



U.S. Department
of Transportation

Federal Highway
Administration

Federal Transit
Administration

Transportation Management Area Planning Certification Review

Northern Middlesex Metropolitan Planning Organization

Northern Middlesex Metropolitan Planning Organization



June 4, 2020

Final Report



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1.0 EXECUTIVE SUMMARY

On March 4, 2020, the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) conducted the certification review of the transportation planning process for the Boston, MA-NH-RI urbanized area, as conducted by the Northern Middlesex Metropolitan Planning Organization (NMMPO), Massachusetts Department of Transportation (MassDOT), and Lowell Regional Transit Authority (LRTA). FHWA and FTA are required to jointly review and evaluate the transportation planning process for each urbanized area over 200,000 in population at least every four years to determine if the process meets the Federal planning requirements.

1.1 Summary of Current Findings

The current review found that the metropolitan transportation planning process as conducted in the Boston, MA-NH-RI area for the NMMPO region substantially meets the Federal planning requirements subject to the resolution of two corrective actions.

As a result of this review, FHWA and FTA are conditionally certifying the transportation planning process conducted by NMMPO, MassDOT, and LRTA. There are also recommendations in this report that warrant close attention and follow-up, as well as areas that the MPO is performing very well in, that are to be commended.

Corrective Actions

1. MPO Organizational Structure

The MPO shall revise its MOU to ensure compliance under 23 CFR 450.314(a) and (b), which will ensure consistency with the MPO's operating procedures, including the number of voting members and signatories required for meetings and endorsements, and shall include responsibilities for the development of financial plans that support MTP and TIP, and the development of the annual listing of obligated projects. The MPO shall develop a process to document its review to reaffirm or revise the MOU in accordance with the timeframe provided in the MOU. This corrective action shall be resolved by March 1, 2021.

2. Regional Planning Agreements and Coordination

The Northern Middlesex MPO must coordinate with the other MPOs that serve the Nashua, NH-MA UZA, along with other required parties, to develop and execute a written agreement that meets the requirements of 23 CFR 450.312(h) and 23 CFR 450.314(e). Minimally, the resulting agreement shall address the coordination needs referenced in the regulations. This corrective action shall be completed by December 31, 2020.

Recommendations

1. MPO Organizational Structure

To support the MOU update, the MPO should develop and adopt official bylaws to document more detailed procedures of the MPO (e.g., elections, term limits, regional representation) that

will enhance transparency and support more consistent operations. If the MPO chooses, they can include this information within the MOU directly.

2. MPO Organizational Structure

To increase participation at MPO meetings, the MPO should consider moving meetings times to other parts of the day and/or providing opportunities for members of the public to join using virtual meeting platforms.

3. Metropolitan Transportation Plan

An MPO MTP requires valid forecasts of future demand for transportation services with model outputs that are used to estimate regional vehicle activity and are a factor in selecting transportation investments. In the next MTP update the MPO should expand its discussion of how implementation of the plan will impact demand and the transportation system within the region.

4. Metropolitan Transportation Plan

In the next MTP update the MPO should consider incorporating scenario planning into its process to help identify projects and strategies that will best address the region's needs and challenges while considering limited resources.

5. Metropolitan Transportation Plan

In the next MTP update, the MPO should include specific amendment and administrative modification procedures to guide future MTP updates.

6. Congestion Management Process

The CMP should include a listing of congested roadways in the region, that is prioritized based on the severity of the congestion. This listing should be supported by identifying strategies to mitigate the congestion. In addition, for each congested roadway, the CMP should include an implementation schedule, responsible parties and potential funding sources. The MPO should monitor and reassess the CMP implementation of strategies in addressing roadway congestion on a regular basis and make the information publicly available.

7. Performance Based Planning and Programming

The MPO should use the terminology "system performance report" for the performance management discussion in the next MTP to clearly demonstrate compliance with 23 CFR 450.324(f)(4) and avoid any potential confusion among partner agencies and stakeholders moving forward. Further, the MPO should include TAM baseline data in the MTP system performance report so future updates of the report can track progress over time, as required.

8. Financial Planning

The financial planning of the TIP should include a description of how the MPO's regional highway target funding and federal transit funding estimates are developed in consultation with MassDOT and the LRTA.

9. Financial Planning

In the next MTP update, the MPO should clearly document the assumptions made to develop transit revenue forecasts for both capital and operating portions of the financial plan.

10. List of Obligated Projects

The MPO should work with its transit partners to ensure they have the necessary information to

be able to accurately report on the obligations that have occurred during the appropriate reporting year.

11. Civil Rights

The 2014 Title VI Assessment Report posted on the MPO’s website should be updated to reflect current reporting. While the MPO provides annual updates to MassDOT, this information should be made available to members of the public who may visit the website.

12. Civil Rights

The MPO should include more details in its meeting notices (e.g., type of presentation(s), activity(s), technology(s)) in order to help persons with disabilities and LEP community members better understand what to expect and therefore be better positioned to request the appropriate accommodation and support their full engagement with the planning process.

13. Public Outreach and Involvement

The MPO should formally document its public involvement evaluation methodology procedures in its PPP with qualitative and quantitative measures to evaluate and improve its process. Using this methodology, the MPO should regularly produce an evaluation of the effectiveness of its public involvement procedures that assesses the strategies and techniques employed and describe what worked well and what could be improved with recommendations for future efforts.

14. Public Outreach and Involvement

The MPO should expand outreach efforts to Title VI/EJ communities outside of Lowell, including residents of Independent Living Centers and disability advocacy organizations.

Commendations

1. Regional Planning Agreements and Coordination

Given the interconnected nature of the larger geographic region, it is beneficial for staff at these MPOs to be regularly sharing data, practices, and plans. The Review Team commends the participants for their initiative in convening these regular coordination meetings and encourage them to continue doing so.

2.0 INTRODUCTION

2.1 Background

Pursuant to 23 U.S.C. 134(k) and 49 U.S.C. 5303(k), FHWA and FTA must jointly certify the metropolitan transportation planning process in Transportation Management Areas (TMAs) at least every four years. A TMA is an urbanized area, as defined by the U.S. Census Bureau, with a population of over 200,000. After the 2010 Census, the Secretary of Transportation designated 183 TMAs – 179 U.S. Census urbanized areas over 200,000 in population plus four urbanized areas that received special designation.

