# Pioneer Valley Metropolitan Planning Organization Unified Planning Work Program

## Fiscal Year 2020 October 1, 2019 to September 30, 2020







Prepared by:

Pioneer Valley Planning Commission 60 Congress Street – Floor 1 Springfield, MA 01104-3419 www.pvpc.org

## Pioneer Valley Unified Planning Work Program

## Fiscal Year 2020 October 1, 2019 to September 30, 2020

Draft Document

### Prepared by the Pioneer Valley Planning Commission

#### For the Pioneer Valley Metropolitan Planning Organization

#### **Pioneer Valley MPO Members**

Title

Name

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 City of Chicopee City of Holyoke Mayor Alexander Morse Mayor Brian P. Sullivan City of Westfield Mayor of Easthampton Mayor Nicole LaChapelle George Archible Belchertown Board of Selectmen Roger Fuller Chesterfield Board of Selectmen **Rick Sullivan** Economic Development Council of Western Massachusetts Alternates Mayor of Springfield Mayor Domenic Sarno Mayor William C. Reichelt City of West Springfield Carmina Fernandes Ludlow Board of Selectmen Southampton Board of Selectmen John Martin **Ex-Officio (Non-Voting)** Jeff McEwen Federal Highway Administration Peter Butler Federal Transit Administration Pioneer Valley Transit Authority Administrator Sandra Sheehan James Czach Chairman - Pioneer Valley Joint Transportation Committee

Prepared in cooperation with the Massachusetts Department of Transportation, and the Federal Highway Administration and the Federal Transit Administration - U.S. Department of Transportation. The views and opinions of the Pioneer Valley Planning Commission expressed herein do not necessarily state or reflect those of the U.S. Department of Transportation.

If information is needed in another language, please contact the PVPC Title VI Specialist by phone at (413) 781-6045.

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

Si necesita información en otro lenguaje, favor contactar al especialista de MassDOT del Título VI al 413-781-6045.

**如果需要使用其它**语言了解信息,请联系马萨诸塞州交通部(PVPC)《民权法》第六章专职人员,电话 413-781-6045

如果需要使用其它語言了解信息,請聯系馬薩諸塞州交通部(PVPC)《民權法》第六章專職人員,電話 413-781-6045

## **Table of Contents**

EXECUTIVE SUMMARY1			
INTRODUCTION			
FAST ACT PL	ANNING FACTORS	5	
FIXING AMERIC	CA'S SURFACE TRANSPORTATION (FAST) ACT	6	
	NNING EMPHASIS AREAS		
	EY MPO VISION AND GOALS		
	E BASED PLANNING AND PROGRAMMING		
	EY METROPOLITAN PLANNING ORGANIZATION MEMBERS		
	PORTATION COMMITTEE (JTC)		
	ION PLANNING STAFF		
	PORT		
	NT 1 – MANAGEMENT AND CERTIFICATION OF THE 3C PROCESS		
Task 1.1	Management of the 3C Process		
Task 1.2 Task 1.3	Unified Planning Work Program Public Participation Process		
Task 1.3 Task 1.4	Transportation Improvement Plan (TIP) Development		
Task 1.5	Title VI and Environmental Justice		
	NT 2 - TECHNICAL SUPPORT & DATA COLLECTION		
Task 2.1	Traffic Counting		
Task 2.2	Regional Travel Demand Modeling/Clean Air Planning		
Task 2.3	GIS, Mapping and Graphics		
Task 2.4	Information Center		
Task 2.5	Regional Congestion Management Process (CMP) - Data Collection		
Task 2.6 Task 2.7	Regional Pavement Management System - Data Collection Regional Performance Measures		
	NT 3 - REGIONAL TRANSPORTATION PLANNING		
Task 3.1	Regional Bicycle, Pedestrian and Complete Streets Planning		
Task 3.1 Task 3.2	Transit System Surveys and Route Implementation.		
Task 3.3	Regional Freight Planning		
Task 3.4	Regional Congestion Management Process-Project Development	32	
Task 3.5	Regional Pavement Management System - Project Development	33	
Task 3.6	Regional Performance Measures Assessment		
Task 3.7	Regional Safety and Planning Studies		
Task 3.8 Task 3.9	Intelligent Transportation Systems (ITS) and Regional Evacuation Planning Climate Change Implementation		
Task 3.9 Task 3.10	Green Streets and Infrastructure		
	NT 4 - ONGOING TRANSPORTATION PLANNING		
Task 4.1	Regional Transit Planning		
Task 4.2	Paratransit Planning Assistance		
Task 4.3	Implementing the Our Next Future: The Region's Sustainability and Smart Growth Plan	42	
Task 4.4	Bicycle and Pedestrian Network and Bike Commute Week		
Task 4.5	Local Technical Assistance		
Task 4.6 Task 4.7	Local Pavement Management Program		
Task 4.7 Task 4.8	Scenic Byways Support ValleyBike Implementation		
	LANNING PROJECTS		
	DMPLETION SCHEDULE OF PLANNING ACTIVITIES		
	ASSESSMENT		
PREVIOUS TRANSPORTATION STUDIES			
	STUDIES COMPLETED AS PART OF THE FY 2019 UPWP		
	MARY		
	COMMENTS ON THE DRAFT UPWP		
MPO ENDORS	MPO ENDORSEMENT60		

## **EXECUTIVE SUMMARY**

Each year, Metropolitan Planning Organizations (MPOs) are required to prepare a Unified Planning Work Program (UPWP), in cooperation with member agencies, to describe all anticipated transportation planning activities over the course of the upcoming federal fiscal year. The UPWP is an essential step in the development of a continuing, cooperative, and comprehensive (3C) transportation planning process in the Pioneer Valley Region. As the lead planning agency for the Pioneer Valley Metropolitan Planning Organization (MPO), the Pioneer Valley Planning Commission (PVPC) is responsible for developing the UPWP in cooperation with the Pioneer Valley Transit Authority, the Massachusetts Department of Transportation (MassDOT), and the 43 communities that comprise the region.

The UPWP also identifies the federal, state, and local funding sources used to carry out the proposed tasks. Tasks included in the UPWP were developed to advance key emphasis areas as identified by the Federal Highway Administration and the Federal Transit Administration. This document was prepared in compliance with the Fixing America's Surface Transportation (FAST) Act and addresses its national goals and planning factors. The FAST Act was signed into law by President Obama on December 4, 2015. This transportation bill specifically addresses all modes of transportation and enhances many of the existing provisions and programs defined in past transportation legislation. Additional information on the FAST Act can be found here: <a href="http://www.fhwa.dot.gov/fastact/">http://www.fhwa.dot.gov/fastact/</a>.

The UPWP is divided into the following sections:

**Work Element 1** - Work Element 1 encompasses the administration and support of the 3-C transportation process. Major products under this task include the development of the TIP, the UPWP, regional public participation process, and Environmental Justice and Title VI planning.

**Work Element 2** – Data collection and other planning services required to support the UPWP are included as part of Work Element 2. This work is traditionally used to assist in transportation analysis and the development of figures and tables included in technical reports. This data is also used to assist in tracking regional transportation performance measures.

**Work Element 3** - This work element is comprised of transportation planning that directly supports the development of projects included in the Regional Transportation Plan (RTP) or the development of RTPs. Key studies included in Work Element 3 for FFY 2020 include:

- Task 3.1 Regional Bicycle and Pedestrian Planning supports local and regional Complete Streets
  planning to accommodate all modes of transportation. As part of this task, PVPC will utilize the statewide
  Potential for Everyday Biking metric to gaps in the regional bicycle and pedestrian network.
- Task 3.2 Transit System Surveys and Route Implementation works in cooperation with PVTA to survey, monitor, and assess the quality of their fixed route and paratransit services. A northern service area fixed route onboard customer survey will be performed to assist in improving the quality of transit service in this area.
- Task 3.3 Regional Freight Planning assists in the planning of the efficient movement of all forms of freight. This task will utilize Truck Travel Time Reliability data for the region to identify existing freight bottlenecks.
- Task 3.4 Regional Congestion Management Process Project Development analyzes regional travel time data along major transportation corridors to confirm areas of congestions. Staff will utilize data available through FHWA's National Performance Management Research Data Set (NPMRDS) to update the regional congested corridor ranking. This data will also be used to analyze congestion on all Interstate and NHS off-ramps.
- Task 3.5 Regional Pavement Management will analyze the data collected under task 2.6 in the communities of Granby, Hadley, Hampden, Monson, Southwick and Ware.
- Task 3.6 Regional Performance Measures Assessment is intended to focus on the federal planning emphasis area of "transitioning to performance-based planning and programming." Staff will continue to review and assess adopted regional performance targets and score projects for the TIP using the regional Transportation Evaluation Criteria.

- Task 3.7 Regional Safety and Planning Studies will begin an update of the Regional Top 100 High Crash Intersections and Safety Compass reports. An addendum to the regional at-grade shared use path crossings study will incorporate more crossing locations and seek to advance preferred strategies based on classifications of at grade crossings.
- Task 3.9 Climate Change Implementation will update regional Climate Action Strategies and develop corresponding tools that can be implemented in the coming years to assist in reducing the impacts of climate change.
- Task 3.10 Green Streets and Infrastructure planning reduces the environmental impacts of streets, roads, and municipal infrastructure. This task will review and update strategies within the regional Green Infrastructure Plan and its corresponding toolkit.

**Work Element 4** – Work Element 4 consists of transportation planning activities that support the day to day operations of the regional transportation system. Key tasks included as part of Work Element 4 included regional fixed route and paratransit planning, bicycle and pedestrian planning, and local technical assistance. Federal and state funded transportation planning studies such as Scenic Byway Studies that are funded outside of the region's allotted Planning (PL) and Section 5303 budgets are also included as part of Work Element 4.

Additional Planning Projects - This section outlines activities for which funding has not yet been secured. These proposed tasks are provided for information purposes only. To date no additional planning projects have been identified for the region for the FFY2020 UPWP.

## INTRODUCTION

The UPWP provides an indication of regional long and short-range transportation planning objectives, the manner in which these objectives will be achieved, the budget necessary to sustain the overall planning effort, and the sources of funding for each specific program element. All tasks will be performed by the PVPC in cooperation with appropriate agencies, unless otherwise stated.

The work tasks within this UPWP are reflective of issues and concerns originating from transportation agencies at the federal, state and local levels. As always, the UPWP continues and extends the PVPC's emphasis on "results-oriented" tasks. In addition, several tasks are specifically targeted to implement provisions of several pieces of federal legislation, particularly the Fixing America's Surface Transportation (FAST) Act, the Clean Air Act Amendments of 1990 (CAAA) and the Americans with Disabilities Act (ADA).

Funding Source	Fiscal Period:
FHWA/MassDOT	October 1, 2019 through September 30, 2020
FTA/MassDOT	April 1, 2019 through March 31, 2020
Ρντα	April 1, 2019 through March 31, 2020

The time periods, or "program years", for the various funding sources are outlined in the following chart:

The Pioneer Valley Metropolitan Planning Organization anticipates endorsement of the Unified Planning Work Program for the Pioneer Valley MPO on May 28, 2019.

#### UPWP AMENDMENT

The descriptions of the tasks to be accomplished and the budgets for these tasks are based on the best estimate of what can be accomplished within the confines of available resources. If, in the performance of this work program, it becomes apparent that certain tasks cannot be accomplished due to changing or unforeseen circumstances, the UPWP will be amended/adjusted by redefining the scope of the tasks and/or reallocating funds among tasks. These changes will be developed in cooperation with MassDOT, the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), the Pioneer Valley Transit Authority (PVTA), and other concerned agencies as appropriate.

Upon endorsement by the MPO, the UPWP may be amended or adjusted as follows:

- Amendment with 21 day public comment period: an addition of a new task and/or deletion of a previously programmed task.
- Adjustment with an approval vote from the MPO and sign-off from the Office of Transportation Planning (OTP): modification of budget or scope to an already programmed task.

#### TRANSPORTATION PLANNING FUNDING SOURCES

**FHWA/MassDOT** - MassDOT receives two types of funds from FHWA that are passed through to planning agencies to conduct 3C transportation planning activities. These funds include Metropolitan Planning funds (PL) and Statewide Planning and Research funds (SPR) and are apportioned to states on the basis of population in urbanized areas and relative to the amount of highway construction funds the state receives. MassDOT maintains multi-year contracts with planning agencies to conduct transportation related planning activities within each region. These multi-year contracts utilize the PL and SPR funds received by FHWA.

Within the Pioneer Valley region the predominant source of funding from MassDOT is PL funds. In the past, unexpended funds from contract to contract were reserved in a "PL Balance" account for the region. Currently, funds not used during a program year are deobligated and may not be available for future use.

A total of \$1,088,964 in PL funds has been programmed for the FY2020 Transportation Work Program. Direct Costs are expected to vary among tasks in the UPWP and are subject to change. A total of \$22,000 has been allocated for Direct Costs in FY2020.

**FTA/MassDOT/PVTA** –Two types of funds are used for transit planning purposes in the Pioneer Valley region; Section 5303 and Section 5307 funds of the Federal Transit Act Amendments of 1991. Section 5303 funds are earmarked for use in planning and technical studies related to urban mass transportation. They are filtered down from the Federal Transit Administration through the MassDOT to the regional planning agencies in the Commonwealth. Section 5307 funds can be used for planning as well as other purposes, and are distributed by the FTA on the basis of the Regional Transit Authority (RTA) service area population. The Pioneer Valley Transit Authority, using Section 5307 funds from the FTA, contracts with the PVPC for assistance on a wide range of planning activities. Both funds require a 20% local match, which is provided by the RTA.

The Pioneer Valley Transit Authority, the FTA Section 5307 applicant, has consulted with the Pioneer Valley Planning Commission and concurs that the public involvement process adopted by the MPO for the development of the UPWP satisfies the public hearing requirements that pertain to the development of the Program of Projects included in the 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 as part of the UPWP review is not sufficient. FTA will require additional public involvement prior to grant approval, as presented in the joint FHWA/FTA environmental regulations, 23 CFR-Part 771.

**Other Funding Sources** – Other funding sources available are typically sought to conduct specific planning activities. These funds include highway funds such as Congestion Mitigation Air Quality (CMAQ) funds and Scenic Byway funds. These funds are awarded on a competitive basis and award is not guaranteed.

Many projects completed by PVPC's Community Development and Land Use Sections are funded through the award of competitive grants and through private contracts with local communities. These sources include Municipal Incentive Grants (MIGs), Community Development Block Grants, Community Development Action Grants, and Urban Development Action Grants. The PVPC also uses community assessment dollars to supplement the local technical assistance program.

## **FAST ACT PLANNING FACTORS**

All metropolitan planning organizations are required to incorporate ten factors into their planning process. The Pioneer Valley MPO has taken great strides to incorporate these ten factors into the Unified Planning Work Program. The Ten Planning Factors and their corresponding transportation planning tasks are:

Factor	Description	UPWP Task
1	Support the economic vitality of the metropolitan areas, especially by enabling global competitiveness, productivity, and efficiency.	Task 1.4 - Transportation Improvement Plan (TIP) development Task 3.6 – Regional Performance Measures Assessment
2	Increase the safety of the transportation system for motorized and non-motorized users.	Task 3.1 - Regional Bicycle and Pedestrian Planning Task 3.7 - Regional Safety and Planning Studies
3	Increase the security of the transportation system for motorized and non-motorized users.	Task 3.2 - Transit System Surveys and Route Implementation Task 3.8 - Intelligent Transportation Systems (ITS) and Regional Evacuation Planning Task 4.1 - Regional Transit Planning
4	Increase the accessibility and mobility of people and for freight.	Task 3.1 - Regional Bicycle and Pedestrian Planning Task 3.3 - Regional Freight Planning Task 4.1 - Regional Transit Planning Task 4.2 - Paratransit Planning Assistance
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.	Task 1.5 - Title VI and Environmental Justice Task 4.3 – Implementing the Regional Land Use Plan
6	Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.	Task 3.1 Regional Bicycle and Pedestrian Planning Task 3.2 - Transit System Surveys and Route Implementation Task 3.3- Regional Freight Planning
7	Promote efficient system management and operation.	Task 2.7 - Regional Performance Measures Task 3.2 Transit System Surveys and Route Implementation Task 3.4 - Regional Congestion Management Process - Project Development
8	Emphasize the preservation of the existing transportation system.	Task 3.5 - Regional Pavement Management System - Project Development Task 3.9 Climate Change Implementation
9	Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation.	Task 3.8 - Intelligent Transportation Systems (ITS) and Regional Evacuation Planning Task 3.10 Green Streets and Infrastructure
10	Enhancing travel and tourism.	Task 4.4 Bicycle and Pedestrian Network and Bike Commute Week Task 4.7 Scenic Byways Support Task 4.8 Bike Share Implementation

## FIXING AMERICA'S SURFACE TRANSPORTATION (FAST) ACT

The FAST Act was signed into law by President Obama on December 4, 2015. This transportation bill specifically addresses all modes of transportation and enhances many of the existing provisions and programs defined in past transportation legislation.

National goal areas identified as part of the Moving Ahead for Progress in the 21st Century (MAP-21) Act 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.

The Pioneer Valley MPO has developed Task 2.7 – Regional Performance Measures to assist in the development measures that advance the seven national goals and are consistent with Massachusetts GreenDOT policy and the Pioneer Valley Regional Transportation Plan. In addition, a number of tasks included as part of Work Element 3 of the UPWP advance a number of planning efforts that support the seven national goals.

