

Unified Planning Work Program

For the Pioneer Valley Metropolitan Planning Organization

Fiscal Year 2017

October 1, 2016 to September 30, 2017



Catalyst for Regional Progress

PVPC

Prepared by:

Pioneer Valley Planning Commission
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Pioneer Valley
Unified Planning Work Program

Fiscal Year 2017
October 1, 2016 to September 30, 2017

Final Document
July, 2016

Prepared by the
Pioneer Valley Planning Commission

For the Pioneer Valley
Metropolitan Planning Organization

Pioneer Valley MPO Members

| Name | Title |
|--------------------------------|--|
| Stephanie Pollack | Secretary and CEO of the Massachusetts Department of Transportation |
| Thomas J. Tinlin | Administrator of the Massachusetts Department of Transportation Highway Division |
| Walter Gunn | Chairman of the Pioneer Valley Executive Committee |
| Mary MacInnes | Administrator of the Pioneer Valley Transit Authority |
| Mayor Domenic Sarno | Mayor of Springfield |
| Mayor Richard Kos | Mayor of Chicopee |
| Mayor Richard Cohen | Mayor of Agawam |
| Mayor David Narkewicz | Mayor of Northampton |
| George Archible | Belchertown Board of Selectmen |
| Marcus Boyle | Hatfield Board of Selectmen |
| Alternates | |
| Mayor Alexander Morse | City of Holyoke |
| Douglas Slaughter | Amherst Board of Selectmen |
| Carmina Fernandes | Ludlow Board of Selectmen |
| Mayor Brian Sullivan | City of Westfield |
| Ex-Officio (Non-Voting) | |
| Jeff McEwen | Federal Highway Administration |
| Mary Beth Mello | Federal Transit Administration |
| Rick Sullivan | Economic Development Council of Western Massachusetts |
| 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. Tasks included in the UPWP were developed to advance key emphasis areas as identified by the Federal Highway Administration and the Federal Transit Administration. This document was prepared in compliance with the Fixing America's Surface Transportation (FAST) Act and addresses its national goals and planning factors. The FAST Act was signed into law by President Obama on December 4, 2015. This transportation bill specifically addresses all modes of transportation and enhances many of the existing provisions and programs defined in past transportation legislation. Additional information on the FAST Act can be found here: <http://www.fhwa.dot.gov/fastact/>.

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

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

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

The UPWP is divided into the following sections:

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

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

Work Element 3 - This work element is comprised of transportation planning that directly supports the development of projects included in the Regional Transportation Plan (RTP) or the development of RTPs. Key studies included in Work Element 3 for FY 2017 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. A sidewalk inventory for the Town of Palmer will also be completed as part of this task.
- Task 3.2 – Transit System Surveys and Route Implementation works in cooperation with PVTA to survey, monitor, and assess the quality of their fixed route and paratransit services. A survey of PVTA's paratransit riders will be performed as part of this task to report on the level of customer satisfaction with this service.
- Task 3.3 – Regional Freight Planning assists in the planning of the efficient movement of all forms of freight. This task will complete the regional freight plan started as part of the FY2016 UPWP to identify regional freight needs, freight bottlenecks, and necessary improvements.

- Task 3.4 – Regional Congestion Management Process Project Development analyzes regional travel time data along major transportation corridors to confirm areas of congestions. This task will continue to collect and analyze greenhouse gas emissions along major corridors and perform a study at the intersection of Route 10 and South Street in the City of Easthampton.
- Task 3.6 – 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 3.7 – Regional Safety and Planning Studies will continue the work completed last year and identify the top high crash locations in each of the 43 communities that comprise the PVPC. This study will provide a summary of the type and severity of the crashes experienced in our region and propose a series of low cost safety improvements that could be implemented at the local level to improve safety. A roadway safety audit for the intersection of Main Street with Frank B. Murray Street in Springfield will also be performed as part of this task.
- Task 3.9 – Climate Change Implementation will build on the vulnerability assessment of critical Pioneer Valley infrastructure completed last year and develop a regional Climate Action and Resiliency Plan. The plan will assess and prioritize culvert and stream crossings in the region and identify strategies and tools to assist in reducing 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 Fixing America's Surface Transportation (FAST) Act, the Clean Air Act Amendments of 1990 (CAAA) and the Americans with Disabilities Act (ADA).

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

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

| Funding Source | Fiscal Period: |
|-----------------------|--|
| FHWA/MassDOT | October 1, 2016 through September 30, 2017 |
| FTA/MassDOT | April 1, 2016 through March 30, 2017 |
| PVTA | April, 2016 through September, 2017 |
| 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 July 25, 2016.

At times, the UPWP may require an amendment when a task is proposed to be added or deleted. In addition, the modification of a proposed budget or scope could require an adjustment to the UPWP. Upon endorsement by the MPO, the UPWP may be amended or adjusted as follows:

- Amendment with 30 day public comment period: an addition of a new task and/or deletion of a previously programmed task.
- Adjustment with an approval vote from the MPO and sign-off from the Office of Transportation Planning (OTP): modification of budget or scope to an already programmed task.

TRANSPORTATION PLANNING FUNDING SOURCES

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

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

A total of \$1,000,134 in PL funds has been programmed for the FY2017 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 FY2017.

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

The Pioneer Valley Transit Authority, the FTA Section 5307 applicant, has consulted with the Pioneer Valley Planning Commission and concurs that the public involvement process adopted by the MPO for the development of the UPWP satisfies the public hearing requirements that pertain to the development of the Program of Projects included in the Section 5307 Urbanized Area Formula Program grant application, including the provision for public notice and the time established for public review and comment.

For FTA projects that are not routine (i.e. Section 5307 applications that required environmental assessment or an environmental impact statement) the public involvement provided herein as part of the UPWP review is not sufficient. FTA will require additional public involvement prior to grant approval, as presented in the joint FHWA/FTA environmental regulations, 23 CFR-Part 771.

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

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

Many projects completed by 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.

FAST ACT PLANNING FACTORS

All metropolitan planning organizations are required to incorporate ten factors into their planning process. The Pioneer Valley MPO has taken great strides to incorporate these ten factors into the Unified Planning Work Program. The Ten Planning Factors 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 3.3 - Regional Freight Planning Task 3.6 – Regional Performance Measures Assessment |
| 2 | Increase the safety of the transportation system for motorized and non-motorized users. | Task 3.1 - Regional Bicycle and Pedestrian Planning Task 3.7 - Regional Safety and Planning Studies |
| 3 | Increase the security of the transportation system for motorized and non-motorized users. | Task 3.2 - Transit System Surveys and Route Implementation Task 3.8 - Intelligent Transportation Systems (ITS) and Regional Evacuation Planning Task 4.1 - Regional Transit Planning |
| 4 | Increase the accessibility and mobility of people and for freight. | Task 3.1 - Regional Bicycle and Pedestrian Planning Task 3.3 - Regional Freight Planning Task 4.1 - Regional Transit Planning Task 4.2 - Paratransit Planning Assistance |
| 5 | Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns. | Task 1.5 - Title VI and Environmental Justice Task 4.3 – Implementing the Regional Land Use Plan |
| 6 | Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight. | Task 3.1 Regional Bicycle and Pedestrian Planning Task 3.2 - Transit System Surveys and Route Implementation Task 3.3- Regional Freight Planning |
| 7 | Promote efficient system management and operation. | Task 2.7 - Regional Performance Measures Task 3.2 Transit System Surveys and Route Implementation Task 3.4 - Regional Congestion Management Process - Project Development |
| 8 | Emphasize the preservation of the existing transportation system. | Task 3.5 - Regional Pavement Management System - Project Development Task 3.9 Climate Change Implementation |

| | | |
|----|--|--|
| 9 | Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation. | Task 3.8 - Intelligent Transportation Systems (ITS) and Regional Evacuation Planning Task 3.10 Green Streets and Infrastructure |
| 10 | Enhancing travel and tourism. | Task 4.4 Off-road Bicycle and Pedestrian Network Planning Task 4.7 Scenic Byways Support Task 4.8 Regional Bike Share Planning |

FIXING AMERICA'S SURFACE TRANSPORTATION (FAST) ACT

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

National goal areas continue to be a priority under the FAST Act and address the following areas:

- **Safety**—To achieve a significant reduction in traffic fatalities and serious injuries on all public roads.
- **Infrastructure condition**—To maintain the highway infrastructure asset system in a state of good repair.
- **Congestion reduction**—To achieve a significant reduction in congestion on the NHS.
- **System reliability**—To improve the efficiency of the surface transportation system.
- **Freight movement and economic vitality**—To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.
- **Environmental sustainability**—To enhance the performance of the transportation system while protecting and enhancing the natural environment.
- **Reduced project delivery delays**—To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices.

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

| Task | Description | National Goals Supported |
|------|--|--|
| 2.7 | Regional Performance Measures collects data used to monitor and evaluate regional performance measures established for the Pioneer Valley Region | All |
| 3.1 | Regional Bicycle and Pedestrian Planning 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 |

| | | |
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| 3.2 | Transit System Surveys and Route Implementation – This ongoing task uses existing route data and ridership surveys to assist in improving the reliability and performance of the PVTA fixed route system. Staff has also been utilizing data available from the ITS equipped transit vehicle to develop new performance measures. | Safety, Congestion Reduction, System Reliability |
| 3.3 | Regional Freight Planning – The freight planning task focuses on identifying opportunities to enhance the movement of freight in the region. | Freight Movement and Economic Vitality |
| 3.4 | Regional Congestion Management Process (CMP) – The CMP uses a variety of data sources to measure congestion along regional corridors and identify congestion bottlenecks. 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. | Congestion Reduction, System Reliability |
| 3.5 | Regional Pavement Management System – Pavement condition data is collected for all federal aid eligible roadways in the region on a four year cycle. The impact of planned roadway improvement projects can be analyzed under a variety of funding levels to identify the level of investment required to keep pavement in a good state of repair. | Infrastructure Condition, Reduce Project Delivery Delays |
| 3.6 | Regional Performance Measures Assessment – 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. | All |
| 3.7 | Regional Safety and Planning Studies – 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. | Safety, Reduce Project Delivery Delays |
| 3.8 | Intelligent Transportation System (ITS) and Regional Evacuation Planning – This task assists in ongoing regional ITS and evacuation planning efforts to increase the deployment of ITS technology, provide real time information to the public, and enhance regional transportation security. | Safety, Congestion Reduction, System Reliability |
| 3.9 | Climate Change Implementation – This task assists Pioneer Valley communities to plan for the impacts of climate change on the regional transportation system. It also serves to develop strategies and projects that can have a positive impact on greenhouse gas emissions from | Infrastructure Condition, Environmental Sustainability |

| | | |
|------|--|--|
| | transportation sources in compliance with the Massachusetts GreenDOT policy. | |
| 3.10 | Green Street and Infrastructure - Encourages the use of green streets and green infrastructure where practical to reduce stormwater and other environmental impacts the regional transportation system. | Infrastructure Condition, Environmental Sustainability |

FEDERAL PLANNING EMPHASIS AREAS

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

- *Bike and Pedestrian Networks* – Several tasks in the UPWP are focused on improving the regional bicycle and pedestrian network. Task 3.1 focuses on the on-road bicycle and pedestrian network and work with communities to advance the concept of “Complete Streets” as part of ongoing roadway improvements and maintenance. Task 4.4 focuses on the off-road bicycle and pedestrian network and will complete an update of the regional trail map. Task 4.8 supports efforts to promote bicycling as part of the regional “Bike to Work” week. Task 4.9 is comprised of planning efforts to support a new “Bike Share” project for the region.
- *Performance Management*. The PVPC has specifically included Tasks 2.7 and 3.6 in the UPWP to address the advancement of performance based planning and project selection. We will continue to work with local communities, MassDOT, and our federal partners to track regional performance measures and utilize the recently adopted Transportation Evaluation Criteria to advance planning studies and transportation improvement projects in the Pioneer Valley Region.
- *Sustainability* – Both the Climate Change Implementation (Task 3.9) and Green Streets and Infrastructure (Task 3.10) tasks assist in advancing strategies to promote a regional transportation system that is sustainable. Task 3.10 supports a series of pilot projects in the region to reduce the impacts of stormwater on the environment. Task 3.9 will develop a regional Climate Action and Resiliency Plan to assess and prioritize culvert and stream crossings in the region and identify strategies and tools to assist in reducing the impacts of climate change.
- *Regional Models of Cooperation* - PVPC routinely coordinates its planning activities with MassDOT, regional transit authorities, and bordering regional planning agencies. Massachusetts RPAs meet quarterly with MassDOT to review the status of proposed transportation improvement project. Transportation Program Managers have monthly meetings to coordinate regional planning efforts tied to the TIP, UPWP, and Title VI. We also meet annually with the Capital Region Council of Governments, located in Hartford Connecticut, to coordinate cross-border transportation planning activities as appropriate for Interstate 91, transit planning, bicycle planning, the regional transportation model, and the Bradley International Airport.
- *Ladders of Opportunity – Access to Essential Services*. PVPC has incorporated enhanced coordination with a wide range of partners as part of our planning program to identify existing gaps in the regional transportation system. We utilize Task 1.5 – Title VI and Environmental Justice to identify opportunities for the public to be involved in the identification of social, economic and environmental impacts of transportation. We have also included an analysis of the attainability by transit to essential services such as employment, health care, and education as part of the Regional Transportation Plan. Task 3.1 also includes a study of regional sidewalks along federally-aided roadways to identify gaps and improve connections to transit.
- *Geographic Distribution of UPWP funded studies and Target TIP Projects* - An equity assessment of transportation planning tasks completed as part of previous UPWP’s was first included as part of the FY2016 UPWP. This task will continue to be updated as part of future UPWP’s.

