

FFY 2020 UNIFIED PLANNING WORK PROGRAM

MONTACHUSETT METROPOLITAN PLANNING ORGANIZATION

MPO Endorsed June 19, 2019



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and Montachusett Regional Planning Commission (MRPC)
Title VI Coordinator
MRPC
464 Abbott Ave.
Leominster, MA 01453
(978) 345-7376
geaton@mrpc.org

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Massachusetts Commission Against Discrimination (MCAD)
One Ashburton Place, 6th Floor
Boston, MA 02109
617-994-6000 ~ TTY: 617-994-6196

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Spanish: Si necesita esta información en otro idioma, por favor contacte el coordinador del MRPC del Título VI al 978-345-7376.

Portuguese: Caso esta informação seja necessária em outro idioma, favor contar o Coordenador em Título VI do MRPC pelo telefone 978-345-7376.

French: Si cette information est nécessaire dans une autre langue, s'il vous plaît communiquer avec le coordonnateur MRPC Titre VI au 978-345-7376.

MONTACHUSETT


REGIONAL PLANNING COMMISSION

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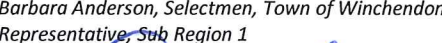
MPO ENDORSEMENT FFY 2020 UNIFIED PLANNING WORK PROGRAM

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 2020 (October 1, 2019 - September 30, 2020) 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 2020 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 Pollack, Secretary and CEO
Massachusetts Department of Transportation


John A. Telepciak, Chairman
Montachusett Regional Planning Commission

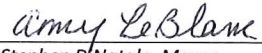

Mark Hawke, Mayor
City of Gardner



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


Phyllis Luck, Selectmen, Town of Lunenburg
Representative, Sub Region 3


Jonathan Gulliver, Administrator
Massachusetts Department of Transportation, Highway Division


Dean Mazzarella, Chairman
Montachusett Regional Transit Authority


Stephen DiNatale, Mayor
City of Fitchburg


Rosemarie Meissner, Selectmen, Town of Ashburnham
Representative, Sub Region 2


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

6/19/19
Date

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TABLE OF CONTENTS

NOTICE OF NONDISCRIMINATION RIGHTS AND PROTECTIONS TO BENEFICIARIES.....	i
MPO ENDORSEMENT	iii
TABLE OF CONTENTS.....	iv
MONTACHUSETT METROPOLITAN PLANNING ORGANIZATION SIGNATORIES.....	v
MONTACHUSETT REGIONAL PLANNING COMMISSION (MRPC) OFFICERS.....	v
MONTACHUSETT JOINT TRANSPORTATION COMMITTEE (MJTC) OFFICERS	v
MONTACHUSETT REGIONAL PLANNING COMMISSION STAFF	v
MONTACHUSETT JOINT TRANSPORTATION COMMITTEE.....	vi
INTRODUCTION	vii
MONTACHUSETT METROPOLITAN PLANNING ORGANIZATION (MMPO).....	vii
TRANSPORTATION/TRANSIT PLANNING IN THE MONTACHUSETT REGION	viii
PRIOR YEAR UPWP TASK RESULTS	x
UPWP DISTRIBUTION OF STUDIES AND TASKS	xii
AMENDMENT AND ADJUSTMENT PROCEDURES FOR THE UPWP	xvii
SOURCES FOR THE MONTACHUSETT UPWP	xvii
STATE AND FEDERAL POLICIES AND PROGRAMS.....	xviii
UPWP TASK NO. 1.11- SUPPORT OF THE 3C PROCESS	2
UPWP TASK NO. 1.21- UNIFIED PLANNING WORK PROGRAM.....	5
UPWP TASK NO. 1.31- PUBLIC INFORMATION REPORTING/PARTICIPATION PROGRAM	6
UPWP TASK NO. 1.41- DEVELOPMENT OF TRANSPORTATION IMPROVEMENT PROGRAM	9
UPWP TASK NO. 1.51- ENVIRONMENTAL JUSTICE AND TITLE VI	13
UPWP TASK NO. 2.11- REGIONAL DEMOGRAPHICS & MODEL	16
UPWP TASK NO. 2.21- GIS MAPPING AND ANALYSIS.....	19
UPWP TASK NO. 2.31- DATA COLLECTION AND ANALYSIS PROGRAM	22
UPWP TASK NO. 2.41- PAVEMENT MANAGEMENT SYSTEMS	26
UPWP TASK NO. 2.51- BEFORE & AFTER SAFETY ANALYSIS	28
UPWP TASK NO. 2.61- FREIGHT CORRIDOR ANALYSIS.....	30
UPWP TASK NO. 2.71- PERFORMANCE MEASURES	32
UPWP TASK NO. 3.11- TRAVEL OPTIONS AND RIDESHARE PROGRAM(S).....	35
UPWP TASK NO. 3.21- TRAVEL BY TOURISM.....	37
UPWP TASK NO. 3.31- CLIMATE CHANGE PROGRAM	38
UPWP TASK NO. 3.41- REGIONAL BIKE AND PED PLAN	40
UPWP TASK NO. 3.51- LOCAL ADA TRANSITION PLAN DEVELOPMENT	42
UPWP TASK NO. 3.61- TRAIL DATA APPLICATION.....	44
UPWP TASK NO. 4.11- TRANSPORTATION EQUITY AND PUBLIC INVOLVEMENT	46
UPWP TASK NO. 4.21- SHORT RANGE TRANSPORTATION PLANNING	48
UPWP TASK NO. 4.31- TECHNICAL ASSISTANCE TO MART.....	50
UPWP TASK NO. 4.41- BUS ROUTES PERFORMANCE EVALUATION	51
FFY 2019 Program Year Staffing Report	53
UPWP BUDGET	54
SUMMARY OF FUNDING BY SOURCE AND ELEMENT.....	55
MRPC FEDERAL FISCAL YEAR "PL" ALLOCATIONS.....	56
APPENDIX A – MRPC FUNDING SOURCES AND PLANNING ACTIVITIES.....	58
APPENDIX B – GLOSSARY/ ACRONYMS	62
APPENDIX C – COMMENTS AND RESPONSES.....	67

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 C. Telepciak
Montachusett Regional Transit Authority (MART) Chairman	Mayor Dean Mazzarella
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>	Jaime Toale
Lancaster Board of Selectmen <i>Subregion 4</i>	Stanley B. Starr, Jr.

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 Mazzarella

EXOFFICIO MEMBERS

Jeffrey H. McEwen, Administrator	Federal Highway Administration
Peter Butler, Acting Regional Administrator	Federal Transit Administration

MONTACHUSETT REGIONAL PLANNING COMMISSION (MRPC) OFFICERS

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

MONTACHUSETT JOINT TRANSPORTATION COMMITTEE (MJTC) OFFICERS

Jon Wyman, Chairman	Westminster
Paula Bertram, Vice Chairman	Lunenburg
Doug Walsh, Secretary	Athol

MONTACHUSETT REGIONAL PLANNING COMMISSION STAFF

Glenn Eaton, Executive Director
Linda Parmenter, Administrative/Human Resources Director
Linda Quinlivan, Fiscal Manager
Holly Ford, Executive Assistant
Brad Harris, Transportation Director
George Snow, Principal Transportation Planner
Sheri Bean, Principal Planner
Brian Doherty, Principal Transportation Planner
George Kahale, Transit Director
John Hume, Planning and Development Director
Karen Chapman, Principal Planner
Sean O'Donnell, Regional Planner
Kayla Kress, GIS Technician

MONTACHUSETT JOINT TRANSPORTATION COMMITTEECOMMUNITYAPPOINTED BY SELECTMEN/MAYORAPPOINTED BY PLANNING BOARD

Ashburnham
Ashby
Athol
Ayer
Clinton
Fitchburg
Gardner
Groton
Harvard
Hubbardston
Lancaster
Leominster
Lunenburg
Petersham
Phillipston
Royalston
Shirley
Sterling
Templeton
Townsend
Westminster
Winchendon

Jessica Caouette

Doug Walsh

Phil Duffy

Treavor Beauregard

Travis Brown
Noreen Piazza
David DiGiovanni
Paula Bertram
Nancy Allen
Gordon Robertson
Roland Hamel

John Kilcoyne
Eric Pollitt

Keith Hickey

Richard Wright
Alan Pease
Doug Walsh
Mark Archambault

Paula Caron

Russell Burke
Erin McBee

Bonnie Lawrence
Michael Pineo
Charles Carroll II

Jon Wyman
Tracy Murphy

EXOFFICIO MEMBERS

Bryan Pounds	Office of Transportation Planning (OTP) and Massachusetts Department of Transportation (MassDOT)
Jeffrey H. McEwen	Federal Highway Administration (FHWA), Administrator
Peter Butler	Federal Transit Administration (FTA), Acting Regional 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)

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
Jessica Strunkin	Mass Development
Peter Lowitt	Devens Enterprise Commission (DEC)
Patricia Pistone	Montachusett Opportunity Council, Inc.
	The ARC of Opportunity

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 2020 program year.

