

Unified Planning Work Program

FY 2024

Northern Middlesex Council of Governments

DRAFT for Public Comment

Federal Fiscal Year 2024 UNIFIED TRANSPORTATION PLANNING WORK PROGRAM

(OCTOBER 1, 2023 – SEPTEMBER 30, 2024)

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MPO ENDORSEMENT

Federal Fiscal Year 2024 UNIFIED PLANNING WORK PROGRAM

The Unified Planning Work Program (UPWP) for the Northern Middlesex 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 Northern Middlesex 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 Committee of Signatories representing the Northern Middlesex Metropolitan Planning Organization (NMMPO) by a majority vote hereby endorses the Federal Fiscal Year 2024 UPWP for the Northern Middlesex MPO with the chair signing on behalf of all members.

Gina Fiandaca, Secretary and CEO
Massachusetts Department of Transportation

Date

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Introduction

The Unified Planning Work Program (UPWP) for the Northern Middlesex Metropolitan Planning Organization (MPO) is a financial programming tool developed annually as part of the federally certified transportation planning process. [Metropolitan Planning Organizations](#) (MPOs) are required to develop UPWPs to govern work programs for the expenditure of FHWA and FTA planning funds. [23 CFR 450.308)(b)] .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 Northern Middlesex Urbanized Area and the Northern Middlesex Region. In addition, this document provides for the coordination of planning efforts between communities in the Middlesex Region.

The Unified Planning Work Program (UPWP) is an annual report that includes a description of all transportation and support planning activities that will be carried out by the Northern Middlesex Metropolitan Planning Organization (NMMPO). The UPWP is required by the United States Department of Transportation (USDOT) as the basis for all Federal funding assistance for transportation planning to state, local, and regional agencies and is developed annually. The document is updated in 2023 and programming begins from October 1, 2023– September 30, 2024, for Federal Fiscal Year 2024.

Transportation planning is funded by separate agencies within the United States Department of Transportation (USDOT), each addressing individual transportation modes such as highways, mass transit, and bicycle and pedestrian facilities. Anticipated planning activities and funding sources are published before each fiscal year as part of the NMMPO’s Unified Planning Work Program (UPWP). Some UPWP funds originate from the Massachusetts Department of Transportation (MassDOT).

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 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 roads, bridges, mass transit, water infrastructure, resilience, and broadband. The UPWP has been prepared under the Infrastructure Investment and Jobs Act (IIJA) provisions, also known as the Bipartisan Infrastructure Law (BIL). It also follows Federal Highway Administration (FHWA) and Federal Transit Authority (FTA) grant application requirements, planning priorities, and guidance. The UPWP provides a means to coordinate these many different planning activities to address the “3-C” (Continuing, Cooperative, and Comprehensive) transportation planning process.

In March 2020, the COVID-19 pandemic altered how the country and the Commonwealth conducted industry operations and daily life. The Governor declared a State of Emergency and issued a Stay at Home Order. This mandate forced some businesses to close either temporarily. Other industries transitioned from an in-person model to remote operations. On March 29, 2023, Governor Healey signed into law a supplemental budget bill, extending the temporary provisions pertaining to the Open Meeting Law to March 31, 2025. This extension allows public bodies to continue to hold public meetings remotely without a quorum of the public body being physically present at a meeting location and to provide “adequate, alternative” access to remote public meetings. The language makes no substantive

changes to the Open Meeting Law other than extending the expiration date of the temporary provisions regarding remote meetings **from March 31, 2023, to March 31, 2025**. In the upcoming year, the NMMPO will update its Public Participation Plan work program to address the most recent update to virtual public engagement.

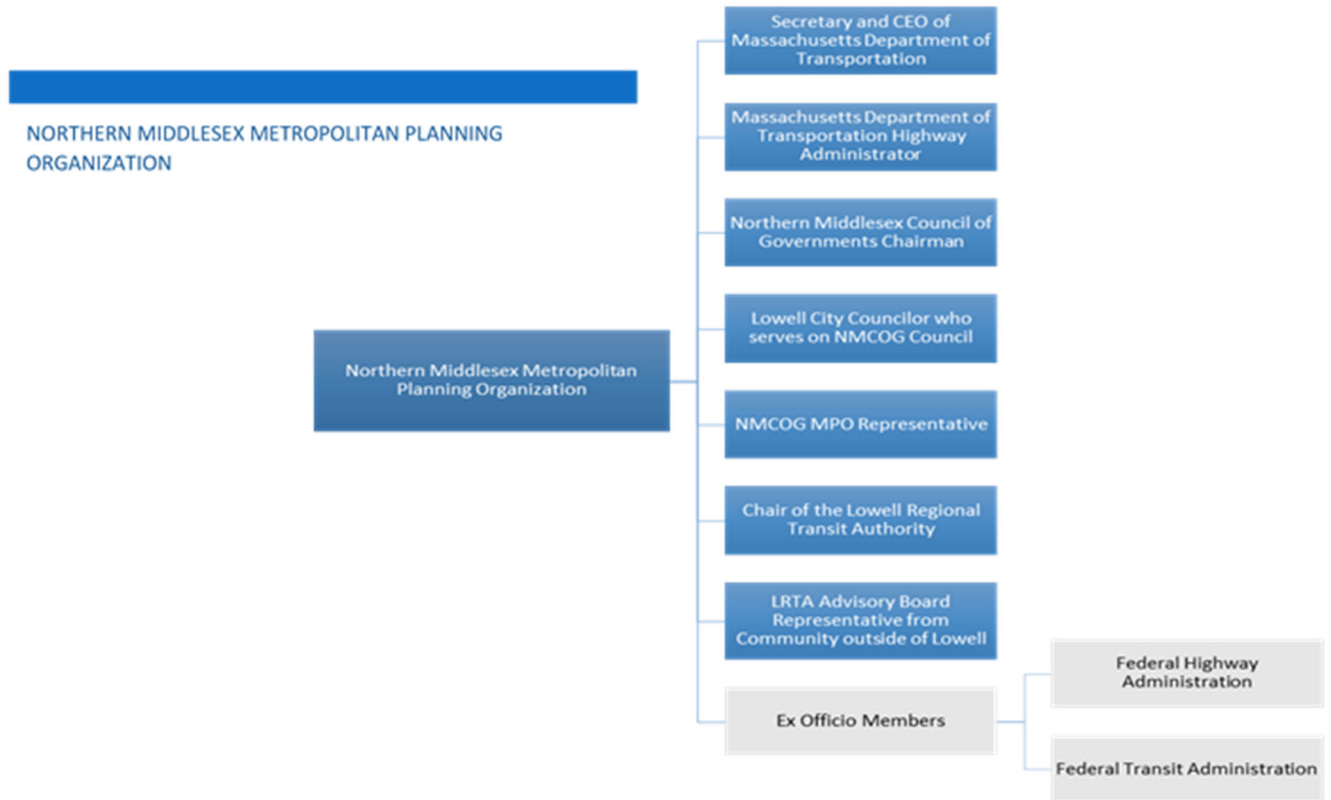
Role of Northern Middlesex Council of Governments

Metropolitan Planning Organizations (MPOs) exist throughout the United States in all urbanized areas with more than 50,000 residents. Using federal funding, MPOs can prioritize, plan, and program transportation projects in urban/metropolitan areas. In Massachusetts, MPOs work in partnership with (MassDOT) to conduct metropolitan planning activities. The Northern Middlesex MPO (NMMPO) was established to direct the transportation planning process per federal and state regulations.

Northern Middlesex Council of Governments (NMCOG) is a regional planning agency established under Chapter 40B of the General Laws of Massachusetts. NMCOG is a public agency governed by an 18-member policy board comprised of locally appointed and elected officials from the City of Lowell and the eight surrounding Towns of Billerica, Chelmsford, Dracut, Dunstable, Pepperell, Tewksbury, Tyngsborough, and Westford. Our objective is to increase the capacity of municipalities and foster regional cooperation and coordination. The NMCOG transportation team serves as staff to the Northern Middlesex Metropolitan Planning Organization (NMMPO), a 7-member policy board tasked with carrying out the transportation planning process for the Northern Middlesex Region. NMCOG staff serves as the transportation planning staff for the NMMPO. The Northern Middlesex Council of Governments also conducts the public participation process for all certification documents.

Membership of the MPO is guided by a 2021 Memorandum of Understanding between the Northern Middlesex Council of Governments (NMCOG), MassDOT, and the Lowell Regional Transit Authority. FHWA and FTA are non-voting Ex-Officio members of the NMMPO. (LRTA). Membership consists of the Massachusetts Secretary of Transportation and the Chief Executive Officer of MassDOT, the Administrator of the Highway Division of MassDOT, the Chairman of NMCOG, the Chairman of the LRTA, the chief elected official from the City of Lowell who serves as the City's representative to NMCOG, a Selectman elected to serve on the NMCOG Council and further elected by the Council to serve as that Town's representative to the NMMPO, and an LRTA Advisory Board member representing a community within the NMMPO boundaries other than the City of Lowell, who may also be an elected official. **Figure 1** displays the structure of the NMMPO.

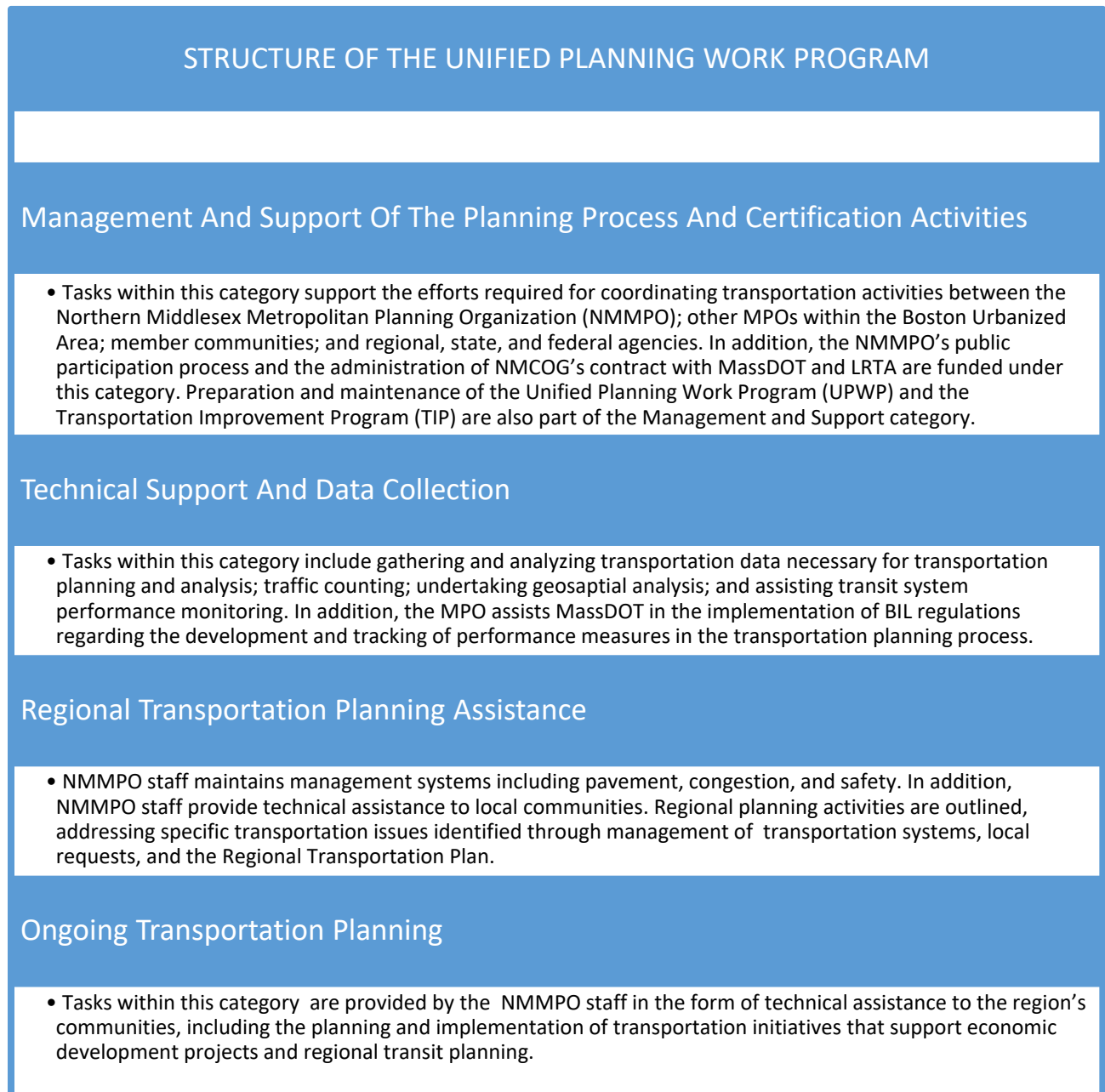
Figure 1 NMMPO Membership



Structure of the Unified Planning Work Program

The NMMPO's UPWP document has been structured to include the following planning activity Categories. The purpose of the categories guide the annual development of UPWP and Planning efforts. As shown, four categories comprise the UPWP annual budget. Within each of the four activities, a series of activities are associated with each category. Activities are completed annually, or in compliance with other federal timeframes. **Figure 2** reflects each category of the UPWP and the associated tasks.

Figure 2 Structure of the Unified Planning Work Program



Conformity to Federal Planning Regulations

The UPWP has been prepared following the provisions of the Bipartisan Infrastructure Law (B.I.L.) (23 C.F.R. § 450.308 (c)). This document follows Federal Highway Administration (FHWA) and Federal Transit Administration (F.T.A.) grant application requirements and planning emphasis areas and guidance. The Bipartisan Infrastructure Law, enacted as the Infrastructure Investment and Jobs Act (IIJA), continues planning programs that provide funding and set procedural requirements for multimodal transportation planning in metropolitan areas and states, resulting in long-range and short-range programs of transportation investment priorities.

F.T.A. and the Federal Highway Administration jointly administer the planning programs. The B.I.L., signed into law by President Biden on November 15, 2021, was built on the Fixing America's Surface Transportation Act (FAST) program structure. The B.I.L. continues all of the metropolitan planning requirements that were in effect under FAST, including the following national goal areas. The B.I.L. and IIJA will be used interchangeably throughout the report.

- **Safety** to achieve a significant reduction in traffic fatalities and serious injuries on all public roads.
- **Infrastructure Condition** to maintain the highway infrastructure asset system in a state of good repair.
- **Congestion Reduction** to achieve a significant reduction in congestion on the National Highway System (N.H.S.).
- **System Reliability** to improve the efficiency of the surface transportation system.
- **Freight Movement** and Economic Vitality to improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.
- **Environmental Sustainability** to enhance the performance of the transportation system while protecting and enhancing the natural environment.
- **Accelerated Project Delivery** to reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices.

The B.I.L. continues the Metropolitan Planning Program, establishing 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 (F.T.A.) responsibility. The B.I.L. continues all requirements for the Metropolitan Planning Program under the Fixing America's Surface Transportation (FAST) Act. Except as specified within the B.I.L. legislation, the B.I.L. continues all funding features that applied to Metropolitan Planning (P.L.) funding under the FAST Act.

Changes with Bipartisan Infrastructure Law

Some of the changes to Metropolitan Planning under the B.I.L. are to promote equity. The law considers state and local housing patterns in metropolitan planning processes. Under B.I.L. MPOs are required to ensure consistency of data used in the planning process, including information used in forecasting travel demand, in areas where more than one M.P.O. is designated within an urbanized area. The guidance under B.I.L. requires M.P.O.s to consider the equitable and proportional representation of the metropolitan planning area when selecting officials for the first time. It allows social media and other

web-based tools to encourage public participation in planning efforts. The B.I.L. also permits more than 80 percent federal share for transportation planning in certain circumstances, including in lower-density or lower-income portions of metropolitan or adjoining rural areas.

The new provision requires each M.P.O. to use at least 2.5% of its P.L. 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. **It also adds the program’s requirements, changes, and standards. For the Northern Middlesex M.P.O., the 2.5% apportionment is \$20,388.76 based on the population size.** A State or M.P.O. may opt out of the requirement, with the approval of the Secretary, if the State or M.P.O. 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.

Complete Street is a concept where all travel modes, including walking, biking, transit, and motorized vehicles, are considered in the design and construction processes to provide safe and accessible transportation for all system users. Designing Complete Streets contributes to a community’s safety, health, economic viability, and quality of life by closing critical gaps in the transportation system. Providing safer and more accessible options for travel between home, school, work, and recreation destinations to promote more livable communities. The NMMPO assists communities with Complete Streets policies and prioritization planning and in finalizing the design and implementation of the identified priorities. All regional municipalities have approved Complete Streets policies and Prioritization Plans in place. Since 2017, funding has been awarded for projects in Billerica, Chelmsford, Lowell, Pepperell, Tewksbury, Tyngsborough, and Westford. **Table 1 displays the status of Complete Streets Funding for all nine NMCOG communities.**

Table 1 Complete Streets for the Northern Middlesex Region

COMPLETE STREETS FUNDING FOR THE NORTHERN MIDDLESEX REGION				
MUNICIPALITY	APPROVED PROJECTS	APPROVED PLAN	PROJECT FUNDING AWARD (2017-2023)	PROJECT AWARD
Billerica	Yes	Yes	\$378,320	Glad Valley Traffic Calming and Sidewalk Improvements (2020)
Chelmsford	Yes	Yes	\$327,129	Billerica Road Sidewalks, Richardson Road Multimodal Improvements and a Crosswalk at Parkhurst/North Road (2017)
Dracut	Yes	Yes	-	-
Dunstable	Yes	Yes	-	-
Lowell	Yes	Yes	\$400,000	South Common Shared Use Path (2017)
Pepperell	Yes	Yes	\$400,000	Main Street Rotary Sidewalk Installation and Upgrades (2023)
Tewksbury	Yes	Yes	\$400,000	East Street at Chandler Street Improvements (2018) Andover St. And Fiske St. (2022)
Tyngsborough	Yes	Yes	\$396,631	Kendall Road Improvements (2018)
Westford	Yes	Yes	\$399,860	Town Center Improvements, Robinson School Sidewalk Connections, and Day School Pedestrian Crossing (2017)

Federal Planning Factors

Title 23 C.F.R. Section 450.308 (c) outlines planning regulations for MPOs in the development of the UPWP, addressing the planning factors (23 C.F.R. § 450.306 (b)) initiated in MAP-21. The BIL continues the requirement that MPOs address the following federal planning factors:

1. Support the **economic vitality** of the metropolitan area, especially by enabling global competitiveness, productivity and efficiency;
2. Increase the **safety** of the transportation system for all motorized and non-motorized users;
3. Increase the ability of the transportation system to support homeland **security** and to safeguard the personal security of motorized and non-motorized users;
4. Increase accessibility and **mobility** of people and freight;
5. Protect and enhance the **environment**, promote energy conservation, improve the quality of life and promote consistency between transportation improvements and State and local planned growth and economic development patterns;
6. Enhance regional **mobility** for people and freight;
7. Promote efficient **system management** and operation;
8. Emphasize **system preservation** of our existing transportation network;
9. Improve transportation system resiliency and **reliability** and reduce or mitigate the stormwater impacts of surface transportation; and
10. **Enhance** travel and tourism.

The NMMPO addresses these ten planning factors through the development of UPWP tasks outlined in this document and in accordance with the goals set forth in the [Northern Middlesex Regional Transportation Plan \(RTP\)](#), updated and adopted in FFY 2020. This UPWP seeks to incorporate these planning factors through the various tasks identified.

