

# FFY 2019 UNIFIED PLANNING WORK PROGRAM

**MONTACHUSETT METROPOLITAN PLANNING ORGANIZATION**

**MPO ENDORSED**

**MAY 16, 2018**

Prepared by the  
**MONTACHUSETT REGIONAL PLANNING COMMISSION**  
**FFY 2018 PROGRAM YEAR**

Prepared in cooperation with the Massachusetts Department of Transportation and the U.S. Department of Transportation. The views and opinions of the Montachusett Regional Planning Commission expressed herein do not necessarily state or reflect those of the Massachusetts Department of Transportation or the U.S. Department of Transportation.

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# MONTACHUSETT REGIONAL PLANNING COMMISSION

Offices: 464 Abbott Ave., Leominster, Massachusetts 01453  
(978) 345-7376 Fax: (978) 348-2490



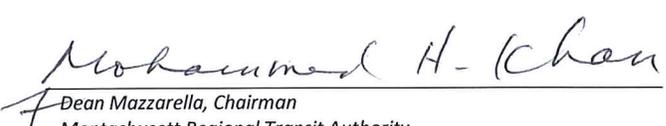
## MPO ENDORSEMENT FFY 2019 UNIFIED PLANNING WORK PROGRAM

The Unified Planning Work Program (UPWP) for the Montachusett Metropolitan Planning Organization (MPO) is a financial programming tool developed annually as part of the federally certified transportation planning process. In accordance with federal guidelines, the FFY 2019 (October 1, 2018 - September 30, 2019) Unified Planning Work Program for the Montachusett MPO was developed and submitted for a 21-day public review and comment period. Comments received have been addressed and are reflected in the final FFY 2019 Unified Planning Work Program. The Montachusett Joint Transportation Committee (MJTC) has reviewed the document and has recommended its endorsement by the members of the MPO.

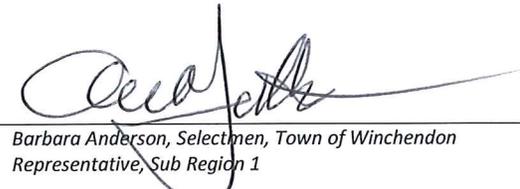
  
Stephanie Pollock, Secretary and CEO  
Massachusetts Department of Transportation

  
John A. Telepciak, Chairman  
Montachusett Regional Planning Commission

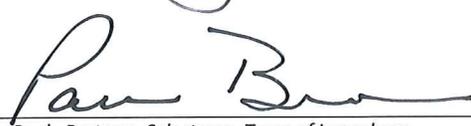
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City of Gardner

  
Dean Mazzarella, Chairman  
Montachusett Regional Transit Authority

Stephen DiNatale, Mayor  
City of Fitchburg

  
Barbara Anderson, Selectmen, Town of Winchendon  
Representative, Sub Region 1

Kyle Johnson, Selectmen, Town of Ashburnham  
Representative, Sub Region 2

  
Paula Bertram, Selectmen, Town of Lunenburg  
Representative, Sub Region 3

Stanley B. Starr, Jr., Selectmen, Town of Lancaster  
Representative, Sub Region 4

5/16/18  
Date

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## **MONTACHUSETT METROPOLITAN PLANNING ORGANIZATION SIGNATORIES**

Massachusetts Department of Transportation (MassDOT) Secretary	Stephanie Pollack
MassDOT Highway Division Administrator	Jonathan L. Gulliver.
Montachusett Regional Planning Commission (MRPC) Chairman	John A. Telepciak
Montachusett Regional Transit Authority (MART) Chairman	Mayor Dean Mazarella
Mayor City of Gardner	Mayor Mark Hawke
Mayor City of Fitchburg	Mayor Stephen DiNatale
Winchendon Board of Selectmen <i>Subregion 1</i>	Barbara Anderson
Ashburnham Board of Selectmen <i>Subregion 2</i>	Kyle Johnson
Lunenburg Board of Selectmen <i>Subregion 3</i>	Paula Bertram
Lancaster Board of Selectmen <i>Subregion 4</i>	Stanley B. Starr, Jr.

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## **MPO SUB-SIGNATORY COMMITTEE MEMBERS**

David Mohler, Director OTP, MassDOT, for Secretary Stephanie Pollack  
Arthur Frost, Project Development Engineer for Administrator Jonathan L. Gulliver  
Glenn Eaton, Executive Director, MRPC, for Chairman John Telepciak  
Mohammed H. Khan, Administrator, MART, for Chairman Mayor Dean Mazarella

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## **EXOFFICIO MEMBERS**

Jeffrey H. McEwen, Administrator	Federal Highway Administration
Mary Beth Mello, Administrator	Federal Transit Administration

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## **MONTACHUSETT REGIONAL PLANNING COMMISSION (MRPC) OFFICERS**

John A. Telepciak, Chairman	Phillipston
Guy Corbosiero, Vice Chairman	Winchendon
Michael Pineo, Secretary	Sterling
Alan Pease, Treasurer	Ashby
Roger Hoyt, Asst. Treasurer	Ashburnham

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## **MONTACHUSETT JOINT TRANSPORTATION COMMITTEE (MJTC) OFFICERS**

Jon Wyman, Chairman	Westminster
Noreen Piazza, Vice Chairman	Lancaster
Doug Walsh, Secretary	Athol

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## **MONTACHUSETT REGIONAL PLANNING COMMISSION STAFF**

Glenn Eaton, Executive Director	John Hume, Planning & Development Director
Linda Parmenter, Administrative/Human Resources Director	Karen Chapman, Principal Planner
Brad Harris, Transportation Director	Noam Goldstein, Regional Planner
George Snow, Principal Transportation Planner	Matthew Leger, Regional Planner
Sheri Bean, Principal Planner	Molly Belanger, Regional Planner
Brian Doherty, Principal Transportation Planner	Jason Stanton, GIS/IT Director
David Fee, Regional Planner	Kayla Kress, GIS Technician
George Kahale, Transit Director	
Holly Ford, Executive Assistant	

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## MONTACHUSETT JOINT TRANSPORTATION COMMITTEE

### COMMUNITY

### APPOINTED BY SELECTMEN/MAYOR

### APPOINTED BY PLANNING BOARD

Ashburnham	Jessica Caouette	Joseph McPeak
Ashby		Alan Pease
Athol	Doug Walsh	Doug Walsh
Ayer	Pauline Hamel	
Clinton	Phil Duffy	
Fitchburg		Paula Caron
Gardner	Treavor Beauregard	
Groton		Russell Burke
Harvard		Erin McBee
Hubbardston	Travis Brown	
Lancaster		Noreen Piazza
Leominster	David DiGiovanni	
Lunenburg	Michael Ray Jeffrey	Kenneth Chenis
Petersham	Nancy Allen	
Phillipston	Gordon Robertson	
Royalston	Roland Hamel	
Shirley		Robert Thurston
Sterling	John Kilcoyne	Michael Pineo
Templeton	Alan Mayo	Charles Carroll
Townsend	Ed Kukkula	
Westminster		Jon Wyman
Winchendon	Albert Gallant	Tracy Murphy

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## EXOFFICIO MEMBERS

Bryan Pounds	Office of Transportation Planning (OTP) and Massachusetts Department of Transportation (MassDOT)
Pamela Stephenson	Federal Highway Administration (FHWA), Administrator
Mary Beth Mello	Federal Transit Administration (FTA), Administrator
Jeffery Hoynoski	Department of Environmental Protection (DEP)
Arthur Frost	MassDOT Highway Division - District 2
	MassDOT Highway Division - District 3
	Montachusett Regional Planning Commission (MRPC)
Mohammed Khan	Montachusett Regional Transit Authority (MART)

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## ORGANIZATION MEMBERS

Al Futterman	Nashua River Watershed Association (NRWA)
Tony Salerno	Amalgamated Transit Union #690 (ATU 690)
Kit Walker	Fitchburg Airport Commission
	North Central MA Chamber of Commerce
	Fitchburg Council on Aging
	Mass Development
Peter Lowitt	Devens Enterprise Commission (DEC)
Patricia Pistone	Montachusett Opportunity Council, Inc.
Robert Benoit	The ARC of Opportunity

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## INTRODUCTION

The Unified Planning Work Program (UPWP) for the Montachusett Metropolitan Planning Organization (MPO) is a financial programming tool developed annually as part of the federally certified transportation planning process. This document contains task descriptions of the transportation-planning program of the MPO, with associated budget information and funding sources for the FFY 2019 program year.

The purpose of the UPWP is to ensure a comprehensive, cooperative, and continuing (3C) transportation planning process in the Leominster - Fitchburg Urbanized Area and the Montachusett Region. In addition, this document provides for the coordination of planning efforts between communities in the Montachusett Region.

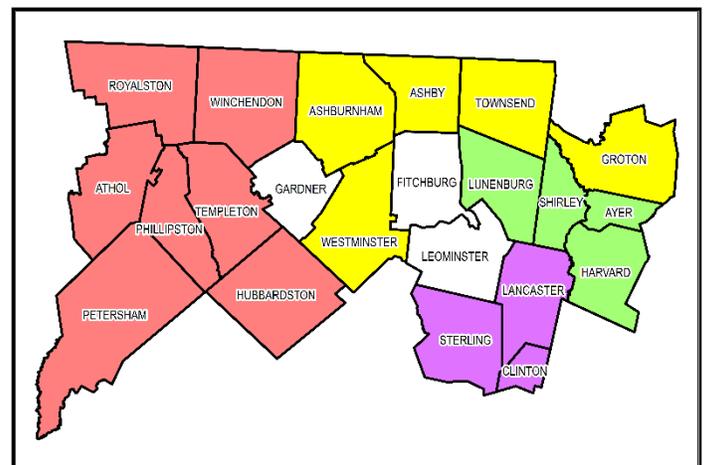
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## MONTACHUSETT METROPOLITAN PLANNING ORGANIZATION (MMPO)

All urbanized areas with a population greater than 50,000 are required by the U.S. Department of Transportation (USDOT) Federal regulations to designate an MPO for the area. The establishment of an MPO is necessary for the State to receive Federal transportation funds. In the Montachusett Region, the Montachusett Regional Planning Commission (MRPC) serves as staff for the MPO. The MRPC staff annually produces a Transportation Improvement Program (TIP) and Unified Planning Work Program (UPWP). In addition, a Regional Transportation Plan is updated periodically to reflect the changing transportation needs of the area. In July of 2015, the MPO formally endorsed the 2016 Regional Transportation Plan.

The MPO in the Montachusett Region (after reorganization in October 2001) is currently comprised of:

- the Secretary and CEO of the Massachusetts Department of Transportation (MassDOT);
- the Administrator of MassDOT Highway Division;
- the Chairman of the MRPC;
- the Chairman of the Montachusett Regional Transit Authority (MART);
- the mayors of Fitchburg, Leominster and Gardner and;
- one Selectman from each of four geographically defined sub Regions.



These sub regions are composed as such:

- Subregion 1) Athol, Hubbardston, Petersham, Phillipston, Royalston, Templeton, and Winchendon;
- Subregion 2) Ashburnham, Ashby, Groton, Townsend, and Westminister;
- Subregion 3) Ayer, Harvard, Lunenburg and Shirley and;
- Subregion 4) Clinton, Lancaster, and Sterling.

Legend	
<b>MPO Membership</b>	
□ Fitchburg/Gardner/Leominster	• Secretary & CEO of MassDOT
■ Representative Subregion 1	• Administrator, Highway Division, MassDOT
■ Representative Subregion 2	• Chair of the MRPC
■ Representative Subregion 3	• Chair of MART
■ Representative Subregion 4	

These 10 members serve as the MPO Policy Board for the regional "3C" transportation planning process. It was felt that increasing the MPO to 10 members would allow for more local input and greater public participation and as such an inter-agency Memorandum of Understanding, entitled "Memorandum of Understanding (MOU) Relating to the Comprehensive,



GIS Department will continue work to expand and improve the MRPC's online GIS web mapping program, MRMapper. Several datalayers and applications continue to be updated on the site such as traffic counts, roadway functional classification information, crash data and trail locations. Also, during the FFY 2017 program year, the MRPC released a handheld application designed to assist communities with the collection of stormwater data related to Environmental Protection Agency (EPA) Phase 2 stormwater requirements. The GIS department and other staff personnel will continue efforts to provide assistance to those communities that are currently utilizing the application as well as provide training and support to any other municipality that wishes to make use of the application. This continues work conducted under prior program years. These work efforts will be supported under tasks 2.24 GIS Mapping & Analysis and 3.34 Climate Change.

In addition to these tasks, MRPC will continue its Data Collection & Analysis Program. This task has evolved from the collection of traffic counts to include additional data needs for the continued maintenance of several online databases such as regional pavement conditions and crash locations. The traffic counting aspect of this program consists of the use of automatic traffic recorder counts necessary to determine average daily traffic (ADT) throughout the region. These counters also allow us to determine speed and classification data as well. Requests for ADT information often come from local communities concerned about safety or future highway improvements. Additionally, the MRPC participates in the MassDOT statewide traffic counting program. Over the last few program years, the MRPC has acquired a video traffic counting system known as Miovision in order to collect data at locations previously too difficult or complex to do by traditional means as well as two radar counter units that are also utilized throughout the region at problem locations. Late in the FFY 2018 program year, the MRPC acquired a bicycle and pedestrian counter called Multi Mobile from a company named Eco-counter. This will allow the MRPC to begin to collect bike and pedestrian data at locations throughout the Region. Initial locations will focus on known trails such as the North Central Pathway in Gardner and Winchendon and the Nashua River Rail Trail in Ayer and Groton. In addition, staff will coordinate with and seek approval from the MassDOT Office of Transportation Planning (OTP) and the MassDOT Bicycle and Pedestrian Coordinator regarding locations that will help in the goal of identifying gaps in the regional bike and pedestrian network.

Public participation is also a vital element of the transportation planning process. Community representatives of the Montachusett Joint Transportation Committee (MJTC) meet every month on the second Wednesday to discuss transportation projects and issues of regional importance. Membership on the MJTC is solicited every April to June from communities and organizations. Certain communities lack membership on the MJTC through non-appointments. Staff continues to reach out and work with communities in an attempt to encourage new appointments to and attendance at the MJTC. This effort could include direct calls to the towns or targeted emails and surveys to ascertain any impediments to attendance. In early 2017, in response to member input, the MJTC meetings were moved from the third to the second Wednesday of the month. In addition, the start time was moved to 6:30 PM in an effort to increase local participation. In January of 2018, the MJTC also began to take the meeting "on the road" to member municipalities. Each month, a community would volunteer to host the next upcoming meeting. At these road meetings, the host community would then discuss transportation and transit issues and topics of particular concern to it and their constituents. As of the writing of this UPWP, these outreach efforts have resulted in a slight increase in attendance (particularly from the host community) and has helped promote connections between towns.

An updated and revised Public Participation Plan (PPP), developed to assist and guide the Montachusett MPO in its outreach efforts, was endorsed by the MPO in May of 2016. This PPP was submitted for a 45-day public review and comment period in March – May 2016. The PPP attempts to more closely follow the state's PPP as well as feedback from the MassDOT Office of Diversity and Civil Rights (ODCR). Issues of Environmental Justice and Title VI of the Civil Rights Act of 1964 and their relationship to the MRPC will continue to be reviewed during the upcoming program year. In April of 2017, the PPP was Amended to change the duration of the public comment periods for the TIP, UPWP and RTP from 30 days to 21 days. This change will allow the MPO to maintain a more consistent meeting schedule throughout the year. The MPO endorsed Limited English Proficiency (LEP) Access Plan will be examined for possible updating this coming program year. Additionally, the

submittal of any annual reports related to Title VI and EJ will be under taken to ensure that state and federal regulations are and will continue to be met. As part of the overall outreach process, the MRPC will continue to update and maintain its web page at [www.mrpc.org](http://www.mrpc.org). This will include the posting of meeting agendas, announcements, documents and any related material needed to improve and enhance public awareness, outreach and participation.

The major work item for this program year will focus on an update to the Regional Transportation Plan (RTP). Endorsed by the MPO in July 2015, the required four-year revision must be completed in the FFY 2019 program year. Through various outreach methods, meetings and events, staff will examine the current transportation network, identify local needs, refine the performance measures compiled for the 2016 RTP, conduct a fiscal analysis and coordinate with MassDOT, FHWA and FTA in order to meet the goal of an updated RTP.

The Unified Planning Work Program (UPWP) also continues to demonstrate a high level of cooperation between MRPC and the Montachusett Regional Transit Authority (MART).

Prior federal provisions have identified the Massachusetts Department of Transportation as the recipient of statewide Section 5303 program funds and to also have the responsibility under present state law to administer FTA grants and to establish a statewide transit-planning program in cooperation with the MPO. The Montachusett MPO has been allocated \$63,955 in federal FY2019 Section 5303 funds. The MMPO holds harmless this allocation.

During this program year, the MPO will continue to be involved in several planning areas relating to mass transit and will continue to coordinate with other transportation related activities undertaken by the MPO. The planning areas include coordination with 3C management process, continuation of monitoring services and updating mass transit activities in the Montachusett Region, cooperation in developing transit related funding categories for the TIP and conducting special studies.

During the FFY 2018 program year, MPO staff compiled an update to the Coordinated Public Transit - Human Services Transportation Plan for the Region. The Coordinated Plan is expected to be endorsed before September 2018. This Plan focused on three target populations within the Montachusett region, individuals with disabilities, low-income individuals (or persons below the poverty level) and the elderly. Gaps in existing transportation services and needs to meet those gaps were identified.

In the upcoming FFY 2019 program year, staff will focus on the development of a method to monitor and evaluate the on-time performance of the existing fixed route bus services in Fitchburg, Leominster and Gardner. MART proposed a performance measure related to on time service averages during the development of the 2016 RTP. In order to accurately assess this goal, a reasonable and concise evaluation method needs to be developed and implemented. MPO staff will examine available data and its source, assess its accuracy and determine an appropriate methodology and metric that can be replicated and maintained.

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## **PRIOR YEAR UPWP TASK RESULTS**

During the prior program year from October 1, 2017 to April 30, 2018, the following studies and/or tasks were undertaken. Some tasks were under development at the time of the writing of this UPWP. In those cases, the anticipated outcome is identified. For more detailed information regarding any of these tasks, please contact the MRPC.

**Task 2.13 Regional Demographics & Model**

- TransCAD software training;
- Regional population projections developed in coordination with MassDOT;
- Additional socio-economic projections related to households and employment to be developed with MassDOT.

**Task 2.33 Data Collection and Analysis Program**

- Traffic counts taken at approximately 170 locations around the region;
- Additional crash reports from local police departments compiled based on various study needs;
- Acquired a bicycle/pedestrian counter in anticipation of upcoming data collection needs.

**Task 2.43 Management Systems (Pavement & Safety)**

Pavement Management

- Data collected/updated for approximately 100 miles of regional roads;
- A yearly Regional Report will be developed.

Regional Safety Review

- Safety analysis of high crash locations developed for the region;
- Road Safety Audits (RSAs) were also conducted at the following locations:
  - Route 31 and Turnpike Road in Ashby
  - Main Street in Fitchburg

**Task 2.53 Sidewalk Inventory & Pedestrian/Bicycle Connections**

- Maps were created of the existing MART fixed bus routes in Gardner with a 1/4-mile buffer along the routes;
- An inventory and map of the sidewalk conditions within the buffer was developed;
- A final analysis of sidewalk gaps and prioritized needs will be conducted.

**Task 2.63 Freight Corridor Identification and Screening**

- Data related to freight generators and major road networks to be compiled;
- Infrastructure issues along corridors to be identified;
- Relevant crash data will be examined and mapped where appropriate;
- A priority listing of freight corridors will be developed leading to a corridor analysis in FFY 2019.

**Task 2.73 Regional Development Initiative**

- Data compiled and uploaded to MassBuilds website in response to identification of major residential and commercial developments in the region.

**Task 3.13 Route 2 at South Athol Road Proposed Interchange Study**

- Coordinated with local officials regarding interchange needs;
- Examined current road network and area freight activity;
- Analyzed crash data within study area;
- Final report to be compiled by end of program year.

**Task 3.23 FAST ACT Performance Measures and Regional Transportation Plan Update**

- Coordinated with MassDOT on support and adoption of state PM2 Safety Performance Measures;
- Reviewed 2016 RTP regional Performance Measures and identified issues for review and/or update;

**Task 3.33 Climate Change Program**

- Bottleneck study begun on Merriam Avenue/South Street in Leominster/Fitchburg;
- Data collection conducted and improvements to reduce congestion and delays developed and evaluated;
- Final report to be completed in FFY 2018 program year;
- Support activities continued for stormwater app developed for local communities for EPA Phase 2 requirements;
- Local training conducted for communities with stormwater app.

**Task 3.53 Regional Transportation Needs Assessment**

- Transportation Needs Survey compiled for various target groups, i.e. businesses, commercial, etc.;
- Data collection occurred at several area events such as Regional Job Fairs, etc.;
- Efforts coordinated with Fitchburg State University;
- Final results expected to be completed by September 2018.

**Task 3.73 Regional Trail Map Development**

- An updated Regional Trail Guide has been developed for printing and distribution.

**Task 4.43 Coordinated Transit Plan Update**

- Applicable demographic data developed for target populations for the Coordinated Plan;
- Updates were made to applicable services in the region;
- Needs, gaps and issues compiled;
- MPO endorsed report expected before September 2018.

**Task 4.53 Ridership Survey Distribution**

- Developed survey coordinated with Regional Transportation Needs Assessment surveys;
- Distribution to occur over Spring/Summer 2018;
- Final results expected by September 2018.

**UPWP DISTRIBUTION OF STUDIES AND TASKS**

MassDOT has requested MPO’s to include a geographic and social equity analysis of past and current tasks undertaken in the UPWP. Listed below are tasks from the past five UPWPs as well as tasks in this FFY 2019 UPWP. The tasks identified for this analysis were limited to specific reports or studies attributable to a community or group of communities. Some tasks involve work or analysis that covers the entire region as a whole. The identified tasks were then mapped versus identified Environmental Justice and/or Title VI populations. Maps can be found in the appendix of this document. Environmental Justice and Title VI populations are defined as indicated in the tables below.

Environmental Justice Block Groups
1. Block group whose annual median household income is equal to or less than 65 percent (%) of the statewide median (\$62,133 in 2010); or
2. Twenty-five percent (25%) or more of the residents identifying as minority; or
3. Twenty-five percent (25%) or more of the households having no one over the age of 14 who speaks English only or very well - Limited English Proficiency (LEP).

