



Pioneer Valley Metropolitan Planning Organization

# Unified Planning Work Program

**Fiscal Year 2018**  
**October 1, 2017 to September 30, 2018**

**DRAFT**



Prepared by:

Pioneer Valley Planning Commission  
60 Congress Street – Floor 1  
Springfield, MA 01104-3419  
[www.pvpc.org](http://www.pvpc.org)

DRAFT

Pioneer Valley  
Unified Planning Work Program

Fiscal Year 2018  
October 1, 2017 to September 30, 2018

Draft Document  
April, 2017

Prepared by the  
Pioneer Valley Planning Commission

For the Pioneer Valley  
Metropolitan Planning Organization

**Pioneer Valley MPO Members**

<b>Name</b>	<b>Title</b>
Stephanie Pollack	Secretary and CEO of the Massachusetts Department of Transportation
Thomas J. Tinlin	Administrator of the Massachusetts Department of Transportation Highway Division
Walter Gunn	Chairman of the Pioneer Valley Executive Committee
Mary MacInnes	Administrator of the Pioneer Valley Transit Authority
Mayor Domenic Sarno	Mayor of Springfield
Mayor Richard Kos	Mayor of Chicopee
Mayor Richard Cohen	Mayor of Agawam
Mayor David Narkewicz	Mayor of Northampton
George Archible	Belchertown Board of Selectmen
Rick Sullivan	Economic Development Council of Western Massachusetts
<b>Alternates</b>	
Mayor Alexander Morse	City of Holyoke
Douglas Slaughter	Amherst Board of Selectmen
Carmina Fernandes	Ludlow Board of Selectmen
Mayor Brian Sullivan	City of Westfield
<b>Ex-Officio (Non-Voting)</b>	
Jeff McEwen	Federal Highway Administration
Mary Beth Mello	Federal Transit Administration
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.

# Table of Contents

<b>EXECUTIVE SUMMARY .....</b>	<b>1</b>
<b>INTRODUCTION .....</b>	<b>3</b>
<b>FAST ACT PLANNING FACTORS .....</b>	<b>5</b>
<b>FIXING AMERICA’S SURFACE TRANSPORTATION (FAST) ACT.....</b>	<b>6</b>
<b>FEDERAL PLANNING EMPHASIS AREAS .....</b>	<b>8</b>
<b>PIONEER VALLEY METROPOLITAN PLANNING ORGANIZATION MEMBERS.....</b>	<b>9</b>
<b>JOINT TRANSPORTATION COMMITTEE (JTC).....</b>	<b>11</b>
<b>TRANSPORTATION PLANNING STAFF.....</b>	<b>12</b>
<b>STAFFING REPORT .....</b>	<b>12</b>
<b>FUNDING PROFILE .....</b>	<b>13</b>
<b>WORK ELEMENT 1 – MANAGEMENT AND CERTIFICATION OF THE 3C PROCESS.....</b>	<b>15</b>
Task 1.1 Management of the 3C Process .....	15
Task 1.2 Unified Planning Work Program .....	16
Task 1.3 Public Participation Process .....	16
Task 1.4 Transportation Improvement Plan (TIP) Development .....	17
Task 1.5 Title VI and Environmental Justice .....	19
<b>WORK ELEMENT 2 - TECHNICAL SUPPORT &amp; DATA COLLECTION .....</b>	<b>22</b>
Task 2.1 Traffic Counting .....	22
Task 2.2 Regional Travel Demand Modeling/Clean Air Planning.....	23
Task 2.3 GIS, Mapping and Graphics .....	24
Task 2.4 Information Center.....	26
Task 2.5 Regional Congestion Management Process (CMP) - Data Collection.....	28
Task 2.6 Regional Pavement Management System - Data Collection.....	29
Task 2.7 Regional Performance Measures .....	30
<b>WORK ELEMENT 3 - REGIONAL TRANSPORTATION PLANNING.....</b>	<b>31</b>
Task 3.1 Regional Bicycle, Pedestrian and Complete Streets Planning .....	31
Task 3.2 Transit System Surveys and Route Implementation.....	32
Task 3.3 Regional Freight Planning .....	33
Task 3.4 Regional Congestion Management Process-Project Development .....	34
Task 3.5 Regional Pavement Management System - Project Development .....	35
Task 3.6 Regional Performance Measures Assessment.....	35
Task 3.7 Regional Safety and Planning Studies .....	36
Task 3.8 Intelligent Transportation Systems (ITS) and Regional Evacuation Planning.....	37
Task 3.9 Climate Change Implementation .....	38
Task 3.10 Green Streets and Infrastructure .....	39
Task 3.11 RTP Planning .....	40
<b>WORK ELEMENT 4 - ONGOING TRANSPORTATION PLANNING .....</b>	<b>41</b>
Task 4.1 Regional Transit Planning .....	41
Task 4.2 Paratransit Planning Assistance.....	43
Task 4.3 Implementing the Our Next Future: The Region's Sustainability and Smart Growth Plan .....	44
Task 4.4 Bicycle and Pedestrian Network and Bike Commute Week .....	46
Task 4.5 Local Technical Assistance .....	47
Task 4.6 Local Pavement Management Program .....	48
Task 4.7 Scenic Byways Support.....	48
Task 4.8 Bike Share Implementation .....	49
<b>ESTIMATED COMPLETION SCHEDULE OF PLANNING ACTIVITIES .....</b>	<b>51</b>
<b>ADDITIONAL PLANNING PROJECTS .....</b>	<b>52</b>
<b>UPWP EQUITY ASSESSMENT.....</b>	<b>52</b>
<b>PLANNING ACRONYMS.....</b>	<b>57</b>
<b>PREVIOUS TRANSPORTATION STUDIES .....</b>	<b>59</b>
<b>STUDIES COMPLETED AS PART OF THE FY 2017 UPWP .....</b>	<b>61</b>
<b>FUNDING SUMMARY.....</b>	<b>62</b>
<b>SUMMARY OF COMMENTS ON THE DRAFT UPWP .....</b>	<b>63</b>
<b>MPO ENDORSEMENT.....</b>	<b>64</b>

## 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: <http://www.fhwa.dot.gov/fastact/>.

Planning activities also comply with MassDOT's GreenDOT Initiative. MassDOT launched its GreenDOT initiative on June 2, 2010. GreenDOT was developed to assure a coordinated approach to sustainability and to integrate sustainability into the decision-making process. The following three mutually-reinforcing goals form the foundation of GreenDOT:

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

More information on GreenDOT is available here: <https://www.massdot.state.ma.us/greendot.aspx>.

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 adopted as part of the RTP.

**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 FY 2018 include:

- Task 3.1 – Regional Bicycle and Pedestrian Planning will seek to assist communities in their Complete Streets planning efforts, develop a methodology for collecting volumes data for existing on-road bicycle lanes, promote bicycle tourism in the Pioneer Valley, and update the online bicycle map for the region.
- 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 market survey of non transit users will be conducted to develop recommendations to encourage new ridership.
- Task 3.3 – Regional Freight Planning assists in the planning of the efficient movement of all forms of freight. This task will utilize the findings of the Massachusetts State Freight Plan to identify region specific freight needs for the Pioneer Valley and complete a regional freight plan started as part of the FY2016 UPWP.
- 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 congestion severity formula. A before and after study will also be completed to gauge the effectiveness of two recently completed transportation improvement projects on reducing congestion.

- Task 3.6 – Regional Performance Measures Assessment task is intended to focus on the federal planning emphasis area of “transitioning to performance-based planning and programming.” An assessment of the regional Transportation Evaluation Criteria will be performed to determine how this new TIP scoring criteria relates to the goals of the FAST Act.
- Task 3.7 – Regional Safety and Planning Studies will continue the work started last year and finalize the top high crash locations in each of the 43 communities that comprise the PVPC. A safety study of at-grade railroad crossing will be conducted to develop recommendations for locations that could be prone to crashes based on the FRA Web Accident Prediction System.. Staff will also work with the JTC to identify an intersection specific safety study.
- Task 3.9 – Climate Change Implementation will complete the infrastructure criticality task from the previous UPWP and develop a draft vulnerability assessment of transportation assets in the Pioneer Valley 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 assist in the evaluation of the green infrastructure and sustainability elements of proposed TIP projects. Work with a local community to identify best green infrastructure retrofit locations for city/town properties, and continue to work with MassDOT's Impaired Waters Program to reduce stormwater impacts from I-91 and other highways that adversely impact combined sewer overflows in urban communities.
- Task 3.11 – RTP Planning begins the preliminary development of the FFY 2020 Regional Transportation Plan for the Pioneer Valley MPO. Work under this task will consist of a review of the Vision, Goals, and Objectives of the current RTP. Additional tasks include participation in the state process to develop socio-economic projections for the RTP, and beginning updates to data included in the Regional Profile Chapter of the RTP.

**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 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.

## 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).

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 adjusted by redefining the scope of the tasks and/or reallocating funds among tasks. Such adjustments 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.

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

<b>Funding Source</b>	<b>Fiscal Period:</b>
FHWA/MassDOT	October 1, 2017 through September 30, 2018
FTA/MassDOT	April 1, 2017 through March 31, 2018
PVTA	April 1, 2017 through March 31, 2018
Scenic Byways Program	Various Contract Periods

***The Pioneer Valley Metropolitan Planning Organization endorsed the Unified Planning Work Program for the Pioneer Valley MPO at its meeting on \_\_\_\_\_.***

## UPWP AMENDMENT

At times, the UPWP may require an amendment when a task is proposed to be added or deleted. In addition, the modification of a proposed budget or scope could require an adjustment to the UPWP. 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 \$1,041,825 in PL funds has been programmed for the FY2018 Transportation Work Program. Direct Costs are expected to vary among tasks in the UPWP and are subject to change. A total of \$24,500 has been allocated for Direct Costs in FY2018.

**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.

PVPC also receives 10% of the regional allocation of Section 5316 (Job Access and Reverse Commute) funds for administration of the program. The program is a competitive process. Section 5316 funds are used to address the unique transportation challenges faced by welfare recipients and low-income persons seeking to get and keep jobs. In the past, PVPC has chosen to allocate 100% of these funds to the successful applicants.

**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 Task 3.11 – RTP Planning
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 3.11 – RTP Planning 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	<b>Transit System Surveys and Route Implementation</b> – 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	<b>Regional Congestion Management Process (CMP)</b> – 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	<b>Regional Pavement Management System</b> – 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 regional performance measures established as part of the update to the RTP. 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	<b>Intelligent Transportation System (ITS) and Regional Evacuation Planning</b> – 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	<b>Climate Change Implementation</b> – 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
3.11	<b>RTP Planning</b> – Consists of the preliminary planning efforts to begin the update of the Regional Transportation Plan for the Pioneer Valley MPO. The RTP outlines the direction of transportation planning and improvements for the region for the next 20 years and provides the basis for the TIP and UPWP.	All

## 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 recently adopted 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. We have also included an analysis of the attainability by transit to essential services such as employment, health care, and education as part of the Regional Transportation Plan. Task 3.1 also includes a study of regional sidewalks along federally-aided roadways to identify gaps and improve connections to transit.

## 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 2017 to elevate the role of the Economic Development Council of Western Massachusetts from an ex-officio non-voting member to a member with full voting privileges. As a result, the number of voting members was increased from ten to eleven and consists of the following officials or their designee or alternate.

