

FFY 2024 UNIFIED PLANNING WORK PROGRAM

MONTACHUSETT METROPOLITAN PLANNING ORGANIZATION

MPO Endorsed
5/17/2023



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

The Montachusett MPO and the MRPC fully comply with Title VI of the Civil Rights Act of 1964 and related statutes and regulations in all programs and activities. The Montachusett MPO operates without regard to race, color, national origin, English Proficiency, ancestry, creed, income, gender, age and/or disability. Any person who believes him/herself or any specific class of persons, to be subject to discrimination prohibited by Title VI may by him/herself or by representative file a written complaint with the MRPC or the MMPO. Complaints are to be filed no later than 180 days from the date of the alleged discrimination. Please contact Glenn Eaton at 978-345-7376 ext. 310 for more information.

This page left blank.

Notice of Nondiscrimination Rights and Protections to Beneficiaries

Federal "Title VI/Nondiscrimination" Protections

The Montachusett Regional Planning Commission (MRPC) operates its programs, services, and activities in compliance with federal nondiscrimination laws including Title VI of the Civil Rights Act of 1964 (Title VI), the Civil Rights Restoration Act of 1987, and related statutes and regulations. Title VI prohibits discrimination in federally assisted programs and requires that no person in the United States of America shall, on the grounds of race, color, or national origin (including limited English proficiency), be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity receiving federal assistance. Related federal nondiscrimination laws administered by the Federal Highway Administration, the Federal Transit Administration, or both prohibit discrimination on the basis of age, sex, and disability. These protected categories are contemplated within MRPC's Title VI Programs consistent with federal interpretation and administration. Additionally, MRPC provides meaningful access to its programs, services, and activities to individuals with limited English proficiency, in compliance with US Department of Transportation policy and guidance on federal Executive Order 13166.

State Nondiscrimination Protections

MRPC also complies with the Massachusetts Public Accommodation Law, M.G.L. c 272 §§ 92a, 98, 98a, prohibiting making any distinction, discrimination, or restriction in admission to or treatment in a place of public accommodation based on race, color, religious creed, national origin, sex, sexual orientation, disability, or ancestry. Likewise, MRPC complies with the Governor's Executive Order 526, section 4 requiring all programs, activities, and services provided, performed, licensed, chartered, funded, regulated, or contracted for by the state shall be conducted without unlawful discrimination based on race, color, age, gender, ethnicity, sexual orientation, gender identity or expression, religion, creed, ancestry, national origin, disability, veteran's status (including Vietnam-era veterans), or background.

Additional Information

To request additional information regarding Title VI and related federal and state nondiscrimination obligations, please contact:

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

Complaint Filing

To file a complaint alleging a violation of Title VI or related federal nondiscrimination law, contact the Title VI Specialist (above) within 180 days of the alleged discriminatory conduct.

To file a complaint alleging a violation of the state's Public Accommodation Law, contact the Massachusetts Commission Against Discrimination within 300 days of the alleged discriminatory conduct at:

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

Language Assistance

English: If this information is needed in another language, please contact the MRPC Title VI Coordinator at 978-345-7376.

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

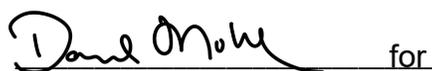
Offices: 464 Abbott Ave., Leominster, Massachusetts 01453
(978) 345-7376 Fax: (978) 348-2490



MPO ENDORSEMENT FFY 2024 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 2024 (October 1, 2023 - September 30, 2024) 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 2024 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.

The Committee of Signatories representing the Montachusett Metropolitan Planning Organization (MMPO) by a majority vote hereby endorses the FFY 2024 UPWP for the Montachusett MPO with the chair signing on behalf of all members.

 for _____
*Gina Fiandaca, Secretary and CEO
Massachusetts Department of Transportation*

5/17/2023

Date

This page left blank.

TABLE OF CONTENTS

Notice of Nondiscrimination Rights and Protections to Beneficiaries	i
MPO ENDORSEMENT	iii
TABLE OF CONTENTS	1
INTRODUCTION	4
MONTACHUSETT METROPOLITAN PLANNING ORGANIZATION (MMPO).....	4
TRANSPORTATION/TRANSIT PLANNING IN THE MONTACHUSETT REGION	5
PRIOR YEAR UPWP TASK RESULTS.....	7
UPWP DISTRIBUTION OF STUDIES AND TASKS	9
AMENDMENT AND ADJUSTMENT PROCEDURES FOR THE UPWP	15
SOURCES FOR THE MONTACHUSETT UPWP	16
STATE AND FEDERAL POLICIES AND PROGRAMS	17
Statewide and Regional Transportation Performance Management	20
UPWP TASK NO. 1.1 – SUPPORT OF 3C PROCESS	29
UPWP TASK NO. 1.2 – UNIFIED PLANNING WORK PROGRAM	32
UPWP TASK NO. 1.3 – PUBLIC PARTICIPATION PROGRAM	33
UPWP TASK NO. 1.4 – DEVELOPMENT OF TRANSPORTATION IMPROVEMENT PROGRAM	36
UPWP TASK NO. 1.5 – ENVIRONMENTAL JUSTICE AND TITLE VI.....	40
UPWP TASK NO. 2.1 - REGIONAL DEMOGRAPHICS	43
UPWP TASK NO. 2.2 – GIS MAPPING AND ANALYSIS	46
UPWP TASK NO. 2.3 – DATA COLLECTION & ANALYSIS PROGRAM	48
UPWP TASK NO. 2.4 – PAVEMENT MANAGEMENT SYSTEMS	52
UPWP TASK NO. 2.5 – PERFORMANCE MEASURES	54
UPWP TASK NO. 3.1 – HOUSING COORDINATION PLANNING	57
UPWP TASK NO. 3.2 – CLIMATE CHANGE PROGRAM.....	59
UPWP TASK NO. 3.3 – NORTH COUNTY LAND TRUST TRAIL PLANNING & MAPPING	61
UPWP TASK NO. 3.4 – MULTI-MODAL CONNECTIONS	62
UPWP TASK NO. 3.5 – FREIGHT STUDY.....	63
UPWP TASK NO. 4.1 – TRANSPORTATION EQUITY AND PUBLIC INVOLVEMENT	66
UPWP TASK NO. 4.2 – TRANSPORTATION MANAGEMENT ASSOCIATION (TMA) DEVELOPMENT STUDY	68
UPWP TASK NO. 4.3 – TECHNICAL ASSISTANCE TO MART.....	69
UPWP TASK NO. 4.4 – TRANSIT DEVELOPMENT PLAN (TDP) FOR FIXED BUS ROUTE SERVICES	70
APPENDIX A – MRPC FUNDING SOURCES AND PLANNING ACTIVITIES	77
APPENDIX B – GLOSSARY/ ACRONYMS.....	81
APPENDIX C – COMMENTS AND RESPONSES	86

MONTACHUSETT METROPOLITAN PLANNING ORGANIZATION SIGNATORIES

Massachusetts Department of Transportation (MassDOT) Secretary & CEO	Gina Fiandaca
MassDOT Highway Division Administrator	Jonathan L. Gulliver
Montachusett Regional Planning Commission (MRPC) Chairman	Guy Corbosiero
Montachusett Regional Transit Authority (MART) Chairman/Mayor City of Gardner	Mayor Michael J. Nicholson
Mayor City of Fitchburg	Mayor Stephen DiNatale
Mayor City of Leominster	Mayor Dean Mazzarella
Winchendon Board of Selectmen <i>Subregion 1</i>	Barbara Anderson
Ashburnham Board of Selectmen <i>Subregion 2</i>	Rosemarie Meissner
Lunenburg Board of Selectmen <i>Subregion 3</i>	Michael-Ray Jeffreys
Lancaster Board of Selectmen <i>Subregion 4</i>	Jason Allison

MPO SUB-SIGNATORY COMMITTEE MEMBERS

David Mohler, Director OTP, MassDOT, for Secretary& CEO Gina Fiandaca
Ann Sullivan, Assistant Project Development Engineer for Administrator Jonathan L. Gulliver
Glenn Eaton, Executive Director, MRPC, for Chairman Guy Corbosiero
Bruno Fisher, Administrator, MART, for Chairman Mayor Michael J. Nicholson

EXOFFICIO MEMBERS

Joi Singh, Division Administrator	Federal Highway Administration
Peter Butler, Region 1 Administrator	Federal Transit Administration

MONTACHUSETT REGIONAL PLANNING COMMISSION (MRPC) OFFICERS

Guy Corbosiero, Chairman	Winchendon
John Telepciak, Vice Chairman	Phillipston
Laura Shifrin, Treasurer	Townsend
Roger Hoyt, Vice Treasurer	Ashburnham
Secretary	Open

MONTACHUSETT JOINT TRANSPORTATION COMMITTEE (MJTC) OFFICERS

Dick Kilhart., Chairman	Athol
Travis Condon, Vice Chairman	North Central MA Chamber of Commerce
Robert Swartz, Secretary	Gardner

MONTACHUSETT REGIONAL PLANNING COMMISSION STAFF

Glenn Eaton, Executive Director
Holly Ford, Administrative Manager
Linda Quinlivan, Fiscal Director
Christopher McNamara, Fiscal Assistant
Brad Harris, Transportation Project Director
George Snow, Principal Transportation Planner
Sheri Bean, Principal Transportation Planner
Brian Doherty, AICP, Principal Transportation Planner
Karen Chapman, Planning and Development Director
Jeffrey Legros, Principal Planner
Jonathan Vos, Regional Planner
Tyler Godin, Regional Planner
Ryan Doherty, Regional Planner
Jason Stanton, GIS & IT Director
Kayla Kress, GIS & IT Analyst

2022-2023 APPOINTMENT LIST

MONTACHUSETT JOINT TRANSPORTATION COMMITTEE

<u>COMMUNITY</u>	<u>APPOINTED BY SELECTMEN/MAYOR</u>	<u>APPOINTED BY PLANNING BOARD</u>
Ashburnham	Rosemarie Meissner	Roger Hoyt
Ashby		Alan Pease
Athol	Dick Kilhart	Jacqueline Doherty
Ayer	Shaun Copeland	Mark Archambault
Clinton	Phil Duffy	
Fitchburg	Nicolas Erickson	Paula Caron
Gardner	Trevor Beauregard	Robert Swartz
Groton		Russell Burke
Harvard	Tim Kilhart	Stacia Donahue
Hubbardston	Travis Brown	Alice Livdahl
Lancaster	Alexandra Turner	Roy Mirabito
Leominster	David DiGiovanni	Peter Latchis
Lunenburg	Todd Dwyer	Matthew Brenner
Petersham	Nancy Allen	
Phillipston	Gordon Robertson	
Royalston	Roland Hamel	
Shirley		Janet Tice
Sterling	Richard Maki	Kirsten Newman
Templeton	Jeffrey Bennett	Charles Carroll II/Laurie Wiita
Townsend	Veronica Kell	Beth Faxon
Westminster		Marie Auger
Winchendon	Brian Croteau	Guy Corbosiero

EXOFFICIO MEMBERS

Derek Krevat	Office of Transportation Planning (OTP), Massachusetts Department of Transportation (MassDOT)
Jeffrey H. McEwen	Federal Highway Administration (FHWA), Administrator
Peter Butler	Federal Transit Administration (FTA), Acting Administrator
	Department of Environmental Protection (DEP)
Paula Simmons	MassDOT Highway Division - District 2
Ann Sullivan	MassDOT Highway Division - District 3
	Montachusett Regional Planning Commission (MRPC)
Bruno Fisher	Montachusett Regional Transit Authority (MART)

ORGANIZATION MEMBERS

Al Futterman	Nashua River Watershed Association (NRWA)
	Amalgamated Transit Union #690 (ATU 690)
Richard Liberatore	Fitchburg Airport Commission
Travis Condon	North Central MA Chamber of Commerce
Jennifer Brennan	Fitchburg Council on Aging
Jessica Strunkin	Mass Development
Peter Lowitt	Devens Enterprise Commission (DEC)
	Montachusett Opportunity Council, Inc.
David Kline	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 2024 program year.

The purpose of the UPWP is to ensure a comprehensive, cooperative, and continuous (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)

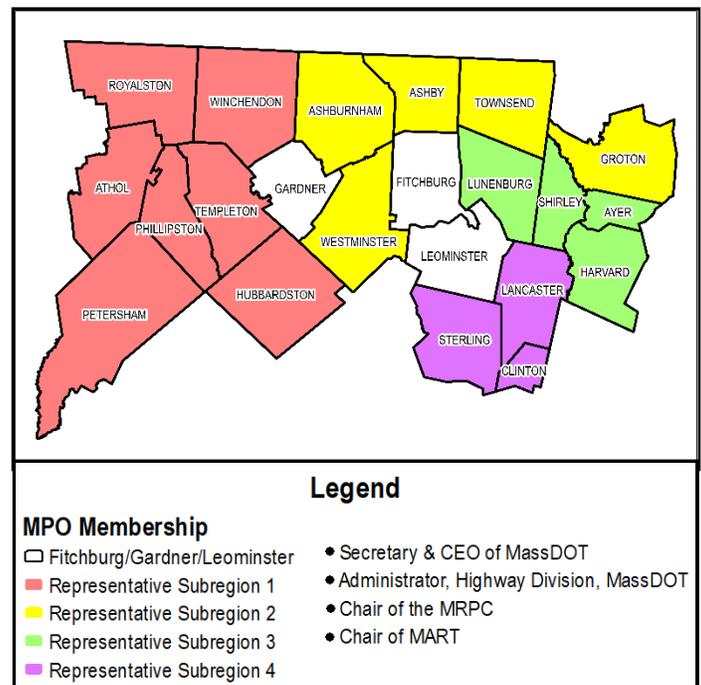
All urbanized areas with a population greater than 50,000 are required by the U.S. Department of Transportation (USDOT) Federal regulations to designate an MPO for the area. The establishment of an MPO is necessary for the State to receive Federal transportation funds. In the Montachusett Region, the 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. The 2024 Regional Transportation Plan is expected to be endorsed in July 2023.

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 Westminster;
- Subregion 3) Ayer, Harvard, Lunenburg and Shirley and;
- Subregion 4) Clinton, Lancaster, and Sterling.



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 an approximate three-year period beginning in September/October. Staff will review the overall selection process in order ensure a comprehensive input process.

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 2 of this document.

TRANSPORTATION/TRANSIT PLANNING IN THE MONTACHUSETT REGION

During the FFY 2024 program year, the MRPC will continue its efforts to maintain a viable transportation planning process through several tasks outlined in this UPWP. If necessary and the current MRPC staff are unable to meet the requirements of a particular work effort, ex. engineering design, etc., an outside agency may be sought. Staff will coordinate and seek approval from MassDOT and FHWA staff before a decision is reached. 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.

The Geographic Information System (GIS) department will continue to support various work activities under several of the UPWP tasks. Again, this program year, the MRPC will continue to provide to our member communities 8 free hours of GIS services. Since 2020 the MRPC, has worked on 37 separate projects for 16 of our 22 communities as part of this program. The GIS Department continues to work to expand and improve the MRPC’s online GIS web mapping program, MRMapper (<https://mrmapper.mrpc.org/>). Information such as traffic counts, roadway functional classification, crash data and analysis, and trail locations will continue to be updated. New data layers will also be added as the program year moves forward.

MRPC will continue its efforts to update and maintain a trail database for the region. Significant data has been compiled over the last few program years and the development of a trail app has extended efforts to include members of the public. Additionally, staff will continue to participate and collaborate with local trail groups and organizations throughout the region.

In addition, the MRPC will continue to expand upon several tasks that provide benefits to multiple member communities. This would include the Data Collection and Analysis Program, Environmental Justice and Title VI, the Climate Change Program, and the Public Participation Program. Each task seeks to collect, inform, educate, and assist communities in addressing important

transportation and transit issues. The Data Collection and Analysis Program has evolved from an initial focus on the collection of traffic counts to include additional data needs such as regional pavement conditions, ADA Public Right of Way (PROW) data and crash location identification. Expanding the Public Participation Program continues to be a vital and important objective of the transportation planning process for the MRPC and the Montachusett MPO. A major part of this is the Montachusett Joint Transportation Committee (MJTC) that meets every month on the second Wednesday to discuss transportation projects and issues of regional importance. Membership consists of representatives solicited every April to June from communities and organizations. Participation in these meetings has increased during the past COVID restrictions mostly due to the establishment of online participation. Upon the formal re-establishment of in-person meetings, the MRPC will continue to provide an online meeting option to those who wish to participate. The same increase and level of participation has also been seen in the MPO over the same COVID time frame. Information on all MRPC meetings along with instructions on how to participate online are provided on the MRPC website (www.mrpc.org) through the Calendar of Events and the individual meeting announcements.