FTA Title VI Communities
1. <u>Minority</u> (% of population including Hispanic or Latino of any race that is considered non-white and is higher than the regional average of 20.51%) - Shirley, Leominster, Lancaster, Fitchburg, Clinton and Ayer
2. <u>Low Income</u> (% Estimated Below Poverty Level that is higher than the regional average of 10.49%) - Athol, Ayer, Fitchburg, Gardner, Shirley and Templeton

FHWA Title VI Communities
1. <u>Elderly</u> (% of Total Population > 65 that is higher than the regional average of 12.58%) – Athol, Clinton, Gardner, Leominster, Lunenburg, Petersham, Sterling, and Templeton
2. <u>Individuals with Disabilities</u> (% of population with a disability that is higher than the regional average of 12.12%) – Athol, Ayer, Fitchburg, Gardner, Leominster, Petersham, and Royalston
3. <u>Minority</u> (% of population including Hispanic or Latino of any race that is considered non-white and is higher than the regional average of 20.51%) - Shirley, Leominster, Lancaster, Fitchburg, Clinton and Ayer
4. <u>Foreign Born</u> (% of population that is Foreign Born and is higher than the regional average of 8.15%) – Ayer, Clinton, Fitchburg, Gardner, Harvard, Leominster and Shirley
5. <u>Language</u> (% of Population Spoken Language Other than English that is higher than the regional average of 13.70%) – Clinton, Fitchburg, Harvard, Leominster, and Shirley

Five Year Task Review							
UPWP Year	Community	Description	Task #	Funding	Within EJ Population	Within Title VI Population	
						FHWA	FTA
2013 - 2014	Fitchburg, Sterling	Traffic Analysis Studies	3.13	\$33,500		X	X
2013 - 2014	Fitchburg, Leominster, Shirley, Ayer	Roadway Connections to Commuter Rail	3.43	\$54,250	X	X	X
2013 - 2014	Ayer	Street Light Analysis	3.63	\$14,000	X	X	X
2014 - 2015	Harvard	Town Center Operational Study	3.14	\$25,000		X	
2014 - 2015	Lancaster	Local Complete Streets Review and Analysis	3.64	\$25,000	X	X	X
2015 - 2016	Shirley	Shirley Safety Study	3.11	\$36,750		X	X
2016 - 2017	Athol	Route 2 at South Athol Road Interchange Study	3.12	\$45,000	X	X	X
2016 - 2017	Athol, Phillipston	Route 2 Before and After Safety Analysis	3.32	\$40,500	X	X	X
2016 - 2017	Shirley	Shirley Railroad Crossing Review and Analysis	3.52	\$35,500	X	X	X
2017-2018	Fitchburg, Leominster	Sidewalk Inventory & Bicycle/Pedestrian Connections	2.53	\$26,500	X	X	X
2017-2018	Athol	South Athol Road/Route 2 Interchange Analysis	3.13	\$39,500	X	X	X
2017-2018	Leominster, Fitchburg	Climate Change Program (Merriam Ave./South St. Bottleneck Study)	3.33	\$36,000	X	X	X
2017-2018	Regionwide (All 22 MRPC Communities)	Local ADA Transition Plan Development	3.53	\$33,500	X	X	X
2017-2018	Fitchburg, Leominster, Gardner	Coordinated Transit Plan Update	4.43	\$31,250	X	X	X
2017-2018	Fitchburg, Leominster, Gardner	Ridership Survey Distribution	4.53	\$15,750	X	X	X
Annually	Regionwide (All 22 MRPC Communities)	Pavement Management System		Varies	X	X	X
Annually	Regionwide (All 22 MRPC Communities)	Traffic Count Database		Varies	X	X	X
Annually	Regionwide (All 22 MRPC Communities)	Regional Trail Database		Varies	X	X	X
Annually	Regionwide (All 22 MRPC Communities)	Regional Crash Database		Varies	X	X	X
Annually	Regionwide (All 22 MRPC Communities)	Freight Corridor Identification & Screening		Varies	X	X	X
2017-2018	Regionwide (All 22 MRPC Communities)	Regional Development Initiative	2.73	\$19,500	X	X	X
2017-2018	Regionwide (All 22 MRPC Communities)	Regional Bike & Ped Trail Update	3.73	\$23,000	X	X	X
2018 - 2019	Regionwide (All 22 MRPC Communities)	Fatal Crash Corridor Analysis	2.54	\$26,250	X	X	X

Five Year Task Review (cont.)							
UPWP Year	Community	Description	Task #	Funding	Within EJ Population	Within Title VI Population	
						FHWA	FTA
2018 - 2019	Regionwide (All 22 MRPC Communities)	Local ADA Transition Plan Development	3.54	\$33,500	X	X	X
2018 - 2019	Lunenburg	Town Center Walkability and Parking Study	3.64	\$25,500		X	

A review of the work tasks identified over the past five-year period, i.e. from FY 2013 to FY 2018, shows:

- Of the 14 identified FHWA Title VI communities, community specific tasks were conducted in 9, or 64%, of those municipalities.
- Of the 8 identified FTA Title VI communities, community specific tasks were conducted in 6, or 75%, of those municipalities.
- Identified Title VI communities for both FHWA and FTA that lacked a community specific work task were Clinton, Gardner and Templeton.
- FHWA Title VI only communities that lacked a community specific work task include the three mentioned above plus Petersham and Royalston.

An examination of Environmental Justice (EJ) populations as defined above, identifies 8 communities in the Montachusett Region that contain at least one or more of the various EJ populations. Again, over the previous five-year period, the following can be determined:

- Of the five communities, Athol, Clinton, Fitchburg, Gardner and Leominster, with segments of the population defined as low income, three, or 60%, had specific work tasks connected to them.
- Of the six communities, Clinton, Fitchburg, Harvard, Lancaster, Leominster, Shirley, containing population segments meeting the minority definition, five, or 83%, had specific work tasks.
- As with the above Title VI analysis, the communities of Clinton and Gardner did not have specific tasks assigned to them.

It should be noted that several tasks identified over the past five work program years, involved all 22 communities of the Montachusett Region and would likely entail some level of work in all of these identified communities.

Based upon this analysis and review, it would appear that the Montachusett MPO is making an effort to address transportation planning issues in Title VI and EJ communities in the Region. It should be noted that every project in the last five years has been located in communities which either have an Environmental Justice population, FHWA Title VI population, FTA Title VI population, or a combination of all three. However, future efforts should focus on the communities of Clinton, Gardner, Petersham, Royalston and Templeton. In particular, Petersham, Royalston and Templeton should be prioritized based upon past work efforts.

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## AMENDMENT AND ADJUSTMENT PROCEDURES FOR THE UPWP

All 3C documents (TIP, LRTP, UPWP, PPP, etc.) endorsed by the MPO must follow a standardized procedure regarding amendments and/or administrative adjustments to the document. The procedures must also be clearly outlined in narrative form within the documents themselves. Below are general guidelines regarding the conditions that constitute an administrative adjustment or amendment to the Unified Planning Work Program (UPWP). All proposed administrative

adjustments or amendments must be presented to the MPO for consultation prior to endorsement. Both adjustments and amendments must be voted on by the MPO members and amendments must be released for a 21-day comment period (or shorter if deemed necessary as outlined in the Public Participation Plan (PPP) for the MMPO) prior to endorsement.

The conditions that identify and constitute what is considered an administrative adjustment or an amendment is as follows:

- UPWP Administrative Adjustment** - Reallocation of budget funds
  - Change in start/completion dates within the originally intended federal fiscal year(s)
  - Adjustment to project scope
  
- UPWP Amendment**
  - Addition or removal of UPWP task(s)
  - Change in start/completion dates outside of originally intended federal fiscal year(s)
  - Significant change in project scope, cost and/or time allocation

Additionally, the following must be adhered to for the Submission of a Budget Reallocation Request:

When submitting the standard Budget Reallocation Request form to MassDOT Office of Transportation Planning (OTP), all fields must be filled out with clear indication that the MPO was consulted prior to submission. Back up documentation must be submitted, including the UPWP description of the task(s) affected, original budget, revised budget, and justification for request.

A Significant Change is defined as a change to a project scope, budget, and/or project schedule when it alters the original intent of the project or intended conclusions of the project.

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## SOURCES FOR THE MONTACHUSETT UPWP

FHWA allocates Metropolitan Planning Funds (PL) to MassDOT who in turn distributes those funds to the state’s regional planning agencies based upon an agreed apportionment formula. As part of this process, each RPA enters into a multi-year “3C” (Continuing, Cooperative and Comprehensive) transportation planning contract. Fiscal years for PL funds follow federal fiscal years, i.e. October 1 to September 30.

FTA also distributes funds to MassDOT for allocation to RPA’s as Section 5303 monies for the conduct of transit planning activities. Section 5303 funds are used for planning and technical studies related to transit. Unless otherwise noted, FTA funds follow federal fiscal year time frames.

Program years described in this UPWP therefore are as follows:

<u>Funding Source</u>	<u>Program Year</u>
FHWA/MassDOT	FFY 2019 October 1, 2018 - September 30, 2019
FTA/Section 5303	FFY 2019 October 1, 2018 - September 30, 2019

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## STATE AND FEDERAL POLICIES AND PROGRAMS

### *The FAST Act and Planning Factors*

On December 4, 2015, President Obama signed into law the new Federal Surface Transportation Authorization known as Fixing America’s Surface Transportation (FAST) Act. The FAST Act “largely maintains current structures and funding shares between

highways and transit” and “makes changes and reforms to many Federal transportation programs, including streamlining the approval processes for new transportation projects, providing new safety tools, and establishing new programs to advance critical freight projects” (source: U. S. DOT website). The FAST Act retains most of the planning requirements of prior federal regulations, i.e. Moving Ahead for Progress in the 21<sup>st</sup> Century (MAP-21) and the Safe Accountable Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU).

The FAST Act did add two additional factors to the eight planning factors for both metro and statewide planning identified in MAP-21:

- 1. Economic Vitality** – Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity and efficiency;
- 2. Safety** – Increase the safety of the transportation system for motorized and nonmotorized users;
- 3. Security** – Increase the ability of the transportation system to support homeland security and to safeguard the personal security of motorized and non-motorized users;
- 4. Mobility** – Increase the accessibility and mobility of people and freight;
- 5. Environment** – 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;
- 6. System Integration** – Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
- 7. System Management** – Promote efficient system management and operation;
- 8. System Preservation** – Emphasize preservation of the existing transportation system.
- 9. Reliability** - Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation; and
- 10. Travel and Tourism** - Enhance travel and tourism.

These ten (10) planning factors must be considered by MPOs in their UPWP’s. This UPWP seeks to incorporate these planning factors through the various tasks identified.

UPWP Tasks		Planning Factors									
		Economic Vitality	Safety	Security	Mobility	Environment	System Integration	System Management	System Preservation	Reliability	Travel and Tourism
1.54	EJ/Title VI				X	X					
2.14	Reg Demo & Model	X			X		X	X			X
2.24	GIS	X	X			X		X	X	X	X
2.34	Data Collection	X	X					X	X	X	
2.44	Pavement Management		X	X	X		X	X		X	X
2.54	Fatal Crash Corridor	X	X				X		X		
2.64	Freight Corridor Analysis	X		X			X	X	X	X	
2.74	Regional Trail Planning	X			X	X	X		X		X
3.14	RTP Update	X	X	X	X	X	X	X	X	X	X
3.24	Perform Measures	X	X		X	X		X	X		X
3.34	Climate Change Prog.				X		X			X	
3.54	Local ADA	X	X		X	X	X				X
3.64	Lunenburg Study	X	X		X				X		X
4.44	Bus Route Performance	X			X		X	X	X	X	X

### *Transit Asset Management*

In July 2016, FTA published a Final Rule for Transit Asset Management. The rule requires FTA grantees to develop asset management plans for their public transportation assets, including vehicles, facilities, equipment, and other infrastructure.

In 2012, the Moving Ahead for Progress in the 21st Century Act (MAP-21) mandated, and in 2015 the Fixing America's Surface Transportation Act (FAST) reauthorized, FTA to develop a rule to establish a strategic and systematic process of operating, maintaining and improving public transportation capital assets effectively through their entire life cycle. FTA's national Transit Asset Management System Rule:

- Defines "state of good repair"
- Requires grantees to develop a TAM plan
- Establishes performance measures
- Establishes annual reporting requirements to the National Transit Database
- Requires FTA to provide technical assistance

TAM requirements in this final rule are part of a larger performance management context. MAP-21 created a performance-based and multimodal program to strengthen the U.S. transportation system, which is comprised of a series of nine rules overseen by FTA and the Federal Highway Administration (FHWA). FTA is tasked with developing other rules, including the National Public Transit Safety Plan and the Public Transportation Agency Safety Plan, and has worked jointly with FHWA on a rule to manage Statewide and Metropolitan Planning.

The Montachusett Regional Transit Authority (MART) has been working to develop a TAM. Data collection is near completion and the plan is expected to be available on or around July 1, 2018.

### *Transportation Performance Management*

FHWA defines Transportation Performance Management as a strategic approach that uses system information to make investment and policy decisions to achieve national performance goals. In short, Transportation Performance Management:

- Is systematically applied, a regular ongoing process
- Provides key information to help decision makers allowing them to understand the consequences of investment decisions across transportation assets or modes
- Improving communications between decision makers, stakeholders and the traveling public.
- Ensuring targets and measures are developed in cooperative partnerships and based on data and objective information

Effective on April 14, 2016 FHWA established a final rule on the first of its Performance Measures, Safety Measures (PM 1). Targets related to PM 1 were then set by MassDOT. The Montachusett MPO has chosen to adopt the statewide safety performance measure targets set by MassDOT for Calendar Year (CY) 2018. In setting these targets, MassDOT has followed FHWA guidelines by using statewide crash data and Highway Performance Monitoring System (HPMS) data for vehicle miles traveled (VMT) in order to calculate 5 year, rolling average trendlines for all FHWA defined safety measures. CY 2018 targets for four of the five safety measures, total number of fatalities, rate of fatalities per 100 million vehicle miles traveled, total number of serious injuries, and rate of serious injuries per 100 million VMT, were established by extending their respective trendlines into the 2014-2018 time period. All four of these measures reflect a decrease in statewide trends. The fifth safety

measure, total number of combined serious injuries and fatalities for non-motorized modes, is the only safety measure for which the statewide trendline depicts an increase. MassDOT's effort to increase the non-motorized mode share throughout the Commonwealth has posed a challenge to simultaneously reducing non-motorized injuries and fatalities. Rather than adopt a target that depicts an increase in the trendline, MassDOT has elected to establish a target of non-motorized fatalities and injuries in CY 2018 to remain constant from the rolling average for 2011-2015. In recent years, MassDOT and the Montachusett MPO have invested in "complete streets," bicycle and pedestrian, intersection and safety improvements in both the Capital Investment Plan (CIP) and Statewide Transportation Improvement Program (STIP) that address increasing mode share and incorporate safety mitigation elements into projects. Moving forward, the Montachusett MPO, alongside MassDOT, is actively seeking to improve data collection and methodology for bicycle and pedestrian VMT counts, and to continue analyzing crash clusters and crash counts that include both motorized and non-motorized modes in order to address safety issues at these locations.

In all safety categories, MassDOT has established a long-term target of "Toward Zero Deaths" through MassDOT's Performance Measures Tracker and will be establishing safety targets for the MPO to consider for adoption each calendar year. While the MPO is not required by FHWA to report on annual safety performance targets, FHWA guidelines require MPOs to adopt MassDOT's annual targets or perennially establish their own.

In addition to the Safety Measures (PM 1), it is anticipated that the following performance measures to be implemented by FHWA along with targets set by MassDOT will be presented to the MPO in the coming months.

- Pavement and Bridge Condition Measures (PM 2)
- Performance of NHS, Freight and CMAQ Measures (PM 3)

Targets established by MassDOT in reference to PM 2 and PM 3 may then be adopted by the MPO, or the MPO may adopt its own targets.

For additional information on the status of FHWA established PM 1, please consult the FFY 2019 – 2023 Montachusett Transportation Improvement Program (TIP).

### *GreenDOT*

GreenDOT is the Massachusetts Department of Transportation's sustainability initiative. It is designed to support the implementation of the following state laws.

- Climate Protection and Green Economy Act (Mass. Gen. L. c. 21N)
- Green Communities Act (Chapter 169 of the Acts of 2008)
- Healthy Transportation Compact (section 33 of Chapter 25 of the Acts of 2009)
- Leading by Example (Executive Order of Governor Patrick, no. 488)
- MassDOT's youMove Massachusetts planning initiative
- The "Complete Streets" design standards of the 2006 MassDOT Highway Division Project Development and Design Guide, as amended

The GreenDOT initiative incorporates three main goals:

1. Reduce greenhouse gas (GHG) emissions

2. Promote the healthy transportation modes of walking, bicycling, and public transit
3. Support smart growth development

Through the GreenDOT policy, MassDOT will seek to “promote sustainable economic development, protect the natural environment, and enhance the quality of life for all the Commonwealth’s residents and visitors.”

As part of implementation plan for GreenDOT, in October 2012 MassDOT announced a “Mode Shift” goal designed to reduce the number of individuals travelling alone by automobile. The Mode Shift goals are measured in Personal Miles Traveled (PMT) and seek to triple the amount of walking, bicycling and public transit use in the Commonwealth between 2010 and 2030. For further information on Mode Shift Goals, refer to the MassDOT website (<http://www.massdot.state.ma.us/Main.aspx>).

#### *weMove Massachusetts*

MassDOT released weMove Massachusetts (WMM): Planning for Performance, the Commonwealth of Massachusetts’ 2040 Long-Range Transportation Plan (LRTP) in May of 2014. This plan includes seven major components:

1. Transportation Reform - emphasis on customers, innovation, accountability, performance management, efficiency, stewardship and stronger collaboration across transportation divisions;
2. Data and Analysis - critical to sound decision making;
3. Transportation System Needs Identification– to help choose the right transportation investments;
4. youMove Massachusetts Themes - ten value statements that capture the diverse values users;
5. Customer and Stakeholder Engagement– incorporate the priorities of customers and stakeholders;
6. Statewide Transportation Plans– implement modal plans;
7. Statewide Priorities and Policies– ensure accountability.

Source: <https://massmoves.org/resource/wemove-massachusetts-planning-for-performance/>

The policies of the Commonwealth will be reviewed, considered and incorporated in the planning studies developed as part of the work tasks outlined in this UPWP. Recommendations derived from these studies will be consistent with state policies.

#### *Healthy Transportation Policy Directive*

On September 20, 2013, MassDOT announced the Healthy Transportation Policy Directive designed to increase bicycling, transit and walking options. The directive is intended to promote multimodal access for users of the transportation networks and systems.

The Healthy Transportation Directive builds upon the goals established under MassDOT’s GreenDOT Implementation Plan and mode shift goal. The Directive requires all MassDOT Districts to review all projects under design to “ensure they are consistent with ...goals.”

Elements included in the Directive are as follows:

- All MassDOT facilities will consider adjacent land uses and be designed to include wider sidewalks, landscaping, crossing opportunities and other features to enhance healthy transportation options;
- Reviews will be conducted of cluster sites where incidents have occurred with healthy transportation users;

- MassDOT will develop a guide to assist communities proposing Shared Use Paths on or along rail beds in order to accelerate the path design process.

Information on the Healthy Transportation Policy Directive and MassDOT's GreenDOT initiative can be found at <https://www.mass.gov/files/documents/2016/11/pf/greendot.pdf>.

*Coordination in the Montachusett UPWP*

The policies and goals of the Commonwealth, such as *GreenDOT* and *Mode Shift*, will be reviewed, considered and incorporated in the planning studies developed as part of the work tasks outlined in this UPWP, i.e. 1.44 Development of TIP, 2.14 Regional Demographics & Model, 2.64 Freight Corridor Analysis, 2.74 Regional Trail Planning & Printing, 3.14 Regional Transportation Plan Update, 3.34 Climate Change Program, 3.54 Local ADA Transition Plan Development, 3.64 Lunenburg Study, and 4.44 Bus Route Performance Evaluation. Recommendations derived from these studies will be consistent with state policies.

1.0

MANAGEMENT AND SUPPORT

**Objective:**

To assist, support, and provide the capability to maintain an open, comprehensive, cooperative, and continuing (3C) transportation/air quality planning and programming process at all levels of government; in conformance with applicable Federal and State requirements and guidelines, as described in the Memorandum of Understanding, and consistent with the DOT/EPA agreement. The task will include the presentation and preparation of transportation related planning activities, including those related to the Transportation Improvement Program (TIP), the Unified Planning Work Program (UPWP), the Regional Transportation Plan (RTP) and other major documents, to various committees and groups; analysis and review of related documents and studies; attendance at federal and state transportation related workshops and meetings; and coordination and liaison with federal, state and local officials.

This task will provide continued technical assistance and liaison with various coalitions/task forces including: the Montachusett Regional Trail Coalition (MRTC), the Montachusett Regional Transit Authority (MART), the Montachusett Regional Emergency Planning Committee (MREPC), the Community Health Network Area 9 (CHNA 9), the Fitchburg Line Working Group and the Montachusett Joint Transportation Committee (MJTC).

A new activity included in the 2017 – 2018 UPWP will be continued in 2018 – 2019. There is a federal initiative to combine regional plans such as CEDS, TDPs and RTPs into “unified” or “combined” state plans (Plan) as described in the Federal Workforce Innovation and Opportunity Act (WIOA) of 2016. This new technical assistance and liaison activity will investigate ways to incorporate the MRPC RTP into the Plan and set the groundwork for the next RTP.

The Montachusett Regional Trail Coalition was established in early 2012 through the joint efforts of the Nashua River Watershed Association, local trail advocates and the MRPC to “advance the development of diverse high-quality trails and greenways for all people.”

The cities of Fitchburg, Leominster and the town of Lunenburg have formed the Montachusett Regional Emergency Planning Committee (MREPC) to address emergency management issues for the three communities. Support services are provided to continue to work with the MREPC on evacuation and security planning.

The Community Health Network of North Central Massachusetts (CHNA 9) is one of 17 CHNAs across Massachusetts, created by the Department of Public Health in 1992. CHNAs are an initiative to improve health through local collaboration. CHNA 9 is a partnership between the Massachusetts Department of Public Health, the Central MA Center for Healthy Communities, residents, hospitals, local service agencies, schools, faith communities, businesses, boards of health, municipalities, and other concerned citizens working together to: identify the health needs of member communities, find ways to address those needs and improve a broad scope of health in these communities. The Community Health Improvement Plan (CHIP) includes Transportation and Access as one of four priority areas.

The Fitchburg Line Working Group is a group of local officials that has worked with consultants and the MA Bay Transportation Authority (MBTA) to examine options for improving commuter rail service on the Fitchburg Line. The special advisory commission was established through state legislation with the purpose of “promoting and facilitating inter-local and inter-regional cooperation and to investigate, propose, evaluate and vote on recommendations to,” (MassDOT) “on the need for transportation improvements, enhancements, and alternatives for the municipalities and regions serviced by the Fitchburg MBTA commuter rail line.” The Advisory Commission is comprised of 24 members including the MRPC.

The MJTC is a sub-committee of the MRPC that focuses on transportation and transit issues. In addition to acting as a sounding board for the development of all "3C" documents, the MJTC serves as a public outreach forum to solicit input from all members of the public.

Additionally, the MRPC will continue to work with MassDOT related to the implementation of regulations and requirements related to the federal transportation authorization.