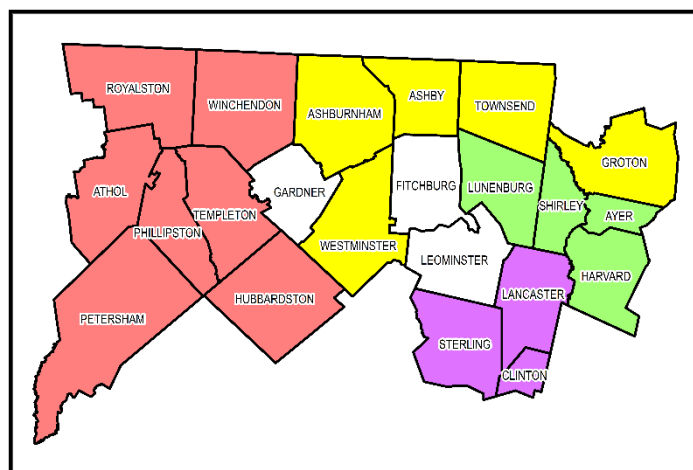
The purpose of the UPWP is to ensure a comprehensive, cooperative, and continuing (3C) transportation planning process in the Leominster - Fitchburg Urbanized Area and the Montachusett Region. In addition, this document provides for the coordination of planning efforts between communities in the Montachusett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

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 every four years to reflect the changing transportation needs of the area. In July of 2019, the MPO is expected to endorse the 2020 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	
MPO Membership	
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,

Montachusett MPO	
Signatories	Representing
Secretary & CEO	Massachusetts Department of Transportation (MassDOT)
Administrator	Massachusetts Department of Transportation (MassDOT) Highway Division
Chair	Montachusett Regional Planning Commission (MRPC)
Chair	Montachusett Regional Transit Authority (MART)
Mayor	City of Fitchburg
Mayor	City of Gardner
Mayor	City of Leominster
Representative	Subregion 1 - Athol, Hubbardston, Petersham, Phillipston, Royalston, Templeton, Winchendon
Representative	Subregion 2 - Ashburnham, Ashby, Groton, Townsend, Westminster
Representative	Subregion 3 - Ayer, Harvard, Lunenburg, Shirley
Representative	Subregion 4 - Clinton, Lancaster, Sterling

Continuing and Cooperative Transportation Planning Process for the Montachusett Region Metropolitan Planning Organization”, defining the expanded MPO, was formally agreed to in September 2001. This MOU was reviewed, revised, updated and endorsed by the MPO on February 4, 2009. The makeup and composition of the MPO remained the same but a revised method to select subregion representatives was adopted. On April 13, 2011, the MOU was updated and endorsed to reflect the Massachusetts Transportation Reform Act enacted on June 26, 2009 that established the Massachusetts Department of Transportation. During the fall/winter of 2015/2016, the representatives and

alternates for the four identified subregions went through a selection process to update membership and participation. These individuals will serve for a three-year period beginning in September/October of 2016. The selection process will be conducted again in the FFY 2019 program year in order to have new representatives in place by September/October of 2019.

In addition to the MPO signatories, members/representatives from various federal, state and regional agencies are identified as Ex-Officio Members to the MPO that provide valuable input and guidance to all MPO actions and decisions. The Ex-Officio Members are identified on page vii of this document.

TRANSPORTATION/TRANSIT PLANNING IN THE MONTACHUSETT REGION

During the FFY 2020 program year, the MRPC will continue its efforts to maintain a viable transportation planning process through several tasks outlined in this UPWP. Each task describes the efforts to be made to address a particular issue or area of concern along with intended products, timeframes, budgets and funding sources.

MRPC staff will continue to work on keeping an up to date trail database through the development of a trail data application. This application will serve as a tool to allow communities to update their trail data on their own through our GIS platform. The goal is to continuously keep the regional trail data updated so that our 5-year update will be a smooth process. As part of this, staff will continue to meet and work with the Montachusett Regional Trail Coalition (MRTC) on a regular basis.

Staff will also continue to work on assisting communities with the development of the transportation aspects of local ADA transition plans. Building upon information developed in the prior program year, staff will seek to assist local governments to either prepare a Plan or to update an existing Plan. The primary focus will be to assist municipalities with the public rights-of-way facilities section of the Plan.

The Geographic Information System (GIS) department will continue to support various work activities under several UPWP tasks as well as provide local assistance through our program of providing 8 free hours of GIS service to member communities. In addition, the 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.

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 has allowed 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 undertaken 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. 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 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 \$70,683 in federal and \$17,671 in state FY2020 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 2019 program year, staff compiled data on the on-time performance of the existing fixed route bus services in Fitchburg, Leominster and Gardner. This is a multiple year process to continue monitoring the performance measure related to on time service performance in the MART Region.

In the upcoming FFY 2020 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.

PRIOR YEAR UPWP TASK RESULTS

During the prior program year from October 1, 2018 to April 30, 2019, 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 2.14 Regional Demographics & Model

- TransCAD software training continued;
- Regional population, household and employment projections developed in coordination with MassDOT;
- Participant Statistical Areas Program (PSAP) work with Census related to Census Tract and Block Group identification.

Task 2.34 Data Collection and Analysis Program

- Traffic counts taken at approximately 137 locations around the region;
- Additional crash reports from local police departments compiled based on various study needs;
- GIS mapping of various datasets – including traffic counts & high crash locations;
- Safety analysis of high crash locations developed for the region;
- Road Safety Audits (RSAs) were also conducted at the following locations:
 - South Street at Wanoosnoc Rd in Fitchburg
 - Greenville Road (Rt. 31) at Turnpike Road in Ashby.

Task 2.44 Pavement Management Systems

Pavement Management

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

Task 2.54 Fatal Crash Corridor Analysis

- Route 2A/31, Westminster Street, Fitchburg.

Task 2.74 Regional Trail Planning & Printing

- Worked with the Montachusett Regional Trails Coalition to create a Strategic Plan;
- Assisted communities with trail related grant applications;
- Updated regional trail guide;
- Printed approximately 10,000 copies of updated trail guide.

Task 3.14 Regional Transportation Plan Update

- Updated and launched an RTP specific website and comment application;
- Conducted local meetings and workshops to discuss and present the RTP;
- Updated chapters.

Task 3.24 Performance Measures

- Coordinated with MassDOT on support and adoption of state PM1 Safety Performance Measures for CY 2019;
- Coordinated with MassDOT on support and adoption of state PM2 Bridge & Pavement Performance Measure and PM3 Reliability, Congestion & Emissions Performance Measure.

Task 3.34 Climate Change Program

- Completed Bottleneck Study for Merriam Avenue/South Street in Leominster and Fitchburg.

Task 3.54 Local ADA Transition Plan Development

- Lancaster ADA PROW Transition Plan
- Lunenburg ADA PROW Transition Plan

Task 3.64 Lunenburg Walkability & Parking Study

- Initial outreach and community meetings were held;
- Study area was identified;
- Existing conditions were reviewed and mapped;
- Concerns and issues were identified and mapped;
- Recommendations were made.

Task 4.44 Bus Route Performance Evaluation

- Reviewed available materials related to On-Time Performance Evaluation methods;
- Reviewed and discussed available data needs with RTA;
- Work to develop Performance Measure Evaluation methodology.

UPWP DISTRIBUTION OF STUDIES AND TASKS

As part of the development of the UPWP, the Montachusett MPO has conducted a geographic and social equity analysis of past and current tasks undertaken in this and prior UPWPs.

For these analyses, the 2013-2017 American Community Survey 5-year estimates were utilized. For some of the data, census estimates were only available at the Census Tract level. This data dealt with Foreign Born, Disabilities and Non-English Spoken at Home. The remaining census data estimates were available at the Block Group level. The tables below list the ACS data sources as well as whether they were broken down to the Census Tract or Block Group level. These tables, therefore, were used to determine Environmental Justice (EJ) and Title VI designated areas.

2013-2017 ACS 5-Year Estimates

By Block Group

Variable	2013-2017 ACS Table
Total Population	B03002
Majority Population	B03002
Poverty Determined Population	B17021
Below Poverty Population	B17021
Population 65 Years or Older Population	B09020
Median Household Income	B19013
Limited English Proficiency (LEP) Households	C16002

2013-2017 ACS 5-Year Estimates

By Census Tract

Variable	2013-2017 ACS Table
Total Population	B05002
Foreign Born	B05002
Individuals with Disabilities	S1810
Percent Household Limited English Proficiency (LEP)	S1602
Percent Language Spoken at Home – Non-English	DP02

EJ and Title VI populations are defined differently by the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA). In addition, EJ analysis is based on different criteria, ex. poverty based on the statewide median income rather than the regional median income. The tables below define the Title VI and EJ criteria utilized in the regional analysis.

Environmental Justice and Title VI Definitions for Analysis

Environmental Justice Block Groups	Analysis Criteria
1. Block group whose annual median household income is equal to or less than 65 percent (%) of the statewide median (\$74,167 in 2017);	Statewide Median Income: \$74,167 65% of Median Household Income: \$48,209 Geography: Block Group
2. Twenty-five percent (25%) or more of the residents identifying as minority;	Minority Population Equal or Greater Than 25% Geography: Block Group
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).	Limited English Proficiency Equal or Greater Than 25% Geography: Block Group

FTA Title VI Communities	Analysis Criteria
1. Minority – Percent of population including Hispanic or Latino of any race that is considered non-white and is higher than the regional average	Regional Average: 12.24% Geography: Block Group
2. Low Income - Percent estimated below poverty level that is higher than the regional average	Regional Average: 10.85% Geography: Block Group

FHWA Title VI Communities	Analysis Criteria
1. Elderly – Percent of Total Population > 65 that is higher than the regional average	Regional Average: 15.11% Geography: Block Group
2. Individuals with Disabilities – Percent of population with a disability that is higher than the regional average	Regional Average: 12.03% Geography: Census Tract
3. Minority – Percent of population including Hispanic or Latino of any race that is considered non-white and is higher than the regional average	Regional Average: 12.24% Geography: Block Group
4. Foreign Born – Percent of population that is Foreign Born and is higher than the regional average	Regional Average: 8.12% Geography: Census Tract
5. Language – Percent of Population Spoken Language Other than English that is higher than the regional average	Regional Average: 14.42% Geography: Census Tract

Listed below are tasks from the past five UPWPs (FFY 2015 to FFY 2019) as well as tasks in this FFY 2020 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, i.e. Traffic Counts, Crash Data Analysis, etc. The identified tasks were then referenced against communities with either Block Groups or Census Tracts that meet the above referenced definitions for Environmental Justice and/or Title VI populations. Geographic equity was also analyzed.