In general, the review consists of three primary activities: a site visit, a review of planning products (in advance of and during the site visit), and preparation of a Certification Review Report that summarizes the review and offers findings. The review focuses on compliance with Federal law and regulations, challenges, successes, and experiences of the cooperative relationship among the MPO(s), the State DOT(s), and public transportation operator(s) in the conduct of the metropolitan transportation planning process. Joint FHWA/FTA Certification Review guidelines provide agency field reviewers with latitude and flexibility to tailor the review to reflect regional issues and needs. As a result, the scope and depth of the Certification Review reports will vary significantly.

The Certification Review process is only one of several methods used to assess the quality of the regional metropolitan transportation planning process, compliance with applicable statutes and regulations, and the level and type of technical assistance needed to enhance the effectiveness of the planning process. Other stewardship and oversight activities provide opportunities for this type of review and comment, including Unified Planning Work Program (UPWP) approval, the Metropolitan Transportation Plan (MTP), Statewide and Transportation Improvement Program (S/TIP) findings, Air Quality (AQ) conformity determinations (in nonattainment and maintenance areas), as well as a range of other formal and less formal interactions provide both FHWA/FTA an opportunity to comment on the planning process. The results of these other processes are considered in the Certification Review process.

While the Certification Review report itself may not fully document those many intermediate and ongoing checkpoints, the “findings” of Certification Review are, in fact, based upon the cumulative findings of the entire review effort.

The review process is individually tailored to focus on topics of significance in each metropolitan planning area. Federal reviewers prepare Certification Reports to document the results of the review process. The reports and final actions are the joint responsibility of the appropriate FHWA and FTA field offices, and their content will vary to reflect the planning process reviewed, whether or not they relate explicitly to formal “findings” of the review.

2.2 Purpose and Objective

Since the enactment of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991, the FHWA and FTA are required to jointly review and evaluate the transportation planning process in all urbanized areas over 200,000 population to determine if the process meets the Federal planning requirements in

23 U.S.C. 134, 49 U.S.C. 5303, and 23 CFR 450. In 2005, the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), extended the minimum allowable frequency of certification reviews to at least every four years. Such frequency has not changed in subsequent Federal transportation legislation, and the latest Federal law, the Fixing America's Surface Transportation (FAST) Act, signed in 2015, continues this requirement for certification reviews.

The NMMPO primarily serves the Boston, MA-NH-RI urbanized area as well as a portion of the Nashua, NH-MA urbanized area. MassDOT is the responsible State agency and LRTA is the primary public transportation operator serving as planning partners with NMMPO for this urbanized area. The Northern Middlesex Council of Governments (NMCOG) staff provide transportation planning staff to the MPO. Current membership of the NMMPO consist of elected officials from Lowell and two additional communities elected by NMCOG; two representatives from LRTA; and two representatives from MassDOT. The geographic area for the NMMPO includes nine municipalities, covering approximately 196 square miles representing 287,000 residents with Lowell as the largest population center.

Certification of the planning process is a prerequisite to the approval of Federal funding for transportation projects in the area. The certification review is also an opportunity to provide assistance on new programs and to enhance the ability of the metropolitan transportation planning process to provide decisionmakers with the knowledge they need to make well-informed capital and operating investment decisions.

3.0 SCOPE AND METHODOLOGY

3.1 Review Process

The initial certification review for this region was conducted in 2007 following the designation as a TMA per the 2000 U.S Census. Subsequent certification reviews were conducted in 2013 and 2017. This is the fourth federal certification review conducted by FHWA and FTA for the region. A summary of the status of findings from the previous certification review is provided in Appendix G: Previous Findings and Disposition. This report covers the 2020 review, which consisted of a public involvement opportunity and formal site visit conducted on February 26, 2020 and March 4, 2020 respectively.

Participants in the review included representatives of FHWA, FTA, MassDOT, LRTA, NMMPO, NMCOG, Merrimack Valley Planning Commission (MVPC), Boston Region MPO Staff (Central Transportation Planning Staff (CTPS)), and Nashua Regional Planning Commission (NRPC). A full list of participants is included in Appendix A: On-Site Meeting Sign-In Sheet.

A review of current documents and correspondence was completed prior to the site visit. In addition to the formal review, routine oversight mechanisms provide a major source of information upon which to base the certification findings.

The certification review covers the transportation planning process conducted cooperatively by the MPO, State DOT, and public transportation operator. Background information, current status, and key findings are summarized in the body of the report for subject areas identified by FHWA and FTA staff for the on-site review.

The certification review report is organized around key transportation planning topic areas discussed during the on-site review. Each planning topic section presents the legal and regulatory basis for the review topic area, summarizes the observations of the Review Team, and lists the key findings. Findings may include corrective actions, recommendations, or commendations. Corrective actions describe items that do not meet the requirements of the transportation statute and regulations, along with the actions that must be taken to attain compliance. Recommendations identify steps that should be implemented to improve processes and planning products that already meet minimum federal requirements. Commendations describe processes and products that are considered notable and identified as best practices.

3.2 Documents Reviewed

The following MPO documents were evaluated as part of this planning certification review:

- NMMPO Memorandum of Understanding (MOU) (March 2011)
- Boston MA-NH-RI Urbanized Area MOU (January 2019)
- MA Performance-Based Planning and Programming (PBPP) Agreement (April 2019)
- MA Air Quality Planning and Coordination for Transportation Conformity MOU (October 2019)
- FY 2019 and 2020 MPO UPWP (May 2018; June 2019)
- FY 2019 UPWP Quarterly and Annual Reports
- FY 2020-2024 TIP (May 2019)
- MPO Self-Certification Statement (May 2019)
- FY 2019 Annual Listing of Obligated Projects (December 2019)
- FY 2020-2040 MTP (July 2019)
- MPO Public Participation Plan (March 2017)
- Title VI Assessment Report (June 2014)
- Limited English Proficiency (LEP) (April 2019)
- Coordination Human Service Public Transit Plan (January 2015)

4.0 PROGRAM REVIEW

4.1 MPO Organizational Structure

4.1.1 Regulatory Basis

23 U.S.C. 134(d) and 23 CFR 450.314(a) state the MPO, the State, and the public transportation operator shall cooperatively determine their mutual responsibilities in carrying out the metropolitan transportation planning process. These responsibilities shall be clearly identified in written agreements among the MPO, the State, and the public transportation operator serving the Metropolitan Planning Area (MPA).

Under 23 CFR 450.310(d), when an MPO representing all or part of a TMA is initially designated or redesignated, the policy board of the MPO shall consist of (a) local elected officials, (b) officials of public agencies that administer or operate major modes of transportation within the metropolitan area, including representation by providers of public transportation, and (c) appropriate State officials. Redesignation is required whenever the existing MPO seeks to substantially change the proportion of voting members or a substantial change in the decisionmaking authority or responsibility of the MPO, or in decisionmaking procedures established under MPO by-laws.

