

TRANSPORTATION IMPROVEMENT PROGRAM (TIP)

2019 - 2023

FOR THE
METROPOLITAN PLANNING ORGANIZATION
PIONEER VALLEY REGION,
MASSACHUSETTS

Endorsed: **DRAFT**



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

- PREFACE5**
- I.GENERAL SUPPORT INFORMATION.....7**
 - FEDERAL AUTHORIZATION.....7
 - CONFORMITY WITH THE REGIONAL TRANSPORTATION PLAN9
 - METROPOLITAN PLANNING ORGANIZATION11
 - DEVELOPMENT OF THE TIP.....11
 - PROJECT SELECTION AND PROGRAMMING.....18
 - AMENDMENT/ADJUSTMENT OF THE TIP.....18
 - DESCRIPTION OF FUNDING SOURCES18
 - TRANSPORTATION SYSTEM OPERATING AND MAINTENANCE COSTS20
- II. PUBLIC PARTICIPATION SUMMARY AND CHANGES23**
- III. FEDERAL COMPONENT25**
 - PIONEER VALLEY MPO ENDORSEMENT.....27
 - CERTIFICATION OF THE 3-C PLANNING PROCESS29
 - FUNDING INFORMATION34
- THE GEOGRAPHIC DISTRIBUTION OF FEDERAL TARGET FUNDS IN THE PIONEER VALLEY METROPOLITAN PLANNING REGION – 2013 TO 2017.....35**
- IV. FEDERAL AID REGIONAL PROJECT LISTINGS41**
 - ORGANIZATION OF PROJECT LISTINGS.....41
 - UNIVERSE OF PROJECTS73
- V. TRANSIT PROJECT LISTING FOR FFY 2019 - 2023.....79**
- VI. STATEWIDE FEDERAL AID PROJECT LISTING.....89**
- VII. PROJECT IMPLEMENTATION113**
- VIII. AIR QUALITY CONFORMITY INFORMATION.....117**
- IX. GREENHOUSE GAS MONITORING AND EVALUATION119**
 - Regional Greenhouse Gas Impact Summary Tables for FFY 2019 – 2022 TIP.....121

APPENDICES	125
APPENDIX A: MassDOT Targets	127
APPENDIX B: Metropolitan Planning Area (MPA) State and Local Consulted Agencies.....	133
APPENDIX C: FAST Act Performance Management Information.....	135
APPENDIX D: Planning Acronyms.....	137

List of Tables

TEC SCORING SUMMARY	14
TABLE 1 INTEGRATION OF GREENDOT GOALS INTO TIP	16
TABLE 2 TRANSPORTATION OPERATING AND MAINTENANCE EXPENDITURES.....	21
TABLE 3 TRANSIT OPERATING AND MAINTENANCE EXPENDITURES.....	21
TABLE 4 COMMENTS RECIEVED DURING PUBLIC REVIEW	24
TABLE 5 FEDERAL HIGHWAY FINANCIAL PLAN.....	34
TABLE 6 FEDERAL TRANSIT FINANCIAL PLAN.....	35
TABLE 7 PROJECTS COMPLETED WITH FEDERAL TARGET FUNDS BY MPO SUB-REGION (2014-2018)	36
TABLE 8 PROJECTS COMPLETED WITH FEDERAL TARGET FUNDS BY MUNICIPALITY (2014-2018)	37
TABLE 9 SUMMARY OF ALL PROJECT FUNDED IN SECTION 1 A FEDERAL AID TARGET PROJECTS	43
TABLE 10 FEDERALLY FUNDED PROJECTS YEAR 2019.....	46
TABLE 11: FEDERALLY FUNDED PROJECTS 2020	52
TABLE 12: FEDERALLY FUNDED PROJECTS 2021	57
TABLE 13: FEDERALLY FUNDED PROJECTS YEAR 2022.....	62
TABLE 14: FEDERALLY FUNDED PROJECTS YEAR 2023.....	67
TABLE 15: UNIVERSE OF PROJECTS	74
TABLE 16: FFY 2019 TRANSIT PROJECT INFORMATION.....	81
TABLE 17: FFY 2020 TRANSIT PROJECT INFORMATION.....	83
TABLE 17: FFY 2020 TRANSIT PROJECT INFORMATION (CONTINUED)	84
TABLE 18: FFY 2021 TRANSIT PROJECT INFORMATION.....	85
TABLE 18: FFY 2021 TRANSIT PROJECT INFORMATION (CONTINUED)	86
TABLE 19: FFY 2022 TRANSIT PROJECT INFORMATION.....	87
TABLE 20: FFY 2023 TRANSIT PROJECT INFORMATION.....	ERROR! BOOKMARK NOT DEFINED.
TABLE 21 STATEWIDE FEDERAL AID PROJECT LISTING.....	90
TABLE 22 PROJECT IMPLEMENTATION	114
TABLE 23 GREENHOUSE GAS SUMMARY TABLES FFY 2019 - 2023	123
TABLE 25: AGENCIES CONTACTED	133
TABLE 26: AGENCIES PROVIDING CONSULTATION)	134

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.

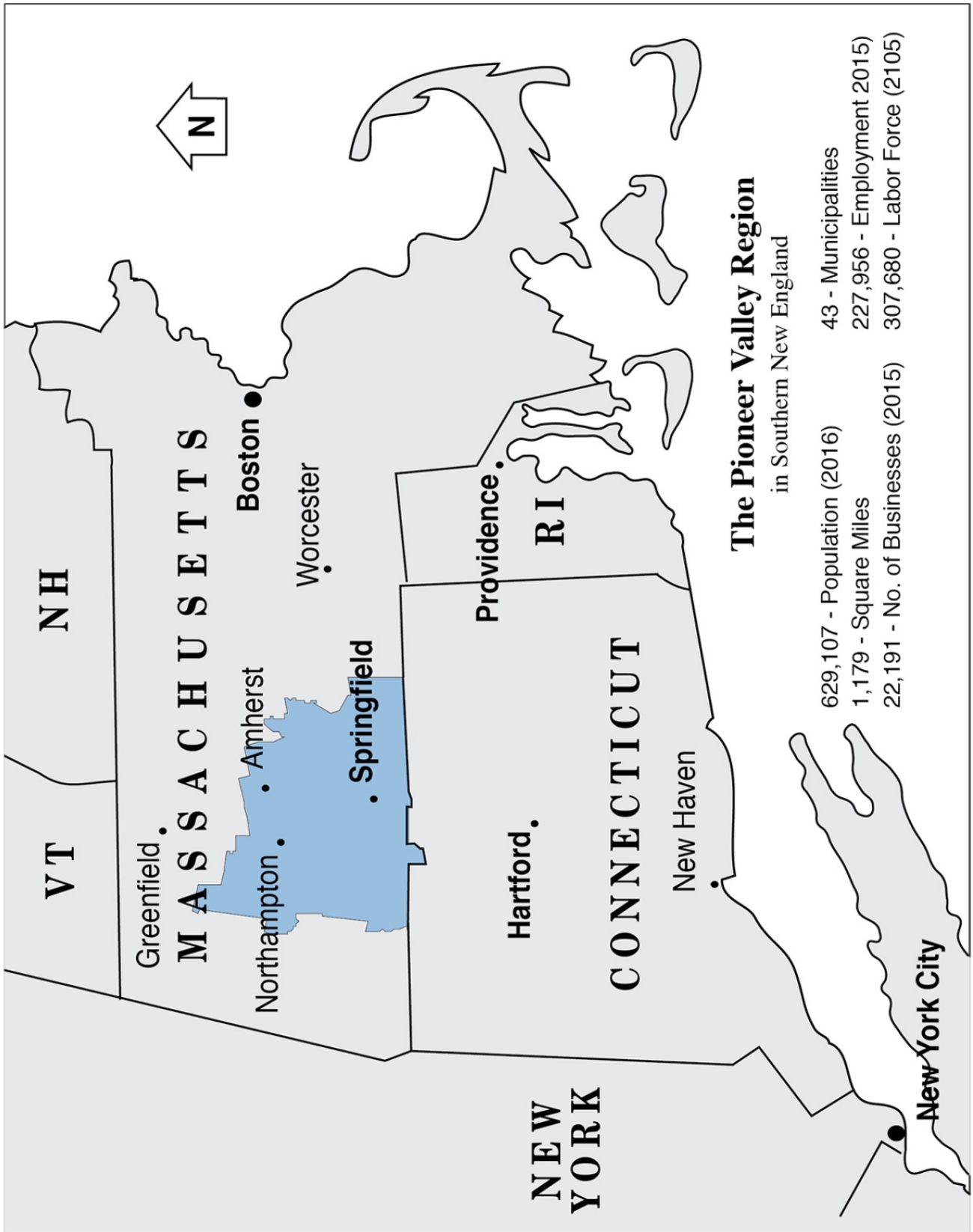
TIP Format and MPO Endorsement

The FFY 2019 - 2023 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 2019 - 2023 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 2019 and beyond. In response to this commitment, Pioneer Valley local officials in cooperation with regional and state officials from the 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 2019. Funding targets for the Pioneer Valley Region have been issued by MassDOT identifying potential resources for each year of the TIP.



I. GENERAL SUPPORT INFORMATION

INTRODUCTION

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

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

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

FEDERAL AUTHORIZATION

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. 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 stormwater impacts of surface transportation.
10. Enhancing travel and tourism

The Moving Ahead for Progress in the 21st Century Act (MAP-21), enacted in 2012, included provisions to make the Federal surface transportation more streamlined, performance-based, and multimodal, and to address challenges facing the U.S. transportation system, including improving safety, maintaining infrastructure condition, reducing traffic congestion, improving efficiency of the

system and freight movement, protecting the environment, and reducing delays in project delivery. The FAST Act builds on the changes made by MAP-21.¹

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 MEASURES

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) refers 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 to 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

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

measure. The Pioneer Valley MPO has 180 days from the date of Commonwealth’s adoption of the statewide performance targets to either adopt the statewide targets or establish their own regional performance targets. A summary of the Implementation Timeline is shown below.

Implementation Timeline

Final Rule	Effective Date	States Set Targets By:	MPOs Set Targets By:	TIP Inclusion
Safety Performance Measures (PM1)	April 14, 2016	August 31, 2017	No later than February 27, 2018	Updates or Amendments on or after May 27, 2018
Pavement/Bridge Performance Measures (PM2)	May 20, 2017	May 20, 2018	No later than November 16, 2018	Updates or Amendments on or after May 20, 2019
System Performance Measures (PM3)	May 20, 2017	May 20, 2018	No later than November 16, 2018	Updates or Amendments on or after May 20, 2019

Massachusetts adopted five annual safety targets as required under the FAST Act. These targets are summarized below.

Commonwealth of Massachusetts Safety Targets

Performance Measure	State Target
Total Number of Fatalities	Reduce Total Number of Fatalities to 352 or less statewide at the current rate of -0.8%/year
Rate of Fatalities per 100 Million Vehicle Miles Traveled (VMT)	Reduce the Rate of Fatalities to 0.61/100 million VMT or less statewide at the current rate of -1.56%/year
Total Number of Serious Injuries	Reduce Total Number of Serious Injuries to 2896 or less statewide at the current rate of -3.65%/year
Rate of Serious Injuries per 100 Million VMT	Reduce the Rate of Serious Injuries to 5.01/100 million VMT or less statewide at the current rate of -4.42%/year
Total Number of Combined Serious Injuries and Fatalities for Non-motorized Modes	Do Not Exceed the Current Average of 541 for Combined Serious Injuries and Fatalities for Non-motorized Modes

The Pioneer Valley MPO was required to establish Safety targets by February 27, 2018. The MPO elected to support the State’s Safety targets as summarized above at their meeting on January 23, 2018. Additional MPO action will be required by no later than November 16, 2018 to adopt regional targets for the PM2 and PM3 federal rules. The UPWP includes specific tasks to support the performance based planning and programming for the Pioneer Valley MPO.

CONFORMITY WITH THE REGIONAL TRANSPORTATION PLAN

All projects in the TIP come from the 2016 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 2019 through 2023 (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 2019 - 2023 TIP is only required for Carbon monoxide. Further details and background information are provided in Chapter 8.

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:

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 Richard Kos	Mayor of Chicopee (Center Tier)
Mayor Alexander Morse	City of Holyoke (Central Tier)
Mayor Brian P. Sullivan	City of Westfield (Southern Tier)
Douglas Slaughter	Amherst Board of Selectmen (Northern Tier)
George Archible	Belchertown Board of Selectmen (Eastern Tier)
Charles Kaniecki	Southampton Board of Selectmen Western Tier
Rick Sullivan	Economic Development Council of Western Massachusetts
Alternates	
Mayor Domenic Sarno	Mayor of Springfield (Center Tier)
Mayor William C. Reichelt	City of West Springfield (Southern Tier)
Vacant	Northern Tier
Carmina Fernandes	Ludlow Board of Selectmen (Eastern Tier)
Roger Fuller	Chesterfield Board of Selectmen (Western Tier)
Ex-Officio (Non-Voting)	
Jeff McEwen	Federal Highway Administration
Mary Beth Mello	Federal Transit Administration
Sandra Sheehan	Pioneer Valley Transit Authority Administrator
James Czach	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 endorse 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.

701 CMR 7.00 USE OF ROAD FLAGGERS AND POLICE DETAILS 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

MassDOT developed a process and set of criteria to prioritize the region's TIP projects which was modified and endorsed by the MPO. 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 set forth by MAP -21. 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
	3		4		Supports Brownfield redevelopment	Preserves prime agricultural land	Creates an EJ Burden
	Completes off-road bike and ped network		Improves Intermodal Connections		0.5	0.5	-5
			2		Improves air quality	Provides safe and reliable access to education	Creates an Title VI Burden
			Reduces congestion on freight routes		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	
					Improves storm resilience	Length of Time Project has been in queue for TIP funding	
					3	1	
Maximum Score	12	17	10	16	12	11	3

PROJECT INITIATION

In the fall of 2017 MassDOT rolled out their new project intake tool MaPIT, this tool 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 <http://massdot.maps.arcgis.com/home/index.html>

MASSDOT GREENDOT POLICY

MassDOT launched its GreenDOT initiative on June 2, 2010. GreenDOT was developed to assure a coordinated approach to sustainability and to integrate sustainability into the responsibilities and decision-making of all MassDOT employees. The following three mutually-reinforcing goals form the foundation of GreenDOT:

- Reduce greenhouse gas (GHG) emissions
- Promote the healthy transportation modes of walking, bicycling, and public transit
- Support smart growth development

The initiative is a comprehensive response to a range of state and MassDOT laws, policies and initiatives including: the Global Warming Solutions Act, the Green Communities Act, the Healthy Transportation Compact, Leading by Example, YouMoveMassachusetts, and Complete Streets. The Global Warming Solutions Act requires Massachusetts to reduce economy wide GHG emissions: 10% -25% below 1990 levels by 2020 and an 80% reduction below 1990 levels by

2050. The transportation sector is the largest GHG emitter, producing 31% of 1990 emissions and projected to produce 38% of 2020 emissions. GreenDOT also incorporates a statewide mode shift goal to triple the percentage of trips made by bicycling, transit and walking.

GreenDOT is also comprised on an additional by seven goals that can be tied to regional planning efforts. In the Pioneer Valley region, these goals and their recommended strategies have been incorporated into the new Transportation Evaluation Criteria (TEC) used to prioritize transportation improvement projects included as part of the TIP. The Tec is described in greater detail in Chapter 10 of the RTP. Table 1 summarizes the seven GreenDOT goals, their associated strategies and how they are addressed in the TEC for the Pioneer Valley.

Table 1 Integration of GreenDOT Goals into TIP

Policy/Planning - Design a Multi-Modal Transportation System, Triple Mode Share of Bicycling, Transit, and Walking, & Promote Healthy Transportation and Livable Communities	
Associated Strategy	RTP/TEC Integration
Providing secure and/or covered bicycle parking and shared used paths	Projects are eligible to receive up to 12 points for bicycle and pedestrian improvements in the "Livability" category. Projects receive 1 point for providing bicycle amenities such as bicycle parking.
Improving access to transit and other vital community services	Projects are eligible to receive up to 4 points by improving access to transit.
Designing complete street projects with municipalities	Complete Streets consistency is worth up to 3 points.
Encouraging Safe Routes to Schools projects	Projects that provide safe and reliable access to education receive 0.5 point.
Incorporating public health impacts in the transportation planning process	Projects that complete a Health Impact Assessment will receive 1 point.
Coordinating on regional and statewide bicycle and pedestrian planning efforts.	Many "Livability" subcategories in the TEC support regional and statewide bicycle and pedestrian planning efforts.
Supporting Bike Share programs locally and regionally.	Projects can receive 2 points for being part of a locally adopted Bike Share Program.
Prioritizing critical pedestrian and bicycle network gaps, i.e. Bay State Greenway	Critical Gaps are identified as part of PVPC's Regional Bicycle Linkages Map. Projects that provide connections to regional bikeways/walkways receive 1 point.
Improving bicycle and pedestrian counts	PVPC collects bicycle and pedestrian movements as part of all intersection turning movement counts.
Air - Reduce Greenhouse Gas Emissions & Improve Air Quality	
Associated Strategy	RTP/TEC Integration
Developing projects to improve air quality	Projects that demonstrate improvements to air quality can receive up to 1 point.
Analyzing GHG reduction strategies in transportation improvement projects and tracking progress	PVPC performs GHG analysis for all proposed RTP and TIP projects.
Setting regional goals for reducing VMT (travel demand)	Projects that demonstrate a significant reduction in single occupant vehicle use will receive 1 point.
Analyzing fleet fuel usage and supporting retrofits and procurement of alternative fuel vehicles	The RTP supports the use of alternatively fueled vehicles. PVTA has hybrid transit vehicles and is in the process of purchasing electric buses.

Supporting alternative fuels vehicle infrastructure	PVTA is in the process of purchasing an electric vehicle charging station.
Increasing bus and transit route efficiency	The PVPC has an ongoing task in its UPWP to study transit route efficiency.
Promoting anti-idling policies and educational outreach	Not specifically addressed in the TEC but included as a Need in the RTP
Energy - Consume Less Energy & Increase Reliance on Renewable Energy	
Associated Strategy	RTP/TEC Integration
Evaluating outdoor lighting and traffic signal systems, and retrofitting where feasible	Upgrades to traffic signal equipment can be worth up to 6 points.
Planning for the implementation of energy efficient measures and renewable energy projects	The RTP incorporates strategies from the Pioneer Valley Clean Energy Plan.
Land - Minimize Energy and Chemicals Used in Maintenance & Enhance Ecological Performance	
Associated Strategy	RTP/TEC Integration
Implementing sustainable stormwater management	Up to 2.5 points can be received through the use of green infrastructure and the reduction of impervious surfaces to manage stormwater.
Protecting and restoring native landscaping, woodland, and urban tree coverage	Projects that protect or enhance environmental assets receive 0.5 point.
Implementing sustainable road salt and sanding practices	Included as a strategy in the RTP.
Designing landscapes for wildlife habitat restoration, safe migration, and accommodation	Improvements to stream crossings and culverts that improve fish and wildlife passage receive 1 point.
Reducing outdoor light pollution	Not specifically addressed.
Advocating for urban trees into Complete Streets designs/studies	Complete Streets consistency is worth up to 3 points.
Materials - Improve Lifecycle Impacts of Investments & Purchase Environmentally Preferred Products	
Associated Strategy	RTP/TEC Integration
Planning for climate resiliency in the development of projects	Projects that preserve floodplains receive 0.5 point. Projects that improve storm resilience in areas prone to flooding receive up to 3 points.
Supporting the use and identify appropriate applications for warm mix and recycled content paving materials	Not specifically addressed.
Waste - Achieve Zero Solid Waste Disposal	
Associated Strategy	RTP/TEC Integration
Identifying projects with zero construction waste diversion goals	Not specifically addressed.
Implementing regional litter prevention programs with their respective municipalities	Not specifically addressed.
Water - Use Less Water & Improve Ecological Function of Water Systems	
Associated Strategy	RTP/TEC Integration
Planning projects that minimize impacts on surface water and enhance wetlands flood storage capacity	Projects that preserve wetlands receive 0.5 point.
Considering sea level rise and storm surge projections in project planning	Projects that improve storm resilience in areas prone to flooding receive up to 3 points.

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 four-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, 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 redemonstration of fiscal constraint. If an amendment involves "non-exempt" projects in nonattainment and maintenance areas, a conformity determination is required.

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

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

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 can be funded 90/10 and even 100% federal in certain circumstances.

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%.

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

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

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

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

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

In compliance with FHWA guidelines projects with federal earmarks are only programmed in the FY 2014 to FY 2017 TIP if the total funding is adequate for project implementation. The remaining earmarked projects will be included in appendix Z for informational and tracking purposes.

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 (PVRTA) 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 2019 - 2023 TIP is consistent with the Regional Transportation Plan (RTP) for the Pioneer Valley Region. Tables 2 and 3 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 2 Transportation Operating and Maintenance Expenditures

Total Available for Programming in the Pioneer Valley RTP	2016-2020	2021-2025	2026-2030	2031-2035	2036-2040	GRAND TOTAL
	Total	Total	Total	Total	Total	Total
	\$ 420,177,748	\$ 426,618,217	\$ 520,221,270	\$ 582,504,200	\$ 623,968,064	\$ 2,573,489,499
<i>Statewide Interstate Maintenance</i>	\$ 29,750,182	\$ 28,157,124	\$ 35,185,257	\$ 39,841,190	\$ 42,920,276	\$ 175,854,029
<i>Statewide NHS</i>	\$ 19,572,131	\$ 18,955,373	\$ 23,686,712	\$ 26,821,085	\$ 28,893,926	\$ 117,929,227
<i>Statewide Bridge</i>	\$ 105,433,448	\$ 102,111,025	\$ 127,598,354	\$ 144,482,963	\$ 155,649,185	\$ 635,274,975
<i>Statewide Infrastructure</i>	\$ 4,219,341	\$ 4,086,381	\$ 5,106,359	\$ 5,782,064	\$ 6,228,925	\$ 25,423,070
<i>Remaining Statewide Programs</i>	\$ 96,040,886	\$ 101,493,887	\$ 126,827,176	\$ 143,609,738	\$ 154,708,473	\$ 622,680,160
<i>NFA Bridge Preservation</i>	\$ 54,049,500	\$ 54,860,243	\$ 55,670,985	\$ 56,481,728	\$ 57,292,470	\$ 278,354,926
<i>Regional Discretionary Funding</i>	\$ 111,112,260	\$ 116,954,184	\$ 146,146,427	\$ 165,485,432	\$ 178,274,809	\$ 717,973,112

Source: Regional Transportation Plan, updated 2016

Table 3 Transit Operating and Maintenance Expenditures

Estimated Transit Operating Revenues 2016 - 2040						
	2016-2020	2021-2025	2026-2030	2031-2035	2036-2040	Grand Total
State Contract Assistance	\$ 125,723,298	\$ 145,747,760	\$ 168,961,600	\$ 195,872,803	\$ 227,070,262	\$ 863,375,723
Local Assessments	\$ 43,637,997	\$ 49,372,389	\$ 55,860,326	\$ 63,200,831	\$ 71,505,940	\$ 283,577,483
5307 Federal Urbanized Area Formula	\$ 53,120,529	\$ 57,917,522	\$ 62,393,619	\$ 67,215,646	\$ 72,410,341	\$ 313,057,657
5339 Federal **	\$ 3,614,988	\$ 3,937,914	\$ 4,242,253	\$ 4,570,110	\$ 4,923,307	\$ 21,288,572
5310 Federal Ederly & Disabled	\$ 2,704,105	\$ 2,913,090	\$ 3,138,225	\$ 3,380,759	\$ 3,642,038	\$ 15,778,217
Farebox	\$ 41,119,964	\$ 45,399,763	\$ 50,125,006	\$ 55,342,057	\$ 61,102,103	\$ 253,088,893
Advertising, other revenue	\$ 2,948,172	\$ 3,255,020	\$ 3,593,805	\$ 3,967,851	\$ 4,380,829	\$ 18,145,677
Available for Programming in Pioneer Valley RTP	\$ 272,869,053	\$ 308,543,458	\$ 348,314,834	\$ 393,550,057	\$ 445,034,820	\$ 1,768,312,222
Estimated Capital Revenues						
	2016-2020	2021-2025	2026-2030	2031-2035	2036-2040	Grand Total
RTACAP	\$ 20,285,825	\$ 22,314,408	\$ 24,545,848	\$ 27,000,433	\$ 29,700,476	\$ 123,846,990
ITC Cap Program	\$ 1,145,277	\$ 1,259,805	\$ 1,385,785	\$ 1,524,364	\$ 1,676,800	\$ 6,992,031
Federal Matching grants	\$ 63,410,806	\$ 69,751,887	\$ 76,727,075	\$ 84,399,783	\$ 92,839,761	\$ 387,129,311
Total Transit Capital Funds for Programming in PV RTP	\$ 84,841,908	\$ 93,326,099	\$ 102,658,709	\$ 112,924,579	\$ 124,217,037	\$ 517,968,332
Grand Total of Revenue	\$ 357,710,961	\$ 401,869,557	\$ 450,973,543	\$ 506,474,636	\$ 569,251,857	\$ 2,286,280,554

Source: Regional Transportation Plan, updated 2016

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 2019 - 2023 TIP underwent a public review and comment period consistent with the Pioneer Valley Metropolitan Planning Organizations Public Participation Process. This began April 27, 2018 and continued until May 18, 2018. During this time, comments were received from communities, JTC, PVTA, PVPC, MassDOT, and FHWA. A public hearing was held on May 9, 2018 as part of the JTC meeting. Below is a summary of the comments received during the public review and comment period.

Table 4 Comments Recieved 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.

III. FEDERAL COMPONENT

PIONEER VALLEY MPO 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 2015. The two day on-site review was preceded by a desk audit of the major planning documents completed as part of the planning process. Based on the certification review, the transportation planning process for the Pioneer Valley region was found to substantially meet the requirements of 23 CFR 450 Subpart C and 49 CFR 613.

PIONEER VALLEY MPO ENDORSEMENT SHEET

The signatures below signify that all members of the Pioneer Valley Region's Metropolitan Planning Organization, or their designees, have met on May 23, 2017 and discussed the following item for endorsement:

CERTIFICATION OF THE 3C PLANNING PROCESS

Concurrent with the submittal of the proposed TIP to the FHWA and the FTA, the MPO shall certify that the metropolitan transportation planning process is being carried out in accordance with all applicable requirements including:

1. 23 U.S.C. 134, 49 U.S.C. 5303, and this subpart;
2. In non-attainment and maintenance areas, sections 174 and 176 (c) and (d) of the Clean Air Act, as amended (42 U.S.C. 7504, 7506 (c) and (d)) and 40 CFR part 93;
3. Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d-1) and 49 CFR part 21;
4. 49 U.S.C. 5332, prohibiting discrimination on the basis of race, color, creed, national origin, sex, or age in employment or business opportunity;
5. Section 1101(b) of the SAFETEA-LU (Pub. L. 109-59) and 49 CFR part 26 regarding the involvement of disadvantaged business enterprises in USDOT funded projects;
6. 23 CFR Part 230, regarding the implementation of an equal employment opportunity program on Federal and Federal-aid highway construction contracts
7. The provisions of US DOT and of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) and 49 CFR parts 27, 37, and 38;
8. The Older Americans Act, as amended (42 U.S.C. 6101), prohibiting discrimination on the basis of age in programs or activities receiving Federal financial assistance;
9. Section 324 of title 23 U.S.C. regarding the prohibition of discrimination based on gender; and
10. Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794) and 49 CFR part 27 regarding discrimination against individuals with disabilities.
11. Anti-lobbying restrictions found in 49 USC Part 20. No appropriated funds may be expended by a recipient to influence or attempt to influence an officer or employee of any agency, a Member of Congress, in connection with the awarding of any Federal contract.

310 CMR 60.05: GLOBAL WARMING SOLUTIONS ACT REQUIREMENTS - ENDORSEMENT

The signatures below signify that all members of the Pioneer Valley Region's Metropolitan Planning Organization, or their designees, have met on May 23, 2017 and discussed the following item for endorsement:

This will certify that the 2018 – 2022 TIP 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 Organizations (MPOs) to:

1. 310 CMR 60.05, 3(b)(1)(a): Evaluate and track the GHG emissions and impacts of RTPs and TIPs;
2. 310 CMR 60.05, 3(b)(1)(b): 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, 3(b)(1)(c): 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, 3(b)(1)(d): 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, 4(a)(2)(a): Develop RTPs and TIPs;
6. 310 CMR 60.05, 4(a)(2)(b): Ensure that RPAs are using appropriate planning assumptions;
7. 310 CMR 60.05, 4(a)(2)(c): Perform regional GHG emissions analysis of RTPs and TIPs;
8. 310 CMR 60.05, 4(a)(2)(d): Calculate GHG emissions for RTPs and TIPs;
9. 310 CMR 60.05, 4(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, 4(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, 6(a): 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.

FUNDING INFORMATION

FEDERAL AID TARGETS

The MassDOT provided the revised PVPC federal aid highway funding targets for the region on February 21, 2018. The targets are provided for FFYs 2019 through 2023 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 FFY2019 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 2019 - 2023. 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 4 shows the projected transit funds for FFY 2019 – 2022.

Table 5 Federal Highway Financial Plan

	2019	2020	2021	2022	2023	GRAND TOTAL
Total Target Funds	\$24,855,247	\$25,782,146	\$26,303,990	\$26,839,603	\$27,425,802	\$131,206,788
Total of Programmed	\$24,842,701	\$25,756,683	\$26,303,991	\$26,839,602	\$27,055,729	\$130,798,706
Programmed STP	\$20,980,734	\$21,656,807	\$21,859,991	\$23,339,602	\$23,555,729	\$111,392,863
Programmed HSIP	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$5,000,000
Programmed CMAQ	\$2,386,880	\$2,599,876	\$2,944,000	\$2,000,000	\$2,000,000	\$11,930,756
Programmed TAP	\$475,087	\$500,000	\$500,000	\$500,000	\$500,000	\$2,475,087
Difference	\$12,546	\$25,463	-\$1	\$1	\$370,073	\$408,082

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 6 represents both apportioned items as well as discretionary items. The total programmed amount represents both the federal, state and local contributions.

Table 6 Federal Transit Financial Plan

	2019	2020	2021	2022	2023	GRAND TOTAL
Transit Capitol Investment	\$29,699,181	\$27,353,435	\$31,285,699	\$29,265,958	\$29,195,129	\$146,799,402
5307	\$17,527,699	\$17,625,646	\$21,011,891	\$27,234,025	\$27,181,085	\$110,580,346
5309						\$0
5310						\$0
5311						\$0
5337						\$0
5339	\$1,836,620	\$7,377,789	\$10,038,808			\$19,253,217
5320						\$0
Other Federal						\$0
Other Non Federal	\$10,334,862	\$2,350,000	\$235,000	\$2,031,933	\$2,014,044	\$16,965,839

The transit projects programmed focus on maintaining and operating the present system while implementing the recommendations of the Comprehensive Service Analysis (CSA) completed in the spring of 2014. For more information regarding the CSA please go to PVTA website. www.pvta.com.

THE GEOGRAPHIC DISTRIBUTION OF FEDERAL TARGET FUNDS IN THE PIONEER VALLEY METROPOLITAN PLANNING REGION – 2013 TO 2017

PVPC staff reviewed historical project programming for the Transportation Improvement Program (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 past 5 years (2013 through 2017) TIP. Table 7 provides the results of this analysis broken out by MPO sub-region while Table 2 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 7 and 8 the PVMPO has successfully programmed 34 projects in 19 communities over the past 5 years. The total funding commitment for these projects was just over \$90 million. During this time the PVMPO averaged \$18 million per year in funding. The average cost per project was \$2.6 million (increase from \$2.4 million last year) or 6.8 projects per year on average. Over the past five years, the PVMPO has committed federal funds for transportation projects in almost half (44%) of the communities in the region.

Table 7 Projects Completed with Federal Target Funds by MPO Sub-Region (2014-2018)

MPO Region	2014	2015	2016	2017	2018	Total Projects	Total Funds	% Funds	Population	
Sub-Region 1	3	2	2	1	1	9	\$19,491,147	20.38%	248,238	39.94%
Sub-Region 2	0	0	2	1	2	5	\$19,649,907	20.55%	107,425	17.28%
Sub-Region 3	3	1	0	2	4	10	\$18,631,567	19.48%	105,185	16.92%
Sub-Region 4	2	1	3	1	1	8	\$29,314,146	30.65%	132,675	21.35%
Sub-Region 5	0	1	0	1	1	3	\$8,556,000	8.95%	28,047	4.51%
Totals	8	5	7	6	9	35	\$95,642,767		621,570	

Source: PVPC TIP archives

As can be seen in Table 7, the distribution of funds across the region is similar to the distribution of population across the region. Sub-region 4 received 30% more funding than population over the past 5 years. This was due to the MPO commitment to fund two large projects, one in Belchertown (Route 181 reconstruction for \$9 million) and one in project in Pelham (Amherst Road reconstruction for \$7.2 million). At the request of the MPO, the Pelham project was split in half and funded over two years (2013 and 2015).

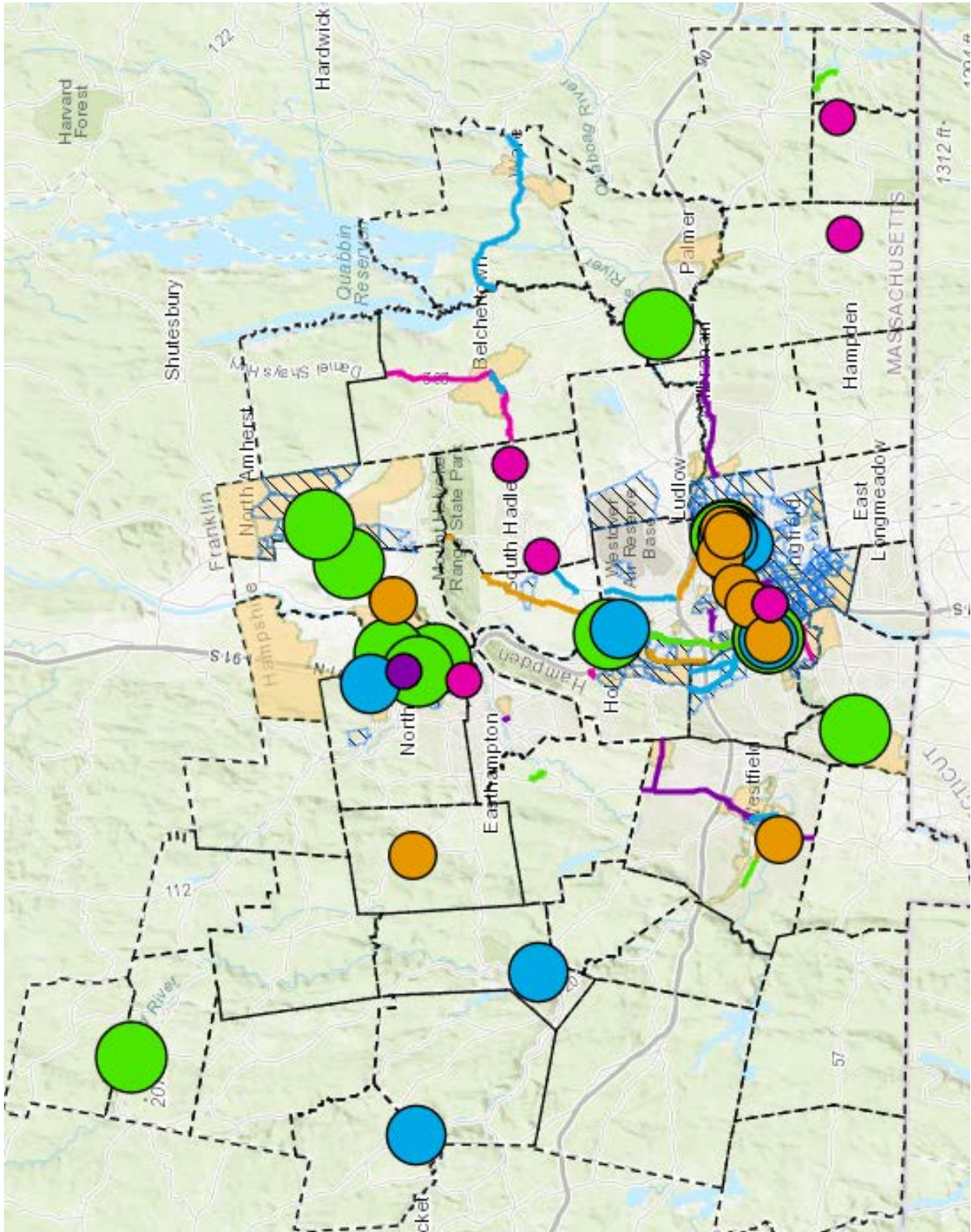
The PVMPO is committed to funding transportation improvement projects across the entire region. The community data provided in Table 8 shows the extent to which this has been achieved over the past 5 years. The PVMPO has accomplished this while supporting communities and projects of all shape and size. 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 8 Projects Completed with Federal Target Funds by Municipality (2014-2018)

	2014	2015	2016	2017	2018	Total Projects	Total Funds	% Funds	Median Income
Agawam					1	1	\$3,288,000	3.44%	\$63,561
Amherst				1	1	2	\$1,604,050	1.68%	\$52,537
Belchertown	1					1	\$9,551,728	9.99%	\$74,221
Blandford						0	\$0	0.00%	\$72,361
Brimfield			1			1	\$3,500,000	3.66%	\$82,365
Chester						0	\$0	0.00%	\$65,648
Chesterfield						0	\$0	0.00%	\$63,594
Chicopee	1					1	\$3,100,000	3.24%	\$47,276
Cummington		1				1	\$1,500,000	1.57%	\$50,521
East Longmeadow						0	\$0	0.00%	\$84,173
Easthampton	1					1	\$2,556,996	2.67%	\$56,927
Goshen				1		1	\$4,345,300	4.54%	\$69,219
Granby						0	\$0	0.00%	\$78,261
Granville						0	\$0	0.00%	\$75,208
Hadley		1			1	2	\$4,438,060	4.64%	\$74,737
Hampden						0	\$0	0.00%	\$78,722
Hatfield						0	\$0	0.00%	\$60,033
Holland					1	1	\$1,409,592	1.47%	\$64,868
Holyoke				1	1	2	\$3,983,493	4.16%	\$35,550
Huntington						0	\$0	0.00%	\$52,275
Longmeadow	1		1			2	\$3,512,048	3.67%	\$108,835
Ludlow				1		1	\$5,848,350	6.11%	\$61,410
Middlefield						0	\$0	0.00%	\$78,214
Monson						0	\$0	0.00%	\$66,389
Montgomery						0	\$0	0.00%	\$78,333
Northampton	2			1	2	5	\$10,032,461	10.49%	\$58,179
Palmer						0	\$0	0.00%	\$51,846
Pelham		1				1	\$4,200,000	4.39%	\$88,462
Plainfield						0	\$0	0.00%	\$57,188
Russell						0	\$0	0.00%	\$68,750
South Hadley						0	\$0	0.00%	\$62,803
Southampton					1	1	\$2,710,700	2.83%	\$68,693
Southwick				1		1	\$7,172,979	7.50%	\$81,967
Springfield	2	2	2			6	\$12,407,654	12.97%	\$34,731
Tolland						0	\$0	0.00%	\$85,750
Wales						0	\$0	0.00%	\$52,500
Ware						0	\$0	0.00%	\$49,630

West Springfield						0	\$0	0.00%	\$52,806
Westfield			2		1	3	\$9,188,928	9.61%	\$60,845
Westhampton						0	\$0	0.00%	\$79,583
Wilbraham			1			1	\$1,292,428	1.35%	\$87,303
Williamsburg						0	\$0	0.00%	\$65,147
Worthington						0	\$0	0.00%	\$71,300
Totals	8	5	7	6	9	35	\$95,642,767	100.00%	\$ 52,108

Source: PVPC TIP Archive



A higher resolution version of this figure can be found here:
<http://pvpc.maps.arcgis.com/apps/StorytellingTextLegend/index.html?appid=f54bf3b6dfd04033980dcd9a898b85a3>

IV. FEDERAL AID REGIONAL PROJECT LISTINGS

The following is a complete listing of the Pioneer Valley Federally Funded Transportation Improvement Projects for Fiscal Years 2019 - 2023.