1. Improving the Safety of the Transportation System for all users;
2. Efficiently managing existing transportation assets and infrastructure;
3. Improving travel time and reliability for people and goods;
4. Ensuring that the transportation network supports economic development needs and accommodates future economic growth;
5. Minimizing and mitigating the impacts of the transportation system on the environment, including air quality, water quality, wildlife habitat, and climate change; and
6. Providing fair and equitable transportation access and service quality to all communities and neighborhoods, regardless of income, race, or LEP status.

In addition to the planning factors and goals developed in the Regional Transportation Plan endorsed in 2020, federal planning emphasis areas have been incorporated into the UPWP. The following emphasis areas are included:

1. Performance Management;
2. Climate Change;
3. Civil Rights;
4. Development of Products;
5. Bike/Pedestrian Safety;
6. Regional Models of Cooperation – Enhancing the process for effective communication between the MPOs, MassDOT, and Regional Transit Authorities (RTAs) to result in improved collaboration and cooperation in the transportation planning process; and

7. Ladders of Opportunity/Access to Essential Services – Identification of gaps in the existing transportation network that may hinder access to essential services such as employment, health care, schools/education, and recreation.

United States Department of Transportation Equity Action Plan

The U.S. Department of Transportation (USDOT or Department) is committed to pursuing a comprehensive approach to advancing equity for all. In response to Executive Order 13985: Advancing Racial Equity and Support for Underserved Communities. In 2022, an Equity Action Plan was created to elevate key actions that USDOT will undertake to expand access and opportunity to all communities while focusing on underserved, overburdened, and disadvantaged communities. The actions described here fall under four focus areas – wealth creation, power of community, interventions, and expanding access. The USDOT has identified these focus areas to develop a set of clear actions to thoughtfully work to restore historic inequities, positively impact historically underserved or overburdened communities in meaningful ways and ensure that the Department is equipped to equitably deliver its resources and benefits. This plan document has created a foundation for addressing longstanding inequity; this living document will serve as a resource with the development of planning efforts in this UPWP. For more information: <https://www.transportation.gov/priorities/equity/equity-action-plan>.

Massachusetts State Policies and Programs

Massachusetts state policies are outlined below. MassDOT Planning conducts a wide assortment of statewide transportation planning projects. Plans include elements from overall vision concepts to specific recommendations on individual transportation improvements. Each plan is different in scale and complexity, but all focus on safety and customer service. The NMMPO has considered them in the region's transportation planning activities and in the formulation of this document. For more information: <https://www.mass.gov/statewide-plans>

Beyond Mobility 2050

At the time of this report, MassDOT is in the process of updating the Long-Range Regional Transportation plan, Beyond Mobility. The Massachusetts 2050 Transportation Plan is a planning effort to develop a blueprint for guiding transportation decision-making and investments in Massachusetts in a way that advances MassDOT's goals and maximizes the equity and resiliency of the transportation system. Your input is needed to help develop this vision. For more information visit <https://www.mass.gov/beyond-mobility>

Massachusetts State Implementation Plan (SIP)

Massachusetts State Implementation Plans describe how Massachusetts ensures that it meets the National Ambient Air Quality Standards and Regional Haze goals under Clean Air. The 2021 SIP – as approved in regulation by the Massachusetts Department of Environmental Protection and the U.S. Environmental Protection Agency which requires that MassDOT and MBTA complete specific projects. These projects are planned to reduce specific air pollutants in eastern Massachusetts.

Massachusetts Freight Plan

The Massachusetts Freight Plan is a planning document that will define a short and long-term vision for the freight system throughout the state. The 2017 plan builds a unified vision for how the multimodal components of air, rail, truck, maritime transport, and intermodal transportation function today and offers a roadmap as to how policymakers and users of the freight system could make improvements to benefit our customers.

Massachusetts Bicycle and Pedestrian Transportation Plan

The Pedestrian Transportation Plan is the Massachusetts framework to achieve more walkable, safe, comfortable and convenient travel options for short trips for all people. The 2021 Plan update highlights investments MassDOT has made since releasing its Bicycle and Pedestrian Transportation Plans in 2019 and planned future investments for advancing walking and biking in the Commonwealth.

Massachusetts Rail Plan

The Massachusetts Department of Transportation (MassDOT) has issued the final 2018 State Rail Plan. The plan outlines the Commonwealth's long-term plan for the statewide rail system. To meet Federal Railroad Administration requirements, the 2018 State Rail Plan provides an overview of the following as it relates to rail operations, Existing system, financing, short-term priorities, long-term investment strategy, and the overall role of rail in the state's transportation network.

Regional Equity: UPWP Studies – 2019-2023

As part of the development of the UPWP, the NMMPO has developed a geographic and social equity analysis of UPWP-funded transportation planning activities past and proposed. UPWP activities have been reviewed between FFY 2019 and FFY 2023. UPWP tasks were analyzed, resulting in three hundred and three hundred and fifty-nine (359) items documented, categorized, and compared over the five-year period. Activities include ongoing data monitoring, targeted studies, development of certification documents and projects funded through the local technical assistance task **Table 2** summarizes the PL apportionment by spending per community. An analysis of the MassDOT Metropolitan Planning (PL) funding apportionment to the NMMPO showed that the City of Lowell received the highest percentage of the planning funds, with 19% of the total funding between 2019 and 2023. The suburban communities surrounding Lowell received comparable funding during the study period, with percentages ranging from 7%-12%. Of note, regional programs such as the TIP and local technical assistance funding were distributed and reported in the Northern Middlesex Annual Progress Report for each fiscal year. **Table 3** displays the PL/5303 apportionment for the NMMPO from 2019-2023.

Funding the Unified Planning Work Program

FHWA allocates Metropolitan Planning Funds (PL) to MassDOT which 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 allocates Section 5303 funds, as established by the Federal Transit Act Amendments of 1991. Section 5303 funds are used for planning and technical studies related to transit. These funds are obtained from FTA and passed through MassDOT to the regional planning agencies. Unless otherwise noted, the tasks described in this document are financed jointly (although not equally) by the Federal Highway Administration (FHWA), MassDOT, and the Federal Transit Administration, through the MassDOT contract with NMCOG. MassDOT provides the appropriate 20% local match for the consolidated FHWA Metropolitan Planning (PL) and FTA 5303 planning grant received by the region.

Table 2 PL/5303 Apportionment Spending By Community (2019-2023)

COMMUNITY	UPWP APPORTIONMENT (2019-2023)	ITEMS PER COMMUNITY	PERCENTAGE
Billerica	\$462,119	39	11%
Chelmsford	\$485,817	41	11%
Dracut	\$450,270	38	11%
Dunstable	\$308,079	26	7%
Lowell	\$817,595	69	19%
Pepperell	\$379,174	32	9%
Tewksbury	\$450,270	38	11%
Tyngsborough	\$402,873	34	9%
Westford	\$497,666	42	12%

Table 3 PL/5303 Apportionment to the Northern Middlesex MPO

UPWP Year	Federal	State	Total
2019	\$682,826	\$170,706	\$853,532
2020	\$723,699	\$180,925	\$904,624
2021	\$729,499	\$183,334	\$911,834
2022	\$707,912	\$176,978	\$884,890
2023	\$873,259	\$218,315	\$1,091,574

Other Federal Funding Sources

FTA Section 5307 funds are allocated to NMCOG through a contract with the Lowell Regional Transit Authority. These funds are used for planning, as well as other purposes, and are distributed by FTA to the RTAs based on the service area population. NMCOG provides technical assistance for a wide range of planning issues relevant to the LRTA service and region in general. The current contract runs from March 31, 2023 through March 31, 2024 and totals \$110,000. NMCOG provides the 20% matching funds for the contract. See **Appendix D** for the Northern Middlesex Council of Government and Lowell Regional Transit Authority 2023 contract.

Table 4 Lowell Regional Transit Authority/ NMCOG Planning Contract 2023 Exhibit B

ACTIVITY	FUNDING SOURCE		
	NMCOG	LRTA/FTA	TOTAL
GIS	\$4,000	\$15,000	\$19,000
Data Collection and Analysis	\$4,000	\$15,000	\$19,000
Transit System Performance	\$4,750	\$26,000	\$30,750
Regional Transit Planning	\$9,250	\$32,000	\$41,250
Total	\$22,000	\$88,000	\$110,000

Safe Streets and Roads for All

The [Bipartisan Infrastructure Law](#) (BIL) established the new Safe Streets and Roads for All (SS4A) discretionary program with \$5 billion in appropriated funds over 5 years. The SS4A program funds regional, local, and Tribal initiatives through grants to prevent roadway deaths and serious injuries. The goal of an Action Plan is to develop a holistic, well-defined strategy to prevent roadway fatalities and serious injuries in a locality, Tribe, or region. Planning and Demonstration Grants also fund supplemental planning and/or demonstration activities that inform the development of a new or existing Action Plan.

The SS4A program supports the U.S. Department of Transportation's [National Roadway Safety Strategy](#) and our goal of zero roadway deaths. The Northern Middlesex Council of Government applied with the Merrimack Valley Planning Commission as the lead applicant in 2022. The total grant award of \$469,041, of that total \$375,233 in federal funding and \$93,808 in MassDOT funds to pay for NMCOG, MVPC, and a consultant to develop a **Northeast Massachusetts Comprehensive Safety Action Plan**. NMCOG will receive a total of \$124,327 once a memorandum of agreement is established. In Task 3 of this UPWP plan, an additional \$25,167 of UPWP funds have been allocated in Task 3.12 to support the planning and demonstration activities to develop a regional Safety Action Plan.

Table 5 Summary of Other NMCOG Funding Sources FFY 2024 (10/01/2023 - 9/30/2024)

SOURCES OF FUNDING	CONTRACT AMOUNT	% MATCH REQUIRED
Billerica Sealer of Weights & Measures	\$ 16,500.00	
Chelmsford Sealer of Weights & Measures	\$ 19,000.00	
DLTA -A	\$ 13,160.00	
DLTA CY2023	\$ 200,236.00	
Dracut Open Space Recreation Plan	\$ 37,848.00	
Dracut Sealer of Weights & Measures	\$ 11,000.00	
Littleton Sealer of Weights & Measures	\$ 9,000.00	
Local Assessments	\$ 108,231.16	
Lowell Sealer of Weights & Measures	\$ 52,500.00	
LRTA CY2023	\$ 110,000.00	20%
Tewksbury Sealer of Weights & Measures	\$ 19,500.00	
Westford Sealer of Weights & Measures	\$ 16,500.00	
Greater Lowell Community Foundation Grant	\$ 15,000.00	
Safe Streets and Roads for All	\$ 225,139.68	
MHP MBTA Communities Tech Asst.	\$ 20,000.00	

Program years described in this UPWP, therefore, are as follows:

Funding Source
 FHWA/MassDOT
 FTA/Section 5303

Program Year
 October 1, 2023 - September 30, 2024
 October 1, 2023 - September 30, 2024

Development of the UPWP and Public Participation Process

Title 23 C.F.R. Section 450.316 requires that MPOs develop and use a documented Public Participation Plan that describes procedures, strategies, and desired outcomes for public review and comment during the development of the UPWP. The outreach process for the development of the NMMPO's UPWP continues to guarantee the following:

- Public access to the UPWP and all supporting documentation;
- Public notification of the availability of the UPWP;
- Respect of the public's right to review the document and comment thereon; and
- Provision of a 21-day public review and comment period prior to endorsement of the UPWP by the NMMPO.

Public Outreach Systems

A number of public outreach tools are used to communicate with the public and to allow for adequate input into the development of the UPWP. These same tools are used to provide information on the progress of the UPWP projects and include the following:

- Electronic mailings;
- Newspaper articles and advertisements;
- NMCOG website;
- Social Media;
- Project fact sheets;
- Meetings with neighborhood groups, non-profit organizations and special interest groups;
- Public meetings;
- Interactive local meetings and public forums; and
- NMCOG and NMMPO meetings.

Notice of the Availability

Notice of availability and opportunity for public comment is published in the Lowell Sun and other local news media such as community-specific or foreign-language newspapers. It is posted at each Town and City Clerk's office. The Public Meeting Notice and draft UPWP document are posted on the NMCOG website at www.nmcog.org. Notices and links are provided to the LRTA for their website at www.lrta.com. An email to the NMMPO public outreach list is sent to interested stakeholders, notifying them of the availability of the draft UPWP. Notices are made available on social media websites. Copies of the draft UPWP are forwarded to the NMMPO members, stakeholders, and interested parties.

A 21-day public comment period commences once a vote of the NMMPO has approved the draft UPWP. A minimum of one public meeting is held to receive comments. Comments may also be submitted through conventional mail, email, phone, or social media. After the comment period, all public comments are considered and incorporated into the draft UPWP if appropriate. The UPWP includes a summary of comments received and a report of responses/actions taken by the NMMPO. The NMMPO then votes on the endorsement of the document.

The endorsed UPWP document is posted on the NMCOG website www.nmcog.org and disseminated to stakeholders through the NMMPO public outreach list. Future substantive changes or amendments to

the UPWP require an additional 21-day comment period and follow the outreach process outlined Above.

UPWP Development for Fiscal Year 2024

Endorsement of the FFY 2024 Northern Middlesex UPWP follows a specific schedule outlined by the NMMPO. The development consists of public outreach to the communities and the presentation of UPWP information to the MPO and NMMCOG Council throughout the process. The following lists key meeting dates throughout the UPWP development process.

1. January 28, 2023: MassDOT provides preliminary funding allocation and guidance to the MPO to be used in the development of the 2023 UPWP.
2. April 26, 2023: Staff presents a draft UPWP task list and funding allocation to the NMMPO.
3. May 24, 2023: Staff presents the draft FFY 2024 UPWP to the NMMPO, which votes to release the document for public review and comment.
4. June 6, 2023: NMMCOG Staff host a virtual public meeting to hear comments on the draft FFY 2024 UPWP.
5. June 28, 2023: Staff presents comments received on the draft UPWP and the NMMPO votes to endorse the document.
6. July 2023: The NMMPO-endorsed UPWP is submitted to FHWA, FTA, and MassDOT for approval.
7. October 1, 2023: The NMMPO FFY 2023 UPWP goes into effect on the first day of the new Federal Fiscal Year.

Amendments and Adjustments to the UPWP

All Federal certification documents endorsed by the Northern Middlesex MPO follow standardized procedures regarding amendments and/or administrative adjustments as outlined in the regional Public Participation Plan. Amendments to the UPWP require an endorsement by the MPO after a public review and comment period. Administrative adjustments to the UPWP can be made without formal MPO action and do not require a public comment period. However, the MPO can vote to release the adjustment for a public comment period if they feel it is in the best interest of the MPO and the transportation planning process. **Table 6** provides an overview of what constitutes an administrative adjustment versus an amendment to the UPWP.

Table 6 UPWP Adjustment Table

UPWP Adjustments	
Administrative Adjustment	Amendment
Reallocation of budget funds	Addition or Removal of UPWP task(s)
Change in start/completion dates within the current federal fiscal year	Change in start/completion dates outside of the federal fiscal year (i.e., extending the project into the next UPWP)
Adjustments to project scope or cost changes equal to or less than 25% of the task budget	A significant change in project scope, cost changes greater than 25% of the task budget, and/or time allocation

Definition of a Significant Change

A **significant change is defined** as a change to a project scope, budget, and/or project schedule is considered significant when it alters the original intent of the project or the intended outcome of the project.

Updates on UPWP Tasks

As part of the 2023 work plan, staff continue the process of development of the FFY 2024-2028 Transportation Improvement Program and the FFY 2024 Unified Planning Work Program. Under this UPWP Pavement Management, Transportation Safety and Security, Intelligent Transportation Systems, and Congestion Management have been combined in Task 3.1 Regional Systems Management.

TITLE VI AND ENVIRONMENTAL JUSTICE – On March 22, 2023, the MPO voted to endorse the [2023 Title VI Report](#). Staff provided updates on regional equity for inclusion in the TIP and UPWP. Staff coordinated with several Councils on Aging on senior and disabled outreach activities and ADA application distributions and reviews. Staff, as part of ongoing transit services, reviewed the latest Census data. Staff assisted LRTA personnel with the review of the LRTA Title VI Complaint Procedures.

TRAFFIC COUNTING – NMCOG staff completed the data collection for the 2022 traffic-counting season. The Annual Traffic Volume Report for 2022 is expected to be completed by the end of FFY 2023. NMCOG is in the process of contracting with a consultant to conduct traffic counting for the 2023 count season as programmed in the UPWP budget. In addition, staff continue to work with MassDOT, municipalities, consultants and developers to assist with traffic counting data in a timely manner.

PAVEMENT MANAGEMENT – Staff continued to monitor roadway pavement conditions, conduct data collection in Lowell as part of the program. Staff continue to participate in the Data Users Group, presenting the IWorQ software and discussing a joint purchasing effort.

TRANSPORTATION SAFETY – The Transportation Safety program work continued this past year with updates to the NMCOG regional crash database and dissemination of data. NMCOG staff continued to work with MassDOT and FHWA on the Highway Safety Improvement Program, following the guidance outlined in the Statewide Strategic Highway Safety Plan and participating in the ongoing SHSP update. Our safety analysis will incorporate the 2023 update to MassDOT's [Strategic Highway Safety Plan \(SHSP\)](#).

CONGESTION MANAGEMENT – Staff continue to monitor roadways, transit facilities and park-and-ride lots throughout the region. Staff use available RITIS data to monitor travel time and delay along major corridors. Staff report LRTA ridership information to the National Transit Database on an ongoing basis. Staff collect park and ride lot occupancy data at Gallagher Terminal in Lowell, the North Billerica Commuter Rail station, and the Tyngsborough Route 113 Park and Ride lot.

INTELLIGENT TRANSPORTATION SYSTEMS – Staff continue to work with MassDOT on the placement of variable message boards and closed-circuit television cameras at regionally significant locations, supporting ongoing projects in Districts 3 and 4. In FFY 2023, staff continued working with the LRTA to purchase automatic passenger counters for their fixed-route bus fleet.

LOCAL TECHNICAL ASSISTANCE – Each year, NMCOG assists local communities in solving technical transportation issues. This local technical assistance task has expanded organically as communities' needs are not always evident as the UPWP is developed each spring. This task allows staff to take on projects requested by communities throughout the year. **Table 7** displays the technical assistance initiatives completed during the first half of FFY 2023 (October 1, 2022 – May 31, 2023).

Table 7 Community Local Technical Assistance Projects

COMMUNITY	LOCAL TECHNICAL ASSISTANCE PROJECTS
Region	Park and Ride Lot Demand Monitoring
	Pavement Condition Inventory
	Section 3A MBTA Communities Zoning Compliance Assistance to seven communities
	Council on Aging Collaboration Assistance
	Education to Communities on Federal and State Funding Programs
	Municipal Annual Report Updates
	LRTA Capital Improvements including Commuter Access Project
	Assistance to Regional Stormwater Collaborative
	Assistance to Northern Middlesex CEO Group
Billerica	Boston Road/Lexington Road/Glad Valley Drive TIP Project Assistance
	Boston Road TIP Project Assistance
	Yankee Doodle Bike Path TIP Project Assistance
Chelmsford	Land Use and Zoning conflict report with focus on commercial traffic
	Vinal Square Transportation Improvement Concept Implementation
	Route 110/I-495 Intersection Improvements
	Route 110 Corridor Project
	Ledge Rd Heavy Vehicle Alternatives
Dracut	Project support for Open Space and Recreation Plan
	Project Prioritization and Education on Funding
Dunstable	Review of potential transportation projects and funding sources with Engineer
	Route 113/Pleasant Street at Pond Street Dam Repair Funding Options
	Route 113/Main Street TIP Project Assistance
Lowell	Lowell Open Streets Project
	Pawtucket Street Project Assistance
	Lowell Connector TIP Project Assistance
	MassHire Transportation Initiative
	Canal Bridges/TIGER Grant Project Assistance
	Rourke Bridge Project Assistance
	Gallagher Terminal Improvements
Pepperell	Inclusionary and 40R Zoning research (promotion of housing in walkable areas of Town)
	Pepperell traffic circulation in Site Plan Reviews and Special Permits
Tewksbury	Tewksbury Center TIP Project Assistance
	Livingston Street Project Funding support
	Potential TIP Project discussion with Town Engineer
	Rerouting of LRTA Fixed Route Bus assistance
	Route 38 Corridor TIP Project Assistance
Tyngsborough	Mapping of water/sewer service in future planning scenarios
Westford	Transportation Updates for Town Annual Report
	Boston Road TIP Project Assistance
	Route 110 Project Assistance

Task 1. Management and Support of the Planning Processes and Certification Activities

OVERVIEW

Task 1 supports the coordination of transportation activities between NMCOG; the Northern Middlesex Metropolitan Planning Organization (NMMPO); other MPOs within the Boston Urbanized Area; member communities; and local, regional, state and federal agencies. Maintenance of the public participation process; administration of the NMCOG contracts with MassDOT and LRTA; and preparation and maintenance of the Regional Transportation Plan, Unified Planning Work Program, and the Transportation Improvement Program are also part of this task.