Five Year Task Review								
UPWP Year	Community	Description	Task #	Funding	Within EJ Community	Within Title VI Community by Block Group		Within Title VI Community by Census Tract
						FTA	FHWA	FHWA
2015	Regionwide (All 22 MRPC Communities)	Heart Healthy Trail Map Development	2.54	\$27,557	X	X	X	X
2015	Harvard	Town Center Operational Study	3.14	\$25,000	X	X	X	
2015	Lancaster	Local Complete Streets Review and Analysis	3.64	\$25,000		X	X	
2016	Shirley	Shirley Safety Study	3.11	\$36,750	X	X	X	X
2017	Fitchburg Leominster	Sidewalk Inventory & Bicycle/Pedestrian Connections	2.52	\$30,500	X X	X X	X X	X X
2017	Athol	Route 2 at South Athol Road Interchange Study	3.12	\$45,000	X	X	X	X
2017	Athol Phillipston	Route 2 Before and After Safety Analysis	3.32	\$40,500	X	X	X	X
2017	Shirley	Shirley Railroad Crossing Review and Analysis	3.52	\$35,500	X	X	X	X
2018	Gardner	Sidewalk Inventory & Bicycle/Pedestrian Connections	2.53	\$25,500	X	X	X	X
2018	Regionwide (All 22 MRPC Communities)	Regional Development Initiative	2.73	\$19,500	X	X	X	X
2018	Athol	South Athol Road/Route 2 Interchange Analysis	3.13	\$39,500	X	X	X	X
2018	Fitchburg Leominster	Climate Change Program (Merriam Ave./South St. Bottleneck Study)	3.33	\$36,000	X X	X X	X X	X X
2018	Regionwide (All 22 MRPC Communities)	Local ADA Transition Plan Development	3.53	\$33,500	X	X	X	X
2018	Regionwide (All 22 MRPC Communities)	Regional Bike & Ped Trail Update	3.73	\$23,000	X	X	X	X
2018	Fitchburg Leominster Gardner	Coordinated Transit Plan Update	4.43	\$31,250	X X X	X X X	X X X	X X X
2018	Fitchburg Leominster Gardner	Ridership Survey Distribution	4.53	\$15,750	X X X	X X X	X X X	X X X
2019	Regionwide (All 22 MRPC Communities)	Fatal Crash Corridor Analysis	2.54	\$26,250	X	X	X	X
2019	Regionwide (All 22 MRPC Communities)	Local ADA Transition Plan Development	3.54	\$68,500	X	X	X	X
2019	Lunenburg	Town Center Walkability and Parking Study	3.64	\$29,500	X	X	X	
2019	Fitchburg Leominster Gardner	Bus Route Performance Evaluation	4.44	\$30,000	X X X	X X X	X X X	X X X

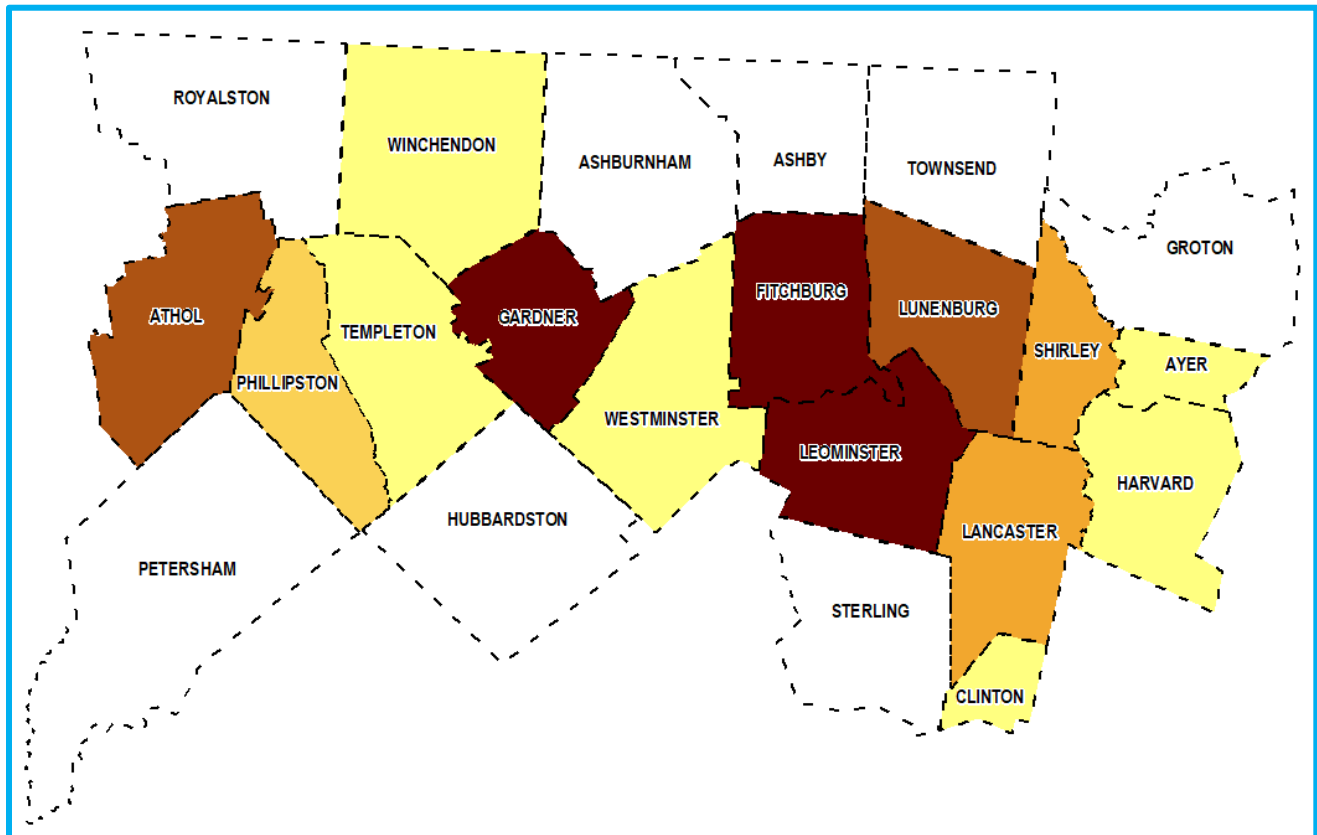
FFY 2020 Task Review								
UPWP Year	Community	Description	Task #	Funding	Within EJ Community	Within Title VI Community by Block Group		Within Title VI Community by Census Tract
						FTA	FHWA	FHWA
2020	Fitchburg Lancaster	Before & After Safety Study	2.51		X	X X	X X	X
2020	Fitchburg Leominster Gardner	Travel Options & Rideshare Programs	3.11		X X X	X X X	X X X	X X X
2020	Athol Phillipston Templeton Gardner Westminster Leominster Fitchburg Lunenburg Shirley Ayer	Travel by Tourism	3.21		X X X X X X X X	X X X X X X X X	X X X X X X X X	X X X X X X X X
2020	Regionwide (All 22 MRPC Communities)	Regional Bike Plan	3.41		X	X	X	X

A review of the work tasks identified over the past five-year period, i.e. from FY 2015 to FY 2019, shows:

- Eleven (11) communities were identified as having one or more Block Groups meeting the definitions for Environmental Justice populations, i.e. Low Income, Minority or LEP. Based upon the identified community specific work tasks over the prior five federal fiscal years, seven (7) of these communities, or 64%, had work conducted within them.
- Of the 13 identified FTA Title VI communities, community specific tasks were conducted in 8, or 62%, of those municipalities.
- Of the 19 identified FHWA Title VI communities with block groups meeting the definitions for Elderly and Disabled populations, community specific tasks were conducted in 8, or 42%, of those municipalities.
- Of the 11 identified FHWA Title VI communities with census tracts meeting the definitions for Disabled, Foreign Born or LEP, five (5), or 45%, had community specific tasks conducted in them.
- Identified EJ communities that lacked a community specific work task were Ashburnham, Ayer, Clinton, and Winchendon.
- FTA Title VI communities that lacked a community specific task are Ashburnham, Ayer, Clinton, Sterling and Winchendon.
- FHWA Title VI only communities with identified populations based on block groups that lacked a community specific work task include Ashburnham, Ayer, Clinton, Groton, Hubbardston, Petersham, Royalston, Sterling, Templeton, Westminster and Winchendon. All of these municipalities were identified as having Elderly population block groups that exceed the regional average that identified them as FHWA Title VI communities.

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. This includes data collection efforts, crash data analysis, trail inventory updates and pavement management inventories.

The map below shows the geographic equity analysis that was also conducted based on the projects conducted over the past five years for those specific communities. The regionwide projects were left out of this analysis. The darker color shows where the most projects were conducted (5+) and the communities shown in white had no projects that were specific to that community over the past five years.



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. Projects or work tasks, compiled in the last five years have been developed in an attempt to locate them in communities which either have an Environmental Justice population, FHWA Title VI population, FTA Title VI population, or a combination of all three. Future efforts should focus on the communities of Ashburnham, Ayer, Clinton, Groton, Hubbardston, Petersham, Royalston, Sterling, Templeton, Westminister and Winchendon. For geographic distribution, it is clear that the major cities of Fitchburg, Gardner and Leominster are where the bulk of the community specific projects are located. The map also shows that more effort could be made in the northern and southern communities and that the communities along the Route 2 corridor seem to be where the major project focus lies.

This analysis also shows that more tasks should be developed to address issues pertinent to the elderly population. Although the task identified in this UPWP entitled "Travel Options & Rideshare Programs" specifically mentions travel options for students, it does have some aspects that could likely be applicable to the elderly population and their particular issues. This task is a result of a prior task conducted in FFY 2018 entitled "Regional Transportation Needs Assessment" that surveyed four specific audiences; large business employers, elderly, medical buildings and higher education. Future efforts will seek to specifically address these audiences but all will still be a consideration as work progress, i.e. work will not focus entirely on a particular audience to that the others are completely excluded.

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.

SOURCES FOR THE MONTACHUSETT UPWP

FHWA allocates Metropolitan Planning Funds (PL) to MassDOT who in turn distributes those funds to the state's RPAs 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, 2019 - September 30, 2020
FTA/Section 5303/MassDOT	FFY 2019 October 1, 2019 - September 30, 2020

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 21st 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
1.51 EJ/Title VI				X	X					
2.11 Reg Demo & Model	X			X		X	X			X
2.21 GIS	X	X			X		X	X	X	X
2.31 Data Collection	X	X					X	X	X	
2.41 Pavement Management		X	X	X		X	X		X	X
2.51 Before & After Analysis		X				X	X	X		
2.61 Freight Corridor Analysis	X		X			X	X	X	X	
2.71 Performance Measures	X			X	X	X		X		X
3.11 Travel Options/Rideshare	X			X	X	X	X	X		
3.21 Travel by Tourism	X			X	X	X				X
3.31 Climate Change Prog.				X		X			X	
3.41 Regional Bike & Ped Plan	X			X	X	X	X			X
3.51 Local ADA	X	X		X	X	X				X
3.61 Trail Data App	X			X	X	X				X
4.41 Bus Route Performance	X			X		X	X	X	X	X

Transit Asset Management

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

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.