**Previous Work:**

During FY 2017-2018, the Montachusett Regional Planning Commission (MPO) staff:

- Administered a viable 3C transportation planning process under the directives of the MPO, as outlined in the previous Unified Planning Work Program (UPWP);
- Scheduled, conducted and maintained an active citizen-participation process including private sector participation through the Montachusett Joint Transportation Committee (MJTC);
- Scheduled, conducted and maintained the operation of the Montachusett Metropolitan Planning Organization (MMPO);
- Coordinated the transportation planning program with local community planning and engineering departments;
- Maintained liaison and coordination with federal and state agencies;
- Administer all requirements and activities of the 3C planning contract.
- South Athol Road and Route 2 Studies Advisory Group, 2016 – Ongoing;
- CHNA 9, 2017- Ongoing;
- Harvard Town Center Operations Study Task Force, 2015-2016;
- Worcester County Highway Association, 2014 – Ongoing;
- Montachusett Regional Trail Coalition, 2012 – Ongoing;
- Montachusett Emergency Regional Planning Committee, 2006- Ongoing;

**Methodology:**

General 3C Support:

1. Provide administrative and technical support to the 3C process such as:
  - a. Provide liaison and short term planning assistance to all communities on transportation planning matters.
  - b. Review Federal and State transportation programs and regulations as required or necessary.
2. Administer the UPWP, 3C Contract, FTA/The Office of Transportation Planning Technical Studies and other transportation related grants.
3. Provide for and support public participation and private enterprise involvement in the 3C Process, FTA and Air Quality Programs.
4. Participation in informational programs on transportation, air quality, hazardous waste, energy conservation and accessibility planning.
5. Coordinate work with agencies involved in the 3C Contract, FTA and Air Quality Planning Programs.
6. Review MassDOT "084" Forms which affect highway capacity, speed, or VMT as part of the MPO's annual Air Quality Consistency Review.
7. Provide for participation of staff in educational development programs and conferences with concurrence with the Office of Transportation Planning and other agencies as needed.
8. Review and comment on traffic studies submitted to member municipalities by developers under the MEPA process or as needed/requested.
9. Insure that transportation/air quality decisions are consistent with regional policies, goals, objectives, and the State Implementation Plan (SIP).

10. Distribute for endorsement all necessary certification documents; maintain all MPO documentation records and files, and act as the general secretariat for the MPO in the Montachusett Region.
11. Work with and assist MassDOT and OTP with the implementation of rules and regulations related to MAP-21 and the FAST Act.
12. Coordinate work with state and regional agencies involved in the unified or combined Massachusetts state plan of the Federal WIOA.

Montachusett Regional Trail Coalition

- Continue participation with the Trail Coalition;
- Coordinate and liaison with the Nashua River Watershed Association and local trail advocates;
- Provide feedback and support related to trail development and implementation through the TIP process as well as other potential funding sources.

Fitchburg Line Working Group:

- Continue participation on and liaison with the working group;
- Continue interaction and work with local officials, MBTA and Devens Enterprise Commission to review information, analysis and recommendations regarding study as developed by consultant, and continue process for development of projects for funding through the TIP, etc.

Montachusett Regional Emergency Planning Committee

- Continue participation on and liaison with MREPC;
- Provide feedback and support services related to evacuation and emergency planning issues;
- Coordinate with local Regional Transit Authority on emergency issues and agreements.

Montachusett Joint Transportation Committee

- Continue scheduling, coordination, and participation of and with the MJTC;
- Provide support services related to meetings and issues raised by the MJTC;
- Coordinate development of federal certification documents with MJTC.

**Products:**

The maintenance and certification of a viable 3C transportation planning process.

Montachusett Regional Trail Coalition:

- Meeting and event support as needed.

Fitchburg Line Working Group:

- Project list for the Fitchburg Commuter Rail Line within the Montachusett Region for use as input to the MBTA's Capital Improvement Plan and where appropriate.

Montachusett Regional Emergency Planning Committee:

- Support maps and data as requested and where appropriate.

Montachusett Joint Transportation Committee:

- Meeting support as needed.
- Coordination with federal certification documents.

**Schedule:**

Management and support activities on a continuing basis throughout the program year.

Task Force and Organization activities to be carried out throughout the program year.

	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	July 2019	Aug 2019	Sep 2019
Support Activities												
Public Input												

**Task 1.14**

<b>FHWA PL</b>	<b>MassDOT</b>	<b>FTA-5303</b>	<b>LOCAL</b>	<b>TOTAL</b>
\$52,117	\$13,029	\$6,000	\$1,500	\$72,646

**Objective:**

To develop and obtain MPO endorsement of an annual Unified Planning Work Program (UPWP) that provides a description of the overall transportation/air quality planning activities, ongoing and anticipated in the region, including funding sources and agency responsibilities. Distribution and notification of documents, drafts and applicable items will follow and be consistent with the Montachusett Public Participation Plan (PPP).

**Previous Work:**

Previous Unified Planning Work Programs and other Federal and State grant applications (including Prospectus) produced annually.

**Methodology:**

In conformance with applicable Federal and State guidelines, prepare and continually maintain a Unified Planning Work Program that describes all transportation-related planning activities anticipated within the Region during the next or upcoming program year regardless of funding sources. The UPWP will include tasks and budget information based upon federal and state guidance.

Maintain the current UPWP during the program year and revise, adjust or amend the UPWP as needed. Adjustments and amendments will be based upon criteria previously identified in this document. Any and all public comment periods will follow procedures outlined in the current Montachusett PPP.

**Products:**

1. Annual Unified Planning Work Program endorsed by the MPO.
2. Amendments, as necessary, endorsed by the MPO.

**Schedule:**

Update and endorsed annually during the middle Segment of each Program Year. Development schedule is designed to coordinate with the state timeline for the Capital Investment Plan (CIP). Meetings to occur throughout the process from December 2018 to May/June 2019 time period. Draft documents prepared March to May 2019. MPO endorsement to be sought no later than June 2019.

Amendments are prepared and endorsed as necessary.

	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	July 2019	Aug 2019	Sep 2019
Start												
Public Input												
Draft												
MPO Endorsement												

**Task 1.24**

FHWA PL	MassDOT	FTA-5303	LOCAL	TOTAL
\$14,400	\$3,600	\$3,500	\$875	\$22,375

**Objective:**

Under this task the Montachusett MPO will continue to support, review and update the Public Participation Plan (PPP) developed for the UPWP, TIP and Regional Transportation Plan (RTP). These processes outline the public outreach procedures to be followed by the MPO in developing and amending the Region's RTP, TIP, UPWP and other major documents as required. It is designed to ensure that all interested public and private agencies, organizations, including non-profits, and citizens have equal access to all transportation related policies, projects, and decisions made within the region. The encouragement of meaningful participation of local individuals in metropolitan transportation planning is one of the most important goals of the "3C" (continuing, cooperative, and comprehensive) process and the Public Participation Program.

An updated and revised Montachusett PPP was developed and endorsed in May 2016 in accordance with federal and state guidelines and regulations. In addition, input from the MassDOT Office of Diversity and Civil Rights (ODCR) related to Title VI was incorporated as necessary. Utilizing the state's PPP as a model, the updated PPP was subject to a 45 day public review period. The PPP will continue to be reviewed and any subsequent revision or amendment will be implemented as deemed appropriate. Any action related to the PPP will seek endorsement by the MPO. Coordination with MassDOT's ODCR will also continue to be maintained and encouraged to ensure a viable and workable PPP.

In addition, staff will continue to monitor, support and encourage public participation through the MJTC, the Montachusett MPO and the MRPC. Staff will continue to prepare for and attend public meetings, seek to identify underserved and underrepresented groups, populations and organizations, identify methods to improve participation in the MJTC, MPO and MRPC and examine new and innovated methods to disseminate materials in order to meet environmental justice, Title VI and other federal and state requirements.

The MRPC website went through a significant update and redesign in spring 2013. This update has allowed staff to better maintain the site and by extension improve the experience and usage by the general public. Within the last few years, features related to online translation of the website have been incorporated across all webpages. Continued refinements to the MRPC web page ([www.mrpc.org](http://www.mrpc.org)) will continue to be undertaken. Efforts will continue to examine ways to make the MRPC website more accessible and easier to navigate for the public especially in relation to Title VI and Limited English Proficiency (LEP) needs or requirements.

**Previous Work:**

- Montachusett Public Participation Plan – May 2016.
- Title VI Annual Report – September 2017
- Title VI Annual Report – July 2015
- MRPC website redesign – 2013 and Ongoing
- Montachusett Public Participation Plan Amendment – April 2010
- Montachusett Public Participation Plan – June 2007

**Methodology:**

As part of the continued development of the MRPC website:

1. Prepare, publish, update and enhance the MRPC web page with information that indicates the status of transportation activities and programs in the region.
2. Continue refinements to the site in order to meet Title VI and LEP needs and requirements to better serve all the interested public.

3. When appropriate, hard copies of information contained on the web site will be distributed to the MPO, the MJTC, local planning boards, selectmen and the general public.

As part of the Public Participation Program/Plan;

1. Conduct review of state Public Participation Program and related Title VI input/comments from ODCR.
2. Identify elements of the PPP that need refinement and/or correction.
3. Update the Public Participation Program that details efforts to involve citizens in the transportation planning process in accordance with FHWA/FTA Planning Regulations as related to MAP-21 and any/all Title VI requirements.
  - a. Provide a proactive public involvement process that provides complete information, timely public notice, full public access to key decisions and supports early and continuing public involvement in developing UPWP's, Regional Transportation Plans, and TIP's and meets the eleven requirements and criteria specified in the regulations.
  - b. Continue efforts to broaden participation to include environmental, public health, elderly and disabled and other public and private interest groups for air quality and accessibility planning.
  - c. Continue efforts to address issues related to Title VI and public outreach and involvement to those identified populations.
4. Identify Innovative Public Participation Techniques and Processes: Based on the update process, staff will attempt to identify innovative public participation techniques and programs that will enhance public participation.
5. Identify Underserved/Underrepresented Groups: Under the Final Rule on Metropolitan Planning, MPO's are required to reach out to those groups who have been traditionally underserved in the provision of transportation services. MRPC staff will identify these groups as well as others who, while not underserved, are not participating in the transportation planning process and attempt to get them more involved.
6. Provide for Open Review of the Implementation of this Process: It is very likely that the Public Participation Program will require continued revision and refinement. MRPC will make sure that interested parties and the general public are involved in developing new and/or additional outreach procedures and will have ample opportunity to voice their opinions on these changes once proposed.
7. Implement Public Participation Plan in All Aspects of MPO Planning: In addition to its use in developing/amending the RTP, TIP, and UPWP, the Public Participation Plan will be used, where appropriate, in other aspects of the MPO planning process.
8. Present Transportation Plans and programs to the public for appropriate action.
9. Utilize MRPC internet web page to promote and solicit public input and involvement in all planning aspects. Actively promote availability of web page.
10. Individuals who need a reasonable accommodation to fully participate in MPO sponsored activities and meetings, such as a tape of the draft document to be considered, a sign interpreter, large print materials, transportation, etc. are encouraged to contact the MRPC office at (978) 345-7376 for assistance.
11. Maintain an ongoing review of the PPP to continue to address issues related to Environmental Justice and Title VI compliance. Update/change the PPP as needed.
12. Continue review of Limited English Proficiency Plan (LEP) and its relation to the PPP. Update LEP and PPP as needed to affectively address MAP-21 and FAST Act rules and regulations.
13. The PPP, where appropriate, seeks to address the needs of individuals with limited English-speaking proficiency as well as all Title VI populations. In addition, the PPP seeks to recognize where appropriate that the development of Regional Transportation Plans will include consultations, as appropriate, with state and local officials responsible for Land Use Management, Natural Resources, Environmental Protection, Conservation, and Historic Preservation.

**Products:**

- Revise/update the PPP to address Title VI and other issues identified and highlighted by MassDOT's ODCR as well as through federal and state rules and regulations.
- Updated Web Page; Print copies as needed.

- Continued maintenance of a viable Public Participation Plan for the TIP, RTP, UPWP and where appropriate, other aspects of MPO planning.

**Schedule:**

To be carried out throughout the program year.

Update/revision to the PPP to be completed and endorsed by the MPO as needed.

Website to be updated on a continuing basis as information developed.

	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	July 2019	Aug 2019	Sep 2019
Web Revisions												
PPP Review												

**Task 1.34**

<b>FHWA PL</b>	<b>MassDOT</b>	<b>FTA-5303</b>	<b>LOCAL</b>	<b>TOTAL</b>
\$22,400	\$5,600			\$28,000

**Objective:**

To develop and maintain a financially constrained staged multi-year program of transportation/air quality improvement projects that is consistent with the region's Transportation Plan, the State Implementation Plan, EPA's Air Quality Conformity Regulations and FHWA/FTA Planning Regulations; and to conduct, on an as needed basis, amendments and administrative adjustments to the TIP regarding new project selection, air quality reviews, etc. based upon procedures outlined within the TIP. Amendments and adjustments would include development of draft and final documents, public and MPO notification, etc. Staff developed in 2012-2013, a revised Transportation Evaluation Criteria (TEC) scoring mechanism based upon MJTC and MPO review and input. The TEC continues to be reviewed and updated as new MAP-21 and FAST Act regulations are promulgated as related to performance measures. Various performance measures developed as part of the 2016 Regional Transportation Plan will be evaluated for inclusion in the TEC analysis.

Distribution and notification of documents, drafts and adjustments/amendments will follow and be consistent with the Montachusett Public Participation Plan (PPP) adopted in 2016.

In addition, staff will conduct the process for MPO Subregions to select a Representative and Alternate based upon the guidelines established in the MPO Memorandum of Understanding (MOU).

**Previous Work:**

- Prior TIP's and Amendments developed on an annual basis.
- Regional Performance Measures and Goals through the 2016 Regional Transportation Plan - 2015
- Transportation Evaluation Criteria (TEC) Revision for the Montachusett Region – 2012-2013.
- MAP-21 Regionally developed Performance Measures – 2015/2016

**Methodology:****1. GENERAL**

- A. The TIP is a staged, multi-year, Intermodal program of transportation projects which are consistent with the regional transportation plan. It is a management and project tracking tool that is used to monitor the progress in implementing the Regional Transportation Plan;
- B. It seeks to insure early involvement of key stakeholders and citizens through adherence with the Public Participation Plan prepared under the 3C Task;
- C. The TIP includes sections on:
  1. Description of funding categories and amounts of Federal funds proposed to be obligated during each program year;
  2. Previously funded projects and programs from the last TIP year;
  3. A description of the criteria and Project Selection Process for prioritizing projects;
  4. Air quality significance and relationship of the TIP to the State Implementation Plan (SIP);
  5. A financial plan that compares revenue needs to revenue sources for highway and transit programs and identifies operating and maintenance costs for the existing transportation system. The MRPC recognizes the need to develop a financially constrained TIP and will work with all members of the MPO to ensure the development of such a document;
- D. The TIP utilizes a Transportation Evaluation Criteria in the review and prioritization process for identified projects. A continued review of the revised TEC will be conducted in order to ensure a regionally specific TEC. Performance Measures as developed during the development of the 2016 RTP and additional measures developed by federal and state officials according to MAP-21 and FAST Act requirements will be incorporated into the TEC as they come online.

- E. The TIP conducts a review and analysis where required to determine compliance and applicability to the Commonwealth's Global Warming Solutions Act. This includes an evaluation and tracking of Green House Gas (GHG) emissions and impacts of projects within the four years of the TIP.

## 2. DEVELOPMENT PROCESS OF THE FIVE-YEAR PROGRAM OF PROJECTS

- A. Update the list of all transit, highway, or air quality projects that are expected to require federal transportation funds for planning and engineering, construction or purchase during the federal fiscal years that the TIP is prepared for;
- B. Prepare a list of all regionally significant transportation projects or programs that require FHWA or FTA approval that are not using Federal transportation funds;
- C. For informational purposes list all regionally significant projects proposed to be funded with Federal funds other than from FHWA and FTA;
- D. For informational purposes list all regionally significant projects proposed to be funded with Non-Federal funds;
- E. The list of projects shall include:
  - 1. The official MassDOT identifying project title;
  - 2. Project description;
  - 3. Transportation Evaluation Criteria Score;
  - 4. Estimated total cost;
  - 5. The amount of Federal funds proposed to be obligated during each program year;
  - 6. Proposed source of Federal and non-Federal funds;
  - 7. Identification of the recipient/sub recipient and State and local agencies responsible for carrying out the project;
  - 8. Identification of those projects which will implement ADA plans.
- F. Project descriptions shall be of sufficient detail to permit air quality analysis in accordance with the U.S. EPA conformity requirements;
- G. The total costs of projects, seeking Federal funds, in each program year shall be in line with anticipated federal funds. Year of Expenditure (YOE) costs will be determined for projects contained within Years 2, 3, 4 and 5 for the TIP;
- H. The projects will be reviewed by MPO Staff, MassDOT Planning and MassDOT Highway Districts 2 and 3 based upon the procedures outlined in the Transportation Evaluation Criteria. Initial scores will be determined and reviewed by the MPO in order to establish the TIP;
- I. Projects will be reviewed and analyzed using MassDOT developed AQ spreadsheets in order to determine GHG impacts and/or reductions.

## 3. AIR QUALITY

Prepare all documentation necessary for an air quality consistency determination required by EPA's recent regulations of "Criteria and Procedures for Determining Conformity to State of Federal Implementation Plans of Transportation Plans, Programs, Projects Funded or Approved Under Title 23 U.S.C. of the Federal Transit Act".

- A. A review of the past year's accomplishments within the Transportation element of the SIP.
- B. The TIP is based upon a conforming Regional Transportation Plan (RTP) and is therefore a conforming document. As such a quantitative air quality analysis of all regionally significant projects will be conducted only as needed and, on those projects, not contained within the conforming RTP. Major air quality projects are defined as those that change vehicular speed, reduce VMT or affect travel delay; as promulgated and endorsed by the State Air Quality Task Force. This as needed analysis will include projects which require an Environmental Impact Study (EIS), Environmental Impact Report (EIR) or Finding of No Significant Impact (FONSI); and will utilize methodology endorsed by the State Air Quality Task Force. The analysis will be based on a network-based transportation demand

model which will be used to compare the action (build) alternatives to the baseline (no-build) alternative relative to air quality impacts.

- C. Prepare and review GHG emission impacts in order to assist in meeting requirements of the Commonwealth's Global Warming Solutions Act.

#### 4. PUBLIC PARTICIPATION

- A. There will be reasonable opportunity for public comment in accordance with the Public Participation Plan developed and endorsed by the MPO in 2016;
- B. The proposed and approved TIP will be published or otherwise made readily available for information purposes.

#### 5. CONSULTATION

Through the TIP development process, consultation with various state and local officials as well as other groups/organizations and stakeholders is required by applicable federal and state rules and regulations. Through meetings with MassDOT and the MJTC, as well as the procedures outlined in the Montachusett Public Participation Plan, notification will be made to a number of "agencies and officials responsible for other planning activities within the Metropolitan Planning Area (MPA) that are affected by transportation" of the development of the TIP. Further coordination and/or consultation will occur as early as possible and as needed and requested. All efforts will be documented within the TIP.

#### 6. TIP APPROVAL

The above completed documents will be reviewed and endorsed by the MPO. The endorsed product will serve as the required air quality consistency documentation necessary for DOT (FHWA/FTA) and EPA conformity determination.

#### 7. ADJUSTMENT/AMENDMENT/MODIFICATIONS

Amendments and Adjustments to the TIP will require MPO approval and action. Procedures outlined in the Montachusett Public Participation Plan will be followed.

#### 8. SELF CERTIFICATION

During the development of the TIP and at the time of endorsement by the MPO, the MRPC will conduct an annual Self Certification Compliance. This will certify that the Comprehensive, Continuing, Cooperative Transportation Planning Process for identified fiscal year in the Montachusett Metropolitan Planning Organization is addressing major issues facing the region and is being conducted in accordance with all applicable requirements.

Additionally, a self-certification will be conducted related to the Global Warming Solutions Act Requirements that will indicate compliance with applicable requirements of State Regulation 310 CMR 60.05.

#### 9. PERFORMANCE AND ECONOMIC MEASURES

When and where applicable, performance and economic measures will be examined so as to be used as part of TIP development and the Transportation Evaluation Criteria process. Economic measures will be based upon a projects ability to improve, enhance or initiate development within its planned limits. This could include the creation of sidewalks in a commercial area, the correction of safety or congestion issues that impact access to shopping areas or the upgrading of access to land areas previously undeveloped.

#### **Products:**

A MPO endorsed Transportation Improvement Program, including, Year 1, 2, 3, 4 and 5 elements, a ranking of the projects based upon the Transportation Evaluation Criteria process, a quantitative analysis of all transportation related emissions as a

result of the implementation of the TIP and a demonstration that its implementation is consistent with the SIP and meets EPA/DEP conformity criteria and disbursed in accordance with the latest distribution matrix.

Adjustments/amendments to the TIP as required. Amendments or administrative action based upon criteria outlined within the TIP.

The TIP and any adjustment or amendment will be a fiscally constrained document for each fiscal year covered.

Performance and economic measures based upon project types that can be used as part of evaluation criteria for TIP development.

**Schedule:**

The TIP will be submitted as required by MassDOT during the second/third quarter of the required Program year.

Draft document to be developed for public release and review in March 2019 to April 2019 time period.

Final and MPO Endorsed documents to be released in May 2019. Development schedule is designed to coordinate with the state timeline for the Capital Investment Plan (CIP). MPO endorsement to be sought no later than May 2019.

Amendments to the TIP are processed as needed.

Performance measures analysis ongoing throughout the year.

	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	July 2019	Aug 2019	Sep 2019
TIP Start												
Public Input												
Draft												
MPO Endorsement												

**Task 1.44**

FHWA PL	MassDOT	FTA-5303	LOCAL	TOTAL
\$41,600	\$10,400	\$6,000	\$1,500	\$59,500

**Objective:**

To continue to integrate the basic principles of Environmental Justice (EJ) and Title VI (compliance to the Civil Rights Act of 1964) into the 3C Transportation Planning Process. Attempts will continue to be made to expand upon and incorporate recommendations previously developed and agreed to by the MRPC. A recent revision of the Public Participation Plan (PPP) was completed in 2016 that sought to improve, encourage and expand participation and access in the transportation planning process by all area individuals. Issues related to Environmental Justice and its inclusion in local technical assistance reports, studies, etc. will continue to be reviewed to ensure the process contains no public involvement barriers to target populations. Methods to measure EJ efforts conducted through other studies/plans will be reviewed and compiled to allow for consistent “tracking” of regional efforts. The MRPC will continue efforts to meet Title VI requirements in accordance with state and federal policies. This includes the continued review and revision of the MPO Endorsed Limited English Proficiency Plan (LEP) as well as annual reports and updates to MassDOT regarding Title VI compliance and procedures. The MRPC will continue to work with the MassDOT Office of Diversity and Civil Rights (ODCR) towards the creation of a more robust Title VI program. Work efforts under this task will include continued working with MassDOT, ODCR, MassDOT’s Title VI Coordinator and the Massachusetts Office of Disability (MOD) to address areas identified by Federal Highway Administration (FHWA) and their incorporation into the planning process within the Montachusett Region. In addition, an equity analysis will be conducted for any 3C document that is developed.

