



# Unified Planning Work Program



**for the Pioneer Valley Metropolitan Planning Organization**

Fiscal Year 2016

October 1, 2015 to September 30, 2016



Prepared by  
Pioneer Valley Planning Commission  
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Draft Document  
May, 2015

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 Tinlin	Acting Administrator of the Massachusetts Department of Transportation Highway Division
Walter Gunn	Chairman of the Pioneer Valley Executive Committee
John Musante	Chairman of the Pioneer Valley Transit Authority Advisory Board
Mayor Domenic Sarno	Mayor of Springfield
Mayor Alexander Morse	Mayor of Holyoke
Mayor Richard Cohen	Mayor of Agawam
Mayor David Narkewicz	Mayor of Northampton
George Archible	Belchertown Board of Selectmen
Marcus Boyle	Hatfield Board of Selectmen
<b>Alternates</b>	
Mayor Richard Kos	Mayor of Chicopee
Mayor Daniel M. Knapik	Mayor of Westfield
<b>Ex-Officio (Non-Voting)</b>	
Pamela Stephenson	Federal Highway Administration
Mary Beth Mello	Federal Transit Administration
Stephen Roberts	Economic Development Council of Western Massachusetts
Mary MacInnes	Administrator of the Pioneer Valley Transit Authority
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.

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## 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 other members of the MPO including the Pioneer Valley Transit Authority and the Massachusetts Department of Transportation (MassDOT).

The UPWP also identifies the federal, state, and local funding sources used to carry out the proposed tasks. This document was prepared in compliance with the Moving Ahead for Progress in the 21<sup>st</sup> century Act (MAP-21) and addresses its seven national goals and eight planning factors. Tasks included in the UPWP were developed to advance key emphasis areas as identified by the Federal Highway Administration and the Federal Transit Administration. Planning activities also comply with MassDOT's GreenDOT Initiative. 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 2016 include:

- Task 3.1 – Regional Bicycle and Pedestrian Planning will seek to coordinate Complete Streets Policy Initiatives for local communities to advance local implementation plans and complete streets oriented transportation improvements.
- Task 3.2 – Transit System Surveys and Route Implementation will perform a system wide survey of PVTA's southern region to ascertain the effectiveness of the implementation of recommendations from the Comprehensive Service Analysis.
- Task 3.4 – Regional Freight Planning will finalize a regional freight plan and develop a survey for private truck carriers and operators to identify regional freight needs and bottlenecks.
- Task 3.5 – Regional Congestion Management Process Project Development will complete a study on congestion that occurs in the northbound direction on Interstate 391 at exits 3 and 4 causing traffic to queue onto the highway during the afternoon peak hour.
- Task 3.7 – Regional Performance Measures Assessment will develop a status report on the progress made in advancing and meeting identified regional performance measures. This task is intended to focus on the federal planning emphasis area of "transitioning to performance-based planning and programming."
- Task 3.8 – Regional Safety and Planning Studies will update the Top 100 High Crash Intersections Report for the latest three years of safety data. A specific focus will be placed on identifying areas in the region that have a history of bicycle and pedestrian conflicts. The Route 9 Safety and Livability Study task for the City of Northampton will also be finalized as part of the FY2016 UPWP.
- Task 3.10 – Climate Change Implementaton will perform an inventory and vulnerability assessment of critical Pioneer Valley transportation, water and wastewater infrastructure that may be vulnerable to the impacts of climate change.

**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 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.

## 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 Moving Ahead for Progress in the 21<sup>st</sup> Century (MAP-21), 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, 2015 through September 30, 2016
FTA/MassDOT	April 1, 2015 through March 30, 2016
PVTA	April, 2015 through September, 2016
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 \_\_\_\_\_.*

## 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. Below is a summary of PVPC's continuing PL funding account.

Total PL Allocation FY 2015	\$978,586
Total PL Expenditures as of April 30, 2015	\$415,468
Estimated PL Expenditure for Remainder of FFY 2015 UPWP	\$563,118
Current PL Balance (Estimated including FY2016)	\$2,250,539
Estimated PL Expenditure in FFY 2016 UPWP	\$943,030
Estimated PL Balance as of September 30, 2015	\$744,391

Source: PVPC

A total of \$943,030 in PL funds has been programmed for the FY2016 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 FY2016.

**FTA/MassDOT/PVTA** –Two types of funds are used for transit planning purposes in the Pioneer Valley region; Section 5303 (formerly Section 8 Metropolitan Planning) and Section 5307 funds (formerly Section 9 Capital) 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) and Section 5317 (New Freedom) funds for administration of these two programs. Both programs are 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. Section 5317 funds are used to support new public transportation services and public transportation alternatives beyond those required by the Americans with Disabilities Act (ADA) of 1990. 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 the 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.

## THE EIGHT PLANNING FACTORS

All metropolitan planning organizations are required to incorporate eight factors into their planning process. The Pioneer Valley MPO has taken great strides to incorporate these eight factors into the Unified Planning Work Program. The Eight Planning Factors 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 3.4 - Regional Freight Planning Task 3.7 – Regional Performance Measures Assessment
2	Increase the safety of the transportation system for motorized and non-motorized users.	Task 3.1 - Regional Bicycle and Pedestrian Planning Task 3.8 - 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 3.9 - 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 3.4 - 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 3.10 - Climate Change Implementation Task 3.11 - Green Streets and Infrastructure
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 3.4 - 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 3.5 - Regional Congestion Management Process - Project Development
8	Emphasize the preservation of the existing transportation system.	Task 3.6 - Regional Pavement Management System - Project Development Task 3.10 Climate Change Implementation Task 3.11 Green Streets and Infrastructure

## MOVING AHEAD FOR PROGRESS IN THE 21<sup>ST</sup> CENTURY (MAP-21)

The MAP-21 legislation was signed into law by President Obama on July 6, 2012. This transportation bill creates a performance-based surface transportation program to address the challenges faced the U.S. transportation system. MAP-21 specifically addresses all modes of transportation and refines many of the existing programs defined in past transportation legislation.

As part of the transition to a performance-based transportation program, states will begin to invest in transportation improvements that demonstrate progress towards the following seven national goal 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
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. Staff has also been utilizing data available from the ITS equipped transit vehicle to develop new performance measures.	Safety, Congestion Reduction, System Reliability
3.4	<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

3.5	<p><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. The MPO collects vehicle travel time data to assist in tracking congestion. Planning studies are developed for congested areas to assist in developing projects to reduce congestion.</p>	Congestion Reduction, System Reliability
3.6	<p><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.</p>	Infrastructure Condition, Reduce Project Delivery Delays
3.7	<p><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). The progress made towards each regional performance goal will be updated on an annual basis.</p>	All
3.8	<p><b>Regional Safety and Planning Studies</b> – The MPO develops a list of the Top 100 High Crash Intersections every four years. The Top 100 list is used to monitor the effectiveness of regional safety improvements and to advance planning studies to identify potential safety improvements.</p>	Safety, Reduce Project Delivery Delays
3.9	<p><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.</p>	Safety, Congestion Reduction, System Reliability
3.10	<p><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.</p>	Infrastructure Condition, Environmental Sustainability
3.11	<p><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.</p>	Infrastructure Condition, Environmental Sustainability

## FEDERAL PLANNING EMPHASIS AREAS

FHWA and FTA have established Federal Planning Emphasis Areas to assist in the implementation of MAP-21 and guide regional transportation planning efforts. The Federal Planning Emphasis Areas are:

- *MAP-21 Implementation – Transition to Performance-based Planning and Programming.* The PVPC has specifically included Tasks 2.7 and 3.7 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 – Ensure a Regional Approach to Transportation Planning by Promoting Cooperation and Coordination across Transit Agency, MPO and State Boundaries.* PVPC routinely coordinated its planning activities with MassDOT, regional transit authorities, and bordering regional planning agencies. We 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, 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. Task 3.1 – Regional Bicycle and Pedestrian Planning. 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. An equity assessment of transportation planning tasks completed as part of previous UPWP's is included as part of the FY2016 UPWP.

## PIONEER VALLEY METROPOLITAN PLANNING ORGANIZATION MEMBERS

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

Chicopee	Holyoke	Springfield
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- The Mayor or a Selectman of one of the following four (4) cities and towns:

Agawam	Southwick	Westfield
West Springfield		

- 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	

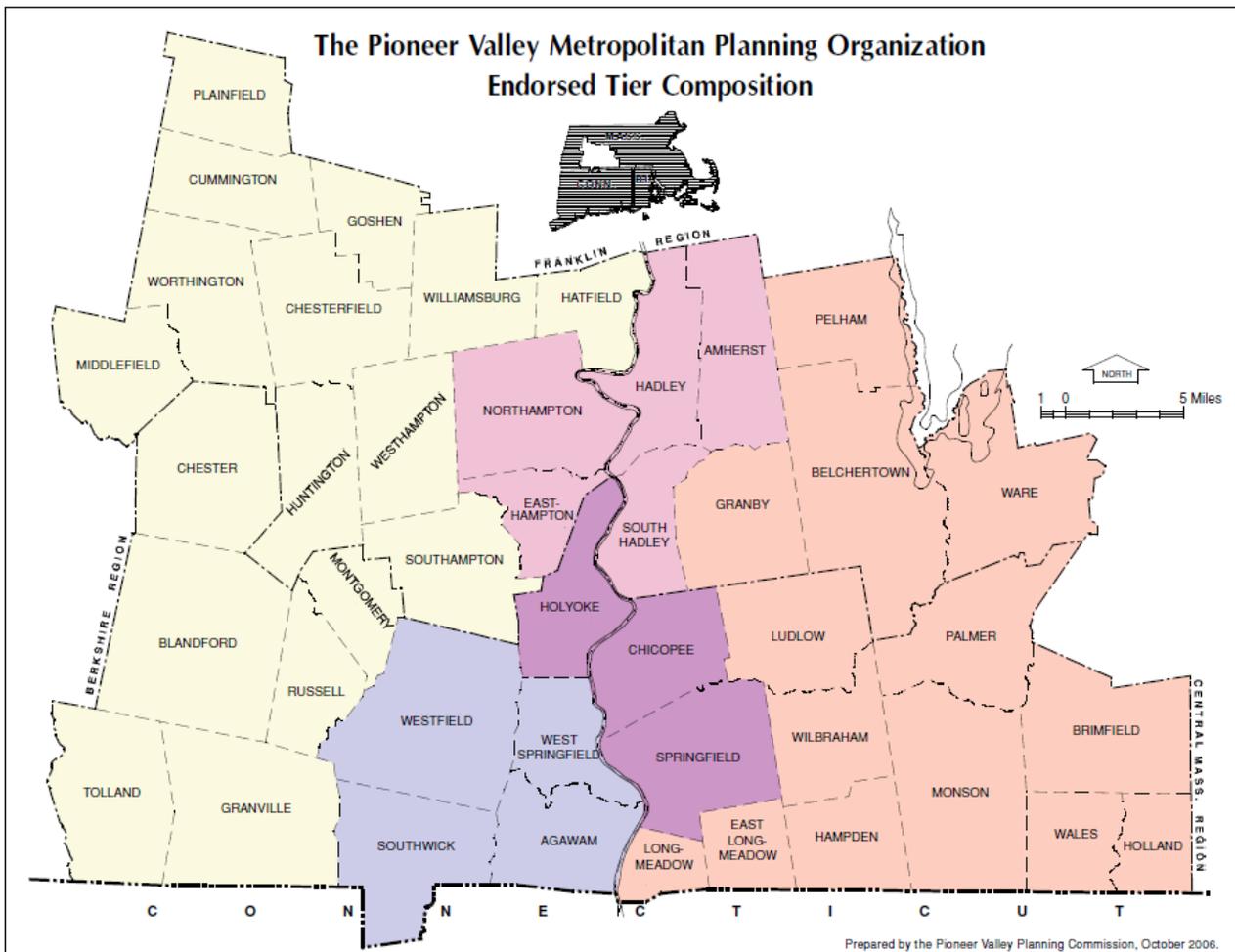
- A Selectman of one of the following seventeen (17) suburban and rural towns:

Blandford	Chester	Chesterfield
Cumington	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 Chair of the Infrastructure Committee of the Western Massachusetts Economic Development Council (EDC), 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 Tinlin	Acting Administrator of the Massachusetts Department of Transportation Highway Division
Walter Gunn	Chairman of the Pioneer Valley Executive Committee
John Musante	Chairman of the Pioneer Valley Transit Authority Advisory Board
Mayor Domenic Sarno	Mayor of Springfield
Mayor Alexander Morse	Mayor of Holyoke
Mayor Richard Cohen	Mayor of Agawam
Mayor David Narkewicz	Mayor of Northampton
George Archible	Belchertown Board of Selectmen
Marcus Boyle	Hatfield Board of Selectmen
<b>Alternates</b>	
Mayor Richard Kos	Mayor of Chicopee
Mayor Daniel M. Knapik	Mayor of Westfield