4.1.2 Observations

NMCOG is the regional planning agency and serves as staff to the NMMPO. The Northern Middlesex Planning Region is made up of nine member communities. The MPO is composed of following members:

Voting Members:

1. NMCOG Chairman (elected annually by NMCOG)
2. NMCOG MPO representative outside of Lowell (elected annually by NMCOG)
3. Lowell City Councilor chosen by the Mayor of Lowell
4. MassDOT Secretary
5. MassDOT Highway Division Administrator
6. LRTA Chairman
7. LRTA Advisory Board representative outside of Lowell

Non-Voting Ex-Officio Members:

1. Federal Highway Administration
2. Federal Transit Administration

While there are seven voting members, there are only six signature lines on “continuing, cooperative, and comprehensive” (3C) document endorsement sheets; the MassDOT Secretary’s signature counts for the endorsement of both MassDOT members (a practice that is not explained within the existing MOU). Four MPO members are needed to endorse documents and establish a quorum at MPO Policy Board meetings. The MPO has never needed to cancel a meeting for lack of quorum, but the MPO does experience limited attendance at meetings, including member communities and the general public.

Regarding local representation, the NMCOG MPO representative and LRTA Advisory Board representatives serve for one year, but there are no term limits. Under this framework, there is the chance that a member community could be represented on two seats of the MPO Board (e.g., LRTA Advisory Board representative could be from the same community as the NMCOG Chairman or NMCOG representative). These two individuals voted to serve on the NMMPO represent all municipal interests within the region.

The MOU states that “the MPO shall adopt rules, bylaws and other procedures as necessary to govern its operation.” The MPO does not have any such bylaws, reasoning that the MOU satisfactorily addresses its operating procedures. Regarding operations, the MOU does not utilize a Technical Advisory Committee (TAC) or any other committee structure that would report to the MPO Policy Board on specific matters. The MOU decided to dissolve the TAC many years ago, given limited participation from members and the fact that the region is small and municipal staffs have a close working relationship with the MPO staff.

The latest MOU documenting the responsibilities of the MPO was signed on March 15, 2011. This MOU supersedes the MOU dated April 29, 1976 outlining the 3C transportation planning process between the planning partners. The current MOU states that “the signatories shall formally review and reaffirm or revise the contents of the MOU at least every three years.” While there may have been discussion of MOU reaffirmation or updates at past MPO meetings, MPO staff were not able to point to any formal documentation of such a review. The existing MOU includes outdated MPO operations and procedures that are no longer in use (e.g., the MOU establishes the position of vice-chair which is not currently used). Under 23 CFR 450.314(a), regarding responsibilities for the development of financial plans that support MTP and TIP, and the development of the annual listing of obligated projects, the current MOU does not include such provisions.

The MPO meets regularly, typically on the fourth Wednesday of each month, at 2:00pm at the MPO’s office in Lowell, MA. MPO meetings are open to the public, and there is always time on the agenda for public comment, but there are very few members of the public that participate in these venues. Limiting meetings to afternoons could be diminishing public participation for working adults and college students. The MPO may want to explore other meeting times or virtual meeting options to allow for greater participation.

4.1.3 Findings

Corrective Action: The MPO shall revise its MOU to ensure compliance under 23 CFR 450.314(a) and (b), which will ensure consistency with the MPO’s operating procedures, including the number of voting members and signatories required for meetings and endorsements, and shall include responsibilities for the development of financial plans that support MTP and TIP, and the development of the annual listing of obligated projects. The MPO shall develop a process to document its review to reaffirm or revise the MOU in accordance with the timeframe provided in the MOU. This corrective action shall be resolved by March 1, 2021.

Recommendation: To support the MOU update, the MPO should develop and adopt official bylaws to document more detailed procedures of the MPO (e.g., elections, term limits, regional representation)

that will enhance transparency and support more consistent operations. If the MPO chooses, they can include this information within the MOU directly.

Recommendation: To increase participation at MPO meetings, the MPO should consider moving meetings times to other parts of the day and/or providing opportunities for members of the public to join using virtual meeting platforms.

4.2 Metropolitan Transportation Plan

4.2.1 Regulatory Basis

23 U.S.C. 134(c), (h) & (i) and 23 CFR 450.324 set forth requirements for the development and contents of the MTP. Among the requirements are that the MTP address no less than a 20-year planning horizon and include both long-range and short-range strategies/actions that lead to the development of an integrated multimodal transportation system to facilitate the safe and efficient movement of people and goods to address current and future transportation demand.

23 CFR 450.324(c) requires the MPO to review and update the MTP at least every four years in air quality nonattainment and maintenance areas and at least every five years in attainment areas to reflect current and forecasted transportation, population, land use, employment, congestion, and economic conditions and trends.

Under 23 CFR 450.324(f), the MTP is required, at a minimum, to include the following:

1. Current and projected transportation demand
2. Existing and proposed transportation facilities
3. Performance measures and targets
4. A system performance report on the condition and performance of the transportation system
5. Operational and management strategies to improve performance
6. Discussion of the congestion management process
7. An assessment of capital investment and other strategies to preserve transportation infrastructure, provide for multimodal capacity increases, and reduce vulnerability
8. Transportation and transit enhancements
9. Design concept and design scope descriptions of proposed transportation facilities
10. Discussion of potential environmental mitigation activities
11. A financial plan
12. Pedestrian walkway and bicycle transportation facilities

Under 23 CFR 450.324(f)(10) and 23 CFR 450.324(g), the MTP shall reflect consultation with state and local land use and resource agencies including a comparison of the plan with conservation plans or maps or inventories of resources along with discussion of types of potential environmental mitigation activities.

4.2.2 Observations

The current approved MTP was adopted in July 2019 and covers years 2020-2040. Public and stakeholder outreach included 20 meetings and events, a comprehensive survey provided in six languages, and a variety of web-based communication tools, including social media and a dedicated MTP page on the NMCOCG website. The MPO continues to grow and implement a continuing, cooperative, and comprehensive performance-based transportation planning process. The MTP update includes six goals, each with several objectives, and over 30 performance measures and targets that go beyond the required federal requirements. For the required Federal measures, the MPO decided to support the State's and LRTA's performance targets. After the adoption of the MTP in July 2019, MassDOT finalized its Transportation Asset Management Plan (TAMP), which provides more detail on its system preservation measures for bridge and pavement condition, as well as more current condition data.