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) completed a TAM plan in September of 2018 and presented it to the Montachusett MPO. The Montachusett MPO will adopt targets in the following categories sometime in the spring of 2019

- Rolling Stock
- Equipment
- Facilities

As dictated by the Final Rule, a Tier I TAM Plan must include the following nine elements:

1. Inventory of Capital Assets – An inventory of the number and type of capital assets. The inventory must include all capital assets that a provider owns, except equipment with an acquisition value under \$50,000 that is not a service vehicle.
2. Condition Assessment – A condition assessment of those inventoried assets for which a provider owns or has direct capital responsibility
3. Identification of Decision Support Tool or Processes – A description of analytical processes or decision-support tools that a provider uses to estimate capital investment needs over time and develop its investment prioritization
4. Investment Prioritization – A project-based prioritization of investments
5. TAM and SGR policy – A TAM policy is the executive-level direction regarding expectations for transit asset management; a TAM strategy consists of the actions that support the implementation of the TAM policy.
6. Implementation strategy – The operational actions that a transit provider decides to conduct, in order to achieve its TAM goals and policies.
7. List of key annual activities – The actions needed to implement a TAM plan for each year of the plan's horizon.
8. Identification of resources – A summary or list of the resources, including personnel, that a provider needs to develop and carry out the TAM plan.
9. Evaluation plan – An outline of how a provider will monitor, update, and evaluate, as needed, its TAM plan and related business practices to ensure the continuous improvement.

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) 2019. 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 2019 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 2015-2019 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.

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 and adopted by the Montachusett MPO for CY 2019 on February 20, 2019. Subsequently, FHWA established two additional performance measures that state Departments of Transportation and MPOs needed to adopt and track. The National Highway System Bridge and Pavement Condition Performance Measure (PM 2) and the Systems Performance Measures, Congestion, Reliability and Emissions (PM 3) were required to be established by the end of 2018. MassDOT then provided statewide target information for PM 2 and PM 3 to the Montachusett MPO for their review and either their adoption by the MPO or the establishment of their own regional PM 2 and PM 3. After review and discussion, the Montachusett formally adopted the statewide PM 2 targets on October 17, 2018 and PM 3 targets on September 19, 2019.

For additional information on these performance measures, please consult the FFY 2020 – 2024 Montachusett Transportation Improvement Program (TIP).

Global Warming Solutions Act (GWSA)

The Global Warming Solutions Act (GWSA), which was signed into law in August 2008, makes Massachusetts a leader in setting aggressive and enforceable GHG reduction targets, and implementing policies and initiatives to achieve these targets. In keeping with the law, on December 29, 2010 the Massachusetts Executive Office of Energy and Environmental Affairs (EOEEA), in consultation with other state agencies and the public, released the Massachusetts Clean Energy and Climate Plan for 2020. In December 2014, DEP issued new regulations that require MPOs to quantify impacts from project investments, track progress towards reductions, and consider impacts in the prioritization of project investments. The targets for overall statewide GHG emissions are:



The Commonwealth’s MPOs are integrally involved in supporting the GHG reductions mandated under the GWSA. The MPOs are most directly involved in helping to achieve the GHG emissions reductions through the promotion of healthy transportation modes through prioritizing and programming an appropriate balance of roadway, transit, bicycle and pedestrian investments – and assisting smart growth development patterns through the creation of a balanced multi-modal transportation system. This is realized through the transportation goals and policies espoused in the 2016 Regional Transportation Plans (RTPs); the major projects planned in those RTPs; and the mix of new transportation projects that are

programmed and implemented through the TIPs. GHG tracking and evaluation processes enable the MPOs to identify anticipated GHG impacts of planned and programmed projects, and also to use GHG impacts as a criterion in prioritizing transportation projects.

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.

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.

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.

Coordination in the Montachusett UPWP

The policies and goals of the Commonwealth, such as *the Global Warming Solutions Act*, 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.

Commission on the Future of Transportation in the Commonwealth

In January 2018, Governor Charlie Baker signed Executive Order No. 579 which created a Commission on the Future of Transportation in the Commonwealth to provide recommendations to the Baker-Polito Administration on how to best account for potential changes in transportation in the future. “The Commission will explore anticipated changes in technology, climate, land use, and the economy to determine likely impacts on transportation between 2020 and 2040. This work will be conducted through a robust grounding in facts and trends, development of plausible future scenarios, and formulation of recommendations to the Governor, Lieutenant Governor, and other key decision makers. The Commission will meet monthly and will provide a report on the analysis of members and make recommendations by December 1, 2018” (www.mass.gov)

Based on this criterion, the following topics were examined;

1. Climate and Resiliency
2. Transportation Electrification
3. Autonomous and Connected Vehicles
4. Transit and Mobility Services
5. Land Use and Demographics

The Commission on the Future of Transportation in the Commonwealth completed their work in early 2019 and released a two-volume report. These reports outline the current trends in the five topic areas and, through scenario planning, provides recommendations to prepare the transportation system in Massachusetts for the future in 2040. Reference to this report was made by staff in the development of the Montachusett 2020 Regional Transportation Plan (RTP).

1.0

MANAGEMENT AND SUPPORT

UPWP TASK NO. 1.11 - SUPPORT OF THE 3C PROCESS

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).

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 local and regional connectivity, community commitment, and enthusiasm for trails in the Montachusett Region.”

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 Massachusetts 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 2020, 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;
- Administered 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:

- Provide administrative and technical support to the 3C process such as:
 - Provide liaison and short-term planning assistance to all communities on transportation planning matters.
 - Review Federal and State transportation programs and regulations as required or necessary.
- Administer the UPWP, 3C Contract, FTA/The Office of Transportation Planning Technical Studies and other transportation related grants.
- Provide for and support public participation and private enterprise involvement in the 3C Process, FTA and Air Quality Programs.
- Participation in informational programs on transportation, air quality, hazardous waste, energy conservation and accessibility planning.
- Coordinate work with agencies involved in the 3C Contract, FTA and Air Quality Planning Programs.
- Review MassDOT "084" Forms which affect highway capacity, speed, or VMT as part of the MPO's annual Air Quality Consistency Review.
- Provide for participation of staff in educational development programs and conferences with concurrence with the Office of Transportation Planning and other agencies as needed.
- Review and comment on traffic studies submitted to member municipalities by developers under the MEPA process or as needed/requested.
- Ensure that transportation/air quality decisions are consistent with regional policies, goals, objectives, and the State Implementation Plan (SIP).
- 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.
- Work with and assist MassDOT and OTP with the implementation of rules and regulations related to MAP-21 and the FAST Act.
- 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, Freedoms Way National Heritage Area 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.

Product:

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 2019	Nov 2019	Dec 2019	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	Jun 2020	July 2020	Aug 2020	Sep 2020
Support Activities												
Public Input												

Task 1.11

FHWA PL	MassDOT	FTA-5303	MassDOT	TOTAL
\$54,027	\$13,507	\$6,000	\$1,500	\$75,034

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:

- Annual Unified Planning Work Program endorsed by the MPO.
- 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 2019 to May/June 2020 time period. Draft documents prepared March to May 2020. MPO endorsement to be sought no later than June 2020.

Amendments are prepared and endorsed as necessary.

	Oct 2019	Nov 2019	Dec 2019	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	Jun 2020	July 2020	Aug 2020	Sep 2020
Start												
Public Input												
Draft												
MPO Endorsement												

Task 1.21

FHWA PL	MassDOT	FTA-5303	MassDOT	TOTAL
\$15,200	\$3,800	\$4,000	\$1,000	\$24,000

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 and continues to be refined and updated to improve accessibility as needed. 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) 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, December 2018
- 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:

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

- 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;

- Conduct review of state Public Participation Program and related Title VI input/comments from ODCR.
- Identify elements of the PPP that need refinement and/or correction.
- 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.
 - 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.
 - 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.
 - Continue efforts to address issues related to Title VI and public outreach and involvement to those identified populations.
- 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.
- 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.
- 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.
- 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.
- Present Transportation Plans and programs to the public for appropriate action.
- Utilize MRPC internet web page to promote and solicit public input and involvement in all planning aspects. Actively promote availability of web page.
- 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.
- 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.
- 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.
- 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.

Product:

- 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 2019	Nov 2019	Dec 2019	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	Jun 2020	July 2020	Aug 2020	Sep 2020
Web Revisions												
PPP Review												

Task 1.31

FHWA PL	MassDOT	FTA-5303	MassDOT	TOTAL
\$28,000	\$7,000			\$35,000

Objective:

To develop and maintain a financially constrained staged multi-year program of transportation/air quality improvement projects that is consistent with the Regional 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 2019, 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. It was recently revised and updated to improve relevance based on MJTC and MPO input.

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:

- Transportation Evaluation Criteria (TEC) Revision for the Montachusett Region – 2019
- Prior TIP's and Amendments developed on an annual basis.
- Regional Performance Measures and Goals through the 2016 Regional Transportation Plan - 2015
- MAP-21 Regionally developed Performance Measures – 2015/2016

Methodology:**GENERAL**

- The TIP is a staged, multi-year, Intermodal program of transportation projects which are consistent with the Regional Transportation Plan (RTP). It is a management and project tracking tool that is used to monitor the progress in implementing the RTP;
- It seeks to ensure early involvement of key stakeholders and citizens through adherence with the Public Participation Plan prepared under the 3C Task;
- The TIP includes sections on:
 - Description of funding categories and amounts of Federal funds proposed to be obligated during each program year;
 - Previously funded projects and programs from the last TIP year;
 - A description of the criteria and Project Selection Process for prioritizing projects;
 - Air quality significance and relationship of the TIP to the State Implementation Plan (SIP);
 - 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;
- The TIP utilizes 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.

- 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.