With the addition of an online meeting option for the public, the Montachusett MPO has had to work to adjust the Public Participation Plan (PPP) to include information on virtual participation. Over the last program year, revisions and updates have been reviewed and compiled into a new PPP that follows the state's PPP. In addition, feedback from the MassDOT Office of Diversity and Civil Rights (ODCR) has been sought throughout the development process. Formal adoption by the MPO will be sought as soon as practical.

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. Efforts will continue to be made to improve our outreach process and our contact lists through the use of the MassDOT Engage website and contact with any Title VI, EJ and LEP groups that can be identified.

The MPO has also recently updated the Limited English Proficiency (LEP) Access Plan endorsed in 2023. 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 MPO's overall outreach process, the MRPC will continue to update and maintain its web page at www.mrpc.org with 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 \$107,635 in federal and \$26,909 in state for a total of \$134,544 in FY2024 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.

In the FFY 2023 program year, staff focused on the development of an updated Coordinated Public Transit – Human Services Transportation Plan (CPT-HSTP) for the Montachusett Region. The CPT_HSTP seeks to identify services that are available to the target populations of individuals with disabilities; low-income individuals (or persons below the poverty level); and the elderly. In addition, a Transit Development Plan (TDP) was conducted for MART's eastern communities of Ayer, Shirley, Littleton, and Devens in order to meet existing public transit demands and guide the future development of transit operations in a financially feasible manner.

PRIOR YEAR UPWP TASK RESULTS

During the prior program year from October 1, 2022 to September 30, 2023, 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 2.1 Regional Demographics

- Review input data for regional demographics and demographic projections
- Regional Greenhouse Gas Analysis
- 2020 Census coordination

Task 2.2 GIS Mapping and Analysis

- Continued collection, analysis and refinement of data sets in order to provide inputs for various planning tasks.
- 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.
- Support of UPWP tasks and special reports where appropriate and necessary.
- Produce handheld applications based upon project needs.
- Provide local support related to developed apps as requested.
- Local GIS Technical Assistance support.

Task 2.3 Data Collection and Analysis Program

- Traffic counts taken at approximately 50 locations around the region
- GIS mapping of various datasets – including traffic counts & high crash locations
- Safety analysis of high crash locations developed for the region
- Download and utilize most recent MassDOT GIS crash data
- Inventory and analyze non MassDOT Park & Ride locations

Task 2.4 Pavement Management Systems

- Database of roads to be inventoried compiled
- Field surveys to be conducted in the Summer months

Task 2.5 Performance Measures

- Filling data needs and gaps (December 2022 – September 2023)
- Maintenance of PM Dashboard (February – September 2022); 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

Task 2.6 Regional Transportation Plan Update

- Identified various stakeholders and schedule outreach meetings
- Work with stakeholders to identify any language or accessibility challenges
- Update & Re-launched RTP website
- Conduct local meetings and workshops
- Review and incorporate prior studies and analyses into identified RTP elements
- Update relevant chapters to incorporate the Bipartisan Infrastructure Law (Bil) requirements as well as applicable state policies
- Develop and review evaluations of alternative solutions to identified problem areas
- Develop plan elements to ensure a multi-modal approach. To include highway, mass transit, pedestrian and bicycle facilities, railroads and airports
- Develop and review the air quality issues and strategies of the plan and its relationship to attaining and maintaining NAAQ Standards. Conduct Air Quality Conformity Determination based upon requirements established and by utilizing the Regional Travel Demand Model

- Development of the Plan will include consultations, as appropriate, with state and local officials responsible for land use management, natural resources, environmental protection, conservation, and historic preservation.
- Develop and review the Financial Section of the Transportation Plan: Federal regulations require that each project and/or program appearing in the RTP must also have an identified source of funding that can reasonably be assumed to be available for implementation. Staff will work with MassDOT, FHWA, the Office of Transportation Planning and FTA to refine the transportation project funding level projections made in the RTP.
- Seek full MPO endorsement of the plan when applicable
- Print document for distribution when applicable. Electronic versions will also be distributed

Task 3.1 Housing Coordination Planning

- Compile all prior reports and studies related to transportation, housing, and economic development.
- Identify goals and strategies that better connect housing and employment, expand housing and economic development near existing transportation facilities, and increase the percentage of the population with sufficient and affordable access to transportation in the region.
- Identify and map existing and potential dense housing developments, employment centers, and goods/services.
- Identify gaps in the transportation network to employment centers, housing clusters, and goods/services
- Prioritize gaps for closure & potential projects
- Conveyal and Accessibility Observatory data will be used where appropriate

Task 3.2 Climate Change Program

- 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
- Identify bottleneck study area, develop study, produce report
- Assist communities with Stormwater App as needed

Task 3.3 Intersection Analysis

- Meet with communities to determine thoughts/concerns at the intersections;
- Conduct vehicle and pedestrian traffic counts;
- Examine the intersections using Level of Service analysis, Average Daily Traffic analysis, Signal Warrant analysis, Safety analysis, Land Use analysis and Existing Geometry and Design Conditions analysis;
- Develop improvement recommendations aiming to diagnose and rectify issues at the intersections;

Task 3.4 Freight Study

- Identification and engagement of stakeholders and heavy truck operators.
- Study area identification: the transportation network impacted by existing and future heavy truck traffic
- Analyze the heavy truck transportation network
- Review and analysis of adjacent land uses, right of way, environmental constraints
- Identification of heavy truck traffic constraints within the study area
- Develop and identify potential short, medium, and long-term improvements based upon feedback from the Freight Study Guiding Committee
- Develop and prepare draft reports and the final Freight Study

Task 4.2 Human Services Transportation Plan

- Update the demographic data to 2020 Census data for the targeted populations;
- Update existing Coordinated Plan with the new demographic data;
- Identify new needs and issues;

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 2017-2021 American Community Survey 5-year estimates were utilized as they were the most current data available for the demographics at the time of this study. 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 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. The data in these tables, therefore, were used to determine Environmental Justice (EJ) and Title VI designated areas.

2017-2021 ACS 5-Year Estimates

By Block Group

Variable	2017-2021 ACS Table
Total Population	B03002
White Alone 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

2017-2021 ACS 5-Year Estimates

By Census Tract

Variable	2017-2021 ACS Table
Total Population	DP02
Foreign Born	DP02
Individuals with Disabilities	DP02
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 (\$89,026 in 2021);	Statewide Median Income: \$89,026 65% of Median Household Income: \$57,867 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: 20.96% Geography: Block Group
2. Low Income - Percent estimated below poverty level that is higher than the regional average	Regional Average: 8.30% 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: 16.45% Geography: Block Group
2. Individuals with Disabilities – Percent of population with a disability that is higher than the regional average	Regional Average: 12.30% 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: 20.96% Geography: Block Group
4. Foreign Born – Percent of population that is Foreign Born and is higher than the regional average	Regional Average: 8.80% Geography: Census Tract
5. Language – Percent of Population Spoken Language Other than English that is higher than the regional average	Regional Average: 15.70% Geography: Census Tract

Listed below are tasks from the past five UPWPs (FFY 2019 to FFY 2023) as well as tasks in this FFY 2024 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	EJ Block Groups			Title VI Block Groups			Title VI Census Tracts		
					Income	Minority	LEP HH	Elderly	Income	Minority	Disabilities	Foreign Born	Language
2019	Regionwide (All 22 MRPC Communities)	Fatal Crash Corridor Analysis	2.54	\$26,250	X	X	X	X	X	X	X	X	X
2019	Lancaster Lunenburg Winchendon	Local ADA Transition Plan Development	3.54	\$68,500	X	X		X	X	X	X		
2019	Lunenburg	Town Center Walkability and Parking Study	3.64	\$29,500		X		X	X	X	X		
2019	Fitchburg Leominster Gardner	Bus Route Performance Evaluation	4.44	\$30,000	X	X	X	X	X	X	X	X	X
2020	Fitchburg Lancaster	Before & After Safety Study	2.51	\$28,250	X	X	X	X	X	X	X	X	X
2020	Fitchburg Leominster Gardner	Travel Options & Rideshare Programs	3.11	\$44,250	X	X	X	X	X	X	X	X	X
2020	Regionwide (All 22 MRPC Communities)	Travel by Tourism	3.21	\$34,500	X	X	X	X	X	X	X	X	X
2020	Regionwide (All 22 MRPC Communities)	Regional Bike Plan	3.41	\$41,500	X	X	X	X	X	X	X	X	X
2020	Westminster Ayer	Local ADA Transition Plan Development	3.51	\$37,750	X			X	X		X	X	
2021	Hubbardston	Pavement Management Assistance	2.4	\$26,000				X					
2021	Fitchburg	Corridor Study	2.5	\$40,000	X	X	X	X	X	X	X	X	X
2021	Fitchburg Hubbardston Townsend	Intersection Analysis	2.6	\$37,500	X	X	X	X	X	X	X	X	X
2021	Sterling Townsend	Walkability Studies	3.1	\$45,000	X			X	X		X		
2022	Regionwide (All 22 MRPC Communities)	Mobility & Access Planning	3.1	\$46,750	X	X	X	X	X	X	X	X	X
2022	Ashburnham Shirley	Corridor Profiles	3.2	\$65,000	X			X	X	X		X	
2022	Sterling Winchendon	Community Trail Planning	3.4	\$40,000	X	X		X	X	X	X		

2022	Hubbardston Leominster	Intersection Analysis	3.5	\$45,760	X	X	X	X	X	X	X	X	X
2023	Regionwide (All 22 MRPC Communities)	Housing Coordination Plan	3.1	\$75,990	X	X	X	X	X	X	X	X	X
2023	Leominster Lunenburg Townsend	Intersection Analysis	3.3	\$70,750	X	X	X	X	X	X	X	X	X
2023	Ayer Lunenburg Shirley	Freight Study	3.4	\$72,500	X	X		X	X	X	X	X	
2023	Ayer Devens Littleton Shirley	Transit Development Plan		\$30,971	X	X		X	X	X	X	X	X

Current Year Task Review													
UPWP Year	Community	Description	Task #	Funding	EJ Block Groups			Title VI Block Groups			Title VI Census Tracts		
					Income	Minority	LEP HH	Elderly	Income	Minority	Disabilities	Foreign Born	Language
2024	Regionwide (16 MRPC Communities)	North County Land Trust Planning & Mapping	3.3	\$50,450	X	X	X	X	X	X	X	X	X
2024	Groton	Multi Modal Connections	3.4	53,750				X		X		X	
2024	Regionwide (All 22 MRPC Communities)	TMA Development Study	4.2	50,250	X	X	X	X	X	X	X	X	X

A review of the work tasks identified over the past five-year period, i.e. from FFY2019 to FFY2023, shows:

- Twelve (12) 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, nine (9) of these communities, or 75%, had work conducted within them.
- Of the fifteen (15) identified FTA Title VI communities, community specific tasks were conducted in ten (10), or 67%, of those municipalities.
- Of the twenty-one (21) identified FHWA Title VI communities with block groups meeting the definitions for Minority or Elderly populations, community specific tasks were conducted in thirteen (13), or 59%, of those municipalities.
- Of the twelve (12) identified FHWA Title VI communities with census tracts meeting the definitions for Disabled, Foreign Born or LEP, eight (8), or 67%, had community specific tasks conducted in them.
- Identified EJ communities that lacked a community specific work task were Athol, Clinton, and Harvard.
- FTA Title VI communities that lacked a community specific task are Athol, Clinton, Groton, Harvard, and Templeton.
- FHWA Title VI communities with identified populations based on block groups that lacked a community specific work task include Ashby, Athol, Clinton, Groton, Harvard, Petersham, Royalston, and Templeton. All these municipalities

were identified as having at least one Elderly population block group that exceed the regional average that identified them as FHWA Title VI communities. Groton and Harvard were also identified as having at least one minority population block group that exceed the regional average.

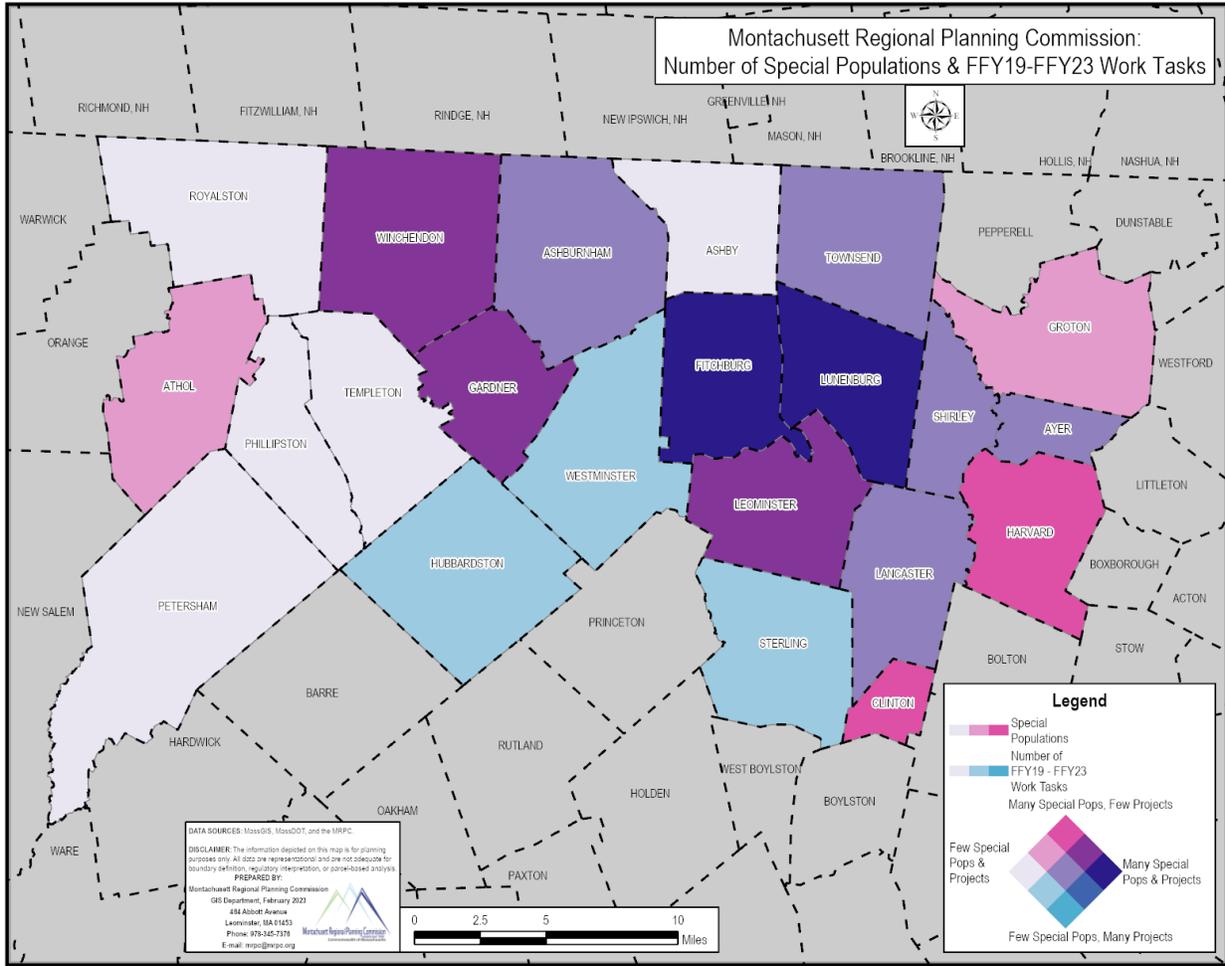
- FHWA Title VI only communities with identified populations based on census tract that lacked a community specific work task include Athol, Clinton, Groton, and Harvard.

A summary table of each category is shown below. The rows that are highlighted in yellow show the communities that meet all three categories for Title VI and Environmental Justice. There are a total of twelve communities within the Montachusett Region that meet those criteria and all but three communities (Athol, Clinton and Harvard) have had individual projects done under the UPWP over the last five years.

