,875
Ware						_	φο,σοσ,2σσ	0%	1.6%	\$49,630	14.9%	9,844
West Springfield	1	3	1			5	\$21,692,328		4.6%	\$52,806	11.0%	28,684
Westfield						J	721,032,320	0%	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								0%	0.4%	. ,	10.2%	
			1			1	¢11 210 424		0.4%	\$65,147		2,466
Worthington	2		1 2	2	2	12	. , ,		74.5%	\$71,300	4.6%	1,167
Hampden County	2	4		2	2	12	\$67,871,699			\$50,036	17.7%	467,313
Hampshire County	2	2	2	1	1	8			25.5%	\$61,460	13.9%	159,596
PVMPO Region	4	6	4	3	3	20	\$ 127,730,118	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**

Information collected from census data, GIS, transit route inventory, and regional models was used to identify and assess transportation deficiencies, benefits, and burdens. The evaluation of each measure of effectiveness included the following:

## DISTRIBUTION OF TRANSPORTATION INVESTMENTS IN THE REGION

Past and proposed funding allocations for TIP projects were calculated for defined low income and minority populations. PVPC completed an inventory of projects included on the RTP 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 annually for the Transportation Improvement Program. PVPC is also working to conduct analysis on other Title VI protected classes. The RTP analysis is presented in Tables 13 and 14.

Table 13 Distribution of Projects in the RTP to Low Income Populations

Low Income Equity Analysis	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	113	51	62	45.13%	54.87%
Projects Not Funded	0	0	0	0	0
Projects	\$1,494,243,790	\$1,159,644,147	\$334,599,643	77.61%	22.39%
Total Project Dollars per Capita	\$2,403.98	\$5,582.54	\$808.52	2.32	0.34
Funded Projects per Capita	\$2,403.98	\$5,582.54	\$808.52	2.32	0.34

**Table 14 Distribution of Projects in the RTP to Minority Populations** 

				% PVPC Total	% PVPC
		Minority Block	Other Block	in Minority Block	Total in Other
Minority Equity Analysis	PVPC Total	Groups	Groups	Groups	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	113	36	77	31.86%	68.14%
Projects Not Funded	0	0	0	0.00%	0.00%
Projects	\$1,494,243,790	\$1,009,927,416	\$484,316,374	67.59%	32.41%
Total Project Dollars per Capita	\$2,403.98	\$4,758.65	\$1,183.16	1.98	0.49
Funded Projects per Capita	\$2,403.98	\$4,758.65	\$1,183.16	1.98	0.49

Mount Zion Island Haydenville Amherst HOLYOKE RANGE Mount Holyoke Range State Park hester Easthampton Huntington Town of Russell Blandford Palmer Chicopee estfield Flynt Park Monson -Main-Rd-Granville Longimeadow A more detailed version of this map can be viewed by clicking: HEKE

Figure 1 - Projects Programmed in the TIP

# IV. FEDERAL AID REGIONAL PROJECT LISTINGS

The following is a complete listing of the Pioneer Valley Federally Funded Transportation Improvement Projects for Fiscal Years 2022 - 2026.

## ORGANIZATION OF PROJECT LISTINGS

Each project in the TIP contains the following information:

<u>MassDOT Project ID</u> - Project identification numbers given by the Massachusetts Highway Department.

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

<u>MassDOT District</u> – The MassDOT sub-Region were 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.

<u>Total Programmed Funds</u> - 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.

<u>Additional Information</u> – 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.

<u>TEC Score</u> – This score is based on criteria developed rank the regional significant of each eligible TIP project

**Table 15 Summary of Programmed Projects Section 1 A Federal Aid Target Projects** 

Year	Project ID	Municipality	MassDOT Project Description	Funding Source	Total Funds	Federal Funds	Non- Federal	Other Information
2022	605032	Hadley	HADLEY- RECONSTRUCTION ON ROUTE 9, FROM MIDDLE STREET TO MAPLE/SOUTH MAPLE STREET	STBG	\$17,486,346	\$13,989,077	\$3,497,269	Construction / (YOE \$26,27,937) Project A/C over 2 years FFY 2021 \$8,793,026, FFY 2022 \$17,486,346 /61 TEC / 100% / STBG
2022	606450	Holyoke	HOLYOKE- TRAFFIC SIGNAL UPGRADES AT 15 INTERSECTIONS ALONG HIGH & MAPLE STREETS	STBG	\$4,603,777	\$3,683,022	\$920,755	Construction / (YOE \$10,755,401 (\$4,603,777 in statewide funding) = \$6,151,624) / 66 TEC / 25 / STBG
2022	608374	West Springfield	WEST SPRINGFIELD- RECONSTRUCTION OF MEMORIAL AVENUE (ROUTE 147), FROM COLONY ROAD TO THE MEMORIAL AVENUE ROTARY (1.4 MILES)	STBG	\$1,125,167	\$900,134	\$225,033	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
2022	608577	Easthampton	EASTHAMPTON- IMPROVEMENTS AND RELATED WORK ON UNION STREET (ROUTE 141) FROM PAYSON AVENUE TO HIGH STREET (0.36 MILES)	STBG	\$3,624,561	\$2,899,649	\$724,912	Construction / (TFPC \$3,624,561) / 62.5 TEC / 75% STBG
			FFY 2022 Total (4 Projects)		\$26,839,851			
Year	Project ID	Municipality	MassDOT Project Description	Funding Source	Total Funds	Federal Funds	Non- Federal	Other Information
2023	606895	Granby	GRANBY- IMPROVEMENTS @ 2 LOCATIONS ON ROUTE 202: SCHOOL STREET & FIVE CORNERS	HSIP	\$1,000,000	\$900,000	\$100,000	Construction / (YOE \$3,382,672) / 43 TEC / 75% STBG, HSIP
2023	606895	Granby	GRANBY- IMPROVEMENTS @ 2 LOCATIONS ON ROUTE 202: SCHOOL STREET & FIVE CORNERS	STBG	\$2,382,672	\$1,906,138	\$476,534	Construction / (YOE \$3,382,672) / 43 TEC / 75% STBG, HSIP
2023	608163	Wales	WALES- RECONSTRUCTION & IMPROVEMENTS ON MONSON ROAD, FROM THE MONSON T.L. TO REED HILL ROAD (1.5 MILES)	STBG	\$5,656,106	\$4,524,885	\$1,131,221	Construction / YOE \$5,656,106 / 39.5 TEC / 75% STBG
2023	608374	West Springfield	WEST SPRINGFIELD- RECONSTRUCTION OF MEMORIAL AVENUE (ROUTE 147), FROM COLONY ROAD TO THE MEMORIAL AVENUE ROTARY (1.4 MILES)	CMAQ	\$3,169,736		, , .	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	West Springfield	WEST SPRINGFIELD- RECONSTRUCTION OF MEMORIAL AVENUE (ROUTE 147), FROM COLONY ROAD TO THE MEMORIAL AVENUE ROTARY (1.4 MILES)	STBG	\$14,499,762	\$11,599,810	\$2,899,952	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	West Springfield	WEST SPRINGFIELD- RECONSTRUCTION OF MEMORIAL AVENUE (ROUTE 147), FROM COLONY ROAD TO THE MEMORIAL AVENUE ROTARY (1.4 MILES)	TAP	\$500,238	\$400,190	\$100,048	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
			FFY 2023 Total (3 Projects)		\$27,208,514	\$21,866,811	\$5,341,703	

Year	Project ID	Municipality	MassDOT Project Description	Funding Source	Total Funds	Federal Funds	Non- Federal	Other Information
2024	606797	Cummington	CUMMINGTON- RETAINING WALL REPLACEMENT ON ROUTE 9 ADJACENT TO SWIFT RIVER	STBG	\$1,792,800	\$1,434,240	\$358,560	Construction / (YOE \$1,792,800 / 9 TEC / Pre 25% / STBG
2024	608374	West Springfield	WEST SPRINGFIELD- RECONSTRUCTION OF MEMORIAL AVENUE (ROUTE 147), FROM COLONY ROAD TO THE MEMORIAL AVENUE ROTARY (1.4 MILES)	STBG	\$2,397,425	, ,	, ,	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	Springfield	SPRINGFIELD- RECONSTRUCTION OF SUMNER AVENUE AT DICKINSON STREET AND BELMONT AVENUE (THE "X")	STBG	\$11,801,891	\$9,441,513	\$2,360,378	Construction / YOE \$11,801,892) 71 TEC / 25% STBG, CMAQ, HSIP, TAP
2024	609287	Worthington	WORTHINGTON- RECONSTRUCTION & RELATED WORK ON ROUTE 143 (PHASE II), FROM PERU T.L. TO COLD STREET	STBG	\$11,210,434	\$8,968,347	\$2,242,087	Construction / (YOE \$11,210,434) / 41 TEC / 75% Project Phase I funded in FFY 2019 / STBG
			FFY 2024 Total (4 Projects)		\$27,202,550	\$21,762,040	\$5,440,510	
Year	Project ID	Municipality	MassDOT Project Description	Funding Source	Total Funds	Federal Funds	Non- Federal	Other Information
2025	608727	Holland	HOLLAND- RESURFACING & RELATED WORK ON BRIMFIELD ROAD, FROM WALES ROAD TO STURBRIDGE STREET (0.9 MILES - PHASE II)	STBG	\$1,177,653	\$942,122	\$235,531	Construction (YOE \$1,177,653) 27.5 TEC / Pre 25% / STBG
2025	608881	Longmeadow	LONGMEADOW- SPRINGFIELD- RESURFACING AND INTERSECTION IMPROVEMENTS ON LONGMEADOW STREET (ROUTE 5) AND CONVERSE STREET (0.84 MILES)	STBG	\$6,754,438	\$5,403,550	\$1,350,888	Construction (YOE \$6,754,438 / 59 TEC / 25% / STBG
2025	609286	Northampton	NORTHAMPTON- DOWNTOWN COMPLETE STREETS CORRIDOR AND INTERSECTION IMPROVEMENTS ON MAIN STREET (ROUTE 9)	STBG	\$16,059,521	\$12,847,617	\$3,211,904	Construction (YOE \$16,059,520) 80 TEC / Pre 25% / STBG
			FFY 2025 (3 Projects)		\$23,991,612	\$19,193,290	\$4,798,322	
Year	Project ID	Municipality	MassDOT Project Description	Funding Source	Total Funds	Federal Funds	Non- Federal	Other Information
2026	608785	South Hadley	SOUTH HADLEY- RECONSTRUCTION OF MAIN STREET FROM THE CHICOPEE CITY LINE TO CANAL STREET (0.67 MILES)	STBG	\$6,302,085	\$5,041,668	\$1,260,417	Construction (YOE \$6,302,085) TEC 38.5 / 25%
2026	609061	Chicopee	CHICOPEE- INTERSECTION IMPROVEMENTS AT MONTGOMERY STREET, GRANBY ROAD, AND MCKINSTRY AVENUE	STBG	\$10,264,718	\$8,211,774	\$2,052,944	Construction (YOE \$10,264,718) TEC 56 / 25%
2026	609065	Holyoke	HOLYOKE- RESURFACING AND RELATED WORK ON CABOT STREET AND RACE STREET (CENTER CITY CONNECTOR)	STBG	\$5,920,788	\$4,736,630	\$1,184,158	Construction (YOE \$5,920,788) TEC 56.5 / 25%
			FFY 2026 (3 Projects)		\$22,487,591	\$17,990,073	\$4,497,518	

**Table 16 Federally Funded Projects Year 2022** 

								STIP:	2022 - 2026 (D)
Program	MassDOT Project ID	MPO	Municipality	MassDOT Project Description	District	Funding Source	Total Programmed Funds	Federal Funds	Non-Federal Funds
Federal Fiscal Year 2022									
Section 1A / Regionally Price	oritized Projects						\$26,839,851	\$21,471,881	\$5,367,970
				HADLEY- RECONSTRUCTION ON ROUTE 9, FROM MIDDLE STREET TO					
Capacity	605032	Pioneer Valley	Hadley	MAPLE/SOUTH MAPLE STREET	2	STBG	\$17,486,346	\$13,989,077	\$3,497,269
				HOLYOKE- TRAFFIC SIGNAL UPGRADES AT 15 INTERSECTIONS ALONG HIGH &			_		_
Intersection Improvements	606450	Pioneer Valley	Holyoke	MAPLE STREETS	2	STBG	\$4,603,777	\$3,683,022	\$920,755
			West	WEST SPRINGFIELD- RECONSTRUCTION OF MEMORIAL AVENUE (ROUTE 147), FROM COLONY ROAD TO THE MEMORIAL					
Roadway Reconstruction	608374	Pioneer Valley	Springfield	AVENUE ROTARY (1.4 MILES)	2	STBG	\$1,125,167	\$900,134	\$225,033
		5: W II		EASTHAMPTON- IMPROVEMENTS AND RELATED WORK ON UNION STREET (ROUTE 141) FROM PAYSON AVENUE TO		o.Th.o	<b>\$</b> 0.004.504	<b>A</b> 0.000.040	<b>ATTO 1 0 10</b>
Roadway Reconstruction	608577	Pioneer Valley	Easthampton	HIGH STREET (0.36 MILES)	2	STBG	\$3,624,561	\$2,899,649	\$724,912
					S	TBG Programmed	\$26,839,851	\$21,471,881	\$5,367,970
				Total Programmed fo	r Pioneer Valle	/ Region Projects*	\$26,839,851	\$21,471,881	\$5,367,970
				Program Target for	or Pioneer Valle	y Region Projects	\$26,839,851	\$21,471,881	\$5,367,970
				Target Funds Available f	or Pioneer Valle	y Region Projects	\$0	\$0	\$0

Federal Aid Regional Project Listings \_\_\_\_\_\_47

Table 14: Federally Funded Projects Year 2022 (Continued)

Section 2A / State Prioritize	ed Reliability Proj	ects					\$20,492,172	\$16,393,738	\$4,098,434
Dridge On syntage MUO		Diagram Valley	Madhanata	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		MUDD	<b>#</b> 2.070.005	<b>#0.000.000</b>	<b>*</b> 074.07
Bridge On-system NHS	606552	Pioneer Valley	Northampton	TO I-91/INTERCHANGE 18	2	NHPP	\$3,370,385	\$2,696,308	\$674,07
Non-Interstate Pavement	608473	Pioneer Valley	South Hadley	SOUTH HADLEY- RESURFACING AND RELATED WORK ON ROUTE 116	2	NHPP	\$7,855,761	\$6,284,609	\$1,571,152
				WARE- BRIDGE REPLACEMENT, W-05- 015, ROUTE 32 (PALMER ROAD) OVER					
Bridge Off-system	605126		Ware	THE WARE RIVER	2	STBG-BR-Off	\$9,266,026	\$7,412,821	\$1,853,20
Section 2B / State Prioritize	ed Modernization	Projects					\$7,014,628	\$6,226,865	\$787,76
				NORTHAMPTON- BRIDGE STREET ELEMENTARY SCHOOL IMPROVEMENTS					
Roadway Reconstruction	609515	Pioneer Valley	Northampton	(SRTS)	2	TAP	\$863,004	\$690,403	\$172,60
				HOLYOKE- TRAFFIC SIGNAL UPGRADES AT 15 INTERSECTIONS ALONG HIGH &					
Intersection Improvements	606450	Pioneer Valley	Holyoke	MAPLE STREETS	2	HSIP	\$6,151,624	\$5,536,462	\$615,16
Section 2C / State Prioritize	ed Expansion Pro	jects					\$1,479,773	\$1,183,818	\$295,95
				AMHERST- BELCHERTOWN- NORWOTTUCK RAIL TRAIL RESURFACING, FROM STATION ROAD IN AMHERST TO WARREN WRIGHT ROAD IN BELCHERTOWN (1.5 MILES)					
Bicycle and Pedestrian	608719	Pioneer Valley	Multiple		2	STBG	\$1,479,773	\$1,183,818	\$295,95