## 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	Brian P. Barnes	Vacant
Belchertown	Steven Williams	Gary Brougham/Douglas Albertson
Blandford	Vacant	Vacant
Brimfield	Vacant	Vacant
Chester	Rene Senecal	Vacant
Chesterfield	Matt Smith	Vacant
Chicopee	Jeffrey Neece	Steven Frederick
Cummington	Rob Dextraze	Vacant
East Longmeadow	Robert Peirent	John M. Claffey
Easthampton	James Gracia	Jessica Allen
Goshen	Joe Dunn	Vacant
Granby	David Derosiers	Vacant
Granville	Doug Roberts	Vacant
Hadley	Vacant	Vacant
Hampden	Vacant	Vacant
Hatfield	Phil Genovese	Vacant
Holland	Jim Wettlaufer	Brian Johnson
Holyoke	Matt Sokop	Jeffrey Burkott
Huntington	Charles Dazelle	Vacant
Longmeadow	Paul Santaniello	Yem Lip
Ludlow	Paul Dzubick	Elie Villeno
MassBike	Don Podolski	Elaine Formica
MassDOT District 1	Mark Moore	Peter Frieri
MassDOT District 2	Richard Masse	Darryl Amaral
Middlefield	Rodney Savery, Jr.	Alan Vint
Monson	John Morrell	Vacant
Montgomery	Curtis Bush, Jr.	Vacant
Northampton	Wayne Feiden	Vacant
Palmer	Graig Dolan	Andrew Golas
Pelham	Rick Adamcek	Vacant
Peter Pan Bus Lines	Peter Picknelly, Jr.	Vacant
Pioneer Valley Railroad	Michael Rennie	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	Peter Shumway
Tolland	James Deming	Vacant
University of Massachusetts	Glen Barrington	Vacant
Wales	Michael Wasiluk	Vacant
Ware	Vacant	David Tworek
Western Massachusetts Economic Development Council	Ken Delude	Vacant
Westfield	Mark Cressotti	Vacant
Westhampton	David Blakesly	Brian Mulvehill
West Springfield	James W. Lyons	
Wilbraham	Tonya Bosch	Vacant
Williamsburg	William Turner	Vacant
Worthington	Cork Nugent	Vacant

## TRANSPORTATION PLANNING STAFF

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

<u>Name</u>	<u>Title</u>
Rana Al Jammal	Senior Transportation Planner - Specialist
Alexander Forrest	Transit Planner II
David Johnson	Transportation Planner - Specialist
Amir Kouzehkanani	Principal Planner – Manager
Andrew McCaul	Transportation Planner I
Jeffrey McCollough	Senior Transportation Planner - Specialist
Khyati Parmar	Senior Transportation Planner II
Andrew Oh	Transit Planner
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 FY2015 Unified Planning Work Program. The percentage of each staff member's time devoted to Transportation Planning Tasks is approximated under “% Time on Transportation”.

<u>Staff</u>	<u>Position</u>	<u>% Time on Transportation</u>
Rana Al Jammal	Senior Transportation Planner - Specialist	100%
Jaimye Bartak	Senior Planner	7%
David Elvin	Senior Planner	7%
Ray Centeno	Graphics Designer	25%
Christopher Curtis	Chief Planner/Section Manager	16%
Jacob Dolinger	GIS Specialist	25%
Christopher Dunphy	Community Development Senior Planner	10%
Alexander Forrest	Transit Planner II	100%
Patty Gambarini	Senior Planner	7%
Molly Goren-Watts	Principal Planner/Manager of Regional Information and Policy Center	23%
Dave Johnson	Transit Planner - Specialist	100%
Erica Johnson	Community Development Planner	10%
Amir Kouzehkanani	Principal Transportation Planner/Manager	100%
James Mazik	Deputy Director for Operation/Community Development Section Manager	5%
Andrew McCaul	Transportation Planner I	100%
Jeffrey McCollough	Senior Transportation Planner	100%
Andrew Oh	Transit Planner	100%
Khyati Parmar	Senior Transportation Planner II	100%
Catherine Ratte	Principal Planner/Section Manager	1%
Dana Roscoe	Principal Planner – Section Manager	100%
Gary Roux	Principal Planner – Section Manager	100%
Ashley Shea	Communications Manager	19%
Larry Smith	Senior Planner	8%
Johanna Stacy	Data and Policy Analyst/Planner II	35%
Dillon Sussman	Senior Planner	7%
Todd Zukowski	GIS/Cartographic Section Manager	25%
Transportation Interns (2)	Intern	100%
Data Interns (2)	Intern	50%

## 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 PVRTA 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  
PVRTA 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  
PVRTA Green 01 Transit Route Survey  
PVRTA 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  
PVRTA 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 Systemwide 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  
 PVTa Schedule Changes and Updates

PVPC Green Tips  
Valley Vision ToolBox Update  
2013 Bike Commute Week  
Merrick/Memorial Phase 2 Existing Conditions  
Brimfield Safety Study  
[State of the Pioneer Valley Update](#)  
Southern Service Area Customer Satisfaction Survey  
Pine Street Congestion Study – Florence, MA  
Final Top 100 High Crash Intersections 2007 – 2009  
FFY 2015 Unified Planning Work Program  
FFY 2014 Transportation Improvement Program  
Amendments

FFY 2015 – 2018 Transportation Improvement Program  
I-91 Corridor Planning Study – Existing Conditions  
Merrick/Memorial Phase 2 Study  
Ware Shuttle Survey  
Palmer Shuttle Survey  
Route 9 Safety and Livability Study Data Collection  
Depot Street/Sheep Pasture/Powder Mill Road Safety Study  
Route 202 at Amherst Street Traffic Signal Warrant Analysis  
2014 Bike Commute Week  
Regional Traffic Count Summary (2009-2013)  
Valley Vision ToolBox Update

## **STUDIES COMPLETED AS PART OF THE FY 2015 UPWP**

[Community and Facility Profiles](#) (various)  
Local Technical Assistance Requests (various)  
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  
MassHighway 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  
Cherry Street at Homestead Avenue Safety Study, Holyoke

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

This work element encompasses the administration and support of the 3-C transportation process and has been divided into the following tasks for FY 2016.

**Task 1.1 Management of the 3-C 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, PVTA, 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.

**PRODUCTS:**

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

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	\$22,707
Indirect Costs	\$27,293

## Task 1.2 Unified Planning Work Program

### OBJECTIVE:

To prepare and maintain a Unified Planning Work Program (UPWP) that describes all anticipated transportation-related 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 - 2015.

### 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. 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 2017)

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

Direct Labor	\$3,974
Indirect Costs	\$4,776

## Task 1.3 Public Participation Process

### OBJECTIVE:

To engage the community and foster an inclusive involvement in the transportation decision making process through a commitment to early and continuous opportunities for the public to be involved in the identification of the social, economic and environmental impacts of transportation. PVPC will reach beyond traditional stakeholders to identify low-income, minority and LEP populations within the Region, identifying population appropriate strategies to be utilized to engage such populations and to seek their input on specific decisions. Our inclusive public participation process will be constantly improving and expanding to include contacts with community-based organizations and networks that can reach the minority, low-income and LEP populations while supporting the objectives of MAP-21.

### PREVIOUS WORK:

1. Expanded stakeholder outreach and capacity building.
2. Created an RTP informational video.
3. Upgraded audio equipment for public meetings to comply with new state regulations.

4. Updated the Pioneer Valley Public Participation Process.
5. Use of social media including Twitter, Facebook, and the PVPC webpage.
6. Press releases announcing transportation projects and events
7. Quarterly PVPC newsletter “Regional Reporter”

**PROPOSED ACTIVITIES:**

1. PVPC will revise and overhaul the MPO’s entire public participation process to incorporate new guidance from FTA and FHWA.
2. Expand “visioning” tools approaches to improve public participation and outreach efforts including new online mapping tools using the PVPC GIS server capabilities.
3. Refocus strategic outreach efforts that actively engage organizations and groups within the framework of existing and established venues.
4. Incorporate public engagement plans into community projects.
5. 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.
6. Incorporate new performance measures for the Public Participation Process and implement changes as needed and track these metrics.
7. Explore alternative media outlets for reaching the Limited English Proficient (LEP) population in the region.
8. Network with social service agencies, neighborhood groups and community organizations to enhance existing outreach.
9. Coordinate public participation with ongoing Environmental Justice Planning (Task 1.5).
10. Include revisions to the PVPC webpage to maintain current information on transportation studies and ongoing projects.

**PRODUCTS:**

1. Meeting minutes.
2. Press releases for transportation projects.
3. Web based information distribution.

Source	Budget	Est. Staff Effort
FHWA PL (80%)	\$11,600	8 weeks
MassDOT (20% match)	\$ 2,900	2 weeks
FTA S.5303	\$ 7,500	4 weeks
<b>TOTAL</b>	<b>\$22,000</b>	<b>14 weeks</b>

Direct Labor	\$ 9,991
Indirect Costs	\$12,009

**Task 1.4 Transportation Improvement Plan (TIP) Development**

**OBJECTIVE:**

The TIP is a four year schedule of federally funded transportation and transit projects for the Pioneer Valley Region. The PVMPO with assistance from PVPC Staff, the JTC, and MassDOT evaluate, coordinate and prioritize a listing transportation and transit improvements to be considered for funding. During this process staff will work to ensure the TIP is fiscally constrained, consistent with the goals and objectives of MAP-21, the Massachusetts GreenDOT Policy, 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 the public outreach is complete, the MPO

with then endorse the TIP and send it to MassDOT for inclusion in the State Transportation Improvement Program (STIP).

**PREVIOUS WORK:**

1. Pioneer Valley Transportation Improvement Programs 1974 – 2016
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. Integrated New TEC forms

**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 and Green DOT Policy 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. Collect GPS data for all projects programmed on the TIP for use with GIS based analysis.

**PRODUCTS:**

1. FFY 2017 - 2020 Transportation Improvement Program.
2. TIP Amendments and Adjustments as necessary.
3. Summary report for comments received during public review for amendments made to the TIP.
4. Ranked list of evaluated TIP projects, with corresponding TEC sheets.
5. Map displaying the 4 years of programmed projects available online.
6. TIP webpage providing all pertinent project information.

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	\$31,222
Indirect Costs	\$37,528

## **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 of low-income, minority and LEP 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. Created a database of non-profit contacts in the region.
2. Created an RTP video with Spanish Language Translations.
3. Updated and submitted revised Title VI program to MassDOT Office of Diversity and Civil Rights (ODCR) and FTA.
4. Revised the TIP scoring criteria to reflect EJ and Title VI.
5. Engaged community organization and non-english speaking residents in the development of the Springfield Bicycle and Pedestrian Plan.
6. Updated the Notice to Beneficiaries to comply with definitions requested by MassDOT.
7. Compiled a list of sign language interpreters.
8. Expanded translation of project related documents and notices to address LEP specific issues.
9. 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.
10. Participated in statewide Title VI networking sessions with the MassDOT Title VI Specialist and other RPAs.
11. Developed bi-lingual survey forms.
12. Coordination with Baystate Health Systems, Springfield Health Coalition, Live Well Springfield, the Rails to Trails Conservancy, and the Springfield Planning Department to create an ongoing Built Environment Task Force to examine transportation barriers in Springfield neighborhoods.

### **PROPOSED ACTIVITIES:**

1. Create a form letter to inform new Title VI database contacts on the operation and role of PVPC and the MPO.
2. Revise and update the database of community contacts including email addresses.
3. Revise the Public Participation Plan to incorporate Title VI and LEP components consistent with MassDOT.

4. Develop strategic LEP outreach plans for individual planning studies as appropriate.
5. Create new Title VI Mapping tools for Title VI and EJ populations for PVPC communities.
6. Continue to expand database of email contacts for non-profit and community based organizations.
7. Enhance evaluation related to Title VI and EJ performance measures.
8. Work closely with the MassDOT Title VI Specialist and CTPS to assess jurisdictional responsibilities for any potential complaints and maintain an open dialogue.
9. Provide the MassDOT Title VI Specialist with an annual update of documented complaints, Title VI related activities, and progress in implementing Title VI programs.
10. Conduct analysis of demographic data including GIS layers of minority populations, languages that meet the 5% threshold in their area, Limited English Proficient populations, Environmental Justice, gender, age, and disability against the location of the projects in the region. This mapping tool (GIS) will be used as a reference during decision making and/or prioritization.
11. Review the Four Factor analysis PVPC uses to formulate a Language Access Plan as required under Executive Order 13166. Evaluate alternative to the use of Safe Harbor Provisions.
12. 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.
13. Distribute Notice of Beneficiaries to community organizations and relevant contacts as identified in the Public Participation Plan
14. 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.
15. 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.
16. Continue to incorporate “visioning techniques” in new projects and planning tasks that will better engage low income and minority populations.
17. 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.
18. Continue to assess proposed transportation investments in the Pioneer Valley region to determine whether low-income and minority communities are receiving a fair allocation of available resources.
19. Review Measures of Effectiveness (MOEs) regarding the implementation of Title VI.
20. 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.