The MTP includes a detailed profile on the region, focusing on current and future population, housing, employment, land use, and travel trends, and is framed by the region's vision. This vision is consistent with the previous MTP, which focuses on "developing a balanced, multimodal, cost effective, energy efficient transportation system connecting points inside and outside the Northern Middlesex Region." Concerning travel demand, MassDOT continues to provide the statewide travel demand model for all the State's MPOs that do not have their own model. This recent MTP update addresses a previous recommendation to include more data on transportation demand and how the implementation of this plan will impact demand within the region. The MPO includes data on vehicle miles of travel (VMT) forecasts through 2040 and provides some discussion about the needs and impacts that specific projects will have to address increased demand. These additional details enhance the document, but further data and discussion about how the model supports specific project selection decisions would be useful.

While the MPO does develop scenarios annually when developing the TIP, which is the first five years of the MTP, the MPO does not include a discussion of its scenario planning process within the plan. While not a requirement, scenario planning can help identify projects and strategies that will best address the region's needs and challenges while considering limited resources over the life of the plan. The MPO should consider incorporating scenario planning in future updates.

Regarding environmental mitigation, the MTP includes multiple maps that overlay proposed projects with various natural and historic resources (i.e., wetlands, 100-ft wetlands buffer, floodplains, Rivers Protection Act buffer, vernal pools, and priority habitats for state-listed rare species as well as locally, state, and nationally listed historic sites). That analysis identified a number of projects with high anticipated impact to aquatic and terrestrial resources and/or historical resources. The MTP also includes a broad discussion of methods (e.g., snow and ice removal efforts) to minimize and mitigate habitat fragmentation and impacts on water quality. However, potential mitigation measures were not linked to particular projects or areas of anticipated impact based on the analysis.

Lastly, the MTP does not include any language on amendment and administrative modification procedures. Having clearly documented procedures demonstrates transparency to the public as well as supports consistency in how changes are managed. As with the TIP and UPWP, the MPO should develop clear definitions and MPO actions that differentiate procedures taken to execute an MTP amendment and administrative modification .

4.2.3 Findings

Recommendation: An MPO MTP requires valid forecasts of future demand for transportation services with model outputs that are used to estimate regional vehicle activity and are a factor in selecting transportation investments. In the next MTP update the MPO should expand its discussion of how implementation of the plan will impact demand and the transportation system within the region.

Recommendation: In the next MTP update the MPO should consider incorporating scenario planning into its process to help identify projects and strategies that will best address the region's needs and challenges while considering limited resources.

Recommendation: In the next MTP update, the MPO should include specific amendment and administrative modification procedures to guide future MTP updates.

4.3 Congestion Management Process / Management and Operations

4.3.1 Regulatory Basis

23 U.S.C. 134(k)(3) and 23 CFR 450.322 set forth requirements for the CMP in TMAs. The CMP is a systematic approach for managing congestion through a process that provides for a safe and effective integrated management and operation of the multimodal transportation system. TMAs designated as non-attainment for ozone must also provide an analysis of the need for additional capacity for a proposed improvement over travel demand reduction, and operational management strategies.

23 CFR 450.324(f)(5) requires the MTP include Management and Operations (M&O) of the transportation network as an integrated, multimodal approach to optimize the performance of the existing transportation infrastructure. Effective M&O strategies include measurable regional operations goals and objectives and specific performance measures to optimize system performance.

4.3.2 Current Status

The MPO's CMP monitors congestion in the region for highways, transit and park and ride facilities. Included as part of the MPO's 2020 MTP, the CMP monitors peak AM/PM roadway congestion using the INRIX data that was procured through a statewide contract. In addition, the MPO has adopted the State's performance measures targets for System Reliability which is measured using National Performance Management Research Data Set (NPMRDS) data for the region. A total of 273 miles of roadway in the region are monitored using NPMRDS; according to an established speed index (Table 10.2), approximately 65% of these roadways are either in somewhat congested or congested condition. The CMP collects data for and provides notable examples of key congested roadways (i.e., I-495 and Route 3), but overall there is no comprehensive list of congested roadways in the CMP. The MPO also routinely collects data to identify congested intersections in the region. Of the approximately 45 congested intersections in the region, 14 intersections are either under construction or planned status (Table 10.3). The MPO explained that, unlike for congested intersections, implementation steps are not included in the CMP for congested roadways because of a preference to limit expansion projects within the region. However, the CMP does identify potential actions for several "low cost operational

measures” that can alleviate roadway congestion through its Transportation System Management (TSM) measures (Table 10.10). In identifying strategies to address congestion, the MPO has identified a CMP “tool box” which includes five potential strategy approaches: Transportation Demand Management, Traffic Operational Improvements, Construction and Maintenance Projects, Incident Management, and Other Strategies (Table 10.11). The MPO acknowledges that each roadway is unique in its challenges and therefore a toolbox approach should be used based on characteristics and nature of the problem.

For transit congestion, the MPO tracks the capacity of fixed bus routes utilized by riders. The MPO references transit Level of Service (LOS) guidelines set forth in the Highway Capacity Manual. Of the eighteen bus routes identified, all routes are operating at LOS rating A (excellent) for passenger capacity. The MPO also monitors on-time system performance for the LRTA for each bus route on a monthly basis. Based on seasonal averages, the LRTA provides an on-time performance service of 81% across the system. The MPO also monitors parking utilization at two commuter rail parking facilities (Lowell & North Billerica) and one park and ride lot in Tyngsborough. Monitored on a quarterly basis, these three locations consistently have been near or exceeded capacity. In 2018, the average utilization was 72.5% for Lowell, 97.5% for North Billerica, and 105% for Tyngsborough. Supporting the TSM strategy to encourage inter-modalism, which includes “promote the expansion/development of park and ride lots,” the MPO, MassDOT, and the Town of Tyngsborough are working collaboratively on the possible expansion of this lot to handle increased demand.

4.3.3 Findings

Recommendation: The CMP should include a listing of congested roadways in the region, that is prioritized based on the severity of the congestion. This listing should be supported by identifying strategies to mitigate the congestion. In addition, for each congested roadway, the CMP should include an implementation schedule, responsible parties and potential funding sources. The MPO should monitor and reassess the CMP implementation of strategies in addressing roadway congestion on a regular basis and make the information publicly available.