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 |
|----------|---------|-------------|

- 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 | |

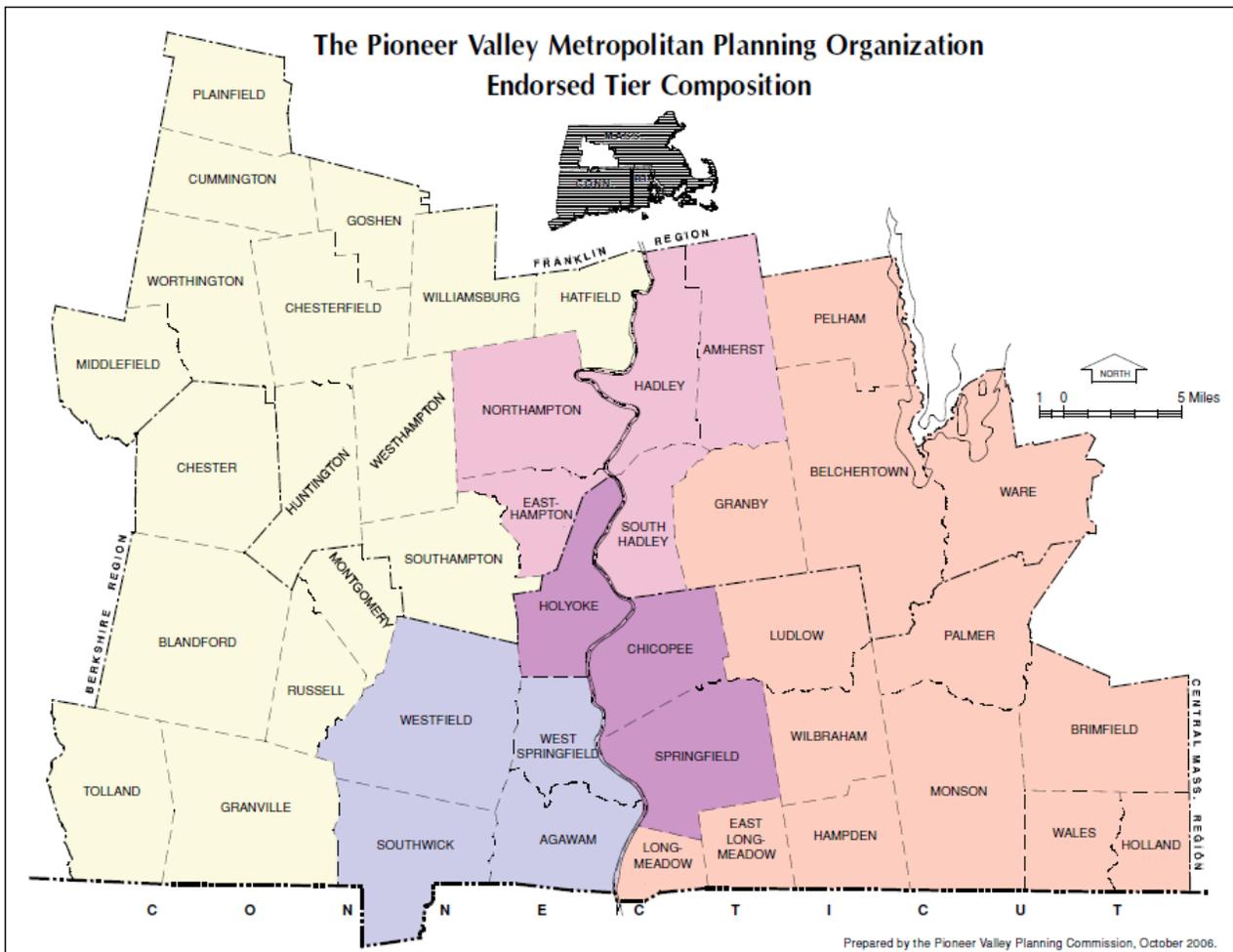
- A Selectman of one of the following seventeen (17) suburban and rural towns:

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

In addition, the Joint Transportation Committee (JTC) Chairman, and one representative each from the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), the 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 J. Tinlin | Administrator of the Massachusetts Department of Transportation Highway Division |
| Walter Gunn | Chairman of the Pioneer Valley Executive Committee |
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| Alternates | |
| Mayor Alexander Morse | Mayor of Holyoke |
| Mayor Brian Sullivan | Mayor of Westfield |
| Douglas Slaughter | Amherst Board of Selectmen |
| Carmina Fernandes | Ludlow Board of Selectmen |



JOINT TRANSPORTATION COMMITTEE (JTC)

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

Pioneer Valley Joint Transportation Committee Members and Alternates

| Community | Member | Alternate |
|--|----------------------|---------------------------------|
| Agawam | Christopher Golba | Michelle Chase |
| Amherst | Guilford Mooring | Jason Skeels |
| Barnes Municipal Airport | Brian P. Barnes | Vacant |
| Belchertown | Steven Williams | Gary Brougham/Douglas Albertson |
| Blandford | Vacant | Vacant |
| Brimfield | Judith Carpenter | Vacant |
| Chester | John Murray | Vacant |
| Chesterfield | Matt Smith | Vacant |
| Chicopee | Jeffrey Neece | Steven Frederick |
| Cummington | Rob Dextraze | Vacant |
| East Longmeadow | Robert Peirent | Vacant |
| Easthampton | Jessica Allen | Vacant |
| Goshen | Vacant | Vacant |
| Granby | David Derosiers | Wayne Tack Sr. |
| Granville | Doug Roberts | Mathew Streeter |
| Hadley | Vacant | Vacant |
| Hampden | Vacant | Vacant |
| Hatfield | Phil Genovese | Vacant |
| Holland | Larry Mandell | Brian Johnson |
| Holyoke | Yem Lip | Jeffrey Burkott |
| Huntington | Charles Dazelle | Vacant |
| Longmeadow | Mario Mazza | Richard Foster |
| Ludlow | JT Gaucher | Elie Villeno |
| MassBike | Gary Briere | Elaine Formica |
| MassDOT District 1 | Mark Moore | Peter Frieri |
| MassDOT District 2 | Richard Masse | Laura Hanson |
| Middlefield | Rodney Savery, Jr. | Alan Vint |
| Monson | John Morrell | Evan Brassard |
| Montgomery | Curtis Bush, Jr. | Vacant |
| Northampton | Wayne Feiden | Vacant |
| Palmer | Gerry Skowronek | Rudy Pisarczyk |
| Pelham | Rick Adamcek | Vacant |
| Peter Pan Bus Lines | Peter Picknelly, Jr. | Vacant |
| Pioneer Valley Railroad | Milt Brill | Vacant |
| Pioneer Valley Transit Authority | Josh Rickman | Vacant |
| Plainfield | Merton Taylor Jr. | Vacant |
| Russell | Pandora Hague | Vacant |
| South Hadley | Jim Reidy | Vacant |
| Southampton | Randall Kemp | Vacant |
| Southwick | Randy Brown | Richard Grannells |
| Springfield | Christopher Cignoli | Peter Shumway |
| Tolland | James Deming | Kathleen Cowles |
| University of Massachusetts | Glen Barrington | Vacant |
| Wales | Bruce Cadieux | Jeff Vanais |
| Ware | Dick Kilhart | David Tworek |
| Western Massachusetts Economic Development Council | Ken Delude | Vacant |
| Westfield | Mark Cressotti | Vacant |
| Westhampton | David Blakesly | Brian Mulvehill |
| West Springfield | James Czach | Vacant |
| Wilbraham | Tonya Bosch | Dena Grochmal |
| Williamsburg | William Turner | Vacant |
| Worthington | Cork Nugent | Vacant |

TRANSPORTATION PLANNING STAFF

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

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

STAFFING REPORT

The following PVPC staff members are expected to work on the FY2017 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% |
| Patrick Beaudry | Communications Manager | 20% |
| David Elvin | Senior Transit Planner | 100% |
| Ray Centeno | Graphics Designer | 25% |
| Christopher Curtis | Chief Planner/Section Head | 16% |
| Jacob Dolinger | GIS Specialist | 25% |
| Christopher Dunphy | Community Development Senior Planner | 10% |
| Ashley Eaton | Land Use 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 Head | 5% |
| Andrew McCaul | Senior Transportation Planner II | 100% |
| Jeffrey McCollough | Senior Transportation Planner - Specialist | 100% |
| Khyati Parmar | Senior Transportation Planner II | 100% |
| Shawn Rairigh | Senior Land Use Planner | 7% |
| Catherine Ratte | Principal Planner/Section Head | 1% |
| Dana Roscoe | Principal Planner – Section Head | 100% |
| Gary Roux | Principal Planner – Section Head | 100% |
| Larry Smith | Senior Planner | 8% |
| Johanna Stacy | Data and Policy Analyst/Planner II | 35% |
| Dillon Sussman | Senior Land Use Planner | 7% |
| Todd Zukowski | GIS/Cartographic Section Head | 25% |
| Transportation Intern | Intern | 100% |
| Data Intern | Intern | 50% |

FUNDING PROFILE

| | Total | FHWA 3C PL | MassDOT 3C Match | Local Match | FTA S. 5303 | PVTA* S. 5303 Match | PVTA S. 5307 | PVTA S. 5307 Match |
|---|------------------|----------------|------------------------|----------------|----------------|---------------------------|-----------------|--------------------------|
| 1.0 Management & Certification of the 3C Process | | | | | | | | |
| 1.1 Management of the 3C Process | 50,000 | 28,000 | 7,000 | | 12,000 | 3,000 | | |
| 1.2 Unified Planning Work Program | 8,750 | 6,000 | 1,500 | | 1,000 | 250 | | |
| 1.3 Public Participation Process | 20,500 | 10,400 | 2,600 | | 6,000 | 1,500 | | |
| 1.4 TIP Development | 68,750 | 45,000 | 11,250 | | 10,000 | 2,500 | | |
| 1.5 Title VI and Environmental Justice | 65,625 | 45,000 | 11,250 | | 7,500 | 1,875 | | |
| Subtotal of Section 1.0 | 213,625 | 134,400 | 33,600 | | 36,500 | 9,125 | | |
| 2.0 Technical Support & Data Collection | | | | | | | | |
| 2.1 Traffic Counting | 37,500 | 30,000 | 7,500 | | | | | |
| 2.2 Regional Travel Demand Modeling/Clean Air Planning | 74,375 | 55,000 | 13,750 | | 4,500 | 1,125 | | |
| 2.3 GIS, Mapping and Graphics | 84,950 | 48,960 | 12,240 | | 7,000 | 1,750 | 12,000 | 3,000 |
| 2.4 Information Center | 49,850 | 38,880 | 9,720 | | 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 | | | | | |
| Subtotal of Section 2.0 | 304,175 | 218,840 | 54,710 | | 12,500 | 3,125 | 12,000 | 3,000 |
| 3.0 RTP Planning | | | | | | | | |
| 3.1 Regional Bicycle, Pedestrian and Complete Streets Planning | 50,000 | 40,000 | 10,000 | | | | | |
| 3.2 Transit System Surveys & Route Implementation | 147,500 | | | | 53,000 | 13,250 | 65,000 | 16,250 |
| 3.3 Regional Freight Planning | 37,500 | 30,000 | 7,500 | | | | | |
| 3.4 Regional Congestion Management Process - Project Development | 128,750 | 95,000 | 23,750 | | 8,000 | 2,000 | | |
| 3.5 Regional Pavement Management System - Project Development | 42,500 | 34,000 | 8,500 | | | | | |
| 3.6 Regional Performance Measures Assessment | 26,250 | 21,000 | 5,250 | | | | | |
| 3.7 Regional Safety and Planning Studies | 126,434 | 96,147 | 24,037 | | 5,000 | 1,250 | | |
| 3.8 Intelligent Transportation Systems (ITS) and Regional Evacuation Planning | 25,000 | 15,000 | 3,750 | | 5,000 | 1,250 | | |
| 3.9 Climate Change Implementation | 11,470 | 9,176 | 2,294 | | | | | |
| 3.10 Green Streets and Infrastructure | 6,140 | 4,912 | 1,228 | | | | | |
| Subtotal of Section 3.0 | 601,544 | 345,235 | 86,309 | | 71,000 | 17,750 | 65,000 | 16,250 |
| 4.0 Ongoing Transportation Planning | | | | | | | | |
| 4.1 Regional Transit Planning | 212,249 | | | | 83,799 | 20,950 | 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 | 31,000 | 24,800 | 6,200 | | | | | |
| 4.4 Off-Road Bicycle and Pedestrian Network Planning | 16,400 | 13,120 | 3,280 | | | | | |
| 4.5 Local Technical Assistance | 23,000 | 18,400 | 4,600 | | | | | |
| 4.6 Local Pavement Management Program | 7,000 | | | 7,000 | | | | |
| 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 Regional Bike Share Planning | 20,700 | 16,560 | 4,140 | | | | | |
| Subtotal of Section 4.0 | 350,539 | 82,032 | 20,508 | 7,000 | 93,799 | 23,450 | 99,000 | 24,750 |
| MassDOT 3C Direct Costs | 24,500 | 19,600 | 4,900 | | | | | |
| Program Sum | 1,494,383 | 800,107 | 200,027 | 7,000 | 213,799 | 53,450 | 176,000 | 44,000 |

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

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

This work element encompasses the administration and support of the 3-C transportation process and has been divided into the following tasks for FY 2017.

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.
9. Work with the Franklin Regional Transit Authority (FRTA) to develop a Memorandum of Understanding (MOU) on cross border participation.

PRODUCTS:

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

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

| | |
|----------------|----------|
| Direct Labor | \$22,852 |
| Indirect Costs | \$27,148 |

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 - 2016.

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 an analysis of the geographical distribution of UPWP funds in the PVPC region.
4. Perform outreach to member communities to identify potential transportation planning activities for inclusion in the UPWP.

PRODUCTS:

1. Amendments to the current UPWP as necessary.
2. UPWP for the next program year (FFY 2018). The estimated completion date is August 2017. Public engagement is estimated to begin in May 2017.

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

| | |
|----------------|---------|
| Direct Labor | \$3,999 |
| Indirect Costs | \$4,751 |

Task 1.3 Public Participation Process

OBJECTIVE:

To foster an inclusive involvement in the transportation decision making though at commitment to early and continuous opportunities for the public to be involved in the identification of social, economic and environmental impacts of transportation. PVPC will reach beyond traditional stakeholders to identify populations and appropriate strategies to engage and seek their input. Our inclusive public participation process will be constantly improving and expanding. PVPC will work to assess the effectiveness of the public participation process and to develop enhanced regional involvement in support of the objectives of the FAST Act. To provide the public with complete information, timely notice, full access to key decisions and opportunities for early and continuing involvement in the 3C process.

The elements of this effort listed below constitute the best practices already used by PVPC and also incorporated best practices from MassDOT, FTA, FHWA, and other transportation agencies. This inclusive public participation process is continually improving and expanding to include contacts with community-based organizations and underrepresented populations.

PREVIOUS WORK:

1. Adopted MassDOT's new Public Participation Process.
2. Expanded stakeholder outreach and capacity building.
3. Created an RTP informational video.
4. Upgraded audio equipment for public meetings to comply with new state regulations.
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. Revise and expand the MPO's definitions of "vital documents" and create a work plan and schedule for translations and access.
2. Incorporate new guidance from FTA and FHWA and MassDOT into the planning process.
3. Incorporate public engagement plans into community projects.
4. Expand "visioning" tools approaches to improve public participation and outreach efforts including new online mapping tools using the PVPC GIS server capabilities.
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. Include revisions to the PVPC webpage to maintain current information on transportation studies and ongoing projects.
7. Incorporate new performance measures for the Public Participation Process and implement changes as needed and track these metrics.
8. Explore alternative media outlets for reaching the Limited English Proficient (LEP) population in the region.
9. Network with social service agencies, neighborhood groups and community organizations to enhance existing outreach.
10. Update PVPC's public participation contact database.

