

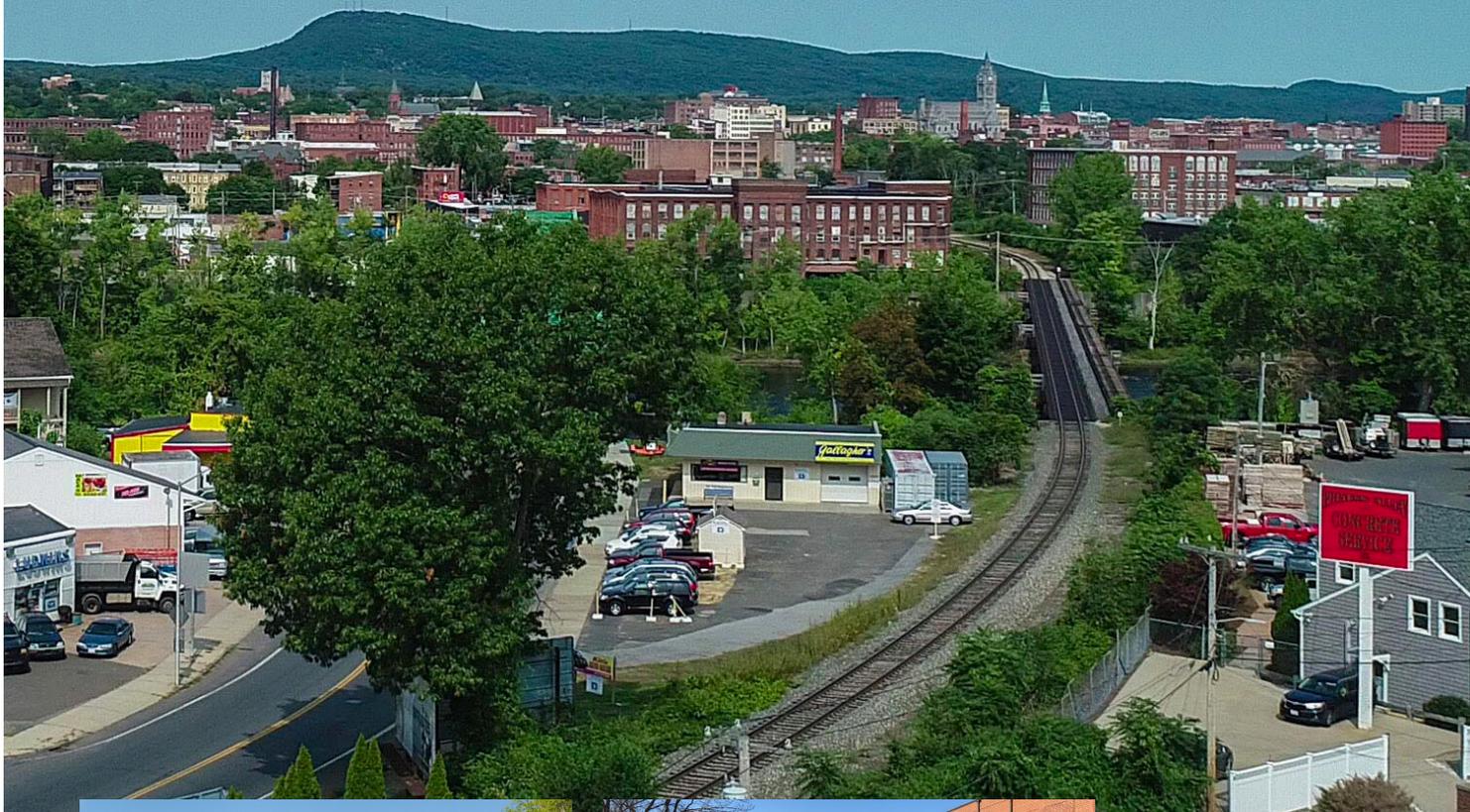


PV MPO

Pioneer Valley Metropolitan Planning Organization

United Planning Work Program

October 1, 2022 to September 30, 2023



Prepared by
 Pioneer Valley
Planning Commission
www.pvpc.org

Pioneer Valley Unified Planning Work Program

Fiscal Year 2023
October 1, 2022 to September 30, 2023

Final Document
May 2022

Prepared by the
Pioneer Valley Planning Commission

For the Pioneer Valley
Metropolitan Planning Organization

Pioneer Valley MPO Members

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Mayor Nicole LaChapelle	City of Easthampton
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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 the Pioneer Valley Transit Authority, Franklin Regional Transit Authority, the Massachusetts Department of Transportation (MassDOT), and the 43 communities that comprise the region.

The UPWP also identifies the federal, state, and local funding sources used to carry out the proposed tasks. Tasks included in the UPWP were developed to advance key emphasis areas as identified by the Federal Highway Administration, the Federal Transit Administration and MassDOT. This document was prepared in compliance with the Infrastructure Investment and Jobs Act, commonly referred to as the Bipartisan Infrastructure Law (BIL), in order to address all national goals and planning factors. The BIL specifically addresses all modes of transportation and enhances many of the existing provisions and programs defined in past transportation legislation. Additional information on the BIL can be found here: <https://www.fhwa.dot.gov/bipartisan-infrastructure-law/>.

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, Title VI planning, Environmental Justice and Justice 40 planning.

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

Work Element 3 - This work element is comprised of transportation planning that directly supports the development of projects included in the Regional Transportation Plan (RTP) or the development of RTPs. Key studies included in Work Element 3 for FFY 2023 include:

- Task 3.1 – Regional Bicycle and Pedestrian Planning supports local and regional Complete Streets planning to accommodate all modes of transportation. This task includes work to support Bay State Bike Month and the expansion of the region's on-road and off-road pedestrian and bicycle network.
- Task 3.2 – Bike Share Implementation is an ongoing task to provide planning support to assist the regional bike share program, ValleyBike communities in its implementation and advancement. A summary of usage statistics for the 2022 calendar year will be developed as part of this report.
- Task 3.3 – Regional Freight Planning assists in the planning of the efficient movement of all forms of freight.
- Task 3.4 – Regional Congestion Management Process Project Development analyzes regional travel time data along major transportation corridors to confirm areas of congestion. Staff will utilize data available through FHWA's National Performance Management Research Data Set (NPMRDS) to update the regional congested corridor ranking.
- Task 3.5 – Regional Pavement Management will analyze the data collected under Task 2.5 in the communities of Springfield and Wilbraham.
- Task 3.6 – Regional Performance Measures Assessment is intended to focus on the federal planning emphasis area of "transitioning to performance-based planning and programming." Staff will continue to review and assess adopted regional performance targets and score projects for the TIP using the regional Transportation Evaluation Criteria. PM1 targets will be updated by February of 2023. PM2 and PM3 targets will be updated in the fall of 2022. Regional transit targets will be updated in cooperation with the PVRTA based on current guidance.

- Task 3.7 – Regional Safety and Planning Studies will perform an assessment of safety and accessibility at the intersection of Mill Street with Cooper Street in Agawam, MA. A second study to assess traffic operations, safety and a signal warrant analysis is proposed for the intersection of Roosevelt Avenue with Roosevelt Terrace in Springfield, MA.
- Task 3.8 – Transit System Surveys and Route Implementation works in cooperation with PVRTA to survey, monitor, and assess the quality of their fixed route and paratransit services.
- Task 3.9 – Regional Transit Planning provides technical assistance and analysis for transit planning, operations and capital programs in cooperation with the PVRTA. Under this task, PVPC will provide support for bus stop consolidation as well as new transit technologies and services, including bus rapid transit, microtransit, TNC coordination, Mobility as a Service, and mobile/electronic fare collection.
- Task 3.10 – Paratransit Planning Assistance supports the paratransit services for people with disabilities and seniors that are provided by PVRTA in fulfillment of the requirements of USDOT Section 504 regulations and other planning requirements under the Americans with Disabilities Act.
- Task 3.11 – Climate Change Implementation will update regional Climate Action Strategies and develop corresponding tools that can be implemented in the coming years to assist in reducing the impacts of climate change. PVPC will also work with municipalities to develop a prioritized list of culverts for repair and/or replacement.
- Task 3.12 – Green Streets and Infrastructure planning reduces the environmental impacts of streets, roads, and municipal infrastructure. As part of this task PVPC will continue a program of local technical assistance to municipalities to implement model green infrastructure strategies.
- Task 3.13 – 2024 Update to the Regional Transportation Plan will update the current 2020 Regional Transportation Plan (RTP) for the Pioneer Valley Metropolitan Planning Organization. Staff will work with MassDOT, the JTC, and MPO to incorporate appropriate Needs, Strategies and Projects for the Pioneer Valley region that address the federal National Goal Areas, the requirements of the BIL, the Massachusetts Global Warming Solutions Act, the Massachusetts Complete Streets Program, and other state and regional initiatives. The RTP outlines the direction of transportation planning and improvements for the Pioneer Valley through the year 2045.

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 include Scenic Byway Planning, Regional Land Use Planning and Local Technical Assistance.

Additional Planning Projects - This section outlines activities for which funding has not yet been secured. These proposed tasks are provided for information purposes only. To date no additional planning projects have been identified for the region for the FFY2023 UPWP.

INTRODUCTION

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

The work tasks within this UPWP are reflective of issues and concerns originating from transportation agencies at the federal, state and local levels and emphasize the development of tangible products. Several tasks are specifically targeted to implement provisions of several pieces of federal legislation, particularly the Infrastructure Investment and Jobs Act, the Clean Air Act Amendments of 1990 (CAAA) and the Americans with Disabilities Act (ADA).

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

Funding Source	Fiscal Period:
FHWA/FTA/MassDOT	October 1, 2022 through September 30, 2023
PVTA	October 1, 2022 through September 30, 2023

The Pioneer Valley Metropolitan Planning Organization will consider endorsement of the Unified Planning Work Program for the Pioneer Valley MPO at their May 2022 meeting.

UPWP AMENDMENT

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

Amendments are defined as significant changes to the overall UPWP that require federal approval. Adjustments or administrative modifications are minor adjustments to the overall UPWP that do not require federal approval.

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

- Amendment with 21 day public comment period:
 - Addition or deletion of a UPWP task or sub-task.
 - Major changes to UPWP task descriptions, activities and other information.
 - Funding increases above the originally approved UPWP overall budget.
 - Funding transfers between tasks equal to or greater than 25% of the UPWP task budget.
 - Funding increases or decreases equal to or greater than 25% of the UPWP task budget.
- Adjustments or Administrative Modifications with an approval vote from the MPO and sign-off from the Office of Transportation Planning (OTP):
 - Minor changes to UPWP task descriptions, activities and other information.
 - Funding transfers between UPWP tasks less than 25% of the UPWP task budget.
 - Funding increases or decreases less than 25% of the UPWP task budget.

TRANSPORTATION PLANNING FUNDING SOURCES

Highway Funding - 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 annual contracts with planning agencies to conduct transportation related planning activities within each region. These 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 \$1,688,604 in PL funds has been programmed for the FY2023 Transportation Work Program. Direct Costs are expected to vary among tasks in the UPWP and are subject to change. A total of \$30,000 has been allocated for Direct Costs in FY2023.

Transit Funding—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. Beginning in FY2020, Section 5303 funding was combined with PL funding in a single contract to be administered through FHWA with MassDOT providing the required 20% match.¹ All total, \$408,131 in Section 5303 funds was transferred from FTA to FHWA for the FY2023 UPWP. The total amount of PL funds programmed for the FY2023 Transportation Work Program includes this transfer of Section 5303 funds.

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. The required a 20% local match for 5307 Funds is provided by the PVTA. A total of \$310,000 in Section 5307 funds has been programmed for the FY2023 Transportation Work Program.

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

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

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

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

FAST ACT PLANNING FACTORS

All metropolitan planning organizations are required to incorporate ten factors into their planning process. The Pioneer Valley MPO has taken great strides to incorporate these ten factors into the Unified Planning

¹ The required Section 5303 match was previously provided by the PVTA. MassDOT now provides this match as part of a combined PL/5303 Contract that will be administered by FHWA.

Work Program. The Ten Planning Factors and their corresponding transportation planning tasks are shown in Table 1.

Table 1 – FAST Act Planning Factors

Factor	Description	UPWP Task
1	Support the economic vitality of the metropolitan areas, especially by enabling global competitiveness, productivity, and efficiency.	Task 1.4 - Transportation Improvement Plan (TIP) development Task 3.6 – Regional Performance Measures Assessment Task 3.13 – Regional Transportation Plan 2024 Update
2	Increase the safety of the transportation system for motorized and non-motorized users.	Task 3.1 - Regional Bicycle, Pedestrian and Complete Streets Planning Task 3.7 - Regional Safety and Planning Studies
3	Increase the security of the transportation system for motorized and non-motorized users.	Task 3.8 - Transit System Surveys and Route Implementation Task 3.9 - Regional Transit Planning
4	Increase the accessibility and mobility of people and for freight.	Task 3.1 - Regional Bicycle, Pedestrian and Complete Streets Planning Task 3.3 - Regional Freight Planning Task 3.9 - Regional Transit Planning Task 3.10 - Paratransit Planning Assistance Task 3.13 – Regional Transportation Plan 2024 Update
5	Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns.	Task 1.5 - Title VI and Environmental Justice Task 3.13 – Regional Transportation Plan 2024 Update Task 4.1 – 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, Pedestrian and Complete Streets Planning Task 3.3- Regional Freight Planning Task 3.8 - Transit System Surveys and Route Implementation Task 3.13 – Regional Transportation Plan 2024 Update
7	Promote efficient system management and operation.	Task 3.4 - Regional Congestion Management Process Task 3.6 – Regional Performance Measures Assessment Task 3.8 Transit System Surveys and Route Implementation Task 3.13 – Regional Transportation Plan 2024 Update
8	Emphasize the preservation of the existing transportation system.	Task 3.5 - Regional Pavement Management System - Project Development Task 3.11 Climate Change Implementation Task 3.13 – Regional Transportation Plan 2024 Update
9	Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation.	Task 3.11 - Climate Change Implementation Task 3.12 Green Streets and Infrastructure Task 3.13 – Regional Transportation Plan 2024 Update
10	Enhancing travel and tourism.	Task 3.1 - Regional Bicycle, Pedestrian and Complete Streets Planning Task 3.2 - Bike Share Implementation Task 4.2 Scenic Byways Support

INFRASTRUCTURE INVESTMENT AND JOBS ACT

This document was prepared in compliance with the Infrastructure Investment and Jobs Act, commonly referred to as the Bipartisan Infrastructure Law (BIL). The BIL specifically addresses all modes of transportation and enhances many of the existing provisions and programs defined in past transportation legislation. The BIL continues the Metropolitan Planning Program, which establishes a cooperative, continuous, and comprehensive (3C) framework for transportation planning in metropolitan areas. This process is overseen jointly by the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA).

The BIL was signed into law by President Biden on November 15, 2021. The BIL will expire on September 30, 2026.

The BIL requires each MPO to use at least 2.5% of its PL funds on specified planning activities to increase safe and accessible options for multiple travel modes for people of all ages and abilities. The Pioneer Valley MPO has included Task 3.5 - Regional Safety and Planning Studies in the UPWP for many years. This task works with federal, state and local authorities to assist in the advancement of a safe and accessible transportation system for all users and travel modes in the Pioneer Valley Region.

FEDERAL PLANNING EMPHASIS AREAS

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

- *Tackling the Climate Crisis – Transition to a Clean Energy, Resilient Future.* Planning tasks included in the UPWP should advance strategies that help achieve the national greenhouse gas reduction goals of 50-52 percent below 2005 levels by 2030, and net-zero emissions by 2050, and increase resilience to extreme weather events and other disasters resulting from the increasing effects of climate change. Tasks included in the FFY2023 UPWP to address this Emphasis Area include: 3.11 - Climate Change Implementation and 3.12 - Green Streets and Infrastructure.
- *Equity and Justice⁴⁰ in Transportation Planning.* The Pioneer Valley UPWP will advance racial equity and support for underserved and disadvantaged communities. The regional planning process and tasks included in the UPWP should comply with Executive Orders 13985 and 14008 and support State and MPO goals for economic opportunity in disadvantaged communities that have been historically marginalized and overburdened by pollution and underinvestment in housing, transportation, water and wastewater infrastructure, recreation, and health care. Tasks included in the FFY2023 UPWP to address this Emphasis Area include: 1.5 – Title VI Planning and 1.6 – Environmental Justice and Justice 40 Planning.
- *Complete Streets.* A complete street is safe, and feels safe, for all users and travel modes. Planning tasks in the UPWP should prioritize safety, comfort, and access to destinations for people who use the street network, including pedestrians, bicyclists, transit riders, micro-mobility users, freight delivery services, and motorists. Complete travel networks that prioritize safety improvements and speed management should be emphasized to provide an equitable and safe transportation network for travelers of all ages and abilities. Tasks included in the FFY2023 UPWP to address this Emphasis Area include: 3.1 - Regional Bicycle, Pedestrian and Complete Streets Planning.
- *Public Involvement.* Early, effective, and continuous public involvement brings diverse viewpoints into the transportation planning process. The use of virtual public involvement tools (VPI) is encouraged to increase opportunities for meaningful public participation in transportation planning activities included in the UPWP. Tasks included in the FFY2023 UPWP to address this Emphasis Area include: 1.3 - Public Participation Process.
- *Strategic Highway Network (STRAHNET)/U.S. Department of Defense (DOD) Coordination.* The MPO should coordinate transportation planning and project programming tasks with the DOD for the purpose of addressing the needs of the federal-aid highway system in meeting national and civil defense. This includes the entire Dwight D. Eisenhower National System of Interstate and Defense Highways and other non-Interstate public highways on the National Highway System. Tasks included in the FFY2023 UPWP to address this Emphasis Area include: 1.4 - TIP Development, 3.13 - 2024 Regional Transportation Plan Update.