ORGANIZATION OF PROJECT LISTINGS

Each project in the TIP contains the following information:

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

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

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

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

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

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

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

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

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

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

Table 9 Summary of All Project Funded in Section 1 A Federal Aid Target Projects

SID	Municipality	FFY	Project Description	District	Funding Sources	Total Funds	Federal Funds	Non-Federal Funds	Additional Information
2019	Springfield	608411	SPRINGFIELD- INTERSECTION IMPROVEMENTS AT BAY STREET AND BERKSHIRE AVENUE	2	STP	\$ 1,886,880	\$ 682,406	\$ 170,602	Construction / (YOE \$1,886,880 STP) / 49.5 TEC / 25%
2019	Agawam	600513	AGAWAM- RECONSTRUCTION OF ROUTE 187 FROM 425 FT. SOUTH OF S. WESTFIELD STREET TO ROUTE 57 (0.3 MILES - PHASE I)	2	STP	\$ 2,516,438	\$1,567,980	\$ 391,995	Construction / (YOE \$2,516,438 STP) / 27 TEC / 25%
2019	Belchertown	608412	BELCHERTOWN- IMPROVEMENTS & RELATED WORK ON ROUTES 202 & 21, FROM TURKEY HILL ROAD TO SOUTH MAIN STREET (1.2 MILES)	2	STP	\$ 5,644,850	\$3,827,200	\$ 956,800	Construction / (YOE \$5,644,850 STP) / 59 TEC / 25%
2019	Ware	607987	WARE- INTERSECTION IMPROVEMENTS @ MAIN STREET, WEST STREET, NORTH STREET, SOUTH STREET & CHURCH STREET	2	STP	\$ 2,475,087	\$ 505,532	\$ 126,383	Construction / (YOE \$2,475,087) STP) / 55 TEC / 75%
2019	PVTA		P21 Express - Year 2 Operating		STP	\$ 500,000	\$ 400,000	\$ 100,000	Operating year 2
2019	Holland	604962	HOLLAND- RESURFACING & RELATED WORK ON BRIMFIELD ROAD, FROM THE BRIMFIELD/HOLLAND T.L. TO WALES ROAD (1.4 MILES - PHASE I)	2	STP	\$ 2,919,446	\$2,335,557	\$ 583,889	Construction / (YOE \$2,919,446) STP) / 26.5 TEC / 25% - 25% Comment Received, cost increased from \$1,409,592
2019	Worthington	606912	Route 143 Reconstruction and Related Work - Phase I	1	STP	\$ 8,900,000	\$7,120,000	\$1,780,000	Construction / (YOE \$8,900,000) STP / 41.5 TEC / 75% Project Phased Total project cost was \$16,300,000
						Programmed \$	24,842,701		
						Target \$	24,855,247		
						Difference \$	12,546		
2020									

SID	Municipality	FFY	Project Description	District	Funding Sources	Total Funds	Federal Funds	Non-Federal Funds	Additional Information
2020	Westfield	607773	WESTFIELD- IMPROVEMENTS & RELATED WORK ON ROUTE 20, COURT STEET & WESTERN AVENUE, LLOYDS HILL ROAD TO HIGH STREET/MILL STREET INTERSECTION (PHASE II)	2	HSIP/STP/CMAQ/TAP	\$ 7,599,876	\$ 972,893	\$ 108,099	Construction / (YOE \$7,599,876 STP) / 48.5 TEC / 25%
2020	Chicopee	604434	CHICOPEE- RECONSTRUCTION & RELATED WORK ON FULLER ROAD, FROM MEMORIAL DR (RTE 33) TO SHAWINIGAN DR (2.0 MILES)	2	STP	\$ 7,907,953	\$6,480,934	\$1,620,233	Construction / (YOE \$7,907,953 STP) / 48.5 TEC / 25%
2020	Northampton	608236	NORTHAMPTON- RECONSTRUCTION OF DAMON ROAD, FROM ROUTE 9 TO ROUTE 5, INCLUDES DRAINAGE SYSTEM REPAIRS & SLOPE STABILIZATION AT THE NORWOTTUCK RAIL TRAIL	2	STP	\$ 10,248,854	\$4,359,945	\$1,089,986	Construction / (YOE \$10,248,854 STP) / 66.5 TEC / 75%
						\$ 25,756,683			
						Target \$ 25,782,146			
2021						Difference \$ 25,463			
2021	Springfield	608718	SPRINGFIELD- INTERSECTION IMPROVEMENTS AT BERKSHIRE AVENUE, COTTAGE AND HARVEY STREETS	2	STP	\$ 2,229,021	\$1,783,217	\$ 445,804	Construction / (YOE \$2,229,021 STP) / 41.5 TEC Score / Pre 25%
2021	Springfield	608782	SPRINGFIELD- INTERSECTION IMPROVEMENTS AT COTTAGE STREET, INDUSTRY AVENUE AND ROBBINS ROAD	2	STP	\$ 1,944,000	\$1,555,200	\$ 388,800	Construction / (YOE \$1,944,000 STP) / 46.5 TEC Score / Pre 25%
2021	Amherst	608084	AMHERST- IMPROVEMENTS & RELATED WORK ON ROUTES 9 & 116, FROM UNIVERSITY DRIVE TO SOUTH PLEASANT STREET (0.8 MILES)	2	STP	\$ 3,621,863	\$1,044,709	\$ 261,177	Construction / (YOE \$3,621,863 STP) / 53.5 TEC / 25%
2021	Northampton	607502	NORTHAMPTON- INTERSECTION IMPROVEMENTS AT KING STREET, NORTH STREET & SUMMER STREET AND AT KING STREET & FINN STREET	2	STP	\$ 3,655,054	\$ 992,000	\$ 248,000	Construction / (YOE \$3,655,054 STP, CMAQ) / 65 TEC / 25%
2021	Easthampton	608577	EASTHAMPTON- IMPROVEMENTS AND RELATED WORK ON UNION STREET (ROUTE 141) FROM PAYSON AVENUE TO HIGH STREET (0.36 MILES)	2	STP	\$ 2,201,643	\$1,169,984	\$ 292,496	Construction / (YOE \$2,201,643 STP) / 62 TEC / Pre 25%
2021	Hadley	605032	HADLEY- RECONSTRUCTION ON ROUTE 9, FROM MIDDLE STREET TO MAPLE/SOUTH MAPLE STREET	2	A/C STP	\$ 12,652,410	\$1,761,984	\$ 440,496	Construction / (YOE \$25,805,364) Year 1 FFY 2021 A/C \$12,652,410, Year 2 FFY 2022 A/C \$13,152,954 STP / 50 TEC / 25%
						\$ 26,303,990			
						Target \$ 26,303,990			
2022						Difference \$ (0)			

SID	Municipality	FFY	Project Description	District	Funding Sources	Total Funds	Federal Funds	Non-Federal Funds	Additional Information
2022	West Springfield	608374	WEST SPRINGFIELD- RECONSTRUCTION OF MEMORIAL AVENUE (ROUTE 147), FROM COLONY ROAD TO THE MEMORIAL AVENUE ROTARY (1.4 MILES)	2	A/C STP	\$ 7,390,199	\$ 972,893	\$ 108,099	Construction / (YOE \$19,797,253 Year 1 FFY 2022 A/C \$7,390,199 Year 2 A/C FFY2023 \$12,407,054 STP / 66.5 TEC 25%
2022	Granby	606895	GRANBY- IMPROVEMENTS @ 2 LOCATIONS ON ROUTE 202: SCHOOL STREET & FIVE CORNERS	2	STP	\$ 2,866,866	\$1,287,046	\$ 321,762	Construction / (YOE \$1,959,470) STP) / 42 TEC / 25%
2022	Holyoke	606156	HOLYOKE- RECONSTRUCTION OF I-91 INTERCHANGE 17 & ROUTE 141	2	STP	\$ 3,429,583	\$2,786,880	\$ 696,720	Construction / (YOE \$3,349,615 STP) / 47 TEC / Pre 25%
2022	Hadley	605032	HADLEY- RECONSTRUCTION ON ROUTE 9, FROM MIDDLE STREET TO MAPLE/SOUTH MAPLE STREET	2	A/C STP	\$ 13,152,954	\$1,761,984	\$ 440,496	Construction / (YOE \$25,805,364) Year 1 FFY 2021 A/C \$12,652,410, Year 2 FFY 2022 A/C \$13,152,954 STP / 50 TEC / 25%
						\$ 26,839,603			
						Target \$ 26,839,603			
						Difference \$ 0			
2023									
2023	West Springfield	608374	WEST SPRINGFIELD- RECONSTRUCTION OF MEMORIAL AVENUE (ROUTE 147), FROM COLONY ROAD TO THE MEMORIAL AVENUE ROTARY (1.4 MILES)	2	A/C STP	\$ 12,407,054	\$ 972,893	\$ 108,099	Construction / (YOE \$19,797,253 Year 1 FFY 2022 A/C \$7,390,199 Year 2 A/C FFY2023 \$12,407,054 STP / 66.5 TEC 25%
2023	Worthington	PV0001	Route 143 Reconstruction and Related Work - Phase II	1	STP	\$ 8,584,000	\$6,867,200	\$ 1,716,800	Construction / (YOE \$8,584,000) STP / 41.5 TEC / 75% Project Phase I funded in FFY 2019 Total project cost was \$16,300,000
2023	Lonmeadow	608881	RESURFACING AND INTERSECTION IMPROVEMENTS ON LONGMEADOW STREET (ROUTE 5) AND CONVERSE STREET (0.84 MILES)	2	STP	\$ 6,064,675	\$4,851,740	\$ 1,212,935	Construction (YOE \$6,064,675 / 54.5 TEC / Pre 25%
						\$ 27,055,729			
						Target \$ 27,425,802			
						Difference \$ 370,073			

Table 10 Federally Funded Projects Year 2019

Amendment / Adjustment Type ▼	STIP Program ▼	MassDOT Project ID ▼	Metropolitan Planning Organization ▼	Municipality Name ▼	MassDOT Project Description ▼	MassDOT District ▼	Funding Source ▼	Total Programmed Funds ▼	Federal Funds ▼	Non-Federal Funds ▼	Additional Information ▼ <i>Present information as follows, if applicable: a) Planning / Design / or Construction; b) total project cost and funding sources used; c) advance construction</i>
► Section 1A / Regionally Prioritized Projects											
► Regionally Prioritized Projects											
Intersection Improvements		608411	Pioneer Valley	Springfield	SPRINGFIELD- INTERSECTION IMPROVEMENTS AT BAY STREET AND BERKSHIRE AVENUE	2	HSIP	\$ 1,000,000	\$ 900,000	\$ 100,000	Construction / (YOE \$1,886,880 STP) / 49.5 TEC / 25% HSIP, CMAQ
Intersection Improvements		608411	Pioneer Valley	Springfield	SPRINGFIELD- INTERSECTION IMPROVEMENTS AT BAY STREET AND BERKSHIRE AVENUE	2	CMAQ	\$ 886,880	\$ 709,504	\$ 177,376	Construction / (YOE \$1,886,880 STP) / 49.5 TEC / 25% HSIP, CMAQ
Roadway Reconstruction		600513	Pioneer Valley	Agawam	AGAWAM- RECONSTRUCTION OF ROUTE 187 FROM 425 FT. SOUTH OF S. WESTFIELD STREET TO ROUTE 57 (0.3 MILES - PHASE I)	2	STP	\$ 2,516,438	\$ 2,013,150	\$ 503,288	Construction / (YOE \$2,516,438 STP) / 27 TEC / 25% STP
Intersection Improvements		608412	Pioneer Valley	Belchertown	BELCHERTOWN- IMPROVEMENTS & RELATED WORK ON ROUTES 202 & 21, FROM TURKEY HILL ROAD TO SOUTH MAIN STREET (1.2 MILES)	2	STP	\$ 5,644,850	\$ 4,515,880	\$ 1,128,970	Construction / (YOE \$5,644,850 STP) / 59 TEC / 25% STP
Intersection Improvements		607987	Pioneer Valley	Ware	WARE- INTERSECTION IMPROVEMENTS @ MAIN STREET, WEST STREET, NORTH STREET, SOUTH STREET & CHURCH STREET	2	STP	\$ 1,000,000	\$ 800,000	\$ 200,000	Construction / (YOE \$2,475,087) STP) / 55 TEC / 75% STP, CMAQ, TAP
Intersection Improvements		607987	Pioneer Valley	Ware	WARE- INTERSECTION IMPROVEMENTS @ MAIN STREET, WEST STREET, NORTH STREET, SOUTH STREET & CHURCH STREET	2	CMAQ	\$ 1,000,000	\$ 800,000	\$ 200,000	Construction / (YOE \$2,475,087) STP) / 55 TEC / 75% STP, CMAQ, TAP
Intersection Improvements		607987	Pioneer Valley	Ware	WARE- INTERSECTION IMPROVEMENTS @ MAIN STREET, WEST STREET, NORTH STREET, SOUTH STREET & CHURCH STREET	2	TAP	\$ 475,087	\$ 380,070	\$ 95,017	Construction / (YOE \$2,475,087) STP) / 55 TEC / 75% STP, CMAQ, TAP
Roadway Reconstruction		604962	Pioneer Valley	Holland	HOLLAND- RESURFACING & RELATED WORK ON BRIMFIELD ROAD, FROM THE BRIMFIELD/HOLLAND T.L. TO WALES ROAD (1.4 MILES - PHASE I)	2	STP	\$ 2,919,446	\$ 2,335,557	\$ 583,889	Construction / (YOE \$2,919,446) STP) / 26.5 TEC / 25% - 25% Comment Received, cost increased from \$1,409,592 STP
Roadway Reconstruction		606912	Pioneer Valley	Worthington	WORTHINGTON- RECONSTRUCTION & RELATED WORK ON ROUTE 143 (PHASE I)	1	STP	\$ 8,900,000	\$ 7,120,000	\$ 1,780,000	Construction / (YOE \$8,900,000) STP) / 41.5 TEC / 75% Project Phased Total project cost was
Planning / Adjustments / Pass-throughs		PV0001	Pioneer Valley	multiple	P21 Express - Year 2 Operating	2	CMAQ	\$ 500,000	\$ 400,000	\$ 100,000	P21 Express - Year 2 Operating CMAQ
Regionally Prioritized Projects subtotal ►								\$ 24,842,701	\$ 19,974,161	\$ 4,868,540	◀ 80% Federal + 20% Non-Federal

► Section 1A / Fiscal Constraint Analysis													
								Total Regional Federal Aid Funds Programmed ►	\$ 24,842,701	\$ 24,855,247	◀ Total Budget	\$ 12,546	Target Funds Available
								STP programmed ►	\$ 20,980,734	\$ 16,784,587	◀ STP		
								HSIP programmed ►	\$ 1,000,000	\$ 900,000	◀ HSIP		
								CMAQ programmed ►	\$ 2,386,880	\$ 1,909,504	◀ CMAQ		
								TAP programmed ►	\$ 475,087	\$ 380,070	◀ TAP		

Section 1A Instructions: MPO Template Name) Choose Regional Name from dropdown list to populate header and MPO column; **Column C**) Enter ID from ProjectInfo; **Column E**) Choose Municipality Name from dropdown list; **Column H**) Choose the Funding Source being used for the project - if multiple funding sources are being used enter multiple lines; **Column I**) Enter the total amount of funds being programmed in this fiscal year and for each funding source; **Column J**) Federal funds autocalculates. Please verify the amount and only change if needed for flex. **Column K**) Non-federal funds autocalculates. Please verify the split/match - if matching an FTA flex.

Table 10: Federally Funded Projects Year 2019 (Continued)

▶ Section 1B / Earmark or Discretionary Grant Funded Projects											
▶ Other Federal Aid											
			Pioneer Valley		Other Federal Aid		HPP	\$ -	\$ -	\$ -	
			Pioneer Valley		Other Federal Aid		HPP	\$ -	\$ -	\$ -	
Other Federal Aid subtotal ▶								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source
▶ Section 2A / State Prioritized Reliability Projects											
▶ Bridge Program / Inspections											
	Bridge Program		Pioneer Valley		Bridge Inspection			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Inspection			\$ -	\$ -	\$ -	
Bridge Program / Inspections subtotal ▶								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source
▶ Bridge Program / Off-System											
	Bridge Program	608429	Pioneer Valley		MIDDLEFIELD- BRIDGE SUPERSTRUCTURE REPLACEMENT, M-19-010, CHESTER ROAD OVER SMART BROOK	1	STP-BR-OFF	\$ 970,807	\$ 776,646	\$ 194,161	
	Bridge Program		Pioneer Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	
Bridge Program / Off-System subtotal ▶								\$ 970,807	\$ 776,646	\$ 194,161	◀ 80% Federal + 20% Non-Federal
▶ Bridge Program / On-System (NHS)											
	Bridge Program		Pioneer Valley		Bridge Program / On-System (NHS)			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / On-System (NHS)			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / On-System (NHS)			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / On-System (NHS)			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / On-System (NHS)			\$ -	\$ -	\$ -	
Bridge Program / On-System (NHS) subtotal ▶								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source
▶ Bridge Program / On-System (Non-NHS)											
	Bridge Program		Pioneer Valley		Bridge Program / On-System (Non-NHS)			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / On-System (Non-NHS)			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / On-System (Non-NHS)			\$ -	\$ -	\$ -	
Bridge Program / On-System (Non-NHS) subtotal ▶								\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal
▶ Bridge Program / Systematic Maintenance											
	Bridge Program		Pioneer Valley		Bridge Program / Systematic Maintenance			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / Systematic Maintenance			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / Systematic Maintenance			\$ -	\$ -	\$ -	
Bridge Program / Systematic Maintenance subtotal ▶								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source

Table 10: Federally Funded Projects Year 2019 (Continued)

► Interstate Pavement

Interstate Pavement	607560	Pioneer Valley	Multiple	CHICOPEE- HOLYOKE- INTERSTATE MAINTENANCE AND RELATED WORK ON I-391	2	NHPP	\$ 11,309,875	\$ 10,178,888	\$ 1,130,988	
Interstate Pavement	607560	Pioneer Valley	Multiple	CHICOPEE- HOLYOKE- INTERSTATE MAINTENANCE & RELATED WORK ON I-391	2	NHPP	\$ 416,000	\$ 374,400	\$ 41,600	
Interstate Pavement		Pioneer Valley		Interstate Pavement			\$ -	\$ -	\$ -	
Interstate Pavement		Pioneer Valley		Interstate Pavement			\$ -	\$ -	\$ -	
Interstate Pavement		Pioneer Valley		Interstate Pavement			\$ -	\$ -	\$ -	
Interstate Pavement subtotal ►							\$ 11,725,875	\$ 10,553,288	\$ 1,172,588	◀ 90% Federal + 10% Non-Federal

► Non-Interstate Pavement

Non-Interstate Pavement	607474	Pioneer Valley	Multiple	GRANBY- SOUTH HADLEY- RESURFACING AND RELATED WORK ON ROTUE 202	2	NHPP	\$ 5,752,500	\$ 4,602,000	\$ 1,150,500	
Non-Interstate Pavement		Pioneer Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
Non-Interstate Pavement		Pioneer Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
Non-Interstate Pavement		Pioneer Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
Non-Interstate Pavement		Pioneer Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
Non-Interstate Pavement		Pioneer Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
Non-Interstate Pavement		Pioneer Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
Non-Interstate Pavement		Pioneer Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
Non-Interstate Pavement		Pioneer Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
Non-Interstate Pavement subtotal ►							\$ 5,752,500	\$ 4,602,000	\$ 1,150,500	◀ 80% Federal + 20% Non-Federal

► Roadway Improvements

Roadway Improvements		Pioneer Valley		Roadway Improvements			\$ -	\$ -	\$ -	
Roadway Improvements		Pioneer Valley		Roadway Improvements			\$ -	\$ -	\$ -	
Roadway Improvements		Pioneer Valley		Roadway Improvements			\$ -	\$ -	\$ -	
Roadway Improvements subtotal ►							\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal

► Safety Improvements

Safety Improvements	607736	Pioneer Valley	Chicopee	CHICOPEE- SIGNAL & INTERSECTION IMPROVEMENTS AT 13 INTERSECTIONS ALONG ROUTE 33 (MEMORIAL DRIVE), FROM FULLER ROAD TO ABBEY STREET	2	HSIP	\$ 6,001,387	\$ 5,401,248	\$ 600,139	
Safety Improvements	608600	Pioneer Valley	Multiple	CHICOPEE- WEST SPRINGFIELD- HIGHWAY LIGHTING UPGRADE ON I-91	2	NHPP	\$ 4,300,759	\$ 3,870,683	\$ 430,076	
Safety Improvements		Pioneer Valley		Safety Improvements			\$ -	\$ -	\$ -	
Safety Improvements		Pioneer Valley		Safety Improvements			\$ -	\$ -	\$ -	
Safety Improvements		Pioneer Valley		Safety Improvements			\$ -	\$ -	\$ -	
Safety Improvements		Pioneer Valley		Safety Improvements			\$ -	\$ -	\$ -	
Safety Improvements subtotal ►							\$ 10,302,146	\$ 9,271,931	\$ 1,030,215	◀ Funding Split Varies by Funding Source

Table 10: Federally Funded Projects Year 2019 (Continued)

▶ Section 2B / State Prioritized Modernization Projects										
▶ ADA Retrofits										
	ADA Retrofits		Pioneer Valley		ADA Retrofits			\$ -	\$ -	\$ -
	ADA Retrofits		Pioneer Valley		ADA Retrofits			\$ -	\$ -	\$ -
								ADA Retrofits subtotal ▶		◀ 80% Federal + 20% Non-Federal
▶ Intersection Improvements										
	Intersection Improvements		Pioneer Valley		Intersection Improvements			\$ -	\$ -	\$ -
	Intersection Improvements		Pioneer Valley		Intersection Improvements			\$ -	\$ -	\$ -
	Intersection Improvements		Pioneer Valley		Intersection Improvements			\$ -	\$ -	\$ -
	Intersection Improvements		Pioneer Valley		Intersection Improvements			\$ -	\$ -	\$ -
	Intersection Improvements		Pioneer Valley		Intersection Improvements			\$ -	\$ -	\$ -
	Intersection Improvements		Pioneer Valley		Intersection Improvements			\$ -	\$ -	\$ -
								Intersection Improvements subtotal ▶		◀ Funding Split Varies by Funding Source
▶ Intelligent Transportation Systems										
	Intelligent Transportation Systems		Pioneer Valley		Intelligent Transportation Systems			\$ -	\$ -	\$ -
	Intelligent Transportation Systems		Pioneer Valley		Intelligent Transportation Systems			\$ -	\$ -	\$ -
	Intelligent Transportation Systems		Pioneer Valley		Intelligent Transportation Systems			\$ -	\$ -	\$ -
								Intelligent Transportation System subtotal ▶		◀ 80% Federal + 20% Non-Federal
▶ Roadway Reconstruction										
	Roadway Reconstruction	608790	Pioneer Valley	Holyoke	HOLYOKE- IMPROVEMENTS AT KELLY COMMUNITY SCHOOL (SRTS)	2	TAP	\$ 1,264,935	\$ 1,011,948	\$ 252,987
	Roadway Reconstruction	606555	Pioneer Valley	Northampton	NORTHAMPTON- ROUNDABOUT CONSTRUCTION AT INTERSECTION ROUTES 5/10 (NORTH KING STREET) & HATFIELD STREET	2	CMAQ	\$ 4,109,480	\$ 3,287,584	\$ 821,896
	Roadway Reconstruction		Pioneer Valley		Roadway Reconstruction			\$ -	\$ -	\$ -
	Roadway Reconstruction		Pioneer Valley		Roadway Reconstruction			\$ -	\$ -	\$ -
								Roadway Reconstruction subtotal ▶		◀ Funding Split Varies by Funding Source

Table 10: Federally Funded Projects Year 2019 (Continued)

► Section 2C / State Prioritized Expansion Projects

► Bicycles and Pedestrians

	Bicycles and Pedestrians	603783	Pioneer Valley	Westfield	WESTFIELD- COLUMBIA GREENWAY RAIL TRAIL CONSTRUCTION (CENTER DOWNTOWN SECTION), FROM EAST SILVER STREET TO COWLES COURT, INCLUDES W-25,014, W-25-015, W-25-016, W-25-017, W-25-018 & W-25-019	2	CMAQ	\$ 6,532,895	\$ 5,226,316	\$ 1,306,579	Construction / PSAC score 39.5
	Bicycles and Pedestrians		Pioneer Valley		Bicycles and Pedestrians			\$ -	\$ -	\$ -	
	Bicycles and Pedestrians		Pioneer Valley		Bicycles and Pedestrians			\$ -	\$ -	\$ -	
Bicycles and Pedestrians subtotal ►								\$ 6,532,895	\$ 5,226,316	\$ 1,306,579	◀ 80% Federal + 20% Non-Federal

► Capacity

	Capacity		Pioneer Valley		Capacity			\$ -	\$ -	\$ -	
	Capacity		Pioneer Valley		Capacity			\$ -	\$ -	\$ -	
Capacity subtotal ►								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source

► Section 3 / Planning / Adjustments / Pass-throughs

► Planning / Adjustments / Pass-throughs

			Pioneer Valley		ABP GANS Repayment	Multiple		\$ -	\$ -	\$ -	
			Pioneer Valley		ABP GANS Repayment	Multiple		\$ -	\$ -	\$ -	
			Pioneer Valley		Award adjustments, change orders, etc.	Multiple		\$ -	\$ -	\$ -	
			Pioneer Valley		Award adjustments, change orders, etc.	Multiple		\$ -	\$ -	\$ -	
			Pioneer Valley		Award adjustments, change orders, etc.	Multiple		\$ -	\$ -	\$ -	
			Pioneer Valley		Award adjustments, change orders, etc.	Multiple		\$ -	\$ -	\$ -	
			Pioneer Valley		Metropolitan Planning	Multiple		\$ -	\$ -	\$ -	
			Pioneer Valley		Metropolitan Planning	Multiple		\$ -	\$ -	\$ -	
			Pioneer Valley		State Planning and Research Work Program I, (SPR I), Planning	Multiple		\$ -	\$ -	\$ -	
			Pioneer Valley		State Planning and Research Work Program II, (SPR II), Research	Multiple		\$ -	\$ -	\$ -	
			Pioneer Valley		Railroad Crossings	Multiple		\$ -	\$ -	\$ -	
			Pioneer Valley		Railroad Crossings	Multiple		\$ -	\$ -	\$ -	
			Pioneer Valley		Recreational Trails	Multiple		\$ -	\$ -	\$ -	
Other Statewide Items subtotal ►								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source

► Section 4 / Non-Federally Aided Projects

► Non-Federally Aided Projects

	Non Federal Aid		Pioneer Valley		Non-Federal Aid			\$ -	\$ -	\$ -	
	Non-Federally Aided Projects		Pioneer Valley		Non-Federal Aid			\$ -	\$ -	\$ -	
Non-Federal Aid subtotal ►								\$ -	\$ -	\$ -	◀ 100% Non-Federal

2019 Summary

		TIP Section 1 - TIP Section 4: Total of All 3: ▼ Projects ▼		
Total ►	\$ 65,501,339	\$ -	\$ 65,501,339	◀ Total Spending in Region
Federal Funds ►	\$ 54,703,873	\$ -	\$ 54,703,873	◀ Total Federal Spending in Region
Non-Federal Funds ►	\$ 10,797,466	\$ -	\$ 10,797,466	◀ Total Non-Federal Spending in Region

701 CMR 7.00 Use of Road Flaggers and Police Details 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.

Table 11: Federally Funded Projects 2020

Amendment / Adjustment Type ▼	STIP Program ▼	MassDOT Project ID ▼	Metropolitan Planning Organization ▼	Municipality Name ▼	MassDOT Project Description ▼	MassDOT District ▼	Funding Source ▼	Total Programmed Funds ▼	Federal Funds ▼	Non-Federal Funds ▼	Additional Information ▼ <i>Present information as follows, if applicable: a) Planning / Design / or Construction; b) total project cost and funding sources used; c) advance construction</i>
► Section 1A / Regionally Prioritized Projects											
► Regionally Prioritized Projects											
	Roadway Reconstruction	607773	Pioneer Valley	Westfield	WESTFIELD- IMPROVEMENTS & RELATED WORK ON ROUTE 20, COURT STEET & WESTERN AVENUE, LLOYDS HILL ROAD TO HIGH STREET/MILL STREET INTERSECTION (PHASE II)	2	STP	\$ 5,500,000	\$ 4,400,000	\$ 1,100,000	Construction / (YOE \$7,599,876 STP) / 48.5 TEC / 25% HSIP, TAP, STP, CMAQ
	Roadway Reconstruction	607773	Pioneer Valley	Westfield	WESTFIELD- IMPROVEMENTS & RELATED WORK ON ROUTE 20, COURT STEET & WESTERN AVENUE, LLOYDS HILL ROAD TO HIGH STREET/MILL STREET INTERSECTION (PHASE II)	2	CMAQ	\$ 599,876	\$ 479,901	\$ 119,975	Construction / (YOE \$7,599,876 STP) / 48.5 TEC / 25% HSIP, TAP, STP, CMAQ
	Roadway Reconstruction	607773	Pioneer Valley	Westfield	WESTFIELD- IMPROVEMENTS & RELATED WORK ON ROUTE 20, COURT STEET & WESTERN AVENUE, LLOYDS HILL ROAD TO HIGH STREET/MILL STREET INTERSECTION (PHASE II)	2	HSIP	\$ 1,000,000	\$ 900,000	\$ 100,000	Construction / (YOE \$7,599,876 STP) / 48.5 TEC / 25% HSIP, TAP, STP, CMAQ
	Roadway Reconstruction	607773	Pioneer Valley	Westfield	WESTFIELD- IMPROVEMENTS & RELATED WORK ON ROUTE 20, COURT STEET & WESTERN AVENUE, LLOYDS HILL ROAD TO HIGH STREET/MILL STREET INTERSECTION (PHASE II)	2	TAP	\$ 500,000	\$ 400,000	\$ 100,000	Construction / (YOE \$7,599,876 STP) / 48.5 TEC / 25% HSIP, TAP, STP, CMAQ
	Roadway Reconstruction	604434	Pioneer Valley	Chicopee	CHICOPEE- RECONSTRUCTION & RELATED WORK ON FULLER ROAD, FROM MEMORIAL DR (RTE 33) TO SHAWINIGAN DR (2.0 MILES)	2	STP	\$ 5,907,953	\$ 4,726,362	\$ 1,181,591	Construction / (YOE \$7,907,953 STP) / 48.5 TEC / 25% STP, CMAQ
	Roadway Reconstruction	604434	Pioneer Valley	Chicopee	CHICOPEE- RECONSTRUCTION & RELATED WORK ON FULLER ROAD, FROM MEMORIAL DR (RTE 33) TO SHAWINIGAN DR (2.0 MILES)	2	CMAQ	\$ 2,000,000	\$ 1,600,000	\$ 400,000	Construction / (YOE \$7,907,953 STP) / 48.5 TEC / 25% STP, CMAQ
	Roadway Reconstruction	608236	Pioneer Valley	Northampton	NORTHAMPTON- RECONSTRUCTION OF DAMON ROAD, FROM ROUTE 9 TO ROUTE 5, INCLUDES DRAINAGE SYSTEM REPAIRS & SLOPE STABILIZATION AT THE NORWOTTUCK RAIL TRAIL	2	STP	\$ 10,248,854	\$ 8,199,083	\$ 2,049,771	Construction / (YOE \$10,248,854 STP) / 66.5 TEC / 75% STP
			Pioneer Valley					\$ -	\$ -	\$ -	
Regionally Prioritized Projects subtotal ►								\$ 25,756,683	\$ 20,705,346	\$ 5,051,337	◀ 80% Federal + 20% Non-Federal

► Section 1A / Fiscal Constraint Analysis

Total Regional Federal Aid Funds Programmed ►		\$ 25,756,683	\$ 25,782,146	◀ Total Budget	\$ 25,463	Target Funds Available
STP programmed ►	\$ 21,656,807	\$ 17,325,446	◀ STP			
HSIP programmed ►	\$ 1,000,000	\$ 900,000	◀ HSIP			
CMAQ programmed ►	\$ 2,599,876	\$ 2,079,901	◀ CMAQ			
TAP programmed ►	\$ 500,000	\$ 400,000	◀ TAP			

Section 1A Instructions: MPO Template Name) Choose Regional Name from dropdown list to populate header and MPO column; **Column C)** Enter ID from ProjectInfo; **Column E)** Choose Municipality Name from dropdown list; **Column H)** Choose the Funding Source being used for the project - if multiple funding sources are being used enter multiple lines; **Column I)** Enter the total amount of funds being programmed in this fiscal year and for each funding source; **Column J)** Federal funds autocalculates. Please verify the amount and only change if needed for flex. **Column K)** Non-federal funds autocalculates. Please verify the split/match - if matching an FTA flex.