FUNDING

UPWP Task 1 Budget							
		Funding Source (combined PL and 5303)					
Work Items	Task Number	Federal	Federal Hrs.	State	State Hrs.	Total Amount	Total Hrs.
Management of the 3C Process	1.1	\$102,844	1,083	\$25,712	271	\$128,556	1,353
Unified Work Program Management	1.2	\$31,842	335	\$7,960	84	\$39,802	419
Public Participation of NMMPO Activities	1.3	\$36,662	386	\$9,165	96	\$45,827	482
Transportation Improvement Program activities	1.4	\$56,032	590	\$14,008	147	\$70,040	737
Title VI & Environmental Justice annual plan update	1.5	\$24,548	258	\$6,137	65	\$30,685	323
Subtotal		\$251,927	2,652	\$62,983	663	\$314,910	3,315

Task 1.1 Management of 3-C Process

OBJECTIVE

To assist, support, and facilitate an open, comprehensive, cooperative and continuing (3-C) transportation planning and programming process at all levels of government in conformance with applicable federal and state requirements and guidelines as described in the 3-C Memorandum of Understanding. The development of all planning documents will be undertaken in accordance with the metropolitan planning requirements set forth in the BIL and as further established through the USDOT metropolitan planning regulations.

PROPOSED ACTIVITIES

1. Provide support and implement BIL policies and guidelines, including emphasis on the seven National Goal Areas.
2. Provide liaison service between the NMCOG communities, LRTA, private transportation providers, adjoining regions, transportation agencies, and other organizations and stakeholders at the local, regional, state, and federal levels, on transportation related matters, issues and actions.
3. Work with the Metropolitan Planning Organization and its constituent members. Present transportation plans and programs developed through the 3-C public participation process for appropriate MPO action.
4. Participate in the Transportation Managers Group as a means to improve the quality and efficiency of the transportation planning process.
5. Review, comment, and assist on federal and state transportation related plans, programs, regulations and guidelines.
6. Provide transportation and transit planning services in support of NMCOG's comprehensive planning programs and conduct meetings and workshops on transportation issues.
7. Participate in transportation and transit workshops, seminars, conferences, training programs, and courses. Review literature on new transportation planning procedures.
8. Participate in the MPO certification process. Prepare and periodically update regional planning documents, as necessary, to maintain federal certification of the NMMPO's planning program
9. Provide management, guidance, and technical support to local communities and others relative to BIL funding programs, Transit Oriented Development, MassWorks, and other statewide and Federal funding programs.
10. Work cooperatively with the other MPOs comprising the Boston Urbanized Area per the terms of the 2021 Memorandum of Understanding for the Boston Urbanized Area.
11. Work with the other MPOs comprising the Nashua Urbanized Area per the terms of the 2020 Memorandum of Understanding for the Nashua Urbanized Area.
12. Coordinate with adjoining regional planning agencies including the Nashua Regional Planning Commission, Merrimack Valley Planning Commission, Montachusett Regional Planning Commission, and the Metropolitan Area Planning Council.
13. Coordinate with neighboring regional transit authorities, including the Massachusetts Bay Transportation Authority, Merrimack Valley Regional Transit Authority, Montachusett Regional

Transit Authority, Nashua Transit System, Manchester Transit Authority, and the Lowell Regional Transit Authority.

14. Coordinate with Transit agencies comprising the Nashua Urbanized Area to update the Nashua UZA Split MOU.
15. Develop monthly and annual progress reports, as required by State and Federal partners.
16. Coordinate transit services with Councils of Aging and outside service providers.

PREVIOUS WORK

- NMMPO MOU update
- Boston and Nashua UZA MOUs
- Nashua UZA Transit funding splits
- Participation in the statewide State Implementation Plan Steering Committee
- Participation in the Transportation Managers Group
- Participation in FTA / LRTA Triennial Review
- Participation in the Route 110/I-93 Project Advisory Committee
- Participation in the Lowell Junction/I-93 Task Force
- Participation in the I-93 Transit Investment Study Advisory Committee
- Participation in the Downtown Lowell Circulation Study Advisory Committee
- Participation in the City of Lowell’s Climate Action Plan Committee
- Participation in the MassDOT/MARPA quarterly meetings
- Past review and processing of regional transportation enhancement applications
- Past review of TDM and TMA funding applications
- Assistance to the National Park Service on Public Lands grants and Transit in the Park grants

DELIVERABLES

- MPO Certification Review Action Plan
- Technical assistance, reports, memoranda, workshops, as appropriate
- Updated certification documents
- MPO meeting notices and minutes
- Press releases, newsletters, and other public information materials

SCHEDULE

Work Items 1.1 Management of 3C Process	O-23	N-23	D-23	J-24	F-24	M-24	A-24	M-24	J-24	J-24	A-24	S-24
3 C Process Activities (On going)	—————▶											

Task 1.2 Unified Planning Work Program

OBJECTIVE

To prepare and maintain a **Unified Planning Work Program (UPWP)** that describes all transportation and Transportation-related planning activities anticipated within the region during the upcoming year, in accordance with applicable federal, state, and regional regulations and guidelines. The UPWP will be developed in accordance with the Northern Middlesex Public Participation Plan (PPP), as well as Title VI, Environmental Justice, and Executive Order 13166, improving access to services for Limited English Proficiency (LEP). The UPWP will maintain performance and outcome-based program that makes progress toward the identification and achievement of performance goals in the following national goal areas, as outlined in the BIL:

- Safety;
- Infrastructure;
- Congestion reduction;
- System reliability;
- Freight movement and economic vitality;
- Environmental sustainability; and
- Reduced project delivery delays

PROPOSED ACTIVITIES

1. Develop a new UPWP for the region for the upcoming year. The UPWP will be reviewed in accordance with the MPO's adopted public participation plan. The UPWP will also be available to the public via the NMCOG website www.nmcog.org and social media outlets.
2. Review and amend, as necessary, relevant portions of the UPWP in order to meet federal planning requirements or to address changes in funding levels or federal emphasis areas.
3. Circulate proposed revisions to appropriate agencies for review and/or endorsement. Amendments to the UPWP shall follow the formal MPO endorsement process. Minor revisions, such as changes to the existing level of effort or addition/deletion of tasks and procedures within the current contract/grant, may be made as an administrative adjustment with the mutual consent of the contractor and FHWA. An administrative adjustment will not require a formal MPO endorsement.
4. Evaluate analysis methods and explore enhanced measures to ensure regional equity in UPWP funding.
5. Monitor the progress of UPWP tasks throughout the work program year.
6. Develop monthly and annual UPWP progress reports, as required by State and Federal partners.

PREVIOUS WORK

- Past Unified Planning Work Programs
- NMMPO MOU update
- Boston and Nashua UZA MOUs
- Nashua UZA Transit funding splits
- Participation in the statewide State Implementation Plan Steering Committee
- MassDOT and MARPA Participation

DELIVERABLES

- FFY 2025 UPWP
- Monthly Progress Reports on UPWP Activities
- Technical assistance, reports, memoranda, workshops, as appropriate

SCHEDULE

Work Items 1.2 UPWP	O-23	N-23	D-23	J-24	F-24	M-24	A-24	M-24	J-24	J-24	A-24	S-24
Monitoring of UPWP Projects	→											
UPWP Quaterly update			●			●			●			
Draft UPWP							→					
Public Comment Opportunity								●				
Final UPWP									→			

Task 1.3 Public Participation Process

OBJECTIVE

To provide the public with complete information, timely notification, full access, input relative to key decisions, and opportunities for early and continual involvement in the 3-C process. To assess the effectiveness of the current public participation process and to develop and enhance the process of regional public involvement, supporting the objectives of the BIL and the metropolitan planning regulations. All public participation and outreach efforts shall be conducted in accordance with USDOT guidance regarding Title VI and environmental justice. NMMPO staff will continue to participate in the transportation planning process of other regions subject to the Boston Urbanized Area MOU and the Nashua Urbanized Area MOU. In this UPWP, the MPO will continue to update the [2017 Public Participation Plan](#) to reflect virtual public engagement opportunities and processes that have been implemented since March 2020. Staff will continue to prepare for and attend public meetings and identify underserved and underrepresented, populations, and organizations. Through this participation NMCOG staff will work to identify the methods to improve participation and examine the use of innovative approaches to working with historically marginalized communities. This engagement effort will include analysis needed 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, NMCOG utilizes the Zoom.com application for online meetings.

PROPOSED ACTIVITIES

1. Update the regional [Public Participation Plan](#) to include virtual public engagement and guidance from the State Public Participation Plan. Publicize any proposed changes to the public and encourage input/comments on revisions.
2. Apply the public participation process to transportation programs and tasks: prepare for public meetings, attend public meetings and inform and educate the public relative to transportation issues.
3. Continue to identify and reach out to underserved/underrepresented groups and improve outreach efforts, offering materials and web site access in accessible formats in order to meet Title VI, environmental justice, and LEP requirements. Periodically attend meetings of organizations representing the underserved/underrepresented community as a means of gathering input.
4. Continue engagement of local and regional groups and organizations and encourage both public and private participation in the transportation planning process through tasks provided in the Northern Middlesex Public Participation Plan.
5. Publicize meetings of the Northern Middlesex MPO, the Northern Middlesex Council of Governments, and opportunities for public input and comments via newspaper notices, City/Town Clerk postings, the NMMPO mailing list, the NMCOG website, and social media.
6. Announce notices of certification documents and amendments and/or adjustments to the public for input.
7. Continue outreach efforts to local and regional communities and organizations, including the Coalition for a Better Acre, the Cambodian Mutual Assistance Association, UTEC, and the International Institute.
8. Remain informed on new legislation related to the [Massachusetts Open Meeting Law](#) as it pertains to public bodies.

PREVIOUS WORK

- Amendment of the Public Participation Plan to reduce public comment periods for TIP, UPWP, and RTP from 30 to 21 days

- Development of the revised Public Participation Plan
- Public review processes for UPWP, TIP, and the Regional Transportation Plan
- Outreach efforts to minority and low-income groups
- Amended the Public Participation Plan to allow for an abbreviated public review and comment period for the TIP when extraordinary circumstances arise
- Maintained updated MPO information on the NMCOG webpage
- Maintained social media sites such as Twitter, Instagram, and Facebook

DELIVERABLES

- NMCOG website update (2023)
- Update the Public Participation Plan (2023)
- Public Meeting Notice, public meetings, community-based meetings, and meeting minutes
- Website and social network maintenance and updates

SCHEDULE

Work Items 1.3	O-23	N-23	D-23	J-24	F-24	M-24	A-24	M-24	J-24	J-24	A-24	S-24
Draft Public Participation on Activities (on going)	→											
Draft PPP	→											
Final PPP						→						
Public Comment Opportunity						●						

Task 1.4 Transportation Improvement Program Activities

OBJECTIVE

NMMPO staff is responsible for annually developing, adjusting, and maintaining the [Transportation Improvement Program \(TIP\)](#) for the region. The TIP is a multi-year document that lists and briefly describes all federally funded transportation projects that are likely to be implemented in the region. Any project that proposes to use federal funding must appear in this document, and any project that may be implemented in the current fiscal year must appear in the Annual Element.

Under this activity, NMMPO staff will refine a multi-year program of transportation improvements that is consistent with the [Regional Transportation Plan](#); the [State Implementation Plan](#); EPA Air Quality Conformity Regulations; FHWA/FTA Planning Regulations; and the Memorandum of Understanding among Massachusetts State and Regional officials to define, develop, and monitor a balanced statewide road and bridge program. The TIP will conform to the federal requirement to produce a financially constrained document.

Each TIP project will be evaluated using the Transportation Evaluation Criteria utilized by the NMMPO and based on NMMPO-adopted performance measures and targets. Project priorities will be generated accordingly. The TIP will be distributed and circulated in accordance with the Northern Middlesex regional Public Participation Plan. The document will be available on the NMCOG website: www.nmcog.org, and distributed via an MPO email contact distribution list and social media.

PROPOSED ACTIVITIES

1. Solicit the submittal of candidate transportation improvement projects from municipalities, MassDOT Highway Division, LRTA, and other transportation providers.
2. Work with the MPO partners to prioritize projects using the Transportation Evaluation Criteria as appropriate.
3. Evaluate and amend the MPO's transportation evaluation criteria as needed, focusing on MPO adopted performance measures and equitable distribution of federal funding.
4. Develop a multi-year TIP that includes all transit, highway, or air quality projects that are expected to require federal and state transportation funding for design, engineering, construction or acquisition. Project descriptions shall be of sufficient detail to permit air quality analysis in accordance with EPA conformity requirements.
5. Present air quality conformity findings for both highway and transit projects with sufficient levels of analysis and documentation to satisfy the requirements of the Metropolitan Planning Regulations under the BIL.
6. Revise and amend the TIP as needed in cooperation with federal, state, and local officials
7. Conduct appropriate public participation for the TIP consistent with the public participation plan for the region and in compliance with Title VI and environmental justice requirements.
8. Present the TIP document to the MPO for endorsement.
9. Produce and distribute TIP documents to federal, state, and local entities.
10. Attend regular meetings with MassDOT staff from the district offices to exchange information regarding TIP projects.
11. Coordinate with MassDOT on the conformity of the NMMPO TIP to the Statewide Transportation Improvement Program (STIP) and the Capital Investment Plan (CIP).

12. Evaluate analysis methods and explore enhanced measures to ensure regional equity in TIP funding.
13. Educate and support member communities on the TIP development process and advance local projects through initiation and design.

PREVIOUS WORK

- Past Transportation Improvement Programs
- Memorandum of Understanding among Massachusetts State and Regional officials to define, develop, and monitor a balanced statewide road and bridge program
- 2019 MOU for the Boston Urbanized Area
- Refinement of the Transportation Project Evaluation Criteria

DELIVERABLES

- FFY 2025-2029 Transportation Improvement Program
- TIP Amendments and Adjustments as needed

It is anticipated that the draft FFY 2025-2029 TIP will be completed and released for public comment in April 2024 and that the final document will be endorsed by the MPO in May 2024.

SCHEDULE

Work Items 1.4 TIP Activities	O-23	N-23	D-23	J-24	F-24	M-24	A-24	M-24	J-24	J-24	A-24	S-24
Monitoring of TIP Projects	→											
Public Outreach	→											
Draft TIP	→											
Final TIP	→											
Public Comment Opportunity								●				

Task 1.5 Title VI & Environmental Justice Annual Plan Update

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 NMCOG. The most updated revision of the Public Participation Plan (PPP) was completed in 2017 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 be reviewed to ensure the process contains no public involvement barriers to target populations. The NMCOG 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 NMCOG will continue to work with the MassDOT Office of Diversity and Civil Rights (ODCR) concerning 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 the Federal Highway Administration (FHWA) and their incorporation into the planning process within the Northern Middlesex Region. In addition, an equity analysis will be conducted for any 3C document that is developed.

PROPOSED ACTIVITIES

1. Continue to coordinate with MassDOT Office of Civil Rights to improve how Title VI is implemented.
2. Address Environmental Justice (EJ) requirements in the preparation of certification documents and in the conduct and preparation of various transportation planning studies and activities, as required under federal guidance and regulations.
3. Attend training seminars and workshops regarding Environmental Justice.
4. Review existing information relative to Environmental Justice/Title VI activities of the NMMPO, LRTA, and NMCOG to ensure compliance of the certification documents with current guidance and regulations.
5. Analyze Census Data and the latest available race and income data and update the Environmental Justice areas in the region accordingly.
6. Evaluate projects for EJ impacts as part of the RTP/TIP/transportation evaluation criteria application processes.
7. Evaluate and assess methods used to determine regional equity of TIP projects and UPWP activities. As part of the process, staff will collect and map data on vulnerable populations based on income, race, color, national origin, disability, age, and sex.
8. Maintain the NMCOG website so that documents are available in alternative languages, including Khmer, Portuguese, Spanish, Vietnamese, and Chinese, are the current Safe Harbor languages for the region.
9. Prepare Title VI documents and updates to the Title VI Plan in accordance with the latest regulations and state and federal policies.
10. Post Title VI updates to the NMCOG website.
11. Revise the MPO's public participation plan to reflect any change in state and federal regulations

and policies.

12. Update the LEP Plan, as needed.
13. Work with MassDOT Office of Civil Rights to revise the MPO’s Title VI complaint process, ensuring that accurate procedures are utilized, information is current, practices meet state and federal requirements, and that the process is focused on resolution.
14. Ensure that complaint forms are available in Safe Harbor languages

PREVIOUS WORK

- Title VI Annual Plan Update (2023)
- NMMPO and LRTA Title VI Review and Certification
- NMMPO/LRTA Annual Title VI Update Reports
- EJ Analysis for RTP and TIP
- LEP Plan

DELIVERABLES

- Preparation of required documentation in studies, reports, and certification documents
- Update and maintenance of the public participation plan to reflect any revisions to Title VI and EJ policies and regulations
- Staff training regarding environmental justice requirements, guidance, and regulations, as needed Preparation of Title VI, EJ, and LEP documents

SCHEDULE

Work Items 1.5 Title VI and EJ Analysis for Annual Plan Update	O-23	N-23	D-23	J-24	F-24	M-24	A-24	M-24	J-24	J-24	A-24	S-24
Civil Rights Activities (On-Going)	→											
Annual Title VI Update	→											

Task 2. Technical Support and Data Collection

OVERVIEW

This element describes technical assistance and data collection activities to be undertaken in support of transportation planning tasks. BIL guidelines continue FAST Act requirements for the development of performance measures in order to achieve targets set forth for national goal areas.

These goal areas include the following:

- Safety,
- Infrastructure Condition,
- Congestion Reduction,
- System Reliability,
- Freight Movement and Economic Vitality,
- Environmental Sustainability, and
- Reduced Project Delivery delays

Activities within this task will support the tracking and analysis of performance-related data and criteria.