**PRODUCTS:**

1. Title VI incorporated into MPO approved revisions to the Public Participation Plan.
2. Annual report to MassDOT on EJ, Title VI and LEP.

3. Updated income map and 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. Race sensitivity training for staff as appropriate.
7. 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	\$53,125	33 weeks

Direct Labor	\$24,126
Indirect Costs	\$28,999

## 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 FY2016 UPWP.

#### PREVIOUS WORK:

1. Regional Traffic Counting Program 1985 - 2015.
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, 2009 – 2013.

#### 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. 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.
7. Update and maintain the PVPC traffic count database.
8. Collect bicycle and pedestrian volumes at pre-determined locations.
9. Update the PVPC's Regional Traffic Count summary report to include ATR counts for the most recent 5 year period.

#### PRODUCTS:

1. PVPC Regional Traffic Count report 2011 - 2015
2. Summary reports of daily traffic count information for the region.
3. PVPC web page Average Daily Traffic counts by community.

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

Direct Labor	\$17,030
Indirect Costs	\$20,470

## **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. Prepared the "PVPC 2010 TAZ Development Guide" outlining procedures followed in creating the base year 2010 model and identifying areas of intersection with the statewide model polygons, areas of finer geography detail, and transformations needed to link the socio economic data from the Census 2010 and ACS 2009.
2. Created the "PV 2010 Model Running Steps Draft" report. This report compiled a step by step user's guide for running the regional travel demand model's simple approach.
3. Used the Quick Response Method application to generate trips for the base year 2010 model. This was followed by a Gravity application for trip distribution and a User Equilibrium Traffic Assignment. The resulting estimated traffic flows were then compared to ADT's at external stations to assess accuracy.
4. Developed a new Transportation Analysis Zone Layer based on the 2010 Census geographies.
5. Calculated a Cross Classification matrix using the number of vehicles and number of people in a household for the 2010 model year.
6. Created a Productions and Attractions table for the internal and external zones in the 2010 base year model.
7. Updated the roadway network with connections to the newly created centroids for the 2010 base year model.
8. Compiled geocoded databases for traffic count locations. This included past Average Daily Traffic data collected at community lines and external stations gathered from in-house traffic counts.
9. Calculated Average Weekday Travel from the Average Annual Daily Travel at External Stations.
10. Draft a memorandum describing the PVPC travel demand model (August 2015).
11. Revise the PV 2010 Model Running Steps report and include new methodologies used in trip generation, trip distribution, and trip assignment developed in accordance with MassDOT guidance (September 2015).

### **PROPOSED ACTIVITIES:**

1. Continue development and refinement of the 2010 base model for the PVPC region following the new approach outlined by CTPS. Perform calibration as appropriate. Create new model macros to read new data and geographies and run models for current and future years (October 2015).
2. Create one comprehensive geocoded database for traffic count locations used in the regional model. This would include new Average Daily Traffic data at community lines and external stations

- gathered from in-house traffic counts as well as from surrounding planning agencies (March 2016).
3. Obtain up to date information on non-exempt regional projects for inclusion in the statewide model from the Office of Transportation Planning (ongoing).
  4. 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).
  5. Perform Greenhouse Gas emissions calculations for projects included on the TIP consistent with the Massachusetts Global Warming Solutions Act (ongoing).
  6. Provide supporting data from the regional travel model to communities and MassDOT upon request (ongoing).
  7. Utilize the regional travel model to assist in the development of future build out estimates of transportation planning activities (ongoing).
  8. Estimate effects of transportation improvement projects on communities by activating local roadway links within the regional model (as needed).
  9. Conduct a separate peak period and off peak highway assignment which sum up to yield daily traffic flows (January 2016).

**PRODUCTS:**

1. Update and maintenance of the regional travel demand model.
2. Air quality conformity and greenhouse gas analysis in support of the TIP.
3. Maps for graphical representation of existing model structure.
4. Transportation build out analysis for TIP projects as needed.

Source	Budget	Est. Staff Effort
FHWA PL (80%)	\$48,000	24 weeks
MassDOT (20% match)	\$12,000	6 weeks
FTA S. 5303	\$ 5,625	2 weeks
TOTAL	\$65,625	32 weeks

Direct Labor	\$29,802
Indirect Costs	\$35,823

**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 MAP21 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 3-C 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 coverages 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).

**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 & 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. Continue to create and update digital municipal spatial data on a phased basis using aerial photography, digital orthophoto quads, municipal sources, field survey, and liaison with officials. (Ongoing Task)
5. Work with state and federal agencies to review, correct and enhance regional GIS map coverages 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)
6. 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)
7. Improve access and use of web-based GIS data/analysis, online data and map products.
8. 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)

**PRODUCTS:**

1. Development of new and enhanced digital data layers.
2. Update to municipal planimetric base maps as necessary.
3. Transportation systems facility and planning maps.
4. Expand, update and maintain the GIS website.
5. Development of regional spatial data to support federal and state initiatives.
6. Update centerline/road inventory and functionally classified roads, as necessary.

Source	Budget	Est. Staff Effort
FHWA PL (80%)	\$46,380	23 weeks
MassDOT (20% match)	\$11,595	6 weeks
FTA S. 5303	\$ 8,750	4 weeks
PVTA S. 5307	\$15,000	8 weeks
TOTAL	\$81,725	41 weeks

Direct Labor	\$37,114
Indirect Costs	\$44,611

**Task 2.4 Information Center**

**OBJECTIVE:**

Support initiatives and goals of MAP-21 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 resource to support Task 2.7 regional performance measure development. Additionally, continue to maintain regional data and related technical infrastructure as well as collect, analyze, and interpret data about the Pioneer Valley region. Focus will continue to be placed on collecting and summarizing data from multiple sources to provide digital and print products that will inform stakeholders in a variety of methods to support ongoing transportation activities. The Information & Policy 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.

**PREVIOUS WORK:**

1. Updated regional and municipal level population and employment projections 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 and related socio-economic analysis.
3. Updated population, household, and employment estimates and projections which comply with the new 2010 Census.
4. Published data products focused on population and housing shifts, Major Employers, and access to food in the Pioneer Valley region.
5. Continued maintenance and updating of a municipal indicators database for every city and town in the Pioneer Valley and updated through January 2013 data.
6. Assisted with analysis of employment centers for regional TOD analysis.
7. Continued data updates in the development of updated definitions of Environmental Justice populations for the Pioneer Valley Region.
8. State of the Region/People – 2013 Update.
9. Analyzed labor market for proposed regional passenger rail project.

10. Regional economic development strategy that for a green regional economy and expanded regional transportation system.
11. Developed a data downloads website available to regional planners and the public. [www.pioneervalleydata.org](http://www.pioneervalleydata.org)
12. Completed first round of integrating community profiles into “Our Communities” page of the PVPC website to allow for easier updating and data access. Worked with consultant to produce second phase of integration for more complex profile creation.

**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 make informed decisions about their community by sharing information widely. This activity continues to focus on making data easily available and understandable, pulling from 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 website will be a key component of this work to ensure the timeliness of the information available. This is an ongoing, annual task.
3. Respond to requests for data and analysis from municipalities and other external stakeholders as requested. This is an ongoing, annual task.
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. 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.
6. Assist in the integration of transportation related initiatives within the regional economic development plan. This is an ongoing, annual task.
7. 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.
8. 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 year will focus on developing a new online capacity to create custom economic development and transportation dashboards that can be embedded in the PVPC website as well as websites of any member communities or partner transportation organizations. This is an ongoing, annual task.

- Maintain current knowledge base of which transportation related data is available and advise planning staff on which might be useful for regional transportation indicators.

**PRODUCTS:**

- Maintain information systems of socio-economic and disparate data.
- Maintain up to date data on the upgraded PVPC website and continue to work on upgrades that enhance accessibility to allow users to view, manipulate, and download data in easy to understand formats. Continued technology upgrades allow for more efficient use of staff time.
- Update region wide data indicators on State of the Pioneer Valley website. This will include a new set of data indicators adjusted to match the newly updated Plan for Progress economic development plan as well as related transportation goals. Continue to upgrade technology and automation of website data updating when possible. Enhance the accessibility of IT and web products when appropriate.
- Maintain and continue to upgrade through PVPC website to allow for more useful, clear, and informative data available to all relevant parties including government agencies, planners, businesses, non-profit organizations, and the general public.

Source	Budget	Est. Staff Effort
FHWA PL (80%)	\$36,800	18 weeks
MassDOT (20% match)	\$ 9,200	5 weeks
FTA S. 5303	\$ 1,250	1 week
TOTAL	\$47,250	24 weeks

Direct Labor	\$21,458
Indirect Costs	\$25,792

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

**OBJECTIVE:**

Under this task PVPC staff will continue to explore opportunities to collect and access data in the most efficient way possible for use in the CMP. Staff will continue to work with the MassDOT, the JTC, PVTA, and MPO to identify new data to be integrated into the Regional CMP. PVPC staff will continue its 4 year cycle of travel time data collection as well as look at ways to improve performance measures used as the basis for the CMP. PVPC will continue to integrate regional ITS data into the CMP Process. Additional PVPC staff will begin a pilot program to explore the potential use of GIS to streamline the travel time analysis for major corridors in the Pioneer Valley Region.

**PREVIOUS WORK:**

- Analysis of data to update top congested corridors and regional bottlenecks
- Development of the PVPC CMP database.
- Travel time data runs to verify congested areas and document the effectiveness of recently completed transportation improvement projects.
- Regional Park and Ride Lot data collection.
- Analysis of PVTA user surveys to identify the number of daily riders per CMP corridor.
- Analysis of number of crashes per mile for each CMP corridor.

**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 for all corridors identified as having severe congestion.
6. GIS travel time data collection using the EsriArcGIS Online spatial analysis Use Proximity tool set; Create Drive-Time Areas.

**PRODUCTS:**

1. Updated Pioneer Valley CMP Database.
2. Updated regional performance measures.
3. Update CMP Corridors based on data.
4. Pilot project comparing travel time results manually collected vs. using EsriArcGIS.

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

Direct Labor	\$6,244
Indirect Costs	\$7,506

**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 on a 4-year cycle. This is an ongoing task.

**PREVIOUS WORK:**

1. Development of PVPC regional PMS database.
2. Collection of roadway pavement distress data and Roadway condition information for all federal aid eligible roadways in the PVPC region.
3. 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 including but not limited to, rutting, various cracking, distortion, and conditions that adversely impact surface friction such as asphalt bleeding and polished aggregate on all federal aid roadways for the communities located in the Year One Data Collection area.
2. Collect and verify additional roadway information such as posted speed, shoulder width, functional class, curb reveal, area zoning, 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. Continue to work towards collecting existing sidewalk surface condition information for selected/interested communities in the region.
5. Continue to maintain and update the MassDOT Roadway Inventory database for the Pioneer Valley Region.
6. Work with MassDOT and Massachusetts MPOs to coordinate regional pavement management data collection and analysis.

**PRODUCTS:**

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

Source	Budget	Est. Staff Effort
FHWA PL (80%)	\$25,000	13 weeks
MassDOT (20% match)	\$ 6,250	4 weeks
<b>TOTAL</b>	<b>\$31,250</b>	<b>17 weeks</b>

Direct Labor	\$14,192
Indirect Costs	\$17,058

**Task 2.7 Regional Performance Measures**

**OBJECTIVE:**

Collect data to evaluate regional performance measures established for the Pioneer Valley Region as part of the FY2016 Update to the Pioneer Valley Regional Transportation Plan.

**PREVIOUS WORK:**

1. Regional Congestion Management Process
2. Regional Pavement Management Process

**PROPOSED ACTIVITIES:**

1. Work with MassDOT, the JTC and MPO to the status and effectiveness of established regional performance measures as necessary.
2. Collect and maintain data to document the status of current regional performance measures.
3. Evaluate regional performance measures based on accepted methodology in consultation with MassDOT, PVTA, FHWA, and FTA.