Table 11: Federally Funded Projects Year 2020 (Continued)

Section 1B / Earmark or Discretionary Grant Funded Projects											
Other Federal Aid											
			Pioneer Valley		Other Federal Aid		HPP	\$ -	\$ -	\$ -	
			Pioneer Valley		Other Federal Aid		HPP	\$ -	\$ -	\$ -	
Other Federal Aid subtotal ▶								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source
Section 2A / State Prioritized Reliability Projects											
Bridge Program / Inspections											
	Bridge Program		Pioneer Valley		Bridge Inspection			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Inspection			\$ -	\$ -	\$ -	
Bridge Program / Inspections subtotal ▶								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source
Bridge Program / Off-System											
	Bridge Program	608631	Pioneer Valley		WESTHAMPTON- BRIDGE REPLACEMENT, W-27-005, KINGS HIGHWAY OVER N BRANCH MANHAN RIVER	2	STP-BR-OFF	\$ 3,072,000	\$ 2,457,600	\$ 614,400	
	Bridge Program		Pioneer Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	
Bridge Program / Off-System subtotal ▶								\$ 3,072,000	\$ 2,457,600	\$ 614,400	◀ 80% Federal + 20% Non-Federal
Bridge Program / On-System (NHS)											
	Bridge Program	400103	Pioneer Valley		WESTFIELD- BRIDGE REPLACEMENT, W-25-006, ROUTE 10/202 (SOUTHWICK ROAD) OVER THE LITTLE RIVER	2	NHPP-On	\$ 12,732,554	\$ 10,186,043	\$ 2,546,511	
	Bridge Program		Pioneer Valley		NORTHAMPTON- BRIDGE RECONSTRUCTION, N-19-059, I-91 OVER US 5/BMRR & N-19-060, I-91 OVER HOCKANUM ROAD	2	NHPP-On	\$ 11,378,353	\$ 9,102,682	\$ 2,275,671	AC Year 1 of 5, Total Cost \$56,891,767
	Bridge Program		Pioneer Valley		Bridge Program / On-System (NHS)			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / On-System (NHS)			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / On-System (NHS)			\$ -	\$ -	\$ -	
Bridge Program / On-System (NHS) subtotal ▶								\$ 24,110,907	\$ 19,288,726	\$ 4,822,181	◀ Funding Split Varies by Funding Source
Bridge Program / On-System (Non-NHS)											
	Bridge Program		Pioneer Valley		Bridge Program / On-System (Non-NHS)			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / On-System (Non-NHS)			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / On-System (Non-NHS)			\$ -	\$ -	\$ -	
Bridge Program / On-System (Non-NHS) subtotal ▶								\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal
Bridge Program / Systematic Maintenance											
	Bridge Program		Pioneer Valley		Bridge Program / Systematic Maintenance			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / Systematic Maintenance			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / Systematic Maintenance			\$ -	\$ -	\$ -	
Bridge Program / Systematic Maintenance subtotal ▶								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source

Table 11: Federally Funded Projects Year 2020 (Continued)

► Interstate Pavement												
	Interstate Pavement		Pioneer Valley		Interstate Pavement				\$ -	\$ -	\$ -	
	Interstate Pavement		Pioneer Valley		Interstate Pavement				\$ -	\$ -	\$ -	
	Interstate Pavement		Pioneer Valley		Interstate Pavement				\$ -	\$ -	\$ -	
	Interstate Pavement		Pioneer Valley		Interstate Pavement				\$ -	\$ -	\$ -	
	Interstate Pavement		Pioneer Valley		Interstate Pavement				\$ -	\$ -	\$ -	
Interstate Pavement subtotal ►									\$ -	\$ -	\$ -	◀ 90% Federal + 10% Non-Federal
► Non-Interstate Pavement												
	Non-Interstate Pavement	608473	Pioneer Valley	South Hadley	SOUTH HADLEY- RESURFACING AND RELATED WORK ON ROUTE 116	2	NHPP	\$ 2,208,960	\$ 1,767,168	\$ 441,792		
	Non-Interstate Pavement	604209	Pioneer Valley	Multiple	HOLYOKE- WEST SPRINGFIELD- REHABILITATION OF ROUTE 5	2	NHPP	\$ 13,953,264	\$ 11,162,611	\$ 2,790,653		
	Non-Interstate Pavement		Pioneer Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -		
	Non-Interstate Pavement		Pioneer Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -		
	Non-Interstate Pavement		Pioneer Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -		
	Non-Interstate Pavement		Pioneer Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -		
	Non-Interstate Pavement		Pioneer Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -		
	Non-Interstate Pavement		Pioneer Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -		
	Non-Interstate Pavement		Pioneer Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -		
Non-Interstate Pavement subtotal ►									\$ 16,162,224	\$ 12,929,779	\$ 3,232,445	◀ 80% Federal + 20% Non-Federal
► Roadway Improvements												
	Roadway Improvements		Pioneer Valley		Roadway Improvements			\$ -	\$ -	\$ -		
	Roadway Improvements		Pioneer Valley		Roadway Improvements			\$ -	\$ -	\$ -		
	Roadway Improvements		Pioneer Valley		Roadway Improvements			\$ -	\$ -	\$ -		
Roadway Improvements subtotal ►									\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal
► Safety Improvements												
	Safety Improvements	608575	Pioneer Valley	Multiple	CHICOPEE TO HOLYOKE- GUIDE AND TRAFFIC SIGN REPLACEMENT ON I-391	2	HSIP	\$ 542,872	\$ 488,585	\$ 54,287		
	Safety Improvements		Pioneer Valley		Safety Improvements			\$ -	\$ -	\$ -		
	Safety Improvements		Pioneer Valley		Safety Improvements			\$ -	\$ -	\$ -		
	Safety Improvements		Pioneer Valley		Safety Improvements			\$ -	\$ -	\$ -		
	Safety Improvements		Pioneer Valley		Safety Improvements			\$ -	\$ -	\$ -		
	Safety Improvements		Pioneer Valley		Safety Improvements			\$ -	\$ -	\$ -		
Safety Improvements subtotal ►									\$ 542,872	\$ 488,585	\$ 54,287	◀ Funding Split Varies by Funding Source

Table 11: Federally Funded Projects Year 2020 (Continued)

▶ Section 2B / State Prioritized Modernization Projects															
▶ ADA Retrofits															
	ADA Retrofits		Pioneer Valley		ADA Retrofits			\$	-	\$ -	\$ -				
	ADA Retrofits		Pioneer Valley		ADA Retrofits			\$	-	\$ -	\$ -				
								ADA Retrofits subtotal ▶	\$	-	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal		
▶ Intersection Improvements															
	Intersection Improvements		Pioneer Valley		Intersection Improvements			\$	-	\$ -	\$ -				
	Intersection Improvements		Pioneer Valley		Intersection Improvements			\$	-	\$ -	\$ -				
	Intersection Improvements		Pioneer Valley		Intersection Improvements			\$	-	\$ -	\$ -				
	Intersection Improvements		Pioneer Valley		Intersection Improvements			\$	-	\$ -	\$ -				
	Intersection Improvements		Pioneer Valley		Intersection Improvements			\$	-	\$ -	\$ -				
	Intersection Improvements		Pioneer Valley		Intersection Improvements			\$	-	\$ -	\$ -				
								Intersection Improvements subtotal ▶	\$	-	\$ -	\$ -	◀ Funding Split Varies by Funding Source		
▶ Intelligent Transportation Systems															
	Intelligent Transportation Systems		Pioneer Valley		Intelligent Transportation Systems			\$	-	\$ -	\$ -				
	Intelligent Transportation Systems		Pioneer Valley		Intelligent Transportation Systems			\$	-	\$ -	\$ -				
	Intelligent Transportation Systems		Pioneer Valley		Intelligent Transportation Systems			\$	-	\$ -	\$ -				
								Intelligent Transportation System subtotal ▶	\$	-	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal		
▶ Roadway Reconstruction															
	Roadway Reconstruction		Pioneer Valley		Roadway Reconstruction			\$	-	\$ -	\$ -				
	Roadway Reconstruction		Pioneer Valley		Roadway Reconstruction			\$	-	\$ -	\$ -				
	Roadway Reconstruction		Pioneer Valley		Roadway Reconstruction			\$	-	\$ -	\$ -				
	Roadway Reconstruction		Pioneer Valley		Roadway Reconstruction			\$	-	\$ -	\$ -				
								Roadway Reconstruction subtotal ▶	\$	-	\$ -	\$ -	◀ Funding Split Varies by Funding Source		
▶ Section 2C / State Prioritized Expansion Projects															
▶ Bicycles and Pedestrians															
	Bicycles and Pedestrians	602911	Pioneer Valley	Chicopee	CHICOPEE- CONNECTICUT RIVERWALK & BIKEWAY CONSTRUCTION, FROMBOAT RAMP NEAR I-90 TO NASH FIELD (2.5 MILES), INCLUDES NEW BRIDGE C-13-060 OVER OVERFLOW CHANNEL	2	CMAQ	\$	3,247,643	\$	2,598,114	\$	649,529		
	Bicycles and Pedestrians		Pioneer Valley		Bicycles and Pedestrians			\$	-	\$ -	\$ -				
	Bicycles and Pedestrians		Pioneer Valley		Bicycles and Pedestrians			\$	-	\$ -	\$ -				
								Bicycles and Pedestrians subtotal ▶	\$	3,247,643	\$	2,598,114	\$	649,529	◀ 80% Federal + 20% Non-Federal

► Capacity											
	Capacity		Pioneer Valley		Capacity			\$ -	\$ -	\$ -	
	Capacity		Pioneer Valley		Capacity			\$ -	\$ -	\$ -	
Capacity subtotal ►								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source

► Section 3 / Planning / Adjustments / Pass-throughs

► Planning / Adjustments / Pass-throughs											
			Pioneer Valley		ABP GANS Repayment		Multiple	\$ -	\$ -	\$ -	
			Pioneer Valley		ABP GANS Repayment		Multiple	\$ -	\$ -	\$ -	
			Pioneer Valley		Award adjustments, change orders, etc.		Multiple	\$ -	\$ -	\$ -	
			Pioneer Valley		Award adjustments, change orders, etc.		Multiple	\$ -	\$ -	\$ -	
			Pioneer Valley		Award adjustments, change orders, etc.		Multiple	\$ -	\$ -	\$ -	
			Pioneer Valley		Award adjustments, change orders, etc.		Multiple	\$ -	\$ -	\$ -	
			Pioneer Valley		Metropolitan Planning		Multiple	\$ -	\$ -	\$ -	
			Pioneer Valley		Metropolitan Planning		Multiple	\$ -	\$ -	\$ -	
			Pioneer Valley		State Planning and Research Work Program I, (SPR I), Planning		Multiple	\$ -	\$ -	\$ -	
			Pioneer Valley		State Planning and Research Work Program II, (SPR II), Research		Multiple	\$ -	\$ -	\$ -	
			Pioneer Valley		Railroad Crossings		Multiple	\$ -	\$ -	\$ -	
			Pioneer Valley		Railroad Crossings		Multiple	\$ -	\$ -	\$ -	
			Pioneer Valley		Recreational Trails		Multiple	\$ -	\$ -	\$ -	
Other Statewide Items subtotal ►								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source

► Section 4 / Non-Federally Aided Projects

► Non-Federally Aided Projects											
	Non Federal Aid		Pioneer Valley		Non-Federal Aid			\$ -	\$ -	\$ -	
	Non-Federally Aided Projects		Pioneer Valley		Non-Federal Aid			\$ -	\$ -	\$ -	
Non-Federal Aid subtotal ►								\$ -	\$ -	\$ -	◀ 100% Non-Federal

2020 Summary

	TIP Section 1 -	TIP Section 4:	Total of All	
	3: ▼	▼	Projects ▼	
Total ►	\$ 72,892,329	\$ -	\$ 72,892,329	◀ Total Spending in Region
Federal Funds ►	\$ 58,468,150	\$ -	\$ 58,468,150	◀ Total Federal Spending in Region
Non-Federal Funds ►	\$ 14,424,179	\$ -	\$ 14,424,179	◀ Total Non-Federal Spending in Region

701 CMR 7.00 Use of Road Flaggers and Police Details 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.

Table 12: Federally Funded Projects 2021

Amendment / Adjustment Type ▼	STIP Program ▼	MassDOT Project ID ▼	Metropolitan Planning Organization ▼	Municipality Name ▼	MassDOT Project Description ▼	MassDOT District ▼	Funding Source ▼	Total Programmed Funds ▼	Federal Funds ▼	Non-Federal Funds ▼	Additional Information ▼ <i>Present information as follows, if applicable: a) Planning / Design / or Construction; b) total project cost and funding sources used; c) advance construction</i>
► Section 1A / Regionally Prioritized Projects											
► Regionally Prioritized Projects											
	Intersection Improvements	608718	Pioneer Valley	Springfield	SPRINGFIELD- INTERSECTION IMPROVEMENTS AT BERKSHIRE AVENUE, COTTAGE AND HARVEY STREETS	2	STP	\$ 1,229,021	\$ 983,217	\$ 245,804	Construction / (YOE \$2,229,021 STP) / 41.5 TEC Score / Pre 25% HSIP, STP
	Intersection Improvements	608718	Pioneer Valley	Springfield	SPRINGFIELD- INTERSECTION IMPROVEMENTS AT BERKSHIRE AVENUE, COTTAGE AND HARVEY STREETS	2	HSIP	\$ 1,000,000	\$ 900,000	\$ 100,000	Construction / (YOE \$2,229,021 STP) / 41.5 TEC Score / Pre 25% HSIP, STP
	Intersection Improvements	608782	Pioneer Valley	Springfield	SPRINGFIELD- INTERSECTION IMPROVEMENTS AT COTTAGE STREET, INDUSTRY AVENUE AND ROBBINS ROAD	2	CMAQ	\$ 1,944,000	\$ 1,555,200	\$ 388,800	Construction / (YOE \$1,944,000) STP) / 46.5 TEC Score / Pre 25% STP
	Roadway Improvements	608084	Pioneer Valley	Amherst	AMHERST- IMPROVEMENTS & RELATED WORK ON ROUTES 9 & 116, FROM UNIVERSITY DRIVE TO SOUTH PLEASANT STREET (0.8 MILES)	2	STP	\$ 3,121,863	\$ 2,497,490	\$ 624,373	Construction / (YOE \$3,621,863 STP) / 53.5 TEC / 25% STP, TAP
	Roadway Improvements	608084	Pioneer Valley	Amherst	AMHERST- IMPROVEMENTS & RELATED WORK ON ROUTES 9 & 116, FROM UNIVERSITY DRIVE TO SOUTH PLEASANT STREET (0.8 MILES)	2	TAP	\$ 500,000	\$ 400,000	\$ 100,000	Construction / (YOE \$3,621,863 STP) / 53.5 TEC / 25% STP, TAP
	Intersection Improvements	607502	Pioneer Valley	Northampton	NORTHAMPTON- INTERSECTION IMPROVEMENTS AT KING STREET, NORTH STREET & SUMMER STREET AND AT KING STREET & FINN STREET	2	STP	\$ 2,655,054	\$ 2,124,043	\$ 531,011	Construction / (YOE \$3,655,054 STP, CMAQ) / 65 TEC / 25% STP, CMAQ
	Intersection Improvements	607502	Pioneer Valley	Northampton	NORTHAMPTON- INTERSECTION IMPROVEMENTS AT KING STREET, NORTH STREET & SUMMER STREET AND AT KING STREET & FINN STREET	2	CMAQ	\$ 1,000,000	\$ 800,000	\$ 200,000	Construction / (YOE \$3,655,054 STP, CMAQ) / 65 TEC / 25% STP, CMAQ
	Roadway Reconstruction	608577	Pioneer Valley	Easthampton	EASTHAMPTON- IMPROVEMENTS AND RELATED WORK ON UNION STREET (ROUTE 141) FROM PAYSON AVENUE TO HIGH STREET (0.36 MILES)	2	STP	\$ 2,201,643	\$ 1,761,314	\$ 440,329	Construction / (YOE \$2,201,643 STP) / 62 TEC / Pre 25% STP
	Roadway Reconstruction	605032	Pioneer Valley	Hadley	HADLEY- RECONSTRUCTION ON ROUTE 9, FROM MIDDLE STREET TO MAPLE/SOUTH MAPLE STREET	2	STP	\$ 12,652,410	\$ 10,121,928	\$ 2,530,482	Construction / (YOE \$25,805,364) Year 1 FFY 2021 A/C \$12,652,410, Year 2 FFY 2022 A/C \$13,152,954 STP / 50 TEC / 25%
Regionally Prioritized Projects subtotal ►								\$ 26,303,991	\$ 21,143,193	\$ 5,160,798	◀ 80% Federal + 20% Non-Federal

► Section 1A / Fiscal Constraint Analysis

Total Regional Federal Aid Funds Programmed ►		\$ 26,303,991	\$ 26,303,990	◀ Total Budget	\$ (1) Funds Over Programmed
STP programmed ►		\$ 21,859,991	\$ 17,487,993	◀ STP	
HSIP programmed ►		\$ 1,000,000	\$ 900,000	◀ HSIP	
CMAQ programmed ►		\$ 2,944,000	\$ 2,355,200	◀ CMAQ	
TAP programmed ►		\$ 500,000	\$ 400,000	◀ TAP	

Section 1A Instructions: MPO Template Name) Choose Regional Name from dropdown list to populate header and MPO column; **Column C)** Enter ID from ProjectInfo; **Column E)** Choose Municipality Name from dropdown list; **Column H)** Choose the Funding Source being used for the project - if multiple funding sources are being used enter multiple lines; **Column I)** Enter the total amount of funds being programmed in this fiscal year and for each funding source; **Column J)** Federal funds autocalculates. Please verify the amount and only change if needed for flex. **Column K)** Non-federal funds autocalculates. Please verify the split/match - if matching an FTA flex.

Table 12: Federally Funded Projects Year 2021 (Continued)

► Section 1B / Earmark or Discretionary Grant Funded Projects											
► Other Federal Aid											
			Pioneer Valley		Other Federal Aid		HPP	\$ -	\$ -	\$ -	
			Pioneer Valley		Other Federal Aid		HPP	\$ -	\$ -	\$ -	
Other Federal Aid subtotal ►								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source
► Section 2A / State Prioritized Reliability Projects											
► Bridge Program / Inspections											
	Bridge Program		Pioneer Valley		Bridge Inspection			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Inspection			\$ -	\$ -	\$ -	
Bridge Program / Inspections subtotal ►								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source
► Bridge Program / Off-System											
	Bridge Program		Pioneer Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	
Bridge Program / Off-System subtotal ►								\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal
► Bridge Program / On-System (NHS)											
	Bridge Program	608460	Pioneer Valley		HADLEY- BRIDGE REPLACEMENT, H-01-005, BAY ROAD (ROUTE 47) OVER THE FORT RIVER	2	NHPP-On	\$ 5,647,995	\$ 4,518,396	\$ 1,129,599	
	Bridge Program	606552	Pioneer Valley		NORTHAMPTON- BRIDGE RECONSTRUCTION, N-19-059, I-91 OVER US 5/BMRR & N-19-060, I-91 OVER HOCKANUM ROAD	2	NHPP-On	\$ 11,378,353	\$ 9,102,682	\$ 2,275,671	AC Year 2 of 5, Total Cost \$56,891,767
	Bridge Program		Pioneer Valley		Bridge Program / On-System (NHS)			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / On-System (NHS)			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / On-System (NHS)			\$ -	\$ -	\$ -	
Bridge Program / On-System (NHS) subtotal ►								\$ 17,026,348	\$ 13,621,078	\$ 3,405,270	◀ Funding Split Varies by Funding Source
► Bridge Program / On-System (Non-NHS)											
	Bridge Program		Pioneer Valley		Bridge Program / On-System (Non-NHS)			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / On-System (Non-NHS)			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / On-System (Non-NHS)			\$ -	\$ -	\$ -	
Bridge Program / On-System (Non-NHS) subtotal ►								\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal
► Bridge Program / Systematic Maintenance											
	Bridge Program		Pioneer Valley		Bridge Program / Systematic Maintenance			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / Systematic Maintenance			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / Systematic Maintenance			\$ -	\$ -	\$ -	
Bridge Program / Systematic Maintenance subtotal ►								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source

Table 12: Federally Funded Projects Year 2021 (Continued)

► Interstate Pavement											
	Interstate Pavement		Pioneer Valley		Interstate Pavement			\$ -	\$ -	\$ -	
	Interstate Pavement		Pioneer Valley		Interstate Pavement			\$ -	\$ -	\$ -	
	Interstate Pavement		Pioneer Valley		Interstate Pavement			\$ -	\$ -	\$ -	
	Interstate Pavement		Pioneer Valley		Interstate Pavement			\$ -	\$ -	\$ -	
	Interstate Pavement		Pioneer Valley		Interstate Pavement			\$ -	\$ -	\$ -	
Interstate Pavement subtotal ►								\$ -	\$ -	\$ -	◀ 90% Federal + 10% Non-Federal
► Non-Interstate Pavement											
	Non-Interstate Pavement	608487	Pioneer Valley	Westfield	WESTFIELD- RESURFACING AND RELATED WORK ON RTE 10 AND 202	2	NHPP	\$ 2,676,240	\$ 2,140,992	\$ 535,248	
	Non-Interstate Pavement	608489	Pioneer Valley	Wilbraham	WILBRAHAM- RESURFACING AND RELATED WORK ON ROUTE 20	2	NHPP	\$ 8,602,200	\$ 6,881,760	\$ 1,720,440	
	Non-Interstate Pavement		Pioneer Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
	Non-Interstate Pavement		Pioneer Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
	Non-Interstate Pavement		Pioneer Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
	Non-Interstate Pavement		Pioneer Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
	Non-Interstate Pavement		Pioneer Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
	Non-Interstate Pavement		Pioneer Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
	Non-Interstate Pavement		Pioneer Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
Non-Interstate Pavement subtotal ►								\$ 11,278,440	\$ 9,022,752	\$ 2,255,688	◀ 80% Federal + 20% Non-Federal
► Roadway Improvements											
	Roadway Improvements		Pioneer Valley		Roadway Improvements			\$ -	\$ -	\$ -	
	Roadway Improvements		Pioneer Valley		Roadway Improvements			\$ -	\$ -	\$ -	
	Roadway Improvements		Pioneer Valley		Roadway Improvements			\$ -	\$ -	\$ -	
Roadway Improvements subtotal ►								\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal
► Safety Improvements											
	Safety Improvements		Pioneer Valley		Safety Improvements			\$ -	\$ -	\$ -	
	Safety Improvements		Pioneer Valley		Safety Improvements			\$ -	\$ -	\$ -	
	Safety Improvements		Pioneer Valley		Safety Improvements			\$ -	\$ -	\$ -	
	Safety Improvements		Pioneer Valley		Safety Improvements			\$ -	\$ -	\$ -	
	Safety Improvements		Pioneer Valley		Safety Improvements			\$ -	\$ -	\$ -	
	Safety Improvements		Pioneer Valley		Safety Improvements			\$ -	\$ -	\$ -	
Safety Improvements subtotal ►								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source

Table 12: Federally Funded Projects Year 2021 (Continued)

▶ Section 2B / State Prioritized Modernization Projects												
▶ ADA Retrofits												
	ADA Retrofits		Pioneer Valley		ADA Retrofits			\$ -	\$ -	\$ -		
	ADA Retrofits		Pioneer Valley		ADA Retrofits			\$ -	\$ -	\$ -		
								ADA Retrofits subtotal ▶	\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal
▶ Intersection Improvements												
	Intersection Improvements	606450	Pioneer Valley	Holyoke	HOLYOKE- TRAFFIC SIGNAL UPGRADES AT 15 INTERSECTIONS ALONG HIGH & MAPLE STREETS	2	CMAQ	\$ 4,450,000	\$ 3,560,000	\$ 890,000		
	Intersection Improvements		Pioneer Valley		Intersection Improvements			\$ -	\$ -	\$ -		
	Intersection Improvements		Pioneer Valley		Intersection Improvements			\$ -	\$ -	\$ -		
	Intersection Improvements		Pioneer Valley		Intersection Improvements			\$ -	\$ -	\$ -		
	Intersection Improvements		Pioneer Valley		Intersection Improvements			\$ -	\$ -	\$ -		
	Intersection Improvements		Pioneer Valley		Intersection Improvements			\$ -	\$ -	\$ -		
								Intersection Improvements subtotal ▶	\$ 4,450,000	\$ 3,560,000	\$ 890,000	◀ Funding Split Varies by Funding Source
▶ Intelligent Transportation Systems												
	Intelligent Transportation Systems		Pioneer Valley		Intelligent Transportation Systems			\$ -	\$ -	\$ -		
	Intelligent Transportation Systems		Pioneer Valley		Intelligent Transportation Systems			\$ -	\$ -	\$ -		
	Intelligent Transportation Systems		Pioneer Valley		Intelligent Transportation Systems			\$ -	\$ -	\$ -		
								Intelligent Transportation System subtotal ▶	\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal
▶ Roadway Reconstruction												
	Roadway Reconstruction		Pioneer Valley		Roadway Reconstruction			\$ -	\$ -	\$ -		
	Roadway Reconstruction		Pioneer Valley		Roadway Reconstruction			\$ -	\$ -	\$ -		
	Roadway Reconstruction		Pioneer Valley		Roadway Reconstruction			\$ -	\$ -	\$ -		
	Roadway Reconstruction		Pioneer Valley		Roadway Reconstruction			\$ -	\$ -	\$ -		
								Roadway Reconstruction subtotal ▶	\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source
▶ Section 2C / State Prioritized Expansion Projects												
▶ Bicycles and Pedestrians												
	Bicycles and Pedestrians	608157	Pioneer Valley	Springfield	SPRINGFIELD- MCKNIGHT COMMUNITY TRAIL CONSTRUCTION, FROM ARMORY STREET TO HAYDEN AVENUE (1.5 MILES)	2	CMAQ	\$ 3,694,624	\$ 2,955,699	\$ 738,925		
	Bicycles and Pedestrians		Pioneer Valley		Bicycles and Pedestrians			\$ -	\$ -	\$ -		
	Bicycles and Pedestrians		Pioneer Valley		Bicycles and Pedestrians			\$ -	\$ -	\$ -		
								Bicycles and Pedestrians subtotal ▶	\$ 3,694,624	\$ 2,955,699	\$ 738,925	◀ 80% Federal + 20% Non-Federal

Table 12: Federally Funded Projects Year 2021 (Continued)

► Capacity										
Capacity		Pioneer Valley		Capacity			\$ -	\$ -	\$ -	
Capacity		Pioneer Valley		Capacity			\$ -	\$ -	\$ -	
Capacity subtotal ►							\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source
► Section 3 / Planning / Adjustments / Pass-throughs										
► Planning / Adjustments / Pass-throughs										
		Pioneer Valley		ABP GANS Repayment	Multiple		\$ -	\$ -	\$ -	
		Pioneer Valley		ABP GANS Repayment	Multiple		\$ -	\$ -	\$ -	
		Pioneer Valley		Award adjustments, change orders, etc.	Multiple		\$ -	\$ -	\$ -	
		Pioneer Valley		Award adjustments, change orders, etc.	Multiple		\$ -	\$ -	\$ -	
		Pioneer Valley		Award adjustments, change orders, etc.	Multiple		\$ -	\$ -	\$ -	
		Pioneer Valley		Award adjustments, change orders, etc.	Multiple		\$ -	\$ -	\$ -	
		Pioneer Valley		Metropolitan Planning	Multiple		\$ -	\$ -	\$ -	
		Pioneer Valley		Metropolitan Planning	Multiple		\$ -	\$ -	\$ -	
		Pioneer Valley		State Planning and Research Work Program I, (SPR I), Planning	Multiple		\$ -	\$ -	\$ -	
		Pioneer Valley		State Planning and Research Work Program II, (SPR II), Research	Multiple		\$ -	\$ -	\$ -	
		Pioneer Valley		Railroad Crossings	Multiple		\$ -	\$ -	\$ -	
		Pioneer Valley		Railroad Crossings	Multiple		\$ -	\$ -	\$ -	
		Pioneer Valley		Recreational Trails	Multiple		\$ -	\$ -	\$ -	
Other Statewide Items subtotal ►							\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source
► Section 4 / Non-Federally Aided Projects										
► Non-Federally Aided Projects										
Non Federal Aid		Pioneer Valley		Non-Federal Aid			\$ -	\$ -	\$ -	
Non-Federally Aided Projects		Pioneer Valley		Non-Federal Aid			\$ -	\$ -	\$ -	
Non-Federal Aid subtotal ►							\$ -	\$ -	\$ -	◀ 100% Non-Federal
2021 Summary							TIP Section 1 - TIP Section 4: Total of All Projects ▼			
Total ►							\$ 62,753,403	\$ -	\$ 62,753,403	◀ Total Spending in Region
Federal Funds ►							\$ 50,302,722	\$ -	\$ 50,302,722	◀ Total Federal Spending in Region
Non-Federal Funds ►							\$ 12,450,681	\$ -	\$ 12,450,681	◀ Total Non-Federal Spending in Region

701 CMR 7.00 Use of Road Flaggers and Police Details 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.

Table 13: Federally Funded Projects Year 2022

Amendment / Adjustment Type ▼	STIP Program ▼	MassDOT Project ID ▼	Metropolitan Planning Organization ▼	Municipality Name ▼	MassDOT Project Description ▼	MassDOT District ▼	Funding Source ▼	Total Programmed Funds ▼	Federal Funds ▼	Non-Federal Funds ▼	Additional Information ▼ <i>Present information as follows, if applicable: a) Planning / Design / or Construction; b) total project cost and funding sources used; c) advance construction</i>
► Section 1A / Regionally Prioritized Projects											
► Regionally Prioritized Projects											
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	STP	\$ 7,390,199	\$ 5,912,159	\$ 1,478,040	Construction / (YOE \$19,797,253 Year 1 FFY 2022 A/C \$7,390,199 Year 2 A/C FFY2023 \$12,407,054 / 66.5 TEC 25% STP
Intersection Improvements		606895	Pioneer Valley	Granby	GRANBY- IMPROVEMENTS @ 2 LOCATIONS ON ROUTE 202: SCHOOL STREET & FIVE CORNERS	2	STP	\$ 1,866,866	\$ 1,493,493	\$ 373,373	Construction / (YOE \$2,866,866) STP) / 42 TEC / 25% STP, HSIP
Intersection Improvements		606895	Pioneer Valley	Granby	GRANBY- IMPROVEMENTS @ 2 LOCATIONS ON ROUTE 202: SCHOOL STREET & FIVE CORNERS	2	HSIP	\$ 1,000,000	\$ 900,000	\$ 100,000	Construction / (YOE \$2,866,866) STP) / 42 TEC / 25% STP, HSIP
Intersection Improvements		606156	Pioneer Valley	Holyoke	HOLYOKE- RECONSTRUCTION OF I-91 INTERCHANGE 17 & ROUTE 141	2	STP	\$ 3,429,583	\$ 2,743,666	\$ 685,917	Construction / (YOE \$3,429,583 STP) / 47 TEC / Pre 25%
Roadway Reconstruction		605032	Pioneer Valley	Hadley	HADLEY- RECONSTRUCTION ON ROUTE 9, FROM MIDDLE STREET TO MAPLE/SOUTH MAPLE STREET	2	STP	\$ 10,652,954	\$ 8,522,363	\$ 2,130,591	Construction / (YOE \$25,805,364) Year 1 FFY 2021 A/C \$12,652,410, Year 2 FFY 2022 A/C \$13,152,954 STP / 50 TEC / 25% STP, CMAQ, TAP
Roadway Reconstruction		605032	Pioneer Valley	Hadley	HADLEY- RECONSTRUCTION ON ROUTE 9, FROM MIDDLE STREET TO MAPLE/SOUTH MAPLE STREET	2	TAP	\$ 500,000	\$ 400,000	\$ 100,000	Construction / (YOE \$25,805,364) Year 1 FFY 2021 A/C \$12,652,410, Year 2 FFY 2022 A/C \$13,152,954 STP / 50 TEC / 25% STP, CMAQ, TAP
Roadway Reconstruction		605032	Pioneer Valley	Hadley	HADLEY- RECONSTRUCTION ON ROUTE 9, FROM MIDDLE STREET TO MAPLE/SOUTH MAPLE STREET	2	CMAQ	\$ 2,000,000	\$ 1,600,000	\$ 400,000	Construction / (YOE \$25,805,364) Year 1 FFY 2021 A/C \$12,652,410, Year 2 FFY 2022 A/C \$13,152,954 STP / 50 TEC / 25% STP, CMAQ, TAP
			Pioneer Valley					\$ -	\$ -	\$ -	
Regionally Prioritized Projects subtotal ►								\$ 26,839,602	\$ 21,571,682	\$ 5,267,920	◀ 80% Federal + 20% Non-Federal

► Section 1A / Fiscal Constraint Analysis											
Total Regional Federal Aid Funds Programmed ►								\$ 26,839,602	\$ 26,839,603	◀ Total Budget	\$ 1 Target Funds Available
STP programmed ►								\$ 23,339,602	\$ 18,671,682	◀ STP	
HSIP programmed ►								\$ 1,000,000	\$ 900,000	◀ HSIP	
CMAQ programmed ►								\$ 2,000,000	\$ 1,600,000	◀ CMAQ	
TAP programmed ►								\$ 500,000	\$ 400,000	◀ TAP	

Section 1A Instructions: MPO Template Name) Choose Regional Name from dropdown list to populate header and MPO column; Column C) Enter ID from ProjectInfo; Column E) Choose Municipality Name from dropdown list; Column H) Choose the Funding Source being used for the project - if multiple funding sources are being used enter multiple lines; Column I) Enter the total amount of funds being programmed in this fiscal year and for each funding source; Column J) Federal funds autocalculates. Please verify the amount and only change if needed for flex. Column K) Non-federal funds autocalculates. Please verify the split/match - if matching an FTA flex.