Community Name	FHWA Title VI Community	FTA Title VI Community	Environmental Justice Community	Number of Community Specific Tasks (FFY19 – FFY23)
Ashburnham	X	X	X	1
Ashby	X			0
Athol	X	X	X	0
Ayer	X	X	X	3
Clinton	X	X	X	0
Fitchburg	X	X	X	5
Gardner	X	X	X	2
Groton	X	X		0
Harvard	X	X	X	0
Hubbardston	X			3
Lancaster	X	X		2
Leominster	X	X	X	3
Lunenburg	X	X	X	4
Petersham	X			0
Phillipston				0
Royalston	X			0
Shirley	X	X	X	3
Sterling	X			2
Templeton	X	X		0
Townsend	X	X	X	3
Westminster	X			1
Winchendon	X	X	X	2

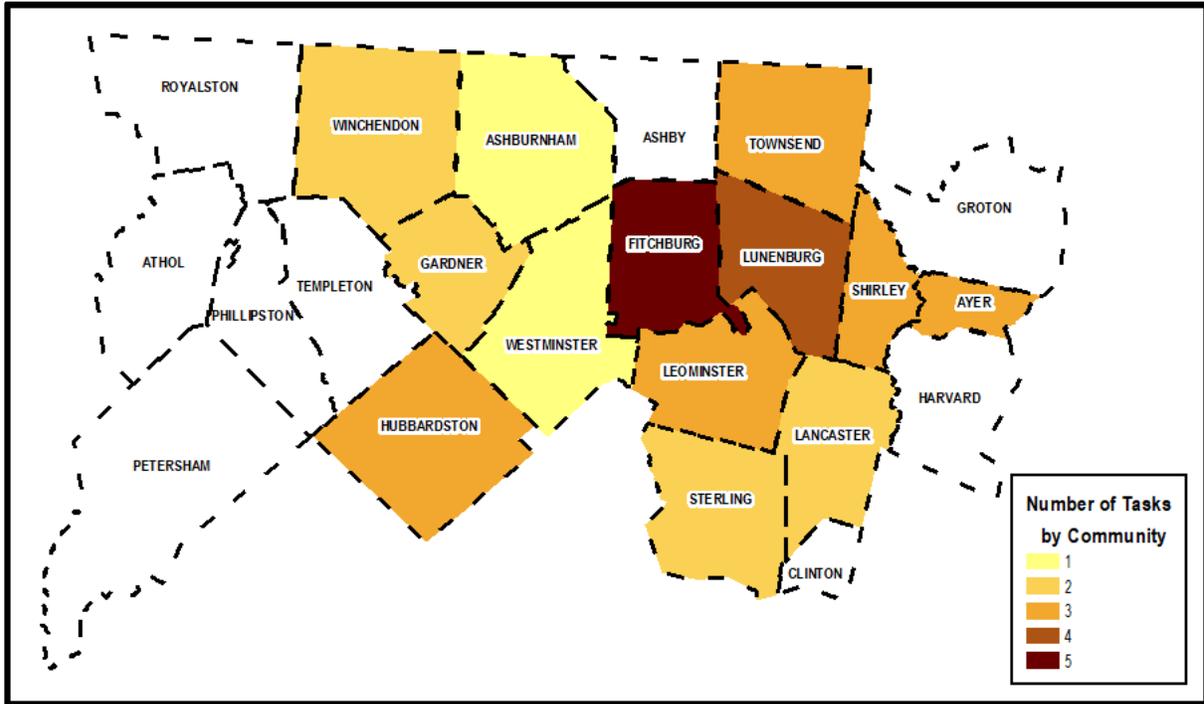
It should be noted that several tasks identified over the past five work program years, involved all 22 communities of the Montachusett Region and would likely entail some level of work in all these identified communities. This includes data collection efforts, crash data analysis, pavement management inventories, housing coordination plan and transit development plan.

The map below shows the social equity distribution for community specific projects over the past five years.



The following map 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.

Past Five-Year (FFY2019 - FFY2023) Geographic Equity for Community Specific Projects



Based upon this analysis and review, it would appear that the Montachusett MPO is making a solid 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 be located in communities which either have an Environmental Justice population, FHWA Title VI population, FTA Title VI population, or a combination of all three. Future geographic equity efforts should focus on the communities of Ashby, Athol, Clinton, Groton, Harvard, Petersham, Phillipston, Royalston, and Templeton and social equity efforts in Clinton and Harvard. For geographic distribution, the bulk of community specific projects are located in Fitchburg (five projects) and Lunenburg (four projects). The map also shows that more effort could be made in the outer edges of the region.

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 under 25% of the total task budget
 - Change in start/completion dates within the originally intended federal fiscal year(s)
 - Minor change to project scope

- UPWP Amendment**
- Reallocation of budget funds over 25% of the total task budget
 - 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
 - Funding increase above the originally approved UPWP overall budget

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 yearly “3C” (Continuous, 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. The Section 5303 match was previously provided by the Montachusett Regional Transit Authority but is now provided by MassDOT as part of the combined PL/5303 contract administered by the FHWA.

Program years described in this UPWP therefore are as follows:

<u>Funding Source</u>	<u>Program Year</u>
FHWA/MassDOT	FFY 2021 October 1, 2023 - September 30, 2024
FTA/Section 5303/MassDOT	FFY 2021 October 1, 2023 - September 30, 2024

STATE AND FEDERAL POLICIES AND PROGRAMS

Infrastructure Investment and Jobs Act

“On November 15, 2021, President Biden signed the [Infrastructure Investment and Jobs Act \(IIJA\) \(Public Law 117-58, also known as the “Bipartisan Infrastructure Law”\)](#) into law. The Bipartisan Infrastructure Law (BIL) is the largest long-term investment in our infrastructure and economy in our Nation’s history. It provides \$550 billion over fiscal years 2022 through 2026 in new Federal investment in infrastructure, including in roads, bridges, and mass transit, water infrastructure, resilience, and broadband.” (FHWA) The BIL provides approximately \$350 billion for Federal highway programs over a five-year period (fiscal years 2022 through 2026). Most of this funding is apportioned (distributed) to States based on formulas specified in Federal law. However, the BIL also provides funding through a wide range of competitive grant programs.

The BIL continues the Metropolitan Planning Program, which establishes a cooperative, continuous, and comprehensive (3C) framework for making transportation investment decisions in metropolitan areas. Program oversight remains a joint Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) responsibility. Except as specified within the BIL legislation, the BIL continues all funding features that applied to Metropolitan Planning (PL) funding under the FAST Act.

The BIL does continue all requirements that applied to the Metropolitan Planning Program under the Fixing America’s Surface Transportation (FAST) Act. It also adds the following requirements, changes and/or standards to the program.

- Requires each MPO to use at least 2.5% of its PL funds (and each State to use 2.5% of its State Planning and Research funding) on specified planning activities to increase safe and accessible options for multiple travel modes for people of all ages and abilities. A State or MPO may opt out of the requirement, with the approval of the Secretary, if the State or MPO has Complete Streets standards and policies in place and has developed an up-to-date Complete Streets prioritization plan that identifies a specific list of Complete Streets projects to improve the safety, mobility, or accessibility of a street.

While the Commonwealth and several Montachusett communities (21 of the 23 including Devens) have Complete Streets standards, policies and/or prioritization plans in place, no opt out of this requirement has been sought by the Montachusett MPO at this time.

A review of the planning tasks within this UPWP, shows that \$70,975 of the \$944,066 Montachusett PL funds are targeted to planning activities that can incorporate Complete Streets and increase safe and accessible options for multiple travel modes for people of all ages and abilities. This is \$52,985.62 more than the required \$17,989.38 required by the BIL.

Task	UPWP Task Budget	% Assigned to Complete Streets	Complete Streets Budget
Task 3.1 Housing Coordination Plan	\$64,750	20%	\$12,950
Task 3.4 Multi Modal Connections	\$53,750	100%	\$53,750
Task 3.5 Freight Study	\$42,750	10%	\$4,275
TOTALS	\$206,250		\$70,975

- Adds several changes to housing considerations in the metropolitan transportation planning process, including:
 - Updating the policy to include, as items in the national interest, encouraging and promoting the safe and efficient management, operation, and development of surface transportation systems that will better connect housing and employment.
 - Adding officials responsible for housing as officials with whom the Secretary shall encourage each MPO to consult.

- Require the metropolitan transportation planning process for a metropolitan planning area to provide for consideration of projects and strategies that will promote consistency between transportation improvements and State and local housing patterns (in addition to planned growth and economic development patterns).
- Add assumed distribution of population and housing to a list of recommended components to be included in optional scenarios developed for consideration as part of development of the metropolitan transportation plan.
- Add affordable housing organizations to a list of stakeholders MPOs are required to provide a reasonable opportunity to comment on the metropolitan transportation plan.

The MRPC will work with the MPO to develop a specific outreach list targeted towards housing organizations and advocates in order provide for better opportunity to participate in the transportation planning process. Discussions will also be held with the state and the MPO to discuss a more formal role for housing organizations in the MPO.

Through the FAST Act and the subsequent continuation in the BIL, ten (10) planning factors must be considered by MPOs in their UPWP's.

- 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 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
1.5 EJ/Title VI				X	X					
2.1 Reg Demo & Model	X			X		X	X			X
2.2 GIS	X	X			X		X	X	X	X
2.3 Data Collection	X	X					X	X	X	
2.4 Pavement Management		X	X	X		X	X		X	X
2.5 Performance Measures	X			X	X	X		X		X
3.1 Housing Coordination	X	X		X	X		X			
3.2 Climate Change Program	X			X	X	X			X	X
3.3 NCLT Trail Planning/Map	X			X	X					X
3.4 Multi Modal Connections	X			X	X					X
4.2 TMA Development	X			X	X	X	X		X	
4.4 TDP for Fixed Bus Routes	X			X	X	X	X		X	

Transit Asset Management

Prior funding legislation (MAP-21 and the FAST Act), authorized 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 (TAM) 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 that requires FTA grantees to develop asset management plans for their public transportation assets to include only including vehicles, facilities, equipment (with a cost of over \$50k), and other guideway 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 (PTASP), and has worked jointly with FHWA on a rule to manage Statewide and Metropolitan Planning.

MART sets new TAM target goals and certifies their plan annually. The TAM Plan was last self-certified by MART on June 6, 2022. The TAM Plan is also required to be updated every four years. The next update is due prior to October 1, 2026 in timing with the TIP process.

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.

Public Transportation Agency Safety Plan (PTASP)

On November 15, 2021, President Biden signed into law the Bipartisan Infrastructure Law (BIL), which authorizes \$108 billion over the next five years for public transportation – the most significant federal investment in transit in the nation's history. The BIL amends FTA's safety program at 49 U.S.C. Section 5329(d) (Section 5329(d)) by adding to the public transportation agency safety plan (PTASP) requirements. The requirements under the BIL apply to those transit agencies

that must have an Agency Safety Plan in place under the PTASP regulation (49 CFR Part 673). The BIL establishes additional PTASP requirements. Most of these requirements are based on the size of the Urbanized Areas (UZA) that the transit agencies serve.

The Leominster-Fitchburg UZA is a Small Urbanized Zone Area (UZA) with a total population of less than 200,000 (111,790 from the 2020 U.S. Census). Based upon this designation and regulations, a PTASP was developed and approved by the MART Advisory Board and Safety Committee in November 2022. Thus, in accordance with requirements, the agency safety plan (ASP), i.e. PTASP, was developed in cooperation with frontline employee representatives, the equivalent board of directors.

The approved PTASP contains strategies to minimize the exposure of the public, its personnel, and property to hazards and unsafe conditions, as well as to minimize exposure to infectious diseases. Also included in the PTASP are a risk reduction program to improve safety by reducing the number and rates of accidents, injuries, and assaults on transit workers as well as reduction of vehicular and pedestrian accidents involving buses.

A series of Risk Reduction Targets is also included in the PTASP. In addition, policies, procedures, communication processes and appropriate accountable management and safety committee individuals are clearly identified. All applicable requirements are identified and included in the approved PTASP as developed by MART.

Statewide and Regional Transportation Performance Management

In addition to the previously discussed federal planning factors, the Commonwealth has developed several planning programs and directives to aid in the transportation planning process. MPO staff has taken steps to consider these programs, policy directives, planning reports and emphasis areas in the development of this UPWP.

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;

On a regional level, MRPC relies on its regional Performance Measures (systems information) to inform the TEC process (investment and policy decisions) to achieve regional performance goals. On the national level, FHWA has established its own Performance Measures to inform decision making.

Effective on April 14, 2016 FHWA established a final rule on the first of its Performance Measures, Safety Measures (PM1). For Calendar Year (CY) 2023, targets related to PM1 were set by MassDOT and adopted by the Montachusett MPO on January 18, 2023. 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 (PM2) and the Systems Performance Measures, Congestion, Reliability and Emissions (PM3) were required to be established by the end of 2018. MassDOT then provided statewide target information for PM2 and PM3 to the Montachusett MPO for their review and either their adoption by the MPO or the establishment of their own regional PM2 and PM3. After review and discussion, the Montachusett formally adopted the statewide PM2 & PM3 targets on March 15, 2023.

Safety Performance Measures (PM1)

Montachusett MPO has chosen to adopt the statewide safety performance measure targets set by MassDOT for Calendar Year (CY) 2023. 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 trend lines for all FHWA-defined safety measures.

For the CY 2023 Total Number of Fatalities Target¹, due to the higher rates of speeding that was caused by decreased vehicle traveled (VMT) during the pandemic shutdowns in 2020 and the ongoing impacts in 2021, the total number of fatalities increased in 2020 and 2021 relative to previous years. MassDOT cannot use a pure trendline approach to set the CY 2023 targets since the Investment and Jobs Act (IIJA) requires “performance targets to demonstrate constant or improved performance”. In light of this, MassDOT developed the CY 2023 targets “... by projecting 2022 fatalities to be equal to 3% higher than the state’s lowest year in recent history (2019), and projecting 2023 fatalities to be equal to 3% lower than 2019.” The result is a projected future downward trend. The five-year average fatalities are projected to decrease from 360 (2017-2021) to 355 (2019-2023) which is a 1.69% decrease. The Rate of Fatalities per 100 million vehicle miles traveled represents five-year average fatalities divided by five-year average VMTs. The pandemic severely impacted VMT causing the fatality rates to rise in 2020 with significantly lower VMT and a slightly higher number of fatalities, along with the ongoing impacts in 2021. The CY 2023 projection is 0.59 fatalities per 100 million VMT for the five-year average of 2019-2023.

For the CY 2023 Total Serious Injury Target, the 2020-2022 serious injury data were not finalized in the IMPACT crash data portal at the time of the CY 2023 target setting. MassDOT used the total serious injury data that was available as of April 2022. Due to the higher speeding rates caused by the decreased VMT during the pandemic shutdowns in 2020 and the ongoing impacts in 2021, the total serious injuries increased in 2020 and 2021 relative to previous years. In light of this, MassDOT developed the CY 2023 targets by projecting the 2022 annual total serious injuries to be equal to the lowest year in recent history and the 2023 annual total serious injuries to continue a downward trend at roughly 10% annual decrease, that reflects the average decreases in the years in which the state experienced reductions in total serious injuries. This resulted in a projected five-year average number of total serious injuries dropping from 2,626 (2017-2021) to 2,569 (2019-2023) for a reduction of 1.99%. The Rate of Total Serious Injuries per 100 million vehicle miles traveled represents five-year average divided by five-year average VMTs. The pandemic severely impacted the total serious injury rate. Following the methods used for the Rate of Fatalities above, the projection is expected to be 4.25 total serious injuries per 100 million VMT (2019-2023) which is down from 4.30 total serious injuries per 100 million VMT (2017-2021) for a reduction of 1.57%.

For the CY 2023 Total Number of Non-Motorized Fatalities and Serious Injury Target, the total number of non-motorist fatalities and serious injuries decreased significantly during the beginning of the pandemic in 2020, followed by an increase in 2021 and further increase to start 2022 which made tracking the trend difficult. In light of this, total non-motorized fatalities and serious injuries for 2022 were set to be equal to 3% higher than the most recent lowest year, and 2023 were set to be 3% lower than the most recent lowest year. This resulted in a five-year average of total non-motorist fatalities and serious injuries reducing from 467 (2017-2021) to 437 (2019-2023) for a reduction of 6.86%.

Fatalities and serious injuries are expected to decrease based on MassDOT efforts in the areas of speed management and safe systems, among other safety strategies. In all safety categories, MassDOT has established a long-term target of “Toward Zero Deaths” through MassDOT’s Performance Measures Tracker² and will be establishing safety targets for the MPO to consider

¹ Source for all data and Targets: MassDOT CY23 Safety Performance Targets (PM1)

² <https://www.mass.gov/lists/tracker-annual-performance-management-reports>

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 to establish their own each year.