4.4 Performance Based Planning and Programming

4.4.1 Regulatory Basis

23 U.S.C. 150(b) identifies the following national goals for the focus of the Federal-aid highway program: Safety, Infrastructure Condition, Congestion Reduction, System Reliability, Freight Movement and Economic Vitality, Environmental Sustainability, and Reduced Project Delivery Delays. Under 23 U.S.C. 134(h)(2), the metropolitan planning process shall provide for the establishment and use of a performance-based approach to transportation decisionmaking to support the national goals, including the establishment of performance targets.

23 CFR 450.306(d) states that each MPO shall establish performance targets to support the national goals and track progress towards the attainment of critical outcomes. Each MPO shall coordinate with the relevant State to ensure consistency, to the maximum extent practicable, and establish performance targets not later than 180 days after the State or provider of public transportation establishes its performance targets. The selection of performance targets that address performance measures described in 49 U.S.C. 5326(c) and 49 U.S.C. 5329(d) shall be coordinated to the maximum extent

practicable, with public transportation providers to ensure consistency with the performance targets that public transportation providers establish under 49 U.S.C. 5326(c) and 49 U.S.C. 5329(d). Additionally, each MPO shall integrate the goals, objectives, performance measures, and targets from other performance-based plans and programs integrated into the metropolitan transportation planning process.

23 CFR 450.314(h) states that the MPO, the State, and the public transportation operator shall jointly develop specific written provisions for Performance Based Planning and Programming (PBPP), which can either be documented as part of the metropolitan planning agreements or in some other means.

23 CFR 450.324(f) states that MTPs shall include descriptions of the performance measures and performance targets used in assessing the performance of the transportation system, a system performance report evaluating the condition and performance of the transportation system with respect to the performance targets, and progress achieved in meeting the performance targets in comparison with system performance recorded in previous reports.

23 CFR 450.326(d) states that the TIP shall include, to the maximum extent practicable, a description of the anticipated effect of the programmed investments with respect to the performance targets established in the MTP, the anticipated future performance target achievement of the programmed investments, and a written narrative linking investment priorities to those performance targets and how the other PBPP documents are being implemented to develop the program of projects.

23 CFR 450.340 states that MPOs have two years from the effective dates of the planning and performance measures rule to comply with the requirements.

4.4.2 Observations

The MPO, LRTA, and MassDOT are working together to coordinate and carry out a performance-based multimodal transportation planning process consistent with the FHWA-FTA joint rule on statewide, nonmetropolitan, and metropolitan transportation planning. The MPO is aware of the requirement to integrate the goals, objectives, performance measures, and targets from other performance-based plans and processes into the metropolitan transportation planning process.

MassDOT, in consultation with Massachusetts' MPOs and public transportation operators, finalized a statewide PBPP Agreement on May 6, 2019 to satisfy the requirements under 23 CFR 450.314(h) for coordinated development of specific written provision for PBPP. The Agreement includes the following sections:

- Development and sharing of performance management data,
- Selection of performance targets,
- Reporting of performance targets,
- Reporting of progress toward achieving targets,
- Process for dispute resolution, and
- Amendment, termination, and supersession of agreement.

Further, the existing Boston, MA-NH-RI urbanized area (UZA) MOU was updated in 2019 to incorporate requirements related to PBPP reporting and target setting. The MPO already has experience sharing performance data with MassDOT as the MPO maintains its own regional pavement management system. The MPO noted that it would like more coordination with the MassDOT pavement management

system and data collection efforts in the future to ensure consistency and avoid any potential redundancies.

For the FHWA performance measures, MassDOT translated statewide performance data into regional datasets so that the MPO could understand the regional performance trends before establishing its metropolitan performance targets. Ultimately the MPO decided to support the MassDOT targets for highway safety, pavement condition, bridge condition, travel time reliability, and freight reliability. For FTA performance measures, LRTA presented its targets for transit asset management (TAM) to the MPO, and the MPO decided to adopt LRTA's targets for the region.

Within the current MTP, the MPO has included required information for a system performance report for all FHWA performance measures, including baseline performance data and targets. It also includes FTA performance measures and targets aligning with TAM, but is missing baseline performance data. Further, while the MTP includes "National Performance Management Rules and Performance Measures" (Table 1.1), it is missing FTA-required performance measures.

The MTP clearly documents the MPO's PBPP approach by aligning its investment programs with its regional goals; these goals reflect federal TPM requirements. Performance measures are used in achieving MTP goals, which were taken into consideration when developing the MPO's investment programs. The TIP discusses how performance measures are utilized in scoring of potential projects via Transportation Evaluation Criteria (TEC) when considering project prioritization and TIP programming scenarios. However, the TIP does not connect projects with investment programs, which could better align with the MTP.

4.4.3 Findings

Recommendation: The MPO should use the terminology "system performance report" for the performance management discussion in the next MTP to clearly demonstrate compliance with 23 CFR 450.324(f)(4) and avoid any potential confusion among partner agencies and stakeholders moving forward. Further, the MPO should include TAM baseline data in the MTP system performance report so future updates of the report can track progress over time, as required.

4.5 Financial Planning

4.5.1 Regulatory Basis

23 U.S.C. 134(i)(2)(E) & (j)(2)(B), 23 CFR 450.234(f)(11), and 23 CFR 450.326(j) set forth the requirements that the MTP and TIP must include a fiscally constrained financial plan that demonstrates how the plan and program of projects can be implemented, including the resources that are expected to be available. Under 23 CFR 450.314, estimates of funds available for use in the financial plan must be developed cooperatively by the MPO, public transportation operator(s), and the State. This cooperative process must be outlined in a written agreement that includes specific provisions for developing and sharing information related to the development of financial plans that support the metropolitan transportation plan.

4.5.2 Observations

The financial projections the MPO uses as the basis of its financial plans are provided by MassDOT. Each year for the TIP, and every four years for the MTP, MassDOT will request guidance from FHWA on the latest projected federal apportionments. The projected apportionments provided to MassDOT are developed based on historic obligation authority and apportionment levels. MassDOT then determines what portion of those FHWA funds will be deducted to various statewide programs with the remainder split, by formula, between the planning regions in the state (i.e., “target funds”). This formula is determined by the Massachusetts Association of Regional Planning Agencies (MARPA), commonly referred to as the MARPA formula.