FUNDING

UPWP Task 2 Budget							
		Funding Source (combined PL and 5303)					
Work Items	Task Number	Federal	Federal Hrs.	State	State Hrs.	Total Amount	Total Hours
Traffic Counting	2.1	\$56,789	598	\$14,197	149	\$70,986	747
Geographic Information System	2.2	\$94,911	999	\$23,728	250	\$118,639	1,249
Data Collection and Analysis	2.3	\$58,406	615	\$14,602	154	\$73,008	769
Transit System Performance Surveillance	2.4	\$42,896	452	\$10,724	113	\$53,620	564
Performance Measures	2.5	\$8,232	87	\$2,058	22	\$10,290	108
Subtotal		\$261,234	2,750	\$65,309	687	\$326,543	3,437

Task 2.1 Traffic Counting

Consistent with national goals, the traffic counting program addresses continued monitoring of the transportation network. The objective of the program is to provide accurate and efficient traffic data collection services to MassDOT and the local communities. The program maintains an ongoing region wide traffic count database for use in monitoring regional VMT growth rates. Whenever possible, the FHWA Traffic Monitoring Guide procedures are followed. Traffic monitoring will focus on all modes of transportation with motor vehicle, bicycle, and pedestrian counts collected at key locations throughout the region.

NMMPO traffic counting data collection efforts generally run from April through November, depending on weather conditions and holidays. The [Northern Middlesex Traffic Volume report](#) is developed annually. In previous years, the Northern Middlesex Council of Government has conducted traffic counting throughout the region using agency-owned traffic counters. Due to capacity reasons and staffing changes, NMCOG will be contracting with a consultant for 2023 traffic counting data collection.

PROPOSED ACTIVITIES

1. Continue to monitor the 12 identified traffic counting locations for the 2023 and 2024 traffic counting seasons to monitor regional traffic patterns. A summary of work will be included in the [Annual Traffic Volume Report](#).
2. Prepare documentation and attain permits for traffic counting activities on State-owned roadways in Districts 3 and 4.
3. Prepare and distribute an RFP for consultant services.
4. Evaluate submitted proposals and execute a contract with bid winner.
5. Submit direct cost requests to MassDOT based on the awards.
6. Manage a contract with a consultant to oversee traffic volume data collection activities in accordance with Federal and State guidelines and procedure.
7. Collect traffic count data for community requested locations, as needed.
8. Compile and upload all traffic count data to MassDOT MS2 interactive database and maintain NMCOG databases.
9. Assist in the development of traffic count adjustment factors and growth rates.
10. Provide quarterly updates to MassDOT on traffic volume data collection.
11. Assist communities in development of projects by providing background traffic volume and growth rate data.
12. Perform data collection activities for other UPWP tasks, including corridor and traffic studies.
13. Collect bicycle and pedestrian counts as part of all turning movement counts and at high volume locations, such as the Bruce Freeman Rail Trail, Nashua River Rail Trail, and downtown Lowell locations.
14. Prepare Annual Traffic Volume Report and present the report to the NMMPO.

PREVIOUS WORK

- Collection of historical traffic count data
- Previous Traffic Volume reports

DELIVERABLES

- 2023 Traffic Volume report
- Traffic count data for various UPWP tasks as needed

- Traffic Volume growth rates, truck percentages, high volume locations, and bike or pedestrian counts
- Regional and MassDOT coverage counts

SCHEDULE

Work Items 2.1 Traffic Counting	O-23	N-23	D-23	J-24	F-24	M-24	A-24	M-24	J-24	J-24	A-24	S-24
Data Collection	→							→				
Data Analysis	→											
Final Report					→							
Presentation to NMMPO							●					

Task 2.2 Geographic Information Systems

OBJECTIVE

A strong emphasis will be placed on providing visual information and interpretation to enhance the public's understanding of complex transportation issues and to facilitate informed decision-making. NMCOG will seek to identify recent data to inform transportation planning efforts across the region. Task 2.2 will include developing and maintaining appropriate digital geographic information system data. Spatial analysis and visual representations have become increasingly important to improve access to convey transportation challenges and opportunities. NMCOG will work with municipalities to develop and enhance regional databases, strengthen spatial analytical capabilities, and exchange and distribute map data.

PROPOSED ACTIVITIES

1. Continue staff training and develop data, maps, and other graphic displays to help facilitate an exchange of information.
2. Continue to use GIS technology in the conduct of various transportation planning tasks.
3. Enhance existing digital map data and develop additional geographically referenced data layers for use in transit service analysis, land use analysis, build-out analysis, evaluation of highway alternatives, and bicycle and pedestrian initiatives.
4. Create work maps, report graphics, and presentation materials using GIS.
5. Work with local communities to improve existing base maps and acquire additional digital map data.
6. Ongoing maintenance and updating of parcel level mapping.
7. Work with state and federal agencies to review, correct, and enhance regional GIS map coverage and related data to meet state standards.
8. Maintain interactive transit route and asset maps (i.e. stops, signage, routes and stop times). Revise the transit route map as needed.
9. Utilize new and existing data sources to incorporate equity planning in all transportation projects
10. Utilize MassDOT mobility dashboards for crash data, pedestrian facilities, and traffic-related analysis

PREVIOUS WORK

- Development and maintenance of parcel-level coverage for NMCOG communities
- Development and maintenance of GIS program
- Preparation of various maps and graphics for transportation reports and programs
- Development of interactive transit route maps

DELIVERABLES

- New expanded and enhanced digital layers and data files
- Transportation planning maps and graphics for reports and presentations
- Databases, data layers, etc., in conformance with State standards

SCHEDULE

Work Items 2.2 Geographic Information Systems	O-23	N-23	D-23	J-24	F-24	M-24	A-24	M-24	J-24	J-24	A-24	S-24
GIS (On- Going)	—————→											

Task 2.3 Data Collection and Analysis

OBJECTIVE

To continue to develop and maintain extensive databases for use in decision-making relative to regional transportation issues. To improve analytical capabilities, monitor statistical trends, and develop projections.

PROPOSED ACTIVITIES

1. Coordinate with MassDOT and municipalities to collect and report on asset management data collection activities. This task will coordinate with efforts that are included in other tasks. For example, Master Plan efforts will be reported here in addition to the Local Technical Assistance task.
2. Continue to work with communities to compile data on affordable housing locations in the region in conjunction with housing production plans and other housing policy development including MGL Chapter 40A section 3A activities.
3. Continue to coordinate with municipalities in development of community-specific plans, including Master Plans and land use, hazard mitigation, climate, municipal vulnerability, affordable housing, and transportation plans.
4. Continue to collect useful and current data. Update and expand demographic data, employment data, workforce data, and land use information.
5. Continue to build databases and develop mechanisms to improve public access to these databases.
6. Research methodologies and models for calculating demographic, land use, and economic forecasts.
7. Promote coordination and cooperation among data generators and data users emphasizing local and regional applications and the need for standardization.
8. Serve as the principal regional liaison to the U.S. Census Bureau. Continue to analyze, aggregate, and disseminate updated demographic data as it is made available.
9. Assist the Census Bureau and the Donahue Institute in collecting relevant demographic data for development of Census estimates.
10. Compile data needed for transportation and transit studies.
11. Assist MassDOT, as needed, in the refinement and maintenance of the statewide travel demand model, incorporating the latest demographic data, land use assumptions, and project information.
12. Work with adjoining regions, MassDOT, and consultants relative to the development of travel demand models created for specific transportation projects.
13. Analyze and utilize most recent Census data as the Census Bureau releases it.
14. Work with federal, state, and regional partners on refinement of new urbanized area boundaries based on 2020 Census information, if needed.

PREVIOUS WORK

- Maintenance of on-going updates to the demographic, land use, and economic databases

- Maintenance of on-going LRTA transit ridership information, including passenger trips, passenger miles, route miles, vehicle information, etc., as required by the FTA National Transit Data systems
- Compilation of data needed for technical analyses relative to various transportation and transit studies
- Demographic forecasts for use in the statewide model, air quality conformity analyses, and the Regional Transportation Plan
- Monitoring and reporting of demographic and land use trends and projections
- Work on past decennial census relative to address range and identification issues
- Compilation of data and statistics from community annual reports, Master Plans, and other existing sources to be used for regional planning efforts

DELIVERABLES

- Census data with updated urban/rural boundaries
- Refined and updated statewide model for purposes of making conformity determinations and for use in major feasibility and corridor studies
- Published data reports and NMCOG website

SCHEDULE

Work Items 2.3 Data Collection and Analysis	O-23	N-23	D-23	J-24	F-24	M-24	A-24	M-24	J-24	J-24	A-24	S-24
Data Collection/ Analysis (On-	—————▶											

Task 2.4 Transit System Performance Surveillance

OBJECTIVE

To maintain a current database for the region’s transit system to provide an accurate basis for future forecasting, planning, program analysis, and project evaluation. The three-year National Transit Database (NTD) ridership survey will be conducted to determine passenger mileage data for both fixed route and demand response services. Performance measures and threshold criteria will be reviewed and analyzed following State and Federal guidelines. Adjustments to bus route alignments will be proposed to reflect changes in local demographics.

PROPOSED ACTIVITIES

1. Produce daily ridership samples for three-year NTD passenger reporting data.
2. Prepare information as needed for FTA reports, SIP submissions, American Public Transit Association reports, MassDOT reports, and other required reporting as needed.
3. Review the LRTA’s Transit Asset Management Plan and Public Transportation Agency Safety Plan and assist the LRTA with presentations to the MPO for adoption of updated performance measures and targets.
4. Maintain and update bus stop and route data in accordance with MassDOT and LRTA guidelines.
5. Assemble and analyze monthly ridership, revenue and safety reports and quarterly monitoring reports.
6. Revise formulae for monthly ridership reports as quarterly monitoring data is received and processed.
7. Provide computerized summaries of above reports and analysis trends at the end of each year, including ridership, revenue, performance measures, and bus stop/ route data.
8. Prepare information as needed for FTA reports, MassDOT reports, and other routine reporting.
9. Analyze transit performance in accordance with the State and Federal criteria.

PREVIOUS WORK

- Prepared NTD reports annually as required
- Prepared Title VI certifications as needed

DELIVERABLES

- Up-to-date ridership/revenue statistics for LRTA
- Information for federal and state reporting requirements
- Maintenance of Title VI certification

SCHEDULE

Work Items 2.4 Transit System Performance Surveillance	O-23	N-23	D-23	J-24	F-24	M-24	A-24	M-24	J-24	J-24	A-24	S-24
Transit Surveillance (On- Going)	—											➔

Task 2.5 Performance Measures

OBJECTIVE

To assist in the development of performance measures in the transportation planning process as directed by Federal and State requirements outlined in the BIL. MAP-21 transformed the US highway program into a more performance- and outcome-based program in which resources are invested to achieve targets that collectively reach national goals concerning safety, infrastructure, congestion, system reliability, freight movement and economic vitality, environmental sustainability, and project delivery delays. This process was continued in the FAST Act and now the BIL. The establishment of performance measures at the regional level is undertaken in conjunction with MassDOT in the following areas:

- Pavement Condition on the Interstate System and on remainder of the National Highway System (NHS);
- Performance of the Interstate System and the remainder of the NHS – Travel Time Reliability;
- Bridge Condition on the NHS;
- Traffic Safety: fatalities and serious injuries – both number and rate per vehicle mile traveled on all public roads; total non-motorized fatalities and serious injuries;
- Traffic Congestion;
- On-road mobile source emissions; and
- Freight movement on the Interstate System – Truck Travel Time Reliability and % mileage uncongested (> 50mph).

PROPOSED ACTIVITIES

1. Assist in continued development of performance measures as part of planning process.
2. Assist in updating state and regional targets for performance measures.
3. Coordinate with FHWA, FTA, MassDOT, and other MPOs on the refinement of set performance measure criteria.
4. Monitor specific planning tasks for progress in achieving targets.
5. Coordinate with the Lowell Regional Transit Authority on asset management, transit safety, and state-of-good repair measures.
6. Review updates to the LRTA Transit Asset Management Plan and Public Transportation Agency Safety Plan for use by the LRTA for MPO adoption of updated performance measures and targets.
7. Use performance measure information to score and prioritize TIP-eligible projects via the transportation evaluation criteria and incorporate stronger equity measures per the US DOT Equity Action Plan.

PREVIOUS WORK

- MPO adoption of PTASP performance measures and targets
- MPO adoption of LRTA Transit Asset Management Plan performance measures and targets
- MPO Adoption of State performance measures and targets for safety, bridge condition, pavement condition, system reliability, and air quality
- 2020-2040 Regional Transportation Plan
- Congestion Management Process

- Transportation Evaluation Criteria for TIPs

DELIVERABLES

- MPO adoption of updated performance measures and targets for safety, bridge, pavement, system reliability, and air quality
- Report on the monitoring of ongoing planning tasks using system performance, data, and tracking

SCHEDULE

Work Items 2.5 Performance Measures	O-23	N-23	D-23	J-24	F-24	M-24	A-24	M-24	J-24	J-24	A-24	S-24
Refinement of Regional Performance Measures and	→											
Monitoring of Planning Tasks to ensure progress toward targets	→											

Task 3. Regional Transportation Planning

OVERVIEW

Specific tasks in this grouping address the National Goal areas and performance measure requirements under BIL guidelines. Management programs are included in this category. These work tasks will be coordinated with MassDOT Office of Transportation Planning, MassDOT District offices, and local communities.

FUNDING

UPWP TASK 3 BUDGET							
		FUNDING SOURCE					
Work Items	Task Number	Federal Funds	Federal Hrs.	State Funds	State Hrs.	Total Amount	Total Hours
Regional Systems Management	3.1	\$75,309	793	\$64,723	681	\$78,838	1,474
Regional Transportation Plan	3.2	\$6,560	69	\$1,640	17	\$8,200	86
Sustainability, Livability and Climate Change	3.3	\$22,176	233	\$5,544	58	\$27,720	292
Local Technical Assistance	3.4	\$43,290	456	\$10,823	114	\$54,113	570
Freight Planning	3.5	\$14,277	150	\$3,569	38	\$17,846	188
Bicycle and Pedestrian Planning	3.6	\$24,653	260	\$6,163	65	\$30,816	324
TIP Project Review Study	3.7	\$14,622	154	\$3,655	38	\$18,277	192
Stormwater Management	3.8	\$21,773	229	\$5,443	57	\$27,216	286
Enhancing Travel and Tourism	3.9	\$8,964	94	\$2,241	24	\$11,205	118
Electric Vehicle Case Study of the NM Region	3.10	\$25,293	266	\$6,323	67	\$31,616	333
Aiken Ave./Bridge St. Intersection Study Dracut	3.11	\$18,421	194	\$4,605	48	\$23,026	242
Safe Streets For All Supplemental Funds	3.12	\$20,134	212	\$5,033	53	\$25,167	265
Subtotal		\$295,471	3,110	\$119,763	1,261	\$354,040	4,371

Task 3.1 Regional Systems Management

OBJECTIVE

Pavement Management, Congestion Management, Intelligent Transportation Systems (ITS), and Transportation Safety and Security will be conducted within Task 3. Pavement condition data will be collected for UPWP studies, TIP projects, and those projects being proposed to the Project Review Committee for approval and funding.

Pavement Management

The USDOT national goal area “Infrastructure Condition” is addressed under this task. NMCOG staff will conduct pavement management based on data collected and the utilization of pavement management software; staff will calculate the cost of maintaining the Region’s roadways and provide an assessment of long-term roadway maintenance needs. This data is included in the Regional Transportation Plan and in planning studies.

Congestion Management

To continue the Congestion Management Process for the Northern Middlesex region, providing effective management of transportation facilities through the use of travel demand reduction and operational management strategies. Identify and evaluate bottlenecks impacting congestion in the region. Assess the region’s system performance by analyzing data based on travel time reliability, truck travel time reliability, peak hour excessive demand, and non-single occupancy vehicle performance measures and targets. Staff will continue to utilize available RITIS data sets to assess regional performance and prioritize regional TIP projects.

Intelligent Transportation Systems (ITS)

In 2011, the MassDOT Office of Transportation Planning led the effort to develop an ITS Architecture for the Region. NMMPO staff continue to participate in the update and maintenance, along with MassDOT and the local communities. NMCOG staff will continue to support the maintenance and updating of the Boston/Eastern Massachusetts Regional ITS Architecture in accordance with BIL requirements that all ITS projects funded through the Highway Trust Fund be in agreement with National ITS Architecture and applicable standards. NMCOG staff assist in the maintenance and updating of the Boston/Eastern Massachusetts Regional ITS Architecture in accordance with BIL requirements that all ITS projects funded through the Highway Trust Fund be in compliance with National ITS Architecture and applicable standards.

Transportation Safety and Security

Transportation Safety has been identified as a priority for the Federal Highway Administration and is supported through the planning factors contained in the BIL. Staff will continue with safety monitoring for all users of the transportation network throughout the region reporting on top crash locations in the region for vehicles, public transit, pedestrians, and bicyclists. In the development of an annual Traffic Safety report, the NMMPO identifies future locations for performing Road Safety Audits so that Highway Safety Improvement Program (HSIP) funding may be sought through the Transportation Improvement Program (TIP). NMCOG staff will continue to examine safety and operating conditions at high hazard intersections identified in the Region. Transit safety review and reporting is conducted by staff on a monthly basis. The LRTA’s Public Transportation Agency Safety Plan was adopted by the MPO in 2020,

and staff continue to work with the LRTA to update the Plan on an annual basis. The next LRTA Board consideration of Transit Safety plan targets is being held in June 2022. The MPO then has 180 days to consider adoption of updated targets.

As part of this task, the NMMPO will continue to provide assistance in the planning and development of local, state, regional, and federal transportation security and emergency response plans. This effort includes planning work needed to protect critical infrastructure and services, including transit, which may be subject to various threats, including pandemics, natural disasters, and terrorism.

PROPOSED ACTIVITIES

Pavement management

1. Collect roadway condition information, including but not limited to ride, distress, and rutting conditions that adversely impact surface friction.
2. Analyze segment condition, including the calculation of remaining service life rating and benefit/cost analysis using IWorQ software.
3. Prepare a description on pavement management activities to be included in the Regional Transportation Plan and on the NMCOG website.
4. Coordinate with MassDOT on meeting pavement management data needs for projects going to the PRC and for TIP projects to which the transportation evaluation criteria will be applied.
5. Participate in the TMG Data Users Group to share ideas and information with other MPOs in the Commonwealth.
6. Coordinate with MassDOT and other MPO's to consider group purchase of pavement management software.

Intelligent Transportation Systems

1. Continue to train and educate staff through ITS workshops and other training opportunities in order to assist local stakeholders with the maintenance and update efforts.
2. Continue to work with FTA consultants to address the ITS needs of the LRTA in support of the Regional Architecture through coordinating transit elements with the overall Regional Architecture.
3. Continue to assist in educating key stakeholders, such as local officials and MPO members, regarding ITS and its potential applications in the region.
4. Continue to plan for electrification of the State and regional transportation system as recommended in the Future of the Commonwealth report.
5. Assist in ensuring a seamless transition of ITS activities between the adjacent metropolitan regions.
6. Ensure short- and long-range ITS projects are consistent with the overall transportation planning process, including the Regional Transportation Plan, the Transportation Improvement Program, and the MPO approval process.

Congestion Management

1. Continue to monitor congestion levels throughout the region. Staff will continue to monitor and adjust programs based on guidance from Federal and State partners.
2. Refine congestion management performance measures and targets as part of BIL regulations.

3. Compile data on arterial corridors identified through UPWP studies, environmental reviews, and the Regional Transportation Plan.
4. Monitor congested corridors using RITIS travel time and delay data.
5. Monitor park and ride/MBTA Commuter lots in Lowell, North Billerica, and Tyngsborough on a quarterly basis. Work with the LRTA, MBTA and MassDOT to share park and ride data.
6. Continue to address regional top bottleneck locations, recommending low cost improvements and identifying potential TIP projects.
7. Continue to monitor and assess ridership information for high ridership transit routes.
8. Work with local communities to identify possible mitigation strategies for congested locations.
9. Participate in the TMG Data Users Group.