- 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 Administrator of the Pioneer Valley Transit Authority
- A Representative of the Economic Development Council of Western Massachusetts (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 or a Selectman of one of the following five (5) cities and towns:

Amherst	Easthampton	Hadley
Northampton	South Hadley	

- A Selectman of one of the following fourteen (14) suburban and rural towns:

Belchertown	Brimfield	East Longmeadow
Granby	Hampden	Holland
Longmeadow	Ludlow	Monson
Palmer	Pelham	Wales
Ware	Wilbraham	

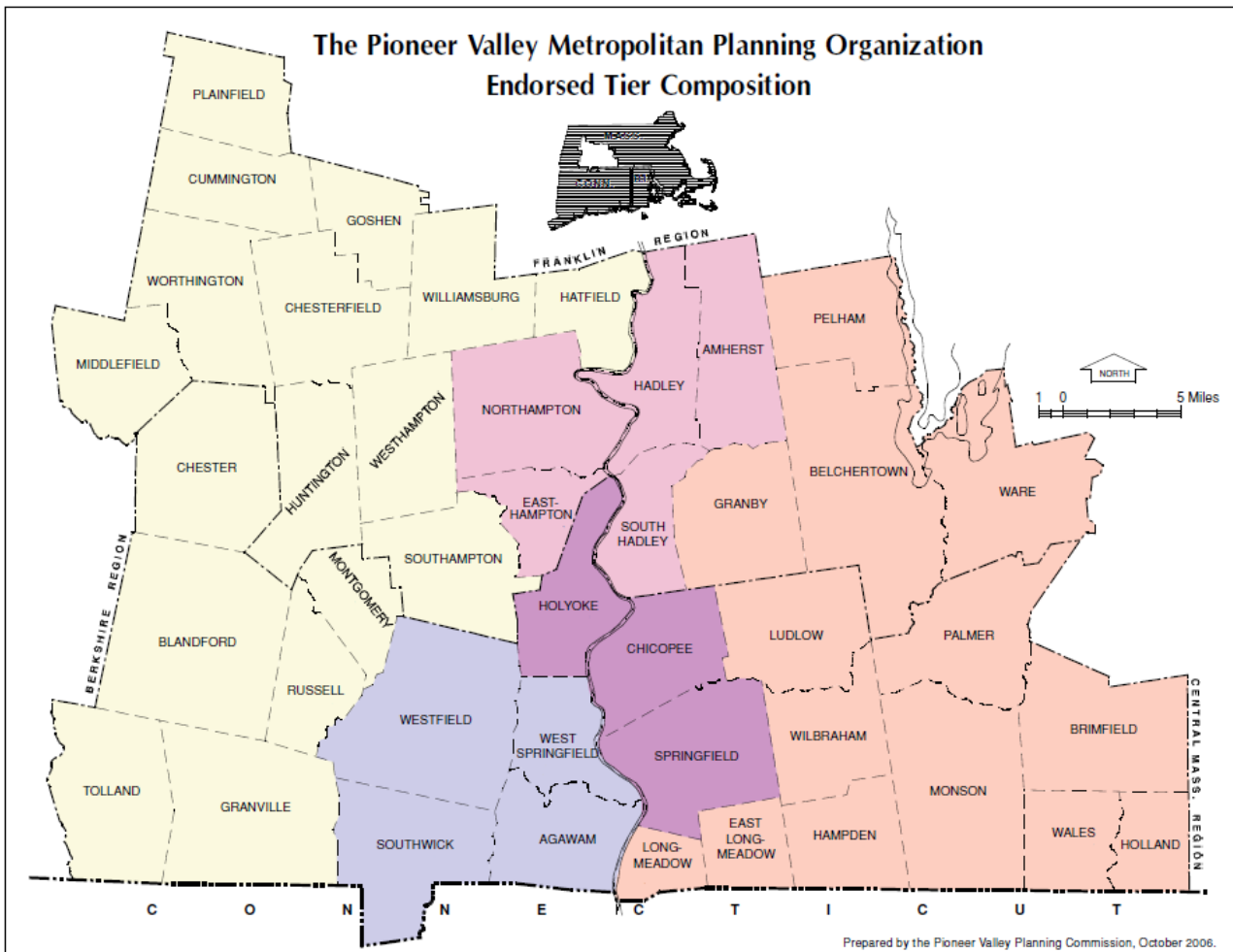
- A Selectman of one of the following seventeen (17) suburban and rural towns:

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

In addition, 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
Thomas J. Tinlin	Administrator of the Massachusetts Department of Transportation Highway Division
Walter Gunn	Chairman of the Pioneer Valley Executive Committee
Mary MacInnes	Administrator of the Pioneer Valley Transit Authority
Mayor Domenic Sarno	Mayor of Springfield
Mayor Richard Kos	Mayor of Chicopee
Mayor Richard Cohen	Mayor of Agawam
Mayor David Narkewicz	Mayor of Northampton
George Archible	Belchertown Board of Selectmen
Rick Sullivan	Economic Development Council of Western Massachusetts
<b>Alternates</b>	
Mayor Alexander Morse	Mayor of Holyoke
Mayor Brian Sullivan	Mayor of Westfield
Douglas Slaughter	Amherst Board of Selectmen
Carmina Fernandes	Ludlow Board of Selectmen



## 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.

### Pioneer Valley Joint Transportation Committee Members and Alternates

Community	Member	Alternate
Agawam	Christopher Golba	Michelle Chase
Amherst	Guilford Mooring	Jason Skeels
Barnes Municipal Airport	Eric Billowitz	Vacant
Belchertown	Steven Williams	Gary Brougham/Douglas Albertson
Blandford	Vacant	Vacant
Brimfield	Judith Carpenter	Vacant
Chester	John Murray	Vacant
Chesterfield	Matt Smith	Vacant
Chicopee	Jeffrey Neece	Steven Frederick
Cummington	Rob Dextraze	Vacant
East Longmeadow	Robert Peirent	Vacant
Easthampton	Jessica Allen	Dan Murphy
Goshen	Vacant	Vacant
Granby	David Derosiers	Vacant
Granville	Doug Roberts	Mathew Streeter
Hadley	Vacant	Vacant
Hampden	Vacant	Vacant
Hatfield	Phil Genovese	Vacant
Holland	Brian Johnson	Larry Mandell
Holyoke	Michael McManus	Jeffrey Burkott
Huntington	Charles Dazelle	Vacant
Longmeadow	Mario Mazza	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
Monson	John Morrell	Evan Brassard
Montgomery	Curtis Bush, Jr.	Vacant
Northampton	Wayne Feiden	Maggie Chan
Palmer	Gerry Skowronek	Rudy Pisarczyk
Pelham	Rick Adamcek	Vacant
Peter Pan Bus Lines	Peter Picknelly, Jr.	Vacant
Pioneer Valley Railroad	Milt Brill	Vacant
Pioneer Valley Transit Authority	Josh Rickman	Vacant
Plainfield	Merton Taylor Jr.	Vacant
Russell	Pandora Hague	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	Dick Kilhart	David Tworek
Western Massachusetts Economic Development Council	Vacant	Vacant
Westfield	Mark Cressotti	Vacant
Westhampton	David Blakesly	Arthur Pichette
West Springfield	James Czach	Vacant
Wilbraham	Tonya Bosch	Dena Grochmal
Williamsburg	William Turner	Vacant
Worthington	Cork Nugent	Vacant

## 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
David Elvin	Principal Transit Planner
Alexander Forrest	Transit Planner II
David Johnson	Transit Planner - Specialist
Amir Kouzehkanani	Principal Transportation Planner – Manager
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 FY2018 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>	<u>Position</u>	<u>% Time on Transportation</u>
Rana Al Jammal	Senior Transportation Planner - Specialist	84%
Jaimye Bartak	Senior Planner	8%
David Elvin	Principal Transit Planner	51%
Ray Centeno	Graphics Designer	25%
Jacob Dolinger	GIS Specialist	25%
Ashley Eaton	Land Use Planner	10%
Alexander Forrest	Transit Planner II	50%
Patty Gambarini	Principal Environmental Planner	8%
Molly Goren-Watts	Principal Planner/Manager of Regional Information and Policy Center	23%
Dave Johnson	Transit Planner - Specialist	40%
Amir Kouzehkanani	Principal Transportation Planner - Manager	80%
Andrew McCaul	Senior Transportation Planner II	86%
Jeffrey McCollough	Senior Transportation Planner - Specialist	81%
Corrin Meise-Munns	Land Use Planner	2%
Khyati Parmar	Senior Transportation Planner II	83%
Catherine Ratte	Principal Planner – Section Head	5%
Dana Roscoe	Principal Planner – Section Head	50%
Gary Roux	Principal Planner – Section Head	80%
Larry Smith	Principal Land Use Planner	10%
Dillon Sussman	Senior Land Use Planner	4%
Todd Zukowski	GIS/Cartographic – Section Head	25%
Transportation Intern	Intern	100%
Data Intern	Intern	25%



# FUNDING PROFILE

	Total	FHWA 3C PL	MassDOT 3C Match	Local Match	FTA S. 5303	PVTA* S. 5303 Match	PVTA S. 5307	PVTA S. 5307 Match
<b>1.0 Management &amp; Certification of the 3C Process</b>								
1.1 Management of the 3C Process	50,000	28,000	7,000		12,000	3,000		
1.2 Unified Planning Work Program	8,750	6,000	1,500		1,000	250		
1.3 Public Participation Process	20,500	10,400	2,600		6,000	1,500		
1.4 TIP Development	68,750	45,000	11,250		10,000	2,500		
1.5 Title VI and Environmental Justice	65,625	45,000	11,250		7,500	1,875		
<b>Subtotal of Section 1.0</b>	<b>213,625</b>	<b>134,400</b>	<b>33,600</b>		<b>36,500</b>	<b>9,125</b>		
<b>2.0 Technical Support &amp; Data Collection</b>								
2.1 Traffic Counting	37,500	30,000	7,500					
2.2 Regional Travel Demand Modeling/Clean Air Planning	74,375	55,000	13,750		4,500	1,125		
2.3 GIS, Mapping and Graphics	88,750	52,000	13,000		7,000	1,750	12,000	3,000
2.4 Information Center	52,250	41,800	10,450					
2.5 Regional Congestion Management Process - Data Collection	13,750	11,000	2,750					
2.6 Regional Pavement Management System - Data Collection	31,250	25,000	6,250					
2.7 Regional Performance Measures Data Collection	12,500	10,000	2,500					
<b>Subtotal of Section 2.0</b>	<b>310,375</b>	<b>224,800</b>	<b>56,200</b>		<b>11,500</b>	<b>2,875</b>	<b>12,000</b>	<b>3,000</b>
<b>3.0 RTP Planning</b>								
3.1 Regional Bicycle, Pedestrian and Complete Streets Planning	50,000	40,000	10,000					
3.2 Transit System Surveys & Route Implementation	147,500				53,000	13,250	65,000	16,250
3.3 Regional Freight Planning	37,500	30,000	7,500					
3.4 Regional Congestion Management Process - Project Development	128,750	95,000	23,750		8,000	2,000		
3.5 Regional Pavement Management System - Project Development	42,500	34,000	8,500					
3.6 Regional Performance Measures Assessment	26,250	21,000	5,250					
3.7 Regional Safety and Planning Studies	127,075	96,660	24,165		5,000	1,250		
3.8 Intelligent Transportation Systems (ITS) and Regional Evacuation Planning	25,000	15,000	3,750		5,000	1,250		
3.9 Climate Change Implementation	15,000	12,000	3,000					
3.10 Green Streets and Infrastructure	15,000	12,000	3,000					
3.11 RTP Planning	30,000	24,000	6,000					
<b>Subtotal of Section 3.0</b>	<b>644,575</b>	<b>379,660</b>	<b>94,915</b>		<b>71,000</b>	<b>17,750</b>	<b>65,000</b>	<b>16,250</b>
<b>4.0 Ongoing Transportation Planning</b>								
4.1 Regional Transit Planning	218,799				89,039	22,260	86,000	21,500
4.2 Paratransit Planning Assistance	28,750				10,000	2,500	13,000	3,250
4.3 Implementing the Regional Land Use Plan	18,000	14,400	3,600					
4.4 Bike and Pedestrian Network and Bike Commute Week	20,000	16,000	4,000					
4.5 Local Technical Assistance	23,250	18,600	4,650					
4.6 Local Pavement Management Program	10,000			10,000				
4.7 Scenic Byways Support	12,500	10,000	2,500					
4.8 Bike Share Implementation	20,000	16,000	4,000					
<b>Subtotal of Section 4.0</b>	<b>351,299</b>	<b>75,000</b>	<b>18,750</b>	<b>10,000</b>	<b>99,039</b>	<b>24,760</b>	<b>99,000</b>	<b>24,750</b>
<b>MassDOT 3C Direct Costs</b>	<b>24,500</b>	<b>19,600</b>	<b>4,900</b>					
<b>Program Sum</b>	<b>1,544,374</b>	<b>833,460</b>	<b>208,365</b>	<b>10,000</b>	<b>218,039</b>	<b>54,510</b>	<b>176,000</b>	<b>44,000</b>

\*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 2018.

### ***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 Program and prospectus documents, transportation plans, Memorandum of Understanding, and Annual Review Reports.

#### **PROPOSED ACTIVITIES:**

1. Provide liaisons between PVPC communities, PVRTA, private transportation providers, abutting regions and communities including the State of Connecticut, and other organizations at the local, regional, state, and federal levels on transportation related matters, issues and actions.
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.
9. Work with FHWA and FTA to implement recommendations from our most recent certification review.

#### **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).

Source	Budget	Est. Staff Effort
FHWA PL (80%)	\$ 28,000	14 weeks
MassDOT (20% match)	\$ 7,000	4 weeks
FTA S.5303	\$ 15,000	8 weeks
<b>TOTAL</b>	<b>\$50,000</b>	<b>26 weeks</b>

Direct Labor	\$22,989
Indirect Costs	\$27,011

## **Task 1.2 Unified Planning Work Program**

### **OBJECTIVE:**

To prepare and maintain a Unified Planning Work Program (UPWP) of state and federally funded transportation planning activities in the PVPC region. 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 - 2017.

### **PROPOSED ACTIVITIES:**

1. 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 2018). The estimated completion date is May 2018. Public engagement is estimated to begin in March 2018.

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

Direct Labor	\$4,023
Indirect Costs	\$4,727

## **Task 1.3 Public Participation Process**

### **OBJECTIVE:**

PVPC will work to assess the effectiveness of the public participation process and to develop enhanced regional involvement in support of the objectives of the FAST ACT. 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. PVPC will engage in efforts to foster an inclusive involvement in the transportation decision making through a commitment to early and continuous opportunities for the public to be involved in the identification of social, economic and environmental impacts of transportation. PVPC will reach beyond traditional stakeholders to identify populations and strategies to engage and seek input.