Task	Description	National Goals Supported
2.7	<b>Regional Performance Measures</b> collects data used to monitor and evaluate regional performance measures established for the Pioneer Valley Region	All
3.1	<b>Regional Bicycle and Pedestrian Planning</b> focuses on the improvement of safety and mobility for bicycles and pedestrians by providing support for local and regional efforts to adopt and implement a "Complete Streets" approach to create neighborhoods, village centers and city streets that safely accommodate all modes of transportation.	Safety, System Reliability, Congestion Reduction
3.2	Transit System Surveys and Route Implementation – This ongoing task uses existing route data and ridership surveys to assist in improving the reliability and performance of the PVTA fixed route system.	Safety, Congestion Reduction, System Reliability
3.3	<b>Regional Freight Planning</b> – The freight planning task focuses on identifying opportunities to enhance the movement of freight in the region.	Freight Movement and Economic Vitality

3.4	Regional Congestion Management Process (CMP) – The CMP uses a variety of data sources to measure congestion along regional corridors and identify congestion bottlenecks. Planning studies are developed for congested areas to assist in developing projects to reduce congestion.	Congestion Reduction, System Reliability
3.5	Regional Pavement Management System – Pavement condition data is collected for all federal aid eligible roadways in the region on a four year cycle. The impact of planned roadway improvement projects can be analyzed under a variety of funding levels to identify the level of investment required to keep pavement in a good state of repair.	Infrastructure Condition, Reduce Project Delivery Delays
3.6	<b>Regional Performance Measures Assessment</b> – This task provides an update on the progress made in meeting the adopted regional performance measures and targets. Data collected as part of Task 2.7 will be used to assist in calculating scores for projects reviewed as part of the region's Transportation Evaluation Criteria (TEC) and document progress made towards regional performance targets.	All
3.7	<b>Regional Safety and Planning Studies</b> – The MPO data from MassDOT and local communities to identify high crash locations. Safety data is used to monitor the effectiveness of regional safety improvements and to advance planning studies to identify potential safety improvements.	Safety, Reduce Project Delivery Delays
3.8	Intelligent Transportation System (ITS) and Regional Evacuation Planning – This task assists in ongoing regional ITS and evacuation planning efforts to increase the deployment of ITS technology, provide real time information to the public, and enhance regional transportation security.	Safety, Congestion Reduction, System Reliability
3.9	Climate Change Implementation – This task assists Pioneer Valley communities to plan for the impacts of climate change on the regional transportation system. It also serves to develop strategies and projects that can have a positive impact on greenhouse gas emissions from transportation sources in compliance with the Massachusetts GreenDOT policy.	Infrastructure Condition, Environmental Sustainability
3.10	<b>Green Street and Infrastructure</b> - Encourages the use of green streets and green infrastructure where practical to reduce stormwater and other environmental impacts the regional transportation system.	Infrastructure Condition, Environmental Sustainability

## FEDERAL PLANNING EMPHASIS AREAS

FHWA and FTA have established Federal Planning Emphasis Areas to assist in the implementation of the FAST Act and guide regional transportation planning efforts. The Federal Planning Emphasis Areas are:

• *Performance Management.* The PVPC has specifically included Tasks 2.7 and 3.6 in the UPWP to address the advancement of performance based planning and project selection. We will continue to work

with local communities, MassDOT, and our federal partners to track regional performance measures and utilize the regional Transportation Evaluation Criteria to advance planning studies and transportation improvement projects in the Pioneer Valley Region.

- Regional Models of Cooperation PVPC routinely coordinates its planning activities with MassDOT, regional transit authorities, and bordering regional planning agencies. Massachusetts RPAs meet quarterly with MassDOT to review the status of proposed transportation improvement project. Transportation Program Managers have monthly meetings to coordinate regional planning efforts tied to the TIP, UPWP, and Title VI. We also meet annually with the Capital Region Council of Governments, located in Hartford Connecticut, to coordinate cross-border transportation planning activities as appropriate for Interstate 91, transit planning, bicycle planning, the regional transportation model, and the Bradley International Airport.
- Ladders of Opportunity Access to Essential Services. PVPC has incorporated enhanced coordination
  with a wide range of partners as part of our planning program to identify existing gaps in the regional
  transportation system. We utilize Task 1.5 Title VI and Environmental Justice to identify opportunities for
  the public to be involved in the identification of social, economic and environmental impacts of
  transportation. The Update to the Regional Transportation Plan will also address access to essential
  services through an analysis of the attainability by transit to essential services such as employment,
  health care, and education.

## PIONEER VALLEY MPO VISION AND GOALS

The Pioneer Valley Metropolitan Planning Organization developed a vision and regional goals to provide a framework for the development of the RTP. The UPWP strives to achieve this vision by incorporating the regional goals in all planning activities.

#### **RTP** Vision

The Pioneer Valley region strives to create and maintain a safe, dependable, resilient, environmentally sound, and equitable transportation system for all. We pledge to balance performance based strategies and projects that promote sustainable development, reduced use of fossil fuels, healthy and livable communities, provide for efficient movement of people and goods, advance economic vitality and enhance connectivity in the region.

#### **REGIONAL GOALS**

- 1. Safety
- 2. Operations and Maintenance
- 3. Environment
- 4. Coordination
- 5. Energy Efficiency
- 6. Cost Effectiveness
- 7. Intermodal Access
- 8. Multimodal Choices
- 9. Economic Productivity
- 10. Quality of Life
- 11. Environmental Justice
- 12. Land Use
- 13. Climate Change

## 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 advance transportation investments based on their ability to meet established goals. This includes setting targets for the performance measures identified in the FAST Act.

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

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

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

Final Rule	Effective Date	Status	Updated	
Safety Performance Measures (PM1)	April 14, 2016	MPO adopted state targets on February 26, 2019	Annually	
Pavement/Bridge Performance Measures (PM2)	May 20, 2017	MPO adopted state targets on October 23, 2018	Every Two Years	
System Performance Measures (PM3)	May 20, 2017	MPO adopted state targets on September 25, 2018	Every Two Years	
Transit Asset Management Plan (TAM)	July 26, 2016	MPO adopted PVTA TAM Plan Targets on March 26, 2019	Every Four Years	

#### **Regional Performance Target Status**

As can be seen from the above table, the Pioneer Valley MPO has elected to adopt the State performance targets for PM1, PM2 and PM3. The MPO will continue to work in close collaboration with the PVTA to incorporate their TAM performance targets in to the regional transportation planning process. The UPWP includes specific tasks to support the performance based planning and programming for the Pioneer Valley MPO. The latest performance targets for each adopted performance measure are presented in the following table.

Performance	Targets	for the	Pioneer	Valley	MPO
	i ai goto		1 1011001	, and	

Rule	Performance Measure	State Target
PM1	Total Number of Fatalities	Reduce Total Number of Fatalities to 353 or less statewide
PM1	Rate of Fatalities per 100 Million Vehicle Miles Traveled (VMT)	Reduce the Rate of Fatalities to 0.58/100 million VMT or less statewide
PM1	Total Number of Incapacitating Injuries	Reduce Total Number of Incapacitating Injuries to 2801 or less statewide
PM1	Rate of Serious Incapacitating per 100 Million VMT	Reduce the Rate of Incapacitating Injuries to 4.37/100 million VMT or less statewide
PM1	Total Number of Combined Incapacitating Injuries and Fatalities for Non-motorized Modes	Do Not Exceed the Current Average of 541 for Combined Incapacitating Injuries and Fatalities for Non-motorized Modes
PM2	Percentage of pavement of the Interstate System in Good condition	Maintain a condition of 70% or better for 2020 and 2022
PM2	Percentage of pavement of the Interstate System in Poor condition	Maintain a condition of 4% or better for 2020 and 2022
PM2	Percentage of pavement of the non- Interstate NHS in Good condition	Maintain a condition of 30% or better for 2020 and 2022
PM2	Percentage of pavement of the non- Interstate NHS in Poor condition	Maintain a condition of 30% or better for 2020 and 2022
PM2	Percentage of NHS bridges classified in Good condition	Maintain a condition of 15% or better for 2020 and 16% or better for 2022
PM2	Percentage of NHS bridges classifies in Poor condition	Maintain a condition of 13% or better for 2020 and 12% or better for 2022
PM3	Level of Travel Time Reliability (LOTTR) on the Interstate System	Maintain a LOTTR at or above 68% statewide for the Interstate System
PM3	Level of Travel Time Reliability (LOTTR) on non-Interstate NHS	Maintain a LOTTR at or above 80% statewide for the non-Interstate NHS
PM3	Level of Truck Travel Time Reliability (TTTR)	Maintain a TTTR of 1.85 or better statewide for the Interstate System.
PM3	Total reduction of on-road mobile source emissions from projects funded under the Congestion Mitigation and Air Quality Program (CMAQ) for the Springfield Maintenance Area	1622 Kg/day CO 1.4 Kg/day Ozone
ТАМ	Percent of revenue vehicles by asset class that have met or exceeded their Useful Life Benchmark (ULB)	Articulated Bus = 0%, Bus = 20%, Minibus = 100%, Cutaway Bus = 25%, Minivan = 30%, Trolleybus = 100%
ТАМ	Percent of vehicles that have met or exceeded their Useful Life Benchmark (ULB)	Automobiles = 25% Trucks and other Rubber Tire Vehicles = 25%
ТАМ	Percent of facilities with a condition rating below 3.0 on the FTA Transit Economic Requirements Model (TERM) Scale	Administrative and Maintenance = 25% Passenger and Parking = 0%

## PIONEER VALLEY METROPOLITAN PLANNING ORGANIZATION MEMBERS

The Pioneer Valley Metropolitan Planning Organization (MPO) implements and oversees the 3C transportation planning process in the Pioneer Valley region. The objective of the **3C** transportation planning process is to assist, support, and provide the capability to maintain an open **comprehensive**, **cooperative**, **and continuing** transportation planning and programming process at all levels of government in conformance with applicable federal and state requirements and guidelines. The Pioneer Valley MPO was restructured in August of 2006 to enhance the role of the local communities in the transportation planning process and allow local MPO members to represent subregional districts respective to community size and geographic location.

- The Secretary and CEO of the Massachusetts Department of Transportation
- The Administrator of the Massachusetts Department of Transportation Highway Division
- The Chairman of the Pioneer Valley Planning Commission
- The Chairman of the Pioneer Valley Transit Authority Advisory Board
- The President and CEO of the Western Massachusetts Economic Development Council (EDC)
- The Mayors of two of the following three (3) urban core cities:

Chicopee Holyoke Springfield

• The Mayor or a Selectman of one of the following four (4) cities and towns:

Agawam	Southwick	Westfield
West		

• The Mayor, Selectman, or Town Councilor of one of the following five (5) cities and towns:

Amherst	Easthampton
Northampton	South Hadley

• A Selectman or Town Councilor from one of the following fourteen (14) suburban and rural towns:

Hadley

Holland Monson Wales

East Longmeadow

Belchertown	Brimfield
Granby	Hampden
Longmeadow	Ludlow
Palmer	Pelham
Ware	Wilbraham

• A Selectman of one of the following seventeen (17) suburban and rural towns:

Blandford Cummington	Chester Goshen	Chesterfield Granville
Hatfield	Huntington	Middlefield
Montgomery	Plainfield	Russell
Southampton	Tolland	Westhampton
Williamsburg	Worthington	

In addition, the Administrator of the Pioneer Valley Transit Authority, the Joint Transportation Committee (JTC) Chairman, and one representative each from the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), the five (5) alternate community MPO representatives, and one representative each from both the Massachusetts Department of Transportation Highway Division District One and District Two Offices shall be considered ex-officio, non-voting members of the Pioneer Valley MPO. Alternate members shall be additional chief elected officials from each of the above-cited categories of communities and he/she shall be eligible to attend, participate and vote at MPO meetings in the event that the primary member cannot attend.

## **Pioneer Valley MPO Members**

Name	Title
Stephanie Pollack	Secretary and CEO of the Massachusetts Department of Transportation
Jonathan L. Gulliver	Administrator of the Massachusetts Department of Transportation Highway Division
Walter Gunn	Chairman of the Pioneer Valley Executive Committee
Mayor David Narkewicz	Chairman of the Pioneer Valley Transit Authority Advisory Board
Mayor Richard Kos	City of Chicopee
Mayor Alexander Morse	City of Holyoke
Mayor Brian P. Sullivan	City of Westfield
Mayor Nicole LaChapelle	Mayor of Easthampton
George Archible	Belchertown Board of Selectmen
Roger Fuller	Chesterfield Board of Selectmen
Rick Sullivan	Economic Development Council of Western Massachusetts
Alternates	
Mayor Domenic Sarno	Mayor of Springfield
Mayor William C. Reichelt	City of West Springfield
Carmina Fernandes	Ludlow Board of Selectmen
John Martin	Southampton Board of Selectmen
Ex-Officio (Non-Voting)	
Jeff McEwen	Federal Highway Administration
Peter Butler	Federal Transit Administration
Sandra Sheehan	Pioneer Valley Transit Authority Administrator
James Czach	Chairman – Pioneer Valley Joint Transportation Committee



## JOINT TRANSPORTATION COMMITTEE (JTC)

The JTC is a committee comprised of representatives of local, regional and state governments, as well as private groups and individuals involved in providing transportation facilities, services, and/or planning. The JTC was established by the 3C Memorandum of Understanding for the purpose of incorporating citizen participation in the transportation planning process. It is intended that the JTC be representative of both public and private interests in the region and provide a forum to guide transportation planning activities and transportation improvements in the region. The JTC also serves in an advisory capacity to the MPO as they decide on whether accepting and endorsing a plan or project is appropriate.

Community Agawam	Member Christopher Golba	Alternate Michelle Chase
Amherst	Guilford Mooring	Jason Skeels
Barnes Municipal Airport	Eric Billowitz	Vacant
Belchertown	Steven Williams	Gary Brougham/Douglas Albertson
Blandford	Josh Garcia	Vacant
Brimfield	Judith Carpenter	Vacant
Chester	John Murray	Vacant
Chesterfield	Matt Smith	Vacant
Chicopee	Elizabette Botelho	Vacant
Cummington	Rob Dextraze	Vacant
East Longmeadow		Vacant
	Bruce Fenney	Vacant
Easthampton Goshen	Dan Murphy Vacant	Vacant
Granby	David Derosiers	Vacant
Granville	Doug Roberts	Mathew Streeter
Hadley	Christian Stanley	Vacant
Hampden	Vacant	Vacant
Hatfield	Phil Genovese	Garrett Barry
Holland	Brian Johnson	Larry Mandell
Holyoke	Michael McManus	Jeffrey Burkott/Robert Peirent
Huntington	Charles Dazelle	Vacant
Longmeadow	Mario Mazza	Andrew Krar/Richard Foster
Ludlow	Vacant	Elie Villeno
MassBike	Gary Briere	Marvin Ward
MassDOT District 1	Mark Moore	Peter Frieri
MassDOT District 2	Paula Simmons	Jeff Hoynoski
Middlefield	Rodney Savery, Jr.	Alan Vint
Mobility Impaired Representative	Jennifer Lee - STAVROS	Vacant
Monson	John Morrell	Evan Brassard
Montgomery	Curtis Bush, Jr.	Vacant
Northampton	Wayne Feiden	Maggie Chan
Palmer	Gilbert St. George-Sorel	Vacant
Pelham	Rick Adamcek	Vacant
Pedestrian Representative	Betsy Johnson – WalkBoston	Dan Call – Westfield Greenway
Peter Pan Bus Lines	Peter Picknelly, Jr.	Vacant
Pioneer Valley Railroad	David Pederson	Vacant
Pioneer Valley Transit Authority	Paul Burns	Vacant
Plainfield	Merton Taylor Jr.	Vacant
Russell	Vacant	Vacant
South Hadley	Jim Reidy	Vacant
Southampton	Randall Kemp	Vacant
Southwick	Randy Brown	Richard Grannells
Springfield	Christopher Cignoli	Matthew Sokop/Peter Shumway
Tolland	James Deming	Kathleen Cowles
University of Massachusetts	Glen Barrington	Vacant
Wales	Bruce Cadieux	Jeff Vanais
Ware	Gilbert St. George-Sorel	Vacant
Western Massachusetts EDC	Vacant	Vacant
Westfield	Mark Cressotti	Jeremy Cigal
Westhampton	David Blakesly	Arthur Pichette
West Springfield	James Czach	Vacant
Wilbraham	Tonya Bosch	Dena Grochmal
Williamsburg	William Turner	Nick Dines
Worthington	Charley Rose	Peggy O'Neal

#### **Pioneer Valley Joint Transportation Committee Members and Alternates**

## **TRANSPORTATION PLANNING STAFF**

The Pioneer Valley Planning Commission employs a total of nine full-time transportation planners, one part time transportation planner, and at least one part-time transportation intern.

<u>Name</u>	<u>Title</u>
Rana Al Jammal	Senior Transportation Planner - Specialist
Connie Englert	Senior Transit Planner
Alexander Forrest	Transit Planner II
Amir Kouzehkanani	Principal Transportation Planner – Manager
Peter Kuusisto	Transit Planner
Andrew McCaul	Senior Transportation Planner II
Jeffrey McCollough	Senior Transportation Planner - Specialist
Khyati Parmar	Senior Transportation Planner II
Dana Roscoe	Principal Planner - Section Head
Gary Roux	Principal Planner - Section Head

## **STAFFING REPORT**

The following PVPC staff members are expected to work on the FY2020 Unified Planning Work Program. The percentage of each staff member's time devoted to Transportation Planning Tasks as part of our MassDOT 3C and Section 5303 contracts is approximated under "% Time on Transportation".

<u>Staff</u>	Position	<u>% Time on Transportation</u>
Rana Al Jammal	Senior Transportation Planner - Specialist	75%
Rebecca Basch	Land Use Planner	10%
Ray Centeno	Graphics Designer	25%
Allison Curtis	Data Manager and Analyst	35%
Jacob Dolinger	GIS Specialist	25%
Connie Englert	Senior Transit Planner	50%
Alexander Forrest	Transit Planner II	50%
Patty Gambarini	Principal Planner – Section Head	12%
Molly Goren-Watts	Principal Planner/Manager of Regional Information and Policy Center	13%
Amir Kouzehkanani	Principal Transportation Planner - Manager	80%
Peter Kuusisto	Transit Planner	50%
Andrew McCaul	Senior Transportation Planner II	86%
Jeffrey McCollough	Senior Transportation Planner - Specialist	78%
Corrin Meise-Munns	Land Use Planner	10%
Khyati Parmar	Senior Transportation Planner II	90%
Catherine Ratte	Principal Planner – Section Head	10%
Dana Roscoe	Principal Planner – Section Head	90%
Gary Roux	Principal Planner – Section Head	90%
Emily Slotnick	Land Use Planner	10%
Todd Zukowski	GIS/Cartographic – Section Head	25%
Transportation Intern	Intern	100%
Data Intern	Intern	25%

Staff members that are estimated to spend less than 10% of their time on tasks associated with the MassDOT 3C and Section 5303 contracts must be approved by the MassDOT Office of Transportation Planning.