**Previous Work:**

- Updated/Revised Public Participation Plan – May 2016
- Public Participation Plan & Amendment – 2007 & April 2010;
- 2016 Regional Transportation Plan;
- Montachusett Title VI Report – 2011, 2012, 2015, 2017
- Updated MRPC website – ongoing;
- Montachusett MPO Endorsed Limited English Proficiency Plan (LEP) – February 2013;

**Methodology:**

- Continue to identify procedures and methods to encourage and improve involvement and participation of all groups in transportation planning process.
- Coordinate discussions and meetings with MassDOT, FHWA and MRPC regarding Title VI issues;
- Continue to review PPP in relation to EJ and Title VI issues as necessary.
- Compile and submit on an annual basis to MassDOT a Title VI Report related to efforts and activities undertaken to meet applicable requirements.
- Continue to review and revise the Montachusett LEP Access Plan to reflect latest federal requirements.
- Continue to work and coordinate with MassDOT Office of Diversity and Civil Rights, MassDOT’s Title VI Coordinator and the Massachusetts Office of Disability (MOD) to address FHWA Title VI issues and needs.
- Continue to conduct equity analysis for Title VI and EJ populations for developed 3C documents, ex. the TIP and UPWP.

**Products:**

- Technical assistance memorandum, reports and workshops as needed.
- Mailing lists of EJ and Title VI related groups and organizations.
- Reports on efforts as needed.
- Limited English Proficiency Plan Updates
- Website updates and refinements
- Annual Title VI report

- Equity analysis of benefits and burdens within developed 3C documents.

**Schedule:**

To be carried out during the program year. Annual Title VI reports prepared and submitted – As required

	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	July 2019	Aug 2019	Sep 2019
Public Input												
Fed/State Coordination												

**Task 1.54**

<b>FHWA PL</b>	<b>MassDOT</b>	<b>FTA-5303</b>	<b>LOCAL</b>	<b>TOTAL</b>
\$38,400	\$9,600	\$3,000	\$750	\$51,750

2.0

DATA COLLECTION AND ANALYSIS FOR REGIONAL TRANSPORTATION PLANNING

**Objective:**

To review, update and develop improved regional demographics:

- MPO staff will collect updated socioeconomic American Community Survey (ACS) at the block group, tract, and community level as it pertains to the travel demand model calibration process as well as other program initiatives. In addition, data from the Massachusetts Travel Survey (MTS) will be utilized for calibrating the regional travel demand model. The MTS was a large-scale effort that collected information on residents' travel patterns, preferences, and behavior in order to help build a fuller, more accurate picture of transportation needs. This data will be utilized to update trip generation rates within the travel demand model.

To review, update and develop improved regional population, household, and employment projections:

- MPO staff will continue to refine population projections produced in-house in recent years. These projections were produced for each of the individual communities within the region, as well as the region as a whole, using the Hamilton-Perry method, a similar method to the Cohort-Component method. The production of these population projections allows MPO staff to compare our results with results from other projection initiatives across the Commonwealth, as well as analyze potential future growth trends for the region as a whole. In addition, MPO staff will play an active role in the development of new population, household, and employment projections for the Commonwealth with MassDOT, the Donahue Institute and the Metropolitan Area Planning Council (MAPC) through continued participation in the ongoing Socioeconomic Projections Committee.

MPO staff will continue and expand regional modeling efforts:

- Existing modeling efforts will be continued. The transportation model (Model) will be updated for the Region for use with transportation plans/studies; for meeting federal requirements and air quality laws and regulations. The Model will also be utilized to support other planning activities within the Region. The Model allows the MRPC to complete the following minimum planning activities: to model existing traffic impacts to reveal congested roadways, to forecast impacts on traffic as a result of population and economic development, to estimate Vehicles Miles Traveled, to evaluate transportation alternatives as needed. Modeling efforts will be expanded into greenhouse gas (GHG) modeling of policy choices.

**Previous Work:**

During the previous program years, the following elements to the model have been accomplished:

- Updated demographic data
- Updated demographic projection data
- Model utilized for review of projection data as part of RTP development
- Conversion to TransCAD from TRIPS (completed)
- Build out analysis for MRPC communities (completed)
- Socioeconomic Projections Committee

**Methodology:***Regional Demographics*

MPO staff will seek to undertake the following:

- Review input data used to develop the regional demographics and demographic projections for updates
  - Review US Census websites for the most recent updates to Census and ACS information
  - Review the MA Executive Office of Labor and Workforce Development for the most recent updates
  - Review the Massachusetts Travel Survey data for the Region
  - Review other data sources as needed

- Continue to construct development database of recent, current, or anticipated residential and commercial development projects in the Region
- Update existing population, household, and employment profiles of Region municipalities as needed

*Regional Demographics Projections*

MPO staff will seek to undertake the following:

- Update regional population and household projections based on methodology used in the FFY 2019 UPWP
  - Distribute population projection report from the UPWP to municipalities for feedback
  - Adjust assumptions within methodology to reflect concerns from the region’s communities
  - Produce updated household projections based on results of population projections from the previous year’s UPWP.
- Continue participation and work with the established Socioeconomic Projections Committee. Information developed by MassDOT, the Donahue Institute and MAPC will continue to be reviewed and feedback given as needed or requested.

*Existing Regional Model*

MPO staff will continue the ongoing process of refining and calibrating the regional model in TransCAD. Further development of the model will continue with the guidance of state officials, consultants, and other RPA’s. The possibility of developing a transit network / multi modal model will be researched. Efforts will include updating existing and projected demographic data, the roadway network to the latest MassDOT Road Inventory File, and traffic volumes utilizing the latest traffic counts.

During the program year, the products developed from the model, i.e. the base and future year scenarios used for network analysis of travel demand, will be reviewed, evaluated, and utilized as part of the development of the Transportation Improvement Program and other applicable studies/projects for the Region currently being developed. Reviews, comparisons and updates to and from the state related to the statewide model will continue as data is developed.

Interim documents, if produced, will be forwarded to the MassDOT Office of Transportation Planning and MassDOT Highway Division Districts as completed.

Training of MPO staff, in cooperation with state officials and guidelines, will continue as needed.

*Regional Greenhouse Gas Model*

MPO staff will seek to be trained in, develop, and utilize the Energy and Emissions Reduction Policy Analysis Tool (EERPAT) to analyze greenhouse gas (GHG) reduction scenarios and alternatives for use in the transportation planning process. EERPAT will allow staff to assess policy interactions in many scenarios. This modeling is part of the ongoing MassDOT effort to include GHG impacts in transportation planning processes.

**Products:**

*Regional Demographics*

Updated demographic data that will be used to develop demographic projections, modeling, and for a variety of other planning purposes in the Region. Beneficiaries include all the communities in the MRPC region.

*Regional Demographics Projections*

Updated demographic projections data will be used for modeling and a variety of other planning purposes in the Region. Beneficiaries include all the communities in the MRPC region.

*Existing Regional Model*

A model of the major road networks that can be expanded upon as needed and utilized for travel demand projecting. Various outputs will be generated based upon the needs of the MRPC, local officials and MassDOT. Beneficiaries include all the communities in the MRPC region.

*Regional Greenhouse Gas Model*

The impact of policies on GHG emissions at the regional level will be modeled.

**Schedule:**

*Regional Demographics*

To be carried out between December 2018 to January 2019

*Regional Demographics Projections*

To be carried out as follows: attend monthly meetings with MassDOT Socioeconomic Projections Committee regarding the development of updated population, household, and employment projections for the Commonwealth between October 2018 and June 2019. Update regional projections to reflect updated methodology of Commonwealth-wide projections and collect feedback on regional and state-wide projections as needed between March 2019 and August 2019.

*Existing Regional Model*

To be carried out as follows: network enhancements – October 2018 to June 2019; as needed model products – June 2019 to September 2019

*Regional Greenhouse Gas Model*

To be carried out throughout the program year

	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	July 2019	Aug 2019	Sep 2019
Regional Demographics												
Demographic Projections												
Regional Model												
GHG Model												

**Task 2.14**

FHWA PL	MassDOT	FTA-5303	LOCAL	TOTAL
\$22,200	\$5,550			\$27,750

**Objective:**

The MRPC will continue to improve and develop staff capabilities with the Geographic Information Systems (GIS) purchased during previous program years. The GIS allows the MRPC to store, display, manage and analyze transportation data for different work tasks. This task will also provide GIS assistance on projects conducted as part of this UPWP, such as, road inventory file updates, traffic count data and locations, trail data, pavement and crash data management, transit analysis and impact analysis and data collection/development. Data will be developed as part of various transportation analysis projects that can be utilized in the decision-making process.

MRPC will also continue to develop and enhance its web-based mapping system for use by member municipalities. This online system is entitled "MRMapper." Developed in 2012, the online web mapping system allows users to view, query and edit data utilizing advanced spatial analysis and geoprocessing tools. Prior information available to end users includes traffic count locations and data, functional classifications of roads, pavement conditions, crash locations, trails, environmental features, road jurisdiction and federal aid eligibility. As more datalayers are developed and as requests come in from member municipalities, the MRMapper system will continue to be expanded and updated. Staff will also continue its outreach efforts to educate local communities about the MRMapper system and its applicability to their needs. Presentations will be provided to local communities and organizations as requested.

Staff will also continue to develop and release various mobile applications in response to various data needs and projects. During the past year, MRPC has introduced or enhanced apps for handheld tablets that assisted communities with abandoned building locations, data collection efforts related to targeted neighborhoods for grant applications, evacuation scenario and critical infrastructure data collection and collection of infrastructure data for sewer systems. Additionally, requirements in the most recent EPA storm water MS4 permit resulted in web and mobile application development to assist member communities.

Staff will also continue their participation in the Massachusetts RPA GIS User Group MARGIS.

In addition, MRPC staff will continue to maintain, develop and archive digital data for the Region. Current hardware and software requirements for the GIS will be evaluated and upgraded as appropriate. Approval on expenditures over \$1,000 will be obtained prior to purchase.

This task will also provide support to member communities as part of the MRPC GIS Technical Assistance program. MRPC provides each member community with 8 free hours per calendar year of GIS technical assistance on various mapping and analysis projects. Staff consistently reviews the latest GIS principals and products and attempts to work with communities to identify areas where assistance and support can be provided. Prior work has included development of official town street maps, refinements to zoning maps, assistance in implementing online assessor maps, local pavement conditions and cemetery mapping. Efforts will continue to provide communities with feedback and assistance in developing their GIS capabilities, technical support related to equipment/software, mobile app development and data acquisition.

**Previous Work:**

- Mobile applications development (2014-2018);
- Montachusett Regional Transit Authority Transit Route update maps (2014-2018);
- Travel Time GPS Data Maps (2013-2014);
- Local educational meetings related to the use of MRMapper. (2014-2018);
- Update Trail Inventory Databases (2014-2018);
- RTP Update Mapping (2015);

- Pavement data updates/mapping (2014-2018);
- General GIS/Data Warehouse Maintenance (2014-2018);
- Traffic Count data updates/mapping (2014-2018);
- Title VI Mapping (2014)
- Sidewalk/Walkability Mapping – Groton & Westminster (2012);
- MRMapper online web-based GIS mapping system (2012-18);
- Fitchburg/Leominster Bus Route Sidewalk Inventory (2017);
- Shirley Village Railroad Crossing (2017);
- Transportation Improvement Plan (2017);
- Coordinated Public Transit - Human Services Plan Update (2017-18);
- Roadway Safety Improvement Project (2018);
- Shirley Complete Streets (2018);
- Fitchburg Trail Brochure (2018);
- Establishment of Technical Assistance Program for member communities.

**Methodology:**

- Maintain and incorporate GPS data as collected
- Continue support and enhancement of MRMapper online GIS program
- Provide local support related to the use of MRMapper
- Ongoing training and enhancement of staff and system abilities.
- Continued collection, analysis and refinement of data sets in order to provide inputs for various planning tasks.
- Integration of existing databases (accident and road inventory) into the GIS as appropriate.
- Support of UPWP tasks and special reports where appropriate and necessary.
- Produce handheld applications based upon project needs. Process will include:
  - Identification of transportation related need, ex. count locations, crash data collection, etc.
  - Define applicable data sets available
  - Define required data inputs for application
  - Compile application
  - Test application on various platforms
  - Refine, correct, and/or improve based on testing
  - Disseminate application to interested individuals or municipalities
  - Provide support services as needed
- Provide local support related to developed apps as requested.
- Local GIS Technical Assistance support.

**Products:**

Continue updating of a data report/listing of archived GIS data for member communities.

Base map and overlay files that can be utilized for numerous tasks including: travel demand modeling, traffic assignment, capacity analysis, accident reporting and analysis, pavement management, transit routing, environmentally sensitive areas, etc.

MRMapper Online Web based mapping system with relational data for MRPC communities.

Handheld apps as project needs are developed.

Information generated will be used to augment or as inputs to numerous studies and tasks as needed.

**Schedule:**

To be carried on throughout the program year.

Technical support: As needed throughout program year.

MRMapper applications and updates throughout the program year based on needs.

Handheld applications developed throughout the program year based on needs.

	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	July 2019	Aug 2019	Sep 2019
Technical Support												
MrMapper Updates												
App Development												
Datalayer Maintenance												

**Task 2.24**

<b>FHWA PL</b>	<b>MassDOT</b>	<b>FTA-5303</b>	<b>LOCAL</b>	<b>TOTAL</b>
\$43,200	\$10,800	\$4,000	\$1,000	\$59,000

**Objective:**

The objective of this task is to continue to develop and maintain a region wide database of information related to regional transportation issues that can be used in the development of studies, analyses and the decision-making process.

Included in this task is the yearly traffic counting program that utilizes automatic traffic recorders (ATRs) and the intersection Turning Movement Count (TMC) program in order to determine Level of Service (LOS) at major intersections. MRPC will also utilize a video traffic counting system purchased in early 2013 known as Miovision to conduct TMCs, volume counts, pedestrian/bicycle counts as well as other non-traditional/difficult counts. Two Radar counters were purchased in 2015 that will assist with speed studies for MRPC as well as community requests. This past year a bicycle and pedestrian counter (Eco Counter) was purchased to conduct bicycle and pedestrian data along roadways, rail trails and hiking trails. This data will assist with developing gaps in our bicycle and trail networks as well as degerming the bikeability and/or walkability for a particular area and establishing a bikeability or quality of service metric (see Task 2.74).

This program will also cover the regular data collection begun under prior work programs related to pavement conditions on federal aid eligible roads as part of the Pavement Management element of the Management Systems task. There are approximately 660 miles of Federal Aid roads in the Montachusett Region that will continue to be surveyed through a 2-year inventory program.

This task will also continue efforts to refine and update our GIS safety database as new crash data is obtained both from the state and local municipalities.

Data collected as part of the Sidewalk Inventory & Pedestrian/Bicycle Connections that were done in 2017 and 2018 were compiled into a workable database/management system that can be reviewed and tracked in upcoming years.

Under the regional safety review program staff will continue to cooperate with the State to meet the goals of the MAP-21 Safety Planning Factor which seeks to improve safety at high crash locations through the Highway Safety Improvement Program (HSIP). HSIP is a data driven program that needs to include crash report gathering and analysis, identification of hazardous crash sites, prioritization and implementation of projects that improve safety at these sites and evaluation of the effectiveness of those safety improvement projects. Staff will continue to refine and update our GIS Regional Crash Database as new crash data is obtained both from the state and local municipalities and to work with the MassDOT Road Safety Audit (RSA) program. Staff will seek to meet with communities in the region to identify and encourage safety improvement project development at high crash locations. Implementing low cost safety improvements will also be recommended.

In addition, staff will provide data support as needed in order to address local and regional issues as they are identified.

**Previous Work:****Traffic Count Program:**

- Traffic counts taken since the initiation of the program in FY 84-85;
- Computerized file system of historical traffic volumes on a town/roadway basis;
- Online maps and database of historical traffic count data;
- Video traffic counting system – 2013
- Radar traffic counting system – 2015
- Bicycle and Pedestrian counting system - 2018

#### Pavement Management Inventory Program:

- Database of Federal Aid Eligible Roads
- 2011 – 2014 reports “Regional Pavement Profile”
- 2 Year Inventory Schedule
- 2016 Montachusett Regional Transportation Plan
- Montachusett Pavement Inventory Program – 2008, 2009, 2010, 2011
- Establishment of GIS Datasets for MRPC
- Technical Support Groups (Pavement Management Users Group)

#### Regional Safety Review Program

- MRPC Regional Crash Database (ongoing)
- MRPC High Crash Locations website application (ongoing)
- MRPC Top Lane Departure Crash Locations website application (ongoing)
- Rt 70 & Old Union Tpk Roundabout (Lancaster) Before & After Safety Performance Analysis – 2017
- Route 2 Before and After Safety Performance Analysis – 2017
- South Athol Road Interchange Study, Athol – 2017
- Shirley Railroad Crossing Review and Analysis – 2017
- RSA - Lunenburg Rd (Rt 70) at Main St (Rt 117), Lancaster RSA - 2017
- RSA - John Fitch Highway at North St & Pearl St, Fitchburg RSA - 2017
- RSA - Westminster Street at Ashburnham Street, Fitchburg RSA - 2017
- RSA - Westminster Street at Simonds Road, Fitchburg RSA - 2017
- RSA - Route 12 at Nelson Lindell Hamilton, Leominster RSA – 2017
- Traffic Study: Groton Rd (Rt 225) and Townsend Rd Intersection, Shirley - 2016
- RSA - Route 2 & Route 68, Gardner RSA - 2016
- RSA - Leominster Connector & Nashua St, Leominster RSA - 2016
- RSA - Route 12 & N Row Rd, Sterling RSA - 2016
- 2016 Montachusett Regional Transportation Plan
- RSA - South St / Electric Ave / Old South St intersection, Fitchburg RSA - 2015
- RSA - Route 12, Leominster RSA – 2015
- Reduce lane Departure Crashes at High Crash Curve Locations Program, Lancaster - 2014
- Traffic Study: John Fitch Highway and North St/Pearl Hill Rd Intersection, Fitchburg - 2014
- RSA - Route 140 at Route 2A, Westminster RSA – 2014
- Route 117 Corridor Profile, Lancaster - 2013-2014
- Route 12 and Willard Street in Leominster Before and After Safety Performance Analysis - 2013
- RSA - Route 101 (Center Street)/Corey Hill Road/Williams Road, Ashburnham RSA - 2013
- RSA - Water Street at High Street and Water Street at Main/Sterling Street, Clinton RSA - 2013
- RSA - Leominster Road (Route 12) at Chocksett Road, Sterling RSA - 2012
- 2012 Montachusett Regional Transportation Plan
- RSA - Route 140, Winchendon RSA - 2012
- RSA - Route 13, Leominster RSA - 2012

#### **Methodology:**

The 2018-19 Traffic Count program will consist of the following sub-tasks:

- Provide assistance to MassDOT's state-wide traffic counting program. MRPC will count approximately 31 locations in the region normally taken as a part of the MassDOT traffic count program;
- Maintain a testing program of traffic counters to ensure accuracy of data based upon MassDOT procedures;

- c. Continue to establish database link of regional counts to GIS;
- d. Maintain ADT computer file system on a town/roadway basis;
- e. Continue to develop, refine and implement a permanent regional traffic counting program of approximately 300 locations;
- f. Conduct Turning Movement Counts (TMC) at major intersections region-wide as part of the regional traffic counting program to determine Level of Service (LOS) for those locations.
- g. Provide for special count requests within the region as requested for local technical assistance.
- h. Update traffic count data posted on MRPC website ([www.mrpc.org](http://www.mrpc.org)).
- i. Implement Video Traffic Counting System at various locations to collect TMCs, volumes, bicycle/pedestrian trail counts, etc.
- j. Conduct Bicycle and Pedestrian counts along various trails and roadways to determine bike and walkability as well as identify multimodal gaps.
- k. Upload all traffic count data to the statewide MS2 website.

As part of the Regional Safety Review program, the following will be undertaken:

- a. Staff will attend SHSP and HSIP meetings and receive training as needed.
- b. To update the GIS Regional Crash Database the following will be undertaken:
  - 1. Receive and collect crash data from MassDOT and communities;
  - 2. Review, verify and correct crash data at selected locations;
  - 3. Coordinate crash data with GIS for mapping purposes;
  - 4. Update crash data and candidate high crash locations for communities for their review.
- c. Create individual community reports of candidate high crash locations from the updated GIS Regional Crash Database for the purpose of seeking the development of safety improvement projects.
- d. Seek to meet with communities in the MRPC region to discuss developing projects or to recommend further study at the candidate high crash locations or other locations identified through safety analysis, local requests, state request, local or regional studies or other data.
- e. Continue to work cooperatively with the MassDOT RSA program to conduct RSAs at candidate high crash locations to meet the goal of the state HSIP to develop safety improvement projects for the TIP. An RSA will be sought on any TIP project that has candidate high crash location(s).
- f. Recommend further study into implementing low cost safety improvements that can be constructed relatively quickly to help remediate a safety problem at candidate high crash locations.

As part of the Regional Trail Planning and Printing program, the following will be undertaken:

- a. Continue to work with the Montachusett Regional Trail Coalition;
- b. Conduct trail events and workshops.
- c. Print the Regional Trail Guide and distribute throughout the region.

**Products:**

Traffic Count Program

- Complete 75 to 100 traffic counts throughout the Region (including approximately 25 MassDOT permanent coverage stations);
- Complete 10 to 20 TMC at intersections throughout the Region;
- Complete 3-5 bicycle and pedestrian counts throughout the Region;
- Maintain a file of traffic counts on a town/roadway basis and a datalayer of regional counts with GIS;
- Maintain documentation/records of testing procedures and accuracy of equipment utilized in data collection
- Update and maintain count data on MRPC website and statewide MS2 site.

Regional Safety Review Program

- Updated GIS Regional Crash Database;
- Updated Candidate High Crash Locations MRPC website application;
- Regional and Community Candidate High Crash Locations Reports and potential list of safety improvement projects;
- Completed RSAs at various locations.

**Schedule:**

Most data collection to occur from April through November, depending upon local weather conditions. Other support efforts likely to occur throughout the program year, i.e. LOS analysis, Travel time analysis, etc.

Safety Database Program – Data collection – October 2018 to April 2019; Data Review – February 2019 to August 2019

Regional Safety Review Program – Data collection and review – October 2018 to May 2019; Community Reports and outreach – January 2019 to August 2019

Sidewalk Inventory & Pedestrian/Bicycle Connections Program – Data collection and Review – October 2018 to August 2019 depending on weather conditions

	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	July 2019	Aug 2019	Sep 2019
Traffic Counts												
Safety Data Collection												
Safety Data Review												
Sidewalk & Ped/Bike												

**Task 2.34**

FHWA PL	MassDOT	FTA-5303	LOCAL	TOTAL
\$31,000	\$7,750			\$38,750

**Objective:**

The objective of this task is to continue regional efforts to maintain a Pavement Management program for federal aid eligible roads.

The Pavement Management Program, begun under prior work programs, will continue to evaluate federal aid eligible roadways within the Region. There are approximately 660 miles of Federal Aid roads in the Montachusett Region that will continue to be surveyed and incorporated into the pavement management program. MRPC has established a four-year program to inventory and analyze these roads. RoadManager Software will be used for the fourth year as the MRPC continues to build its database. At the completion of data collection and analysis efforts during this program year, the first fully updated report of the regions roadways since the 2016 RTP will be available. The annual "Regional Pavement Profile" report will include a comprehensive analysis comparing the condition of these roadways and the changes over this four-year period.