The elements of this effort listed below constitute the best practices already used by PVPC and also incorporated best practices from

MassDOT, FTA, FHWA other transportation agencies. This inclusive public participation process is continually improving and expanding to include contacts with community-based organizations and under-represented populations.

**PREVIOUS WORK:**

1. Adopted MassDOT’s new Public Participation Process.
2. Expanded stakeholder outreach and capacity building.
3. Upgraded audio equipment for public meetings to comply with new state regulations.
4. Use of social media including Twitter, Facebook, and the PVPC webpage.
5. Press releases announcing transportation projects and events

**PROPOSED ACTIVITIES:**

1. Incorporate new guidance from FTA and FHWA and MassDOT into the planning process.
2. 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 activities.
3. Update and revise the MPO online content to maintain current information on transportation studies and ongoing projects.
4. Incorporate new performance measures for the Public Participation Process and implement changes as needed and track these metrics.
5. Explore alternative media outlets for reaching the Limited English Proficient (LEP) population in the region.
6. Network with social service agencies, neighborhood groups and community organizations to enhance existing outreach.
7. Coordinate public participation with ongoing Environmental Justice Planning.

**PRODUCTS:**

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

Source	Budget	Est. Staff Effort
FHWA PL (80%)	\$10,400	8 weeks
MassDOT (20% match)	\$ 2,600	2 weeks
FTA S.5303	\$ 7,500	4 weeks
<b>TOTAL</b>	<b>\$20,500</b>	<b>14 weeks</b>

Direct Labor	\$ 9,425
Indirect Costs	\$11,075

***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 Regional Significant improvement projects to be considered for funding in TIP. During this process, staff will work to ensure the TIP is fiscally constrained, consistent with the goals and objectives of the FAST Act, both the Massachusetts GreenDOT and Healthy Transportation Policies, and the current Regional Transportation Plan for the Pioneer Valley. PVPC Staff, with guidance from the MPO, will organize an extensive public outreach

program to develop the TIP with the most current project information available. Once completed, the MPO will then endorse the TIP for inclusion in the State Transportation Improvement Program (STIP).

**PREVIOUS WORK:**

1. Pioneer Valley Transportation Improvement Programs 1974 – 2018
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
6. Regional Equity analysis

**PROPOSED ACTIVITIES:**

1. 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 project information as appropriate.
2. Assist communities with the development of new and existing projects in order to meet MassDOT Design Guide Book, Green DOT Policy, and Healthy Transportation requirements.
3. Assist the JTC in utilizing project evaluation criteria to develop a financially constrained project listing for each program year.
4. Maintain the financial element for all years of the TIP. Financial constraint will be maintained based on funding targets provided by MassDOT. Funding sources will also be provided when available.
5. Present air quality conformity findings and Greenhouse Gas emissions calculations. Analyses and documentation will satisfy the requirements of the Metropolitan Planning Rules and be consistent with the Massachusetts Global Warming Solutions Act.
6. Conduct appropriate public participation for the TIP consistent with the public participation plan for the region.
7. Conduct formal amendments and adjustments as necessary.
8. Provide links on the PVPC web site for communities to access current as well as archived TIP documents and project information.
9. Map all projects programmed on the TIP for use in PVPC analysis.
10. Update regional equity analysis based on new 2018-2022 TIP
11. Work with JTC and MPO to update TEC forms to meet FHWA/FTA requirements.

**PRODUCTS:**

1. FFY 2019 - 2023 Transportation Improvement Program. The estimated completion date is May 2018. Public engagement is estimated to begin in February 2017.
2. TIP Amendments and Adjustments as necessary.
3. Summary report for comments received during public review for amendments made to the TIP. June 2017.
4. Ranked list of evaluated TIP projects, with corresponding TEC sheets. March 2017.
5. Map displaying the 5 years of programmed projects available online. August 2018.
6. TIP webpage providing all pertinent project information. August 2018.

7. Updated TEC Forms.

Source	Budget	Est. Staff Effort
FHWA PL (80%)	\$45,000	22 weeks
MassDOT (20% match)	\$11,250	6 weeks
FTA S.5303	\$12,500	6 weeks
<b>TOTAL</b>	<b>\$68,750</b>	<b>34 weeks</b>

Direct Labor	\$31,609
Indirect Costs	\$37,141

**Task 1.5 Title VI and Environmental Justice**

**OBJECTIVE:**

To foster an inclusive involvement in the transportation decision making through a commitment to early and continuous opportunities for the public to be involved in the identification of social, economic and environmental impacts of transportation. This will include the identification under represented populations within the Region to seek input on the transportation planning process. Tasks outlined in this section will assist PVPC in identifying Title VI responsibilities and addressing environmental justice and social equity issues as part of its transportation planning process. These specific tasks address the goals of the RTP, Limited English Proficiency Plan, Environmental Justice plan and Disadvantaged Business Enterprise plan to enhance the existing public participation process, better identify protected populations, engage low income and minority populations, and develop performance measures to evaluate transportation deficiencies, benefits, and burdens. Staff will continue to improve its planning process to ensure that it is conducted in accordance with Title VI of the Civil Right Act of 1964, the revised FHWA/FTA guidance on Limited English Proficiency (LEP), and new requirements of Executive Order 12898 (Environmental Justice) to give full and fair consideration to all residents in the region.

**PREVIOUS WORK:**

1. Updated the Four Factor analysis PVPC uses to formulate a Language Access Plan as required under Executive Order 13166. Evaluated alternatives under the Safe Harbor Provisions. Updated language data using revised ACS census data issued in December of 2016.
2. Staff completed “Unconscious Bias” awareness and sensitivity training in 2017.
3. Revised the Public Participation Plan to incorporate Title VI and LEP components consistent with MassDOT.
4. Revised the TIP scoring criteria to reflect EJ and Title VI.
5. Developed bilingual public notices for the Transportation Improvement Plan and the Regional Transportation Plan. Explored options for reaching Spanish speaking residents through “alternative” local newspapers.
6. Coordinated with community liaisons in the Springfield Built Environment Task Force to examine transportation barriers in Springfield neighborhoods.
7. Created an RTP video with Spanish Language Translations.
8. Updated and submitted revised Title VI program to MassDOT Office of Diversity and Civil Rights (ODCR) and FTA.
9. Compiled a list of sign language interpreters
10. Created a form letter to inform new Title VI database contacts on the operation and role of PVPC and the MPO.

11. Expanded translation of project related documents and notices to address LEP specific issues.
12. Coordinated with community liaisons in the Springfield Built Environment Task Force to examine transportation barriers in Springfield neighborhoods.

**PROPOSED ACTIVITIES:**

1. Implement use of the MassDOT “Engage Tool” to improve public outreach and interaction with the public.
2. Revise and update the database of community contacts including email addresses of non-profit and community based organizations.
3. Work closely with the MassDOT Title VI Specialist to assess jurisdictional responsibilities and maintain an open dialogue.
4. Enhance 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.
5. Provide the MassDOT Title VI Specialist with an annual update of documented complaints, Title VI related activities, and progress in implementing Title VI programs.
6. Update Title VI Mapping tools for Title VI and EJ populations for PVPC communities.
7. 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.
8. 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.
9. Distribute Notice of Beneficiaries to community organizations and relevant contacts as identified in the Public Participation Plan
10. Continue to seek out stakeholders and meet with regional organizations and groups that work with the Environmental Justice Community to facilitate and coordinate participation in the regional transportation planning process and expand the database of email contacts.
11. Develop bilingual surveys for PVRTA and bilingual public notices for the Transportation Improvement Plan and the Unified Planning Work Program to provide increased opportunities for under-served populations to be represented in the public participation process.
12. Review Measures of Effectiveness (MOEs) regarding the implementation of Title VI.

**PRODUCTS:**

1. Revised public outreach using the “Engage Tool.”
2. Annual report to MassDOT on EJ, Title VI and LEP.
3. Updated maps of Title VI protected population demographics and related impacts.
4. Updated database of email contacts for community groups and relevant non-profits.
5. Ongoing coordination of the Springfield Partners for Healthier Communities Built Environment Task Force.



6. Expanded posting of the Notice to Beneficiaries including language translations to new MassDOT requirements

Source	Budget	Est. Staff Effort
FHWA PL (80%)	\$45,000	22 weeks
MassDOT (20% match)	\$11,250	6 weeks
FTA S.5303	\$ 9,375	5 weeks
TOTAL	\$65,625	33 weeks

Direct Labor	\$30,172
Indirect Costs	\$35,453

## 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 traffic data collection services to support MassDOT, the PVPC's 43 member communities, and planning tasks included in the FY2018 UPWP.

#### PREVIOUS WORK:

1. Regional Traffic Counting Program 1985 - 2017.
2. Data collection and analysis as part of Highway Performance Monitoring System (HPMS).
3. Traffic count library and database at PVPC.
4. Regional Traffic Counts, 2011 – 2015.
5. Updates to MassDOT MS2 traffic count site

#### PROPOSED ACTIVITIES:

1. Collect 48 hour Automatic Traffic Recorder (ATR) count data and GPS coordinates to assist in mapping at locations requested by MassDOT.
2. Provide up to 2 free daily traffic counts per member community on request.
3. Collect HPMS data and perform analysis, as requested by MassDOT.
4. Collect Turning Movement Count (TMC) data as requested by MassDOT and member communities.
5. Upload all ATR count data into the MassDOT MS2 website.
6. Work with MassDOT to help start to utilize the Collector for ArcGIS mobile app to GeoCode traffic count locations providing coordinates for each count station.
7. Collect daily and peak hour traffic count data to support UPWP tasks such as the Regional Transportation Model, Local Technical Assistance, the Regional Pavement Management System, and the Regional Congestion Management Process.
8. Update the PVPC traffic count database by incorporating truck percentages for locations whose vehicle classification data is available.
9. Collect bicycle and pedestrian volumes at pre-determined locations.

#### PRODUCTS:

1. Summary reports of daily traffic count information for the region.
2. PVPC web page Average Daily Traffic counts by community.
3. Document traffic counts for other UPWP tasks as performed.

Source	Budget	Est. Staff Effort
FHWA PL (80%)	\$30,000	17 weeks
MassDOT (20% match)	\$ 7,500	4 weeks
TOTAL	\$37,500	21 weeks

Direct Labor	\$17,241
Indirect Costs	\$20,259

## **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, and forecast long range transportation needs. 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. Address the transportation sector's regional impact on air pollution and climate change by estimating travel demand and the effectiveness of mitigation strategies.

### **PREVIOUS WORK:**

1. Technical Memo: Regional Congestion Analysis Comparing Volume Over Capacity Ratios for major routes between base year 2010 model and the future build year 2040 (May 2017).
2. Scenario Analysis: Identify potential construction and long term impacts of proposed transportation improvements to Route 147 (Memorial Avenue) corridor and the reconstruction of the Morgan-Sullivan bridge in the towns of Agawam and West Springfield (July 2017).
3. Calibrated the 2010 base year model and calculated adjustment factors for future build years (January 2016).
4. Conducted peak period and off peak highway assignment that sum up to daily traffic flows (February 2016).
5. Developed and presented guidance on Travel Demand Modeling training for work force development at the Institute of Transportation Engineers' UMass Technical Day (March 2016).
6. Reviewed scenario planning alternatives for the I-91 corridor as a member of the I-91 viaduct study working group.
7. Prepared a report on the 2010 base year model and the future build years 2020, 2030, 2040 results. This model update included comparisons between estimated Vehicle Miles Traveled and Traffic Flow for the four model years (April 2016).
8. Revised the PV 2010 Model Running Steps report to include new methodologies used in trip generation, trip distribution, and trip assignment developed in accordance with MassDOT guidance (May 2016).

### **PROPOSED ACTIVITIES:**

1. Update the traffic count database with current Average Daily Traffic data at community lines and external stations gathered from in-house traffic counts as well as from surrounding planning agencies (November 2017).
2. Continue efforts that began in 2017 to improve the 2010 base model for the PVPC region. A comparison of before and after Toll plaza removal on I-90. Automated Toll collection and interchange exit and entry points need to be accounted for in a more robust fashion using TransCAD's options of toll links as opposed to using penalties and to account for future high-speed toll collection (December 2017).
3. Recalibrate the 2010 base year model to reflect the recent toll plaza removal on the Massachusetts Turnpike (February 2018).
4. Route 20 corridor analysis during the week of the Brimfield Antique Flea Market (July 2018).