The MPO’s regional financial plan of the FY 2020-2024 TIP describes that revenue estimates are provided by MassDOT as part of the Statewide Road and Bridge MOU and refined as part of the STIP development process. However, the TIP lacks specifics regarding the details of the Statewide Road and Bridge MOU and how this relates to the MARPA formula. There is very little detail and transparency as to how the formula is developed and how target funds are established. In addition, the TIP financial plan includes “Regional Programming Funding (Outside of Targets)” but there is not sufficient detail on how this funding amount was established and how it relates to the regional targets. In Table 12, the TIP demonstrates financial constraint is maintained for the regional highway projects (i.e., “Target Funding Unprogrammed”), but no similar demonstration is shown for “Regional Programming Funding (Outside of Targets)” or transit projects (Table 13). On average, there is approximately \$1 million of unprogrammed highway funding throughout the duration of the TIP. The MPO explained that this approach has to do with the fact that the restrictive nature of TIP funding results in municipalities funding their own projects. The funding that is unprogrammed has therefore been used for unforeseen project contingencies or flexed to FTA. Further, the TIP financial plan provides no detail to the sources of non-federal funding particularly for transit projects.

The financial planning for highway and transit projects is also presented in Chapter 15 of the 2020-2040 MTP. The MTP identifies highway and transit projects in five-year increments through 2040 and provides projections for target and non-target funding sources. For the outer ten years, the MPO chose to summarize planned investments by program category (i.e., Intersection Improvements/Safety, Roadway/Corridor Improvements, Bicycle and Pedestrian Improvements, and Bridge Rehabilitation/Reconstruction), as opposed to specific projects. Rather, the percentages for each investment program are estimated based on anticipated revenues and the anticipated value of the projects assumed to be ready for programming during the last ten years of the plan. This method was used to alleviate the challenge of identifying costs for projects that have not yet been scoped. While funding is allocated to the different program categories, there is no clear indication how the spending aligns with the RTP goals (Figure 15.1).

Unlike the TIP financial plan, the MTP is supported by a financial narrative which outlines inputs and assumptions such as revenue growth percentage, debt service, and MARPA formula calculations (Table 15.9). The financial assumptions are very informative and result with the MPO receiving 3.9% of the State’s federal highway funding. The MPO develops the transit financial projections through consultation with LRTA and MassDOT. Similar to highway revenues, transit revenues are also shown in five-year increments through the life of the MTP. However, unlike highway revenues, the assumptions for transit revenues are not included in comparable detail. Anticipated LRTA revenues and expenditures are provided in multiple tables within the financial plan; additional narrative explaining the assumptions behind those numbers would be useful.

4.5.3 Findings

Recommendation: The financial planning of the TIP should include a description of how the MPO's regional highway target funding and federal transit funding estimates are developed in consultation with MassDOT and the LRTA.

Recommendation: In the next MTP update, the MPO should clearly document the assumptions made to develop transit revenue forecasts for both capital and operating portions of the financial plan.

4.6 List of Obligated Projects

4.6.1 Regulatory Basis

23 U.S.C. 134(j)(7) and 23 CFR 450.334 requires that the State, the MPO, and public transportation operators cooperatively develop a listing of projects for which Federal funds under 23 U.S.C. or 49 U.S.C. Chapter 53 have been obligated in the previous year. The listing must include all federally funded projects authorized or revised to increase obligations in the preceding program year and, at a minimum, the following for each project:

- The amount of funds requested in the TIP
- Federal funding obligated during the preceding year
- Federal funding remaining and available for subsequent years
- Sufficient description to identify the project
- Identification of the agencies responsible for carrying out the project

4.6.2 Current Status

The MPO's annual listing of obligated projects for Federal Fiscal Year (FFY) 2019 was posted on its website. The document includes both highway and transit projects, and clearly shows amounts obligated against amounts programmed for each project from the TIP. Specifically, the listing includes the total project amount requested in the TIP, information on the federal programmed portion, the federal amount previously obligated, the federal amount obligated in FFY 2019, the obligation date, the project location and description, and the responsible agency.

For transit projects, however, the listing includes transit projects that were obligated in FFY 2018. When discussing with the MPO and LRTA, they explained that these projects were programmed according to the state fiscal year of the state match for the project. Additionally, some transit projects obligated in FFY 2019 were missing. This is not consistent with the intent of the requirement to report on federal funding obligated in the preceding year.

4.6.3 Findings

Recommendation: The MPO should work with its transit partners to ensure they have the necessary information to be able to accurately report on the obligations that have occurred during the appropriate reporting year.

4.7 Regional Planning Agreements and Coordination

4.7.1 Regulatory Basis

In accordance with 23 U.S.C. 134 and 23 CFR 450, MPOs must consult with agencies and officials responsible for other planning processes when developing TIPs and MTPs and must carry out a 3C planning process. This includes establishing MOUs identifying the mutual roles, responsibilities, and procedures governing their cooperative efforts. These agreements must identify the designated agency for air quality planning under the Clean Air Act and address the responsibilities and situations arising from there being more than one MPO in a metropolitan area.

More specifically, 23 CFR 450.314(e) states:

“If more than one MPO has been designated to serve an urbanized area there shall be a written agreement among the MPOs, the State(s), and the public transportation operator(s) describing how the metropolitan transportation planning processes will be coordinated to assure the development of consistent metropolitan transportation plans and TIPs across the MPA boundaries, particularly in cases in which a proposed transportation investment extends across the boundaries of more than one MPA. If any part of the urbanized area is a nonattainment or maintenance area, the agreement also shall include State and local air quality agencies. The metropolitan transportation planning processes for affected MPOs should, to the maximum extent possible, reflect coordinated data collection, analysis, and planning assumptions across the MPAs. Alternatively, a single metropolitan transportation plan and/or TIP for the entire urbanized area may be developed jointly by the MPOs in cooperation with their respective planning partners. Coordination efforts and outcomes shall be documented in subsequent transmittals of the UPWP and other planning products, including the metropolitan transportation plan and TIP, to the State(s), the FHWA, and the FTA.”

On April 23, 2014, then United States Department of Transportation Secretary Anthony Foxx outlined three Planning Emphasis Areas for FY 2016. These are not regulations, but rather are topic areas that MPOs and State departments of transportations are encouraged to focus on when conducting their planning processes and developing their planning work programs. One of these Planning Emphasis Areas is Models of Regional Planning Cooperation, which reads:

“Promote cooperation across MPO boundaries and across State boundaries where appropriate to ensure a regional approach to transportation planning. This is particularly important where more than one MPO or State serves an urbanized area or adjacent urbanized areas. The cooperation could occur through the metropolitan planning agreements..., through the development of joint planning products, and/or by other locally determined means.”