**PRODUCTS:**

1. Update Regional Performance Measures database

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

Direct Labor	\$ 5,677
Indirect Costs	\$ 6,823

## **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 and Pedestrian Planning***

#### **OBJECTIVE:**

To implement the goals and objectives of the Regional Transportation Plan with respect to bicycling and walking. 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 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. Springfield Complete Streets Bicycle and Pedestrian Plan.
2. South Hadley Bike Ped Study
3. Southwick Depot Road Study
4. Baystate Bike Week 2015.
5. Support for the Live Well Springfield Initiative including bicycle purchase for the Pioneer Valley Rowing Club and related PVRC engagement activities.
6. Facilitated planning related to the Norwottuck Rail Trail rehabilitation.
7. Collected bicycle and pedestrian volume counts on regionally significant facilities.
8. Successful implementation of regionally significant bicycling and walking projects including components of the Baystate Greenway.
9. Facilitated Safe Route to School initiatives.
10. Assisted Baystate Roads in developing a Complete Streets workshop.

#### **PROPOSED ACTIVITIES:**

1. Map bicycle and pedestrian crash clusters using updated RMV data.
2. Promote and attend the new round of MassDOT sponsored Complete Streets Training workshops.
3. Work with the JTC’s Bicycle and Pedestrian subcommittee as well as national organizations such the Rails to Trails Conservancy to ensure consistency with the RTP and implement sustainable transportation strategies.
4. Revise online mapping tools for regionally significant bicycle facilities.
5. PVPC staff will work with MassDOT, Massachusetts Department of Conservation and Recreation, Norwottuck Rail Trail Advisory Committee and the MassBike Pioneer Valley Chapter to coordinate efforts related to the Norwottuck Rail Trail (a Baystate Greenway MassCentral Corridor project).
6. Review bicycle and pedestrian projects for eligibility under various federal funding programs.
7. Update sidewalk data collection efforts for Holyoke.
8. Assist local communities in efforts to develop Complete Streets policy initiatives and a local implementation plan and coordination with Baystate Roads.

9. Assist communities in the development of bicycle and pedestrian infrastructure and programs.
10. Participate in the Massachusetts Statewide Bicycle Advisory Board.

**PRODUCTS:**

1. JTC Bicycle Advisory Committee meeting minutes and notices.
2. Updated online regional bikeways map product.
1. Springfield Built Environment Meetings.

Source	Budget	Est. Staff Effort
FHWA PL (80%)	\$35,000	17 weeks
MassDOT (20% match)	\$ 8,750	4 weeks
TOTAL	\$43,750	21 weeks

Direct Labor	\$19,868
Indirect Costs	\$23,882

**Task 3.2 Transit System Surveys and Route Implementation**

**OBJECTIVE:**

Work closely with PVTA to monitor their fixed route and paratransit service utilizing Mystery Riders. Perform on-site observations utilizing PVPC staff and Mystery Riders to monitor PVTA's fixed route On-time Performance. Conduct surveys of current transit riders and potential transit users as requested by PVTA. Update and produce PVTA's fixed route schedules as needed.

**PREVIOUS WORK:**

1. PVTA onboard Mystery Rider fixed route field observations (reports submitted quarterly).
2. PVTA onboard Mystery Rider paratransit van rider field observations (reports submitted quarterly).
3. PVTA onboard K9 Mystery Rider field observations (reports submitted quarterly).
4. PVTA On-time performance monitoring, (reports submitted quarterly).
5. PVTA's printed fixed route schedules.
6. PVTA's System Field Guide

**PROPOSED ACTIVITIES:**

1. Mystery rider observations for fixed route (including K-9) and paratransit services.
2. On time performance field observations.
3. Perform a system wide survey of PVTA's southern region to ascertain the effectiveness of the Comprehensive Service Analysis' recommendations.
4. Update Mystery Rider survey forms as needed with PVTA's input.
5. Update and produce PVTA's fixed route schedules.
6. Update and produce PVTA's System Field Guide.

**PRODUCTS:**

1. Mystery Rider fixed route, paratransit, and K9 quarterly reports
2. On-time performance quarterly report.
3. Updated printed bus schedules
4. Updated System Field Guide.
5. Other technical analysis and assistance as required by PVTA

Source	Budget	Est. Staff Effort
FTA S. 5303	\$ 66,250	33 weeks
PVTA S. 5307	\$ 81,250	41 weeks
<b>TOTAL</b>	<b>\$147,500</b>	<b>74 weeks</b>

Direct Labor	\$66,985
Indirect Costs	\$80,515

**Task 3.3 Interstate Route I-91 Corridor Planning Assistance**

**OBJECTIVE:**

Continue to work with MassDOT, their consultant (Milone & MacBroom), and surrounding communities to assist in the management of traffic related to the viaduct reconstruction project and the advancement of a long range planning study to develop future improvement alternatives for the I-91 corridor. The study is currently estimated to be completed in April, 2016.

**PREVIOUS WORK**

1. Data collection and analysis supporting the I-91 improvement project as requested by MassDOT.
2. I-91 Corridor Study Existing Conditions Report and Appendices.

**PROPOSED ACTIVITIES:**

1. Participate as a member of the Project Advisory Committee for the Long Range Planning Study for I-91.
2. Assist MassDOT in the project public participation process to obtain feedback and guidance from project stakeholders.
3. Collect data to assist with ongoing planning and construction projects. (Ongoing Task)
4. Consistent with the Healthy Transportation Directive, MassDOT will be analyzing health outcomes as part of its I-91 Corridor Planning Study.
5. Assist in the development and analysis of long range planning alternatives as appropriate.
6. Perform greenhouse gas and air quality analysis as appropriate.

**PRODUCTS:**

1. Technical reports and analysis as necessary.

Source	Budget	Est. Staff Effort
FHWA PL (80%)	\$8000	4 weeks
MassDOT (20% match)	\$2000	1 week
<b>TOTAL</b>	<b>\$10,000</b>	<b>5 weeks</b>

Direct Labor	\$4,541
Indirect Costs	\$5,459

### **Task 3.4 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 finalize the regional freight plan that was started in FY2014.

**PREVIOUS WORK**

1. Merrick Memorial Neighborhood Study Freight Analysis.
2. Ware E.O. 418 Transportation Component – Rail Freight Analysis
3. Palmer Redevelopment Authority Track Capacity Improvements.
4. Pioneer Valley RR TIGER submission for track improvements.

**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.
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.
4. Participate in FHWA web conferences, and other related workshops and conferences concerning freight movement. As needed.
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.
7. Finalize a regional trucking survey geared towards private trucking carriers. Identify regional needs and bottlenecks in the regional transportation system for the trucking industry.
8. Update the regional inventory of public and private truck stops. Identify locations of potential new truck stops such as one planned in the City of Westfield.

**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.
2. Regional Freight Plan.

Source	Budget	Est. Staff Effort
FHWA PL (80%)	\$22,000	11 weeks
MassDOT (20% match)	\$ 5,500	3 weeks
<b>TOTAL</b>	<b>\$27,500</b>	<b>14 weeks</b>

Direct Labor	\$12,489
Indirect Costs	\$15,011

### **Task 3.5 Regional Congestion Management Process-Project Development**

#### **OBJECTIVE:**

The Congestion Management Process (CMP) is a tool used by PVPC staff to monitor congestion, mobility, and safety needs across all modes of transportation. The CMP identifies locations requiring additional analysis through the UPWP, while setting goals and objectives to be used as performance measure. The Congestion Management Process (CMP) in the PVMPO Region follows federal guidelines and recommendations from the MPO, JTC, and MassDOT. The CMP will be used to assist in the development of the TIP, the RTP, and the UPWP. PVPC staff will continue to integrate Greenhouse Gas (GHG) data collection and analysis into the CMP.

#### **PREVIOUS WORK:**

1. Downtown Signal Coordination Study – Ware
2. Berkshire Avenue and Cottage Street Congestion Study
3. 2010 CMP Report
4. Regional Bottlenecks Report
5. Pine Street Study – Northampton
6. 2014 CMP corridor ranking update
7. 2014 Top Regional Bottlenecks update
8. 2014 Travel Time Contours update

#### **PROPOSED ACTIVITIES:**

1. Work on updating the regional CMP performance measures according to the MAP-21 guidelines. Continue to develop and modify methodology to collect and utilize additional forms data to further integrate alternative modes of transportation into the CMP.
2. Continue to coordinate with the Regional Transportation Information Center (RTIC) and PVTA Automated Vehicle Location (AVL) system the collection and integration of data in to the CMP.
3. Advance new strategies to encourage public participation in the CMP process.
4. Update CMP corridors in coordination with the JTC.
5. Update Congestion Severity Formula to incorporate addition performance measures
6. Travel time runs including GHG data collection and analysis of the Interstate Highway System and other major arterial roadways in the urbanized area of the Pioneer Valley.
7. Summarize findings of Pilot project comparing EsriArcGIS data analysis vs traditionally collected data.
8. I-391 Ramp study at Exits 3 and 4 northbound. Collect Data and identify the cause of congestion that results in the northbound off ramps at exit 3 and 4 of I-391 backing up onto I-391 into the travel lanes.
9. Before and after study for TIP projects. Under this activity location(s) will be identified for analysis to identify how a recent TIP project has impacted congestion once the project is complete.

**PRODUCTS:**

- 1. GHG analysis in urbanized area on major roadways.
- 2. CMP Corridor update
- 3. CMP Pilot project summary
- 4. I-391 ramp study
- 5. Before and after TIP project analysis.

Source	Budget	Est. Staff Effort
FHWA PL (80%)	\$ 75,484	37 weeks
MassDOT (20% match)	\$ 18,871	9 weeks
FTA S. 5303	\$ 10,000	5 weeks
TOTAL	\$104,355	51 weeks

Direct Labor	\$47,391
Indirect Costs	\$56,964

**Task 3.6 Regional Pavement Management System - Project Development**

**OBJECTIVE:**

To analyze the data collected as part of Task 2.6 of the UPWP to identify the extent of pavement distress on federal aid eligible roadways. This is an ongoing task.

**PREVIOUS WORK:**

- 1. Regional PMS report for the Pioneer Valley Region.
- 2. Regional roadway improvement backlog included in the Regional Transportation Plan update.
- 3. Community roadway improvement backlog.
- 4. Community project priority listings.

**PROPOSED ACTIVITIES:**

- 1. Analysis of the newly collected pavement distress data for the region's suburban 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. Analysis of existing sidewalk segment conditions in selected communities and in support of ongoing transportation planning activities.
- 4. Assist in the prioritization of pavement projects included as part of the Pioneer Valley TIP.
- 5. Provide member communities with pavement distress data analysis as appropriate.

**PRODUCTS:**

- 1. Pavement OCI maps on each community's surveyed federal aid eligible roadways.
- 2. Pavement regional OCI map.
- 3. Sidewalk condition work maps.
- 4. Community roadway improvement backlog.
- 5. Community benefit/cost ratio listing.

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	\$19,301
Indirect Costs	\$23,199

### **Task 3.7 Regional Performance Measures Assessment**

**OBJECTIVE:**

This task is intended to focus on the federal planning emphasis area of “transitioning to performance-based planning and programming.” Data collected as part of Task 2.7 of the UPWP will be used to identify the progress in meeting regional performance measures and advancing performance based transportation projects through the TIP.

**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. Develop a status report on the progress made in advancing and meeting identified regional performance measures.
4. Provide data and analysis as necessary to assist in scoring TEC forms submitted for TIP projects
5. Develop updates to regional performance measures and the TEC scoring process as necessary to coincide with updates to federal planning rules.

**PRODUCTS:**

1. Regional Performance Measures Status Report.

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

Direct Labor	\$11,921
Indirect Costs	\$14,329

### **Task 3.8 Regional Safety and Planning Studies**

**OBJECTIVE:**

To work in cooperation with the Massachusetts Department of Transportation (MassDOT) in utilizing the available crash data from the local police departments, MassDOT Crash Portal, and other sources towards achieving the traffic safety goals of the Commonwealth. PVPC staff will work towards streamlining the refinement of the existing crash data and crash information process to develop more efficient utilization of the reported data towards alleviating the traffic safety problems at locations of high concern.