Table 13: Federally Funded Projects Year 2022 (Continued)

► Section 1B / Earmark or Discretionary Grant Funded Projects											
► Other Federal Aid											
			Pioneer Valley		Other Federal Aid		HPP	\$ -	\$ -	\$ -	
			Pioneer Valley		Other Federal Aid		HPP	\$ -	\$ -	\$ -	
Other Federal Aid subtotal ►								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source
► Section 2A / State Prioritized Reliability Projects											
► Bridge Program / Inspections											
	Bridge Program		Pioneer Valley		Bridge Inspection			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Inspection			\$ -	\$ -	\$ -	
Bridge Program / Inspections subtotal ►								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source
► Bridge Program / Off-System											
	Bridge Program	608846	Pioneer Valley		MONSON- BRIDGE REPLACEMENT, M-27-015, OLD WALES ROAD OVER CONANT BROOK	2	STP-BR-OFF	\$ 1,742,784	\$ 1,394,227	\$ 348,557	
	Bridge Program		Pioneer Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	
Bridge Program / Off-System subtotal ►								\$ 1,742,784	\$ 1,394,227	\$ 348,557	◀ 80% Federal + 20% Non-Federal
► Bridge Program / On-System (NHS)											
	Bridge Program	606552	Pioneer Valley		NORTHAMPTON- BRIDGE RECONSTRUCTION, N-19-059, I-91 OVER US 5/BMRR & N-19-060, I-91 OVER HOCKANUM ROAD	1	NHPP-On	\$ 11,378,353	\$ 9,102,682	\$ 2,275,671	AC Year 3 of 5, Total Cost \$56,891,767
	Bridge Program		Pioneer Valley		Bridge Program / On-System (NHS)			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / On-System (NHS)			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / On-System (NHS)			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / On-System (NHS)			\$ -	\$ -	\$ -	
Bridge Program / On-System (NHS) subtotal ►								\$ 11,378,353	\$ 9,102,682	\$ 2,275,671	◀ Funding Split Varies by Funding Source
► Bridge Program / On-System (Non-NHS)											
	Bridge Program		Pioneer Valley		Bridge Program / On-System (Non-NHS)			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / On-System (Non-NHS)			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / On-System (Non-NHS)			\$ -	\$ -	\$ -	
Bridge Program / On-System (Non-NHS) subtotal ►								\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal
► Bridge Program / Systematic Maintenance											
	Bridge Program		Pioneer Valley		Bridge Program / Systematic Maintenance			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / Systematic Maintenance			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / Systematic Maintenance			\$ -	\$ -	\$ -	
Bridge Program / Systematic Maintenance subtotal ►								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source

Table 13: Federally Funded Projects Year 2022 (Continued)

► Interstate Pavement											
	Interstate Pavement		Pioneer Valley		Interstate Pavement			\$ -	\$ -	\$ -	
	Interstate Pavement		Pioneer Valley		Interstate Pavement			\$ -	\$ -	\$ -	
	Interstate Pavement		Pioneer Valley		Interstate Pavement			\$ -	\$ -	\$ -	
	Interstate Pavement		Pioneer Valley		Interstate Pavement			\$ -	\$ -	\$ -	
	Interstate Pavement		Pioneer Valley		Interstate Pavement			\$ -	\$ -	\$ -	
Interstate Pavement subtotal ►								\$ -	\$ -	\$ -	◀ 90% Federal + 10% Non-Federal
► Non-Interstate Pavement											
	Non-Interstate Pavement	608466	Pioneer Valley	Multiple	BELCHERTOWN- GRANBY- RESURFACING AND RELATED WORK ON ROUTE 202	2	NHPP	\$ 4,163,040	\$ 3,330,432	\$ 832,608	
	Non-Interstate Pavement		Pioneer Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
	Non-Interstate Pavement		Pioneer Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
	Non-Interstate Pavement		Pioneer Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
	Non-Interstate Pavement		Pioneer Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
	Non-Interstate Pavement		Pioneer Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
	Non-Interstate Pavement		Pioneer Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
	Non-Interstate Pavement		Pioneer Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
Non-Interstate Pavement subtotal ►								\$ 4,163,040	\$ 3,330,432	\$ 832,608	◀ 80% Federal + 20% Non-Federal
► Roadway Improvements											
	Roadway Improvements		Pioneer Valley		Roadway Improvements			\$ -	\$ -	\$ -	
	Roadway Improvements		Pioneer Valley		Roadway Improvements			\$ -	\$ -	\$ -	
	Roadway Improvements		Pioneer Valley		Roadway Improvements			\$ -	\$ -	\$ -	
Roadway Improvements subtotal ►								\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal
► Safety Improvements											
	Safety Improvements		Pioneer Valley		Safety Improvements			\$ -	\$ -	\$ -	
	Safety Improvements		Pioneer Valley		Safety Improvements			\$ -	\$ -	\$ -	
	Safety Improvements		Pioneer Valley		Safety Improvements			\$ -	\$ -	\$ -	
	Safety Improvements		Pioneer Valley		Safety Improvements			\$ -	\$ -	\$ -	
	Safety Improvements		Pioneer Valley		Safety Improvements			\$ -	\$ -	\$ -	
	Safety Improvements		Pioneer Valley		Safety Improvements			\$ -	\$ -	\$ -	
Safety Improvements subtotal ►								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source

Table 13: Federally Funded Projects Year 2022 (Continued)

► Section 2B / State Prioritized Modernization Projects											
► ADA Retrofits											
	ADA Retrofits		Pioneer Valley		ADA Retrofits			\$ -	\$ -	\$ -	
	ADA Retrofits		Pioneer Valley		ADA Retrofits			\$ -	\$ -	\$ -	
								ADA Retrofits subtotal ►		\$ -	◀ 80% Federal + 20% Non-Federal
► Intersection Improvements											
	Intersection Improvements	608560	Pioneer Valley	Springfield	SPRINGFIELD- IMPROVEMENTS ON ST JAMES AVENUE AT TAPLEY STREET	2	HSIP	\$ 2,688,000	\$ 2,419,200	\$ 268,800	
	Intersection Improvements	608565	Pioneer Valley	Springfield	SPRINGFIELD- IMPROVEMENTS ON ST JAMES AVENUE AT ST JAMES BOULEVARD AND CAREW STREET AT TAPLEY STREET	2	HSIP	\$ 2,784,000	\$ 2,505,600	\$ 278,400	
	Intersection Improvements		Pioneer Valley		Intersection Improvements			\$ -	\$ -	\$ -	
	Intersection Improvements		Pioneer Valley		Intersection Improvements			\$ -	\$ -	\$ -	
	Intersection Improvements		Pioneer Valley		Intersection Improvements			\$ -	\$ -	\$ -	
	Intersection Improvements		Pioneer Valley		Intersection Improvements			\$ -	\$ -	\$ -	
								Intersection Improvements subtotal ►		\$ 5,472,000	◀ Funding Split Varies by Funding Source
► Intelligent Transportation Systems											
	Intelligent Transportation Systems		Pioneer Valley		Intelligent Transportation Systems			\$ -	\$ -	\$ -	
	Intelligent Transportation Systems		Pioneer Valley		Intelligent Transportation Systems			\$ -	\$ -	\$ -	
	Intelligent Transportation Systems		Pioneer Valley		Intelligent Transportation Systems			\$ -	\$ -	\$ -	
								Intelligent Transportation System subtotal ►		\$ -	◀ 80% Federal + 20% Non-Federal
► Roadway Reconstruction											
	Roadway Reconstruction		Pioneer Valley		Roadway Reconstruction			\$ -	\$ -	\$ -	
	Roadway Reconstruction		Pioneer Valley		Roadway Reconstruction			\$ -	\$ -	\$ -	
	Roadway Reconstruction		Pioneer Valley		Roadway Reconstruction			\$ -	\$ -	\$ -	
	Roadway Reconstruction		Pioneer Valley		Roadway Reconstruction			\$ -	\$ -	\$ -	
								Roadway Reconstruction subtotal ►		\$ -	◀ Funding Split Varies by Funding Source

Table 13: Federally Funded Projects Year 2022 (Continued)

► Section 2C / State Prioritized Expansion Projects											
► Bicycles and Pedestrians											
	Bicycles and Pedestrians	602912	Pioneer Valley	Chicopee	CHICOPEE- CHICOPEE RIVER RIVERWALK MULTI-USE PATH CONSTRUCTION, FROM GRAPE STREET TO FRONT STREET (NEAR ELLERTON STREET) (1 MILE)	2	CMAQ	\$ 2,273,911	\$ 1,819,129	\$ 454,782	
	Bicycles and Pedestrians		Pioneer Valley		Bicycles and Pedestrians			\$ -	\$ -	\$ -	
	Bicycles and Pedestrians		Pioneer Valley		Bicycles and Pedestrians			\$ -	\$ -	\$ -	
Bicycles and Pedestrians subtotal ►								\$ 2,273,911	\$ 1,819,129	\$ 454,782	◀ 80% Federal + 20% Non-Federal
► Capacity											
	Capacity		Pioneer Valley		Capacity			\$ -	\$ -	\$ -	
	Capacity		Pioneer Valley		Capacity			\$ -	\$ -	\$ -	
Capacity subtotal ►								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source
► Section 3 / Planning / Adjustments / Pass-throughs											
► Planning / Adjustments / Pass-throughs											
			Pioneer Valley		ABP GANS Repayment	Multiple		\$ -	\$ -	\$ -	
			Pioneer Valley		ABP GANS Repayment	Multiple		\$ -	\$ -	\$ -	
			Pioneer Valley		Award adjustments, change orders, etc.	Multiple		\$ -	\$ -	\$ -	
			Pioneer Valley		Award adjustments, change orders, etc.	Multiple		\$ -	\$ -	\$ -	
			Pioneer Valley		Award adjustments, change orders, etc.	Multiple		\$ -	\$ -	\$ -	
			Pioneer Valley		Award adjustments, change orders, etc.	Multiple		\$ -	\$ -	\$ -	
			Pioneer Valley		Metropolitan Planning	Multiple		\$ -	\$ -	\$ -	
			Pioneer Valley		Metropolitan Planning	Multiple		\$ -	\$ -	\$ -	
			Pioneer Valley		State Planning and Research Work Program I, (SPR I), Planning	Multiple		\$ -	\$ -	\$ -	
			Pioneer Valley		State Planning and Research Work Program II, (SPR II), Research	Multiple		\$ -	\$ -	\$ -	
			Pioneer Valley		Railroad Crossings	Multiple		\$ -	\$ -	\$ -	
			Pioneer Valley		Railroad Crossings	Multiple		\$ -	\$ -	\$ -	
			Pioneer Valley		Recreational Trails	Multiple		\$ -	\$ -	\$ -	
Other Statewide Items subtotal ►								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source
► Section 4 / Non-Federally Aided Projects											
► Non-Federally Aided Projects											
	Non Federal Aid		Pioneer Valley		Non-Federal Aid			\$ -	\$ -	\$ -	
	Non-Federally Aided Projects		Pioneer Valley		Non-Federal Aid			\$ -	\$ -	\$ -	
Non-Federal Aid subtotal ►								\$ -	\$ -	\$ -	◀ 100% Non-Federal
2022 Summary								TIP Section 1 - TIP Section 4: Total of All Projects ▼			
Total ►								\$ 51,869,690	\$ -	\$ 51,869,690	◀ Total Spending in Region
Federal Funds ►								\$ 42,142,952	\$ -	\$ 42,142,952	◀ Total Federal Spending in Region
Non-Federal Funds ►								\$ 9,726,738	\$ -	\$ 9,726,738	◀ Total Non-Federal Spending in Region

701 CMR 7.00 Use of Road Flaggers and Police Details 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.

Table 14: Federally Funded Projects Year 2023

Amendment / Adjustment Type ▼	STIP Program ▼	MassDOT Project ID ▼	Metropolitan Planning Organization ▼	Municipality Name ▼	MassDOT Project Description ▼	MassDOT District ▼	Funding Source ▼	Total Programmed Funds ▼	Federal Funds ▼	Non-Federal Funds ▼	Additional Information ▼ <i>Present information as follows, if applicable: a) Planning / Design / or Construction; b) total project cost and funding sources used; c) advance construction</i>
► Section 1A / Regionally Prioritized Projects											
► Regionally Prioritized Projects											
	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	STP	\$ 8,907,054	\$ 7,125,643	\$ 1,781,411	Construction / (YOE \$19,797,253 Year 1 FFY 2022 A/C \$7,390,199 Year 2 A/C FFY2023 \$12,407,054 / 66.5 TEC 25% STP, CMAQ, TAP, HSIP
	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	CMAQ	\$ 2,000,000	\$ 1,600,000	\$ 400,000	Construction / (YOE \$24,552,371 Year 1 FFY 2022 A/C \$7,390,199 Year 2 A/C FFY2023 \$17,162,172 / 66.5 TEC 25% STP, CMAQ, TAP, HSIP
	Roadway Reconstruction	608374	Pioneer Valley	West Springfield	WEST SPRINGFIELD- RECONSTRUCTION OF MEMORIAL AVENUE (ROUTE 147), FROM COLONY ROAD TO THE MEMORIAL AVENUE ROTARY (1.4 MILES)	2	TAP	\$ 500,000	\$ 400,000	\$ 100,000	Construction / (YOE \$24,552,371 Year 1 FFY 2022 A/C \$7,390,199 Year 2 A/C FFY2023 \$17,162,172 / 66.5 TEC 25% STP, CMAQ, TAP, HSIP
	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	HSIP	\$ 1,000,000	\$ 900,000	\$ 100,000	Construction / (YOE \$24,552,371 Year 1 FFY 2022 A/C \$7,390,199 Year 2 A/C FFY2023 \$17,162,172 / 66.5 TEC 25% STP, CMAQ, TAP, HSIP
	Roadway Reconstruction	PV0002	Pioneer Valley	Worthington	WORTHINGTON- RECONSTRUCTION & RELATED WORK ON ROUTE 143 (PHASE II)	1	STP	\$ 8,584,000	\$ 6,867,200	\$ 1,716,800	Construction / (YOE \$8,584,000) STP / 41.5 TEC / 75% Project Phase I funded in FFY 2019 Total
	Roadway Reconstruction	608881	Pioneer Valley	Longmeadow	RESURFACING AND INTERSECTION IMPROVEMENTS ON LONGMEADOW STREET (ROUTE 5) AND CONVERSE STREET (0.84 MILES)	2	STP	\$ 6,064,675	\$ 4,851,740	\$ 1,212,935	Construction (YOE \$6,064,675 / 54.5 TEC / Pre 25%
			Pioneer Valley					\$ -	\$ -	\$ -	
Regionally Prioritized Projects subtotal ►								\$ 27,055,729	\$ 21,744,583	\$ 5,311,146	◀ 80% Federal + 20% Non-Federal
► Section 1A / Fiscal Constraint Analysis											
Total Regional Federal Aid Funds Programmed ►								\$ 27,055,729	\$ 27,425,802	◀ Total Budget	\$ 370,073 Target Funds Available
STP programmed ►								\$ 23,555,729	\$ 18,844,583	◀ STP	
HSIP programmed ►								\$ 1,000,000	\$ 900,000	◀ HSIP	
CMAQ programmed ►								\$ 2,000,000	\$ 1,600,000	◀ CMAQ	
TAP programmed ►								\$ 500,000	\$ 400,000	◀ TAP	

Section 1A Instructions: MPO Template Name) Choose Regional Name from dropdown list to populate header and MPO column; Column C) Enter ID from ProjectInfo; Column E) Choose Municipality Name from dropdown list; Column H) Choose the Funding Source being used for the project - if multiple funding sources are being used enter multiple lines; Column I) Enter the total amount of funds being programmed in this fiscal year and for each funding source; Column J) Federal funds autocalculates. Please verify the amount and only change if needed for flex. Column K) Non-federal funds autocalculates. Please verify the split/match - if matching an FTA flex.

Table 14: Federally Funded Projects Year 2023 (Continued)

► Section 1B / Earmark or Discretionary Grant Funded Projects											
► Other Federal Aid											
			Pioneer Valley		Other Federal Aid		HPP	\$ -	\$ -	\$ -	
			Pioneer Valley		Other Federal Aid		HPP	\$ -	\$ -	\$ -	
Other Federal Aid subtotal ►								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source
► Section 2A / State Prioritized Reliability Projects											
► Bridge Program / Inspections											
	Bridge Program		Pioneer Valley		Bridge Inspection			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Inspection			\$ -	\$ -	\$ -	
Bridge Program / Inspections subtotal ►								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source
► Bridge Program / Off-System											
	Bridge Program	TBA	Pioneer Valley	Ludlow	LUDLOW- BRIDGE REPLACEMENT, L-16-026, PINEY LANE OVER BROAD BROOK	2	STP-BR-OFF	\$ 598,560	\$ 478,848	\$ 119,712	
	Bridge Program		Pioneer Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / Off-System			\$ -	\$ -	\$ -	
Bridge Program / Off-System subtotal ►								\$ 598,560	\$ 478,848	\$ 119,712	◀ 80% Federal + 20% Non-Federal
► Bridge Program / On-System (NHS)											
	Bridge Program	608848	Pioneer Valley	Springfield	SPRINGFIELD- BRIDGE REPLACEMENT, S-24-016, ARMORY STREET OVER CSX MAINLINE	2	NHPP-On	\$ 5,723,440	\$ 4,578,752	\$ 1,144,688	
	Bridge Program	608853	Pioneer Valley	Springfield	SPRINGFIELD- BRIDGE REPLACEMENT, S-24-026, ARMORY STREET OVER CSX	2	NHPP-On	\$ 3,948,640	\$ 3,158,912	\$ 789,728	
	Bridge Program	606552	Pioneer Valley	Northampton	NORTHAMPTON- BRIDGE RECONSTRUCTION, N-19-059, I-91 OVER US 5/BMRR & N-19-060, I-91 OVER HOCKANUM ROAD	2	NHPP-On	\$ 11,378,353	\$ 9,102,682	\$ 2,275,671	AC Year 4 of 5, Total Cost \$56,891,767
	Bridge Program		Pioneer Valley		Bridge Program / On-System (NHS)			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / On-System (NHS)			\$ -	\$ -	\$ -	
Bridge Program / On-System (NHS) subtotal ►								\$ 21,050,433	\$ 16,840,346	\$ 4,210,087	◀ Funding Split Varies by Funding Source
► Bridge Program / On-System (Non-NHS)											
	Bridge Program		Pioneer Valley		Bridge Program / On-System (Non-NHS)			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / On-System (Non-NHS)			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / On-System (Non-NHS)			\$ -	\$ -	\$ -	
Bridge Program / On-System (Non-NHS) subtotal ►								\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal
► Bridge Program / Systematic Maintenance											
	Bridge Program		Pioneer Valley		Bridge Program / Systematic Maintenance			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / Systematic Maintenance			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Program / Systematic Maintenance			\$ -	\$ -	\$ -	
Bridge Program / Systematic Maintenance subtotal ►								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source

Table 14: Federally Funded Projects Year 2023 (Continued)

► Interstate Pavement										
Interstate Pavement		Pioneer Valley		Interstate Pavement			\$ -	\$ -	\$ -	
Interstate Pavement		Pioneer Valley		Interstate Pavement			\$ -	\$ -	\$ -	
Interstate Pavement		Pioneer Valley		Interstate Pavement			\$ -	\$ -	\$ -	
Interstate Pavement		Pioneer Valley		Interstate Pavement			\$ -	\$ -	\$ -	
Interstate Pavement		Pioneer Valley		Interstate Pavement			\$ -	\$ -	\$ -	
Interstate Pavement subtotal ►							\$ -	\$ -	\$ -	◀ 90% Federal + 10% Non-Federal
► Non-Interstate Pavement										
Non-Interstate Pavement		Pioneer Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
Non-Interstate Pavement		Pioneer Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
Non-Interstate Pavement		Pioneer Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
Non-Interstate Pavement		Pioneer Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
Non-Interstate Pavement		Pioneer Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
Non-Interstate Pavement		Pioneer Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
Non-Interstate Pavement		Pioneer Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
Non-Interstate Pavement		Pioneer Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
Non-Interstate Pavement		Pioneer Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -	
Non-Interstate Pavement subtotal ►							\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal
► Roadway Improvements										
Roadway Improvements		Pioneer Valley		Roadway Improvements			\$ -	\$ -	\$ -	
Roadway Improvements		Pioneer Valley		Roadway Improvements			\$ -	\$ -	\$ -	
Roadway Improvements		Pioneer Valley		Roadway Improvements			\$ -	\$ -	\$ -	
Roadway Improvements subtotal ►							\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal
► Safety Improvements										
Safety Improvements		Pioneer Valley		Safety Improvements			\$ -	\$ -	\$ -	
Safety Improvements		Pioneer Valley		Safety Improvements			\$ -	\$ -	\$ -	
Safety Improvements		Pioneer Valley		Safety Improvements			\$ -	\$ -	\$ -	
Safety Improvements		Pioneer Valley		Safety Improvements			\$ -	\$ -	\$ -	
Safety Improvements		Pioneer Valley		Safety Improvements			\$ -	\$ -	\$ -	
Safety Improvements		Pioneer Valley		Safety Improvements			\$ -	\$ -	\$ -	
Safety Improvements subtotal ►							\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source

Table 14: Federally Funded Projects Year 2023 (Continued)

▶ Section 2B / State Prioritized Modernization Projects										
▶ ADA Retrofits										
	ADA Retrofits		Pioneer Valley		ADA Retrofits			\$ -	\$ -	\$ -
	ADA Retrofits		Pioneer Valley		ADA Retrofits			\$ -	\$ -	\$ -
								ADA Retrofits subtotal ▶		◀ 80% Federal + 20% Non-Federal
▶ Intersection Improvements										
	Intersection Improvements		Pioneer Valley		Intersection Improvements			\$ -	\$ -	\$ -
	Intersection Improvements		Pioneer Valley		Intersection Improvements			\$ -	\$ -	\$ -
	Intersection Improvements		Pioneer Valley		Intersection Improvements			\$ -	\$ -	\$ -
	Intersection Improvements		Pioneer Valley		Intersection Improvements			\$ -	\$ -	\$ -
	Intersection Improvements		Pioneer Valley		Intersection Improvements			\$ -	\$ -	\$ -
	Intersection Improvements		Pioneer Valley		Intersection Improvements			\$ -	\$ -	\$ -
								Intersection Improvements subtotal ▶		◀ Funding Split Varies by Funding Source
▶ Intelligent Transportation Systems										
	Intelligent Transportation Systems		Pioneer Valley		Intelligent Transportation Systems			\$ -	\$ -	\$ -
	Intelligent Transportation Systems		Pioneer Valley		Intelligent Transportation Systems			\$ -	\$ -	\$ -
	Intelligent Transportation Systems		Pioneer Valley		Intelligent Transportation Systems			\$ -	\$ -	\$ -
								Intelligent Transportation System subtotal ▶		◀ 80% Federal + 20% Non-Federal
▶ Roadway Reconstruction										
	Roadway Reconstruction		Pioneer Valley		Roadway Reconstruction			\$ -	\$ -	\$ -
	Roadway Reconstruction		Pioneer Valley		Roadway Reconstruction			\$ -	\$ -	\$ -
	Roadway Reconstruction		Pioneer Valley		Roadway Reconstruction			\$ -	\$ -	\$ -
	Roadway Reconstruction		Pioneer Valley		Roadway Reconstruction			\$ -	\$ -	\$ -
								Roadway Reconstruction subtotal ▶		◀ Funding Split Varies by Funding Source

Table 14: Federally Funded Projects Year 2023 (Continued)

► Section 2C / State Prioritized Expansion Projects											
► Bicycles and Pedestrians											
	Bicycles and Pedestrians	607283	Pioneer Valley	Southampton	SOUTHAMPTON- GREENWAY RAIL TRAIL CONSTRUCTION, FROM COLEMAN ROAD TO ROUTE 10 (3.5 MILES)	2	CMAQ	\$ 7,053,638	\$ 5,642,910	\$ 1,410,728	
	Bicycles and Pedestrians		Pioneer Valley		Bicycles and Pedestrians			\$ -	\$ -	\$ -	
	Bicycles and Pedestrians		Pioneer Valley		Bicycles and Pedestrians			\$ -	\$ -	\$ -	
Bicycles and Pedestrians subtotal ►								\$ 7,053,638	\$ 5,642,910	\$ 1,410,728	◀ 80% Federal + 20% Non-Federal
► Capacity											
	Capacity		Pioneer Valley		Capacity			\$ -	\$ -	\$ -	
	Capacity		Pioneer Valley		Capacity			\$ -	\$ -	\$ -	
Capacity subtotal ►								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source
► Section 3 / Planning / Adjustments / Pass-throughs											
► Planning / Adjustments / Pass-throughs											
			Pioneer Valley		ABP GANS Repayment	Multiple		\$ -	\$ -	\$ -	
			Pioneer Valley		ABP GANS Repayment	Multiple		\$ -	\$ -	\$ -	
			Pioneer Valley		Award adjustments, change orders, etc.	Multiple		\$ -	\$ -	\$ -	
			Pioneer Valley		Award adjustments, change orders, etc.	Multiple		\$ -	\$ -	\$ -	
			Pioneer Valley		Award adjustments, change orders, etc.	Multiple		\$ -	\$ -	\$ -	
			Pioneer Valley		Award adjustments, change orders, etc.	Multiple		\$ -	\$ -	\$ -	
			Pioneer Valley		Metropolitan Planning	Multiple		\$ -	\$ -	\$ -	
			Pioneer Valley		Metropolitan Planning	Multiple		\$ -	\$ -	\$ -	
			Pioneer Valley		State Planning and Research Work Program I, (SPR I), Planning	Multiple		\$ -	\$ -	\$ -	
			Pioneer Valley		State Planning and Research Work Program II, (SPR II), Research	Multiple		\$ -	\$ -	\$ -	
			Pioneer Valley		Railroad Crossings	Multiple		\$ -	\$ -	\$ -	
			Pioneer Valley		Railroad Crossings	Multiple		\$ -	\$ -	\$ -	
			Pioneer Valley		Recreational Trails	Multiple		\$ -	\$ -	\$ -	
Other Statewide Items subtotal ►								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source
► Section 4 / Non-Federally Aided Projects											
► Non-Federally Aided Projects											
	Non Federal Aid		Pioneer Valley		Non-Federal Aid			\$ -	\$ -	\$ -	
	Non-Federally Aided Projects		Pioneer Valley		Non-Federal Aid			\$ -	\$ -	\$ -	
Non-Federal Aid subtotal ►								\$ -	\$ -	\$ -	◀ 100% Non-Federal
2023 Summary								TIP Section 1 - TIP Section 4: Total of All Projects ▼			
Total ►								\$ 55,758,360	\$ -	\$ 55,758,360	◀ Total Spending in Region
Federal Funds ►								\$ 44,706,688	\$ -	\$ 44,706,688	◀ Total Federal Spending in Region
Non-Federal Funds ►								\$ 11,051,672	\$ -	\$ 11,051,672	◀ Total Non-Federal Spending in Region

701 CMR 7.00 Use of Road Flaggers and Police Details 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.

UNIVERSE OF PROJECTS

Community	SID	Project Name and Description	Design	TEC Score	Estimated Cost
Agawam	600513	RECONSTRUCTION OF ROUTE 187 FROM 425 FT. SOUTH OF S. WESTFIELD STREET TO ROUTE 57 (0.3 MILES - PHASE I)	25	27.0	\$2,239,065
Agawam	603372	RECONSTRUCTION ON ROUTE 5 CONNECTOR TO ROUTE 57, INCLUDES A-05-013 & A-05-014	0	53.0	\$11,670,939
Agawam	607316	RECONSTRUCTION OF ROUTE 187, FROM SOUTHWICK/SPRINGFIELD STREET TO ALLISON LANE (1.29 MILES - PHASE II)	0	33.8	\$5,562,610
Agawam	607317	AGAWAM- RECONSTRUCTION OF ROUTE 187, FROM ALLISON LANE TO THE WESTFIELD CITY LINE (1.69 MILES - PHASE III)	0	33.8	\$7,589,668
Amherst	608084	AMHERST - IMPROVEMENTS & RELATED WORK ON ROUTES 9 & 116, FROM UNIVERSITY DRIVE TO SOUTH PLEASANT STREET (0.8 MILES)	25	53.5	\$3,353,577
Amherst / Belchertown	608719	AMHERST- BELCHERTOWN- NORWOTTUCK RAIL TRAIL RESURFACING, FROM STATION ROAD IN AMHERST TO WARREN WRIGHT ROAD IN BELCHERTOWN (1.5 MILES)	0	12.0	\$1,083,220.00
Belchertown	608412	BELCHERTOWN- IMPROVEMENTS & RELATED WORK ON ROUTES 202 & 21, FROM TURKEY HILL ROAD TO SOUTH MAIN STREET (1.2 MILES)	25	59.0	\$4,738,044
Belchertown / Granby	608466	BELCHERTOWN- GRANBY- RESURFACING AND RELATED WORK ON ROUTE 202	0	17	\$4,491,288.00
Chesterfield	608886	RECONSTRUCTION OF NORTH ROAD AND DAMON POND ROAD	0	10	\$4,441,000.00
Chicopee	602911	CONNECTICUT RIVERWALK & BIKEWAY CONSTRUCTION, FROM BOAT RAMP NEAR I-90 TO NASH FIELD (2.5 MILES) INCL NEW BRIDGE OVER OVERFLOW CHANNEL	75	27 (4.85)	\$3,122,734
Chicopee	602912	CHICOPEE RIVER RIVERWALK MULTI-USE PATH CONSTRUCTION, FROM GRAPE STREET TO FRONT STREET (NEAR ELLERTON STREET) (1 MILE)	25	21.5	\$4,000,000
Chicopee	604434	RECONSTRUCTION & RELATED WORK ON FULLER ROAD, FROM MEMORIAL DR (RTE 33) TO SHAWINIGAN DR (2.0 MILES)	25	48.5	\$7,603,801
Chicopee	606892	SLOPE PROTECTION IMPROVEMENTS AT I-391 BRIDGE OVER THE CONNECTICUT RIVER	0	7.0	\$282,622.00
Chicopee	607736	CHICOPEE- SIGNAL & INTERSECTION IMPROVEMENTS AT 13 INTERSECTIONS ALONG ROUTE 33 (MEMORIAL DRIVE), FROM FULLER ROAD TO ABBEY STREET	25	41.5	\$5,800,000
Chicopee		CHICOPEE - INTERSECTION RECONSTRUCTION, MONTGOVERLY ROAD AT GRANBY ROAD AND MCKINSTRY AVENUE, AND MONTGOMERY ROAD AT TURNPIKE ACCESS ROAD	NA		\$6,000,000
Cumington	606797	Route 9 Retaining Wall	0	8.0	\$1,660,000
Easthampton	608577	EASTHAMPTON- IMPROVEMENTS AND RELATED WORK ON UNION STREET (ROUTE 141) FROM PAYSON AVENUE TO HIGH STREET (0.36 MILES)	0	62.0	\$2,037,200.00
Easthampton/ Southampton	608423	IMPROVEMENTS AND RELATED WORK ON TWO SECTIONS OF ROUTE 10 IN EASTHAMPTON AND SOUTHAMPTON	0	28.5	\$2,799,540
Goshen	602888	Route 9 reconstruction	0	25.0	\$7,500,000
Granby	606895	Route 202 Intersection Improvements 2 Locations @ 5 Corners and @ School Street	25	42.0	\$1,749,527
Granby / South Hadley	607474	GRANBY- SOUTH HADLEY- RESURFACING & RELATED WORK ON ROUTE 202, FROM LYMAN STREET SOUTH HADLEY TO PLEASANT STREET GRANBY (2 MILES)	25	22.0	\$5,751,651
Granville	608736	GRANVILLE- RECONSTRUCTION OF ROUTE 57	0	29.0	\$7,000,000

Table 15: Universe of Projects

Hadley	605032	HADLEY- RECONSTRUCTION ON ROUTE 9, FROM MIDDLE STREET TO MAPLE/SOUTH MAPLE STREET	25	50.0	\$20,006,920
Hadley	606547	PEDESTRIAN SIGNAL INSTALLATION AT 2 LOCATIONS ALONG ROUTE 9 NEAR WEST ST	0	14.5	\$134,600
Hadley	607886	RESURFACING AND RELATED WORK ON ROUTE 47 FROM COMINS DRIVE TO OLD RIVER DRIVE, INCLUDES CULVERT REPLACEMENT AT RUSSELVILLE BROOK	0	16 (2.88)	\$2,100,000
Hadley	608089	INTERSECTION, BICYCLE AND PEDESTRIAN IMPROVEMENTS @ ROUTES 9, 116 & WESTGATE CENTER DRIVE	0	25.5	\$1,544,720
Hatfield	608553	HATFIELD- RESURFACING AND RELATED WORK ON ROUTES 5 & 10, FROM 350 FEET NORTH OF CHURCH AVE TO THE WHATELY TOWN LINE (3.2 MILES)	0	6.5	\$3,124,760.40
Holland	608727	HOLLAND- RESURFACING & RELATED WORK ON BRIMFIELD ROAD, FROM WALES ROAD TO STURBRIDGE STREET (0.9 MILES - PHASE II)	0	27.5	\$1,051,476
Holyoke	606156	RECONSTRUCTION OF I-91 INTERCHANGE 17 & ROUTE 141	0	47.0	\$2,990,728
Holyoke	606450	TRAFFIC SIGNAL UPGRADES AT 15 INTERSECTIONS ALONG HIGH & MAPLE STREETS	25	45.5	\$4,234,543
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)	25	49.0	\$9,619,997
Longmeadow	607430	RESURFACING & RELATED WORK ON LONGMEADOW STREET (ROUTE 5), FROM THE CT S.L. TO CONVERSE STREET (2.88 MILES)	25	44.5	\$2,394,860
Longmeadow / Springfield	606469	RETAINING WALL REPLACEMENT/REHABILITATION ON I-91 (SB)	0		\$6,143,750
Longmeadow / Springfield	608881	RESURFACING AND INTERSECTION IMPROVEMENTS ON LONGMEADOW STREET (ROUTE 5) AND CONVERSE STREET (0.84 MILES)	0	54.5	\$5,228,167.90
Northampton	605048	IMPROVEMENTS ON ROUTE 5 (MOUNT TOM ROAD) - FROM BRIDGE E-5-4 OVER THE MANHAN RIVER TO 850' SOUTH OF I-91 NB EXIT 18 RAMP (0.85 MILES)	0	40.0	\$1,200,112
Northampton	606555	NORTHAMPTON- ROUNDABOUT CONSTRUCTION AT INTERSECTION ROUTES 5/10 (NORTH KING STREET) & HATFIELD STREET	25	55.0	\$4,612,652
Northampton	607502	INTERSECTION IMPROVEMENTS AT KING STREET, NORTH STREET & SUMMER STREET AND AT KING STREET & FINN STREET	25	65.0	\$3,305,959
Northampton	607893	NORTHAMPTON- INTERSECTION IMPROVEMENTS @ ELM STREET, MAIN STREET, WEST STREET, STATE STREET & NEW SOUTH STREET	0	68.0	\$2,000,000
Northampton	608236	NORTHAMPTON- RECONSTRUCTION OF DAMON ROAD, FROM ROUTE 9 TO ROUTE 5, IONSTRUNCLUDES DRAINAGE SYSTEM REPAIRS & SLOPE STABILIZATION AT THE NORWOTTUCK RAIL TRAIL (old#180525)	75	66.5	\$9,854,667
Northampton	608413	NORTHAMPTON- ROCKY HILL GREENWAY MULTI-USE TRAIL, FROM THE MANHAN RAIL TRAIL TO ROCKY HILL ROAD (0.4 MILES)	25	32.0	\$621,050
Northampton	608729	NORTHAMPTON- IMPROVEMENTS AND RELATED WORK ON MAIN STREET (ROUTE 9) FROM MASONIC STREET TO MARKET/HAWLET STREET (0.33 MILES)	0	74.0	\$5,354,523.20

Table 15: Universe of Projects (CMAQ Eligible)

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) (TFPC \$6,134,080) HPP Eamark \$2,500,000	0	18.0	\$3,570,304
Palmer	607372	PALMER- RECONSTRUCTION OF ROUTE 32, FROM 1/2 MILE SOUTH OF RIVER STREET TO THE WARE T.L. (PHASE II) (2.1 MILES)	0	14.0	\$8,476,770
Russell	608945	RUSSELL- RESURFACING & RELATED WORK ON ROUTE 20	0	14.0	\$6,500,000
South Hadley	608473	SOUTH HADLEY- RESURFACING AND RELATED WORK ON ROUTE 116	0	26.0	\$2,338,560.00
South Hadley	608785	MAIN STREET ROAD IMPROVEMENT PROJECT	0	38.5	\$3,089,720
Southampton	604653	REHABILITATION OF EAST STREET - FROM COLLEGE HIGHWAY EASTERLY TO COUNTY ROAD (2.6 MILES)	25	31.5	\$5,022,200
Southampton	607823	GREENWAY RAIL TRAIL CONSTRUCTION, FROM COLEMAN RD TO ROUTE 10 (3.5 MILES)	0	19.5	\$6,080,722
Southwick	604155	RESURFACING & RELATED WORK ON ROUTE 10/202, COLLEGE HIGHWAY (NORTHERLY SECTION) FROM THE WESTFIELD/SOUTHWICK T.L. TO TANNERY ROAD (1.4 MILES)	0	18.5	\$3,600,000
Southwick	606141	RECONSTRUCTION OF FEEDING HILLS ROAD (ROUTE 57), FROM COLLEGE HIGHWAY TO THE AGAWAM T.L.	0	42.5	\$4,080,000
Springfield	608157	SPRINGFIELD- MCKNIGHT COMMUNITY TRAIL CONSTRUCTION, FROM ARMORY STREET TO HAYDEN AVENUE (1.5 MILES)	0	36.5	\$4,300,000
Springfield	608411	SPRINGFIELD- INTERSECTION IMPROVEMENTS AT BAY STREET AND BERKSHIRE AVENUE	25	49.5	\$1,886,880
Springfield	608717	SPRINGFIELD- RECONSTRUCTION OF SUMNER AVENUE AT DICKINSON STREET AND BELMONT AVENUE (THE "X")	0	70.5	\$8,055,000.00
Springfield	608718	SPRINGFIELD- INTERSECTION IMPROVEMENTS AT BERKSHIRE AVENUE, COTTAGE AND HARVEY STREETS	0	41.5	\$2,063,908.40
Springfield	608782	SPRINGFIELD- INTERSECTION IMPROVEMENTS AT COTTAGE STREET, ROBBINS ROAD AND INDUSTRY AVE	0	46.5	\$1,800,000
Wales	605669	PEDESTRIAN ACCESS IMPROVEMENTS & RELATED WORK ON ROUTE 19	0	9.0	\$312,500
Wales	608163	WALES- RECONSTRUCTION & IMPROVEMENTS ON MONSON ROAD, FROM THE MONSON T.L. TO REED HILL ROAD (1.5 MILES)	25	39.5	\$4,118,974
Ware	607987	WARE- INTERSECTION IMPROVEMENTS @ MAIN STREET, WEST STREET, NORTH STREET, SOUTH STREET & CHURCH STREET	75	55.0	\$2,475,087
West Springfield	604746	BRIDGE REPLACEMENT, W-21-006, CSX RAILROAD OVER UNION STREET	0	21.0	\$12,403,054
West Springfield	608374	RECONSTRUCTION OF MEMORIAL AVENUE (ROUTE 147), FROM COLONY ROAD TO THE MEMORIAL AVENUE ROTARY (1.4 MILES)	25	69.5	\$19,573,000
Westfield	603783	WESTFIELD- COLUMBIA GREENWAY RAIL TRAIL CONSTRUCTION (CENTER DOWNTOWN SECTION)	75	36.5 (6.58)	\$6,250,000
Westfield	604445	RECONSTRUCTION ON ROUTE 187, INCLUDES REPLACEMENT OF W-25-002, SHERMAN'S MILL BRIDGE OVER GREAT BROOK AT PONTOOSIC ROAD			\$6,250,000
Westfield	607773	WESTFIELD- IMPROVEMENTS & RELATED WORK ON ROUTE 20, COURT STEET & WESTERN AVENUE, LLOYDS HILL ROAD TO HIGH STREET/MILL STREET INTERSECTION (PHASE II) Eastern Section	25	48.5	\$6,047,573

Westfield	608073	WESTFIELD RIVER LEVEE MULTI-USE PATH CONSTRUCTION, FROM CONGRESS ST TO WILLIAMS RIDING WAY (NEAR MEADOW ST) (2MILES)	0	36	\$4,801,730
Westfield	608487	WESTFIELD- RESURFACING AND RELATED WORK ON ROUTE 10 AND 202	0	29	\$2,760,000
Wilbraham	608489	WILBRAHAM- RESURFACING AND RELATED WORK ON ROUTE 20	0	36.0	\$9,441,500
Williamsburg	607231	Reconstruction of High Street and Mountain Street	0	18.0	\$3,600,000
Williamsburg	608787	CONSTRUCTION OF THE "MILL RIVER GREENWAY" SHARED USE PATH	0	29.0	\$14,400,000
Worthington	606912	Route 143 Reconstruction and Related Work	75	41.5	\$16,300,000
Total Estimated project Cost (69 Projects)					\$355,597,454

Table 15: Projects Awaiting Design and Funds (Appendix Z) (Cont.) High Priority Project Listing (HPP)