## FUNDING PROFILE

.0       Management & Certification of the 3C Process         1.1       Management of the 3C Process         1.2       Unified Planning Work Program         1.3       Public Participation Process         1.4       TIP Development         1.5       Title VI and Environmental Justice         Subtotal of Section 1.0         Contechnical Support & Data Collection         2.1       Traffic Counting         2.2       Regional Travel Demand Modeling/Clean Air Planning         2.3       GIS, Mapping and Graphics         2.4       Information Center         2.5       Regional Congestion Management Process - Data Collection         2.6       Regional Performance Measures Data Collection         2.7       Regional Performance Measures Data Collection         2.8       Regional Bicycle, Pedestrian and Complete Streets Planning         3.1       Regional Bicycle, Pedestrian and Complete Streets Planning         3.2       Transit System Surveys & Route Implementation         3.3       Regional Freight Planning         3.4       Regional Preight Planning         3.4       Regional Pavement Management Process - Project Development         3.5       Regional Pavement Management System - Project Development         3.6       Reg	Total 50,000 8,750 22,500 81,250 65,625 <b>228,125</b> 40,000 75,625 91,750 54,500 15,000 32,500 12,500 <b>321,875</b>	28,000 6,000 12,000 55,000 <b>146,000</b> 32,000 56,000 54,200 43,600 12,000 26,000	1,500 3,000 13,750 11,250 <b>36,500</b> 8,000 14,000 13,550 10,900	Local Match	FTA S. 5303 12,000 1,000 6,000 10,000 7,500 <b>36,500</b> 4,500	PVTA* S. 5303 Match 3,000 250 1,500 2,500 1,875 <b>9,125</b>	PVTA S. 5307	PVTA S. 5307 Match
1.1       Management of the 3C Process         1.2       Unified Planning Work Program         1.3       Public Participation Process         1.4       TIP Development         1.5       Title VI and Environmental Justice         Subtotal of Section 1.0         Contention Environmental Justice         Subtotal of Section 1.0         Contechnical Support & Data Collection         2.1       Traffic Counting         2.2       Regional Travel Demand Modeling/Clean Air Planning         2.3       GIS, Mapping and Graphics         2.4       Information Center         2.5       Regional Congestion Management Process - Data Collection         2.6       Regional Pavement Management System - Data Collection         Subtotal of Section 2.0	50,000 8,750 22,500 81,250 65,625 <b>228,125</b> 40,000 75,625 91,750 54,500 15,000 32,500 12,500	PL 28,000 6,000 12,000 45,000 146,000 32,000 56,000 54,200 43,600 12,000 26,000	Match 7,000 1,500 3,000 13,750 11,250 <b>36,500</b> 8,000 14,000 13,550 10,900		S. 5303 12,000 1,000 6,000 10,000 7,500 <b>36,500</b>	Match 3,000 250 1,500 2,500 1,875 <b>9,125</b>		
1.1       Management of the 3C Process         1.2       Unified Planning Work Program         1.3       Public Participation Process         1.4       TIP Development         1.5       Title VI and Environmental Justice         Subtotal of Section 1.0         Contention Environmental Justice         Subtotal of Section 1.0         Contechnical Support & Data Collection         2.1       Traffic Counting         2.2       Regional Travel Demand Modeling/Clean Air Planning         2.3       GIS, Mapping and Graphics         2.4       Information Center         2.5       Regional Congestion Management Process - Data Collection         2.6       Regional Pavement Management System - Data Collection         Subtotal of Section 2.0	50,000 8,750 22,500 81,250 65,625 <b>228,125</b> 40,000 75,625 91,750 54,500 15,000 32,500 12,500	28,000 6,000 12,000 55,000 <b>146,000</b> 32,000 56,000 54,200 43,600 12,000 26,000	7,000 1,500 3,000 13,750 11,250 <b>36,500</b> 8,000 14,000 13,550 10,900		12,000 1,000 6,000 10,000 7,500 <b>36,500</b>	3,000 250 1,500 2,500 1,875 <b>9,125</b>		
1.1       Management of the 3C Process         1.2       Unified Planning Work Program         1.3       Public Participation Process         1.4       TIP Development         1.5       Title VI and Environmental Justice         Subtotal of Section 1.0         Contention Environmental Justice         Subtotal of Section 1.0         Contechnical Support & Data Collection         2.1       Traffic Counting         2.2       Regional Travel Demand Modeling/Clean Air Planning         2.3       GIS, Mapping and Graphics         2.4       Information Center         2.5       Regional Congestion Management Process - Data Collection         2.6       Regional Pavement Management System - Data Collection         Subtotal of Section 2.0	8,750 22,500 81,250 65,625 <b>228,125</b> 40,000 75,625 91,750 54,500 15,000 32,500 12,500	6,000 12,000 55,000 45,000 146,000 56,000 56,000 54,200 43,600 12,000 26,000	1,500 3,000 13,750 11,250 <b>36,500</b> 8,000 14,000 13,550 10,900		1,000 6,000 10,000 7,500 <b>36,500</b>	250 1,500 2,500 1,875 <b>9,125</b>		
1.2       Unified Planning Work Program         1.3       Public Participation Process         1.4       TIP Development         1.5       Title VI and Environmental Justice         Subtotal of Section 1.0         2.0         Contechnical Support & Data Collection         2.1       Traffic Counting         2.2       Regional Travel Demand Modeling/Clean Air Planning         2.3       GIS, Mapping and Graphics         2.4       Information Center         2.5       Regional Congestion Management Process - Data Collection         2.6       Regional Performance Measures Data Collection         2.7       Regional Performance Measures Data Collection         2.8       Regional Bicycle, Pedestrian and Complete Streets Planning         3.1       Regional Bicycle, Pedestrian and Complete Streets Planning         3.2       Transit System Surveys & Route Implementation         3.3       Regional Congestion Management Process - Project Development         3.4       Regional Congestion Management System - Project Development         3.5       Regional Pavement Management System - Project Development         3.6       Regional Performance Measures Assessment         3.7       Regional Safety and Planning Studies	22,500 81,250 65,625 <b>228,125</b> 40,000 75,625 91,750 54,500 15,000 32,500 12,500	6,000 12,000 55,000 45,000 146,000 56,000 56,000 54,200 43,600 12,000 26,000	1,500 3,000 13,750 11,250 <b>36,500</b> 8,000 14,000 13,550 10,900		1,000 6,000 10,000 7,500 <b>36,500</b>	250 1,500 2,500 1,875 <b>9,125</b>		
1.3       Public Participation Process         1.4       TIP Development         1.5       Title VI and Environmental Justice         Subtotal of Section 1.0         Contechnical Support & Data Collection         2.1       Traffic Counting         2.2       Regional Travel Demand Modeling/Clean Air Planning         2.3       GIS, Mapping and Graphics         2.4       Information Center         2.5       Regional Congestion Management Process - Data Collection         2.6       Regional Performance Measures Data Collection         2.7       Regional Performance Measures Data Collection         2.8       Regional Bicycle, Pedestrian and Complete Streets Planning         3.1       Regional Bicycle, Pedestrian and Complete Streets Planning         3.2       Transit System Surveys & Route Implementation         3.3       Regional Congestion Management Process - Project Development         3.4       Regional Congestion Management System - Project Development         3.5       Regional Pavement Management System - Project Development         3.6       Regional Performance Measures Assessment         3.7       Regional Safety and Planning Studies	22,500 81,250 65,625 <b>228,125</b> 40,000 75,625 91,750 54,500 15,000 32,500 12,500	12,000 55,000 45,000 146,000 56,000 56,000 54,200 43,600 12,000 26,000	3,000 13,750 11,250 <b>36,500</b> 8,000 14,000 13,550 10,900		6,000 10,000 7,500 <b>36,500</b>	1,500 2,500 1,875 <b>9,125</b>		
1.4       TIP Development         1.5       Title VI and Environmental Justice         Subtotal of Section 1.0         2.0         Contechnical Support & Data Collection         2.1       Traffic Counting         2.2       Regional Travel Demand Modeling/Clean Air Planning         2.3       GIS, Mapping and Graphics         2.4       Information Center         2.5       Regional Congestion Management Process - Data Collection         2.6       Regional Pavement Management System - Data Collection         2.7       Regional Performance Measures Data Collection         2.8       Regional Performance Measures Nata Collection         2.9       Subtotal of Section 2.0	81,250 65,625 <b>228,125</b> 40,000 75,625 91,750 54,500 15,000 32,500 12,500	55,000 45,000 146,000 32,000 56,000 54,200 43,600 12,000 26,000	13,750 11,250 <b>36,500</b> 8,000 14,000 13,550 10,900		10,000 7,500 <b>36,500</b>	2,500 1,875 <b>9,125</b>		
1.5       Title VI and Environmental Justice         Subtotal of Section 1.0         2.0         Technical Support & Data Collection         2.1       Traffic Counting         2.2       Regional Travel Demand Modeling/Clean Air Planning         2.3       GIS, Mapping and Graphics         2.4       Information Center         2.5       Regional Pavement Management Process - Data Collection         2.6       Regional Pavement Management System - Data Collection         2.7       Regional Performance Measures Data Collection         2.7       Regional Performance Measures Data Collection         2.8       Regional Performance Measures Data Collection         2.7       Regional Performance Measures Data Collection         2.6       Regional Performance Measures Data Collection         3.1       Regional Bicycle, Pedestrian and Complete Streets Planning         3.2       Transit System Surveys & Route Implementation         3.3       Regional Freight Planning         3.4       Regional Congestion Management Process - Project Development         3.5       Regional Performance Measures Assessment         3.6       Regional Performance Measures Assessment         3.7       Regional Safety and Planning Studies	65,625 <b>228,125</b> 40,000 75,625 91,750 54,500 15,000 32,500 12,500	45,000 146,000 32,000 56,000 54,200 43,600 12,000 26,000	11,250 36,500 8,000 14,000 13,550 10,900		7,500 <b>36,500</b>	1,875 <b>9,125</b>		
Subtotal of Section 1.0           2.0 Technical Support & Data Collection           2.1 Traffic Counting           2.2 Regional Travel Demand Modeling/Clean Air Planning           2.3 GIS, Mapping and Graphics           2.4 Information Center           2.5 Regional Congestion Management Process - Data Collection           2.6 Regional Pavement Management System - Data Collection           2.7 Regional Performance Measures Data Collection           2.8 Regional Bicycle, Pedestrian and Complete Streets Planning           3.1 Regional Bicycle, Pedestrian and Complete Streets Planning           3.2 Transit System Surveys & Route Implementation           3.3 Regional Freight Planning           3.4 Regional Pavement Management Process - Project Development           3.5 Regional Pavement Management System - Project Development           3.6 Regional Pavement Management System - Project Development           3.7 Regional Safety and Planning Studies	40,000 75,625 91,750 54,500 15,000 32,500 12,500	146,000 32,000 56,000 54,200 43,600 12,000 26,000	<b>36,500</b> 8,000 14,000 13,550 10,900		36,500	9,125		
2.1       Traffic Counting         2.2       Regional Travel Demand Modeling/Clean Air Planning         2.3       GIS, Mapping and Graphics         2.4       Information Center         2.5       Regional Congestion Management Process - Data Collection         2.6       Regional Pavement Management Process - Data Collection         2.7       Regional Performance Measures Data Collection         2.7       Regional Performance Measures Data Collection         8.0       RTP Planning         3.1       Regional Bicycle, Pedestrian and Complete Streets Planning         3.2       Transit System Surveys & Route Implementation         3.3       Regional Congestion Management Process - Project Development         3.4       Regional Congestion Management System - Project Development         3.5       Regional Performance Measures Assessment         3.7       Regional Safety and Planning Studies	75,625 91,750 54,500 15,000 32,500 12,500	56,000 54,200 43,600 12,000 26,000	14,000 13,550 10,900		4,500			
2.1       Traffic Counting         2.2       Regional Travel Demand Modeling/Clean Air Planning         2.3       GIS, Mapping and Graphics         2.4       Information Center         2.5       Regional Congestion Management Process - Data Collection         2.6       Regional Pavement Management Process - Data Collection         2.7       Regional Performance Measures Data Collection         2.7       Regional Performance Measures Data Collection         8.0       RTP Planning         3.1       Regional Bicycle, Pedestrian and Complete Streets Planning         3.2       Transit System Surveys & Route Implementation         3.3       Regional Congestion Management Process - Project Development         3.4       Regional Congestion Management System - Project Development         3.5       Regional Performance Measures Assessment         3.7       Regional Safety and Planning Studies	75,625 91,750 54,500 15,000 32,500 12,500	56,000 54,200 43,600 12,000 26,000	14,000 13,550 10,900		4,500			
2.2       Regional Travel Demand Modeling/Clean Air Planning         2.3       GIS, Mapping and Graphics         2.4       Information Center         2.5       Regional Congestion Management Process - Data Collection         2.6       Regional Pavement Management Process - Data Collection         2.7       Regional Performance Measures Data Collection         2.8       RTP Planning         3.1       Regional Bicycle, Pedestrian and Complete Streets Planning         3.2       Transit System Surveys & Route Implementation         3.3       Regional Congestion Management Process - Project Development         3.5       Regional Pavement Management System - Project Development         3.6       Regional Pavement Management System - Project Development         3.7       Regional Safety and Planning Studies	75,625 91,750 54,500 15,000 32,500 12,500	56,000 54,200 43,600 12,000 26,000	14,000 13,550 10,900		4,500			
2.3       GIS, Mapping and Graphics         2.4       Information Center         2.5       Regional Congestion Management Process - Data Collection         2.6       Regional Pavement Management System - Data Collection         2.7       Regional Performance Measures Data Collection         Subtotal of Section 2.0         Subtotal Orgestion Management Process - Project Development	91,750 54,500 15,000 32,500 12,500	54,200 43,600 12,000 26,000	13,550 10,900		+,000	1,125		
2.4       Information Center         2.5       Regional Congestion Management Process - Data Collection         2.6       Regional Pavement Management System - Data Collection         2.7       Regional Performance Measures Data Collection         2.7       Regional Performance Measures Data Collection         3.0       RTP Planning         3.1       Regional Bicycle, Pedestrian and Complete Streets Planning         3.2       Transit System Surveys & Route Implementation         3.3       Regional Freight Planning         3.4       Regional Pavement Management Process - Project Development         3.5       Regional Pavement Management System - Project Development         3.6       Regional Safety and Planning Studies	54,500 15,000 32,500 12,500	43,600 12,000 26,000	10,900		7,200	1,800	12,000	3,00
2.5       Regional Congestion Management Process - Data Collection         2.6       Regional Pavement Management System - Data Collection         2.7       Regional Performance Measures Data Collection         Subtotal of Section 2.0         Subtota	15,000 32,500 12,500	12,000 26,000			7,200	1,000	12,000	0,00
2.6       Regional Pavement Management System - Data Collection         2.7       Regional Performance Measures Data Collection         Subtotal of Section 2.0         Subtotal of Section 2.0         3.0         RTP Planning         3.1       Regional Bicycle, Pedestrian and Complete Streets Planning         3.2       Transit System Surveys & Route Implementation         3.3       Regional Freight Planning         3.4       Regional Congestion Management Process - Project Development         3.5       Regional Pavement Management System - Project Development         3.6       Regional Performance Measures Assessment         3.7       Regional Safety and Planning Studies	32,500 12,500	26,000	3,000					
2.7       Regional Performance Measures Data Collection         Subtotal of Section 2.0         Subtotal of Se	12,500		6,500					
Subtotal of Section 2.0           8.0 RTP Planning           3.1 Regional Bicycle, Pedestrian and Complete Streets Planning           3.2 Transit System Surveys & Route Implementation           3.3 Regional Freight Planning           3.4 Regional Congestion Management Process - Project Development           3.5 Regional Pavement Management System - Project Development           3.6 Regional Performance Measures Assessment           3.7 Regional Safety and Planning Studies			2,500					
8.0 RTP Planning         3.1 Regional Bicycle, Pedestrian and Complete Streets Planning         3.2 Transit System Surveys & Route Implementation         3.3 Regional Freight Planning         3.4 Regional Congestion Management Process - Project Development         3.5 Regional Pavement Management System - Project Development         3.6 Regional Performance Measures Assessment         3.7 Regional Safety and Planning Studies	021,010		2,500 58,450		11,700	2,925	12,000	3,00
3.1       Regional Bicycle, Pedestrian and Complete Streets Planning         3.2       Transit System Surveys & Route Implementation         3.3       Regional Freight Planning         3.4       Regional Congestion Management Process - Project Development         3.5       Regional Pavement Management System - Project Development         3.6       Regional Performance Measures Assessment         3.7       Regional Safety and Planning Studies		200,000	30,400		11,700	2,520	12,000	0,00
3.2       Transit System Surveys & Route Implementation         3.3       Regional Freight Planning         3.4       Regional Congestion Management Process - Project Development         3.5       Regional Pavement Management System - Project Development         3.6       Regional Performance Measures Assessment         3.7       Regional Safety and Planning Studies								
3.3       Regional Freight Planning         3.4       Regional Congestion Management Process - Project Development         3.5       Regional Pavement Management System - Project Development         3.6       Regional Performance Measures Assessment         3.7       Regional Safety and Planning Studies	62,500	50,000	12,500					
3.3       Regional Freight Planning         3.4       Regional Congestion Management Process - Project Development         3.5       Regional Pavement Management System - Project Development         3.6       Regional Performance Measures Assessment         3.7       Regional Safety and Planning Studies	158,750				62,000	15,500	65,000	16,25
3.5       Regional Pavement Management System - Project Development         3.6       Regional Performance Measures Assessment         3.7       Regional Safety and Planning Studies	37,500	30,000	7,500					
3.5       Regional Pavement Management System - Project Development         3.6       Regional Performance Measures Assessment         3.7       Regional Safety and Planning Studies	142,500	106,000	26,500		8,000	2,000		
3.6 Regional Performance Measures Assessment           3.7 Regional Safety and Planning Studies	45,000		9,000			·····		
3.7 Regional Safety and Planning Studies	27,500		5,500	~~~~~				
	145,964		27,943		5,000	1,250		000000000000000000000000000000000000000
3.8 Intelligent Transportation Systems (ITS) and Regional Evacuation Planning	25,000		3,750		5,000	1,250		
3.9 Climate Change Implementation	20,000		4,000		0,000	.,_00		
3.10 Green Streets and Infrastructure	20,000		4,000					
Subtotal of Section 3.0	684,714		100,693		80,000	20,000	65,000	16,25
I.0 Ongoing Transportation Planning								
4.1 Regional Transit Planning	238,153				92,522	23,131	98,000	24,50
4.2 Paratransit Planning Assistance	35,000	******			15,000	3,750	13,000	3,25
4.3 Implementing the Regional Land Use Plan	20,000		4,000		10,000	0,100	10,000	0,20
4.4 Bike and Pedestrian Network and Bike Commute Week	23,500	18,800	4,700					
4.4 Bike and Pedesthan Network and Bike Commute Week 4.5 Local Technical Assistance	23,300	18,600	4,700					
4.6 Local Pavement Management Program	7,000		4,030	7,000				
4.7 Scenic Byways Support	9,000	*****	1,800	,000				
4.8 Bike Share Implementation	13,000		2,600					
	13,000	10,400	2,000					
Subtotal of Section 4.0	368,903	71,000	17,750	7,000	107,522	26,881	111,000	27,75
Subtotal of Section 4.0	300,903	71,000	17,750	7,000	107,522	20,001	111,000	21,13
AassDOT 3C Direct Costs	22,000	17,600	4,400					
Program Sum		871,171	217,793	7,000	235,722	58,931	188,000	47,00

\*PVTA S. 5303 match is 20% of total program amount only.

## WORK ELEMENT 1 – MANAGEMENT AND CERTIFICATION OF THE 3C PROCESS

This work element encompasses the administration and support of the 3C transportation process and has been divided into the following tasks for FY 2020.

#### Task 1.1 Management of the 3C Process

#### **OBJECTIVE:**

To assist, support, and facilitate an open Comprehensive, Cooperative, and Continuing (3C) transportation planning and programming process at all levels of government in conformance with federal and state requirements as described in the 3C Memorandum of Understanding.

#### **PREVIOUS WORK:**

1. Management of the 3C process using previous Unified Planning Work Programs, transportation plans, Memorandum of Understanding, and Annual Review Reports.