**PREVIOUS WORK:**

1. Agawam Rotary Safety Study Report
2. Signal warrant analysis at the intersection of Route 202 and Amherst in the Town of Granby
3. Southwick traffic safety study for the Depot Street/Sheep Pasture Road/Powder Mill Road area.
4. Top 100 High Crash Intersections 2007 - 2009.
5. Draft Route 9 Safety and Livability Study

**PROPOSED ACTIVITIES:**

1. Contribute in MassDOT’s Roadway Safety Audits and provide regional perspective and input.
2. Work towards achieving Strategic Highway Safety Plan objectives for the region. Participate as part of the Strategic Highway Safety Plan Steering Committee.
3. Work on Update of the Top High Crash Locations report of the region. PVPC staff will work on ensuring the equitable representation of the entire region in the report as well as check the data to make sure no community is underrepresented.
4. Collect public input and integrate stakeholder comments on the draft recommendations for the Route 9 Safety and Livability Study for downtown Northampton. Specifically, staff will:
  - a) Present the results of the stakeholder survey and focus areas highlighted by the people as well as the areas of concern to the City.
  - b) Discuss with the City of Northampton the results of the Safety and Level of Service analysis and highlight the major findings.
  - c) Develop and present a series of recommendations to improve the multi modal level of service along the corridor. Modify the recommendations based on the input of the officials and public. Highlight opportunities to advance bicycle and pedestrian friendly strategies and alternatives to further improve transportation conditions for all modes in the downtown area.
5. Work on developing new strategies of including more detailed bicyclists and pedestrian safety information into the existing Top Crash Locations report.
6. Develop safety performance measures for the Pioneer Valley Region in cooperation with MassDOT, the JTC, and MPO. Assist member communities in reviewing crash data to determine the potential eligibility of transportation improvement projects for Highway Safety Improvement Program funding. Ongoing task.
7. Perform safety, traffic calming and truck exclusion route studies as requested by member communities. As necessary.
8. Project GHG reductions as a result of potential improvements.

**PRODUCTS:**

1. Update to the Top 100 High Crash Intersections Report.
2. Route 9 Safety and Livability Study Final Report.
3. Other safety reports and data as appropriate.

Source	Budget	Est. Staff Effort
FHWA PL (80%)	\$ 90,000	45 weeks
MassDOT (20% match)	\$ 22,500	11 weeks
FTA S. 5303	\$ 6,250	3 weeks
<b>TOTAL</b>	<b>\$118,750</b>	<b>59 weeks</b>

Direct Labor	\$53,928
Indirect Costs	\$64,822

### **Task 3.9 Intelligent Transportation Systems (ITS) and Regional Evacuation Planning**

**OBJECTIVE:**

Promote and advance the implementation of the Western Massachusetts Regional ITS Architecture. 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. Statewide Evacuation Coordination Planning Committee
5. Western Massachusetts Regional Homeland Security Advisory Committee.

**PROPOSED ACTIVITIES:**

1. Work with communities to incorporate the FHWA ITS National Architecture into future improvement projects. Ongoing task.
2. Serve as a member of the Steering Committee for the Regional Traffic Information Center (RTIC). Ongoing Task.
3. Certify TIP project compliance with the Western Massachusetts Regional Architecture. Ongoing task as needed.
4. Analysis and support of data from regional ITS projects such as the I-91 ITS system and PVTA AVL system.
5. Serve as a member of the Massachusetts Strategic ITS Planning and Coordination Committee (SIPCC) and Regional ITS Planning and Coordination Committee (RIPCC). Work with MassDOT to assist in the development of Statewide ITS Performance Measures.
6. Participate in ongoing planning efforts of the Western Massachusetts Regional Homeland Security Advisory Committee and MassDOT Smart Work Zone Committee. Ongoing Task.
7. 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
TOTAL	\$25,000	12 weeks

Direct Labor	\$11,353
Indirect Costs	\$13,647

### **Task 3.10 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 to plan for the reality of climate change.

**PREVIOUS WORK:**

1. Completed draft Climate Change Toolkit for municipalities, including fact sheets and model strategies for local and regional actions to

- reduce GHG emissions. Disseminated toolkit to municipalities and posted on PVPC website.
2. Established a Climate Action and Clean Energy Advisory Committee to help promote the Climate Change toolkit and plan. Coordinate regular Committee meetings.
  3. Completed “Climate Action and Clean Energy Plan” for the Pioneer Valley region in 2013, as part of the Sustainable Knowledge Corridor project.
  4. Worked, in concert with transportation staff, to update Transportation Project Evaluation criteria to include climate and sustainability criteria.

**PROPOSED ACTIVITIES:**

1. Coordinate a regional climate action summit or event to help promote action on the Climate Change Toolkit and plan.
2. Continue a program of technical assistance to communities to implement elements of the Climate Change Toolkit, including zoning for GHG reduction and Green Communities designations.
3. Develop an inventory and vulnerability assessment of critical Pioneer Valley transportation, water and wastewater infrastructure which is vulnerable to the impacts of climate change (i.e. severe weather, flooding). Include an assessment and prioritization of culvert and stream crossings in the region.
4. Identify strategies and tools to adapt programs to address climate change impacts to better prepare communities including storm proofing, armoring and reducing vulnerabilities of targeted infrastructure and seek resources to implement the strategies. Consider how the results of such assessments can inform transportation planning activities and how adaptation and mitigation strategies can be implemented effectively.
5. Continue to refine and update the adopted Transportation Project Evaluation criteria which include climate and sustainability criteria, as needed. Evaluate the effectiveness of the new TEC criteria, based on their use in project evaluation.
6. Identify strategies that can be used to prioritize culvert and stream crossings in the region, so that replacement projects can be TIP-ready.
7. Participate, as necessary, in MassDOT’s ongoing study of the Deerfield Watershed in partnership with DEP that will examine the Deerfield Watershed. The study will determine how climate change scenarios impact the river system, make recommendations to help determine if culvert size should be increased, and if so, will develop an incremental implementation strategy.

**PRODUCTS:**

1. Climate action regional summit or event.
2. Inventory and vulnerability assessment of critical transportation and water infrastructure in the Pioneer Valley.
3. Evaluation of adopted TEC criteria, with amendments as needed.
4. Strategies to prioritize culverts and achieve project readiness.
5. Adoption of Climate Change Toolkit strategies in selected communities.

Source	Budget	Est. Staff Effort
FHWA PL (80%)	\$ 9,176	4 weeks
MassDOT (20% match)	\$ 2,294	1 weeks
TOTAL	\$11,470	5 weeks

Direct Labor	\$ 5,209
Indirect Costs	\$ 6,261

**Task 3.11 Green Streets and Infrastructure**

**OBJECTIVE:**

To encourage communities to adopt policies and regulations 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. Finalized, reproduced and distributed a Green Infrastructure Toolkit including a set of model municipal strategies to achieve green streets and green infrastructure.
2. Coordinated a series of green infrastructure workshops for municipal DPW and other officials to provide detailed information on green streets, urban stormwater control and low impact development (LID) tools.
3. Prepared “Green Infrastructure Plan” for the Pioneer Valley region in 2013, as part of the Sustainable Knowledge Corridor project.
4. Worked with Northampton to develop a model Green Streets and Green Infrastructure Policy statement.
5. Worked with Springfield, Chicopee and Holyoke to develop funding for design of green streets, installation of rain gardens, and urban tree planting.

**PROPOSED ACTIVITIES:**

1. Continue a program of local technical assistance to municipalities to implement model green infrastructure strategies, including green streets policies and LID zoning.
2. Work to develop programs for urban tree planting and green infrastructure installation, as part of road reconstruction projects.
3. Develop strategies to integrate green infrastructure into construction projects throughout the region, including community development projects.
4. 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 streets and green infrastructure strategies in selected communities.

2. Implementation of green streets pilot projects in selected communities.
3. Urban tree planting programs.
4. Strategies to integrate green infrastructure into community development projects.
5. Strategies to reduce highway stormwater impacts to combined sewer overflows.

Source	Budget	Est. Staff Effort
FHWA PL (80%)	\$4,912	2 weeks
MassDOT (20% match)	<u>\$1,228</u>	<u>1 week</u>
TOTAL	\$6,140	3weeks

Direct Labor	\$2,788
Indirect Costs	\$3,352

## **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 comprehensive transit planning services and facilities, including technical assistance, organizational support, and regulatory compliance; support for operational analyses of transit services; and public involvement and agency participation to the Pioneer Valley Transit Authority (PVTA), PVTA member municipalities and the Pioneer Valley Metropolitan Planning Organization (PVMPO). Included in this task is identification and updating of unmet regional transit needs consistent with MAP-21 and the Massachusetts GreenDOT Policy.

#### **PREVIOUS WORK:**

1. Produce materials for PVTA including bus route schedules, signs for print and electronic distribution, bus operator field guides, and other PVTA related materials. This also requires coordination between vendors and PVTA and management of inventory.
2. Participate and attend public and agency meetings related to transit planning.
3. Design and implemented the Tiger Trolley, a PVTA Pilot Program to introduce Flex services to South Hadley. Work also included schedule creation and routing information.
4. Support and analysis of the PVTA ITS systems including (AVL, GTFS, Replay)
5. Support for PVTA Advisory Board and subcommittee activities.
6. Provide PVTA with general planning assistance for transit programs.
7. Staffing meetings of municipal public transportation committees in the region.
8. Coordination and facilitation of transit items of TIP planning.
9. Provide planning assistance and support for the Comprehensive Service Analysis of PVTA's fixed route system.
10. Production of PVTA Comprehensive Service Analysis Implementation Plan including development of Performance Measures and route improvements.
11. Coordination and facilitation of Bus Rider Forums, van riders meetings and LEP outreach.
12. Production of videos for Travel Training.

#### **PROPOSED ACTIVITIES:**

1. Review and analysis of PVTA fixed routes and facilities to identify opportunities for improved and efficient operations. This work includes: evaluation of routes and related costs, support for regulatory compliance with environmental and Title VI, service quality monitoring, project development, and other tasks as requested.
2. Ongoing review and evaluation of PVTA new fixed route service introduced through the Comprehensive Service Analysis.
3. Planning assistance and production of materials to market new services provided by PVTA. Section 5307 funds will be used to produce and purchase these products.
4. Ongoing incorporation of GIS and GPS technologies to support transit route and facilities planning, scheduling and customer information.

5. Coordination of transit planning activities of the PVMPO region among PVTA, MassDOT, Franklin Regional Transit Authority, Connecticut Department of Transportation, Capital Regional Council of Governments and other stakeholders to enhance inter-regional transit services.
6. Support and guidance to PVTA, PVMPO and agencies for regulatory compliance with Title VI, environmental justice and other federal requirements.
7. Continue to assist PVTA in their preparation for relocation to Union Station, Westfield Intermodal Center and to the Springfield maintenance facility. This will include new route planning, bay assignments, turning movement counts and other tasks as requested.
8. Produce a video to promote PVTA's Travel Training Program. This video will be shared with local public access channels and played on PVTA monitors in the Springfield Bus Terminal and the Holyoke Transportation Center.
9. Updates, production and inventory management of PVTA fixed route schedules and associated graphics products and signs. Included in this task is developing a new mapping template for PVTA schedules. Section 5307 funds will be used to produce and purchase these schedules.
10. Coordination of public involvement for transit planning, including bus rider forums, paratransit van user meetings, community outreach and meetings for LEP residents, agency coordination, and other public meetings, hearings and outreach as requested.
11. Work in cooperation with OTP to conduct an alternatives analysis of potential PVTA Bus Rapid Transit corridor(s) in the City of Springfield. Respective PVPC/PVTA/MassDOT roles and funding responsibility will be determined at a later date.
12. Update the Coordinated Public Transit-Human Services Transportation (CHST) plan consistent with MAP-21 for the Pioneer Valley MPO to identify the transportation needs of individuals with disabilities, older adults, and people with low incomes, and prioritize transportation services for funding and implementation. The CHST plans will be developed with strong input from the public, including representatives of human services and local transportation providers.

**PRODUCTS:**

1. Monthly Service Guidelines Analysis that review fixed route services to determine if Performance Measures are being met.
2. Monthly specific fixed route analysis highlighting travel patterns and ridership levels.
3. PVTA's System Map Brochure to be distributed to the public.
4. Production of print and digital materials related to PVTA fixed route schedules and maps.
5. Brochures, public notices, posters, maps, and other print and digital materials as requested by PVTA including annual updates and new products.
6. Production of translated materials of any PVTA products for LEP populations.

Source	Budget	Est. Staff Effort
FTA S. 5303	\$107,004	53 weeks
PVTA S. 5307	\$107,500	53 weeks
TOTAL	\$214,504	106 weeks

Direct Labor	\$ 97,413
Indirect Costs	\$117,091

## **Task 4.2 Paratransit Planning Assistance**

### **OBJECTIVE:**

To fulfill the planning and programming requirements of USDOT Section 504 regulations and other planning requirements under the Americans with Disabilities Act. This task includes providing technical assistance to PVTA for planning services for paratransit services for disabled and senior residents of the region. Technical assistance is also provided to communities, human service agencies, councils on aging, private entities and other parties involved in providing ADA transportation in the PVMPO region.