- *Federal Land Management Agency (FLMA) Coordination.* The Pioneer Valley MPO must coordinate with FLMAs on transportation planning and project programming activities to ensure access routes and transportation services that connect to Federal lands are properly maintained. All FLMAs must be included in the development of the Regional Transportation Plan and Transportation Improvement Program. Tasks included in the FFY2023 UPWP to address this Emphasis Area include: 1.4 - TIP Development, 3.13 - 2024 Regional Transportation Plan Update.
- *Planning and Environment Linkages (PEL).* PEL is a collaborative and integrated approach to transportation decision making that considers environmental, community, and economic goals early in the transportation planning process. The UPWP should advance transportation programs and projects that serve the community's transportation needs more effectively while avoiding and minimizing the impacts on human and natural resources. Tasks included in the FFY2023 UPWP to address this Emphasis Area include: 1.4 - TIP Development, 3.13 - 2024 Regional Transportation Plan Update.
- *Data in Transportation Planning.* The UPWP should address data sharing, needs, and analytics. Tasks should incorporate and advance data sharing principles to efficiently use resources and share all transportation data to improve policy and decision making at all levels. Tasks included in the FFY2023 UPWP to address this Emphasis Area include all of the tasks included in Section 2.0 - Technical Support & Data Collection.

PIONEER VALLEY MPO VISION AND GOALS

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

RTP Vision

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

REGIONAL GOALS

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

For a complete description of the regional goals, please visit <http://www.pvpc.org/sites/default/files/Chapter%201%20-%20Introduction.pdf>.

PERFORMANCE BASED PLANNING AND PROGRAMMING

The FAST Act requires MPOs, in collaboration with the state DOT and transit agencies, to formally establish targets for performance measures aligned with the national goals. Performance Based Planning and Programming (PBPP) refers to the application of performance management within the parameters of

the FAST Act to achieve desired outcomes for the multimodal transportation system. It is intended advance transportation investments based on their ability to meet established goals. This includes setting targets for the performance measures identified in the FAST Act.

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

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

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

Public Transportation Agency Safety Plans (PTASP) were authorized by the MAP–21 legislation. Under this rule, operators of public transportation systems that receive Federal financial assistance under 49 U.S.C. Chapter 53 such as the PVTA, must develop and implement a PTASP to help ensure that public transportation systems are safe nationwide. The PTASP must include four main elements: (1) Safety Management Policy, (2) Safety Risk Management, (3) Safety Assurance, and (4) Safety Promotion.

Table 2 - Regional Performance Target Status

Final Rule	Effective Date	Status	Updated
Safety Performance Measures (PM1)	April 14, 2016	MPO adopted state targets on January 25, 2022	Annually
Pavement/Bridge Performance Measures (PM2)	May 20, 2017	MPO adopted state targets on October 1, 2020	Every Two Years
System Performance Measures (PM3)	May 20, 2017	MPO adopted state targets on October 1, 2020	Every Two Years
Transit Asset Management Plan (TAM)	July 26, 2016	MPO adopted PVTA TAM Plan Targets on March 26, 2019	Every Four Years
Public Transportation Agency Safety Plan (PTASP)	November 18, 2020	MPO adopted PVTA PTASP in 2021.	Annually

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

Table 3 - Performance Targets for the Pioneer Valley MPO

Rule	Performance Measure	Target
PM1	Total Number of Fatalities	Reduce the Total Number of Fatalities to 3409 or less statewide with an overarching goal of zero fatalities.
PM1	Rate of Fatalities per 100 Million Vehicle Miles Traveled (VMT)	Reduce the Rate of Fatalities to 0.56/100 million VMT or less statewide with an overarching goal of zero fatalities/100 million VMT.
PM1	Total Number of Serious Injuries	Reduce the Total Number of Serious Injuries to 2504 or less statewide.
PM1	Rate of Serious Injuries per 100 Million VMT	Reduce the Rate of Serious Injuries to 4.11/100 million VMT or less statewide.
PM1	Total Number of Non-Motorized Fatalities and Serious Injuries	Do not exceed 471 for the Total Number of Non-Motorized Fatalities and Serious Injuries statewide with an overarching goal of zero fatalities.
PM2	Percentage of pavement of the Interstate System in Good condition	Maintain a condition of 70% or better for 2020 and 2022
PM2	Percentage of pavement of the Interstate System in Poor condition	Maintain a condition of 4% or better for 2020 and 2022
PM2	Percentage of pavement of the non-Interstate NHS in Good condition	Maintain a condition of 30% or better for 2020 and 2022
PM2	Percentage of pavement of the non-Interstate NHS in Poor condition	Maintain a condition of 30% or better for 2020 and 2022
PM2	Percentage of NHS bridges classified in Good condition	Maintain a condition of 15% or better for 2020 and 16% or better for 2022
PM2	Percentage of NHS bridges classifies in Poor condition	Maintain a condition of 13% or better for 2020 and 12% or better for 2022
PM3	Level of Travel Time Reliability (LOTTR) on the Interstate System	Maintain a LOTTR at or above 68% statewide for the Interstate System
PM3	Level of Travel Time Reliability (LOTTR) on non-Interstate NHS	Maintain a LOTTR at or above 80% statewide for the non-Interstate NHS
PM3	Level of Truck Travel Time Reliability (TTTR)	Maintain a TTTR of 1.85 or better statewide for the Interstate System.
PM3	Total reduction of on-road mobile source emissions from projects funded under the Congestion Mitigation and Air Quality Program (CMAQ) for the Springfield Maintenance Area	0.559 kg/day VOC 1.71 kg/day NOx 6.53 kg/day CO
TAM	Percent of revenue vehicles by asset class that have met or exceeded their Useful Life Benchmark (ULB)	Articulated Bus = 0%, Bus = 32%, Cutaway Bus = 39%,
TAM	Percent of vehicles that have met or exceeded their Useful Life Benchmark (ULB)	Automobiles = 100% Trucks and other Rubber Tire Vehicles = 27%
TAM	Percent of facilities with a condition rating below 3.0 on the FTA Transit Economic Requirements Model (TERM) Scale	Administrative and Maintenance = 0% Passenger and Parking = 0%
PTASP	Total Number of Fatalities	Target of 0 Fatalities
PTASP	Rate of Fatalities per Million Vehicle Miles Traveled (VMT)	Target Fatalities Rate of 0.0058/ million VMT
PTASP	Total Number of Serious Injuries	Target of 0 Serious injuries
PTASP	Rate of Serious Injuries per Million VMT	Target Rate of Incapacitating Injuries of 0.0437/ million VMT
PTASP	Fixed Route miles between breakdowns	Target of 20,000 miles
PTASP	Paratransit miles between breakdowns	Target of 24,500 miles
PTASP	Fixed Route preventable accidents/100,000 miles	Target of 2.0
PTASP	Paratransit preventable accidents/100,000 miles	Target of 0.8

PIONEER VALLEY METROPOLITAN PLANNING ORGANIZATION MEMBERS

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

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

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

Agawam West	Southwick	Westfield
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- The Mayor, Selectman, or Town Councilor of one of the following five (5) cities and towns:

Amherst Northampton	Easthampton South Hadley	Hadley
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- A Selectman or Town Councilor from 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	

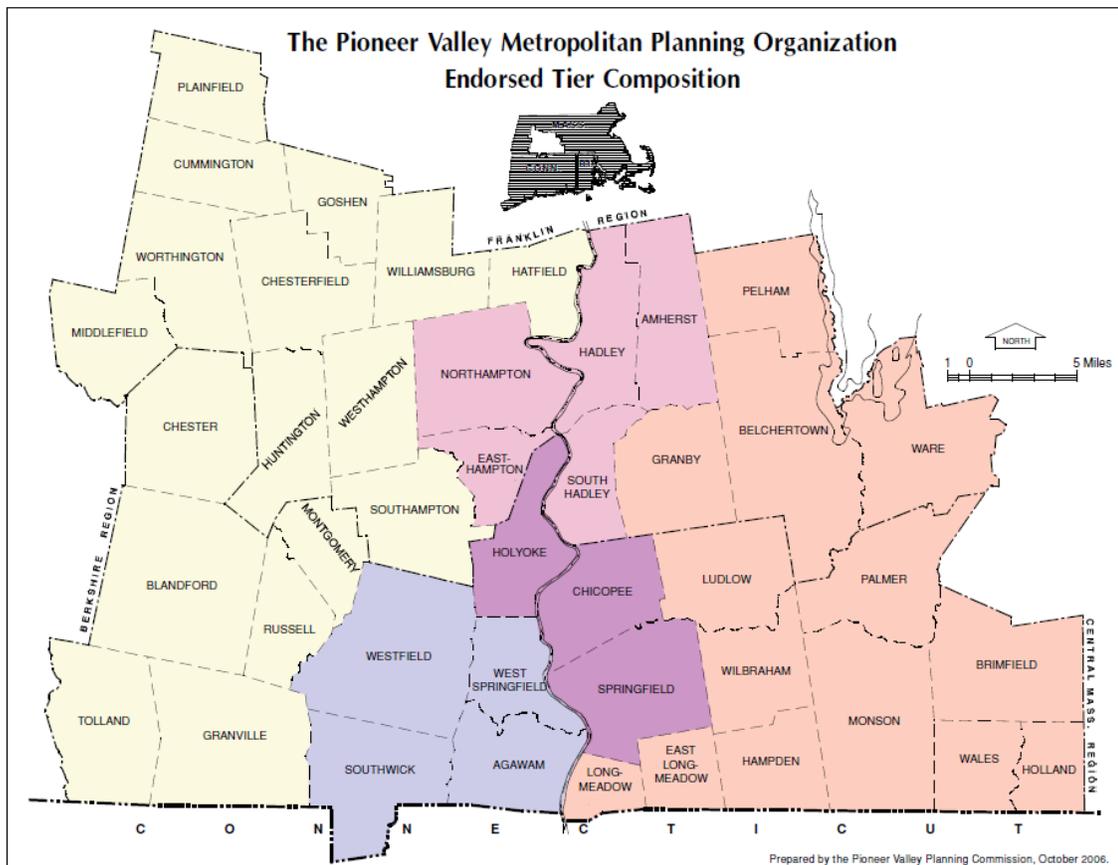
In addition, the Administrator of the Pioneer Valley Transit Authority, the Administrator of the Franklin Regional Transit Authority, the Joint Transportation Committee (JTC) Chair, and one representative each from the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), the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

<http://pvmpo.pvpc.org/mou-for-pioneer-valley-metropolitan-planning-organization/>

Table 4 - Pioneer Valley MPO Members

Name	Title
Jamey Tesler	Secretary and CEO of the Massachusetts Department of Transportation
Jonathan L. Gulliver	Administrator of the Massachusetts Department of Transportation Highway Division
Walter Gunn	Chairman of the Pioneer Valley Executive Committee
Douglas Slaughter	Chairman of the Pioneer Valley Transit Authority Advisory Board
Mayor John Vieau	City of Chicopee
Mayor Domenic Sarno	City of Springfield
Mayor William C. Reichelt	City of West Springfield
Mayor Nicole LaChapelle	City of Easthampton
Roger Fuller	Chesterfield Selectboard
James Barry	Belchertown Selectboard
Rick Sullivan	Economic Development Council of Western Massachusetts
Alternates	
Mayor Joshua Garcia	City of Holyoke
Mayor William Sapelli	Town of Agawam
Mark Gold	Longmeadow Selectboard
Ex-Officio (Non-Voting)	
Jeff McEwen	Federal Highway Administration
Peter Butler	Federal Transit Administration
Sandra Sheehan	Pioneer Valley Transit Authority Administrator
Tina Cote	Franklin Regional Transit Authority Administrator

Figure 1 – Pioneer Valley MPO Map



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 a forum to guide transportation planning activities, transportation investments through the TIP and as an advisory body to the MPO.

Table 5 - Pioneer Valley Joint Transportation Committee Members and Alternates

Community	Member	Alternate
Agawam	Michelle Chase	Vacant
Amherst	Guilford Mooring	Jason Skeels
Barnes Municipal Airport	Christopher Willenborg	Vacant
Belchertown	Steven Williams	Gary Brougham/Douglas Albertson
Blandford	Vacant	Vacant
Brimfield	Judith Carpenter	Vacant
Chester	Carl Baldasaro	Vacant
Chesterfield	Matt Smith	Vacant
Chicopee	Elizabeth Batista	Doug Ellis
Cummington	Alan Taylor	Vacant
East Longmeadow	Bruce Fenney	Vacant
Easthampton	Dan Murphy	Vacant
Goshen	Vacant	Vacant
Granby	David Derosiers	Vacant
Granville	Doug Roberts	Mathew Streeter
Hadley	Bill Dwyer	Scott McCarthy
Hampden	Vacant	Vacant
Hatfield	Phil Genovese	Garrett Barry
Holland	Brian Johnson	Larry Mandell
Holyoke	Jim Czach	Jeffrey Burkott/Robert Peirent
Huntington	Charles Dazelle	Vacant
Longmeadow	Vacant	Timothy Keane
Ludlow	Jim Goodreau	Marc Strange
MassBike	Gary Briere	Marvin Ward
MassDOT District 1	Mark Moore	Peter Frieri
MassDOT District 2	Paula Simmons	Daryl Amaral
Middlefield	Rodney Savery, Jr.	Vacant
Mobility Impaired Representative	Vacant	Carmen Rosado (STAVROS)
Monson	Benjamin Murphy	Jennifer Wolowicz
Montgomery	Curtis Bush, Jr.	Vacant
Northampton	Wayne Feiden	Maggie Chan
Palmer	Ryan McNutt	Vacant
Pelham	Rick Adamcek	Vacant
Pedestrian Representative	Betsy Johnson - WalkSpringfield	Dan Call – Westfield Greenway
Peter Pan Bus Lines	Peter Picknelly, Jr.	Vacant
Pioneer Valley Railroad	David Pederson	Vacant
Pioneer Valley Transit Authority	Paul Burns	Vacant
Plainfield	Walter Jennings.	Vacant
Russell	Vacant	Vacant
South Hadley	Chris Bouchard	Mike Sullivan
Southampton	Randall Kemp	Vacant
Southwick	Randy Brown	Richard Grannells
Springfield	Andrew Krar	Christopher Cignoli/Peter Shumway
Tolland	James Deming	Kathleen Cowles
University of Massachusetts	Glen Barrington	Vacant
Wales	Bruce Cadieux	Vacant
Ware	Vacant	Vacant
Western Massachusetts EDC	Vacant	Vacant
Westfield	Mark Cressotti	Jeremy Cigal
Westhampton	David Blakesly	Arthur Pichette
West Springfield	Vacant	Vacant
Wilbraham	Tonya Bosch	Dena Grochmal
Williamsburg	Daniel Banister	Nick Dines
Worthington	Charley Rose	Peggy O'Neal

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.

Table 6 – Proposed Transportation Staff

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

STAFFING REPORT

The following PVPC staff members are expected to work on the FY2022 Unified Planning Work Program. The percentage of each staff member’s time devoted to Transportation Planning Tasks as part of our MassDOT 3C and Section 5303 contracts is approximated under “% Time on Transportation”.

Table 7 – Proposed Staff Time for FY2023 UPWP

<u>Staff</u>	<u>Position</u>	<u>% Time on Transportation</u>
Rana Al Jammal	Senior Transportation Planner - Specialist	85%
Ray Centeno	Graphics Designer	20%
Jacob Dolinger	GIS Specialist	20%
Alexander Forrest	Transit Planner II	20%
Patty Gambarini	Chief Environmental Planner	12%
Douglas Hall	Data Manager and Analyst	20%
Molly Jackson-Watts	Principal Planner/Manager of Regional	15%
Mimi Kaplan	Senior Land Use Planner	10%
Amir Kouzehkanani	Principal Transportation Planner - Manager	76%
Peter Kuusisto	Transit Planner II	60%
Andrew McCaul	Senior Transportation Planner I	95%
Jeffrey McCollough	Senior Transportation Planner - Specialist	80%
Khyati Parmar	Senior Transportation Planner II	88%
Catherine Ratte	Director of Land Use and Environment	11%
Dana Roscoe	Principal Planner – Section Head	95%
Gary Roux	Principal Planner – Section Head	80%
Todd Zukowski	GIS/Cartographic – Section Head	25%
Transportation Intern	Intern	100%
Data Intern	Intern	25%
Vacant	Senior Transit Planner	20%

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

FUNDING PROFILE

Table 8 – Funding by Task and Source

	Total	FHWA 3C PL	MassDOT 3C Match	Local Match	PVTA S. 5307	PVTA* S. 5307 Match
1.0 Management & Certification of the 3C Process						
1.1 Management of the 3C Process	49,300	39,440	9,860			
1.2 Unified Planning Work Program	18,750	15,000	3,750			
1.3 Public Participation Process	40,000	32,000	8,000			
1.4 TIP Development	140,000	112,000	28,000			
1.5 Title VI Planning	40,000	32,000	8,000			
1.6 Environmental Justice and Justice 40 Planning	40,000	32,000	8,000			
Subtotal of Section 1.0	328,050	262,440	65,610	0	0	0
2.0 Technical Support & Data Collection						
2.1 Traffic Counting	56,000	44,800	11,200			
2.2 Regional Travel Demand Modeling/Clean Air Planning	90,000	72,000	18,000			
2.3 GIS, Mapping and Graphics	102,000	69,600	17,400		12,000	3,000
2.4 Information Center	42,000	33,600	8,400			
2.5 Regional Pavement Management System - Data Collection	56,000	44,800	11,200			
Subtotal of Section 2.0	346,000	264,800	66,200	0	12,000	3,000
3.0 RTP Planning						
3.1 Regional Bicycle, Pedestrian and Complete Streets Planning	78,000	62,400	15,600			
3.2 Bike Share Implementation	19,000	15,200	3,800			
3.3 Regional Freight Planning	30,000	24,000	6,000			
3.4 Regional Congestion Management Process	75,000	60,000	15,000			
3.5 Regional Pavement Management System - Project Development	78,000	62,400	15,600			
3.6 Regional Performance Measures Assessment	15,000	12,000	3,000			
3.7 Regional Safety and Planning Studies	135,000	108,000	27,000			
3.8 Transit System Surveys & Route Implementation	275,000	117,000	29,250		103,000	25,750
3.9 Regional Transit Planning	296,250	117,000	29,250		120,000	30,000
3.10 Paratransit Planning Assistance	35,000	15,000	3,750		13,000	3,250
3.11 Climate Change Implementation	20,000	16,000	4,000			
3.12 Green Streets and Infrastructure	20,000	16,000	4,000			
3.13 2024 Long Range Transportation Plan Update	158,304	126,643	31,661			
Subtotal of Section 3.0	1,234,554	751,643	187,911	0	236,000	59,000
4.0 Ongoing Transportation Planning						
4.1 Implementing the Regional Land Use Plan	16,000	12,800	3,200			
4.2 Scenic Byways Support	10,000	8,000	2,000			
4.3 Local Pavement Management Program	25,000			25,000		
4.4 Local Technical Assistance	34,000	27,200	6,800			
Subtotal of Section 4.0	85,000	48,000	12,000	25,000	0	0
MassDOT 3C Direct Costs	30,000	24,000	6,000			
Program Sum	2,023,604	1,350,883	337,721	25,000	248,000	62,000

*MassDOT S. 5303 match is 20% of total program amount. PVTA S. 5307 match is 20% of total program amount.