DEVELOPMENT PROCESS OF THE FIVE-YEAR PROGRAM OF PROJECTS

- 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;
- Prepare a list of all regionally significant transportation projects or programs that require FHWA or FTA approval that are not using Federal transportation funds;
- For informational purposes list all regionally significant projects proposed to be funded with Federal funds other than from FHWA and FTA;
- For informational purposes list all regionally significant projects proposed to be funded with Non-Federal funds;
- The list of projects shall include:
 - The official MassDOT identifying project title;
 - Project description;
 - Transportation Evaluation Criteria Score;
 - Estimated total cost;
 - The amount of Federal funds proposed to be obligated during each program year;
 - Proposed source of Federal and non-Federal funds;
 - Identification of the recipient/sub recipient and State and local agencies responsible for carrying out the project;
 - Identification of those projects which will implement ADA plans.
- Project descriptions shall be of sufficient detail to permit air quality analysis in accordance with the U.S. EPA conformity requirements;
- 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;
- 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;
- Projects will be reviewed and analyzed using MassDOT developed AQ spreadsheets in order to determine GHG impacts and/or reductions.

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 review of the past year's accomplishments within the Transportation element of the SIP.
- 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.
- Prepare and review GHG emission impacts in order to assist in meeting requirements of the Commonwealth's Global Warming Solutions Act.

PUBLIC PARTICIPATION

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

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.

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.

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.

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.

PERFORMANCE AND ECONOMIC MEASURES

- When and where applicable, performance and economic impacts will be examined so as to be used as part of TIP development and Transportation Evaluation Criteria process. Performance measure impacts will be judged based upon the projects ability to address certain PM characteristics, such as Safety or Infrastructure both from a state and regional perspective. Economic impacts will be based upon whether a project helps to promote growth or access to identified commercial, industrial or other areas in a community. The TEC was updated in the winter of 2018 to improve the scoring process. Further refinements will continue to be examined.

Product:

An 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 2020 to April 2020 time period.

Final and MPO Endorsed documents to be released in May 2020. 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 2020.

Amendments to the TIP are processed as needed.

Performance measures analysis ongoing throughout the year.

	Oct 2019	Nov 2019	Dec 2019	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	Jun 2020	July 2020	Aug 2020	Sep 2020
TIP Start												
Public Input												
Draft												
MPO Endorsement												

Task 1.41

FHWA PL	MassDOT	FTA-5303	MassDOT	TOTAL
\$44,000	\$11,000	\$6,000	\$1,500	\$62,500

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 work 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:

- 2020 Regional Transportation Plan;
- Updated/Revised Public Participation Plan – May 2016
- Public Participation Plan & Amendment – 2007 & April 2010;
- Montachusett Title VI Report – 2011, 2012, 2015, 2017, 2018, 2019
- 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.

Product:

- 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 2019	Nov 2019	Dec 2019	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	Jun 2020	July 2020	Aug 2020	Sep 2020
Public Input												
Fed/State Coordination												

Task 1.51

FHWA PL	MassDOT	FTA-5303	MassDOT	TOTAL
\$39,200	\$9,800	\$3,000	\$750	\$52,750

2.0

DATA COLLECTION AND ANALYSIS FOR REGIONAL TRANSPORTATION PLANNING

Objective:

To review, update and develop improved regional demographics:

- MPO staff will continue to 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 monitor regional population, household, and employment projections:

- MPO staff will continue to review population projections produced by MassDOT as part of the development of the 2020 Regional Transportation Plan (RTP) and conduct comparisons to in-house projections from past years. The RTP projections for population, households and employment were produced for the region as a whole. Based upon RPA developed procedures, these regional totals were distributed to the individual communities. In addition, continued updates to the MassBuilds website developed and supported by CTPS, will be maintained as applicable data is identified in the region.

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.

MPO staff will also continue to provide support services as part of the upcoming 2020 U. S. Census:

- Prior work has included participation in the Participant Statistical Area Program (PSAP) conduct by the Census Bureau to help improve the identification of Census Tracts and Block Groups. It is anticipated that additional work and support will be needed as the census program moves forward.

Previous Work:

During the previous program years, the following has been accomplished:

- Updated development data for MassBuilds
- Updated regional and community demographic projection data
- Identification of Census Tracts and Block Groups through the PSAP

Methodology:***Regional Demographics***

MPO staff will seek to undertake the following:

- Review input data for regional demographics and demographic projections
 - 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 as needed
 - Distribute population projections data to municipalities for feedback
 - Adjust assumptions within methodology to reflect concerns from the region's communities

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.

Regional 2020 Census Participation

Staff will continue to liaise with the U. S. Census Bureau in order to provide support services as the 2020 Census proceeds. Continued participation in the PSAP will be maintained as products developed as requested.

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.

Regional 2020 Census Participation

Improved census data results throughout the Region. Beneficiaries include all the communities in the MRPC region.

Schedule:

Regional Demographics

To be carried out between December 2019 to July 2020

Regional Demographics Projections

To be carried out as follows: attend any meetings with MassDOT related to population, household, and employment projections for the Commonwealth. Update regional projections to reflect updated methodologies and collect feedback on regional and state-wide projections as needed between March 2020 and August 2020.

Existing Regional Model

To be carried out as follows: network enhancements – October 2019 to June 2020; as needed model products – December 2019 to September 2020

Regional Greenhouse Gas Model

To be carried out throughout the program year

Regional 2020 Census Participation

To be carried out throughout the program year

	Oct 2019	Nov 2019	Dec 2019	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	Jun 2020	July 2020	Aug 2020	Sep 2020
Regional Demographics												
Demographic Projections												
Regional Model												
GHG Model												
2020 Census Participation												

Task 2.11

FHWA PL	MassDOT	FTA-5303	MassDOT	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 data layers 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 principles 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 (2014-2019);
- Montachusett Regional Transit Authority Transit Route update maps (2014-2019);
- Local educational meetings related to the use of MRMapper. (2014-2019);
- Update Trail Inventory Databases (2014-2019);
- Regional Trail Guide (2018-2019);

- Pavement data updates/mapping (2014-2019);
- General GIS/Data Warehouse Maintenance (2014-2018);
- Traffic Count data updates/mapping (2014-2019);
- Title VI Mapping (2014, 2017, 2019)
- MRMapper online web-based GIS mapping system (2012-19);
- Fitchburg/Leominster Bus Route Sidewalk Inventory (2017);
- Shirley Village Railroad Crossing (2017-2018);
- Transportation Improvement Plan (2017-2019);
- Coordinated Public Transit - Human Services Plan Update (2017-18);
- Roadway Safety Improvement Project (2018);
- Shirley Complete Streets (2018);
- Fitchburg Trail Brochure (2018-2019);
- Gardner Sidewalk Inventory (2018);
- Climate Change Mapping (2018);
- Project Equity Mapping (2018);
- Sidewalk/Walkability Mapping – Lunenburg (2019);
- Establishment of Technical Assistance Program for member communities.

Methodology:

- Assist member communities with the MaPIT tool.
- 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 2019	Nov 2019	Dec 2019	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	Jun 2020	July 2020	Aug 2020	Sep 2020
Technical Support												
MRMapper Updates												
App Development												
Data layer Maintenance												

Task 2.21

FHWA PL	MassDOT	FTA-5303	MassDOT	TOTAL
\$46,400	\$11,600	\$4,000	\$1,000	\$63,000

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 determining the bikeability and/or walkability for a particular area.

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 Regional Crash 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 (HCLs) through HSIP. HSIP is a data driven program that needs to include crash report gathering and analysis, identification of HCLs, prioritization and implementation of projects that improve safety at HCLs and evaluation of the effectiveness of those safety improvement projects. Staff will continue to refine and update our GIS Regional Crash Database and to work with the MassDOT RSA program. In 2018, MassDOT completed an update to the Strategic Highway Safety Plan (SHSP). The vision of the updated SHSP is “a roadway system with zero deaths and serious injuries”. Staff will seek to meet with communities in the region to identify and encourage safety improvement project development at HCLs and Fatality Locations (FLs).

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 HCLs and FLs website application (ongoing)
- MRPC Fatal Crash Corridor Analysis (2018, ongoing)
- South Athol Road Interchange Study, Athol – (ongoing)
- RSA – South Street at Wanoosnoc Road, Fitchburg – 2019
- RSA - Greenville Rd (Rt 31) at Turnpike Rd, Ashby - 2018
- RSA - Main Street Corridor - Prichard St to Summer St & Water St at Laurel St, Fitchburg – 2018
- RSA - Uptown Rty (Central/Pearl/Elm/Green), Rt 101 @ Woodland, Rt 101 @ Chestnut, Gardner – 2017
- MRPC Top Lane Departure Crash Locations website application (needs update)
- Rt 70 & Old Union Tpk Roundabout (Lancaster) Before & After Safety Performance Analysis – 2017
- Route 2 Before and After Safety Performance Analysis – 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

Methodology:

The 2019-20 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;
- Continue to establish database link of regional counts to GIS;
- Maintain ADT computer file system on a town/roadway basis;
- Continue to develop, refine and implement a permanent regional traffic counting program of approximately 300 locations;
- 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.
- Provide for special count requests within the region as requested for local technical assistance.
- Update traffic count data posted on MRPC website (www.mrpc.org).
- Implement Video Traffic Counting System at various locations to collect TMCs, volumes, bicycle/pedestrian trail counts, etc.

- Conduct Bicycle and Pedestrian counts along various trails and roadways to determine bike and walkability as well as identify multimodal gaps.
- Upload all traffic count data to the statewide MS2 website.

For the Regional Safety Review program, the following sub-tasks will be undertaken:

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

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

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

Product:

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 HCLs and FLs MRPC website application;
- Regional and Community Candidate HCLs and FLs 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.