### **PREVIOUS WORK:**

1. Member of PVTA's Paratransit Appeals Committee.
2. Coordination and technical assistance to agencies seeking capital grants under FTA Section 5311.
3. Member of selection committee for the comprehensive service analysis for paratransit.
4. Coordination, facilitation and support of Paratransit Van Riders meetings.
5. Coordination and attendance of the Pioneer Valley Regional Coordinating Council and Hilltown Regional Coordinating Council meetings

### **PROPOSED ACTIVITIES:**

1. Continued participation with the Pioneer Valley Regional Coordinating Council.
2. Continued participation with the Hilltown Regional Coordinating Council
3. Provide technical and administrative support to the MPO's Joint Transportation Committee (JTC) on mobility issues and concerns of the region's elderly and disabled residents.
4. Planning assistance and technical support for the implementation of the Comprehensive Service Analysis Recommendations of PVTA's paratransit system.
5. On-going review of zone assignments of paratransit vans in the PVTA service area. This work will include the creation of an origin-destination matrix of paratransit trips and a comparison to the current zone assignments.
6. Continue assisting PVTA with planning for actions to comply with regulations of the Americans with Disabilities Act (ADA), including public participation activities, operational analyses of policies and services.
7. Perform paratransit surveys and studies requested by PVTA and MPO municipalities.
8. Coordinate and schedule paratransit van riders meetings by contacting Councils on Aging Senior Centers for meeting room reservation and the development of public notices and e-mail notifications.

### **PRODUCTS:**

1. Digital data to support paratransit planning related tasks.
2. Development of performance measure reports for PVTA paratransit services.
3. Creation of public notices and distribution to riders, agencies and municipalities for paratransit van rider meetings.

4. Meeting notes from paratransit user meetings.
5. Survey results, technical memoranda, reports and presentations for PVTA, JTC and MPO member municipalities as needed.
6. Monthly Performance Measures Report to MassDOT.

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

Direct Labor	\$13,056
Indirect Costs	\$15,694

### **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 new "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.

#### **PREVIOUS WORK:**

1. Prepared the "Our Next Future" plan for sustainability and smart growth in the Pioneer Valley region. This plan was then formally adopted by vote of the full PVPC. The plan incorporates 8 new regional plans, including an updated Valley Vision Regional Land Use Plan, Sustainable Transportation Plan, Regional Housing Plan, Climate Action Plan, and Green Infrastructure Plan, as part of the Sustainable Knowledge Corridor project.
2. Completed a new Sustainability Toolkit of strategies to implement Our Next Future, including strategies for sustainability, smart growth, green infrastructure and climate action.
3. Continued to facilitate meetings of the Valley Development Council to oversee the development of Valley Vision and to help implement its recommendations.
4. Technical assistance to implement smart growth strategies in Hadley, Easthampton, Westfield, Palmer, Chesterfield, Amherst, and other communities
5. Developed model TOD overlay zoning regulations, and tailored TOD model for 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) Work to implement the new Regional Housing Plan with a focus on identifying strategies for transit-oriented and community center mixed use housing development;

- b) Convene a support group for developers that are interested in implementing smart growth projects.
2. 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.
3. Coordinate a series of events and activities to roll out and promote the region's new Pioneer Valley Sustainability Toolkit. This toolkit contains 118 strategies with fact sheets, and model bylaws, in categories including smart growth, climate action, green infrastructure and environment. Activities will include a regional forum, media release, television programming, adding the toolkit to the PVPC and Sustainable Knowledge Corridor websites.
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, bikable and transitfriendly downtowns.

**PRODUCTS:**

1. Coordination of quarterly meetings of the Valley Development Council and related products.
2. Summary of assistance provided to communities to implement strategies from Our Next Future, and copies of adopted bylaws/ordinances.
3. 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.

Source	Budget	Est. Staff Effort
FHWA PL (80%)	\$32,800	16 weeks
MassDOT (20% match)	\$ 8,200	4 weeks
TOTAL	\$41,000	20 weeks

Direct Labor	\$18,619
Indirect Costs	\$22,381

**Task 4.4 Off-Road Bicycle and Pedestrian Network Planning**

**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.

**PREVIOUS WORK:**

1. Continued to coordinate design/engineering work and advisory committees for riverwalks in Agawam, Chicopee, Holyoke, and West Springfield.

2. Created a River Walk brochure and website to help promote broad public support for, and use of, the River Walk, including bicyclists, landowners, businesses, residents.
3. Prepared the Regional Biking Map and the Pioneer Valley Trails Map.
4. Completed development of a plan for policing, long-term maintenance and increased parking for the Connecticut River Walk and Bikeway as segments complete construction and are opened to public use.
5. Added components on the Connecticut Riverwalk to the Connecticutriver.us and PVPC websites, to promote public use of the Riverwalk by illustrating trail maps, parking locations and destinations on the Riverwalk. (Schedule: ongoing).

**PROPOSED ACTIVITIES:**

1. Coordinate meetings of the Regional Connecticut Riverwalk Advisory Committee, as needed. Provide meeting notices, materials, and staff support. (Schedule: ongoing).
2. Promote the completion of engineering and construction phases on 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. (Schedule: ongoing).
3. Complete development of the regional trails map website ([www.connecticutriver.us](http://www.connecticutriver.us)), linked with the PVPC website, to provide access to the new Regional Trails Map and detailed hiking and biking trail data for individual hiking and biking destinations.
4. Complete development of a new, updated regional trails map, with an expanded roster of participating trails. Utilize newly released DCR state trails data to update map.
5. 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.
6. Work with community officials to continue an analysis of alternatives to link existing components of the region's bikeway/walkway network to other components and key regional destinations.

**PRODUCTS:**

1. Regional Riverwalk Advisory Committee meetings and activities.
2. Technical assistance to communities on advancing Riverwalk segments.
3. New updated and expanded Pioneer Valley Trails Map in web-based format.
4. Updated analysis of regional bikeway/walkway network linkages
5. New off-road pedestrian and bike trails design and construction projects.

Source	Budget	Est. Staff Effort
FHWA PL (80%)	\$17,120	8 weeks
MassDOT (20% match)	\$ 4,280	2 weeks
TOTAL	\$21,400	10 weeks

Direct Labor	\$9,718
Indirect Costs	\$11,682

### **Task 4.5 Local Technical Assistance**

**OBJECTIVE:**

Assist PVPC communities and organizations through short term technical support as requested. To review transportation related impact reports, traffic studies, and environmental notification forms. To provide education on the benefits of sustainable development and a sustainable transportation system. 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. Quinnetuck Road Traffic Calming Study.

**PROPOSED ACTIVITIES:**

1. Provide Local Technical Assistance (LTA) to communities on an as requested basis. Each community will be limited to three requests per year. Typical activities may include data collection, operational analysis, and safety studies.
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 PVTA and member communities to assure understanding of transit options in the region.

**PRODUCTS:**

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

Source	Budget	Est. Staff Effort
FHWA PL (80%)	\$18,400	9 weeks
MassDOT (20% match)	\$ 4,600	2 weeks
TOTAL	\$23,000	11 weeks

Direct Labor	\$10,445
Indirect Costs	\$12,555

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

**OBJECTIVE:**

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

**PREVIOUS WORK:**

1. Local Pavement Management Update report for Longmeadow.
2. Local Pavement Management Data Collection and study for Belchertown.
3. Holyoke Sidewalk Management Phases 1-4.

**PROPOSED ACTIVITIES:**

1. 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.
2. Conduct training sessions to educate local staff on the identification of pavement distresses as well as sidewalk distress and data recording techniques.
  3. Provide follow-up technical assistance to other communities with pavement management programs already in place. Assist communities in the development of new roadway improvement projects based on their annual maintenance budget.
  4. Ensure that any new roadway is officially accounted for by Collecting GPS coordinate information to assist in Mapping.

**PRODUCTS:**

1. OCI Updates for specific roadways in communities with an existing Pavement Management Program as requested.
2. PMS study for Palmer.
3. PMS study for Ware.
4. Updates for existing municipal pavement management plans, as requested.

Source	Budget	Est. Staff Effort
Estimated Local Funds	\$22,300	11 weeks
TOTAL	\$22,300	11 weeks

Direct Labor	\$10,127
Indirect Costs	\$12,173

**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 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 Farm 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, Goshen, Cummington and Worthington. 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. Completed, with FRCOG, a comprehensive scenic byway plans for the Connecticut River Scenic Farm Byway on Routes 47 and 63 in South Hadley, Hadley, Sunderland, Montague, and Northfield, and the Route 112 Scenic Byway in Huntington, Goshen, Cummington, Worthington and Franklin County towns.
2. Provided staff support to the two Scenic Byway Area Committees for both of the Byways.
3. Developed priority projects for Scenic Byway funding and prepared applications for funding.
4. Secured funding for purchase of scenic easements along the corridor, and for other projects.
5. Implemented an intergovernmental compact for land protection along the Connecticut River Scenic Byway, between and among Hadley,

South Hadley, MassDOT, DCR, DOA, Kestrel Trust and The Trustees of Reservations.

**PROPOSED ACTIVITIES:**

1. Coordinate meetings of the Byway Area Committees for the Connecticut River Byway 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 and prioritize scenic byway implementation 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. Contribute to website updates for Western Massachusetts Byways website.

**PRODUCTS:**

1. Byway Area Committee and regional trails advisory group meetings and activities, as needed;
2. Technical assistance to communities in securing scenic byway implementation funding.
3. Updated Western Massachusetts Byways website.

Source	Budget	Est. Staff Effort
FHWA PL (80%)	\$4,912	2 weeks
MassDOT (20% match)	\$1,228	1 week
TOTAL	\$6,140	3 weeks

Direct Labor	\$2,788
Indirect Costs	\$3,352

**Task 4.8 Regional Bicycle Commute Week**

**OBJECTIVE:**

To promote livability, sustainability and bicycle friendly communities by making it easy and fun for people to try bicycling by facilitating the 15<sup>th</sup> annual Pioneer Valley Bicycle Commute Week, which in 2010 became merged with Bay State Bike Week. Thanks to the success and commitment of the PVPC and the western Mass chapter of MassBike and with financial and technical support from the MassDOT. This is an ongoing annual task.

**PREVIOUS WORK:**

1. Successful Bike Commute Week activities since 1999.

**PROPOSED ACTIVITIES:**

1. Facilitate Pioneer Valley Bike Commute Week annually to coincide with national Bike Commute Week—the third week of May and to coincide with Bay State Bike Week.
2. Recruit community participation and identify leaders in each community to promote their community’s activities.
3. Act as a liaison with MassDOT and MassBike.

4. Assure publicity and broad promotion of Bike Commute Week activities.

**PRODUCTS:**

1. Bike Commute week report.

Source	Budget	Est. Staff Effort
FHWA PL (80%)	\$4,240	2 weeks
MassDOT (20% match)	\$1,060	1 week
TOTAL	\$5,300	3 weeks

Direct Labor	\$2,407
Indirect Costs	\$2,893

**Task 4.9 Blanche Barlow Acres/Goose Pond Recreational Access Project**

**OBJECTIVE:**

To provide Byway travelers direct access to an extensive hiking trail system throughout 147 acres of conservation land enabling access to both Goose Pond and the Appalachian Trail. This project will connect the trail system to the traveling public by providing a paved access road from the Byway (State Route 20) to a new parking area. This parking area will provide space for seven cars inclusive of one van accessible space with access aisle. A bike rack will also be installed in this area so visitors traveling by bicycle will have a secure location to leave their bike while utilizing the trails. Finally, interpretive signage will highlight the site's history and inhabitants, the broader Berkshire region, and the collaboration between the Scenic Byway, The Trustees of Reservation and the Lee Land Trust. To date work is approximately 7% complete. This contract ends on December 31, 2015.

**PREVIOUS WORK:**

1. Roadside Landscape Improvements – 2009
2. Hampden Park Revitalization – 2009
3. Historic Society (Former Methodist Church) Rehabilitation – 2008
4. Appalachian Trail Parking & Trailhead Improvements – 2005
5. Scenic Easement at Summit Cairn – 2004
6. Boulder Park Accessible Trail – 2003
7. Byway Gateway Signs – 2002 & 2003
8. H. Newman Marsh Hiking Trail & Overlook – 2000

**PROPOSED ACTIVITIES:**

1. The Pioneer Valley Planning Commission (PVPC) will serve as project manager on behalf of Jacob's Ladder Trail Scenic Byway, Inc. (JLTSB).
2. PVPC staff will conduct the procurement process for a project designer. Preference will be given to landscape designers with prior scenic byway, trail-head and/or handicapped accessible projects. Award is anticipated by the end of May 2015.
3. The designer selected will produce completed design plans based on the application submitted to the Federal Highway Administration with ongoing guidance from JLTSB.
4. The project designer will attend regular meetings with JLTSB and MassDOT during the design process. Representatives from the Lee Land Trust and The Trustees for Reservation will be encouraged to attend and provide feedback on project development.