The safety measures MassDOT has established for CY 2023, and that Montachusett MPO has adopted, are as follows:

- 1) Fatalities: The target number of fatalities for years CY 2023 is 355 (2019-2023), down from an average of 360 fatalities for the years 2017-2021. [See Figure 1 for Montachusett MPO vs. statewide comparison of the trend for this performance measure]
- 2) Rate of Fatalities per 100 million VMT: The target fatality rate for years CY 2023 is 0.59 (2019-2023), which is equal to the average for years 2017-2021. [See Figure 1 for Montachusett MPO vs. statewide comparison of the trend for this performance measure]
- 3) Serious Injuries: The target number of serious injuries for CY 2023 is 2,569 (2019-2023), down from the average of 2,626 for years 2017-2021. [See Figure 2 for Montachusett MPO vs. statewide comparison of the trend for this performance measure]
- 4) Rate of Serious Injuries per 100 million VMT: The serious injury rate target for CY2023 is 4.25 (2019-2023), down from the 4.30 average for years 2017-2021. [See Figure 2 for Montachusett MPO vs. statewide comparison of the trend for this performance measure]
- 5) Total Number of Combined Incapacitating Injuries and Fatalities for Non-Motorized Modes: The CY 2023 target number of fatalities and incapacitating injuries for non-motorists is 437 (2019-2023), down from the average of 467 for years 2017-2021. [See Figure 3 for Montachusett MPO vs. statewide comparison of the trend for this performance measure]

Figure 1 - Montachusett MPO / Statewide: Total Fatalities Per 5-Yr Rolling Average (RA)

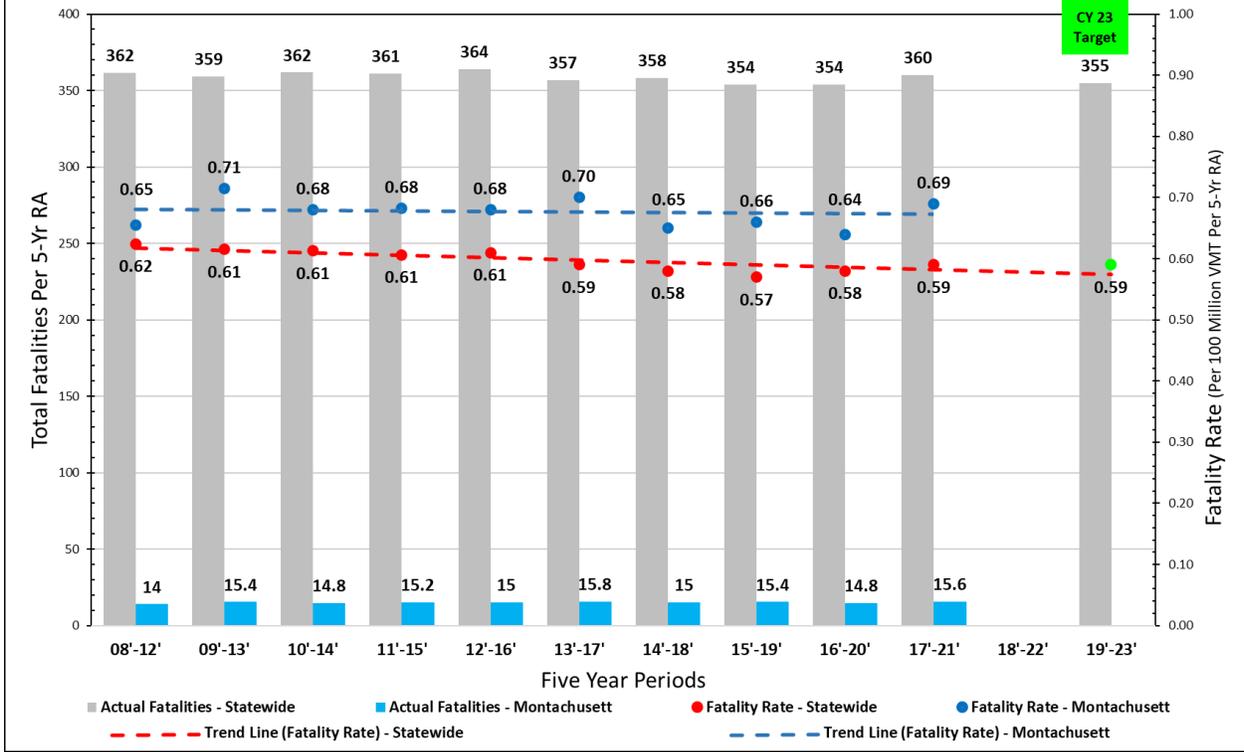
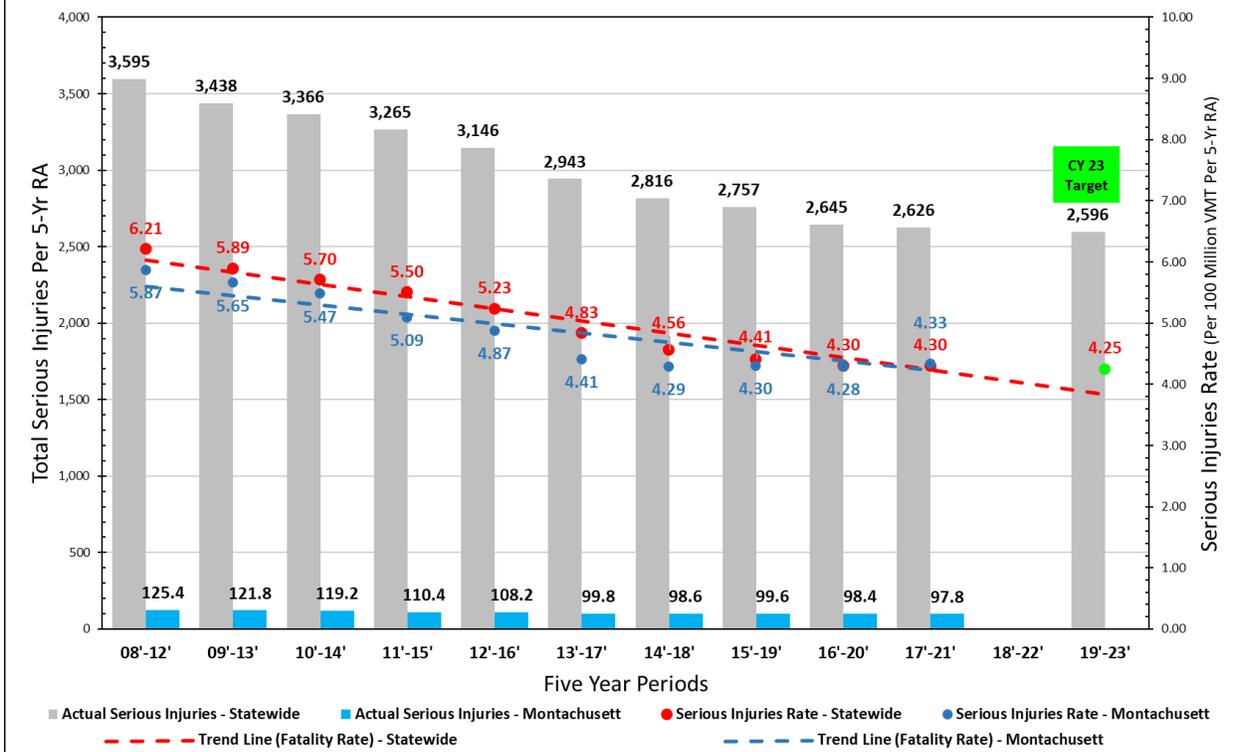
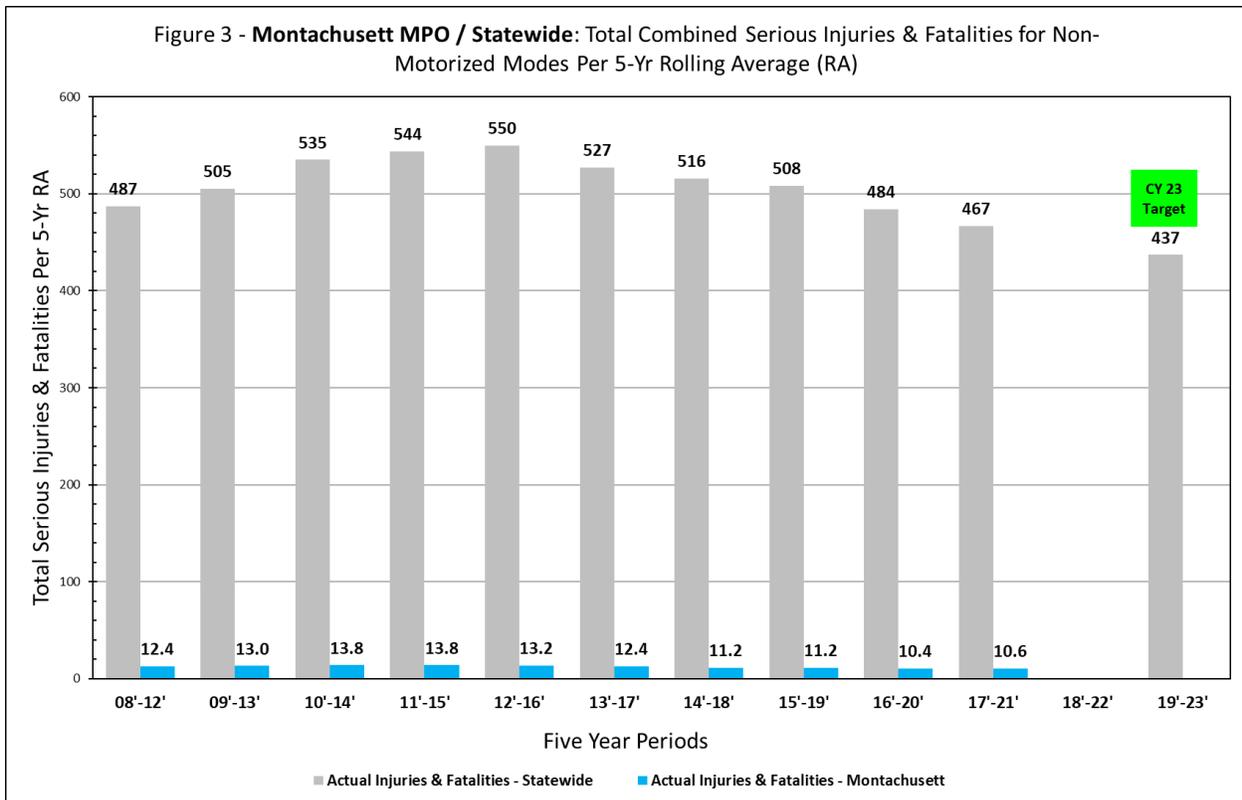


Figure 2 - Montachusett MPO / Statewide: Total Serious Injuries Per 5-Yr Rolling Average (RA)





Bridge & Pavement Performance Measures (PM2)

Montachusett MPO has chosen to adopt the 2-year (2024) and 4-year (2026) statewide bridge and pavement performance measure targets set by MassDOT. MassDOT was required to adopt a statewide target by December 16th, 2022. In setting these targets, MassDOT has followed FHWA guidelines by measuring bridges and pavement condition using the 9-point National Bridge Inventory Standards (NBIS); the International Roughness Index (IRI); the presence of pavement rutting; and the presence of pavement cracking. 2-year and 4-year targets were set for six individual performance measures: percent of bridges in good condition; percent of bridges in poor condition; percent of Interstate pavement in good condition; percent of Interstate pavement in poor condition; percent of non-Interstate pavement in good condition; and percent of non-Interstate pavement in poor condition. All of the above performance measures are tracked in greater detail in MassDOT's 2022 Transportation Asset Management Plan (TAMP).

Targets for bridge-related performance measures were determined by identifying which bridge projects are programmed and projecting at what rate bridge conditions deteriorate. The bridge-related performance measures measure the percentage of deck area, rather than the total number of bridges.

Performance targets for pavement-related performance measures were based on a single year of data collection, and thus were set to remain steady under the guidance of FHWA. These measures are to be revisited at the 2-year mark (2024), once three years of data are available, for more informed target setting.

MassDOT continues to measure pavement quality and to set statewide short-term and long-term targets in the MassDOT Performance Management Tracker using the Pavement Serviceability Index (PSI), which differs from IRI. These measures and targets are used in conjunction with federal measures to inform program sizing and project selection.

Performance Measure	Current (2021)	2-year target (2024)	4-year target (2026)
Bridges in good condition	16%	16%	16%
Bridges in poor condition	12.2%	12%	12%
Interstate Pavement in good condition	71.8%	70%	70%
Interstate Pavement in poor condition	0.0%	2%	2%
Non-Interstate Pavement in good condition		30%	30%
Non-Interstate Pavement in poor condition		5%	5%

Reliability, Congestion, & Emissions Performance Measures (PM3)

Montachusett MPO has chosen to adopt the 2-year (2024) and 4-year (2026) statewide reliability, congestion, and emissions performance measure targets set by MassDOT. MassDOT was required to adopt a statewide target by December 16, 2022, with MPOs either adopting the statewide target or establishing their own by June 2023.

MassDOT followed FHWA regulation in measuring Level of Travel Time Reliability (LOTTR) on both the Interstate and non-Interstate NHS as well as Truck Travel Time Reliability (TTTR) on the Interstate system using the National Performance Management Research Dataset (NPMRDS) provided by FHWA. These performance measures aim to identify the predictability of travel times on the roadway network by comparing the average travel time along a given segment against longer travel times. For LOTTR, the performance of all segments of the Interstate and of the non-Interstate NHS are defined as either reliable or unreliable based on a comparison between the 50th percentile travel time and the 80th percentile travel time, and the proportion of reliable segments is reported. For TTTR, the ratio between the 50th percentile travel time and the 90th percentile travel time for trucks only along the Interstate system is reported as a statewide measure.

Emissions reduction targets are measured as the sum total of all emissions reductions anticipated through CMAQ-funded projects in non-attainment or air quality maintenance areas (currently the cities of Lowell, Springfield, Waltham, and Worcester, and the town of Oak Bluffs) identified in the Statewide Transportation Improvement Program (STIP). This anticipated emissions reduction is calculated using the existing CMAQ processes.

Measure	Current (2021)	2-year (2023)	4-year (2025)
Interstate LOTTR	84.2%	74.0%	76.0%
Non-Interstate LOTTR	87.2%	85.0%	87.0%
TTTR	1.61	1.80	1.75
PHED (Boston UZA)	18.0	24.0	22.0
PHED (Springfield UZA)	6.2	6.5	6.0
PHED (Worcester UZA)	6.8	7.0	5.0
% non-SOV (Boston UZA)	36.9%	38.8%	39.8%
% non-SOV (Springfield UZA)	21.5%	22.2%	22.2%
% non-SOV (Worcester UZA)	23.4%	25.4%	26.1%
Emissions Reductions: PM2.5			
Emissions Reductions: NOx	0.490	0.000	0.000
Emissions Reductions: VOC	0.534	0.000	0.000
Emissions Reductions: PM10			
Emissions Reductions: CO	6.637	0.354	0.354

Global Warming Solutions Act (GWSA)

The Global Warming Solutions Act (GWSA) was signed into law in August 2008 and makes Massachusetts a leader in setting aggressive and enforceable GHG reduction targets, policies and initiatives to achieve these targets. On December 29, 2010 the Massachusetts Executive Office of Energy and Environmental Affairs (EOEEA), released the Massachusetts Clean Energy and Climate Plan for 2020. The targets for overall statewide GHG emissions are:



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 through the creation of a balanced multi-modal transportation system. This is realized through the transportation goals and policies presented in the 2020 and 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 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 are 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

In 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 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 those listed above as well as those in state freight, bicycle, pedestrian and rail plans, will continue to be reviewed, considered and incorporated in the planning studies developed as part of the work tasks outlined in this UPWP. This includes work developed under tasks such as 1.4 Development of TIP, 2.1 Regional Demographics, 2.5 Performance Measures, 3.1 Housing Coordination Planning, 3.3 Multi-Modal Connections, 3.5 Freight Study, and 4.4 Transit Development Plan for Fixed Bus Routes. Recommendations derived from these studies will be consistent with state policies.

Commission on the Future of Transportation in the Commonwealth

In 2018, Governor Baker signed Executive Order No. 579 which created a “Commission on the Future of Transportation in the Commonwealth” to provide recommendations 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.”