Transportation Safety and Security

1. Further, develop performance measures for vehicle, bicycle, and pedestrian safety as outlined in Federal legislation. Consider adoption and incorporation of the LRTA, PTASP measures and target updates.
2. Assist in Road Safety Audits to fulfill Federal guidelines for using HSIP funds.
3. Assist in development of improvement strategies for HSIP locations to correct safety and operating deficiencies.
4. Update the regional traffic safety report (top 100 crashes).
5. Continue to assist MassDOT in updating and implementing the Strategic Highway Safety Plan (SHSP) and the Highway Safety Program.
6. Participate in the TMG Data Users Group to share ideas and information with other MPOs in the Commonwealth.
7. Provide Safety Education materials for all vulnerable users of the transportation system.
8. Assist, as appropriate, local emergency planning committees (LEPCs), Massachusetts Emergency Management Agency (MEMA), Federal Emergency Management Agency (FEMA), the US Department of Transportation (USDOT), the Department of Homeland Security (DHS), and the Executive Office of Public Safety and Security (EOPSS), State 911 Department, and law enforcement organizations with comprehensive emergency management plans.
9. Provide technical assistance to State and local emergency planning agencies to support evacuation planning such as traffic counts, roadway capacity, planned highway construction, maps, and other such data necessary to facilitate the evacuations in an emergency.
10. Review current plans for emergency planning and security elements, identifying critical facilities and infrastructure. Outline the roles of various agencies.
11. Attend training seminars and workshops regarding disaster planning and regarding transportation safety and security.
12. Participate in meetings of Local Emergency Planning Committees and emergency management agencies as a Northern Middlesex Council of Governments (NMCOG) and Lowell Regional Transit Authority (LRTA) representative.

PREVIOUS WORK

Pavement Management

- Past inventory and assessment of pavement conditions for pavement management program
- Pepperell Pavement Inventory Report 2019
- FFY 2020-2040 Northern Middlesex Regional Transportation Plan

Intelligent Transportation Systems

- Provided stakeholder input on locations of VMS and traffic cameras included in ITS TIP projects along I-495, Route 3, Lowell Connector, and Merrimack River Bridge Crossings
- Worked with the City of Lowell to identify congested corridors as part of City wide monitoring program
- Attended several workshops and training sessions run by FHWA and MassDOT regarding ITS
- Assisted the LRTA in the development of the Transit Service Plan, which includes an assessment of ITS needs
- Participated in the MassDOT ITS Working Group
- Reviewed and commented on MassDOT initiated ITS architecture plans and documents
- Identification of ITS stakeholders and projects throughout the region
- Development of the Regional ITS Architecture

Congestion Management

- Previous Congestion Management Plans
- 2020-2040 Regional Transportation Plan
- LRTA Transit Service Plan
- LRTA 21st Century Transit Initiative
- Route 3 Park and Ride Lot Feasibility Report
- Various corridor and traffic studies
- NTD Reporting Data
- Traffic impact studies for various development projects throughout the region

Transportation Safety and Security

- FFY 2021 Regional Transportation Safety Report
- Analysis of high crash intersections
- 2020-2040 Regional Transportation Plan
- Previous corridor and traffic studies
- The Top 100 High Crash Intersections in the Northern Middlesex Region (2010-2012)
- 2017 Northern Middlesex Regional Transportation Safety Report
- Various roadway safety audits performed in conjunction with MassDOT
- Past High Crash Intersection Reports
- Participation and attendance in meetings of the LEPCs and emergency management agencies
- Work on FEMA/MEMA Hazard Mitigation Plans and Homeland Security Planning
- Work with Executive Office of Public Safety and Security on the implementation of the goals contained in the Statewide Security Strategy

DELIVERABLES

Pavement Management

- Updated NMCOG Pavement Management database
- Pavement Management data for inclusion in the Regional Transportation Plan and studies
- Data for application of the transportation evaluation criteria

Intelligent Transportation Systems

- Facilitate education and training of ITS stakeholders

- Assistance to MassDOT in maintaining and updating the Regional ITS Architecture
- Preparation of MOUs and other agreements between various ITS stakeholders
- Monitoring ITS projects to ensure consistency with the transportation planning process

Congestion Management

- Updated CMP system performance data
- Updated regional Park and Ride lot Inventory
- LRTA Fixed Route Ridership monitoring

Transportation Safety and Security

- FFY 2022 Regional Transportation Safety Report
- Updated PTASP performance measures and targets
- Roadway Safety Audits, as appropriate
- Future coordination with the local communities and MassDOT to advance identified safety improvements
- Assistance in the development of transportation security and emergency response plans
- Attendance at meetings, seminars and workshops related to emergency planning

SCHEDULE

Pavement

Work Items 3.1 (Pavement)	O-23	N-23	D-23	J-24	F-24	M-24	A-24	M-24	J-24	J-24	A-24	S-24
Data Collection Analysis (On-	→											
TIP Project Evaluation					→							
Annual Reporting											→	

Intelligent Transportation Systems

Work Items 3.1 (Intelligent Transportation Systems)	23-Oct	23-Nov	23-Dec	1-Jan	23-Feb	23-Mar	23-Apr	23-May	23-Jun	23-Jul	23-Aug	23-Sep
Meeting Participation (On-Going)	→											
Technical Assistance/ reviewing ITS Docs (On- Going)	→											

Congestion Management

Work Items 3.1 (Congestion)	O-23	N-23	D-23	J-24	F-24	M-24	A-24	M-24	J-24	J-24	A-24	S-24
Data Collection	→											
Data Analysis Update	→											

Transportation Safety and Security

Work Items 3.1 (Transportation Safety and Security)	O-23	N-23	D-23	J-24	F-24	M-24	A-24	M-24	J-24	J-24	A-24	S-24
Data Collection / Analysis (On-	→											
Draft Safety Report			→									
Final Safety Report					→							

Task 3.2 Regional Transportation Plan

OBJECTIVE

The objective of this task is to update the Northern Middlesex Regional Transportation Plan as required by the BIL. Every four years, the NMMPO updates this plan by identifying the transportation system's strengths and weaknesses, forecasting changes in population, land use, employment, and households, and creating recommendations to address existing and future transportation needs. The resulting long-range planning document identifies federal funding for regional transportation projects and serves as a guide for capital investment. The Northern Middlesex Metropolitan Planning Organization endorsed the current update to the RTP in 2023. The updated Regional Transportation Plan will be one that:

- Complies with all applicable environmental and planning regulations;
- Furthers the statewide smart growth and sustainable development policies;
- Offers multimodal strategies to address the region's transportation needs;
- Fosters economic development in the Northern Middlesex region;
- Is financially constrained to available and projected funding sources;
- Reflects the NMMPO's goals and policies;
- Addresses the national goal areas outlined in BIL;
- Complies with Performance Measure requirements as outlined in BIL legislation;
- Consider the impacts that the region's transportation infrastructure and transportation services have on Climate Change;
- Complies with Title VI, Environmental Justice, and Executive Order 13166, Access to Services for Persons with Limited English Proficiency.

PROPOSED ACTIVITIES

1. Collaborate with municipalities across the region to support and advance efforts outlined in the updated Regional Transportation Plan
2. Monitor existing RTP recommendations
3. Amend or administratively adjust the FFY 2024-2050 endorsed RTP document as needed.
4. Review the air quality issues and strategies outlined in the plan and its relationship to attaining and maintaining NAAQ Standards.
5. Distribute amendments and adjustments to the plan electronically
6. Staff will work with MassDOT, FHWA, the Office of Transportation Planning and FTA to refine the transportation project funding level projections as necessary.

PREVIOUS WORK

- 2024-2050 Regional Transportation Plan
- 2020-2040 Regional Transportation Plan
- RTP Amendments and updates

DELIVERABLES

- Adjustments and amendments as needed

SCHEDULE

Work Items 3.2 Regional Transportation Plan	O-23	N-23	D-23	J-24	F-24	M-24	A-24	M-24	J-24	J-24	A-24	S-24
Monitoring (On-Going)	=====											→
Amendments (as needed)	=====											→

Task 3.3 Sustainability, Livability and Climate Change

OBJECTIVE

The BIL guidelines prioritize sustainability and livability within the transportation planning process. One method for measuring sustainability is to assess transportation programs and projects against existing best practices. FHWA developed a web-based tool called [the Infrastructure Voluntary Evaluation Sustainability Tool \(INVEST\)](#), which covers the full lifecycle of transportation services, including system planning, project planning, design, construction, and operations and maintenance. This tool includes a System Planning for Regions (SPR) module for evaluating an agency's programs and a PD module for assessing projects, from early project planning to construction. Although many programs, project development, and implementation efforts are already considered sustainable, INVEST focuses on "above and beyond" efforts. No points are earned in INVEST for sustainability efforts typically required for federally funded programs and projects. In FY 2023, the NMMPO will use this tool to identify areas where it can enhance sustainability.

In addition to the sustainability of projects, the NMMPO will further address livability through climate change monitoring efforts. In December 2022, in compliance with the Global Warming Solutions Act, as amended by An Act Creating a Next-Generation Roadmap for Massachusetts Climate Policy, the Secretary of the Executive Office of Energy and Environmental Affairs (EEA) adopted statewide greenhouse gas (GHG) emissions limit and sector-specific sub limits for 2050. The legislation updates the greenhouse gas emissions limits related to the 2008 Global Warming Solutions Act. It authorizes the Secretary of Energy and Environmental Affairs to establish an emissions limit of no less than 50% for 2030 and no less than 75% for 2040. It also authorizes EEA to set emissions limits every five years with specific limits for at least six sectors of the Massachusetts economy - electric power; transportation; commercial and industrial heating and cooling; residential heating and cooling; industrial processes; and natural gas distribution and service. NMMPO staff will work to identify the impacts of transportation projects and programs in the Northern Middlesex region on climate change, and they will implement strategies that help reduce greenhouse gas (GHG) emissions from transportation sources. GHG analysis will be performed for proposed TIP projects using guidance provided by MassDOT. In addition, work under this task will include assessing the impacts of climate change on critical transportation infrastructure by identifying roadways, bridges, and other infrastructure vulnerable to flooding and other climate impacts, such as drought and extreme temperatures. NMMPO staff will work with the local communities and the State to develop climate action plans and work with MassDOT to carry out state initiatives.

PROPOSED ACTIVITIES

1. Monitor CMAQ performance measures for reporting to MassDOT and FHWA.
2. Review the NMMPO CMAQ Performance Plan and update as needed.
3. Review MEPA projects and comment on transportation and environmental impacts of proposed developments using the Resilient MA Action Team (RMAT) Climate Resilience Design Standards Tool.
4. Monitor sustainability of projects and programs using FHWA-developed INVEST Tool. Prepare a technical memo on the analysis results.

5. Develop strategies for reducing GHG emissions.
6. Perform GHG analysis on potential TIP projects to report on improvements to air quality and determine eligibility for CMAQ funding.
7. Continue to work with regional partners to improve access to alternative transportation options.
8. Maintain a GIS-based inventory of vulnerable infrastructure in the region.
9. Assist communities and the State in the development of local climate action plans.
10. Coordinate opportunities for collaboration and sharing of best practices related to GHG reduction and climate action plans.
11. Participate in State initiatives to reduce GHG emissions.
12. Coordinate and initiate activities integrating climate change and transportation planning in accordance with MassDOT and FHWA guidance.
13. Develop outreach and education materials to engage with municipal staff, volunteers, and citizens on GHG reduction and climate action plans.
14. Assist communities with the development and implementation of climate action plans

PREVIOUS WORK

- NMMPO CMAQ Performance Plan
- Participation on the City of Lowell’s Climate Action Plan Advisory Committee
- Completion of the region’s Hazard Mitigation Plan and assistance to communities with the MVP Planning process
- Massachusetts’ Clean Energy and Climate Plan for 2020
- Assistance with preparation of MVP Plans and community master plans
- Regional Strategic Plan
- GHG analysis for RTP/TIP projects
- MEPA Project reviews
- Assistance with Green Communities Annual Reporting and drafting of climate action plans
- Hosting quarterly Regional Clean Energy Workshops

DELIVERABLES

- Updated inventory of flood hazard areas and vulnerable transportation infrastructure assessment
- Assistance to communities with the MVP Planning Process and the development of Community Master Plans
- GHG analysis of transportation projects
- MEPA Project reviews
- Regional Clean Energy Workshops
- Green Communities Annual Reports

SCHEDULE

Work Items 3.3 Sustainability, Livability, and Climate Change	O-23	N-23	D-23	J-24	F-24	M-24	A-24	M-24	J-24	J-24	A-24	S-24
Monitoring (On-Going)	→											
Identification of CMAQ eligible TIP Projects												
GHG Analysis of TIP Projects	→											
Assess vulnerable transportation infrastructure/outline adaptation strategies	→											
Green Communities Annual	→											

Task 3.4 Local Technical Assistance

OBJECTIVE

To provide member municipalities in the Northern Middlesex region with technical assistance on a variety of transportation planning related activities upon request. This task will include studies that municipalities request and subject to guidance from State, Federal, and local stakeholders. This task will also focus on the coordination of land use, housing, economic development, and transportation as recommended in BIL legislation.

PROPOSED ACTIVITIES

1. Assist Northern Middlesex municipalities with transportation related activities throughout the year. Known projects at this point include:
 - a. Housing Planning coordination with infrastructure needs, including compliance with MGL Chapter 40A section 3A activities and Housing Production Plan assistance in Lowell and Chelmsford;
 - b. Lowell Open Streets;
 - c. Dracut Prioritization and Education of Transportation Projects;
 - d. Dunstable Electric Vehicle Siting Study;
2. Data collection and operational analysis.
3. Assist with the MassDOT project development process.
4. Attendance at local meetings related to transportation issues.
5. Provide review and comment to local, state and federal interests on transportation related documents.
6. Assist with implementation of recommendations derived from UPWP studies.
7. Analyze small-scale transportation problems and solutions.
8. Enhance the MPO's assistance in helping communities advance projects from studies to the MassDOT Project Development Process, including project initiation submissions through the IMPACT portal and guidance on agency coordination.
9. Alert and assist Northern Middlesex Communities with accessing private, state, and federal grant opportunities related to transportation, transit-oriented development, infrastructure, or complete neighborhoods and assist them with applications, when possible
10. Assist communities with compliance with compliance with Section 3A of M.G.L. c. 40A (Multi-Family Zoning Requirement for MBTA Communities).

PREVIOUS WORK

- Transportation planning assistance to communities in the Northern Middlesex region
- Coordinating communities with Complete Neighborhoods grant, EDA ARPA and Economic Adjustment Assistance Public Works grants, and Multi-family zoning requirement for MBTA communities

DELIVERABLES

- Transportation related data and analysis of transportation issues and problems
- Assistance and guidance relative to the project development process

SCHEDULE

Work Items 3.4 Local Technical Assistance	O-23	N-23	D-23	J-24	F-24	M-24	A-24	M-24	J-24	J-24	A-24	S-24
Monitoring (On-Going)												

Task 3.5 Freight Planning

OBJECTIVE

Freight transportation continues to be an important component of the Northern Middlesex regional economy. The NMCOG region is traversed by I-495, a major truck route in the northeast. Truck percentages on the highway average 12% of all vehicles per day. Additionally, there are several railroad lines across the region that move commodities throughout the northeast. The purpose of the Northern Middlesex regional freight-planning program is to enhance the regional freight system, both within the region and to outside connections with other freight movement networks. The Northern Middlesex region supports MassDOT's Statewide Freight Plan and its goals, which include: (1) facilitate the movement of goods to consumers efficiently and cost effectively; and (2) support economic prosperity for Massachusetts businesses and a strong quality of life for Massachusetts residents.

Freight system evaluation is used in the development of the NMMPO Regional Transportation Plan and in the identification of projects in the Transportation Improvement Program. The NMMPO will continue to work with the State to develop strategies for improving infrastructure and promoting the efficient movement of goods along the transportation network.

The BIL continues the use of performance measures in evaluating the transportation system. These include truck travel time reliability and percent-uncongested roadway mileage as established by FHWA. The NMMPO will continue to work with FHWA and MassDOT on monitoring of these performance measures, updating of NMMPO-adopted targets, and programming any resulting infrastructure improvement projects into the NMMPO TIP. The NMMPO will also continue to, through the public participation process, provide opportunities for input from freight stakeholders throughout the region.

PROPOSED ACTIVITIES

1. Assist the MPO in updating freight movement performance measures as part of the planning process.
2. Use freight performance measure data in TIP project prioritization efforts through the transportation evaluation criteria.
3. Refine the region's designated Critical Rural and Urban Freight Corridors as needed.
4. Report on freight planning data through the Annual Traffic Volume Report and Transportation Improvement Program.
5. Present freight data to the NMCOG Council and NMMPO as part of Annual Traffic Volume Report.
6. Inventory on existing truck parking locations and potential new truck parking locations for both commercial truck stops and public rest areas along major highways.
7. Identify and monitor region wide truck routes, regional freight corridors and alternative routes to understand truck movement and network in our region. This web map should also include layers on underpasses, limited vertical clearances, and weight restrictions on bridges, bottlenecks, and major industrial areas within our region.
8. Inventory of major and small businesses with truck/freight activities and their needs.
9. Identify, develop and populate the freight stakeholders contact information list within our region. Conduct outreach and engagement meetings with freight stakeholders to understand freight specific transportation issues as part of developing a Regional Freight Plan.

PREVIOUS WORK

- 2020-2040 Regional Transportation Plan
- 2016-2040 Regional Transportation Plan
- Congestion Management Process
- Annual Traffic Volume Reports
- Staff participation in development of State Freight Plan

DELIVERABLES

- List of specific performance measures and targets for freight planning (TIP)
- Annual Traffic Volume Report (NMCOG website)
- Vehicle classification data (Traffic Volume Report)

SCHEDULE

Work Items 3.5 Freight Planning	O-23	N-23	D-23	J-24	F-24	M-24	A-24	M-24	J-24	J-24	A-24	S-24
Development of Regional	→											
Monitoring of Freight network	→											
Regional Traffic Volume Report	→											

Task 3.6 Bicycle and Pedestrian Planning

OBJECTIVE

NMMPO staff will continue to promote region-wide active transportation in the form of bicycle and pedestrian planning. Active transportation reduces greenhouse gas emissions and recurring congestion due to changes in mode share and is critical to public health. The COVID-19 pandemic increased demand throughout the region for outdoor activities, including bicycling and walking. Staff will continue collaborating with MassDOT and stakeholders on implementing recommendations for the Statewide Pedestrian Plan and the Statewide Bicycle Plan. It is intended that projects outlined in these plans will be funded and advanced through the TIP. Activities under this task will support the local communities by promoting bicycle and pedestrian projects through the MassDOT project development process.

PROPOSED ACTIVITIES

1. Inventory and update regional on-road and off-road bicycling and walking trails and facilities.
2. Assist with maintenance of the regional trails map.
3. Collaborate with local communities and MassDOT relative to future funding opportunities available for plan implementation.
4. Work with local communities and MassDOT to advance bicycle and pedestrian projects through the TIP process on the Dracut Safe Routes to School project, and the Yankee Doodle Bike Path in Billerica.
5. Identify and assess regional bicycle and pedestrian safety needs by monitoring crashes involving non-motorized users.
6. Assist municipalities in prioritizing projects that reduce greenhouse gas emissions
7. Analyze bike/pedestrian accessibility at transit locations/stations, including Gallagher Terminal, North Billerica MBTA Station, and the Tyngsborough Park and Ride Lot.
8. Identify critical gaps in the sidewalk and bicycle network throughout the region to assist in development of future TIP projects.
9. Continue to develop a quality of service feasibility for bicycling and walking throughout the region
10. Research efforts to conduct bicycle and pedestrian counting in the region and participate in the Transportation Managers Group Data Users Group.
11. Identify gaps in the regional bicycle network by mapping existing or planned regional bike facilities and evaluating areas where bicycle facilities may be lacking. Once identified, staff will work with communities to bridge those gaps, through the TIP process, Complete Streets Program, or other funding opportunities.