11. Revise and update the database of community contacts including email addresses of non-profit and community based organizations.
12. Coordinate public participation with ongoing Environmental Justice Planning.

PRODUCTS:

1. Meeting minutes.
2. Press releases for transportation projects (as necessary).
3. Quarterly regional newsletters.
4. Updated contact database.
5. Updated database of email contacts for community groups and relevant non-profits. January 2017.
6. Web based information distribution.

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

| | |
|----------------|----------|
| Direct Labor | \$ 9,369 |
| Indirect Costs | \$11,131 |

Task 1.4 Transportation Improvement Plan (TIP) Development

OBJECTIVE:

The TIP is a five year schedule of federally funded bridge, bicycle and pedestrian, roadway, and transit projects for the Pioneer Valley Region. The PVMPO with assistance from PVPC Staff, the JTC, and MassDOT evaluate and prioritize a listing of improvement projects 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 the FAST Act, both the Massachusetts GreenDOT and Healthy Transportation Policies, and the current Regional Transportation Plan for the Pioneer Valley. PVPC Staff, with guidance from the MPO, will organize an extensive public outreach program to develop the TIP with the most current project information available. Once the public outreach is complete, the MPO will 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 – 2017
2. Updates to the Transportation Improvement Program Database
3. Annual Transportation Evaluation Criteria (TEC) Forms Update
4. Annual TEC summary sheet to assist in populating the Draft TIP.
5. TIP Project locations mapped using GPS
6. Regional Equity analysis

PROPOSED ACTIVITIES:

1. Update and improve PVPC’s database of transportation projects. Data will satisfy the requirements of the Metropolitan Planning Rules. The MassDOT “Grants Plus +” system will be used to develop project information as appropriate.
2. Assist communities with the development of new and existing projects in order to meet MassDOT Design Guide Book, Green DOT Policy, and Healthy Transportation requirements.
3. Assist the JTC in utilizing project evaluation criteria to develop a financially constrained project listing for each program year.

4. Maintain the financial element for all years of the TIP. Financial constraint will be maintained based on funding targets provided by MassDOT. Funding sources will also be provided when available.
5. Present air quality conformity findings and Greenhouse Gas emissions calculations. Analyses and documentation will satisfy the requirements of the Metropolitan Planning Rules and be consistent with the Massachusetts Global Warming Solutions Act.
6. Conduct appropriate public participation for the TIP consistent with the public participation plan for the region.
7. Conduct formal amendments and adjustments as necessary.
8. Provide links on the PVPC web site for communities to access current as well as archived TIP documents and project information.
9. Collect GPS data for all projects programmed on the TIP for use with GIS based analysis.
10. Identify elements of proposed TIP projects that could be eligible for TAP funding.
11. Update regional equity analysis based on new 2018-2022 TIP

PRODUCTS:

1. FFY 2018 - 2022 Transportation Improvement Program. The estimated completion date is August 2017. Public engagement is estimated to begin in May 2017.
2. TIP Amendments and Adjustments as necessary.
3. Summary report for comments received during public review for amendments made to the TIP. June 2017.
4. Ranked list of evaluated TIP projects, with corresponding TEC sheets. April 2017.
5. Map displaying the 5 years of programmed projects available online. August 2017.
6. Listing of TAP eligible project components. May 2017.
7. TIP webpage providing all pertinent project information. August 2017.

| 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 |
| TOTAL | \$68,750 | 34 weeks |

| | |
|----------------|----------|
| Direct Labor | \$31,421 |
| Indirect Costs | \$37,329 |

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 under represented populations within the Region to seek input on the transportation planning process. Tasks outlined in this section will assist PVPC in identifying Title VI responsibilities and addressing environmental justice and social equity issues as part of its transportation planning process. These specific tasks address the goals of the RTP, Limited English Proficiency Plan, Environmental Justice plan and Disadvantaged Business Enterprise plan to enhance the existing public participation process, better identify protected populations, engage low income and minority populations, and develop performance measures to evaluate transportation deficiencies, benefits, and burdens. Staff will

continue to improve its planning process to ensure that it is conducted in accordance with Title VI of the Civil Right Act of 1964, the revised FHWA/FTA guidance on Limited English Proficiency (LEP), and the new requirements of Executive Order 12898 (Environmental Justice) to give full and fair consideration to all residents in the region.

PREVIOUS WORK:

1. Revised the Public Participation Plan to incorporate Title VI and LEP components consistent with MassDOT.
2. Created a form letter to inform new Title VI database contacts on the operation and role of PVPC and the MPO.
3. Revised the TIP scoring criteria to reflect EJ and Title VI.
4. Developed bilingual public notices for transportation projects.
5. Created an RTP video with Spanish Language Translations.
6. Updated and submitted revised Title VI program to MassDOT Office of Diversity and Civil Rights (ODCR) and FTA.
7. Updated the Notice to Beneficiaries to comply with definitions requested by MassDOT.
8. Created a database of non-profit contacts in the region.
9. Compiled a list of sign language interpreters.
10. Expanded translation of project related documents and notices to address LEP specific issues.
11. Participated in statewide Title VI networking sessions with the MassDOT Title VI Specialist and other RPAs.
12. Developed bi-lingual survey forms.

PROPOSED ACTIVITIES:

1. Update strategies to engage LEP individuals in accordance with the MPO's four-factor analysis. Incorporate language outreach into planning studies as appropriate.
2. Continue to expand the MPO's database of email contacts for enhanced evaluation related to Title VI and EJ performance measures.
3. Work closely with the MassDOT Title VI Specialist to assess jurisdictional responsibilities, maintain an open dialogue, provide an annual update of documented complaints, and progress in implementing Title VI programs.
4. Update Title VI Mapping tools for Title VI and EJ populations for PVPC communities. 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.
5. Review the Four Factor analysis PVPC uses to formulate a Language Access Plan as required under Executive Order 13166. Evaluate alternatives to the use of Safe Harbor Provisions.
6. Sign Certification and Assurances as put out by FTA/FHWA. Include Title VI language (as referenced by FHWA) into contracts with third party consultants advising entities of Title VI obligations.
7. Distribute Notice of Beneficiaries to community organizations and relevant contacts as identified in the Public Participation Plan.
8. 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.
9. 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.

10. Continue to incorporate “visioning techniques” in new projects and planning tasks that will better engage low income and minority populations.
11. Develop bilingual surveys for PVRTA and bilingual public notices for the Transportation Improvement Plan and the Unified Planning Work Program to provide increased opportunities for under-served populations to be represented in the public participation process.
12. Review Measures of Effectiveness (MOEs) regarding the implementation of Title VI.
13. 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. Revised four factor analysis for the Pioneer Valley MPO.
2. Annual report to MassDOT on EJ, Title VI and LEP. July 2017.
3. Updated maps of Title VI protected population demographics and related impacts. As needed.
4. Ongoing coordination of the Springfield Partners for Healthier Communities Built Environment Task Force.
5. Race sensitivity training for staff as appropriate.
6. Expanded posting of the Notice to Beneficiaries including language translations to new MassDOT requirements.

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

| | |
|----------------|----------|
| Direct Labor | \$29,993 |
| Indirect Costs | \$35,632 |

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 FY2017 UPWP.

PREVIOUS WORK:

1. Regional Traffic Counting Program 1985 - 2016.
2. Data collection and analysis as part of Highway Performance Monitoring System (HPMS).
3. Traffic count library and database at PVPC.
4. Regional Traffic Counts, 2011 – 2015.

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, Turning Movement Count (TMC) data, and perform analysis, as requested by MassDOT and member communities.
4. Upload all ATR count data into the MassDOT MS2 website.
5. 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.
6. Update and maintain the PVPC traffic count database.
7. Collect bicycle and pedestrian volumes at pre-determined locations.

PRODUCTS:

1. Summary reports of all traffic count information for the region.
2. PVPC web page Average Daily Traffic counts by community.

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

| | |
|----------------|----------|
| Direct Labor | \$17,139 |
| Indirect Costs | \$20,361 |

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. Drafted a memorandum describing the PVPC travel demand model (August 2015).
2. Developed the 2010 base model for the PVPC region following the new approach outlined by CTPS. Created new model macros to read new data and geographies and run models for current and future years (October 2015).
3. Calibrated the 2010 base year model and calculated adjustment factors for future build years (January 2016).
4. Conducted a separate peak period and off peak highway assignment which sum up to yield daily traffic flows (February 2016).
5. Developed and presented guidance on Travel Demand Modeling training for work force development at the Institute of Transportation Engineers' UMass Technical Day (March 2016).
6. Looked at scenario planning for I-91 corridor as part of the I-91 viaduct study working group task.
7. Prepared a report on the 2010 base year model and the future build years 2020, 2030, 2040 results. This model update included comparisons between estimated Vehicle Miles Traveled and Traffic Flow for the four model years (April 2016).
8. Revised the PV 2010 Model Running Steps report and include new methodologies used in trip generation, trip distribution, and trip assignment developed in accordance with MassDOT guidance (May 2016).
9. 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.
10. Created the "PVRM 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.
11. 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.

PROPOSED ACTIVITIES:

1. Enhance the 2010 base model for the PVPC region following suggestions by CTPS. Tolls need to be accounted for in a more robust fashion using TransCAD's options of toll links as opposed to using penalties and to account for future high-speed toll collection (April 2017).

2. Merge geocoded databases into one for traffic count locations used in the regional model. Update database with current Average Daily Traffic data at community lines and external stations gathered from in-house traffic counts as well as from surrounding planning agencies (November 2017).
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 in 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. Coordinate regional travel demand model data with MassDOT, surrounding Massachusetts RPAs, and the Capital Region Council of Governments.
10. Use the regional model to identify the potential construction and long term impacts of proposed transportation improvements to the Route 147 (Memorial Avenue) corridor and the reconstruction of the Morgan-Sullivan bridge in the towns of Agawam and West Springfield. Work with both communities to identify other planning scenarios, as appropriate, to identify the impact of future development in this area.

PRODUCTS:

1. Refinement and maintenance of the regional travel demand model.
2. Air quality conformity and greenhouse gas analysis in support of the TIP. June 2017.
3. Maps for graphical representation of existing model structure.
4. Transportation build out analysis for TIP projects as needed.
5. Agawam/West Springfield project analysis results.

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

| | |
|----------------|----------|
| Direct Labor | \$33,992 |
| Indirect Costs | \$40,383 |

Task 2.3 GIS, Mapping and Graphics

OBJECTIVE:

This on-going effort collects, maintains and creates geo-spatial data that supports the overarching performance initiatives of the FAST Act and the project-specific goals outlined in this UPWP. Through these activities, PVPC GIS/Graphics staff will provide planners and government partners with traditional GIS mapping products intended to support their 3C planning processes and decision-making. Additionally, PVPC GIS/Graphics staff continually works on updates to existing data layers to enhance access to the general public through online GIS mapping and enhanced web content for planning project information.

PREVIOUS WORK:

1. Created and maintained GIS regional bus system database; including updates to the transit system map, preparation of individual maps and schedules, regional transit service analysis, and support to PVRTA web page. (Ongoing Task)
2. Acquired, revised and integrated relevant GIS spatial data/map coverage generated at local, state and federal levels into Pioneer Valley regional projects, including: road centerlines, road names, updated municipal zoning, land use, parcel, and critical public infrastructure data. (Ongoing Task)
3. Developed, enhanced, and maintained several spatial data layers to support transportation-related projects, including: functional classification of roads, traffic count locations, congestion management, parking facilities, signalization, pavement conditions, regional bicycle and pedestrian infrastructure, ADA transit service area, areas of regional growth, etc. (Ongoing Task)
4. Continued to support and participate in the statewide GIS Advisory Committee, Western Massachusetts GIS User group, and direct assistance to Pioneer Valley communities. (Ongoing Task).

PROPOSED ACTIVITIES:

1. Continue to develop and implement management strategies, which address staff training, establish agency data standards and data collection protocol, and conformance to map design that can be applied to all GIS products. (Ongoing Task)
2. Pursue the use of GIS and other automated mapping and spatial analytical technologies for transportation applications. Enhance existing digital base map data and develop geographically referenced data layers for use in transit service analysis, regional land use and smart growth planning activities, emergency response, critical infrastructure assessment, public works and pavement management, and transportation system planning. (Ongoing Task)
3. Integrate information generated to support transit and transportation management systems into the GIS. Create maps and graphics to promote understanding of related issues. (Ongoing Task)
4. Work with state and federal agencies to review, correct and enhance regional GIS map coverage and related data to meet state and federal standards and support development to Homeland Security and pre-disaster mitigation spatial data for western Massachusetts. (Ongoing Task)
5. Work with PVPC staff to assimilate state and federal data and data structure (i.e., road centerline/road inventory) into the Commission's database and analytic modeling programs. (Ongoing Task)

6. Improve access and use of web-based GIS data/analysis, online data and map products.
7. Promote the agency and its efforts to resolve regional issues through published materials, thematic maps, and distribution of information over the worldwide web, and educational multi-media presentations. (Ongoing Task).

PRODUCTS:

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

| Source | Budget | Est. Staff Effort |
|---------------------|-----------------|-------------------|
| FHWA PL (80%) | \$48,960 | 23 weeks |
| MassDOT (20% match) | \$12,240 | 6 weeks |
| FTA S. 5303 | \$ 8,750 | 4 weeks |
| PVTA S. 5307 | \$15,000 | 8 weeks |
| TOTAL | \$84,950 | 41 weeks |

| | |
|----------------|----------|
| Direct Labor | \$38,825 |
| Indirect Costs | \$46,125 |

Task 2.4 Information Center

OBJECTIVE:

Support the initiatives and goals of the FAST Act by serving as a regional data and analysis resource to transportation, economic development, land use, and municipal planning staff throughout the region. In particular, this Task will provide data and resources to support Task 2.7 Regional Performance Measures Development. The focus will continue to be placed on collecting and summarizing data from multiple sources to provide digital and print products that will inform stakeholders and support ongoing transportation activities. The Information Center produces high quality written and graphic information and research products that are easily accessible and understandable to the public. As technology opportunities expand, we continue to place more weight on making data and products easily available to download and manipulate through online venues including visualizing key data indicators. We also place a focus on assisting multiple partners to develop positive outcomes through collaborative examination of data and strategy development.

PREVIOUS WORK:

1. Updated regional and municipal level population, household, and employment projections which comply with the new 2010 Census and assisted transportation staff in integrating this into the transportation model.
2. Data Digest report focused on commute times and patterns with the Pioneer Valley surrounding major employment centers within the region.
3. Continued maintenance and updating of a municipal indicators database for every city and town in the Pioneer Valley and updated through June 2016 data.
4. Assisted with analysis of employment centers for regional TOD analysis.