**Table 17 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 Price	oritized Projects						\$27,208,514	\$21,866,811	\$5,341,703
				GRANBY- IMPROVEMENTS @ 2					
				LOCATIONS ON ROUTE 202: SCHOOL					
Intersection Improvements	606895	Pioneer Valley	Granby	STREET & FIVE CORNERS	2	HSIP	\$1,000,000	\$900,000	\$100,000
				GRANBY- IMPROVEMENTS @ 2					
				LOCATIONS ON ROUTE 202: SCHOOL					
Intersection Improvements	606895	Pioneer Valley	Granby	STREET & FIVE CORNERS	2	STBG	\$2,382,672	\$1,906,138	\$476,534
				WALES- RECONSTRUCTION &					
				IMPROVEMENTS ON MONSON ROAD,					
Deadway December	000400	Diamage Valley	Welso.	FROM THE MONSON T.L. TO REED HILL		CTDC	ФЕ СЕС 40C	¢4 504 005	<b>C4 404 004</b>
Roadway Reconstruction	608163	Pioneer Valley	vvales	ROAD (1.5 MILES) WEST SPRINGFIELD- RECONSTRUCTION	2	STBG	\$5,656,106	\$4,524,885	\$1,131,221
				OF MEMORIAL AVENUE (ROUTE 147),					
			West	FROM COLONY ROAD TO THE MEMORIAL					
Roadway Reconstruction	608374	Pioneer Valley	Springfield	AVENUE ROTARY (1.4 MILES)	2	STBG	\$17,669,498	\$14,135,598	\$3,533,900
rtodaway rtoconomodion		r remoti valley	Opinignoid	WEST SPRINGFIELD- RECONSTRUCTION	_	0.20	ψ11,000,100	Ψ11,100,000	φο,σσο,σσο
				OF MEMORIAL AVENUE (ROUTE 147),					
			West	FROM COLONY ROAD TO THE MEMORIAL					
Roadway Reconstruction	608374	Pioneer Valley	Springfield	AVENUE ROTARY (1.4 MILES)	2	TAP	\$500,238	\$400,190	\$100,048
	·	·				HSIP Programmed	\$1,000,000	\$900,000	\$100,000
						TBG Programmed	\$25,708,276	\$20,566,621	\$5,141,655
						TAP Programmed	\$500,238	\$400,190	\$100,048
				Total Programmed for	r Pioneer Valle	<u> </u>	\$27,208,514	\$21,866,811	\$5,341,703
				•	•	ey Region Projects	\$27,426,056	\$21,940,845	\$5,485,211
						· · · ·			\$143,508
				Target Funds Available f	or Pioneer Valle	ey Region Projects	\$217,542	\$74,034	\$143,508

Federal Aid Regional Project Listings \_\_\_\_\_\_\_49

Table 15: Federally Funded Projects Year 2023 (Continued)

Section 2A / State Prioritize	ed Reliability P	rojects					\$30,978,819	\$25,245,958	\$5,732,861
				LUDLOW- BRIDGE REPLACEMENT, L-16-					
Bridge Off-system	609120	Pioneer Valley	Ludlow	026, PINEY LANE OVER BROAD BROOK	2	STBG-BR-Off	\$556,192	\$444,954	\$111,238
				WALES- BRIDGE REPLACEMENT, W-02-					
				002, HOLLAND ROAD OVER WALES					
Bridge Off-system	608847	Pioneer Valley	Wales	BROOK	2	STBG-BR-Off	\$3,049,418	\$2,439,534	\$609,884
				SPRINGFIELD- IMPROVEMENTS ON ST.					
				JAMES AVENUE AT ST. JAMES			• • • • • • • • • • • • • • • • • • • •	<b>.</b>	
Safety Improvements	608565	Pioneer Valley	Springfield	BOULEVARD AND CAREW STREET	2	HSIP	\$4,629,032	\$4,166,129	\$462,903
				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					
Non-Interstate Pavement	604209	Pioneer Valley	Multiple	SPRINGFIELD (3.2 MILES)	2	NHPP	\$22,744,177	\$18,195,342	\$4,548,835
Section 2B / State Prioritize	ed Modernizati	on Projects					\$4,346,994	\$3,726,676	\$620,318
				LONGMEADOW- BLUEBERRY HILL					
				ELEMENTARY SCHOOL IMPROVEMENTS					
Roadway Reconstruction	609517	Pioneer Valley	Longmeadow	(SRTS)	2	TAP	\$364,139	\$291,311	\$72,828
				SPRINGFIELD- IMPROVEMENTS ON ST.					
Intersection Improvements	608560	Pioneer Valley	Springfield	JAMES AVENUE AT TAPLEY STREET	2	HSIP	\$2,490,805	\$2,241,725	\$249,081
				AGAWAM- ROBINSON PARK					
				ELEMENTARY SCHOOL IMPROVEMENTS			• • • • • • • • • • • • • • • • • • • •		
Roadway Reconstruction	610652	Pioneer Valley	Agawam	(SRTS)	2	TAP	\$1,492,050	\$1,193,640	\$298,410
Section 2C / State Prioritize	ed Expansion I	Projects					\$8,748,334	\$6,998,667	\$1,749,667
				ODDINGERED MOVARIOUT COMMUNITY					
				SPRINGFIELD- MCKNIGHT COMMUNITY					
Bicycle and Pedestrian	609157	Pioneer Valley	Springfield	TRAIL CONSTRUCTION, FROM ARMORY STREET TO HAYDEN AVENUE (1.5 MILES)	2	CMAQ	\$8,748,334	\$6,998,667	\$1,749,667
Dicycle and Fedestilan	608157	Fiorieer valley	Springileiu	STALL TO HAT DEN AVENUE (1.3 MILES)		CIVIAQ	φο, 1 40,334	φυ, 990,007	φ1,743,007

Table 18: Federally Funded Projects 2024

Program	MassDOT Project ID	MPO	Municipality	MassDOT Project Description	District	Funding Source	Total Programmed Funds	Federal Funds	Non-Federal Funds
Federal Fiscal Year 2024									
Section 1A / Regionally Pri	oritized Projects						\$27,202,550	\$21,862,040	\$5,340,510
Roadway Reconstruction	606797	Pioneer Valley	Cummington	CUMMINGTON- RETAINING WALL REPLACEMENT ON ROUTE 9 ADJACENT TO SWIFT RIVER	1	STBG	\$1,792,800	\$1,434,240	\$358,560
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	\$2,397,425	\$1,917,940	\$479,485
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	\$10,301,891	\$8,241,513	\$2,060,378
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	\$11,210,434	\$8,968,347	\$2,242,087
			-			HSIP Programmed	\$1,000,000	\$900,000	\$100,000
					S	TBG Programmed	\$25,702,550	\$20,562,040	\$5,140,510
						TAP Programmed	\$500,000	\$400,000	\$100,000
				Total Programmed fo	r Pioneer Valle	y Region Projects*	\$27,202,550	\$21,862,040	\$5,340,510
				Program Target for	or Pioneer Valle	ey Region Projects	\$27,785,521	\$22,228,417	\$5,557,104
				Target Funds Available for	or Pioneer Valle	ey Region Projects	\$582,971	\$366,377	\$216,594

Federal Aid Regional Project Listings \_\_\_\_\_\_51

# Table 16: Federally Funded Projects Year 2024 (Continued)

Section 2A / State Prioritiz	ection 2A / State Prioritized Reliability Projects								\$829,840
				MONSON- BRIDGE REPLACEMENT, M-27-					
				015, OLD WALES ROAD OVER CONANT					
Bridge Off-system	608846	Pioneer Valley	Monson	BROOK	2	STBG-BR-Off	\$2,613,234	\$2,090,587	\$522,647
				HAMPDEN- BRIDGE MAINTENANCE, H-04-					
				004, ROCKADUNDEE BRIDGE OVER					
Bridge Off-system	610779	Pioneer Valley	Hampden	SCANTIC RIVER	2	STBG-BR-Off	\$1,535,968	\$1,228,774	\$307,194

**Table 19: Federally Funded Projects 2025** 

Program	MassDOT Project ID	MPO	Municipality	MassDOT Project Description	District	Funding Source	Total Programmed Funds	Federal Funds	Non-Federal Funds
Federal Fiscal Year 2025									
Section 1A / Regionally Price	oritized Projects						\$23,991,612	\$19,193,290	\$4,798,322
Roadway Reconstruction	608727	Pioneer Valley	Holland	HOLLAND- RESURFACING & RELATED WORK ON BRIMFIELD ROAD, FROM WALES ROAD TO STURBRIDGE STREET (0.9 MILES - PHASE II)	2	STBG	\$1,177,653	\$942,122	\$235,531
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	\$6,754,438	\$5,403,550	\$1,350,888
Roadway Reconstruction	609286	Pioneer Valley	Northampton	NORTHAMPTON- DOWNTOWN COMPLETE STREETS CORRIDOR AND INTERSECTION IMPROVEMENTS ON MAIN STREET (ROUTE 9)	2	STBG	\$16,059,521	\$12,847,617	\$3,211,904
					S	TBG Programmed	\$23,991,612	\$19,193,290	\$4,798,322
				Total Programmed for			\$23,991,612	\$19,193,290	\$4,798,322
				Program Target fo	or Pioneer Valle	ey Region Projects	\$27,136,864	\$21,709,491	\$5,427,373
_				Target Funds Available fo	or Pioneer Valle	ey Region Projects	\$3,145,252	\$2,516,201	\$629,051

Federal Aid Regional Project Listings \_\_\_\_\_\_\_53

Table 17: Federally Funded Projects Year 2025 (Continued)

Section 2A / State Prioritize	d Reliability P	rojects					\$65,775,557	\$52,620,446	\$13,155,111
Bridge On-system NHS	609409	Pioneer Valley	Springfield	SPRINGFIELD- BRIDGE REPLACEMENT, S- 24-016, ARMORY STREET OVER CSX MAINLINE & S-24-026, ARMORY STREET OVER ABANDONED CSX	2	NHPP	\$36,897,333	\$29,517,866	\$7,379,467
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	\$1,936,973	\$1,549,578	\$387,395
				NORTHAMPTON- BRIDGE REPLACEMENT, N-19-068, OLD SPRINGFIELD ROAD OVER					
Bridge Off-system	608869	Pioneer Valley	Northampton	THE MILL RIVER	2	STBG-BR-Off	\$3,826,144	\$3,060,915	\$765,229
Bridge On-system NHS	608460	Pioneer Valley	Hadley	HADLEY- BRIDGE REPLACEMENT, H-01- 005, BAY ROAD (ROUTE 47) OVER THE FORT RIVER	2	NHPP	\$6,471,024	\$5,176,819	\$1,294,205
Bridge On dydddii 14 ie	- COO+OO	i ionoci vanoy	ridatoy	MONSON- PALMER- BRIDGE REPLACEMENT, M-27-007=P-01-007, STATE AVENUE OVER THE QUABOAG			φο, 17 1, σ2 1	ψο, 17 ο, ο 1 ο	ψ1,201,200
Bridge On-system Non-NHS	604136	Pioneer Valley	Multiple	RIVER	2	STBG	\$10,132,472	\$8,105,978	\$2,026,494
				WORTHINGTON- RESURFACING AND					
Non-Interstate Pavement	612031	Pioneer Valley	Worthington	RELATED WORK ON ROUTE 112	1	NHPP	\$6,511,611	\$5,209,289	\$1,302,322
Section 2B / State Prioritize	d Modernizati	on Projects			_		\$1,994,161	\$1,595,329	\$398,832
		D: 14 II		CHICOPEE- HUGH SCOTT STREIBER ELEMENTARY SCHOOL IMPROVEMENTS		TA D	04 000 704	<b>A</b> 4 400 070	<b>4070 745</b>
Roadway Reconstruction	612079	Pioneer Valley	Chicopee	(SRTS) SPRINGFIELD- REBECCA M. JOHNSON	2	TAP	\$1,383,724	\$1,106,979	\$276,745
				ELEMENTARY SCHOOL IMPROVEMENTS					
Roadway Reconstruction	612080	Pioneer Valley	Springfield	(SRTS)	2	TAP	\$610,437	\$488,350	\$122,087
Section 2C / State Prioritize	d Expansion I	Projects					\$4,974,699	\$3,979,759	\$994,940
				NORTHAMPTON- ROCKY HILL GREENWAY MULTI-USE TRAIL, FROM THE MANHAN RAIL TRAIL TO ROCKY HILL					
Bicycle and Pedestrian	608413	Pioneer Valley	Northampton	ROAD (0.4 MILES)	2	CMAQ	\$1,918,701	\$1,534,961	\$383,740
				EASTHAMPTON- NORTHAMPTON- INSTALLATION OF A SHARED-USE PATH ALONG MOUNT TOM ROAD FROM THE					
Bicycle and Pedestrian	610657	Pioneer Valley	Multiple	MANHAN TRAIL TO ATWOOD DRIVE	2	STBG	\$3,055,998	\$2,444,798	\$611,200

Table 20: Federally Funded Projects Year 2026

Program	MassDOT Project ID	MPO	Municipality	MassDOT Project Description	District	Funding Source	Total Programmed Funds	Federal Funds	Non-Federal Funds
Federal Fiscal Year 2026									
Section 1A / Regionally Pri	oritized Projects						\$22,487,591	\$17,990,073	\$4,497,518
Roadway Reconstruction	608785	Pioneer Valley	South Hadley	SOUTH HADLEY- RECONSTRUCTION OF MAIN STREET FROM THE CHICOPEE CITY LINE TO CANAL STREET (0.67 MILES) CHICOPEE- INTERSECTION	2	STBG	\$6,302,085	\$5,041,668	\$1,260,417
Roadway Reconstruction	609061	Pioneer Valley	Chicopee	IMPROVEMENTS AT MONTGOMERY STREET, GRANBY ROAD, AND MCKINSTRY AVENUE	2	STBG	\$10,264,718	\$8,211,774	\$2,052,944
Roadway Reconstruction	609065	Pioneer Valley	Holyoke	HOLYOKE- RESURFACING AND RELATED WORK ON CABOT STREET AND RACE STREET (CENTER CITY CONNECTOR)	2	STBG	\$5,920,788	\$4,736,630	\$1,184,158
					S	TBG Programmed	\$22,487,591	\$17,990,073	\$4,497,518
				Total Programmed for	or Pioneer Valley	Region Projects*	\$22,487,591	\$17,990,073	\$4,497,518
				Program Target	for Pioneer Valle	y Region Projects	\$26,432,171	\$21,145,737	\$5,286,434
				Target Funds Available	for Pioneer Valle	y Region Projects	\$3,944,580	\$3,155,664	\$788,916
Section 2A / State Prioritiz	ed Reliability Proje	ects					\$772,896	\$695,606	\$77,290
Safety Improvements	611953	Pioneer Valley	Multiple	SPRINGFIELD- CHICOPEE- GUIDE AND TRAFFIC SIGN REPLACEMENT ON A SECTION OF INTERSTATE 291	2	HSIP	\$772,896	\$695,606	\$77,290
	·			•	'				
				Pioneer Valle	y Region Total F	Program Summary	\$278,457,353	\$224,370,318	\$54,087,035

Federal Aid Regional Project Listings \_\_\_\_\_\_55

Table 21: Universe of Projects and TEC Scores

2022- 2026	Municipality	SID	Project Name and Description	Design	TEC Score		Cost Estimate
2022/2023	West Springfield	608374	RECONSTRUCTION OF MEMORIAL AVENUE (ROUTE 147), FROM COLONY ROAD TO THE MEMORIAL AVENUE ROTARY (1.4 MILES)	75	72.5	2	\$ 21,692,328
2022	Easthampton	608577	EASTHAMPTON- IMPROVEMENTS AND RELATED WORK ON UNION STREET (ROUTE 141) FROM PAYSON AVENUE TO HIGH STREET (0.36 MILES)	75	62.5	5	\$ 3,624,561
2023 SW	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)	75	59	6	\$ 25,319,402
2023	Granby	606895	GRANBY- IMPROVEMENTS @ 2 LOCATIONS ON ROUTE 202: SCHOOL STREET & FIVE CORNERS	75	43.0	11	\$ 3,252,569
2024	Worthington	609287	ROUTE 143 RECONSTRUCTION (PHASE II) PERU TOWN LINE TO COLD STREET	75	40.0	13	\$ 10,380,031
2023	Wales	608163	WALES- RECONSTRUCTION & IMPROVEMENTS ON MONSON ROAD, FROM THE MONSON T.L. TO REED HILL ROAD (1.5 MILES)	75	39.5	14	\$ 5,438,563
2023 SW	Springfield	608560	IMPROVEMENTS ON ST. JAMES A VENUE AT TAPLEY STREET	25	NA		\$ 2,395,005
2023 SW	Springfield	608565	IMPROVEMENTS ON ST. JAMES A VENUE AT ST. JAMES BOULEVARD AND CAREW STREET	25	NA		\$ 4,450,992
2024	Springfield	608717	SPRINGFIELD- RECONSTRUCTION OF SUMNER A VENUE AT DICKINSON STREET AND BELMONT A VENUE (THE "X")	25	71.0	3	\$ 10,927,677
2022 STP / SW CMAQ	Holyoke	606450	HOLYOKE-TRAFFIC SIGNAL UPGRADES AT 15 INTERSECTIONS ALONG HIGH & MAPLE STREETS (Total cost is \$10,755,401 - \$5,425,894)	25	66.0	4	\$ 5,329,507
2025	Longmeadow / Springfield	608881	RESURFACING AND INTERSECTION IMPROVEMENTS ON LONGMEADOW STREET (ROUTE 5) AND CONVERSE STREET (0.84 MILES)	25	59.0	6	\$ 6,030,749
2026	Holyoke	609065	HOLYOKE- RESURFACING AND RELATED WORK ON CABOT STREET AND RACE STREET (CENTER CITY CONNECTOR)	25	56.5	7	\$ 5,104,128
2026	Chicopee	609061	CHICOPEE - INTERSECTION RECONSTRUCTION, MONTGOMERY ROAD AT GRANBY ROAD AND MCKINSTRY A VENUE, AND MONTGOMERY ROAD AT TURNPIKE ACCESS ROAD	25	56.0	8	\$ 8,848,895
	Longmeadow	607430	RESURFACING & RELATED WORK ON LONGMEADOW STREET (ROUTE 5), FROM THE CT S.L. TO CONVERSE STREET (2.88 MILES)	25	47.0	9	\$ 10,515,417