#### **PROPOSED ACTIVITIES:**

- 1. Provide liaisons on transportation related matters between PVPC communities, PVTA, private transportation providers, abutting regions, the State of Connecticut, and other organizations at the regional, state, and federal levels.
- 2. Work with the Metropolitan Planning Organization (MPO) and its constituent members. Present transportation plans, studies and programs developed through the 3C public participation process for appropriate MPO action.
- 3. Coordinate required MPO caucuses to solicit recommendations for local MPO members.
- 4. Provide technical assistance to the Joint Transportation Committee and subgroups thereof.
- 5. Participate in the Massachusetts Transportation Managers Group as a means to continually improve the quality and operation of the transportation planning process.
- 6. Review and comment on federal and state transportation-related plans, programs, regulations and guidelines.
- 7. Provide transportation planning services in support of the PVPC's comprehensive planning programs.
- 8. Participate in informational transportation programs and courses. Review literature on new transportation planning procedures.

#### **PRODUCTS:**

- 1. Technical memoranda and reports as needed.
- 2. Monthly Invoices (completed monthly).
- 3. Updates to certification documents as required.
- 4. MPO meeting minutes (completed monthly).

0 26 weeks	
4	
	4 6

#### Task 1.2 Unified Planning Work Program

#### **OBJECTIVE:**

To prepare and maintain a regional Unified Planning Work Program (UPWP) of state and federally funded transportation planning activities. The UPWP will include a summary of the estimated funding source(s) for each task and be completed in conformance with applicable federal, state, and regional guidelines.

#### **PREVIOUS WORK:**

1. Pioneer Valley Unified Work Programs 1974 - 2019.

#### **PROPOSED ACTIVITIES:**

- Review and amend relevant portions of the PVPC's UPWP in order to meet new planning requirements and/or circumstances pertinent to the region's transportation sector. Circulate revisions to the appropriate agencies for review and/or endorsement.
- 2. Develop a new UPWP for the Pioneer Valley MPO covering the next federal fiscal year. The development of a new UPWP will be prepared in cooperation with the Regional Joint Transportation Committee (JTC) and MPO and subject to the current Public Participation Plan.
- 3. Update the Title VI Equity Analysis of the geographical distribution of UPWP planning activities in the PVPC region.
- 4. Perform outreach to member communities to identify potential transportation planning activities for inclusion in the UPWP.

#### **PRODUCTS:**

- 1. Amendments to the current UPWP as necessary.
- 2. UPWP for the next program year (FFY 2021). The estimated completion date is May 2020. Public engagement is estimated to begin in March 2020.

Source	Budget	Est. Staff Effort
FHWA PL (80%)	\$6,000	3 weeks
MassDOT (20% match)	\$1,500	1 week
FTA S.5303	<u>\$1,250</u>	<u>1 week</u>
TOTAL	\$8,750	5 weeks
Direct Labor	\$3,868	
Indirect Costs	\$4,882	

## Task 1.3 Public Participation Process

#### **OBJECTIVE:**

To provide the public with complete information, timely notice, full access to key decisions and opportunities for early and continuing involvement in the 3C process in compliance with the FAST Act. This inclusive public participation process is continually improving and expanding to include contacts with community-based organizations and under-represented populations to engage and seek input.

#### **PREVIOUS WORK:**

- 1. Adopted MassDOT's new Public Participation Process.
- 2. Expanded stakeholder outreach and capacity building.
- 3. Press releases announcing transportation projects and events

#### **PROPOSED ACTIVITIES:**

1. Apply the Public Participation Process to transportation programs and tasks to: prepare for public meetings; attend public meetings;

perform outreach to increase public participation; inform and educate residents and employers of the region about transportation legislation and PVPC products.

- 2. Update and revise the MPO online content to maintain current information on transportation studies and ongoing projects.
- 3. Explore alternative media outlets for reaching the Limited English Proficient (LEP) population in the region.
- 4. Network with social service agencies, neighborhood groups and community organizations to enhance existing outreach.

#### **PRODUCTS:**

- 1. Meeting minutes.
- 2. Press releases for transportation projects (as necessary).
- 3. Web based information distribution.

<u>Source</u>	Budget	Est. Staff Effort
FHWA PL (80%)	\$12,000	9 weeks
MassDOT (20% match)	\$ 3,000	2 weeks
FTA S.5303	<u>\$ 7,500</u>	<u>4 weeks</u>
<b>TOTAL</b>	<b>\$22,500</b>	15 weeks
Direct Labor Indirect Costs	\$ 9,947 \$12,553	

## Task 1.4 Transportation Improvement Plan (TIP) Development

#### **OBJECTIVE:**

The PVMPO, with assistance from PVPC Staff, the JTC, and MassDOT will evaluate and prioritize a listing of transportation improvement projects to develop a fiscally constrained TIP. Staff will work closely with federal, state and municipal partners to ensure that the process meets all federal, state and local requirements.

#### **PREVIOUS WORK:**

- 1. Pioneer Valley Transportation Improvement Programs 1974 2019
- 2. Updates to the Transportation Improvement Program Database
- 3. Annual Transportation Evaluation Criteria (TEC) Forms Update
- 4. Annual TEC summary sheet to assist in populating the Draft TIP.
- 5. TIP Project locations mapped using GPS

#### **PROPOSED ACTIVITIES:**

- Update and improve PVPC's database of transportation projects. Data will satisfy the requirements of the Metropolitan Planning Rules. The MassDOT "Grants Plus +" system will be used to develop the Transit TIP.
- 2. Assist communities with the development of new TIP project through the MassDOT MaPIT intake tool. Attend training for updates to the project intake tool as necessary.
- 3. Assist the JTC in utilizing project evaluation criteria to develop a financially constrained project listing for each program year.
- Develop and maintain the Draft and Final FFY 2021 2025 TIP. Perform air quality conformity and Greenhouse Gas emissions calculations. Map all projects programmed on the TIP and update the regional equity analysis.
- 5. Conduct appropriate public participation for the TIP consistent with the public participation plan for the region.
- 6. Conduct formal TIP amendments and adjustments in consultation with the MPO as necessary.

- 7. Provide links on the PVPC web site for communities to access current as well as archived TIP documents and project information.
- 8. Work with JTC and MPO to update TEC forms to meet FHWA/FTA requirements.

#### **PRODUCTS:**

- 1. FFY 2021 2025 Transportation Improvement Program. The estimated completion date is May 2020. Public engagement is estimated to begin in February 2020.
- 2. TIP Amendments and Adjustments as necessary.
- 3. Summary of comments received during public review for all TIP amendments. As necessary.
- 4. Ranked list of evaluated TIP projects, with corresponding TEC sheets. March 2020.

<u>Source</u>	<u>Budget</u>	Est. Staff Effort
FHWA PL (80%)	\$55,000	28 weeks
MassDOT (20% match)	\$13,750	7 weeks
FTA S.5303	<u>\$12,500</u>	<u>6 weeks</u>
<b>TOTAL</b>	<b>\$81,250</b>	41 weeks
Direct Labor Indirect Costs	\$35,920 \$45,330	

### Task 1.5 Title VI and Environmental Justice

#### **OBJECTIVE:**

In compliance with Federal Statutes this task assists PVPC in identifying Title VI responsibilities and addressing environmental justice and social equity issues as part of its transportation planning process. This task addresses the goals of the RTP and the region's Language Access Plan to enhance the existing public participation process, better identify protected populations, and develop performance measures to evaluate transportation deficiencies, benefits, and burdens.

#### **PREVIOUS WORK:**

- 1. Update to the regional Four Factor analysis 2019.
- 2. Expanded membership on the Pioneer Valley Joint Transportation Committee (JTC) to include representatives from the pedestrian and mobility impaired communities.
- 3. Developed bilingual public notices for transportation products.
- 4. Updated and submitted revised Title VI program to MassDOT Office of Diversity and Civil Rights (ODCR) and FTA.
- 5. Annual reporting to MassDOT on EJ, Title VI and LEP.

#### **PROPOSED ACTIVITIES:**

- 1. Continue use of the MassDOT "Engage Tool" to improve public outreach and interaction with the public. Staff will continue to identify new stakeholders and meet with regional organizations and groups to facilitate participation in the regional transportation planning process.
- 2. Revise and update the email database of community contacts for non-profit and community based organizations.
- 3. Identify training opportunities for staff regarding federal revisions to Title VI, LEP and EJ. Work with MassDOT, Massachusetts RPAs, and local partners to identify best practices to improve LEP and Environmental Justice outreach and planning.

- 4. Provide an annual update of documented complaints, Title VI related activities, and progress in implementing Title VI programs to MassDOT.
- 5. Update Title VI Mapping tools for Title VI and EJ populations for PVPC communities to include data from the most recent version of the ACS.
- 6. Sign Certification and Assurances as put out by FTA/FHWA. Include Title VI language (as referenced by FHWA) into contracts with third party consultants advising entities of Title VI obligations.
- 7. Regularly monitor the benefits and burdens of transportation projects and conduct ongoing analysis of ways to engage all groups within the region and to increase participation in the transportation planning process.
- 8. Distribute Notice of Beneficiaries to community organizations and relevant contacts as identified in the Public Participation Plan
- 9. Develop bilingual products and public notices for the MPO to provide increased opportunities for under-served populations to be represented in the public participation process.

#### **PRODUCTS:**

- 1. Updated email contact database and revised public outreach using the "Engage Tool." January 2020.
- 2. Annual report to MassDOT on EJ, Title VI and LEP. December 2020.
- 3. Updated maps of Title VI protected population demographics and related impacts.
- 4. Summary of Benefits and Burdens Analysis. May 2020 with public participation beginning in February 2020
- 5. Bilingual notices and products as necessary.

<u>Source</u>	Budget	Est. Staff Effort
FHWA PL (80%)	\$45,000	22 weeks
MassDOT (20% match)	\$11,250	6 weeks
FTA S.5303	<u>\$ 9,375</u>	<u>5 weeks</u>
<b>TOTAL</b>	<b>\$65,625</b>	33 weeks
Direct Labor Indirect Costs	\$29,012 \$36,613	

## WORK ELEMENT 2 - TECHNICAL SUPPORT & DATA COLLECTION

This element outlines specific activities to be conducted in support of transportation planning tasks described in other UPWP elements.

## Task 2.1 Traffic Counting

#### **OBJECTIVE:**

To provide accurate and efficient bicycle, pedestrian and vehicle data collection services to support MassDOT, the PVPC's 43 member communities, and planning tasks included in the FY2020 UPWP.

#### PREVIOUS WORK:

- 1. Regional Traffic Counting Program and database 1985 2019.
- 2. Data collection and analysis as part of Highway Performance Monitoring System (HPMS).
- 3. Updates to MassDOT MS2 traffic count site

#### **PROPOSED ACTIVITIES:**

- 1. Perform data collection for all transportation modes. This work includes:
  - a) Collect 48 hour Automatic Traffic Recorder (ATR) count data and HPMS data for locations as requested by MassDOT. Utilize the Collector for ArcGIS mobile app to geo-code all traffic count locations.
  - b) Collect Turning Movement Count (TMC) data as requested by MassDOT and member communities.
  - c) Collect bicycle, pedestrian and vehicular count data to support UPWP tasks.
  - d) Update the MassDOT MS2 website and PVPC traffic count database to include all recent data collection.
  - e) Collect traffic data for underserved communities as identified in the UPWP Equity Assessment. Target communities for FFY2020 include Blandford, Holland, Middlefield, Montgomery, and Palmer.
- 2. Provide up to 2 free daily traffic counts per member community on request.
- 3. Collect and document vehicle classification data and speed data for the region.
- 4. Develop a regional report on traffic volume trends for data collected from 2015 2019.

#### **PRODUCTS:**

- 1. Summary reports of daily traffic count information for the region. Ongoing task.
- 2. PVPC web page Average Daily Traffic counts by community. Ongoing task.
- 3. Document traffic counts for other UPWP tasks as necessary.
- 4. Regional Traffic Counts 2015 2019 Report. April 2020.

<u>Source</u>	<u>Budget</u>	Est. Staff Effort
FHWA PL (80%)	\$32,000	16 weeks
MassDOT (20% match)	<u>\$ 8,000</u>	<u>4 weeks</u>
<b>TOTAL</b>	<b>\$40,000</b>	20 weeks
Direct Labor Indirect Costs	\$17,683 \$22,317	

## Task 2.2 Regional Travel Demand Modeling/Clean Air Planning

#### **OBJECTIVE:**

Develop and maintain a baseline travel demand model to estimate future travel demand, calculate vehicles miles traveled, forecast long range transportation needs and estimate transportation impacts on air quality. Support local and regional sustainability and livability initiatives through analysis of corridors and projects in terms of circulation impacts and Green House Gas emission reductions.

#### PREVIOUS WORK:

- 1. Updated the Regional Transportation Model to include revised demographic projections for the 2020 RTP.
- 2. Completed a Scenario Analysis of the impacts of removing tolls from the Massachusetts Turnpike.
- 3. Completed a Technical Memo on the impact of the Brimfield Antique Shows on the Route 20 corridor.

#### **PROPOSED ACTIVITIES:**

- 1. Update the traffic count database with current Average Daily Traffic data at community lines and external stations gathered from inhouse traffic counts as well as from surrounding planning agencies (ongoing task).
- 2. Continue to assist in the review of proposed changes and advancement of the 2020 Census (ongoing).
- 3. Obtain up to date information on non-exempt regional projects for inclusion in the statewide model from the Office of Transportation Planning (ongoing).
- 4. Update the MassBuilds site with new development data for the PVPC region (ongoing).
- 5. Perform air quality conformity determinations for TIP projects to be funded under the Congestion Mitigation and Air Quality (CMAQ) program and for potential projects applying for funding under the Transportation Demand Management (TDM) program (ongoing).
- 6. Utilize the regional transportation model to assist in the development of future build out estimates, provide support data and estimate the effects of planned transportation improvements (ongoing).
- 7. Coordinate regional travel demand model data with MassDOT, surrounding Massachusetts RPAs, and the Capital Region Council of Governments.
- Perform an update the 2040 Regional Transportation Model network to included recommendations from the Springfield I-91 Viaduct Study (Summer 2020).

#### **P**RODUCTS:

- 1. Refinement and maintenance of the regional travel demand model. (ongoing)
- 2. Air quality conformity and greenhouse gas analysis in support of the TIP. February 2020.
- 3. 2040 Model Update to include recommendations from the I-91 Viaduct Study. Summer 2020.

<u>Source</u>	Budget	Est. Staff Effort
FHWA PL (80%)	\$56,000	28 weeks
MassDOT (20% match)	\$14,000	7 weeks
FTA S. 5303	<u>\$ 5,625</u>	<u>2 weeks</u>
<b>TOTAL</b>	<b>\$75,625</b>	37 weeks
Direct Labor Indirect Costs	\$33,433 \$42,192	

#### Task 2.3 GIS, Mapping and Graphics

#### **OBJECTIVE:**

This on-going effort collects, maintains and creates geo-spatial data that supports the overarching performance initiatives of the FAST Act and the project-specific goals outlined in this UPWP. Through these activities, PVPC GIS/Graphics staff will provide planners, government partners and the public with traditional GIS mapping products intended to support the 3C planning process.

#### **PREVIOUS WORK:**

- 1. Created and maintained GIS regional transit system database, maps and schedules (Ongoing Task)
- Acquired, revised and integrated relevant GIS spatial data/map coverage generated at local, state and federal levels into Pioneer Valley regional projects, including: road centerlines, road names, updated municipal zoning, land use, parcel, and critical public infrastructure data. (Ongoing Task)
- 3. Developed, enhanced, and maintained spatial data layers such as functional classification of roads, traffic count locations, pavement condition, regional bicycle and pedestrian infrastructure, etc. to support transportation-related projects. (Ongoing Task)
- 4. Created, updated, and maintained new online interactive ESRI map analysis tool for PVTA bus stop consolidation, optimization, and public information.

#### **PROPOSED ACTIVITIES:**

- Drone deployment to collect video/photos for use in transportationrelated analyses, public participation and public information efforts. (Ongoing Task).
- 2. Develop and implement management strategies to address staff training, establish data standards, define data collection protocol and conform map design to standardize GIS products. (Ongoing Task).
- 3. Pursue the use of GIS and other automated mapping and spatial analytical technologies for transportation applications. Enhance existing digital base map data and develop geographically referenced data layers for use in transit service analysis, emergency response, critical infrastructure assessment, pavement management, and transportation system planning. (Ongoing Task).
- 4. Integrate information generated to support transit and transportation management systems into GIS. (Ongoing Task).

- 5. Work with state and federal agencies to review, correct and enhance regional GIS map coverage and related data to meet state and federal standards and support development of Homeland Security and pre-disaster mitigation spatial data. (Ongoing Task).
- 6. Assimilate state and federal data and data structure (i.e., road centerline/road inventory) into the PVPC's database and analytic modeling programs. (Ongoing Task).
- 7. Improve access and use of web-based GIS data/analysis, online data and map products. (As necessary).
- 8. Provide support for transit planning services for the PVTA, including graphic layout, production of bus schedules, mapping, online bus stop inventory, public outreach, rider guides, public information and other vital documents. (Ongoing Task).

#### **PRODUCTS:**

- 1. Development of new and enhanced digital data layers. As needed.
- 2. Update to municipal planimetric base maps as necessary.
- 3. Transportation systems facility and planning maps. As needed.
- 4. Expand, update and maintain the GIS website. As necessary.
- 5. Development of regional spatial data to support federal and state initiatives. As necessary.
- 6. Update centerline/road inventory and functionally classified roads, as necessary.
- 7. Maintenance, updates, and enhancements to ESRI online bus stop and route analysis interface. As necessary.

<u>Source</u>	Budget	Est. Staff Effort
FHWA PL (80%)	\$54,200	27 weeks
MassDOT (20% match)	\$13,550	7 weeks
FTA S. 5303	\$ 9,000	4 weeks
PVTA S. 5307	<u>\$15,000</u>	<u>8 weeks</u>
<b>TOTAL</b>	<b>\$91,750</b>	46 weeks
Direct Labor Indirect Costs	\$40,561 \$51,189	

## Task 2.4 Information Center

#### **OBJECTIVE:**

Support the initiatives and goals of the FAST Act by serving as a regional data and analysis resource to transportation, economic development, land use, and municipal planning staff throughout the region. In particular, this Task will provide data and resources to support Task 2.7 Regional Performance Measures Development. The focus will continue to be placed on collecting and summarizing data from multiple sources to provide digital and print products that will inform stakeholders and support ongoing transportation activities. The Information Center focuses on assisting multiple partners to develop positive outcomes through a collaborative examination of data.

#### **PREVIOUS WORK:**

- 1. Updated regional and municipal level population, household, and employment projections which comply with the new 2010 Census and assisted transportation staff in integrating this into the transportation model.
- 2. Data Digest report focused on commute times and patterns with the Pioneer Valley surrounding major employment centers within the region.

- 3. Continued data updates in the development of updated definitions of Environmental Justice populations for the Pioneer Valley Region.
- 4. Developed and maintain a data downloads website available to regional planners and the public. <u>www.pioneervalleydata.org</u>
- 5. Incorporated relevant safety data and regional performance target data into regional database. Will continue to update annually.