Regional Safety Review Program – Data collection and review – October 2019 to August 2020; Community Reports and outreach – November 2019 to September 2020

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

	Oct 2019	Nov 2019	Dec 2019	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	Jun 2020	July 2020	Aug 2020	Sep 2020
Traffic Counts												
Safety Data Collection & Review												
Safety Community Reports & Outreach												
Sidewalk & Ped/Bike												

Task 2.31

FHWA PL	MassDOT	FTA-5303	MassDOT	TOTAL
\$32,000	\$8,000			\$40,000

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 fifth year as the MRPC continues to build its database. 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
- 2020 Montachusett Regional Transportation Plan
- 2016 Montachusett Regional Transportation Plan
- 2012 Montachusett Regional Transportation Plan
- 2011 – 2019 reports "Regional Pavement Profile"
- Database of Federal Aid Eligible Roads
- 4 Year Inventory Schedule
- Montachusett Pavement Inventory Program – 2008 - 2019
- Technical Support Groups (Pavement Management Users Group)

Methodology:

- 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:

- Distribution of annual mailing consisting of pavement related activities including but not limited to: Report information, Ch. 90 information, Questionnaires, Services, etc.
- Year-end report "Regional Pavement Profile" analyzing region and municipal pavement data
- 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 2019 and April to September 2020. Analysis and review of data to be conducted from December 2019 to September 2020.

	Oct 2019	Nov 2019	Dec 2019	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	Jun 2020	July 2020	Aug 2020	Sep 2020
Pavement Data Collection												
Pavement Analysis												

Task 2.41

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

Objective:

Staff will conduct a before and after safety performance analysis of two completed safety projects in order to assess the effectiveness of the safety improvements. Two completed roundabout projects at two former high crash locations will be assessed – the John Fitch Highway at Ashby State Road (Route 31) intersection in Fitchburg and the Route 70 (Lunenburg Road) at Old Union Turnpike intersection in Lancaster. Conclusions will be made of the pre and post-construction safety analysis and the set of implemented countermeasures at the intersections. This will help establish improvement alternative identification in future studies by providing us with bases to assess viability and effectiveness of proposed safety improvements.

Previous Work:

- Route 2 Before and After Safety Performance Analysis – 2017
- Route 12 at Willard Street, Leominster, MA Safety Project Analysis Study – 2013
- MRPC Regional Crash Database (ongoing)
- MRPC High Crash Locations and Fatality Locations website application (ongoing)
- MRPC Fatal Crash Corridor Analysis (ongoing)

Methodology:

The analysis will consist of the following:

- Outreach to the communities of Fitchburg and Lancaster;
- Three-year pre-construction crash analysis;
- Pre-construction existing conditions;
- Historic average daily traffic (ADT);
- Implemented countermeasures completed; and
- Three-year post construction safety analysis

Products:

- John Fitch Highway at Ashby State Road (Route 31) Roundabout, Fitchburg, MA Before and After Safety Performance Analysis and
- Route 70 (Lunenburg Road) at Old Union Turnpike Roundabout in Lancaster, MA Before and After Safety Performance Analysis

Schedule:

To be carried out throughout the program year as follows:

	Oct 2019	Nov 2019	Dec 2019	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	Jun 2020	July 2020	Aug 2020	Sep 2020
Community Outreach												
Crash Data Collection												
Crash Data Analysis												
Inventory of Safety Improvement Countermeasures												
Draft												
Final Report(s)												

Task 2.51

FHWA PL	MassDOT	FTA-5303	MassDOT	TOTAL
\$22,600	\$5,650			\$28,250

Objective:

This task will continue work undertaken in past program years to continue with the analysis of 1 to 2 freight corridors as previously identified. This task will support local/regional Performance Measures developed through the 2020 Regional Transportation Plan (RTP) that seeks to improve freight mobility in the region. The Massachusetts Freight Plan will be reviewed and incorporated, where applicable, into the study. In addition, other freight corridors will be identified and prioritized for further study and staff will examine issues related to freight travel time, tracking and reliability if appropriate.

Previous Work:

- Freight Corridor Identification and Screening, 2018-2019

Methodology:

MRPC Region (Region) Freight Corridor Screening Update

- 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.

From the results of the Screening, a Freight Corridor Study will be developed for further study.

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.

Products:

Prioritized Freight Corridor Studies Report for the MRPC Region.

Schedule:

	Oct 2019	Nov 2019	Dec 2019	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	Jun 2020	July 2020	Aug 2020	Sep 2020
Public Participation												
Updated ID Freight Centers												
Revised Bridge Restrictions												
Access Restrictions												
Crash Data Analysis												
Draft												
Final Report												

Task 2.61

FHWA PL	MassDOT	FTA-5303	MassDOT	TOTAL
\$22,600	\$5,650			\$28,250

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 develops their set of goals and PMs they are tracked over time to determine the progress in meeting them. In addition, the 2020 RTP has expanded on those PMs originally set in 2016.

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.

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 chose, via a formal vote, to adopt the statewide safety performance measure targets set by MassDOT for Calendar Year 2019. Similarly, Pavement and Bridge Condition Measures (PM2) and Performance of NHS, Freight and CMAQ Measures (PM3) were established by MassDOT and adopted by the Montachusett MPO in 2018.

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 monitor and present their TAM plan to the MPO as needed.

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 & 2020
- 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 2019 – September 2020)
- Maintenance of PM Dashboard (February – September 2020); 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 through an excel spreadsheet. Online posting will be incorporated.

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 2.71

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

3.0

TRANSPORTATION PLANNING STUDIES

Objective:

With the increasing number of vehicles being put on the road each year, roadway congestion and air pollution are also increasing. It is important that we, as a region, work towards creating a mode shift by making additional travel options easier and better understood. This task was created due to a need that was identified in the Regional Transportation Needs Assessment done in 2018. This assessment found that students at Mount Wachusett Community College (MWCC) were having trouble getting to campus as well as to and from the additional campus locations (Gardner, Leominster, Devens and Fitchburg). MRPC is currently working with MWCC along with the Community Health Network Area 9 (CHNA9) and Heywood Hospital to help identify solutions to the transportation needs. Student listening sessions were held on the Gardner, Leominster and Devens campuses and it was clear that a rideshare program and/or a shuttle was the preferred option.

This task will identify a number of alternative travel options, including rideshare programs, that can be better marketed and promoted throughout the Montachusett Region. The goal is to inventory the options and help educate the public with what other travel modes are available.

Previous Work:

- Sidewalk Inventory and Pedestrian/Bicycle Connections – 2018
- Coordinated Transit Plan Update - 2018
- Ridership Survey Distribution - 2018
- Regional Transportation Needs Assessment - 2018

Methodology:

- Inventory existing travel options and rideshare programs throughout the region
- Prioritize the options that are most likely to create a mode shift
- Promote these options to our communities, populations, and organizations that would benefit most
- Continue to work with these communities, populations and organizations to study the impact

Products:

- A list and or map of travel options
- A Report that documents that process and results

Schedule:

To be carried out throughout the program year as follows:

	Oct 2019	Nov 2019	Dec 2019	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	Jun 2020	July 2020	Aug 2020	Sep 2020
Inventory Options												
Prioritize Options												
Promotion												
Impact Analysis												

Task 3.11

FHWA PL	MassDOT	FTA-5303	MassDOT	TOTAL
\$28,400	\$7,100	\$7,000	\$1,750	\$44,250

Objective:

Tourism is the third largest industry statewide. Many of our local communities rely on tourism as an income source. It is important that these tourist locations be accessible to all visitors, not just vehicular access but multimodal access such as transit and sidewalks or bike lanes. This study will analyze the top tourism sites throughout the region, focusing heavily on the cities of Fitchburg, Gardner and Leominster. Each site will show accessibility for vehicles, pedestrian and bicyclists. Transportation gaps will be inventoried as potential future projects.

Previous Work:

- Sidewalk/Walkability Mapping – Lunenburg - 2019
- Update Trail Inventory Databases -2014-2019
- Montachusett Trail Map & Visitor Guide – 2018
- Transportation Needs Assessment – 2018
- Fitchburg Trail Brochure – 2018
- Shirley Complete Streets – 2018
- Fitchburg Trail Brochure – 2018
- Gardner Bus Route Sidewalk Inventory - 2018
- Fitchburg/Leominster Bus Route Sidewalk Inventory - 2017
- Montachusett Regional Transportation Plan – 2016
- Roadway & Alternate Mode Access to Commuter Rail in the Region

Methodology:

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

- Identify top tourism sites
- Identify and analyze transportation options within ½ mile of each site
- Identify and analyze transportation gaps

Products:

A report will be developed that describes the process and outcome of the study. Maps will also be developed to show top tourism sites and the transportation options that are currently available.

Schedule:

To be carried out throughout the program year as follows:

	Oct 2019	Nov 2019	Dec 2019	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	Jun 2020	July 2020	Aug 2020	Sep 2020
Identify sites												
Identify travel options												
Identify Gaps												

Task 3.21

FHWA PL	MassDOT	FTA-5303	MassDOT	TOTAL
\$27,600	\$9,900			\$34,500

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.

Previous Work:

- Community Pre-Disaster Mitigation Plans – 2016
- Merriam Avenue – South Street Corridor Bottleneck Report
- 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, 2019

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 2020)
- Updated vulnerable infrastructures database (August 2020)

Schedule:

To be carried out throughout the program year as follows:

	Oct 2019	Nov 2019	Dec 2019	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	Jun 2020	July 2020	Aug 2020	Sep 2020
Data Research												
Data Collection												
Database Updates												
Flood Zone Mapping												
Vulnerability Analysis												
GHG Analysis												

Task 3.31

FHWA PL	MassDOT	FTA-5303	MassDOT	TOTAL
\$22,800	\$5,700	\$4,000	\$1,000	\$33,500

Objective:

The objective of this task is to analyze and promote the importance of biking and walking as an alternate mode of travel throughout the Montachusett Region. Biking and walking are both efficient, healthy, low-cost and fun ways to travel for transportation as well as recreation. State and Federal policies and programs such as Global Warming Solutions Act, weMove Massachusetts, and the Healthy Transportation Policy Directive all play a key role in this type of mode shift.

MRPC staff will work to mirror the statewide Bike and Pedestrian Plans and inventory existing bike and pedestrian facilities throughout the region, with highest emphasis on downtown areas, connections to transit facilities, and areas of Environmental Justice and/or Title VI populations. Based on this inventory, gaps and impediments to biking or walking will also be identified and examined. Strategies will be developed to encourage biking and walking as well as promote transportation projects that will include multimodal components. The goal is to promote a vision that each community will work towards implementing.