5. Revise the speed and capacity lookup table used to set the attributes of roadway links by functional class values in the regional model network (August 2018).
6. Obtain up to date information on non-exempt regional projects for inclusion in the statewide model from the Office of Transportation Planning (ongoing).
7. 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).
8. Perform Greenhouse Gas emissions calculations for projects included in the TIP consistent with the Massachusetts Global Warming Solutions Act (ongoing).
9. Provide supporting data from the regional travel model to communities and MassDOT upon request (ongoing).
10. Utilize the regional travel model to assist in the development of future build out estimates of transportation planning activities (ongoing).
11. Estimate effects of transportation improvement projects on communities by activating local roadway links within the regional model (as needed).
12. Coordinate regional travel demand model data with MassDOT, surrounding Massachusetts RPAs, and the Capital Region Council of Governments.

**PRODUCTS:**

1. Refinement and maintenance of the regional travel demand model.
2. Air quality conformity and greenhouse gas analysis in support of the TIP. April 2018.
3. Route 20 Brimfield project analysis results. July 2018
4. Before and After Toll Plaza Removal Analysis. February 2018
5. Revised speed and capacity lookup table. August 2018

Source	Budget	Est. Staff Effort
FHWA PL (80%)	\$55,000	27 weeks
MassDOT (20% match)	\$13,750	7 weeks
FTA S. 5303	\$ 5,625	2 weeks
<b>TOTAL</b>	<b>\$74,375</b>	<b>36 weeks</b>

Direct Labor	\$34,195
Indirect Costs	\$40,180

**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 and government partners with traditional GIS mapping products intended to support their 3C planning processes and decision-making. Additionally, PVPC GIS/Graphics staff continually works on updates to existing data layers to enhance access to the general public through online GIS mapping and enhanced web content for planning project information.

**PREVIOUS WORK:**

1. Created and maintained GIS regional bus system database; including updates to the transit system map, preparation of individual maps and schedules, regional transit service analysis, and support to PVTA web page. (Ongoing Task)

2. 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 several spatial data layers to support transportation-related projects, including: functional classification of roads, traffic count locations, congestion management, parking facilities, signalization, pavement conditions, regional bicycle and pedestrian infrastructure, ADA transit service area, areas of regional growth, etc. (Ongoing Task)
4. Continued to support and participate in the statewide GIS Advisory Committee, Western Massachusetts GIS User group, and direct assistance to Pioneer Valley communities. (Ongoing Task).
5. Created, updated, and maintained new online interactive ESRI map analysis tool for PVRTA bus stop consolidation, optimization, and public information.

**PROPOSED ACTIVITIES:**

1. Continue to develop and implement management strategies, which address staff training, establish agency data standards and data collection protocol, and conformance to map design that can be applied to all GIS products. (Ongoing Task)
2. 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, regional land use and smart growth planning activities, emergency response, critical infrastructure assessment, public works and pavement management, and transportation system planning. (Ongoing Task)
3. Integrate information generated to support transit and transportation management systems into the GIS. Create maps and graphics to promote understanding of related issues. (Ongoing Task)
4. 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 to Homeland Security and pre-disaster mitigation spatial data for western Massachusetts. (Ongoing Task)
5. Work with PVPC staff to assimilate state and federal data and data structure (i.e., road centerline/road inventory) into the Commission's database and analytic modeling programs. (Ongoing Task)
6. Improve access and use of web-based GIS data/analysis, online data and map products.
7. Promote the agency and its efforts to resolve regional issues through published materials, thematic maps, and distribution of information over the worldwide web, and educational multi-media presentations. (Ongoing Task).
8. Continuing support for transit planning services to PVRTA, including graphic layout, updates, and print production management of bus schedules and maps; updates and enhancements to the ESRI online bus stop and route analysis and public outreach tool; and graphic design and production of rider guides, public information and vital documents.

**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.

Source	Budget	Est. Staff Effort
FHWA PL (80%)	\$52,000	26 weeks
MassDOT (20% match)	\$13,000	7 weeks
FTA S. 5303	\$ 8,750	4 weeks
PVTA S. 5307	\$15,000	8 weeks
<b>TOTAL</b>	<b>\$88,750</b>	<b>45 weeks</b>

Direct Labor	\$40,805
Indirect Costs	\$47,945

## **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 produces high quality written and graphic information and research products that are easily accessible and understandable to the public. As technology opportunities expand, we continue to place more weight on making data and products easily available to download and manipulate through online venues including visualizing key data indicators. We also place a focus on assisting multiple partners to develop positive outcomes through collaborative examination of data and strategy development.

### **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 maintenance and updating of a municipal indicators database for every city and town in the Pioneer Valley and updated through June 2016 data.
4. Assisted with analysis of employment centers for regional TOD analysis.
5. Continued data updates in the development of updated definitions of Environmental Justice populations for the Pioneer Valley Region.
6. Analyzed labor market for proposed regional passenger rail project.
7. Developed and maintain a data downloads website available to regional planners and the public. [www.pioneervalleydata.org](http://www.pioneervalleydata.org)
8. Integrated additional transportation measures into the regional economic development indicators.

9. Incorporated relevant safety data and regional performance target data into regional database. Will continue to update annually.
10. Developed online tool that allows the creation of custom, visual data dashboards that can be embedded in PVPC and other partner websites.

**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, and sustainability to include in State of the Region database, websites, 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. Continue to maintain region wide data indicators with updated data and analysis on the State of the Pioneer Valley website to measure progress and needs of the region in the areas of transportation, economic development, and health. This is an ongoing, annual task.
10. Maintain online data dashboard monitoring trends in key transportation indicators. This is an ongoing, annual task.
11. Explore federal freight analysis framework data to assist in its integration into PVPC's planning activities.

**PRODUCTS:**

1. Maintain information systems of socio-economic and disparate data. Ongoing task.
2. Region wide data indicators updates to be conducted in December 2017 and May-July 2018.

3. PVPC website updates and maintenance. Ongoing task.
4. Maintain online data dashboard monitoring trends in key transportation indicators. Ongoing task.

Source	Budget	Est. Staff Effort
FHWA PL (80%)	\$41,800	21 weeks
MassDOT (20% match)	\$10,450	5 weeks
<b>TOTAL</b>	<b>\$52,250</b>	<b>26 weeks</b>

Direct Labor	\$24,023
Indirect Costs	\$28,227

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

#### **OBJECTIVE:**

PVPC staff will continue to collect travel time data in support of transportation related projects. Staff will develop new methodology using ESRI GIS and National Performance Management Research Data Set (NPMRDS) for use in updating the CMP and Top Bottlenecks in the Pioneer Valley Region. PVPC will continue to explore data sources to assist in the measurement of congestion incurred by all modes of transportation.

#### **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.
4. Analysis of PVTA user surveys to identify the number of daily riders per CMP corridor.
5. GIS based data analysis on CMP corridors

#### **PROPOSED ACTIVITIES:**

1. Collect data for CMP problem verification, studies, regional model calibration, and transportation monitoring.
2. Collect transit travel time, delay, percentage of riders making transfers, and other appropriate performance measure data to assist in the identification of congested corridors.
3. Collect data at existing park and ride facilities in the region.
4. Monitor CMP performance measures and update data as appropriate.
5. Begin collecting Greenhouse Gas (GHG) samples at all park and ride lots
6. Develop GIS based travel time analysis tool using National Performance Management Research Data Set (NPMRDS)

#### **PRODUCTS:**

1. Updated Pioneer Valley CMP Database. Ongoing task.
2. Updated regional performance measures. Ongoing task.
3. New Formula for Ranking Congestion in the Pioneer Valley Region.

Source	Budget	Est. Staff Effort
FHWA PL (80%)	\$11,000	6 weeks
MassDOT (20% match)	\$ 2,750	2 weeks
<b>TOTAL</b>	<b>\$13,750</b>	<b>8 weeks</b>

Direct Labor	\$6,322
Indirect Costs	\$7,428



## 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 (RPMS) on all federal aid eligible roadways. PVPC staff collects pavement distress data based on a 3 to 4-year cycle. The region has been divided into a number of sub-regions based on predefined sub regions. This is an ongoing task.

### PREVIOUS WORK:

1. Development of PVPC regional PMS database.
2. Collection of roadway pavement distress data roadway geometry and roadway condition information for all federal aid eligible roadways in the PVPC region.
3. Completed roadway pavement distress data collection in Belchertown, Easthampton, Springfield, and Westfield.
4. Development of Roadway Overall Condition Index (OCI) to assist in the evaluation and prioritization of proposed transportation improvement projects.

### PROPOSED ACTIVITIES:

1. Collect roadway pavement distress data on all federal aid roadways in Amherst, Wilbraham, East Longmeadow, Holyoke, and South Hadley.
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.
3. 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.
4. Perform limited existing sidewalk location inventory for selected/interested communities in the region on request.
5. Continue to maintain and update the MassDOT Roadway Inventory database for the Pioneer Valley Region and submit findings to MassDOT as requested.
6. Continue to conduct quality control checks of pavement inventory and condition data.
7. Provide technical assistance to other Massachusetts RPAs with pavement management 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	Budget	Est. Staff Effort
FHWA PL (80%)	\$25,000	13 weeks
MassDOT (20% match)	\$ 6,250	4 weeks
TOTAL	\$31,250	17 weeks

Direct Labor	\$14,368
Indirect Costs	\$16,882

## **Task 2.7 Regional Performance Measures**

### **OBJECTIVE:**

Collect data to evaluate regional performance measures as identified under federal transportation law and established by the Pioneer Valley MPO. This task will support planning activities included as part of Tasks 1.4, 3.4, 3.5, and 3.6.

### **PREVIOUS WORK:**

1. Regional Congestion Management Process
2. TEC data collection for TIP projects

### **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.

Source	Budget	Est. Staff Effort
FHWA PL (80%)	\$ 10,000	5 weeks
MassDOT (20% match)	\$ 2,500	1 week
TOTAL	\$ 12,500	6 weeks

Direct Labor	\$ 5,747
Indirect Costs	\$ 6,753

## **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 Regional Transportation Plan with respect to bicycling and walking. To assist the State of Massachusetts in reaching mode shift goals and to advance directives outlined in the Massachusetts Complete Streets Initiatives and GreenDOT promoting healthy transportation options such as walking and bicycling for all residents of the Pioneer Valley.

#### **PREVIOUS WORK:**

1. FHWA sponsor training workshop; “Incorporating On-Road bicycle Networks into Resurfacing Projects.”
2. South Hadley Bike Ped Study
3. Updated bicycle and pedestrian crash clusters
4. Springfield Complete Streets Bicycle and Pedestrian Plan.
5. Baystate Bike Week 2017.
6. Coordinated efforts related to municipal participation in the “Massachusetts Complete Streets Program.”
7. Engaged local schools in Safe Route to School initiatives.

#### **PROPOSED ACTIVITIES:**

1. Collected bicycle and pedestrian volume counts on regionally significant facilities
2. Coordinate efforts related to bicycle tourism.
3. Work with the JTC’s Bicycle and Pedestrian subcommittee to ensure consistency with the RTP, implement sustainable transportation strategies and develop a counting program for on-road bicycle lanes.
4. Revise online mapping tools for regionally significant bicycle facilities.
5. Assist local communities in efforts related to Complete Streets policy initiatives, projects and the development of complete Prioritization Plans.
6. Participate in the Massachusetts Statewide Bicycle Advisory Board.
7. Review regional sidewalk connections as part ongoing transportation planning tasks to identify gaps along federally-aided roadways and improve connections to transit stops. Ongoing task.
8. Participate in the Regional Bike Share Committee meetings.

#### **PRODUCTS:**

1. JTC Bicycle Advisory Committee meeting minutes and notices. Monthly.
2. Updated online regional bikeways map product.

3. Bicycle facility volume counts

Source	Budget	Est. Staff Effort
FHWA PL (80%)	\$40,000	20 weeks
MassDOT (20% match)	\$10,000	5 weeks
<b>TOTAL</b>	<b>\$50,000</b>	<b>25 weeks</b>

Direct Labor	\$22,989
Indirect Costs	\$27,011

### **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 (reports submitted quarterly).
2. Paratransit Mystery Rider onboard van service quality field observations (reports submitted quarterly).
3. Fixed route Mystery Rider “K-9” onboard field observations of service animal policy compliance (reports submitted quarterly).
4. Fixed route on-time performance (OTP) field observations (reports submitted quarterly).
5. Fixed route full system on-time performance (OTP) reports.
6. Northern System onboard rider survey (1,151 customers surveyed), analysis, and report.
7. Customer surveys and engagement at rider forums and outreach events.
8. In-person surveys reaching more than 250 customers on topics of bankability and bus stop consolidation.

**PROPOSED ACTIVITIES:**

1. Fixed route Mystery Rider onboard service quality observations, including ADA and Title VI compliance and OTP monitoring.
2. Paratransit Mystery Rider onboard service quality observations, including ADA and Title VI compliance and OTP monitoring.
3. Fixed route OTP monitoring focusing on the collection and analysis of data from the AVAIL bus information system at the system wide and route-specific levels, supplemented.
4. Market survey of non-bus-riders along PVTA Tier 1 and Tier 2 bus routes to better understand potential future customer demand and transportation needs; develop strategies to encourage new ridership in high-demand corridors.
5. Rider surveys on specific routes that are underperforming with below average performance measures, as well as routes that have lost more than 5% ridership compared to previous year.