Funding estimates for FY2023 for federal PL funds were provided to the Pioneer Valley MPO by the MassDOT Office of Transportation Planning. All total, \$1,688,604 in PL funding was programmed in the FY2023 UPWP. This includes a total of \$408,131 in former Section 5303 funds that was transferred from FTA to FHWA. PVPC also receives a total of \$310,000 in Section 5307 funds under contract with PVTA. Local matching funds for the local pavement management program are estimated and not guaranteed.

A total of \$718,131 is programmed in the FY2023 UPWP for transit planning. This represents the total of the Section 5307 funding received from PVTa and the Section 5303 funding transferred from FTA to FHWA as follows:

Table 9 – Transit Funding Programmed in the FY2023 UPWP

Planning Task	Transit Funding Programmed
1.4 TIP Development	\$40,131
1.5 Title VI Planning	\$10,000
1.6 Environmental Justice and Justice 40 Planning	\$10,000
2.3 GIS, Mapping and Graphics	\$25,000
3.8 Transit System Surveys & Route Implementation	\$275,000
3.9 Regional Transit Planning	\$296,250
3.10 Paratransit Planning Assistance	\$35,000
3.13 2024 Regional Transportation Plan Update	\$26,750
Total	\$718,131

A total of \$30,000 is programmed in the FY2023 UPWP for direct costs. Direct expenses greater than \$1,000 require approval in advance of the purchase from MassDOT. Direct costs are estimated as follows:

Table 10 – Direct Cost Breakdown for the FY2023 UPWP

Direct Cost	Amount
Computer Equipment and Software	\$11,500
Traffic Counting Equipment and Supplies	\$3,000
Parking, Tolls, Mileage Reimbursement	\$10,000
Professional Development	\$1,500
Translation Services	\$1,000
Advertising	\$1,000
Postage	\$300
Printing	\$1,000
Miscellaneous	\$700
Total	\$30,000

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

This work element encompasses the administration and support of the 3C transportation process and has been divided into the following tasks for FY 2023.

Task 1.1 Management of the 3C Process

OBJECTIVE:

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

PREVIOUS WORK:

1. Management of the 3C process using previous Unified Planning Work Programs, transportation plans, Memorandum of Understanding, and Annual Review Reports.
2. Updated MOU for Springfield UZA

PROPOSED ACTIVITIES:

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

PRODUCTS:

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

<u>Source</u>	<u>Budget</u>	<u>Est. Staff Effort</u>
FHWA PL (80%)	\$ 39,440	20 weeks
MassDOT (20% match)	\$ 9,860	5 weeks
TOTAL	\$49,300	25 weeks
Direct Labor	\$22,162	
Indirect Costs	\$27,138	

Task 1.2 Unified Planning Work Program

OBJECTIVE:

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

PREVIOUS WORK:

1. Pioneer Valley Unified Work Programs 1974 - 2022.

PROPOSED ACTIVITIES:

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

PRODUCTS:

1. Amendments to the current UPWP as necessary.
2. UPWP for the next program year (FFY 2024). The estimated completion date is May 2023. Public engagement is estimated to begin in March 2023.

<u>Source</u>	<u>Budget</u>	<u>Est. Staff Effort</u>
FHWA PL (80%)	\$15,000	8 weeks
MassDOT (20% match)	\$ 3,750	2 weeks
TOTAL	\$18,750	10 weeks
Direct Labor	\$8,429	
Indirect Costs	\$10,321	

Task 1.3 Public Participation Process

OBJECTIVE:

To provide the public with complete information, timely notice, full access to key decisions and opportunities for early and continuing involvement in the 3C process in compliance with the BIL. Expand the regional process to encourage participation from community-based organizations and under-represented populations.

Early, effective, and continuous public involvement brings diverse viewpoints into the decision-making process. By integrating Virtual Public Involvement (VPI) tools into the overall public involvement approach while ensuring continued public participation by individuals without access to computers and mobile devices. Virtual tools provide increased transparency and access to transportation planning activities and decision-making processes.

PREVIOUS WORK:

1. Expanded stakeholder outreach and capacity building.
2. Updated JTC Bylaws.
3. Survey of JTC, MPO, local partners and stakeholders on outreach and communication strategies to improve and expand participation Survey of virtual public engagement.

PROPOSED ACTIVITIES:

1. Apply the Public Participation Process to transportation programs and tasks to: prepare for public meetings; attend public meetings; perform outreach to increase public participation; inform and educate residents and employers of the region about transportation legislation and PVPC products.
2. Update and revise the MPO online content to maintain current information on transportation studies and ongoing projects.
3. Explore and expand engagement with non-traditional partners including Limited English Proficient (LEP) population in the region.
4. Network with social service agencies, neighborhood groups and community organizations to enhance existing outreach.

PRODUCTS:

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

<u>Source</u>	<u>Budget</u>	<u>Est. Staff Effort</u>
FHWA PL (80%)	\$32,000	16 weeks
MassDOT (20% match)	\$ 8,000	4 weeks
TOTAL	\$40,000	20 weeks
Direct Labor	\$17,982	
Indirect Costs	\$22,018	

Task 1.4 Transportation Improvement Plan (TIP) Development

OBJECTIVE:

The PVMPO with the assistance PVPC Staff, the JTC, and MassDOT will develop the 2023 – 2027 TIP. To complete this task, the Transportation Evaluation Criteria (TEC) will first be reviewed and updated to ensure the TEC are compliant with the Bipartisan Infrastructure Law (BIL). Once the TEC is updated Staff will work with the JTC to update project scoring and provide the MPO with the most up to date project information so that the MPO can program projects that help meet regional performance measures as well as Federal and State initiatives.

PREVIOUS WORK:

1. Pioneer Valley Transportation Improvement Programs 1974 – 2023
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.

PROPOSED ACTIVITIES:

1. Continue to use the eSTIP to develop the 2024-2028 TIP.
2. Assist communities with the development of new TIP projects through the MassDOT MaPIT intake tool. Attend training for updates to the project intake tool as necessary.

3. Assist the JTC in utilizing project evaluation criteria to develop a financially constrained project listing for each program year.
4. Perform air quality conformity and Greenhouse Gas emissions calculations.
5. Conduct a regional equity analysis for all programmed projects.
6. Conduct appropriate public participation for the TIP consistent with the public participation plan for the region.
7. Conduct formal TIP amendments and adjustments in consultation with the MPO 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. Engage JTC, MPO, and Public to review and update TEC to ensure TEC is compliant with the requirements of the recently passed Bipartisan Infrastructure Law (BIL).

PRODUCTS:

1. FFY 2024 - 2028 Transportation Improvement Program. The estimated completion date is May 2023. Public engagement is estimated to begin in February 2023.
2. TIP Amendments and Adjustments as necessary.
3. Summary of comments received during public review for all TIP documents and amendments. As necessary.
4. Ranked list of evaluated TIP projects, with corresponding TEC sheets. March 2023.
5. Review and update TEC form to ensure the TEC is compliant with both State and Federal regulations as necessary– December 2022.

<u>Source</u>	<u>Budget</u>	<u>Est. Staff Effort</u>
FHWA PL (80%)	\$112,000	56 weeks
MassDOT (20% match)	\$ 28,000	14 weeks
TOTAL	\$140,000	70 weeks
Direct Labor	\$62,935	
Indirect Costs	\$77,065	

Task 1.5 Title VI Planning

OBJECTIVE:

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

PREVIOUS WORK:

1. Update to the regional Four Factor analysis.
2. Finalized expanded membership on the Pioneer Valley Joint Transportation Committee (JTC) to include representatives from the pedestrian and mobility impaired communities.
3. Developed public notices for transportation products that comply with the region’s LAP.
4. Updated and submitted revised Title VI program to MassDOT Office of Diversity and Civil Rights (ODCR) and FTA.
5. Reporting to MassDOT on EJ, Title VI and LEP.

PROPOSED ACTIVITIES:

1. Continue use of the MassDOT “Engage Tool” to improve public outreach and interaction with the public. Staff will continue to identify

- new stakeholders and meet with regional organizations and groups to facilitate participation in the regional transportation planning process.
2. Revise and update the email database of community contacts for non-profit and community based organizations.
 3. Provide an annual update of documented complaints, Title VI related activities, and progress in implementing Title VI programs to MassDOT.
 4. Update Title VI Mapping tools for Title VI populations for PVPC communities to include data from the most recent version of the ACS.
 5. 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.
 6. 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.
 - a) Map the location of each project and calculate the distribution of project expenditures to minority populations, people with LEP, elderly populations, and people with disabilities categories. This work will also include low-income and transit-dependent households and include populations within a one-half mile buffer of projects programmed in the TIP.
 7. Distribute Notice of Beneficiaries to community organizations and relevant contacts as identified in the Public Participation Plan
 8. Provide translations consistent with the region's LAP for products and public notices for the MPO to provide increased opportunities for under-served populations to be represented in the public participation process.

PRODUCTS:

1. Updated email contact database and revised public outreach using the "Engage Tool." January 2023.
2. Updates to MassDOT on EJ, Title VI and LEP activities (as necessary).
3. Translations consistent with the region's LAP for notices and products (as necessary).

<u>Source</u>	<u>Budget</u>	<u>Est. Staff Effort</u>
FHWA PL (80%)	\$32,000	16 weeks
MassDOT (20% match)	\$ 8,000	4 weeks
TOTAL	\$40,000	20 weeks
Direct Labor	\$17,982	
Indirect Costs	\$22,018	

Task 1.6 Environmental Justice and Justice 40 Planning

OBJECTIVE:

To advance racial equity and support for the underserved and disadvantaged communities.

EO 12898 "Federal Actions to Address Environmental Justice in Minority Populations and Low-income Populations" directs recipients of federal financial assistance to identify and address any disproportionate burdens placed on low-income and minority populations.

EO 13985 (Advancing Racial Equity and Support for Underserved Communities) defines “equity” as the consistent and systematic fair, just, and impartial treatment of all individuals, including individuals who belong to underserved communities that have been denied such treatment, such as Black, Latino, and Indigenous and Native American persons, Asian Americans and Pacific Islanders and other persons of color; members of religious minorities; lesbian, gay, bisexual, transgender, and queer (LGBTQ+) persons; persons with disabilities; persons who live in rural areas; and persons otherwise adversely affected by persistent poverty or inequality. The term “underserved communities” refers to populations sharing a particular characteristic, as well as geographic communities, that have been systematically denied a full opportunity to participate in aspects of economic, social, and civic life.

PREVIOUS WORK:

1. Updated maps of population demographics and related impacts.

PROPOSED ACTIVITIES:

1. PVPC will explore the use of the Climate and Economic Justice Screening Tool (CEJST) that helps agencies identify disadvantaged communities (DACs) that are marginalized, underserved, and overburdened by pollution as part of the Justice40 Initiative, which aims to deliver 40 percent of the overall benefits of federal investments in climate and clean energy to disadvantaged communities.
 - a) Identify opportunities for use of the CEJST in cooperation with the Pioneer Valley JTC.
2. Work to identify ways to improve infrastructure for non-motorized travel, public transportation in underserved communities.
3. Support economic opportunities in disadvantaged communities that have been underserved, marginalized, and overburdened by pollution and underinvestment in housing and transportation.
4. Network with social service agencies, neighborhood groups and community organizations to enhance existing outreach.

PRODUCTS:

1. CEJST products as defined by the Pioneer Valley JTC.

<u>Source</u>	<u>Budget</u>	<u>Est. Staff Effort</u>
FHWA PL (80%)	\$32,000	16 weeks
MassDOT (20% match)	\$ 8,000	4 weeks
TOTAL	\$40,000	20 weeks
Direct Labor	\$17,982	
Indirect Costs	\$22,018	

WORK ELEMENT 2 - TECHNICAL SUPPORT & DATA COLLECTION

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

Task 2.1 Traffic Counting

OBJECTIVE:

To provide accurate and efficient bicycle, pedestrian and vehicle data collection services to support MassDOT, the PVPC's 43 member communities, and planning tasks included in the FY2023 UPWP.

PREVIOUS WORK:

1. Regional Traffic Counting Program and database 1985 - 2022.
2. Regional Traffic Counts 2015 - 2019
3. Data collection and analysis as part of Highway Performance Monitoring System (HPMS).
4. Updates to MassDOT MS2 traffic count site.
5. PVPC 2020 regional traffic counts monitoring COVID19 impact.

PROPOSED ACTIVITIES:

1. Perform data collection for all transportation modes. The process to collect and report including methodology, equipment, and locations is explained in the appendix. This work includes:
 - a) Collect 48 hour Automatic Traffic Recorder (ATR) count data and HPMS data for locations as requested by MassDOT.
 - b) Collect and document vehicle classification data and speed data for the region.
 - c) Collect Turning Movement Count (TMC) data as requested by MassDOT and member communities.
 - d) Collect bicycle, pedestrian and vehicular count data to support UPWP tasks.
 - e) Update the MassDOT MS2 website and PVPC traffic count database to include all recent data collection. <https://mhd.public.ms2soft.com/tcds/tsearch.asp?loc=Mhd&mod=>
2. Provide up to 2 free daily traffic counts per member community on request.

PRODUCTS:

1. Summary reports of daily traffic count information for the region. Ongoing task.
2. PVPC web page Average Daily Traffic counts by community. Ongoing task.
3. Document traffic counts for other UPWP tasks as necessary. Ongoing task.
4. Online traffic count viewer and download portal. Ongoing task.
5. Share traffic counts with respective communities. Ongoing task.

<u>Source</u>	<u>Budget</u>	<u>Est. Staff Effort</u>
FHWA PL (80%)	\$44,800	22 weeks
MassDOT (20% match)	\$11,200	6 weeks
TOTAL	\$56,000	28 weeks
Direct Labor	\$25,174	
Indirect Costs	\$30,826	

Task 2.2 Regional Travel Demand Modeling/Clean Air Planning

OBJECTIVE:

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

PREVIOUS WORK:

1. Estimated emissions of GHG and criteria pollutants by community based on VMT obtained from the 2010 Regional Travel Demand Model base year (February 2021).
2. Analyzed impact of I-91 near and mid term improvements on regional traffic flow (December 2020).
3. Coordinated with MassDOT OTP and District 2 to update the 2040 Regional Transportation Model network to include recommendations from the Springfield I-91 Viaduct Study (November 2020).
4. Updated the Regional Transportation Model to include revised demographic projections for the 2020 RTP (July 2020).

PROPOSED ACTIVITIES:

1. Update the traffic count database with current Average Daily Traffic data at community lines and external stations gathered from in-house traffic counts and surrounding planning agencies. Coordinate the exchange of data with MassDOT, surrounding Massachusetts RPAs, and Connecticut's Capital Region Council of Governments (ongoing task).
2. Update information on non-exempt regional projects for inclusion in the statewide model from the Office of Transportation Planning (ongoing).
3. Perform air quality conformity determinations for TIP projects to be funded under the Congestion Mitigation and Air Quality (CMAQ) program (ongoing).
4. Utilize the regional transportation model to assist in the development of future build out estimates, provide supporting data and estimate the effects of planned transportation improvements (ongoing).
5. Begin updates for the 2020 Regional Transportation Model new base year, as information from the Census 2020 data becomes available. This is an 18-month endeavor that includes creating new TAZs with socio-economic data from block groups (tentative completion date January 2023)
6. Continue efforts to update the existing Speed/Capacity Lookup table used in running the Regional Transportation Model macro to identify any necessary adjustments. Expand on this effort during the model calibration process.
7. As socio-economic data and future projections of Build Out years become available, update and re-run the 2020, 2030, 2040, 2050 and any potential scenarios we develop in-house for model years to obtain new estimates based on the new TAZ's and socio-economic data obtained from 2020 US Census.
8. Run assessments and scenarios using the regional model to assist in the update of the regional transportation plan. Look at projected growth in VMT over 30 years.
9. Run model Build Out scenarios of the 2024 RTP update.

PRODUCTS:

1. Refinement and maintenance of the regional travel demand model. (ongoing)
2. Air quality conformity and greenhouse gas analysis in support of the TIP. (quarterly as necessary).
3. Complete the calibration of the 2020 Base Year Model using new socio-economic data from 2020 US Census data (June 2023).
4. Analysis for products and scenarios associated with the long-range regional transportation plan update (as necessary).