In addition, this task will allow for our participation in the RPA/State Pavement Management User Group as well as other potential work based upon arrangements and directives from MassDOT and FHWA.

Staff will also continue its outreach to area DPW Superintendents, Planning Directors, etc. in order to provide communities with pertinent data and materials. Communities utilize their limited Chapter 90 funds to address local road condition issues based upon various local parameters. In order to assist them in attempting to maximize the value of funding, this program will continue to provide available data related to their towns through various outreach methods.

Staff will also maintain its membership and participation in the Worcester County Highway Association.

**Previous Work:**

- Database development under new RoadManager Software
- RoadManager software program purchase and training
- Data migration to Road Manager system
- 2016 Montachusett Regional Transportation Plan
- 2012 Montachusett Regional Transportation Plan
- 2011 – 2018 reports "Regional Pavement Profile"
- Database of Federal Aid Eligible Roads
- 4 Year Inventory Schedule
- Montachusett Pavement Inventory Program – 2008 - 2018
- Technical Support Groups (Pavement Management Users Group)

**Methodology:****Pavement Management**

- Continue new database development with new software
- Data collection based on Road Manager input requirements
- Analysis reports utilizing new Road Manager software
- Develop local condition maps for member communities.
  
- Participation in RPA Pavement Management Users Group as needed.
- Technical assistance to MassDOT Highway as part of state PMS program based upon mutually agreeable scope.
- Update PMS database, including recent repair/reconstruction activities.
- Assist interested communities with PMS programs as requested.

- Public outreach and presentation where necessary and requested
- Conduct project specific pavement analysis and profiles as needed
- Assist communities in the compilation of local projects, the PNF/PIF process and public awareness as needed.

**Products:**

Pavement Management

- Distribution of annual mailing consisting of pavement related activities including but not limited to: Report information, Ch. 90 information, Questionnaires, Services, etc.
- Distribution of year-end report “Regional Pavement Profile” analyzing region and municipal pavement data
- Distribution of individual municipal specific profiles as needed
- Pavement Management database for federal aid eligible roads.
- Integration of data and analysis into project level reports as needed.
- Community condition maps.
- PNF/PIF’s for federal aid eligible roads based upon community needs

**Schedule:**

Pavement Management – Data collection efforts to be carried out during October/November 2018 and April to September 2019. Analysis and review of data to be conducted from December 2018 to September 2019.

	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	July 2019	Aug 2019	Sep 2019
Pavement Data Collection												
Pavement Analysis												

**Task 2.44**

FHWA PL	MassDOT	FTA-5303	LOCAL	TOTAL
\$18,600	\$4,650			\$23,250

**Objective:**

This task will address the MRPC Safety Performance Measure goal of reducing fatal crashes in the MRPC region (Region). During the 3-year period of 2012-2014, 95% (44 of 49) of the fatal crashes that occurred in the Region happened at locations other than where High Crash Locations\* (HCLs) took place. Another disparity lies with number of communities in the Region that experienced fatal crashes versus the number of communities that experienced HCLs - 82% (18 of 22) experienced at least one fatal crash while only 59% (13 of 22) experienced at least one HCL. Additionally, fatal crashes rarely occurred in clusters as only one location in the Region experienced two fatal crashes.

The purpose of this corridor safety analysis is to study the crash characteristics of at least one corridor that experienced at least one fatal crash and to provide an inventory of proven safety improvement countermeasures that can be implemented to reduce fatal crashes and improve overall safety on the corridor(s). The corridor(s) will then be considered for further study during the following UPWP program year and/or project development.

**Previous Work:**

- Preliminary analysis of fatal crash locations & their relationship to high crash locations / injury crashes / PDO crashes - 2018
- \*Roadway Safety Improvement Project Development Report - 2018
- Before and After Safety Performance Analysis of Route 2 Safety Improvements - 2017
- Route 2 South Athol Road Proposed Interchange Study - (2017 - 2018)
- Traffic Study: Groton Rd (Rt 225) and Townsend Rd Intersection, Shirley - 2016
- Montachusett Regional Transportation Plan - 2016
- Montachusett Crash Database - (ongoing)
- Montachusett Traffic Count Database - (ongoing)
- Road Safety Audits- (numerous and ongoing)
- Route 140 North Safety Improvement Study in Westminster, Gardner and Winchendon - 2011

**Methodology:**

This task will begin with outreach to the communities of the Region to inform them of this task. MRPC staff will inform the communities at MPO, MJTC, MPO Subregion meetings and through social media. MRPC staff will then schedule meetings with a number of communities to discuss conducting a safety analysis of the corridor(s) that experienced at least one fatal crash.

Below is a list of randomly selected corridors sorted in descending order by community from the preliminary analysis of fatal crash locations (see **Previous Work** section above):

Communities	Corridor Names	Fatal	Injury	PDO	Total Corridor Crashes
Ashburnham	Route 12 Winchendon Road, Ashburnham	1	2	5	8
Ayer	Route 2A & Washington Street, Ayer	2	18	57	77
Clinton	Routes 62/70/110 Main Street, Clinton	1	17	31	49
Fitchburg & Ashby	Route 31, Fitchburg/Ashby (south)	3	19	92	114
Gardner	Green & Elm St, Gardner	1	25	68	94
Leominster	Route 12 Central Street, Leominster	1	32	156	189
Lunenburg & Leominster	Rt 13 Electric Ave Main St, Lunenburg /Leominster	2	35	121	158
Royaston	Route 32 Athol Richmond Road, Royaston	1	0	0	1

The corridor safety analysis will be conducted as follows:

The most recent MassDOT crash data (2013-2015) will be selected for the corridor(s) to be analyzed. Crash reports for the most recent five-year period from community(ies) will be obtained for the corridor(s) to be analyzed. Crash data from the crash reports will then inputted into a database and geocoded. The safety analysis will potentially include the following analysis types and crash categories: crash rate, crash severity, type of collision, crash manner, driver characteristics, road and vehicle characteristics, time of year, time of day, weather conditions, and crash diagrams and maps will be created. Other categories may be added as needed. For each category, results of the analyses will be reported based on the crash severity associated with the crashes.

An inventory of proven safety improvement countermeasures that may be applicable to the corridor(s) that can be implemented to reduce fatal crashes and improve overall safety on the corridor(s) will be compiled from sources such as MassDOT, FHWA, and other sources.

Interim documents, if produced, will be forwarded to MassDOT as completed.

**Products:**

The final product will be a safety analysis of the corridor(s) where at least one fatal crash occurred that identifies safety issues and will provide a comprehensive list of proven and potential safety improvement countermeasures. The final product may be used as a source for further study. Potential future HSIP projects for inclusion in the TIP may also be identified.

**Schedule:**

To be carried out throughout the program year as follows:

	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	July 2019	Aug 2019	Sep 2019
Community Outreach												
Crash Data Collection												
Crash Data Analysis												
Inventory of Safety Improvement Countermeasures												
Draft												
Final Report												

**Task 2.54**

FHWA PL	MassDOT	FTA-5303	LOCAL	TOTAL
\$21,000	\$5,250			\$26,250

**Objective:**

This task will address the Performance Measure Review and analyze 1 to 2 freight corridors through development of a Unified Planning Work Program (UPWP) task every 5 years for Goal 5 - Improve Economic Vitality and Freight Movement of the 2040 Montachusett RTP. This task will identify and prioritize freight corridors in the Montachusett Region for further study.

**Previous Work:**

- Freight Corridor Identification and Screening, 2018

**Methodology:**

MRPC Region (Region) Freight Corridor Screening

- Identify Freight Movement Activity Centers (Centers)
  - Review existing databases and/or conduct field reviews in the Region to identify shippers, truckers, and other sites (such as post offices) that generate freight or heavy truck traffic.
  - Create Freight Corridors (Corridors) using GIS by identifying where the Centers are located and the routes they are located on.
  - Identify the access type provided to the Centers.
    - Observe the operations at the driveways or intersections and note the degree of difficulty of making turns into or out of the Centers.
  - Identify the nearest non-Region regional freight facilities, that may indicate the direction of entering/egressing heavy trucks for the Centers.
- Identify bridge restrictions and other bridge constraints for heavy trucks along the Corridors.
- Identify heavy truck constraints to accessing Route 2 to and from the Corridors.
- Crash Data Analysis
  - Analyze crash data for the identified Corridors and review the data for the number of crashes involving trucks.
  - Review crash data for HSIP eligible crash locations and their proximity to the driveways and access points of the Centers.
  - Review other crash data and report trends or observations as to the types of crashes and their locations.
  - Based upon this analysis, identify any potential trouble spots that may require additional and more detailed analysis of crash data and trends.

Depending on the results of the Screening, a Priority Freight Corridor Study List will be developed and Corridors will be recommended for further study. At least one Corridor will be selected from this list for further study for the FFY 2019 UPWP.

Public participation will be sought from freight stakeholders directly. Their involvement will be a valuable resource for undertaking the task of improving economic vitality, freight movement, and the challenges that they face in the MRPC region. Additional efforts will be made to identify and coordinate with these stakeholders.

Information developed and contained within the MassDOT Freight Plan will be reviewed and coordinated with local data and issues. Recommendations as well as potential projects and/or issues contained within the MassDOT Freight Plan will be examined for connections to local level problems and where appropriate, identified. Efforts will be made to ensure a close connection between the local and statewide plans.

**Products:**

Prioritized Freight Corridor Studies Report for the MRPC Region.

**Schedule:**

	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	July 2019	Aug 2019	Sep 2019
Public Participation												
ID Freight Centers												
ID Bridge Restrictions												
ID Rt. 2 Access Rest.												
Crash Data Analysis												
Draft												
Final Report												

**Task 2.64**

<b>FHWA PL</b>	<b>MassDOT</b>	<b>FTA-5303</b>	<b>LOCAL</b>	<b>TOTAL</b>
\$22,600	\$5,650			\$28,250

**Objective:**

This task will be in two parts. 1. Trail Planning- Staff will work with the Montachusett Regional Trail Coalition (MRTC) and other local trail advocates and groups to assist with trail planning and other related tasks. These tasks will include trail event and workshop planning, marketing and website design, community outreach, and grant application assistance when needed. In addition, staff will utilize bicycle and pedestrian data collected in the traffic count program to establish multimodal gaps and potential projects for future planning and funding that will coincide with the statewide bike and pedestrian plans. A bikeability or quality of service metric will also be established. Staff will also work with the MRTC and member communities in an attempt to develop a bikeability index and/or quality of service metric for the region. 2. Mapping- Staff will work to print the updated Regional Trail Guide and distribute this guide throughout the Montachusett Region.

**Previous Work:**

- Montachusett Regional Trails Coalition work (2012-present)
- Regional Trail Inventory Update (2012 & 2018)
- Sidewalk Inventory & Pedestrian/Bicycle Connections (Fitchburg/Leominster/Gardner)
- Trail Connections (2016)
- Safe Routes to School Reports (2008-2011)
- Walkability Reports – Westminster & Groton (2012)

**Methodology:**

1. Review the MRTC’s Strategic Plan and establish tasks to assist with implementing goals & objectives
2. Plan & conduct 3-5 trail workshops/events
3. Conduct a search of current metrics related to bikeability and quality of service.
4. Examine data needs to develop these metrics
5. Discuss and coordinate with the MRTC in order to make it applicable to the Montachusett Region and where appropriate develop community indexes
6. Print 20,000 copies of the updated Regional Trail Guide

**Products:**

The final product will be a report detailing the tasks that were completed for the Montachusett Regional Trail Coalition (MRTC) and the final printed Regional Trail Guides.

**Schedule:**

	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	July 2019	Aug 2019	Sep 2019
Review Strategic Plan												
Establish Tasks												
Plan & Conduct Trail Events												
Print Trail Guide												
Draft Report												
Final Report												

**Task 2.74**

FHWA PL	MassDOT	FTA-5303	LOCAL	TOTAL
\$22,400	\$5,600			\$28,000

3.0

TRANSPORTATION PLANNING STUDIES

**Objective:**

The objective of this task is to complete the development of an update to the 2016 Regional Transportation Plan (RTP) for the Montachusett Region that was endorsed by the Montachusett MPO on July 30, 2015. Federal regulations require that the RTP be updated and revised every 4 years. The RTP is a comprehensive, multi-modal transportation plan which is used to enhance the decision-making capability of local, regional, and state officials by identifying both short range and long-range improvements to the regional transportation system. This effort will reflect the 3C (Continuing, Cooperative and Comprehensive) process and will be based on federal and state policies, regional goals and objectives, detailed technical data and analysis, input from local technical assistance activities conducted by the RPA, and citizen participation.

Federal legislation (Intermodal Surface Transportation Efficiency Act (ISTEA), 1991) established the primacy of the Regional Transportation Plan in the 3C transportation planning process. Provisions in the Act governing the contents of the plan were designed to promote the development of an intermodal transportation system and to have that system help meet the NAAQS (National Ambient Air Quality Standards) set forth in the CAAA (Clean Air Act Amendments) of 1990 and the mobility provisions established under ADA (Americans with Disabilities Act). ISTEA identified key factors which must be considered in developing the Transportation Plan including 20-year forecasts of population and employment, the elimination and prevention of congestion, consideration of the land use impacts of planned transportation projects, and the preservation of existing transportation facilities as well as a number of additional areas. The 2016 RTP was developed in accordance with these requirements and the requirements of MAP-21 (Moving Ahead for Progress in the 21<sup>st</sup> Century) (2012). The update for the 2020 RTP will likewise be developed in accordance with all necessary requirements contained within the new federal legislation FAST Act (Fixing America's Surface Transportation) (2015) and the MassDOT GreenDOT Policy, Mode Shift Goals, youMove Massachusetts, and the Healthy Transportation Policy Directive.

The RTP comprehensively examines the existing transportation network in the region, identifies those issues and problems which either require or will require improvement, and outlines possible courses of action designed to facilitate these improvements. It considers virtually all forms of transportation in the region and is developed so that it is consistent with the region's comprehensive, long-term land use plans as well as any social, economic, environmental, and energy conservation goals and objectives.

Information developed as part of the 2016 RTP, previous studies conducted during past program years, as well as the MRPC's GIS, will be utilized as part of the 2020 RTP as well as a new Air Quality Conformity Determination based upon the requirements of EPA (Environmental Protection Agency) and DEP (Department of Environmental Protection).

Short and long-range improvements related to transit will also be identified and incorporated into the 2020 RTP in order to promote the development of an intermodal transportation system that will help meet NAAQS set forth in the CAAA and the mobility provisions established under ADA.

The updated 2020 RTP will address safety, climate change, livability and pavement management in the region. The principals and strategies of Livability will be reviewed and incorporated with the various chapters and policies of the Montachusett RTP were applicable. The ongoing safety and pavement management data compiled for the Montachusett Region will be utilized to assess operation and maintenance issues related to regionwide safety and pavement needs.

**Previous Work:**

- 2016 Montachusett Regional Transportation Plan - July 30, 2015
- Adopted MassDOT Safety PMs for Federal Highway Reporting - 2018

- Roadway Safety Improvement Project Selection Report - 2018
- Pavement Management Systems - 2018
- Traffic Count Program - 2018
- Regional Crash Database - 2018
- Geographic Information System for the Region - 2018
- Road Safety Audits - 2018
- Regional Travel Demand Model - 2018
- Public Participation Plan - 2018
- Regional Trail Inventory - 2018
- Roadway Safety Improvement Project Selection Report - 2018
- Climate Change and Transportation in the Montachusett Region - 2018
- Sidewalk Inventory and Pedestrian/Bicycle Connections – 2018
- Freight Corridor Identification and Screening - 2018
- Regional Development Initiative - 2018
- Route 2 at South Athol Road Proposed Interchange Study - 2018
- Coordinated Transit Plan Update - 2018
- Ridership Survey Distribution - 2018
- Local ADA Transition Plan Development - 2018
- Regional Transportation Needs Assessment - 2018
- Montachusett PMs Report - 2018
- Stormwater Data Development Program - 2017
- Shirley Railroad Crossing Review and Analysis - 2017
- Updated PM Tracking spreadsheets - 2017
- Updated PM Dashboard and Data Warehouse - 2017
- PM Dashboard and Data Warehouse - 2017
- PM Tracking spreadsheets - 2017
- Community Trail Brochure – 2017 & 2018
- Montachusett Trail Map & Visitor Guide - 2018
- Roadway & Alternate Mode Access to Commuter Rail in the Region - 2013-14
- Fixed Route Services Maps, Fitchburg/Leominster/Gardner - 2014
- Fitchburg Commuter Rail Line Improvement Implementation plan - 2005
- Fitchburg Commuter Rail Line Corridor Alternative Analysis Scoping Package - 2007
- Fitchburg Commuter Rail Line Service Expansion Study - 2005
- Fitchburg Commuter Rail Line Improvement Project Alternatives Analysis - 2007

**Methodology:**

The following areas will be conducted/developed utilizing traditional system planning combined with public participation as part of the revision process:

1. Identify various stakeholders within the region and coordinate meetings with individuals/groups to incorporate and integrate their thoughts/ideas/input/plans into the RTP. Efforts will be made to conduct coordination as early as possible in the update process. Stakeholders are considered members of the public, the business community, various local and state agencies, governments and other interested parties. Efforts will be documented within the final RTP
2. Review previous public outreach program. Update and revise as needed
3. Update and re-launch RTP specific website
4. Conduct local meetings and workshops to discuss and present the RTP

5. Review and incorporate prior studies and analyses into identified RTP elements
6. Update relevant chapters to incorporate FAST Act requirements and the MassDOT GreenDOT Policy, Mode Shift Goals, youMove Massachusetts, and the Healthy Transportation Policy Directive
7. Develop and review evaluations of alternative solutions to identified problem areas
8. Develop plan elements to ensure a multi-modal approach. To include highway, mass transit, pedestrian and bicycle facilities, railroads and airports
9. Develop and review the air quality issues and strategies of the plan and its relationship to attaining and maintaining NAAQ Standards. Conduct Air Quality Conformity Determination based upon requirements established and by utilizing the Regional Travel Demand Model
10. Development of the Plan will include consultations, as appropriate, with state and local officials responsible for land use management, natural resources, environmental protection, conservation, and historic preservation.
11. Develop and review the Financial Section of the Transportation Plan: Federal regulations require that each project and/or program appearing in the RTP must also have an identified source of funding that can reasonably be assumed to be available for implementation. Staff will work with MassDOT, FHWA, the Office of Transportation Planning and FTA to refine the transportation project funding level projections made in the RTP. Staff will also examine in greater detail the following basic activities required to produce a Long-Range Transportation Plan:
  - Assessment of current financial conditions;
  - Projection of future financial requirements for operation and maintenance;
  - Assessment of ability to meet future financial requirements, based on analysis of existing revenue sources;
  - Identification of potential revenue sources to meet possible future shortfalls, including innovative financing methodologies;
  - Analysis of existing and future revenue sources, to include long-term availability and sensitivity to external factors;
  - Forecasts of baseline transportation system costs for use in making service and investment decisions
12. Seek full MPO endorsement of the plan when applicable
13. Print document for distribution when applicable. Electronic versions will also be distributed

Interim documents, if produced, will be forwarded to MassDOT as completed.

**Products:**

The final product will be a comprehensive, multi-modal transportation plan endorsed by the MPO for the Montachusett Region to include an Air Quality Conformity determination. Distribution of endorsed copies will be to local public officials, MPO and MJTC members and other interested parties. Copies will also be made available to the general public thru the MRPC website ([www.mrpc.org](http://www.mrpc.org)).

**Schedule:**

To be carried out throughout the program year as follows:

	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	July 2019	Aug 2019	Sep 2019
Identify Stakeholders	■	■	■									
Review & Update Public Outreach	■	■										
Launch RTP Website		■	■									
Conduct Public Outreach			■	■	■	■						
Incorporate Prior Studies			■	■	■	■	■					
Update Chapters	■	■	■	■	■	■	■	■				
Evaluation of Alternatives	■	■	■	■	■	■	■	■				
Multi-modal Approach	■	■	■	■	■	■	■	■				
Air Quality Issues				■	■	■	■	■				
Plan Consultations				■	■	■	■	■				
Financial Section					■	■	■	■				
MPO Endorsement										■		
Print RTP									■	■		

**Task 3.14**

FHWA PL	MassDOT	FTA-5303	LOCAL	TOTAL
\$56,200	\$14,050	\$7,000	\$1,750	\$79,000

**Objective:**

The creation of Performance Measures (PMs) was a main focus of the 2016 Montachusett Regional Transportation Plan (RTP). PMs remain a priority under the federal authorization "Fixing America's Surface Transportation (FAST) Act". PMs are meant to inform and improve the MPO decision making process. PMs are set to achieve a desired set of goals for a multimodal transportation network. After an MPO developed their set of goals and PMs they are tracked over time to determine the progress in meeting them.

This task includes continued work on maintaining a centralized database of PMs (or PM Dashboard) which was originally created during the 2016/2017 UPWP. This PM Dashboard is designed to monitor PM progress and inform MPO data needs throughout the program year. The PM Dashboard will also inform the public on the conditions in the transportation network and progress being made towards goals which have been set.

This task will also include the coordination of existing regional PMs with state and federal PMs as they are developed.

Effective on April 14, 2016 FHWA established a final rule on the first of its Performance Measures, Safety Measures (PM 1). Targets related to PM 1 were then set by MassDOT. In FFY 2018 the Montachusett MPO has chosen via a formal vote to adopt the statewide safety performance measure targets set by MassDOT for Calendar Year 2018.

It is anticipated that the following performance measures which were implemented by FHWA and targets set by MassDOT be presented to the MPO in November.

- Pavement and Bridge Condition Measures (PM 2)
- Performance of NHS, Freight and CMAQ Measures (PM 3)

Targets established by MassDOT in reference to PM 2 and PM 3 may then be adopted by the MPO, or the MPO may adopt its own targets.

In July 2016, FTA published a Final Rule for Transit Asset Management (TAM). The rule requires FTA grantees to develop asset management plans for their public transportation assets, including vehicles, facilities, equipment, and other infrastructure. MPO staff will work with MART to develop and present their TAM plan to the MPO in sometime in the fall.

**Previous Work:**

- Adopted MassDOT Safety PMs for Federal Highway Reporting - 2018
- Roadway Safety Improvement Project Selection Report - 2018
- Montachusett PMs Report - 2017
- Updated PM Tracking spreadsheets - 2017
- Updated PM Dashboard and Data Warehouse - 2017
- PM Dashboard and Data Warehouse – 2017
- PM Tracking spreadsheets - 2017
- Montachusett Trail Map & Visitor Guide - 2017
- Montachusett Regional Transportation Plan - 2016
- Goals & Objectives for the 2016 Regional Transportation Plan - 2015
- Regional PMs and Targets - 2015

- Regional Crash Database (ongoing)
- Traffic Counting Program (ongoing)
- Geographic Information System for the Region (ongoing)
- Pavement Management Regional Report (ongoing)
- Regional Trail Inventory (ongoing)
- Climate Change and Transportation in the Montachusett Region (ongoing)
- Road Safety Audits (ongoing)
- Roadway & Alternate Mode Access to Commuter Rail in the Region
- Siting of Renewable Energy Facilities

**Methodology:**

The following activities will be undertaken as part of the development of this program:

- Filling data needs and gaps (December 2018 – September 2019)
- Maintenance of PM Dashboard (February – September 2019); Information will be presented related to existing statewide PMs as adopted by the MPO as well as the measures developed for the prior RTP. Users should be able to ascertain how the MPO is proceeding related to these PMs.
- Coordinate regional PMs with state and federal PMs as they are developed - throughout program year

**Products:**

Updated PMs and PM Dashboard.