PREVIOUS WORK

- 2020-2040 Regional Transportation Plan
- Congestion Management Process
- Bruce Freeman Rail Trail and Nashua River Trail planning and design work activities

DELIVERABLES

- Non-Motorized Safety Performance Measures and Target Updates

- Regional Trails Map
- Bicycle and Pedestrian Volume Counts for Bruce Freeman Rail Trail and Nashua River Rail Trail
- Inventory of existing bicycle and pedestrian facilities
- Recommendations for new bicycle and pedestrian facilities
- Interactive region wide map of bicycle and pedestrian facilities

SCHEDULE

Work Items Bike and Pedestrian Planning 3.6	O-23	N-23	D-23	J-24	F-24	M-24	A-24	M-24	J-24	J-24	A-24	S-24
Region wide Bike and Pedestrian Planning (On-Going)	—————→											

Task 3.7 TIP Project Review Study

OBJECTIVE

Evaluation of implemented transportation improvement projects is a key measure of effectiveness in the metropolitan planning process. Year 3 of this study continues its aim to compile and review data relative to completed TIP projects and compare the operational and safety conditions before and after project completion to assess the effectiveness of these projects. By examining how well different strategies work and by quantifying the benefits of various project types, the NMMPO staff and regional partners will have a better understanding of how to most effectively and efficiently allocate federal funds in the future.

PROPOSED ACTIVITIES

1. Identify recently completed TIP-funded projects in the region.
2. Compile historical data prior to the construction stage of the study location.
3. Collect and analyze current data at study locations.
4. Compare historical and current data and conditions to determine the effectiveness of the project.
5. Present findings to the MPO and make a summary report available to regional partners.

PREVIOUS WORK

- TIP Project Review Study Report (Year 1-2)
- Northern Middlesex Transportation Improvement Programs
- Road Safety Audits
- Traffic studies and corridor studies throughout the region
- Crash data analysis
- Congestion analysis

DELIVERABLES

- Summary Report
- Presentation to the NMMPO

SCHEDULE

Work Items TIP Project Review Study 3.7	O-23	N-23	D-23	J-24	F-24	M-24	A-24	M-24	J-24	J-24	A-24	S-24
Data Collection/ Analysis									→			
Develop Final Report												→

Task 3.8 Stormwater Management

OBJECTIVE

The purpose of this task is to provide technical assistance to local communities in the area of stormwater management and stormwater infrastructure. Infrastructure across municipal boundaries will be examined. The 2016 MS4 Permit for Massachusetts required operators of municipal separate storm sewer systems (“MS4s”) to develop and implement six *minimum* stormwater management measures:

- Public education and outreach;
- Public participation and involvement;
- Illicit discharge detection and elimination;
- Construction site runoff control;
- Post-construction runoff control; and
- Stormwater pollution prevention/municipal good housekeeping.

Successful implementation of these six measures requires a detailed knowledge of the location, function, and condition of urbanized areas’ municipal storm drainage infrastructure – storm drains, manholes, catch basins, and outfall pipes – as well as of the receiving waters. Except in the case of more recent subdivisions, such infrastructure information is often incomplete, or is not available in a consistent, retrievable, and user-friendly format.

It is anticipated that the urbanized area boundaries will be changing because of the 2020 U.S. Census. Furthermore, intercensal updates of urban areas have not been possible to date due to the lack of population counts at the census block-level between decennial censuses. As a result, although the Census Bureau presented estimated populations for urban areas based on the ACS, these data were produced using boundaries defined based on data from the previous decennial census and did not keep pace with changes to the extent of urbanization. Going forward, the Census Bureau is proposing to release intercensal urban area revisions based on housing unit density using housing unit information in the Census Bureau's Master Address File, as outlined in the February 19, 2021 Federal Register. The Census Bureau also proposes that an area will qualify as urban if it contains at least 4,000 housing units or has a population of at least 10,000. The proposed increase in the minimum population responds to calls for the Census Bureau to increase its minimum threshold for defining urban areas from the 2,500-person minimum established in 1910. In addition, when establishing urban area boundaries, the criteria for addressing Jumps (and the shorter distance hops), which recognize that urban development is not always a continuous and contiguous, is also changing, as described in the Federal Register. It is unknown if these proposed changes will impact the current MS4 areas for Massachusetts municipalities, altering the extent of their stormwater programs.

Compliance with permit requirements on an individual community basis is an expensive proposition that challenges already strained local DPW and highway department budgets and staff. It also results in mapping, products and programs that are duplicative and not compatible on an intermunicipal, watershed, or Regional Planning District level, as the products will have been developed by different parties using wide-ranging methodologies and protocols. It is imperative that communities work collaboratively to address the current permit requirements set for by the EPA on July 1, 2018. This collaborative foundation will allow communities to proactively address stormwater management on a regional basis upon the release of the updated MS4 Permit and Statewide Stormwater Handbook.

PROPOSED ACTIVITIES

1. *Training Workshops and Development of Stormwater Management Regulations/Outreach Materials:* Staff will design and conduct local and regional workshops to inform and train municipal personnel (public works and highway departments, conservation commissions, boards of health) on Phase II Small MS4 General Permit requirements. Topics include stormwater infrastructure testing, maintenance, illicit discharge detection and elimination, municipal operations best management practices, stormwater management program (SWMP) financing options, and education and outreach.
2. Draft and customize relevant local stormwater management documents and associated public outreach materials, which are critical to reducing the volume and pollutant loads of uncontrolled stormwater that enters local drainage systems, waterways, and groundwater.
3. Assist communities with procurement of stormwater program related equipment, materials and services, such as catch basin cleaning and disposal of materials, street sweeping, and outfall testing and laboratory services.
4. Assist communities in revising and developing local stormwater bylaws and ordinances.
5. *Stormwater Infrastructure Inventorying and Mapping:* Building on previous infrastructure inventorying and mapping work, NMCOG will collect and review stormwater drainage data and will work with municipal DPW and highway department personnel and MassDOT to integrate local stormwater facilities into a central mapping application for communities. NMCOG will provide application support for the local communities. The emphasis will be on mapping drain pipe locations as well as the catchment areas of outfall pipes.
6. *Stormwater Sampling Program Training & Design:* NMCOG staff will conduct training sessions for municipal personnel and assist in the design of sampling programs that are tailored to the needs of individual communities, or, as appropriate, the region overall. These training sessions will be designed to ensure compliance with the updated MS4 Permit to be released in 2023.
7. Evaluate potential impact of urbanized area boundary changes on municipal stormwater programs and requirements.
8. Respond to community requests for assistance, and provide local, or regional, solutions where possible.

PREVIOUS WORK

- Stormwater infrastructure facilities inventory and mapping
- Northern Middlesex Regional Transportation Plans
- Northern Middlesex Stormwater Collaborative meetings and training sessions around stormwater management issues
- Previous customizable stormwater education materials for municipalities
- 2014 and 2015 Community Innovation Challenge grant activities
- 2020 DEP MS4 grant to create customizable stormwater bylaw and regulations and to create a web-based tool for post-construction monitoring
- Participation in the Statewide Stormwater Collaborative Quarterly Meetings with EPA and DEP

DELIVERABLES

- Template for municipalities to use for stormwater management reporting
- Trainings for municipal staff and officials around the updated MS4 Permit
- Public outreach and education materials
- Customizable stormwater bylaw and regulations
- Regional procurement of stormwater management services and materials

- Equipment and best practices sharing
- Annual Draft report on stormwater management activities
- Annual Final report on stormwater management activities

SCHEDULE

Work Items Stormwater Management 3.8	O-23	N-23	D-23	J-24	F-24	M-24	A-24	M-24	J-24	J-24	A-24	S-24
Training/ Workshops	→											
Inventory/Mapping												
Develop Draft Report												
Public Outreach	→											
Develop Final Report												

Task 3.9 Enhancing Travel and Tourism

OBJECTIVE

BIL guidelines included the addition of a national emphasis area for enhancing travel and tourism as part of the metropolitan planning process and are continued with BIL. The BIL encourages MPO officials to consult and coordinate with regional officials to identify issues related to enhancement of tourism. The objective of this task is to provide technical assistance to the NMMPO's regional partners to help remove barriers to tourism by improving transportation infrastructure throughout the region. Through this task, the MPO will identify transportation network issues and work to mitigate these issues through the TIP process. The MPO will also support coordination of local tourism destinations, businesses that serve visitors and tourists, tourism-aligned agencies, and municipalities.

The COVID-19 pandemic affected tourism in that visitors in and around the region decreased significantly. Outdoor socially distanced attractions have become more important to the region's tourism industry. The region has been awarded federal and state assistance to promote local efforts to improve the economy. Initiatives like the Shared Streets and Spaces program help promote local businesses by reimagining outdoor space. The MPO will continue to support such programs and promote local tourism. Staff continue to promote local attractions in cooperation with regional tourist organizations including the Lowell National Historic Park, the Greater Merrimack Valley Convention and Visitors Bureau, the Greater Lowell Chamber of Commerce, and other stakeholders.

PROPOSED ACTIVITIES

1. Continue development of an inventory of local and regional tourist destinations and contact information for each destination. NMCOG Staff will seek ways to promote this information through partner agencies.
2. Facilitate quarterly interdisciplinary meetings with local tourism destinations, businesses that serve visitors and tourists, tourism-aligned agencies, and municipalities to enhance coordination and identify potential shared programs and projects.
3. Consult with and assist local and regional officials responsible for travel and tourism to help identify transportation barriers to visitors of the region. Research development of a regional travel and tourism committee to meet and discuss issues and priorities in the region. Such a committee could include the Lowell National Historic Park, the Greater Lowell Convention and Visitors Bureau, and other regional stakeholders.
4. Expand outreach efforts to other regional tourist and travel related organizations including Friends of the Bruce Freeman Rail Trail and Middlesex Canal Commission.
5. Maintain an interactive map on the NMCOG website showing tourist destinations/landmarks, marking congested roadways, structurally deficient bridges, high crash locations, and other relevant information that may hinder access to tourist destinations, such as the Lowell National Historic Park, local museums and scenic and recreation areas.
6. Promote local tourism through NMCOG social media (Twitter and Instagram).

PREVIOUS WORK

- Northern Middlesex Tourism, Visitation, and Marketing: Strategies for Coordination (2023)
- Social media posts promoting local tourist attractions and providing access information
- Inventory of local and regional tourist destinations on NMCOG website
- Regional Transportation Plan 2020

DELIVERABLES

- Updated Interactive map showing travel/tourism destinations posted on the NMCOG website
- Updated regional inventory of tourist destinations/contact information
- Notes from quarterly interdisciplinary meetings
- Assistance with grants or similar efforts for coalitions identified in quarterly interdisciplinary meetings

SCHEDULE

Work Items 3.9 Enhancing Travel and Tourism	O-23	N-23	D-23	J-24	F-24	M-24	A-24	M-24	J-24	J-24	A-24	S-24
Inventory Review/ Updates	→											
NMCOG Website Interactive Map Updates	→											
Quarterly Interdisciplinary Meetings	→											

Task 3.10 Electric Vehicle Study of the Northern Middlesex Region

OBJECTIVE

In response to the national climate crisis, On November 2021, President Biden signed the Bipartisan Infrastructure Law (BIL) into law. The Presidential Administration seeks to accelerate the adoption of Electric Vehicles by creating funding to support Electric vehicle infrastructure across the United States. As the United States continues to convert to alternative fuel choices, Electric vehicles continue to rise in popularity. Americans are switching from gas-powered vehicles to electricity, a more sustainable fuel choice. With an increase in electric vehicles in the Northern Middlesex Region, the transportation team will conduct this project to understand the existing Electric Vehicle landscape. Using spatial analysis to understand Electric vehicle ownership, infrastructure, and perspectives, a regional report will be used to advance regional understanding of the subject and the use of alternative fuels as a tool for climate mitigation. This research is an initial step to understanding the context of Electric Vehicles in the Northern Middlesex geographic area. This work will be a starting point that will lead to more robust research into the subject matter and related projects to support competitiveness, productivity, and efficiency for our region.

PROPOSED ACTIVITIES

1. NMCOG staff will conduct background research on Electric Vehicles.
2. EV infrastructure and EV ownership will be mapped in the NMCOG region.
3. This project be conducted in a two-phased approach.
 - a. The research conducted in phase 1 will be used to identify concentrations of EV users and will be documented using MA RMV data.
 - b. In phase 2, NMCOG staff will prioritize communication, outreach, and engagement.
4. Through discussions with municipal leaders, NMCOG staff will create an inventory of EV infrastructure across the NMCOG region, map EV clusters using available data sets, and interview all Northern Middlesex Communities to understand the level of interests, constraints, and challenges.
5. NMCOG will contact municipal staff from each of the 9 municipalities; interested staff will be encouraged to engage in this effort.
6. NMCOG will conduct Interviews with Municipal staff from all NMCOG communities, when possible, for virtual or in-person meetings
7. NMCOG will collaborate with MassDOT and the Massachusetts Registry of Motor Vehicles to learn what data sources are available and use anonymized data to inform this study
8. NMCOG Staff will use available data layers from the MassDOT database
9. Synthesizing data and formulating a final deliverable in the form of a report and presentation
10. This project will include a discussion of equity considerations of Electric Vehicle use and installation in the Northern Middlesex Region.

PREVIOUS WORK

Not Applicable

DELIVERABLES

- Presentation of Scope of Work before the NMMPO
- Final report presenting findings of this research effort (2023)
- Presentation of Final Report and any public comments before the NMMPO for endorsement

SCHEDULE

Work Items 3.10 Regional Electric Vehicle Study	O-23	N-23	D-23	J-24	F-24	M-24	A-24	M-24	J-24	J-24	A-24	S-24
Research and Project Management (On-Going)	→											
Draft Plan	→											
Final Plan											→	

Task 3.11 Aiken Ave. and Bridge St Intersection Study Dracut

OBJECTIVE

This study will include a traffic and safety analysis of the Bridge Street (Route 38) intersection with Aiken Avenue in Dracut. Bridge Street is a main commercial corridor connecting Dracut to downtown Lowell via the Bridge Street bridge crossing over the Merrimack River. The traffic intersection is stop-controlled and is located just south of the signalized intersection of Bridge Street and Pleasant Street (Route 113). Aiken Ave is a mainly residential roadway connecting Dracut with Lowell near the Aiken Street Bridge over the Merrimack River. The Town has expressed interest in NMCOG studying the intersection as the area becomes congested during peak hours of the day, and vehicles accessing Bridge Street from Aiken Avenue regularly experience delays, which affects the safety of people traversing the area. The study will take a complete streets review of the site, reviewing bicycle and pedestrian facilities and recommending potential strategies to improve safety at the intersection.

PROPOSED ACTIVITIES

1. Develop scope and present to the Town and NMMPO.
2. Prepare and conduct a study kickoff meeting with the Town.
3. Review Existing conditions, including intersection geometry, bicycle, and pedestrian facilities, available transit infrastructure, traffic volumes, and crash data.
4. Collect turning movement data during peak periods of a typical day.
5. Analyze existing traffic conditions to assess the capacity and reliability of the intersection.
6. Perform a traffic signal warrant analysis if needed.
7. Develop recommendations to improve the safety and performance of the intersection.
8. Develop a report and present it to the NMMPO and Town.

PREVIOUS WORK

Not Applicable

DELIVERABLES

- Scope of work for the Study
- Final report with Recommendations presented to the Town and NMMPO

SCHEDULE

Work Items 3.11 Dracut Aiken Ave and Bridge St. Study	O-23	N-23	D-23	J-24	F-24	M-24	A-24	M-24	J-24	J-24	A-24	S-24
Research (On-going)	→											
Draft Plan	→											
Final Plan	→											

Task 3.12 Safe Streets for All Supplemental Funds

OBJECTIVES

As described in the Funding the UPWP section of this plan the Safe Street for All Grant funds regional, local, and Tribal initiatives through grants to prevent roadway deaths and serious injuries. The goal of an Action Plan is to develop a holistic, well-defined strategy to prevent roadway fatalities and serious injuries in a locality, Tribe, or region. Planning and Demonstration Grants also fund supplemental planning and/or demonstration activities that inform the development of a new or existing Action Plan. In Task 3 of this UPWP plan an additional \$25,167 of UPWP, funds have been allocated to support the planning and demonstration activities to develop a regional Safety Action Plan. As part of this effort, a comprehensive Safety Action plan will be developed including demonstration activities based on the federal guidance for this grant. To carry out this plan a task force or implementation group will be established to support the development, implementation, and monitoring, in addition to collaboration with key stakeholders. The plan will include the development of a list of projects and strategies informed by data to recommend practices with consideration of equity and inclusive representation, maintaining transparency and incorporating resident feedback.

PROPOSED ACTIVITIES

1. Develop local Safe Streets and Roads goals for implementation as part of a broader Regional Safety Action Plan;
2. Develop support from Communities and regional stakeholders;
3. Support Communities in adoption of Vision Zero commitment;
4. Establish regional goals and a timeline for the development of a Safety Action Plan;
5. Research national Safety Action Plan to build knowledge of the subject;
6. Collaborate with Regional Planning Agencies across the state to learn and share approaches for execution of this grant;
7. Collaborate with MVPC staff to collaborate on grant materials, communications, and events related to this grant award.
8. Monitor and manage consultant activities related to this project;
9. Assess current policies and process changes to improve the process to prioritize transportation safety;
10. Identify common risks to users of our road networks;
11. Conduct Stakeholder engagement and collaboration across nine NMCOG communities;
12. Support the development of bikeway and pedestrian networks throughout the region;
13. Identify potential activities that protects vulnerable road users in high-traffic areas where pedestrians, bicyclists, motorcyclists, etc. interact;
14. Reporting on the progress from Action Plan implementation for transparency;
15. Review MassDOT Impact Portal for crash data;

PREVIOUS WORK

- Regional Transportation Plan 2020
- Transportation Improvement Plan 2023
- Title VI 2023
- Safety Reports 2022

DELIVERABLES

- Safety Action Plan for the Northern Middlesex Region

SCHEDULE

Work Items 3.12 Safe Streets For All Supplemental Funds	O-23	N-23	D-23	J-24	F-24	M-24	A-24	M-24	J-24	J-24	A-24	S-24
Research Activities												→
Coordination with MVPC on Plan												→
Coordination with consultant on plan												→
Development of Safety Action												→

Task 4. On Going Transportation Planning

OVERVIEW

Task 4 demonstrates the ongoing Transportation Planning activities at NMCOG. This task includes the technical assistance NMCOG provides to our communities on a regular basis. The activities included in this past include assistance in the design, coordination, and implementation of transportation and economic development projects and regional transit planning.

FUNDING

UPWP Task 4 Budget							
		Funding Source (combined PL and 5303)					
Work Items	Task Number	Federal	Federal Hrs.	State	State Hrs.	Total Amount	Total Hrs.
Regional Transit Planning (LRTA activities and Coordinated Plan (3yr)	4.1	\$35,908	378	\$8,977	94	\$44,885	472
Multidisciplinary Planning activities (Land use, Housing, Economic Development, and Transportation)	4.2	\$60,000	632	\$15,000	158	\$75,000	789
Subtotal		\$95,908	1,010	\$23,977	252	\$119,885	1,262

Task 4.1 Regional Transit Planning

OBJECTIVE

To provide technical planning services and assistance to the Lowell Regional Transit Authority (LRTA) 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 LRTA route maps and stop locations, assistance with route planning/timing. NNMCOG will continue to support the exploration of potential new service and financial arrangements with local human service agencies, and continued implementation of the requirements of the Americans with Disabilities Act.