<u>Source</u>	<u>Budget</u>	<u>Est. Staff Effort</u>
FHWA PL (80%)	\$72,000	36 weeks
MassDOT (20% match)	\$18,000	9 weeks
TOTAL	\$90,000	45 weeks
Direct Labor	\$40,459	
Indirect Costs	\$49,541	

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 BIL and the project-specific goals outlined in this UPWP. Through these activities, PVPC GIS/Graphics staff will provide planners, government partners and the public with traditional GIS mapping products intended to support the 3C planning process.

PREVIOUS WORK:

1. Updated online interactive ESRI map analysis tool for PVTA bus stop consolidation. Maintenance of GIS regional transit system database, maps and schedules (Ongoing Task).
2. Maintenance of spatial transportation data layers such as functional classification of roads, traffic counts, pavement condition, bicycle and pedestrian infrastructure, etc. (Ongoing Task)

PROPOSED ACTIVITIES:

1. Perform data collection as necessary using the PVPC drone. PVPC is fully licensed by the FAA for small Unmanned Aircraft System sUAS aka drone operation. PVPC follows FAA guidance and industry best practices including: pre-flight inspections, mission planning, weather monitoring, situational awareness, post-flight inspections and aircraft maintenance, as required. (As needed.)
2. Update Priority Development Areas (PDAs), 43D Priority Development Sites and Transformative Development Initiative Districts (TDIs) in the region. (Ongoing as needed.)
3. Identify and map the location of new Affordable Housing in the region. (Ongoing task.)
4. Pursue the use of GIS and other automated mapping and spatial analytical technologies for transportation applications. Enhance existing digital base map data and develop geographically referenced data layers for use in transit service analysis, emergency response, critical infrastructure assessment, pavement management, transportation system planning and regional performance measures. (Ongoing task.)
5. Work with state and federal agencies to review, correct and enhance regional GIS map coverage and related data to meet state and federal standards, support development of Homeland Security, pre-

- disaster mitigation spatial data and regional resiliency planning. (Ongoing task.)
6. Assimilate state and federal data and data structure (i.e., road centerline/road inventory) into the PVPC's database and analytic modeling programs. (Ongoing task.)
 7. Improve access and use of web-based GIS data/analysis, online data and map products. (As necessary.)
 8. Provide support for transit planning services for the PVTA, including graphic layout, production of bus schedules, mapping, online bus stop inventory, public outreach, rider guides, public information and other vital documents. Funding has been budgeted separately for the production of schedules and graphics on behalf of the PVTA. (Ongoing task.)
 9. Conduct outreach to regional communities to identify existing GIS layers (speed limit data, sidewalks, traffic signals, etc.) and share new data with MassDOT. (Ongoing task.)

PRODUCTS:

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

<u>Source</u>	<u>Budget</u>	<u>Est. Staff Effort</u>
FHWA PL (80%)	\$ 69,600	35 weeks
MassDOT (20% match)	\$ 17,400	9 weeks
PVTA S. 5307	<u>\$ 15,000</u>	<u>7 weeks</u>
TOTAL	<u>\$102,000</u>	<u>51 weeks</u>
Direct Labor	\$45,853	
Indirect Costs	\$56,147	

Task 2.4 Information Center

OBJECTIVE:

The Information Center focuses on assisting multiple partners to support the initiatives and goals of the BIL as well as regional transportation, economic development, land use, and municipal planning needs.

PREVIOUS WORK:

1. Updated regional and municipal level population, household, and employment projections for the RTP and regional transportation model.
2. Data to support updated definitions for regional EJ populations.
3. Developed and maintain a data downloads website available to regional planners and the public. www.pioneervalleydata.org
4. Report on Regional Hybrid and Remote Work Trends.

PROPOSED ACTIVITIES:

1. Collect and analyze data regarding current transportation, economic development, land use, and municipal planning issues. Continue to maintain and improve the Information Center's regional database to integrate transportation, demographic, economic, health, education and municipal data. Maintain and improve data access through the PVPC website. This is an ongoing, annual task.

2. Maintain regional data indicators related to socioeconomics, transportation, regional performance targets, sustainability, and health to include in State of the Region database, Pioneer Valley Data website, and community and regional profiles. Maintain online data dashboard monitoring trends in key transportation indicators. This is an ongoing, annual task.
3. 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. Assist with the integration of 2020 Census data as it is released. This is an ongoing, annual task.
4. Update regional socioeconomic data for the 2024 Update to the RTP. Utilize the most recent sources of data to identify trends in regional population, housing, employment, income, vehicle ownership and other areas. Develop a comprehensive assessment of the trends and the potential impacts on the regional transportation system.

PRODUCTS:

1. Maintain information systems of socioeconomic and disparate data. Ongoing task.
2. Region wide data indicators updates to be conducted in December 2022 and May-July 2023.
3. PVPC website updates and maintenance of online data dashboard. Ongoing task. <https://pioneervalleydata.org/search-by-topic/>
4. Updated Regional Socio Economic data for the 2024 RTP. February 2023

<u>Source</u>	<u>Budget</u>	<u>Est. Staff Effort</u>
FHWA PL (80%)	\$33,600	17 weeks
MassDOT (20% match)	<u>\$ 8,400</u>	<u>4 weeks</u>
TOTAL	\$42,000	21 weeks
Direct Labor	\$18,881	
Indirect Costs	\$23,119	

Task 2.5 Regional Pavement Management System - Data Collection

OBJECTIVE:

Develop and maintain an updated pavement distress database for the Pioneer Valley Regional Pavement Management System (PMS) on all federal aid eligible roadways. PVPC staff collects pavement distress data on a 4-year rotating cycle based on federal aid eligible roadway mileage. The proposed four year pavement data collection plan is shown in the proposed regional data collection by community map. This is an ongoing task.

PREVIOUS WORK:

1. Collection of roadway pavement distress data, roadway geometry and overall condition index (OCI) for all federal aid eligible roadways in the PVPC region.
2. Completed roadway pavement distress data collection in Brimfield, Holland, Wales, Monson, and Hampden.

PROPOSED ACTIVITIES:

1. Collect roadway pavement distress data on all federal aid roadways in Springfield and Wilbraham in the Summer of 2023. The process

- to collect and analyze pavement distress data including methodology, and software is explained in the appendix.
2. Collect and verify additional roadway information such as posted speed, shoulder width, functional class, curb reveal, area zoning, width, segment length, and special route designations. As necessary.
 3. Collect roadway pavement distress and condition information for proposed transportation improvement projects in the region to continue to assist in the regional project evaluation process. As necessary.
 4. Perform limited existing sidewalk inventory and data collection for interested communities on request.
 5. Continue to conduct quality control checks of pavement inventory and condition data. As necessary.
 6. Coordinate pavement data collection with MassDOT and other RPAs. As necessary.

PRODUCTS:

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

<u>Source</u>	<u>Budget</u>	<u>Est. Staff Effort</u>
FHWA PL (80%)	\$44,800	22 weeks
MassDOT (20% match)	\$11,200	5 weeks
TOTAL	\$56,000	27 weeks
Direct Labor	\$25,174	
Indirect Costs	\$30,826	

WORK ELEMENT 3 - REGIONAL TRANSPORTATION PLANNING

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

Task 3.1 Regional Bicycle, Pedestrian and Complete Streets Planning

OBJECTIVE:

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

PREVIOUS WORK:

1. Worked to expand the region’s on-road and off-road pedestrian and bicycle network, developed collaborations with communities and non-profit organizations to implement new projects.
2. Completed a pedestrian safety study along Main and State Streets in the Town of Monson
3. Traffic volume counts on shared-use-paths and on-road bicycle lanes.
4. Bay State Bike Month coordination and reporting.
5. Surveyed users of Valley Bike, the region’s bike share resource.
6. PVPC website for information on the region’s shared-use-paths.

PROPOSED ACTIVITIES:

1. Work with MassDOT and the JTC’s Bicycle, Pedestrian, and Complete Streets subcommittee to identify four bicycle and pedestrian count locations in FY 2023.
2. Work with the JTC’s Bicycle, Pedestrian, and Complete Streets subcommittee to begin identifying an on-road regional network of bicycle facilities.
3. Assist local communities in efforts related to Complete Streets policy initiatives, projects, and the development of Prioritization Plans. Ongoing task.
4. Participate in the Massachusetts Statewide Bicycle Advisory Board. Ongoing task.
5. Work with member municipalities, MassBike and MassDOT to facilitate Bay State Bike Month. This work includes promotion through a variety of media platforms and close collaboration with municipal officials and community-based organizations, to assure publicity and broad promotion of planned activities.

PRODUCTS:

1. JTC Bicycle, Pedestrian, and Complete Streets subcommittee meeting minutes and notices. Monthly
2. Bicycle and pedestrian volume counts. Ongoing.
3. Pioneer Valley On-Road Bike Network Map. May 2023
4. Bike Commute week report. Summer 2023.

<u>Source</u>	<u>Budget</u>	<u>Est. Staff Effort</u>
FHWA PL (80%)	\$62,400	31 weeks
MassDOT (20% match)	\$15,600	7 weeks
TOTAL	\$78,000	38 weeks
Direct Labor	\$35,064	
Indirect Costs	\$42,936	

Task 3.2 Bike Share Implementation

OBJECTIVE:

ValleyBike is the regional bike share program for the Pioneer Valley region, serving the communities of Amherst, Chicopee, Easthampton, Holyoke, Northampton, South Hadley, Springfield, West Springfield and the University of Massachusetts. This is an ongoing task to provide planning support to assist the ValleyBike communities in the implementation and advancement of this program.

PREVIOUS WORK:

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

PROPOSED ACTIVITIES:

1. Participate in meetings of the Bike Share Steering Committee that will assist and guide the Bike Share program development process. Ongoing task.
2. Work with the vendor (Bewegen) to promote awareness of the ValleyBike Access Pass to economically disadvantaged people. Coordinate events through the Bike Share Steering Committee to promote and register people for the Access Pass. Ongoing task.
3. Continue to support member municipalities with necessary planning work as necessary.
4. Work with community officials to coordinate promotion and public outreach activities for ValleyBike. Ongoing task.
5. Evaluate monthly usage statistics and develop a year-end report on ValleyBike. April 2023.

PRODUCTS:

1. ValleyBike Steering Committee monthly meetings. Ongoing task.
2. Valley Bike Access Pass Registration Event(s). As Needed.
3. Summary of Usage Statistics – Ongoing monthly task
4. Draft Report – Year 5, March 2023
1. Final Report – Year 5, April 2023

<u>Source</u>	<u>Budget</u>	<u>Est. Staff Effort</u>
FHWA PL (80%)	\$15,200	7 weeks
MassDOT (20% match)	\$ 3,800	2 weeks
TOTAL	\$19,000	9 weeks
Direct Labor	\$ 8,541	
Indirect Costs	\$10,459	

Task 3.3 Regional Freight Planning

OBJECTIVE:

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

PREVIOUS WORK

1. Massachusetts State Freight Plan Working Group.
2. Pioneer Valley Regional Freight Transportation Plan.
3. Holyoke Underpass Safety Study

PROPOSED ACTIVITIES:

1. Work with the JTC, public and private sectors to identify regional freight bottlenecks on NHS corridors in the region. Using the latest NPMRDS data set staff will review the Truck Travel Time Reliability (TTTR), collect other site specific data and update the regional NHS freight bottlenecks. September 2023.
2. Continue to work with MassDOT and private entities to identify any adverse impacts to freight movement resulting from existing and proposed passenger rail service. Ongoing task.
3. Participate in FHWA web conferences, and other related workshops and conferences regarding new freight requirements included in the BIL. As necessary.
4. Perform outreach to regional freight providers to incorporate freight needs into the 2024 Update to the RTP.

PRODUCTS:

1. Freight Bottleneck Updates, September 2023.

<u>Source</u>	<u>Budget</u>	<u>Est. Staff Effort</u>
FHWA PL (80%)	\$24,000	12 weeks
MassDOT (20% match)	\$ 6,000	3 weeks
TOTAL	\$30,000	15 weeks
Direct Labor	\$13,486	
Indirect Costs	\$16,514	

Task 3.4 Regional Congestion Management Process

OBJECTIVE:

Under this task staff will use Conveyal and RITIS Probe Data Analytics Suite to perform our CMP related activities. Staff will strengthen data for use in TEC rankings, advance transportation studies to verify and develop appropriate recommendations to mitigate areas of congestion.

PREVIOUS WORK:

1. Before and After TIP Project Analysis.
2. Regional CMP Corridors Update.
3. Analysis of data to update top congested corridors and regional bottlenecks.
4. Regional Park and Ride Lot data collection.

PROPOSED ACTIVITIES:

1. Update the Regional Corridor Congestion Ranking based on RITIS data. Ongoing task.

- a) Use Conveyal, ESRI GIS, PowerBI, and the RITIS platform to process data to support ongoing congestion activities.
- b) Update Monthly congestion “dashboard” for the region. This dashboard will be web-browser based.
2. Identify no more than 5 locations to perform congestion analysis, the locations will be chosen based on CMP ranking– August 2023.
3. Collect data at existing park and ride facilities and truck rest stops in the region. Coordinate all park and ride lot data with MassDOT. Ongoing task
4. Work with communities to incorporate the ITS technology as appropriate into regional transportation improvement projects. Ongoing task.

PRODUCTS:

1. CMP Corridor updates for RTP. December 2022.
2. Regional Corridor Congestion Ranking based on Performance Measure Matrix. Ongoing.
3. Updated Congestion Dashboard with monthly analysis. Ongoing
4. Monthly Park and Ride Occupancy analysis
5. Congestion Analysis (up to 5 locations). August 2023.

<u>Source</u>	<u>Budget</u>	<u>Est. Staff Effort</u>
FHWA PL (80%)	\$ 60,000	30 weeks
MassDOT (20% match)	\$ 15,000	5 weeks
TOTAL	\$75,000	35 weeks
Direct Labor	\$ 33,715	
Indirect Costs	\$ 41,285	

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 2.5. This is an ongoing task.

PREVIOUS WORK:

1. Regional PMS report for the Pioneer Valley Region.
2. Community project priority listing.
3. Roadway improvement backlog of projects.

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. Ongoing task.
2. Perform various budget scenario analyses including the calculation of backlog of repairs for the region’s federal-aid roadways. As necessary.
3. Regional pavement investment scenario planning for the 2024 Update to the RTP. May 2023.

PRODUCTS:

1. Pavement OCI maps on each community’s surveyed federal aid eligible roadways. As necessary.
2. Online OCI maps for federal aid eligible roadways. Summer 2023.
3. RTP pavement investment scenario. May 2023.

- Community specific pavement information such as recommended repair strategies and benefit/cost ratio listing and backlog of repairs. As necessary.

<u>Source</u>	<u>Budget</u>	<u>Est. Staff Effort</u>
FHWA PL (80%)	\$62,400	31 weeks
MassDOT (20% match)	\$15,600	7 weeks
TOTAL	\$78,000	38 weeks
Direct Labor	\$35,064	
Indirect Costs	\$42,936	

Task 3.6 Regional Performance Measures Assessment

OBJECTIVE:

This task supports federal planning requirements to integrate performance-based planning into the regional transportation planning process. New performance measures and targets will be developed in consultation with MassDOT and the Pioneer Valley MPO based on statewide performance measures.

PREVIOUS WORK:

- Regional Performance Target Adoption.

PROPOSED ACTIVITIES:

- Analyze and track data collected as part of the UPWP to identify the progress in meeting regional performance measures. Coordinate with CTDOT and CRCOG as necessary. Ongoing task.
- Work with MassDOT, PVTA, and surrounding regions to coordinate data collection and share analysis methods. Ongoing task.
- Participate as part of MassDOT's Performance Management Subcommittee. Ongoing task.
- Provide data and analysis as necessary to assist in scoring TEC forms submitted for TIP projects. February 2023.
- Develop updates to regional performance measures and the TEC scoring process as necessary to coincide with statewide performance measures and BIL requirements. Ongoing task.

PRODUCTS:

- Regional Performance Measures reporting and updates. Ongoing task.
- PM2 and PM3 Target Updates. October 2022.
- PM1 Target Updates. February 2023.

<u>Source</u>	<u>Budget</u>	<u>Est. Staff Effort</u>
FHWA PL (80%)	\$12,000	6 weeks
MassDOT (20% match)	\$ 3,000	2 weeks
TOTAL	\$15,000	8 weeks
Direct Labor	\$6,743	
Indirect Costs	\$8,257	

Task 3.7 Regional Safety and Planning Studies

OBJECTIVE:

Plan for the safety of all road users, particularly those on arterials, through infrastructure improvement and advanced speed management. Utilize the MassDOT IMPACT site as well as local traffic safety data and other relevant information to advance recommendations that are

consistent with the Massachusetts Strategic Highway Safety Plan and assist in meeting regional safety performance targets.

PREVIOUS WORK:

1. Pioneer Valley Safety Compass: 2015 - 2017
2. Route 20 West Springfield Safety Study
3. St. James Avenue at Worthington Street Safety Study

PROPOSED ACTIVITIES:

1. Participate in MassDOT’s Roadway Safety Audits and provide regional perspective and input. Ongoing task
2. Work in cooperation with MassDOT to promote and advance the goals and objectives of the Massachusetts Strategic Highway Safety Plan. Ongoing task.
3. As requested by the Town of Agawam, work in cooperation with municipal staff to advance a study of safety and accessibility in the vicinity of the intersection of Mill Street with Cooper Street. September 2023.
 - a) Collect current traffic and transportation data related to speed, volume, heavy vehicles, turning movement counts, and existing geometry of the location.
 - b) Update historic crash data through the Agawam Police Department.
 - c) Perform technical analysis and develop recommendation in cooperation with municipal staff to improve safety and accessibility.
4. Perform an assessment of traffic operations and safety for the intersection of Roosevelt Avenue with Roosevelt Terrace in the City of Springfield. Collect all necessary data to identify existing transportation conditions at the intersection. Review historic crash data through MassDOT and the Springfield Police Department to assess existing crash experience. Work with the City to develop a series of short and long term improvement options. This study was requested by the City of Springfield. September 2023.
5. Continue to use the MassDOT IMPACT Safety Analysis Tools to identify crash trends and identify potential areas for high risk crashes in the region. Ongoing task.
6. Perform safety, traffic calming and truck exclusion route studies as requested by member communities. As necessary.