5. Continued data updates in the development of updated definitions of Environmental Justice populations for the Pioneer Valley Region.
6. Analyzed labor market for proposed regional passenger rail project.
7. Developed and maintain a data downloads website available to regional planners and the public. www.pioneervalleydata.org
8. Integrated additional transportation measures into the regional economic development indicators.
9. Incorporated relevant safety data and regional performance target data into regional database. Will continue to update annually.
10. Developed online tool that allows the creation of custom, visual data dashboards that can be embedded in PVPC and other partner websites.

PROPOSED ACTIVITIES:

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

11. Explore federal freight analysis framework data to assist in its integration into PVPC's planning activities.

PRODUCTS:

1. Maintain information systems of socio-economic and disparate data. Ongoing task.
2. Region wide data indicators update.
3. PVPC website updates and maintenance. Ongoing task.
4. Online data dashboard monitoring trends in key transportation indicators.

| Source | Budget | Est. Staff Effort |
|---------------------|----------|-------------------|
| FHWA PL (80%) | \$38,880 | 18 weeks |
| MassDOT (20% match) | \$ 9,720 | 5 weeks |
| FTA S. 5303 | \$ 1,250 | 1 week |
| TOTAL | \$49,850 | 24 weeks |

| | |
|----------------|----------|
| Direct Labor | \$22,783 |
| Indirect Costs | \$27,067 |

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

OBJECTIVE:

Staff will continue to collect data to assist in the measurement of congestion incurred by all modes of transportation. This includes the identification of new sources of data to be integrated into the Regional CMP as well as ways to improve performance measures used as the basis for the CMP. PVPC will continue to integrate GIS based data into the CMP Process in order to streamline the travel time analysis for major corridors in the Pioneer Valley Region.

PREVIOUS WORK:

1. Analysis of data to update top congested corridors and regional bottlenecks
2. Development of the PVPC CMP database.
3. Travel time data runs to verify congested areas and document the effectiveness of recently completed transportation improvement projects.
4. Regional Park and Ride Lot data collection.
5. Analysis of PVTA user surveys to identify the number of daily riders per CMP corridor.
6. Analysis of number of crashes per mile for each CMP corridor.
7. GIS based data analysis on CMP corridors

PROPOSED ACTIVITIES:

1. Collect data for CMP problem verification, studies, regional model calibration, and transportation monitoring.
2. Collect transit travel time, delay, percentage of riders making transfers, and other appropriate performance measure data to assist in the identification of congested corridors.
3. Collect data at existing park and ride facilities in the region.
4. Monitor CMP performance measures and update data as appropriate.
5. Begin collecting Greenhouse Gas (GHG) samples 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. Ongoing task.
2. Updated regional performance measures. Ongoing task.
3. Update CMP Corridors based on data. Ongoing task.

| 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 | \$6,284 |
| Indirect Costs | \$7,466 |

Task 2.6 Regional Pavement Management System - Data Collection

OBJECTIVE:

Develop and maintain an updated pavement distress database for the Pioneer Valley Regional Pavement Management System (RPMS) on all federal aid eligible roadways. PVPC staff collects pavement distress data on a 3 to 4-year cycle based on predefined sub regions. This is an ongoing task.

PREVIOUS WORK:

1. Development of PVPC regional PMS database.
2. Collection of roadway pavement distress data 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 on all federal aid roadways on a rotating basis and PVPC's defined sub regions.
2. Collect and verify additional roadway geometry information as necessary.
3. Collect roadway pavement distress and condition information for proposed transportation improvement projects in the region to continue to assist in the regional TEC process.
4. Collect existing sidewalk surface condition and location information for selected/interested communities in the region as part of the Complete Streets Program.
5. Continue to maintain and update the MassDOT Roadway Inventory database for the Pioneer Valley Region and submit findings to MassDOT as requested.
6. Continue to conduct quality control checks of pavement inventory and condition data.
7. Provide technical assistance to other Massachusetts RPAs with pavement management as necessary.

PRODUCTS:

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

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

| | |
|----------------|----------|
| Direct Labor | \$14,282 |
| Indirect Costs | \$16,968 |

Task 2.7 Regional Performance Measures

OBJECTIVE:

Collect data to evaluate regional performance measures established for the Pioneer Valley Region as part of the FY2017 Update to the Pioneer Valley Regional Transportation Plan. This task is intended to provided the data that will be used as part of Tasks 1.4 and 3.6.

PREVIOUS WORK:

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

PROPOSED ACTIVITIES:

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

PRODUCTS:

1. Update Regional Performance Measures database. Ongoing task.

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

| | |
|----------------|----------|
| Direct Labor | \$ 5,713 |
| Indirect Costs | \$ 6,787 |

WORK ELEMENT 3 - REGIONAL TRANSPORTATION PLANNING

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

Task 3.1 Regional Bicycle, Pedestrian and Complete Streets Planning

OBJECTIVE:

Provide support for local and regional efforts to adopt and implement a “Complete Streets” approach to create neighborhoods, village centers and city streets that safely accommodate all modes of transportation. To implement the goals and objectives of the Regional Transportation Plan with respect to bicycling and walking. To assist the State of Massachusetts in reaching mode shift goals and to advance directives outlined in the Massachusetts Complete Streets Initiatives and GreenDOT promoting healthy transportation options such as walking and bicycling for all residents of the Pioneer Valley.

PREVIOUS WORK:

1. South Hadley Bike Ped Study
2. Assisted Baystate Roads in Complete Streets training workshops.
3. Springfield Complete Streets Bicycle and Pedestrian Plan.
4. Support for the Live Well Springfield Initiative
5. Facilitated planning related to the Norwottuck Rail Trail rehabilitation.
6. Successful implementation of regionally significant bicycling and walking projects including components of the Baystate Greenway.
7. Engaged local schools in Safe Route to School initiatives.
8. Complete Streets planning assistance to local communities

PROPOSED ACTIVITIES:

1. Promote and attend the new round of MassDOT sponsored Complete Streets Training workshops.
2. Collect bicycle and pedestrian volume counts on regionally significant facilities.
3. Continue to map bicycle and pedestrian crash clusters using updated RMV data.
4. 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.
5. Revise online mapping tools for regional bicycle facilities.
6. Coordinate efforts related to maintain and enhance the Norwottuck Rail Trail (a Baystate Greenway MassCentral Corridor project).
7. Review bicycle and pedestrian projects for eligibility under various federal funding programs.
8. Update sidewalk data collection efforts for local communities.
9. Assist local communities in efforts to develop Complete Streets policy initiatives and a local implementation plan and coordination with Baystate Roads.
10. Assist communities in the development of bicycle and pedestrian infrastructure and programs.
11. Participate in the Massachusetts Statewide Bicycle Advisory Board.
12. Continue to review regional sidewalk connections to identify gaps along federally-aided roadways and improve connections to transit.
13. Participate in the Regional Bike Share Committee meetings.

14. Explore the administration of a bicycle parking program through CMAQ in the PVPC region.
15. Review potential bicycle and pedestrian improvements included as part of transportation improvement projects for compliance with the Healthy Transportation Directive.
16. Perform an inventory of existing sidewalks in the Town of Palmer.

PRODUCTS:

1. JTC Bicycle Advisory Committee meeting minutes and notices. Monthly.
2. Updated online regional bikeways map product.
3. Springfield Built Environment Meetings.
4. Update bicycle and pedestrian crash clusters.
5. Completed Complete Streets Training.
6. Bicycle parking administration assessment.
7. Palmer sidewalk inventory.

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

| | |
|----------------|----------|
| Direct Labor | \$22,852 |
| Indirect Costs | \$27,148 |

Task 3.2 Transit System Surveys and Route Implementation

OBJECTIVE:

To work closely with PVRTA to survey, monitor, and evaluate the general quality of fixed route and paratransit services, including customer satisfaction, basic service quality measures, ADA and Title VI compliance, and on-time performance.

PREVIOUS WORK:

1. Fixed route Mystery Rider onboard service quality observations (reports submitted quarterly).
2. Paratransit Mystery Rider onboard van service quality field observations (reports submitted quarterly).
3. Fixed route Mystery Rider “K-9” onboard field observations of service animal policy compliance (reports submitted quarterly).
4. Fixed route on-time performance (OTP) field observations (reports submitted quarterly).
5. Southern System onboard rider survey (approximately 1,500 customers surveyed), analysis, and report.
6. Customer surveys and engagement at rider forums and outreach events.

PROPOSED ACTIVITIES:

1. Fixed route Mystery Rider onboard service quality observations, including ADA and Title VI compliance and OTP monitoring.
2. Paratransit Mystery Rider onboard service quality observations, including ADA and Title VI compliance and OTP monitoring.
3. Fixed route Mystery Rider “K-9” onboard service animal policy compliance observations.
4. Fixed route on time performance (OTP) monitoring, including field observations, analysis of data from AVAIL “Replay” system, and onboard observations by Mystery Riders.
5. Paratransit customer satisfaction survey mailed to all paratransit clients (approximately 3,000), response tabulation, analysis, and report.

PRODUCTS:

1. Fixed route Mystery Rider quarterly reports.
2. Paratransit Mystery Rider quarterly reports.
3. Fixed route Mystery Rider “K-9” quarterly reports.
4. On time performance (OTP) quarterly reports.
5. Paratransit riders survey.
6. Other technical assistance requested by PVTA.

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

| | |
|----------------|----------|
| Direct Labor | \$67,413 |
| Indirect Costs | \$80,087 |

Task 3.3 Regional Freight Planning

OBJECTIVE:

Work with appropriate public and private partners to plan for the efficient movement of freight. Freight modes covered under this task include rail, truck, air (when applicable), water (when applicable) and pipelines. This task will also incorporate new freight planning requirements as identified in the FAST Act.

PREVIOUS WORK

1. Merrick Memorial Neighborhood Study Freight Analysis.
2. Pioneer Valley RR TIGER submission for track improvements.
3. Regional Freight Plan Congestion Survey.

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 regarding new freight requirements included in the FAST Act. 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 the Regional Freight Plan for the Pioneer Valley.

PRODUCTS:

1. Technical reports, memoranda, surveys, computerized databases, GIS and other map products, meetings, workshops, forums, grant applications, project proposals, etc. which are produced in conjunction with the execution of this work task. As needed.
2. Final Regional Freight Plan. December 2016.

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

| | |
|----------------|----------|
| Direct Labor | \$17,139 |
| Indirect Costs | \$20,361 |

Task 3.4 Regional Congestion Management Process-Project Development

OBJECTIVE:

The Congestion Management Process (CMP) is a series of strategies used to identify, monitor and improve congestion in the Pioneer Valley region. The CMP identifies locations requiring additional analysis through the UPWP, monitors those locations identified as congested, and sets goals and objectives to be used as performance measure. The CMP in the PVMPO Region follows state and federal guidelines. The CMP will be used to assist in the development of the TIP, the RTP, and the UPWP.

PREVIOUS WORK:

1. Downtown Signal Coordination Study – Ware
2. Regional Bottlenecks Report
3. 2014 CMP corridor ranking update
4. 2014 Top Regional Bottlenecks update
5. 2014 Travel Time Contours update
6. I-391 Ramp Congestion Study

PROPOSED ACTIVITIES:

1. Work on updating the regional CMP performance measures according to the FAST Act 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 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 the regional Congestion Severity Formula to incorporate addition performance measures as necessary.
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. All GHG analysis will be coordinated with MassDOT's Sustainable transportation Planning group.
7. 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

8. Conduct a study at the intersection of Route 10 and South Street in the City of Easthampton to quantify existing congestion and develop recommendations to improve traffic flow and safety.

PRODUCTS:

1. GHG analysis in urbanized area on major roadways. July 2017.
2. CMP Corridor update. Monthly (September – June)
3. Easthampton Congestion Study. December 2016.
4. Before and after TIP project analysis. As necessary.

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

| | |
|----------------|----------|
| Direct Labor | \$58,844 |
| Indirect Costs | \$69,906 |

Task 3.5 Regional Pavement Management System - Project Development

OBJECTIVE:

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

PREVIOUS WORK:

1. Regional PMS report for the Pioneer Valley Region.
2. Community roadway improvement backlog.
3. Community project priority listings.

PROPOSED ACTIVITIES:

1. Analysis of the newly collected pavement distress data for the region’s communities’ federal-aid roadways in order to calculate OCI ratings, benefit/cost ratio listings, and develop a backlog of recommended improvement projects.
2. Perform various budget scenario analyses including the calculation of backlog of repairs for the region’s federal-aid roadways.
3. Analysis of existing sidewalk segment conditions in selected communities as part of the Complete Streets program, 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 interested member communities with pavement distress data analysis as appropriate.

PRODUCTS:

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

| 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 | \$19,424 |
| Indirect Costs | \$23,076 |

Task 3.6 Regional Performance Measures Assessment

OBJECTIVE:

This task is intended to support on the federal planning requirement to integrate performance-based planning into the regional transportation planning process. Data collected as part of Task 2.7 of the UPWP will be used to identify the progress in meeting regional performance measures 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. Participate as part of MassDOT's Performance Management Subcommittee.
4. Develop a status report on the progress made in advancing and meeting identified regional performance measures.
5. Provide data and analysis as necessary to assist in scoring TEC forms submitted for TIP projects
6. 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 Update. September 2017.

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

| | |
|----------------|----------|
| Direct Labor | \$11,997 |
| Indirect Costs | \$14,253 |

Task 3.7 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. Holyoke –Cherry Street at Homestead Avenue analysis
2. Top 100 High Crash Intersections 2011 - 2013.
3. 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. Utilize the data from the recent update to the Top 100 High Crash Intersections report to develop a report on the top high crash locations for each of the 43 communities in the Pioneer Valley region. Identify locations at which planned transportation improvements could improve safety. Develop a series of low-cost safety recommendations for each of the identified locations.
4. Coordinate a Roadway Safety Audit for the intersection of Main Street with Frank B. Murray Street in the City of Springfield. Work in cooperation with MassDOT, PVTA, and city officials to assess the impacts of the new Union Station project on the safety of this intersection.
5. 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.
6. Perform safety, traffic calming and truck exclusion route studies as requested by member communities. As necessary.

PRODUCTS:

1. Main Street at Frank B. Murray Street Roadway Safety Audit. June 2017.
2. High crash locations in the PVPC region report. September 2017.
3. Other safety reports and data as appropriate.

| Source | Budget | Est. Staff Effort |
|---------------------|------------------|-------------------|
| FHWA PL (80%) | \$ 96,147 | 48 weeks |
| MassDOT (20% match) | \$ 24,037 | 12 weeks |
| FTA S. 5303 | \$ 6,250 | 3 weeks |
| TOTAL | \$126,434 | 63 weeks |

| | |
|----------------|----------|
| Direct Labor | \$57,785 |
| Indirect Costs | \$68,649 |

Task 3.8 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 | \$11,426 |
| Indirect Costs | \$13,574 |

Task 3.9 Climate Change Implementation

OBJECTIVE:

To respond to the urgencies of climate change by reducing greenhouse gas emissions from transportation in compliance with the Massachusetts GreenDOT policy. To assist Pioneer Valley communities to plan for the reality of climate change.