**Schedule:**

To be carried out throughout the program year as follows:

	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	July 2019	Aug 2019	Sep 2019
List of New Data Needs												
Data Collection												
Refinements												
Present and Adopt PM2, PM3 and TAM												
Update Dashboard												
PM Coordination												

**Task 3.24**

FHWA PL	MassDOT	FTA-5303	LOCAL	TOTAL
\$19,600	\$4,900			\$24,500

**Objective:**

An annual part of our Climate Change Program is updating the vulnerable infrastructures identified in the 2016 RTP. This data is to be included in transportation decision making. Major roadways and rail lines will be identified and mapped to assess their proximity to various flood zones in order to assess vulnerability. The MRPC has developed Pre-Disaster Mitigation Plans for individual communities in the Region. Data from these reports will be incorporated where applicable.

All activity in this task will be directly related to an action item in the 2016 RTP to “Program and implement 100% of Congestion Mitigation Air Quality (CMAQ) project funds available within the TIP.” Potential CMAQ projects will be identified and developed through this task. MRPC staff will also continue to work with and assist MassDOT in relation to GreenDOT initiatives. This includes the analysis and calculation of possible Greenhouse Gas Emissions (GHG) of transportation projects within the Transportation Improvement Program (TIP) where appropriate.

During the 2016/2017 work program MRPC developed a Stormwater Data Collection App which was made available to member communities required to abide by the EPA’s MS4 Permit. Any request for assistance or training on this application will be covered under this task.

During the previous program year staff analyzed a traffic “Bottleneck” on the Merriam Ave./ South St. corridor of Leominster and Fitchburg. Any carryover requests for presentations or further consultation regarding this report will be managed through this task.

**Previous Work:**

- Community Pre-Disaster Mitigation Plans - 2016
- 2016 Montachusett Regional Transportation Plan – August 2015
- Travel Time Data and Analysis – 2014, 2015, 2016
- GIS Datalayer – Travel Time 2014, 2015
- Stormwater App – 2016-17
- Climate Change Data Update 2016, 2017, 2018

**Methodology:**

- Map major roadways and rail lines within flood zones within the region;
- Assess flood vulnerability of identified roads and rail lines;
- Conduct GHG analysis of applicable TIP projects based upon MassDOT guidelines
- Use any related Climate Change Program activities to maximize amount of CMAQ funds spent in MRPC Region
- Assist communities with Stormwater App as needed

**Products:**

- GHG emissions analysis for TIP projects (May 2019)
- Updated vulnerable infrastructures database (August 2019)

**Schedule:**

To be carried out throughout the program year as follows:

	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	July 2019	Aug 2019	Sep 2019
Data Research	■	■	■									
Data Collection	■	■	■					■	■	■	■	■
Database Updates	■	■	■	■							■	■
Flood Zone Mapping					■	■	■					
Vulnerability Analysis							■	■	■	■		
GHG Analysis								■	■	■	■	

**Task 3.34**

<b>FHWA PL</b>	<b>MassDOT</b>	<b>FTA-5303</b>	<b>LOCAL</b>	<b>TOTAL</b>
\$22,000	\$5,500	\$4,000	\$1,000	\$32,500

**Objective:**

The objective of this task is to provide a quick and effective response mechanism to handle special, short term issues and projects as they arise. This will include the development, upon the written request from the chief elected official of a local community or from state and federal agencies, of detailed technical data and reports that will assist local communities or the MassDOT in improving the Region's transportation system. Studies will include accident analyses, intersection capacity investigations, signal warrant investigation, analysis of potential projects related to Management Systems Activities, and traffic impact reports. Based upon local requests, reviews of proposed development impact reports will be conducted to determine accuracy, feasibility, completeness and integrity of results. Where appropriate GIS applications will be utilized. These studies may involve the establishment of a subarea transportation model, analysis of major and/or critical intersections within the study area and liaison with local and state officials in order to determine viable solutions to the identified problems.

In addition, it is anticipated that follow up work related to prior UPWP tasks will be undertaken under this task. This task will cover staff work required to print and or distribute documents in both an electronic and hard version to members of the MRPC region. Staff will investigate the possibility of electronic distribution through USB, CD and or other applicable means. Any costs in excess of \$1,000 will require prior approval from MassDOT before expenditure.

Staff will also assist the community requests with the Project Initiation Form (PIF) and Project Need Form (PNF) submission process for towns interested in pursuing a project through the Transportation Improvement Program (TIP).

**Previous Work:**

- Truck Traffic Study for West Townsend Road, Highland Street, and Main Street – Lunenburg, 2018
- Road Safety Audit: Greenville Road (Route 31) / Turnpike Road, 2018
- Road Safety Audit: Main St Corridor: Prichard St to Summer St & Water St at Laurel St – Fitchburg, 2018
- Shirley Village Railroad Crossing Review – Shirley, 2017
- Critical Urban and Rural Freight Corridors Identification and MPO Endorsement – 2017
- Harvard Town Center Study – Harvard, 2016
- Development Impact Study Review, Cumberland Farms – Leominster, 2016
- Templeton Project Data Review – Patriots Road, 2015-16
- Winchendon Safety Review & Project Discussions – Route 140, 2016
- Local Town Impact Data & Review Related to Proposed Leominster Casino – Sterling, 2013

**Methodology:**

Provide technical assistance in the form of meetings, data and reports to MassDOT, DEP, local communities, and other local, State and Federal agencies as the need arises. This includes but is not limited to: air quality analyses; intersection and capacity analyses; traffic impact analyses of proposed developments; both commuter and municipal parking analyses; carpool/vanpool analyses; GIS applications and routine requests from local communities or citizens that continually arise in connection with the administration of the transportation planning program. Technical assistance from MassRides will be sought related to carpool/vanpool issues.

For each non-routine issue or sub-regional analysis, a study design will be developed for the Office of Transportation Planning /FHWA approval that outlines the geographic scope and level of effort required, including on a generalized basis a cost estimate based upon mandated requirements. In addition, potential bicycle and pedestrian connections will be reviewed and evaluated as part of any study.

**Products:**

Detailed technical data and reports as appropriate. Distribution to include local officials of communities involved as well as state and federal officials. PIF/PNF submission forms upon local request.

**Schedule:**

To be carried out throughout the program year as requests are received:

	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	July 2019	Aug 2019	Sep 2019
Response to Local Requests												

**Task 3.44**

<b>FHWA PL</b>	<b>MassDOT</b>	<b>FTA-5303</b>	<b>LOCAL</b>	<b>TOTAL</b>
\$18,800	\$4,700			\$23,500

**Objective:**

This task is a continuation of Task 3.53 from the previous UPWP. MRPC transportation staff will continue the task of assisting municipalities in the MRPC Region to develop municipal Americans with Disabilities Act (ADA) Transition Plan (Plan) to bring them into compliance with the ADA Act. The ADA Act provides standards that secure accessibility of public services and facilities for people with disabilities. The MRPC will seek to assist the local governments of up to three municipalities to either prepare a Plan or to update an existing Plan. The MRPC transportation staff primary focus will be to assist municipalities with the FHWA Massachusetts Division Office Plan components (see below). Request for proposals for consultant services to prepare or update a Plan should also be considered by municipalities.

**Previous Work:**

The MRPC completed the following - 2018:

- Obtained Plan compliance status of municipalities in the MRPC region from the Massachusetts Office on Disability
- Communicated this effort to each municipality in the MRPC through meetings and other venues
- Developed and completed an online Plan status survey for municipalities to complete
- Followed up on the municipalities that did not respond to the survey
- Held a Plan development training workshop for MRPC municipalities
- Assisted a municipality with developing the FHWA Massachusetts Division Office Plan components

**Methodology:**

The MRPC will seek to assist the local governments of up to three municipalities in either preparing a Plan or updating an existing Plan. The MRPC will assist the municipalities to primarily develop the FHWA Massachusetts Division Office Plan components. There are six components that should be included in a municipal Plan.

The six components are summarized below.

**I. Self-evaluation:**

- a) Describe the policies and practices the municipality evaluated that may affect physical or communications access to programs, service, or activity; and describe any modifications made or planned as a result of the evaluation
- b) Describe the technical survey of municipal owned/operated facilities according to the appropriate standards; and describe all deficiencies identified
- c) Describe the public participation plan that affords interested persons, including individuals with disabilities or organizations that represent individuals with disabilities, an opportunity to participate in the Self-evaluation

Self-evaluation can help municipalities sort through and prioritize issues that improve accessibility for people with disabilities. Improving accessibility at the local level increases their level of independence. Also, having a Plan can be a valid defense for a municipality in ADA-related legal actions.

**II. Public Rights-of-Way Barrier Removal/Transition Schedules:**

These schedules are lists of all public rights-of-way ADA deficiencies that provides a prioritization scheme for installation, alteration/reconstruction consistent with requirements. Suggested Schedules may include but may not be limited to:

- Curb Ramps
- Sidewalks
- Accessible Pedestrian Signals
- Bus Shelters/Stops
- Street Level Crossings Deficiency Removal
- Shared use trails

III. Multi-year Plan:

- a) Describe the method(s) and plan for making your programs and services accessible when viewed in their entirety
- b) Develop a budget
- c) Develop a monitoring plan
- d) Develop a system to report progress and to update the plan
- e) Describe the public participation plan that affords interested persons, including individuals with disabilities or organizations that represent individuals with disabilities an opportunity to actively participate in the ADA Transition Plan

IV. Indicate the agency or public official responsible for implementation of the plan; the official assigned to manage the day-to-day implementation of the plan must have sufficient authority to direct the activities and resources necessary to carry it out. In addition, the person ultimately responsible for the plan must be the head public or agency official.

V. The designation of an ADA Coordinator who is responsible for organizing the public entity’s efforts to comply with regulations. This person is also responsible for handling ADA complaints.

VI. Establish and disseminate a grievance procedure and public notice that conforms to ADA requirements.

Task coordination: In addition, this task will coordinate with MRPC Task 2.74: Regional Trail Planning which has the following objective: “... staff will utilize ... pedestrian data collected in the traffic counting program to establish multimodal gaps and potential projects for future planning and funding that will coincide with statewide ... pedestrian plans.” Coordination with Task 3.64: Lunenburg Walkability and Parking Study will also take place. Task 3.64 has the following objective: “... develop an inventory of ... sidewalk facilities in the study area ...”.

Based on the demands of the six components and the coordination with Task 2.74, there is a possibility that these Plans may not be completed during the Program Year therefore they will be carried over to the next Program Year.

**Products:**

Up to three municipal ADA Transition Plans.

**Schedule:**

To be carried out throughout the program year as follows:

	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	July 2019	Aug 2019	Sep 2019
Municipal Outreach												
Assist Municipalities with Plan												
Drafts												
Final Plans												

**Task 3.54**

FHWA PL	MassDOT	FTA-5303	LOCAL	TOTAL
\$26,800	\$6,700			\$33,500

**Objective:**

The Town of Lunenburg has expressed interest in identifying various projects that will improve the accessibility and safety of various modes of travel in the Town Center area. Staff will work with the Town to develop an inventory of traffic, parking and sidewalk facilities in the study area. These existing facilities will be analyzed and possible improvements will be identified. This study will complement the towns Complete Streets Prioritization Plan.

**Previous Work:**

- Regional Trail Inventory Update
- Sidewalk Inventory & Pedestrian/Bicycle Connections (Fitchburg/Leominster/Gardner)
- Trail Connections
- Safe Routes to School Reports
- Walkability Reports – Westminster & Groton

**Methodology:**

1. Review existing conditions – Land Development, Sidewalks/walkways, Bicycling, Trails, Intersections/Crossings, Parking, Signage, Environmental Justice Neighborhoods, and target populations
2. Inventory points of interest
3. Conduct walkability assessments, invite the public
4. Identify walkability and parking issues, concerns and solutions
5. Map current conditions, EJ areas, and recommendations
6. Encourage projects that take walkability & complete streets into account
7. Promote traffic management concepts that improve walkability and parking options
8. Include the Complete Streets concept which promotes safe access for all roadway users

**Products:**

The final product will be a report showing the study area with current conditions and recommendations. These recommendations could result in the programming of future TIP projects. Maps will show points of interest, sidewalk locations, parking, handicap accessibility, locations of concern, etc.

**Schedule:**

To be carried out throughout the program year as follows:

	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	July 2019	Aug 2019	Sep 2019
Data Gathering												
Conduct Assessments												
ID & Map Concerns												
ID & Map EJ Areas												
Potential Projects												
Draft Report												
Final Report												

**Task 3.64**

<b>FHWA PL</b>	<b>MassDOT</b>	<b>FTA-5303</b>	<b>LOCAL</b>	<b>TOTAL</b>
\$23,600	\$5,900			\$29,500

4.0

MULTIMODAL PLANNING ACTIVITIES

**Objective:**

The objective of this task is for the staff to participate in the Montachusett Joint Transportation Committee (MJTC) and the Montachusett Regional Planning Commission (MRPC) for transit involvement issues to represent the needs of the Montachusett Regional Transit Authority (MART). Staff will also continue to work with the Montachusett Regional Emergency Planning Committee (MREPC) on evacuation and security plans in an emergency situation. Also, staff will continue to participate in the Fitchburg Line Working Group to improve rail service on the Fitchburg Line in the Montachusett Region; the Leominster Crime Stoppers Group to continue to educate the public in participating in the crime stopper program; the North Central Regional Coordinating Council (NCRCC) in order to identify unmet needs, formulate regional priorities, and build coalitions around new transportation projects and coordinate existing services at the local level in order to serve more people and increase sustainability of services; and the Human Service Transportation (HST) Coordination Advisory Group in order to assist MART, other RTAs and the communities in their effort to improve access to transportation services for persons with special mobility needs.

In addition, staff will continue efforts to meet applicable Title VI requirements, including any updates to the MPO endorsed Limited English Proficiency (LEP) Access Plan as well as other issues related to Environmental Justice, Title VI and state and federal policies as necessary. In particular, staff will address Federal Transit Administration (FTA) requirements and transit issues in regards to Title VI, Environmental Justice and LEP as they are raised and as they relate to any underserved populations that see environmental justice planning as an opportunity to address local transit issues. This task also includes efforts to encourage private enterprise and minority business participation throughout the planning process.

**Previous Work:**

- North Central Regional Coordinating Council (NCRCC) – on going
- Public Participation Plan Amendment- 2015
- Regional Low-Income Threshold- 2016
- Montachusett Regional Transportation Plan (RTP) Update - 2016
- Montachusett MPO Endorsed Limited English Proficiency (LEP) Access Plan – February 2013;
- Annual Title VI Report – 2011-2012; 2015, 2017
- Montachusett Regional Emergency Planning Committee (MREPC) - on going
- The Human Service Transportation (HST) Coordination Advisory Group- on going
- Fitchburg Line Working Group - on going
- MinuteVan Regional Transit Group- on going
- North Central Massachusetts Community Reinvestment Act Coalition (NCMCRA) - on going
- Montachusett Region Comprehensive Economic Development Strategy (MRCEDS) - on going
- Leominster Crime Stoppers Group - ongoing

**Methodology:**

Coordinate planning activities through participation in the MJTC.

Prepare required information/data which can assist in ongoing efforts to identify clients and available public transit services.

In addition, issues related to Environmental Justice and Title VI will be reviewed and addressed through the various aspects of this task. Where appropriate action will be taken thru the various coalitions and participation plans to improve the involvement of those traditionally not part of the planning process.

Interim documents, if produced, will be forwarded to MassDOT as completed.

**Products:**

Regionwide database of relevant socioeconomic data based upon collected information.

**Schedule:**

Ongoing throughout the program year.

	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	July 2019	Aug 2019	Sep 2019
Public Participation												

**Task 4.14**

FHWA PL	MassDOT	FTA-5303	LOCAL	TOTAL
		\$2,955	\$739	\$3,694

**Objective:**

Provide technical support services to the Montachusett Regional Transit Authority (MART) related to the improvement of the commuter rail service facilities in the Montachusett Region. Efforts will include assistance to MART in assessing: commuter rail parking lots, the identification and assessment of park-and-ride lots, the review of commuter rail station construction plans, bid documents and the continued monitoring of transit construction projects.

**Previous Work:**

- 2016 Montachusett Regional Transportation Plan - 2015
- Fitchburg Commuter Rail Line Improvement Project – on going
- Wachusett Station and Layover Facility – on going
- 2012 Montachusett Regional Transportation Plan - 2011
- Wachusett Extension Environmental Assessment – 2010
- North Leominster Commuter Rail Station Parking Expansion - 2013
- Ayer Commuter Rail Parking Expansion – on going
- Assisted MART and the Town of Ayer with the location, design and funding of the Ayer Commuter Rail Parking Facility including:
  - Preparation of appropriation request;
  - Preparation of the parking alternatives;
  - Preparation of responses to MassDOT concerns regarding financial constraint and handicapped accessibility;
  - Meetings with Town Officials to discuss federal funding of Ayer Commuter Rail Station.
- Littleton Commuter Rail Station improvement – 2016
- Ayer Parking Garage Impact Analysis - 2009
- Wachusett – Gardner Extension (Phase I: Feasibility Screening) – 2009
- Fitchburg Commuter Rail Line Improvement Project (Alternatives Analysis Report) - 2007

**Methodology:**

MRPC will continue to review the commuter rail services in Fitchburg/Leominster and assist in the technical support and implementation of improvements to the region’s facilities. This will include all stops along the Fitchburg MBTA line from Littleton to Fitchburg (and Gardner).

**Products:**

Support services at meetings and presentations related to improvements to area facilities. Where appropriate technical documents and reports will be developed.

**Schedule:**

To be carried out during the program year.

Wachusett Station and Layover Facility – October 2018 to September 2019.

Ayer Commuter Rail Parking Projects – October 2018 to September 2019.

	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	July 2019	Aug 2019	Sep 2019
Wachusett												
Ayer												

**Task 4.24**

<b>FHWA PL</b>	<b>MassDOT</b>	<b>FTA-5303</b>	<b>LOCAL</b>	<b>TOTAL</b>
		\$6,000	\$1,500	\$7,500

**Objective:**

To provide technical planning services and assistance to the Montachusett Regional Transit Authority (MART) which will include the coordination of special transit planning projects, GIS assistance and mapping on identified transit projects such as transit and impact analyses, technical assistance at RTA board meetings and with MART’s Job Access Reverse Commute Program (JARC).

**Previous Work:**

- GIS mapping of Fixed Route Transit Services and Updates – 2012-2013, 2015-2017
- Solar Voltaic Energy Production and Energy Management System Project – 2013-2014
- 2012 Montachusett Regional Transportation Plan - 2011
- Categorical Exclusions for Ayer Commuter Rail Parking Improvements - 2011
- Expansion of MART Storage Facility Leominster – 2010
- Categorical Exclusions for Acquisition of Property in Leominster for Temporary Parking- 2010
- Wachusett Extension Application for TIGER Discretionary Grant – 2009
- Fitchburg Commuter Rail Line – License Plate Survey – 2009
- Gardner MART Storage and Maintenance Facility - 2008

**Methodology:**

The FY19 MART technical assistance activities will consist of the following sub-tasks:

- Provide planning and management services as needed, including the maintenance of record keeping systems.
- Coordinate short range transit planning projects with long range transit goals and planning for the Region.
- Provide technical planning assistance to MART and member communities.
- Assist MART in meeting federal reporting requirements related to fixed route services.
- Assess and evaluate bus and van routes, schedules and fare structures.
- Prepare information and data for FTA reports.
- Conduct and review air quality related analysis and data for transit projects.

**Products:**

Reports to public groups concerning MART activities.

**Schedule:**

The planning assistance program to the RTA is to be carried out continuously during the program year.

	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	July 2019	Aug 2019	Sep 2019
LTA												

**Task 4.34**

FHWA PL	MassDOT	FTA-5303	LOCAL	TOTAL
		\$11,000	\$2,750	\$13,750

**Objective:**

Transit on-time performance is a leading indicator of service reliability. MART's bus tracker webpage features the current location and speed of its fixed route buses. Data for on-time performance is listed as "accuracy percentage" which is a comparison of actual arrival at stops vs. the time listed on the posted bus timetable. Unfortunately, there is no record of on-time performance over a given time period. The purpose of the study is to track on-performance of buses on all individual bus routes over time to establish a base line of bus performance reliability to determine whether the bus service is running on-time or not beyond the current daily tracker. This will be a multiyear project spanning from the origination of the performance measure to monitoring the rise or fall in service reliability by route. This tool should factor into future decision making by focusing on more problematic routes and increasing reliable bus service through appropriate means when possible.

**Previous Work:**

- Fixed Route Service Maps, Fitchburg/Leominster/Gardner- 2007-2008
- Transit Development Program Update – Fitchburg and Leominster 2013;
- Transit Development Program Update – Fitchburg and Leominster 2003; 2008
- Transit Development Program Update – GLink 2005;
- Transit Development Program Update – Gardner 2000
- Ridership Survey Development – UPWP 2016-2017
- Coordinated Public Transit-Human Services Plan 2007
- Coordinated Public Transit-Human Services Plan 2015
- Coordinated Public Transit-Human Services Plan 2018

**Methodology:**

MRPC Staff will:

- Examine all fixed route timetables and select study time periods
- Set a defined time period window in minutes to classify on-time service
- Consult with MART if schedule is unrealistic, frequency of bus breakdowns or employees caused a delay
- Consider incidental factors for delays: traffic congestion, accidents and weather
- Analyze results using quantitative and qualitative methods
- Identify key themes and concerns addressed in data
- Establish an on-time performance measure target percentage as future goal
- Produce report summarizing the findings from study and provide recommendations
- Monitor the progress of on-time bus performance over a multiyear span.

**Products:**

A report will examine on-time performance data in light of MART operational procedures and local conditions impacting service. Bus arrival and/or departure times will be tracked in the future as an indicator of service reliability to give a longitudinal view of public transit in MRPC served communities.

**Schedule:**

To be carried out throughout the program year.