PRODUCTS:

1. Mill and Cooper Street Safety Study, Agawam, MA. September 2023.
2. Roosevelt Avenue with Roosevelt Terrace Safety Study, Springfield, MA. September 2023.
3. Summary of crash experience. As necessary.

<u>Source</u>	<u>Budget</u>	<u>Est. Staff Effort</u>
FHWA PL (80%)	\$108,000	54 weeks
MassDOT (20% match)	\$ 27,000	13 weeks
TOTAL	\$135,000	67 weeks
Direct Labor	\$ 60,688	
Indirect Costs	\$ 74,312	

Task 3.8 Transit System Surveys and Route Implementation

OBJECTIVE:

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

PREVIOUS WORK:

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

PROPOSED ACTIVITIES:

1. Work in cooperation with the PVRTA to develop a fixed route onboard customer survey to identify current trends and route performance. Staff will develop a digital and paper survey in accordance with our Language Access Plan. A summary report will be developed based on the survey results. It is estimated the survey will begin in March of 2023 with a report by the Summer of 2023.
2. Fixed route Mystery Rider onboard service quality observations, including ADA and Title VI compliance. Ongoing task.
3. Route specific analysis based on performance measures to determine any required increase or reduction in service. As necessary.
4. Rider surveys on specific routes, as requested.

PRODUCTS:

1. Onboard rider survey data and report. Summer 2023.
2. Fixed route Mystery Rider quarterly reports.
3. Route performance analysis as required.
4. Rider surveys of individual routes. As requested.
5. Other technical assistance for surveys and route implementation. As requested.

<u>Source</u>	<u>Budget</u>	<u>Est. Staff Effort</u>
FHWA PL (80%)	\$117,000	59 weeks
MassDOT (20% match)	\$ 29,250	15 weeks
PVRTA S. 5307	<u>\$128,750</u>	<u>65 weeks</u>
TOTAL	\$275,000	139 weeks
Direct Labor	\$123,623	
Indirect Costs	\$151,377	

Task 3.9 Regional Transit Planning

OBJECTIVE:

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

PREVIOUS WORK:

1. Provided PVTA with planning and technical assistance for fixed route services and facilities planning and operations.
2. Produced PVTA's printed fixed route bus schedules, system map, and related products; updated bus operator field guides; managed vendors for printed products.
3. Produced and installed maps and signage for transit facilities. As requested.
4. Provided analysis of operational data from PVTA's ITS systems including as requested.
5. Supported PVTA Advisory Board and subcommittee activities as requested.
6. Provided general coordination among PVTA, PVMPO, PVPC staff, and MassDOT including regular executive level PVTA/PVPC coordination meetings and programming of transit items in the TIP.
7. Assisted PVTA with the preparation of two Federal grants (HOPE, AIM) that were both funded in FFY 2021.
8. Performed public engagement and facilitated public hearings for proposed service and fare changes.
9. Produced fare impact study.
10. Produced Title VI service equity analyses for proposed service changes; assisted with preparation of fare equity analysis.
11. Continued support for regional bus stop consolidation.

PROPOSED ACTIVITIES:

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

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

PRODUCTS:

1. PVTA fixed route printed schedules and related digital materials for web posting. As needed.
2. PVTA field operators guide updates. As needed.
3. PVTA Title VI Updates, Public Participation Plan Updates, Safety Plan and any additional FTA required document updates. As needed.
4. PVTA Transit TIP 2023-2027. May 2023.
5. Brochures, public notices, posters, maps, website services, and other print and digital materials. As requested. <http://www.pvta.com/>
6. Updates and translation of “vital documents” in print and electronic formats for LEP persons. Ongoing.
7. Reports, plans, and other documents. Ongoing.

<u>Source</u>	<u>Budget</u>	<u>Est. Staff Effort</u>
FHWA PL (80%)	\$117,000	59 weeks
MassDOT (20% match)	\$ 29,250	15 weeks
PVTA S. 5307	<u>\$150,000</u>	<u>75 weeks</u>
TOTAL	\$296,250	149 weeks
Direct Labor	\$133,176	
Indirect Costs	\$163,074	

Task 3.10 Paratransit Planning Assistance

OBJECTIVE:

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

human service agencies, health care providers, nonprofits, and other entities in the PVMPO region.

PREVIOUS WORK:

1. Provided general paratransit planning assistance to PVTA as requested, including public participation activities, operational analyses of policies and services.
2. Provided support to the Paratransit Subcommittee of the PVTA Advisory Board as requested.
3. Provided a staff representative to serve on the PVTA Paratransit Appeals Committee. Prepared draft letters of eligibility determinations on behalf of the committee.
4. 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.
5. Coordinated and provided technical assistance to agencies seeking funding for transit service.

PROPOSED ACTIVITIES:

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

PRODUCTS:

1. Data and analysis to support ADA and senior van service paratransit planning. As needed.
2. Materials for paratransit performance measure reports for PVTA paratransit services. As needed.
3. Facilitation and documentation of meetings of PVTA ADA van riders and Senior Service riders. As meetings occur.
4. CPT-HST Plan update. September 2023. (As necessary)
5. Reports and presentations to PVTA, JTC and PVMPO member municipalities. As requested.

6. Assistance with PVRTA monthly paratransit performance measures. As requested.
7. Letters of support and technical exhibits for HST grant applications. As requested.
8. Appeal Decision letters regarding approval or denial of request of eligibility for service as determined by the Paratransit Appeals Committee members. As needed.

<u>Source</u>	<u>Budget</u>	<u>Est. Staff Effort</u>
FHWA PL (80%)	\$15,000	7 weeks
MassDOT (20% match)	\$ 3,750	2 weeks
PVRTA S. 5307	<u>\$16,250</u>	<u>8 weeks</u>
TOTAL	\$35,000	17 weeks
Direct Labor	\$15,734	
Indirect Costs	\$19,266	

Task 3.11 Climate Change Implementation

OBJECTIVE:

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

PREVIOUS WORK:

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

PROPOSED ACTIVITIES:

1. Perform an update to the Climate Chapter for the 2024 Regional Transportation Plan Update. Incorporate strategies from the regional Climate Action Plan and corresponding elements in the Climate Change Toolkit.
 - a) Update prioritized listing of dams and culverts in cooperation with state and local officials.
 - b) Update information from the Pioneer Valley Clean Energy Plan to identify the barriers to and opportunities for deployment of fueling and charging infrastructure in the region.
 - c) Identify transportation system vulnerabilities to climate change impacts.
 - d) Convene the Environmental Focus Group to assist in the update of regional goals and strategies for the 2024 RTP Update. November 2022.
2. Continue to host Pioneer Valley Clean Energy Climate Action working group meetings and update the status/goals of the regional plan.
3. Stay abreast of TCI status, updates and progress and educate member communities and stakeholders about the Transportation and Climate Initiative (TCI) to reduce GHG emissions from transportation and create new funding streams for vital transportation work.

PRODUCTS:

1. Environmental Focus Group for RTP Update. November 2022.

- Updated Climate Change Chapter for the 2024 Update to the RTP. March 2023.
- Four meetings of the Pioneer Valley Clean Energy Climate Action committee. Ongoing quarterly task.

<u>Source</u>	<u>Budget</u>	<u>Est. Staff Effort</u>
FHWA PL (80%)	\$16,000	8 weeks
MassDOT (20% match)	\$ 4,000	2 weeks
TOTAL	\$20,000	10 weeks
Direct Labor	\$ 8,991	
Indirect Costs	\$11,009	

Task 3.12 Green Streets and Infrastructure

OBJECTIVE:

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

PREVIOUS WORK:

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

PROPOSED ACTIVITIES:

- Continue to update regional Green Infrastructure Toolkit, identify and fill gaps where needed. Ongoing task.
<http://www.pvpc.org/content/green-infrastructure-toolkit>
- Perform an update to the Sustainability Chapter for the 2024 Regional Transportation Plan Update. Incorporate strategies to implement model green infrastructure strategies, including LID/green infrastructure subdivision regulations and zoning, treescape restoration plans and green streets project implementation. Advance work to develop green infrastructure BMP design templates with municipalities that can then be easily deployed for implementation throughout the region. March 2023.
- Evaluate green infrastructure and sustainability elements of proposed projects using the Transportation Project Evaluation criteria. As necessary.

PRODUCTS:

- Updated Green Infrastructure Toolkit elements. Ongoing task.
- Implementation of green streets projects in coordination with local communities. Ongoing task.
- Updated Sustainability Chapter for the 2024 Update to the RTP. March 2023.

<u>Source</u>	<u>Budget</u>	<u>Est. Staff Effort</u>
FHWA PL (80%)	\$16,000	8 weeks
MassDOT (20% match)	\$ 4,000	2 weeks
TOTAL	\$20,000	10 weeks
Direct Labor	\$ 8,991	
Indirect Costs	\$11,009	

Task 3.13 2024 Regional Transportation Plan Update

OBJECTIVE:

Perform an update of the 2020 Regional Transportation Plan for the Pioneer Valley Metropolitan Planning Organization (RTP). Work with MassDOT, the JTC, and MPO to incorporate appropriate Needs, Strategies and Projects for the Pioneer Valley region that address the federal National Goal Areas, the requirements of the BIL, the Massachusetts Global Warming Solutions Act, the Massachusetts Complete Streets Program, and other state and regional initiatives.

PREVIOUS WORK:

1. Regional Transportation Plans for the Pioneer Valley MPO – 1993, 1997, 2000, 2003, 2007, 2012, 2016, 2020.

PROPOSED ACTIVITIES:

1. Review the Vision, Goals, Objectives and other content in the current RTP and update to comply with the BIL, MassDOT Statewide Plans, other regional plans, and local plans as appropriate.
2. Assist MassDOT in the development of socio-economic data projections for inclusion in the RTP.
3. Review Scenario Planning tools such as appropriate for use in development and analysis of regional development scenarios for inclusion in the RTP.
4. Update the status of current short and long range transportation recommendations included as part of the 2020 RTP.
5. Organize a series of comprehensive outreach efforts such as online surveys and regional focus groups to identify appropriate Needs, Strategies and Projects to be considered for inclusion in the RTP Update.
6. Develop a public participation schedule to present the RTP to the Pioneer Valley Region.
7. Incorporate appropriate regionally significant transportation recommendations from recently completed studies.
8. Work with the Office of Transportation Planning to develop a financially constrained listing of regional transportation improvement projects.
9. Conduct air quality conformity and greenhouse gas analysis as necessary.
10. Develop a consultation strategy to integrate comments from regional environmental organizations into the RTP.
11. Develop a variety of visual and web-based products to assist in the distribution of draft and final versions of the RTP.

PRODUCTS:

1. RTP Public Participation Process. October 2022.
2. RTP Outline. November 2022.
3. Regional Focus Groups. November 2022.
4. Draft RTP. May 2023.
5. Final RTP. June 2023.

Source	Budget	Est. Staff Effort
FHWA PL (80%)	\$126,643	63 weeks
MassDOT (20% match)	<u>\$ 31,661</u>	<u>16</u> weeks
TOTAL	\$158,304	129 weeks
Direct Labor	\$ 71,164	
Indirect Costs	\$ 87,140	

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

OBJECTIVE:

Work with local communities to implement the “Our Next Future” Plan for sustainability and smart growth in the Pioneer Valley” region. To promote compact, efficient urban growth centered in existing urban and town centers served by existing transportation and other public infrastructure and services. Discourage urban sprawl, inefficient land use, and development in environmentally sensitive areas while striving to reduce auto trips and promote transit, walking, biking and car-pooling.

PREVIOUS WORK:

1. Valley Development Council meetings.
2. City of Holyoke model TOD overlay zoning regulations.
3. Regional Housing Plan Advisory Committee meetings.
4. Revised methodology for 2014 priority development/conservation maps.
5. 2021 Housing Survey

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. Ongoing task.
2. Continue to provide staff support to the Housing Plan Advisory Committee to advance strategies for transit-oriented and community center mixed use housing development, and other priorities. Ongoing task.
3. Update the goals and strategies of the RTP to include the integration of land use, economic development, and housing affordability. February, 2023
4. Provide technical assistance to communities on new local zoning bylaws, land use regulations, and policies in the following key areas:
 - a) commercial development standards
 - b) traditional neighborhood developments/mixed use village centers
 - c) transit oriented development bylaws
 - d) inclusionary housing bylaws
 - e) local strategies to address global climate change and reduce greenhouse gas emissions
 - f) downtown revitalization strategies including market-rate housing.
5. Continue to update regional Land Use and Housing Sustainability Toolkit, identify and fill gaps. As necessary. <http://www.pvpc.org/content/smart-growth-toolkit>

PRODUCTS:

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

4. Updated Land Use and Housing Toolkit elements. As necessary.
5. Integration of land use, economic development, and housing affordability goals and strategies into the RTP. February, 2023

<u>Source</u>	<u>Budget</u>	<u>Est. Staff Effort</u>
FHWA PL (80%)	\$12,800	6 weeks
MassDOT (20% match)	\$ 3,200	2 weeks
TOTAL	\$16,000	8 weeks
Direct Labor	\$ 7,193	
Indirect Costs	\$ 8,807	

Task 4.2 Scenic Byways Support

OBJECTIVE:

The objective of this task is to prioritize and advance projects in conjunction with communities along the Connecticut River Byway, Jacob's Ladder Trail Byway and the Route 112 Byway and to provide planning services and technical assistance.

PREVIOUS WORK

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

PROPOSED ACTIVITIES:

1. Continue to work with advisory groups to advance trail related projects located in Byway areas, including the New England National Scenic Trail, Highlands Footpath and the exploration of new mountain biking trails/destinations. Provide meeting notices, materials, and staff support. As necessary.
2. Provide technical assistance to communities in byway project development, including identification of funding sources. As necessary.
3. Provide updates as needed for Western Massachusetts Scenic Byways website. <https://www.bywayswestmass.com/>

PRODUCTS:

1. Advisory Committee meetings and activities. As necessary.
2. Technical assistance to communities in defining tourism and other byway projects and scopes of work for scenic byway priorities implementation funding. As necessary.
3. Updated Western Massachusetts Byways website. As necessary.

<u>Source</u>	<u>Budget</u>	<u>Est. Staff Effort</u>
FHWA PL (80%)	\$8,000	3 weeks
MassDOT (20% match)	\$2,000	1 week
TOTAL	\$10,000	4 weeks
Direct Labor	\$4,495	
Indirect Costs	\$5,505	

Task 4.3 Local Pavement Management Program

OBJECTIVE:

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

PREVIOUS WORK:

1. Local Pavement Management Data Collection and studies for Monson and Ludlow.

PROPOSED ACTIVITIES:

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

PRODUCTS:

1. OCI Updates for specific roadways in communities with an existing Pavement Management Program. As requested.
2. Draft study for two PVPC Communities. As requested.
3. Updates for existing municipal pavement management plans, as requested.

<u>Source</u>	<u>Budget</u>	<u>Est. Staff Effort</u>
Estimated Local Funds	\$25,000	12 weeks
TOTAL	\$25,000	12 weeks
Direct Labor	\$11,238	
Indirect Costs	\$13,762	

Task 4.4 Local Technical Assistance

OBJECTIVE:

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

PREVIOUS WORK:

1. Data collection activities at the request of local communities.
2. Reviews of all MEPA documents filed in the Pioneer Valley Region.

PROPOSED ACTIVITIES:

1. Provide Local Technical Assistance (LTA) to communities on an as requested basis. Typical activities may include data collection, operational analysis, and small scale studies that can be completed in 2 -3 days of staff time. Community requests are considered on a

case by case basis and preference is given to communities that have not recently received assistance.

2. Review and comment on all Environmental Notification Forms and Environmental Impact Reports as part of the MEPA process. Attend project scoping sessions for significant projects in the region as part of the MEPA process. Review all documents prepared under federal environmental laws and regulations. As necessary.
3. Work with local communities to advance the recommendations of previously completed planning studies to the project development stage. As requested.
4. Assist member communities in the preparation of MassDOT Project Need Forms and Project Initiation Forms. As requested.

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.

<u>Source</u>	<u>Budget</u>	<u>Est. Staff Effort</u>
FHWA PL (80%)	\$27,200	13 weeks
MassDOT (20% match)	\$ 6,800	3 weeks
TOTAL	\$34,000	16 weeks
Direct Labor	\$15,284	
Indirect Costs	\$18,716	

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 are awaiting funding. Additional information will be provided to the Pioneer Valley JTC and MPO in the event potential new planning tasks are identified..