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 outlined the current trends in the five topic areas and, through scenario planning, provided 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). In addition, information from this report was reviewed and included in the RTP update, i.e., the 2040 RTP.

1.0

MANAGEMENT AND SUPPORT

UPWP TASK NO. 1.1 – SUPPORT OF 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 Northern Tier Passenger Rail Study Working Group, the Montachusett Regional Transit Authority (MART), the Community Health Network Area 9 (CHNA 9), the Fitchburg Line Working Group, the North Central Regional Coordinating Council (RCC) and the Montachusett Joint Transportation Committee (MJTC).

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 North Central Regional Coordinating Council (RCC) is a voluntary coalition made up of human service representatives, state agencies, the transit authority, regional planning agency, consumers, advocates, etc. The RCC meets quarterly, on average, to discuss the transportation priorities and challenges within the region.

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.

The current Memorandum of Understanding defining the MPO and the Transportation Planning process enacted in 2010 will be reviewed in cooperation with MassDOT and FHWA to determine any and all necessary updates. Additional MOU's that have been approved by the MPO include:

- Boston UZA between MA, NH & RI (2018)
- Worcester UZA between MA, CT, CMRPC, MRPC, NMCOG, MART & WRTA (2020)
- Nashua UZA between MA, NH & RPAs (2020)

Previous Work:

During FY 2023, the Montachusett Regional Planning Commission 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.
- Participated in the Northern Tier Passenger Rail Study Working Group.
- Participation in the CHNA 9, 2017- Ongoing;
- Member and participant in the Worcester County Highway Association, 2014 – Ongoing;
- Participated in the North Central Regional Coordinating Council - 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 BIL.

- Coordinate work with state and regional agencies involved in the unified or combined Massachusetts state plan of the Federal WIOA.

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.

North Central Regional Coordinating Council

- Continue participating with the RCC
- Provide support services as needed

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.

- 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.
- North Central Regional Coordinating Council – Meeting and data support as needed.
- 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 2023	Nov 2023	Dec 2023	Jan 2024	Feb 2024	Mar 2024	Apr 2024	May 2024	Jun 2024	July 2024	Aug 2024	Sep 2024
Support Activities												
Public Input												

Task 1.1

	Budget	Estimated Staff Effort
FHWA PL/FTA-5303	\$74,035.20	21.67 weeks
MassDOT	\$18,508.80	5.42 weeks
TOTAL	\$92,544.00	27.09 weeks

UPWP TASK NO. 1.2 – UNIFIED PLANNING WORK PROGRAM

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 2023 to May/June 2024 time period. Draft documents prepared March to May 2024. MPO endorsement to be sought no later than June 2024.

Amendments are prepared and endorsed as necessary.

	Oct 2023	Nov 2023	Dec 2023	Jan 2024	Feb 2024	Mar 2024	Apr 2024	May 2024	Jun 2024	July 2024	Aug 2024	Sep 2024
Start of Draft												
Public Input												
Draft for Comment												
MPO Endorsement												

Task 1.2

	Budget	Estimated Staff Effort
FHWA PL/FTA-5303	\$20,400	5.97 weeks
MassDOT	\$ 5,100	1.49 weeks
TOTAL	\$25,500	7.46 weeks

UPWP TASK NO. 1.3 – PUBLIC PARTICIPATION PROGRAM

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" (continuous, 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. A further revision to the PPP was undertaken in the last program year. At the time of this document, formal adoption by the MPO had not been sought. The newest iteration of the PPP seeks to reflect the state's PPP overall and in particular address the issue of virtual public involvement through online meeting presentations. The updated PPP will be subjected 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. Staff will continue to expand virtual public engagement methods to the extent possible. Currently, the MRPC utilizes the GoToMeeting.com application for online meetings. However, staff continually examines available technologies in order to expand and improve the VPI process.

The MRPC website will continue to be refined and updated to improve accessibility as needed. This process has allowed staff to better maintain the site and by extension improve the experience and usage by the general public. 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:

- Limited English Proficiency Plan update – February 2023
- Montachusett Public Participation Plan Update – Fall 2023
- Title VI Annual Report – September 2017, December 2018, February 2023

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 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 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.
- Continue to expand and improve the Virtual Public Involvement options of the PPP in order to provide easy access for interested individuals. This will include technology reviews and upgrades where possible.
- Identify Innovative Public Participation Techniques and Processes: Staff will attempt to identify innovative public participation techniques and programs that will enhance public participation. This will include virtual participation options.
- 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 seek to 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.
- Continue to ensure that individuals who need a reasonable accommodation to fully participate in MPO sponsored activities and meetings, such as a tape of the draft document, 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.
- 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:

- Revised/updated PPP that 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.
- Maintain and update the VPI aspects of all applicable meetings.

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 2023	Nov 2023	Dec 2023	Jan 2024	Feb 2024	Mar 2024	Apr 2024	May 2024	Jun 2024	July 2024	Aug 2024	Sep 2024
Web Revisions												
PPP Review												

Task 1.3

	Budget	Estimated Staff Effort
FHWA PL/FTA-5303	\$24,000	7.02 weeks
MassDOT	\$ 6,000	1.76 weeks
TOTAL	\$30,000	8.78 weeks

UPWP TASK NO. 1.4 – DEVELOPMENT OF TRANSPORTATION IMPROVEMENT PROGRAM

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 recently launched electronic STIP (eSTIP) application will be used as part of the annual development of the Transportation Improvement Program (TIP). Distribution and notification of documents, drafts and adjustments/amendments will follow and be consistent with the Montachusett Public Participation Plan (PPP) adopted in 2016 and updated in this UPWP program year.

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 2020 Regional Transportation Plan - 2019

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 2020 RTP and additional measures developed by federal and state officials according Bipartisan Infrastructure Law (BIL) 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 as well as the updated plan to be developed by the Fall of 2023;

- 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 2024 to April 2024 time period.

Final and MPO Endorsed documents to be released in May 2024. 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 2024.

Amendments to the TIP are processed as needed.

Performance measures analysis ongoing throughout the year.

	Oct 2023	Nov 2023	Dec 2023	Jan 2024	Feb 2024	Mar 2024	Apr 2024	May 2024	Jun 2024	July 2024	Aug 2024	Sep 2024
TIP Start												
Public Input												
Draft												
MPO Endorsement												
TIP Amendments												

Task 1.4

	Budget	Estimated Staff Effort
FHWA PL/FTA-5303	\$48,400	14.17 weeks
MassDOT	\$12,100	3.54 weeks
TOTAL	\$60,500	17.71 weeks

UPWP TASK NO. 1.5 – ENVIRONMENTAL JUSTICE AND TITLE VI

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. The most updated 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;
- Update/Revised Limited English Proficiency Plan - 2023
- Updated/Revised Public Participation Plan – May 2016, 2023
- Montachusett Title VI Report – 2017, 2018, 2019, 2023
- Updated MRPC website – ongoing;

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.
- Continue to update and revise the email contact database within MassDOT’s “Engage” Tool.

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 2023	Nov 2023	Dec 2023	Jan 2024	Feb 2024	Mar 2024	Apr 2024	May 2024	Jun 2024	July 2024	Aug 2024	Sep 2024
Public Input												
Fed/State Coordination												

Task 1.5

	Budget	Estimated Staff Effort
FHWA PL/FTA-5303	\$45,400	13.29 weeks
MassDOT	\$11,350	3.32 weeks
TOTAL	\$56,750	16.61 weeks

DATA COLLECTION AND ANALYSIS FOR REGIONAL TRANSPORTATION PLANNING

UPWP TASK NO. 2.1 - REGIONAL DEMOGRAPHICS

Objective:

MPO staff will examine, collect and compile available data from various sources in order to establish and maintain a comprehensive demographic database for the region.

- MPO staff will continue to collect and update socioeconomic American Community Survey (ACS) data at the block group, tract, and community level as it pertains program initiatives. MPO staff will also collect 2020 Census data when it becomes available.
- MPO staff will seek to establish and incorporate data and demographic links to other RPA projects and reports including the Montachusett Region Comprehensive Economic Development Strategy (MRCEDS) plan.
- MPO staff will initiate development of a database related to resiliency in the region. Various critical and at-risk infrastructure will be identified and pertinent information will be collected. This database will be used for current and future climate change analysis.
- MPO staff will continue to collect and analyze data on Title VI and Environmental Justice populations. This will include data on vulnerable populations based on income, race, color, national origin, disability, age, and sex.
- MPO staff will begin to review and document what impacts the COVID pandemic had upon regional data, i.e. traffic volumes, travel patterns, regional developments, etc.

MPO staff will continue to examine resources such as Conveyal and the Accessibility Observatory (AO) data provided by MassDOT. Data derived through these sources will assist staff with congestion planning, economic development, and other regional planning efforts.

To review, update and monitor regional population, household, and employment projections:

- MPO staff will work with the statewide Socio-Economic Projection Working Group in the development and review of population projections produced by MassDOT. Comparisons to projections from past years will be conducted as needed leading to new projections to be utilized with the next Regional Transportation Plan Update. This process is expected to continue into the next program year.
- MPO staff, where possible, will collect data on housing developments, both affordable and otherwise, in the region. Available information will be added to the MassBuilds (www.massbuilds.com/map) development database that includes information on affordable housing units completed, under construction, or projected.

MPO staff will also continue to provide support services as part of the 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 as data becomes available, additional work will be required to review, analyze and distribute pertinent information to all departments of the MRPC as well as in response to local requests.

Previous Work:

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

- Updated development data for MassBuilds
- Collection of updated ACS data
- Updated regional and community demographic data
- Identification of Census Tracts and Block Groups through the PSAP
- Regional Profiles
- Title VI and Environmental Justice data sets

Methodology:

MPO staff will seek to undertake the following:

Regional Demographics

- Review input data for regional demographics and demographic projections
 - Review US Census websites for the most recent updates to 2020 Census and ACS information.
 - Review, establish and compile data and various linkages to MRPC departments and plans including the Montachusett Region Comprehensive Economic Development Strategy (MRCEDS) plan.
 - Compile listings of critical infrastructure and obtain available data for at risk and climate change analysis.
 - Collect and analyze data on Title VI and Environmental Justice populations.
 - Construct a development database of recent, current, or anticipated residential and commercial development projects in the Region. Collected data will be added to MassBuilds to document data on housing developments, both affordable and otherwise.
 - Staff will attend and work with the statewide Socio-Economic Projection Working Group in the development and review of population projections.

Regional Greenhouse Gas Analysis

MPO staff will continue to use existing methodologies to analyze the GHG impacts of transportation projects as well as identified in the TIP and other project level studies as needed.

2020 Census

Staff will continue to coordinate with the U. S. Census Bureau in order to provide support services as the results of the 2020 Census proceeds.

During the program year, the products developed from the models and the compiled databases will be reviewed, evaluated, and utilized as part of the development of the Transportation Improvement Program and other applicable studies/projects for the Region.

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

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

Through work with the MassDOT Socio-Economic Working Group, any updated demographic projections will be used when applicable for a variety of planning purposes in the Region. Beneficiaries include all the communities in the MRPC region.

2020 Census Participation

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

Schedule:

Regional Demographics

To be carried out between October 2023 to September 2024.

Regional Demographics Projections

To be carried out through participation in the MassDOT Socio-Economic Working Group based upon their schedule. Updated regional projections based on updated methodologies and feedback on state-wide projections as needed between October 2023 to September 2023.

2020 Census Participation

To be carried out throughout the program year

	Oct 2023	Nov 2023	Dec 2023	Jan 2024	Feb 2024	Mar 2024	Apr 2024	May 2024	Jun 2024	July 2024	Aug 2024	Sep 2024
Regional Demographics												
Regional Demographic Projections												
GHG Model												
2020 Census Participation												

Task 2.1

	Budget	Estimated Staff Effort
FHWA PL/FTA-5303	\$19,000	5.57 weeks
MassDOT	\$4,750	1.39 weeks
TOTAL	\$23,750	6.95 weeks

UPWP TASK NO. 2.2 – GIS MAPPING AND ANALYSIS

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, demographic, land use, environmental, etc. data for different work tasks under this UPWP as well as within the entire organization. Data will continue to be developed and updated 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. Staff will also continue to develop and release various mobile applications in response to data needs and projects.

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.
- Support 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.
- Provide communities with feedback and assistance in developing their GIS capabilities, technical support related to equipment/software, mobile app development and data acquisition.
- Collect and map data related to Title VI, Environmental Justice and other vulnerable populations (i.e. based on income, race, color, national origin, disability, age, and sex). Data related to seniors and disabilities will be reported separately.
- Based upon other MRPC work, staff will seek to collect and map affordable housing data in the region. Staff will work to incorporate appropriate data, i.e. affordable housing units completed, under construction, or projected, into the MassBuilds development database.
- Collect existing information on sidewalks and sidewalk coverage in the region for mapping.
- As part of MRPC work related to economic development, staff will work to identify Priority Development Areas (PDAs), 43D Priority Development Sites, and Transformative Development Initiative Districts (TDIs) within the Montachusett region.
- Identify and map:
 - Transit routes and bus stops;
 - Park & Ride lots and facilities;
 - Congestion corridors and/or bottleneck locations and;
 - Vulnerable infrastructure assets that are at risk of climate change impacts.

Previous Work:

- MRMapper online web-based GIS mapping system;
- Mobile applications development;
- Montachusett Regional Transit Authority Transit Route update maps;
- Update Trail Inventory Databases;
- Pavement data updates/mapping;
- Traffic Count data updates/mapping;
- Title VI Mapping;
- Transportation Improvement Plan;
- Roadway Safety Improvement Project;

- Climate Change Mapping;
- Regional Transportation Plan Mapping;
- Census Mapping and Data Management;
- Regional Bicycle Infrastructure Inventory;
- Regional Sidewalk Inventory – Pedestrian Plan Mapping;
- Trail Data Collection Application Development;
- ADA PROW Application Development

Methodology:

- Continued collection, analysis and refinement of data sets in order to provide inputs for various planning tasks.
- 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.
- Support of UPWP tasks and special reports where appropriate and necessary.
- Produce handheld applications based upon project needs.
- 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.
- Custom maps 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, economic development, title VI and Environmental Justice data, affordable housing, etc.
- MRMapper Online Web based mapping system with relational data for MRPC communities.
- Handheld apps as project needs are developed.

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 2023	Nov 2023	Dec 2023	Jan 2024	Feb 2024	Mar 2024	Apr 2024	May 2024	Jun 2024	July 2024	Aug 2024	Sep 2024
Technical Support												
MRMapper Updates												
App Development												
Data Layer Maintenance												
Various Identified Map Sets												

Task 2.2

	Budget	Estimated Staff Effort
FHWA PL/FTA-5303	\$66,400	19.43 weeks
MassDOT	\$16,600	4.86 weeks
TOTAL	\$83,000	24.29 weeks

UPWP TASK NO. 2.3 – DATA COLLECTION & ANALYSIS PROGRAM

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 to determine Level of Service (LOS) at major intersections. MRPC also utilizes a Spack video traffic counting system purchased in 2021 to conduct TMCs, volume counts, pedestrian/bicycle counts as well as other non-traditional/difficult counts. Two Radar counters purchased in 2015 assist with speed studies. A bicycle and pedestrian counter (Eco Counter) has been purchased to conduct bicycle and pedestrian data along roadways, rail trails and hiking trails. This data will assist with identifying gaps in our bicycle and trail networks as well as the bikeability and/or walkability for a particular area.

Under the MRPC Regional Safety Review Program, staff will continue to cooperate with the FHWA to meet the goal of the Safety Planning Factor and the vision of the MassDOT Strategic Highway Safety Plan (SHSP) which is to create “a roadway system with zero deaths and serious injuries”. Staff will seek to improve safety at Fatality / Serious Injury Locations and Corridors (High Crash Locations (HCLs) / High Crash Corridors (HCCs)) through the Highway Safety Improvement Program (HSIP). HSIP is a data driven program that includes crash report gathering and analysis, identification of HCLs and HCCs prioritization, implementation of projects that improve safety at HCLs and HCCs and evaluation of the effectiveness of those safety improvement projects. Staff will continue to refine and update our GIS Regional Crash Database as new crash data is obtained both from the state and local municipalities and to work with the MassDOT Road Safety Audit (RSA) program. Staff will seek to meet with communities in the region to identify and encourage safety improvement project development at HCLs and HCCs.