#### **PROPOSED ACTIVITIES:**

- 1. Collect and analyze data regarding current transportation, economic development, land use, and municipal planning issues. This is an ongoing, annual task.
- 2. Assist decision makers and community members in making informed decisions about their community by sharing information widely. This activity continues to focus on making data easily available and understandable, using a variety of sources including the American Community Survey, the Economic Census, Census population estimates, municipal finance data, current economic indicators, and labor market information that will assist in positive transportation planning and decision making. Continued maintenance and improvements to data access through the PVPC website. This is an ongoing, annual task.
- 3. Respond to requests for data and analysis from municipalities and other external stakeholders as requested.
- 4. Maintain regional data indicators related to socio-economics, transportation, sustainability, and health to include in State of the Region database, State of the Pioneer Valley website, and community and regional profiles. This is an ongoing, annual task.
- 5. Continue to incorporate relevant safety data and regional performance target data into the annual State of the Region database as appropriate.
- 6. Update data for Pioneer Valley region's Environmental Justice definitions and assist with the use of these definitions and data in mapping activities and transportation planning efforts. Ensure consistency of Environmental Justice definitions across all planning areas of the PVPC. Continue to maintain and improve the Information Center's regional database to integrate transportation, demographic, economic, health, education and municipal data. This is an ongoing, annual task.
- 7. Continue to maintain the integration of transportation related initiatives within the regional economic development plan. This is an ongoing, annual task.
- 8. Provide support to transportation planners as they update the regional transportation model with the most up to date population and employment data and projections for future analysis. This is an ongoing, annual task.
- 9. Maintain online data dashboard monitoring trends in key transportation indicators. This is an ongoing, annual task.

#### **PRODUCTS:**

- 1. Maintain information systems of socio-economic and disparate data. Ongoing task.
- 2. Region wide data indicators updates to be conducted in December 2019 and May-July 2020.
- 3. PVPC website updates and maintenance. Ongoing task.
- 4. Maintain online data dashboard monitoring trends in key transportation indicators. Ongoing task.

<u>Source</u>	<u>Budget</u>	Est. Staff Effort
FHWA PL (80%)	\$43,600	22 weeks
MassDOT (20% match)	<u>\$10,900</u>	<u>5 weeks</u>
<b>TOTAL</b>	<b>\$54,500</b>	27 weeks
Direct Labor Indirect Costs	\$24,094 \$30,406	

#### Task 2.5 Regional Congestion Management Process (CMP) - Data Collection

#### **OBJECTIVE:**

Under this task PVPC staff will continue to integrate ESRI GIS and the National Performance Management Research Data Set (NPMRDS) into the CMP.

#### **PREVIOUS WORK:**

- 1. Analysis of data to update top congested corridors and regional bottlenecks.
- 2. Travel time data runs to verify congested areas and document the effectiveness of recently completed transportation improvement projects.
- 3. Regional Park and Ride Lot data collection.

#### **PROPOSED ACTIVITIES:**

- 1. Collect data for CMP problem verification, studies, regional model calibration, and transportation monitoring. As necessary.
- 2. Download and review NPMRDS data sets for the region. Ongoing task.
- 3. Collect data at existing park and ride facilities and truck rest stops in the region. Ongoing task.
- 4. Review potential CMP data sources for potential use on non-NHS and federal aid eligible roadways. As necessary.

#### **PRODUCTS:**

- 1. Updated Pioneer Valley CMP Database. Ongoing task.
- 2. Updated regional park and ride lot and truck rest stop occupancy summary. Summer 2020.

<u>Source</u>	<u>Budget</u>	Est. Staff Effort
FHWA PL (80%)	\$12,000	6 weeks
MassDOT (20% match)	<u>\$ 3,000</u>	<u>2 weeks</u>
<b>TOTAL</b>	<b>\$15,000</b>	8 weeks
Direct Labor Indirect Costs	\$6,631 \$8,369	

## Task 2.6 Regional Pavement Management System - Data Collection

#### **OBJECTIVE:**

Develop and maintain an updated pavement distress database for the Pioneer Valley Regional Pavement Management System (PMS) on all federal aid eligible roadways. PVPC staff collects pavement distress data based on a 4-year cycle. This is an ongoing task.

#### **PREVIOUS WORK:**

- Collection of roadway pavement distress data, roadway geometry and overall condition index (OCI) for all federal aid eligible roadways in the PVPC region.
- 2. Completed roadway pavement distress data collection in Blandford, Chesterfield, Cummington, Montgomery, Palmer and Springfield.

#### **PROPOSED ACTIVITIES:**

- 1. Collect roadway pavement distress data on all federal aid roadways in Granby, Hadley, Hampden, Monson, Southwick, and Ware. Summer 2020.
- 2. Collect and verify additional roadway information such as posted speed, shoulder width, functional class, curb reveal, area zoning, width, segment length, and special route designations. As necessary.
- Collect roadway pavement distress and condition information for proposed transportation improvement projects in the region to continue to assist in the regional project evaluation process. As necessary.
- 4. Continue to conduct quality control checks of pavement inventory and condition data. As necessary.
- 5. Coordinate pavement data collection with MassDOT and other RPAs. As necessary.

#### **PRODUCTS:**

- 1. Pioneer Valley regional PMS Database. Ongoing task.
- 2. Region existing Overall Condition Index (OCI) Maps. Ongoing task.
- 3. Community existing OCI Maps. Ongoing task.

Source	<u>Budget</u>	Est. Staff Effort
FHWA PL (80%)	\$26,000	13 weeks
MassDOT (20% match)	<u>\$ 6,500</u>	<u>3 weeks</u>
TOTAL	<b>\$32,500</b>	16 weeks
Direct Labor Indirect Costs	\$14,368 \$18,132	

#### Task 2.7 Regional Performance Measures

#### **OBJECTIVE:**

Collect data to evaluate regional performance measures as defined in the FAST Act and as established by the Commonwealth of Massachusetts and Pioneer Valley MPO. This task will support planning activities included as part of Tasks 1.4, 3.3, 3.4, 3.5, and 3.6.

#### **PREVIOUS WORK:**

1. Regional Performance Measures and Target Adoption.

#### **PROPOSED ACTIVITIES:**

- 1. Work with MassDOT, the JTC and MPO to update the status and effectiveness of established regional performance measures as necessary.
- 2. Collect, monitor, and maintain data to document the status of current regional performance measures and performance targets.
- 3. Collect and monitor data as related to the regional performance measures identified as part of the FAST Act.
- 4. Evaluate regional performance measures based on accepted methodology in consultation with MassDOT, PVTA, FHWA, and FTA.

#### **PRODUCTS:**

1. Update Regional Performance Measures database. Ongoing task.

<u>Source</u>	<u>Budget</u>	Est. Staff Effort
FHWA PL (80%)	\$ 10,000	5 weeks
MassDOT (20% match)	<u>\$ 2,500</u>	<u>1 week</u>
<b>TOTAL</b>	<b>\$ 12,500</b>	6 weeks
Direct Labor Indirect Costs	\$ 5,526 \$ 6,974	

## WORK ELEMENT 3 - REGIONAL TRANSPORTATION PLANNING

This work element provides transportation planning that directly supports the development of projects included in the Regional Transportation Plan (RTP) or the development of RTPs.

#### Task 3.1 Regional Bicycle, Pedestrian and Complete Streets Planning

#### **OBJECTIVE:**

Provide support for local and regional efforts to adopt and implement a "Complete Streets" approach to create neighborhoods, village centers and city streets that safely accommodate all modes of transportation. To implement the goals and objectives of the Massachusetts Bicycle Plan, Massachusetts Pedestrian Plan and Regional Transportation Plan to promote healthy transportation options such as walking and bicycling.

#### **PREVIOUS WORK:**

- 1. Pioneer Valley online bicycle map.
- 2. On-road bicycle lane counts.
- 3. Regional bike metric assessment.

#### **PROPOSED ACTIVITIES:**

- 1. Work with MassDOT and the JTC's Bicycle, Pedestrian, and Complete Streets subcommittee to identify bicycle and pedestrian count locations in FY 2020.
- 2. Work with the JTC's Bicycle, Pedestrian, and Complete Streets subcommittee to ensure consistency with the RTP, implement sustainable transportation strategies and continue the regional on-road bicycle lane counting program.
- 3. Assist local communities in efforts related to Complete Streets policy initiatives, projects and the development of Prioritization Plans.
- 4. Participate in the Massachusetts Statewide Bicycle Advisory Board.
- 5. Participate in Valley BikeShare Committee meetings.
- 6. Work with MassDOT to incorporate the Potential for Everyday Biking (PEB) into the regional planning process. June 2020.
  - a) Identify gaps in the on-road bicycle and pedestrian network to enhance connectivity.
  - b) Prioritize gaps for proposed improvement projects consistent with PEB.

#### **PRODUCTS:**

- 1. JTC Bicycle Advisory Committee meeting minutes and notices. Monthly.
- 2. Bicycle and pedestrian volume counts. Ongoing
- 3. Assessment of regional bicycle and pedestrian gaps. June 2020.

<u>Source</u> FHWA PL (80%) MassDOT (20% match) <b>TOTAL</b>	<u>Budget</u> \$50,000 <u>\$12,500</u> <b>\$62,500</b>	Est. Staff Effort 25 weeks <u>6 weeks</u> 31 weeks
Direct Labor	\$27,630	
Indirect Costs	\$34,870	
# Task 3.2 Transit System Surveys and Route Implementation

# **OBJECTIVE:**

To work closely with PVTA to survey, monitor, and evaluate the quality of fixed route and paratransit services with respect to customer satisfaction, operational performance, and compliance with ADA and Title VI regulations.

### **PREVIOUS WORK:**

- 1. Fixed route Mystery Rider onboard service quality observations and reports.
- 2. Paratransit Mystery Rider onboard ADA van service quality field observations and reports.
- 3. Customer surveys and engagement
- 4. Survey of Springfield residents for bus stop consolidation project.
- 5. Production of bus stop signs.

#### **PROPOSED ACTIVITIES:**

- 1. Northern service area fixed route onboard customer survey. September 2020.
- 2. Fixed route Mystery Rider onboard service quality observations, including ADA and Title VI compliance. Ongoing task.
- 3. Rider surveys on specific routes, as requested.

#### **PRODUCTS:**

- 1. Northern system onboard rider survey data and report. September 2020.
- 2. Fixed route Mystery Rider quarterly reports.
- 3. Rider surveys of individual routes. As requested.
- 4. Other technical assistance for surveys and route implementation. As requested.

<u>Source</u>	Budget	Est. Staff Effort
FTA S. 5303	\$ 77,500	39 weeks
PVTA S. 5307	<u>\$ 81,250</u>	<u>41 weeks</u>
<b>TOTAL</b>	<b>\$158,750</b>	80 weeks
Direct Labor Indirect Costs	\$70,181 \$88,569	

# Task 3.3Regional Freight Planning

# **OBJECTIVE:**

Work with appropriate public and private partners to plan for the efficient movement of freight. Freight modes covered under this task include rail, truck, air (when applicable), water (when applicable) and pipelines. This task incorporates the freight planning requirements of the FAST Act and recommendations specific to the Pioneer Valley MPO included in the Massachusetts State Freight Plan.

## **PREVIOUS WORK**

- 1. Regional Freight Plan Congestion Survey.
- 2. Urban and Rural Critical Freight Corridors.
- 3. Massachusetts State Freight Plan Working Group.

#### **PROPOSED ACTIVITIES:**

 Work with the JTC, public and private sectors to identify regional freight bottlenecks on NHS corridors in the region. Using the latest NPMRDS data set staff will review the Truck Travel Time Reliability (TTTR), collect other site specific data and develop recommendations for the top regional NHS freight bottlenecks. Summer 2020.

- 2. Continue to work with MassDOT and private entities to identify any adverse impacts to freight movement resulting from existing and proposed passenger rail service. Ongoing task.
- 3. Participate in FHWA web conferences, and other related workshops and conferences regarding new freight requirements included in the FAST Act. As necessary.
- 4. Continue to work with the Capital Region Council of Governments (CRCOG) and the Vermont Agency of Transportation (VTRANS) to address regional freight issues and improve the movement of goods between Hartford and Springfield as well as northern core cities.
- 5. Utilize FHWA's Freight Analysis Framework (FAF) data to assess freight origin and destination flows through the region. Ongoing task
- 6. Collect data as necessary on Urban and Rural Critical Freight Corridors in the Pioneer Valley MPO.

#### **PRODUCTS:**

- 1. Technical reports, memoranda, surveys and map products that support the execution of this task. As needed.
- 2. NHS Freight Bottlenecks Report. Summer 2020.

<u>Source</u>	Budget	Est. Staff Effort
FHWA PL (80%)	\$30,000	15 weeks
MassDOT (20% match)	\$7,500	<u>4 weeks</u>
<b>TOTAL</b>	<b>\$37,500</b>	19 weeks
Direct Labor Indirect Costs	\$16,578 \$20,922	

# Task 3.4 Regional Congestion Management Process-Project Development

## **OBJECTIVE:**

This task uses data collected as part of Task 2.5 to track and mitigate congestion identified as part of the Regional Congestion Management Process (CMP). Work under this task identifies congested corridors, regional bottlenecks and advances transportation studies to verify and develop appropriate recommendations to mitigate areas of congestion.

## **PREVIOUS WORK:**

- 1. Before and After TIP Project Analysis.
- 2. Regional Travel Time Contours.

- 1. Update the Regional Corridor Congestion Ranking based on NPMRDS data. Work with the JTC to redefine regional CMP corridors. Ongoing task.
- 2. Travel time runs to support ongoing congestion studies in the Pioneer Valley. As necessary.
- 3. Provide technical assistance to the City of Springfield and identified surrounding communities with review of actual and special event traffic related to the MGM Springfield Casino. Assist surrounding communities in consultation efforts required as part of annual applications to the Casino Mitigation Fund. Ongoing task.
- 4. Perform a comprehensive analysis of peak hour congestion on all interstate highway and NHS off ramps. Staff will utilize the most recent version of NPMRDS data to identify periods of congestion, potential contributing factors and proposed improvement projects

that could mitigate congestion. Site specific recommendations will be developed as necessary for the top congested off ramps. Summer 2020.

#### **PRODUCTS:**

- 1. CMP Corridor updates for RTP. September 2020.
- 2. Regional Corridor Congestion Ranking based on NPMRDS data. Ongoing.
- 3. Interstate and NHS Off Ramp Study. Summer 2020
- 4. MGM Casino Traffic Impacts Analysis. As necessary.

Source	<b>Budget</b>	Est. Staff Effort
FHWA PL (80%)	\$106,000	53 weeks
MassDOT (20% match)	\$ 26,500	13 weeks
FTA S. 5303	<u>\$ 10,000</u>	5 weeks
TOTAL	\$142,500	71 weeks
Direct Labor Indirect Costs	\$62,997 \$79,503	

# Task 3.5 Regional Pavement Management System - Project Development

## **OBJECTIVE:**

To maintain a regional Pavement Management System on all federal aid eligible roadways and prioritize regional pavement improvement projects. This task analyzes the data collected as part of Task 2.6. This is an ongoing task.

## **PREVIOUS WORK:**

- 1. Regional PMS report for the Pioneer Valley Region.
- 2. Roadway improvement backlog of projects.

#### **PROPOSED ACTIVITIES:**

- Analysis of the newly collected pavement distress data for the region's communities' federal-aid roadways in order to calculate OCI ratings, benefit/cost ratio listings, and develop a backlog of recommended improvement projects.
- 2. Perform various budget scenario analyses including the calculation of backlog of repairs for the region's federal-aid roadways. Develop specific regional pavement funding scenarios for use in the update to the RTP.

- 1. Pavement OCI maps on each community's surveyed federal aid eligible roadways. As necessary.
- 2. Online OCI maps for federal aid eligible roadways. Summer 2020.
- 3. Community specific pavement data such as recommended repair strategies and benefit/cost ratio listing. As necessary.

Source	Budget	Est. Staff Effort
FHWA PL (80%)	\$36,000	18 weeks
MassDOT (20% match)	<u>\$ 9,000</u>	<u>5 weeks</u>
TOTAL	\$45,000	23 weeks
Direct Labor	\$19,894	
Indirect Costs	\$25,106	

# Task 3.6 Regional Performance Measures Assessment

## **OBJECTIVE:**

This task supports federal planning requirements to integrate performance-based planning into the regional transportation planning process. Data collected as part of Task 2.7 of the UPWP will be used to identify the progress in meeting regional performance measures and targets. New performance measures and targets will be developed based on statewide performance measures as required by the FAST Act.

## **PREVIOUS WORK:**

1. Regional Performance Measures Development.

#### **PROPOSED ACTIVITIES:**

- 1. Analyze and track data collected as part of Task 2.7 of the UPWP to identify the progress in meeting regional performance measures. Ongoing task.
- 2. Work with MassDOT, PVTA, and surrounding regions to coordinate data collection and share analysis methods. Ongoing task.
- 3. Participate as part of MassDOT's Performance Management Subcommittee. Ongoing task.
- 4. Provide data and analysis as necessary to assist in scoring TEC forms submitted for TIP projects. February 2020.
- 5. Develop updates to regional performance measures and the TEC scoring process as necessary to coincide with statewide performance measures and FAST Act requirements. Ongoing task.

#### **PRODUCTS:**

1. Regional Performance Measures reporting and updates. Ongoing task.

<u>Source</u>	Budget	Est. Staff Effort
FHWA PL (80%)	\$22,000	11 weeks
MassDOT (20% match)	\$ 5,500	<u>3 weeks</u>
<b>TOTAL</b>	<b>\$27,500</b>	14 weeks
Direct Labor Indirect Costs	\$12,157 \$15,343	

# Task 3.7 Regional Safety and Planning Studies

## **OBJECTIVE:**

Develop transportation studies in cooperation with MassDOT and local communities to enhance safety for all modes of transportation. Utilize state and local traffic safety data as well as other relevant information to advance recommendations that are consistent with the Massachusetts Strategic Highway Safety Plan and assist in meeting regional safety performance targets.

#### **PREVIOUS WORK:**

- 1. Bliss Street at Williams Street Study Longmeadow, MA.
- 2. At-grade Railroad Crossing Study
- 3. At-grade Shared Use Path Crossing Study.

- 1. Contribute in MassDOT's Roadway Safety Audits and provide regional perspective and input. Ongoing task
- 2. Work in cooperation with MassDOT to promote and advance the goals and objectives of the Massachusetts Strategic Highway Safety Plan. Ongoing task.