PROPOSED ACTIVITIES

1. Provide continued technical assistance to the LRTA in capital planning activities, data collection for grant applications, and meeting federal and state reporting requirements.
2. Assist in preparing proposals, statistical analysis, small studies, capital planning, and program implementation.
3. Provide analysis of service and fare structures. Assist in layout, costing, and scheduling of modifications or “special service” proposals as needed by LRTA.
4. Assist LRTA in plan preparation, data collection, reporting, and other activities associated with FTA annual DBE reporting requirements.
5. Assist LRTA as a liaison with human service agencies and special interest groups such as the Lowell Commission for the Disabled. Assist with maintenance of effort, update, and implementation associated with its Compliance Plan and other requirements of the Americans with Disabilities Act.
6. Review and update the NMMPO Coordinated Human Service Transportation Plan as needed.
7. Continue to work with regional communities to identify gaps and opportunities in transit service provision.
8. Participate in Merrimack Valley Regional Coordinating Council (MVRCC) and other Coordinating Council meetings and workshops.

PREVIOUS WORK

- Preparation of statistical reports
- Evaluation of proposed fare restructuring
- Review of ADA Compliance issues
- Previous grant applications
- Title VI 2023
- Coordinated Public Transit – Human Services Transportation Plan (July 2023)

DELIVERABLES

- Coordinated Plan – 3 year cycle

SCHEDULE

Work Items 4.1 Regional Transit Planning	O-23	N-23	D-23	J-24	F-24	M-24	A-24	M-24	J-24	J-24	A-24	S-24
Transit Planning Activities (On-going)	→											

Task 4.2 Multidisciplinary Planning Activities Related to Transportation Planning

OBJECTIVE

To assist local communities and the state in addressing transportation needs specific to land use, housing, and economic development projects; to advance economic development and housing plans and projects that will better utilize existing transportation assets or enhance the feasibility of alternative transportation; and to tie together transportation, land use, housing, and economic development activities.

As outlined by FHWA during previous certification reviews, USDOT assigns high priority to transportation improvement projects that promote economic development and foster job growth, and the economic competitiveness of the Greater Lowell region depends largely on the quality of the transportation system. The major highway networks of I-495, I-93, and Route 3, in addition to a local street network, serve the Northern Middlesex region. This efficient highway network benefits the regional economy by supporting businesses accessing labor, supply, and customer markets. Investing in transportation improvements to attract new private investment fuels the growth of the Greater Lowell economy. In addition, the Commonwealth has emphasized the link between housing development and transportation, as exemplified by the new Section 3A of M.G.L. c. 40A (Multi-Family Zoning Requirement for MBTA Communities).

Therefore, NMCOG works diligently to holistically address transportation, housing, and economic development. In addition to implementing its transportation program on behalf of the NMMPO, NMCOG has maintained its partnership with the Economic Development Administration (EDA) via the Greater Lowell Comprehensive Economic Development Strategy (CEDS) for 2020-2024, its annual updates and the Greater Lowell Economic Recovery and Resiliency Plan (ERRP), funded partially through the EDA. The CEDS document provides an “economic blueprint” for the Greater Lowell region and identifies barriers to economic growth, such as transportation infrastructure.

Within the Greater Lowell CEDS Update for 2020-2024, more than one hundred twenty-five (125) priority projects were identified, including nine (9) major development projects described below. Work completed under this task will focus on advancing the transportation infrastructure improvements needed to support these projects. The CEDS planning process will incorporate the transportation elements developed within the Regional Transportation Plan, TIP, and UPWP documents. NMCOG will also continue to utilize this task to leverage partnerships to advance transportation and economic development.

PROPOSED ACTIVITIES

1. Provide assistance to the City of Lowell and Towns of Billerica, Chelmsford, Dracut, Dunstable, Lowell, Pepperell, Tewksbury, Tyngsborough and Westford in advancing major development projects through transportation infrastructure investments as described above.
2. Monitor development proposals in the region, update the MassBuilds online map. Identify transportation issues and infrastructure needs related to each project.
3. Work with the LRTA, MassDOT, EOHEd, the local communities, EDA and economic development organizations and stakeholders to address transportation issues that present an obstacle to continued economic growth and job creation.

4. Tie together the CEDS Priority Projects and local economic development related transportation initiatives with the region's transportation planning program.
5. Improve access to jobs by working with the region's business organizations and workforce development agencies to address the transportation needs of the area's workforce.
6. Assist Northern Middlesex communities and local and state housing agencies to holistically plan and create housing, including affordable housing with access to jobs, transit-oriented development, and complete neighborhoods.
7. Assist communities toward compliance with Section 3A of M.G.L. c. 40A (Multi-Family Zoning Requirement for MBTA Communities).
8. Address the negative impacts of COVID-19 through the implementation of transportation and economic development programs.
9. Advance and implement interdisciplinary studies and plans such as the Greater Lowell Comprehensive Economic Development Strategy (CEDS) Update for 2020-2024 and Economic Recovery and Resiliency Plan (ERRP) Phase II
10. Prepare for the upcoming Greater Lowell Comprehensive Economic Development Strategy (CEDS) Update for 2025-2029, work anticipated to be completed in 2024-2025.

PREVIOUS WORK

- Chelmsford Route 40/Groton Road Corridor Study (2023)
- Chelmsford Analyze Land Use/Zoning Conflicts (2023)
- Holistic Labor Study (Workforce, Transportation, Human Services, and Housing) Scope of Work (2023)
- Greater Lowell Comprehensive Economic Development Strategy (CEDS) Annual Performance Report (2023)
- Economic Recover and Resiliency Plan (ERRP) Phase II Report (2022)
- Greater Lowell Comprehensive Economic Development Strategy (CEDS) Annual Performance Report (2022)
- Economic Recovery and Resiliency Plan (ERRP) Phase I Report (2022)
- Local Rapid Recovery Plans (LRRPs) for Dracut, Pepperell, and Tyngsborough (2021)
- Greater Lowell Comprehensive Economic Development Strategy (CEDS) Update for 2020-2024 (2020)
- Pepperell Master Plan (2020)
- Dracut Master Plan (2019)
- Dunstable Master Plan (2018)
- Billerica Economic Development Strategy (2017)
- Upper Merrimack Street/Pawtucket Street Land Use/Zoning Analysis (2017)
- Dracut Economic Development Strategy (2016)
- Transportation Section of the Dracut and Dunstable Master Plans
- Siting of Renewable Energy Facilities in Montachusett and Northern Middlesex Regions (2014)
- Route 38 Transportation Study (2014)
- Vinal Square Strategic Plan (2014) and Concept Plan (2021)

DELIVERABLES

- 2024 Greater Lowell Comprehensive Economic Development Strategy (CEDS) Annual Performance Report
- Technical updates with the monthly billings on the progress on each of these components
- Technical assistance to the local communities and MassDOT on transportation infrastructure needs related to major development projects, as outlined above
- Plans and reports such as transportation and economic development sections of Master Plans
- Work with economic development partners and stakeholders in identifying and addressing transportation needs related to continued economic growth and workforce needs
- Coordination of transportation, housing, and economic development through internal NMCOG meetings and the attendance of local and regional affordable housing and economic development groups
- Coordination of the infrastructure needs identified through the transportation planning process, community development programs and the CEDS planning process

SCHEDULE

Progress on these components will be summarized in technical updates included with the monthly billings and annual report. Technical assistance to local communities will be provided on an ongoing basis.

Work Items 4.2 Multidisciplinary Planning Activities	O-23	N-23	D-23	J-24	F-24	M-24	A-24	M-24	J-24	J-24	A-24	S-24
Technical Assistance (On-going)	—————▶											

Appendices

Appendix: A Relationship between the UPWP Tasks and National Planning Factors

Relationship Between UPWP Tasks and National Planning Factors for Federal Fiscal Year 2024

Unified Planning Work Program Work Items		<i>1. Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.</i>	<i>2. Increase the safety of the transportation system for motorized and non-motorized users.</i>	<i>3. Increase the security of the transportation system for motorized and non-motorized users.</i>	<i>4. Increase accessibility and mobility of people and freight.</i>	<i>5. Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and state and local planned growth and economic development patterns.</i>	<i>6. Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.</i>	<i>7. Promote efficient system management and operation.</i>	<i>8. Emphasize preservation of the existing transportation system.</i>	<i>9. Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation.</i>	<i>10. Enhance travel and tourism.</i>
Task 1	No.										
Management of the 3C Process	1.1	x	x	x	x	x	x	x	x	x	x
Unified Work Program Management	1.2	x	x	x	x	x	x	x	x	x	x
Public Participation of NMMPO activities	1.3	x				x		x		x	
Transportation Improvement Program activities	1.4	x	x		x	x	x	x	x	x	x
Title VI & Environmental Justice annual plan update	1.5		x		x	x					
Task 2											
Traffic Counting	2.1						x		x		x
Geographic Information System	2.2	x	x	x	x	x	x	x	x	x	x
Data Collection and Analysis	2.3	x	x	x	x	x	x	x	x		x
Transit System Performance Surveillance	2.4		x			x	x	x	x		
Performance Measures	2.5	x	x	x	x	x	x	x	x	x	
Task 3											
Regional Systems Management	3.1	x	x	x	x	x	x	x	x	x	
Regional Transportation Plan	3.2	x	x	x	x	x	x	x	x	x	x
Sustainability, Livability and Climate Change	3.3					x		x		x	
Local Technical Assistance	3.4	x	x	x	x	x	x	x	x		x
Freight Planning	3.5	x			x	x	x	x			
Bicycle and Pedestrian Planning	3.6		x			x	x	x			
TIP Project Review Study	3.7	x	x		x	x					
Stormwater Management	3.8	x	x			x	x	x	x	x	
Enhancing Travel and Tourism	3.9	x				x		x			x
Electric Vehicle Case Study of the NM Region	3.10	x		x		x			x	x	
Aiken Ave./Bridge St. Intersection Study Dracut	3.11	x	x		x	x	x	x	x		
Safe Streets For All Supplemental Funds	3.12	x	x	x	x	x	x	x	x		x
Task 4											
Regional Transit Planning (LRTA activities and Coordinated Plan (3yr)	4.1	x	x	x	x	x	x	x		x	x
Multidisciplinary Planning activities (Landuse, Housing, Economic Development, and Transportation)	4.2	x			x		x				

Appendix B: UPWP Budget FFY 2024

**Northern Middlesex Metropolitan Planning Organization Unified Planning Work Program Budget
Federal Fiscal Year 2024**

UNIFIED PLANNING WORK PROGRAM WORK ITEMS	NMMPO Task #	MASSDOT (PL)			FTA 5303			Combined PL/5303 Funding			2.5% Complete Streets (combined funding)
		FEDERAL	STATE	TOTAL	FEDERAL	STATE	TOTAL	FEDERAL	STATE	TOTAL	FEDERAL
Task 1											
Management of the 3C Process (MARPA, TMG, other activities)	1.1	\$80,706	\$20,177	\$100,883	\$22,138	\$5,535	\$27,673	\$102,844	\$25,712	\$128,556	\$0
Unified Planning Work Program Management	1.2	\$25,122	\$6,280	\$31,402	\$6,720	\$1,680	\$8,400	\$31,842	\$7,960	\$39,802	\$995
Public Participation of NMMPO activities	1.3	\$36,662	\$9,165	\$45,827	\$0	\$0	\$0	\$36,662	\$9,165	\$45,827	\$0
Transportation Improvement Program activities	1.4	\$42,966	\$10,741	\$53,707	\$13,066	\$3,267	\$16,333	\$56,032	\$14,008	\$70,040	\$87
Title VI & Environmental Justice annual plan update	1.5	\$16,206	\$4,051	\$20,257	\$8,342	\$2,086	\$10,428	\$24,548	\$6,137	\$30,685	\$0
Subtotal		\$201,661	\$50,415	\$252,076	\$50,267	\$12,568	\$62,834	\$251,927	\$62,983	\$314,910	\$1,082
Traffic Counting	2.1	\$56,789	\$14,197	\$70,986	\$0	\$0	\$0	\$56,789	\$14,197	\$70,986	\$1,775
Geographic Information System	2.2	\$79,791	\$19,948	\$99,739	\$15,120	\$3,780	\$18,900	\$94,911	\$23,728	\$118,639	\$2,966
Data Collection and Analysis	2.3	\$58,406	\$14,602	\$73,008	\$0	\$0	\$0	\$58,406	\$14,602	\$73,008	\$1,825
Transit System Performance Surveillance	2.4	\$0	\$0	\$0	\$42,896	\$10,724	\$53,620	\$42,896	\$10,724	\$53,620	\$1,341
Performance Measures	2.5	\$8,232	\$2,058	\$10,290	\$0	\$0	\$0	\$8,232	\$2,058	\$10,290	\$257
Subtotal		\$203,218	\$50,805	\$254,023	\$58,016	\$14,504	\$72,520	\$261,234	\$65,309	\$326,543	\$8,164
Regional Systems Management	3.1	\$61,194	\$61,194	\$61,194	\$14,115	\$3,529	\$17,644	\$75,309	\$64,723	\$78,838	\$1,971
Regional Transportation Plan	3.2	\$6,560	\$1,640	\$8,200	\$0	\$0	\$0	\$6,560	\$1,640	\$8,200	\$205
Sustainability, Livability, and Climate Change	3.3	\$22,176	\$5,544	\$27,720	\$0	\$0	\$0	\$22,176	\$5,544	\$27,720	\$693
Local Technical Assistance	3.4	\$43,290	\$10,823	\$54,113	\$0	\$0	\$0	\$43,290	\$10,823	\$54,113	\$1,353
Freight Planning	3.5	\$14,277	\$3,569	\$17,846	\$0	\$0	\$0	\$14,277	\$3,569	\$17,846	\$446
Bicycle and Pedestrian Planning	3.6	\$24,653	\$6,163	\$30,816	\$0	\$0	\$0	\$24,653	\$6,163	\$30,816	\$770
TIP Project Review Study	3.7	\$14,622	\$3,655	\$18,277	\$0	\$0	\$0	\$14,622	\$3,655	\$18,277	\$457
Stormwater Management	3.8	\$21,773	\$5,443	\$27,216	\$0	\$0	\$0	\$21,773	\$5,443	\$27,216	\$0
Enhancing Travel and Tourism	3.9	\$8,964	\$2,241	\$11,205	\$0	\$0	\$0	\$8,964	\$2,241	\$11,205	\$280
Electric Vehicle Case Study of the NM Region	3.10	\$25,293	\$6,323	\$31,616	\$0	\$0	\$0	\$25,293	\$6,323	\$31,616	\$790
Aiken Ave./Bridge St. Intersection Study Dracut	3.11	\$18,421	\$4,605	\$23,026	\$0	\$0	\$0	\$18,421	\$4,605	\$23,026	\$576
Safe Streets For All Supplemental Funds	3.12	\$20,134	\$5,033	\$25,167	\$0	\$0	\$0	\$20,134	\$5,033	\$25,167	\$629
Subtotal		\$281,356	\$116,234	\$336,396	\$14,115	\$3,529	\$17,644	\$295,471	\$119,763	\$354,040	\$8,171
Regional Transit Planning (LRTA activities and Coordinated Plan (3yr))	4.1	\$0	\$0	\$0	\$35,908	\$8,977	\$44,885	\$35,908	\$8,977	\$44,885	\$1,122
Multidisciplinary Planning activities (Landuse, Housing, Economic Development, and Transportation)	4.2	\$60,000	\$15,000	\$75,000	\$0	\$0	\$0	\$60,000	\$15,000	\$75,000	\$1,875
Subtotal		\$60,000	\$15,000	\$75,000	\$35,908	\$8,977	\$44,885	\$95,908	\$23,977	\$119,885	\$2,997
TOTALS		\$746,235	\$232,454	\$917,495	\$158,306	\$39,577	\$197,883	\$904,540	\$272,032	\$1,115,378	\$20,413

Appendix C: Northern Middlesex Council of Government and NMMPO Staff

NORTHERN MIDDLESEX COUNCIL OF GOVERNMENTS STAFF

- Jennifer Raitt, Executive Director (0%)
- Kelly Lynema, AICP, Deputy Director (25%)
- Transportation Program Manager, Vacant (90%)
- Jessica Boulanger, Transportation Mobility Specialist (70%)
- Shravanthi Gopalan Narayanan, Transportation Planner (100%)
- Transit Planner, Vacant (100%)
- Transportation Planner, Vacant (100%)
- Christopher Glenn Hayes, AICP, Housing and Economic Development Planner (50%)
- Carlin Andrus, GISP, GIS Specialist (75%)
- Michael Asciola, AICP, Senior Planner of Housing and Land Use (50%)
- Isabel Emmet, AICP, Regional Land Use Planner II (50%)
- Daniela Garcia Moreno, Sustainability Planner (50%)
- Sara Paz, Finance and Benefits Manager (0%)
- Lesley Shahbazian, Executive Assistant (0%)
- Mark Normandin, Sealer of Weights and Measures (0%)
- Ricardo Machado, Sealer of Weights and Measures (part-time) (0%)
- Keith Taverna, Custodian (part-time) (0%)

(Numbers in parentheses represent the approximate percentages of time devoted to transportation planning)

NORTHERN MIDDLESEX TRANSPORTATION PLANNING STAFF

- Transportation Program Manager Vacant, Jessica Boulanger, Transportation Mobility Specialist
- Shravanthi Gopalan Narayanan, Transportation Planner
- Transportation Planner, Vacant
- Carlin Andrus, GIS Specialist

NORTHERN MIDDLESEX JOINT TRANSPORTATION COMMITTEE

The Northern Middlesex Council of Governments Board, which is comprised of a chief elected official and Planning Board member from each community, also serves as the Joint Transportation Committee.

Appendix D: NMCOG and Lowell Regional Transit Authority Contract

CONTRACTUAL AGREEMENT
between the
LOWELL REGIONAL TRANSIT AUTHORITY
and the
NORTHERN MIDDLESEX COUNCIL OF GOVERNMENTS
for
TRANSIT PLANNING SERVICES
UNDER FTA PROJECT NO. MA-2023-001-00

THIS AGREEMENT, effective the 31 day of ^{March} ~~February~~ 2023 by and between the Northern Middlesex Council of Governments (NMCOG) a public body corporate with principal offices at 40 Church Street, Lowell, Massachusetts, acting by and through its Executive Director (herein called the "Contractor") and the Lowell Regional Transit Authority, a public body corporate with principal offices at 115 Thorndike Street, Lowell, Massachusetts (herein called the "LRTA") acting by and through its Administrator;

WITNESSETH THAT:

WHEREAS, the Lowell Regional Transit Authority has received authorization by the Federal Transit Administration to expend funds regarding its transit system under Section 9 of the Surface Transportation Act of 1982, Intermodal Surface Transportation Efficiency Act of 1991, (ISTEA) the Transportation Efficiency Act for the 21st Century, The Safe, Accountable, Flexible, Efficient Transportation Act: A Legacy for Users of 2005 (SAFETEA-LU), Moving Ahead for Progress in the 21st Century of 2012 (MAP – 21), the Fixing America's Surface Transportation (FAST) Act, and the Infrastructure Investment and Jobs Act (IIJA), and

WHEREAS, the Northern Middlesex Council of Governments is authorized to undertake planning and related services under Section 40B of the Massachusetts General Laws, as amended, and

WHEREAS, the Lowell Regional Transit Authority desires to engage the Northern Middlesex Council of Governments to render certain professional services hereinafter described as authorized by its Advisory Board in submitting its §5307 application, and

WHEREAS, the Northern Middlesex Council of Governments has agreed by a vote of the Council on January 18, 2023 to provide the required local match for such planning related services.