4.7.2 Observations

NMMPO is geographically surrounded by other MPOs. Over the years, there have been regular meetings, roughly annually, of staff from the multiple Massachusetts MPOs serving northern portions of the Boston UZA; these meetings recently expanded to include the NH-based MPOs that include portions

of the Boston UZA. The discussions at these coordination meetings aim to avoid duplication of efforts and include topics like data collection, modeling, and major planning studies. NMMPO staff and their neighboring MPO staff also coordinate on an ad hoc basis, sharing practices and approaches used on common issues as well as coordinating on studies when transportation needs and/or services cross MPO boundaries.

With the significant transportation linkages across MPO borders in this region, there have been projects that also cross boundaries, in physical work and/or funding streams. One such project discussed with the planning partners during this review was the Exit 36 Southbound project. Previously the subject of a highly coordinated planning process between NMMPO and the Nashua MPO, Exit 36 appears in both of the relevant MPOs' current MTPs. However, one of the MPOs identifies it as a fiscally constrained project to be implemented during the life of the plan while the other MPO includes it as an unfunded, illustrative project only.

The Northern Middlesex MPO is a signatory to the Boston, MA-NH-RI UZA MOU which was finalized in January 2019. The agreement supersedes a previous 2003 agreement and reflects the collective planning responsibilities as a result of the 2010 Census urbanized boundary, as well as changes in federal transportation planning requirements. The MOU includes 11 MPOs spanning across three states and includes appropriate reference to the coordinated data collection, analysis, and planning assumptions requirements across the MPAs. The MOU also makes reference to the separate air quality and performance-based planning responsibilities as required in statute. Separate agreements among the parties in Massachusetts have been created to cover these joint responsibilities, including the "Conduct of Air Quality Planning Coordination for Transportation Conformity," recently updated October 2019, and the "Performance-based Planning and Programming Agreement" that was created in April 2019.

Although most of the Northern Middlesex region is within the Boston UZA, a portion is in the Nashua, NH-MA UZA, which is also served by the Nashua MPO, Southern New Hampshire MPO, and Montachusett MPO. These MPOs have a history of coordinating with their neighbors, such as through data sharing, sharing draft planning documents, and coordination on multi-regional planning studies; however, a formal written agreement has yet to be executed.

4.7.3 Findings

Corrective Action: The Northern Middlesex MPO must coordinate with the other MPOs that serve the Nashua, NH-MA UZA, along with other required parties, to develop and execute a written agreement that meets the requirements of 23 CFR 450.312(h) and 23 CFR 450.314(e). Minimally, the resulting agreement shall address the coordination needs referenced in the regulations. This corrective action shall be completed by December 31, 2020.

Commendation: Given the interconnected nature of the larger geographic region, it is beneficial for staff at these MPOs to be regularly sharing data, practices, and plans. The Review Team commends the participants for their initiative in convening these regular coordination meetings and encourage them to continue doing so.

4.8 Intermodal Transportation Coordination

4.8.1 Regulatory Basis

Federal regulation makes clear the need for coordination across modes during the transportation planning process. According to 23 CFR 450.306, the scope of the metropolitan planning process must include:

- Consideration of both motorized and non-motorized users;
- Enhancing the integration and connectivity of the transportation system, across and between modes, for people and freight; and
- Preparation of the coordinated public transit-human services transportation plan in coordination with the metropolitan transportation planning process.

Furthermore, 23 CFR 450.316 calls for a planning process that incorporates input from public transit riders, pedestrians, bicyclists, providers of private transportation, and airports; and 23 CFR 450.324 specifies that the MTP should include consideration of “pedestrian walkways and bicycle facilities.”

4.8.2 Observations

LRTA is the primary provider of transit within the Northern Middlesex region. The LRTA and MPO share a staff person who physically splits time between the two offices, providing transit planning services to the LRTA through a contract between the two agencies. Two representatives of the LRTA Advisory Board also serve on the MPO board, one of whom is the LRTA Chairperson. This leads to very close coordination between the two agencies at both the staff level and the decisionmaker level.

The LRTA is continuously working to enhance transit connections throughout the region. One example is a new pilot project to provide service on Sundays. This service connects with the neighboring Merrimack Valley Regional Transit Authority’s (MVRTA) Sunday service, eliminating a major transportation barrier between the two regions. Staff noted that ridership has been growing steadily and they will be seeking to extend the pilot for another 9 months.

LRTA and MPO staff coordinate closely with the University of Massachusetts Lowell to enhance transit options for students, including a partnership where students and faculty can tap their ID cards to board LRTA buses. Staff also coordinate closely with the Massachusetts Bay Transportation Authority (MBTA) and regularly attend meetings of the Middlesex 3 Coalition, a transportation management association.

MPO staff highlighted multiple efforts to enhance the mobility of pedestrians throughout the region such as the MPO’s Healthy Communities Initiative which encourages senior citizens to be more active by walking and biking. The MPO also provides technical assistance to member communities on a variety of multimodal studies and projects.

4.8.3 Findings

The transportation planning process in the Northern Middlesex Region is consistent with the federal requirements for this topic area.

4.9 Civil Rights (Title VI, EJ, LEP, ADA)

4.9.1 Regulatory Basis

Title VI of the Civil Rights Act of 1964, prohibits discrimination based upon race, color, and national origin. Specifically, 42 U.S.C. 2000d states that “No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.” In addition to Title VI, there are other Nondiscrimination statutes that afford legal protection. These statutes include the following: Section 162 (a) of the Federal-Aid Highway Act of 1973 (23 U.S.C. 324), Age Discrimination Act of 1975, and Section 504 of the Rehabilitation Act of 1973/Americans with Disabilities Act (ADA) of 1990. ADA specifies that programs and activities funded with Federal dollars are prohibited from discrimination based on disability.

Executive Order #12898 (Environmental Justice (EJ)) directs federal agencies to develop strategies to address disproportionately high and adverse human health or environmental effects of their programs on minority and low-income populations. In compliance with this Executive Order, the United States Department of Transportation (USDOT) and FHWA issued orders to establish policies and procedures for addressing environmental justice in minority and low-income populations. The planning regulations, at 23 CFR 450.316(a)(1)(vii), require that the needs of those “traditionally underserved” by existing transportation systems, such as low-income and/or minority households, be sought out and considered.

Executive Order # 13166 (LEP) requires agencies to ensure that LEP persons are able to meaningfully access the services provided consistent with and without unduly burdening the fundamental mission of each federal agency.

4.9.2 Current Status

The review of the MPO’s website revealed an easily located Title VI page. The information on the Title VI page clearly explains the federal Title VI/non-discrimination requirements, Massachusetts State protections and an explanation of Environmental Justice. Furthermore, the Title VI page includes easily discerned information on how to file a Title VI Complaint and contact information for the MPO’s Title VI Specialist. While the MPO does make an effort to share MassDOT’s Title VI program website for more information, the link does not direct the public to the appropriate webpage; this should be updated.