In addition, staff will provide data support as needed to address local and regional issues as they are identified. These areas will also include an examination of the the following datasets:

- Park & Ride Lot Occupancy - Data will be collected at Park & Ride Lots within the region that are outside of MassDOT owned Park & Ride Lots. Counts will be conducted in alignment with MassDOT procedures.
- Asset Management – Staff will seek data based upon coordination with MassDOT and local municipalities.
- Bicycle and Pedestrian Count Data – Staff seek to collect data at identified trails using current equipment. Staff will also review MassDOT informational guidance currently under development in order to assure compatibility with the state.
- Transit – Staff will update data and maps on the existing fixed route system.
- Sidewalk Coverage – Staff will collect and map existing sidewalk data in the Region. Additional data locations will be examined for further data collection. Any data generated will be shared with MassDOT.

Previous Work:

Traffic Count Program:

- 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, 2021
- Bicycle and Pedestrian counting system - 2018

Regional Safety Review Program:

- MRPC Regional Crash Database (ongoing)
- MRPC HCLs and HCCs website application (ongoing)
- MRPC Fatal Crash Corridor Analysis 2018 / MRPC Region Fatal Crashes Report 2019 (ongoing)
- RSA - Old Union Turnpike at Route2, Exit34, Lancaster – 2020
- Before & After Safety Performance Report: Roundabout at John Fitch Highway & Ashby State Rd (Rt 31), Fitchburg - 2020
- South Athol Road Interchange Study, Athol - 2019
- RSA - South Street at Wanoosnoc Road, Fitchburg - 2019
- RSA - Greenville Rd (Rt 31) at Turnpike Rd, Ashby - 2018

Methodology:

The FY24 Traffic Count Program will consist of the following sub-tasks:

- Provide assistance to MassDOT's state-wide traffic counting program. MRPC will count approximately 30 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
- 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.
- Develop a candidate Top 100 HCLs and HCCs List Report to inform communities of the need to improve safety for the purpose of seeking the development of safety improvement projects.
- Create individual community reports of candidate Top 100 HCLs and HCCs as needed or requested.
- Seek to meet with communities in the MRPC region to discuss developing projects or to recommend further study at the candidate Top 100 HCLs and HCCs 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 Top HCLs and HCCs 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 Top 100 HCLs and HCCs.
- Recommend further study into implementing low-cost safety improvements that can be constructed relatively quickly to help remediate a safety problem at candidate Top 100 HCLs and HCCs.

As part of the additional data collection tasks, the following will be undertaken:

- Identify non-MassDOT owned Park & Ride Lots in the Region and establish data collection parameters that are comparable to MassDOTs;
- Coordinate with MassDOT regarding data requirements of Asset Management planning. Work with local municipalities to collect available data as needed.
- Continue to update bicycle and pedestrian infrastructure using the MrMapper web application that was created in 2019 and identify locations for regular data collection.
- Staff will compile existing sidewalk data and identify locations and/or municipalities for additional data collection.

Product:

Traffic Count Program

- Complete 75 to 100 traffic counts throughout the Region (including approximately 30 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 Top 100 HCLs and HCCs MRPC website application;
- Regional and Community Candidate Top 100 HCL and HCC Report which is a list of potential safety improvement projects;
- Completed RSAs for various Candidate Top 100 HCLs and HCCs;
- List of HSIP Projects for TIP.

Regional Data Sets

- Park & Ride Lot Vehicle Counts
- Regional Asset Management Database
- Regional Sidewalk 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 and Data Collection and Review – October 2023 to August 2024; Community Reports and outreach – November 2023 to September 2024.

Sidewalk Inventory & Pedestrian/Bicycle Connections Program – Data collection and Review – October 2023 to August 2024 depending on weather conditions.

	Oct 2023	Nov 2023	Dec 2023	Jan 2024	Feb 2024	Mar 2024	Apr 2024	May 2024	Jun 2024	July 2024	Aug 2024	Sep 2024
Traffic Counts												
Safety Data Collection												
Safety Analysis												
Safety Review												
Community Safety Reports												
Road Safety Audits												
Sidewalk Inventory												
Ped & Bike Program												
Data Collection – Other Sets												

Task 2.3

	Budget	Estimated Staff Effort
FHWA PL/FTA-5303	\$50,400	14.75 weeks
MassDOT	\$12,600	3.69 weeks
TOTAL	\$63,000	18.44 weeks

UPWP TASK NO. 2.4 – PAVEMENT MANAGEMENT SYSTEMS

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 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 trends over the years.

In addition, this task will allow for our participation in the RPA/State Pavement Management User Group, a group of RPA pavement management users from across Massachusetts which meets as needed to share best practices, as well as other potential work based upon arrangements and directives from MassDOT and FHWA.

Staff will also continue their outreach to area DPW Superintendents, Planning Directors, etc. 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. 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. If a community wishes to consult with staff on the benefits of a pavement management program, how one functions, or have staff demonstrate the benefits of a program to a specific group or board in the community, this task will allow time to do so.

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

Previous Work:

- Database development under RoadManager Software
- RoadManager software program purchase and training
- Data migration to Road Manager system
- Montachusett Regional Transportation Plan, 2016, 2020
- 2011 – 2021 reports “Regional Pavement Profile”
- Database of Federal Aid Eligible Roads
- 4 Year Inventory Schedule
- Montachusett Pavement Inventory Program – 2008 - 2021
- 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.
- 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:

- 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 2023 and April to September 2024. Analysis and review of data to be conducted from December 2023 to September 2024. Annual mailing occurs on an as needed basis, typically in the spring. Year-end report will be available in September 2024.

	Oct 2023	Nov 2023	Dec 2023	Jan 2024	Feb 2024	Mar 2024	Apr 2024	May 2024	Jun 2024	July 2024	Aug 2024	Sep 2024
Pavement Data Collection												
Pavement Analysis												

Task 2.4

	Budget	Estimated Staff Effort
FHWA PL/FTA-5303	\$28,000	8.02 weeks
MassDOT	\$ 7,000	2.05 weeks
TOTAL	\$35,000	10.24 weeks

UPWP TASK NO. 2.5 – PERFORMANCE MEASURES

Objective:

The creation of Performance Measures (PMs) was a focus of the 2016 Montachusett Regional Transportation Plan (RTP) and will again be included in the upcoming 2024 RTP. 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 2024 RTP will continue to 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. The PM dashboard will be made available on the MRPC website during this program year.

This task will also include the coordination of existing regional PMs with state and federal PMs. With the development of the 2024 RTP, staff will take the opportunity to fine tune existing PMs and amend them where needed. Also, consultation and review of MassDOT PMs, along with PMs established by neighboring RPA and RTAs will occur.

Effective on April 14, 2016, FHWA established a final rule on the first of its Performance Measures. Safety Measures (PM 1), 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. MPO staff will work with MassDOT to monitor and present these Performance Measures to the MPO as needed. MPO staff will work with MassDOT to monitor, amend, and present these Performance Measures to the MPO as needed.

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. Additionally, MART developed and presented their Public Transit Agency Safety Plan (PTASP) to the MPO in late 2020 and early 2021 where the safety targets developed were adopted. As MART continues to monitor and update items as needed, the MRPC will work to ensure appropriate action is taken.

Previous Work:

- Roadway Safety Improvement Project Selection Report – 2018
- Adopted MassDOT PMs for Federal Highway Reporting – 2018
- Montachusett Regional Transportation Plan – 2016 & 2020
- 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 2023 – September 2024)
- Maintenance of PM Dashboard (February – September 2024); 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 2023	Nov 2023	Dec 2023	Jan 2024	Feb 2024	Mar 2024	Apr 2024	May 2024	Jun 2024	July 2024	Aug 2024	Sep 2024
List of New Data Needs												
Data Collection												
Refinements												
Present and Adopt PM1												
Update Dashboard												
PM Coordination												

Task 2.5

	Budget	Estimated Staff Effort
FHWA PL/FTA-5303	\$18,400	5.39 weeks
MassDOT	\$ 4,600	1.35 weeks
TOTAL	\$23,000	6.73 weeks

3.0

TRANSPORTATION PLANNING STUDIES

UPWP TASK NO. 3.1 – HOUSING COORDINATION PLANNING

Objective:

This task will expand upon information compiled in year 1 of this program to incorporate the new MBTA Communities Multifamily Zoning Action Plans. The housing coordination plan will develop regional goals for the integration of housing, transportation, and economic development strategies; identify the location of existing and planned housing and employment developments; and identify transportation options that connect housing and employment centers. Staff will also incorporate MBTA Communities Multifamily Zoning Action Plans to add more information that goes hand in hand with the variety of other documents that has been included such as local master plans, housing production plans, complete streets prioritization plans, etc. Strategies for implementing concepts of transit-oriented development within proposed or approved MBTA Communities Section 3A Multifamily Zoning Districts will be evaluated and incorporated into the housing coordination plan. Additional emphasis will focus on identified disadvantaged and underserved populations.

Previous Work:

- 2023 MBTA Communities Transit Oriented Multifamily Zoning Action Plans – MGL Chapter 40A, Section 3A (Ayer, Ashby, Ashburnham, Fitchburg, Groton, Harvard, Lancaster, Leominster, Lunenburg, Shirley, Townsend, Westminster)
- Housing Coordination Plan (2023) that excludes information for MBTA Communities Transit Oriented Multifamily Action Plans.
- Mobility & Access Plan
- Regional Bike & Pedestrian Plans
- Walkability Reports – Groton, Sterling, Townsend, Westminster
- Travel by Tourism
- Regional Trail Inventory
- Sidewalk Inventory & Pedestrian/Bicycle Connections (Fitchburg/Leominster/Gardner)
- Trail Connections
- Safe Routes to School Reports
- Complete Streets Prioritization Plans – Shirley and Sterling
- Master Plans
- Housing Production Plans
- Regional Comprehensive Economic Development Strategy
- 2018 Coordinated Public Transit – Human Services Transportation Plan (CPT-HST)

Methodology:

1. Identify goals and strategies that better connect housing and employment, expand housing and economic development near existing transportation facilities, and increase the percentage of the population with sufficient and affordable access to transportation in the region.
2. Identify MBTA Communities transit-oriented multifamily zoning districts, employment centers, and goods/services.
3. Identify gaps in the transportation network to employment centers, housing clusters, and goods/services
4. Prioritize gaps for closure & potential projects
5. Conveyal and Accessibility Observatory data will be used where appropriate

Products:

The final product will be a housing coordination plan integrating transportation, transit-oriented development zoning, housing, and economic development goals and strategies regionwide and will identify prioritized areas for gap closures within the transportation network.

Schedule:

To be carried out throughout the program year as follows:

	Oct 2023	Nov 2023	Dec 2023	Jan 2024	Feb 2024	Mar 2024	Apr 2024	May 2024	Jun 2024	July 2024	Aug 2024	Sep 2024
Inventory Options												
Community Involvement												
Prioritize Options												
Impact Analysis & Final Report												

Task 3.1

	Budget	Estimated Staff Effort
FHWA PL/FTA-5303	\$51,800	15.16 weeks
MassDOT	\$ 12,950	3.79 weeks
TOTAL	\$64,750	18.95 weeks

UPWP TASK NO. 3.2 – CLIMATE CHANGE PROGRAM

Objective:

An annual part of our Climate Change Program is updating the vulnerable infrastructures identified in the 2024 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. Information will also be sought from local resiliency plans from member communities.

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.

Staff will also seek to examine issues related to electric vehicles, their use and the location and availability of charging stations and other supporting infrastructure within the region. Updates to an ongoing effort to track this infrastructure and identify needs will continue in the annual Climate Change Data Update report.

Previous Work:

- 2024 Montachusett Regional Transportation Plan – July 2023
- Climate Change Data Update 2016-2022

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

Products:

- GHG emissions analysis for TIP projects (May 2024)
- Updated vulnerable infrastructures database (August 2024)

Schedule:

To be carried out throughout the program year as follows:

	Oct 2023	Nov 2023	Dec 2023	Jan 2024	Feb 2024	Mar 2024	Apr 2024	May 2024	Jun 2024	July 2024	Aug 2024	Sep 2024
Data Research												
Data Collection												
Database Updates												
Flood Zone Mapping												
Vulnerability Analysis												
GHG Analysis												

Task 3.2

	Budget		Estimated Staff Effort
FHWA PL/FTA-5303	\$41,937.60		12.27 weeks
MassDOT	\$10,484.40		3.07 weeks
TOTAL	\$52,422.00		15.34 weeks

UPWP TASK NO. 3.3 – NORTH COUNTY LAND TRUST TRAIL PLANNING & MAPPING

Objective:

This task will be in two parts. 1. Trail Planning- Staff will work with the North County Land Trust (NCLT) to conduct a trail inventory for all the NCLT properties as well as ground-truthing trail distances and difficulties for the existing trails. Potential trail connections, within NCLT properties and beyond, will be studied with the hopes of establishing links to expand the trail networks in the NCLT area. In addition, Staff will inventory historical, natural and other points of interest on all NCLT properties with trails. 2. Mapping – Staff will create updated trail maps for all properties, as well as a regional map suitable for professional printing. An interactive web map for the NCLT region will be created which will include all properties and trails with points of interest identified and established in the trail planning process. This web map will be made available for the NCLT website.

Previous Work:

- Montachusett Regional Trails Coalition work (2012-present)
- Walkability Studies – Groton, Lunenburg, Sterling, Townsend, Westminster
- Regional Trail Inventory Update (2012 & 2018)
- Sidewalk Inventory & Pedestrian/Bicycle Connections (Fitchburg/Leominster/Gardner)

Methodology:

1. Review existing NCLT properties and associated datasets.
2. Update trail data and points of interest where appropriate.
3. Work with NCLT to establish potential trail links and connections.
4. Create trail maps and regional maps suitable for printing.
5. Create web map for NCLT website.
6. Assist with trail map printing if budget allows.

Products:

- Printable trail maps for each NCLT property based on updated trail data.
- Printable regional trail maps for NCLT region.
- Web based, interactive, trail map for NCLT website.

Schedule:

To be carried out throughout the program year as follows:

	Oct 2023	Nov 2023	Dec 2023	Jan 2024	Feb 2024	Mar 2024	Apr 2024	May 2024	Jun 2024	July 2024	Aug 2024	Sep 2024
Identify and update trail data												
Add points of interest												
Establish trail links/connections												
Create individual trail maps & regional maps												
Create interactive web map												

Task 3.3

	Budget	Estimated Staff Effort
FHWA PL/FTA-5303	\$40,360	11.81 weeks
MassDOT	\$10,090	2.95 weeks
TOTAL	\$50,450	14.71 weeks

UPWP TASK NO. 3.4 – MULTI-MODAL CONNECTIONS

Objective:

The objective of this task is to assist the community of Groton with updating the existing Walkability Study (2012) that was for the downtown area and expanding the focus to include the extensive trail networks and points of interest that the town has to offer. With a significant increase in bicycle and pedestrian activity in town, Complete Streets concepts and finding multi-modal connections to the town trails, schools, parks, cultural and historical venues, and commercial establishments has become a focus of the community. This study will work to address these concerns and connections by identifying areas of multi-modal focus that will help establish prioritized projects and potential future funding opportunities. This task was selected through our Project Solicitation outreach memo

Previous Work:

- Walkability Studies – Groton, Lunenburg, Sterling, Townsend, Westminster
- Sidewalk & Bicycle Inventory Update (2021/2022)
- Regional Trail Inventory Update (2012 & 2018)
- Sidewalk Inventory & Pedestrian/Bicycle Connections (Fitchburg/Leominster/Gardner)

Methodology:

1. Meet with the community to establish focus areas for multi modal connections.
2. Review existing conditions – Land Development, Sidewalks/walkways, Bicycling, Trails, Intersections/Crossings, Parking, Signage, Environmental Justice Neighborhoods, and target populations.
3. Inventory points of interest.
4. Conduct walkability assessments in cooperation and with the input of the public.
5. Identify walkability concerns and solutions.
6. Map current conditions, EJ areas, and recommendations.
7. Encourage projects that take walkability & complete streets into account.