- 3. Develop an Addendum to the Regional At-grade Shared Use Path Crossing Study. Summer 2020.
  - a) Inventory additional at-grade crossing locations as identified during the public participation process on the original study.
  - b) Classify categories of regional at-grade crossings based on existing attributes such as existing volume and roadway classification.
  - c) Work with MassDOT and the JTC to develop concepts to promote consistency in traffic controls, signs and pavement markings for each at-grade crossing classification category.
  - d) Incorporate recommendations from the Massachusetts Bicycle and Pedestrian Plans as appropriate.
- 4. Begin a comprehensive update to the Regional Safety Compass to incorporate the Regional Top 100 High Crash Intersections Report, Regional Bicycle and Pedestrian Crash Clusters, and listing of top crash locations by community into one document. This is an anticipated 15 month task. December 2020.
  - a) Utilize the most recent 3 years of data from MassDOT to update the regional listing of Top 100 High Crash Intersections. Calculate the equivalent property damage only (EPDO) score and update the status of proposed safety improvement projects for each location.
  - b) Update the regional bicycle and pedestrian crash cluster using the most recent data from MassDOT. Update the regional crash cluster map and work with communities to advance safety improvements as appropriate.
  - c) Update the Regional Safety Compass summaries of the top crash locations for each of the 43 communities in the Pioneer Valley region. Provide a digital data layer of all crash locations for each community based on MassDOT crash data.
  - d) Coordinate with MassDOT and the JTC to include new relevant data sets and recommendations into the report to improve safety in the region.

- 1. Addendum to Regional At-grade Shared Use Path Crossing Study. Summer 2020.
- 2. Update to the Regional Safety Compass. December 2020

Source	<b>Budget</b>	Est. Staff Effort
FHWA PL (80%)	\$111,771	56 weeks
MassDOT (20% match)	\$ 27,943	14 weeks
FTA S. 5303	<u>\$ 6,250</u>	3 weeks
TOTAL	\$145,964	73 weeks
Direct Labor	\$64,529	
Indirect Costs	\$81,435	

# Task 3.8 Intelligent Transportation Systems (ITS) and Regional Evacuation Planning

## **OBJECTIVE:**

Promote and advance the implementation of the Western Massachusetts Regional ITS Architecture in cooperation with MassDOT. Assist in ongoing regional evacuation planning efforts to enhance regional transportation security.

## **PREVIOUS WORK**

- 1. Massachusetts Strategic ITS Planning and Coordination Committee.
- 2. MassDOT Smart Work Zone Committee.
- 3. I-91 Viaduct Study Working Group.

## **PROPOSED ACTIVITIES:**

- 1. Work with communities to incorporate the ITS technology as appropriate into regional transportation improvement projects. Ongoing task.
- Collect and analyze data from regional ITS projects such as the I-91 ITS system and PVTA AVL system. Work with MassDOT to collect data to support regional incident and work zone management needs. Ongoing task.
- 3. Participate in ongoing planning efforts of the Western Massachusetts Regional Homeland Security Advisory Committee. Ongoing task.
- 4. Assist communities in the development and testing of regional evacuation planning scenarios. As necessary.

#### **PRODUCTS:**

1. Recommendations, comments and technical memoranda. As necessary.

<u>Source</u>	Budget	Est. Staff Effort
FHWA PL (80%)	\$15,000	7 weeks
MassDOT (20% match)	\$ 3,750	2 weeks
FTA S. 5303	<u>\$ 6,250</u>	<u>3 weeks</u>
<b>TOTAL</b>	<b>\$25,000</b>	12 weeks
Direct Labor Indirect Costs	\$11,052 \$13,948	

# Task 3.9 Climate Change Implementation

## **OBJECTIVE:**

To respond to the urgencies of climate change by reducing greenhouse gas emissions from transportation in compliance with the Massachusetts Global Warming Solutions Act (GWSA). To assist Pioneer Valley communities in implementing climate resiliency strategies.

# **PREVIOUS WORK:**

- 1. Provided technical assistance to Pioneer Valley communities on Green Communities designations and climate action policies.
- 2. Completed initial research on an inventory and vulnerability assessment of critical Pioneer Valley infrastructure.

#### **PROPOSED ACTIVITIES:**

- 1. Continue to review and update strategies within Climate Action Plan and corresponding elements in Climate Change Toolkit; identify and fill gaps where needed.
- 2. Continue to conduct outreach to municipalities and JTC to help facilitate understanding of MassDOT statewide vulnerability assessment and regional analysis.
- 3. Continue participating in Transportation Project Evaluation process with respect to TEC involving climate and sustainability as necessary.
- 4. More actively promote Climate Change Toolkit strategies in selected communities to reduce GHG emissions from Transportation.

- 1. Updated Climate Action Strategies and corresponding tools that are implementable in the coming years. Ongoing task.
- 2. At least two meetings with JTC and/or roundtable to help facilitate understanding of MassDOT climate study. Ongoing task.
- 3. Summary of projects and use of climate related transportation evaluation criteria (toward eventual evaluation of criteria and possible recommendation of amendments). As necessary.
- 4. Implementation of Climate Change Toolkit strategies in selected communities. Ongoing task.

Source	<u>Budget</u>	Est. Staff Effort
FHWA PL (80%)	\$16,000	8 weeks
MassDOT (20% match)	<u>\$_4,000</u>	<u>2 weeks</u>
TOTAL	<b>\$20,000</b>	10 weeks
Direct Labor Indirect Costs	\$ 8,842 \$ 11,158	

# Task 3.10Green Streets and Infrastructure

#### **OBJECTIVE:**

To promote the development of green streets and green infrastructure, in order to reduce stormwater and other environmental impacts of streets, roads, and municipal infrastructure.

# **PREVIOUS WORK:**

- 1. Developed green infrastructure/green streets conceptual plan for Day Brook watershed in Holyoke.
- 2. Designed green infrastructure retrofit mapping methodology and tool and piloted in City of Springfield

#### **PROPOSED ACTIVITIES:**

- 1. Continue a program of local technical assistance to municipalities to implement model green infrastructure strategies, including LID/green infrastructure subdivision regulations and zoning, and treescape restoration plans. Ongoing task.
- 2. Continue to coordinate work in Springfield, Chicopee and Holyoke to develop and implement green streets projects. Ongoing task.
- Continue to review and update strategies within regional Green Infrastructure Plan and corresponding elements in Green Infrastructure Toolkit, identify and fill gaps where needed. Ongoing task.
- 4. Continue work with municipalities to identify best green infrastructure retrofit locations for city/town properties, including roadway right of ways. Ongoing task.
- 5. Evaluate green infrastructure and sustainability elements of proposed projects using the Transportation Project Evaluation criteria. As necessary.

- 1. Adoption of green infrastructure strategies in selected communities. As necessary.
- 2. Implementation of green streets projects in Springfield, Chicopee, and Holyoke. Ongoing task.
- 3. Updated Green Infrastructure Plan Strategies and corresponding tools that are implementable in the coming years. Ongoing task.
- 4. Use of green infrastructure retrofit location methodology. As necessary.

Source	Budget	Est. Staff Effort
FHWA PL (80%)	\$16,000	8 weeks
MassDOT (20% match)	<u>\$ 4,000</u>	<u>2 weeks</u>
TOTAL	<b>\$20,000</b>	10 weeks
Direct Labor Indirect Costs	\$ 8,842 \$ 11,158	

# WORK ELEMENT 4 - ONGOING TRANSPORTATION PLANNING

This element outlines specific activities to be conducted in support of Transportation Planning tasks described in other UPWP elements.

# Task 4.1 Regional Transit Planning

# **OBJECTIVE:**

To provide transit planning services to the Pioneer Valley Transit Authority (PVTA), the Pioneer Valley Metropolitan Planning Organization (PVMPO), and the member communities of these agencies. Types of services include technical assistance and analysis for transit planning, operations and capital programs; general organizational and technical assistance; assistance with regulatory compliance; and support and facilitation of public and agency participation.

## **PREVIOUS WORK:**

- 1. Provided PVTA with planning and technical assistance for fixed route services and facilities planning and operations.
- 2. Produced PVTA's printed fixed route bus schedules, system map, and related products; updated bus operator field guides; managed vendors for printed products.
- 3. Produced and installed maps and signage for transit facilities. As requested.
- 4. Provided analysis of operational data from PVTA's ITS systems including as requested.
- 5. Supported PVTA Advisory Board and subcommittee activities as requested.
- 6. Provided general coordination among PVTA, PVMPO, PVPC staff, and MassDOT including regular executive level PVTA/PVPC coordination meetings and programming of transit items in the TIP.
- 7. Performed public engagement and facilitated public hearings for proposed service and fare changes.
- 8. Produced fare impact study.
- 9. Produced Title VI service equity analyses for proposed service changes; assisted with preparation of fare equity analysis.
- 10. Continued support for regional bus stop consolidation.

- Continue to provide general support to PVTA operations and planning for fixed route services and facilities, including: service evaluation and optimization; compliance with ADA regulations, Title VI and environmental justice policies, and other applicable policies, laws, and regulations; updating and maintenance of vital documents; and other tasks as assigned.
- 2. Continue to update and produce PVTA's fixed route printed bus schedules, bus operator field guides, and related products; and continue to manage print vendors for these products.
- 3. Continue to produce and install maps and signage at transit facilities and on vehicles as requested.
- 4. Continue to attend and participate in relevant public, municipal, regional, and state agency meetings.
- 5. Continue to provide analysis of data from PVTA's information systems as requested.
- 6. Continue to provide support for meetings of the PVTA Advisory Board and its subcommittees.
- 7. Continue to support PVTA Bus Rider Forums and other customer outreach.

- 8. Continue to conduct and enhance outreach to transit customers with limited English proficiency, including research on best practices, such as partnering with ESL programs, and assure compliance with requirements of Title VI for PVTA and PVMPO.
- 9. Support ongoing implementation of the PVTA public participation plan and language access plan.
- 10. Continue to provide support for new transit technologies and services, including bus rapid transit, microtransit, TNC coordination, Mobility as a Service, and mobile/electronic fare collection.
- 11. Continue to advance the use and incorporation of GIS, GPS, and online mapping technologies to support PVTA transit route and facilities planning, public engagement, and regulatory compliance.
- 12. Continue to support PVTA bus stop consolidation planning.
- 13. Continue to provide coordination among PVTA, PVMPO, PVPC staff, and MassDOT for proactive communication and the programming of transit items in the TIP.
- 14. Continue to coordinate and participate in transit planning activities of the PVMPO region among PVTA, MassDOT, Franklin Regional Transit Authority, Connecticut Department of Transportation, Capital Regional Council of Governments, Amtrak, intercity bus carriers and other transit service providers, and other stakeholders to enhance inter-regional transit services.

#### **PRODUCTS:**

- 1. PVTA fixed route printed schedules and related digital materials for web posting. As needed.
- 2. PVTA field operators guide updates. As needed.
- 3. PVTA System Map update in requested formats. As needed.
- 4. Brochures, public notices, posters, maps, website services, and other print and digital materials. As requested.
- 5. Updates and translation of "vital documents" in print and electronic formats for LEP persons. Ongoing.
- 6. Reports, plans, and other documents. Ongoing.

<u>Source</u>	Budget	Est. Staff Effort
FTA S. 5303	\$115,653	58 weeks
PVTA S. 5307	<u>\$122,500</u>	61 weeks
TOTAL	\$238,153	119 weeks
Direct Labor	\$105.284	
Indirect Costs	\$132.869	

# Task 4.2 Paratransit Planning Assistance

## **OBJECTIVE:**

To provide planning and technical assistance to support the paratransit services for people with disabilities and seniors that are provided by PVTA in fulfillment of the requirements of USDOT Section 504 regulations and other planning requirements under the Americans with Disabilities Act and the policies of the PVTA Advisory Board, as well as similar transportation services provided by municipal councils on aging, human service agencies, health care providers, nonprofits, and other entities in the PVMPO region.

## **PREVIOUS WORK:**

- 1. Provided general paratransit planning assistance to PVTA as requested, including public participation activities, operational analyses of policies and services.
- 2. Participated in activities of regional paratransit planning groups.

- 3. Provided support to the Paratransit Subcommittee of the PVTA Advisory Board as requested.
- 4. Provided a staff representative to serve on the PVTA Paratransit Appeals Committee.
- 5. Provided technical and administrative support to the MPO's Joint Transportation Committee (JTC) regarding mobility issues and concerns of the region's elderly and disabled residents.
- 6. Coordinated and provided technical assistance to agencies seeking capital grants under FTA Section 5311 Rural Transit Assistance Program.
- 7. Provided technical assistance to Town of Ware for Quaboag Connector paratransit service.
- 8. Supported communities seeking funds from the state Human Service Transportation (HST) program.

## **PROPOSED ACTIVITIES:**

- Continue to provide general paratransit planning assistance to PVTA, including public participation activities, analyses of policies and services, regulatory compliance, and updating and maintenance of vital documents. Ongoing task.
- 2. Continue to support the work of the Paratransit Subcommittee of the PVTA Advisory Board and provide a staff member to serve on the PVTA Paratransit Appeals Committee. Ongoing task.
- 3. Continue to support meetings of PVTA paratransit van riders who use the ADA Service and the Senior (Dial-a-Ride) Service.
- 4. Continue to participate in meetings and activities of regional paratransit planning groups as requested.
- 5. Continue to provide technical and administrative support to the MPO's Joint Transportation Committee (JTC) regarding mobility issues and concerns of the region's elderly and disabled residents.
- 6. Continue to coordinate and provide technical assistance to agencies seeking capital grants under FTA Section 5311 Rural Transit Assistance Program.
- 7. Perform paratransit surveys and studies requested by PVTA and PVMPO municipalities.
- 8. Continue to support communities seeking funds from the state Human Service Transportation (HST) program.
- Work with the PVTA, FRTA, and Regional Coordinating Councils (RCC) to update the Coordinated Public Transit – Human Services Transportation Plan (CPT-HST) for the region. The CPT-HST will identify needs and gaps in human transportation services for seniors and individuals with disabilities.

- 1. Data and analysis to support ADA and senior van service paratransit planning. As needed.
- 2. Materials for paratransit performance measure reports for PVTA paratransit services. As needed.
- 3. Facilitation and documentation of meetings of PVTA ADA van riders and Senior Service riders. As meetings occur.

- 4. Reports and presentations to PVTA, JTC and PVMPO member municipalities. As requested.
- 5. Assistance with PVTA monthly paratransit performance measures. As requested.
- 6. Letters of support and technical exhibits for HST grant applications. As requested.
- 7. CPT-HST Plan update. September 2020.

<u>Source</u>	<u>Budget</u>	Est. Staff Effort
FTA S. 5303	\$18,750	9 weeks
PVTA S. 5307	<u>\$16,250</u>	<u>8 weeks</u>
<b>TOTAL</b>	<b>\$35,000</b>	17 weeks
Direct Labor Indirect Costs	\$15,473 \$19,527	

# Task 4.3 Implementing the Our Next Future: The Region's Sustainability and Smart Growth Plan

#### **OBJECTIVE:**

The objective of this task is to work with local communities to implement the "Our Next Future" Plan for sustainability and smart growth in the Pioneer Valley" region. Our Next Future promotes compact, efficient urban growth centered around existing urban and town centers, served by existing transportation and other public infrastructure and services; discourages urban sprawl, inefficient land use, and development in environmentally sensitive areas; helps the region meet air quality goals by reducing auto trips and promoting use of transportation alternatives, such as transit, walking, biking and car-pooling.

#### **PREVIOUS WORK:**

- 1. Valley Development Council meetings.
- 2. Technical assistance to implement smart growth strategies in PVPC communities.
- 3. Developed model TOD overlay zoning regulations for the City of Holyoke.
- 4. Regional Housing Plan Advisory Committee meetings.

- 1. Continue to provide staff support to the Valley Development Council, which provides input from community officials and the development community in implementing Valley Vision. Ongoing task.
- Continue to provide staff support to the Housing Plan Advisory Committee to advance strategies for transit-oriented and community center mixed use housing development, and other priorities. Ongoing task.
- 3. Provide continued, targeted technical assistance to communities across the Pioneer Valley on an as-needed basis to implement pilot projects for Our Next Future strategies in the following key areas: commercial development standards; traditional neighborhood developments; mixed use village centers; cluster or creative development bylaws; transfer of development rights bylaws; inclusionary housing bylaws; local strategies to address global climate change and reduce greenhouse gas emissions; complete streets policies; form-based codes; and downtown revitalization strategies including market-rate housing. These strategies may include new local zoning bylaws and land use regulations, and policies on infrastructure improvements/extensions. Ongoing task.

4. Review and update strategies within regional Land Use and Housing plans and corresponding elements in Sustainability Toolkit, identify and fill gaps. As necessary.

#### **PRODUCTS:**

- 1. Coordination of quarterly meetings of the Valley Development Council and related products.
- 2. Coordination of quarterly meetings of Housing Plan Advisory Committee
- 3. Summary of assistance provided to communities to implement strategies from Our Next Future, and copies of adopted bylaws/ordinances. As necessary.
- 4. Activities and events to review and update strategies within regional Land Use and Housing plans and promote the Sustainability Toolkit. As necessary.

<u>Source</u>	<u>Budget</u>	Est. Staff Effort
FHWA PL (80%)	\$16,000	8 weeks
MassDOT (20% match)	<u>\$ 4,000</u>	<u>2 weeks</u>
<b>TOTAL</b>	<b>\$20,000</b>	10 weeks
Direct Labor Indirect Costs	\$ 8,842 \$ 11,158	

# Task 4.4 Bicycle and Pedestrian Network and Bike Commute Week

## **OBJECTIVE:**

To help facilitate the development and increased use of a comprehensive linked regional network of bicycle and pedestrian trails and infrastructure, in order to provide a viable, green and sustainable alternative to auto-based trips in the Pioneer Valley. Planning activities completed as part of this task will be coordinated with the MassDOT Statewide Bicycle and Pedestrian Coordinator. Also, to promote livability, sustainability, healthy activities and bicycle friendly communities by making it easy and fun for people to try bicycling by facilitating the 20<sup>th</sup> annual Pioneer Valley Bicycle Commute Week. This is an ongoing annual task that is coordinated with Bay State Bike Week.

## **PREVIOUS WORK:**

- 1. Regional Biking Map.
- 2. Updated Pioneer Valley Trails Map
- 3. Bike Commute Week activities since 1999.

- 1. Continue promoting and distributing updated Pioneer Valley Trails map. Ongoing task.
- 2. Promote the regionally important trail projects such as the Connecticut Riverwalk and Canalwalk segments in Chicopee, West Springfield, Agawam and Holyoke, and the Ware bike path, by providing intercommunity liaison services and technical assistance to communities in project planning, design and construction issues on an ongoing basis.
- Work to expand the region's off-road pedestrian and bike trails network, seeking collaborations with communities and non-profit organizations to implement new trails design and construction projects. Ongoing task.
- 4. Explore the potential to develop a more interactive trails resource interface for the region. Ongoing task.

- 5. Work with member municipalities, MassBike and MassDOT to facilitate Pioneer Valley Bike Commute Week/Bay State Bike Week which coincides with national Bike Commute Week—the third week of May. This includes identifying leaders in each community to facilitate community-specific activities and serving as liaison with MassDOT and MassBike. Ongoing task.
- 6. Promote Bike Commute Week through a variety of media platforms and in close collaboration with municipal officials and communitybased organizations, assure publicity and broad promotion of Bike Commute Week activities. As necessary.

#### **PRODUCTS:**

- 1. Technical assistance to communities on advancing critical bicyclepedestrian segments. As necessary.
- 2. New off-road pedestrian and bike trails design and construction projects. As necessary.
- 3. Bike Commute week report. Summer 2020.