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

2024 SW	Wilbraham	608489	WILBRAHAM- RESURFACING AND RELATED WORK ON ROUTE 20	25	42.5	12	\$ 28,635,835
2026	South Hadley	608785	SOUTH HADLEY- RECONSTRUCTION OF MAIN STREET FROM THE CHICOPEE CITY LINE TO CANAL STREET (0.67 MILES)	25	38.5	16	\$ 5,432,832
	Williamsburg	607231	RECONSTRUCTION OF MOUNTAIN STREET	25	34.5	18	\$ 12,497,537
	Granville	608736	GRANVILLE- RECONSTRUCTION OF ROUTE 57	25	34.0	<del>19</del>	\$ 
	Southampton	604653	REHABILITATION OF EAST STREET - FROM COLLEGE HIGHWAY EASTERLY TO COUNTY ROAD (2.6 MILES)	25	31.5	20	\$ 4,956,200
2025	Northampton	609286	NORTHAMPTON- DOWNTOWN COMPLETE STREETS CORRIDOR AND INTERSECTION IMPROVEMENTS ON MAIN STREET (ROUTE 9)	0	80	1	\$ 14,338,858
	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	20	\$ 7,055,628
2025 SW	Westfield	608487	WESTFIELD- RESURFACING AND RELATED WORK ON ROUTE 10 AND 202	0	32	20	\$ 8,475,109
	Granby	608466	GRANBY- RESURFACING AND RELATED WORK ON ROUTE 202 FROM KENDALL STREET TO SCHOOL STREET	0	30	21	\$ 4,638,760
	Easthampton	608423	EASTHAMPTON- IMPROVEMENTS AND RELATED WORK ON ROUTE 10, FROM WEST STREET TO THE NORTHAMPTON TOWN LINE	0	29.5	22	\$ 5,758,750
2025	Holland	608727	HOLLAND- RESURFACING & RELATED WORK ON BRIMFIELD ROAD, FROM WALES ROAD TO STURBRIDGE STREET (0.9 MILES - PHASE II)	0	27.5	23	\$ 1,051,476
	Goshen	602888	ROUTE 9 RECONSTRUCTION	0	25.0	25	\$ 8,526,000
	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	26	\$ 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	27	\$ 3,600,000
	Chesterfield	608886	RECONSTRUCTION OF NORTH ROAD AND DAMON POND ROAD	0	16.5	28	\$ 4,441,000
2024	Cummington	606797	ROUTE 9 RETAINING WALL	0	9.0	30	\$ 1,660,000
			30 - STP Projects				\$ 240,511,889
			17 - CMAQ Eligible Projects				\$ 154,831,917
			9 - Bicycle / Pedestrian Projects				\$ 82,528,193
			39 - Total Projects				\$ 299,544,328

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

2022-	Municipality	SID	Project Name and Description	Design		TEC Rank	Cost Est	imate
2026	· ·	~	v	~	Score			~
2025 SW	Northampton	608413	NORTHA MPTON- ROCKY HILL GREENWAY MULTI-USE TRA IL,	100	38.5	15	\$ 1,7	13,126
2023 5 **	1		FROM THE MANHAN RAIL TRAIL TO ROCKY HILL ROAD (0.4					
			MILES)					
	Westfield	608073	WESTFIELD-WESTFIELD RIVER LEVEE MULTI-USE PATH	75	37	17	\$ 5,3	14,431
			CONSTRUCTION, FROM CONGRESS STREET TO WILLIAMS RIDING					
			WAY (NEAR MEADOW STREET) (2 MILES)					
2022 SW	Amherst/	608719	AMHERST-BELCHERTOWN-NORWOTTUCK RAIL TRAIL	25	13	29	\$ 1,3	58,834
	Belchertown		RESURFACING, FROM STATION ROAD IN A MHERST TO WARREN					
			WRIGHT ROAD IN BELCHERTOWN (1.5 MILES)					
2025 SW	Easthampton /	610657	EASTHAMPTON-NORTHAMPTON-INSTALLATION OF A SHARED-	0	44.0	10	\$ 2,7	28,570
	Northampton		USE PATH ALONG MOUNT TOM ROAD FROM THE MANHAN					
			TRAIL TO A TWOOD DRIVE					
	Westfield	610536	WESTFIELD-PEDESTRIAN AND BICYCLE IMPROVEMENTS ON	0	44.0	10	\$ 2,5	41,400
			MAIN STREET (ROUTE 20)					
2023 SW	Springfield	608157	SPRINGFIELD-MCKNIGHT COMMUNITY TRAIL CONSTRUCTION,	0	42.5	12	\$ 8,4	11,860
			FROM ARMORY STREET TO HA YDEN A VENUE (1.5 MILES)					
	Williamsburg	608787	WILLIA MSBURG- CONSTRUCTION OF THE "MILL RIVER	0	31.5	20	\$ 23,9	38,754
			GREENWAY" SHARED USE PATH					
	Springfield	610664	SPRINGFIELD-RECONSTRUCTION OF BIRNIE A VENUE AT GERENA	0	26.0	24	\$ 1,2	06,348
			SCHOOL PEDESTRIA N TUNNEL (Total Project Cost \$2+ million, City to					
			cover remainding balance)					
	Southampton	607823	SOUTHAMPTON- GREENWAYRAIL TRAIL CONSTRUCTION,	0	19.5	27	\$ 6,0	80,722
			FROM COLEMA N ROAD TO ROUTE 10 (3.5 MILES)					

Projects listed in the Universe of Projects are shown for informational purposes and are not programmed in the TIP. If additional funds become available 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 2022 - 2026

The following is a complete listing of programmed transit projects for FFY 2022 - 2026

**Table 22 FFY 2022 Transit Project Information** 

FTA Program 5307	Project Number	Transit Agency	FTA Activity Line Item	Project Description	Carryover (unobligated)	Federal Funds S	tate Funds	TDC	Local Funds	Total Cost
5307	RTD0010233	Pioneer Valley Transit Authority	114402	Pioneer Valley Transit Authority / REHAB/RENOVATE - MAINTENANCE FACILITY - Northampton Bus Maintenance Facility Generator Replace		\$260,000	\$65,000	\$0	\$0	\$325,000
5307	RTD0010231	Pioneer Valley Transit Authority	114405	Pioneer Valley Transit Authority / REHAB/RENOVATE - YARDS AND SHOPS - Install new exterior lighting at Northampton Bus Maintenance Facility		\$96,000	\$24,000	\$0	\$0	\$120,000
5307	RTD0009835	Pioneer Valley Transit Authority	442301	Pioneer Valley Transit Authority / LONGTERM TRANS PLAN - SYSTEM LEVEL		\$196,000	\$49,000	\$0	\$0	\$245,000
5307	RTD0009864	Pioneer Valley Transit Authority	114402	Pioneer Valley Transit Authority / Main Street Paratransit O&M Facility - Yr 4 - Replace Generator w/ electrical upgrades		\$224,000	\$56,000	\$0	\$0	\$280,000
5307	RTD0009870	Pioneer Valley Transit Authority	116100	Pioneer Valley Transit Authority / ENGINEERING & DESIGN Cottage St at Robbins Road		\$32,000	\$8,000	\$0	\$0	\$40,000
5307	RTD0009827	Pioneer Valley Transit Authority	111202	Pioneer Valley Transit Authority / Replace 35' Buses (6)		\$2,471,542	\$31,811	\$462,497	\$0	\$2,503,353
5307	RTD0008751	Pioneer Valley Transit Authority	119406	Pioneer Valley Transit Authority / Bike Access for shelters and Buses		\$5,600	\$1,400	\$0	\$0	\$7,000
5307	RTD0009830	Pioneer Valley Transit Authority	119402	Pioneer Valley Transit Authority / Purchase Shelters and shelter accessories		\$52,000	\$13,000	\$0	\$0	\$65,000
5307	RTD0009833	Pioneer Valley Transit Authority	117A00	Pioneer Valley Transit Authority/Preventive Maintenance		\$3,178,384	\$794,596	\$0	\$0	\$3,972,980
5307	RTD0010230	Pioneer Valley Transit Authority	114406	Pioneer Valley Transit Authority / REHAB/RENOVATE - SHOP EQUIPMENT - Replace Fluid Pumps Dispenser System		\$72,000	\$18,000	\$0	\$0	\$90,000
5307	RTD0009865	Pioneer Valley Transit Authority	114211	Pioneer Valley Transit Authority / Purchase replacement support vehicles (2)		\$55,090	\$13,773	\$0	\$0	\$68,863
5307	RTD0010234	Pioneer Valley Transit Authority	114402	Pioneer Valley Transit Authority / REHAB/RENOVATE - MAINTENANCE FACILITY Umass O&M Facility Generator replacementcement		\$300,000	\$75,000	\$0	\$0	\$375,000

# Table 22 FFY 2022 Transit Project Information (Continued)

5307	RTD0009868	Pioneer Valley Transit Authority	111401	Pioneer Valley Transit Authority / REHAB/REBUILD 40-FT BUS (6)	\$1,282,879	\$320,720	\$0	\$0	\$1,603,599
5307	RTD0009848	Pioneer Valley Transit Authority	114406	Pioneer Valley Transit Authority / Purchase shop equipment	\$80,000	\$20,000	\$0	\$0	\$100,000
5307	RTD0009828	Pioneer Valley Transit Authority	114411	Pioneer Valley Transit Authority / Replace Supervisory Vehicles (2)	\$43,200	\$10,800	\$0	\$0	\$54,000
5307	RTD0009831	Pioneer Valley Transit Authority	119408	Pioneer Valley Transit Authority / Signage & Lighting	\$8,854	\$1,634	\$0	\$0	\$10,488
5307	RTD0010232	Pioneer Valley Transit Authority	114404	Pioneer Valley Transit Authority / REHAB/RENOVATE - STORAGE FACILITY - Umass Bus O&M Facility New lighting in Service and Storage	\$96,000	\$24,000	\$0	\$0	\$120,000
5307	RTD0009834	Pioneer Valley Transit Authority	117C00	Pioneer Valley Transit Authority / NON FIXED ROUTE ADA PARA SERV	\$928,055	\$232,014	\$0	\$0	\$1,160,069
5307	RTD0010229	Pioneer Valley Transit Authority	117A00	Pioneer Valley Transit Authority / PREVENTIVE MAINTENANCE - PVTA Facilties State of Good Repair	\$16,000	\$4,000	\$0	\$0	\$20,000
5307	RTD0009826	Pioneer Valley Transit Authority	111201	Pioneer Valley Transit Authority / Purchase 40' Replacement Buses (6)	\$1,758,589	\$812,944	\$0	\$0	\$2,571,533
5307	RTD0010235	Pioneer Valley Transit Authority	114401	Pioneer Valley Transit Authority / REHAB/RENOVATE - ADMINISTRATIVE FACILITY - Carpet Replacement / Floor Repairs at the Admin/Main Street Building	\$48,000	\$12,000	\$0	\$0	\$60,000
5307	RTD0009869	Pioneer Valley Transit Authority	111402	Pioneer Valley Transit Authority / REHAB/REBUILD 35-FT BUS (4)	\$690,453	\$172,613	\$0	\$0	\$863,066
5307	RTD0009829	Pioneer Valley Transit Authority	114402	Pioneer Valley Transit Authority / Environmental Compliance	\$16,000	\$4,000	\$0	\$0	\$20,000
5307	RTD0009832	Pioneer Valley Transit Authority	116202	Pioneer Valley Transit Authority / Information Technology Systems	\$1,212,687	\$1,212,687	\$0	\$0	\$2,425,374
					Subtotal \$13,123,333	\$3,976,992	\$462,497	\$0	\$17,100,325

Table 22 FFY 2022 Transit Project Information (Continued)

5309											
						Subtotal	\$0	\$0	\$0	\$0	\$0
5310						Culatatal	ćo	ćo	ćo	ćo	¢0
						Subtotal	\$0	\$0	\$0	\$0	\$0
5311						Subtotal	\$0	\$0	\$0	\$0	\$0
5337								<u> </u>	·	·	· .
						Subtotal	\$0	\$0	\$0	\$0	\$0
5339											
	5339	RTD0010347	Pioneer Valley Transit Authority	111201	BUY REPLACEMENT 40-FT BUS		\$488,396	\$97,679	\$0	\$0	\$586,075
	5339	RTD0010349	Pioneer Valley Transit Authority	111202	BUY REPLACEMENT 35-FT BUS		\$488,396	\$97,679	\$0	\$0	\$586,075
						Subtotal	\$976,792	\$195,358	\$0	\$0	\$1,172,150
5320											
						Subtotal	\$0	\$0	\$0	\$0	\$0
Other Fe	deral										
						Subtotal	\$0	\$0	\$0	\$0	\$0
Other No	n-Fedei	ral									
Other No	n-	RTD0009867	Pioneer Valley Transit Authority	111202	Pioneer Valley Transit Authority / BUY		\$0	\$0	\$0	\$3,672,134	\$3,672,134
Federal					REPLACEMENT 35-FT BUS - Electric (4) (VW						
					mitigation)						
Other No	n-	RTD0009866	Pioneer Valley Transit Authority	111201	Pioneer Valley Transit Authority / BUY		\$0	\$0	\$0	\$3,826,159	\$3,826,159
Federal					REPLACEMENT 40-FT BUS - Electric (4) (VW						
					Mitigation)						
						Subtotal	\$0	\$0	\$0	\$7,498,293	\$7,498,293
						Total	\$14,100,125	\$4,172,350	\$462,497	\$7,498,293	\$25,770,768