**PRODUCTS:**

1. Fixed route Mystery Rider quarterly reports.
2. Paratransit Mystery Rider quarterly reports.
3. Full system on time performance (OTP) monthly reports and route-specific OTP analysis reports as requested.
4. Tier 1 and 2 corridor non-rider market survey. September 2018.
5. Rider surveys on individual under-performing routes. As requested.

6. Other technical assistance as requested by PVRTA.

Source	Budget	Est. Staff Effort
FTA S. 5303	\$ 66,250	33 weeks
PVRTA S. 5307	\$ 81,250	41 weeks
TOTAL	\$147,500	74 weeks

Direct Labor	\$67,816
Indirect Costs	\$79,684

### **Task 3.3 Regional 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 will also incorporate new freight planning requirements as identified in the FAST Act and recommendations specific to the Pioneer Valley MPO included as part of the Massachusetts State Freight Plan.

#### **PREVIOUS WORK**

1. Regional Freight Plan Congestion Survey.
2. Urban and Rural Critical Freight Corridors

#### **PROPOSED ACTIVITIES:**

1. Coordinate and cooperate with affected constituencies, both decision makers and stakeholders, from the public and private sectors to identify regional freight bottlenecks and improve conditions for the movement of freight in and out of the region. Ongoing task.
2. Work with MassDOT and Pan Am officials to assure that passenger rail service on the Conn River line will not adversely impact freight rail traffic. Continue to work with MassDOT to identify any adverse impacts to freight movement resulting from the proposed Inland Route for passenger rail service. Ongoing task.
3. Continue working with MassDOT, West Springfield officials and CSX representatives on the redevelopment of the CSX yard with proposed access via the Union Street Bridge and a new truck access road. As necessary.
4. Participate in FHWA web conferences, and other related workshops and conferences regarding new freight requirements included in the FAST Act. As necessary.
5. 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.
6. Utilize FHWA's Freight Analysis Framework (FAF) data to assess freight origin and destination flows through the region. Ongoing Task
7. Reconvene the Regional Freight Plan Advisory Committee to discuss recommendations from the Massachusetts State Freight Plan. Advance region specific recommendations and develop a Regional Freight Plan for the Pioneer Valley MPO.

#### **PRODUCTS:**

1. Technical reports, memoranda, surveys, computerized databases, GIS and other map products, meetings, workshops, forums, grant applications, project proposals, etc. which are produced in conjunction with the execution of this work task. As needed.

2. Regional Freight Plan. February 2018.

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

Direct Labor	\$17,241
Indirect Costs	\$20,259

**Task 3.4 Regional Congestion Management Process-Project Development**

**OBJECTIVE:**

The CMP identifies locations requiring additional analysis through the UPWP, monitors those locations identified as congested, and sets goals and objectives to be used as performance measure. PVPC Staff will continue identify and monitor congestion within the Pioneer Valley Region. Through the CMP Report as well as Congestion Studies, PVPC will continue implement strategies to improve congestion in the Pioneer Valley region. The CMP will be used to assist in the development of the TIP, the RTP, and the UPWP.

**PREVIOUS WORK:**

1. Downtown Signal Coordination Study – Ware
2. I-391 Ramp Congestion Study
3. Route 10 at South Street Study – Easthampton

**PROPOSED ACTIVITIES:**

1. Work on updating the regional CMP performance measures according to the FAST Act guidelines.
2. Update CMP corridors in coordination with the JTC.
3. Update the regional Congestion Severity Formula, base on new data methodology as well as integration of alternative modes of transportation into the CMP.
4. Travel time runs to support ongoing congestion studies in the Pioneer Valley.
5. Before and after study for TIP projects. Under this activity the intersection of Pleasant Street at Conz Street in the City of Northampton and the Atkins Corner intersection in the Town of Amherst will be analyzed to identify the effectiveness of recently completed TIP projects.

**PRODUCTS:**

1. CMP Corridor updates. As needed
2. CMP Formula Update. September 2018
3. Before and after TIP project analysis. Summer 2018.

Source	Budget	Est. Staff Effort
FHWA PL (80%)	\$ 95,000	47 weeks
MassDOT (20% match)	\$ 23,750	11 weeks
FTA S. 5303	\$ 10,000	5 weeks
<b>TOTAL</b>	<b>\$128,750</b>	<b>63 weeks</b>

Direct Labor	\$59,195
Indirect Costs	\$69,555

### **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. Community roadway improvement backlog.
3. Community project priority listings.
4. Regional roadway improvement backlog.

**PROPOSED ACTIVITIES:**

1. 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.
3. Assist in the prioritization of pavement projects included as part of the Pioneer Valley TIP.
4. Provide interested member communities with pavement distress data analysis as well existing roadway pavement condition as appropriate.

**PRODUCTS:**

1. Pavement OCI maps on each community’s surveyed federal aid eligible roadways on request.
2. Community roadway recommended repair on request.
3. Community roadway improvement backlog on request.
4. Community benefit/cost ratio listing on request.

Source	Budget	Est. Staff Effort
FHWA PL (80%)	\$34,000	17 weeks
MassDOT (20% match)	\$ 8,500	4 weeks
TOTAL	\$42,500	21 weeks

Direct Labor	\$19,540
Indirect Costs	\$22,960

### **Task 3.6 Regional Performance Measures Assessment**

**OBJECTIVE:**

This task is intended to support on the federal planning requirement 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. 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.
2. Work with MassDOT, PVTA, and surrounding regions to coordinate data collection and share analysis methods.

3. Participate as part of MassDOT's Performance Management Subcommittee.
4. Provide data and analysis as necessary to assist in scoring TEC forms submitted for TIP projects.
5. Perform an assessment of the TEC criteria for the Pioneer Valley TIP.
6. Develop updates to regional performance measures and the TEC scoring process as necessary to coincide with statewide performance measures and FAST Act requirements.

**PRODUCTS:**

1. Regional TEC Criteria Assessment. September 2018.
2. Regional Performance Measures Updates to meet FAST Act requirements. As needed (milestones based on passage of Final Rules).

Source	Budget	Est. Staff Effort
FHWA PL (80%)	\$21,000	10 weeks
MassDOT (20% match)	\$ 5,250	2 weeks
TOTAL	\$26,250	12 weeks

Direct Labor	\$12,069
Indirect Costs	\$14,181

**Task 3.7 Regional Safety and Planning Studies**

**OBJECTIVE:**

Continue utilizing MassDOT's updated traffic safety database and information to improve traffic safety and efficiency in the region. Periodically collect local crash data and other related information at specific locations to develop recommendations to improve safety for all modes of travel.

**PREVIOUS WORK:**

1. Holyoke –Cherry Street at Homestead Avenue analysis
2. Pioneer Valley Traffic Safety Compass: Traffic Safety Conditions by community.
3. Updated Top 100 High crash intersections Report 2011-2013

**PROPOSED ACTIVITIES:**

1. Utilize the Federal Railroad Administration's Web Accident Prediction System Report for the region (Hampshire and Hampden Counties) to analyze the safety at high risk at-grade rail road crossings in the Pioneer Valley. PVPC shall study the historic crash information provided in the report and further collect local information (if needed) to summarize specific recommendations to address safety. September 2018
2. Summarize the non motorist crash information along at-grade crossings between designated bike paths and major highways. PVPC shall utilize the geographic information system (GIS) tools and MassDOT crash data to identify the top high risk bike path crossings in the region. This report aims to establish an ongoing task of monitoring safety for non-motorists. September 2018
3. Contribute in MassDOT's Roadway Safety Audits and provide regional perspective and input. Ongoing task
4. Perform safety, traffic calming and truck exclusion route studies as requested by member communities. As necessary.



5. Finalize the Pioneer Valley Traffic Safety Compass for the remaining communities in the region. December 2017.
6. PVPC shall continue to work in cooperation with MassDOT towards achieving Strategic Highway Safety Plan objectives for the region. Participate as part of the Strategic Highway Safety Plan Steering Committee. Ongoing task.
7. Work in cooperation with members of the Joint Transportation Committee and other local representatives to identify a location to conduct a traffic safety and planning study. Based on JTC guidance PVPC will collect the necessary data to analyze intersection operations and develop recommendations to improve safety. Summer 2018

**PRODUCTS:**

1. Pioneer Valley At-Grade Rail Road Crossings Safety Report. September 2018
2. Traffic Safety along Bike Path/Highway Crossings in the Pioneer Valley. September 2018
3. Traffic Safety Study as identified by JTC. Summer 2018
4. Final Pioneer Valley Traffic Safety Compass. December 2017
5. Other safety reports and data as appropriate.

Source	Budget	Est. Staff Effort
FHWA PL (80%)	\$ 96,660	48 weeks
MassDOT (20% match)	\$ 24,165	12 weeks
FTA S. 5303	\$ 6,250	3 weeks
TOTAL	\$127,075	63 weeks

Direct Labor	\$58,425
Indirect Costs	\$68,650

***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. RTIC Steering Committee.
4. I-91 Viaduct Study Working Group

**PROPOSED ACTIVITIES:**

1. Work with communities to incorporate the FHWA ITS National Architecture into future improvement projects. Certify TIP project compliance with the Western Massachusetts Regional Architecture. Ongoing task.
2. Analysis and support of data from regional ITS projects such as the I-91 ITS system, PVTA AVL system, and Route 9 Overheight Vehicle Detection System. Ongoing task.
3. Work with MassDOT to assist in the development of Statewide ITS Performance Measures. As necessary.

4. Participate in ongoing planning efforts of the Western Massachusetts Regional Homeland Security Advisory Committee and MassDOT Smart Work Zone Committee. Ongoing Task.
5. Assist communities in regional evacuation planning as necessary.

**PRODUCTS:**

1. Recommendations and comments as necessary as part of Committee activities.
2. Technical Memoranda and reports as appropriate.

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

Direct Labor	\$11,494
Indirect Costs	\$13,506

**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 GreenDOT policy. To assist Pioneer Valley communities in implementing climate resiliency strategies.

**PREVIOUS WORK:**

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

**PROPOSED ACTIVITIES:**

1. Finalize infrastructure criticality analysis approach, which will follow the model established in MassDOT's state-wide assessment, to identify the most important transportation infrastructure in the region for climate vulnerability analysis.
2. Begin vulnerability analysis, following the model established in MassDOT's state-wide assessment, to identify critical infrastructure in the region that is most vulnerable to climate-related hazards.
3. Review and update strategies within Climate Action Plan and corresponding elements in Climate Change Toolkit; identify and fill gaps where needed.
4. Conduct outreach to municipalities and JTC to help facilitate understanding of MassDOT statewide vulnerability assessment and regional analysis.
5. Participate in Transportation Project Evaluation evaluation process with respect to TEC involving climate and sustainability.

**PRODUCTS:**

1. Finalized infrastructure criticality analysis for the Pioneer Valley region.
2. Draft vulnerability analysis for the Pioneer Valley region.
3. Updated Climate Action Strategies and corresponding tools that are implementable in the coming years.
4. At least two meetings with JTC and/or roundtable to help facilitate understanding of MassDOT climate study.

5. Summary of projects and use of climate related transportation evaluation criteria (toward eventual evaluation of criteria and possible recommendation of amendments).
6. Implementation of Climate Change Toolkit strategies in selected communities. As necessary.

Source	Budget	Est. Staff Effort
FHWA PL (80%)	\$12,000	6 weeks
MassDOT (20% match)	\$ 3,000	2 weeks
TOTAL	\$15,000	8 weeks

Direct Labor	\$ 6,897
Indirect Costs	\$ 8,103

### **Task 3.10 Green 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. Updated TEC to include green infrastructure and sustainability criteria.
2. Model Green Streets and Green Infrastructure Policy statement for the City of Northampton.
3. Design of green streets, installation of rain gardens, and urban tree planting in Springfield, Chicopee and Holyoke.
4. Developed green streets design plans for the "X" neighborhood in 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, .
2. Continue to coordinate work in Springfield, Chicopee and Holyoke to develop and implement green streets projects
3. Review and update strategies within regional Green Infrastructure Plan and corresponding elements in Green Infrastructure Toolkit, identify and fill gaps where needed
4. Begin work with municipalities to identify best green infrastructure retrofit locations for city/town properties, including roadway right of ways. For the coming year, this will entail finalizing the methodology and piloting in one community.
5. Participate in evaluating projects with Transportation Project Evaluation criteria which include green infrastructure and sustainability criteria.
6. Continue to work with MassDOT's Impaired Waters Program to reduce stormwater impacts from I-91 and other highways that adversely impact combined sewer overflows in urban communities.

#### **PRODUCTS:**

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

4. Finalized green infrastructure retrofit location methodology and pilot project in one municipality
5. Strategies to reduce highway stormwater impacts to combined sewer overflows. Ongoing task.