Project Description	City/Town	Project ID	Funding	Fed. Funds	State Funds	Total	Notes
Route 20 Access Improvements on Court Street & Western Avenue This reconstruction project on city-owned streets begins at Court Street at the intersection of Mill and High Street, and runs 0.2 miles westerly to Western Avenue, then westerly 2.25 miles to the intersection of Bates Road. The project will include traffic signal installation at Lloyd's Hill and an upgrade at Mill and High Streets	Westfield	603449	HPP-4287	\$2,002,950	\$500,738	\$2,503,688	
Route 32 Ware Road Reconstruction (\$22,854,850)	Palmer	601504	HPP-4287	\$2,303,744	\$575,936	\$2,879,680	#602844 was advertised on 9/30/06; #604443 was advertised on 8/8/09
Design and construction of Southwick and Westfield Rail Trail	Southwick/Westfield	602844; 604443; 603783	HPP-1656	\$1,857,506	\$464,377	\$46,779	#604451 was advertised on 9/1/2007
*Construct Access roads to Hospital Hill (\$1,652,818)	Northampton	604451	HPP-158	\$302,865	\$75,716	\$378,581	#604447 was advertised on 9/22/07
*State St. Corridor Redevelopment Project (\$18,052,897)	Springfield	604447	HPP-217	\$899,056	\$224,764	\$1,123,820	#602338 was advertised on 12/6/2008
*Design and construct 1.5 mile Red Stone Rail Trail(\$1,112,074)	East Longmeadow	602338	HPP-578	\$224,764	\$56,191	\$280,955	#604822 was advertised on 9/8/2007
*Intersection improvements Memorial Park II - Roosevelt Ave. (\$2,310,853)	Springfield	604822	HPP-836	\$149,843	\$37,461	\$187,304	
Design north and southbound ramps on I-91 at Exit 19 (\$15,000,000)	Northampton	604597	HPP-847	\$224,764	\$56,191	\$280,955	
Upgrade Route 9 - Calvin Coolidge bridge (1998) (\$31,840,515)	Hadley	124913	HPP - 862	\$83,828	\$20,957	\$104,785	#124913 was advertised on 9/30/2000
Total Project Cost				\$8,049,320	\$2,012,330	\$10,061,650	
Earmarks located in Appendix Z will remain un-programmed until full project funding is available							

Projects list in appendix Z 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 2019 - 2023

The following is a complete listing of programmed transit projects for FFY 2019 - 2023

Table 16: FFY 2019 Transit Project Information

5307

Project Number	Agency	Line Item	Project Description	Carry Over	Federal Funds	State Funds	TDC	Local Funds	Total
RTD0006918	PVTA	119302	Purchase Bus Shelters, benches, trash receptacles, etc.		\$100,000	\$25,000	\$0	\$0	\$125,000
RTD0006919	PVTA	119308	Purchase & Replace signage and lighting		\$12,000	\$3,000	\$0	\$0	\$15,000
RTD0006920	PVTA	114220	ACQUIRE - MISC SUPPORT EQUIPMENT		\$8,000	\$2,000	\$0	\$0	\$10,000
RTD0006921	PVTA	442400	Transportation Planning		\$188,000	\$47,000	\$0	\$0	\$235,000
RTD0006922	PVTA	117C00	ADA Service subsidy		\$1,250,014	\$312,504	\$0	\$0	\$1,562,518
RTD0006923	PVTA	117A00	Preventive Maintenance		\$5,261,986	\$1,315,496	\$0	\$0	\$6,577,482
RTD0006933	PVTA	116220	Information Technology Systems		\$1,417,799	\$354,450	\$0	\$0	\$1,772,249
RTD0006956	PVTA	114302	Cottage Street Design and Construction Administration, Year 3		\$2,000,000	\$0	\$500,000	\$0	\$2,000,000
RTD0007283	PVTA	111201	Buy Replacement 40' Diesel Bus (4)		\$1,257,787	\$445,296	\$0	\$0	\$2,226,480
RTD0006917	PVTA	114402	REHAB/RENOVATE - Environmental Compliance		\$60,000	\$90,000	\$0	\$0	\$150,000
RTD0006952	PVTA	114302	Retrofit SATCO facility to paratransit		\$251,912	\$398,088	\$0	\$0	\$650,000
RTD0007282	PVTA	111202	Buy Replacement 35" Bus (4)		\$1,763,176	\$440,794	\$0	\$0	\$2,203,970
					\$13,570,674	\$3,433,628	\$500,000	\$0	\$17,527,699

5339

Project Number	Agency	Line Item	Project Description	Carry Over	Federal Funds	State Funds	TDC	Local Funds	Total
RTD0006949	PVTA	111215	Purchase Replacement Vans (27)		\$326,510	\$1,510,110	\$0	\$0	\$1,836,620
					\$326,510	\$1,510,110	\$0	\$0	\$1,836,620

Other NonFederal

Project Number	Agency	Line Item	Project Description	Carry Over	Federal Funds	State Funds	TDC	Local Funds	Total
RTD0006916	PVTA	114406	Purchase & Replace Shop Equipment		\$0	\$300,000	\$0	\$0	\$300,000

Table 16: FFY 2019 Transit Project Information (Continued)

RTD0006931	PVTA	114211	Purchase & Replace support vehicles (2)	\$0	\$75,000	\$0	\$0	\$75,000
RTD0006932	PVTA	114211	ACQUIRE - SUPPORT VEHICLES (4)	\$0	\$120,000	\$0	\$0	\$120,000
RTD0006955	PVTA	114302	Cottage Street Construction, Year 3	\$0	\$9,824,862	\$0	\$0	\$9,824,862
RTD0007287	PVTA	114306	UMTS rehab - Reinstall exhaust fans over maintenance bays	\$0	\$15,000	\$0	\$0	\$15,000
				\$0	\$10,334,862	\$0	\$0	\$10,334,862
				13,897,184	15,278,600	500,000	0	29,699,181

Table 17: FFY 2020 Transit Project Information

5307

Project Number	Agency	Line Item	Project Description	Carry Over	Federal Funds	State Funds	TDC	Local Funds	Total
RTD0006924	PVTA	119202	Purchase Bus Shelters, benches, trash receptacles, etc.	2019 - \$77,424	\$77,424	\$19,356	\$0	\$0	\$96,780
RTD0006925	PVTA	119208	Purchases signage and lighting	2019 - \$20,000	\$20,000	\$5,000	\$0	\$0	\$25,000
RTD0006926	PVTA	119206	Purchase bicycle Equipment for shelters and buses	2019 - \$5,600	\$5,600	\$1,400	\$0	\$0	\$7,000
RTD0006927	PVTA	114402	Environmental Compliance	2019 - \$60,000	\$60,000	\$15,000	\$0	\$0	\$75,000
RTD0006928	PVTA	442301	Planning Services - Long Term System	2019 - \$192,000	\$192,000	\$48,000	\$0	\$0	\$240,000
RTD0006929	PVTA	117C00	ADA Service subsidy	2019 - \$1,287,796	\$1,287,796	\$321,949	\$0	\$0	\$1,609,745
RTD0006930	PVTA	117A00	Preventive Maintenance	2019 - \$5,224,204	\$5,224,204	\$1,306,051	\$0	\$0	\$6,530,255
RTD0006934	PVTA	111201	Buy Replacement 40' Diesel Bus (12)	2019 - \$1,918,610	\$1,918,610	\$2,063,947	\$0	\$0	\$6,879,823
RTD0006953	PVTA	114220	Information Technology Systems	2019 - \$1,729,634	\$1,729,634	\$432,409	\$0	\$0	\$2,162,043
					\$10,515,268	\$4,213,112	\$0	\$0	\$17,625,646

5339

Project Number	Agency	Line Item	Project Description	Carry Over	Federal Funds	State Funds	TDC	Local Funds	Total
RTD0006101	PVTA	111202	Buy Replacement 35" Bus (13)	2019 - \$2,615,863; 2019 - \$885,729	\$885,729	\$1,327,608	\$0	\$0	\$7,377,789
					\$885,729	\$1,327,608	\$0	\$0	\$7,377,789

Other NonFederal

Project Number	Agency	Line Item	Project Description	Carry Over	Federal Funds	State Funds	TDC	Local Funds	Total
RTD0006935	PVTA	114411	Replace support vehicle (2)		\$0	\$150,000	\$0	\$0	\$150,000
RTD0006936	PVTA	114406	Purchase & Replace Shop Equipment		\$0	\$110,000	\$0	\$0	\$110,000
RTD0006954	PVTA	114402	Convert SATCO Maintenance Facility to Paratransit Operations, Year 2		\$0	\$1,900,000	\$0	\$0	\$1,900,000
RTD0007289	PVTA	114211	Replacement supervisory vehicles (2)		\$0	\$50,000	\$0	\$0	\$50,000

Table 17: FFY 2020 Transit Project Information (Continued)

RTD0005869	PVTA	114403	Rehab Northampton Maint Facility, Year 1	\$0	\$50,000	\$0	\$0	\$50,000
RTD0006097	PVTA	114402	Bus Wash System Replacement -Northampton Maintenance Facility	\$0	\$90,000	\$0	\$0	\$90,000
				\$0	\$2,350,000	\$0	\$0	\$2,350,000
				11,400,997	7,890,720	0	0	27,353,435

Table 18: FFY 2021 Transit Project Information

5307

Project Number	Agency	Line Item	Project Description	Carry Over	Federal Funds	State Funds	TDC	Local Funds	Total
RTD0006942	PVTA	119402	Bus Shelters, Benches, Trash Receptacles	2020 - \$82,969	\$82,969	\$20,742	\$0	\$0	\$103,711
RTD0006943	PVTA	119408	Bus Stop Signage and Lighting	2020 - \$16,000	\$16,000	\$4,000	\$0	\$0	\$20,000
RTD0006944	PVTA	119406	Bicycle access equipment for buses and shelters	2020 - \$5,600	\$5,600	\$1,400	\$0	\$0	\$7,000
RTD0006945	PVTA	116202	Information Technology Systems	2020 - \$2,338,688	\$2,338,688	\$584,672	\$0	\$0	\$2,923,360
RTD0006946	PVTA	440000	PLANNING	2020 - \$196,000	\$196,000	\$49,000	\$0	\$0	\$245,000
RTD0006947	PVTA	300900	ADA OPERATING ASSISTANCE	2020 - \$1,307,113	\$1,307,113	\$326,778	\$0	\$0	\$1,633,891
RTD0006948	PVTA	117A00	PREVENTIVE MAINTENANCE	2020 - \$5,380,930	\$5,380,930	\$1,345,233	\$0	\$0	\$6,726,163
RTD0007291	PVTA	111201	Buy Replacement 35-FT Buses (16)	2020 - \$2,285,222	\$2,285,222	\$4,676,383	\$0	\$0	\$9,352,766
					\$11,612,522	\$7,008,208	\$0	\$0	\$21,011,891

5339

Project Number	Agency	Line Item	Project Description	Carry Over	Federal Funds	State Funds	TDC	Local Funds	Total
RTD0006080	PVTA	111202	Buy Replacement 40-FT Buses (17)	2020 - \$1,458,609; 2020 - \$885,729	\$885,729	\$5,019,404	\$0	\$0	\$10,038,808
					\$885,729	\$5,019,404	\$0	\$0	\$10,038,808

Other NonFederal

Project Number	Agency	Line Item	Project Description	Carry Over	Federal Funds	State Funds	TDC	Local Funds	Total
RTD0006939	PVTA	114411	Replace Supervisory Vehicles (2)		\$0	\$50,000	\$0	\$0	\$50,000
RTD0006940	PVTA	114406	Purchase/Replace Shop Equipment		\$0	\$110,000	\$0	\$0	\$110,000
RTD0006941	PVTA	114402	Environmental Compliance		\$0	\$75,000	\$0	\$0	\$75,000
					\$0	\$235,000	\$0	\$0	\$235,000

12,498,251 12,262,612 0 0 31,285,699

Table 18: FFY 2022 Transit Project Information

5307

Project Number	Agency	Line Item	Project Description	Carry Over	Federal Funds	State Funds	TDC	Local Funds	Total
RTD0006958	PVTA	111202	Replace 35' Buses (10)	2021 - \$989,313	\$989,313	\$1,204,169	\$0	\$0	\$6,020,843
RTD0006964	PVTA	119402	Purchase Shelters and shelter accessories	2021 - \$82,969	\$82,969	\$20,742	\$0	\$0	\$103,711
RTD0006965	PVTA	119408	Signage & Lighting	2021 - \$16,000	\$16,000	\$4,000	\$0	\$0	\$20,000
RTD0006966	PVTA	119406	Bike Access for shelters and Buses	2021 - \$5,600	\$5,600	\$1,400	\$0	\$0	\$7,000
RTD0006967	PVTA	116202	Information Technology Systems	2021 - \$2,521,702	\$2,521,702	\$630,425	\$0	\$0	\$3,152,127
RTD0006968	PVTA	117A00	Preventive Maintenance	2021 - \$5,542,358	\$5,542,358	\$1,385,590	\$0	\$0	\$6,927,948
RTD0006969	PVTA	117C00	NON FIXED ROUTE ADA PARA SERV	2021 - \$1,307,113	\$1,307,113	\$326,778	\$0	\$0	\$1,633,891
RTD0006970	PVTA	442301	LONGTERM TRANS PLAN - SYSTEM LEVEL	2021 - \$196,000	\$196,000	\$49,000	\$0	\$0	\$245,000
RTD0006957	PVTA	111201	Purchase 40' Replacement Buses (15)	2021 - \$2,410,075; 2021 - \$888,729	\$2,410,075	\$1,824,701	\$0	\$0	\$9,123,505
					\$13,071,130	\$5,446,805	\$0	\$0	\$27,234,025
Other NonFederal									
Project Number	Agency	Line Item	Project Description	Carry Over	Federal Funds	State Funds	TDC	Local Funds	Total
RTD0006960	PVTA	114211	Purchase replacement support vehicles (3)		\$0	\$148,000	\$0	\$0	\$148,000
RTD0006961	PVTA	114411	Replace Supervisory Vehicles (4)		\$0	\$25,000	\$0	\$0	\$25,000
RTD0006963	PVTA	114402	Environmental Compliance		\$0	\$75,000	\$0	\$0	\$75,000
RTD0006971	PVTA	111215	Purchase Replacement Vans (24)		\$0	\$1,783,933	\$0	\$0	\$1,783,933
					\$0	\$2,031,933	\$0	\$0	\$2,031,933
					13,071,130	7,478,738	0	0	29,265,958

Table 19: FFY 2023 Transit Project Information

5307

Project Number	Agency	Line Item	Project Description	Carry Over	Federal Funds	State Funds	TDC	Local Funds	Total
RTD0007293	PVTA	111201	Purchase 40' Replacement Buses (17)	2022 - \$1,530,820; 2022 - \$902,060	\$1,530,820	\$5,325,086	\$0	\$0	\$10,650,172
RTD0007297	PVTA	119302	Purchase Bus Shelters, benches, trash receptacles, etc.	2022 - \$84,538	\$84,538	\$21,134	\$0	\$0	\$105,672
RTD0007299	PVTA	119306	Purchase and replace bicycle equipment for shelters and buses	2022 - \$5,600	\$5,600	\$1,400	\$0	\$0	\$7,000
RTD0007298	PVTA	119308	Purchase & Replace signage and lighting	2022 - \$16,000	\$16,000	\$4,000	\$0	\$0	\$20,000
RTD0007300	PVTA	116220	Information Technology Systems	2022 - \$1,914,305	\$1,914,305	\$478,576	\$0	\$0	\$2,392,881
RTD0007305	PVTA	442400	Transporation planning	2022 - \$200,000	\$200,000	\$50,000	\$0	\$0	\$250,000
RTD0007306	PVTA	117C00	ADA service subsidy	2022 - \$1,326,720	\$1,326,720	\$331,680	\$0	\$0	\$1,658,400
RTD0007307	PVTA	117A00	Preventive Maintenance	2022 - \$5,708,629	\$5,708,629	\$1,427,157	\$0	\$0	\$7,135,786
RTD0007295	PVTA	111202	Purchase 35' Replacement Buses (8)	2022 - \$2,480,587	\$2,480,587	\$2,480,587	\$0	\$0	\$4,961,174
					\$13,267,199	\$10,119,620	\$0	\$0	\$27,181,085

Other NonFederal

Project Number	Agency	Line Item	Project Description	Carry Over	Federal Funds	State Funds	TDC	Local Funds	Total
RTD0007296	PVTA	111402	REHAB/RENOVATE - Environmental Compliance		\$0	\$75,000	\$0	\$0	\$75,000
RTD0007301	PVTA	114402	Northampton Hydraulic Lift Project		\$0	\$750,000	\$0	\$0	\$750,000
RTD0007302	PVTA	114400	Renovate Holyoke ITC Canopy & Pavement		\$0	\$500,000	\$0	\$0	\$500,000
RTD0007342	PVTA	111215	Purchase Replacement Vans (9)		\$0	\$689,044	\$0	\$0	\$689,044
					\$0	\$2,014,044	\$0	\$0	\$2,014,044
					13,267,199	12,133,664	0	0	29,195,129

VI. STATEWIDE FEDERAL AID PROJECT LISTING

The MassDOT provided each planning agency a listing of statewide items anticipated for FFY 2019 to 2023. These items are to be funded separately from the regional TIP program. This information is provided in the following Tables.

Table 21 Statewide Federal Aid Project Listing

2019

► Section 2A / State Prioritized Reliability Projects											
► Bridge Program / Inspections											
	Bridge Program		Pioneer Valley		Bridge Inspection			\$ -	\$ -	\$ -	
Bridge Program / Inspections subtotal ►								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source
► Bridge Program / Off-System											
	Bridge Program	608190	Central Mass	BROOKFIELD	BROOKFIELD- EAST BROOKFIELD- BRIDGE REPLACEMENT, B-26-006 – E-02-001, SOUTH POND ROAD OVER SOUTH POND INLET	3	STP-BR-OFF	\$ 1,857,041	\$ 1,485,633	\$ 371,408	
	Bridge Program	608243	Berkshire Region	NEW MARLBOROUGH	NEW MARLBOROUGH- BRIDGE REPLACEMENT, N-08-010, UMPACHENE FALLS OVER KONKAPOT RIVER	1	STP-BR-OFF	\$ 1,602,022	\$ 1,281,618	\$ 320,404	
	Bridge Program	603255	Berkshire Region	PITTSFIELD	PITTSFIELD- BRIDGE REPLACEMENT, P-10-049, LAKEWAY DRIVE OVER ONOTA LAKE	1	STP-BR-OFF	\$ 1,511,864	\$ 1,209,491	\$ 302,373	
	Bridge Program	608263	Berkshire Region	SHEFFIELD	SHEFFIELD- BRIDGE REPLACEMENT, S-10-019, BERKSHIRE SCHOOL ROAD OVER SCHENOB BROOK	1	STP-BR-OFF	\$ 3,479,307	\$ 2,783,446	\$ 695,861	
	Bridge Program	608249	Pioneer Valley	MIDDLEFIELD	MIDDLEFIELD- BRIDGE SUPERSTRUCTURE REPLACEMENT, M-19-010, CHESTER ROAD OVER SMART BROOK	1	STP-BR-OFF	\$ 970,807	\$ 776,645	\$ 194,161	
	Bridge Program	608079	Boston Region	SHARON	SHARON- BRIDGE REPLACEMENT, S-09-003 (40N), MASKWONICUT STREET OVER AMTRAK/MBTA	5	STP-BR-OFF	\$ 2,683,087	\$ 2,146,469	\$ 536,617	
	Bridge Program	608260	Montachusett	ATHOL	ATHOL- BRIDGE REPLACEMENT, A-15-005, WASHINGTON AVE OVER ATHOL POND OUTLET	2	STP-BR-OFF	\$ 2,485,419	\$ 1,988,335	\$ 497,084	
	Bridge Program	608255	Boston Region	STOW	STOW- BRIDGE REPLACEMENT, S-29-011, BOX MILL ROAD OVER ELIZABETH BROOK	3	STP-BR-OFF	\$ 3,612,223	\$ 2,889,779	\$ 722,445	
	Bridge Program	608259	Montachusett	TOWNSEND	TOWNSEND- BRIDGE REPLACEMENT, T-07-013, WEST MEADOW ROAD OVER LOCKE BROOK	3	STP-BR-OFF	\$ 991,896	\$ 793,517	\$ 198,379	
	Bridge Program	607534	Northern Middlesex	TEWKSBURY	TEWKSBURY- BRIDGE PRESERVATION, T-03-003, MILL STREET OVER SHAWSHOEN RIVER	4	STP-BR-OFF	\$ 2,160,000	\$ 1,728,000	\$ 432,000	
AMENDMENT:Move Project - (FROM 2018)	Bridge Program	607127	Montachusett	HUBBARDSTON	HUBBARDSTON- BRIDGE REPLACEMENT, H-24-009, EVERGREEN ROAD OVER MASON BROOK	4	STP-BR-OFF	\$ 3,365,860	\$ 2,692,688	\$ 673,172	
	Bridge Program	608523	Berkshire Region	PITTSFIELD	PITTSFIELD- BRIDGE REPLACEMENT, P-10-042, NEW ROAD OVER WEST BRANCH OF THE HOUSATONIC RIVER	1	STP-BR-OFF	\$ 1,587,096	\$ 1,269,677	\$ 317,419	
Bridge Program / Off-System subtotal ►								\$ 26,306,621	\$ 21,045,297	\$ 5,261,324	◀ 80% Federal + 20% Non-Federal
► Bridge Program / On-System (NHS)											
AMENDMENT:Move Project - (FROM 2018)	Bridge Program	604952	Boston Region	LYNN	LYNN- SAUGUS- BRIDGE REPLACEMENT, L-18-016=S-05-008, ROUTE 107 OVER THE SAUGUS RIVER (AKA - BELDEN G. BLY BRIDGE)	4	NHPP-On	\$ 14,894,228	\$ 11,915,382	\$ 2,978,846	AC Year 1 of 5, Total Cost \$74,471,140
	Bridge Program	604173	Boston Region	BOSTON	BOSTON- BRIDGE REPLACEMENT, B-16-016, NORTH WASHINGTON STREET OVER THE BOSTON INNER HARBOR	6	NHPP-On	\$ 21,000,000	\$ 16,800,000	\$ 4,200,000	AC Year 3 of 6, Total Cost \$176,318,433
	Bridge Program	605306	Merrimack Valley	HAVERRHILL	HAVERRHILL- BRIDGE REPLACEMENT, H-12-039, I-495 (NB & SB) OVER MERRIMACK RIVER	4	NHPP-On	\$ 23,703,426	\$ 18,962,741	\$ 4,740,685	AC Year 2 of 6, Total Cost \$118,786,388
	Bridge Program	605287	Boston Region	CHELSEA	CHELSEA- ROUTE 1 VIADUCT REHABILITATION (SB/NB) ON C-09-007 & C-09-011	6	NHPP-On	\$ 71,677,130	\$ 57,341,704	\$ 14,335,426	AC Year 2 of 4, Total Cost \$213,972,689
Bridge Program / On-System (NHS) subtotal ►								\$ 131,274,784	\$ 105,019,827	\$ 26,254,957	◀ Funding Split Varies by Funding Source

► Bridge Program / On-System (Non-NHS)											
	Bridge Program	608612	Montachusett	ATHOL	ATHOL- BRIDGE REPLACEMENT, A-15-008, CRESCENT STREET OVER MILLERS RIVER	2	NHPP-Off	\$ 7,860,160	\$ 6,288,128	\$ 1,572,032	
Bridge Program / On-System (Non-NHS) subtotal ►								\$ 7,860,160	\$ 6,288,128	\$ 1,572,032	◄ 80% Federal + 20% Non-Federal
► Bridge Program / Systematic Maintenance											
	Bridge Program	TBA	Pioneer Valley	Multiple	DISTRICT 1- SYSTEMATIC BRIDGE MAINTENANCE AT VARIOUS LOCATIONS (2019)	1	NHPP-Off	\$ 522,200	\$ 417,760	\$ 104,440	
	Bridge Program	608251	Pioneer Valley	Multiple	DISTRICT 2- SYSTEMATIC BRIDGE MAINTENANCE AT VARIOUS LOCATIONS (2019)	2	NHPP-Off	\$ 1,989,000	\$ 1,591,200	\$ 397,800	
ADJUSTMENT:Decrease Cost	Bridge Program	607908	Central Mass	HOLDEN	HOLDEN- BRIDGE MAINTENANCE OF H-18-028 & 029, I-190 OVER RIVER STREET & QUINAPOXET RIVER	3	NHPP-On	\$ 466,076	\$ 372,861	\$ 93,215	
	Bridge Program	608257	Northern Middlesex	LOWELL	LOWELL- DECK REPLACEMENTS, L-15-068 (2H5) AND (2HG), LOWELL CONNECTOR OVER INDUSTRIAL AVENUE EAST	4	NHPP-On	\$ 4,007,143	\$ 3,205,715	\$ 801,429	
	Bridge Program	608234	Boston Region	RANDOLPH	RANDOLPH- BRIDGE PRESERVATION OF 2 BRIDGES: R-01-005 & R-01-007	6	NHPP-On	\$ 4,984,738	\$ 3,987,791	\$ 996,948	
Bridge Program / Systematic Maintenance subtotal ►								\$ 11,969,158	\$ 9,575,326	\$ 2,393,832	◄ Funding Split Varies by Funding Source
► Interstate Pavement											
	Interstate Pavement	607560	Pioneer Valley	Multiple	CHICOPEE- HOLYOKE- INTERSTATE MAINTENANCE AND RELATED WORK ON I-391	2	NHPP	\$ 11,309,875	\$ 10,178,888	\$ 1,130,988	
	Interstate Pavement	607560	Pioneer Valley	Multiple	CHICOPEE- HOLYOKE- INTERSTATE MAINTENANCE & RELATED WORK ON I-391	2	NHPP	\$ 416,000	\$ 374,400	\$ 41,600	
Interstate Pavement subtotal ►								\$ 11,725,875	\$ 10,553,288	\$ 1,172,588	◄ 90% Federal + 10% Non-Federal
► Non-Interstate Pavement											
	Non-Interstate Pavement	607474	Pioneer Valley	Multiple	GRANBY- SOUTH HADLEY- RESURFACING AND RELATED WORK ON ROTUE 202	2	NHPP	\$ 5,752,500	\$ 4,602,000	\$ 1,150,500	
Non-Interstate Pavement subtotal ►								\$ 5,752,500	\$ 4,602,000	\$ 1,150,500	◄ 80% Federal + 20% Non-Federal
► Roadway Improvements											
	Roadway Improvements		Pioneer Valley		Roadway Improvements			\$ -	\$ -	\$ -	
Roadway Improvements subtotal ►								\$ -	\$ -	\$ -	◄ 80% Federal + 20% Non-Federal
► Safety Improvements											
	Safety Improvements	608571	Cape Cod	Multiple	BOURNE TO FALMOUTH- GUIDE AND TRAFFIC SIGN REPLACEMENT ON A SECTION OF ROUTE	5	HSIP	\$ 433,353	\$ 390,018	\$ 43,335	
	Safety Improvements	607736	Pioneer Valley	Chicopee	CHICOPEE- SIGNAL & INTERSECTION IMPROVEMENTS AT 13 INTERSECTIONS ALONG ROUTE 33 (MEMORIAL DRIVE), FROM FULLER ROAD TO ABBEY STREET	2	HSIP	\$ 6,001,387	\$ 5,401,248	\$ 600,139	
	Safety Improvements	608582	Statewide	Multiple	STATEWIDE-VARIOUS SAFETY STRATEGIES TO ADDRESS SHSP - TO BE DETERMINED IN CONSULTATION WITH FHWA IN 2019	Multiple	HSIP	\$ 6,103,182	\$ 5,492,864	\$ 610,318	
	Safety Improvements	608206	Boston Region	Multiple	CHELSEA TO DANVERS- GUIDE AND TRAFFIC SIGN REPLACEMENT ON A SECTION OF US ROUTE 1	4	NHPP	\$ 7,195,084	\$ 6,475,576	\$ 719,508	
	Safety Improvements	608205	Boston Region	Multiple	READING TO LYNNFIELD- GUIDE AND TRAFFIC SIGN REPLACEMENT ON A SECTION OF I-95 (SR 128)	4	NHPP	\$ 4,513,288	\$ 4,061,959	\$ 451,329	
	Safety Improvements	608608	Boston Region	Braintree	BRAINTREE- HIGHWAY LIGHTING IMPROVEMENTS AT I-93/ROUTE 3 INTERCHANGE	6	NHPP	\$ 7,008,503	\$ 6,307,653	\$ 700,850	
	Safety Improvements	608600	Pioneer Valley	Multiple	CHICOPEE- WEST SPRINGFIELD- HIGHWAY LIGHTING UPGRADE ON I-91	2	NHPP	\$ 4,300,759	\$ 3,870,683	\$ 430,076	
Safety Improvements subtotal ►								\$ 35,555,556	\$ 32,000,000	\$ 3,555,556	◄ Funding Split Varies by Funding Source

► Section 2B / State Prioritized Modernization Projects

► ADA Retrofits

ADA Retrofits		Pioneer Valley		ADA Retrofits			\$ -	\$ -	\$ -		
ADA Retrofits subtotal ►							\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal	

► Intersection Improvements

Intersection Improvements	603251	Central Mass	Worcester	WORCESTER- SIGNAL & INTERSECTION IMPROVEMENTS @ HOLDEN STREET, DRUMMOND AVENUE & SHORE DRIVE, INCLUDES CULVERT EXTENSION OF W-44-122, SHORE DRIVE OVER (UNNAMED) STREAM	3	CMAQ	\$ 2,005,070	\$ 1,804,563	\$ 200,507		
Intersection Improvements	608755	Boston Region	Boston	BOSTON- INTERSECTION IMPROVEMENTS AT MORTON STREET AND HARVARD STREET	6	HSIP	\$ 1,500,000	\$ 1,350,000	\$ 150,000		
Intersection Improvements	608582	Statewide	Multiple	STATEWIDE-VARIOUS SAFETY STRATEGIES TO ADDRESS SHSP - TO BE DETERMINED IN CONSULTATION WITH FHWA IN 2019	MULTIPLE	HSIP	\$ 8,325,742	\$ 7,493,168	\$ 832,574		
Intersection Improvements	607757	Central Mass	Worcester	WORCESTER- SIGNAL & INTERSECTION IMPROVEMENTS ON ROUTE SR 122A (PROVIDENCE STREET) AT MILLBURY STREET & MCKEON ROAD	3	NFP	\$ 1,100,000	\$ 990,000	\$ 110,000		
Intersection Improvements	607760	Berkshire	Pittsfield	PITTSFIELD- INTERSECTION & SIGNAL IMPROVEMENTS AT 9 LOCATIONS ALONG SR 8 & SR 9	1	HSIP	\$ 3,000,000	\$ 2,700,000	\$ 300,000		
Intersection Improvements	609003	Statewide	Multiple	WELLESLEY TO WORCESTER - CONNECTED VEHICLE TIMING AND COMMUNICATION	Multiple	CMAQ	\$ 4,000,000	\$ 3,600,000	\$ 400,000		
Intersection Improvements	607249	Boston Region	Sudbury	SUDBURY- INTERSECTION IMPROVEMENTS @ ROUTE 20 & LANDHAM ROAD	3	HSIP	\$ 2,152,521	\$ 1,937,269	\$ 215,252		
Intersection Improvements subtotal ►							\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source	

► Intelligent Transportation Systems

Intelligent Transportation Systems		Pioneer Valley		Intelligent Transportation Systems			\$ -	\$ -	\$ -		
Intelligent Transportation System subtotal ►							\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal	

► Roadway Reconstruction

Roadway Reconstruction	608790	Pioneer Valley	Holyoke	HOLYOKE- IMPROVEMENTS AT KELLY COMMUNITY SCHOOL (SR7S)	2	TAP	\$ 1,264,935	\$ 1,011,948	\$ 252,987		
Roadway Reconstruction	606555	Pioneer Valley	Northampton	NORTHAMPTON- ROUNDABOUT CONSTRUCTION AT INTERSECTION ROUTES 5/10 (NORTH KING STREET) & HATFIELD STREET	2	CMAQ	\$ 4,109,480	\$ 3,287,584	\$ 821,896		
Roadway Reconstruction subtotal ►							\$ 5,374,415	\$ 4,299,532	\$ 1,074,883	◀ Funding Split Varies by Funding Source	

► Section 2C / State Prioritized Expansion Projects

► Bicycles and Pedestrians

Bicycles and Pedestrians	603783	Pioneer Valley	Westfield	WESTFIELD- COLUMBIA GREENWAY RAIL TRAIL CONSTRUCTION (CENTER DOWNTOWN SECTION), FROM EAST SILVER STREET TO COWLES COURT, INCLUDES W-25,014, W-25-015, W-25-016, W-25-017, W-25-018 & W-25-019	2	CMAQ	\$ 6,532,895	\$ 5,226,316	\$ 1,306,579	Construction / PSAC score 39.5	
Bicycles and Pedestrians subtotal ►							\$ 6,532,895	\$ 5,226,316	\$ 1,306,579	◀ 80% Federal + 20% Non-Federal	

► Capacity

Capacity		Pioneer Valley		Capacity			\$ -	\$ -	\$ -		
Capacity subtotal ►							\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source	

2019

► Section 3 / Planning / Adjustments / Pass-throughs

► Planning / Adjustments / Pass-throughs										
		Pioneer Valley		ABP GANS Repayment	Multiple		\$ -	\$ -	\$ -	
		Pioneer Valley		ABP GANS Repayment	Multiple		\$ -	\$ -	\$ -	
		Pioneer Valley		Award adjustments, change orders, etc.	Multiple		\$ -	\$ -	\$ -	
		Pioneer Valley		Metropolitan Planning	Multiple		\$ -	\$ -	\$ -	
		Pioneer Valley		Metropolitan Planning	Multiple		\$ -	\$ -	\$ -	
		Pioneer Valley		State Planning and Research Work Program I, (SPR I), Planning	Multiple		\$ -	\$ -	\$ -	
		Pioneer Valley		State Planning and Research Work Program II, (SPR II), Research	Multiple		\$ -	\$ -	\$ -	
		Pioneer Valley		Railroad Crossings	Multiple		\$ -	\$ -	\$ -	
		Pioneer Valley		Railroad Crossings	Multiple		\$ -	\$ -	\$ -	
		Pioneer Valley		Recreational Trails	Multiple		\$ -	\$ -	\$ -	
Other Statewide Items subtotal ►							\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source

► Section 4 / Non-Federally Aided Projects

► Non-Federally Aided Projects										
	Non Federal Aid		Pioneer Valley		Non-Federal Aid		\$ -	\$ -	\$ -	
Non-Federal Aid subtotal ►							\$ -	\$ -	\$ -	◀ 100% Non-Federal

2019 Summary TIP Section 1 - TIP Section 4: Total of All
3: ▼ ▼ Projects ▼

Total ►	\$ 242,351,964	\$ -	\$ 242,351,964	◀ Total Spending in Region
Federal Funds ►	\$ 198,609,714	\$ -	\$ 198,609,714	◀ Total Federal Spending in Region
Non-Federal Funds ►	\$ 43,742,250	\$ -	\$ 43,742,250	◀ Total Non-Federal Spending in Region

701 CMR 7.00 Use of Road Flaggers and Police Details 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>

► Section 2A / State Prioritized Reliability Projects

► Bridge Program / Inspections

	Bridge Program		Pioneer Valley	Multiple	Bridge Inspection	Multiple	NHPP	\$ 11,933,333	\$ 9,546,667	\$ 2,386,667	
	Bridge Program		Pioneer Valley	Multiple	Bridge Inspection	Multiple	STP-BR-OFF	\$ 5,966,667	\$ 4,773,333	\$ 1,193,333	
Bridge Program / Inspections subtotal ►								\$ 17,900,000	\$ 14,320,000	\$ 3,580,000	◄ Funding Split Varies by Funding Source