Examine Routes and Select Study Period: October 2018- January 2019

Data Collection and MART Operational Conditions: January 2019 – April 2019

Initial Analysis of Results: March 2019 – June 2019

Production of Final Report: June 2019 – September 2019

	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	July 2019	Aug 2019	Sep 2019
Bus Route Performance Evaluation												

**Task 4.44**

<b>FHWA PL</b>	<b>MassDOT</b>	<b>FTA-5303</b>	<b>LOCAL</b>	<b>TOTAL</b>
\$12,000	\$3,000	\$10,500	\$2,625	\$28,125

**Montachusett Regional Planning Commission  
FFY 2019 Program Year Staffing Report**

<b>Staff</b>	<b>Title</b>	<b>Expected Time on 3C Contract</b>	<b>Expected Time on FTA Contract</b>
Bradford Harris	Transportation Project Director	98%	2%
George Kahale	Transit Project Director	5%	95%
George Snow	Principal Transportation Planner	98%	2%
Sheri Bean	Principal Planner	98%	2%
Brian Doherty	Principal Planner	98%	2%
David Fee	Transportation Planner	75%	25%
Jason Stanton	GIS Project Director	50%	15%
Kayla Kress	GIS Technician	50%	15%
		100%	-
	Transportation Intern	100%	-

**UPWP BUDGET**  
SUMMARY OF FUNDING BY SOURCE AND TASK  
FFY 2019 PROGRAM YEAR  
OCTOBER 1, 2018 to SEPTEMBER 30, 2019

TASK NO./NAME	SPR	PL			FTA - 5303	LOCAL	TOTAL
		FHWA	MassDOT	TOTAL			
1.14 Support of 3C Process	-	\$52,117	\$13,029	\$65,146	\$6,000	\$1,500	\$72,646
1.24 Unified Planning Work Program	-	\$14,400	\$3,600	\$18,000	\$3,500	\$875	\$22,375
1.34 Public Info Reporting/Participation Program	-	\$22,400	\$5,600	\$28,000	-	-	\$28,000
1.44 Development of TIP	-	\$41,600	\$10,400	\$52,000	\$6,000	\$1,500	\$59,500
1.54 Environmental Justice/Title VI	-	\$38,400	\$9,600	\$48,000	\$3,000	\$750	\$51,750
<b>Subtotal</b>	-	<b>\$168,917</b>	<b>\$42,229</b>	<b>\$211,146</b>	<b>\$18,500</b>	<b>\$4,625</b>	<b>\$234,271</b>
2.14 Regional Demographics & Model	-	\$22,200	\$5,550	\$27,750	-	-	\$27,750
2.24 GIS Mapping and Analysis	-	\$43,200	\$10,800	\$54,000	\$4,000	\$1,000	\$59,000
2.34 Data Collection & Analysis Program	-	\$31,000	\$7,750	\$38,750	-	-	\$38,750
2.44 Pavement Management Systems	-	\$18,600	\$4,650	\$23,250	-	-	\$23,250
2.54 Fatal Crash Corridor Analysis	-	\$21,000	\$5,250	\$26,250	-	-	\$26,250
2.64 Freight Corridor Analysis	-	\$22,600	\$5,650	\$28,250	-	-	\$28,250
2.74 Regional Trail Planning & Printing	-	\$22,400	\$5,600	\$28,000	-	-	\$28,000
<b>Subtotal</b>	-	<b>\$181,000</b>	<b>\$45,250</b>	<b>\$226,250</b>	<b>\$4,000</b>	<b>\$1,000</b>	<b>\$231,250</b>
3.14 Regional Transportation Plan Update	-	\$56,200	\$14,050	\$70,250	\$7,000	\$1,750	\$79,000
3.24 Performance Measures	-	\$19,600	\$4,900	\$24,500	-	-	\$24,500
3.34 Climate Change Program	-	\$22,000	\$5,500	\$27,500	\$4,000	\$1,000	\$32,500
3.44 Local Technical Assistance	-	\$18,800	\$4,700	\$23,500	-	-	\$23,500
3.54 Local ADA Transition Plan Development	-	\$26,800	\$6,700	\$33,500	-	-	\$33,500
3.64 Lunenburg Walkability & Parking Study	-	\$23,600	\$5,900	\$29,500	-	-	\$29,500
<b>Subtotal</b>	-	<b>\$167,000</b>	<b>\$41,750</b>	<b>\$208,750</b>	<b>\$11,000</b>	<b>\$2,750</b>	<b>\$222,500</b>
4.14 Transportation Equity & Public Involvement	-	-	-	-	\$2,955	\$739	\$3,694
4.24 Short Range Transportation Planning	-	-	-	-	\$6,000	\$1,500	\$7,500
4.34 Technical Assistance to MART	-	-	-	-	\$11,000	\$2,750	\$13,750
4.44 Bus Routes Performance Evaluation	-	\$12,000	\$3,000	\$15,000	\$10,500	\$2,625	\$28,125
<b>Subtotal</b>	-	<b>\$12,000</b>	<b>\$3,000</b>	<b>\$15,000</b>	<b>\$30,455</b>	<b>\$7,614</b>	<b>\$53,069</b>
<b>TOTAL FFY 2019</b>	-	<b>\$528,917</b>	<b>\$132,229</b>	<b>\$661,146</b>	<b>\$63,955</b>	<b>\$15,989</b>	<b>\$741,090</b>

SUMMARY OF FUNDING BY SOURCE AND ELEMENT						
PROGRAM YEAR FFY 2019						
ELEMENT	FHWA/MassDOT		FTA - 5303	LOCAL	TOTAL	
	SPR	PL				
1	-	\$211,146	\$18,500	\$4,625	\$234,271	
2	-	\$226,250	\$4,000	\$1,000	\$231,250	
3	-	\$208,750	\$11,000	\$2,750	\$222,500	
4	-	\$15,000	\$30,455	\$7,614	\$53,069	
<b>TOTAL</b>	<b>-</b>	<b>\$661,146</b>	<b>\$63,955</b>	<b>\$15,989</b>	<b>\$741,090</b>	

SUMMARY OF FUNDING BY SOURCE AND GRANTEE						
PROGRAM YEAR FFY 2019						
GRANTEE	FHWA/MassHighway		FTA - 5303	LOCAL	TOTAL	
	SPR	PL				
MRPC	-	\$661,146	\$63,955	\$15,989	\$741,090	
LOCAL GOV'T (MART)	-	-	-	-	-	
<b>TOTAL</b>	<b>-</b>	<b>\$661,146</b>	<b>\$63,955</b>	<b>\$15,989</b>	<b>\$741,090</b>	

\*100% FTA FUNDING FOR PRIVATE SECTOR ACTIVITIES

\* NOTE: Source of Local Funds: Local Assessment, State and Other Sources (i.e. interest, etc.) and MART. No Section 5307 funds are included.

**MRPC FEDERAL FISCAL YEAR "PL" ALLOCATIONS**

FY	ANNUAL	CUMULATIVE
1974-2004	\$1,434,456.00	\$5,875,735
2005	\$506,127.00	\$6,381,862
2006	\$496,737.00	\$6,878,599
2007	\$508,486.00	\$7,387,085
2008	\$546,217.00	\$7,933,302
2009	\$567,231.00	\$8,500,533
2010	\$582,543.00	\$9,083,076
2011	\$563,751.00	\$9,646,827
2012	\$563,751.00	\$10,210,578
2013	\$555,297.00	\$10,765,875
2014	\$570,098.00	\$11,335,973
2015	\$544,557.00	\$11,880,530
2016	\$585,751.00	\$12,466,281
2017	\$621,347.00	\$13,087,628
2018	\$647,248.00	\$13,734,876
2019	\$661,145.00	\$14,396,021

**MRPC "PL" EXPENDITURES**

CONTRACT #	AMOUNT	SPENT	CUMULATIVE
18281-88006-24717	\$1,442,781.61	\$1,396,386.79	\$1,396,386.79
6047	\$165,000.00	\$165,000.00	\$1,561,386.79
94022	\$772,599.00	\$678,525.78	\$2,239,912.57
96506	\$1,278,009.00	\$930,861.89	\$3,170,774.46
30049	\$1,427,409.00	\$1,427,134.28	\$4,597,908.74
4034020	\$1,941,815.00	\$1,528,445.40	\$6,126,354.14
0052453	\$2,354,263.00	\$2,081,355.65	\$8,207,709.79
69656	\$2,429,837.00	\$2,205,964.00	\$10,413,673.79
88872	\$2,343,484.00	\$1,395,485.25	\$11,809,159.04 *

Cumulative PL Allocation	\$13,734,876.00
- Cumulative Amount Spent	\$11,809,159.04 *
-	<u>\$4,287.57</u>
	\$1,921,429.39
-	<u>\$25,000.00</u>
	\$1,896,429.39

Overhead rate adj. from Contract #22725  
 Approved Addn'l Funds from PL Balance 9/12/2005  
 Estimated remaining bank balance\*\*

\*Estimated Expenditure Through February 28, 2018

2019 Unified Planning Work Program Funding

FFY 19	FFY 18	Δ
\$ 9,525,236	\$ 9,325,022	
93.1%	93.1%	
\$ 8,869,900	\$ 8,683,460	2.10%
\$ 11,087,375	\$ 10,854,326	

apportionment  
obligation authority  
federal PL funds only  
matching funds added

The recommended PL Allocation Formula was developed by the Massachusetts Association of Regional Planning Agencies and recommended by MassDOT to FHWA, is based upon the following three factors: 40% of available funds divided equally among the ten MPOs, 30% is allocated based on each MPO's relative share of Massachusetts population, and 30% is allocated based on each MPO's relative share of urbanized population. These factors result in the percentages shown.

PL funds are provided to the MPOs from the previous year's federal-aid ("forward funded")

Contract status	40% of total funds/ten MPOs		30% of funding for relative size of population		30% of funding for relative size of urbanized population		Total FFY19 funding by MPO	Federal aid number	PARS number
	\$	%	\$	%	\$	%			
<i>MPOs PL funded</i>									
Berkshire	\$ 443,495	131,219	2.03%	\$ 67,673	88,795	1.49%	\$ 49,622	\$ 560,790	
Boston	\$ 443,495	3,087,975	47.88%	\$ 1,592,555	3,026,176	50.84%	\$ 1,691,143	\$ 3,727,192	
<i>GTPS</i>									
Yr 1							\$ 3,019,026		
<i>MAPC</i>									
Yr 1							\$ 708,767		
Cape Cod	\$ 443,495	215,888	3.35%	\$ 111,339	198,826	3.34%	\$ 111,112	\$ 665,946	
Central Mass	\$ 443,495	556,698	8.63%	\$ 287,105	462,724	7.77%	\$ 258,588	\$ 989,187	
Merrimack Valley	\$ 443,495	333,748	5.17%	\$ 172,123	316,362	5.32%	\$ 176,795	\$ 792,413	
Montachusett	\$ 443,495	236,475	3.67%	\$ 121,957	171,236	2.88%	\$ 95,693	\$ 661,145	
Northern Middlesex	\$ 443,495	286,901	4.45%	\$ 147,963	277,474	4.66%	\$ 155,063	\$ 746,521	
Old Colony	\$ 443,495	362,406	5.62%	\$ 186,903	342,110	5.75%	\$ 191,184	\$ 821,582	
Pioneer Valley	\$ 443,495	621,570	9.64%	\$ 320,561	537,074	9.02%	\$ 300,137	\$ 1,064,193	
Southeastern Mass	\$ 443,495	616,670	9.56%	\$ 318,034	531,236	8.93%	\$ 296,875	\$ 1,058,404	
	\$ 4,434,950	6,449,550	100.00%	\$ 3,326,212	5,952,013	100.00%	\$ 3,326,212	\$ 11,087,375	

Contract status	SPR the year before (federal only)		FFY 19 total funding by RPA		Federal aid number	PARS number
	Δ	\$	\$	\$		
<i>RPA's SPR funded</i>						
Franklin	2.10%	\$ 432,944	\$ 552,555			
Martha's Vineyard	2.10%	\$ 248,283	\$ 316,877			
Nantucket	2.10%	\$ 211,196	\$ 269,544			

The SPR funding provided to the RPAs not officially recognized as MPOs is adjusted year-to-year based on the change in funding experienced by the MPOs for their PL funds.

**APPENDIX A – MRPC FUNDING SOURCES AND PLANNING ACTIVITIES**

Other planning activities currently taking place involving the Montachusett Regional Planning Commission include the following:

- As part of MRPC's contract with the federal Department of Commerce, Economic Development Administration, MRPC provides assistance to communities seeking grant funds to improve economic vitality. MRPC staff assisted Shirley and Winchendon to prepare a regional FY17 Community Development Block Grant application for Housing Rehabilitation and Home Heating Fuel Assistance in both Shirley and Winchendon, and improvements to Chestnut Street in Winchendon. MRPC is administering the grant for Shirley and Winchendon and the beneficiaries of these programs are low and moderate-income residents.
- MRPC staff assisted Lancaster, Shirley, Townsend, and Winchendon to prepare FY18 Community Development Block Grant applications for Housing Rehabilitation. This year, block grants were due and submitted on March 2, 2018.
- On October 1, 2015, MRPC and the federal Environmental Protection Agency (EPA) executed a three-year term Cooperative Agreement in the amount of \$400,000 for Community-wide Brownfields Assessments for hazardous substances and petroleum contaminated sites. MRPC hired a qualified engineering firm (TRC, Lowell, MA) to assist with the conduction of Phase I and Phase II environmental site assessments. Community-wide petroleum grant funds are also being used for the same tasks at sites with potential petroleum contamination. This project is anticipated to conclude on schedule on or before September 30<sup>th</sup>, 2018.
- MRPC is working on the update of a Community Health Assessment of North Central Massachusetts for Heywood Hospital. The report will consist of a broad scope of data from multiple sources including but not limited to primary and secondary data sources, input from stakeholder interviews, community member focus groups, and survey(s) in order to provide a status of health in the service area. The project will be completed summer 2018.
- MRPC staff received a grant from the Massachusetts Office of Technical Assistance and Technology (OTA) and the US Environmental Protection Agency (EPA) to sponsor workshops designed to educate city officials, community leaders, Fire Departments, Departments of Public Works, Local Emergency Planning Committees (LEPCs) and businesses about the toxic chemicals stored, used and transported through their communities. The goal is to make our region's communities more capable of addressing climate change-related disasters by providing critical information and thoughtful preparation needed for targeted planning and reducing the use of toxics in the communities. The project will be completed summer 2018.
- MRPC was awarded grant funds from the Massachusetts Department of Energy Resources (DOER) to assist the Town of Hubbardston, Royalston, and Templeton to become Green Communities and to assist with administration of existing Green Communities for Fitchburg, Lunenburg, and Westminster.
- Through Chapter 205 of the Acts of 2006, Massachusetts has provided funding to regional planning agencies to provide technical assistance to their communities through the State's District Local Technical Assistance (DLTA) program. MRPC is assisting several communities in the areas of achieving sustainable development and land use objectives and establishing partnerships among communities. All current DLTA projects will be completed by December 31, 2018.

The following DLTA projects have been initiated:

- **Town of Winchendon:** Assistance to complete previous work on individual chapters of Winchendon's Master Plan and compile each chapter into a complete Master Plan document.
- **Town of Athol:** Transportation Master Plan Chapter Update.
- **Town of Ayer:** Assistance with identifying and prioritizing existing and potential conservation lands in Ayer.
- **MRPC:** Region – Wide Industrial Lands Analysis.
- **Ashby:** Housing Production Plan.
- **Lunenburg:** Promotional Tourism Brochure and Implementation Plan for the “Formation of a Business/Town Partnership” drafted in the 2017 DLTA round.
- **Lunenburg:** Permitting Guidebook.
- **Fitchburg:** Investigating/researching parking adjustments that can be made to support Smart Growth in the City's denser neighborhoods.
- **Fitchburg:** Best practices review with recommendations for off-site student housing policy/procedures in University neighborhoods.

**SUMMARY OF OTHER MRPC FUNDING SOURCES**

<b>Agency</b>	<b>Program</b>	<b>Funding Total</b>
Federal: Dept. of Commerce Economic Development Administration	<i>Section 203 Area Planning Assistance Grant (4/1/18-3/31/19)</i>	\$70,000.00
Federal: Dept. of Transportation Federal Transit Administration	<i>Section 5303 Technical Assistance</i>	\$58,338
Federal: Department of Commerce (DOC), Economic Development Administration (EDA)	<i>Section 203 Area Planning Assistance Grant (4/1/18-3/31/19)</i>	\$70,000
State: Massachusetts Department of Housing & Community Development (DHCD)	<i>District Local Technical Assistance Round 11 (1/1/18 – 12/31/18)</i>	\$103,761
	<i>District Local Technical Assistance Round 12 (1/1/19 – 12/31/19)</i>	\$98,820
State: Department of Energy Resources (DOER)	<i>Municipal Energy Technical Assistance (META) Grant, Green Community Designations</i>	\$51,250
Regional: Montachusett Regional Transit Authority (MART)	<i>Transit Planning Technical Assistance (7/1/18 – 6/30/19)</i>	\$125,000
	<i>Transit Planning Technical Assistance (7/1/19 – 6/30/20)</i>	\$125,000
Local Communities: All	<i>Local Assessments (7/1/18 – 6/30/19)</i>	\$77,370
Local Communities: Some	<i>GIS (7/1/18 – 6/30/19)</i>	\$8,000
Local Communities: Two. Massachusetts Department of Housing & Community Development (DHCD), Community Development Block Grant (CDBG) Administration via Contracts with Shirley and Winchendon	<i>FY17 Shirley CDBG Grant</i>	\$91,833
	<i>FY17 Winchendon CDBG Grant</i>	\$41,823

**APPENDIX B – GLOSSARY/ ACRONYMS**

## Acronyms and Abbreviations

3C	Continuing, Cooperative and Comprehensive Transportation Planning
AADT	Average Annual Daily Traffic
AASHTO	American Association of State Highway and Transportation Officials
ABP	Accelerated Bridge Program
ADA	Americans with Disabilities Act (1990)
ADT	Average Daily Traffic
AMPO	Association of Metropolitan Planning Organizations
ANR	Approval Not Required Plans
APA	American Planning Association
APTA	American Public Transportation Association
ATR	Automatic Traffic Recorder
AVL	Automatic Vehicle
BMP	Best Management Practice
BMS	Bridge Management System
CAAA	Clean Air Act Amendments of 1990
CDBG	Community Development Block Grant
CEDS	Comprehensive Economic Development Strategy
CFR	Code of Federal Regulations
CIP	Capital Improvement Program
CHNA 9	Community Health Network Area 9
CMAQ	Congestion Mitigation and Air Quality
CMS	Congestion Management System
CRFCs	Critical Rural Freight Corridors
CSS	Context Sensitive Solutions
CUFCS	Critical Urban Freight Corridors
DEP	Department of Environmental Protection
DHV	Design Hour Volume
DLTA	District Local Technical Assistance
DRS	Demand Responsive Service
EDA	Economic Development Administration
EIR	Environmental Impact Report
EIS	Environmental Impact Study/Statement
EJ	Environmental Justice
ENF	Environmental Notification Form
EOEEA	Executive Office of Energy and Environmental Affairs
EPA	Environmental Protection Agency
EPDO	Equivalent Property Damage Only
FAST Act	Fixing America's Surface Transportation Act (2015-2020)
FASTLANE	Fostering Advancements in Shipping and Transportation for the Long-term Achievement of National Efficiencies Grants Program
FEIR	Final Environmental Impact Report
FEMA	Federal Emergency Management Agency
FFY	Federal Fiscal Year (begins October 1 <sup>st</sup> to September 30 <sup>th</sup> )
FHWA	Federal Highway Administration
FO	Functionally Obsolete

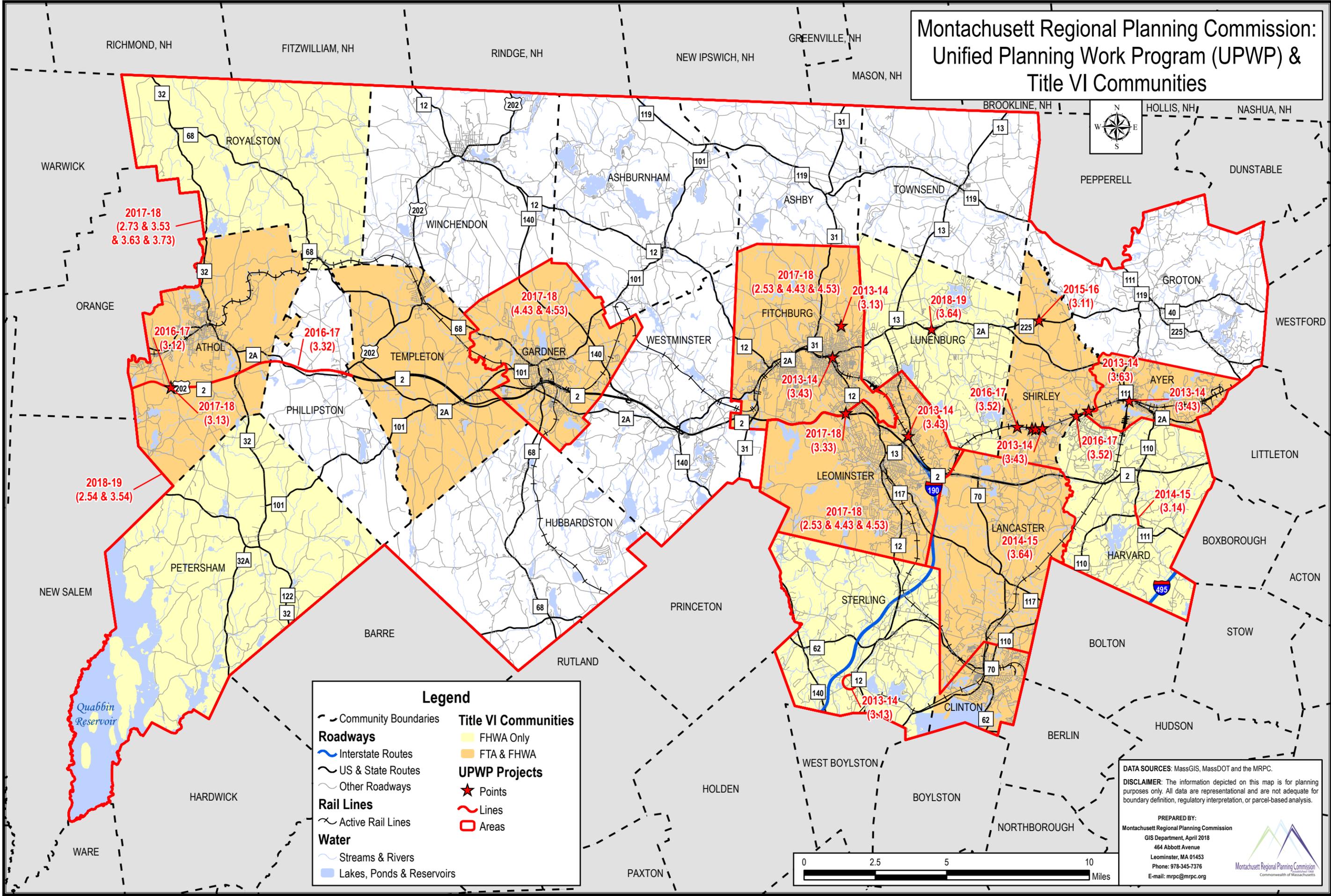
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
FY	Fiscal Year (July 1 <sup>st</sup> to June 30 <sup>th</sup> )
GANs	Grant Anticipation Notes
GIS	Geographic Information System
GPS	Global Positioning System
GVW	Gross Vehicle Weight
HAZMAT	Hazardous Material
HCM	Highway Capacity Manual
HCS	Highway Capacity Software
HOV	High Occupancy Vehicle
HPMS	Highway Performance Monitoring System
HPP	High Priority Project
HSIP	Highway Safety Improvement Program
HTF	Highway Trust Fund
I/M	Inspection and Maintenance
IM	Interstate Maintenance
ISTEA	Intermodal Surface Transportation Efficiency Act (1991-1997)
ITC	Intermodal Transportation Center
ITE	Institute of Transportation Engineers
ITS	Intelligent Transportation System
JARC	Job Access Reverse Commute
LOS	Level of Service
LRT	Light Rail Transit
L RTP	Long-Range Transportation Plans
MAP	Mobility Assistance Program
MAP-21	Moving Ahead for Progress in the 21 <sup>st</sup> Century (2012-2015)
MARPA	Massachusetts Association of Regional Planning Agencies
MART	Montachusett Regional Transit Authority
MARTA	Massachusetts Association of Regional Transit Authorities
MBTA	Massachusetts Bay Transportation Authority
MassDOT	Massachusetts Department of Transportation
MEMA	Massachusetts Emergency Management Agency
MIS	Major Investment Study
MJTC	Montachusett Joint Transportation Committee
MMPO	Montachusett Metropolitan Planning Organization
MOE	Measures of Effectiveness
MOU	Memorandum of Understanding
MPO	Metropolitan Planning Organization
MRPC	Montachusett Regional Planning Commission
MRTC	Montachusett Regional Trail Coalition
MSA	Metropolitan Statistical Area
MUTCD	Manual on Uniform Traffic Control Devices
NAAQS	National Ambient Air Quality Standards
NARC	National Association of Regional Councils
NEPA	National Environmental Policy Act