Source	Budget	Est. Staff Effort
FHWA PL (80%)	\$12,000	6 weeks
MassDOT (20% match)	\$ 3,000	2 weeks
<b>TOTAL</b>	<b>\$15,000</b>	<b>8 weeks</b>
Direct Labor	\$ 6,897	
Indirect Costs	\$ 8,103	

### **Task 3.11 RTP Planning**

#### **OBJECTIVE:**

This task consists of the preliminary planning associated with the development of the update to the Regional Transportation Plan (RTP) for the Pioneer Valley MPO. Last updated in July, 2015. Work on this task will begin in the summer of 2018 and continue through the endorsement of the RTP update in July 2019.

#### **PREVIOUS WORK:**

1. FFY2016 RTP for the Pioneer Valley MPO

#### **PROPOSED ACTIVITIES:**

1. Review the Vision, Goals, and Objectives of the current RTP and update to comply with the FAST Act, MassDOT Statewide Plans, other regional plans, and local plans as appropriate.
2. Assist MassDOT in the development of socio-economic data projections for inclusion in the RTP.
3. Review Scenario Planning tools such as Envision Tomorrow Plus for use in development and analysis of regional development scenarios for inclusion in the RTP.
4. Begin updates to the Regional Profile (Chapter 5) of the document.
5. Begin updates to the Needs, Strategies, and Projects (Chapter 14) of the document.

#### **PRODUCTS:**

1. Updated regional Vision, Goals, and Objectives as needed.
2. Scenario Planning Tool assessment as appropriate.

Source	Budget	Est. Staff Effort
FHWA PL (80%)	\$24,000	12 weeks
MassDOT (20% match)	\$ 6,000	3 weeks
<b>TOTAL</b>	<b>\$30,000</b>	<b>15 weeks</b>
Direct Labor	\$ 13,793	
Indirect Costs	\$ 16,207	

## **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 support; assistance with regulatory compliance; and support and facilitation of public and agency participation.

#### **PREVIOUS WORK:**

1. Provided PVTA with general planning assistance for fixed route services and facilities planning and operations.
2. Redesigned, updated, and produced PVTA's printed fixed route bus schedules, PVTA system map, and related products to support transition of bus routes to Springfield Union Station; updated bus operator field guides; managed vendors for printed products.
3. Produced and installed maps and signage for transit facilities and on vehicles 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. Provided planning assistance for the transition of PVTA fixed route and customer service operations to Springfield Union Station.
8. Facilitated PVTA Bus Rider Forums.
9. Facilitated public hearings for proposed service changes.
10. Performed customer outreach at bus terminals.
11. Produced Title VI equity analyses for proposed changes in fare media and transit service.
12. Continued support for Springfield bus stop consolidation, including development of online ESRI map analysis tool; updates to the plan and itemized list of stops and their status; facilitation of neighborhood outreach meetings; support for municipal agency meetings; and documentation of all comments received and responses.
13. Regularly updated transit performance measures and performance guidelines reports.
14. Provided support for PVTA bus rapid transit planning.
15. Participated in regional passenger rail planning.

#### **PROPOSED ACTIVITIES:**

1. 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 statutes, 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 facilitate 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. Includes preparation and updates of vital documents in sufficient language translations and acceptable screen reader formats for posting on [www.pvta.com](http://www.pvta.com) and in transit facilities and on vehicles.
9. Update and ongoing implementation of the PVTA public participation plan and language access plan.
10. Continue to update PVTA fixed route monthly performance measures and monthly guidelines.
11. Continue to provide support for PVTA bus rapid transit planning.
12. Facilitate and coordinate the use and incorporation of GIS GPS, and online mapping technologies to support PVTA transit route and facilities planning, public engagement, and regulatory compliance.
13. Continue to support PVTA bus stop consolidation planning.
14. Continue to provide coordination among PVTA, PVMPO, PVPC staff, and MassDOT for proactive communication and the programming of transit items in the TIP.
15. 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. Monthly Service Guidelines Analysis for Performance Measures reporting.
4. PVTA System Map update in requested formats. As needed.
5. Brochures, public notices, posters, maps, and other print and digital materials. As requested.
6. Updates and translation of "vital documents" in print and electronic formats for LEP persons. Ongoing.
7. Reports, plans, and other documents. Ongoing.

Source	Budget	Est. Staff Effort
FTA S. 5303	\$111,299	56 weeks
PVTA S. 5307	\$107,500	53 weeks
TOTAL	\$218,799	109 weeks

Direct Labor	\$100,597
Indirect Costs	\$118,202

## **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. Facilitated quarterly Paratransit Van Riders meetings.
3. Facilitated public hearings and produced equity analyses for proposed changes in PVTA Senior Service in four communities.
4. Participated in activities of regional paratransit planning groups, including the Pioneer Valley Regional Coordinating Council, the Hilltown Regional Coordinating Council, and the Quaboag Regional Transportation Committee. Provided support as directed to the Paratransit Subcommittee of the PVTA Advisory Board.
5. Provided a staff representative to serve on the PVTA Paratransit Appeals Committee.
6. 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.
7. Coordinated and provided technical assistance to agencies seeking capital grants under FTA Section 5311 Rural Transit Assistance Program.
8. Provided technical assistance to Town of Ware to establish Quaboag Connector paratransit service.

### **PROPOSED ACTIVITIES:**

1. Continue to provide general paratransit planning assistance to PVTA, including public participation activities, operational analyses of policies and services, regulatory compliance, and updating and maintenance of vital documents.
2. Continue to provide a staff member to serve on the PVTA Paratransit Appeals Committee.
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, including the Pioneer Valley Regional Coordinating Council, the Hilltown Regional Coordinating Council, the Quaboag Regional Transportation Committee, and/or others that may request assistance or are identified.
5. Continue to support the work of the Paratransit Subcommittee of the PVTA Advisory Board as directed.
6. 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.

7. Continue to coordinate and provide technical assistance to agencies seeking capital grants under FTA Section 5311 Rural Transit Assistance Program.
8. Perform paratransit surveys and studies requested by PVTA and PVMPO municipalities.

**PRODUCTS:**

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.

Source	Budget	Est. Staff Effort
FTA S. 5303	\$12,500	6 weeks
PVTA S. 5307	\$16,250	8 weeks
<b>TOTAL</b>	<b>\$28,750</b>	<b>14 weeks</b>

Direct Labor	\$13,218
Indirect Costs	\$15,532

***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. Assist in the support of Transit Oriented Development in and around the region's new passenger rail stations and high capacity bus routes.

"Our Next Future is strongly linked to, and important to surface transportation planning in many ways:

- It includes a smart growth plan to reduce sprawl and focus future growth in existing city and village centers, which will reduce future transportation infrastructure expansion needs and air quality impacts;
- It includes a sustainable transportation plan to, among other things, reduce auto use by improving bike-ped infrastructure;
- It promotes the development of Transit Oriented Development centers in the region;
- It provides information to assist communities in the development of TEC forms and update the TEC as necessary.

**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.

**PROPOSED ACTIVITIES:**

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 2. Coordinate ongoing VDC activities, including:
  - a) Convene a support group for developers that are interested in implementing smart growth projects.
2. Reconvene the Housing Plan Advisory Committee to advance strategies for transit-oriented and community center mixed use housing development, and other priorities.
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. Prioritize regional or intermunicipal actions on smart growth and sustainability.
4. Work with selected communities to develop new zoning standards to incentivize Transit Oriented Development, and investigate other strategies to support TOD area infrastructure improvements and project development costs, as well as strategies to support vibrant, walkable, bikeable and transit-friendly downtowns.

**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. Community specific local technical assistance on TOD with TOD overlay zoning regulations tailored to community needs. Activities and events to roll out and promote the new Sustainability Toolkit. Website upgrades to incorporate the toolkit. As necessary.

Source	Budget	Est. Staff Effort
FHWA PL (80%)	\$14,400	7 weeks
MassDOT (20% match)	\$ 3,600	2 weeks
<b>TOTAL</b>	<b>\$18,000</b>	<b>9 weeks</b>

Direct Labor	\$ 8,276
Indirect Costs	\$ 9,724

## **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 18<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. Advisory committees for river walk projects in PVPC region.
2. River Walk brochure and website.
3. Regional Biking Map.
4. Update to printed Pioneer Valley Trails Map
5. Long-term maintenance and parking plan for the Connecticut River Walk and Bikeway.
6. Updates to the Connecticutriver.us and PVPC websites on the Connecticut River Walk. (Schedule: ongoing).
7. Bike Commute Week activities since 1999.

### **PROPOSED ACTIVITIES:**

1. Continue promoting and distributing updated Pioneer Valley Trails map
2. Work to help solicit participation from the region's communities in reviewing the newly drafted MassDOT Statewide Bicycle and Pedestrian Plan and provide plan comments as appropriate.
3. 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 for FY18 will include: assisting West Springfield with outreach on soon to be completed Riverwalk segment in that town; ensuring that Riverwalk considerations are part of planning for I-91 Viaduct project; and conducting outreach with reopening of Springfield Riverwalk when CSO separation work is completed... (Schedule: ongoing).
4. 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.
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.
6. Promote Bike Commute Week through a variety of media platforms and in close collaboration with municipal officials and community-based organizations, assure publicity and broad promotion of Bike Commute Week activities.

**PRODUCTS:**

1. Comments on new MassDOT Statewide Bicycle and Pedestrian Plan
2. Technical assistance to communities on advancing Riverwalk and other important bicycle-pedestrian segments. As necessary.
3. New off-road pedestrian and bike trails design and construction projects. As necessary.
4. Bike Commute week report

Source	Budget	Est. Staff Effort
FHWA PL (80%)	\$16,000	8 weeks
MassDOT (20% match)	\$ 4,000	2 weeks
TOTAL	\$20,000	10 weeks

Direct Labor	\$ 8,276
Indirect Costs	\$11,724

**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. Route 20 at Elm Street Study – West Springfield.

**PROPOSED ACTIVITIES:**

1. 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. Application of the latest versions of transportation software programs to perform analysis and test recommendations.
4. Present findings to communities through documentation and oral presentation as required.
5. Work with local communities to advance the recommendations of previously completed planning studies to the project development stage.
6. Assist member communities in the preparation of MassDOT Project Need Forms and Project Initiation Forms.
7. 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.

- 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	2 weeks
TOTAL	\$23,250	11 weeks

Direct Labor	\$10,690
Indirect Costs	\$12,560

### **Task 4.6 Local Pavement Management Program**

#### **OBJECTIVE:**

To promote and update pavement management services among member communities by conducting road condition, budget, and plan analyses on a contract basis for the accepted paved locally maintained roadway system. This work is performed solely by PVPC staff.

#### **PREVIOUS WORK:**

- Local Pavement Management Data Collection and study for Holland.
- Local Pavement Management Data Collection and study for Chester.

#### **PROPOSED ACTIVITIES:**

- Follow up with the Towns of West Springfield, Easthampton, Agawam, and Ludlow on requests for Pavement Management System assistance.
- Identify additional communities interested in conducting local pavement management programs.
- Meet with local officials and staff from the selected communities to explain the program and to coordinate activities.
- 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.
- Provide follow-up technical assistance to other communities with pavement management programs already in place such as Longmeadow and Wilbraham.
- Assist communities in the development of new roadway improvement projects based on their annual maintenance budget.
- Ensure that any new roadway is officially accounted for by Collecting GPS coordinate information to assist in Mapping.

#### **PRODUCTS:**

- OCI Updates for specific roadways in communities with an existing Pavement Management Program as requested.
- Updates for existing municipal pavement management plans, as requested.

Source	Budget	Est. Staff Effort
Estimated Local Funds	\$10,000	5 weeks
TOTAL	\$10,000	5 weeks

Direct Labor	\$4,598
Indirect Costs	\$5,402

### **Task 4.7 Scenic 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 to each of the communities involved in these two Scenic Byways. The Connecticut River Scenic Byway was designated as the first National Scenic Byway in Massachusetts, and runs along the Connecticut River on Route 47 in the PVPC towns of South Hadley and Hadley. The Route 112 Scenic Byway is a state-designated Scenic Byway in the PVPC towns of Huntington, Worthington,, Cummington and. Goshen. Both Byways continue from the Pioneer Valley region into Franklin County, and PVPC and FRCOG have assisted these communities in completing Byway Plans, which identify projects and strategies.

**PREVIOUS WORK**

1. 2016 updated Corridor Management Plan (CMP) for the Connecticut River Scenic Farm Byway on Routes 47 and 63
2. CMP for the Route 112 Scenic Byway.
3. Implemented an intergovernmental compact for land protection along the Connecticut River Scenic Byway.

**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.
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.
3. Provide technical assistance to communities in byway project development, including identification of funding sources.
4. Implement plans to expand the Connecticut River Byway to the west side of the Connecticut River in Hatfield and other communities, including pursuing state byways designation.
5. Provide updates as needed for Western Massachusetts Scenic Byways website.