Table 23 FFY 2023 Transit Project Information

FTA Program	Project Number	Transit Agency	FTA Activity Line Item	Project Description	Carryover (unobligated)	Federal Funds	State Funds <sup>-</sup>	TDC Local Funds	Total Cost
5307									
5307	RTD0009837	Pioneer Valley Transit Authority	111201	Pioneer Valley Transit Authority / Purchase 40' Replacement Buses (7)	2022 - \$2,547,118	\$2,547,118	\$509,424	\$0 \$0	\$3,056,542
5307	RTD0009838	Pioneer Valley Transit Authority	111202	Pioneer Valley Transit Authority / Purchase 35' Replacement Buses (5)	2022 - \$1,633,011	\$1,633,011	\$326,602	\$0 \$0	\$1,959,613
5307	RTD0009843	Pioneer Valley Transit Authority	116220	Pioneer Valley Transit Authority / Information Technology Systems	2022 - \$1,318,237	\$1,318,237	\$1,318,237	\$0 \$0	\$2,636,474
5307	RTD0009845	Pioneer Valley Transit Authority	442400	Pioneer Valley Transit Authority / Transporation planning	2022 - \$196,000	\$196,000	\$49,000	\$0 \$0	\$245,000
5307	RTD0009846	Pioneer Valley Transit Authority	117C00	Pioneer Valley Transit Authority / Partransit ADA service subsidy	2022 - \$946,616	\$946,616	\$236,654	\$0 \$0	\$1,183,270
5307	RTD0009847	Pioneer Valley Transit Authority	117A00	Pioneer Valley Transit Authority / Preventive Maintenance	2022 - \$3,241,952	\$3,241,952	\$810,488	\$0 \$0	\$4,052,440
5307	RTD0009874	Pioneer Valley Transit Authority	114400	Pioneer Valley Transit Authority / REHAB/RENOVATE BUS SUPPORT FACIL/EQUIP - Holyoke ITC Fuel and fluid UST and AST Removal	2016 - \$29,482; 2022 - \$82,518	\$112,000	\$28,000	\$0 \$0	\$140,000
5307	RTD0009875	Pioneer Valley Transit Authority	114406	Pioneer Valley Transit Authority / REHAB/RENOVATE - SHOP EQUIPMENT	2022 - \$120,000	\$120,000	\$30,000	\$0 \$0	\$150,000
5307	RTD0009840	Pioneer Valley Transit Authority	119302	Pioneer Valley Transit Authority / Purchase Bus Shelters, benches, trash receptacles, etc.	2018 - \$21,966	\$21,966	\$5,491	\$0 \$0	\$27,457
5307	RTD0009842	Pioneer Valley Transit Authority	119308	Pioneer Valley Transit Authority / Purchase & Replace signage and lighting	2015 - \$75,430	\$75,430	\$18,858	\$0 \$0	\$94,288
5307	RTD0009873	Pioneer Valley Transit Authority	111401	Pioneer Valley Transit Authority / REHAB/REBUILD 40-FT BUS (8)	2022 - \$1,451,559	\$1,451,559	\$750,716	\$0 \$0	\$2,202,275
5307	RTD0008771	Pioneer Valley Transit Authority	114402	Pioneer Valley Transit Authority / UMass O&M Facility MEP updgrades, restrooms, administration	2022 - \$288,000	\$288,000	\$72,000	\$0 \$0	\$360,000

Table 23	FFY 2023 T	ransit Project (Continued)								
5307	RTD0010236	Pioneer Valley Transit Authority	111406	Pioneer Valley Transit Authority / REHAB/REBUILD 60' ARTICULATED BUS (2	2022 - \$445,578 )	\$445,578	\$297,052	\$0	\$0	\$742,630
5307	RTD0010238	Pioneer Valley Transit Authority	114211	Pioneer Valley Transit Authority / ACQUIRE - SUPPORT VEHICLES (2)	2022 - \$52,000	\$52,000	\$13,000	\$0	\$0	\$65,000
5307	RTD0010237	Pioneer Valley Transit Authority	111204	Pioneer Valley Transit Authority / BUY REPLACEMENT <30 FT BUS (2) Type D Shuttle buses	2022 - \$125,600	\$125,600	\$31,400	\$0	\$0	\$157,000
5307	RTD0010239	Pioneer Valley Transit Authority	114211	Pioneer Valley Transit Authority / ACQUIRE - SUPPORT VEHICLES (2) Supervisory Vehicles	2022 - \$43,200	\$43,200	\$10,800	\$0	\$0	\$54,000
5307	RTD0010241	Pioneer Valley Transit Authority	117A00	Pioneer Valley Transit Authority / PREVENTIVE MAINTENANCE - State of Good Repair	2022 - \$16,000	\$16,000	\$4,000	\$0	\$0	\$20,000
5307	RTD0010242	Pioneer Valley Transit Authority	114401	Pioneer Valley Transit Authority / REHAB/RENOVATE - ADMINISTRATIVE FACILITY - Rehab Paratransit offices	2022 - \$400,000	\$400,000	\$100,000	\$0	\$0	\$500,000
5307	RTD0010243	Pioneer Valley Transit Authority	116100	Pioneer Valley Transit Authority / ENGINEERING & DESIGN - Robbins Road Construction Administration	2022 - \$100,000	\$100,000	\$25,000	\$0	\$0	\$125,000
					Subtotal	\$13,134,267	\$4,636,722	\$0	\$0 :	\$17,770,989
5309					Subtotal	\$0	\$0	\$0	\$0	\$0
5310					Subtotal	\$0	\$0	\$0	\$0	\$0
5311					Subtotal	\$0	\$0	\$0	\$0	\$0
5337					Subtotal	\$0	\$0	\$0	\$0	\$0

**Table 23 FFY 2023 Transit Project (Continued)** 

5339		ransit i roject (continued)								
5339	RTD0009844	Pioneer Valley Transit Authority	114402	Pioneer Valley Transit Authority / Northampton Bus Maintenance Facility rehabs: bathrooms, bays, ceilings, MEP		\$864,000	\$216,000	\$0	\$0	\$1,080,000
5339	RTD0010348	Pioneer Valley Transit Authority	111201	upgrades, IT Room, etc. BUY REPLACEMENT 40-FT BUS	2022 - \$488,396	\$488,396	\$97,679		\$0 \$0	\$586,075
					Subtotal	\$1,352,396	\$313,679	ŞU	\$0	\$1,666,075
5320					Subtotal	\$0	\$0	\$0	\$0	\$0
Other Fede	ral									
					Subtotal	\$0	\$0	\$0	\$0	\$0
Other Non-	Federal									
Other	RTD0009871	Pioneer Valley Transit Authority	111201	Pioneer Valley Transit Authority / BUY		\$0	\$0	\$0	\$3,940,943	\$3,940,943
Non-		·		REPLACEMENT 40-FT BUS - Electric (4)						
Federal				(LOCAL should be VW Mitigation)						
Other	RTD0009872	Pioneer Valley Transit Authority	111202	Pioneer Valley Transit Authority / BUY		\$0	\$0	\$0	\$3,782,298	\$3,782,298
Non-				REPLACEMENT 35-FT BUS - Electric (4)						
Federal				(LOCAL should be VW Mitigation)						
					Subtotal	\$0	\$0	\$0	\$7,723,241	\$7,723,241
					Total	\$14,486,663	\$4,950,401	\$0	\$7,723,241	\$27,160,305

Federal Aid Regional Project Listing (Transit)

Table 24 FFY 2024 Transit Project Information

FTA Program	Project Number	Transit Agency	FTA Activity Line Item	Project Description	Carryover (unobligated)	Federal Funds	State Funds 1	DC Local Funds	Total Cost
5307									
5307	RTD0009852	Pioneer Valley Transit Authority	119202	Pioneer Valley Transit Authority / PURCHASE BUS SHELTERS	2023 - \$60,000	\$60,000	\$15,000	\$0 \$0	\$75,000
5307	RTD0009853	Pioneer Valley Transit Authority	119208	Pioneer Valley Transit Authority / Signage and Lighting	2023 - \$16,000	\$16,000	\$4,000	\$0 \$0	\$20,000
5307	RTD0009854	Pioneer Valley Transit Authority	119206	Pioneer Valley Transit Authority / Bike access Equipment	2023 - \$5,600	\$5,600	\$1,400	\$0 \$0	\$7,000
5307	RTD0009855	Pioneer Valley Transit Authority	114220	Pioneer Valley Transit Authority / Information Technology Systems	2023 - \$1,318,237	\$1,318,237	\$1,318,237	\$0 \$0	\$2,636,474
5307	RTD0009857	Pioneer Valley Transit Authority	114402	Pioneer Valley Transit Authority / Umass Bus Maintenance Facility - Upgrade Bus Bay Doors	2023 - \$220,000	\$220,000	\$55,000	\$0 \$0	\$275,000
5307	RTD0009858	Pioneer Valley Transit Authority	114400	Pioneer Valley Transit Authority / Holyoke ITC-Bus Bay Canopy/Pavement Upgrades	2023 - \$480,000	\$480,000	\$120,000	\$0 \$0	\$600,000
5307	RTD0009859	Pioneer Valley Transit Authority	114406	Pioneer Valley Transit Authority / Purchase Shop Equipment - All Garages	2023 - \$96,000	\$96,000	\$24,000	\$0 \$0	\$120,000
5307	RTD0009861	Pioneer Valley Transit Authority	300900	Pioneer Valley Transit Authority / ADA Operating Assistance	2023 - \$965,548	\$965,548	\$241,387	\$0 \$0	\$1,206,935
5307	RTD0010245	Pioneer Valley Transit Authority	111202	Pioneer Valley Transit Authority / BUY REPLACEMENT 35-FT BUS (6)	2023 - \$2,622,059	\$2,622,059	\$655,515	\$0 \$0	\$3,277,574
5307	RTD0010248	Pioneer Valley Transit Authority	111401	Pioneer Valley Transit Authority / REHAB/REBUILD 40-FT BUS (7)	2023 - \$1,190,881	\$1,190,881	\$793,920	\$0 \$0	\$1,984,801
5307	RTD0010249	Pioneer Valley Transit Authority	111204	Pioneer Valley Transit Authority / BUY REPLACEMENT <30 FT BUS (2) Type D Shuttle Bus	2023 - \$128,000	\$128,000	\$32,000	\$0 \$0	\$160,000
5307	RTD0010250	Pioneer Valley Transit Authority	114211	Pioneer Valley Transit Authority / ACQUIRE - SUPPORT VEHICLES (2)	2023 - \$53,600	\$53,600	\$13,400	\$0 \$0	\$67,000
5307	RTD0010252	Pioneer Valley Transit Authority	114211	Pioneer Valley Transit Authority / ACQUIRE - SUPPORT VEHICLES (2) Supervisory Vehicle	2023 - \$44,000	\$44,000	\$11,000	\$0 \$0	\$55,000
5307	RTD0010254	Pioneer Valley Transit Authority	117A00	Pioneer Valley Transit Authority / PREVENTIVE MAINTENANCE - State of Good Repair	2023 - \$12,000	\$12,000	\$3,000	\$0 \$0	\$15,000

# Table 24 FFY 2024 Transit Project Information (Continued)

5307	RTD0010262	Pioneer Valley Transit Authority	114404	Pioneer Valley Transit Authority / REHAB/RENOVATE - STORAGE FACILITY	2023 - \$280,000	\$280,000	\$70,000	\$0	\$0	\$350,000
5307	RTD0010263	Pioneer Valley Transit Authority	114401	Main Street Paratransit O&M Pioneer Valley Transit Authority / REHAB/RENOVATE - ADMINISTRATIVE FACILITY Main Street HVAC Replacemen	2023 - \$360,000 t	\$360,000	\$90,000	\$0	\$0	\$450,000
5307	RTD0010264	Pioneer Valley Transit Authority	442400	Pioneer Valley Transit Authority / SHORT RANGE TRANSIT PLANNING	2023 - \$200,000	\$200,000	\$50,000	\$0	\$0	\$250,000
5307	RTD0010267	Pioneer Valley Transit Authority	117A00	Pioneer Valley Transit Authority / PREVENTIVE MAINTENANCE	2023 - \$3,306,791	\$3,306,791	\$826,698	\$0	\$0	\$4,133,489
5307	RTD0009851	Pioneer Valley Transit Authority	111201	Pioneer Valley Transit Authority / Replacement 40' Bus (4)	2023 - \$1,786,617	\$1,786,617	\$446,654	\$0	\$0	\$2,233,271
					Subtotal	\$13,145,333	\$4,771,211	\$0	\$0	\$17,916,544
5309					Subtotal	\$0	\$0	\$0	\$0	\$0
5310					Subtotal	\$0	\$0	\$0	\$0	\$0
5311					Subtotal	<del>, , , , , , , , , , , , , , , , , , , </del>	70	ΨŪ	γo	ÇÜ
					Subtotal	\$0	\$0	\$0	\$0	\$0
5337					Subtotal	\$0	\$0	\$0	\$0	\$0
5339										
5339	RTD0009856	Pioneer Valley Transit Authority	114403	Pioneer Valley Transit Authority / Rehab Northampton Maint Facility, Year 4		\$2,016,000	\$504,000	\$0	\$0	\$2,520,000
5339	RTD0010261	Pioneer Valley Transit Authority	114402	Pioneer Valley Transit Authority / REHAB/RENOVATE - MAINTENANCE FACILITY - Main Street O&M Facility		\$1,600,000	\$400,000	\$0	\$0	\$2,000,000
					Subtotal	\$3,616,000	\$904,000	\$0	\$0	\$4,520,000
5320					Subtotal	\$0	\$0	\$0	\$0	\$0
Other Fed	leral				Subtotal	\$0	\$0	\$0	\$0	\$0

# Table 24 FFY 2024 Transit Project Information (Continued)

-Federal									
RTD0010246	Pioneer Valley Transit Authority	111201	Pioneer Valley Planning Commission / BUY REPLACEMENT 40-FT BUS (7) - Electric Buses with VW Mitigation Funds		\$0	\$0	\$0	\$7,103,550	\$7,103,550
RTD0010247	Pioneer Valley Transit Authority	111202	Pioneer Valley Transit Authority / BUY REPLACEMENT 35-FT BUS (1)		\$0	\$0	\$0	\$976,792	\$976,792
				Subtotal	\$0	\$0	\$0	\$8,080,342	\$8,080,342
				Total	\$16,761,333	\$5,675,211	\$0	\$8,080,342	\$30,516,886

**Table 25 FFY 2025 Transit Project Information** 

FTA Program	Project Number	Transit Agency	FTA Activity Line Item	Project Description	Carryover (unobligated)	Federal Funds	State Funds	TDC Local Fund	ls Total Cost
<b>5307</b> 5307	RTD0009880	Pioneer Valley Transit Authority	111401	Pioneer Valley Transit Authority /	2024 - \$1,431,041	\$1,431,041	\$613,303	\$0	\$0 \$2,044,344
5307	RTD0009881	Pioneer Valley Transit Authority	111402	REHAB/REBUILD 40-FT BUS (7) Pioneer Valley Transit Authority /	2024 - \$825,208	\$825,208	\$353,661	\$0	\$0 \$1,178,869
5307	RTD0009882	Pioneer Valley Transit Authority	114406	REHAB/REBUILD 35-FT BUS (5) Pioneer valley Transit Authority /	2024 - \$120,000	\$120,000	\$30,000	\$0	\$0 \$150,000
		·		REHAB/RENOVATE - SHOP EQUIPMENT				·	, ,
5307	RTD0009883	Pioneer Valley Transit Authority	114402	Pioneer Valley Transit Authority / REHAB/RENOVATE - MAINTENANCE FACILITY - Environmental Compliance	2024 - \$4,000	\$4,000	\$1,000	\$0	\$5,000
5307	RTD0009884	Pioneer Valley Transit Authority	119408	Pioneer Valley Transit Authority / REHAB/RENOV SIGNAGE	2024 - \$16,000	\$16,000	\$4,000	\$0	\$20,000
5307	RTD0009885	Pioneer Valley Transit Authority	119406	Pioneer Valley Transit Authority / REHAB/RENOV BICYCLE ACCESS, FACIL & EQUIP ON BUSES	2024 - \$5,600	\$5,600	\$1,400	\$0	\$7,000
5307	RTD0009886	Pioneer Valley Transit Authority	119402	Pioneer Valley Transit Authority / BUS SHELTERS	2024 - \$60,000	\$60,000	\$15,000	\$0	\$75,000
5307	RTD0009887	Pioneer Valley Transit Authority	114402	Pioneer Valley Transit Authority / REHAB/RENOVATE - MAINTENANCE FACILITY - Corewall building	2024 - \$80,000	\$80,000	\$20,000	\$0	\$100,000
5307	RTD0009888	Pioneer Valley Transit Authority	114402	Pioneer Valley Transit Authority / REHAB/RENOVATE - MAINTENANCE FACILITY - UMass AC Install	2024 - \$200,000	\$200,000	\$50,000	\$0	\$250,000
5307	RTD0009889	Pioneer Valley Transit Authority	114402	Pioneer Valley Transit Authority / REHAB/RENOVATE - MAINTENANCE FACILITY HITC Paint Interior structural steal	2024 - \$360,000	\$360,000	\$90,000	\$0	\$450,000
5307	RTD0009891	Pioneer Valley Transit Authority	440000	Pioneer Valley Transit Authority / PLANNING	2024 - \$200,000	\$200,000	\$50,000	\$0	\$250,000
5307	RTD0009892	Pioneer Valley Transit Authority	300900	Pioneer Valley Transit Authority / ADA OPERATING ASSISTANCE	2024 - \$984,859	\$984,859	\$246,215	\$0	\$0 \$1,231,074
5307	RTD0009893	Pioneer Valley Transit Authority	117A00	Pioneer Valley Transit Authority / PREVENTIVE MAINTENANCE	2024 - \$3,372,927	\$3,372,927	\$843,232	\$0	\$4,216,159

Table 25 FFY 2025 Transit Project Information (Continued)