PREVIOUS WORK:

1. Climate Change Toolkit for municipalities.
2. Climate Action and Clean Energy Advisory Committee.
3. 2013 Climate Action and Clean Energy Plan.
4. Update TEC to include climate and sustainability criteria.
5. Provided technical assistance to Pioneer Valley communities on Green Communities designations and climate action policies.
6. Completed initial research on an inventory and vulnerability assessment of critical Pioneer Valley infrastructure.

PROPOSED ACTIVITIES:

1. 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.
2. Utilize the vulnerability assessment inventory of critical Pioneer Valley transportation, water and wastewater infrastructure completed as part of the FFY2016 UPWP to develop a Climate Adaptation and Resiliency Plan for the Pioneer Valley region. Include an assessment and prioritization of culvert and stream crossings in the

region. Identify strategies and tools to adapt and address climate change impacts and 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.

3. Continue to refine and update the adopted Transportation Project Evaluation criteria which include climate and sustainability criteria, as needed.

PRODUCTS:

1. Climate Adaptation and Resiliency Plan for the Pioneer Valley region. September 2017
2. Evaluation of adopted TEC criteria, with amendments as needed.
3. Adoption of Climate Change Toolkit strategies in selected communities. As necessary.

| 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 | \$ 5,242 |
| Indirect Costs | \$ 6,228 |

Task 3.10 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. Green Infrastructure Toolkit.
2. Green infrastructure workshops for municipal officials.
3. 2013 Green Infrastructure Plan.
4. Model Green Streets and Green Infrastructure Policy statement for the City of Northampton.
5. Design of green streets, installation of rain gardens, and urban tree planting in Springfield, Chicopee and Holyoke.
6. Developed green streets design plans for the “X” neighborhood in Springfield.

PROPOSED ACTIVITIES:

1. Continue a program of local technical assistance to municipalities to implement model green infrastructure strategies, including green streets policies and LID zoning.
2. Coordinate work in Springfield, Chicopee and Holyoke to develop design plans 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. As necessary.
2. Implementation of green streets pilot projects in Springfield, Chicopee and Holyoke. Ongoing task.
3. Coordinate urban tree planting programs in Springfield, Chicopee and Holyoke. As necessary.
4. Strategies to integrate green infrastructure into community development projects. Ongoing task.
5. Strategies to reduce highway stormwater impacts to combined sewer overflows. Ongoing task.

| 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 | \$2,806 | |
| Indirect Costs | \$3,334 | |

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

PREVIOUS WORK:

1. Provided PVTA with general planning assistance for fixed route services and facilities planning and operations as requested.
2. Updated and produced PVTA's printed fixed route bus schedules and related products, including bus operator field guides and schedules for web; managed vendor for printed schedules.
3. Produced and installed maps and signage for transit facilities and on vehicles as requested.
4. Attended and participated in relevant public and agency meetings involving transit planning, including meetings of municipal and regional transportation committees.
5. Provided analysis of data from PVTA's ITS systems including as requested.
6. Supported PVTA Advisory Board and subcommittee activities as requested.
7. Provided general coordination among PVTA, PVMPO, PVPC staff, and MassDOT including regular executive level PVTA/PVPC coordination meetings and programming of transit items in the TIP.
8. Provided planning assistance for the transition of PVTA fixed route and customer service operations to Springfield Union Station.
9. Facilitated PVTA Bus Rider Forums.
10. Facilitated outreach to transit customers with limited English proficiency.
11. Regularly updated transit performance measures and performance guidelines reports.
12. Provided support for PVTA bus rapid transit planning.
13. Participated in regional passenger rail planning.

PROPOSED ACTIVITIES:

1. Continue to provide general support to PVTA operations and planning for fixed route services and facilities, including: route evaluation and optimization; compliance with ADA regulations, Title VI statutes, environmental justice policies, all other applicable policies, laws, and regulations; and other tasks as assigned.
2. Continue to update and produce PVTA's fixed route printed bus schedules and related products; and continue to manage the printing vendor for schedules. Produce options for updated design of printed schedules to coincide with transition of fixed route and customer services to Springfield Union Station.
3. Continue to produce and install maps and signage at transit facilities and on vehicles as requested.

4. Continue to attend and participate in relevant public and agency meetings that involve transit planning, including meetings of municipal and regional bodies.
5. Continue to provide analysis of data from PVTA's ITS systems as requested.
6. Continue to provide support for meetings of the PVTA Advisory Board and its subcommittees.
7. Continue to provide coordination among PVTA, PVMPO, PVPC staff, and MassDOT for general communication and for programming of transit items in the TIP.
8. Continue to provide planning assistance for the transition of PVTA fixed route and customer service operations to Springfield Union Station.
9. Continue to facilitate PVTA Bus Rider Forums and other customer outreach.
10. Continue to conduct and enhance outreach to transit customers with limited English proficiency, including research on best practices, such as partnering with ESL programs, and assure compliance with requirements of Title VI for PVTA and PVMPO. Task specifically includes: preparation of "vital documents" in sufficient language translations and acceptable screen reader formats for posting on PVTA.com and in transit facilities; and updates to the PVTA and PVMPO Language Access Plan (LAP) and Public Participation Plan.
11. Continue to update PVTA fixed route monthly performance measures and monthly guidelines.
12. Continue to provide support for PVTA bus rapid transit planning.
13. Continue to participate in regional passenger rail planning.
14. Facilitate and coordinate the use and incorporation of GIS and GPS technologies in supporting PVTA transit route and facilities planning.
15. Continue to support PVTA bus stop consolidation planning.
16. Continue to coordinate transit planning activities of the PVMPO region among PVTA, MassDOT, Franklin Regional Transit Authority, Connecticut Department of Transportation, Capital Regional Council of Governments, Amtrak, intercity bus carriers and other transit service providers, and other stakeholders to enhance inter-regional transit services.
17. Update the PVTA system map to reflect stop and route changes related to transition of fixed route services to Springfield Union Station and other system improvements.

PRODUCTS:

1. PVTA fixed route printed schedules and related digital materials for web posting.
2. Monthly Service Guidelines Analysis for Performance Measures reporting.
3. PVTA System Map update in print and electronic formats.
4. Brochures, public notices, posters, maps, and other print and digital materials as requested by PVTA.
5. Production of "vital documents" translated materials in print and electronic formats of PVTA products for LEP persons as necessary.

| Source | Budget | Est. Staff Effort |
|--------------|------------------|-------------------|
| FTA S. 5303 | \$104,749 | 52 weeks |
| PVTA S. 5307 | \$107,500 | 53 weeks |
| TOTAL | \$212,249 | 105 weeks |

| | |
|----------------|-----------|
| Direct Labor | \$ 97,006 |
| Indirect Costs | \$115,243 |

Task 4.2 Paratransit Planning Assistance

OBJECTIVE:

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

PREVIOUS WORK:

1. Provided general paratransit planning assistance to PVTA as requested, including public participation activities, operational analyses of policies and services.
2. Provided a staff representative to serve on the PVTA Paratransit Appeals Committee.
3. Facilitated quarterly Paratransit Van Riders meetings.
4. Participated in meetings and activities of regional paratransit planning groups, including the Pioneer Valley Regional Coordinating Council, the Hilltown Regional Coordinating Council, and the Quaboag Regional Transportation Committee.
5. Supported the work of the Paratransit Subcommittee of the PVTA Advisory Board.
6. Provided technical and administrative support to the MPO's Joint Transportation Committee (JTC) regarding mobility issues and concerns of the region's elderly and disabled residents.
7. Coordinated and provided technical assistance to agencies seeking capital grants under FTA Section 5311 Rural Transit Assistance Program.
8. Participated in meetings of health care providers in Hampshire County and produced an informational brochure for them about paratransit services in the region.

PROPOSED ACTIVITIES:

1. Continue to provide general paratransit planning assistance to PVTA upon request, including public participation activities, operational analyses of policies and services.
2. Continue to provide a staff member to serve on the PVTA Paratransit Appeals Committee.
3. Continue to facilitate quarterly meetings of PVTA paratransit van riders who use the ADA Service and the Senior (Dial-a-Ride) Service.
4. Continue to participate in meetings and activities of regional paratransit planning groups, including the Pioneer Valley Regional Coordinating Council, the Hilltown Regional Coordinating Council, the Quaboag Regional Transportation Committee, and/or others that may request assistance or be identified.
5. Continue to support the work of the Paratransit Subcommittee of the PVTA Advisory Board.
6. Continue to provide technical and administrative support to the MPO's Joint Transportation Committee (JTC) regarding mobility issues and concerns of the region's elderly and disabled residents.
7. Continue to coordinate and provide technical assistance to agencies seeking capital grants under FTA Section 5311 Rural Transit Assistance Program.
8. Perform paratransit surveys and studies requested by PVTA and MPO municipalities.

PRODUCTS:

1. Data and analysis to support ADA and senior van service paratransit planning.
2. Materials for paratransit performance measure reports for PVTA paratransit services.
3. Facilitation and documentation of meetings of PVTA ADA van riders and Senior Service riders.
4. Reports and presentations to PVTA, JTC and PVMPO member municipalities as requested.
5. Assistance with PVTA monthly paratransit performance measures as requested.

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

| | |
|----------------|----------|
| Direct Labor | \$13,140 |
| Indirect Costs | \$15,610 |

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.

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

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

PREVIOUS WORK:

1. Our Next Future plan.
2. Sustainability Toolkit of strategies to implement Our Next Future.
3. Valley Development Council meetings.
4. Technical assistance to implement smart growth strategies in PVPC communities.
5. Developed model TOD overlay zoning regulations for the City of Holyoke.

PROPOSED ACTIVITIES:

1. Continue to provide staff support to the Valley Development Council, which provides input from community officials and the development community in implementing Valley Vision 2. Coordinate ongoing VDC activities, including:
 - a) 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. Work with selected communities to develop new zoning standards to incentivize Transit Oriented Development, and investigate other strategies to support TOD area infrastructure improvements and project development costs, as well as strategies to support vibrant, walkable, bikeable and transit-friendly downtowns..

PRODUCTS:

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

| Source | Budget | Est. Staff Effort |
|---------------------|----------|-------------------|
| FHWA PL (80%) | \$24,800 | 12 weeks |
| MassDOT (20% match) | \$ 6,200 | 3 weeks |
| TOTAL | \$31,000 | 15 weeks |

| | |
|----------------|----------|
| Direct Labor | \$14,168 |
| Indirect Costs | \$16,832 |

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. Planning activities completed as part of this task will be coordinated with the MassDOT Statewide Bicycle and Pedestrian Coordinator.

PREVIOUS WORK:

1. Advisory committees for river walks projects in PVPC region.
2. River Walk brochure and website.
3. Regional Biking Map.
4. Update to the Pioneer Valley Trails Map.
5. Long-term maintenance and parking plan for the Connecticut River Walk and Bikeway.
6. Updates to the Connecticutriver.us and PVPC websites on the Connecticut River Walk. (Schedule: ongoing).

PROPOSED ACTIVITIES:

1. Complete printing, release and promotion of a new, updated Pioneer Trails map, with an expanded roster of participating trails. Utilize newly released DCR state trails data to update map.
2. Complete update of the Pioneer Valley Trails map website (www.connecticutriver.us), linked with the PVPC website, to provide access to the new Regional Trails Map and detailed hiking and biking trail data/maps for individual hiking and biking destinations.
3. Coordinate meetings of the Regional Connecticut Riverwalk Advisory Committee, as needed. Provide meeting notices, materials, and staff support. (Schedule: ongoing).
4. 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).
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. New updated and expanded Pioneer Valley Trails Map in both printed and web-based format. December 2016.
2. Regional Riverwalk Advisory Committee meetings and activities.
3. Technical assistance to communities on advancing Riverwalk segments. As necessary.
4. Updated analysis of regional bikeway/walkway network linkages. September 2017.
5. New off-road pedestrian and bike trails design and construction projects. As necessary.

| Source | Budget | Est. Staff Effort |
|---------------------|----------|-------------------|
| FHWA PL (80%) | \$13,120 | 7 weeks |
| MassDOT (20% match) | \$ 3,280 | 1 weeks |
| TOTAL | \$16,400 | 8 weeks |

| | |
|----------------|----------|
| Direct Labor | \$ 6,581 |
| Indirect Costs | \$ 7,819 |
| Direct Costs | \$ 2,000 |

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. Route 20 at Elm Street Study – West Springfield.

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 local communities to advance the recommendations of previously completed planning studies to the project development stage.
6. Assist member communities in the preparation of MassDOT Project Need Forms and Project Initiation Forms.
7. Work with PVTA and member communities to assure understanding of transit options in the region.

PRODUCTS:

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

| 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 | \$10,512 |
| Indirect Costs | \$12,488 |

Task 4.6 Local Pavement Management Program

OBJECTIVE:

To promote pavement management services for member communities by conducting road condition, budget, and plan analyses on a contract basis for their locally maintained roadways. This work is performed solely by PVPC staff.

PREVIOUS WORK:

1. Local Pavement Management update report for Hadley.
2. Local Pavement Management Data Collection and study for the Towns of Holland, Palmer, and Ware.

PROPOSED ACTIVITIES:

1. Follow up with the Towns of West Springfield and Hatfield on requests for Pavement Management System assistance.
2. Identify additional communities interested in conducting local pavement management programs.
3. Meet with local officials and staff from the select communities to explain the program and coordinate assistance.
4. Conduct training sessions to educate local staff on the identification of pavement distresses as well as sidewalk distress and data recording techniques.
5. Provide follow-up technical assistance to other communities with pavement management programs already in place.
6. Assist communities in the development of new roadway improvement projects based on their annual maintenance budget.
7. Ensure that any new locally maintained roadway is officially accounted for by collecting GPS coordinate information.

PRODUCTS:

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

| Source | Budget | Est. Staff Effort |
|-----------------------|----------------|-------------------|
| Estimated Local Funds | <u>\$7,000</u> | <u>3 weeks</u> |
| TOTAL | \$7,000 | 3 weeks |

| | |
|----------------|---------|
| Direct Labor | \$3,199 |
| Indirect Costs | \$3,801 |

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

PROPOSED ACTIVITIES:

1. Continue to coordinate 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. Updates for Western Massachusetts Byways website.

PRODUCTS:

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

| 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 | \$2,806 |
| Indirect Costs | \$3,334 |

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 16th annual Pioneer Valley Bicycle Commute Week. This is an ongoing annual task that is coordinated with Bay State Bike Week.