5. PVPC staff, in conjunction with JLTSB, will gather and prepare historical material for the site's interpretive signage.
6. PVPC staff, in conjunction with the project designer, will conduct the procurement for project construction.
7. The contractor awarded the project will complete all work in accordance with the plans and specifications developed by the project designer and approved by MassDOT.

**PRODUCTS:**

Completed paved access driveway, parking area with accessible space, bike rack and accessible picnic table, interpretive signage and native landscaping.

Source	Budget	Est. Staff Effort
FHWA (80%)	\$21,160	10 weeks
MassDOT (20%)	\$5,290	2 weeks
TOTAL	\$26,450	12 weeks

Direct Labor	\$12,089
Indirect Costs	\$14,361

**Task 4.10 Enhancing the Recreational Experience on the Connecticut River Scenic Byway**

**OBJECTIVE:**

Improve recreational access from the Byway to the Connecticut River and scenic, natural, and historic areas along the Byway, including creating a waypoint center to provide visitors with information on Byway features, history and destinations. The project will also work with existing public lands and easements, and willing landowners to develop plans for a canoe and kayak access to the Connecticut River, and several trails that link the Byway to the Connecticut River, Mount Warner, and other nearby scenic natural resources. Most of the proposed activities will be done through the use of consultants. This is year two of a two year contract.

**PREVIOUS WORK:**

1. Finalized contract for project and received notice to proceed from MassDOT on October 15, 2013.
2. Prepared and issued three bid documents: one for trail and trailhead design, another for trail easement negotiation, and a third for design of exhibits at Byway Waypoint Visitor's Center
3. Convened meetings to review submissions scheduled with local representatives
4. Initiated work on all proposed activities, completed initial feasibility analysis and trail layouts, exhibit design plans, and initial easement meetings with landowners.

**PROPOSED ACTIVITIES:**

1. Work with partners at the Porter Phelps Huntington House Museum to establish a new visitor's waypoint interpretive center at the historic museum complex in Hadley.
2. Conduct a feasibility study and develop design plans and specifications for a car-top boat access point for canoes and kayaks, with fishing access, to the Connecticut River at Ferry Road in North Hadley. Work will include surveying and purchasing of recreational easements as needed.

3. Work with the Porter Phelps Huntington House Museum, the Trustees of Reservations, the Kestrel Trust and adjacent landowners to explore feasibility and to develop design plans and specifications for an interpretive hiking trail system linking the Byway to the Connecticut River and to Mount Warner.
4. Develop design plans and specifications for improved trailhead signage, interpretive information and safe, attractive parking for the New England National Scenic Trail (NENST) near its crossing of the Connecticut River Byway. Recreational easements will be negotiated and secured on the trail route.
5. Develop a trail layout plan for a two-mile Connecticut River hiking trail segment on town-owned and private land in the Bachelor Brook/Stony Brook Conservation Area, along the Connecticut River bank near South Hadley center and linking to trails on the Mount Holyoke Range, working in concert with willing property owners. Work will also include a feasibility study for connecting this trail to the neighboring Mount Holyoke Range State Park.
6. Work with the Massachusetts Department of Conservation and Recreation and a consultant to undertake a feasibility analysis and trail layout plan for a Connecticut River hiking trail segment along the riverbank in North Hadley, focusing on state-owned land under the Department of Conservation and Recreation, and working in concert with willing private property owners to secure needed permissions and access agreements.

**PRODUCTS:**

1. New visitor's Waypoint Interpretive Center at the Porter Phelps Huntington House Museum
2. Design plans and specifications for a canoe/kayak access area on Ferry Road in North Hadley
3. Design plans and specifications for a trail that links the Byway to the Connecticut River/Porter Phelps Huntington House and Mount Warner
4. Improved trailhead, interpretive information, and safe and attractive parking for the New England National Scenic near its crossing of the Byway
5. Feasibility study and design plans for a two-mile Connecticut River hiking trail segment in South Hadley on town-owned and private land in the Bachelor Brook/Stony Brook Conservation Area
6. Feasibility study for connecting the two-mile hiking trail segment along the Connecticut River in South Hadley to the neighboring Mount Holyoke Range State Park.
7. Feasibility study and design plans for a Connecticut River hiking trail segment in North Hadley, focusing on state owned land

Source	Budget	Est. Staff Effort
Scenic Byway Funds	\$203,364	24 months
<b>TOTAL</b>	<b>\$203,364</b>	<b>24 months</b>

Direct Labor	\$ 9,872
Indirect Costs	\$ 11,728
Direct Costs	\$181,764

## **Task 4.11 Connecticut River Byway Corridor Management Plan Update**

### **OBJECTIVE:**

Develop an updated corridor management plan and accompanying public participation process to recognize, interpret, preserve, and promote the Byways' unique scenic, cultural, archeological, natural, and recreational resources. This project will involve a multi-regional collaborative effort by the Franklin Regional Council of Governments (FRCOG), and the Pioneer Valley Planning Commission (PVPC) as the 38 mile Scenic Byway route passes through Franklin County (Northfield, Erving, Montague, and Sunderland) and Hampshire County (Hadley and South Hadley).

Also evaluate the expansion of the Byway on the west side of the River into the towns of Hatfield, Whately, Deerfield and Greenfield. If there is an interest on the part of these towns (Hatfield has already expressed an interest) to join the Byway, the exact route will be determined based on input received from the towns and the necessary legislation for the expanded Scenic Byway designation will be written and filed with the Massachusetts Legislature. This is a two year contract.

### **PREVIOUS WORK:**

1. Primary contractor, FRCOG, received notice to proceed from MassDOT
2. FRCOG and PVPC signed Memorandum of Understanding April 14, 2014.
3. Initiated work on the Connecticut River Corridor Management Plan, and completed four initial draft chapters.

### **PROPOSED ACTIVITIES:**

1. Continue to coordinate meeting of the Byway Area Committee for Hampshire County that will assist and guide the Corridor Management Plan Update development process.
2. Discuss and receive input from the town of Hatfield, on the expansion of the Byway on the west side of the Connecticut River, prepare the necessary legislative language, and work with area legislators to have the special legislation for the expansion submitted for approval by the State Legislature.
3. Develop and update the corridor management plan for the Byway. The work will include completing updated inventories of the Byway resources, documenting any issues of concern, and developing recommendations to preserve and protect Byway resources while also fostering future sustainable economic development for the area. This update will also include evaluations based on the six intrinsic qualities for areas of expansion of the Byway to the west side of the river. The potential expansions routes include consideration of River Road and/or Route 5/10, although the final determination will be made based on the input from the communities.

### **PRODUCTS:**

1. Byway Area Committee quarterly meetings
2. Outreach to the towns of Hatfield, to determine interest in expanding the Scenic Byway.
3. Chapters of the Corridor Management Plan Update that are devoted to the documentation and assessment of and recommendations for the following along the Byway: roadway and transportation system; cultural, historic and heritage resources; natural resources;

landscape features and view sheds; tourism related attractions; community planning; recreational resources and connections to the recreational resources along other neighboring Byways.

4. Maps for the plan illustrating the following: transportation infrastructure and recommended roadway improvements; historic, cultural and heritage resources; natural resources; and the locations of scenic road segments and prominent view sheds.
5. 80 copies of the Corridor Management Plan Update for the Connecticut River Byway including implementation strategies.

Source	Budget	Est. Staff Effort
Scenic Byway Funds	\$78,067	24 months
TOTAL	\$78,067	24 months

Direct Labor	\$33,303
Indirect Costs	\$39,564
Direct Costs	\$ 5,200

## ESTIMATED COMPLETION SCHEDULE OF PLANNING ACTIVITIES

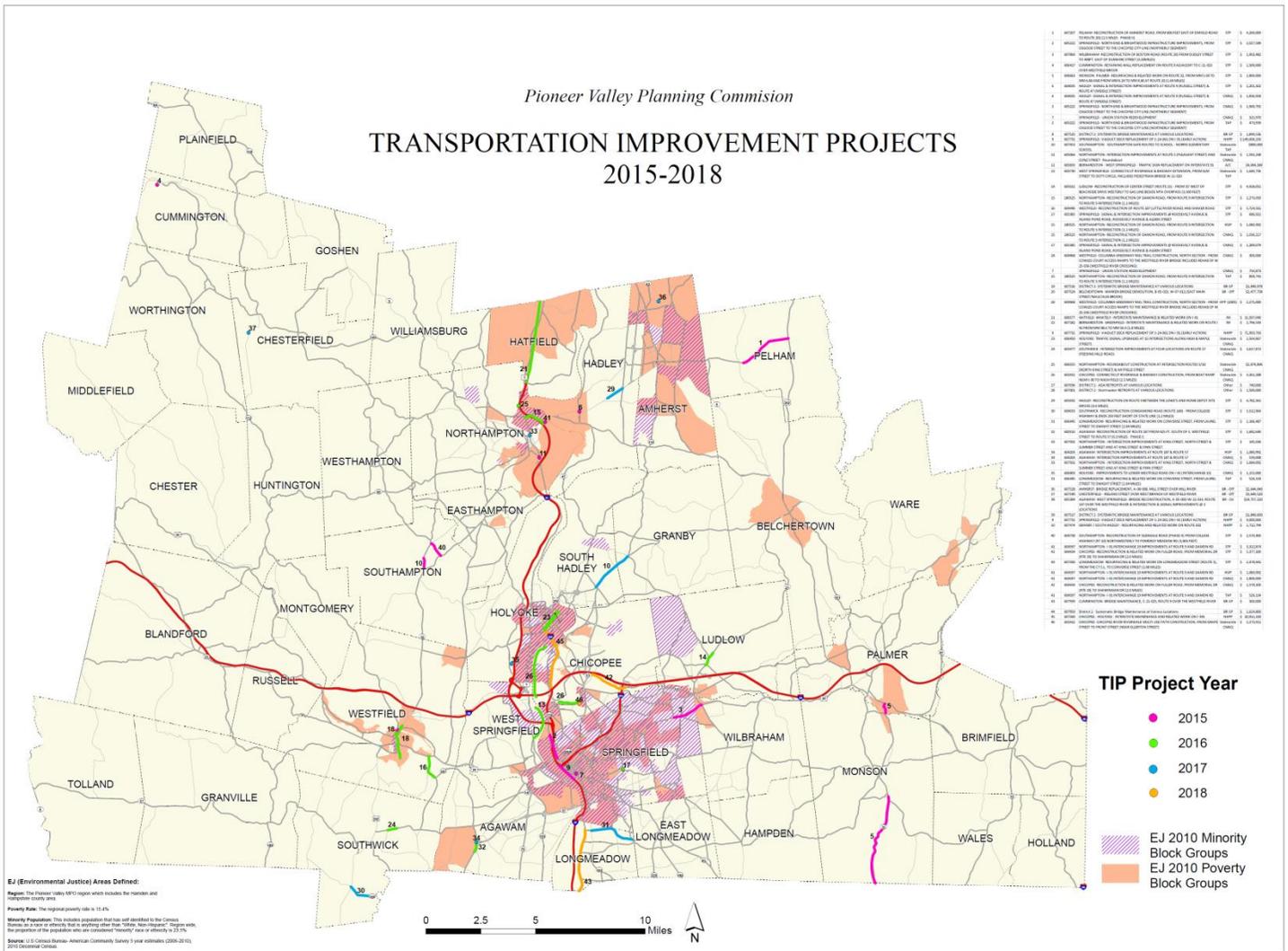
Task	Product	Anticipated Completion
1.1	Invoices	Monthly
1.2	FY2016 UPWP	August 2016
1.3	PVPC Regional Reporter Newsletter	Quarterly
1.4	FY2016 - 2019 TIP	August 2016
1.5	Reports as required for EJ, Title VI, and LEP	Annually
1.5	Updated Public Participation Plan	December 2015
1.5	Updated Email Contact listing	Annually
2.1	Regional Traffic Counts	Ongoing (April – November)
2.1	Regional traffic Counts 2011 – 2015 Report	February 2016
2.2	CMAQ and Greenhouse Gas Analysis	As needed (typically June)
2.3	GIS mapping to support transportation planning	As needed
2.3	GIS spatial data analysis	As needed
2.4	Information Center Reports	Summer 2016
2.4	Update region wide data indicators	September 2016
2.4	Data Center web site updates	Ongoing
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
3.1	Updated Bicycle and pedestrian Crash Clusters	Summer 2016
3.1	Updated Regional Bike Map	September 2016
3.2	Mystery Rider, K-9, On time Performance reporting	Quarterly
3.2	Bus Schedule Updates	As needed
3.3	I-91 Study Data Collection	As needed
3.4	Regional Freight Plan	September 2016
3.5	CMP ESRI/ARC GI Pilot Project	September 2016
3.5	I-391 Ramp Congestion Study	Summer 2016
3.5	GHG Analysis for Major Corridors	July 2016
3.5	CMP Database Updates	Monthly (September – June)
3.6	PMS Project Development Database Updates	Ongoing - Monthly
3.7	Regional Performance Measures Report	September 2016
3.8	Route 9 Safety and Livability Study Final Report	December 2015
3.8	Top 100 High Crash Intersections Report Update	September 2016
3.8	Top Bicycle and pedestrian Crash Clusters Analysis	Summer 2016
3.9	PVTA AVL Data Analysis	Monthly
3.10	Critical Infrastructure Vulnerability Assessment	September 2016
3.11	Green Infrastructure Strategies for CD Projects	September 2016
3.11	Pilot Project Implementation	Summer 2016
4.1	Fixed Route Service Performance Measures Report	Quarterly
4.1	PVTA Schedule Updates	Summer 2016 and Fall 2016
4.1	PVTA System Map Brochure	Summer 2016
4.1	One year and multiyear LEP Action Plans	September 2015
4.2	Paratransit Performance Measure Report	July 2015
4.3	TOD/Sustainability Ordinances and Bylaws	As requested
4.3	Valley Development Council meetings	Quarterly meetings
4.4	Riverwalk Advisory Committee Meetings	Quarterly meetings
4.4	Draft updated regional trails map – web format	September 2016
4.4	Update to Analysis of bikeway linkages	September 2016
4.5	Local Technical Assistance	As requested
4.6	Palmer Local Pavement Management Report	October 2015
4.6	Ware Local Pavement Management Report	December 2015
4.7	Byway Area Committee meetings	Quarterly meetings
4.7	Updated website	Summer 2016
4.8	Bike Commute Week Report	Summer 2016
4.9	Completed Project	December 2015
4.10	Fesibility Studies for hiking trails	December 2015
4.11	Corridor Management Plan Update	April 2016