Previous Work:

- Lunenburg Walkability and Parking Study (2019)
- 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:

- Engage the Montachusett Regional Trails Coalition and other stakeholders
- Inventory existing bike and pedestrian facilities
- Identify gaps/future projects
- Identify strategies to increase biking and walking as transportation options

Products:

The final product will be two separate reports, reflecting the Massachusetts Bike & Pedestrian Plans, showing the region with current bike conditions and recommendations and current pedestrian conditions and recommendations. These recommendations could result in the programming of future TIP projects. Maps will show existing and potential sidewalk and bikeway data as well as other datasets as deemed appropriate. It is expected that this task could continue into the following program year.

Schedule:

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

	Oct 2019	Nov 2019	Dec 2019	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	Jun 2020	July 2020	Aug 2020	Sep 2020
Engage Stakeholders												
Inventory Existing Infrastructure												
Identify Gaps												
Identify Strategies												

Task 3.41

FHWA PL	MassDOT	FTA-5303	MassDOT	TOTAL
\$33,200	\$8,300			\$41,500

Objective:

This task continues Task 3.54 from the previous UPWP. MRPC transportation staff will build upon the assistance provided to municipalities in the MRPC Region during the previous year to develop municipal ADA Public Rights-of-Way (PROW) Transition Plans (Plan) to bring them into compliance with the ADA. The ADA 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 MA Division Office Plan components.

Previous Work:

The MRPC completed the following – 2019:

- Began a pilot development Plan with Lancaster
- Conducted a Plan public outreach survey in Lancaster
- Held meetings with Lancaster officials and interested parties to determine Plan scope of work and identify pedestrian facilities to be surveyed
- Completed preliminary pedestrian facilities inventory
- Consultant hired through Request for Proposals process to complete Plans
- Draft Plan completed for the Town of Lancaster
- Other Plans in progress of being completed

The MRPC completed the following - 2018:

- Obtained Plan compliance status of municipalities in the MRPC region from the MOD
- 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 MA Division Office Plan components. There are six components that should be included in a Plan.

The six components are summarized below.

1. 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 will sort through and prioritize a municipalities issues that improve accessibility for people with disabilities and can be a valid defense for a municipality in ADA-related legal actions.

2. PROW Barrier Removal/Transition Schedules:

These schedules are lists of all PROW ADA deficiencies that provides a prioritization scheme for installation, alteration/reconstruction consistent with requirements. Suggested Schedules may include but are not be limited to: Curb ramps, sidewalks, accessible pedestrian signals, bus shelters/stops, shared use trails

3. 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 a 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 Plan

4. 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.

5. 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.

6. 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 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."

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 2019	Nov 2019	Dec 2019	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	Jun 2020	July 2020	Aug 2020	Sep 2020
Municipal Outreach												
Assist Municipalities with Plan												
Drafts												
Final Plans												

Task 3.51

FHWA PL	MassDOT	FTA-5303	MassDOT	TOTAL
\$30,200	\$7,550			\$37,750

UPWP TASK NO. 3.61**TRAIL DATA APPLICATION**

Objective: To create a mobile application(s) that will allow communities to update the existing Trail Inventory in a 'live' or 'offline' (disconnected) editing session.

Previous Work:

- Mobile applications development (2014-2019);
- Update Trail Inventory Databases (2014-2019);
- MRMapper online web-based GIS mapping system (2012-19);

Methodology:

Preparation

- Identify best mobile application (Collector for ArcGIS, Survey 123 for ArcGIS, etc.) and online setting (ArcGIS online or Portal for ArcGIS) for the underlying webmap
- Determine workflow for 'accepting' edits and maintaining data (versioning, archiving)
- Prepare existing data for 'live' or 'offline' (disconnected) editing on Server for ArcGIS
- Develop and test mobile application
- Develop manual(s) for mobile application data collection

Outreach

- Identify key stakeholders (public and private) and perform outreach

Development

- Deploy final application

Training

- Complete training sessions on trail data collection through mobile application(s) for all stakeholders identified by Communities, regional entities and organizations.

Support

- Provide support on mobile application(s)

Products:

An online application that will be available to all member communities and organizations.

Schedule:

To be carried out throughout the program year as follows:

Task	Oct 2019	Nov 2019	Dec 2019	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	Jun 2020	July 2020	Aug 2020	Sep 2020
Preparation												
Outreach												
Deployment												
Training												
Support												

Task 3.61

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

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.

Product:

Regionwide database of relevant socioeconomic data based upon collected information.

Schedule:

Ongoing throughout the program year.

	Oct 2019	Nov 2019	Dec 2019	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	Jun 2020	July 2020	Aug 2020	Sep 2020
Public Participation												

Task 4.11

FHWA PL	MassDOT	FTA-5303	MassDOT	TOTAL
		\$3,683	\$921	\$4,604

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).

Product:

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 2019	Nov 2019	Dec 2019	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	Jun 2020	July 2020	Aug 2020	Sep 2020
Wachusett												
Ayer												

Task 4.21

FHWA PL	MassDOT	FTA-5303	MassDOT	TOTAL
		\$8,000	\$2,000	\$10,000

UPWP TASK NO. 4.31**TECHNICAL ASSISTANCE TO MART****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 FY18 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.

Product:

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 2019	Nov 2019	Dec 2019	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	Jun 2020	July 2020	Aug 2020	Sep 2020
LTA												

Task 4.31

FHWA PL	MassDOT	FTA-5303	MassDOT	TOTAL
		\$13,000	\$3,250	\$16,250

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-time 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 2019	Nov 2019	Dec 2019	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	Jun 2020	July 2020	Aug 2020	Sep 2020
Examine Routes												
Data Collection												
Analysis												
Final Report												

Task 4.41

FHWA PL	MassDOT	FTA-5303	MassDOT	TOTAL
\$12,000	\$3,000	\$12,000	\$3,000	\$27,000

Montachusett Regional Planning Commission
FFY 2019 Program Year Staffing Report

Staff	Title	Expected Time on 3C Contract	Expected Time on FTA Contract
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%
Jason Stanton	GIS Project Director	50%	15%
Kayla Kress	GIS Technician	50%	15%
Sean O'Donnell	Regional Planner	25%	-
	Transportation Intern(s)	100%	-

UPWP BUDGET

SUMMARY OF FUNDING BY SOURCE AND TASK								
FFY 2020 PROGRAM YEAR								
OCTOBER 1, 2019 to SEPTEMBER 30, 2020								
TASK NO./NAME	SPR	PL			FTA - 5303	MassDOT	TOTAL	
		FHWA	MassDOT	TOTAL				
1.11 Support of 3C Process	-	\$54,027	\$13,507	\$67,534	\$6,000	\$1,500	\$75,034	
1.21 Unified Planning Work Program	-	\$15,200	\$3,800	\$19,000	\$4,000	\$1,000	\$24,000	
1.31 Public Info Reporting/Participation Program	-	\$28,000	\$7,000	\$35,000	-	-	\$35,000	
1.41 Development of TIP	-	\$44,000	\$11,000	\$55,000	\$6,000	\$1,500	\$62,500	
1.51 Environmental Justice/Title VI	-	\$39,200	\$9,800	\$49,000	\$3,000	\$750	\$52,750	
Subtotal	-	\$180,427	\$45,107	\$225,534	\$19,000	\$4,750	\$249,284	
2.11 Regional Demographics & Model	-	\$22,200	\$5,550	\$27,750	-	-	\$27,750	
2.21 GIS Mapping and Analysis	-	\$46,400	\$11,600	\$58,000	\$4,000	\$1,000	\$63,000	
2.31 Data Collection & Analysis Program	-	\$32,000	\$8,000	\$40,000	-	-	\$40,000	
2.41 Pavement Management Systems	-	\$18,600	\$4,650	\$23,250	-	-	\$23,250	
2.51 Before & After Safety Analysis	-	\$22,600	\$5,650	\$28,250	-	-	\$28,250	
2.61 Freight Corridor Analysis	-	\$22,600	\$5,650	\$28,250	-	-	\$28,250	
2.71 Performance Measures	-	\$22,400	\$5,600	\$28,000	-	-	\$28,000	
Subtotal	-	\$186,800	\$46,700	\$233,500	\$4,000	\$1,000	\$238,500	
3.11 Travel Options & Rideshare Program(s)	-	\$28,400	\$7,100	\$35,500	\$7,000	\$1,750	\$44,250	
3.21 Travel By Tourism	-	\$27,600	\$6,900	\$34,500	-	-	\$34,500	
3.31 Climate Change Program	-	\$22,800	\$5,700	\$28,500	\$4,000	\$1,000	\$33,500	
3.41 Regional Bike & Pedestrian Plan	-	\$33,200	\$8,300	\$41,500	-	-	\$41,500	
3.51 Local ADA Transition Plan Development	-	\$30,200	\$7,550	\$37,750	-	-	\$37,750	
3.61 Trail Data Application	-	\$22,200	\$5,550	\$27,750	-	-	\$27,750	
Subtotal	-	\$164,400	\$41,100	\$205,500	\$11,000	\$2,750	\$219,250	
4.11 Transportation Equity & Public Involvement	-	-	-	-	\$3,683	\$921	\$4,604	
4.21 Short Range Transportation Planning	-	-	-	-	\$8,000	\$2,000	\$10,000	
4.31 Technical Assistance to MART	-	-	-	-	\$13,000	\$3,250	\$16,250	
4.41 Bus Routes Performance Evaluation	-	\$12,000	\$3,000	\$12,000	\$12,000	\$3,000	\$27,000	
Subtotal	-	\$12,000	\$3,000	\$12,000	\$36,683	\$9,171	\$57,854	
TOTAL FFY 2020	-	\$543,627	\$135,907	\$676,534	\$70,683	\$17,671	\$764,888	

SUMMARY OF FUNDING BY SOURCE AND ELEMENT
PROGRAM YEAR FFY 2020

ELEMENT	FHWA/MassDOT		FTA - 5303	MassDOT	TOTAL
	SPR	PL			
1	-	\$225,534	\$19,000	\$4,750	\$249,284
2	-	\$233,500	\$4,000	\$1,000	\$238,500
3	-	\$205,500	\$11,000	\$2,750	\$219,250
4	-	\$12,000	\$36,683	\$9,171	\$57,854
TOTAL	-	\$676,534	\$70,683	\$17,671	\$764,888