► Bridge Program / Off-System

	Bridge Program	608642	Berkshire Region	NEW MARLBOROUGH	NEW MARLBOROUGH- SUPERSTRUCTURE REPLACEMENT, N-08-001, NORFOLK ROAD OVER UMPACHENE BROOK	1	STP-BR-OFF	\$ 5,461,456	\$ 4,369,165	\$ 1,092,291	
	Bridge Program	608643	Franklin Region	CHARLEMONT	CHARLEMONT- BRIDGE REPLACEMENT, C-05-037, WEST OXBOW ROAD OVER WILDER BROOK	1	STP-BR-OFF	\$ 2,706,000	\$ 2,164,800	\$ 541,200	
	Bridge Program	608644	Franklin Region	CHARLEMONT	CHARLEMONT- BRIDGE REPLACEMENT, C-05-008, TOWER ROAD OVER CHICKLEY RIVER	1	STP-BR-OFF	\$ 2,692,000	\$ 2,153,600	\$ 538,400	
	Bridge Program	608645	Berkshire Region	NEW MARLBOROUGH	NEW MARLBOROUGH- BRIDGE REPLACEMENT, N-08-006, CAMPBELL FALLS ROAD OVER	1	STP-BR-OFF	\$ 3,286,528	\$ 2,629,222	\$ 657,306	
	Bridge Program	608646	Berkshire Region	TYRINGHAM	TYRINGHAM- BRIDGE REPLACEMENT, T-10-007, MONTEREY ROAD OVER HOP BROOK	1	STP-BR-OFF	\$ 1,727,040	\$ 1,381,632	\$ 345,408	
	Bridge Program	608631	Pioneer Valley	WESTHAMPTON	WESTHAMPTON- BRIDGE REPLACEMENT, W-27-005, KINGS HIGHWAY OVER N BRANCH MANHAN RIVER	2	STP-BR-OFF	\$ 3,072,000	\$ 2,457,600	\$ 614,400	
	Bridge Program	608635	Montachusett	SHIRLEY	SHIRLEY- BRIDGE REPLACEMENT, S-13-005, CARRYING LONGLEY ROAD OVER THE MULPUS BROOK	3	STP-BR-OFF	\$ 1,764,940	\$ 1,411,952	\$ 352,988	
	Bridge Program	608633	Central Mass	WEST BROOKFIELD	WEST BROOKFIELD- BRIDGE REPLACEMENT, W-19-009, FOSTER HILL ROAD OVER COYS BROOK	2	STP-BR-OFF	\$ 1,837,034	\$ 1,469,627	\$ 367,407	
	Bridge Program	608639	Montachusett	WESTMINSTER	WESTMINSTER- BRIDGE REPLACEMENT, W-28-010, CARRYING WHITMANVILLE ROAD OVER THE WHITMAN RIVER	3	STP-BR-OFF	\$ 2,791,200	\$ 2,232,960	\$ 558,240	
	Bridge Program	608640	Central Mass	SUTTON	SUTTON- BRIDGE RECONSTRUCTION/REHABILITATION, S-33-004, CARRYING DEPOT STREET OVER THE BLACKSTONE RIVER	3	STP-BR-OFF	\$ 3,763,199	\$ 3,010,559	\$ 752,640	
AMENDMENT-Add Project	Bridge Program	TBA	Berkshire Region	NEW MARLBOROUGH	NEW MARLBOROUGH- SUPERSTRUCTURE REPLACEMENT, N-08-017, LAMBERTS CROSS ROAD OVER UMPACHENE RIVER	1	STP-BR-OFF	\$ 2,278,848	\$ 1,823,078	\$ 455,770	
AMENDMENT-Add Project	Bridge Program	TBA	Berkshire Region	NEW MARLBOROUGH	NEW MARLBOROUGH- SUPERSTRUCTURE REPLACEMENT, N-08-018, CANAAN-SPRINGFIELD ROAD OVER UMPACHENE RIVER	1	STP-BR-OFF	\$ 1,064,448	\$ 851,558	\$ 212,890	
Bridge Program / Off-System subtotal ►								\$ 32,444,692	\$ 25,955,753	\$ 6,488,938	◄ 80% Federal + 20% Non-Federal

► Bridge Program / On-System (NHS)											
	Bridge Program		Pioneer Valley						\$ -	\$ -	
	Bridge Program	605342	Boston Region	STOW	STOW- BRIDGE REPLACEMENT, S-29-001, (ST 62) GLEASONDALE ROAD OVER THE ASSABET RIVER	3	NHPP-On	\$ 6,706,556	\$ 5,365,245	\$ 1,341,311	
	Bridge Program	400103	Pioneer Valley	WESTFIELD	WESTFIELD- BRIDGE REPLACEMENT, W-25-006, ROUTE 10/202 (SOUTHWICK ROAD) OVER THE LITTLE RIVER	2	NHPP-On	\$ 12,732,554	\$ 10,186,043	\$ 2,546,511	
AMENDMENT:Move Project - (FROM 2018)	Bridge Program	606552	Pioneer Valley	NORTHAMPTON	NORTHAMPTON- BRIDGE RECONSTRUCTION, N-19-059, I-91 OVER US 5/BMRR & N-19-060, I-91 OVER HOCKANUM ROAD	2	NHPP-On	\$ 11,378,353	\$ 9,102,682	\$ 2,275,671	AC Year 1 of 5, Total Cost \$56,891,767
	Bridge Program	604173	Boston Region	BOSTON	BOSTON- BRIDGE REPLACEMENT, B-16-016, NORTH WASHINGTON STREET OVER THE BOSTON INNER HARBOR	6	NHPP-On	\$ 20,000,000	\$ 16,000,000	\$ 4,000,000	AC Year 4 of 6, Total Cost \$176,318,433
	Bridge Program	605306	Merrimack Valley	HAVERHILL	HAVERHILL- BRIDGE REPLACEMENT, H-12-039, I-495 (NB & SB) OVER MERRIMACK RIVER	4	NHPP-On	\$ 19,797,731	\$ 15,838,185	\$ 3,959,546	AC Year 3 of 6, Total Cost \$118,786,388
	Bridge Program	605287	Boston Region	CHELSEA	CHELSEA- ROUTE 1 VIADUCT REHABILITATION (SB/NB) ON C-09-007 & C-09-011	6	NHPP-On	\$ 40,952,933	\$ 32,762,346	\$ 8,190,587	AC Year 3 of 4, Total Cost \$213,972,689
	Bridge Program	604952	Boston Region	LYNN	LYNN- SAUGUS- BRIDGE REPLACEMENT, L-18-016-S-05-008, ROUTE 107 OVER THE SAUGUS RIVER (AKA - BELDEN G. BLY BRIDGE)	4	NHPP-On	\$ 14,894,228	\$ 11,915,382	\$ 2,978,846	AC Year 2 of 5, Total Cost \$74,471,140
Bridge Program / On-System (NHS) subtotal ►								\$ 126,462,355	\$ 101,169,884	\$ 25,292,471	◀ Funding Split Varies by Funding Source
► Bridge Program / On-System (Non-NHS)											
	Bridge Program	604189	Franklin Region	BERNARDSTON	BERNARDSTON- BRIDGE REPLACEMENT, B-10-004, U.S. ROUTE 5 (BRATTLEBORO ROAD) OVER SHATTUCK BROOK	2	NHPP-Off	\$ 2,993,214	\$ 2,394,571	\$ 598,643	
Bridge Program / On-System (Non-NHS) subtotal ►								\$ 2,993,214	\$ 2,394,571	\$ 598,643	◀ 80% Federal + 20% Non-Federal
► Bridge Program / Systematic Maintenance											
	Bridge Program	TBA	Pioneer Valley	Multiple	DISTRICT 1- SYSTEMATIC BRIDGE MAINTENANCE AT VARIOUS LOCATIONS (2020)	1	NHPP-Off	\$ 522,200	\$ 417,760	\$ 104,440	
	Bridge Program	608550	Pioneer Valley	Multiple	DISTRICT 2- SYSTEMATIC BRIDGE MAINTENANCE AT VARIOUS LOCATIONS (2020)	2	NHPP-Off	\$ 1,428,571	\$ 1,142,857	\$ 285,714	
ADJUSTMENT:Increase Cost	Bridge Program	608589	Central Mass	WORCESTER	WORCESTER- CLEAN AND PAINT STRUCTURAL STEEL ON W-44-082	3	NHPP-On	\$ 2,154,029	\$ 1,723,223	\$ 430,806	
ADJUSTMENT:Increase Cost	Bridge Program	608592	Pioneer Valley	Multiple	DISTRICT 5- SYSTEMATIC BRIDGE PRESERVATION ALONG THE I-95 CORRIDOR	5	NHPP-On	\$ 2,724,909	\$ 2,179,927	\$ 544,982	
Bridge Program / Systematic Maintenance subtotal ►								\$ 6,829,709	\$ 5,463,767	\$ 1,365,942	◀ Funding Split Varies by Funding Source

► Interstate Pavement										
Interstate Pavement		Pioneer Valley		Interstate Pavement			\$ -	\$ -	\$ -	
Interstate Pavement subtotal ►							\$ -	\$ -	\$ -	◀ 90% Federal + 10% Non-Federal
► Non-Interstate Pavement										
Non-Interstate Pavement	608473	Pioneer Valley	South Hadley	SOUTH HADLEY- RESURFACING AND RELATED WORK ON ROUTE 116	2	NHPP	\$ 2,208,960	\$ 1,767,168	\$ 441,792	
Non-Interstate Pavement	604209	Pioneer Valley	Multiple	HOLYOKE- WEST SPRINGFIELD- REHABILITATION OF ROUTE 5	2	NHPP	\$ 13,953,264	\$ 11,162,611	\$ 2,790,653	
Non-Interstate Pavement subtotal ►							\$ 16,162,224	\$ 12,929,779	\$ 3,232,445	◀ 80% Federal + 20% Non-Federal
► Roadway Improvements										
Roadway Improvements		Pioneer Valley		Roadway Improvements			\$ -	\$ -	\$ -	
Roadway Improvements subtotal ►							\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal
► Safety Improvements										
Safety Improvements	608573	Central Mass	Multiple	UXBRIDGE TO WORCESTER- GUIDE AND TRAFFIC SIGN REPLACEMENT ON A SECTION	3	HSIP	\$ 1,213,380	\$ 1,092,042	\$ 121,338	
Safety Improvements	608575	Pioneer Valley	Multiple	CHICOPEE TO HOLYOKE- GUIDE AND TRAFFIC SIGN REPLACEMENT ON I-391	2	HSIP	\$ 542,872	\$ 488,585	\$ 54,287	
Safety Improvements	608572	SE Mass	Multiple	DARTMOUTH TO RAYNHAM- GUIDE AND TRAFFIC SIGN REPLACEMENT ON SECTIONS OF I-195 AND I-495	5	HSIP	\$ 8,139,312	\$ 7,325,381	\$ 813,931	
Safety Improvements	608608	Boston Region	Braintree	BRAINTREE- HIGHWAY LIGHTING IMPROVEMENTS AT I-93/ROUTE 3 INTERCHANGE	6	NHPP	\$ 2,688,726	\$ 2,419,853	\$ 268,873	
Safety Improvements	608611	Boston Region	Multiple	CANTON- MILTON- RANDOLPH- REPLACEMENT AND REHABILITATION OF THE HIGHWAY LIGHTING SYSTEM AT THE ROUTE 24/ROUTE 1/ 93 INTERCHANGE	6	NHPP	\$ 9,434,070	\$ 8,490,663	\$ 943,407	
Safety Improvements	608583	Statewide	Multiple	STATEWIDE- VARIOUS SAFETY STRATEGIES TO ADDRESS SHSP -TO BE DETERMINED (2020)	Multiple	HSIP	\$ 898,307	\$ 808,476	\$ 89,831	
Safety Improvements subtotal ►							\$ 22,916,667	\$ 20,625,000	\$ 2,291,667	◀ Funding Split Varies by Funding Source
► Section 2B / State Prioritized Modernization Projects										
► ADA Retrofits										
ADA Retrofits		Pioneer Valley		ADA Retrofits			\$ -	\$ -	\$ -	
ADA Retrofits subtotal ►							\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal

► Intersection Improvements										
Intersection Improvements	608562	Boston Region	Somerville	SOMERVILLE- SIGNAL AND INTERSECTION IMPROVEMENT ON I-93 AT MYSTIC AVENUE AND MCGRATH HIGHWAY (TOP 200 CRASH LOCATION)	4	HSIP	\$ 5,000,000	\$ 4,500,000	\$ 500,000	
Intersection Improvements	606011	Franklin	Multiple	DEERFIELD- WHATELY- RESURFACING & RELATED WORK ON ROUTES 5 & 10, FROM OLD STATE ROAD TO CONWAY ROAD (1.1 MILES)	2	HSIP	\$ 1,500,000	\$ 1,350,000	\$ 150,000	
Intersection Improvements	608757	Central Mass	Worcester	WORCESTER- INTERSECTION IMPROVEMENTS AT WEST MOUNTAIN STREET AT I-190 FRONTAGE ROAD & BROOKS STREET EXTENSION	3	HSIP	\$ 2,500,000	\$ 2,250,000	\$ 250,000	
Intersection Improvements	606272	Cape Cod	Barnstable	BARNSTABLE- INTERSECTION IMPROVEMENTS AT IYANOUGH ROAD (ROUTE 28) AND YARMOUTH ROAD	5	NFP	\$ 540,800	\$ 486,720	\$ 54,080	
Intersection Improvements	608086	Old Colony	Avon	AVON- INTERSECTION IMPROVEMENTS AT HARRISON BOULEVARD AND POND STREET	5	CMAQ	\$ 3,888,000	\$ 3,499,200	\$ 388,800	
Intersection Improvements	607756	Berkshire	Great Barrington	GREAT BARRINGTON- INTERSECTION & SIGNAL IMPROVEMENTS ON US 7 (SOUTH MAIN STREET) AT SR 23 & SR 41 (MAPLE AVENUE)	1	HSIP	\$ 1,949,630	\$ 1,754,667	\$ 194,963	
Intersection Improvements	607342	Boston Region	Milton	MILTON- INTERSECTION & SIGNAL IMPROVEMENTS @ ROUTE 28 (RANDOLPH	6	HSIP	\$ 1,531,200	\$ 1,378,080	\$ 153,120	
Intersection Improvements	607759	Boston Region	Boston	BOSTON- INTERSECTION & SIGNAL IMPROVEMENTS AT THE VFW PARKWAY & SPRING STREET	6	HSIP	\$ 974,815	\$ 877,334	\$ 97,482	
Intersection Improvements subtotal ►							\$ 17,884,445	\$ 16,096,001	\$ 1,788,445	◀ Funding Split Varies by Funding Source
► Intelligent Transportation Systems										
Intelligent Transportation Systems		Pioneer Valley		Intelligent Transportation Systems			\$ -	\$ -	\$ -	
Intelligent Transportation System subtotal ►							\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal
► Roadway Reconstruction										
Roadway Reconstruction		Pioneer Valley		Roadway Reconstruction			\$ -	\$ -	\$ -	
Roadway Reconstruction subtotal ►							\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source
► Section 2C / State Prioritized Expansion Projects										
► Bicycles and Pedestrians										
Bicycles and Pedestrians	602911	Pioneer Valley	Chicopee	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	2	CMAQ	\$ 3,247,643	\$ 2,598,114	\$ 649,529	Construction / PSAC score 25.5
Bicycles and Pedestrians subtotal ►							\$ 3,247,643	\$ 2,598,114	\$ 649,529	◀ 80% Federal + 20% Non-Federal
► Capacity										
Capacity		Pioneer Valley		Capacity			\$ -	\$ -	\$ -	
Capacity subtotal ►							\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source

2020

► Section 3 / Planning / Adjustments / Pass-throughs

► Planning / Adjustments / Pass-throughs									
		Pioneer Valley		ABP GANS Repayment	Multiple	\$ -	\$ -	\$ -	
		Pioneer Valley		ABP GANS Repayment	Multiple	\$ -	\$ -	\$ -	
		Pioneer Valley		Award adjustments, change orders, etc.	Multiple	\$ -	\$ -	\$ -	
		Pioneer Valley		Award adjustments, change orders, etc.	Multiple	\$ -	\$ -	\$ -	
		Pioneer Valley		Award adjustments, change orders, etc.	Multiple	\$ -	\$ -	\$ -	
		Pioneer Valley		Award adjustments, change orders, etc.	Multiple	\$ -	\$ -	\$ -	
		Pioneer Valley		Metropolitan Planning	Multiple	\$ -	\$ -	\$ -	
		Pioneer Valley		Metropolitan Planning	Multiple	\$ -	\$ -	\$ -	
		Pioneer Valley		State Planning and Research Work Program I, (SPR I), Planning	Multiple	\$ -	\$ -	\$ -	
		Pioneer Valley		State Planning and Research Work Program II, (SPR II), Research	Multiple	\$ -	\$ -	\$ -	
		Pioneer Valley		Railroad Crossings	Multiple	\$ -	\$ -	\$ -	
		Pioneer Valley		Railroad Crossings	Multiple	\$ -	\$ -	\$ -	
		Pioneer Valley		Recreational Trails	Multiple	\$ -	\$ -	\$ -	
Other Statewide Items subtotal ►						\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source

► Section 4 / Non-Federally Aided Projects

► Non-Federally Aided Projects									
	Non Federal Aid	Pioneer Valley		Non-Federal Aid		\$ -	\$ -		
	Non-Federally Aided Projects	Pioneer Valley		Non-Federal Aid		\$ -	\$ -		
Non-Federal Aid subtotal ►						\$ -	\$ -	◀ 100% Non-Federal	

2020 Summary TIP Section 1 - TIP Section 4: Total of All Projects ▼

Total ►	\$ 246,840,949	\$ -	\$ 246,840,949	◀ Total Spending in Region
Federal Funds ►	\$ 201,552,870	\$ -	\$ 201,552,870	◀ Total Federal Spending in Region
Non-Federal Funds ►	\$ 45,288,079	\$ -	\$ 45,288,079	◀ Total Non-Federal Spending in Region

701 CMR 7.00 Use of Road Flaggers and Police Details 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>

► Section 1B / Earmark or Discretionary Grant Funded Projects

► Other Federal Aid											
			Pioneer Valley		Other Federal Aid		HPP	\$ -	\$ -	\$ -	
			Pioneer Valley		Other Federal Aid		HPP	\$ -	\$ -	\$ -	
Other Federal Aid subtotal ►								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source

► Section 2A / State Prioritized Reliability Projects

► Bridge Program / Inspections											
	Bridge Program		Pioneer Valley		Bridge Inspection			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Inspection			\$ -	\$ -	\$ -	
Bridge Program / Inspections subtotal ►								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source

► Bridge Program / Off-System

	Bridge Program	608636	Berkshire Region	LENOX	LENOX- BRIDGE REPLACEMENT, L-07-006, ROARING BROOK ROAD OVER ROARING BROOK	1	STP-BR-OFF	\$ 1,122,880	\$ 898,304	\$ 224,576	
	Bridge Program	608647	Berkshire Region	SAVOY	SAVOY- BRIDGE SUPERSTRUCTURE REPLACEMENT, S-06-003, CENTER ROAD OVER CENTER BROOK	1	STP-BR-OFF	\$ 813,740	\$ 650,992	\$ 162,748	
	Bridge Program	608634	Franklin Region	DEERFIELD	DEERFIELD- BRIDGE PRESERVATION D-06-001, UPPER ROAD OVER DEERFIELD RIVER	2	STP-BR-OFF	\$ 6,551,200	\$ 5,240,960	\$ 1,310,240	
	Bridge Program	608637	Boston Region	MAYNARD	MAYNARD- BRIDGE REPLACEMENT, M-10-006, CARRYING FLORIDA ROAD OVER THE ASSABET RIVER	3	STP-BR-OFF	\$ 1,646,400	\$ 1,317,120	\$ 329,280	
	Bridge Program	608615	Old Colony	KINGSTON	KINGSTON- BRIDGE REPLACEMENT, K-01-014, SMITHS LANE OVER ROUTE 3 (PILGRIM HIGHWAY)	5	STP-BR-OFF	\$ 12,788,000	\$ 10,230,400	\$ 2,557,600	
	Bridge Program	608616	Southeastern Mass	TAUNTON	TAUNTON- BRIDGE REPLACEMENT, T-01-024, SCADDING STREET OVER SNAKE RIVER.	5	STP-BR-OFF	\$ 942,500	\$ 754,000	\$ 188,500	
	Bridge Program	603796	Southeastern Mass	MANSFIELD	MANSFIELD- BRIDGE REPLACEMENT, M-03-003 & M-03-045, BALCOM STREET OVER THE WADING RIVER	5	STP-BR-OFF	\$ 768,000	\$ 614,400	\$ 153,600	
	Bridge Program	608617	Cape Cod	HARWICH	HARWICH- BRIDGE REPLACEMENT, H-10-019, AZALEA DRIVE OVER HERRING RIVER	5	STP-BR-OFF	\$ 899,800	\$ 719,840	\$ 179,960	
	Bridge Program	608618	Southeastern Mass	REHOBOTH	REHOBOTH- BRIDGE REPLACEMENT, R-04-004, REED STREET OVER PALMER RIVER	5	STP-BR-OFF	\$ 1,220,000	\$ 976,000	\$ 244,000	
	Bridge Program	608619	Southeastern Mass	FALL RIVER	FALL RIVER- BRIDGE REPLACEMENT, F-02-019, WEAVER STREET OVER MASSACHUSETTS COASTAL RAILROAD	5	STP-BR-OFF	\$ 4,612,100	\$ 3,689,680	\$ 922,420	
	Bridge Program	608854	Berkshire Region	PITTSFIELD	PITTSFIELD- BRIDGE REPLACEMENT, P-10-034, MILL STREET OVER W. BRANCH OF HOUSATONIC RIVER	1	STP-BR-OFF	\$ 1,776,772	\$ 1,421,418	\$ 355,354	
Bridge Program / Off-System subtotal ►								\$ 33,141,393	\$ 26,513,115	\$ 6,628,279	◀ 80% Federal + 20% Non-Federal

► Bridge Program / On-System (NHS)

AMENDMENT: Move Project - (FROM 2020)	Bridge Program	608460	Pioneer Valley	HADLEY	HADLEY- BRIDGE REPLACEMENT, H-01-005, BAY ROAD (ROUTE 47) OVER THE FORT RIVER	2	NHPP-On	\$ 5,647,995	\$ 4,518,396	\$ 1,129,599	
	Bridge Program	608189	Pioneer Valley	FITCHBURG	FITCHBURG- BRIDGE REPLACEMENT AND RELATED WORK, F-04-017, WATER STREET (STATE 2A) OVER BOULDER DRIVE AND PANAM RAILROAD & F-04-018, WATER STREET (ROUTE 12) OVER NORTH NASHUA RIVER	3	NHPP-On	\$ 21,643,216	\$ 17,314,573	\$ 4,328,643	
	Bridge Program	604173	Boston Region	BOSTON	BOSTON- BRIDGE REPLACEMENT, B-16-016, NORTH WASHINGTON STREET OVER THE BOSTON INNER HARBOR	6	NHPP-On	\$ 20,000,000	\$ 16,000,000	\$ 4,000,000	AC Year 5 of 6, Total Cost \$176,318,433
	Bridge Program	605306	Merrimack Valley	HAVERHILL	HAVERHILL- BRIDGE REPLACEMENT, H-12-039, I-495 (NB & SB) OVER MERRIMACK RIVER	4	NHPP-On	\$ 19,797,731	\$ 15,838,185	\$ 3,959,546	AC Year 4 of 6, Total Cost \$118,786,388
	Bridge Program	605287	Boston Region	CHELSEA	CHELSEA- ROUTE 1 VIADUCT REHABILITATION (SB/NB) ON C-09-007 & C-09-011	6	NHPP-On	\$ 29,992,990	\$ 23,994,392	\$ 5,998,598	AC Year 4 of 4, Total Cost \$213,972,689
	Bridge Program	604952	Boston Region	LYNN	LYNN- SAUGUS- BRIDGE REPLACEMENT, L-18-016-S-05-008, ROUTE 107 OVER THE SAUGUS RIVER (AKA - BELDEN G. BLYBRIDGE)	4	NHPP-On	\$ 17,028,354	\$ 13,622,683	\$ 3,405,671	AC Year 3 of 5, Total Cost \$74,471,140
	Bridge Program	606552	Pioneer Valley	NORTHAMPTON	NORTHAMPTON- BRIDGE RECONSTRUCTION, N-19-059, I-91 OVER US 5/BRRR & N-19-060, I-91 OVER HOCKANUM ROAD	2	NHPP-On	\$ 11,378,353	\$ 9,102,682	\$ 2,275,671	AC Year 2 of 5, Total Cost \$56,891,767
Bridge Program / On-System (NHS) subtotal ►								\$ 125,488,639	\$ 100,390,911	\$ 25,097,728	◀ Funding Split Varies by Funding Source

► Bridge Program / On-System (Non-NHS)											
	Bridge Program	608596	Pioneer Valley	ESSEX	ESSEX- SUPERSTRUCTURE REPLACEMENT, E-11-001 (2TV), ROUTE 133/MAIN STREET OVER	4	NHPP-Off	\$ 4,511,360	\$ 3,609,088	\$ 902,272	
Bridge Program / On-System (Non-NHS) subtotal ►								\$ 4,511,360	\$ 3,609,088	\$ 902,272	◀ 80% Federal + 20% Non-Federal
► Bridge Program / Systematic Maintenance											
	Bridge Program	TBA	Pioneer Valley	Multiple	DISTRICT 1- SYSTEMATIC BRIDGE MAINTENANCE AT VARIOUS LOCATIONS (2021)	1	NHPP-Off	\$ 522,200	\$ 417,760	\$ 104,440	
	Bridge Program	608551	Pioneer Valley	Multiple	DISTRICT 2- SYSTEMATIC BRIDGE MAINTENANCE AT VARIOUS LOCATIONS (2021)	2	NHPP-Off	\$ 1,325,862	\$ 1,060,690	\$ 265,172	
ADJUSTMENT:Increase Cost	Bridge Program	608590	Pioneer Valley	Multiple	DISTRICT 3- CLEAN AND PAINT STRUCTURAL STEEL BRIDGES ON I-190 AND I-290	3	NHPP-On	\$ 3,015,220	\$ 2,412,176	\$ 603,044	
ADJUSTMENT:Increase Cost	Bridge Program	608593	Pioneer Valley	Multiple	DISTRICT 5- SYSTEMATIC BRIDGE PRESERVATION ALONG THE I-195 CORRIDOR	5	NHPP-On	\$ 2,298,657	\$ 1,838,926	\$ 459,731	
	Bridge Program	608610	Boston Region	NEWTON	NEWTON- STEEL SUPERSTRUCTURE CLEANING (FULL REMOVAL) AND PAINTING OF N-12-055	6	NHPP-On	\$ 2,304,000	\$ 1,843,200	\$ 460,800	
Bridge Program / Systematic Maintenance subtotal ►								\$ 9,465,939	\$ 7,572,751	\$ 1,893,188	◀ Funding Split Varies by Funding Source
► Interstate Pavement											
	Interstate Pavement		Pioneer Valley		Interstate Pavement			\$ -	\$ -	\$ -	
Interstate Pavement subtotal ►								\$ -	\$ -	\$ -	◀ 90% Federal + 10% Non-Federal
► Non-Interstate Pavement											
	Non-Interstate Pavement	608487	Pioneer Valley	Westfield	WESTFIELD- RESURFACING AND RELATED WORK ON RTE 10 AND 202	2	NHPP	\$ 2,676,240	\$ 2,140,992	\$ 535,248	
	Non-Interstate Pavement	608489	Pioneer Valley	Wilbraham	WILBRAHAM- RESURFACING AND RELATED WORK ON ROUTE 20	2	NHPP	\$ 8,602,200	\$ 6,881,760	\$ 1,720,440	
Non-Interstate Pavement subtotal ►								\$ 11,278,440	\$ 9,022,752	\$ 2,255,688	◀ 80% Federal + 20% Non-Federal
► Roadway Improvements											
	Roadway Improvements		Pioneer Valley		Roadway Improvements			\$ -	\$ -	\$ -	
Roadway Improvements subtotal ►								\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal
► Safety Improvements											
	Safety Improvements	609090	Boston Region	Multiple	BOSTON-MILTON-QUINCY- HIGHWAY LIGHTING SYSTEM REPLACEMENT ON I-93, FROM	6	NHPP	\$ 3,000,000	\$ 2,700,000	\$ 300,000	
	Safety Improvements	608620	Statewide	Multiple	ANDOVER- TEWKSBURY- HIGHWAY LIGHTING SYSTEM REHABILITATION AND REPAIR AT THE INTERCHANGE OF INTERSTATE ROUTES 93 AND 495	4	NHPP	\$ 5,152,000	\$ 4,636,800	\$ 515,200	
	Safety Improvements	608584	Statewide	Multiple	STATEWIDE- VARIOUS SAFETY STRATEGIES TO ADDRESS SHSP - TO BE DETERMINED (2021)	Multiple	HSIP	\$ 4,000,000	\$ 3,600,000	\$ 400,000	
	Safety Improvements	608759	SE Mass	Swansea	SWANSEA- TRAFFIC SIGNAL AND SAFETY IMPROVEMENTS AT THREE INTERSECTIONS ON ROUTE 6	5	HSIP	\$ 7,020,000	\$ 6,318,000	\$ 702,000	
Safety Improvements subtotal ►								\$ 19,172,000	\$ 17,254,800	\$ 1,917,200	◀ Funding Split Varies by Funding Source
► Section 2B / State Prioritized Modernization Projects											
► ADA Retrofits											
	ADA Retrofits		Pioneer Valley		ADA Retrofits			\$ -	\$ -	\$ -	
ADA Retrofits subtotal ►								\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal

► Intersection Improvements											
Intersection Improvements	607761	Boston Region	Swampscott	SWAMPSCOTT- INTERSECTION & SIGNAL IMPROVEMENTS AT SR 1A (PARADISE ROAD) AT SWAMPSCOTT MALL	4	HSIP	\$ 2,000,000	\$ 1,800,000	\$ 200,000		
Intersection Improvements	608053	SE Mass	Mansfield	MANSFIELD- INTERSECTION & SIGNAL IMPROVEMENTS AT SR 140 (COMMERCIAL STREET) & SR 106 (CHAUNCEY STREET)	5	NHPP	\$ 974,815	\$ 877,334	\$ 97,482		
Intersection Improvements	606450	Pioneer Valley	Holyoke	HOLYOKE- TRAFFIC SIGNAL UPGRADES AT 15 INTERSECTIONS ALONG HIGH & MAPLE STREETS	2	CMAQ	\$ 4,450,000	\$ 4,005,000	\$ 445,000		
Intersection Improvements	608561	Montachusett	Leominster	LEOMINSTER- IMPROVEMENTS AT ROUTE 12 (NORTH MAIN STREET) AT HAMILTON STREET; ROUTE 12 (NORTH MAIN STREET) AT NELSON STREET	3	HSIP	\$ 3,000,000	\$ 2,700,000	\$ 300,000		
Intersection Improvements subtotal ►							\$ 18,424,815	\$ 16,582,334	\$ 1,842,482	◀ Funding Split Varies by Funding Source	
► Intelligent Transportation Systems											
Intelligent Transportation Systems		Pioneer Valley		Intelligent Transportation Systems			\$ -	\$ -	\$ -		
Intelligent Transportation System subtotal ►							\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal	
► Roadway Reconstruction											
Roadway Reconstruction		Pioneer Valley		Roadway Reconstruction			\$ -	\$ -	\$ -		
Roadway Reconstruction subtotal ►							\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source	
► Section 2C / State Prioritized Expansion Projects											
► Bicycles and Pedestrians											
Bicycles and Pedestrians	608157	Pioneer Valley	Springfield	SPRINGFIELD- MCKNIGHT COMMUNITY TRAIL CONSTRUCTION, FROM ARMORY STREET TO HAYDEN AVENUE (1.5 MILES)	2	CMAQ	\$ 3,694,624	\$ 2,955,699	\$ 738,925	Construction / PSAC score 30.5	
Bicycles and Pedestrians subtotal ►							\$ 3,694,624	\$ 2,955,699	\$ 738,925	◀ 80% Federal + 20% Non-Federal	
► Capacity											
Capacity		Pioneer Valley		Capacity			\$ -	\$ -	\$ -		
Capacity subtotal ►							\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source	
► Section 3 / Planning / Adjustments / Pass-throughs											
► Planning / Adjustments / Pass-throughs											
		Pioneer Valley		ABP GANS Repayment	Multiple		\$ -	\$ -	\$ -		
		Pioneer Valley		ABP GANS Repayment	Multiple		\$ -	\$ -	\$ -		
		Pioneer Valley		Award adjustments, change orders, etc.	Multiple		\$ -	\$ -	\$ -		
		Pioneer Valley		Award adjustments, change orders, etc.	Multiple		\$ -	\$ -	\$ -		
		Pioneer Valley		Award adjustments, change orders, etc.	Multiple		\$ -	\$ -	\$ -		
		Pioneer Valley		Award adjustments, change orders, etc.	Multiple		\$ -	\$ -	\$ -		
		Pioneer Valley		Metropolitan Planning	Multiple		\$ -	\$ -	\$ -		
		Pioneer Valley		Metropolitan Planning	Multiple		\$ -	\$ -	\$ -		
		Pioneer Valley		State Planning and Research Work Program I, (SPR I), Planning	Multiple		\$ -	\$ -	\$ -		
		Pioneer Valley		State Planning and Research Work Program II, (SPR II), Research	Multiple		\$ -	\$ -	\$ -		
		Pioneer Valley		Railroad Crossings	Multiple		\$ -	\$ -	\$ -		
		Pioneer Valley		Railroad Crossings	Multiple		\$ -	\$ -	\$ -		
		Pioneer Valley		Recreational Trails	Multiple		\$ -	\$ -	\$ -		
Other Statewide Items subtotal ►							\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source	

2021

► Section 4 / Non-Federally Aided Projects

► Non-Federally Aided Projects

Non Federal Aid	Pioneer Valley	Non-Federal Aid	\$ -	\$ -
Non-Federal Aid subtotal►			\$ -	\$ - ◀100% Non-Federal

2021 Summary

		TIP Section 1 - TIP Section 4: Total of All 3: ▼ ▼ Projects ▼	
Total ►	\$ 225,177,210	\$ -	\$ 225,177,210 ◀ Total Spending in Region
Federal Funds ►	\$ 183,901,450	\$ -	\$ 183,901,450 ◀ Total Federal Spending in Region
Non-Federal Funds ►	\$ 41,275,761	\$ -	\$ 41,275,761 ◀ Total Non-Federal Spending in Region

701 CMR 7.00 Use of Road Flaggers and Police Details 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>

► Section 2A / State Prioritized Reliability Projects

► Bridge Program / Inspections

Bridge Program		Pioneer Valley	Multiple	Bridge Inspection	Multiple	NHPP	\$ 11,933,333	\$ 9,546,667	\$ 2,386,667	
Bridge Program		Pioneer Valley	Multiple	Bridge Inspection	Multiple	STP-BR-OFF	\$ 5,966,667	\$ 4,773,333	\$ 1,193,333	
Bridge Program / Inspections subtotal ►							\$ 17,900,000	\$ 14,320,000	\$ 3,580,000	◀ Funding Split Varies by Funding Source

► Bridge Program / Off-System

Bridge Program	605296	Montachusett	FITCHBURG	FITCHBURG- BRIDGE PRESERVATION, F-04-011, CIRCLE STREET OVER NORTH NASHUA RIVER	3	STP-BR-OFF	\$ 3,058,688	\$ 2,446,950	\$ 611,738	
Bridge Program	608862	Central Mass, Montachusett	SOUTHBRIDGE	SOUTHBRIDGE- BRIDGE REPLACEMENT, S-21-009, MILL STREET OVER THE MCKINSTRY BROOK	3	STP-BR-OFF	\$ 1,500,000	\$ 1,200,000	\$ 300,000	
Bridge Program	608861	Northern Middlesex	WESTFORD	WESTFORD- BRIDGE REPLACEMENT, W-26-002, STONY BROOK ROAD OVER THE STONY BROOK	3	STP-BR-OFF	\$ 2,205,120	\$ 1,764,096	\$ 441,024	
Bridge Program	608907	Central Mass	UXBRIDGE	UXBRIDGE- BRIDGE REPLACEMENT, U-02-052, ROUTE 146 RAMP OVER EMERSON BROOK	3	STP-BR-OFF	\$ 1,518,862	\$ 1,215,090	\$ 303,772	
Bridge Program	608851	Central Mass	HARDWICK- NEW BRAINTREE	HARDWICK- NEW BRAINTREE- BRIDGE REPLACEMENT, H-08-003-N-07-002, CREAMERY ROAD OVER WARE RIVER	2	STP-BR-OFF	\$ 4,123,104	\$ 3,298,483	\$ 824,621	
Bridge Program	608850	Montachusett	PETERSHAM	PETERSHAM- BRIDGE REPLACEMENT, P-08-002, GLEN VALLEY ROAD OVER EAST BRANCH OF SWIFT RIVER	2	STP-BR-OFF	\$ 4,569,936	\$ 3,655,949	\$ 913,987	
Bridge Program	608849	Franklin Region	LEVERETT	LEVERETT- BRIDGE REPLACEMENT, L-09-003, MILLERS ROAD OVER ROARING BROOK	2	STP-BR-OFF	\$ 1,128,912	\$ 903,130	\$ 225,782	
Bridge Program	608869	Pioneer Valley	NORTHAMPTON	NORTHAMPTON- BRIDGE REPLACEMENT, N-19-068, OLD SPRINGFIELD ROAD OVER THE MILL RIVER	2	STP-BR-OFF	\$ 3,981,000	\$ 3,184,800	\$ 796,200	
Bridge Program	608847	Pioneer Valley	WALES	WALES- BRIDGE REPLACEMENT, W-02-002, HOLLAND ROAD OVER WALES BROOK	2	STP-BR-OFF	\$ 540,096	\$ 432,077	\$ 108,019	
Bridge Program	608855	Franklin Region	ROWE	ROWE- BRIDGE REPLACEMENT, R-10-008, CYRUS STAGE ROAD OVER POTTER BROOK	1	STP-BR-OFF	\$ 1,990,560	\$ 1,592,448	\$ 398,112	
Bridge Program	608856	Berkshire Region	OTIS	OTIS- BRIDGE REPLACEMENT, O-05-007, TANNERY ROAD OVER W. BRANCH OF FARMINGTON RIVER	1	STP-BR-OFF	\$ 821,280	\$ 657,024	\$ 164,256	
Bridge Program	608857	Berkshire Region	CHESHIRE	CHESHIRE- BRIDGE REPLACEMENT, C-10-002, SAND MILL ROAD OVER DRYBROOK	1	STP-BR-OFF	\$ 2,462,448	\$ 1,969,958	\$ 492,490	
Bridge Program	608858	Franklin Region	CHARLEMONT	CHARLEMONT- BRIDGE REPLACEMENT, C-05-042, EAST OXBOW ROAD OVER OXBOW BROOK	1	STP-BR-OFF	\$ 1,396,176	\$ 1,116,941	\$ 279,235	
Bridge Program	608860	Berkshire Region	PITTSFIELD	PITTSFIELD- BRIDGE REPLACEMENT, P-10-055, EAST NEW LENOX ROAD OVER SACKETT BROOK	1	STP-BR-OFF	\$ 573,504	\$ 458,803	\$ 114,701	
Bridge Program	608859	Berkshire Region	TYRINGHAM	TYRINGHAM- BRIDGE REPLACEMENT, T-10-003, JERUSALEM ROAD OVER HOP BROOK	1	STP-BR-OFF	\$ 3,087,325	\$ 2,469,860	\$ 617,465	
Bridge Program	608846	Pioneer Valley	MONSON	MONSON- BRIDGE REPLACEMENT, M-27-015, OLD WALES ROAD OVER CONANT BROOK	2	STP-BR-OFF	\$ 1,742,784	\$ 1,394,227	\$ 348,557	
Bridge Program / Off-System subtotal ►							\$ 34,699,795	\$ 27,759,836	\$ 6,939,959	◀ 80% Federal + 20% Non-Federal