ESTIMATED COMPLETION SCHEDULE OF PLANNING ACTIVITIES – FFY 2023 UPWP

Table 11 – Estimated Product Completion Schedule

Task	Product	Anticipated Completion	Public Engagement
1.1	Invoices	Monthly through FFY23	
1.1	MPO Meeting Minutes	Monthly through FFY23	
1.2	FY2024 UPWP	May 2023	March/April 2023
1.3	Press Releases and Public Participation Notices	As necessary through FFY23	As necessary
1.4	Updated TEC Form	December 2022	October 2022
1.4	FY2024 - 2028 TIP	May 2023	February 2023
1.4	TEC Project Evaluation	March 2023	February 2023
1.4	TIP Amendments	As necessary through FFY23	
1.5	Updates to Title VI Activities	As necessary through FFY23	
1.5	Updated Contact Database	January 2023	
1.6	Climate and Economic Justice Screening Tool Products	As Necessary through FFY23	
2.1	Online traffic count viewer (MS2) updates	Ongoing through FFY23	
2.1	Website update of daily traffic counts	Ongoing through FFY23	
2.2	CMAQ and Greenhouse Gas Analysis	As necessary through FFY23	
2.2	2020 Base Year Model	June 2023	
2.3	GIS mapping to support transportation planning	As needed through FFY23	
2.3	GIS spatial data analysis	As needed through FFY23	
2.4	Information Center Reports/ website updates	Ongoing through FFY23	
2.4	Update region wide data indicators	December 2022 and July 2023	
2.4	Updated Regional Socio-Economic Data for RTP	February 2023	
2.5	PMS Data Collection	Ongoing through FFY23	
3.1	JTC Bicycle and Pedestrian Subcommittee	Monthly through FFY23	Monthly through FFY23
3.1	Bicycle and Pedestrian Counts	Ongoing through FFY23	
3.1	Pioneer Valley On-road Bike Network Map	May 2023	
3.1	Bike Commute Week Report	Summer 2023	
3.2	ValleyBike Steering Committee Meetings	Monthly through FFY23	
3.2	Valley Bike Access Pass Registration Event(s)	As needed through FFY23	
3.2	ValleyBike Year 5 Summary Report	April 2023	
3.3	CMP Freight Bottleneck Updates	September 2023	
3.4	CMP Corridor Updates	December 2022	
3.4	Congestion Analysis (up to 5 locations)	August 2023	
3.4	Park and Ride/Truck Stop Occupancy Reports	Ongoing through FFY23	
3.4	Regional Congestion Dashboard	Ongoing through FFY23	
3.5	Updated Online OCI Maps	Summer 2023	
3.5	RTP Pavement Investment Scenario	May 2023	
3.6	Updated PM2 and PM3 regional targets	October 2022	
3.6	Updated PM1 regional targets	February 2023	
3.7	Agawam Mill Street at Cooper Street Safety Study	September 2023	
3.7	Springfield Roosevelt Ave. at Roosevelt Terrace Study	September 2023	
3.8	Mystery Rider, K-9, On time Performance reporting	Quarterly through FFY23	
3.8	Onboard rider survey data and report	Summer 2023	
3.9	PVTA Schedule Updates	As Needed through FFY23	
3.9	PVTA System Map Update	As Needed through FFY23	
3.9	Regional Transit TIP	May 2023	February 2023
3.10	Paratransit Performance Measures reporting	Monthly through FFY23	
3.10	CPT-HST Plan Update	September 2023 (As Necessary)	
3.11	Updated Climate Chapter for RTP	March 2023	
3.11	Pioneer Valley Clean Energy – Climate Action Meetings	Quarterly through FFY23	
3.12	Updated Green Infrastructure Plan Strategies	Ongoing through FFY23	
3.12	Updated Green Infrastructure Toolkit	Ongoing through FFY23	
3.12	Updated Sustainability Chapter for RTP	March 2023	
3.13	RTP Public Participation Process	October 2022	
3.13	RTP Outline	November 2022	

Task	Product	Anticipated Completion	Public Engagement
3.13	RTP Focus Groups	November 2022	
3.13	2024 RTP for the Pioneer Valley	June 2023	May 2023
4.1	Valley Development Council Meetings	Quarterly meetings through FFY23	
4.1	Housing Plan Advisory Committee Meetings	Quarterly through FFY23	
4.1	Community Bylaws/Ordinances	As Needed through FFY23	
4.1	Land Use and Housing Toolkit Elements	As Needed through FFY23	
4.1	Updated Housing and Land Use Goals for the RTP	February 2023	
4.2	Byway Area Committee meetings	As Needed through FFY23	
4.2	Byway-related Tourism Materials	Ongoing through FFY23	
4.3	Local Pavement Management Reports	As Needed through FFY23	
4.4	Local Technical Assistance	As requested through FFY23	As necessary through FFY23

UPWP EQUITY ASSESSMENT

The Pioneer Valley MPO is required to certify their planning process addresses the major transportation issues facing the region. This certification assures that planning is conducted in accordance with Title VI of the Civil Rights Act of 1964, and requirements of Executive Order 12898 (Environmental Justice). PVPC works cooperatively with MassDOT, the Pioneer Valley Transit Authority (PVTA), Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) on addressing the principles of Title VI and Environmental Justice in the transportation planning process for the Region.

- The MPO defines “minority” as “the population that is not identified by the census as White-Non-Hispanic” in the ACS (2010 based Census). Under this definition, minority persons constitute 23.48% of the region’s population.
- The MPO defines “low income” areas using census block group data. Any block group with a proportion of people in that block group living at or below the federally defined poverty level that exceeds the proportion of people in poverty in the region as a whole, which is 15.47%, is defined as “low income.”
- The MPO identifies persons with Limited English Proficiency (LEP) through analysis of demographic data related to the ability to speak English from the 2013-17 U.S. Census and the American Community Survey (ACS). The PVMPO actively works to identify programs, activities, and services provided by the MPO that are of importance to the general public, and take reasonable steps to overcome language barriers.

For more information on Equity please refer to the 2020 RTP -

<http://www.pvpc.org/sites/default/files/Chapter%204%20-%20Equity.pdf>

PVPC conducted an equity assessment on the transportation planning tasks completed as part of previous UPWP’s. This assessment process has previously been used on the Regional TIP and identifies how regional transportation improvement projects have potentially impacted defined minority and low-income block groups in the region. Analysis of these projects also reflects some of the planning work performed by staff under Task 1.5 - Title VI and Environmental Justice. A map of low income and minority areas in the region is shown on Figure 2 while the TIP project map is shown on Figure 3. A map of planning tasks completed by community from 2011 – 2023 is shown on Figure 4.

Past UPWP’s were reviewed to identify the transportation planning tasks that were completed for each of the 43 communities in the PVPC region. Tasks included data collection, planning studies, local technical assistance requests, and regional activities such as the update to the TIP or CMP. All total, 1426 tasks were identified over this timeframe. While the total number of projects for each community is often a function of the size of the community, at least one task was completed for each community. This information is summarized on the Table 12. Tasks completed or estimated to be completed as part of the FFY 2022 and FFY 2023 UPWP have also been included on this table for informational purposes. Completion of these tasks are estimated and additional detail is added at the completion of the federal fiscal year as part of future UPWP’s to identify other specific planning work completed such as requested traffic counts, local technical assistance requests, meeting attendance, etc.

Only two communities, Chesterfield and Middlefield, were found to have less than five transportation tasks completed over the entire analysis period. Every community had at least 2 transportation tasks completed from 2017 – 2021. PVPC has made efforts to reach out to communities to offer planning assistance such as traffic counts and safety assessments. Recent region-wide efforts such as the Safety Compass report have resulted in the ability to offer community wide data to each of the region’s 43 cities and towns. PVPC also sends GIS related data directly to each community for integration into their own system.

The Transportation Tasks Table 12 was annotated to identify communities that have at least one Census Block Group that meets the MPO’s definition of a Low Income or Minority Block Group. Similarly, communities with a higher percentage of population that speaks a language other than English were identified. PVPC works in close collaboration with each community to identify opportunities for outreach in the early stages of all planning tasks to engage, inform and involve all interested parties in the planning process. Some examples of how PVPC addressed Social Equity in the regional planning process are provided below:

- PVPC included outreach to the local Russian population as part of the Merrick/Memorial Neighborhood Study in West Springfield, MA. Staff worked in cooperation with a local non-profit organization - Ascentria Care Alliance (formerly Lutheran Social Services of New England) to identify the critical concerns of the residents of the study area and organize a training session for residents to learn how to use the PVTA bus system. All meeting notices were provided in both English and Russian and a Russian interpreter was present at public meetings.
- PVPC provides transit surveys performed as part of Task 3.2 - Transit System Surveys and Route Implementation in both English and Spanish. Additional languages are available on request.
- Live Well Springfield is a community based coalition that includes over 20 organizations working in Springfield. The coalition supports a grassroots movement towards health equity through improving access to healthy eating and active living opportunities. The Pioneer Valley Planning Commission is an active member of Live Well Springfield and has worked on food access projects and Springfield's walking and bicycling plan as part of the Live Well Springfield initiative.
- Task 3.2 – ValleyBike Implementation includes a task to promote awareness of the ValleyBike Access Pass for economically disadvantaged people. PVPC will provide assistance to promote and register people for the Access Pass. Events were held during the Fall of 2021 in the Cities of Holyoke and Springfield, MA to help promote the ValleyBike Access Pass.
- PVPC added Stavros, an organization with a mission to help persons with disabilities and Deaf people develop the tools and skills they need to take charge of their own lives, as a voting member of the JTC in 2019.
- The website for the MPO was recently revised to include translation tools for all LEP languages. All major documents, meeting notices and agendas for MPO related activities include a notice regarding the availability of language translations.

Traffic counting and pavement management data collection have been conducted in PVPC communities as summarized in Tables 13 and 14. In addition to counts completed for MassDOT and as part of ongoing planning studies, PVPC offers two free traffic counts for each member community per calendar year. Traffic counts from 2011 - 2021 were reviewed for each community to determine how much data has been collected across the region and to identify how many communities may not be aware of the traffic counting services that we offer. This information along with the estimated traffic counts for the 2022 and 2023 calendar years is summarized in Table 13. The number of estimated counts will increase as we receive requests from MassDOT and local communities. Traffic counts include both automatic traffic counts and manual turning movement counts.

A wide range of traffic count data has been collected across each of the 43 communities. In general, a higher number of completed traffic counts is an indication that a transportation safety or congestion study was conducted in that community during the calendar year. No traffic counts were performed over the five-year period from 2017-2021 for the Towns of Blandford, Chesterfield, Holland, Montgomery, Southampton and Wales. Less than five traffic counts were performed in another 13 (down from 17) communities. In 2019, PVPC started scheduling traffic counts for communities without recent count data as part of Task 2.1 – Traffic Counting. Upon completion, these counts are sent to the chief locally elected official and JTC representatives. It is estimated a number of these counts can be conducted during the summer of 2023. PVPC also plans to conduct a number of traffic counts in support of the regional transportation model update during the 2022 calendar year as budget allows.

PVPC collects pavement distress data for all federal aid eligible roadways in the region. This data is typically collected on a four-year rotation based on roadway miles. A summary is provided in Table 14 and Figure 5. No pavement distress data is currently collected for the Town of Middlefield as there are no federal aid eligible roadways. Pavement distress data is summarized and distributed to each of the remaining 42 communities after it is collected. New pavement data was collected in 11 communities during 2021 to assist in the 2024 update to the Regional Transportation Plan. New data will be collected in 4 communities in 2022 and 2 communities in 2023. The lower number of communities in 2022 and 2023 is a reflection of the size of the community and higher amount of federal-aid roadway mileage.

Figure 2 - Low Income and Minority Areas Map

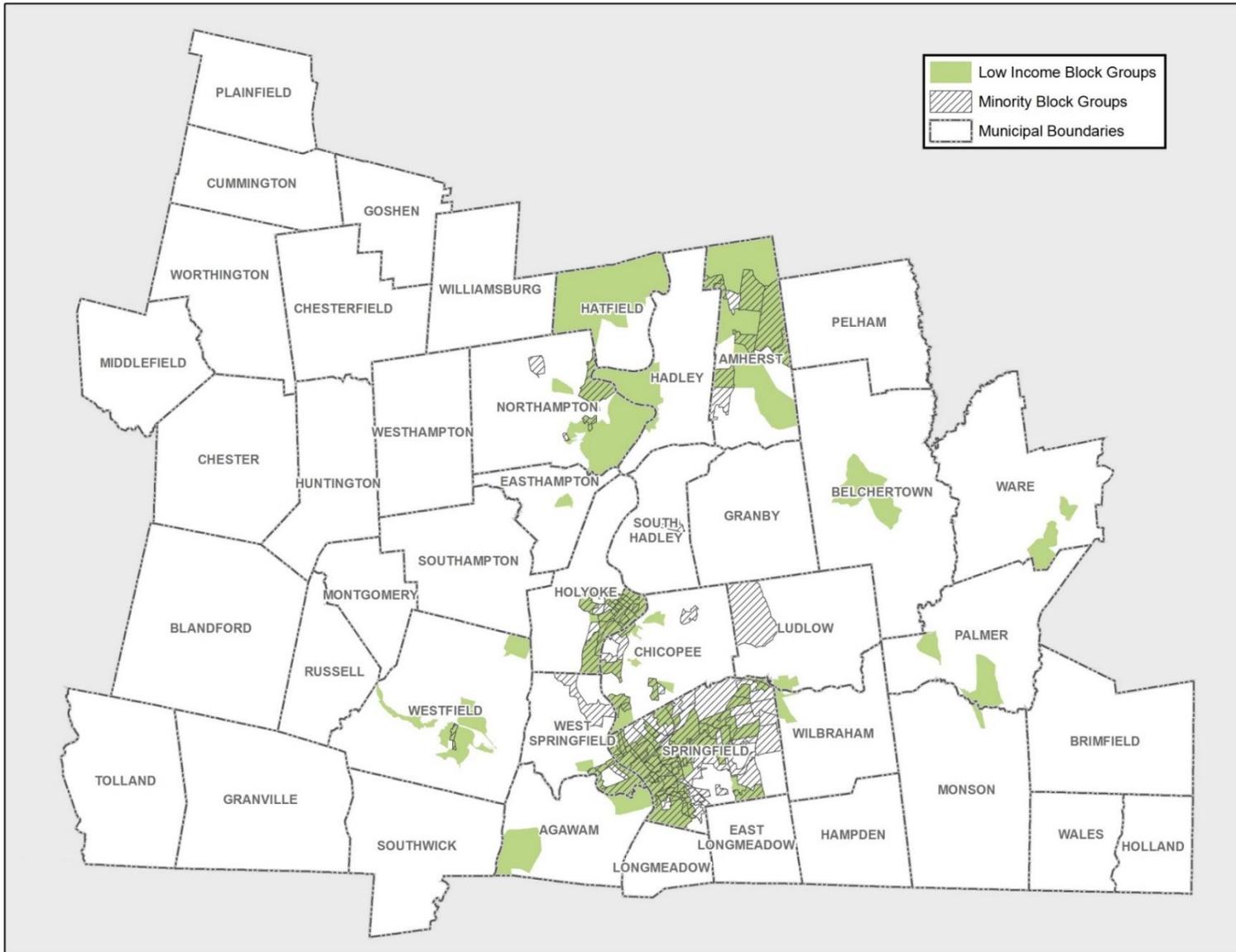
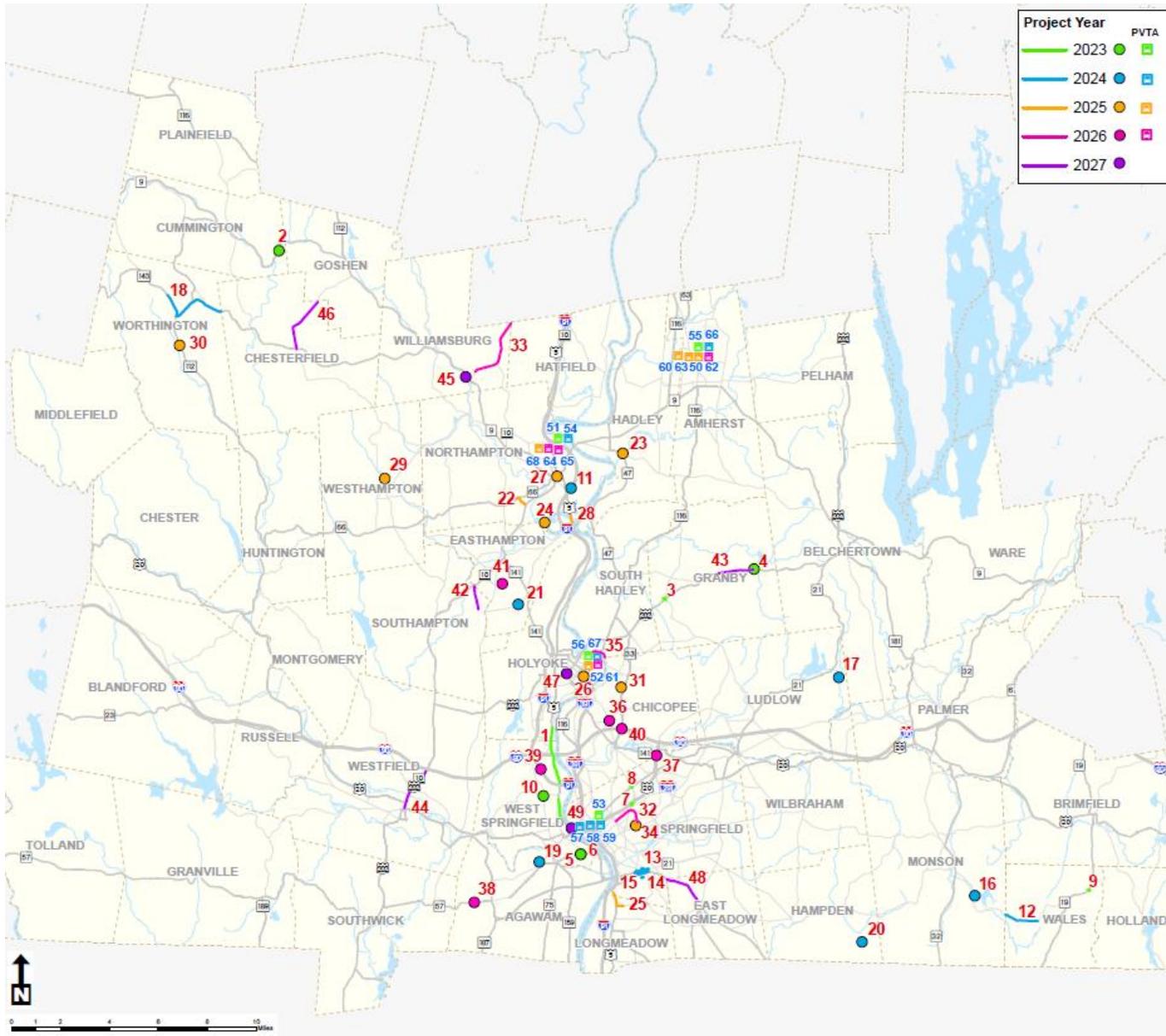
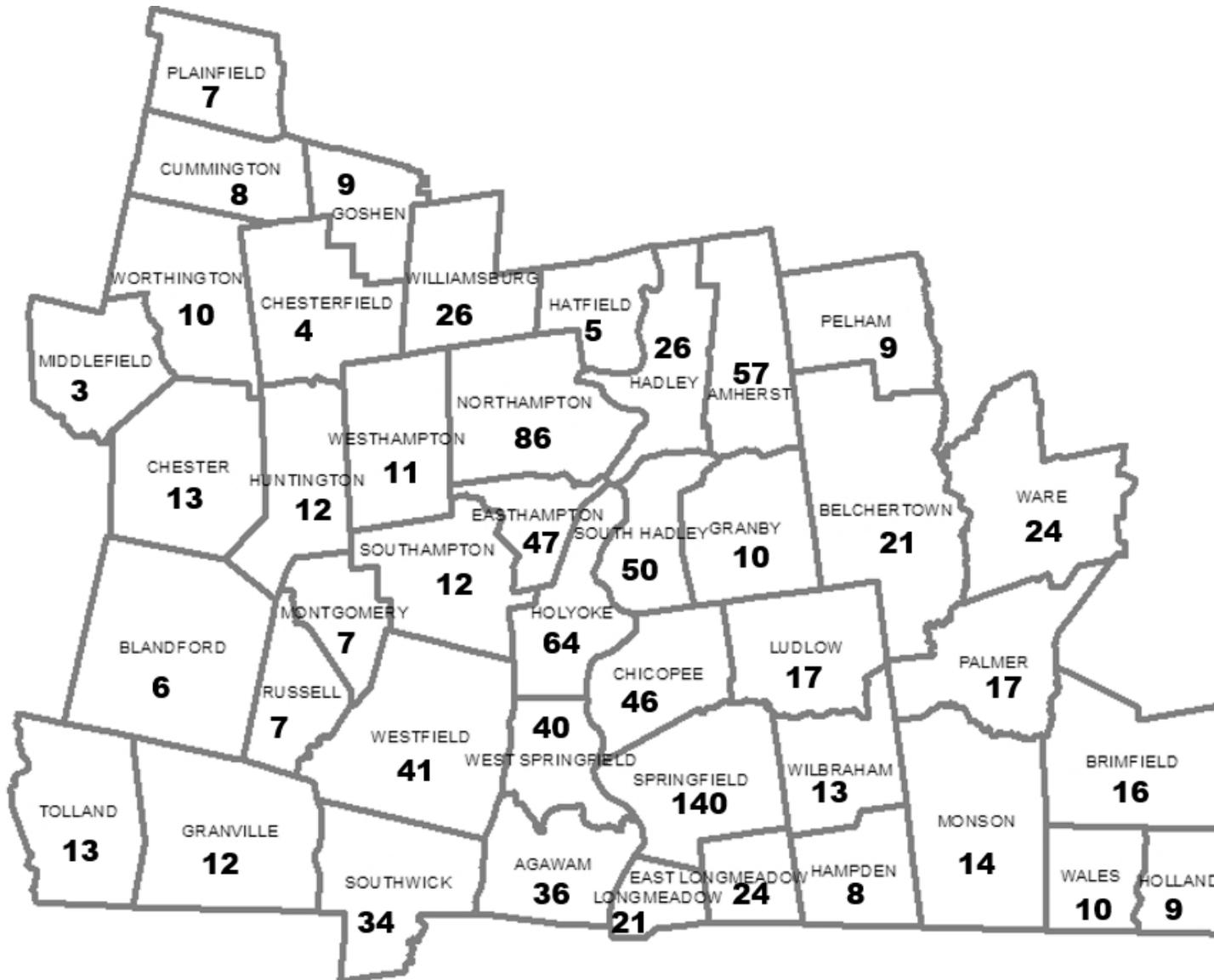