PREVIOUS WORK:

1. Bike Commute Week activities since 1999.

PROPOSED ACTIVITIES:

1. Work with our member municipalities, MassBike and MassDOT to facilitate Pioneer Valley Bike Commute Week/Bay State Bike Week which coincides with national Bike Commute Week—the third week of May.
2. Identify leaders in each community to facilitate community-specific activities.
3. Liaise with MassDOT and MassBike.
4. Working on a variety of media platforms and in close collaboration with municipal officials and community-based organizations, assure publicity and broad promotion of Bike Commute Week activities.

PRODUCTS:

1. Bike Commute week report. Summer 2017.

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

| | |
|----------------|---------|
| Direct Labor | \$2,422 |
| Indirect Costs | \$2,878 |

Task 4.9 Regional Bike Share Planning

OBJECTIVE:

Plan, develop and launch a regional bike share program for the Pioneer Valley region, serving the communities of Springfield, Holyoke, Northampton, Amherst and the University of Massachusetts, with potential expansion to others areas. A regional bike share will both serve as an inexpensive way to extend transit service without new buses and to provide service for standalone trips, diverting trips from single occupancy vehicles and reducing congestion and GHG and other air pollution.

Bike share is a useful means to extend the public transit system, reduce auto trips, provide short-range commuting alternatives and opportunities for exercise. Bikes are made available to members for a small fee to make short, point-to-point trips from one station to another station. Bike share programs are being successfully established in cities, large and small, across the United States, with notable examples including Hubway in Boston, Citibike in New York, and many more.

A regional Bike Share program for the Pioneer Valley will offer significant benefits to the region's communities, residents and businesses, including:

- Extending the service area of the region's new high speed rail system.
- Providing opportunities for healthy exercise and recreation for residents.
- Offering a non-auto commuting option for short trips.
- Reducing air quality emissions and greenhouse gas impacts.
- Promoting economic development in our downtown areas.
- Attracting and retaining young professionals and new businesses to enhance urban centers.
- Enabling college students better access to neighboring town centers and colleges.
- Providing a viable transportation option for tourists in the Pioneer Valley

The proposed first phase of Valley Bike would include 26 bike share stations and 180 bikes in the four participating communities, Northampton, Amherst, Holyoke and Springfield, and at UMass Amherst. Rollout would be completed in two phases with Northampton, Amherst and UMass Amherst in Phase One, and Springfield and Holyoke in Phase Two.

PREVIOUS WORK:

1. 2015 Bike Share Feasibility Analysis.
2. 2016 Advanced Bike Share Feasibility Analysis.
3. Bike Share Intergovernmental Compact.
4. Bike Share Steering Committee.

PROPOSED ACTIVITIES:

1. Coordinate meetings of the Bike Share Steering Committee that will assist and guide the Bike Share program development process.
2. Complete and finalize a proposed equipment model and business model for the Bike Share project.
3. Identify and pursue funding options: Prepare information describing needs for capital equipment acquisition and costs. Finalize and update regional request under CMAQ for bike share. Seek assistance from corporations, foundations and grants to support this effort.
4. Secure sponsorship for Bike Share: Coordinate a search for corporate, local and regional sponsorships of the program. Execute sponsorship agreements/contracts.
5. Organizational structure: Develop an organizational structure for bike share management.
6. Station locations: Finalize bike share station locations in Northampton, Springfield, Amherst and Northampton. Work with communities to secure needed permits and approvals for station locations.
7. Vendor selection process: Develop an RFP for selection of a vendor to operate the program based upon preferred bike share system agreed upon in the first year /phase I of this regional work.. Overseeing Vendor selection.
8. Develop a pre-launch outreach strategy and finalize station locations for launch sites: Work with community officials to coordinate public meetings and events in advance of a bike share launch. Promotion and public outreach activities for bike share, including website, flyers, media releases, social media linkages.

PRODUCTS:

1. Bike Share Steering Committee monthly meetings
2. Business model
3. Equipment model
4. Organizational structure
5. Station locations
6. Vendor selection
7. Pre-launch outreach strategy.

| Source | Budget | Est. Staff Effort |
|---------------|----------|-------------------|
| FHWA (80%) | \$16,560 | 8 weeks |
| MassDOT (20%) | \$ 4,140 | 2 weeks |
| TOTAL | \$20,700 | 10 weeks |

| | |
|----------------|----------|
| Direct Labor | \$ 9,461 |
| Indirect Costs | \$11,239 |

ESTIMATED COMPLETION SCHEDULE OF PLANNING ACTIVITIES

| Task | Product | Anticipated Completion | Public Engagement |
|------|---|---------------------------------|-------------------|
| 1.1 | Invoices | Monthly | |
| 1.1 | MPO Meeting Minutes | As necessary | |
| 1.1 | FRTA MOU | September 2017 | As necessary |
| 1.2 | FY2017 UPWP | August 2017 | May 2017 |
| 1.3 | PVPC Regional Reporter Newsletter | Quarterly | Quarterly |
| 1.3 | Updated Contact Database | January 2017 | |
| 1.4 | Listing of TAP eligible project components | March 2017 | |
| 1.4 | FY2018 - 2022 TIP | August 2017 | May 2017 |
| 1.4 | TEC Project Evaluation | April 2017 | March 2017 |
| 1.5 | Reports as required for EJ, Title VI, and LEP | July 2017 | As necessary |
| 1.5 | Updated Four Factor Analysis | December 2016 | |
| 2.1 | Regional Traffic Counts | Ongoing (April – November) | |
| 2.1 | Website update of daily traffic counts | March 2017 | |
| 2.2 | CMAQ and Greenhouse Gas Analysis | As needed (typically June) | |
| 2.2 | High Speed Tolling Analysis | April 2017 | |
| 2.2 | Agawam/West Springfield analysis (Route 147) | August 2017 | |
| 2.3 | GIS mapping to support transportation planning | As needed | |
| 2.3 | GIS spatial data analysis | As needed | |
| 2.4 | Information Center Reports/ website updates | Ongoing | |
| 2.4 | Update region wide data indicators | September 2017 | |
| 2.4 | Transportation Data Dashboard | September 2017 | |
| 2.5 | CMP Data Collection | Ongoing (September – June) | |
| 2.6 | PMS Data Collection | Ongoing (requires dry pavement) | |
| 2.7 | Regional Performance Measures Data Collection | Ongoing | |
| 3.1 | JTC Bicycle and Pedestrian SubCommittee | Monthly | Monthly |
| 3.1 | Updated Regional Bike Map | September 2017 | Summer 2017 |
| 3.1 | Sidewalk Gaps Inventory and Recommendations | September 2017 | |
| 3.1 | Bicycle parking administration assessment | September 2017 | |
| 3.1 | Palmer Sidewalk Inventory | July 2017 | |
| 3.2 | Mystery Rider, K-9, On time Performance reporting | Quarterly | |
| 3.2 | Bus Schedule Updates | As needed | |
| 3.2 | Paratransit Rider Survey | September 2017 | |
| 3.3 | Regional Freight Plan | December 2016 | October 2016 |
| 3.4 | Route 10 at South Street Study - Easthampton | December 2016 | |
| 3.4 | CMP Database Updates | Monthly (September – June) | |
| 3.5 | PMS Project Development Database Updates | Ongoing - Monthly | |
| 3.6 | Regional Performance Measures Report | September 2017 | Summer 2017 |
| 3.7 | Union Station RSA | June 2017 | |
| 3.7 | Top High Crash by Community Report | September 2017 | Summer 2017 |
| 3.8 | PVTA AVL Data Analysis | Monthly | |
| 3.9 | Climate Adaptation and Resiliency Plan | September 2017 | Summer 2017 |
| 3.10 | Urban Tree Planting Program | Ongoing | |
| 3.10 | Pilot Project Implementation | Ongoing | |
| 4.1 | Fixed Route Service Guideline Updates | Monthly | |
| 4.1 | PVTA Schedule Updates | Summer 2017 and Fall 2017 | |
| 4.1 | PVTA System Map Update | Summer 2017 | |
| 4.2 | Paratransit Performance Measures | Monthly | |
| 4.3 | TOD/Sustainability Ordinances and Bylaws | As requested | |
| 4.3 | Valley Development Council meetings | Quarterly meetings | |
| 4.4 | Riverwalk Advisory Committee Meetings | Quarterly meetings | |
| 4.4 | Regional trails map | December 2016 | |
| 4.4 | Update to Analysis of bikeway linkages | September 2017 | |
| 4.5 | Local Technical Assistance | As requested | As necessary |
| 4.6 | Chester Local Pavement Management Report | December 2016 | |
| 4.7 | Byway Area Committee meetings | Quarterly meetings | |
| 4.8 | Bike Commute Week Report | Summer 2017 | |
| 4.9 | Bike Share business and equipment models | December 2016 | |
| 4.9 | Bike Share station locations | February 2017 | |
| 4.9 | Bike Share Vendor Selection | Summer 2017 | |

ADDITIONAL PLANNING PROJECTS

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

UPWP EQUITY ASSESSMENT

PVPC conducted an equity assessment on the transportation planning tasks completed as part of previous UPWP's this assessment process has previously been used on the Regional TIP and identifies how regional transportation improvement projects have potential impacted defined minority and low-income block groups in the region. This information is shown on the figure on page 54.

UPWP's for the previous six 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, 575 tasks were identified over the six 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 six year period. This information is summarized on the table on page 55.

Four communities (Chesterfield, Hatfield, Middlefield, and Worthington) were identified as only having one transportation task completed from 2010 – 2015. This is a reflection of the smaller size of these communities and small network of federal aid eligible roadways. PVPC has performed pavement management and traffic counting in some of these communities as summarized in the tables on pages 56 and 57.

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 six years were reviewed for each community to determine how much data has been collected across the region and as a way to identify how many communities may not be aware of the traffic counting services we offer. This information is summarized in the table on page 56. 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, 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 typically collected on a five year rotation and is summarized in the table on page 57. 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 six year period. New pavement data is was collected in 34 communities during 2015 to assist in the development of the Regional Transportation Plan.

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 corridors as they typically have the most congestion. This information is summarized on page 58. Travel time data was collected between 2014 and 2015 in the vicinity of major employment centers to assist in the development of regional travel time contour maps.

Transportation Tasks By Community and Year

| Community | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | Total |
|--------------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|
| Agawam | 2 | 2 | 2 | 1 | 3 | 1 | 11 |
| Amherst | 4 | 2 | 4 | 4 | 1 | 1 | 16 |
| Belchertown | 1 | 3 | 1 | | 1 | 3 | 9 |
| Blandford | 1 | 1 | | 1 | | 1 | 4 |
| Brimfield | | 2 | 3 | 2 | 1 | | 8 |
| Chester | 1 | 2 | 1 | 1 | 1 | | 6 |
| Chesterfield | 1 | | | | | | 1 |
| Chicopee | 4 | 1 | 3 | 3 | 3 | 3 | 17 |
| Cummington | 1 | | 1 | | 1 | | 3 |
| East Longmeadow | 2 | 2 | | 1 | 1 | 1 | 7 |
| Easthampton | 3 | 3 | 2 | 1 | 3 | 1 | 13 |
| Goshen | 1 | 1 | 1 | | 1 | 1 | 5 |
| Granby | | 2 | | 3 | | | 5 |
| Granville | | 1 | 1 | 1 | 1 | | 4 |
| Hadley | 1 | 3 | 4 | 2 | 1 | 2 | 13 |
| Hampden | 1 | | 2 | | 1 | | 4 |
| Hatfield | | | | 1 | | | 1 |
| Holland | 1 | 1 | | | | 1 | 3 |
| Holyoke | 3 | 5 | 6 | 3 | 3 | 3 | 23 |
| Huntington | 1 | 1 | 1 | 2 | 1 | | 6 |
| Longmeadow | 3 | | 1 | 4 | 2 | 1 | 11 |
| Ludlow | 7 | 1 | | | 2 | | 10 |
| Middlefield | | 1 | | | | | 1 |
| Monson | 1 | 1 | | 1 | | | 3 |
| Montgomery | | | 1 | 2 | 1 | | 4 |
| Northampton | 7 | 6 | 5 | 7 | 3 | 4 | 32 |
| Palmer | 1 | | | | | 3 | 4 |
| Pelham | 1 | 1 | | 1 | | | 3 |
| Plainfield | 1 | 1 | 1 | 1 | 1 | | 5 |
| Region Wide | 38 | 29 | 33 | 34 | 28 | 30 | 192 |
| Russell | 1 | 1 | 1 | 1 | | 1 | 5 |
| South Hadley | 3 | 1 | 2 | 4 | 3 | 2 | 15 |
| Southampton | 1 | 1 | 2 | 1 | | 1 | 6 |
| Southwick | 6 | 2 | 1 | 2 | 3 | 1 | 15 |
| Springfield | 8 | 12 | 10 | 6 | 6 | 10 | 52 |
| Tolland | | | 1 | 1 | 1 | | 3 |
| Wales | | | 1 | 1 | | | 2 |
| Ware | 5 | 2 | 1 | 2 | 2 | 3 | 15 |
| West Springfield | 4 | 3 | 2 | 2 | 1 | 1 | 13 |
| Westfield | 1 | 1 | 3 | 3 | 1 | | 9 |
| Westhampton | 2 | | | 1 | 1 | | 4 |
| Wilbraham | 1 | | 1 | 1 | 1 | | 4 |
| Williamsburg | 1 | | 3 | 1 | 1 | 1 | 7 |
| Worthington | 1 | | | | | | 1 |
| Grand Total | 121 | 95 | 101 | 102 | 80 | 76 | 575 |

Traffic Counts By Community and Year

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

Pavement Data Collection By Community and Year

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

CMP Data Collection By Community and Year

| Community | Total Corridors | 2010 - 2011 | 2011 - 2012 | 2012 - 2013 | 2013 - 2014 | 2014 - 2015 |
|------------------|------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Agawam | 5 | X | X | X | | X |
| Amherst | 4 | | | | | X |
| Belchertown | 2 | | X | | X | |
| Chicopee | 12 | X | X | | X | X |
| East Longmeadow | 3 | | X | X | | X |
| Easthampton | 3 | | X | X | X | |
| Granby | 1 | | X | | | |
| Hadley | 3 | | | X | X | X |
| Hatfield | 0 | | | | | |
| Holyoke | 10 | X | X | X | X | X |
| Longmeadow | 4 | | X | X | | |
| Ludlow | 3 | | X | | X | X |
| Northampton | 5 | | | X | X | X |
| Palmer | 1 | | | X | | X |
| South Hadley | 2 | | X | | | |
| Southwick | 1 | | | X | | |
| Springfield | 23 | X | X | X | X | X |
| Ware | 1 | | X | | | |
| West Springfield | 4 | | X | | X | |
| Westfield | 3 | | X | X | | X |
| Wilbraham | 3 | | | X | X | |