<u>Source</u>	Budget	Est. Staff Effort
FHWA PL (80%)	\$18,800	9 weeks
MassDOT (20% match)	<u>\$ 4,700</u>	<u>2 weeks</u>
TOTAL	\$23,500	11 weeks
Direct Labor	\$ 9,505	
Indirect Costs	\$13,995	

# Task 4.5 Local Technical Assistance

#### **OBJECTIVE:**

Assist PVPC communities and organizations through short term technical transportation support as requested by the chief locally elected official. To review transportation related impact reports, traffic studies, and environmental notification forms. This is an ongoing task.

## **PREVIOUS WORK:**

- 1. Data collection activities at the request of local communities.
- 2. Reviews of all MEPA documents filed in the Pioneer Valley Region.
- 3. Bay Road and Chauncey Walker Street Sign Assessment Belchertown.

- Provide Local Technical Assistance (LTA) to communities on an as requested basis. Typical activities may include data collection, operational analysis, and small scale studies that can be completed in 2 -3 days of staff time. Community requests are considered on a case by case basis and preference is given to communities that have not recently received assistance.
- 2. Review and comment on all Environmental Notification Forms and Environmental Impact Reports as part of the MEPA process. Attend project scoping sessions for significant projects in the region as part of the MEPA process. Review all documents prepared under federal environmental laws and regulations.
- 3. Work with local communities to advance the recommendations of previously completed planning studies to the project development stage.
- 4. Assist member communities in the preparation of MassDOT Project Need Forms and Project Initiation Forms.
- 5. Work with PVTA and member communities to assure understanding of transit options in the region.

### **PRODUCTS:**

- 1. Reports documenting the findings and recommendations of all LTAs. As necessary.
- 2. Recommendations and comments as appropriate for the review of MEPA documents. As necessary.

Source	Budget	Est. Staff Effort
FHWA PL (80%)	\$18,600	9 weeks
MassDOT (20% match)	\$ 4,650	<u>2 weeks</u>
TOTAL	\$23,250	11 weeks
Direct Labor Indirect Costs	\$10,279 \$12,971	

# Task 4.6 Local Pavement Management Program

#### **OBJECTIVE:**

To promote and update pavement management services for member communities by conducting road condition, budget, and plan analyses on a contract basis for the accepted paved locally maintained roadway system.

## **PREVIOUS WORK:**

1. Local Pavement Management Data Collection and studies for Granville and Wilbraham.

# **PROPOSED ACTIVITIES:**

- 1. Follow up with the local communities on requests for Pavement Management System assistance.
- 2. Meet with local officials and staff from the selected communities to explain the program and to coordinate activities.
- 3. Conduct training sessions to educate local DPW and Highway Department staff on the identification of pavement distresses as well as sidewalk distress and data recording techniques.
- 4. Assist communities in the development of new roadway improvement projects based on their annual maintenance budget.
- 5. Ensure that any new roadway is officially accounted for by Collecting GPS coordinate information to assist in Mapping.

- 1. OCI Updates for specific roadways in communities with an existing Pavement Management Program. As requested.
- 2. Draft study for the Town of \_\_\_\_\_. January 2020.
- 3. Updates for existing municipal pavement management plans, as requested.

Source	<u>Budget</u>	<u>Est. Staff Effort</u>
Estimated Local Funds	<u>\$7,000</u>	<u>4 weeks</u>
TOTAL	<b>\$7,000</b>	4 weeks
Direct Labor Indirect Costs	\$3,095 \$3,905	

# Task 4.7Scenic Byways Support

## **OBJECTIVE:**

The objective of this task is to work with the Byway Area Committees for the Connecticut River Byway and the Route 112 Byway to prioritize and advance projects for each byway and to provide planning services and technical assistance.

# **PREVIOUS WORK**

- 1. 2016 updated Corridor Management Plan (CMP) for the Connecticut River Scenic Farm Byway on Routes 47 and 63
- 2. Implemented an intergovernmental compact for land protection along the Connecticut River Scenic Byway.
- 3. Completed an Action Plan for the Highlands Footpath, a walking journey in the Route 112 and Jacob's Ladder Trail Scenic Byways.

#### **PROPOSED ACTIVITIES:**

- 1. Continue to coordinate and attend meetings of the Byway Area Committees and the regional trails advisory group working on the Highlands Footpath along the Route 112 Scenic Byway. Provide meeting notices, materials, and staff support. As necessary.
- 2. Work with above Committees and community representatives to continue to develop, prioritize, and implement scenic byway projects, such as land protection, acquisition of scenic easements, signage, scenic overlooks, trails and river access, and similar projects. Ongoing task.
- 3. Provide technical assistance to communities in byway project development, including identification of funding sources. As necessary.
- 4. Provide updates as needed for Western Massachusetts Scenic Byways website.

- 1. Byway Area Committee meetings and activities. As necessary.
- 2. Quarterly regional trails advisory group meetings.
- 3. Technical assistance to communities in defining projects and scopes of work for scenic byway priorities implementation funding. As necessary.
- 4. Updated Western Massachusetts Byways website. As necessary.

<u>Source</u>	<u>Budget</u>	Est. Staff Effort
FHWA PL (80%)	\$7,200	3 weeks
MassDOT (20% match)	<u>\$1,800</u>	<u>1 week</u>
<b>TOTAL</b>	<b>\$9,000</b>	4 weeks
Direct Labor Indirect Costs	\$3,979 \$5,021	

# Task 4.8 ValleyBike Implementation

#### **OBJECTIVE:**

ValleyBike is the regional bike share program for the Pioneer Valley region, serving the communities of Springfield, Holyoke, Northampton, Amherst, South Hadley and the University of Massachusetts. Funding for this program was programmed as part of the FFY 2017 Transportation Improvement Program using Congestion Mitigation and Air Quality (CMAQ) funds. This is a multiple year task to provide planning support to assist the ValleyBike communities in the implementation and advancement of this program.

# **PREVIOUS WORK:**

- 1. Bike Share Intergovernmental Compact and Community Agreements.
- 2. ValleyBike RFP release and management.
- 3. ValleyBike Vendor selection, oversight and management.
- 4. ValleyBike Year 1 CMAQ Analysis.

#### **PROPOSED ACTIVITIES:**

- 1. Coordinate meetings of the Bike Share Steering Committee that will assist and guide the Bike Share program development process. Ongoing task.
- 2. Oversee work of the vendor (Bewegen) in the implementation of ValleyBike.
- 3. Continue to support member municipalities with necessary planning work as necessary.
- 4. Work with community officials to coordinate promotion and public outreach activities for ValleyBike.
- 5. Evaluate monthly usage statistics and develop a year-end report on ValleyBike.

#### **PRODUCTS:**

- 1. ValleyBike Steering Committee monthly meetings. Ongoing task.
- 2. Summary of Usage Statistics Ongoing monthly task
- 3. Draft Report Year 2, December 2019
- 4. Final Report Year 2, February 2020

<u>Source</u>	Budget	<u>Est. Staff Effort</u>
FHWA PL (80%)	\$10,400	5 weeks
MassDOT (20% match)	\$ 2,600	<u>1 week</u>
<b>TOTAL</b>	\$13,000	6 weeks
Direct Labor Indirect Costs	\$ 5,747 \$ 7,253	

# **ADDITIONAL PLANNING PROJECTS**

This section outlines activities for which funding has not yet been secured. These proposed tasks are provided for information purposes only. An amendment to the UPWP will be completed to reflect any contracts secured for these proposed tasks. No tasks have been identified to date that meet this criteria.

Task	Product	Anticipated Completion	Public Engagement		
1.1	Invoices	Monthly			
1.1	MPO Meeting Minutes	As necessary			
1.2	FY2020 UPWP	May 2020	March 2020		
1.3	Press Releases and Public Participation Notices	As necessary	As necessary		
1.3	Updated Contact Database	January 2020			
1.4	TIP Project Map	August 2019			
1.4	FY2021 - 2025 TIP	May 2020	February 2020		
1.4	TEC Project Evaluation	March 2020	February 2020		
1.4	TIP Amendments	As necessary			
1.5	Reports as required for EJ, Title VI, and LEP	December 2019	As necessary		
1.5	Summary of Benefits and Burdens Analysis	May 2020	February 2020		
2.1	Regional Traffic Counts 2015 – 2019 Report	April 2020			
2.1	Website update of daily traffic counts	March 2020			
2.2	CMAQ and Greenhouse Gas Analysis	February 2020			
2.2	2040 Regional Model Update – I-91 Viaduct Recs	Summer 2020			
2.3	GIS mapping to support transportation planning	As needed			
2.3	GIS spatial data analysis	As needed			
2.4	Information Center Reports/ website updates	Ongoing			
2.4	Update region wide data indicators	December 2019 and July 2020			
2.5	CMP Data Collection	Ongoing (September – June)			
2.5	Park and Ride/Truck Stop Occupancy Report	Summer 2020			
2.6	PMS Data Collection	Ongoing (requires dry pavement)			
2.7	Regional Performance Measures Data Collection	Ongoing			
3.1	JTC Bicycle and Pedestrian Subcommittee	Monthly	Monthly		
3.1	Bicycle and Pedestrian Counts	Ongoing			
3.1	Regional Bicycle and Pedestrian Gap Summary	June 2020			
3.2	Mystery Rider, K-9, On time Performance reporting	Quarterly			
3.2	Bus Schedule Updates	As needed			
3.2	Northern System on board survey.	September 2020			
3.3	NHS Freight Bottlenecks Report	Summer 2020			
3.4	CMP Corridor Updates	September 2020			
3.4	Interstate and NHS Off Ramp Study	Summer 2020			
3.5	Online OCI Maps	Summer 2020			
3.6	Regional Performance Measures Updates	Ongoing			
3.7	At-Grade Shared Use Path Crossings Addendum	December 2019			
3.7	Regional Safety Compass Report	December 2020			
3.8	PVTA AVL Data Analysis	Monthly			
3.9	Updates to Regional Climate Action Strategies	Ongoing			
3.9	Implementation of Climate Change Toolkit	Ongoing			
3.10	Updated Green Infrastructure Plan Strategies	Ongoing			
3.10	Pilot Project Implementation	Ongoing			
4.1	PVTA Schedule Updates	As Needed			
4.1	PVTA System Map Update	As Needed			
4.2	Paratransit Performance Measures	Monthly			
4.2	CPT-HST Update	September 2020	July 2020		
4.3	TOD/Sustainability Ordinances and Bylaws	As requested			
4.3	Valley Development Council meetings	Quarterly meetings			
4.4	Community trail technical assistance	As necessary			
4.4	Bike Commute Week Report	Summer 2020			
4.5	Local Technical Assistance	As requested	As necessary		
4.6	Local Pavement Management Report	Winter 2020	,		
4.7	Byway Area Committee meetings	Quarterly meetings			
4.8	ValleyBike Steering Committee Meetings	Monthly			
4.8	ValleyBike Year 2 Summary Report,	February 2020			

# ESTIMATED COMPLETION SCHEDULE OF PLANNING ACTIVITIES

# **UPWP EQUITY ASSESSMENT**

PVPC conducted an equity assessment on the transportation planning tasks completed as part of previous UPWP's. This assessment process has previously been used on the Regional TIP and identifies how regional transportation improvement projects have potentially impacted defined minority and low-income block groups in the region. Analysis of these projects also reflects some of the planning work performed by staff under Task 1.5 - Title VI and Environmental Justice. A map of planning tasks by community from 2010 – 2020 is shown on the figure on page 50.

Past UPWP's were reviewed to identify the transportation planning tasks that were completed for each of the 43 communities in the PVPC region. Tasks included data collection, planning studies, local technical assistance requests, and regional activities such as the update to the TIP or CMP. All total, 970 tasks were identified over this timeframe. While the total number of projects for each community is often a function of the size of the community, at least one task was completed for each community. This information is summarized on the table on page 51. Tasks completed or estimated to be completed as part of the FFY 2019 and FFY 2020 UPWP have also been included on this table for informational purposes. Completion of these tasks are estimated and will be updated as part of future UPWP's.

Five communities were found to have less than five transportation tasks completed over the entire analysis period. Five communities (Blandford, Granby, Hatfield, Pelham and Russell) were identified as having only one transportation task completed from 2014 – 2018. This is a reflection of the smaller size of these communities and their small network of federal aid eligible roadways. The Town of Middlefield has not had a transportation planning task completed since 2011. PVPC has made efforts to reach out to these communities to offer planning assistance such as traffic counts and safety assessments. In 2017, all of these communities received as summary of their top crash locations for the 2012 – 2014 calendar years as part of the Safety Compass report for the region. This included a digital layer of every reported crash in their community. PVPC will continue to perform outreach to our member communities to identify opportunities to provide transportation planning services in an equitable manner.

Pavement management and traffic counting data collection have been conducted in PVPC communities as summarized in the tables on pages 52 and 53. In addition to counts completed for MassDOT and as part of ongoing planning studies, PVPC offers two free traffic counts for each member community per calendar year. Traffic counts from 2010 - 2018 were reviewed for each community to determine how much data has been collected across the region and as a way to identify how many communities may not be aware of the traffic counting services we offer. This information is summarized in the table on page 52. Traffic counts include both automatic traffic counts and manual turning movement counts.

A wide range of traffic count data has been collected across each of the 43 communities. In general, a higher number of completed traffic counts is an indication that a transportation safety or congestion study was conducted in that community during the calendar year. No traffic counts were performed for the Town of Middlefield and less than five traffic counts were performed in the communities of Blandford, Hatfield, Holland, Montgomery, Palmer, and Worthington. PVPC staff sent letters to the Board of Selectmen in each of these communities in the 2017 calendar year to provide information on our regional traffic counts program. Unfortunately, none of these communities were interested in participating in the regional traffic counting program at that time. In response, PVPC has scheduled traffic counts for communities without any recent data in the last five years as part of Task 2.1 – Traffic Counting in the UPWP. These counts will be conducted on key regional roadways and sent to the chief locally elected official and JTC representatives upon completion.

PVPC collects pavement distress data for all federal aid eligible roadways in the region. This data is typically collected on a five year rotation and is summarized in the table on page 53. No pavement distress data is currently collected for the Town of Middlefield as there are no federal aid eligible roadways. Pavement distress data is summarized and distributed to each of the remaining 42 communities after it is collected. New pavement data was collected in 5 communities during 2018 to assist in the development of the update to the Regional Transportation Plan. New data will be collected in 7 communities in 2019 and 6 communities in 2020.



\* Planning Activities for 2019 and 2020 are estimated based on current and proposed UPWP Tasks.

# Transportation Tasks By Community and Year

Community	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019*	2020*	Total
Agawam	2	2	2	1	3	1	3	5	5			24
Amherst	4	2	4	4	1	1	1	2	2			21
Belchertown	1	3	1		1	3	2	2	2			15
Blandford	1	1		1		1					1	5
Brimfield		2	3	2	1			1	3	1		13
Chester	1	2	1	1	1			3	1			10
Chesterfield	1						1		1			3
Chicopee	4	1	3	3	3	3	1	2	3	1		24
Cummington	1		1		1		1	1	2	1		8
East Longmeadow	2	2		1	1	1	1	3	3	1		15
Easthampton	3	3	2	1	3	1	1	5	4			23
Goshen	1	1	1		1	1	1	1	2	1		10
Granby		2		3				1			1	7
Granville		1	1	1	1		1		3	1		9
Hadley	1	3	4	2	1	2	1	2	2		1	19
Hampden	1		2		1		1	1	1		1	8
Hatfield				1			1					2
Holland	1	1				1	2	1	2			8
Holyoke	3	5	6	3	3	3	6	6	4	1		40
Huntington	1	1	1	2	1		1		1			8
Longmeadow	3		1	4	2	1	4	2	1	1		19
Ludlow	7	1			2		1	2				13
Middlefield		1										1
Monson	1	1		1				1	1		1	6
Montgomery			1	2	1			1				5
Northampton	7	6	5	7	3	4	5	6	6			49
Palmer	1					3	3	2	2			11
Pelham	1	1		1				1				4
Plainfield	1	1	1	1	1				1	1		7
Region Wide	38	29	33	34	28	30	26	24	26	25	25	318
Russell	1	1	1	1		1						5
South Hadley	3	1	2	4	3	2	1	4	2			22
Southampton	1	1	2	1		1	2	1	1			10
Southwick	6	2	1	2	3	1	2	3	1		1	22
Springfield	8	12	10	6	6	10	14	11	8	3		88
Tolland			1	1	1		1	1	2			7
Wales			1	1			1	2	2			7
Ware	5	2	1	2	2	3	2	2	1		1	21
West Springfield	4	3	2	2	1	1	3	9	2			27
Westfield	1	1	3	3	1		2	5	6			22
Westhampton	2			1	1			1				5
Wilbraham	1		1	1	1		2	1	4			11
Williamsburg	1		3	1	1	1	2	1	2			12
Worthington	1		Ŭ				1	1	2	1		6
Grand Total	121	95	101	102	80	76	97	117	110	38	32	970

	I raffic Counts By Community and Year								
Community	2010	2011	2012	2013	2014	2015	2016	2017	2018
Agawam	6		1		1		1	1	12
Amherst	5	7	5	8	4	8	4	9	5
Belchertown	2	9				1			
Blandford	1	2		1					
Brimfield			17					4	4
Chester	1	1	1	2	2	1	4	1	1
Chesterfield	4						2		
Chicopee	10	1	1	1	16	1	13	7	8
Cummington	2		2		2		4		2
East Longmeadow	8	4		1		3		1	
Easthampton	10	4	3	16	3	6	8	5	3
Goshen	3	1	1		2		1		1
Granby		1		6		10		1	
Granville	1	3	2	1	1	2			
Hadley	1	1	3	8	1	21	1	1	2
Hampden	6		2		2	3	2		2
Hatfield							1		
Holland		1		1					
Holyoke	11	29	13	2	10	3	5	4	2
Huntington	3			2		2			1
Longmeadow	4		1	3	1		1		23
Ludlow	9	1			1	6			
Middlefield									
Monson	2	7		2		3	1	3	
Montgomery			2						
Northampton	18	8	16	34	8	10	7	6	8
Palmer	3								
Pelham	1	7		1		1		1	
Plainfield	1	2	6		2		1		1
Russell	4	4	1	1					
South Hadley	6	12	1	4	3	25	1	26	5
Southampton	4	14			3				
Southwick	21	2	1	2	28	14	3	4	13
Springfield	10	15	35	28	24	9	6	13	6
Tolland			2	1	2	3		4	2
Wales			2	4					
Ware	9	1			15			1	
West Springfield	9	1	36	1	8	3	3	1	2
Westfield	1	4	5	20	2	6	3	5	2
Westhampton	1	1		1	3	1	4	1	
Wilbraham	5		3	2	7	2	3		3
Williamsburg			13		3	6	2		
Worthington	1		-			2		1	