Figure 3 - TIP Project Distribution Map



[Click here for a higher quality and most up to date version of the TIP Project Map](#)

Figure 4 - Transportation Planning Activities by PVPC Community Map 2011 – 2023*



* Planning Activities for 2022 and 2023 are estimated based on current and proposed UPWP Tasks. Transportation Planning Activities included data collection, planning studies, local technical assistance requests, and regional activities such as the TIP and UPWP

Table 12 - Transportation Tasks by Community and Year

Community	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021*	2022*	2023*	Total
Agawam 1 2	2	2	1	3	1	3	5	5	3	1	4		6	36
Amherst 1 2 3	2	4	4	1	1	1	2	2	10	12	9	9		57
Belchertown 1	3	1		1	3	2	2	2	2	2	3			21
Blandford	1		1		1				1	1			1	6
Brimfield	2	3	2	1			1	3	1	1	1	1		16
Chester	2	1	1	1			3	1	1	1	1	1		13
Chesterfield						1		1		1			1	4
Chicopee 1 2 3	1	3	3	3	3	1	2	3	3	12	11	1		46
Cummington		1		1		1	1	2	1		1			8
East Longmeadow	2		1	1	1	1	3	3	4	2	2	1		21
Easthampton 1	3	2	1	3	1	1	5	4	11	6	6	4		47
Goshen	1	1		1	1	1	1	2	1					9
Granby	2		3				1			2	2			10
Granville	1	1	1	1		1		3	3	1				12
Hadley 1	3	4	2	1	2	1	2	2	2	4	2	1		26
Hampden		2		1		1	1	1			1	1		8
Hatfield 1			1			1			2				1	5
Holland	1				1	2	1	2				1	1	9
Holyoke 1 2 3	5	6	3	3	3	6	6	4	6	6	9	7		64
Huntington	1	1	2	1		1		1	1	1	3			12
Longmeadow		1	4	2	1	4	2	1	3	4	2			24
Ludlow 1 2	1			2		1	2		4	2	2	3		17
Middlefield	1								2					3
Monson	1		1				1	1	2	3	3	2		14
Montgomery		1	2	1			1		1				1	7
Northampton 1 2	6	5	7	3	4	5	6	6	17	10	10	7		86
Palmer 1					3	3	2	2	4	2	1			17
Pelham	1		1				1		1	3	1	1		9
Plainfield	1	1	1	1				1	1		1			7
Region Wide	29	33	34	28	30	26	24	26	30	28	29	33	31	381
Russell	1	1	1		1				3					7
South Hadley 1 2	1	2	4	3	2	1	4	2	7	10	9	5		50
Southampton	1	2	1		1	2	1	1	1		1		1	12
Southwick	2	1	2	3	1	2	3	1	4	7	6	2		34
Springfield 1 2 3	12	10	6	6	10	14	11	8	19	18	12	8	6	140
Tolland		1	1	1		1	1	2	2	2	2			13
Wales		1	1			1	2	2	1			1	1	10
Ware 1	2	1	2	2	3	2	2	1	3	4	2			24
West Springfield 1 2 3	3	2	2	1	1	3	9	2	9	3	4	1		40
Westfield 1 2	1	3	3	1		2	5	6	6	6	5	3		41
Westhampton			1	1			1		3	1	3	1		11
Wilbraham 1		1	1	1		2	1	4	2			1		13
Williamsburg		3	1	1	1	2	1	2	1	7	7			26
Worthington						1	1	2	2	1	3			10
Grand Total	95	101	102	80	76	97	117	111	180	164	158	95	50	1426

* Estimated

1 Community with Low Income Block Groups

2 Community with Minority Block Groups

3 This community has a higher probability of requiring translation of documents into a language other than English

Transportation Planning Activities included data collection, planning studies, local technical assistance requests, and regional activities such as the TIP and UPWP.

Table 13 - Traffic Counts by Community and Year

Community	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022*	2023*	Total
Agawam		1		1		1	1	12	1	1	2		5	25
Amherst	7	5	8	4	8	4	9	5	9	9	5	9		82
Belchertown	9				1				1	1	15			27
Blandford	2		1										1	3
Brimfield		17					4	4		1	1			27
Chester	1	1	2	2	1	4	1	1	1	1	1	1		17
Chesterfield						2							1	2
Chicopee	1	1	1	16	1	13	7	8	1	10	2	1		62
Cumington		2		2		4		2			2			12
East Longmeadow	4		1		3		1		1	2	1	1		14
Easthampton	4	3	16	3	6	8	5	3	6	5	4	4		67
Goshen	1	1		2		1		1			1			7
Granby	1		6		10		1			1	1			20
Granville	3	2	1	1	2				2		1			12
Hadley	1	3	8	1	21	1	1	2	1	2	3	1		45
Hampden		2		2	3	2		2			2			13
Hatfield						1			2				1	3
Holland	1		1										1	2
Holyoke	29	13	2	10	3	5	4	2	3	4	5	7		87
Huntington			2		2			1	1	1	2			9
Longmeadow		1	3	1		1		23	1	2	2			34
Ludlow	1			1	6				4	1	1	3		17
Middlefield									2					2
Monson	7		2		3	1	3		2	3	1	2		24
Montgomery		2											1	2
Northampton	8	16	34	8	10	7	6	8	9	8	8	7		129
Palmer									2					13
Pelham	7		1		1		1		1	1		1		13
Plainfield	2	6		2		1		1			1			13
Russell	4	1	1						2					8
South Hadley	12	1	4	3	25	1	26	5	5	8	5	5		100
Southampton	14			3									1	17
Southwick	2	1	2	28	14	3	4	13	2	5	15	2		91
Springfield	15	35	28	24	9	6	13	6	15	11	19	8	5	194
Tolland		2	1	2	3		4	2	2	2	3			21
Wales		2	4										1	6
Ware	1			15			1		1	2	2			22
West Springfield	1	36	1	8	3	3	1	2	7	2	9	1		74
Westfield	4	5	20	2	6	3	5	2	4	5	4	3		63
Westhampton	1		1	3	1	4	1		3	1		1		16
Wilbraham		3	2	7	2	3					2	1		20
Williamsburg		13		3	6	2				4	1			29
Worthington					2		1	1		1				5

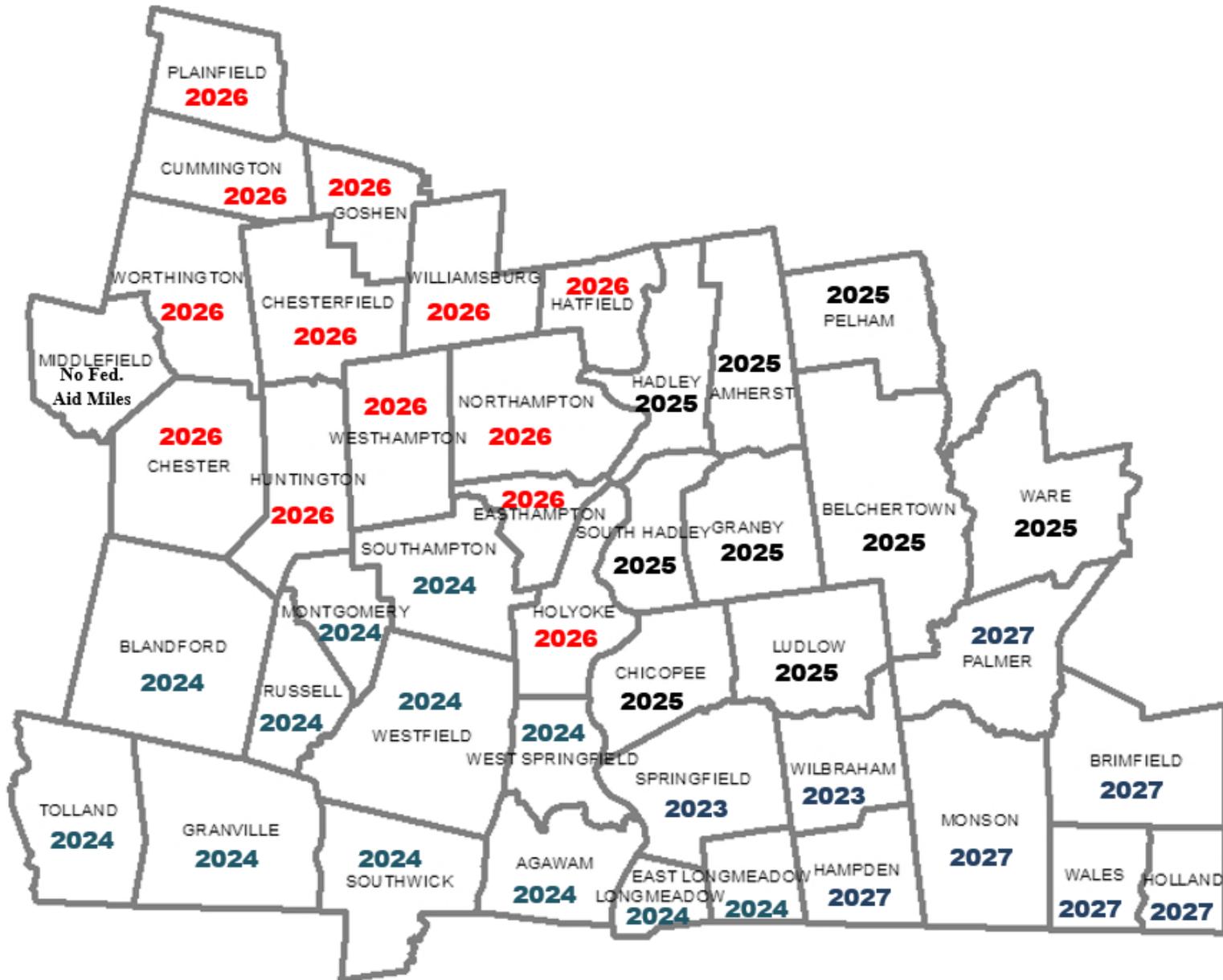
* Estimated

Table 14 - Pavement Data Collection by Community and Year

Community	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Agawam	X			X		X			X				
Amherst	X			X	X		X	X		X			
Belchertown				X			X			X			
Blandford	X				X					X			
Brimfield					X			X				X	
Chester						X					X		
Chesterfield					X				X		X		
Chicopee		X			X					X			
Cummington	X				X				X				
East Longmeadow	X				X			X	X				
Easthampton	X					X	X				X		
Goshen	X				X				X				
Granby					X					X			
Granville	X				X					X			
Hadley					X					X			
Hampden	X				X				X			X	
Hatfield					X		X				X		
Holland					X			X				X	
Holyoke		X			X		X	X			X		
Huntington					X			X			X		
Longmeadow	X			X		X					X		
Ludlow				X			X			X			
Middlefield*													
Monson					X				X		X		
Montgomery					X				X				
Northampton			X	X		X					X		
Palmer					X					X			
Pelham					X					X			
Plainfield		X			X				X				
Russell					X				X				
South Hadley					X		X	X		X			
Southampton					X		X		X				
Southwick	X				X				X				
Springfield		X			X				X				X
Tolland	X				X				X				
Wales					X			X				X	
Ware					X					X			
West Springfield	X			X		X			X				
Westfield			X		X				X				
Westhampton	X				X			X			X		
Wilbraham					X			X					X
Williamsburg	X				X			X			X		
Worthington					X				X				

* There are no Federal Aid Eligible Roads in the Town of Middlefield

Figure 5 - Proposed Regional Pavement Management Data Collection by PVPC Community Map



PLANNING ACRONYMS

3C - Continuing, Comprehensive, and Cooperative Planning
AADT - Average Annual Daily Traffic
AASHTO - American Association of State Highway and Transportation Officials
ADA - Americans with Disabilities Act (1990)
ADT - Average Daily Traffic
AFV - Alternative Fuel Vehicles
ATR - Automatic Traffic Recorder
AVR - Average Vehicle Ridership
BAPAC - Barnes Aquifer Protection Advisory Committee
BID - Business Improvement District
BIL - Bipartisan Infrastructure Law
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
CEDSS - Comprehensive Economic Development Strategy
CIP - Capital Improvements Plan (or Program)
CMAQ - Congestion Mitigation and Air Quality Improv. Program
CMP - Congestion Management Process
CNG - Compressed Natural Gas
CO - Carbon Monoxide
COG - Council of Governments
Comm-PASS - Commonwealth Procurement Access and Solicitation System
CPA - Community Preservation Act
CPTC - Citizen Planner Training Collaborative
CRCOG - Capitol Region Council of Governments
CSO - Combined Sewer Overflow
DCR - Department of Conservation and Recreation
DEP - Department of Environmental Protection
DHCD - Department of Housing and Community Development
DLTA - District Local Technical Assistance
DOT - Department of Transportation
DPW - Department of Public Works
E.O. - Executive Order
EDC - Economic Development Council
EIR - Environmental Impact Report
EIS - Environmental Impact Statement
EJ - Environmental Justice
ENF - Environmental Notification Form
EOA - Economic Opportunity Area
EOEEA - Executive Office of Energy and Environmental Affairs
EPA - Environmental Protection Agency
FA - Federal Aid
FAST - Fixing America's Surface Transportation Act
FC - Functional Classification (of roadways)
FHA - Federal Housing Administration
FHWA - Federal Highway Administration
FRCOG - Franklin Regional Council of Governments
FRTA - Franklin Regional Transit Authority
FTA - Federal Transit Administration
GHG - Greenhouse Gas
GIS - Geographic Information System
GPS - Global Positioning System
HOV - High Occupancy Vehicle
HUD - U.S. Department of Housing and Urban Development
IJA - Infrastructure, Investment and Jobs Act
ITS - Intelligent Transportation Systems
JARC - Job Access and Reverse Commute
JLSB - Jacob's Ladder Scenic Byway
JLT - Jacob's Ladder Trail
JTC - Joint Transportation Committee
LEP - Limited English Proficiency
LOS - Level of Service
LPMS - Local Pavement Management System
LRV - Light Rail Vehicle
LTA - Local Technical Assistance
M.G.L. - Massachusetts General Laws
MAP 21 - Moving Ahead for Progress in the 21st Century
MARPA - Massachusetts Assoc. of Regional Planning Agencies
MassDOT - Massachusetts Department of Transportation
MassGIS - Massachusetts Geographic Information System
MEPA - Massachusetts Environmental Policy Act
MMA - Massachusetts Municipal Association
MOA - Memorandum of Agreement
MOU - Memorandum of Understanding
MPO - Metropolitan Planning Organization
MUTCD - Manual of Uniform Traffic Control Devices
NFA - Non-Federal Aid
NHS - National Highway System
NHTSA - National Highway Traffic Safety Administration
NOx - Nitrogen Oxide
NTSB - National Transportation Safety Board
OCI - Overall Condition Index (Pavement)
PEB - Potential for Everyday Biking
PCI - Pavement Condition Index
PL - [Metropolitan] Planning Funds
PMS - Pavement Management System
PMUG - Pavement Management Users Group
PPP - Public Participation Process
PTASP - Public Transportation Agency Safety Plan
PVTA - Pioneer Valley Transit Authority
QVDCD - Quaboag Valley Community Development Corp.
REB - Regional Employment Board
RIF - Roadway Inventory Files
RPA - Regional Planning Agency
RTA - Regional Transit Authority
RTP - Regional Transportation Plan
SAFETEA-LU - Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
SBA - Small Business Administration
SIP - State Implementation Plan (for air quality)
SKC - Sustainable Knowledge Corridor
SOV - Single Occupancy Vehicle
SPR - Statewide Planning and Research Funds
STIP - Statewide Transportation Improvement Program
STP - Surface Transportation Program
TDM - Transportation Demand Management
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