PURCHASE COMMUNICATIONS SYSTEM-ITS											
REPLACEMENT 40-FT BUS (11)  5307 RTD0010270 Pioneer Valley Transit Authority   114211 Pioneer Valley Transit Authority / ACQUIRE - Superiory VEHICLES S44,000 S13,400 S0 S13,400 S0 S0 S55,000 S0	5307	RTD0009894	Pioneer Valley Transit Authority	116202	PURCHASE COMMUNICATIONS SYSTEM -	2024 - \$1,194,369	\$1,194,369	\$1,194,369	\$0	\$0	\$2,388,738
SUPPORT VEHICLES	5307	RTD0009895	Pioneer Valley Transit Authority	111201		2024 - \$4,064,263	\$4,064,263	\$812,853	\$0	\$0	\$4,877,116
ACQUIRE - Supervisory VEHICLES \$44,000 \$3,000 \$3,000 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	5307	RTD0010270	Pioneer Valley Transit Authority	114211	• •	2024 - \$53,600	\$53,600	\$13,400	\$0	\$0	\$67,000
PREVENTIVE MAINTENANCE - State of Good Repair  5307 RTD0010273 Pioneer Valley Transit Authority 114404 Pioneer Valley Transit Authority / 2024 - \$240,000 \$240,000 \$60,000 \$0 \$0 \$0 \$300,000 \$200,000 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	5307	RTD0010271	Pioneer Valley Transit Authority	114211			\$44,000	\$11,000	\$0	\$0	\$55,000
REHAB/RENOVATE - STORAGE FACILITY - Paving and access improvements Umass Facility  Subtotal \$13,267,867 \$4,412,433 \$0 \$0 \$17,680,300 \$30 \$30 \$30 \$30 \$30 \$30 \$30 \$30 \$30	5307	RTD0010272	Pioneer Valley Transit Authority	117A00	PREVENTIVE MAINTENANCE - State of	2024 - \$12,000	\$12,000	\$3,000	\$0	\$0	\$15,000
Subtotal	5307	RTD0010273	Pioneer Valley Transit Authority	114404	REHAB/RENOVATE - STORAGE FACILITY - Paving and access improvements Umass	2024 - \$240,000	\$240,000	\$60,000	\$0	\$0	\$300,000
Subtotal   Substitution   Substitu						Subtotal	\$13,267,867	\$4,412,433	\$0	\$0	\$17,680,300
Subtotal	5309										
Subtotal   Substitution   Substitu						Subtotal	\$0	\$0	\$0	\$0	\$0
Subtotal   Substitution   Substitu	5310					Subtotal	\$0	\$0	\$0	\$0	\$0
Subtotal   \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	5311					Subtotal	\$0	\$0	\$0	\$0	\$0
FACILITY - Lateral Expansion Umass Facility  5339  RTD0010351  Pioneer Valley Transit Authority  11201  BUY REPLACEMENT 40-FT BUS  \$1,008,000 \$1,008,000 \$252,000 \$0 \$0 \$1,260,00 \$0 \$1,260,00 \$0 \$1,260,00 \$0 \$1,480,00 \$296,000 \$0 \$1,480,00 \$1,480,	5337										
RTD0010275 Pioneer Valley Transit Authority 114402 Pioneer Valley Transit Authority / \$1,008,000 \$252,000 \$0 \$0 \$1,260,000 REHAB/RENOVATE - MAINTENANCE FACILITY - Lateral Expansion Northampton Maintenance Facility  5339 RTD0010274 Pioneer Valley Transit Authority 114402 Pioneer Valley Transit Authority / REHAB/RENOVATE - MAINTENANCE FACILITY - Lateral Expansion Umass Facility  5339 RTD0010351 Pioneer Valley Transit Authority 111201 BUY REPLACEMENT 40-FT BUS \$996,328 \$199,266 \$0 \$0 \$1,195,59						Subtotal	\$0	\$0	\$0	\$0	\$0
REHAB/RENOVATE - MAINTENANCE FACILITY - Lateral Expansion Northampton Maintenance Facility  Facility - Lateral Expansion Northampton Maintenance Facility  Fineer Valley Transit Authority  Facility - Lateral Expansion Umass Facility  Fac		DTD 00400TF		444400			44 000 000	40=0.000	40	40	44 050 000
RTD0010274 Pioneer Valley Transit Authority 114402 Pioneer Valley Transit Authority / \$1,184,000 \$296,000 \$0 \$0 \$1,480,000 REHAB/RENOVATE - MAINTENANCE FACILITY - Lateral Expansion Umass Facility  81,184,000 \$296,000 \$0 \$0 \$1,480,000 REHAB/RENOVATE - MAINTENANCE FACILITY - Lateral Expansion Umass Facility  81,184,000 \$296,000 \$0 \$0 \$1,480,000 REHAB/RENOVATE - MAINTENANCE FACILITY - Lateral Expansion Umass Facility  81,184,000 \$296,000 \$0 \$0 \$1,480,000 REHAB/RENOVATE - MAINTENANCE FACILITY - Lateral Expansion Umass Facility  81,184,000 \$296,000 \$0 \$0 \$1,480,000 REHAB/RENOVATE - MAINTENANCE FACILITY - Lateral Expansion Umass Facility  81,184,000 \$296,000 \$0 \$1,184,000 REHAB/RENOVATE - MAINTENANCE FACILITY - Lateral Expansion Umass Facility  81,184,000 \$296,000 \$0 \$1,184,000 REHAB/RENOVATE - MAINTENANCE FACILITY - Lateral Expansion Umass Facility  81,184,000 \$296,000 \$0 \$1,184,000 REHAB/RENOVATE - MAINTENANCE FACILITY - Lateral Expansion Umass Facility	5339	R1D0010275	Pioneer Valley Transit Authority	114402	REHAB/RENOVATE - MAINTENANCE FACILITY - Lateral Expansion		\$1,008,000	\$252,000	<b>\$</b> 0	<b>\$</b> 0	\$1,260,000
5339 RTD0010351 Pioneer Valley Transit Authority 111201 BUY REPLACEMENT 40-FT BUS \$996,328 \$199,266 \$0 \$0 \$1,195,59	5339	RTD0010274	Pioneer Valley Transit Authority	114402	Pioneer Valley Transit Authority / REHAB/RENOVATE - MAINTENANCE FACILITY - Lateral Expansion Umass		\$1,184,000	\$296,000	\$0	\$0	\$1,480,000
	5339	RTD0010351	Pioneer Valley Transit Authority	111201	-		\$996,328	\$199,266	\$0	\$0	\$1,195,594
Subtotal \$3,188,328 \$747,266 \$0 \$0 \$3,935,59						Subtotal	\$3,188,328		\$0		

# Table 25 FFY 2025 Transit Project Information (Continued)

5320										
					Subtotal	\$0	\$0	\$0	\$0	\$0
Other Federa	I									
					Subtotal	\$0	\$0	\$0	\$0	\$0
Other Non-Fe	deral									
Other Non-	RTD0010268	Pioneer Valley Transit Authority	111201	Pioneer Valley Transit Authority / BUY		\$0	\$0	\$0	\$3,135,710	\$3,135,710
Federal				REPLACEMENT 40-FT BUS (3) - Electric						
				(VW Mitigation Funds)						
					Subtotal	\$0	\$0	\$0	\$3,135,710	\$3,135,710
					Total	\$16,456,195	\$5,159,699	\$0	\$3,135,710	\$24,751,604

Table 26 FFY 2026 Transit Project Information

FTA I Program	Project Number	Transit Agency	FTA Activity Line Item	Project Description	Carryover (unobligated)	Federal Funds	State Funds	TDC Local Fu	ınds	Total Cost
5307										
5307	RTD0010277	Pioneer Valley Transit Authority	111206	Pioneer Valley Transit Authority / BUY REPL ARTICULATED BUS (2 - 60ft)	2025 - \$1,600,000	\$1,600,000	\$400,000	\$0	\$0	\$2,000,000
5307	RTD0010278	Pioneer Valley Transit Authority	111201	Pioneer Valley Transit Authority / BUY REPLACEMENT 40-FT BUS (4)	2025 - \$1,895,421	\$1,895,421	\$473,855	\$0	\$0	\$2,369,276
5307	RTD0010279	Pioneer Valley Transit Authority	111202	Pioneer Valley Transit Authority / BUY REPLACEMENT 35-FT BUS	2025 - \$1,301,864	\$1,301,864	\$260,373	\$0	\$0	\$1,562,237
5307	RTD0010281	Pioneer Valley Transit Authority	114406	Pioneer Valley Transit Authority / REHAB/RENOVATE - SHOP EQUIPMENT	2025 - \$120,000	\$120,000	\$30,000	\$0	\$0	\$150,000
5307	RTD0010282	Pioneer Valley Transit Authority	117A00	Pioneer Valley Transit Authority / PREVENTIVE MAINTENANCE - State of Good Repair	2025 - \$12,000	\$12,000	\$3,000	\$0	\$0	\$15,000
5307	RTD0010285	Pioneer Valley Transit Authority	111402	Pioneer Valley Transit Authority REHAB/REBUIld Environmental Compliance	2025 - \$4,000	\$4,000	\$1,000	\$0	\$0	\$5,000
5307	RTD0010283	Pioneer Valley Transit Authority	119402	Pioneer Valley Transit Authority / BUS SHELTERS	2025 - \$106,566	\$106,566	\$26,642	\$0	\$0	\$133,208
5307	RTD0010284	Pioneer Valley Transit Authority	119408	Pioneer Valley Transit Authority / REHAB/RENOV SIGNAGE	2025 - \$16,000	\$16,000	\$4,000	\$0	\$0	\$20,000
5307	RTD0010286	Pioneer Valley Transit Authority	119406	Pioneer Valley Transit Authority / REHAB/RENOV BICYCLE ACCESS, FACIL & EQUIP ON BUSES	2025 - \$5,600	\$5,600	\$1,400	\$0	\$0	\$7,000
5307	RTD0010289	Pioneer Valley Transit Authority	114402	Pioneer Valley Transit Authority / REHAB/RENOVATE - MAINTENANCE FACILITY - Holyoke ITC Lower Level Renovations	2025 - \$1,440,000	\$1,440,000	\$360,000	\$0	\$0	\$1,800,000
5307	RTD0010290	Pioneer Valley Transit Authority	113103	Pioneer Valley Transit Authority / TERMINAL, INTERMODAL (TRANSIT) Northampton ITC	2025 - \$400,000	\$400,000	\$100,000	\$0	\$0	\$500,000
5307	RTD0010291	Pioneer Valley Transit Authority	442400	Pioneer Valley Transit Authority / SHORT RANGE TRANSIT PLANNING	2025 - \$204,000	\$204,000	\$51,000	\$0	\$0	\$255,000

# Table 26 FFY 2026 Transit Project Information (Continued)

5307	RTD0010292	Pioneer Valley Transit Authority	117C00	Pioneer Valley Transit Authority / NON FIXED ROUTE ADA PARA SERV	2025 - \$1,004,557	\$1,004,557	\$251,139	\$0	\$0	\$1,255,696
5307	RTD0010293	Pioneer Valley Transit Authority	117A00	Pioneer Valley Transit Authority / PREVENTIVE MAINTENANCE	2025 - \$3,440,386	\$3,440,386	\$860,096	\$0	\$0	\$4,300,482
5307	RTD0010294	Pioneer Valley Transit Authority	116202	Pioneer Valley Transit Authority / PURCHASE ITS	2025 - \$1,223,373	\$1,223,373	\$1,223,373	\$0	\$0	\$2,446,746
					Subtotal	\$12,773,767	\$4,045,878	\$0	\$0	\$16,819,645
5309					Subtotal	\$0	\$0	\$0	\$0	\$0
5310					Subtotal	\$0	\$0		\$0	\$0
5311					Subtotal	\$0	\$0	\$0	\$0	\$0
5337					Subtotal	\$0		\$0	\$0	\$0
5339						·	<u> </u>		<u> </u>	
5339	RTD0010287	Pioneer Valley Transit Authority	114402	Pioneer Valley Transit Authority / REHAB/RENOVATE - MAINTENANCE FACILITY - Northampton Bus Facility		\$2,656,000	\$664,000	\$0	\$0	\$3,320,000
5339	RTD0010288	Pioneer Valley Transit Authority	114402	Lateral Expansion Pioneer Valley Transit Authority /		\$2,352,000	\$588,000	\$0	\$0	\$2,940,000
				REHAB/RENOVATE - MAINTENANCE FACILITY - Umass Bus Facility - Lateral Expansion						
5339	RTD0010352	Pioneer Valley Transit Authority	111202	BUY REPLACEMENT 35-FT BUS		\$1,016,254	\$203,251	\$0	\$0	\$1,219,505
		· · · · · · · · · · · · · · · · · · ·			Subtotal	\$6,024,254	\$1,455,251	\$0	\$0	
5320										
·					Subtotal	\$0	\$0	\$0	\$0	\$0
Other Fed	eral				Subtotal	\$0	\$0	\$0	\$0	\$0
Other Nor	n-Federal									
					Subtotal	\$0 ·	\$0 ·	\$0	\$0	\$0 ·
					Total	\$18,798,021	\$5,501,129	\$0	\$0	\$24,299,150

### **VII. 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 2020-2021TIP projects are identified in Table 27.

**Table 27 Project Implementation** 

TIP Year	Project ID	Project	Funding	Total Funds	Status
2020	607502	NORTHAMPTON- INTERSECTION IMPROVEMENTS AT KING STREET, NORTH STREET & SUMMER STREET AND AT KING STREET & FINN STREET	STBG / CMAQ	\$4,066,668	Construction
2020	604434	CHICOPEE- RECONSTRUCTION & RELATED WORK ON FULLER ROAD, FROM MEMORIAL DR (RTE 33) TO SHAWINIGAN DR (2.0 MILES)	STBG / HSIP	\$9,735,424	Construction
2020	608236	NORTHAMPTON- RECONSTRUCTION OF DAMON ROAD, FROM ROUTE 9 TO ROUTE 5, INCLUDES DRAINAGE SYSTEM REPAIRS & SLOPE STABILIZATION AT THE NORWOTTUCK	STBG, TAP	\$11,274,259	Construction
2020	PV0001	NORTHAMPTON, AMHERST, CHICOPPE, EASTHAMPTON, HADLEY, HOLYOKE, SOUTH HADLEY, SPRINGFIELD, and WEST SPRINGFIELD: ValleyBike share (phase II)	STBG	\$1,200,000	Operating
2020	PV0002	P 21 Express Year 3	CMAQ	\$500,000	Operating
2020	608718	SPRINGFIELD- INTERSECTION IMPROVEMENTS AT BERKSHIRE AVENUE, COTTAGE AND HARVEY STREETS	HIP	\$3,154,158	Construction
2020	608631	WESTHAMPTON- BRIDGE REPLACEMENT, W- 27-005, KINGS HIGHWAY OVER N BRANCH MANHAN RIVER	STBG-BR-OFF	\$1,937,318	Construction
2020	400103	WESTFIELD- BRIDGE REPLACEMENT, W-25- 006, ROUTE 10/202 (SOUTHWICK ROAD) OVER THE LITTLE RIVER	NHPP-On	\$ 13,276,980	Construction
2020	606552	NORTHAMPTON- BRIDGE RECONSTRUCTION, N-19-059, I-91 OVER US 5/BMRR & N-19-060, I-91 OVER HOCKANUM ROAD	NHPP-On	\$4,671,793	Construction
2020	608575	CHICOPEE TO HOLYOKE- GUIDE AND TRAFFIC SIGN REPLACEMENT ON I-391	HSIP	\$1,861,310	Construction
2020	602911	CHICOPEE- CONNECTICUT RIVERWALK & BIKEWAY CONSTRUCTION, FROM BOAT RAMP NEAR I-90 TO NASH FIELD (2.5 MILES), INCLUDES NEW BRIDGE C-13-060 OVER OVERFLOW CHANNEL	CMAQ	\$ 3,041,445	Construction

TIP Year	SID	Project Description	Funding Source	Programmed Funds	Status
2021	605032	HADLEY- RECONSTRUCTION ON ROUTE 9, FROM MIDDLE STREET TO MAPLE/SOUTH MAPLE STREET	STBG	\$8,793,026	9/11/21 Ad Date
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	Advertised
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	4/24/21 Ad Date
2021	608782	SPRINGFIELD- INTERSECTION IMPROVEMENTS AT COTTAGE STREET, INDUSTRY AVENUE AND ROBBINS ROAD	STBG, CMAQ	\$3,268,656	Advertised
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

### VIII. Air Quality Conformity Information FFY 2022 - 2026

This section documents the latest air quality conformity determination for the 1997 ozone National Ambient Air Quality Standards (NAAQS) in the Pioneer Valley 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. These 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 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 Pioneer Valley FFY 2022-2026 Transportation Improvement Program, and Massachusetts' FFY 2022-2026 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 Pioneer Valley FFY 2022-2026 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 January 21, 2021. 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 <u>The</u>
  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 <u>Public Participation Plan</u> 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 28, 2021. 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 18, 2021 and subsequently, the Pioneer Valley MPO [is expected to endorse] this air quality conformity determination before May 25, 2021. 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 Pioneer Valley 2022-2026 Transportation Improvement Program and 2020-2040 Regional Transportation Plan are fiscally constrained, as demonstrated in this document.