# 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 below.



UPWP's for the previous five 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, nearly 499 tasks were identified over the five 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 five year period. This information is summarized on the table on the next page.

## 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>Total</b>
Agawam	2	2	2	1	3	10
Amherst	4	2	4	4	1	15
Belchertown	1	3	1		1	6
Blandford	1	1		1		3
Brimfield		2	3	2	1	8
Chester	1	2	1	1	1	6
Chesterfield	1					1
Chicopee	4	1	3	3	3	14
Cummington	1		1		1	3
East Longmeadow	2	2		1	1	6
Easthampton	3	3	2	1	3	12
Goshen	1	1	1		1	4
Grandby		2		3		5
Granville		1	1	1	1	4
Hadley	1	3	4	2	1	11
Hampden	1		2		1	4
Hatfield				1		1
Holland	1	1				2
Holyoke	3	5	6	3	3	20
Huntington	1	1	1	2	1	6
Longmeadow	3		1	4	2	10
Ludlow	7	1			2	10
Middlefield		1				1
Monson	1	1		1		3
Montgomery			1	2	1	4
Northampton	7	6	5	7	3	28
Palmer	1					1
Pelham	1	1		1		3
Plainfield	1	1	1	1	1	5
Region Wide	38	29	33	34	28	162
Russell	1	1	1	1		4
South Hadley	3	1	2	4	3	13
Southampton	1	1	2	1		5
Southwick	6	2	1	2	3	14
Springfield	8	12	10	6	6	42
Tolland			1	1	1	3
Wales			1	1		2
Ware	5	2	1	2	2	12
West Springfield	4	3	2	2	1	12
Westfield	1	1	3	3	1	9
Westhampton	2			1	1	4
Wilbraham	1		1	1	1	4
Williamsburg	1		3	1	1	6
Worthington	1					1
<b>Grand Total</b>	<b>121</b>	<b>95</b>	<b>101</b>	<b>102</b>	<b>80</b>	<b>499</b>

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 five year 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 on page 61. 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, Chesterfield, Hatfield, Holland, Huntington, Montgomery, Palmer, and Worthington. This could be an indication of the need for the transportation section to alert each of these communities of the availability of our regional traffic counting program.

PVPC also collects pavement distress data for all federal aid eligible roadways in the region. This data is collected on a five year rotation and is summarized in the table on page 62. No pavement distress data is currently collected for the Town of Middlefield as there are no federal aid eligible roadways. Pavement distress data was collected and distributed to each of the remaining 42 communities over this five year period. New pavement data is not collected under this program until pavement data has been collected for the entire region.

Travel time data is collected for select communities and corridor as part of the regional congestion management process (CMP). CMP corridors are identified based on input from communities and the JTC. Data collection occurs on a four year cycle but is also constrained by ongoing construction or other activities that could skew travel time data. There are currently CMP corridors or a portion of a CMP corridor in 20 of our 43 communities. The three largest cities of Springfield, Chicopee, and Holyoke have the most corridor as they typically have the most congestion. This information is summarized on page 63.

## Traffic Counts By Community and Year

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

## Pavement Data Collection By Community and Year

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

## CMP Data Collection By Community and Year

<b>Community</b>	<b>Total Corridors</b>	<b>2010 - 2011</b>	<b>2011 - 2012</b>	<b>2012 - 2013</b>	<b>2013 - 2014</b>
Agawam	5	X	X	X	
Amherst	4				
Belchertown	2		X		X
Chicopee	12	X	X		X
East Longmeadow	3		X	X	
Easthampton	3		X	X	X
Granby	1		X		
Hadley	3			X	X
Holyoke	10	X	X	X	X
Longmeadow	4		X	X	
Ludlow	3		X		X
Northampton	5			X	X
Palmer	1			X	
South Hadley	2		X		
Southwick	1			X	
Springfield	23	X	X	X	X
Ware	1		X		
West Springfield	4		X		X
Westfield	3		X	X	
Wilbraham	3			X	X



# FUNDING PROFILE

## FFY 2016 Unified Planning Work Program Funding Profile

	Total	MassDOT			FTA S. 5303	PVTA*	PVTA	PVTA	Scenic Byways
		FHWA 3C PL	3C Match	Local Match		S. 5303 Match	S. 5307	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	22,000	11,600	2,900		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>215,125</b>	<b>135,600</b>	<b>33,900</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	65,625	48,000	12,000		4,500	1,125			
2.3 GIS, Mapping and Graphics	81,725	46,380	11,595		7,000	1,750	12,000	3,000	
2.4 Information Center	47,250	36,800	9,200		1,000	250			
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>289,600</b>	<b>207,180</b>	<b>51,795</b>		<b>12,500</b>	<b>3,125</b>	<b>12,000</b>	<b>3,000</b>	
<b>3.0 RTP Planning</b>									
3.1 Regional Bicycle and Pedestrian Planning	43,750	35,000	8,750						
3.2 Transit System Surveys & Route Implementation	147,500				53,000	13,250	65,000	16,250	
3.3 Interstate Route I-91 Corridor Planning Assistance	10,000	8,000	2,000						
3.4 Regional Freight Planning	27,500	22,000	5,500						
3.5 Regional Congestion Management Process - Project Development	104,355	75,484	18,871		8,000	2,000			
3.6 Regional Pavement Management System - Project Development	42,500	34,000	8,500						
3.7 Regional Performance Measures Assessment	26,250	21,000	5,250						
3.8 Regional Safety and Planning Studies	118,750	90,000	22,500		5,000	1,250			
3.9 Intelligent Transportation Systems (ITS) and Regional Evacuation Planning	25,000	15,000	3,750		5,000	1,250			
3.10 Climate Change Implementation	11,470	9,176	2,294						
3.11 Green Streets and Infrastructure	6,140	4,912	1,228						
<b>Subtotal of Section 3.0</b>	<b>563,215</b>	<b>314,572</b>	<b>78,643</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	214,504				85,603	21,401	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	41,000	32,800	8,200						
4.4 Off-Road Bicycle and Pedestrian Network Planning	21,400	17,120	4,280						
4.5 Local Technical Assistance	23,000	18,400	4,600						
4.6 Local Pavement Management Program	22,300			22,300					
4.7 Scenic Byways Support	6,140	4,912	1,228						
4.8 Regional Bicycle Commute Week	5,300	4,240	1,060						
4.9 Blanche Barlow Acres/Goose Pond Recreational Access	26,450								26,450
4.10 Enhancing the Recreational Experience on the CT River Scenic Byway	203,364		0						203,364
4.11 Connecticut River Byway Corridor Management	78,067		0						78,067
<b>Subtotal of Section 4.0</b>	<b>670,275</b>	<b>77,472</b>	<b>19,368</b>	<b>22,300</b>	<b>95,603</b>	<b>23,901</b>	<b>99,000</b>	<b>24,750</b>	<b>307,881</b>
<b>MHD 3C Direct Costs</b>	<b>24,500</b>	<b>19,600</b>	<b>4,900</b>						
<b>Program Sum</b>	<b>1,762,715</b>	<b>754,424</b>	<b>188,606</b>	<b>22,300</b>	<b>215,603</b>	<b>53,901</b>	<b>176,000</b>	<b>44,000</b>	<b>307,881</b>

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

## FUNDING SUMMARY

<b>Transportation Funding</b>	<b>Value</b>	<b>% of Total</b>
FHWA PL (80%)	\$ 754,424.00	42.80%
MassHighway PL (20% match)	\$ 188,606.00	10.70%
FTA Section 5307 (80%)	\$ 176,000.00	9.98%
PVTA Section 5307 (20% match)	\$ 44,000.00	2.50%
FTA Section 5303 (80%)	\$ 215,603.00	12.23%
PVTA Section 5303 (20% match)	\$ 53,901.00	3.06%
Local Funds (includes in-kind contributions)	\$ 22,300.00	1.27%
Scenic Byways	\$ 307,881.00	17.47%
<b>Total</b>	<b>\$ 1,762,715.00</b>	<b>100.00%</b>

<b>Other Funding</b>	<b>Value</b>	<b>% of Total</b>
Other Commonwealth of Massachusetts	\$ 2,512,124.00	40.54%
US Environmental Protection Agency	\$ 250,000.00	4.03%
US Department of Transportation	\$ 680,000.00	10.97%
US Department Health/Human Services	\$ 250,000.00	4.03%
US Economic Development Administration	\$ 481,000.00	7.76%
US Department of Energy	\$ 100,000.00	1.61%
US Department HUD	\$ 50,000.00	0.81%
Local Grants	\$ 1,780,000.00	28.73%
Local Assessments	\$ 93,000.00	1.50%
<b>Total</b>	<b>\$ 6,196,124.00</b>	<b>100.00%</b>

<b>Overall Funding</b>	<b>Value</b>	<b>% of Total</b>
FHWA PL (80%)	\$ 754,424.00	9.48%
MassHighway PL (20% match)	\$ 188,606.00	2.37%
FTA Section 5307 (80%)	\$ 176,000.00	2.21%
PVTA Section 5307 (20% match)	\$ 44,000.00	0.55%
FTA Section 5303 (80%)	\$ 215,603.00	2.71%
PVTA Section 5303 (20% match)	\$ 53,901.00	0.68%
Local Funds (includes in-kind contributions)	\$ 22,300.00	0.28%
Scenic Byways	\$ 307,881.00	3.87%
Other Commonwealth of Massachusetts	\$ 2,512,124.00	31.56%
US Environmental Protection Agency	\$ 250,000.00	3.14%
US Department of Transportation	\$ 680,000.00	8.54%
US Department Health/Human Services	\$ 250,000.00	3.14%
US Economic Development Administration	\$ 481,000.00	6.04%
US Department of Energy	\$ 100,000.00	1.26%
US Department HUD	\$ 50,000.00	0.63%
Local Grants	\$ 1,780,000.00	22.37%
Local Assessments	\$ 93,000.00	1.17%
<b>Total</b>	<b>\$ 7,958,839.00</b>	<b>100.00%</b>

\* Denotes Pass-through Funding

## SUMMARY OF COMMENTS ON THE DRAFT UPWP

Task/Section	Comment	From	Response
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To be added as part of the final UPWP.

## **MPO ENDORSEMENT**

To be added as part of the final UPWP.