Agawam Safety Study – Pine Street at Barry Street
Agawam/West Springfield Route 147 Improvement Project Analysis
At-Grade Rail Crossing Study
Before and After Congestion Studies – Roosevelt Avenue at Island Pond Road and Alden Street
Before and After MassPike Toll Plaza Removal Analysis
Belchertown Main and Park Streets Congestion Study
Bike Share Scope of Work and Station Locations
Blandford Local Pavement Management Report
Bliss Street at Williams Street Transportation Study – Longmeadow
Brimfield Safety Study
CMAQ and Greenhouse Gas Analysis
CMP Corridor and Bottleneck Updates
Coordinated Public Transit Human Service Transportation Plan and Updates
Cottage Street, Robbins Road and Industry Avenue Intersection: Springfield Safety Study
Critical Infrastructure Vulnerability Assessment
Depot Street/Sheep Pasture/Powder Mill Road Safety Study
Easthampton – Route 10 at South Street Intersection Study
EJ and Title VI Reports to MassDOT
Final At-Grade Shared-use Path Crossing Safety Study
GHG Analysis for Major Corridors
Green Infrastructure Retrofit Mapping
High Speed Tolling Analysis for Massachusetts Turnpike
I-391 Ramp Congestion Study
I-91 Corridor Planning Study – Existing Conditions
I-91 SB Congestion Analysis
JTC Bylaws and Updates
Longmeadow Local Pavement Management Report
Low Clearance RR Underpass Inventory
Ludlow Local Pavement Management Report
Manhan Rail Trail User Survey Report
MassDOT Crash Data Updates
Merrick/Memorial Plan Phases 1 and 2
Mobility Chapter – Southampton Master Plan
Monson Local Pavement Management Report
Online Regional Bike Map and Updates
Palmer Shuttle Survey
Palmer Sidewalk Inventory
Paratransit User Survey
Pine Street Congestion Study – Florence, MA
Pioneer Valley Annual Unified Planning Work Program and Amendments
Pioneer Valley Bike Commute Week Coordination and Reporting
Pioneer Valley Regional Transportation Plan and Updates
Pioneer Valley Trail Map
Pioneer Valley Transportation Improvement Program and Amendments
Pleasant Street Congestion Study – Holyoke, MA
Project Development Process Primer Video
Public Participation Plan and Updates
Public Participation Survey
PVPC Green Tips
PVPC/CRCOG MOU and Updates
PVTA Non-Rider Survey
PVTA Northern Tier On-Board Survey
PVTA Schedule Changes and Updates
PVTA Southern Service Area Customer Satisfaction Survey
PVTA Southern Tier Route Survey
PVTA Title VI Updates
Regional Affordable Housing Survey
Regional Culvert Assessments
Regional Data Indicators Update
Regional Freight Congestion Survey
Regional Pavement Management Report Update
Regional Performance Measures Updates
Regional Safety Compass
Regional Saturation Flow Rate Report
Regional Top 100 High Crash Intersection Reports
Regional Traffic Counting Program Reports
Regional Transportation Model – Report on Future Traffic Projections
Route 10 Build Out Analysis – Easthampton
Route 202 at Amherst Street Traffic Signal Warrant Analysis
Route 9 (Federal Street) at Bay Road Safety Study – Belchertown, MA
Route 9 (Locust Street) at Hatfield Street Safety Study – Northampton, MA
Route 9 Safety and Livability Study
South Hadley Intersection Summary Report
Southampton Local Pavement Management Study
Southwick Rail Trail/Columbia River Greenway Rail Trail User Survey
Springfield Crash Data Analysis
State Freight Plan Advisory Committee
State of the Pioneer Valley Update
Technical Report: Community Green House Gas Emissions
Technical Report: Impacts of Roadway Improvements: A 2040 Future Scenarios Comparison.
Transit Mystery Rider Reports
Transportation Evaluation Criteria (TEC), Assessment and Updates
Transportation Impacts on Route 20 of the Brimfield Antique Shows
Union Station Roadway Safety Audit
Updates to Regional Data Indicators
Updates to the Regional Transportation Model
Valley Vision ToolBox and Updates
Valley Vision Update
ValleyBike Assessment Reports Years 1-3
Ware Shuttle Survey
West Springfield Route 20 Safety Study
Williamsburg Pedestrian Safety Study

STUDIES COMPLETED AS PART OF THE FY 2022 UPWP

[Community and Facility Profiles](#) (various)
Local Technical Assistance Requests (various)
MassDOT Crash Data Updates
CMP Corridor and Bottleneck Updates
EJ and Title VI Reports to MassDOT
CMAQ and Greenhouse Gas Analysis
Mystery Rider Reports
PVRTA Schedule Changes and Updates
TEC Evaluation Criteria Assessment and Updates
Regional Traffic Counting Program
FFY2023 Unified Planning Work Program
FFY 2023 – 2027 Transportation Improvement Program
FFY 2022 TIP Amendments
Public Participation Plan Update
Regional Data Indicators Update
ValleyBike Year 4 Assessment Report
Updates to the Regional Transportation Model
Transit Schedule Updates
Holyoke RR Underpass Safety Study
Monson Pedestrian Study
Springfield St. James at Worthington Study
Springfield Page Blvd at Bircham St. Study
CMP Corridor Updates
Regional Performance Measures Updates
PVRTA Title VI Update
Regional Affordable Housing Survey
2022 Bike Commute Week
Hybrid Work Survey

FUNDING SUMMARY

Table 15 – Summary of Annual Funding for the Pioneer Valley Planning Commission

Transportation Funding	Value	% of Total
FHWA PL (80%)	\$ 1,350,883.00	66.76%
MassHighway PL (20% match)	\$ 337,721.00	16.69%
FTA Section 5307 (80%)	\$ 248,000.00	12.26%
PVTA Section 5307 (20% match)	\$ 62,000.00	3.06%
Local Funds (includes in-kind contributions)	\$ 25,000.00	1.24%
Total	\$ 2,023,604.00	100.00%
Other Funding	Value	% of Total
Other Commonwealth of Massachusetts	\$ 2,050,000.00	31.53%
Massachusetts DEP	\$ 1,537,500.00	23.65%
US Department Health/Human Services	\$ 174,250.00	2.68%
US Economic Development Administration	\$ 102,500.00	1.58%
Other Federal Revenue	\$ 102,500.00	1.58%
Local Revenue	\$ 2,308,662.00	35.51%
Local Assessments	\$ 111,879.00	1.72%
Loan Repayment/Recapture	\$ 102,500.00	1.58%
Other	\$ 11,788.00	0.18%
Total	\$ 6,501,579.00	100.00%

Overall Funding	Value	% of Total
FHWA PL (80%)	\$ 1,350,883.00	15.85%
MassHighway PL (20% match)	\$ 337,721.00	3.96%
FTA Section 5307 (80%)	\$ 248,000.00	2.91%
PVTA Section 5307 (20% match)	\$ 62,000.00	0.73%
Local Funds (includes in-kind contributions)	\$ 25,000.00	0.29%
Other Commonwealth of Massachusetts	\$ 2,050,000.00	24.05%
Massachusetts DEP	\$ 1,537,500.00	18.03%
US Department Health/Human Services	\$ 174,250.00	2.04%
US Economic Development Administration	\$ 102,500.00	1.20%
Other Federal Revenue	\$ 102,500.00	1.20%
Local Revenue	\$ 2,308,662.00	27.08%
Local Assessments	\$ 111,879.00	1.31%
Loan Repayment/Recapture	\$ 102,500.00	1.20%
Other	\$ 11,788.00	0.14%
Total	\$ 8,525,183.00	100.00%

SUMMARY OF COMMENTS ON THE DRAFT UPWP

Table 16 – Comments Received on the Draft FY2023 UPWP

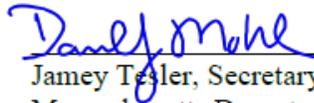
Page	Comment	From	Response
General	General comment: Consider numbering tables/figures in this document, as with the TIP, to improve readability/accessibility.	Andrew Reovan, FHWA	Tables and Figures will be numbered in the final report
13	Table: Please confirm whether pavement targets (poor) were updated at the mid-performance period and endorsed by the MPO in 2020/2021? (Same comment as in TIP)	Andrew Reovan, FHWA	We reviewed the meeting minutes from the Pioneer Valley MPO for September and October of 2020. Performance measures were discussed at both meetings. As a result, we believe the date for the PM2 targets should be the same for the PM3 targets in the TIP and UPWP. The MPO will continue to work with MassDOT to update the PM2 and PM3 targets prior to the 2022 deadline.
37	Task 3.6: Please note: With the population threshold for CMAQ congestion measure now at \$250k, please ensure target setting efforts align with CTDOT and Hartford area. See: https://www.fhwa.dot.gov/environment/air_quality/cmaq/measures/cmaq_applicability/october_2021/	Andrew Reovan, FHWA	PVPC meets annually with our counterparts at the Capitol Region Council of Governments (CRCOG). We believe our current MOU addresses the need for coordination on target setting. We will continue to work with CTDOT, CRCOG, and MassDOT to set appropriate targets for CMAQ congestion measures.
49	Additional Planning Projects: Unless tasks are identified here, I suggest making the last sentence a new paragraph ("No tasks have been identified..."), to avoid confusion with the next table.	Andrew Reovan, FHWA	Change made as requested.
50	Estimated Completion of Planning Activities Table: For consideration/to align with UPWP guidelines: it may be helpful to list the ongoing/monthly/quarterly items as "Ongoing through FFY23 " just to specify an end date. Since this UPWP & funding ends at the end of FFY23.	Andrew Reovan, FHWA	Change made as requested.
56	Transportation Planning Activities by PVPC Community Map This is a helpful analysis. How are activities being defined here? Is it traffic counts and planning studies, mainly, as described in the write-up?	Andrew Reovan, FHWA	Additional text was added for this map and table in the final report.

	Consider some descriptive text for this map and following table.		
58	Please update the 'Community and Facility Profiles' link on document page 58 - page not found online.	Christopher Klem, MassDOT OTP	This hyperlink has been updated.
General	If possible, please add numbers to the title of tables and figures to improve accessibility, as done in the TIP.	Christopher Klem, MassDOT OTP	Tables and Figures will be numbered in the final report
6	Thank you for referencing the ways in which these (federal) emphasis areas connect to planning tasks.	Christopher Klem, MassDOT OTP	Comment noted.
Inside cover, 11	(MPO) List differs slightly from MPO members posted online, please update to confirm both lists the same	Christopher Klem, MassDOT OTP	The MPO membership list on the website for the Pioneer Valley MPO was not accurate. The list that appears in the UPWP is correct. The website has been updated.
11	Please provide web-link or appendix item to most recent governing MOU.	Christopher Klem, MassDOT OTP	This information will be provided in the final report.
Inside cover	Secretary Tesler is no longer the Acting Secretary. His title should be changed to "Secretary"	Christopher Klem, MassDOT OTP	This has been corrected in the final report.
18	Grants Plus + will no longer be used, and eSTIP will support development of the Highway and Transit TIP.	Christopher Klem, MassDOT OTP	This has been corrected in the final report.
27	Task 2.1 references the FY2022 UPWP.	Christopher Klem, MassDOT OTP	This has been corrected to read "FY2023"
30	Under Task 3.4 "RITS" should read "RITIS"	Christopher Klem, MassDOT OTP	This has been corrected in the final report.

MPO ENDORSEMENT

PIONEER VALLEY MPO ENDORSEMENT SHEET

The signature below signifies that all members of the Pioneer Valley Region's Metropolitan Planning Organization, or their designees, have met on May 24, 2022 and discussed the following item for endorsement: The Pioneer Valley Region's 2023 Unified Planning Work Program UPWP



for

Jamey Tesler, Secretary and Chief Executive Officer
Massachusetts Department of Transportation
Chair, Pioneer Valley MPO

APPENDIX

Pioneer Valley Planning Commission Traffic Counting Program

DATA COLLECTION

The Pioneer Valley Planning Commission collects transportation data on the movement of people and vehicles across specific points in the region. This information is often used as the basis for transportation planning studies but has a wide variety of applications and uses. The following provides a summary of the type of data collected, current data collection policies and the equipment used for data collection.

1. Data collected
 - a) Daily traffic count data is collected using Automatic Traffic Recorders (ATRs). Data is collected on a weekday for a minimum of 48 hours. All ATRs are capable of counting traffic volume, speed, vehicle class and gap data. Select ATRs are capable of classifying bicycles.
 - b) Intersection Turning Movement Counter (TMC) Counts are performed at intersections during the peak hours of travel (typically 7-9 AM and 4-6 PM). TMCs are counted in 15-minute intervals. Bicycles, pedestrians and trucks are all counted separately from passenger vehicles as part of all TMCs.
 - c) Bicycles and pedestrians are counted on shared use paths using a passive infra-red signal detector.
 - d) Pedestrians are manually counted at high volume locations during peak hours.
2. Data Collection Policies
 - a) PVPC performs traffic counts at specific locations as requested by MassDOT. The location of these counts is updated annual by MassDOT. The counts are conducted throughout the counting season. PVPC conducts traffic counts for areas subject to seasonal traffic variation such as schools, colleges, and special events during the appropriate time period to obtain average traffic volumes.
 - b) PVPC selects its own traffic count locations to supplement data collection activities required as part of ongoing corridor studies, the regional congestion management system, the regional pavement management system, and the regional transportation model.
 - c) PVPC collects bicycle and pedestrian volume counts for shared use paths, pedestrian counts on urban sidewalks and bicycle volumes on dedicated bike lanes in consultation with the JTC Bicycle, Pedestrian, and Complete Streets subcommittee.
 - d) A member community may request traffic counts under PVPC's LTA program. Under PVPC's current policy, each community is eligible to receive up to two free traffic counts per calendar year. After this member communities are charged for each count based on PVPC's actual cost.
 - e) Private organizations are charged for traffic counts based on PVPC's flat hourly rate.
3. Equipment
 - a) 11 Apollyon traffic recorders - Jamar Technologies, Inc.
 - b) 2 Cycles Plus traffic recorders (provides bicycle lane data) - Jamar Technologies, Inc.
 - c) 4 DB-100, 1 DB-400, and 1 TDC Ultra turning movement counters - Jamar Technologies, Inc.
 - d) 1 traffic recorder testing unit. All recorders are certified prior to the start of the counting season as required by MassDOT.

- e) 3 passive infra-red signal detectors (TRAFx and ECO) with a data logger to collect volume counts.
 - f) 1 COUNTcam 2 portable traffic video recorder.
 - g) 2 Count Stick Radar Counters.
4. Data
- a) All traffic counts are uploaded to the MassDOT MS2 site on a regular basis during the counting season. Bicycle and pedestrian count data are also shared with MassDOT. Copies of completed counts are distributed to member communities as they are finalized.

Pavement Management System Program

PVPC undertakes an ongoing Regional Pavement Management System Program. A Pavement Management System (PMS) is a systematic process that collects and analyzes roadway pavement information for use in selecting cost-effective strategies for providing and maintaining pavements in serviceable condition. The role of PMS is to provide an opportunity to improve roadway conditions, and to help make cost-effective decisions on maintenance priorities and schedules.

1. Regional Pavement Management
 - a) The roadway network covered by the regional PMS includes all urban and rural Federal-Aid eligible highways of the 43 cities and towns in the region constituting approximately 1,400 miles.
 - b) The region is divided into several sub-region areas with data collection activities performed on a 3 or 4-year rotational basis.
 - c) The regional PMS inventories the existing federal aid roadway network, records the pavement maintenance history for the network, and uses the pavement distress data collected to identify regional needs and maintenance activities.
2. Local Pavement Management
 - a) This program aims to provide the region's 43 communities with the knowledge and ability to effectively administer their available roadway improvement funds. It expands on the regional program to include all roadways maintained by the community. Communities are charged a fee for this service based on their roadway mileage.
3. Software
 - a) PVPC utilizes the Pavement Management software program Cartegraph OMS developed by Cartegraph Systems. Cartegraph OMS assesses the present pavement conditions and forecasts them annually based on historically derived roadway deterioration curves. Budget scenarios can be developed to identify the impact of various investments on pavement condition.
 - b) Cartegraph OMS uses an Overall Condition Index (OCI) as a measurement of roadway serviceability and as a method to establish performance criteria.
4. Pavement Distress Data
 - a) Pavement distress data is collected via a windshield survey and is based on accepted federal standards.