NFA	Non-Federal Aid
NHFN	National Highway Freight Network
NHFP	National Highway Freight Program
NHS	National Highway System
NHTSA	National Highway Traffic Safety Administration
NSBP	National Scenic Byways Program
NTP	Notice to Proceed
NTS	National Transportation System
OA	Obligational Authority
OTP	Office of Transportation Planning
PHF	Peak Hour Factor
PHFS	Primary Highway Freight System
PL	Planning Funds
PMS	Pavement Management System
PMT	Personal Miles Traveled
PMUG	Pavement Management User's Group
PPP	Public Participation Program
PRC	Project Review Committee
PS&E	Plans, Specifications & Estimates
PWED	Public Works/Economic Development
RABA	Revenue Aligned Budget Authority
RFP	Request for Proposals
RFQ	Request for Quotes
RFR	Request for Referrals
ROW	Right of Way
RPAs	Regional Planning Agencies
RPOs	Rural Planning Organizations
RRF	Request a Release of Funds
RTA	Regional Transit Authority
RTP	Regional Transportation Plan
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (2005-2009)
SEIR	Supplemental Environmental Impact Report
SIP	State Implementation Plan
SPR	State Planning and Research Funds
SOV	Single Occupant Vehicle
STIP	Statewide Transportation Improvement Program
STP	Surface Transportation Program
TCM	Transportation Control Measure
TCSP	Transportation and Community System Preservation
TDM	Travel Demand Management
TDP	Transit Development Plan
TE	Transportation Enhancement
TEA-21	Transportation Equity Act for the 21 <sup>st</sup> Century (1998-2003)
TIGER	Transportation Investment Generating Economic Recovery
TIGGER	Transit Investment in Greenhouse Gas and Energy Reduction
TIP	Transportation Improvement Program
TMA	Transportation Management Area

TMC	Turning Movement Count
TOD	Transit Oriented Development
TSM	Travel/Transportation System Management
UPWP	Unified Planning Work Program
UZA	Urbanized Areas
V/C	Volume to Capacity Ratio
VMS	Variable Message Sign
VMT	Vehicle Miles Traveled
VOCs	Volatile Organic Compounds
VPH	Vehicles Per Hour

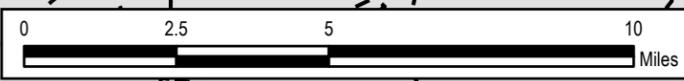
**APPENDIX C – UPWP DISTRIBUTION OF STUDIES AND TASKS MAPS**

# Montachusett Regional Planning Commission: Unified Planning Work Program (UPWP) & Title VI Communities



**Legend**

Community Boundaries	<b>Title VI Communities</b>
<b>Roadways</b>	FHWA Only
Interstate Routes	FTA & FHWA
US & State Routes	<b>UPWP Projects</b>
Other Roadways	Points
<b>Rail Lines</b>	Lines
Active Rail Lines	Areas
<b>Water</b>	
Streams & Rivers	
Lakes, Ponds & Reservoirs	

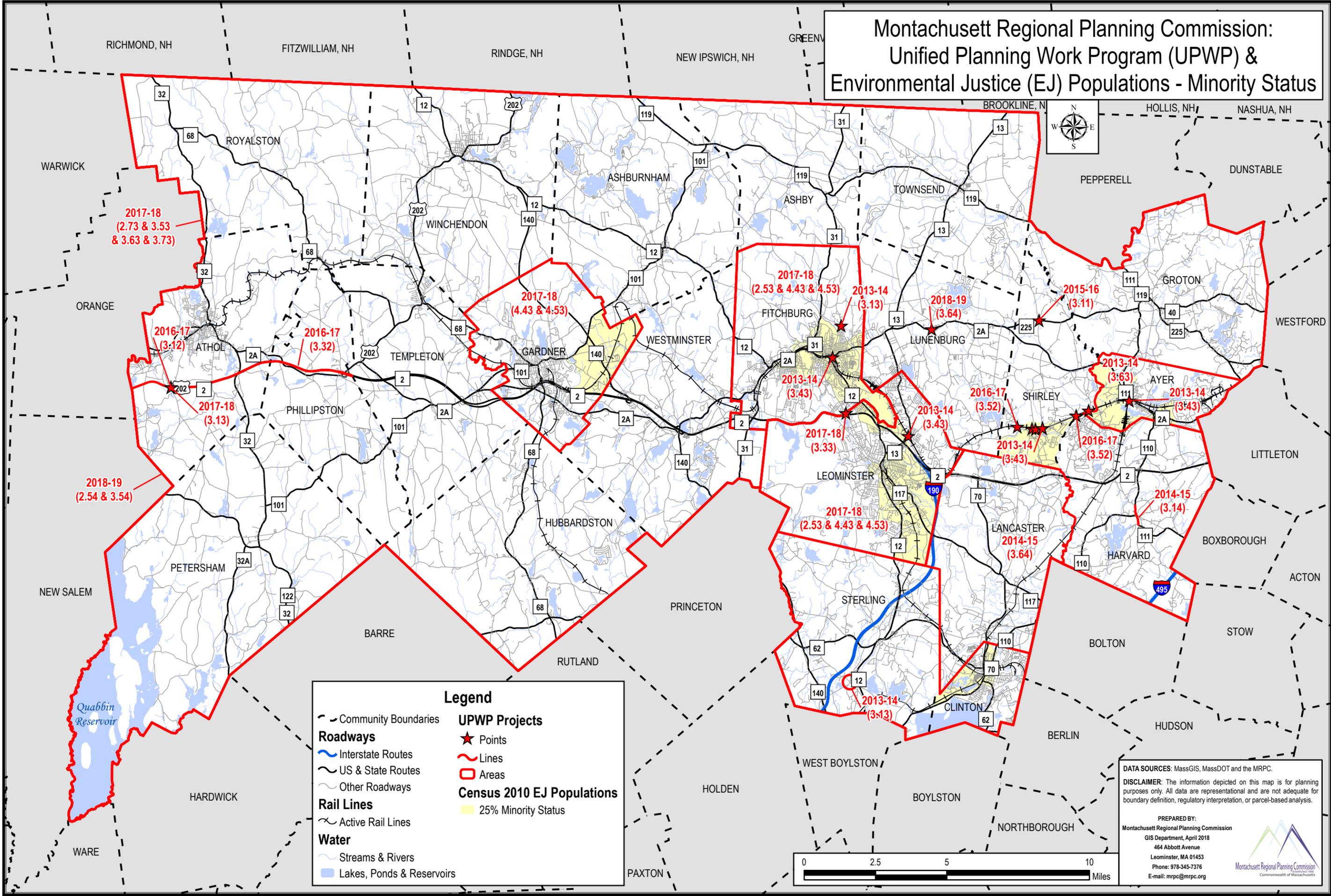
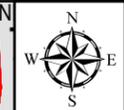


**DATA SOURCES:** MassGIS, MassDOT and the MRPC.

**DISCLAIMER:** The information depicted on this map is for planning purposes only. All data are representational and are not adequate for boundary definition, regulatory interpretation, or parcel-based analysis.

**PREPARED BY:**  
Montachusett Regional Planning Commission  
GIS Department, April 2018  
464 Abbott Avenue  
Leominster, MA 01453  
Phone: 978-345-7376  
E-mail: mrpc@mrpc.org

# Montachusett Regional Planning Commission: Unified Planning Work Program (UPWP) & Environmental Justice (EJ) Populations - Minority Status



2017-18  
(2.73 & 3.53  
& 3.63 & 3.73)

2016-17  
(3.12)

2016-17  
(3.32)

2017-18  
(4.43 & 4.53)

2017-18  
(2.53 & 4.43 & 4.53)

2013-14  
(3.13)

2018-19  
(3.64)

2015-16  
(3.11)

2017-18  
(3.13)

2018-19  
(2.54 & 3.54)

2017-18  
(3.13)

2017-18  
(3.33)

2017-18  
(3.33)

2017-18  
(2.53 & 4.43 & 4.53)

2013-14  
(3.43)

2016-17  
(3.52)

2013-14  
(3.43)

2016-17  
(3.52)

2013-14  
(3.63)

2013-14  
(3.43)

2014-15  
(3.14)

2013-14  
(3.13)

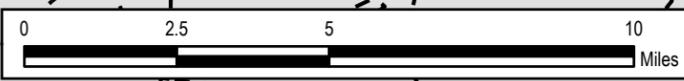
**Legend**

- Community Boundaries
- Roadways**
  - Interstate Routes
  - US & State Routes
  - Other Roadways
- Rail Lines**
  - Active Rail Lines
- Water**
  - Streams & Rivers
  - Lakes, Ponds & Reservoirs
- UPWP Projects**
  - Points
  - Lines
  - Areas
- Census 2010 EJ Populations**
  - 25% Minority Status

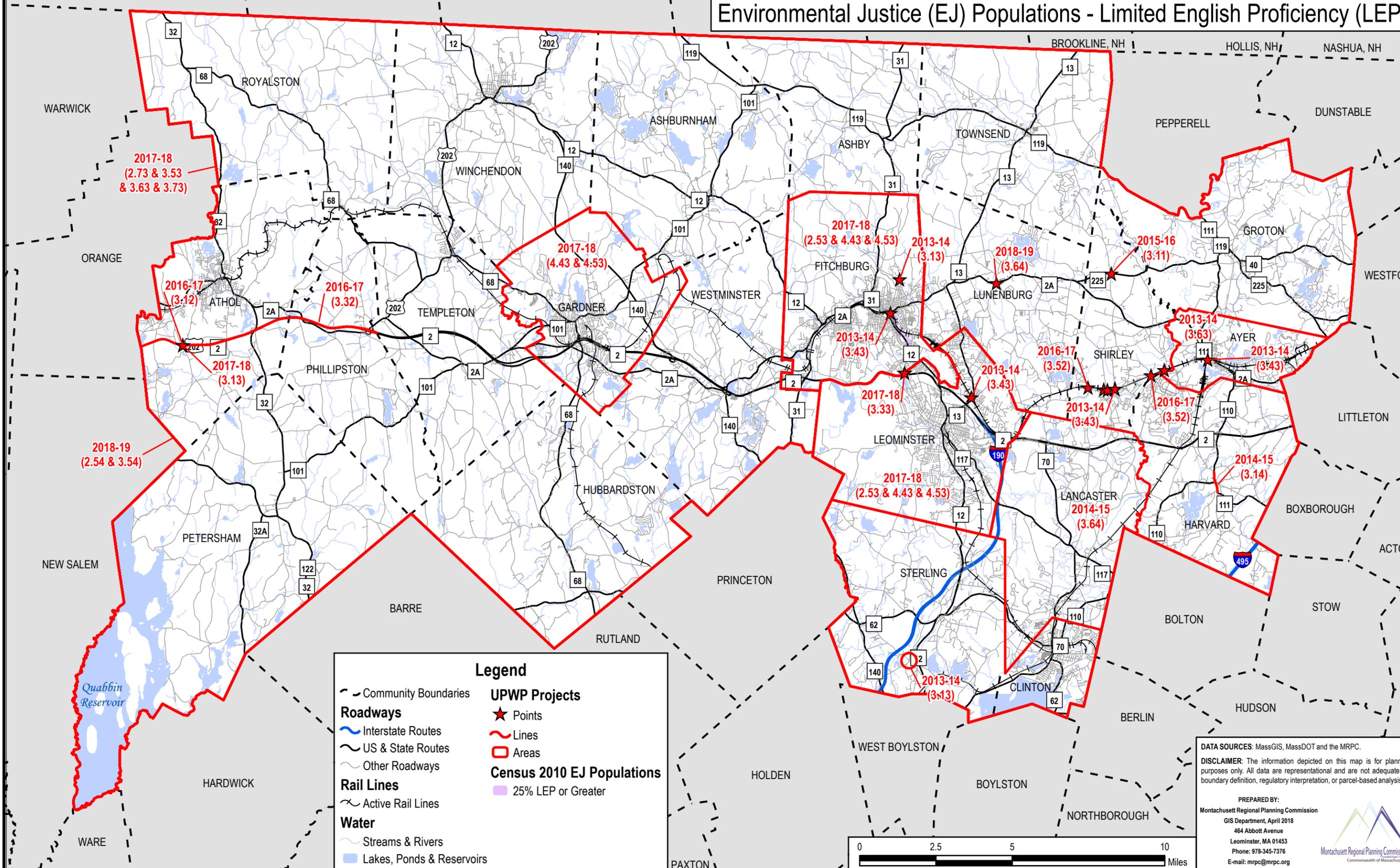
DATA SOURCES: MassGIS, MassDOT and the MRPC.

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Montachusett Regional Planning Commission  
GIS Department, April 2018  
464 Abbott Avenue  
Leominster, MA 01453  
Phone: 978-345-7376  
E-mail: mrpc@mrpc.org

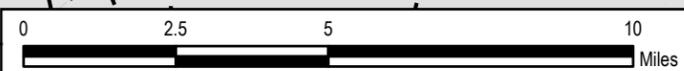


# Montachusett Regional Planning Commission: Unified Planning Work Program (UPWP) & Environmental Justice (EJ) Populations - Limited English Proficiency (LEP)



**Legend**

- Community Boundaries
- Roadways**
  - Interstate Routes
  - US & State Routes
  - Other Roadways
- Rail Lines**
  - Active Rail Lines
- Water**
  - Streams & Rivers
  - Lakes, Ponds & Reservoirs
- UPWP Projects**
  - Points
  - Lines
  - Areas
- Census 2010 EJ Populations**
  - 25% LEP or Greater

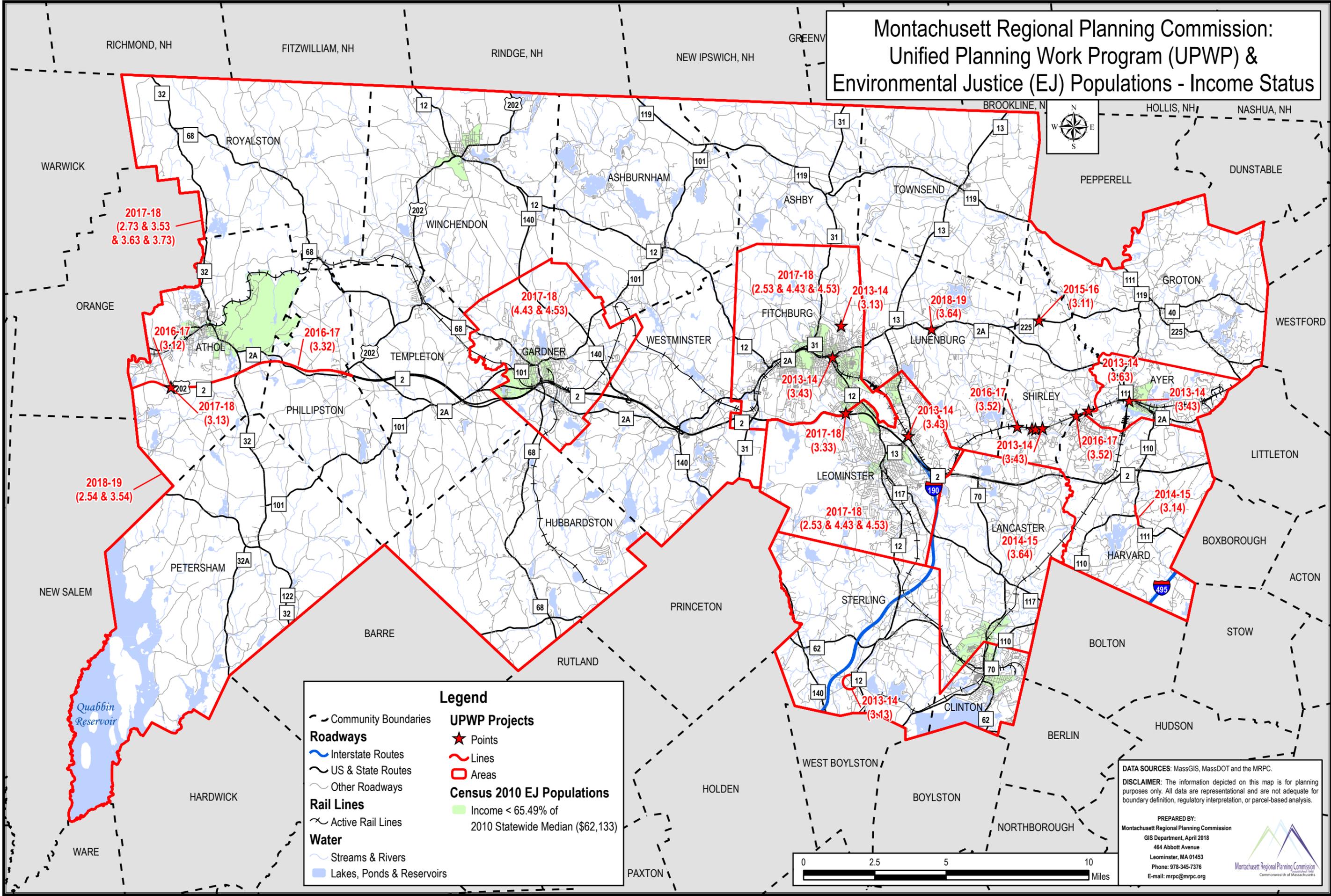
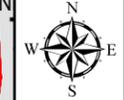


**DATA SOURCES:** MassGIS, MassDOT and the MRPC.

**DISCLAIMER:** The information depicted on this map is for planning purposes only. All data are representational and are not adequate for boundary definition, regulatory interpretation, or parcel-based analysis.

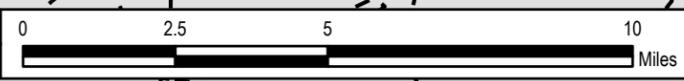
**PREPARED BY:**  
Montachusett Regional Planning Commission  
GIS Department, April 2018  
464 Abbott Avenue  
Leominster, MA 01453  
Phone: 978-345-7376  
E-mail: mrpc@mrpc.org

# Montachusett Regional Planning Commission: Unified Planning Work Program (UPWP) & Environmental Justice (EJ) Populations - Income Status



**Legend**

- Community Boundaries
- Roadways**
  - Interstate Routes
  - US & State Routes
  - Other Roadways
- Rail Lines**
  - Active Rail Lines
- Water**
  - Streams & Rivers
  - Lakes, Ponds & Reservoirs
- UPWP Projects**
  - Points
  - Lines
  - Areas
- Census 2010 EJ Populations**
  - Income < 65.49% of 2010 Statewide Median (\$62,133)



**DATA SOURCES:** MassGIS, MassDOT and the MRPC.

**DISCLAIMER:** The information depicted on this map is for planning purposes only. All data are representational and are not adequate for boundary definition, regulatory interpretation, or parcel-based analysis.

**PREPARED BY:**  
Montachusett Regional Planning Commission  
GIS Department, April 2018  
464 Abbott Avenue  
Leominster, MA 01453  
Phone: 978-345-7376  
E-mail: mrpc@mrpc.org

**APPENDIX D – COMMENTS AND RESPONSES**

**COMMENTS AND RESPONSES**

<p><b>Comment 1.</b></p>	<p>Email from MassDOT Office of Transportation Planning (OTP) with the following items identified</p> <ol style="list-style-type: none"> <li>1. Links to WeMove Massachusetts and GreenDOT on pages xviii and xix need to be updated;</li> <li>2. Ensure consistency with pluralization of “products” for each subsection of each task</li> <li>3. Include a procedure for establishing a bikeability or quality of service metric and explain how work will be done identifying gaps in the regional bicycle network</li> <li>4. Under Task 1.44 (Development of Transportation Improvement Program) – Provide more detail as to what the “economic measures” used in the TIP entail</li> <li>5. Under Task 2.14 (Regional Demographics and Model) - Describe how task will tie into the ongoing Socioeconomic Projects Committee work with the Donahue Institute and MAPC</li> <li>6. Under Task. 2.64 (Freight Corridor Analysis) – Describe how this task will tie into the MassDOT Freight Plan</li> <li>7. Under Task 3.24 (Performance Measures) – more thoroughly outline the federally required performance measures, include timeframe for performance measure adoption, describe the format of the PM Dashboard and what info it will contain.</li> <li>8. Under Task 4.34 (Technical Assistance to MART) – Update year to FFY2019</li> <li>9. Ensure all relevant task are performed with input from MassDOT Dist. 2 and 3, as appropriate</li> <li>10. Check document for overall consistency in punctuation, capitalization, font size, grammar and typos</li> </ol>
<p><b>Response 1.</b></p>	<p>Requested updates and references made to final UPWP document to reflect and address comments.</p> <p>Items 1, 2, 8, 9, and 10 addressed as indicated.</p> <p>Item 3 - Added wording to section “Transportation/Transit Planning in the Montachusett Region” indicating that a bikeability and quality of service metric will be examined and developed for the region. Work related to this activity as well as the identification of trail gaps will be undertaken in Task 2.74 Regional Trail Planning &amp; Printing.</p> <p>Item 4 – Updated Performance and Economic Measures under Task 1.44 Development of TIP to expand how economic measures will be addressed in the TEC process.</p> <p>Item 5 – Updated sections of task to highlight involvement with the MassDOT Socioeconomic Projections Committee. Continued work with the committee will continue.</p> <p>Item 6 – Added wording to indicate that the state Freight Plan will be part of the development process for the regional freight activities. Coordination with the state plan will be a component of anticipated work.</p> <p>Item 7 – Additional information has been included in Task 3.24 Performance Measures to address upcoming measures and deadlines as indicated by MassDOT.</p>