NOW, THEREFORE, the parties hereto do mutually agree as follows:

1. Employment of Contractor. The LRTA hereby agrees to engage the Contractor and the Contractor hereby agrees to perform the services hereinafter set forth pursuant to the statutory authority of each and the Memorandum of Understanding creating the Metropolitan Planning Organization for the Lowell area.

2. Area Covered. The Contractor shall perform all the necessary services provided under this contract in connection with and respect to the transit services operating to, from, and within the communities in Massachusetts in which services the LRTA has a present interest.

3. Scope of Services. The Contractor shall do, perform, and carry out in a satisfactory and proper manner, as determined by the LRTA, those activities incorporated herein and attached as "Exhibit A", Scope of Services.

4. Data to be Furnished to Contractor. All information, data, reports, records and maps as are existing, available, and necessary for the carrying out of work shall be furnished to the Contractor without charge by the LRTA and the LRTA shall cooperate with the Contractor in every way possible in the carrying out of the planning work.

5. Personnel.

a. The Contractor represents that it has, or will secure at its own expense, all personnel required in performing the services under the contract. Such personnel shall not be employees of or have any contractual relationship with the LRTA.

b. All of the services required hereunder will be performed by the Contractor or under its supervision, and all personnel engaged in the work shall be fully qualified and shall be authorized under state and local law to perform such services.

c. None of the work or services covered by this contract shall be subcontracted without prior written approval of the LRTA.

6. Time of Performance. The services of the Contractor are to commence upon the date of the execution of this contractual agreement, and shall be undertaken and completed in such service as to assure their expeditious completion within 12 months after the date of execution.

7. Compensation. The total contract cost shall be \$110,000 (One-Hundred Ten Thousand Dollars). The LRTA agrees to pay the Contractor for 80% of the cost of the services provided, a sum not to exceed \$88,000 (Eighty-Eight Thousand Dollars) in the method hereinafter provided. The Contractor shall incur the remaining 20% of the costs of the services, which shall be considered to be the required local match for the services.

8. Method of Payment. The LRTA will pay to the Contractor 80% of the actual cost of the services provided (without profit) in the attached scope of services (Exhibit A), which shall constitute full and complete compensation for the Contractor's services hereunder. Payment shall be subject to receipt of a requisition for payment from the Contractor specifying that it has performed the work under this contract in conformance with the contract and that it is entitled to receive the amount requisitioned under the terms of the contract. Said requisition shall indicate charges in accordance with the Contractor's approved cost accounting procedures pursuant to OMB Circular A-102, and the Contractor shall maintain records to show actual time devoted and costs incurred.

9. Progress Reports. The Contractor shall provide quarterly progress reports to the LRTA, which shall conform to standard FTA reporting requirements. These progress reports shall discuss in narrative form the status of each of the tasks described in Exhibit A.

10. Audit and Inspection of Records. The Contractor shall permit the authorized representatives of the LRTA and the Commonwealth of Massachusetts to inspect and audit all data and records of the Contractor relating to his performance under the contract.

11. Termination of Contract for Cause. If, through any cause, the Contractor shall fail to fulfill in timely and proper manner his obligations under this contract, or if the Contractor shall violate any of the covenants, agreements, or stipulations of this contract, the LRTA shall thereupon have the right to terminate this contract by giving written notice to the Contractor of such termination and specifying the effective date thereof, at least five days before the effective date of such termination. In that event, all finished or unfinished documents, data, studies, surveys, drawings, maps, models, photographs and reports prepared by the Contractor shall be the property of the LRTA, and the Contractor shall be entitled to receive just and equitable compensation for any satisfactory work completed on such documents and other materials.

12. Changes. The LRTA may, from time to time, require changes in the scope of the services of the Contractor to be performed hereunder. Such changes, including any increase or decrease in the amount of the Contractor's compensation, which are mutually agreed upon by and between the LRTA and the Contractor, shall be incorporated in written amendments to this contract.

13. Equal Employment Opportunity. In connection with the execution of this contract, the Contractor shall not discriminate against any employee or applicant for employment because of race, religion, color, sex or nation of origin. The Contractor shall take affirmative action to insure that applicants are employed, and that employees are treated during their employment without regard to their race, religion, color, sex or national origin. Such actions shall include, but not be limited to the following; employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training.

14. Disadvantaged Business Enterprise In connection with the performance of this Agreement, the Contractor will provide for full and fair utilization of disadvantaged business enterprises and will use its best efforts to ensure that DBEs shall have an equitable opportunity to compete for contract and subcontract work under this Agreement.

15. Interest of Members of or Delegates to Congress. No member of or delegate to the Congress of the United States shall be admitted to any share or part of this Contract or to any benefit arising therefrom.

16. Prohibited Interest. No member, officer or employee of the LRTA or of a local public body during his tenure or one year thereafter, shall have any interest, direct or indirect, in this Contract or the proceeds thereof, except in connection with representation of the LRTA or the Northern Middlesex Council of Governments.

17. Assignability. The Contractor shall not assign any interest in the Contract, and shall not transfer any interest in this Contract, and shall not transfer any interest in the same whether by assignment or novation, without the prior written consent of the LRTA thereto: provided, however, that claims for money due or to become due to the Contractor from the LRTA under this Contract may be assigned to a bank, trust company, or other financial institution without such approval. Notice of any such assignment or transfer shall be furnished promptly to the LRTA.

18. Interest of Contractor. The Contractor covenants that it presently has no interest and shall not acquire any interest, direct or indirect, which would conflict in any manner or degree with the performance of services required to be performed under this Contract. The Contractor further covenants that in the performance of this Contract no person having any such interest shall be employed

19. Findings Confidential. Any reports, information, data, etc. given to or prepared or assembled by the Contractor under this Contract which the LRTA requests to be kept as confidential, shall not be made available to any individual or organization by the Contractor without the prior written approval of the LRTA.

20. Copyright. No reports, maps or other documents produced while or in part under this Contract shall be the subject of an application for copyright by or in behalf of the Contractor, and all plans, specifications, and related documents are owned by the LRTA.

IN WITNESS WHEREOF the LRTA and the Contractor have executed this agreement as of the date first above written.

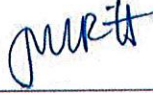
Lowell Regional Transit Authority

By:


David R. Bradley
Administrator

Northern Middlesex Council of Governments

By:


Jennifer M. Raitt
Executive Director

**EXHIBIT A: SCOPE OF SERVICES
LRTA / NMCOG PLANNING CONTRACT
UNDER FTA #MA-2023-001-00**

ACTIVITY 1: GIS

OBJECTIVE: To continue to develop and maintain digital geo-coded referenced data, increase access to regional databases, improve spatial analytical capabilities, and exchange and distribute map data. A strong emphasis will be placed on providing visual information and interpretation to enhance the public's understanding of complex transportation issues and to facilitate informed decision-making.

TASKS:

- 1 Maintain an up-to-date fixed route data layer for use in analyses, Title VI program, published route maps and more.
- 2 Maintain base data and transit trip generators showing demographics, employment data, land uses, government buildings, faith-based organizations, schools, etc. to generate demand for transit.
- 3 Enhance existing digital map data and develop additional geographically referenced data layers for use in transit service analysis, land use analysis, build out analysis, evaluation of highway alternatives, and air quality.
- 4 Develop a database of regionally significant points of interest (POI) data to develop and evaluate fixed route service changes.
- 5 Develop and maintain a comprehensive inventory of bus stops served by fixed route transit saved in a geographic database. The database will include information on physical amenities at each stop, routes serving the stop, infrastructure supporting the stop, adjacent land uses, and businesses and cultural elements served by the stop. Periodically, the database will be updated to ensure accuracy of information.
- 6 Maintain interactive systems maps for all Fixed Route Systems, including bus stop information (e.g. signage, routes, and stop times). The interactive map will be placed on NMCOG's and LRTA's website.
- 7 Assist with analysis and preparation of reports regarding established performance measures and targets on capital investments that evaluate the effectiveness of transit service.
- 8 Work with the LRTA to install APCs or provide available Fixed Route Boarding/Alighting Data from other sources to review locations of each boarding and alighting passenger. Staff will assist the LRTA in analyzing and mapping these data.

ACTIVITY 2: DATA COLLECTION AND ANALYSIS

OBJECTIVE: To continue to develop and maintain extensive databases for use in decision-making relative to regional transportation issues. To improve analytical capabilities, monitor statistical trends and develop projections.

TASKS:

- 1 Identify areas of congestion and measure identified congested areas on corridors/roadways/transit/ pedestrian/ bicycle through a data collection and analysis effort

- 2 Continue ongoing collection and analysis of fixed-route transit data. Also included in this process will be to conduct origin/ destination surveys of current transit ridership, walk to transit, and the development and utilization of condition measures and load factors
- 3 Provide transit inputs into regional transit and transportation modeling efforts, and conduct air quality analysis as needed for transit projects.
- 4 Operate and maintain a Congestion Management Process.
- 5 Conduct public health assessments and consider public health outcomes as part of ongoing planning and performance measures planning.
- 6 Review and analyze changes made to LRTA bus routes and services, commuting patterns, and ridership levels.
- 7 Provide technical planning assistance to transit providers and member communities on transit matters. This assistance may take the form of assistance in meeting federal reporting requirements and in assessing and evaluating routes; Title VI update; fare change and service change equity analyses; schedule and fare changes; assessment of human and capital needs; provide and improve LRTA's analytical and forecasting capabilities; assist with the Americans with Disabilities Act Plan update; Title VI Trend Analysis; and Service Area Demographic Trend Profiles.

ACTIVITY 3: TRANSIT SYSTEM PERFORMANCE

OBJECTIVE: To maintain a current database for the region's transit system in order to provide an accurate basis for future forecasting, planning and program analysis and project evaluation. Performance measures and threshold criteria will be reviewed and analyzed in accordance with State and Federal guidelines.

TASKS:

- 1 Produce daily ridership samples for three-year NTD passenger reporting data.
- 2 Prepare information as needed for FTA reports, State Implementation Plan (SIP) submissions, American Public Transit Association reports, MassDOT reports, and other required reporting.
- 3 Review the LRTA's Transit Asset Management Plan and Public Transportation Agency Safety Plan and present to the MPO for adoption of updated performance measures and targets.
- 4 Maintain and update bus stop and route data in accordance with MassDOT and LRTA guidelines.
- 5 Assemble and analyze monthly ridership, revenue and safety reports and quarterly monitoring reports.
- 6 Revise formulae for monthly ridership reports as quarterly monitoring data is received and processed.
- 7 Provide computerized summaries of above reports and analysis trends at the end of each year, including ridership, revenue, performance measures, and bus stop/ route data.
- 8 Prepare information as needed for FTA reports, MassDOT reports, and other routine reporting.
- 9 Analyze transit performance in accordance with the State and Federal criteria.

ACTIVITY 4: REGIONAL TRANSIT PLANNING

OBJECTIVE: Continue to provide a high level of technical assistance to the Lowell Regional Transit Authority. Work under this task will include ongoing analysis of existing transit services and special service proposals, as well as the exploration of potential new service and financial arrangements with

local human service agencies, and continued implementation of the requirements of the Americans with Disabilities Act. The COVID-19 pandemic adversely affected the entire LRTA system. Revenues and ridership plummeted, and the LRTA needed to make changes to the overall system to compensate. The USDOT has provided assistance via CARES Act and ARPA funding, which will boost operating assistance as documented in the Northern Middlesex MPO TIP.

TASKS:

- 1** Provide continued technical assistance to the LRTA in capital planning activities, data collection for grant applications, computer operations and meeting federal and state reporting requirements.
- 2** Assist in preparation of proposals, statistical analysis, small and special studies, capital planning and program implementation.
- 3** Assist the LRTA in complying with ADA paratransit requirements by reviewing EZTrans Service for compliance with ADA Paratransit requirements.
- 4** Conduct outreach to elderly and disabled stakeholders regarding transportation needs and improvements to the transportation infrastructure.
- 5** Provide continued support for LRTA marketing activities, supplying information to media, employers, employees, service agencies, etc. Preparation of special presentations and presentation materials.
- 6** Provide analysis of service and fare structures and assist in layout, costing and scheduling of modifications or "special service" proposals as needed by LRTA.
- 7** Assist LRTA in plan preparation, data collection, reporting and other activities associated with FTA DBE reporting requirements.
- 8** Provide technical assistance to public and private non-profit agencies in the development, maintenance, and expansion of senior and/ or individuals with disabilities services in the region.
- 9** Provide support for the replacement of paratransit vehicles.
- 10** Assist LRTA as liaison with human service agencies, and special interest groups such as the Lowell Commission for the Disabled. Assist with maintenance of effort, update and implementation associated with its Compliance Plan and other requirements of the Americans with Disabilities Act.
- 11** Develop updates for the Coordinated Public Transit Human Service Coordination Plan in coordination with communities, transit providers, and regional coordination committees, as appropriate.
- 12** Continue to work with regional communities to identify gaps and opportunities in transit service provision.
- 13** Participate in Merrimack Valley Regional Coordinating Council (MVRCC) and other coordinating council meetings and workshops.
- 14** Provide technical planning assistance to area communities outside the transit authority service areas on transit matters. This assistance can take the form of helping the communities in: assessing potential membership in the transit authority; assisting the communities in providing for private carrier service; identifying and assessing park-and-ride lots; assessing commuter rail lots; encouraging private enterprise participation; and Census and Journey-to-Work technical assistance.

EXHIBIT B: BUDGET

ACTIVITY		FUNDING SOURCE		
		NMCOG	LRTA/ FTA	TOTAL
1	GIS	\$4,000	\$15,000	\$19,000
2	DATA COLLECTION AND ANALYSIS	\$4,000	\$15,000	\$19,000
3	TRANSIT SYSTEM PERFORMANCE	\$4,750	\$26,000	\$30,750
4	REGIONAL TRANSIT PLANNING	\$9,250	\$32,000	\$41,250
TOTALS		\$22,000	\$88,000	\$110,000

CERTIFICATION OF PRIMARY PARTICIPANT

The primary participant, the Northern Middlesex Council of Governments certifies to the best of its knowledge and belief, that it and its principals:

1. Are not presently debarred, suspended, purposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
2. Have not within a three-year period preceding this proposal been convicted of or had a civil judgement rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
3. Are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal, State, or local) with commission of any of the offenses enumerated in Paragraph 2 of this certification; and
4. Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

The primary participant, the Northern Middlesex Council of Governments, certifies or affirms the truthfulness and accuracy of the contents of the statements submitted on or with this certification and understands that the provisions of 31 U.S.C. Sections 3801 et. seq. are applicable thereto.



Jennifer M. Raitt, Executive Director

3/31/2023

Date

LOWELL REGIONAL TRANSIT AUTHORITY

CERTIFICATE

BUY AMERICA PROVISIONS

This procurement is subject to the FEDERAL TRANSIT ADMINISTRATION'S Buy America Requirements in 49 CFR 661.

A Buy America Certificate, as per attached format, must be completed and submitted with the proposal. A proposal which does not include the certificate will be considered non-responsive.


A waiver from the Buy America Provision may be sought by (Recipient) if grounds for the waiver exist.

In order to qualify as a domestic end-product, the cost of components produced in the United States must exceed 50 percent (50%) to the cost of all components, and final assembly must take place in the United States.

BUY AMERICA CERTIFICATE

The proposer/bidder hereby certifies that it will comply with the requirements of Section 165(b)3 of the Surface Transportation Assistance Act of 1982, as amended and the regulations in 49 CFR 661.

Date: 3/31/2023


Signature: 

Title: Jennifer M. Raitt
NMCOC Executive Director

or

The proposer/bidder hereby certifies that it cannot comply with the requirements of Section 165(b)3 of the Surface Transportation Act of 1982, as amended but it may qualify for an exception to the requirement pursuant to Section 165(b)2 or (b)4 of the Surface Transportation Assistance Act and regulations at 49 CFR 661.7.

Date: 3/31/23

Signature: 

Title: David R. Bradley
LRTA Administrator

NORTHERN MIDDLESEX COUNCIL OF GOVERNMENTS

CERTIFICATION REGARDING LOBBYING

Certification for Contracts, Grants, Loans, and Cooperative Agreements

The undersigned certifies to the best of his or her knowledge and belief that:

- (1) No Federal appropriated funds have been paid or will be paid by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement and the extension, renewal, continuation, amendment or modification of any Federal contract, grant, loan or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for making lobbying contacts to an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "DISCLOSURE FORM TO REPORT LOBBYING" in accordance with its instructions [as amended by "Government wide Guidance for New Restrictions on Lobbying," 61 Fed. Reg. 1413 (1/9/96). Note: Language in paragraph (2) herein has been modified in accordance with Section 10 of the Lobbying Disclosure Act of 1996 (P.L. 104-65, to be codified at 2 U.S.C. 1601 et seq.)].
- (3) The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including subcontract, sub-grants, and contracts under grants, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31, U.S.C. section 1352 (as amended by the Lobbying Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure. [Note: Pursuant to 31 U.S.C. section 1352 (c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such expenditure or failure.]

The Northern Middlesex Council of Governments (NMCOG) certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, NMCOG understands and agrees that the provisions of 31 U.S.A. section 3801, et seq., apply to this certification and disclosure, if any.

Signature of NMCOG's Authorized Official:



Jennifer M. Raitt, NMCOG Executive Director:

Date 03/31/2023

[CRC:lra2022]

Appendix E: List of Acronyms

3C Process: Continuing, Cooperative, And Comprehensive
ADA: Americans with Disabilities Act
ARPA: American Rescue Plan Act
BIL: Bipartisan Infrastructure Law (aka IIA)
CARES: Coronavirus Aid, Relief and Economic Security Act
CBA: Coalition for a Better Acre
CEDS: Comprehensive Economic Development Strategy
CFR: Code of Federal Regulations
CGI: Common Ground Inc.
CMR: Code of Massachusetts Regulations
CTI: Community Teamwork, Inc.
DLTA: District Local Technical Assistance
EDA: Economic Development Administration
EOHED: Executive Office of Housing and Economic Development
EPA: Environmental Protection Agency
FAST: Fixing America's Surface Transportation Act
FFY: Federal Fiscal Year (October 1 through September 30)
FHWA: Federal Highway Administration
FTA: Federal Transit Administration
GHG: Greenhouse Gas
GLWIB: Greater Lowell Workforce Investment Board
GWSA: Global Warming Solutions Act
IIJA: Infrastructure Investment and Jobs Act (aka BIL)
LDFC: Lowell Development and Financial Corporation
LEP: Limited English Proficiency

LNHP: Lowell National Historic Park
LRTA: Lowell Regional Transit Authority
MAP-21: Moving Ahead for Progress in the 21st Century Act
MassDOT: Massachusetts Department of Transportation
MEPA: Massachusetts Environmental Protection Agency
MOBD: Massachusetts Office of Business Development
MOU: Memorandum of Understanding
MPO: Metropolitan Planning Organization
NMCOG: Northern Middlesex Council of Governments
NMMPO: Northern Middlesex Metropolitan Planning Organization
PL: Planning (Funds)
PPP: Public Participation Plan
RFP: Request for Proposal
RTA: Regional Transit Authority
RTP: Regional Transportation Plan
SAFETEA-LU: Safe Accountable Flexible Efficient Transportation Equity Act – A Legacy for Users
TIP: Transportation Improvement Program
TMA: Transportation Management Association
FFY 2023 Northern Middlesex MPO Unified Planning Work Program 89
UMASS: University of Massachusetts
UPWP: Unified Planning Work Program
USDOT: United State Department of Transportation
UZA: Urbanized Area

Appendix F: Public Comments