SUMMARY OF FUNDING BY SOURCE AND GRANTEE
PROGRAM YEAR FFY 2020

GRANTEE	FHWA/MassDOT		FTA - 5303	MassDOT	TOTAL
	SPR	PL			
MRPC	-	\$676,534	\$70,683	\$17,671	\$764,888
LOCAL GOVT (MART)	-	-	-	-	-
TOTAL	-	\$676,534	\$70,683	\$17,671	\$764,888

*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
2020	\$676,534.00	\$15,072,555

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	\$2,042,167.38	\$12,455,841.17 *

Cumulative PL Allocation	\$13,734,876.00
- Cumulative Amount Spent	\$11,809,159.04 *
-	\$4,287.57
	\$1,921,429.39
-	\$25,000.00
	\$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 March 31, 2019

2020 Unified Planning Work Program Funding

apportionment
obligation authority
federal PL funds only
matching funds added

FFY 20	FFY 19	Δ
\$ 9,746,953	\$ 9,525,236	
93.1%	93.1%	2.27%
\$ 9,076,363	\$ 8,869,900	
\$ 11,345,453	\$ 11,087,375	

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 FFY20 funding by MPO	Federal aid number	PARS number
<i>MPOs PL funded</i>						
Berkshire Yr 4	\$ 4,538,181	\$ 131,219	\$ 88,795	\$ 11,345,453	573,844	
Boston Yr 4	\$ 453,818	\$ 3,087,375	\$ 3,026,176	\$ 3,813,950		
CTPS Yr 1				\$ 3,089,299		
MAPC Yr 1				\$ 724,650		
Cape Cod Yr 4	\$ 453,818	\$ 215,888	\$ 198,826	\$ 681,447		
Central Mass Yr 1	\$ 453,818	\$ 556,698	\$ 462,724	\$ 1,012,213		
Merrimack Valley Yr 4	\$ 453,818	\$ 333,748	\$ 316,362	\$ 810,858		
Montachusett Yr 1	\$ 453,818	\$ 236,475	\$ 171,236	\$ 676,534		
Northern Middlesex Yr 4	\$ 453,818	\$ 286,901	\$ 277,474	\$ 763,898		
Old Colony Yr 1	\$ 453,818	\$ 362,406	\$ 342,110	\$ 840,706		
Pioneer Valley Yr 4	\$ 453,818	\$ 621,570	\$ 537,074	\$ 1,088,964		
Southeastern Mass Yr 1	\$ 453,818	\$ 616,670	\$ 531,236	\$ 1,083,040		
	\$ 4,538,181	\$ 6,449,550	\$ 5,952,013	\$ 11,345,453		

Contract status	SPR the year before (federal only)	FFY 20 total funding by RPA	Federal aid number	PARS number
<i>RPAs SPR funded</i>				
Franklin Yr 4	\$ 2,27%	\$ 432,944		
Martha's Vineyard Yr 4	\$ 2,27%	\$ 248,283		
Nantucket Yr 3	\$ 2,27%	\$ 211,196		
		\$ 270,000		

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 (EDA), MRPC is completing its 5-year update of our regional CEDS to help with the visioning and planning for greater economic prosperity throughout all 22 Montachusett Region communities. In addition to a close analysis of demographic and economic conditions and trends, innovative new approaches to economic development – for example, the recent designation of ten Opportunity Zones in the region as well as the development of several collaborative workspaces and business incubators – will be highlighted in this update. MRPC has been working closely with economic development partners and community leaders to complete this update, and a final draft will be made available for public review and comment in spring 2019.

Also, as part of MRPC's contract with EDA, MRPC provides assistance to communities seeking grant funds to improve economic vitality. MRPC staff successfully assisted Shirley to prepare a FY17 Community Development Block Grant application for Housing Rehabilitation and Home Heating Fuel Assistance that was awarded in July 2017 and continues to administer the grant for Shirley with an anticipated completion date of summer 2019. Beneficiaries of these programs are low and moderate-income residents.

- 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 and all funds have been expended and the project concluded on March 31, 2019. 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 were used for the same tasks at sites with potential petroleum contamination.

MRPC applied for additional Hazardous Substance grant funding in January 2019 under the U.S. Environmental Protection Agency's Brownfields Assessment Grants Program. The total request of \$300,000 includes the expenditure on Hazardous Substances funding for the completion of Phase I and Phase II Environmental Site Assessments, over three program years. It is anticipated that grant award announcements will be made late spring 2019.

- MRPC completed an update of a Community Health Assessment of North Central Massachusetts for Heywood Hospital in September 2018. The report consisted 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.
- MRPC continues to use grant funds from the Massachusetts Department of Energy Resources (DOER) to assist the Towns of Hubbardston, and Templeton to become Green Communities and to assist with administration of existing Green Communities for Ashby, Athol, Harvard, Fitchburg, Lunenburg, Shirley, Townsend and Westminster. MRPC staff is working to apply to the DOER's Regional Energy Planning Assistance (REPA) Grant Program to either assist interested communities with Green Community Designation or assist existing Green Communities with competitive grant application preparation, Annual Report Preparation, and municipal energy data analysis and evaluation.
- 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, 2019.

As of April 30, 2019, the following DLTA projects have been initiated:

- Ashburnham: Housing Production Plan.
- Clinton: Assist the Town of Clinton with designation as a Green Community.
- Harvard: Permitting Guidebook.
- Townsend: Assist to provide the municipality with regional data to update the Town's Housing Production Plan and Master Plan.
- Athol: Urban Renewal Planning Assistance.
- Hubbardston: Historical and Cultural Resources Master Plan Chapter.
- Sterling: Housing Production Plan update.
- Groton: Housing Production Plan.
- Ashby, Townsend, and Pepperell: Regional Dispatch Feasibility Study.
- Lunenburg: ADA Self-Evaluation and Transition Plan - limited partial completion.

SUMMARY OF OTHER MRPC FUNDING SOURCES

Agency	Program	Funding Total
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 FTA FY19 (10/1/18-9/3-/19)</i>	\$68,352
State: Massachusetts Department of Housing & Community Development (DHCD)	<i>District Local Technical Assistance Round 12 (1/1/19 – 12/31/19)</i>	\$197,640
State: Department of Energy Resources (DOER)	<i>Municipal Energy Technical Assistance (META) Grant, Green Community Designations DOER (9/1/17-5/30/19)</i>	\$71,250
Regional: Montachusett Regional Transit Authority (MART)	<i>Transit Planning Technical Assistance (7/1/18 – 6/30/19)</i>	\$127,000
	<i>Transit Planning Technical Assistance (7/1/19 – 6/30/20)</i>	TBD
Local Communities: All	<i>Local Assessments (7/1/18 – 6/30/19)</i>	\$77,370
	<i>Local Technical Assistance (7/1/19-6/30/20)</i>	\$79,304
Local Communities: Some	<i>GIS (7/1/18 – 6/30/19)</i>	\$8,000

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 st to September 30 th)
FHWA	Federal Highway Administration
FO	Functionally Obsolete

FRA	Federal Railroad Administration
FTA	Federal Transit Administration
FY	Fiscal Year (July 1 st to June 30 th)
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 st 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 st 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 – COMMENTS AND RESPONSES

COMMENTS AND RESPONSES

Action	
Comment 1.	<p>MassDOT Office of Transportation Planning (OTP) with the following items identified</p> <ol style="list-style-type: none"> 1. Include a signature line for MassDOT Highway Administrator Jonathan Gulliver 2. Ensure that all page numbers listed within the Table of Contents are internally linked properly 3. Indicate that the Regional Transportation Plan (RTP) is updated every four years 4. Provide details on the work undertaken in FFY2019 for Task 3.54, Local ADA Transition Plan Development 5. In addition to analyzing social equity, please provide one or more bullet points summarizing the distribution of UPWP tasks through a geographic equity lens 6. Update the language on the Governor's Commission on the Future of Transportation since the report has now been finalized, and briefly summarize the report's findings 7. Define the distinction that is made between performance measures and economic measures as part of the TIP development process 8. Describe whether and to what extent GIS-related coordination with member communities includes assistance with the Massachusetts Project Intake Tool (MaPIT) 9. Briefly describe how the results of Task 2.51, "Before & After Safety Analysis," will be used to inform future planning efforts 10. Within Task 2.61, "Freight Corridor Analysis," please reference the recently developed Massachusetts Freight Plan and describe how this task will utilize the information included within that plan. Additionally, please clarify how many corridors are expected to be analyzed as a result of the screening activities detailed in this task, and explain what these corridor studies will entail. 11. Within Task 3.41, "Regional Bike and Pedestrian Plan," please reference both the Statewide Bicycle Plan and the Statewide Pedestrian Plan and explain whether and to what extent the methodologies used by MassDOT will be used as part of these planning efforts. Additionally, please clarify whether the bike and pedestrian plans will be produced jointly or if they will be separate reports. 12. Please ensure the final version of the documents list all comments received on the document, as well as responses from staff.
Response 1.	<ol style="list-style-type: none"> 1. Signature line has been added 2. Page numbers with links have been addressed as indicated 3. RTP update information has been added 4. FFY2019 work has been included 5. Geographic equity has been included 6. The Future of Transportation report has been referenced 7. Performance vs Economic measures for the TIP process has been included 8. MaPIT assistance was included as part of GIS community assistance 9. Results of the Before & After Safety Analysis study will be mentioned as part of future planning efforts 10. The Massachusetts Freight Plan information was included in the Freight Corridor Analysis task as well as the number of corridors that will be analyzed 11. Statewide Bike & Pedestrian plans were included in the Regional Bike & Pedestrian task and the write up now indicates that there will be two separate documents 12. All comments & responses were included in the final UPWP
Comment 2.	<ol style="list-style-type: none"> 1. A request that funding be allocated to study the potential of linking the Twin Cities Rail Trail project with the Mass Central Rail Trail
Response 2.	<ol style="list-style-type: none"> 2. This will be studied as a part of Task 3.41 "Regional Bike and Pedestrian Plan". MRPC will work with CMRPC and the Montachusett Regional Trails Coalition to discuss these possibilities