As of April 22, 2002, the city of Springfield was re-designated as being in attainment for carbon monoxide (CO) with an EPA-approved limited maintenance plan. In areas with approved limited maintenance plans, federal actions requiring conformity determinations under the transportation conformity rule are considered to satisfy the "budget test" (as budgets are treated as not constraining in these areas for the length of the initial maintenance period). Any future required "project level" conformity determinations for projects located within this community will continue to use a "hot-spot" analysis to assure that any new transportation projects in this CO attainment area do not cause or contribute to carbon monoxide non-attainment.

In summary and based upon the entire process described above, the Pioneer Valley MPO 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 2022-2026 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 Pioneer Valley MPO's FFY 2022-2026 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.

### IX. 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 repaying 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.

MassDot Project ID	MassDOT Project Description	GHG Analysis Type	GHG Impact Description	GHG CO2 Impact (kg/yr)	Additional Information
Federal Fiscal	Year 2022				
Pioneer Valley					
605032	HADLEY- RECONSTRUCTION ON ROUTE 9, FROM	Quantified	Quantified Decrease in Emissions	-354	
605126	WARE- BRIDGE REPLACEMENT, W-05-015, ROUTE 32		No assumed impact/negligible	0	
606450	HOLYOKE- TRAFFIC SIGNAL UPGRADES AT 15	Quantified	Quantified Decrease in Emissions	-12,567	
606552	NORTHAMPTON- BRIDGE REPLACEMENT, N-19-059, I-	Qualitative	No assumed impact/negligible	0	
608374	WEST SPRINGFIELD- RECONSTRUCTION OF MEMORIAL AVENUE (ROUTE 147), FROM COLONY	Quantified	Quantified Decrease in Emissions from Complete Streets Project	0	All CO2 emissions reductions are included within the last year of
	ROAD TO THE MEMORIAL AVENUE ROTARY (1.4		, ,		advanced construction (FFY 2024)
608473	SOUTH HADLEY- RESURFACING AND RELATED WORK		No assumed impact/negligible	0	
608577	EASTHAMPTON- IMPROVEMENTS AND RELATED	Quantified	Quantified Decrease in Emissions	-3,170	
608719	AMHERST- BELCHERTOWN- NORWOTTUCK RAIL TRAIL		No assumed impact/negligible	0	
609515	NORTHAMPTON- BRIDGE STREET ELEMENTARY	Qualitative	Qualitative Decrease in Emissions	0	
Pioneer Valley			Total GHG Increase (kg/year)	0	
			Total GHG Reduction (kg/year)	-16,091	
			Total GHG Difference (kg/year)	-16,091	
	2022		Total GHG Increase (kg/year)	0	
			Total GHG Reduction (kg/year)	-16,091	
			Total GHG Difference (kg/year)	-16,091	

ear 2023				
HOLYOKE- WEST SPRINGFIELD- REHABILITATION OF	Qualitative	Qualitative Decrease in Emissions	0	
GRANBY- IMPROVEMENTS @ 2 LOCATIONS ON	Quantified	Quantified Decrease in Emissions	-273	
SPRINGFIELD- MCKNIGHT COMMUNITY TRAIL	Quantified	Quantified Decrease in Emissions	-45,830	
WALES- RECONSTRUCTION & IMPROVEMENTS ON	Qualitative	Qualitative Decrease in Emissions	0	
WEST SPRINGFIELD- RECONSTRUCTION OF MEMORIAL AVENUE (ROUTE 147), FROM COLONY ROAD TO THE MEMORIAL AVENUE ROTARY (1.4	Quantified	Quantified Decrease in Emissions from Complete Streets Project	0	All CO2 emissions reductions are included within the last year of advanced construction (FFY 2024)
SPRINGFIELD- IMPROVEMENTS ON ST. JAMES		No assumed impact/negligible	0	
SPRINGFIELD- IMPROVEMENTS ON ST. JAMES		No assumed impact/negligible	0	
WALES- BRIDGE REPLACEMENT, W-02-002, HOLLAND		No assumed impact/negligible	0	
LUDLOW- BRIDGE REPLACEMENT, L-16-026, PINEY		No assumed impact/negligible	0	
LONGMEADOW- BLUEBERRY HILL ELEMENTARY	Qualitative	Qualitative Decrease in Emissions	0	
AGAWAM- ROBINSON PARK ELEMENTARY SCHOOL	Qualitative	Qualitative Decrease in Emissions	0	
		Total GHG Increase (kg/year)	0	
		Total GHG Reduction (kg/year)	-46,103	
		Total GHG Difference (kg/year)	-46,103	
2023		Total GHG Increase (kg/year)	0	
		Total GHG Reduction (kg/year)	-46,103	
	GRANBY- IMPROVEMENTS @ 2 LOCATIONS ON SPRINGFIELD- MCKNIGHT COMMUNITY TRAIL VALES- RECONSTRUCTION & IMPROVEMENTS ON VEST SPRINGFIELD- RECONSTRUCTION OF MEMORIAL AVENUE (ROUTE 147), FROM COLONY ROAD TO THE MEMORIAL AVENUE ROTARY (1.4 SPRINGFIELD- IMPROVEMENTS ON ST. JAMES SPRINGFIELD- IMPROVEMENTS ON ST. JAMES VALES- BRIDGE REPLACEMENT, W-02-002, HOLLAND UDLOW- BRIDGE REPLACEMENT, L-16-026, PINEY ONGMEADOW- BLUEBERRY HILL ELEMENTARY AGAWAM- ROBINSON PARK ELEMENTARY SCHOOL	GRANBY- IMPROVEMENTS @ 2 LOCATIONS ON Quantified SPRINGFIELD- MCKNIGHT COMMUNITY TRAIL Quantified WALES- RECONSTRUCTION & IMPROVEMENTS ON Qualitative VEST SPRINGFIELD- RECONSTRUCTION OF MEMORIAL AVENUE (ROUTE 147), FROM COLONY ROAD TO THE MEMORIAL AVENUE ROTARY (1.4 SPRINGFIELD- IMPROVEMENTS ON ST. JAMES SPRINGFIELD- IMPROVEMENTS ON ST. JAMES WALES- BRIDGE REPLACEMENT, W-02-002, HOLLAND UDLOW- BRIDGE REPLACEMENT, L-16-026, PINEY ONGMEADOW- BLUEBERRY HILL ELEMENTARY Qualitative AGAWAM- ROBINSON PARK ELEMENTARY SCHOOL QUAlitative	GRANBY- IMPROVEMENTS @ 2 LOCATIONS ON Quantified Quantified Decrease in Emissions Quantified Decrease in Emissions Quantified Decrease in Emissions Quantified Decrease in Emissions Qualitative Decrease in Emissions Qualitative Decrease in Emissions Qualitative Decrease in Emissions Quantified Decrease in Emissions Qualitative Decrease in Emissions Qualitative Decrease in Emissions Total GHG Increase (kg/year) Total GHG Increase (kg/year) Total GHG Increase (kg/year) Total GHG Increase (kg/year)	GRANBY- IMPROVEMENTS @ 2 LOCATIONS ON Quantified Quantified Decrease in Emissions -273 GPRINGFIELD- MCKNIGHT COMMUNITY TRAIL Quantified Quantified Decrease in Emissions -45,830 WALES- RECONSTRUCTION & IMPROVEMENTS ON Qualitative Qualitative Decrease in Emissions 0 WEST SPRINGFIELD- RECONSTRUCTION OF Quantified Decrease in Emissions 0 MEMORIAL AVENUE (ROUTE 147), FROM COLONY from Complete Streets Project 0 GOAD TO THE MEMORIAL AVENUE ROTARY (1.4 GPRINGFIELD- IMPROVEMENTS ON ST. JAMES No assumed impact/negligible 0 GPRINGFIELD- IMPROVEMENTS ON ST. JAMES No assumed impact/negligible 0 WALES- BRIDGE REPLACEMENT, W-02-002, HOLLAND No assumed impact/negligible 0 UDLOW- BRIDGE REPLACEMENT, L-16-026, PINEY No assumed impact/negligible 0 ONGMEADOW- BLUEBERRY HILL ELEMENTARY Qualitative Decrease in Emissions 0 GAWAM- ROBINSON PARK ELEMENTARY SCHOOL Qualitative Decrease in Emissions 0 Total GHG Increase (kg/year) -46,103 Total GHG Reduction (kg/year) -46,103 Total GHG Reduction (kg/year) -46,103 Total GHG Reduction (kg/year) -46,103

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					
606797	CUMMINGTON- RETAINING WALL REPLACEMENT ON	Qualitative	No assumed impact/negligible	0	
608374	WEST SPRINGFIELD- RECONSTRUCTION OF MEMORIAL AVENUE (ROUTE 147), FROM COLONY ROAD TO THE MEMORIAL AVENUE ROTARY (1.4	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)
608717	SPRINGFIELD- RECONSTRUCTION OF SUMNER	Quantified	Quantified Decrease in Emissions	-39,183	·
608846	MONSON- BRIDGE REPLACEMENT, M-27-015, OLD		No assumed impact/negligible	0	
609287	WORTHINGTON- RECONSTRUCTION & RELATED	Quantified	Quantified Decrease in Emissions	-220	
610779	HAMPDEN- BRIDGE MAINTENANCE, H-04-004,		No assumed impact/negligible	0	
Pioneer Valley			Total GHG Increase (kg/year)	0	
			Total GHG Reduction (kg/year)	-47,837	
			Total GHG Difference (kg/year)	-47,837	
	2024		Total GHG Increase (kg/year)	0	
			Total GHG Reduction (kg/year)	-47,837	
			Total GHG Difference (kg/year)	-47,837	

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-		No assumed impact/negligible	0	
608413	NORTHAMPTON- ROCKY HILL GREENWAY MULTI-USE	Quantified	Quantified Decrease in Emissions	-3,665	
608460	HADLEY- BRIDGE REPLACEMENT, H-01-005, BAY		No assumed impact/negligible	0	
608727	HOLLAND- RESURFACING & RELATED WORK ON	Qualitative	Qualitative Decrease in Emissions	0	
608869	NORTHAMPTON- BRIDGE REPLACEMENT, N-19-068,		No assumed impact/negligible	0	
608881	LONGMEADOW- SPRINGFIELD- RESURFACING AND	Quantified	Quantified Decrease in Emissions	-3,410	
609286	NORTHAMPTON- DOWNTOWN COMPLETE STREETS	Qualitative	Qualitative Decrease in Emissions	0	
609409	SPRINGFIELD- BRIDGE REPLACEMENT, S-24-016,		No assumed impact/negligible	0	
610657	EASTHAMPTON- NORTHAMPTON- INSTALLATION OF A	Qualitative	Qualitative Decrease in Emissions	0	
610768	WESTHAMPTON- BRIDGE MAINTENANCE, W-27-028,		No assumed impact/negligible	0	
612031	WORTHINGTON- RESURFACING AND RELATED WORK		No assumed impact/negligible	0	
612079	CHICOPEE- HUGH SCOTT STREIBER ELEMENTARY	Qualitative	Qualitative Decrease in Emissions	0	
612080	SPRINGFIELD- REBECCA M. JOHNSON ELEMENTARY	Qualitative	Qualitative Decrease in Emissions	0	
Pioneer Valley			Total GHG Increase (kg/year)	0	
			Total GHG Reduction (kg/year)	-7,075	
			Total GHG Difference (kg/year)	-7,075	
	2025		Total GHG Increase (kg/year)	0	
			Total GHG Reduction (kg/year)	-7,075	
			Total GHG Difference (kg/year)	-7,075	

MassDot Project ID	MassDOT Project Description	GHG Analysis Type	GHG Impact Description	GHG CO2 Impact (kg/yr)	Additional Information
Federal Fiscal \	ear 2026				
Pioneer Valley					
608785	SOUTH HADLEY- RECONSTRUCTION OF MAIN STREET	Qualitative	Qualitative Decrease in Emissions	0	
609061	CHICOPEE- INTERSECTION IMPROVEMENTS AT	Qualitative	Qualitative Decrease in Emissions	0	
609065	HOLYOKE- RESURFACING AND RELATED WORK ON	Qualitative	Qualitative Decrease in Emissions	0	
611953	SPRINGFIELD- CHICOPEE- GUIDE AND TRAFFIC SIGN		No assumed impact/negligible	0	
Pioneer Valley			Total GHG Increase (kg/year)	0	
			Total GHG Reduction (kg/year)	0	
			Total GHG Difference (kg/year)	0	
	2026		Total GHG Increase (kg/year)	0	
			Total GHG Reduction (kg/year)	0	
			Total GHG Difference (kg/year)	0	
2022 - 2026			Total GHG Increase (kg/year)	0	
			Total GHG Reduction (kg/year)	-117,106	
			Total GHG Difference (kg/year)	-117,106	

MassDOT/FTA Project ID ▼	MassDOT/FTA Project Description ▼	Total Programmed Funds ▼	GHG Analysis Type ▼	GHG CO₂ Impact (kg/yr) ▼	GHG Impact Description ▼	Total Cost ▼	Additional Information▼
RTD0009838	Buy Replacement 35-FT Buses (5)	\$1,959,613	Quantified	708423.59	Quantified Decrease in Emissions from Bus Replacement	\$1,959,613	141684.718 kg per year per bus (5) buses
RTD0009837	Buy Replacement 40-FT Buses (7)	\$3,056,542	Quantified		Quantified Decrease in Emissions from Bus Replacement		130375.549 kg per bus (7) per year
RTD0009871	BUY REPLACEMENT 40-FT BUS - Electric (4) (RTACAP should be VW Mitigation)	\$3,000,000	Quantified	7921604	Quantified Decrease in Emissions from Bus Replacement	5941203	1980401 kg per bus per year (4)
RTD0009872	BUY REPLACEMENT 35-FT BUS - Electric (4) (RTACAP should be VW mitigation)	\$2,700,000	Quantified		Quantified Decrease in Emissions from Bus Replacement	5941203	1980401 kg per bus per year (4)
RTD0009868	REHAB/REBUILD 40-FT BUS (9)	\$2,925,000	Qualitative		Qualitative Decrease in Emissions	2202275	
RTD0009869	REHAB/REBUILD 35-FT BUS (4)	\$863,066	Qualitative		Qualitative Decrease in Emissions	\$863,066	

Mana DOT/FTA	Maca DOT/TTA Danies	Total	CIIC Analysis	CHC CO. Impost	GHG		Addis
MassDOT/FTA Project ID ▼	MassDOT/FTA Project Description ▼	•	GHG Analysis Type ▼	GHG CO₂ Impact (kg/yr) ▼	Impact Description ▼	Total Cost ▼	Additional Information▼
RTD0009837	Purchase 40' Replacement Buses (6)	\$2,571,533			Quantified Decrease in		130375.549 kg per
					Emissions from Bus		bus (6) per year
			Quantified	912628.843	Replacement		
RTD0009838	Replace 35' Buses (6)	\$2,503,353			Quantified Decrease in	\$2,503,353	141684.718 kg per
					Emissions from Bus		year per bus (6)
			Quantified	141684.718	Replacement		buses
RTD0009871	BUY REPLACEMENT 40-FT BUS - Electric (4)	\$3,826,159			Quantified Decrease in	\$3,826,159	1980401 kg per bus
	(RTACAP should be VW Mitigation)				Emissions from Bus		per year (4)
			Quantified	7921604	Replacement		
RTD0009872	BUY REPLACEMENT 35-FT BUS - Electric (4)	\$3,672,134			Quantified Decrease in	\$3,672,134	1980401 kg per bus
	(RTACAP should be VW mitigation)				Emissions from Bus		per year (4)
			Quantified	7921604	Replacement		
RTD0009873	REHAB/REBUILD 40-FT BUS (6)	\$1,603,599			Qualitative Decrease in	\$1,603,599	
			Qualitative		Emissions		
					Quantified Decrease in		260181.813 kg per
	BUY REPLACEMENT <30 FT BUS (2)				Emissions from Bus		year per van (2)
RTD0010237	Type D Shuttle buses	\$ 157,000	Quantified	520363.626	Replacement	\$ 157,000	
	REHAB/REBUILD 60' ARTICULATED BUS (2)				Qualitative Decrease in		
RTD0010236		\$ 742,630	Qualitative		Emissions		