Products:

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

Schedule:

To be carried out throughout the program year:

	Oct 2023	Nov 2023	Dec 2023	Jan 2024	Feb 2024	Mar 2024	Apr 2024	May 2024	Jun 2024	July 2024	Aug 2024	Sep 2024
Municipal Outreach												
Data Collection Efforts												
Data Analysis												
Recommendations and draft report												
Final Study												

Task 3.4

	Budget	Estimated Staff Effort
FHWA PL/FTA-5303	\$43,000	12.59 weeks
MassDOT	\$10,750	3.15 weeks
TOTAL	\$53,750	15.73 weeks

UPWP TASK NO. 3.5 – FREIGHT STUDY

Objective:

The objective of this task is to expand the study area to include Lancaster while continuing with the effort to assist the original study area communities of Ayer, Lunenburg, and Shirley with identifying major truck routes that provide heavy truck access to destinations within these communities and to address their concerns with the heavy truck traffic. There are currently several large commercial operations, as well as a number of future planned developments, that generate/will generate heavy truck traffic and safety concerns for these communities. The freight study will also provide potential solutions/improvement alternatives to mitigate current and future heavy truck conditions and needs.

Previous Work:

- 2023 Freight Study:
 - 2023 Freight Study Methodology Task items completed in 2023:
 1. Stakeholders and heavy truck operators were identified and engaged for the original three study area communities and Lancaster
 2. A Freight Study Guiding Committee was established out of Item #1
 3. The transportation network impacted by existing and future heavy truck traffic was identified for all four study area communities
 4. Traffic count data and crash data collection began for all four study area communities
 5. 2023 Interim report was completed for all four communities
- Freight Corridor Report – 2019
- Freight Corridor Report Update – 2020

Methodology:

The Freight Study will contain a review of several management systems including the following: MRPC Traffic Counting (includes heavy truck traffic counts); MRPC Congestion Management; MRPC Safety Database and Analysis; MRPC Pavement Management System; MassDOT Bridge Management System; and will include applicable freight concepts from the 2017 Ma Freight Plan or the 2023 Ma Freight Plan after the plan becomes available.

Remaining 2023 Freight Study Task to be completed:

- Continued community and Freight Study Guiding Committee engagement
- Complete all data collection efforts
- Analyze the heavy truck transportation network using:
 - level of service analysis; average daily traffic and heavy truck traffic analysis; signal warrant analysis; safety analysis; and existing geometric conditions analysis
- Review and analysis of adjacent land uses, right of way, environmental constraints
- Identification of heavy truck traffic constraints within the study area
- Develop and identify potential short, medium, and long-term improvements based upon feedback from the Freight Study Guiding Committee
- Develop and prepare draft reports and the final Freight Study

Performance Measure:

This task will support efforts to meet the MassDOT statewide Truck Travel Time Reliability (TTTR) performance measure targets set for 2024 and 2026. This task will coordinate these efforts with MassDOT Districts 2 and 3, MART, and other RPAs. The Montachusett MPO chose to adopt the 2-year (2024) and 4-year (2026) statewide reliability performance measure target set by MassDOT which was required by FHWA to adopt by December 16, 2022. MPOs were then either required to adopt the statewide target or establish their own by June 2023.

For the TTTR performance measure, MassDOT followed FHWA regulation in measuring TTTR on the Interstate system using the National Performance Management Research Dataset (NPMRDS) provided by FHWA. These performance measures aim to identify the predictability of travel times on the roadway network by comparing the average travel time along a given

segment against longer travel times. For TTTR, the ratio between the 50th percentile travel time and the 90th percentile travel time for trucks only along the Interstate system is reported as a statewide measure. For more, please go to the Performance Measures chapter of the 2024 Montachusett Regional Transportation Plan.

Products:

The final product will be a study showing the major trucking routes within the communities of Ayer, Lancaster, Lunenburg, and Shirley that identifies the heavy truck congestion, safety, and other concerns as well as improvement alternatives. The preferred alternative may result in the programming of future TIP projects.

Schedule:

To be carried out throughout the program year:

	Oct 2023	Nov 2023	Dec 2023	Jan 2024	Feb 2024	Mar 2024	Apr 2024	May 2024	Jun 2024	July 2024	Aug 2024	Sep 2024
Engagement												
Data Collection Efforts												
Data Analysis												
Recommendations and draft report												
Final Study												

Task 3.5

	Budget	Estimated Staff Effort
FHWA PL/FTA-5303	\$34,200	10.01 weeks
MassDOT	\$8,550	2.5 weeks
TOTAL	\$42,750	12.51 weeks

4.0

TRANSIT PLANNING ACTIVITIES

UPWP TASK NO. 4.1 – TRANSPORTATION EQUITY AND PUBLIC INVOLVEMENT

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 and to represent the needs of the Montachusett Regional Transit Authority (MART). Staff will continue to work as needed with Regional and Local Emergency Planning Committees on evacuation and security plans related to emergency situations. Staff will also continue to participate in the Northern Tier Passenger Rail Working Group to improve and examine rail service extension on the Fitchburg Line in the Montachusett Region; the North Central Regional Coordinating Council (NCRCC) to identify unmet transit needs, formulate regional priorities, and build coalitions around new transportation projects and coordinate existing services at the local level to serve more people and increase the sustainability of services; the Community Health Network Area 9 (CHNA 9) to address transit needs and issues related to health and the Human Service Transportation (HST) Coordination Advisory Group 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 updates to the MPO endorsed Limited English Proficiency (LEP) Plan (MPO endorsed in February 2023) 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 regarding 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:

- Northern Tier Passenger Rail Working Group - ongoing
- Montachusett Regional Transportation Plan (RTP) Update – 2019, 2023
- Montachusett MPO Endorsed Limited English Proficiency (LEP) Plan Update – 2023
- Annual Title VI Report – 2011-2012; 2015, 2017, 2019, 2023
- North Central Regional Coordinating Council (NCRCC) – ongoing
- Montachusett Region Comprehensive Economic Development Strategy (MRCEDS) - ongoing

Methodology:

- Coordinate planning activities through participation in the MJTC.
- Prepare required information/data which can assist efforts to identify clients and available public transit services.
- In addition, issues related to Environmental Justice and Title VI will continue to be reviewed and addressed through the various aspects of this task. Where appropriate action will be taken through 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.
- Maps and graphics of relevant socioeconomic data as needed.

Schedule:

Ongoing throughout the program year.

	Oct 2023	Nov 2023	Dec 2023	Jan 2024	Feb 2024	Mar 2024	Apr 2024	May 2024	Jun 2024	July 2024	Aug 2024	Sep 2024
Public Participation												

Task 4.1

	Budget
FHWA PL/FTA-5303	\$8,800
MassDOT	\$2,200
TOTAL	\$11,000

Estimated Staff Effort
2.58 weeks
0.64 weeks
3.22 weeks

UPWP TASK NO. 4.2 – TRANSPORTATION MANAGEMENT ASSOCIATION (TMA) DEVELOPMENT STUDY

Objective:

The objective of this task is to examine the possibility of establishing a Transportation Management Association (TMA), or TMAs, in the Montachusett Region. Based upon recent public workshops and meetings held as part of the development of the 2024 Montachusett Regional Transportation Plan (RTP), the need to examine the desirability, feasibility and viability of a Transportation Management Association (TMA) in the Montachusett Region is needed. Multiple comments focused on the inherent problems with mobility in the region, especially within the smaller more rural communities. The need extends from simple social interaction and shopping to job access, medical appointments, and health management issues. This need is particularly extreme in some of the more vulnerable populations, such as the elderly, the disabled, low income and transit dependent populations. A TMA can provide an area with various transportation services to assist with access to jobs as well as medical, commercial, and social services. The limited transportation options for residents are also one of the major challenges that the region’s businesses face in attracting new employees.

This task will review the various aspects of a TMA, the amount of local interest there is in a TMA, the level of community support, the target populations to be served, potential business partners and the alignment and makeup of a TMA region(s). In addition, possible funding sources for establishing a TMA, or multiple TMA’s, will be a key factor in this analysis.

Previous Work:

- 2024 Montachusett Regional Transportation Plan (RTP) – 2023 (under development)
- 2020 Montachusett Regional Transportation Plan (RTP) – 2019
- Coordinated Public Transit - Human Services Transportation Plan & Updates - 2018

Methodology:

- Identify interested agencies, employers and populations.
- Review requirements for a TMA designation and its establishment.
- Establish possible TMA service areas or regions.
- Investigate funding options for the establishment of a TMA and for long term sustainability.

Products:

- TMA Service Areas
- Key Support and Implementation Requirements
- Funding Sources

Schedule:

Ongoing throughout the program year.

	Oct 2023	Nov 2023	Dec 2023	Jan 2024	Feb 2024	Mar 2024	Apr 2024	May 2024	Jun 2024	July 2024	Aug 2024	Sep 2024
Identification of Key Entities												
Data Analysis & Service Area Development												
Public Outreach												
Identification of Funding Options												
Final Report & Recommendations												

Task 4.2

	Budget	Estimated Staff Effort
FHWA PL/FTA-5303	\$40,200	11.77 weeks
MassDOT	\$10,050	2.94 week
TOTAL	\$50,250	14.71 weeks

UPWP TASK NO. 4.3 – TECHNICAL ASSISTANCE TO MART

Objective:

To provide technical planning services and assistance to the Montachusett Regional Transit Authority (MART) which includes the coordination with special transit planning projects, GIS assistance and mapping on identified transit projects such as transit and impact analyses, technical assistance at RTA board meetings, updates and revisions to various MART route maps and stop locations, assistance with route planning/timing and support for MART’s Job Access Reverse Commute Program (JARC).

Previous Work:

- 2024 Montachusett Regional Transportation Plan (RTP) – 2023 (under development)
- GIS mapping of Fixed-Route Transit Services and Updates – 2021, 2022, 2023
- GIS mapping for MART Title VI report – 2021
- Expansion of parking areas at Shirley Station – 2020, 2021
- Service area map updates – 2021, 2022, 2023
- Bus Stop Locations for Shared Streets 4 All Grant Application and Implementation – 2022, 2023
- Mobile Application set-up and training for Bus Stop and PROW ADA data collection – 2022
- Coordinated Public Transit & Human Services Plan maps – 2022, 2023

Methodology:

The FY24 MART technical assistance activities will consist of the following sub-tasks:

- Provide planning services as needed and requested.
- 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 with federal reporting requirements related to fixed-route services.
- Assess and evaluate bus and van routes, schedules, and fare structures.
- Provide GIS mapping and planning assistance.
- Conduct and review air quality-related analysis and data for transit projects as needed for the TIP and RTP.

Product:

- Reports to public groups and MART as developed.
- Transit Route maps and timings based upon MART data requests.
- Various Transit related mapping products.

Schedule:

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

	Oct 2023	Nov 2023	Dec 2023	Jan 2024	Feb 2024	Mar 2024	Apr 2024	May 2024	Jun 2024	July 2024	Aug 2024	Sep 2024
LTA												

Task 4.3

	Budget	Estimated Staff Effort
FHWA PL/FTA-5303	\$13,880	4.06 weeks
MassDOT	\$3,470	1.02 week
TOTAL	\$17,350	5.08 weeks

UPWP TASK NO. 4.4 – TRANSIT DEVELOPMENT PLAN (TDP) FOR FIXED BUS ROUTE SERVICES

Objective:

The objective of this task is to develop an updated Transit Development Program (TDP) of the Fixed Route Services in Fitchburg, Leominster and Gardner that will examine and analyze the current system and identify how to improve service routes and route times. The overall goal will be to create shorter route loops, increase frequency and shorter ride times. The current major route layouts have been in place for decades. Expansion and new services have resulted in several route deviations that have increased ride times while reducing stop frequency. In addition, new commercial, medical, educational and employment areas have developed in the region that may be in need of transit service in order to provide the best options for users.

The plan will review community needs and requirements, identify critical infrastructure, important and key attractors and major population centers. In particular, environmental justice populations will be identified and mapped. Various route options will be developed and analyzed that may result in a major revision to the current MART Fixed Route system. Ridership projections, route times and frequency will be developed for review and consideration by MART with the goal of future public review and release.

Previous Work:

- 2024 Montachusett Regional Transportation Plan (RTP) – 2023 (under development)
- GIS mapping of Fixed-Route Transit Services and Updates – 2021, 2022, 2023
- GIS mapping for MART Title VI report – 2021

Methodology:

- Compile applicable 2020 Census data for the service area
- Review current transit services and operations
- Identify short comings related to access, populations, facilities, and services
- Develop new route options that focus on frequency and ridership time
- Map of various route options
- Recommend service changes to address identified needs

Products:

- Transit Development Program with Route and Service Recommendations
- Maps of service options

Schedule:

Ongoing throughout the program year.

	Oct 2023	Nov 2023	Dec 2023	Jan 2024	Feb 2024	Mar 2024	Apr 2024	May 2024	Jun 2024	July 2024	Aug 2024	Sep 2024
Data Collection Efforts												
Data Analysis												
MART Coordination												
Route Options/Analysis												
Draft & Final report												

Task 4.4

	Budget
FHWA PL/FTA-5303	\$86,640
MassDOT	\$21,660
TOTAL	\$108,300

Estimated Staff Effort
25.36 weeks
6.34 week
31.70 weeks

Montachusett Regional Planning Commission			
FFY 2024 Program Year Staffing Report			
Staff	Title	Expected Time on PL/FTA Contract	Estimated Time on Transit Tasks
Bradford Harris	Transportation Project Director	85%	15%
George Snow	Principal Transportation Planner	85%	15%
Sheri Bean	Principal Planner	100%	2%
Brian Doherty	Principal Planner	100%	2%
Jason Stanton	GIS Project Director	65%	15%
Kayla Kress	GIS Analyst	65%	15%
Jeffery Legros	Principal Planner	10%	-
Jonathan Vos	Regional Planner	10%	-
Tyler Godin	Regional Planner	10%	-
Ryan Doherty	Regional Planner	10%	-

Please note that staff will be devoting some of their time to Transit-related planning efforts as outlined within this UPWP.

MONTACHUSETT REGIONAL PLANNING COMMISSION

October 1, 2023 to September 30, 2024

Task No.	Task Description	UPWP Annual Budget		
		FHWA/FTA	MassDOT	Total Budget
1.0	Management and Support			
1.1	Support of 3C Process	\$74,035.20	\$18,508.80	\$92,544.00
1.2	Unified Planning Work Program	\$20,400.00	\$5,100.00	\$25,500.00
1.3	Public Information & Participation Program	\$24,000.00	\$6,000.00	\$30,000.00
1.4	Development of TIP	\$48,400.00	\$12,100.00	\$60,500.00
1.5	Environmental Justice/Title VI	\$45,400.00	\$11,350.00	\$56,750.00
	<i>Subtotal:</i>	<i>\$212,235.20</i>	<i>\$53,058.80</i>	<i>\$265,294.00</i>
2.0	Highway Surveillance			
2.1	Regional Demographics & Model	\$19,000.00	\$4,750.00	\$23,750.00
2.2	GIS Mapping and Analysis	\$66,400.00	\$16,600.00	\$83,000.00
2.3	Data Collection & Analysis Program	\$50,400.00	\$12,600.00	\$63,000.00
2.4	Pavement Management Systems	\$28,000.00	\$7,000.00	\$35,000.00
2.5	Performance Measures	\$18,400.00	\$4,600.00	\$23,000.00
	<i>Subtotal:</i>	<i>\$182,200.00</i>	<i>\$45,550.00</i>	<i>\$227,750.00</i>
3.0	Transportation Plan			
3.1	Housing Coordination Plan	\$51,800.00	\$12,950.00	\$64,750.00
3.2	Climate Change & Resiliency Program	\$41,937.60	\$10,484.40	\$52,422.00
3.3	North County Land Trust Planning & Mapping	\$40,360.00	\$10,090.00	\$50,450.00
3.4	Multi Modal Connections	\$43,000.00	\$10,750.00	\$53,750.00
3.5	Freight Study	\$34,200.00	\$8,550.00	\$42,750.00
	<i>Subtotal:</i>	<i>\$211,297.60</i>	<i>\$52,824.40</i>	<i>\$264,122.00</i>
4.0	Multimodal Planning Activities			
4.1	Transportation Equity & Public Involvement	\$8,800.00	\$2,200.00	\$11,000.00
4.2	TMA Development Study	\$40,200.00	\$10,050.00	\$50,250.00
4.3	Technical Assistance to MART	\$13,880.00	\$3,470.00	\$17,350.00
4.4	TDP for Fixed Bus Routes	\$86,640.00	\$21,660.00	\$108,300.00
	<i>Subtotal:</i>	<i>\$149,520.00</i>	<i>\$37,380.00</i>	<i>\$186,900.00</i>
	TOTAL	\$755,252.80	\$188,813.20	\$944,066.00

SUMMARY OF FUNDING BY SOURCE AND ELEMENT
PROGRAM YEAR FFY 2024

ELEMENT	FHWA/FTA	MassDOT	TOTAL
1	\$212,235.20	\$53,058.80	\$265,294
2	\$182,200.00	\$45,550.00	\$227,750
3	\$211,297.60	\$52,824.40	\$264,122
4	\$149,520.00	\$37,380.00	\$186,900
TOTAL	\$755,252.80	\$188,813.20	\$944,066

**MRPC FEDERAL FISCAL YEAR "PL" & "FTA" COMBINED
ALLOCATIONS**

FFY	ANNUAL ALLOCATION		CUMULATIVE
1974- 2005	\$1,940,583		\$12,257,597
2006	\$496,737		\$6,878,599
2007	\$508,486		\$7,387,085
2008	\$546,217		\$7,933,302
2009	\$567,231		\$8,500,533
2010	\$582,543		\$9,083,076
2011	\$563,751		\$9,646,827
2012	\$563,751		\$10,210,578
2013	\$555,297		\$10,765,875
2014	\$570,098		\$11,335,973
2015	\$544,557		\$11,880,530
2016	\$585,751		\$12,466,281
2017	\$621,347		\$13,087,628
2018	\$647,248		\$13,734,876
2019	\$661,145		\$14,396,021
2020	\$676,534		\$15,072,555
2021	\$770,478	**	\$15,744,012
2022	\$747,979	**	\$16,491,991
2023	\$927,038	**	\$17,419,029
2024	\$944,066	**	\$18,363,095

** Beginning with FFY 2021, the Annual Allocation includes both the PL and FTA 5303 Allocations for Montachusett.

2024
Unified Planning Work Program Funding
UPDATED MARCH 2, 2023

	FFY 23 (PL)	FFY 22 (PL)	Δ
40% of total funds / ten MPOs	\$ 12,095,567	\$ 11,868,339	
apportionment obligation authority	90.0%	90.0%	
federal PL funds only	\$ 10,886,010	\$ 10,672,559	2.0%
matching funds added	\$ 13,607,513	\$ 13,340,689	
Total funds (PL funds+ 5303)	\$ 18,287,935	\$ 17,929,945	2.0%

PL funds are provided to the MPOs from the previous year's federal aid ("forward funded").
5303 funding will be transferred from FTA to FHWA and be administered as a Combined Planning Grant.
Updated population numbers are based on SEY 2023 Chapter 90 apportionments

The recommended PL Allocation Formula was developed by the Massachusetts Association of Regional Planning Agencies and recommended by MassDOT to FHWA. It 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.