**PRODUCTS:**

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

Source	Budget	Est. Staff Effort
FHWA PL (80%)	\$10,000	5 weeks
MassDOT (20% match)	\$ 2,500	1 week
TOTAL	\$12,500	6 weeks

Direct Labor	\$ 5,747
Indirect Costs	\$ 6,753

**Task 4.8 Bike Share Implementation**

**OBJECTIVE:**

Plan, develop and launch a regional bike share program for the Pioneer Valley region, serving the communities of Springfield, Holyoke, Northampton, Amherst, South Hadley and the University of Massachusetts, with potential expansion to others areas. A regional bike

share will both serve as an inexpensive way to extend transit service without new buses and to provide service for standalone trips, diverting trips from single occupancy vehicles and reducing congestion and GHG and other air pollution.

Funding for the Regional Bike Share Program was programmed as part of the FFY 2017 Transportation Improvement Program using Congestion Mitigation and Air Quality (CMAQ) funds. To date, the bike share station locations have been identified, agreements executed with each of the communities, and a scope of work developed for the implementation of the system.

**PREVIOUS WORK:**

1. 2016 Advanced Bike Share Feasibility Analysis.
2. Bike Share Intergovernmental Compact and Community Agreements.
3. Bike Share Scope of Work.
4. Bikeshare website and video.

**PROPOSED ACTIVITIES:**

1. Coordinate meetings of the Bike Share Steering Committee that will assist and guide the Bike Share program development process.
2. Oversee work of the vendor selected to implement the Bikeshare program
3. Continue to support member municipalities with necessary local work including sponsorships, permitting and other issues that might arise.
4. Implement organizational structure for bike share management.
5. Develop a pre-launch outreach strategy. Work with community officials to coordinate public meetings and events in advance of a bike share launch. Promotion and public outreach activities for bike share, including website, flyers, media releases, social media linkages.

**PRODUCTS:**

1. Bike Share Steering Committee monthly meetings. Ongoing task.
2. Business and equipment models. December 2017.
3. RFP release and management. Fall 2017.
4. Vendor selection, oversight and management. Fall 2017/ongoing.
5. Pre-launch outreach strategy. Ongoing task.

Source	Budget	Est. Staff Effort
FHWA (80%)	\$16,000	8 weeks
MassDOT (20%)	\$ 4,000	2 weeks
<b>TOTAL</b>	<b>\$20,000</b>	<b>10 weeks</b>

Direct Labor	\$ 9,195
Indirect Costs	\$10,805

## ESTIMATED COMPLETION SCHEDULE OF PLANNING ACTIVITIES

Task	Product	Anticipated Completion	Public Engagement
1.1	Invoices	Monthly	
1.1	MPO Meeting Minutes	As necessary	
1.2	FY2018 UPWP	May 2018	March 2018
1.3	Press Releases and Public Participation Notices	As necessary	As necessary
1.3	Updated Contact Database	January 2017	
1.4	TIP Project Map	August 2018	
1.4	FY2019 - 2023 TIP	May 2018	February 2018
1.4	TEC Project Evaluation	March 2018	February 2018
1.5	Reports as required for EJ, Title VI, and LEP	July 2018	As necessary
1.5	Revised Public Outreach using Engage Tool	As necessary	
2.1	Regional Traffic Counts	Ongoing (April – November)	
2.1	Website update of daily traffic counts	March 2018	
2.2	CMAQ and Greenhouse Gas Analysis	As needed (typically April)	
2.2	Before and After Toll Plaza Removal Analysis	February 2018	
2.2	Brimfield Route 20 Analysis	July 2018	
2.2	Revised Speed and Capacity Lookup Table	August 2018	
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 2017 and July 2018	
2.4	Transportation Data Dashboard	September 2018	
2.5	CMP Data Collection	Ongoing (September – June)	
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	Updated Regional Bike Map	September 2018	Summer 2018
3.1	Bike Lane Volume Counts	September 2018	
3.2	Mystery Rider, K-9, On time Performance reporting	Quarterly	
3.2	Bus Schedule Updates	As needed	
3.2	OTP Reports	Monthly	
3.2	Tier 1 and 2 corridor non-rider market survey.	September 2018	
3.3	Regional Freight Plan	February 2018	January 2018
3.4	Before and After Congestion Studies	Summer 2018	
3.4	CMP Formula Update	September 2018	Summer 2018
3.5	PMS Project Development Database Updates	Ongoing - Monthly	
3.6	Regional Performance Measures Updates	Ongoing	
3.6	TEC Criteria Assessment	September 2018	Summer 2018
3.7	At-grade Rail Crossing Study	September 2018	Summer 2018
3.7	Top High Crash by Community Report	December 2017	September 2017
3.7	Traffic Safety Study of At-grade Bikepath Crossings	September 2018	Summer 2018
3.8	PVTA AVL Data Analysis	Monthly	
3.9	Final Infrastructure Criticality Analysis	December 2017	
3.9	Draft Vulnerability Analysis	September 2018	
3.9	Updates to Regional Climate Action Strategies	Ongoing	
3.10	Updated Green Infrastructure Plan Strategies	Ongoing	
3.10	Pilot Project Implementation	Ongoing	
3.11	Updates to Vision, Goals, Objective and Projections	Ongoing	
3.11	Scenario Planning Assessment	September 2018	
4.1	Fixed Route Service Guideline Updates	Monthly	
4.1	PVTA Schedule Updates	Summer 2018 and Fall 2018	
4.1	PVTA System Map Update	Summer 2018	
4.2	Paratransit Performance Measures	Monthly	
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 2018	
4.5	Local Technical Assistance	As requested	As necessary
4.6	Local Pavement Management Report	Summer 2018	
4.7	Byway Area Committee meetings	Quarterly meetings	
4.9	Bike Share business and equipment models	December 2017	
4.9	Bike Share RFP Release and Management	Fall 2017	
4.9	Bike Share Vendor Selection	Fall 2017	

## **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.

## **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 potential impacted defined minority and low-income block groups in the region. This information is shown on the figure on page 53.

UPWP's for the previous seven years 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, 672 tasks were identified over the seven year period. 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 over the seven year period. This information is summarized on the table on page 54.

Twelve communities were found to have less than five transportation task completed over the seven year period. Four communities (Chesterfield, Hatfield, Middlefield, and Worthington) were identified as having less than three transportation tasks completed from 2010 – 2016. This is a reflection of the smaller size of these communities and their small network of federal aid eligible roadways. PVPC has performed pavement management and traffic counting in some of these communities as summarized in the tables on pages 55 and 56.

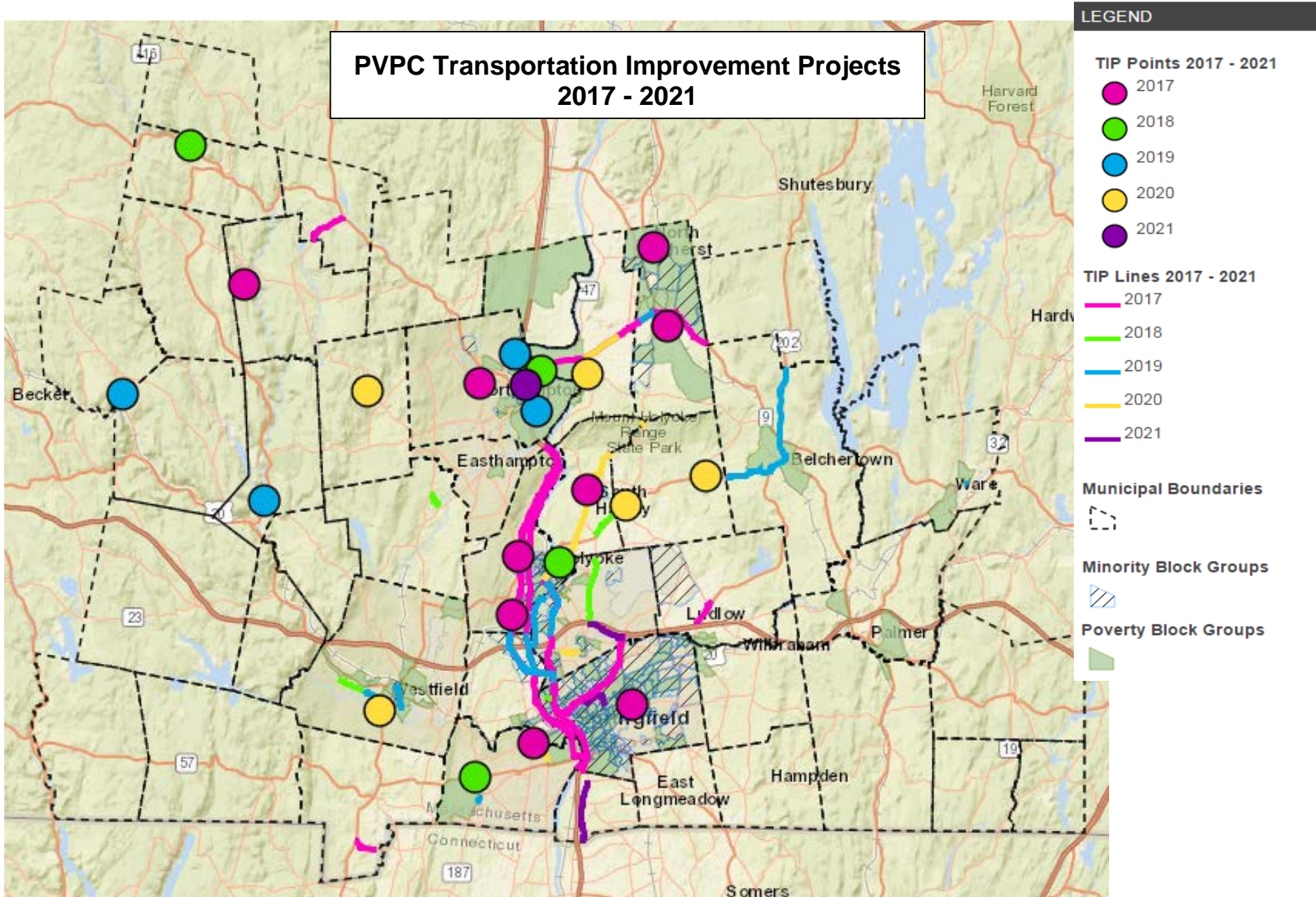
In addition to counts completed for MassDOT and as part of ongoing planning studies, PVPC offer two free traffic counts for each member community per calendar year. Traffic counts over the last seven years were reviewed for each community to determine how much data has been collected across the region 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 55. Traffic counts include both automatic traffic counts and manual turning movement counts.

There is a wide range of traffic count data that 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 will perform outreach to each of these communities on our regional traffic counting program.

PVPC also 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 56. 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 is was collected in 4 communities during 2016 to assist in the development of the update to the Regional Transportation Plan.

Travel time data collected for select communities and corridors as part of the regional congestion management process (CMP) was previously used as an equity assessment measure for the UPWP. PVPC has begun to transition to FHWA's National Performance Management Research Data Set (NPMRDS) to update the regional congestion data. As a result this information is no longer included as part of this equity assessment.





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

## Transportation Tasks By Community and Year

<b>Community</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>Total</b>
Agawam	2	2	2	1	3	1	3	14
Amherst	4	2	4	4	1	1	1	17
Belchertown	1	3	1		1	3	2	11
Blandford	1	1		1		1		4
Brimfield		2	3	2	1			8
Chester	1	2	1	1	1			6
Chesterfield	1						1	2
Chicopee	4	1	3	3	3	3	1	18
Cummington	1		1		1		1	4
East Longmeadow	2	2		1	1	1	1	8
Easthampton	3	3	2	1	3	1	1	14
Goshen	1	1	1		1	1	1	6
Granby		2		3				5
Granville		1	1	1	1		1	5
Hadley	1	3	4	2	1	2	1	14
Hampden	1		2		1		1	5
Hatfield				1			1	2
Holland	1	1				1	2	5
Holyoke	3	5	6	3	3	3	6	29
Huntington	1	1	1	2	1		1	7
Longmeadow	3		1	4	2	1	4	15
Ludlow	7	1			2		1	11
Middlefield		1						1
Monson	1	1		1				3
Montgomery			1	2	1			4
Northampton	7	6	5	7	3	4	5	37
Palmer	1					3	3	7
Pelham	1	1		1				3
Plainfield	1	1	1	1	1			5
Region Wide	38	29	33	34	28	30	26	218
Russell	1	1	1	1		1		5
South Hadley	3	1	2	4	3	2	1	16
Southampton	1	1	2	1		1	2	8
Southwick	6	2	1	2	3	1	2	17
Springfield	8	12	10	6	6	10	14	66
Tolland			1	1	1		1	4
Wales			1	1			1	3
Ware	5	2	1	2	2	3	2	17
West Springfield	4	3	2	2	1	1	3	16
Westfield	1	1	3	3	1		2	11
Westhampton	2			1	1			4
Wilbraham	1		1	1	1		2	6
Williamsburg	1		3	1	1	1	2	9
Worthington	1						1	2
<b>Grand Total</b>	<b>121</b>	<b>95</b>	<b>101</b>	<b>102</b>	<b>80</b>	<b>76</b>	<b>97</b>	<b>672</b>