MassDOT/FTA Project ID ▼	MassDOT/FTA Project Description ▼	Total Programmed Funds ▼	GHG Analysis Type ▼	GHG CO₂ Impact (kg/yr) ▼	GHG Impact Description ▼	Total Cost ▼	Additional Information ▼
RTD0009851	Purchase 40' Replacement	\$2,233,271			Quantified Decrease in	\$2,233,271	130375.549 kg per bus (4)
	Buses (4)				Emissions from Bus		per year
			Quantified	521502.196	Replacement		
RTD0010245	Purchase 35' Replacement	\$3,277,574			Quantified Decrease in	\$3,277,574	141684.718 kg per year
	Buses (6)				Emissions from Bus		per bus (6) buses
			Quantified	850108.308	Replacement		
RTD0010246	BUY REPLACEMENT 40-FT BUS -	\$7,103,550			Quantified Decrease in	\$7,103,550	1980401 kg per bus per
	Electric (7) (RTACAP should be				Emissions from Bus		year (7)
	VW Mitigation)		Quantified	1386287	Replacement		
RTD0010247	BUY REPLACEMENT 35-FT BUS -	\$976,792			Quantified Decrease in	\$976,792	1980401 kg per bus per
	Electric (1) (RTACAP should be				Emissions from Bus		year (1)
	VW Mitigation)		Quantified	1980401	Replacement		
RTD0010248	REHAB/REBUILD 40-FT BUS (7)	\$ 1,984,801	Qualitative		Qualitative Decrease in Emissio	\$ 1,984,801	
RTD0010249					Quantified Decrease in		260181.813 kg per year
	BUY REPLACEMENT <30 FT				Emissions from Bus		per van (2)
	BUS (2) Type D Shuttle buses	\$ 160,000	Quantified	520363.626	Replacement	\$ 160,000	

		<b>-</b>	auo				
MassDOT/FTA	MassDOT/FTA Project	Total Programmed	GHG Analysis	GHG CO <sub>2</sub> Impact	GHG	Total	
Project ID ▼	Description ▼	Funds ▼	Type ▼	(kg/yr)▼	Impact Description ▼		Additional Information ▼
RTD0010268	BUY REPLACEMENT 40-FT BUS -	\$3,135,710			Quantified Decrease in Emissions	\$3,135,710	1980401 kg per bus per
	Electric (3)		Quantified	5941203	from Bus Replacement		year (3)
RTD0009880	REHAB/REBUILD 40-FT BUS (7)	\$2,044,344				\$2,044,344	
			Qualitative		Qualitative Decrease in Emissions		
RTD0009881	REHAB/REBUILD 435-FT BUS (3)	\$1,178,868				\$1,178,868	
			Qualitative		Qualitative Decrease in Emissions		
RTD0009895	Replacement 40' Bus (11)	\$4,877,116			Quantified Decrease in Emissions	\$4,877,116	130375.549 kg per bus
			Quantified	1434131.04	from Bus Replacement		(11) per year

			y				
MassDOT/FTA Project ID ▼	MassDOT/FTA Project Description ▼	Total Programmed Funds ▼	GHG Analysis Type ▼	GHG CO₂ Impact (kg/yr) ▼	GHG Impact Description ▼	Total Cost ▼	Additional Information ▼
RTD0010278	Pioneer Valley Transit	\$2,369,276	f <b>*</b> *			\$2 369 276	130375.549 kg per bus (4)
11120010270	Authority / BUY	<i>\$2,303,270</i>				, , ,	per year
	REPLACEMENT 40-FT BUS				Quantified Decrease in		
	(4)		Quantified	521502.196	Emissions from Bus Replacement		
RTD0010279	Pioneer Valley Transit	\$1,562,237				\$1,562,237	141684.718 kg per year
	Authority / BUY				Quantified Decrease in		per bus (3) buses
	REPLACEMENT 35-FT BUS		Quantified	125054.154	Emissions from Bus Replacement		
RTD0010277	Pioneer Valley Transit						130375.549 kg per bus (2)
	Authority / BUY REPL						per year
	ARTICULATED BUS (2 -				Quantified Decrease in		
	60ft)	\$ 2,000,000	Quantified	260751.118	Emissions from Bus Replacement	\$ 2,000,000	

## **APPENDICES**

Appendices \_\_\_\_\_\_ 103

### **APPENDIX A: MassDOT Targets**

FFY 2021–2025 STIP 2021–2025 BUDGET (Federal Aid + Match)

2021 Cur authority	rent Obligation	orify	2022 Current 2022 Propo Obligation authority Obligation authority (9	sed 1%)*	2023 Current 2023 Propo Obligation Authority Obligation authority (9	sed 1%)*	2024 Current 2024 Proposed Obligation authority Obligation authority (91%)*	2024 Proposed Obligation authority (91%)*
Base obligation authority \$ Planned redistribution request \$	641,988,270.00 \$ 50.000.000.00 \$	\$ 621,541,829.00 \$ 50,000,000,00	621,541,829.00 \$ 638,744,163.00 \$ 634,503,827.00 \$ 676,662,004.60 \$ 647,736,142.00 \$ 689,684,332.90 \$ 661,244,412.00 50,000.00 0 \$ 50,000,000	\$ 634,503,827.00	\$ 676,662,004.60	\$ 647,736,142.00	\$ 689,684,332.90	\$ 661,244,412.00
Total estimated funding available \$	691,988,270.00 \$		671,541,829.00 \$ 708,744,163.00 \$ 684,503,827.00 \$ 726,662,004.60 \$ 697,736,142.00 \$ 739,684,332.90 \$ 711,244,412.00	\$ 684,503,827.00	\$ 726,662,004.60	\$ 697,736,142.00	\$ 739,684,332.90	\$ 711,244,412.00
ABP GANS Repayment \$	(85,190,000.00) \$		(82,375,000.00) \$ (89,590,000.00) \$ (86,470,000.00) \$ (93,985,000.00) \$ (89,510,000.00) \$ (98,715,000.00) \$ (93,985,000.00)	\$ (86,470,000.00)	\$ (93,985,000.00)	\$ (89,510,000.00)	\$ (98,715,000.00)	\$ (93,985,000.00)
Total non-earmarked funding available (federal aid) \$	606,798,270.00 \$		589,166,829,00 \$ 619,154,163,00 \$ 598,033,827,00 \$ 632,677,004.60 \$ 608,226,142,00 \$ 640,969,332,90 \$ 617,259,412,00	\$ 598,033,827.00	\$ 632,677,004.60	\$ 608,226,142.00	\$ 640,969,332.90	\$ 617,259,412.00
Total non-earmarked funding available (federal aid + match) \$	750,612,944.18 \$		728,325,042.88 \$ 766,456,220.10 \$ 739,775,231.22 \$ 782,700,504.29 \$ 752,059,445.48 \$ 792,949,657.91 \$ 763,212,630.54	\$ 739,775,237.22	\$ 782,700,504.29	\$ 752,059,445.48	\$ 792,949,657.91	\$ 763,212,630.54
Planning and Pass-throughs (excluding EWO) \$	<b>\$</b> 74,887,887.47 <b>\$</b>		48,138,639,97 \$ 47,887,887.47 \$ 48,186,662.47 \$ 45,080,547.47 \$ 45,428,785.47 \$ 45,080,547.47 \$ 45,479,733.47	\$ 48,186,662.47	\$ 45,080,547.47	\$ 45,428,785.47	\$ 45,080,547.47	\$ 45,479,733.47
Funding for Regional Priorities** \$	243,332,160.75 \$		243,332,160.75 \$ 248,287,195.75 \$ 248,287,195.75 \$ 253,709,791.53 \$ 253,709,791.53 \$ 257,035,097.92 \$ 257,035,097.92	\$ 248,287,195.75	\$ 253,709,791.53	\$ 253,709,791.53	\$ 257,035,097.92	\$ 257,035,097.92
Highway Division Programs*** \$	459,392,895.96 \$	ı	436,894,242.16 \$ 470,280,136.87 \$ 443,301,379.00 \$ 483,910,165.28 \$ 452,920,868.48 \$ 490,634,012.52 \$ 460,697,799.14	\$ 443,301,379.00	\$ 483,910,165.28	\$ 452,920,868.48	\$ 490,834,012.52	\$ 460,697,799.14

"Base Obligation Authority based on 2.1% growth rate from actual FFY 2020 apportionment and average of Fast Act Obligation Authority (91%) through FFY 2020
"MIPO TIP targets will be held harmless from the change in proposed Obligation Authority
"\*\*MassDOT Highway Division programs (including EWO/Awarda/Adjustments) need revised based on new ABP GANS schedule and proposed Obligation Authority

		2025 Proposed Obligation authority (91%)*
	Blanned redistribution request	\$ 675,034,391
	Total setimated funding available	725.034.304
	ABP GANS Repayment	\$ (122,185,000)
Total non-earmarked funding available		\$ 602,849,391.00
Total non-earmarked funding available (federal aid + match)		\$ 745,410,138.60
Planning and Pass-throughs (excluding EWO)		\$ 45,479,733.47
	3.5596% Berkshire	\$ 8,935,836
	42.9671% Boston	\$ 107,862,383
	4.5851% Cape Cod	\$ 11,510,198
	8.6901% Central Mass	\$ 21,815,177
	2.5397% Franklin	\$ 6,375,531
	0.3100% Martha's Vineyard	\$ 778,208
	4.4296% Merrimack Valley	\$ 11,119,839
	4.4596% Montachusett	\$ 11,195,149
	0.2200% Nantucket	\$ 552,277
	3.9096% Northern Middlesex	\$ 9,814,457
	4.5595% Old Colony	\$ 11,445,933
	10.8099% Pioneer Valley	\$ 27,136,613
	8.9601% Southeastern Mass	\$ 22,492,971
	Funding for Regional Priorities	\$ 251,034,571.91
	Linharay Division Drograms	4 AAO OOE 022 22

### 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 F	iscal Year 20	22						\$61,810,769	\$50,063,778	\$11,746,991						
Section 1	A / Regionally	y Prioritized Proje	ects					\$26,839,851	\$21,471,881	\$5,367,970						
Capacity								\$17,486,346	\$13,989,077	\$3,497,269						
2022	605032	Pioneer Valley	Hadley	HADLEY- RECONSTRUCTION ON ROUTE 9, FROM MIDDLE STREET TO MAPLE/SOUTH MAPLE STREET	2	STBG	\$26,279,372	\$17,486,346	\$13,989,077	\$3,497,269 <sup>'</sup>	61		68		MassDOT	Construction / (YOE \$26,279,372) Project A/C over 2 years FFY 2021 \$8,793,026, FFY 2022 \$17,486,346 / 61 TEC / 100% / STBG
	on Improveme							\$4,603,777	\$3,683,022	\$920,755						
2022	606450	Pioneer Valley	Holyoke	HOLYOKE- TRAFFIC SIGNAL UPGRADES AT 15 INTERSECTIONS ALONG HIGH & MAPLE STREETS	2	STBG	\$10,755,401	\$4,603,777	\$3,683,022	\$920,755 <sup>'</sup>	66		68		Holyoke	Construction / (YOE \$10,755,401 (\$4,603,777 in statewide funding = \$6,151,624 in regional target funding) / 66
Roadway	Reconstructi	on						\$4,749,728	\$3,799,782	\$949,946						
2022	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	\$21,692,328	\$1,125,167	\$900,134	\$225,033 <sup>'</sup>	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
2022	608577	Pioneer Valley	Easthampton	EASTHAMPTON- IMPROVEMENTS AND RELATED WORK ON UNION STREET (ROUTE 141) FROM PAYSON AVENUE TO HIGH STREET (0.36 MILES)	2	STBG	\$3,624,561	\$3,624,561	\$2,899,649	\$724,912 <i>'</i>	62.5		61.5		Easthampton	Construction / (TFPC \$3,624,561) / 62.5 TEC / 75% STBG
Section 1	B / Earmark o	or Discretionary (	Grant Funded Pr	ojects				\$5,984,345	\$4,787,476	\$1,196,869						
Earmark	Discretionary							\$5,984,345	\$4,787,476	\$1,196,869						
2022	606552	Pioneer Valley	Northampton	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	2	HIP-BR	\$60,423,296	\$5,984,345	\$4,787,476	\$1,196,869					MassDOT	AC'd over 2020-2024; TFPC: \$60,423,296; NHPP + HIP Bridge (2019)
		oritized Reliability	Projects					\$20,492,172	· · ·							
Bridge Of					_			\$9,266,026	\$7,412,821	\$1,853,205						
	605126	Pioneer Valley	Ware	WARE- BRIDGE REPLACEMENT, W-05-015, ROUTE 32 (PALMER ROAD) OVER THE WARE RIVER	2	STBG-BR-O	ff \$9,266,026		\$7,412,821	\$1,853,205					MassDOT	
_	n-system NHS				_			\$3,370,385	\$2,696,308	\$674,077						
2022	606552	Pioneer Valley	Northampton	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	2	NHPP	\$60,423,296	\$3,370,385	\$2,696,308	\$674,077					MassDOT	AC'd over 2020-2024; TFPC: \$60,423,296; NHPP + HIP Bridge (2019)
Non-Inters	state Paveme	nt				<u>'</u>		\$7,855,761	\$6,284,609	\$1,571,152		·			_	
	608473	Pioneer Valley	,	SOUTH HADLEY- RESURFACING AND RELATED WORK ON ROUTE 116	2	NHPP	\$7,855,761	\$7,855,761	\$6,284,609	\$1,571,152					MassDOT	
		oritized Moderniza	ation Projects					\$7,014,628	\$6,226,865	\$787,763						
	on Improveme							\$6,151,624	\$5,536,462	\$615,162			ļ.			
2022	606450	Pioneer Valley	Holyoke	HOLYOKE- TRAFFIC SIGNAL UPGRADES AT 15 INTERSECTIONS ALONG HIGH & MAPLE STREETS	<b>'</b> 2	HSIP	\$10,755,401	\$6,151,624	\$5,536,462	\$615,162 <sup>'</sup>	66		68		Holyoke	Construction / (YOE \$10,755,401 (\$4,603,777 in statewide funding = \$6,151,624 in regional target funding) / 66
	Reconstructi							\$863,004	\$690,403	\$172,601						
2022	609515	Pioneer Valley	Northampton	NORTHAMPTON- BRIDGE STREET ELEMENTARY SCHOOL IMPROVEMENTS (SRTS)	2	TAP	\$863,004	\$863,004	\$690,403	\$172,601			27		City of Northampton	
		oritized Expansio	n Projects					\$1,479,773	\$1,183,818	\$295,955						
,	nd Pedestriar							\$1,479,773	\$1,183,818	\$295,955						
2022	608719	Pioneer Valley	Multiple	AMHERST- BELCHERTOWN- NORWOTTUCK RAIL TRAIL RESURFACING, FROM STATION ROAD IN AMHERST TO WARREN WRIGHT ROAD IN BELCHERTOWN (1.5 MILES)	2	STBG	\$1,479,773	\$1,479,773	\$1,183,818	\$295,955			21		MassDOT	