MPOs PL funded	40% of total funds / ten MPOs		30% of funding for relative size of population		30% of funding for relative size of urbanized population		\$5303 Full Amount w/ Match (FFY 23)	\$5303 Full Amount w/Match FFY 24	Total FFY 23 funding by MPO	Total FFY 24 funding by MPO	ΔFFY23-24 (2020 Population)
	2010 Population (%)	2020 Population (%)	2010 Population (\$)	2020 Population (\$)	2010 Population (%)	2020 Population (%)					
Berkshire**	2.03%	1.86%	\$4,082,254	\$4,082,254	1.49%	1.49%	\$ 77,191	\$ 77,191	\$ 762,120	\$ 758,322	\$ 6,203
Boston	47.88%	48.49%	\$ 1,954,539	\$ 1,979,485	50.84%	50.84%	\$ 2,470,364	\$ 2,517,632	\$ 6,955,046	\$ 7,116,954	\$ 161,907
CTPS*			\$ 1,583,177	\$ 1,603,393			\$ 2,037,574	\$ 2,076,561	\$ 5,670,167	\$ 5,802,072	\$ 131,844
MAPC			\$ 371,362	\$ 376,102			\$ 432,790	\$ 441,071	\$ 1,284,879	\$ 1,314,942	\$ 30,063
Cape Cod	3.35%	3.31%	\$ 136,647	\$ 135,123	3.34%	3.34%	\$ 137,616	\$ 140,422	\$ 988,904	\$ 956,212	\$ 17,308
Central Mass	8.53%	8.73%	\$ 352,363	\$ 356,381	7.77%	7.77%	\$ 317,364	\$ 323,722	\$ 1,573,945	\$ 1,551,609	\$ 37,063
Merrimack Valley	5.17%	5.34%	\$ 211,246	\$ 217,932	5.32%	5.32%	\$ 216,980	\$ 219,344	\$ 1,166,802	\$ 1,199,882	\$ 33,080
Montachusett	3.67%	3.62%	\$ 149,677	\$ 147,778	2.88%	2.88%	\$ 117,444	\$ 131,526	\$ 1,031,344	\$ 944,066	\$ 17,029
Northern Middlesex	4.45%	4.48%	\$ 181,594	\$ 182,895	4.66%	4.66%	\$ 190,309	\$ 193,105	\$ 1,091,437	\$ 1,115,377	\$ 24,034
Old Colony	5.62%	5.68%	\$ 229,386	\$ 231,872	5.75%	5.75%	\$ 234,640	\$ 207,883	\$ 1,196,437	\$ 1,225,035	\$ 28,598
Pioneer Valley	9.64%	9.07%	\$ 393,424	\$ 370,260	9.02%	9.02%	\$ 368,558	\$ 408,131	\$ 1,688,604	\$ 1,693,381	\$ 4,778
Southeastern Mass	9.56%	9.42%	\$ 390,322	\$ 384,548	8.93%	8.93%	\$ 384,354	\$ 428,197	\$ 1,699,705	\$ 1,727,096	\$ 27,391
	100.00%	100.00%	\$ 4,082,254	\$ 4,082,254	100.00%	100.00%	\$ 4,082,254	\$ 4,589,246	\$ 17,929,945	\$ 18,287,935	

RPA's SPR funded	SPR the year before (federal only)		FFY 23 total funding by RPA		FFY 24 total funding by RPA	
	Δ					
Franklin**	2.0%	\$ 521,684	\$ 652,105	\$ 664,891	\$ 12,786	
Martha's Vineyard**	2.0%	\$ 299,173	\$ 373,966	\$ 381,299	\$ 7,333	
Nantucket**	2.0%	\$ 254,485	\$ 318,106	\$ 324,343	\$ 6,237	

The SPR funding provided to the RPAs is not officially recognized as MPOs is adjusted year-to-year based on the change in funding experienced by the MPOs for their PL funds.
*CTPS 5303 includes MassDOT 5303

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

- MRPC received Year 1 of 3 Partnership Planning Grant in the amount of \$70,000 from the Federal Economic Development Administration (EDA) for the year April 1, 2022, through March 31, 2023, enabling the MRPC to implement regional economic development strategies, provide economic development technical assistance to municipalities and implement the Montachusett Region Comprehensive Economic Development Strategy (CEDS).
- MRPC received Year 2 of 3 Partnership Planning Grant in the amount of \$70,000 from the Federal EDA for the year April 1, 2023, through March 31, 2024, enabling the MRPC to implement regional economic development strategies, provide economic development technical assistance to municipalities and update the five-year Montachusett Region Comprehensive Economic Development Strategy (MRCEDS) 2019-2024.
- On December 30, 2022, MRPC staff applied for a Federal EDA grant in the amount of \$268,162 to undertake a study called “Future Industrial Lands for Long Term Recovery and Resilience” (FILLTERR). If awarded, this grant will allow MRPC to research and document existing business and industrial parks and determine future parcels for inclusion in new business or industrial parks. Existing and needed infrastructure will be a part of the study.
- MRPC staff received four FY22 Planning Assistance Grants from the MA Executive Office of Energy and Environmental Affairs (EAA) to fund four Master Plan Chapters for the Town of Ashburnham, an updated solar bylaw for the Town of Hubbardston, an update to the Town of Townsend’s Open Space and Recreation Plan, and climate resiliency planning for the Town of Phillipston. All four grants totaled \$148,000, were awarded in December 2021, and work will be completed by October 2023.
- MRPC staff received two FY23 Planning Assistance Grants from the state EOEEA in the amount of \$55,000 to fund technical assistance to the Town of Shirley to implement objectives from their Master Plan; and technical assistance to the Town of Lunenburg to help the town comply with the new MBTA Communities Multifamily Transit Oriented Development requirements under the Zoning Act. Grants were awarded July 2022 and work will be completed by 6/30/24.
- On December 1, 2022, MRPC applied for the federal Environmental Protection Agency (EPA) Community-wide Brownfields Assessment grant for hazardous substances contaminated sites in the amount of \$500,000 to complete Phase I and II environmental assessments in the region. MRPC will learn the success of the application by summer 2023.
- Ayer Hazard Mitigation Plan – MRPC has contracted with the Town of Ayer to update their expired Hazard Mitigation Plan in the amount of \$25,000. The Plan will be completed and submitted to MEMA and FEMA by the end of June 2024.
- MRPC continues to assist the Towns of Ashby, Athol, Clinton, Fitchburg, Groton, Harvard, Hubbardston, Lancaster, Lunenburg, Royalston, Shirley, Townsend, and Westminster with their Green Communities Grant Awards. Tasks associated with managing the grant awards include quarterly and annual reporting, procurement, completing Competitive Grant applications, and data management, as well as project initiation and management. MRPC received \$80,700 to assist our communities with Green Communities tasks in October 2021 from the MA Department of Energy Resources (DOER). The contract ends 5/31/23.

MRPC will apply for an additional Green Communities Technical Assistance grant in May 2023 to continue assistance to our communities. That grant will be awarded for July 1, 2023, through May 2025. MRPC was

awarded a \$30,000 contract with Growing Places to develop a strategic plan for the Food Hub they are planning to build in the region to connect, farmers, producers, growers, consumers, retail shops, and others to create food security and collaboration around food production and sales in the region. In addition, MRPC will create a resources library for stakeholders including available grants and other resources for the collaborative.

- MRPC received MA District Local Technical Assistance funds in the amount of \$207,474 to help our communities with economic development, housing, land use, master planning, open space planning, zoning, and mapping. The contract is 1/21/23-12/31/23. Contracts are currently underway to assist our communities with the new state MBTA Communities law requiring zoning for multifamily transit-oriented development at increased density, updating zoning bylaws, developing Housing Production Plans, and studying the impact of a new music center on transportation, traffic, and the economy.
- MRPC received MA District Local Technical Assistance Augmentation funds in the amount of \$138,316 to assist our communities with prioritizing projects and applying for grants to implement the projects. Award is 1/21/23 through 6/30/24.
- MRPC received funds from the Mass Housing Partnership in the amount of \$75,000 to assist the communities of Ashburnham, Ashby, Groton, Harvard, and Lancaster in complying with the new MBTA Communities law requiring zoning for multifamily transit-oriented development at increased density. The contract is from February 2023 through September 2023.
- MRPC signed a contract with the City of Leominster for \$36,000 to assist the city in complying with the new MBTA Communities law requiring zoning for multifamily transit-oriented development at increased density. The contract is from December 2022 through June 2024.
- MRPC contracted with the Town of Ashburnham under a Community Compact grant in the amount of \$33,000 to review their zoning bylaw with an eye towards inconsistencies and reducing barriers to housing and economic development. Contracted March 2023 through December 2023.
- MRPC is contracted with the Mass Tech Collaborative and the Mass Broadband Institute to provide planning services to our communities in Digital Equity. MRPC is currently contracted for \$83,800 for Phillipston, Royalston, and Templeton to complete a regional digital equity plan and for Leominster to complete an individual digital equity plan for the City. Additional communities will be joining this contract as time goes on. This contract runs through June 2025.
- The MRPC was notified on January 31st by the U.S. Department of Transportation that our application under the FY 2022 Safe Streets for All (SS4A) Grant program was selected for award. The "*SS4A Action Plan Grant for the Montachusett Region in North Central Massachusetts*" was awarded \$750,000 in Federal funding. The total estimated project cost is \$979,500 and includes \$229,500 in matching funds from MART, MRPC Local Assessment, District Local Technical Assistance (DLTA) and MassDOT to develop an Action Plan.

SUMMARY OF OTHER MRPC FUNDING SOURCES

Agency	Program	Funding Total
Federal: Department of Commerce Economic Development Administration	Section 203 Area Partnership Planning Grant 4/1/22 - 3/31/23	\$ 70,000
Federal: Department of Commerce Economic Development Administration	Section 203 Area Partnership Planning Grant 4/1/23- 3/31/24	\$70,000
State: Executive Office of Energy & Environmental Affairs (EOEEA)	Planning Assistance Grant Ashburnham, Townsend, Hubbardston, Phillipston 12/8/22-6/30/23	\$148,000
State: Executive Office of Energy & Environmental Affairs (EOEEA)	Planning Assistant Grant Shirley, Lunenburg 7/1/22 - 6/30/24	\$ 55,000
State: Department of Energy Resources	Regional Energy Planning Assistance Grant 10/1/21- 5/31/23	\$ 80,700
State: Massachusetts Dept of Housing & Community Development (DHCD)	District Local Technical Assistance 1/21/23 - 12/31/23	\$207,474
State: Massachusetts Dept of Housing & Community Development (DHCD)	District Local Technical Assistance Augmentation 1/21/23 – 6/30/24	\$138,316
State: Mass Housing Partnership	Technical Assistance for MBTA Communities 2/1/23 – 9/30/23	\$75,000
State: Mass Tech Collaborative	Digital Equity Planning Services 2/10/23 – 12/31/25	\$83,800
Local: Town of Ayer	Hazard Mitigation Plan 4/30/23 – 5/30/24	\$ 25,000
Local: Town of Hubbardston	Hubbardston Green Community 10/01/20 – 8/30/23	\$ 5,000
Local: Town of Templeton	Templeton Green Community 2/10/21 - 10/31/23	\$ 7,000
Local: Leominster	MBTA Communities Technical Assistance 12/15/23 – 6/30/24	\$36,000
Local: Ashburnham	Community Compact Zoning Review 3/20/23 – 12/31/23	\$33,000
Local Communities: All	Local Technical Assistance 7/1/22 - 6/30/23	\$ 85,401
Local Communities: All	Local Technical Assistance 7/1/23 – 6/30/24	\$87,537
Local Communities: Some	GIS 7/1/21 - 6/30/22	\$ 8,000
Federal: Department of Transportation	Safe Streets for All (SS4A) Action Plan Grant Dates: TBD; 24 Month Schedule	\$750,000

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
SS4A	Safe Streets for All
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

FFY2024 UPWP Comments

Action	
Comment 1	<p>MassDOT OTP - Completeness</p> <ul style="list-style-type: none"> • Please address missing or broken links noted in the Draft Document. Additionally, please consider adding links to documents and reports referenced throughout the UPWP • Please consider making the Legend beneath the Montachusett region map on page 4 larger to improve legibility. Please include the CY 2023 targets in the PM1 figures on pages 23 and 24. Please edit the UPWP Funding Table on page 76 at is currently challenging to read. • Using the Accessibility Checker feature in Adobe Acrobat, a number of minor issues were identified that could help improve accessibility of this document. Please consider using this tool and making improvements where feasible. • According to the MPO list online, the Mayor of Leominster serves as the MART Chairman. Please verify this is correct and update accordingly. Additionally, please update the MPO members list online as it pre-dates the new State Administration.
Response 1	Noted and changes were made.
Comment 2	<p>MassDOT OTP - UPWP Tasks</p> <ul style="list-style-type: none"> • Please consider expanding on performance-based planning work opportunities in any relevant tasks. • Please consider expanding on utilization of previous work. Additionally, consider limiting previous work tasks to the last 5 years.
Response 2	Updates and changes were made to each task mentioned as requested.
Comment 3	<p>FHWA</p> <ul style="list-style-type: none"> • Task 3.1: Housing Coordination Planning <ul style="list-style-type: none"> ○ We understand that work continues on this task from FY23, but the methodology and schedule remains unchanged from FY23. We know work was/will be completed in FY23 (see page 8, summary of prior year task results). Please confirm and/or provide rationale for why the schedule of tasks remains the same. Do you expect to complete this by end of FY24, or is this recurring? • Task 3.3: North County Land Trust Trail Planning and Mapping <ul style="list-style-type: none"> ○ Sounds like there may be potential for complete street budget application here depending on types of trails/connections proposed • Task 3.5: Freight Study <ul style="list-style-type: none"> ○ Same comments as with Housing Coordination Planning – the schedule and methodology is the same/very close to FY23 UPWP. Summary of prior tasks (page 8) includes "develop and prepare draft reports and final freight study." How does this align with the proposed FY24 schedule, which has final study due by Sep 2024?
Response 3	Clarification regarding tasks 3.1 and 3.5 have been added