### Traffic Counts By Community and Year

Community	2010	2011	2012	2013	2014	2015	2016
Agawam	5		1		1		1
Amherst	5	7	5	8	4	8	4
Belchertown	5	7				1	
Blandford	1	2		1			
Brimfield			17				
Chester	1	1	1	2	2	1	4
Chesterfield	4						2
Chicopee	10	1	1	1	16	1	13
Cummington	2		2		2		4
East Longmeadow	8	4		1		3	
Easthampton	10	4	3		3	6	8
Goshen	3	1	1		2		1
Granby		1		6		10	
Granville		3	2	1	1	2	
Hadley	1	1	3	8	1	21	1
Hampden	6		2		2	3	2
Hatfield				1			1
Holland		1					
Holyoke	11	29	13	2	10	3	5
Huntington	3			1		2	
Longmeadow	4		1	3	1		1
Ludlow	9	1			1	6	
Middlefield							
Monson	2	7		2		3	1
Montgomery			2				
Northampton	18	8	16	34	8	10	7
Palmer	3						
Pelham	3	7		1		1	
Plainfield	1	2	6		2		1
Russell	4	4	1	1			
South Hadley	6	12	1	4	3	25	1
Southampton	4	14					
Southwick	21	2	1	2	28	14	3
Springfield	10	15	35	31	24	9	6
Tolland			2	1	2	3	
Wales			2	4			
Ware	9	1			15		
West Springfield	10	1	36	1	8	3	3
Westfield	1	4	5	20	2	6	3
Westhampton	1			1	3	1	4
Wilbraham	6		3	2	7	2	3
Williamsburg	1		13		3	6	2
Worthington	1					2	

### Pavement Data Collection By Community and Year

Community	2010	2011	2012	2013	2014	2015	2016
Agawam					X		
Amherst					X	X	
Belchertown					X		X
Blandford		X				X	
Brimfield	X					X	
Chester	X					X	
Chesterfield	X					X	
Chicopee			X				
Cummington		X				X	
East Longmeadow		X				X	
Easthampton		X					X
Goshen		X				X	
Granby	X					X	
Granville		X				X	
Hadley	X					X	
Hampden		X				X	
Hatfield	X					X	
Holland	X					X	
Holyoke			X			X	
Huntington		X				X	
Longmeadow					X		
Ludlow					X		
Middlefield	No Federal Aid Eligible Roadways						
Monson	X					X	
Montgomery	X					X	
Northampton				X			
Palmer	X					X	
Pelham	X					X	
Plainfield				X		X	
Russell	X					X	
South Hadley	X					X	
Southampton	X					X	
Southwick		X				X	
Springfield			X			X	X
Tolland		X				X	
Wales	X					X	
Ware	X					X	
West Springfield					X		X
Westfield				X		X	
Westhampton		X				X	
Wilbraham	X					X	
Williamsburg		X				X	
Worthington	X					X	

## PLANNING ACRONYMS

**3C** - Continuing, Comprehensive, and Cooperative Planning Process

**AADT** - Average Annual Daily Traffic

**AASHTO** - American Association of State Highway and Transportation Officials

**ADA** - Americans with Disabilities Act (1990)

**ADT** - Average Daily Traffic

**AFV** - Alternative Fuel Vehicles

**ATR** - Automatic Traffic Recorder

**AVR** - Average Vehicle Ridership

**BAPAC** - Barnes Aquifer Protection Advisory Committee

**BID** - Business Improvement District

**BLOS** - Bicycle Level of Service

**BMP** - Best Management Practice

**BMS** - Bridge Management System

**CAAA** - Clean Air Act Amendments of 1990

**CBD** - Central Business District

**CDBG** - Community Development Block Grant

**CDC** - Centers for Disease Control

**CEDS** - Comprehensive Economic Development Strategy

**CIP** - Capital Improvements Plan (or Program)

**CMAQ** - Congestion Mitigation and Air Quality Improvement Program

**CMP** - Congestion Management Process

**CNG** - Compressed Natural Gas

**CO** - Carbon Monoxide

**COG** - Council of Governments

**Comm-PASS** - Commonwealth Procurement Access and Solicitation System

**CPA** - Community Preservation Act

**CPTC** - Citizen Planner Training Collaborative

**CRCOG** - Capitol Region Council of Governments

**CSO** - Combined Sewer Overflow

**DCR** - Department of Conservation and Recreation

**DEP** - Department of Environmental Protection

**DHCD** - Department of Housing and Community Development

**DLTA** - Direct Local Technical Assistance

**DOT** - Department of Transportation

**DPW** - Department of Public Works

**E.O.** - Executive Order

**EDC** - Economic Development Council

**EIR** - Environmental Impact Report

**EIS** - Environmental Impact Statement

**EJ** - Environmental Justice

**ENF** - Environmental Notification Form

**EOA** - Economic Opportunity Area

**EOEEA** - Executive Office of Energy and Environmental Affairs

**EPA** - Environmental Protection Agency

**FA** - Federal Aid

**FAST** - Fixing America's Surface Transportation Act

**FC** - Functional Classification (of roadways)

**FHA** - Federal Housing Administration

**FHWA** - Federal Highway Administration

**FRCOG** - Franklin Regional Council of Governments

**FRTA** - Franklin Regional Transit Authority

**FTA** - Federal Transit Administration

**GHG** - Greenhouse Gas

**GIS** - Geographic Information System

**GPS** - Global Positioning System

**HOV** - High Occupancy Vehicle

**HUD** - U.S. Department of Housing and Urban Development

**ISTEA** - Intermodal Surface Transportation Efficiency Act of 1991

**ITS** - Intelligent Transportation Systems

**JARC** - Job Access and Reverse Commute

**JLSB** - Jacob's Ladder Scenic Byway

**JLT** - Jacob's Ladder Trail

**JTC** - Joint Transportation Committee

**LEP** - Limited English Proficiency

**LOS** - Level of Service

**LPMS** - Local Pavement Management System

**LRV** - Light Rail Vehicle

**LTA** - Local Technical Assistance

**M.G.L.** - Massachusetts General Laws

**MAP 21** - Moving Ahead for Progress in the 21st Century

**MARPA** - Massachusetts Association of Regional Planning Agencies

**MassDOT** - Massachusetts Department of Transportation

**MassGIS** - Massachusetts Geographic Information System

**MEPA** - Massachusetts Environmental Policy Act

**MMA** - Massachusetts Municipal Association

**MOA** - Memorandum of Agreement

**MOU** - Memorandum of Understanding

**MPO** - Metropolitan Planning Organization

**MUTCD** - Manual of Uniform Traffic Control Devices

**NFA** - Non-Federal Aid

**NHS** - National Highway System

**NHTSA** - National Highway Traffic Safety Administration

**NOx** - Nitrogen Oxide

**NTSB** - National Transportation Safety Board

**OCI** - Overall Condition Index (Pavement)

**PCI** - Pavement Condition Index

**PL** - [Metropolitan] Planning Funds

**PMS** - Pavement Management System

**PMUG** - Pavement Management Users Group

**PPP** - Public Participation Process

**PVTA** - Pioneer Valley Transit Authority

**QVCD** - Quaboag Valley Community Development Corp.

**REB** - Regional Employment Board

**RIF** - Roadway Inventory Files

**RPA** - Regional Planning Agency  
**RTA** - Regional Transit Authority  
**RTP** - Regional Transportation Plan  
**SAFETEA-LU** - Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users  
**SBA** - Small Business Administration  
**SIP** - State Implementation Plan (for air quality)  
**SKC** - Sustainable Knowledge Corridor  
**SOV** - Single Occupancy Vehicle  
**SPR** - Statewide Planning and Research Funds  
**STIP** - Statewide Transportation Improvement Program  
**STP** - Surface Transportation Program  
**TCSP** - Transportation and Community System Preservation [Pilot Program]  
**TDM** - Transportation Demand Management  
**TEA-21** - Transportation Equity Act for the 21st Century

**TIP** - Transportation Improvement Program  
**TMC** - Turning Movement Count  
**TND** - Traditional Neighborhood District  
**TOD** - Transit Oriented Design (or Development)  
**TRB** - Transportation Research Board  
**TRO** - Trip Reduction Ordinance  
**TSM** - Transportation Systems Management  
**UMass** - University of Massachusetts  
**UPWP** - Unified Planning Work Program  
**VMT** - Vehicle Miles Traveled  
**VOC** - Volatile Organic Compound  
**VOR** - Vehicle Occupancy Rate  
**WBE** - Women-owned Business Enterprises  
**WRWA** - Westfield River Watershed Association  
**WRWSAC** - Westfield River Wild & Scenic Advisory Committee  
**ZBA** - Zoning Board of Adjustment (or Appeals)

## PREVIOUS TRANSPORTATION STUDIES

Jacob's Ladder Trail Scenic Byway - Landscape Inventory & Assessment  
Jacob's Ladder Trail Scenic Byway Study- Executive Summary  
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 – Holyoke, 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  
 PVRTA 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  
 PVRTA 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 Study  
 GHG Analysis for Major Corridors  
 I-391 Ramp Congestion Study  
 Top 100 High Crash Intersection Report  
 Draft Critical Infrastructure Vulnerability Assessment  
 PVRTA Northern Tier On-Board Survey  
 Regional Performance Measures Updates

## STUDIES COMPLETED AS PART OF THE FY 2017 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  
 PVRTA Schedule Changes and Updates  
 FFY 2018 Unified Planning Work Program  
 FFY 2017 Transportation Improvement Program  
 Amendments  
 FFY 2018 – 2022 Transportation Improvement Program  
 2017 Bike Commute Week  
 Listing of TAP Eligible Project Components  
 Updated Four Factor Analysis  
 High Speed Tolling Analysis for Massachusetts Turnpike  
 Agawam/West Springfield Route 147 Improvement Project  
 Analysis  
 Updated Online Regional Bike Map  
 Sidewalk Gaps and Inventory Recommendations  
 Bicycle Parking Administration Assessment  
 Palmer Sidewalk Inventory  
 PVRTA Paratransit Rider Survey  
 State Freight Plan Advisory Committee  
 Easthampton – Route 10 at South Street Intersection Study  
 Union Station Roadway Safety Audit  
 Draft Top Crash Locations by Community Report  
 Regional Trails Map Update  
 Bikeway Linkages Update  
 Bike Share Scope of Work and Station Locations

## FUNDING SUMMARY

<b>Transportation Funding</b>	<b>Value</b>	<b>% of Total</b>
FHWA PL (80%)	\$ 833,460.00	53.97%
MassHighway PL (20% match)	\$ 208,365.00	13.49%
FTA Section 5307 (80%)	\$ 176,000.00	11.40%
PVTA Section 5307 (20% match)	\$ 44,000.00	2.85%
FTA Section 5303 (80%)	\$ 218,039.00	14.12%
PVTA Section 5303 (20% match)	\$ 54,510.00	3.53%
Local Funds (includes in-kind contributions)	\$ 10,000.00	0.65%
<b>Total</b>	<b>\$ 1,544,374.00</b>	<b>100.00%</b>
<b>Other Funding</b>		
	<b>Value</b>	<b>% of Total</b>
Other Commonwealth of Massachusetts	\$ 2,737,710.00	46.95%
US Environmental Protection Agency	\$ 75,000.00	1.29%
US Department of Agriculture	\$ 200,000.00	3.43%
US Department Health/Human Services	\$ 360,000.00	6.17%
US Economic Development Administration	\$ 70,000.00	1.20%
US Department of Homeland Security	\$ 90,000.00	1.54%
Other Federal Revenue	\$ 263,000.00	4.51%
Local Grants	\$ 1,937,495.00	33.23%
Local Assessments	\$ 97,645.00	1.67%
<b>Total</b>	<b>\$ 5,830,850.00</b>	<b>100.00%</b>

<b>Overall Funding</b>	<b>Value</b>	<b>% of Total</b>
FHWA PL (80%)	\$ 833,460.00	11.30%
MassHighway PL (20% match)	\$ 208,365.00	2.83%
FTA Section 5307 (80%)	\$ 176,000.00	2.39%
PVTA Section 5307 (20% match)	\$ 44,000.00	0.60%
FTA Section 5303 (80%)	\$ 218,039.00	2.96%
PVTA Section 5303 (20% match)	\$ 54,510.00	0.74%
Local Funds (includes in-kind contributions)	\$ 10,000.00	0.14%
Other Commonwealth of Massachusetts	\$ 2,737,710.00	37.12%
US Environmental Protection Agency	\$ 75,000.00	1.02%
US Department of Agriculture	\$ 200,000.00	2.71%
US Department Health/Human Services	\$ 360,000.00	4.88%
US Economic Development Administration	\$ 70,000.00	0.95%
US Department HUD	\$ 90,000.00	1.22%
Other Federal Revenue	\$ 263,000.00	3.57%
Local Grants	\$ 1,937,495.00	26.27%
Local Assessments	\$ 97,645.00	1.32%
<b>Total</b>	<b>\$ 7,375,224.00</b>	<b>100.00%</b>



## **MPO ENDORSEMENT**