PLANNING ACRONYMS

3C - Continuing, Comprehensive, and Cooperative Planning Process

AADT - Average Annual Daily Traffic

AASHTO - American Association of State Highway and Transportation Officials

ADA - Americans with Disabilities Act (1990)

ADT - Average Daily Traffic

AFV - Alternative Fuel Vehicles

ATR - Automatic Traffic Recorder

AVR - Average Vehicle Ridership

BAPAC - Barnes Aquifer Protection Advisory Committee

BID - Business Improvement District

BLOS - Bicycle Level of Service

BMP - Best Management Practice

BMS - Bridge Management System

CAAA - Clean Air Act Amendments of 1990

CBD - Central Business District

CDBG - Community Development Block Grant

CDC - Centers for Disease Control

CEDS - Comprehensive Economic Development Strategy

CIP - Capital Improvements Plan (or Program)

CMAQ - Congestion Mitigation and Air Quality Improvement Program

CMP - Congestion Management Process

CNG - Compressed Natural Gas

CO - Carbon Monoxide

COG - Council of Governments

Comm-PASS - Commonwealth Procurement Access and Solicitation System

CPA - Community Preservation Act

CPTC - Citizen Planner Training Collaborative

CRCOG - Capitol Region Council of Governments

CSO - Combined Sewer Overflow

DCR - Department of Conservation and Recreation

DEP - Department of Environmental Protection

DHCD - Department of Housing and Community Development

DLTA - Direct Local Technical Assistance

DOT - Department of Transportation

DPW - Department of Public Works

E.O. - Executive Order

EDC - Economic Development Council

EIR - Environmental Impact Report

EIS - Environmental Impact Statement

EJ - Environmental Justice

ENF - Environmental Notification Form

EOA - Economic Opportunity Area

EOEEA - Executive Office of Energy and Environmental Affairs

EPA - Environmental Protection Agency

FA - Federal Aid

FAST - Fixing America's Surface Transportation Act

FC - Functional Classification (of roadways)

FHA - Federal Housing Administration

FHWA - Federal Highway Administration

FRCOG - Franklin Regional Council of Governments

FRTA - Franklin Regional Transit Authority

FTA - Federal Transit Administration

GHG - Greenhouse Gas

GIS - Geographic Information System

GPS - Global Positioning System

HOV - High Occupancy Vehicle

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

ISTEA - Intermodal Surface Transportation Efficiency Act of 1991

ITS - Intelligent Transportation Systems

JARC - Job Access and Reverse Commute

JLSB - Jacob's Ladder Scenic Byway

JLT - Jacob's Ladder Trail

JTC - Joint Transportation Committee

LEP - Limited English Proficiency

LOS - Level of Service

LPMS - Local Pavement Management System

LRV - Light Rail Vehicle

LTA - Local Technical Assistance

M.G.L. - Massachusetts General Laws

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

MARPA - Massachusetts Association of Regional Planning Agencies

MassDOT - Massachusetts Department of Transportation

MassGIS - Massachusetts Geographic Information System

MEPA - Massachusetts Environmental Policy Act

MMA - Massachusetts Municipal Association

MOA - Memorandum of Agreement

MOU - Memorandum of Understanding

MPO - Metropolitan Planning Organization

MUTCD - Manual of Uniform Traffic Control Devices

NFA - Non-Federal Aid

NHS - National Highway System

NHTSA - National Highway Traffic Safety Administration

NOx - Nitrogen Oxide

NTSB - National Transportation Safety Board

OCI - Overall Condition Index (Pavement)

PCI - Pavement Condition Index

PL - [Metropolitan] Planning Funds

PMS - Pavement Management System

PMUG - Pavement Management Users Group

PPP - Public Participation Process

PVTA - Pioneer Valley Transit Authority

QV CDC - Quaboag Valley Community Development Corp.

REB - Regional Employment Board

RIF - Roadway Inventory Files

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

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

PREVIOUS TRANSPORTATION STUDIES

Jacob's Ladder Trail Scenic Byway - Landscape Inventory & Assessment
Jacob's Ladder Trail Scenic Byway Study- Executive Summary
Jacob's Ladder Trail Scenic Byway - Highway and Safety Analysis
Jacob's Ladder Trail Scenic Byway- Cultural Resources Inventory
Jacob's Ladder Trail Scenic Byway Study- Land Use Strategies
Touring Jacob's Ladder Trail by Bicycle or Car
Jacob's Ladder Trail Scenic Byway Development Guidebook
Jacob's Ladder Trail Scenic Byway. Improvements Plan: Phase II
Town of Hadley Ma. Americans with Disability Act. Transition Plan.
The Pioneer Valley Plan For Progress
Connecticut River Walk & Bikeway Analysis
Valley Vision: The Regional Land Use Plan
A View of Our Valley: Population
A View Of Our Valley: Transportation
A View of Our Valley: Employment & Income
A View of Our Valley: Market Trends
Employment Projections for the PVPC
Major Employers Inventory for the Pioneer Valley Region
1997 Major Employers Inventory Report
Route 9 Corridor Study, Traffic Improvements
I- 91 Corridor Study: An Impact Analysis of the Cultural Landscape
Southwick Report: A Report on Traffic Issues
1990 Transit Riders Study
Route 10 Corridor Study
Route 9 Corridor Supplemental Report
Route 5 Corridor Study
Rte.9 Corridor Study: Land Use Trends
Rte.9 Corridor Study Addendum
Rte. 5 Corridor Study Supplemental Reports:
Rte. 5 Signal Coordination
Elmwood Area Preliminary Travel Demand Analysis
Route 10/202 Corridor Study
Regional Traffic Count Reports
Origin/Destination Survey of PVTA Rte. 107
Complimentary Paratransit Plan
Forging a Link Between Land Use & Transportation Planning in the Pioneer Valley Region
Boston Road Corridor Study
The VMT Reduction Workbook
PVTA Economic Benefit and Impact Study
1997 Pioneer Valley Regional Transportation Plan
Regional Pavement Management Report
State Street Signal Coordination Project
Pioneer Valley Region Congestion Mgmt. System
Traffic and Parking Study Update Report for Easthampton
Connecticut River Scenic Farm Byway Study
Route 20 Corridor Study – Westfield/West Springfield
Town of Wilbraham Pavement Management Study
Town of Belchertown Pavement Management Study
Town of Ludlow Pavement Management Study
PVTA Green 01 Transit Route Survey
PVTA Bus Stop Survey
Downtown Amherst Parking Study
Downtown Ware Parking Study
East Longmeadow Rotary Study
There's No Place Like Our Home (Strategy 2000)
Springfield Street Traffic Study – Agawam
Norwottuck Rail Trail Parking Study
Public Participation within the Transportation Planning Process
State of the Pioneer Valley: 2000
State of the Pioneer Valley: 2001
Trends in Building Permits: 1988 to 1997
Data Digest: Commercial and Industrial Capacity in the Pioneer Valley Region
Data Digest: Residential Property in the Pioneer Valley Region: 1993 - 98
Regional Profile: A Statistical Profile of the Hartford-Springfield Interstate Region
Agawam Pavement Management Study
Pioneer Valley Regional Bicycle and Pedestrian Transportation Plan
Bradley Airport Study for Western Massachusetts
2000 Pioneer Valley Regional Transportation Plan
[Outer Belt Transportation Study](#)
[Holyoke Downtown Flow Study](#)
Hampden County House of Correction Parking Study
Linden Street Traffic Study
Northampton Transportation Plan
2003 Regional Transportation Plan Update
West Springfield Parking Study
PVTA Garage Parking Study
[Longmeadow Route 5 Traffic Study](#)
[Norwottuck Rail Trail User Survey](#)
Executive Order 418 Community Development Plans (various)
[Route 32 – Ware Traffic Study](#)
Springfield – St. James Ave./St. James Blvd. Study
[Merrick/Memorial Neighborhood Plan – Phase I](#)
[Route 9 at North and South Maple Street Safety Study](#)
[Massachusetts Turnpike Exit 6 at I-291 Safety Study](#)
Route 5 at Conz Street Safety Study
Pavement Management Informational Brochure
[Springfield Riverwalk User Survey](#)
Updates to the Regional Congestion Management System
Center Street Traffic Study – Ludlow
Feeding Hills Center Safety Study – Agawam
Florence Road at Burts Pit Road Safety Study – Northampton
[Boston and Maine Railroad Bridge Safety Study – Northampton](#)
West Street at Pantry Road Safety Study – Hatfield
Regional Bike Map Update
Amendment to the 2003 Regional Transportation Plan
2006 Update to Joint Transportation Committee Bylaws
Regional Traffic Count Report Summary: 2001-2005
SABIS School Study – Springfield
[Amostown Road and Morgan Road Traffic Study – West Springfield](#)
Connecticut River Walk and Bikeway Brochure
[Main Street at Jackson Street Safety Study – Holyoke](#)
Route 141 Safety Study – Easthampton and Holyoke

I-291 Exit 6 off ramp at Shawinigan Drive Safety Study – Chicopee
[Downtown Huntington Parking Study](#)
 Route 57 intersection study – Southwick
 Regional CMS Data Collection Update
 Merrick/Memorial Truck and Pedestrian Surveys
 Palmer Park and Ride Lot Study
 Local Technical Assistance Requests (various)
 2007 Regional Transportation Plan Update
 Route 141 Safety Study Updates – Easthampton and Holyoke
 Valley Vision 2
[Regional Bicycle and Pedestrian Plan Update](#)
[Feeding Hills Center Transportation and Safety Study Final Report](#)
 Regional CMP Annual Report Update
[Top 100 Crash Locations in the Pioneer Valley](#)
 Route 202 Transportation Study – Belchertown
 Florence Road Traffic Study – Northampton
 Palmer Redevelopment Authority Track Capacity Improvements
 Route 10/202 Transportation Study – Southwick
 Route 57 Transportation Study – Southwick
 North Pleasant Street at Fearing Street Study – Amherst
 PVPC Regional Bridge Map
 Palmer Bike Path Study
 Route 112 Scenic Byway Study - Draft
 Public Participation Plan for the Pioneer Valley MPO Update
 STCC Environmental Justice Analysis
 Regional Traffic Counts: 2003-2007
 State of the Region/People 2008
 PVTA Fare Assessment
 Route 10 Corridor Study Existing Conditions Analysis– Easthampton
 R41 and Nashawannuck Express Passenger Surveys
 PVTA System wide Passenger Survey
 Amherst Parking and Transit Survey
 Granby Master Plan – Transportation Component
 Adams Road Safety Study – Williamsburg
 Feeding Hills Center Crash Data Review – Agawam
 Route 9 at North Street and Petticoat Hill Road Study – Williamsburg
 Southwick Transit Study
 Intermodal Connector Review
 Major Employers Report Update
 Westfield CBD Traffic Circulation Study
 Page Boulevard at Goodwin Street Congestion Study - Springfield
[Berkshire Avenue at Cottage Street Congestion Study - Springfield](#)
 Route 5 Traffic Signal Coordination Study – Holyoke
[Granby Road at McKinstry Avenue and Montgomery Street Safety Study – Chicopee](#)
 Maple Street at Resnic Boulevard Safety Study – Holyoke
 Dwight Street at Worthington Street Safety Study – Springfield
[Congestion Management Process Report \(CMP\)](#)
 Jacob’s Ladder Trail II – Transportation Section Update
[Chicopee Parking Study](#)
[Telecommuter Survey](#)
[North Main Street at Wilbraham Street, Sykes Street, and Shearer Street Safety Study – Palmer](#)
[Public Participation Plan for the Pioneer Valley MPO Update](#)

[Regional Traffic Count Report: 2005 – 2009](#)
[PVTA Northern/Eastern Region Onboard Bus Rider Survey](#)
[Regional Bottlenecks Report](#)
[Route 116 at Route 33 and Lyman Street Safety Study – South Hadley](#)
[East Street at Winsor Street and Hampden Street Study – Ludlow](#)
[West Avenue at Fuller Street Study – Ludlow](#)
 Transportation Chapter – Ludlow Master Plan
 Manhan Rail Trail User Survey
[Downtown Ware Signalization Study](#)
 Longmeadow Local Pavement Management
 West Springfield Local Pavement Management
 Greenleaf Community Center Safety Study
[FFY 2012 Unified Planning Work Program](#)
 FFY 2011 Transportation Improvement Program Amendments
 FFY 2012 – 2015 Transportation Improvement Program
 Project Development Process Primer Video
 Manhan Rail Trail User Survey Report
[2012 Update to the Regional Transportation Plan](#)
 Transit Mystery Rider Reports
[PVTA Non-Rider Survey](#)
 Route 10 Build Out Analysis – Easthampton
 Springfield Crash Data Analysis
 Cottage Street at Robbins Road Safety Study – Springfield, MA
 Route 9 (Locust Street) at Hatfield Street Safety Study – Northampton, MA
 Valley Vision Update
 Pioneer Valley Trail Map
 Southampton Local Pavement Management Study
[FFY 2013 Unified Planning Work Program](#)
 FFY 2012 Transportation Improvement Program Amendments
[FFY 2013 – 2016 Transportation Improvement Program](#)
[Route 9 \(Federal Street\) at Bay Road Safety Study – Belchertown, MA](#)
[Cottage Street, Robbins Road and Industry Avenue Intersection: Springfield Safety Study](#)
 PVPC/CRCOG MOU
 Regional Traffic Count Report: 2007 – 2011
 Regional Saturation Flow Rate Analysis
 Paratransit User Survey
 Mobility Chapter – Southampton Master Plan
 Pleasant Street Congestion Study – Holyoke, MA
 Regional Pavement Management Report Update
[Top 100 High Crash Intersections 2007 - 2009](#)
 Williamsburg Pedestrian Safety Study
 I-91 Corridor Planning Study Data Collection
 PVTA Schedule Changes and Updates
[Coordinated Public Transit Human Service Transportation Plan](#)
 PVPC Green Tips
 Valley Vision ToolBox Update
 2012 Bike Commute Week
 Merrick/Memorial Phase 2 Data Collection
 FFY 2014 Unified Planning Work Program
 FFY 2013 Transportation Improvement Program Amendments
 FFY 2014 – 2017 Transportation Improvement Program
 CMP Report Update
 EJ and Title VI Reports to MassDOT
 Regional Saturation Flow Rate Report