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 Fi	scal Year 20:	23						\$71,282,661	\$57,838,113	\$13,444,549						
Section 1	A / Regionally	/ Prioritized Proje	ects					\$27,208,514	\$21,866,811	\$5,341,703		<u> </u>				
	n Improveme		l					\$3,382,672	\$2,806,138	\$576,534						
2023 (	606895	Pioneer Valley	Granby	GRANBY- IMPROVEMENTS @ 2 LOCATIONS ON 2 ROUTE 202: SCHOOL STREET & FIVE CORNERS	2 F	HSIP	\$3,382,672	\$1,000,000	\$900,000	\$100,000	43		62.5		MassDOT D2	Construction / (YOE \$3,382,672) / 43 TEC / 75% STBG, HSIP
2023 (	606895	Pioneer Valley	Granby	GRANBY- IMPROVEMENTS @ 2 LOCATIONS ON 2 ROUTE 202: SCHOOL STREET & FIVE CORNERS	2 8	STBG	\$3,382,672	\$2,382,672	\$1,906,138	\$476,534	43		62.5		MassDOT D2	Construction / (YOE \$3,382,672) / 43 TEC / 75% STBG, HSIP
Roadway I	Reconstruction	on		,				\$23,825,842	\$19,060,674	\$4,765,168						
2023 (	608163	Pioneer Valley	Wales	WALES- RECONSTRUCTION & IMPROVEMENTS ON MONSON ROAD, FROM THE MONSON T.L. TO REED HILL ROAD (1.5 MILES)	2 5	STBG	\$5,656,106	\$5,656,106	\$4,524,885	\$1,131,221	39.5		20.5		Wales	Construction / YOE \$5,656,106 / 39.5 TEC / 75% STBG
2023 6	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	\$21,692,328	\$17,669,498	\$14,135,598	\$3,533,900	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 1	ГАР	\$21,692,328	\$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
Section 2	A / State Pric	oritized Reliability	Projects					\$30,978,819	\$25,245,958	\$5,732,861						
	tate Paveme	nt						\$22,744,177	\$18,195,342	\$4,548,835						
2023 (		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)	Ž N	NHPP	\$22,744,178	\$22,744,177	\$18,195,342	\$4,548,835	59		65.5		MassDOT	Construction (YOE \$22,744,177) / 59 TEC / 75% Design / NHPP
_	-system NHS	3						\$0	\$0	\$0						
2023 (	606552	Pioneer Valley	Northampton	NORTHAMPTON- BRIDGE REPLACEMENT, N-19-7059, 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	2 N	NHPP	\$60,423,296	\$0	\$0	\$0					MassDOT	AC'd over 2020-2024; TFPC: \$60,423,296; NHPP + HIP Bridge (2019)
Safety Imp	provements							\$4,629,032	\$4,166,129	\$462,903						
2023	608565	Pioneer Valley	Springfield	SPRINGFIELD- IMPROVEMENTS ON ST. JAMES SAVENUE AT ST. JAMES BOULEVARD AND CAREW STREET	Ź F	HSIP	\$4,629,032	\$4,629,032	\$4,166,129	\$462,903					MassDOT	
Bridge Off-	-system							\$3,605,610	\$2,884,488	\$721,122						
2023		Pioneer Valley		HOLLAND ROAD OVER WALES BROOK		STBG-BR-Of		\$3,049,418	\$2,439,534	\$609,884					MassDOT	
2023	609120	Pioneer Valley	Ludlow	LUDLOW- BRIDGE REPLACEMENT, L-16-026, PINEY LANE OVER BROAD BROOK	2 8	STBG-BR-Of	f \$556,192	\$556,192	\$444,954	\$111,238					MassDOT	
Section 2E	3 / State Pric	pritized Moderniz	ation Projects	I WE I BIKE OVER BROKE BROOK				\$4,346,994	\$3,726,676	\$620,318						
Intersection	n Improveme	nts						\$2,490,805	\$2,241,725	\$249,081						
	608560	Pioneer Valley	Springfield	SPRINGFIELD- IMPROVEMENTS ON ST. JAMES ZAVENUE AT TAPLEY STREET	2 H	HSIP	\$2,490,805	\$2,490,805	\$2,241,725	\$249,081			75.5		MassDOT	
	Reconstruction							\$1,856,189	\$1,484,951	\$371,238						
2023	609517	Pioneer Valley	Longmeadow	LONGMEADOW- BLUEBERRY HILL ELEMENTARY SCHOOL IMPROVEMENTS (SRTS)	2 1	TAP	\$364,139	\$364,139	\$291,311	\$72,828			29.5		Town of Longmeadow	
	610652	Pioneer Valley	ľ	AGAWAM- ROBINSON PARK ELEMENTARY SCHOOL IMPROVEMENTS (SRTS)	2 T	TAP	\$1,492,050	\$1,492,050	\$1,193,640	\$298,410			36.5		Town of Agawam	
		oritized Expansio	n Projects					\$8,748,334	\$6,998,667	\$1,749,667 \$1,740,667						
	nd Pedestrian 508157	Pioneer Valley	Springfield	SPRINGFIELD- MCKNIGHT COMMUNITY TRAIL CONSTRUCTION, FROM ARMORY STREET TO HAYDEN AVENUE (1.5 MILES)	2 (	CMAQ	\$8,748,334	\$8,748,334 \$8,748,334	\$6,998,667 \$6,998,667	\$1,749,667 \$1,749,667			30.5		Springfield	Construction (YOE \$8,748,334) / 42.5 TEC / Pre 25% / CMAQ / MassDOT Bicycle and Pedestrian Program

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 F	Fiscal Year 202	24						\$31,351,752	\$25,181,402	\$6,170,350						
Section '	1A / Regionally	Prioritized Proj	ects					\$27,202,550	\$21,862,040	\$5,340,510						
Roadway	Reconstruction	on						\$27,202,550	\$21,862,040	\$5,340,510						
2024	606797	Pioneer Valley	Cummington	CUMMINGTON- RETAINING WALL REPLACEMENT ON ROUTE 9 ADJACENT TO SWIFT RIVER	1	STBG	\$1,792,800	\$1,792,800	\$1,434,240	\$358,560	9				MassDOT D1	Construction / (YOE \$1,792,800 / 9 TEC / Pre 25% / 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	\$21,692,328	\$2,397,425	\$1,917,940	\$479,485	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	\$11,801,891	\$1,000,000	\$900,000	\$100,000	<b>7</b> 1		77.5		Springfield	Construction / YOE \$11,801,892) 71 TEC / 25% STBG, HSIP, TAP
2024	608717	Pioneer Valley	Springfield	SPRINGFIELD- RECONSTRUCTION OF SUMNER AVENUE AT DICKINSON STREET AND BELMONT AVENUE (THE "X")	2	STBG	\$11,801,891	\$10,301,891	\$8,241,513	\$2,060,378	71		77.5		Springfield	Construction / YOE \$11,801,892) 71 TEC / 25% STBG, HSIP, TAP
2024	608717	Pioneer Valley	Springfield	SPRINGFIELD- RECONSTRUCTION OF SUMNER AVENUE AT DICKINSON STREET AND BELMONT AVENUE (THE "X")	2	TAP	\$11,801,891	\$500,000	\$400,000	\$100,000	71		77.5		Springfield	Construction / YOE \$11,801,892) 71 TEC / 25% STBG, HSIP, TAP
2024	609287	Pioneer Valley	Worthington	WORTHINGTON- RECONSTRUCTION & RELATED WORK ON ROUTE 143 (PHASE II), FROM PERU T.L. TO COLD STREET	1	STBG	\$11,210,433	\$11,210,434	\$8,968,347	\$2,242,087	41		26.5		Worthington	Construction / (YOE \$11,210,434) / 41 TEC / 75% Project Phase I funded in FFY 2019 / STBG
Section 2	2A / State Prio	ritized Reliability	Projects					\$4,149,202	\$3,319,362	\$829,840						
Bridge O	n-system NHS	3						\$0	\$0	\$0						
2024	606552	Pioneer Valley	Northampton	NORTHAMPTON- BRIDGE REPLACEMENT, N-19-7059, 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	2	NHPP	\$60,423,296	\$0	\$0	\$0					MassDOT	AC'd over 2020-2024; TFPC: \$60,423,296; NHPP + HIP Bridge (2019)
Bridge O	ff-system							\$4,149,202	\$3,319,362	\$829,840						
	608846	Pioneer Valley		MONSON- BRIDGE REPLACEMENT, M-27-015, OLD WALES ROAD OVER CONANT BROOK	2	STBG-BR-Of	, , , , , ,	\$2,613,234	\$2,090,587	\$522,647					MassDOT	
2024	610779	Pioneer Valley	Hampden	HAMPDEN- BRIDGE MAINTENANCE, H-04-004, ROCKADUNDEE BRIDGE OVER SCANTIC RIVER	2	STBG-BR-Of	f \$1,535,968	\$1,535,968	\$1,228,774	\$307,194					MassDOT	

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
	iscal Year 20							\$96,736,029	\$77,388,823	\$19,347,206						
		Prioritized Proje	ects					\$23,991,612	\$19,193,290	\$4,798,322						
-	Reconstruction							\$23,991,612		\$4,798,322						
2025	608727	Pioneer Valley	Holland	HOLLAND- RESURFACING & RELATED WORK ON BRIMFIELD ROAD, FROM WALES ROAD TO STURBRIDGE STREET (0.9 MILES - PHASE II)	2	STBG	\$1,177,653	\$1,177,653	\$942,122	\$235,531	27.5				Holland	Construction (YOE \$1,177,653) 27.5 TEC / Pre 25% / STBG
2025	608881	Pioneer Valley	Longmeadow	LONGMEADOW- SPRINGFIELD- RESURFACING AND INTERSECTION IMPROVEMENTS ON LONGMEADOW STREET (ROUTE 5) AND CONVERSE STREET (0.84 MILES)	2	STBG	\$6,754,438	\$6,754,438	\$5,403,550	\$1,350,888	59		57.5		Longmeadow	Construction (YOE \$6,754,438 / 59 TEC / 25% / STBG
2025	609286	Pioneer Valley	Northampton	NORTHAMPTON- DOWNTOWN COMPLETE STREETS CORRIDOR AND INTERSECTION IMPROVEMENTS ON MAIN STREET (ROUTE 9)	2	STBG	\$16,059,521	\$16,059,521	\$12,847,617	\$3,211,904	80		71.5		Northampton	Construction (YOE \$16,059,520) 80 TEC / Pre 25% / STBG
Section 2	A / State Pric	ritized Reliability	Projects					\$65,775,557	\$52,620,446	\$13,155,111						
	-system Non							\$10,132,472	\$8,105,978	\$2,026,494						
2025	604136	Pioneer Valley	Multiple	MONSON- PALMER- BRIDGE REPLACEMENT, M. 27-007=P-01-007, STATE AVENUE OVER THE QUABOAG RIVER	2	STBG	\$10,132,472	\$10,132,472	\$8,105,978	\$2,026,494					MassDOT	
Bridge On	-system NHS			QUIDONG HIVEH				\$43,368,357	\$34,694,686	\$8,673,671						
2025	608460	Pioneer Valley	Hadley	HADLEY- BRIDGE REPLACEMENT, H-01-005, BAY ROAD (ROUTE 47) OVER THE FORT RIVER	2	NHPP	\$6,471,024	\$6,471,024	\$5,176,819	\$1,294,205					MassDOT	
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	NHPP	\$41,325,013	\$36,897,333	\$29,517,866	\$7,379,467					MassDOT	
Bridge Off	•							\$5,763,117	\$4,610,494	\$1,152,623						
2025	608869	Pioneer Valley	Northampton	NORTHAMPTON- BRIDGE REPLACEMENT, N-19- 068, OLD SPRINGFIELD ROAD OVER THE MILL RIVER	2	STBG-BR-Off	\$3,826,144	\$3,826,144	\$3,060,915	\$765,229					MassDOT	
2025	610768	Pioneer Valley	Westhampton	WESTHAMPTON- BRIDGE MAINTENANCE, W-27- 028, PERRY HILL ROAD OVER NORTH BROOK OF MANHAN RIVER	2	STBG-BR-Off	\$1,936,973	\$1,936,973	\$1,549,578	\$387,395					MassDOT	
Safety Imp	provements			,				\$0	\$0	\$0			·			
2025	611953	Pioneer Valley	Multiple	SPRINGFIELD- CHICOPEE- GUIDE AND TRAFFIC SIGN REPLACEMENT ON A SECTION OF INTERSTATE 291	2	HSIP	\$772,896	\$0	\$0	\$0					MassDOT	
Non-Inters	state Paveme	nt						\$6,511,611	\$5,209,289	\$1,302,322						
	612031	Pioneer Valley ritized Moderniza		WORTHINGTON- RESURFACING AND RELATED WORK ON ROUTE 112	1	NHPP	\$6,511,611	\$6,511,611 \$1,994,161	\$5,209,289 \$1,595,329	\$1,302,322 \$398,832					MassDOT	
	Reconstruction		ation Flojects					\$1,994,161	\$1,595,329	\$398,832						
	612079	Pioneer Valley	Chicopee	CHICOPEE- HUGH SCOTT STREIBER ELEMENTARY SCHOOL IMPROVEMENTS (SRTS)	2	TAP	\$1,383,724	\$1,383,724	\$1,106,979	\$276,745					City of Chicopee	
2025	612080	Pioneer Valley	Springfield	SPRINGFIELD- REBECCA M. JOHNSON ELEMENTARY SCHOOL IMPROVEMENTS (SRTS)	2	TAP	\$610,437	\$610,437	\$488,350	\$122,087					City of Springfield	
		ritized Expansio	n Projects					\$4,974,699	\$3,979,759	\$994,940						
	nd Pedestrian		la d	NORTH MOTON DOCUMENT CONTROL		0144	<b>.</b>	\$4,974,699	\$3,979,759	\$994,940			24		N	0
	608413	Pioneer Valley		NORTHAMPTON- ROCKY HILL GREENWAY MULTI-USE TRAIL, FROM THE MANHAN RAIL TRAIL TO ROCKY HILL ROAD (0.4 MILES)	2	CMAQ	\$1,918,701	\$1,918,701	\$1,534,961	\$383,740	38.5		21		Northampton	Construction (YOE \$1.918,701) 38.5 TEC / 100% Design / CMAQ / MassDOT Bicycle and Pedestrian Program
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	\$3,055,998	\$3,055,998	\$2,444,798	\$611,200			37.5		MassDOT	

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 F	iscal Year 202	26						\$23,260,487	\$18,685,679	\$4,574,808						
Section 1	A / Regionally	Prioritized Proje	ects					\$22,487,591	\$17,990,073	\$4,497,518						
Roadway	Reconstruction	on						\$22,487,591	\$17,990,073	\$4,497,518						
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	\$6,302,085	\$6,302,085	\$5,041,668	\$1,260,417	38.5				South Hadley	Construction (YOE \$6,302,085) TEC 38.5 / 25%
2026	609061	Pioneer Valley	Chicopee	CHICOPEE- INTERSECTION IMPROVEMENTS AT MONTGOMERY STREET, GRANBY ROAD, AND MCKINSTRY AVENUE	2	STBG	\$10,264,718	\$10,264,718	\$8,211,774	\$2,052,944	56				Chicopee	Construction (YOE \$10,264,718) TEC 56 / 25%
2026	609065	Pioneer Valley	Holyoke	HOLYOKE- RESURFACING AND RELATED WORK ON CABOT STREET AND RACE STREET (CENTER CITY CONNECTOR)	2	STBG	\$5,920,788	\$5,920,788	\$4,736,630	\$1,184,158	56.5				Holyoke	Construction (YOE \$5,920,788) TEC 56.5 / 25%
Section 2	A / State Prior	ritized Reliability	Projects					\$772,896	\$695,606	\$77,290						
Safety Im	provements							\$772,896	\$695,606	\$77,290						
2026	611953	Pioneer Valley	Multiple	SPRINGFIELD- CHICOPEE- GUIDE AND TRAFFIC SIGN REPLACEMENT ON A SECTION OF INTERSTATE 291	2	HSIP	\$772,896	\$772,896	\$695,606	\$77,290					MassDOT	

#### APPENDIX C: 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 30 Agencies Contacted** 

Agency	Agency Location
Westfield River Wild and Scenic Advisory Committee	Haydenville
MassDOT - Office of Transportation Planning	Boston
FEDERAL HIGHWAY ADMIN	Cambridge
US EPA	Boston
MassDOT	Boston
COUNCIL ON AGING	Granby
AIR QUALITY CONTROL (DEP)	Boston
FEDERAL TRANSIT ADMIN	Cambridge
MassDOT Highway Division District 1& 2	Northampton/Lenox
OFFICE OF SOCIAL CONCERN	Springfield
Economic Development Council of Western Mass	Springfield
PETER PAN BUS LINES, INC.	Springfield
Pioneer Valley Transit Authority (PVTA)	Springfield
BARNES AIRPORT	Westfield
Pioneer Valley RR	Westfield
Bike/Ped Community (MassBike)	Williamsburg
UMASS Transit	Amherst
Columbia Greenway Rail Trail Committee	Westfield

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 31 Agencies Providing Consultation**

Agency	Agency Location

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

Appendices \_\_\_\_\_\_\_ 115

\_

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

QVCDC - 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)