► Bridge Program / On-System (NHS)											
AMENDMENT:Move Project - (FROM 2020)	Bridge Program	608614	Berkshire Region	BOSTON	BOSTON- BRIDGE SUBSTRUCTURE REPAIRS, B-16-179, AUSTIN STREET OVER I-93 RAMPS, MBTA COMMUTER RAIL AND ORANGE LINE	6	NHPP-On	\$ 22,132,800	\$ 17,706,240	\$ 4,426,560	
	Bridge Program	607327	Boston Region	WILMINGTON	WILMINGTON- BRIDGE REPLACEMENT, W-38-002, ROUTE 38 (MAIN STREET) OVER THE B&M RAILROAD	4	NHPP-On	\$ 10,760,960	\$ 8,608,768	\$ 2,152,192	
	Bridge Program	606548	Franklin Region	GREENFIELD	GREENFIELD- BRIDGE REPLACEMENT, G-12-052 (0XR) & G-12-053 (0XT), I-91 (NB & SB) OVER BMRR	2	NHPP-On	\$ 20,563,987	\$ 16,451,190	\$ 4,112,797	
	Bridge Program	604173	Boston Region	BOSTON	BOSTON- BRIDGE REPLACEMENT, B-16-016, NORTH WASHINGTON STREET OVER THE BOSTON INNER HARBOR	6	NHPP-On	\$ 18,436,073	\$ 14,748,858	\$ 3,687,215	AC Year 6 of 6, Total Cost \$176,318,433
	Bridge Program	605306	Merrimack Valley	HAVERHILL	HAVERHILL- BRIDGE REPLACEMENT, H-12-039, I-495 (NB & SB) OVER MERRIMACK RIVER	4	NHPP-On	\$ 19,797,731	\$ 15,838,185	\$ 3,959,546	AC Year 5 of 6, Total Cost \$118,786,388
	Bridge Program	604952	Boston Region	LYNN	LYNN- SAUGUS- BRIDGE REPLACEMENT, L-18-016=S-05-008, ROUTE 107 OVER THE SAUGUS RIVER (AKA - BELDEN G. BLY BRIDGE)	4	NHPP-On	\$ 21,746,735	\$ 17,397,388	\$ 4,349,347	AC Year 4 of 5, Total Cost \$74,471,140
	Bridge Program	606552	Pioneer Valley	NORTHAMPTON	NORTHAMPTON- BRIDGE RECONSTRUCTION, N-19-059, I-91 OVER US 5/BMRR & N-19-060, I-91 OVER HOCKANUM ROAD	2	NHPP-On	\$ 11,378,353	\$ 9,102,682	\$ 2,275,671	AC Year 3 of 5, Total Cost \$56,891,767
Bridge Program / On-System (NHS) subtotal ►								\$ 124,816,639	\$ 99,853,311	\$ 24,963,328	◀ Funding Split Varies by Funding Source
► Bridge Program / On-System (Non-NHS)											
AMENDMENT:Add Project	Bridge Program	608929	Boston Region	WILMINGTON	WILMINGTON- BRIDGE REPLACEMENT, W-38-003, BUTTERS ROW OVER MBTA	4	NHPP-Of	\$ 5,183,360	\$ 4,146,688	\$ 1,036,672	
Bridge Program / On-System (Non-NHS) subtotal ►								\$ 5,183,360	\$ 4,146,688	\$ 1,036,672	◀ 80% Federal + 20% Non-Federal
► Bridge Program / Systematic Maintenance											
	Bridge Program	TBA	Pioneer Valley	Multiple	DISTRICT 1- SYSTEMATIC BRIDGE MAINTENANCE AT VARIOUS LOCATIONS (2022)	1	NHPP-Of	\$ 522,200	\$ 417,760	\$ 104,440	
	Bridge Program	608837	Pioneer Valley	Multiple	DISTRICT 2- SYSTEMATIC BRIDGE MAINTENANCE AT VARIOUS LOCATIONS (2022)	2	NHPP-Of	\$ 1,540,000	\$ 1,232,000	\$ 308,000	
	Bridge Program	TBA	Pioneer Valley	Multiple	DISTRICT 4- SYSTEMATIC BRIDGE MAINTENANCE AT VARIOUS LOCATIONS (2022)	4	NHPP-Of	\$ 3,000,000	\$ 2,400,000	\$ 600,000	
ADJUSTMENT:Decrease Cost	Bridge Program	608863	Pioneer Valley	Multiple	DISTRICT 5- SYSTEMATIC BRIDGE PRESERVATION ALONG THE ROUTE 24 CORRIDOR	5	NHPP-On	\$ 1,605,100	\$ 1,284,080	\$ 321,020	
	Bridge Program	608866	Boston Region	NEWTON-WESTON	NEWTON- WESTON- STEEL SUPERSTRUCTURE CLEANING (FULL REMOVAL) AND PAINTING OF 3 BRIDGES: N-12-051, W-29-011 & W-29-028	6	NHPP-On	\$ 2,349,900	\$ 1,879,920	\$ 469,980	
Bridge Program / Systematic Maintenance subtotal ►								\$ 9,017,200	\$ 7,213,760	\$ 1,803,440	◀ Funding Split Varies by Funding Source
► Interstate Pavement											
	Interstate Pavement		Pioneer Valley		Interstate Pavement			\$ -	\$ -	\$ -	
Interstate Pavement subtotal ►								\$ -	\$ -	\$ -	◀ 90% Federal + 10% Non-Federal

► Non-Interstate Pavement											
Non-Interstate Pavement	608466	Pioneer Valley	Multiple	BELCHERTOWN- GRANBY- RESURFACING AND RELATED WORK ON ROUTE 202	2	NHPP	\$ 4,163,040	\$ 3,330,432	\$ 832,608		
Non-Interstate Pavement subtotal ►							\$ 4,163,040	\$ 3,330,432	\$ 832,608	◀ 80% Federal + 20% Non-Federal	
► Roadway Improvements											
Roadway Improvements		Pioneer Valley		Roadway Improvements			\$ -	\$ -	\$ -		
Roadway Improvements subtotal ►							\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal	
► Safety Improvements											
Safety Improvements	608574	Pioneer Valley	Multiple	BURLINGTON TO TYNGSBOROUGH- GUIDE AND TRAFFIC SIGN REPLACEMENT ON A SECTION OF US 3	4	NHPP	\$ 8,352,098	\$ 7,516,888	\$ 835,210		
Safety Improvements	608433	Central Mass	Webster	WEBSTER- INTERSECTION IMPROVEMENTS AT I-395 RAMPS (EXIT 2) AT ROUTE 16 (EAST MAIN STREET) AND SUTTON ROAD	3	HSIP	\$ 2,500,000	\$ 2,250,000	\$ 250,000		
Safety Improvements	608620	Statewide	Multiple	ANDOVER- TEWKSBURY- HIGHWAY LIGHTING SYSTEM REHABILITATION AND REPAIR AT THE INTERCHANGE OF INTERSTATE ROUTES 93 AND 495	4	NHPP	\$ 5,152,000	\$ 4,636,800	\$ 515,200		
Safety Improvements	609063	SE Mass	Multiple	ATTLEBORO-NORTH ATTLEBOROUGH GUIDE AND TRAFFIC SIGN REPLACEMENT ON INTERSTATE 295	5	HSIP	\$ 408,454	\$ 367,609	\$ 40,845		
Safety Improvements	609064	Pioneer Valley	Multiple	WAREHAM TO BOURNE- GUIDE AND TRAFFIC SIGN REPLACEMENT ON ROUTE 25	5	HSIP	\$ 448,767	\$ 403,891	\$ 44,877		
Safety Improvements subtotal ►							\$ 16,861,319	\$ 15,175,187	\$ 1,686,132	◀ Funding Split Varies by Funding Source	
► Section 2B / State Prioritized Modernization Projects											
► ADA Retrofits											
ADA Retrofits		Pioneer Valley		ADA Retrofits			\$ -	\$ -	\$ -		
ADA Retrofits subtotal ►							\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal	
► Intersection Improvements											
Intersection Improvements	608567	Boston Region	Peabody	PEABODY- IMPROVEMENTS AT ROUTE 114 AT SYLVAN STREET, CROSS STREET, NORTHSHORE MALL, LORIS ROAD, ROUTE 128 INTERCHANGE AND ESQUIRE DRIVE	4	HSIP	\$ 3,200,000	\$ 2,880,000	\$ 320,000		
Intersection Improvements	608568	Cape Cod	Yarmouth	YARMOUTH- IMPROVEMENTS AT MAIN STREET (ROUTE 28) AT NORTH MAIN STREET AT OLD MAIN STREET	5	HSIP	\$ 2,784,000	\$ 2,505,600	\$ 278,400		
Intersection Improvements	608560	Pioneer Valley	Springfield	SPRINGFIELD- IMPROVEMENTS ON ST JAMES AVENUE AT TAPLEY STREET	2	HSIP	\$ 2,688,000	\$ 2,419,200	\$ 268,800		
Intersection Improvements	608841	Statewide	Multiple	STATEWIDE-VARIOUS INTERSECTION STRATEGIES TO ADDRESS SHSP - TO BE DETERMINED (2022)	Multiple	HSIP	\$ 882,667	\$ 794,400	\$ 88,267		
Intersection Improvements	608569	Boston Region	Quincy	QUINCY- INTERSECTION IMPROVEMENTS AT ROUTE 3A (SOUTHERN ARTERY) AND BROAD STREET	6	HSIP	\$ 4,000,000	\$ 3,600,000	\$ 400,000		
Intersection Improvements	608565	Pioneer Valley	Springfield	SPRINGFIELD- IMPROVEMENTS ON ST JAMES AVENUE AT ST JAMES BOULEVARD AND CAREW STREET AT TAPLEY STREET	2	HSIP	\$ 2,784,000	\$ 2,505,600	\$ 278,400		
Intersection Improvements subtotal ►							\$ 16,338,667	\$ 14,704,800	\$ 1,633,867	◀ Funding Split Varies by Funding Source	

► Intelligent Transportation Systems											
	Intelligent Transportation Systems		Pioneer Valley		Intelligent Transportation Systems			\$ -	\$ -	\$ -	
Intelligent Transportation System subtotal ►								\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal
► Roadway Reconstruction											
	Roadway Reconstruction		Pioneer Valley		Roadway Reconstruction			\$ -	\$ -	\$ -	
Roadway Reconstruction subtotal ►								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source
► Section 2C / State Prioritized Expansion Projects											
► Bicycles and Pedestrians											
	Bicycles and Pedestrians	602912	Pioneer Valley	Chicopee	CHICOPEE- CHICOPEE RIVER RIVERWALK MULTI-USE PATH CONSTRUCTION, FROM GRAPE STREET TO FRONT STREET (NEAR ELLERTON STREET) (1 MILE)	2	CMAQ	\$ 2,273,911	\$ 1,819,129	\$ 454,782	Construction / PSAC score 29
Bicycles and Pedestrians subtotal ►								\$ 2,273,911	\$ 1,819,129	\$ 454,782	◀ 80% Federal + 20% Non-Federal
► Capacity											
	Capacity		Pioneer Valley		Capacity			\$ -	\$ -	\$ -	
	Capacity		Pioneer Valley		Capacity			\$ -	\$ -	\$ -	
Capacity subtotal ►								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source
► Section 3 / Planning / Adjustments / Pass-throughs											
► Planning / Adjustments / Pass-throughs											
			Pioneer Valley		ABP GANS Repayment	Multiple		\$ -	\$ -	\$ -	
			Pioneer Valley		ABP GANS Repayment	Multiple		\$ -	\$ -	\$ -	
			Pioneer Valley		Award adjustments, change orders, etc.	Multiple		\$ -	\$ -	\$ -	
			Pioneer Valley		Award adjustments, change orders, etc.	Multiple		\$ -	\$ -	\$ -	
			Pioneer Valley		Award adjustments, change orders, etc.	Multiple		\$ -	\$ -	\$ -	
			Pioneer Valley		Award adjustments, change orders, etc.	Multiple		\$ -	\$ -	\$ -	
			Pioneer Valley		Metropolitan Planning	Multiple		\$ -	\$ -	\$ -	
			Pioneer Valley		Metropolitan Planning	Multiple		\$ -	\$ -	\$ -	
			Pioneer Valley		State Planning and Research Work Program I, (SPR I), Planning	Multiple		\$ -	\$ -	\$ -	
			Pioneer Valley		State Planning and Research Work Program II, (SPR II), Research	Multiple		\$ -	\$ -	\$ -	
			Pioneer Valley		Railroad Crossings	Multiple		\$ -	\$ -	\$ -	
			Pioneer Valley		Railroad Crossings	Multiple		\$ -	\$ -	\$ -	
			Pioneer Valley		Recreational Trails	Multiple		\$ -	\$ -	\$ -	
Other Statewide Items subtotal ►								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source
► Section 4 / Non-Federally Aided Projects											
► Non-Federally Aided Projects											
	Non-Federal Aid		Pioneer Valley		Non-Federal Aid			\$ -	\$ -	\$ -	
	Non-Federally Aided Projects		Pioneer Valley		Non-Federal Aid			\$ -	\$ -	\$ -	
Non-Federal Aid subtotal ►								\$ -	\$ -	\$ -	◀ 100% Non-Federal

2022 Summary								TIP Section 1 - TIP Section 4: Total of All Projects ▼				
								Total ►	\$ 231,253,931	\$ -	\$ 231,253,931	◀ Total Spending in Region
								Federal Funds ►	\$ 188,323,144	\$ -	\$ 188,323,144	◀ Total Federal Spending in Region
								Non-Federal Funds ►	\$ 42,930,788	\$ -	\$ 42,930,788	◀ Total Non-Federal Spending in Region

701 CMR 7.00 Use of Road Flaggers and Police Details 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>

► Section 1B / Earmark or Discretionary Grant Funded Projects

► Other Federal Aid											
			Pioneer Valley		Other Federal Aid		HPP	\$ -	\$ -	\$ -	
			Pioneer Valley		Other Federal Aid		HPP	\$ -	\$ -	\$ -	
Other Federal Aid subtotal ►								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source

► Section 2A / State Prioritized Reliability Projects

► Bridge Program / Inspections											
	Bridge Program		Pioneer Valley		Bridge Inspection			\$ -	\$ -	\$ -	
	Bridge Program		Pioneer Valley		Bridge Inspection			\$ -	\$ -	\$ -	
Bridge Program / Inspections subtotal ►								\$ -	\$ -	\$ -	◀ Funding Split Varies by Funding Source

► Bridge Program / Off-System

	Bridge Program	TBA	Berkshire Region	SHEFFIELD	SHEFFIELD- BRIDGE REPLACEMENT, S-10-015, KELSEY ROAD OVER SCHENOB BROOK	1	STP-BR-OFF	\$ 1,805,424	\$ 1,444,339	\$ 361,085	
	Bridge Program	TBA	Berkshire Region	BECKET	BECKET- BRIDGE REPLACEMENT, B-03-045, QUARRY ROAD OVER CUSHMAN BROOK	1	STP-BR-OFF	\$ 2,040,672	\$ 1,632,538	\$ 408,134	
	Bridge Program	TBA	Berkshire Region	ALFORD	ALFORD- BRIDGE REPLACEMENT, A-06-004, WEST ROAD OVER SCRIBNER BROOK	1	STP-BR-OFF	\$ 1,873,632	\$ 1,498,906	\$ 374,726	
	Bridge Program	TBA	Berkshire Region	NEW MARLOBOROUGH	NEW MARLOBOROUGH- BRIDGE REPLACEMENT, N-08-020, KEYES HILL ROAD OVER UMPACHENE RIVER	1	STP-BR-OFF	\$ 2,902,900	\$ 2,322,320	\$ 580,580	
	Bridge Program	TBA	Berkshire Region	WILLIAMSTOWN	WILLIAMSTOWN- BRIDGE REPLACEMENT, W-37-010, WEST MAIN STREET OVER HEMLOCK BROOK	1	STP-BR-OFF	\$ 2,612,784	\$ 2,090,227	\$ 522,557	
	Bridge Program	TBA	Berkshire Region	MONTEREY	MONTEREY- BRIDGE REPLACEMENT, M-29-001, CURTIS ROAD OVER KONKAPOT RIVER	1	STP-BR-OFF	\$ 1,255,584	\$ 1,004,467	\$ 251,117	
	Bridge Program	TBA	Berkshire Region	GREAT BARRINGTON	GREAT BARRINGTON- BRIDGE REPLACEMENT, G-11-006, COTTAGE STREET OVER HOUSATONIC RIVER	1	STP-BR-OFF	\$ 5,143,440	\$ 4,114,752	\$ 1,028,688	
	Bridge Program	TBA	Pioneer Valley	LUDLOW	LUDLOW- BRIDGE REPLACEMENT, L-16-026, PINEY LANE OVER BROAD BROOK	2	STP-BR-OFF	\$ 598,560	\$ 478,848	\$ 119,712	
	Bridge Program	TBA	Central Mass	WORCESTER	WORCESTER- SUPERSTRUCTURE REPLACEMENT, W-44-083, HARRISION STREET OVER I-290	3	STP-BR-OFF	\$ 10,568,180	\$ 8,454,544	\$ 2,113,636	
	Bridge Program	TBA	Central Mass	WORCESTER	WORCESTER- SUPERSTRUCTURE REPLACEMENT, W-44-093, LAUREL STREET OVER I-290	3	STP-BR-OFF	\$ 5,467,811	\$ 4,374,249	\$ 1,093,562	
	Bridge Program	TBA	Montachusett	HUBBARDSTON	HUBBARDSTON-BRIDGE REPLACEMENT, H-24-003, WILLIAMSVILE ROAD OVER BURNCHIRT RIVER	3	STP-BR-OFF	\$ 1,684,320	\$ 1,347,456	\$ 336,864	
Bridge Program / Off-System subtotal ►								\$ 35,953,307	\$ 28,762,646	\$ 7,190,661	◀ 80% Federal + 20% Non-Federal

► Bridge Program / On-System (NHS)											
	Bridge Program	TBA	Southeastern Mass	ATTLEBORO	ATTLEBORO- SUPERSTRUCTURE REPLACEMENT, A-16-062, I 295 Ramp over ten mile river	5	NHPP-On	\$ 3,450,768	\$ 2,760,614	\$ 690,154	
	Bridge Program	606902	Boston Region	BOSTON	BOSTON- BRIDGE RECONSTRUCTION/REHAB, B-16-181, WEST ROXBURY PARKWAY OVER MBTA	6	NHPP-On	\$ 6,900,000	\$ 5,520,000	\$ 1,380,000	
	Bridge Program	TBA	Central Mass	DUDLEY	DUDLEY- SUPERSTRUCTURE REPLACEMENT, D-12-026, ROUTE 131 OVER QUINEBAUG RIVER	3	NHPP-On	\$ 9,744,696	\$ 7,795,757	\$ 1,948,939	
AMENDMENT:Move Project - (FROM 2022)	Bridge Program	606728	Boston Region	BOSTON	BOSTON- BRIDGE REPLACEMENT B-16-365, BOWKER OVERPASS OVER STORROW DRIVE (EB)	6	NHPP-On	\$ 24,009,700	\$ 19,207,760	\$ 4,801,940	
AMENDMENT:Move Project - (FROM 2022)	Bridge Program	606527	Southeastern Mass	NEW BEDFORD	NEW BEDFORD- SUPERSTRUCTURE REPLACEMENT, N-06-020, I-195 (EB & WB) RAMP C & F OVER ST 18, COUNTY STREET, STATE STREET, MASS COASTAL RAILROAD, PURCHASE STREET, WELD STREET, INCLUDES REPLACING N-06-046, I-195 (EB) RAMP F OVER WELD STREET	5	NHPP-On	\$ 16,733,314	\$ 13,386,651	\$ 3,346,663	AC Year 1 of 5, Total Cost \$117,077,491
AMENDMENT:Move Project - (FROM 2021)	Bridge Program	605843	Berkshire Region	NORTH ADAMS	NORTH ADAMS- BRIDGE REPLACEMENT, N-14-016, ROUTE 2 OVER THE HOOSIC RIVER	1	NHPP-On	\$ 18,315,704	\$ 14,652,563	\$ 3,663,141	
AMENDMENT:Move Project - (FROM 2022)	Bridge Program	608848	Pioneer Valley	SPRINGFIELD	SPRINGFIELD- BRIDGE REPLACEMENT, S-24-016, ARMORY STREET OVER CSX MAINLINE	2	NHPP-On	\$ 5,723,440	\$ 4,578,752	\$ 1,144,688	
AMENDMENT:Move Project - (FROM 2022)	Bridge Program	608853	Pioneer Valley	SPRINGFIELD	SPRINGFIELD- BRIDGE REPLACEMENT, S-24-026, ARMORY STREET OVER CSX	2	NHPP-On	\$ 3,948,640	\$ 3,158,912	\$ 789,728	
	Bridge Program	605306	Merrimack Valley	HAVRHILL	HAVRHILL- BRIDGE REPLACEMENT, H-12-039, I-495 (NB & SB) OVER MERRIMACK RIVER	4	NHPP-On	\$ 15,892,036	\$ 12,713,629	\$ 3,178,407	AC Year 6 of 6, Total Cost \$118,786,388
	Bridge Program	604952	Boston Region	LYNN	LYNN- SAUGUS- BRIDGE REPLACEMENT, L-18-016-S-05-008, ROUTE 107 OVER THE SAUGUS RIVER (AKA - BELDEN G. BLY BRIDGE)	4	NHPP-On	\$ 5,907,595	\$ 4,726,076	\$ 1,181,519	AC Year 5 of 5, Total Cost \$74,471,140
	Bridge Program	606552	Pioneer Valley	NORTHAMPTON	NORTHAMPTON- BRIDGE RECONSTRUCTION, N-19-059, I-91 OVER US 5/BMRR & N-19-060, I-91 OVER HOCKANUM ROAD	2	NHPP-On	\$ 11,378,353	\$ 9,102,682	\$ 2,275,671	AC Year 4 of 5, Total Cost \$56,891,767
Bridge Program / On-System (NHS) subtotal ►								\$ 122,004,246	\$ 97,603,397	\$ 24,400,849	◀ Funding Split Varies by Funding Source
► Bridge Program / On-System (Non-NHS)											
	Bridge Program	TBA	Boston Region	BOSTON	BOSTON- SUPERSTRUCTURE REPLACEMENT, B-16-107, CANTERBURY STREET OVER AMTRAK/MBTA	6	NHPP-Off	\$ 4,678,280	\$ 3,742,624	\$ 935,656	
	Bridge Program	604005	Franklin Region	CONWAY	CONWAY- BRIDGE REPLACEMENT, C-20-003, NORTH POLAND ROAD OVER POLAND BROOK	1	NHPP-Off	\$ 4,139,808	\$ 3,311,846	\$ 827,962	
Bridge Program / On-System (Non-NHS) subtotal ►								\$ 8,818,088	\$ 7,054,470	\$ 1,763,618	◀ 80% Federal + 20% Non-Federal
► Bridge Program / Systematic Maintenance											
	Bridge Program	TBA	Pioneer Valley	Multiple	DISTRICT 1- SYSTEMATIC BRIDGE MAINTENANCE AT VARIOUS LOCATIONS (2023)	1	NHPP-Off	\$ 522,200	\$ 417,760	\$ 104,440	
	Bridge Program	609023	Pioneer Valley	Multiple	DISTRICT 2- SYSTEMATIC BRIDGE MAINTENANCE AT VARIOUS LOCATIONS (2023)	2	NHPP-Off	\$ 1,540,200	\$ 1,232,160	\$ 308,040	
	Bridge Program	609040	Pioneer Valley	Multiple	DISTRICT 3- SYSTEMATIC BRIDGE MAINTENANCE AT VARIOUS LOCATIONS	3	NHPP-Off	\$ 1,285,080	\$ 1,028,064	\$ 257,016	
	Bridge Program	TBA	Pioneer Valley	Multiple	DISTRICT 4- SYSTEMATIC BRIDGE PRESERVATION	4	NHPP-Off	\$ 1,983,700	\$ 1,586,960	\$ 396,740	
	Bridge Program	609037	Pioneer Valley	Multiple	DISTRICT 5- SYSTEMATIC BRIDGE PRESERVATION ALONG THE I-195 CORRIDOR	5	NHPP-On	\$ 1,413,595	\$ 1,130,876	\$ 282,719	
	Bridge Program	608609	Boston Region	NEWTON-WESTWOOD	NEWTON- WESTWOOD- STEEL SUPERSTRUCTURE CLEANING (FULL REMOVAL) AND PAINTING OF 2 BRIDGES: N-12-056 & W-31-006	6	NHPP-Off	\$ 2,142,857	\$ 1,714,285	\$ 428,571	
Bridge Program / Systematic Maintenance subtotal ►								\$ 8,887,631	\$ 7,110,105	\$ 1,777,526	◀ Funding Split Varies by Funding Source

2023

► Interstate Pavement												
Interstate Pavement		Pioneer Valley		Interstate Pavement			\$ -	\$ -	\$ -			
Interstate Pavement subtotal ►							\$ -	\$ -	\$ -	◀ 90% Federal + 10% Non-Federal		
► Non-Interstate Pavement												
Non-Interstate Pavement		Pioneer Valley		Non-Interstate Pavement			\$ -	\$ -	\$ -			
Non-Interstate Pavement subtotal ►							\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal		
► Roadway Improvements												
Roadway Improvements		Pioneer Valley		Roadway Improvements			\$ -	\$ -	\$ -			
Roadway Improvements subtotal ►							\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal		
► Safety Improvements												
Safety Improvements	608841	Statewide	Multiple	STATEWIDE-VARIOUS INTERSECTION STRATEGIES TO ADDRESS SHSP - TO BE DETERMINED (2023)	Multiple	HSIP	\$ 5,791,753	\$ 5,212,578	\$ 579,175	\$	20,837,498	
Safety Improvements	609053	Boston Region	Multiple	CANTON-DEDHAM-NORWOOD- HIGHWAY LIGHTING IMPROVEMENTS AT I93 & I95/I28	6	NHPP	\$ 4,000,000	\$ 3,600,000	\$ 400,000			
Safety Improvements	609062	Pioneer Valley	Multiple	WORCESTER- LEOMINSTER- GUIDE AND TRAFFIC SIGN REPLACEMENT ON INTERSTATE 190	3	HSIP	\$ 3,574,130	\$ 3,216,717	\$ 357,413			
Safety Improvements	609097	Pioneer Valley	Multiple	STATEWIDE-VARIOUS INTERSECTION STRATEGIES TO ADDRESS SHSP - TO BE DETERMINED (2023)	Multiple	HSIP	\$ 4,500,000	\$ 4,050,000	\$ 450,000			
Safety Improvements	609056	Pioneer Valley	Multiple	HOLLAND TO STURBRIDGE- GUIDE AND TRAFFIC SIGN REPLACEMENT ON INTERSTATE 84	3	HSIP	\$ 517,904	\$ 466,114	\$ 51,790			
Safety Improvements	609058	Boston Region	Multiple	PEABODY TO GLOUCESTER- GUIDE AND TRAFFIC SIGN REPLACEMENT ON ROUTE 128	4	HSIP	\$ 1,960,848	\$ 1,764,764	\$ 196,085			
Safety Improvements	609060	Boston Region	Multiple	LYNNFIELD- PEABODY- DANVERS- GUIDE AND TRAFFIC SIGN REPLACEMENT ON I-95/I28 (TASK 'A' INTERCHANGE)	4	HSIP	\$ 492,862	\$ 443,576	\$ 49,286			
Safety Improvements subtotal ►							\$ 20,837,498	\$ 18,753,748	\$ 2,083,750	◀ Funding Split Varies by Funding Source		
► Section 2B / State Prioritized Modernization Projects												
► ADA Retrofits												
ADA Retrofits		Pioneer Valley		ADA Retrofits			\$ -	\$ -	\$ -			
ADA Retrofits subtotal ►							\$ -	\$ -	\$ -	◀ 80% Federal + 20% Non-Federal		

► Intersection Improvements										
Intersection Improvements	608052	Boston Region	Norwood	NORWOOD- INTERSECTION & SIGNAL IMPROVEMENTS AT US 1 (PROVIDENCE HIGHWAY) & MORSE STREET	5	HSIP	\$ 974,815	\$ 877,334	\$ 97,482	
Intersection Improvements	608563	SE Mass	Swansea	SWANSEA- IMPROVEMENTS ON ROUTE 6 (GRAND ARMY OF THE REPUBLIC HIGHWAY) AT GARDNERS NECK ROAD	5	HSIP	\$ 2,688,000	\$ 2,419,200	\$ 268,800	
Intersection Improvements	608754	Berkshire	Dalton	DALTON- INTERSECTION IMPROVEMENTS AT ROUTES 8 & 9 (MAIN ST) AT SOUTH ST & WEST HOUSATONIC ST	1	HSIP	\$ 1,500,000	\$ 1,350,000	\$ 150,000	
Intersection Improvements	609094	Pioneer Valley	Multiple	DISTRICT 3- INTERSECTION IMPROVEMENTS TO TOP CRASH LOCATION (HSIP 2022 PLACEHOLDER)	3	HSIP	\$ 450,000	\$ 405,000	\$ 45,000	
Intersection Improvements	609095	Pioneer Valley	Multiple	DISTRICT 4- INTERSECTION IMPROVEMENTS TO TOP CRASH LOCATION (HSIP 2022 PLACEHOLDER)	4	HSIP	\$ 450,000	\$ 405,000	\$ 45,000	
Intersection Improvements	609055	Pioneer Valley	Multiple	DISTRICT 5- INTERSECTION IMPROVEMENTS TO TOP CRASH LOCATION (HSIP 2022 PLACEHOLDER)	5	HSIP	\$ 450,000	\$ 405,000	\$ 45,000	
Intersection Improvements	608564	Boston Region	Watertown	WATERTOWN- INTERSECTION IMPROVEMENTS AT ROUTE 16 AND GALEN STREET	6	HSIP	\$ 2,630,000	\$ 2,367,000	\$ 263,000	
Intersection Improvements	608566	Boston Region	Marlborough	MARLBOROUGH- IMPROVEMENTS AT ROUTE 20 (EAST MAIN STREET) AT CURTIS AVENUE	3	HSIP	\$ 5,200,000	\$ 2,505,600	\$ 278,400	
Intersection Improvements	609097	Pioneer Valley	Multiple	STATEWIDE-VARIOUS INTERSECTION STRATEGIES TO ADDRESS SHSP - TO BE DETERMINED (2023)	Multiple	HSIP	\$ 450,000	\$ 405,000	\$ 45,000	
Intersection Improvements	608774	Northern Middlesex	Tewksbury	TEWKSBURY - ROUTE 38 INTERSECTION IMPROVEMENTS FROM LOWELL LINE TO PIKE STREET/ASTLE STREET	4	HSIP	\$ 3,005,529	\$ 2,704,976	\$ 300,553	
Intersection Improvements	609093	Pioneer Valley	Multiple	DISTRICT 2- INTERSECTION IMPROVEMENTS TO TOP CRASH LOCATION (HSIP 2022 PLACEHOLDER)	2	HSIP	\$ 450,000	\$ 405,000	\$ 45,000	
Intersection Improvements	609096	Statewide	Multiple	DISTRICT 6- INTERSECTION IMPROVEMENTS TO TOP CRASH LOCATION (HSIP 2022)	6	HSIP	\$ 450,000	\$ 405,000	\$ 45,000	
Intersection Improvements subtotal ►							\$ 18,698,344	\$ 14,654,110	\$ 1,628,234	◄ Funding Split Varies by Funding Source
► Intelligent Transportation Systems										
Intelligent Transportation Systems		Pioneer Valley		Intelligent Transportation Systems			\$ -	\$ -	\$ -	
Intelligent Transportation Systems		Pioneer Valley		Intelligent Transportation Systems			\$ -	\$ -	\$ -	
Intelligent Transportation Systems		Pioneer Valley		Intelligent Transportation Systems			\$ -	\$ -	\$ -	
Intelligent Transportation System subtotal ►							\$ -	\$ -	\$ -	◄ 80% Federal + 20% Non-Federal
► Roadway Reconstruction										
Roadway Reconstruction		Pioneer Valley		Roadway Reconstruction			\$ -	\$ -	\$ -	
Roadway Reconstruction		Pioneer Valley		Roadway Reconstruction			\$ -	\$ -	\$ -	
Roadway Reconstruction		Pioneer Valley		Roadway Reconstruction			\$ -	\$ -	\$ -	
Roadway Reconstruction		Pioneer Valley		Roadway Reconstruction			\$ -	\$ -	\$ -	
Roadway Reconstruction subtotal ►							\$ -	\$ -	\$ -	◄ Funding Split Varies by Funding Source

2023

► Section 2C / State Prioritized Expansion Projects

► Bicycles and Pedestrians

Bicycles and Pedestrians	607823	Pioneer Valley	Multiple	SOUTHAMPTON- GREENWAY RAIL TRAIL CONSTRUCTION, FROM COLEMAN ROAD TO ROUTE 10 (3.5 MILES)	2	CMAQ	\$ 7,053,638	\$ 5,642,910	\$ 1,410,728	
Bicycles and Pedestrians subtotal ►							\$ 7,053,638	\$ 5,642,910	\$ 1,410,728	◄ 80% Federal + 20% Non-Federal

► Capacity

Capacity		Pioneer Valley		Capacity			\$ -	\$ -	\$ -	
Capacity subtotal ►							\$ -	\$ -	\$ -	◄ Funding Split Varies by Funding Source

► Section 3 / Planning / Adjustments / Pass-throughs

► Planning / Adjustments / Pass-throughs

		Pioneer Valley		ABP GANS Repayment	Multiple		\$ -	\$ -	\$ -	
		Pioneer Valley		ABP GANS Repayment	Multiple		\$ -	\$ -	\$ -	
		Pioneer Valley		Award adjustments, change orders, etc.	Multiple		\$ -	\$ -	\$ -	
		Pioneer Valley		Award adjustments, change orders, etc.	Multiple		\$ -	\$ -	\$ -	
		Pioneer Valley		Award adjustments, change orders, etc.	Multiple		\$ -	\$ -	\$ -	
		Pioneer Valley		Award adjustments, change orders, etc.	Multiple		\$ -	\$ -	\$ -	
		Pioneer Valley		Award adjustments, change orders, etc.	Multiple		\$ -	\$ -	\$ -	
		Pioneer Valley		Metropolitan Planning	Multiple		\$ -	\$ -	\$ -	
		Pioneer Valley		Metropolitan Planning	Multiple		\$ -	\$ -	\$ -	
		Pioneer Valley		State Planning and Research Work Program I, (SPR I), Planning	Multiple		\$ -	\$ -	\$ -	
		Pioneer Valley		State Planning and Research Work Program II, (SPR II), Research	Multiple		\$ -	\$ -	\$ -	
		Pioneer Valley		Railroad Crossings	Multiple		\$ -	\$ -	\$ -	
		Pioneer Valley		Railroad Crossings	Multiple		\$ -	\$ -	\$ -	
		Pioneer Valley		Recreational Trails	Multiple		\$ -	\$ -	\$ -	
Other Statewide Items subtotal ►							\$ -	\$ -	\$ -	◄ Funding Split Varies by Funding Source

► Section 4 / Non-Federally Aided Projects

► Non-Federally Aided Projects

Non Federal Aid		Pioneer Valley		Non-Federal Aid			\$ -	\$ -	\$ -	
Non-Federal Aid subtotal ►							\$ -	\$ -	\$ -	◄ 100% Non-Federal

2023 Summary	TIP Section 1 - TIP Section 4: Total of All Projects ▼				
	Total ►	\$ 219,836,752	\$ -	\$ 219,836,752	◄ Total Spending in Region
	Federal Funds ►	\$ 179,581,386	\$ -	\$ 179,581,386	◄ Total Federal Spending in Region
	Non-Federal Funds ►	\$ 40,255,366	\$ -	\$ 40,255,366	◄ Total Non-Federal Spending in Region

701 CMR 7.00 Use of Road Flaggers and Police Details 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>

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 2017-2018 TIP projects are identified in table 22.