Mystery Rider Reports
 PVTA Schedule Changes and Updates
 PVPC Green Tips
 Valley Vision ToolBox Update
 2013 Bike Commute Week
 Merrick/Memorial Phase 2 Existing Conditions
 Brimfield Safety Study
[State of the Pioneer Valley Update](#)
 Southern Service Area Customer Satisfaction Survey
 Pine Street Congestion Study – Florence, MA
 Final Top 100 High Crash Intersections 2007 – 2009
 FFY 2015 Unified Planning Work Program
 FFY 2014 Transportation Improvement Program
 Amendments
 FFY 2015 – 2018 Transportation Improvement Program
 I-91 Corridor Planning Study – Existing Conditions
 Merrick/Memorial Phase 2 Study
 Ware Shuttle Survey
 Palmer Shuttle Survey
 Route 9 Safety and Livability Study Data Collection
 Depot Street/Sheep Pasture/Powder Mill Road Safety Study

Route 202 at Amherst Street Traffic Signal Warrant Analysis
 2014 Bike Commute Week
 Regional Traffic Count Summary (2009-2013)
 Valley Vision Toolbox Update
 FFY 2016 Unified Planning Work Program
 FFY 2016 Transportation Improvement Program
 Amendments
 FFY 2016 – 2019 Transportation Improvement Program
 FY2016 Update to the Regional Transportation Plan
 MassDOT Crash Data Updates
 CMP Corridor and Bottleneck Update
 EJ and Title VI Reports to MassDOT
 CMAQ and Greenhouse Gas Analysis
 Mystery Rider Reports
 PVTA Schedule Changes and Updates
 2015 Bike Commute Week
 Updated Transportation Evaluation Criteria (TEC)
 Route 9 Safety and Livability Study Draft Report
 Updates to the Regional Transportation Model

STUDIES COMPLETED AS PART OF THE FY 2016 UPWP

[Community and Facility Profiles](#) (various)
 Local Technical Assistance Requests (various)
 FFY 2017 Unified Planning Work Program
 FFY 2016 Transportation Improvement Program
 Amendments
 FFY 2017 – 2021 Transportation Improvement Program
 MassDOT Crash Data Updates
 CMP Corridor and Bottleneck Update
 EJ and Title VI Reports to MassDOT
 CMAQ and Greenhouse Gas Analysis
 Mystery Rider Reports
 PVTA Schedule Changes and Updates
 2016 Bike Commute Week
 Updated Transportation Evaluation Criteria (TEC)
 Regional Transportation Model – Report on Future Traffic
 Projections
 Updated Public Participation Plan
 Updates to Regional Data Indicators
 Regional Freight Congestion Survey
 CMP ARC GIS Pilot Project – Data Collection
 GHG Analysis for Major Corridors
 I-391 Ramp Congestion Study
 Regional Performance Measures Update Report
 Top 100 High Crash Intersection Report
 Critical Infrastructure Vulnerability Assessment
 PVTA Northern Tier On-Board Survey

FUNDING SUMMARY

| Transportation Funding | Value | % of Total |
|--|------------------------|-------------------|
| FHWA PL (80%) | \$ 800,107.00 | 53.54% |
| MassHighway PL (20% match) | \$ 200,027.00 | 13.39% |
| FTA Section 5307 (80%) | \$ 176,000.00 | 11.78% |
| PVTA Section 5307 (20% match) | \$ 44,000.00 | 2.94% |
| FTA Section 5303 (80%) | \$ 213,799.00 | 14.31% |
| PVTA Section 5303 (20% match) | \$ 53,450.00 | 3.58% |
| Local Funds (includes in-kind contributions) | \$ 7,000.00 | 0.47% |
| Total | \$ 1,494,383.00 | 100.00% |
| Other Funding | | |
| | Value | % of Total |
| Other Commonwealth of Massachusetts | \$ 2,685,000.00 | 42.89% |
| US Environmental Protection Agency | \$ 75,000.00 | 1.20% |
| US Department of Agriculture | \$ 200,000.00 | 3.20% |
| US Department of Transportation | \$ 750,000.00 | 11.98% |
| US Department Health/Human Services | \$ 310,000.00 | 4.95% |
| US Economic Development Administration | \$ 70,000.00 | 1.12% |
| US Department of Homeland Security | \$ 40,000.00 | 0.64% |
| Other Federal Revenue | \$ 115,000.00 | 1.84% |
| Local Grants | \$ 1,919,222.00 | 30.66% |
| Local Assessments | \$ 95,355.00 | 1.52% |
| Total | \$ 6,259,577.00 | 100.00% |

| Overall Funding | Value | % of Total |
|--|------------------------|-------------------|
| FHWA PL (80%) | \$ 800,107.00 | 10.32% |
| MassHighway PL (20% match) | \$ 200,027.00 | 2.58% |
| FTA Section 5307 (80%) | \$ 176,000.00 | 2.27% |
| PVTA Section 5307 (20% match) | \$ 44,000.00 | 0.57% |
| FTA Section 5303 (80%) | \$ 213,799.00 | 2.76% |
| PVTA Section 5303 (20% match) | \$ 53,450.00 | 0.69% |
| Local Funds (includes in-kind contributions) | \$ 7,000.00 | 0.09% |
| Other Commonwealth of Massachusetts | \$ 2,685,000.00 | 34.63% |
| US Environmental Protection Agency | \$ 75,000.00 | 0.97% |
| US Department of Agriculture | \$ 200,000.00 | 2.58% |
| US Department of Transportation | \$ 750,000.00 | 9.67% |
| US Department Health/Human Services | \$ 310,000.00 | 4.00% |
| US Economic Development Administration | \$ 70,000.00 | 0.90% |
| US Department HUD | \$ 40,000.00 | 0.52% |
| Other Federal Revenue | \$ 115,000.00 | 1.48% |
| Local Grants | \$ 1,919,222.00 | 24.75% |
| Local Assessments | \$ 95,355.00 | 1.23% |
| Total | \$ 7,753,960.00 | 100.00% |

SUMMARY OF COMMENTS ON THE DRAFT UPWP

| Task/Section | Comment | From | Response |
|---|---|---------|--|
| 1.1 - Management of the 3C Process | Added a task to develop a memorandum of Understanding with the Franklin Regional Transit Authority regarding cross border participation in the MPO process. | PVPC | Addresses FAST Act requirements. |
| Task 3.1 - Regional Bicycle, Pedestrian and Complete Streets Planning | Added a task to assess the need for additional bicycle parking administration through CMAQ for the PVPC region. | PVPC | Addresses a suggested planning activity by MassDOT. |
| Planning Acronyms | Added a list of common planning acronyms. | PVPC | Per MassDOT guidance. |
| MPO Membership | Updated the listing of MPO members and alternates | PVPC | Based on the results of regional MPO representation elections. |
| Task 4.6 Local Pavement Management | In Kind Contributions – Please specify who will be performing the work (MPO staff or municipalities) | FHWA | Additional language added as requested. |
| FAST Act Planning Factors | The narrative should be revised to reflect the change from eight to ten planning factors | FHWA | This error has been corrected as requested. |
| General | Please incorporate the required UPWP Amendment and Adjustment procedures. | MassDOT | This language has been added to the introduction to the UPWP. |
| Table of Contents | Correct indentation error. | MassDOT | This error has been corrected as requested. |
| Executive Summary | Provided a narrative on MassDOT's GreenDOT initiative | MassDOT | This language has been added as requested. |
| Executive Summary | Provide a reference to the FAST Act. | MassDOT | This change has been made as requested. |
| Executive Summary | Remove references to Section 8 Metropolitan Planning and Section 9 Capital. | MassDOT | These references have been removed. |
| Staffing Report | Ensure that the "Transportation Planning Staff" and "Staffing Report" match. | MassDOT | These errors have been corrected. |
| Previous Transportation Studies | Recommend moving to the Appendices | MassDOT | This section has been moved to the end of the UPWP. |

| | | | |
|---|---|---------|--|
| Task 1.3 – Public Participation Process | The Pioneer Valley Planning Commission outreach lists are in need of extensive review to update for the inclusion of all stakeholders, interested parties and Environmental Justice populations. Ensure that these efforts are included in the Public Participation Process and coordinated with MassDOT’s Title VI Specialist. | MassDOT | Task 1.3 has been updated as requested. |
| Task 1.3 – Public Participation Process | Incorporate any public participation efforts under Title VI and Environmental Justice task into Public Participation Process task. | MassDOT | These modifications have been made as requested. |
| Task 1.3 – Public Participation Process | Ensure that all private transportation carriers are included in any relevant outreach efforts and public participation activities. | MassDOT | Private transportation carriers are represented on the JTC. The JTC mailing list is included as part of all outreach activities and public participation efforts. |
| Task 1.5 - Title VI and Environmental Justice | The Pioneer Valley Planning Commission is commended for increasing the proposed budget and activities associated with this task. | MassDOT | Comment noted. |
| Task 1.5 - Title VI and Environmental Justice | Please move public participation related activities to task 1.3 Public Participation Process. | MassDOT | These modifications have been made as requested. |
| Task 3.1 – Regional Bicycle, Pedestrian and Complete Streets Planning | Under Proposed activities, include a review of potential bicycle and pedestrian improvements to ready project recommendations for compliance with the Healthy Transportation Directive. | MassDOT | This activity has been added as requested. |
| Task 3.4 – Regional Congestion Management Process | Under Products, regarding GHG Analysis in urbanized areas on major roadways, ensure that these efforts are conducted with MassDOT’s Sustainable Transportation Planning group. | MassDOT | Additional language will be added as requested. |
| Task 3.6 – Regional Performance Measures | Include efforts on the Performance Measures subcommittee as part of the Proposed Activities. | MassDOT | This activity has been added as requested. |
| Task 3.9 – Climate Change Implementation. | The total budget (\$11,470) appears low for this task, which includes the production of a Climate Adaptation and Resiliency Plan. | MassDOT | We believe the budget is sufficient as the work build on efforts completed as part of the FY2016 UPWP. The task description has been modified to make this more clear. |
| Task 4.4 - Off-Road Bicycle and Pedestrian Planning | Coordinate with the MassDOT Statewide Bicycle and Pedestrian Coordinator on associated efforts and products. | MassDOT | Additional language on coordination has been added to the Objective for the Task. |

| | | | |
|--|---|---------|--|
| Task 4.9 - Regional Bike Share Planning | Reference the proposed timeline for completion in the Proposed Activities (as listed in the table on page 52). | MassDOT | A reference has been added to the Task as requested. |
| UPWP Equity Assessment | The map is illegible. Recommend providing a link and embedding into the document for reference. | MassDOT | A higher resolution map will be included as part of the final document. The requested changes and links will be added to the final document. |
| Transportation Tasks by Community and Year | Include in the narrative justification why there are only one task for Chesterfield, Hatfield and Worthington over the last five years. | MassDOT | Additional language has been included in the narrative as requested. |
| Funding Profile | Move this table to the beginning of the document. | MassDOT | This has been moved as requested. |

MPO ENDORSEMENT

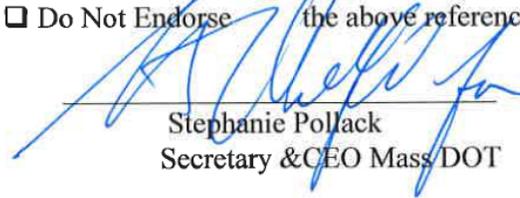
PIONEER VALLEY MPO ENDORSEMENT SHEET

The signatures below signify that all members of the Pioneer Valley Region's Metropolitan Planning Organization, or their designees, have met on July 25, 2016 and discussed the following item for endorsement: The Pioneer Valley Region's 2017 Unified Planning Work Program (UPWP)

Massachusetts Department of Transportation (Mass DOT)

I, Secretary of the Massachusetts Department of Transportation, hereby

Endorse Do Not Endorse the above referenced item.

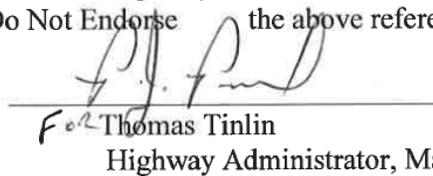

Stephanie Pollack
Secretary & CEO Mass DOT

7/25/16
Date

Massachusetts Department of Transportation Highway Division

I, Acting Administrator of the Highway Division of MassDOT, hereby

Endorse Do Not Endorse the above referenced item.

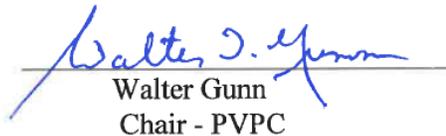

For Thomas Tinlin
Highway Administrator, Mass DOT

7/25/2016
Date

Pioneer Valley Planning Commission (PVPC)

I, Chair of the Pioneer Valley Planning Commission, hereby

Endorse Do Not Endorse the above referenced item.

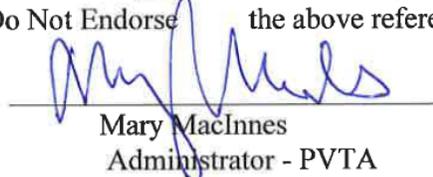

Walter Gunn
Chair - PVPC

7/25/2016
Date

Pioneer Valley Transit Authority (PVTA)

I, Administrator of the Pioneer Valley Transit Authority, hereby

Endorse Do Not Endorse the above referenced item.


Mary MacInnes
Administrator - PVTA

7/25/2016
Date

City of Springfield

I, Mayor of the City of Springfield, hereby

Endorse Do Not Endorse the above referenced item.

Domenic Sarno
Mayor-Springfield

Date

City of Holyoke

I, Mayor of the City of Holyoke, hereby

Endorse Do Not Endorse the above referenced item.

Alex Morse
Mayor-Holyoke

Date

City of Chicopee

I, Mayor of the City of Chicopee, hereby

Endorse Do Not Endorse the above referenced item.

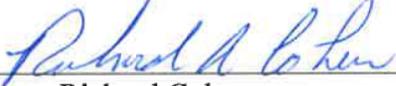
Richard Kos
Mayor-Chicopee

Date

Town of Agawam

I, Mayor of the Town of Agawam, hereby

Endorse Do Not Endorse the above referenced item.



Richard Cohen
Mayor-Agawam

25 July 2016
Date

Town of Amherst

I, Board of Selectmen member of the Town of Amherst, hereby

Endorse Do Not Endorse the above referenced item.



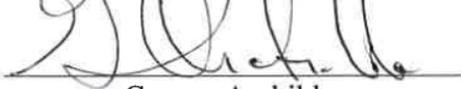
Douglas Slaughter
Selectman-Amherst

7/25/2016
Date

Town of Belchertown

I, Board of Selectmen member of the Town of Belchertown, hereby

Endorse Do Not Endorse the above referenced item.



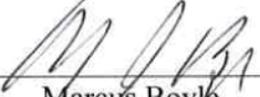
George Archible
Selectman-Belchertown

7/25/16
Date

Town of Hatfield

I, Board of Selectmen member of the Town of Hatfield, hereby

Endorse Do Not Endorse the above referenced item.



Marcus Boyle
Selectman-Hatfield

25 July 16
Date