# Traffic Counts By Community and Year

# Pavement Data Collection By Community and Year

Community	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Agawam		Х			Х		Х				
Amherst		Х			Х	Х		Х	Х		
Belchertown	Х				Х			Х			
Blandford		Х				Х					
Brimfield	Х					X X					
Chester							Х				
Chesterfield	Х					Х				Х	
Chicopee	Х		Х			Х					
Cummington		Х				Х				Х	
East Longmeadow	Х	Х				Х			Х	Х	
Easthampton	Х	Х					Х	Х			
Goshen		Х				Х				Х	
Granby	Х					Х					Х
Granville		Х				Х					
Hadley	Х					Х					Х
Hampden		Х				Х					Х
Hatfield	Х					Х					
Holland	Х					Х					
Holyoke	Х		Х			Х		Х	Х		
Huntington	Х					Х					
Longmeadow		Х			Х		Х				
Ludlow	Х				Х			Х			
Middlefield		1	<u> </u>	No F	ederal A	id Eligib	le Road	ways		1	<u> </u>
Monson	Х					X					Х
Montgomery	Х					Х					
Northampton	Х			Х	Х		Х				
Palmer	Х					Х					
Pelham	Х					Х					
Plainfield	Х		Х			Х				Х	
Russell	Х					Х					
South Hadley	Х					Х		Х	Х		
Southampton	Х					Х		Х			
Southwick	Х	Х				Х					Х
Springfield	Х		Х			Х				Х	
Tolland		Х				X					
Wales	Х					X			1		
Ware	X					X					Х
West Springfield		Х			Х		Х		1		
Westfield	Х			Х		Х					
Westhampton		Х				X					
Wilbraham	Х					X			Х		
Williamsburg		Х				X			-		
Worthington	Х					X				Х	

# **PLANNING ACRONYMS**

3C - Continuing, Comprehensive, and Cooperative Planning 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 Improv. 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** - District 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 Assoc. 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) PEB - Potential for Everyday Biking PCI - Pavement Condition Index PL - [Metropolitan] Planning Funds PMS - Pavement Management System PMUG - Pavement Management Users Group PPP - Public Participation Process **PVTA** - Pioneer Valley Transit Authority QVCDC - Quaboag Valley Community Development Corp. **REB** - Regional Employment Board **RIF** - Roadway Inventory Files **RPA** - Regional Planning Agency RTA - Regional Transit Authority RTP - Regional Transportation Plan SAFETEA-LU - Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users SBA - Small Business Administration SIP - State Implementation Plan (for air quality) SKC - Sustainable Knowledge Corridor SOV - Single Occupancy Vehicle SPR - Statewide Planning and Research Funds STIP - Statewide Transportation Improvement Program STP - Surface Transportation Program **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)

# **PREVIOUS TRANSPORTATION STUDIES**

Jacob's Ladder Trail Scenic Byway - Landscape Inventory & Assessment Jacob's Ladder Trail Scenic Byway Study- Executive Summarv Jacob's Ladder Trail Scenic Byway - Highway and Safety Analysis Jacob's Ladder Trail Scenic Byway- Cultural Resources Inventory Jacob's Ladder Trail Scenic Byway Study- Land Use Strategies Touring Jacob's Ladder Trail by Bicycle or Car Jacob's Ladder Trail Scenic Byway Development Guidebook Jacob's Ladder Trail Scenic Byway. Improvements Plan: Phase II Town of Hadley Ma. Americans with Disability Act. Transition Plan. The Pioneer Valley Plan For Progress **Connecticut River Walk & Bikeway Analysis** Valley Vision: The Regional Land Use Plan A View of Our Valley: Population A View Of Our Valley: Transportation A View of Our Valley: Employment & Income A View of Our Valley: Market Trends **Employment Projections for the PVPC** Major Employers Inventory for the Pioneer Valley Region 1997 Major Employers Inventory Report Route 9 Corridor Study, Traffic Improvements I- 91 Corridor Study: An Impact Analysis of the Cultural Landscape Southwick Report: A Report on Traffic Issues 1990 Transit Riders Study Route 10 Corridor Study Route 9 Corridor Supplemental Report Route 5 Corridor Study Rte.9 Corridor Study: Land Use Trends Rte.9 Corridor Study Addendum Rte. 5 Corridor Study Supplemental Reports: Rte. 5 Signal Coordination Elmwood Area Preliminary Travel Demand Analysis Route 10/202 Corridor Study **Regional Traffic Count Reports** Origin/Destination Survey of PVTA Rte. 107 **Complimentary Paratransit Plan** Forging a Link Between Land Use & Transportation Planning in the Pioneer Valley Region Boston Road Corridor Study The VMT Reduction Workbook PVTA Economic Benefit and Impact Study 1997 Pioneer Valley Regional Transportation Plan **Regional Pavement Management Report** State Street Signal Coordination Project Pioneer Valley Region Congestion Mgmt. System Traffic and Parking Study Update Report for Easthampton Connecticut River Scenic Farm Byway Study Route 20 Corridor Study - Westfield/West Springfield Town of Wilbraham Pavement Management Study Town of Belchertown Pavement Management Study Town of Ludlow Pavement Management Study PVTA Green 01 Transit Route Survey **PVTA Bus Stop Survey** Downtown Amherst Parking Study

Downtown Ware Parking Study East Longmeadow Rotary Study There's No Place Like Our Home (Strategy 2000) Springfield Street Traffic Study – Agawam Norwottuck Rail Trail Parking Study Public Participation within the Transportation Planning Process State of the Pioneer Valley: 2000 State of the Pioneer Valley: 2001 Trends in Building Permits: 1988 to 1997 Data Digest: Commercial and Industrial Capacity in the Pioneer Valley Region Data Digest: Residential Property in the Pioneer Valley Region: 1993 - 98 Regional Profile: A Statistical Profile of the Hartford-Springfield Interstate Region Agawam Pavement Management Study Pioneer Valley Regional Bicycle and Pedestrian Transportation Plan Bradley Airport Study for Western Massachusetts 2000 Pioneer Valley Regional Transportation Plan Outer Belt Transportation Study Holyoke Downtown Flow Study Hampden County House of Correction Parking Study Linden Street Traffic Study Northampton Transportation Plan 2003 Regional Transportation Plan Update West Springfield Parking Study PVTA Garage Parking Study Longmeadow Route 5 Traffic Study Norwottuck Rail Trail User Survey Executive Order 418 Community Development Plans (various) Route 32 - Ware Traffic Study Springfield - St. James Ave./St. James Blvd. Study Merrick/Memorial Neighborhood Plan - Phase I Route 9 at North and South Maple Street Safety Study Massachusetts Turnpike Exit 6 at I-291 Safety Study Route 5 at Conz Street Safety Study Pavement Management Informational Brochure Springfield Riverwalk User Survey Updates to the Regional Congestion Management System Center Street Traffic Study - Ludlow Feeding Hills Center Safety Study - Agawam Florence Road at Burts Pit Road Safety Study -Northampton Boston and Maine Railroad Bridge Safety Study -Northampton West Street at Pantry Road Safety Study - Hatfield Regional Bike Map Update Amendment to the 2003 Regional Transportation Plan 2006 Update to Joint Transportation Committee Bylaws Regional Traffic Count Report Summary: 2001-2005 SABIS School Study – Springfield Amostown Road and Morgan Road Traffic Study - West Springfield Connecticut River Walk and Bikeway Brochure Main Street at Jackson Street Safety Study - Holyoke Route 141 Safety Study - Easthampton and Holyoke

I-291 Exit 6 off ramp at Shawinigan Drive Safety Study – Chicopee

#### Downtown Huntington Parking Study

Route 57 intersection study – Southwick Regional CMS Data Collection Update Merrick/Memorial Truck and Pedestrian Surveys Palmer Park and Ride Lot Study Local Technical Assistance Requests (various) 2007 Regional Transportation Plan Update Route 141 Safety Study Updates - Easthampton and Holyoke Valley Vision 2 Regional Bicycle and Pedestrian Plan Update Feeding Hills Center Transportation and Safety Study Final Report Regional CMP Annual Report Update Top 100 Crash Locations in the Pioneer Valley Route 202 Transportation Study – Belchertown Florence Road Traffic Study - Northampton Palmer Redevelopment Authority Track Capacity Improvements Route 10/202 Transportation Study – Southwick Route 57 Transportation Study – Southwick North Pleasant Street at Fearing Street Study - Amherst **PVPC Regional Bridge Map** Palmer Bike Path Study Route 112 Scenic Byway Study - Draft Public Participation Plan for the Pioneer Valley MPO Update STCC Environmental Justice Analysis Regional Traffic Counts: 2003-2007 State of the Region/People 2008 **PVTA Fare Assessment** Route 10 Corridor Study Existing Conditions Analysis-Easthampton R41 and Nashawannuck Express Passenger Surveys PVTA System wide Passenger Survey Amherst Parking and Transit Survey Granby Master Plan – Transportation Component Adams Road Safety Study – Williamsburg Feeding Hills Center Crash Data Review - Agawam Route 9 at North Street and Petticoat Hill Road Study -Williamsburg Southwick Transit Study Intermodal Connector Review Major Employers Report Update Westfield CBD Traffic Circulation Study Page Boulevard at Goodwin Street Congestion Study -Springfield Berkshire Avenue at Cottage Street Congestion Study -Springfield Route 5 Traffic Signal Coordination Study - Holyoke Granby Road at McKinstry Avenue and Montgomery Street Safety Study - Chicopee Maple Street at Resnic Boulevard Safety Study - Holyoke Dwight Street at Worthington Street Safety Study -Springfield Congestion Management Process Report (CMP) Jacob's Ladder Trail II - Transportation Section Update Chicopee Parking Study **Telecommuter Survey** North Main Street at Wilbraham Street, Sykes Street, and Shearer Street Safety Study - Palmer Public Participation Plan for the Pioneer Valley MPO Update Regional Traffic Count Report: 2005 - 2009 PVTA Northern/Eastern Region Onboard Bus Rider Survey

**Regional Bottlenecks Report** Route 116 at Route 33 and Lyman Street Safety Study -South Hadley East Street at Winsor Street and Hampden Street Study -Ludlow West Avenue at Fuller Street Study - Ludlow Transportation Chapter – Ludlow Master Plan Manhan Rail Trail User Survey Downtown Ware Signalization Study Longmeadow Local Pavement Management West Springfield Local Pavement Management Greenleaf Community Center Safety Study FFY 2012 Unified Planning Work Program FFY 2011 Transportation Improvement Program Amendments FFY 2012 - 2015 Transportation Improvement Program Project Development Process Primer Video Manhan Rail Trail User Survey Report 2012 Update to the Regional Transportation Plan Transit Mystery Rider Reports **PVTA Non-Rider Survey** Route 10 Build Out Analysis – Easthampton Springfield Crash Data Analysis Cottage Street at Robbins Road Safety Study - Springfield, MA Route 9 (Locust Street) at Hatfield Street Safety Study -Northampton, MA Valley Vision Update Pioneer Valley Trail Map Southampton Local Pavement Management Study FFY 2013 Unified Planning Work Program FFY 2012 Transportation Improvement Program Amendments FFY 2013 – 2016 Transportation Improvement Program Route 9 (Federal Street) at Bay Road Safety Study -Belchertown, MA Cottage Street, Robbins Road and Industry Avenue Intersection: Springfield Safety Study PVPC/CRCOG MOU Regional Traffic Count Report: 2007 - 2011 **Regional Saturation Flow Rate Analysis** Paratransit User Survey Mobility Chapter – Southampton Master Plan Pleasant Street Congestion Study - Holvoke, MA Regional Pavement Management Report Update Top 100 High Crash Intersections 2007 - 2009 Williamsburg Pedestrian Safety Study I-91 Corridor Planning Study Data Collection **PVTA Schedule Changes and Updates** Coordinated Public Transit Human Service Transportation Plan **PVPC Green Tips** Valley Vision ToolBox Update 2012 Bike Commute Week Merrick/Memorial Phase 2 Data Collection FFY 2014 Unified Planning Work Program FFY 2013 Transportation Improvement Program Amendments FFY 2014 – 2017 Transportation Improvement Program **CMP** Report Update EJ and Title VI Reports to MassDOT Regional Saturation Flow Rate Report Mystery Rider Reports

**PVTA Schedule Changes and Updates** 

**PVPC Green Tips** Valley Vision ToolBox Update 2013 Bike Commute Week Merrick/Memorial Phase 2 Existing Conditions Brimfield Safety Study State of the Pioneer Valley Update Southern Service Area Customer Satisfaction Survey Pine Street Congestion Study - Florence, MA Final Top 100 High Crash Intersections 2007 - 2009 FFY 2015 Unified Planning Work Program FFY 2014 Transportation Improvement Program Amendments FFY 2015 - 2018 Transportation Improvement Program I-91 Corridor Planning Study - Existing Conditions Merrick/Memorial Phase 2 Study Ware Shuttle Survey Palmer Shuttle Survey Route 9 Safety and Livability Study Data Collection Depot Street/Sheep Pasture/Powder Mill Road Safety Study Route 202 at Amherst Street Traffic Signal Warrant Analysis 2014 Bike Commute Week Regional Traffic Count Summary (2009-2013) Valley Vision Toolbox Update FFY 2016 Unified Planning Work Program FFY 2016 Transportation Improvement Program Amendments FFY 2016 - 2019 Transportation Improvement Program FY2016 Update to the Regional Transportation Plan MassDOT Crash Data Updates CMP Corridor and Bottleneck Update EJ and Title VI Reports to MassDOT CMAQ and Greenhouse Gas Analysis Mystery Rider Reports **PVTA Schedule Changes and Updates** 2015 Bike Commute Week Updated Transportation Evaluation Criteria (TEC) Route 9 Safety and Livability Study Draft Report Updates to the Regional Transportation Model FFY 2017 Unified Planning Work Program

FFY 2016 Transportation Improvement Program Amendments FFY 2017 – 2021 Transportation Improvement Program 2016 Bike Commute Week Updated Transportation Evaluation Criteria (TEC) Regional Transportation Model - Report on Future Traffic Projections Updated Public Participation Plan Updates to Regional Data Indicators Regional Freight Congestion Survey GHG Analysis for Major Corridors I-391 Ramp Congestion Study Top 100 High Crash Intersection Report Draft Critical Infrastructure Vulnerability Assessment PVTA Northern Tier On-Board Survey **Regional Performance Measures Updates** FFY 2018 Unified Planning Work Program FFY 2017 Transportation Improvement Program Amendments FFY 2018 – 2022 Transportation Improvement Program 2017 Bike Commute Week High Speed Tolling Analysis for Massachusetts Turnpike Agawam/West Springfield Route 147 Improvement Project Analysis Updated Online Regional Bike Map Palmer Sidewalk Inventory State Freight Plan Advisory Committee Easthampton - Route 10 at South Street Intersection Study Union Station Roadway Safety Audit Safety Compass Bike Share Scope of Work and Station Locations FFY 2019 Unified Planning Work Program FFY 2018 Transportation Improvement Program Amendments FFY 2019 - 2023 Transportation Improvement Program 2018 Bike Commute Week Report Draft At-Grade Shared-use Path Crossing Safety Study Agawam Safety Study - Pine Street at Barry Street

# STUDIES COMPLETED AS PART OF THE FY 2019 UPWP

Community and Facility Profiles (various) Local Technical Assistance Requests (various) MassDOT Crash Data Updates CMP Corridor and Bottleneck Updates EJ and Title VI Reports to MassDOT CMAQ and Greenhouse Gas Analysis Mystery Rider Reports PVTA Schedule Changes and Updates **TEC Evaluation Criteria Assessment** Before and After Congestion Studies - Roosevelt Avenue at Island Pond Road and Alden Street **Regional Traffic Counting Program** Final At-Grade Shared-use Path Crossing Safety Study At-Grade Rail Crossing Study Bliss Street at Williams Street Transportation Study -Longmeadow Springfield UZA MOU Update FFY2020 Unified Planning Work Program FFY 2020 – 2024 Transportation Improvement Program FFY 2019 TIP Amendments

Transportation Impacts on Route 20 of the Brimfield Antique Shows Before and After MassPike Toll Plaza Removal Analysis PVTA Southern Tier Route Survey 2020 Update to the Pioneer Valley RTP 2019 Bike Commute Week Report ValleyBike Year 1 Assessment Report

# FUNDING SUMMARY

Transportation Funding		Value	% of Total
FHWA PL (80%)		\$ 871,171.00	54.76%
MassHighway PL (20% match)		\$ 217,793.00	13.69%
FTA Section 5307 (80%)		\$ 188,000.00	11.82%
PVTA Section 5307 (20% match)		\$ 47,000.00	2.95%
FTA Section 5303 (80%)		\$ 207,855.00	13.07%
PVTA Section 5303 (20% match)		\$ 51,964.00	3.27%
Local Funds (includes in-kind contributions)		\$ 7,000.00	0.44%
	Total	\$ 1,590,783.00	100.00%
Other Funding		Value	% of Total
Other Commonwealth of Massachusetts		\$ 2,911,986.00	
US Environmental Protection Agency		\$ 75,000.00	1.16%
US Department of Agriculture		\$ 200,000.00	3.08%
US Department Health/Human Services		\$ 360,000.00	5.54%
US Economic Development Administration		\$ 70,000.00	
US Department of Homeland Security		\$ 90,000.00	
Other Federal Revenue		\$ 263,000.00	
Local Grants		\$ 2,200,000.00	33.88%
Local Assessments		\$ 102,590.00	1.58%
Loan Repayment/Recapture		\$ 150,000.00	2.31%
Other		\$ 70,500.00	1.09%
	Total	\$ 6.493.076.00	100.00%

Overall Funding		Value	% of Total
FHWA PL (80%)		\$ 871,171.00	10.78%
MassHighway PL (20% match)		\$ 217,793.00	2.69%
FTA Section 5307 (80%)		\$ 188,000.00	2.33%
PVTA Section 5307 (20% match)		\$ 47,000.00	0.58%
FTA Section 5303 (80%)		\$ 207,855.00	2.57%
PVTA Section 5303 (20% match)		\$ 51,964.00	0.64%
Local Funds (includes in-kind contributions)		\$ 7,000.00	0.09%
Other Commonwealth of Massachusetts		\$ 2,911,986.00	36.02%
US Environmental Protection Agency		\$ 75,000.00	0.93%
US Department of Agriculture		\$ 200,000.00	2.47%
US Department Health/Human Services		\$ 360,000.00	4.45%
US Economic Development Administration		\$ 70,000.00	0.87%
US Department HUD		\$ 90,000.00	1.11%
Other Federal Revenue		\$ 263,000.00	3.25%
Local Grants		\$ 2,200,000.00	27.21%
Local Assessments		\$ 102,590.00	1.27%
Loan Repayment/Recapture		\$ 150,000.00	1.86%
Other		\$ 70,500.00	0.87%
	Total	\$ 8,083,859.00	100.00%

# SUMMARY OF COMMENTS ON THE DRAFT UPWP

Task/Section	Comment	From	Response

This section will be added after the completion of the 21 day public comment period on the UPWP.

# **MPO ENDORSEMENT**

This section will be added upon endorsement of the UPWP by the Pioneer Valley MPO. This action is anticipated to occur at their meeting on May 28, 2019.