Table 22 Project Implementation

Year	Highway Project Description	SID	Funding	Programmed	Status
2017	PIONEER VALLEY REGIONAL BICYCLE SHARE (PHASE 1)	PV001	CMAQ	\$ 1,343,971	Construction
2017	HOLYOKE- IMPROVEMENTS TO LOWER WESTFIELD ROAD ON I-91 (INTERCHANGE 15)	606903	STP	\$ 1,700,004	Construction
2017	AMHERST- HADLEY- SIDEWALK & WHEELCHAIR RAMP CONSTRUCTION ON ROUTE 9	608023	STP, TAP	\$ 1,204,050	Construction
2017	SOUTHWICK- RECONSTRUCTION CONGAMOND ROAD (ROUTE 168), FROM COLLEGE HIGHWAY & ENDS 250 FEET SHORT OF STATE LINE (1.2 MILES)	604033	STP, CMAQ	\$ 7,172,979	Advertised
2017	LUDLOW- RECONSTRUCTION OF CENTER STREET (ROUTE 21), FROM 35' WEST OF BEACHSIDE DRIVE WESTERLY TO GAS LINE BESIDE MTA OVERPASS (3,500 FEET)	605011	STP, HSIP, TAP	\$ 5,845,350	Advertised
2017	GOSHEN- RESURFACING & RELATED WORK ON WEST STREET	605150	STP	\$ 3,800,000	Advertised
2017	AGAWAM- WEST SPRINGFIELD- BRIDGE REPLACEMENT, A-05-002=W-21-014, ROUTE 147 OVER THE WESTFIELD RIVER & INTERSECTION & SIGNAL IMPROVEMENTS @ 3 LOCATIONS	605384	NHPP	\$ 23,173,893	Advertised
2017	AMHERST- BRIDGE REPLACEMENT, A-08-008, MILL STREET OVER MILL RIVER	607528	NHPP	\$ 2,075,400	Construction
2017	CHESTERFIELD- BRIDGE REPLACEMENT, C-12-009, IRELAND STREET OVER WEST BRANCH BRONSON BROOK	607549	NHPP	\$ 3,341,040	Construction
2017	CHICOPEE- SPRINGFIELD- INTERSTATE MAINTENANCE & RELATED WORK ON I-291	608211	IM	\$ 4,118,400	Construction
2017	AGAWAM- CHICOPEE- HOLYOKE- WEST SPRINGFIELD- STORMWATER IMPROVEMENTS ALONG I-91, I-391, ROUTE 57 AND ROUTE 5	608192	IM	\$ 1,276,062	Construction

Year	Highway Project Description	SID	Status	Programmed	Status
2018	AGAWAM- INTERSECTION IMPROVEMENTS AT ROUTE 187 & ROUTE 57	604203	STP	\$ 3,288,000	Not Advertised
2018	NORTHAMPTON- IMPROVEMENTS ON I-91 INTERCHANGE 19 AT ROUTE 9 AND DAMON ROAD	604597	NFP	\$ 7,438,490	Not Advertised
2018	WESTFIELD- ROUTE 20 ACCESS IMPROVEMENTS ON COURT STREET & WESTERN AVENUE, FROM LLEWELLYN DRIVE EASTERLY TO LLOYDS HILL ROAD (PHASE I)	603449	STP	\$ 3,630,245	Not Advertised
2018	SOUTHAMPTON- RECONSTRUCTION OF GLENDALE ROAD (PHASE II) FROM COLLEGE HIGHWAY (RT 10) NORTHWESTERLY TO POMEROY MEADOW RD (3,801 FEET)	604738	STP	\$ 2,710,700	Not Advertised
2018	HOLYOKE- RESURFACING & RELATED WORK ON HERITAGE STREET, FRONT STREET & DWIGHT STREET FROM MAPLE ST TO THE 1ST LEVEL CANAL (.54 MILES)	607256	STP	\$ 2,283,489	Not Advertised
2018	HOLLAND- RESURFACING & RELATED WORK ON BRIMFIELD ROAD, FROM THE BRIMFIELD/HOLLAND T.L. TO WALES ROAD (1.4 MILES - PHASE I)	604962	STP	\$ 1,409,592	Not Advertised
2018	AMHERST- HADLEY- NORTHAMPTON- TRANSIT SIGNAL PRIORITY UPGRADES AT VARIOUS LOCATIONS	608786	TAP	\$ 792,630	Not Advertised
2018	AMHERST- HADLEY- NORTHAMPTON- TRANSIT SIGNAL PRIORITY UPGRADES AT VARIOUS LOCATIONS	608786	STP	\$ 407,369	Not Advertised
2018	PVTA P21 Express Service Between Union Station in Springfield and the Holyoke Transportation Center	PV0005	CMAQ	\$ 500,000	Not Advertised
2018	WESTFIELD- ROUTE 20 ACCESS IMPROVEMENTS ON COURT STREET & WESTERN AVENUE, FROM LLEWELLYN DRIVE EASTERLY TO LLOYDS HILL ROAD (PHASE I)	603449	HPP	\$ 2,503,688	Not Advertised
2018	NORTHAMPTON- BRIDGE RECONSTRUCTION, N-19-059, I-91 OVER US 5/BMRR & N-19-060, I-91 OVER HOCKANUM ROAD	606552	NHPP-On	\$ 10,000,000	Not Advertised
2018	HOLYOKE- BRIDGE REPLACEMENT, H-21-018, LYMAN STREET OVER FIRST LEVEL CANAL	600936	NHPP-On	\$ 11,762,603	Not Advertised

2018	PALMER - BRIDGE REHABILITATION, P-01-005, MAIN STREET OVER QUABOAG RIVER	608870	NHPP-Off	\$ 3,000,000	Not Advertised
2018	CUMMINGTON- BRIDGE MAINTENANCE, C-21-025, ROUTE 9 OVER THE WESTFIELD RIVER	607939	NHPP-On	\$ 312,000	Not Advertised
2018	HOLYOKE- STRUCTURAL STEEL BEAM CLEANING AND PAINTING, H-21-048, I-91 NB & SB OVER WESTFIELD ROAD	607959	NHPP-On	\$ 1,564,622	Not Advertised
2018	SPRINGFIELD- NORTH END PEDESTRIAN PATH CONSTRUCTION (UNDER THE CONNECTICUT RIVER RAILROAD), BETWEEN PLAINFIELD STREET AND BIRNIE AVENUE, INCLUDES CONSTRUCTION OF NEW UNDERPASS S-24-044	607589	TAP	\$ 6,640,845	Not Advertised
2018	SPRINGFIELD- NORTH END PEDESTRIAN PATH CONSTRUCTION (UNDER THE CONNECTICUT RIVER RAILROAD), BETWEEN PLAINFIELD STREET AND BIRNIE AVENUE, INCLUDES CONSTRUCTION OF NEW UNDERPASS S-24-044	607589	CMAQ	\$ 421,266	Not Advertised

VIII. Air Quality Conformity Information

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 2019 - 2023 TIP is not required for ozone. Conformity determination is however required for carbon monoxide. Further details and background information are provided below:

Carbon Monoxide

A new transportation conformity determinations for carbon monoxide is required for the 2019 - 2023 TIP in Central Massachusetts MPO (Worcester); Pioneer Valley MPO (Springfield); Boston MPO (Waltham and Boston Area); Northern Middlesex MPO (Lowell).

The Boston Carbon Monoxide Area (nine communities - Boston, Cambridge, Chelsea, Everett, Malden, Medford, Quincy, Revere, and Somerville) has a maintenance plan in place with a SIP-Approved 2010 motor vehicle carbon monoxide emission budget in place requiring a regional emission analysis for any carbon monoxide conformity determination of the Boston CO Area.

Limited Maintenance Plans are in place for Worcester; Springfield; Waltham and Lowell, hence regional emissions analyses are assumed to satisfy the budget test in these areas.

Ozone

As of July 20, 2013, Dukes County, Massachusetts [Dukes County Wampanoag Tribe of Gay Head (Aquinnah) of Massachusetts] is nonattainment, classification marginal, for the 2008 8-Hour Ozone National Ambient Air Quality Standard (NAAQS), also known as the 2008 ozone standard. However, Interagency Transportation Conformity Consultation has determined Dukes County, Massachusetts to be an isolated rural nonattainment area for the 2008 8-hour ozone standard. An ozone conformity determination is required when the isolated rural area (Dukes County) includes non-exempt projects in its STIP/TIP and TP. See 40 CFR Section 109(g) for conformity in isolated rural nonattainment and maintenance areas.

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. 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.

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.

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.

Legislative and Regulatory Background

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 classified as unclassifiable/attainment. Therefore, conformity for ozone in the Pioneer Valley MPO does not require conformity under the current 2008 standard and the MPO does not need to perform a conformity determination for ozone on the program.

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 2019 – 2022 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.
-

GreenDOT Policy and Metropolitan Planning Organizations

The Commonwealth's thirteen metropolitan planning organizations (MPOs) are integrally involved in helping to achieve the GreenDOT goals and supporting the GHG reductions mandated under the GWSA. The MPOs are most directly involved in helping to achieve the GHG emissions reductions under the second goal – to promote healthy transportation modes through prioritizing and programming an appropriate balance of roadway, transit, bicycle and pedestrian investments – and assist in the third goal by supporting smart growth development patterns through the creation of a balanced multi-modal transportation system. This will be realized through the transportation goals and policies espoused in the 2017 Regional Transportation Plans (RTPs), the major projects planned in the RTPs, and the mix of new transportation projects that are programmed and implemented through the TIPs. The GHG tracking and evaluation processes enable the MPOs to identify the anticipated GHG impacts of the planned and programmed projects, and also to use GHG impacts as a criterion in prioritizing transportation projects.

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 2035 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 CO₂ impacts. The data and analysis required for these calculations is available from functional design reports that should be submitted for projects that would produce a measurable GHG impact.

Projects with Quantified Impacts

RTP Projects - Major capacity expansion projects would be expected to have a significant impact on GHG emissions. However, these projects are included in the RTPs and analyzed using the statewide model or Boston regional model, which would reflect their GHG impacts. Therefore, no independent TIP calculations are required.

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

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

Projects with Assumed Impact

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

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

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

Regional Greenhouse Gas Impact Summary Tables for FFY 2019 – 2022 TIP

The following table (table 23) summarize the calculated quantitative and assumed qualitative impacts of the projects included in the regional FFY 2019 – 2022 TIP.

Table 23 Greenhouse Gas Summary Tables FFY 2019 - 2023

Project ID	Project Description	Total Funds	GHG Analysis	CO2(kg/yr)	GHG Impact Description
2019					
608411	SPRINGFIELD- INTERSECTION IMPROVEMENTS AT BAY STREET AND BERKSHIRE AVENUE	\$ 1,000,000	Quantified	222,751	Quantified Decrease in Emissions from Traffic Operational Improvement
600513	AGAWAM- RECONSTRUCTION OF ROUTE 187 FROM 425 FT. SOUTH OF S. WESTFIELD STREET TO ROUTE 57 (0.3 MILES - PHASE I)	\$ 2,516,438	Quantified	414	Quantified Decrease in Emissions from Complete Streets Project
608412	BELCHERTOWN- IMPROVEMENTS & RELATED WORK ON ROUTES 202 & 21, FROM TURKEY HILL ROAD TO SOUTH MAIN STREET (1.2 MILES)	\$ 5,644,850	Quantified	1,107	Quantified Decrease in Emissions from Complete Streets Project
607987	WARE- INTERSECTION IMPROVEMENTS @ MAIN STREET, WEST STREET, NORTH STREET, SOUTH STREET & CHURCH STREET	\$ 1,000,000	Quantified	995	Quantified Decrease in Emissions from Complete Streets Project
604962	HOLLAND- RESURFACING & RELATED WORK ON BRIMFIELD ROAD, FROM THE BRIMFIELD/HOLLAND T.L. TO WALES ROAD (1.4 MILES - PHASE I)	\$ 2,919,446	Quantified	317	Quantified Decrease in Emissions from Complete Streets Project
606912	WORTHINGTON- RECONSTRUCTION & RELATED WORK ON ROUTE 143 (PHASE I)	\$ 8,900,000	Quantified	345	Quantified Decrease in Emissions from Complete Streets Project
PV0001	P21 Express - Year 2 Operating	\$ 500,000	Quantified	24,671	Quantified Decrease in Emissions from New/Additional Transit Service
603783	WESTFIELD- COLUMBIA GREENWAY RAIL TRAIL CONSTRUCTION (CENTER DOWNTOWN SECTION), FROM EAST SILVER STREET TO COWLES COURT, INCLUDES W-25-014, W-25-015, W-25-016, W-25-017, W-25-018 & W-25-019	\$ 6,532,895	Quantified	4,458	Quantified Decrease in Emissions from Bicycle and Pedestrian Infrastructure
Total				255,058	
2020					
607773	WESTFIELD- IMPROVEMENTS & RELATED WORK ON ROUTE 20, COURT STEET & WESTERN AVENUE, LLOYDS HILL ROAD TO HIGH STREET/MILL STREET INTERSECTION (PHASE II)	\$ 5,500,000	Quantified	1,290	Quantified Decrease in Emissions from Complete Streets Project
604434	CHICOPEE- RECONSTRUCTION & RELATED WORK ON FULLER ROAD, FROM MEMORIAL DR (RTE 33) TO SHAWINIGAN DR (2.0 MILES)	\$ 5,907,953	Quantified	205,229	Quantified Decrease in Emissions from Traffic Operational Improvement

Table 23 Transit Greenhouse Gas Summary Tables FFY 2019 - 2023 (Continued)

608236	NORTHAMPTON- RECONSTRUCTION OF DAMON ROAD, FROM ROUTE 9 TO ROUTE 5, INCLUDES DRAINAGE SYSTEM REPAIRS & SLOPE STABILIZATION AT THE NORWOTTUCK RAIL TRAIL	\$ 10,248,854	Quantified	1,983	Quantified Decrease in Emissions from Complete Streets Project
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	\$ 3,247,643	Quantified	73,253	Quantified Decrease in Emissions from Bicycle and Pedestrian Infrastructure
			Total	281,755	
2021					
608084	AMHERST- IMPROVEMENTS & RELATED WORK ON ROUTES 9 & 116, FROM UNIVERSITY DRIVE TO SOUTH PLEASANT STREET (0.8 MILES)	\$ 3,121,863	Quantified	3,109	Quantified Decrease in Emissions from Complete Streets Project
608577	EASTHAMPTON- IMPROVEMENTS AND RELATED WORK ON UNION STREET (ROUTE 141) FROM PAYSON AVENUE TO HIGH STREET (0.36 MILES)	\$ 2,201,643	Quantified	3,170	Quantified Decrease in Emissions from Complete Streets Project
605032	HADLEY- RECONSTRUCTION ON ROUTE 9, FROM MIDDLE STREET TO MAPLE/SOUTH MAPLE STREET	\$ 12,652,410	Quantified	354	Quantified Decrease in Emissions from Complete Streets Project
608157	SPRINGFIELD- MCKNIGHT COMMUNITY TRAIL CONSTRUCTION, FROM ARMORY STREET TO HAYDEN AVENUE (1.5 MILES)	\$ 3,694,624	Quantified	45,830	Quantified Decrease in Emissions from Bicycle and Pedestrian Infrastructure
			Total	52,463	
2022					
606895	GRANBY- IMPROVEMENTS @ 2 LOCATIONS ON ROUTE 202: SCHOOL STREET & FIVE CORNERS	\$ 1,866,866	Quantified	273	Quantified Decrease in Emissions from Complete Streets Project
608466	BELCHERTOWN- GRANBY- RESURFACING AND RELATED WORK ON ROUTE 202	\$ 4,163,040	Quantified	3,812	Quantified Decrease in Emissions from Complete Streets Project
602912	CHICOPEE- CHICOPEE RIVER RIVERWALK MULTI-USE PATH CONSTRUCTION, FROM GRAPE STREET TO FRONT STREET (NEAR ELLERTON STREET) (1 MILE)	\$ 2,273,911	Quantified	3,248	Quantified Decrease in Emissions from Bicycle and Pedestrian Infrastructure
			Total	7,333	
2023					
	NO QUANTIFIED PROJECTS AT THIS TIME				
			Total	0	
			Total 2019-2023	596,609	

APPENDICES

APPENDIX A: MassDOT Targets

**FFY 2019-2023 STIP
2019 BUDGET**

	Obligation authority <i>(federal aid only)</i>	Matching funds	FFY 2019 (Proposed) <i>(federal aid + match)</i>
Base obligation authority	\$ 611,680,644		
Planned redistribution request	\$ 50,000,000		
Total Estimated Funding Available	\$ 661,680,644		
ABP GANS Repayment	\$ (66,015,000)		
Total non-earmarked funding available	\$ 595,665,644	\$ 138,437,429	\$ 734,103,074
Planning / Adjustments / Pass-throughs			
Award adjustments, change orders, etc.	\$ 21,645,935	\$ 5,411,484	\$ 27,057,419
Metropolitan planning	\$ 8,670,263	\$ 2,167,566	\$ 10,837,829
State planning and research	\$ 14,026,697	\$ 3,506,674	\$ 17,533,371
Freight Plan flex to Rail and Transit	\$ 2,021,285	\$ 505,321	\$ 2,526,606
Recreational trails	\$ 2,519,509	\$ 629,877	\$ 3,149,386
Railroad grade crossings	\$ 3,800,000	\$ 422,222	\$ 4,222,222
MassRides program	\$ 2,660,000	\$ 665,000	\$ 3,325,000
<i>subtotal of planning / adjustments / pass-throughs</i>	\$ 55,343,689	\$ 13,308,145	\$ 68,651,834
Funding for regional priorities	regional share %	MPO	Total federal aid
			Matching funds
			Total funding (proposed)
	3.5596%	Berkshire	\$ 6,583,267
	42.9671%	Boston	\$ 79,465,073
	4.5851%	Cape Cod	\$ 8,479,867
	8.6901%	Central Mass	\$ 16,071,819
	2.5397%	Franklin	\$ 4,697,023
	0.3100%	Martha's Vineyard	\$ 573,326
	4.4296%	Merrimack Valley	\$ 8,192,279
	4.4596%	Montachusett	\$ 8,247,763
	0.2200%	Nantucket	\$ 406,877
	3.9096%	Northern Middlesex	\$ 7,230,571
	4.5595%	Old Colony	\$ 8,432,522
	10.8099%	Pioneer Valley	\$ 19,992,261
	8.9601%	Southeastern Mass	\$ 16,571,167
		<i>Total funding of regional priorities</i>	\$ 184,944,000
Highway Division programs			\$ 44,986,185
Reliability programs			\$ 80,143,100
Bridge program			\$ 36,951,989
		<i>Inspections</i>	\$ -
		<i>Systematic maintenance</i>	\$ 2,000,000
		<i>On-system NHS (minimum)</i>	\$ 24,000,000
		<i>On-System Non-NHS</i>	\$ 3,826,989
		<i>Off-system</i>	\$ 7,125,000
Interstate pavement program			\$ 30,722,222
Non-interstate DOT pavement program			\$ 17,300,000
Roadway improvements program			\$ 500,000
Safety improvements program			\$ 4,555,556
Modernization programs			\$ 8,683,333
ADA retrofits program			\$ 600,000
Intersection improvements program			\$ 3,083,333
Intelligent Transportation Systems program			\$ 2,750,000
Roadway reconstruction program			\$ 2,250,000
Expansion programs			\$ 9,080,000
Bicycles and pedestrians program			\$ 9,080,000
Capacity program			\$ -

**FFY 2019-2023 STIP
2020 BUDGET**

	Obligation authority <i>(federal aid only)</i>	Matching funds	FFY 2020 (Proposed) <i>(federal aid + match)</i>
Base obligation authority	\$ 626,330,019		
Planned redistribution request	\$ 50,000,000		
Total Estimated Funding Available	\$ 676,330,019		
ABP GANS Repayment	\$ (81,570,000)		
Total non-earmarked funding available	\$ 594,760,019	\$ 139,025,281	\$ 733,785,300
Planning / Adjustments / Pass-throughs			
Award adjustments, change orders, etc.	\$ 38,175,176	\$ 9,543,794	\$ 47,718,969
Metropolitan planning	\$ 8,670,263	\$ 2,167,566	\$ 10,837,829
State planning and research	\$ 14,026,697	\$ 3,506,674	\$ 17,533,371
Freight Plan flex to Rail and Transit	\$ 2,245,872	\$ 561,468	\$ 2,807,340
Recreational trails	\$ 1,186,729	\$ 296,682	\$ 1,483,411
Railroad grade crossings	\$ 2,000,000	\$ 222,222	\$ 2,222,222
MassRides program	\$ 2,660,000	\$ 665,000	\$ 3,325,000
	<i>subtotal of planning / adjustments / pass-throughs</i>	\$ 68,964,737	\$ 16,963,406
Funding for regional priorities	regional share % MPO	Total federal aid	Matching funds Total funding (proposed)
	3.5596% Berkshire	\$ 6,791,857	\$ 1,697,964 \$ 8,489,822
	42.9671% Boston	\$ 81,982,925	\$ 20,495,731 \$ 102,478,656
	4.5851% Cape Cod	\$ 8,748,552	\$ 2,187,138 \$ 10,935,690
	8.6901% Central Mass	\$ 16,581,054	\$ 4,145,264 \$ 20,726,318
	2.5397% Franklin	\$ 4,845,848	\$ 1,211,462 \$ 6,057,310
	0.3100% Martha's Vineyard	\$ 591,492	\$ 147,873 \$ 739,365
	4.4296% Merrimack Valley	\$ 8,451,852	\$ 2,112,963 \$ 10,564,815
	4.4596% Montachusett	\$ 8,509,093	\$ 2,127,273 \$ 10,636,366
	0.2200% Nantucket	\$ 419,769	\$ 104,942 \$ 524,711
	3.9096% Northern Middlesex	\$ 7,459,671	\$ 1,864,918 \$ 9,324,589
	4.5595% Old Colony	\$ 8,699,706	\$ 2,174,927 \$ 10,874,633
	10.8099% Pioneer Valley	\$ 20,625,716	\$ 5,156,429 \$ 25,782,146
	8.9601% Southeastern Mass	\$ 17,096,225	\$ 4,274,056 \$ 21,370,281
	<i>Total funding of regional priorities</i>	\$ 190,803,952	\$ 47,700,940 \$ 238,504,702
Highway Division programs	\$ 334,991,330	\$ 74,360,935	\$ 409,352,265
Reliability programs	\$ 280,591,330	\$ 62,844,268	\$ 343,435,598
Bridge program	\$ 154,820,000	\$ 38,705,000	\$ 193,525,000
	<i>Inspections</i>	\$ 14,320,000	\$ 3,580,000 \$ 17,900,000
	<i>Systematic maintenance</i>	\$ 8,000,000	\$ 2,000,000 \$ 10,000,000
	<i>On-system NHS (minimum)</i>	\$ 94,900,000	\$ 23,725,000 \$ 118,625,000
	<i>On-System Non-NHS</i>	\$ 9,100,000	\$ 2,275,000 \$ 11,375,000
	<i>Off-system</i>	\$ 28,500,000	\$ 7,125,000 \$ 35,625,000
Interstate pavement program	\$ 37,585,665	\$ 4,176,185	\$ 41,761,850
Non-interstate DOT pavement program	\$ 65,185,665	\$ 16,296,416	\$ 81,482,081
Roadway improvements program	\$ 3,000,000	\$ 750,000	\$ 3,750,000
Safety improvements program	\$ 20,000,000	\$ 2,916,667	\$ 22,916,667
Modernization programs	\$ 34,400,000	\$ 6,516,667	\$ 40,916,667
ADA retrofits program	\$ -	\$ -	\$ -
Intersection improvements program	\$ 17,000,000	\$ 2,166,667	\$ 19,166,667
Intelligent Transportation Systems program	\$ 10,000,000	\$ 2,500,000	\$ 12,500,000
Roadway reconstruction program	\$ 7,400,000	\$ 1,850,000	\$ 9,250,000
Expansion programs	\$ 20,000,000	\$ 5,000,000	\$ 25,000,000
Bicycles and pedestrians program	\$ 20,000,000	\$ 5,000,000	\$ 25,000,000
Capacity program	\$ -	\$ -	\$ -

**FFY 2019-2023 STIP
2021 BUDGET**

	Obligation authority <i>(federal aid only)</i>	Matching funds	FFY 2021 (Proposed) <i>(federal aid + match)</i>
Base obligation authority	\$ 641,988,270		
Planned redistribution request	\$ 50,000,000		
Total Estimated Funding Available	\$ 691,988,270		
ABP GANS Repayment	\$ (85,190,000)		
Total non-earmarked funding available	\$ 606,798,270	\$ 144,651,660	\$ 751,449,930
Planning / Adjustments / Pass-throughs			
Award adjustments, change orders, etc.	\$ 33,342,205	\$ 8,335,551	\$ 41,677,756
Metropolitan planning	\$ 8,670,263	\$ 2,167,566	\$ 10,837,829
State planning and research	\$ 14,026,697	\$ 3,506,674	\$ 17,533,371
Freight Plan flex to Rail and Transit	\$ 2,245,872	\$ 561,468	\$ 2,807,340
Recreational trails	\$ 1,186,729	\$ 296,682	\$ 1,483,411
Railroad grade crossings	\$ 2,000,000	\$ 222,222	\$ 2,222,222
MassRides program	\$ 2,660,000	\$ 665,000	\$ 3,325,000
<i>subtotal of planning / adjustments / pass-throughs</i>	\$ 64,131,766	\$ 15,755,164	\$ 79,886,929
Funding for regional priorities	regional share % MPO	Total federal aid	Matching funds Total funding (proposed)
	3.5596% Berkshire	\$ 6,929,328	\$ 1,732,332 \$ 8,661,660
	42.9671% Boston	\$ 83,642,302	\$ 20,910,575 \$ 104,552,877
	4.5851% Cape Cod	\$ 8,925,627	\$ 2,231,407 \$ 11,157,034
	8.6901% Central Mass	\$ 16,916,663	\$ 4,229,166 \$ 21,145,829
	2.5397% Franklin	\$ 4,943,930	\$ 1,235,983 \$ 6,179,913
	0.3100% Martha's Vineyard	\$ 603,464	\$ 150,866 \$ 754,330
	4.4296% Merrimack Valley	\$ 8,622,922	\$ 2,155,730 \$ 10,778,652
	4.4596% Montachusett	\$ 8,681,322	\$ 2,170,330 \$ 10,851,652
	0.2200% Nantucket	\$ 428,265	\$ 107,066 \$ 535,331
	3.9096% Northern Middlesex	\$ 7,610,659	\$ 1,902,665 \$ 9,513,324
	4.5595% Old Colony	\$ 8,875,793	\$ 2,218,948 \$ 11,094,741
	10.8099% Pioneer Valley	\$ 21,043,192	\$ 5,260,798 \$ 26,303,990
	8.9601% Southeastern Mass	\$ 17,442,261	\$ 4,360,565 \$ 21,802,827
	<i>Total funding of regional priorities</i>	\$ 194,665,923	\$ 48,666,432 \$ 243,332,161
Highway Division programs	\$ 348,000,581	\$ 80,230,065	\$ 428,230,646
Reliability programs	\$ 239,280,581	\$ 54,577,842	\$ 293,858,423
Bridge program	\$ 140,500,000	\$ 35,125,000	\$ 175,625,000
	<i>Inspections</i>	\$ -	\$ - \$ -
	<i>Systematic maintenance</i>	\$ 8,000,000	\$ 2,000,000 \$ 10,000,000
	<i>On-system NHS (minimum)</i>	\$ 94,900,000	\$ 23,725,000 \$ 118,625,000
	<i>On-System Non-NHS</i>	\$ 9,100,000	\$ 2,275,000 \$ 11,375,000
	<i>Off-system</i>	\$ 28,500,000	\$ 7,125,000 \$ 35,625,000
Interstate pavement program	\$ 24,744,581	\$ 2,749,398	\$ 27,493,979
Non-interstate DOT pavement program	\$ 54,036,000	\$ 13,509,000	\$ 67,545,000
Roadway improvements program	\$ 3,000,000	\$ 750,000	\$ 3,750,000
Safety improvements program	\$ 17,000,000	\$ 2,444,444	\$ 19,444,444
Modernization programs	\$ 80,720,000	\$ 18,652,222	\$ 99,372,222
ADA retrofits program	\$ 1,400,000	\$ 350,000	\$ 1,750,000
Intersection improvements program	\$ 16,000,000	\$ 2,472,222	\$ 18,472,222
Intelligent Transportation Systems program	\$ 8,000,000	\$ 2,000,000	\$ 10,000,000
Roadway reconstruction program	\$ 55,320,000	\$ 13,830,000	\$ 69,150,000
Expansion programs	\$ 28,000,000	\$ 7,000,000	\$ 35,000,000
Bicycles and pedestrians program	\$ 28,000,000	\$ 7,000,000	\$ 35,000,000
Capacity program	\$ -	\$ -	\$ -

**FFY 2019-2023 STIP
2022 BUDGET**

	Obligation authority <i>(federal aid only)</i>	Matching funds	FFY 2022 (Proposed) <i>(federal aid + match)</i>
Base obligation authority	\$ 658,744,163		
Planned redistribution request	\$ 50,000,000		
Total Estimated Funding Available	\$ 708,744,163		
ABP GANS Repayment	\$ (89,590,000)		
Total non-earmarked funding available	\$ 619,154,163	\$ 147,301,057	\$ 766,455,220
Planning / Adjustments / Pass-throughs			
Award adjustments, change orders, etc.	\$ 36,361,281	\$ 9,090,320	\$ 45,451,601
Metropolitan planning	\$ 8,670,263	\$ 2,167,566	\$ 10,837,829
State planning and research	\$ 14,026,697	\$ 3,506,674	\$ 17,533,371
Freight Plan flex to Rail and Transit	\$ 2,245,872	\$ 561,468	\$ 2,807,340
Recreational trails	\$ 1,186,729	\$ 296,682	\$ 1,483,411
Railroad grade crossings	\$ 2,000,000	\$ 222,222	\$ 2,222,222
MassRides program	\$ 2,660,000	\$ 665,000	\$ 3,325,000
<i>subtotal of planning / adjustments / pass-throughs</i>	\$ 67,150,842	\$ 16,509,933	\$ 83,660,774
Funding for regional priorities	regional share % MPO	Total federal aid	Matching funds Total funding (proposed)
	3.5596% Berkshire	\$ 7,070,426	\$ 1,767,607 \$ 8,838,033
	42.9671% Boston	\$ 85,345,463	\$ 21,336,366 \$ 106,681,829
	4.5851% Cape Cod	\$ 9,107,375	\$ 2,276,844 \$ 11,384,218
	8.6901% Central Mass	\$ 17,261,128	\$ 4,315,282 \$ 21,576,410
	2.5397% Franklin	\$ 5,044,601	\$ 1,261,150 \$ 6,305,751
	0.3100% Martha's Vineyard	\$ 615,752	\$ 153,938 \$ 769,690
	4.4296% Merrimack Valley	\$ 8,798,505	\$ 2,199,626 \$ 10,998,132
	4.4596% Montachusett	\$ 8,858,094	\$ 2,214,524 \$ 11,072,618
	0.2200% Nantucket	\$ 436,986	\$ 109,246 \$ 546,232
	3.9096% Northern Middlesex	\$ 7,765,631	\$ 1,941,408 \$ 9,707,038
	4.5595% Old Colony	\$ 9,056,526	\$ 2,264,131 \$ 11,320,657
	10.8099% Pioneer Valley	\$ 21,471,682	\$ 5,367,921 \$ 26,839,603
	8.9601% Southeastern Mass	\$ 17,797,428	\$ 4,449,357 \$ 22,246,785
	<i>Total funding of regional priorities</i>	\$ 198,629,796	\$ 49,657,399 \$ 248,286,997
Highway Division programs		\$ 353,373,525	\$ 81,133,725 \$ 434,507,250
Reliability programs		\$ 246,873,525	\$ 56,592,058 \$ 303,465,583
Bridge program		\$ 154,820,000	\$ 38,705,000 \$ 193,525,000
	<i>Inspections</i>	\$ 14,320,000	\$ 3,580,000 \$ 17,900,000
	<i>Systematic maintenance</i>	\$ 8,000,000	\$ 2,000,000 \$ 10,000,000
	<i>On-system NHS (minimum)</i>	\$ 94,900,000	\$ 23,725,000 \$ 118,625,000
	<i>On-System Non-NHS</i>	\$ 9,100,000	\$ 2,275,000 \$ 11,375,000
	<i>Off-system</i>	\$ 28,500,000	\$ 7,125,000 \$ 35,625,000
Interstate pavement program		\$ 22,909,525	\$ 2,545,503 \$ 25,455,028
Non-interstate DOT pavement program		\$ 51,144,000	\$ 12,786,000 \$ 63,930,000
Roadway improvements program		\$ 1,000,000	\$ 250,000 \$ 1,250,000
Safety improvements program		\$ 17,000,000	\$ 2,305,556 \$ 19,305,556
Modernization programs		\$ 78,500,000	\$ 17,541,667 \$ 96,041,667
ADA retrofits program		\$ -	\$ - \$ -
Intersection improvements program		\$ 15,000,000	\$ 1,666,667 \$ 16,666,667
Intelligent Transportation Systems program		\$ 8,000,000	\$ 2,000,000 \$ 10,000,000
Roadway reconstruction program		\$ 55,500,000	\$ 13,875,000 \$ 69,375,000
Expansion programs		\$ 28,000,000	\$ 7,000,000 \$ 35,000,000
Bicycles and pedestrians program		\$ 28,000,000	\$ 7,000,000 \$ 35,000,000
Capacity program		\$ -	\$ - \$ -

**FFY 2019-2023 STIP
2023 BUDGET**

	Obligation authority (federal aid only)	Matching funds	FFY 2023 (Proposed) (federal aid + match)
Base obligation authority	\$ 676,662,005		
Planned redistribution request	\$ 50,000,000		
Total Estimated Funding Available	\$ 726,662,005		
ABP GANS Repayment	\$ (93,985,000)		
Total non-earmarked funding available	\$ 632,677,005	\$ 150,023,500	\$ 782,700,504
Planning / Adjustments / Pass-throughs			
Award adjustments, change orders, etc.	\$ 20,000,000	\$ 5,000,000	\$ 25,000,000
Metropolitan planning	\$ 8,670,263	\$ 2,167,566	\$ 10,837,829
State planning and research	\$ 14,026,697	\$ 3,506,674	\$ 17,533,371
Recreational trails	\$ 1,186,729	\$ 296,682	\$ 1,483,411
Railroad grade crossings	\$ 2,000,000	\$ 222,222	\$ 2,222,222
MassRides program	\$ 2,660,000	\$ 665,000	\$ 3,325,000
<i>subtotal of planning / adjustments / pass-throughs</i>	\$ 48,543,689	\$ 11,858,144	\$ 60,401,833
Funding for regional priorities	regional share %	MPO	Total federal aid
			Matching funds
			Total funding (proposed)
	3.5596%	Berkshire	\$ 7,224,850
	42.9671%	Boston	\$ 87,209,479
	4.5851%	Cape Cod	\$ 9,306,287
	8.6901%	Central Mass	\$ 17,638,125
	2.5397%	Franklin	\$ 5,154,779
	0.3100%	Martha's Vineyard	\$ 629,201
	4.4296%	Merrimack Valley	\$ 8,990,672
	4.4596%	Montachusett	\$ 9,051,563
	0.2200%	Nantucket	\$ 446,530
	3.9096%	Northern Middlesex	\$ 7,935,238
	4.5595%	Old Colony	\$ 9,254,328
	10.8099%	Pioneer Valley	\$ 21,940,642
	8.9601%	Southeastern Mass	\$ 18,186,139
		<i>Total funding of regional priorities</i>	\$ 202,968,036
Highway Division programs			\$ 381,165,279
Reliability programs			\$ 61,384,440
Bridge program			\$ 166,996,123
			\$ 41,749,031
			\$ -
		<i>Inspections</i>	\$ -
		<i>Systematic maintenance</i>	\$ 8,629,176
		<i>On-system NHS</i>	\$ 94,900,000
		<i>On-System Non-NHS</i>	\$ 9,815,687
		<i>Off-system</i>	\$ 28,500,000
Interstate pavement program			\$ 24,711,290
Non-interstate DOT pavement program			\$ 56,414,722
Roadway improvements program			\$ 1,142,119
Safety improvements program			\$ 18,336,998
Modernization programs			\$ 84,673,787
ADA retrofits program			\$ 1,400,000
Intersection improvements program			\$ 16,934,757
Intelligent Transportation Systems program			\$ 8,000,000
Roadway reconstruction program			\$ 58,339,029
Expansion programs			\$ 28,890,241
Bicycles and pedestrians program			\$ 28,890,241
Capacity program			\$ -

APPENDIX B: 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 26 lists the agencies from table 26 which responded and coordinated meetings were held during TIP development.

Table 25: 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 26: Agencies Providing Consultation)

APPENDIX C: FAST Act Performance Management Information

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

PVPC accomplishes these requirements 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 criteria. The TEC criteria is mainly based of PVPC various data driven process which include Pavement, Congestion, Safety as well as other readily available data.

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

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

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
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 stormwater impacts of surface transportation.	Environment and Climate Change
10	Enhancing travel and tourism.	Mobility, Quality of Life

APPENDIX D: 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

Comm-PASS - 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

QVCD - Quabog 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)