Visitors to the MPO’s website can find NMMPO’s Title VI and Non-Discrimination Policy directly from the home page. The website includes the option to translate the policy into the MPO’s regional language groups (i.e., Spanish, Portuguese, Khmer, Chinese, and Vietnamese), as identified through its LEP analysis. From the Title VI webpage, visitors can easily find information about Title VI Complaint process, including the appropriate complaint form in six languages. The MPO website is supported by Google translate which can be used to translate the entire website into 80 different languages, including the five NMMPO regional language groups listed above.

The MPO's Title VI Assessment Report is available on its website and demonstrates that the recipient collects and analyzes data in accordance with requirements found in 28 CFR 42.406 and 49 CFR 21.9(b). The report is comprehensive and well-written. However, the report was issued in 2014 and is therefore outdated. While the MPO does provide annual updates to MassDOT, this information should be made available to members of the public. The 2019 LEP Plan is also available on the MPO's website and supports its commitment to adhering to LEP requirements. The document provides members of the public with information on the federal requirements, the availability of interpreters, and Safe Harbor requirements.

Regarding meeting accommodations, the MPO clearly documents the steps it takes to ensure persons with disabilities and LEP populations have the option to participate in the planning process. Specifically, all meeting notices include language that instructs those requiring language services or special accommodations under ADA (free of charge) to contact the MPO in advance of the meeting. To enhance these notices, the MPO should consider adding more details about the type of presentation(s), activity(s), technology(s), etc. being planned for the meeting. Providing this information may help persons with disabilities and LEP community members better understand what to expect and therefore be better positioned to request the appropriate accommodation and support their full engagement with the planning process.

4.9.3 Findings

Recommendation: The 2014 Title VI Assessment Report posted on the MPO's website should be updated to reflect current reporting. While the MPO provides annual updates to MassDOT, this information should be made available to members of the public who may visit the website.

Recommendation: The MPO should include more details in its meeting notices (e.g., type of presentation(s), activity(s), technology(s)) in order to help persons with disabilities and LEP community members better understand what to expect and therefore be better positioned to request the appropriate accommodation and support their full engagement with the planning process.

4.10 Public Outreach and Involvement

4.10.1 Regulatory Basis

23 U.S.C. 134(i)(6) and 134(j)(1)(B) set forth the requirements for MPOs to provide adequate opportunity for the public to participate in and comment on the products and planning processes of the MPO. The requirements for public involvement are detailed in 23 CFR 450.316, which requires the MPO to develop and implement a documented public participation plan that includes explicit procedures and strategies to include the public and other interested parties in the transportation planning process. Additionally, 23 CFR 450.324 and 23 CFR 450.326 require the MPO to create opportunities for public involvement, participation, and consultation throughout the development of the MTP and TIP, respectively.

Specific requirements include: providing adequate and timely notice of opportunities to participate in, or comment on, transportation issues and processes; employing visualization techniques to describe MTPs and TIPs; making public information readily available in electronically accessible formats; holding

public meetings at convenient and accessible locations and times; demonstrating explicit consideration of, and responding to, public input; and periodically reviewing the effectiveness of the procedures and strategies contained in the public participation plan to ensure a full and open participation process.

4.10.2 Observations

The MPO's Public Participation Plan (PPP) update was endorsed in March 2017. The PPP describes the public participation procedures for the MTP, TIP, and UPWP; these procedures are reiterated within those documents. The PPP is a living document that will be reviewed and updated as needed to address current requirements as well as ideas and feedback from community members. The MPO explained the methodology it uses to measure the effectiveness of its public involvement strategies (i.e., tracking attendance at public meetings, survey responses, website usage, social media postings, and numbers of public comments received through the process), but these evaluation procedures are not well documented in the PPP, nor are the results of the effectiveness evaluation documented. Regarding public feedback on the MTP, TIP, and UPWP, the outreach process and public comments received are described in these documents.

The MPO continues to demonstrate a strong public participation program that is framed by goals and guiding principles that reflect a process striving to be fully inclusive, fair, and accessible. The MPO uses a variety of tools in order to increase the effectiveness of its public participation on its overall transportation planning process. Face-to-face techniques include public meetings and hearings, open houses, workshops, and targeted outreach gatherings. The MPO also utilizes a mix of outreach methods to distribute information, including the NMCOG website, press releases, print advertisements in the Lowell Sun and Khmer Post, mailings and emails, brochures and flyers local events and City/Town Halls, and various social media platforms.

The MPO provides evidence in its PPP of its efforts to have a fully inclusive public participation process, consistent with State and federal requirements, regularly and proactively reaching out to communities throughout the region that are traditionally underserved and underrepresented, including minorities and persons with disabilities and LEP. For example, the PPP includes detailed steps for planning, implementing, and following-up on different types of public outreach opportunities to ensure compliance with applicable laws and policies. The MPO regularly references its demographic data to understand where and when to increase its outreach efforts for particular Title VI populations, but at a minimum publishes announcements in multiple languages (beyond English) that represent the region (i.e., Spanish, Portuguese, Khmer, Chinese, and Vietnamese). The MPO also consults with community leaders and community-based organizations to gather input on community concerns, meeting times/locations, and types of outreach methods that would maximize public involvement. Outreach efforts seem to be focused in Lowell, which holds the highest concentration of Title VI/Environmental Justice/LEP communities, but the MPO should ensure that persons with disabilities across the region are similarly targeted for input during the transportation planning process.

Within the 2020-2040 MTP, the MPO describes the robust public participation process it led to inform its update. It details the variety of methods used to inform and collect information from the public, consistent with the strategies outlined in the PPP. To help with coordination and implementation of the various strategies during the MTP update, the MPO developed a Public Outreach Plan that details the steps required, including roles and responsibilities of MPO staff, to follow-through with the various

strategies (e.g., survey development and translations; outreach to municipalities, community groups, and other stakeholders; advertisement and social media posting schedules). Another creative approach to public outreach was what the MPO described as “participatory photography,” a tactic used to engage with the Lowell middle school students. The MPO collaborated with a group called Girls, Inc. where children were asked to take photographs of obstacles to pedestrian and bicycle transportation that they observed in their neighborhoods. They then presented their findings and ideas for improvements to the MPO and the Lowell City Council. It proved to be a successful outreach opportunity that educated and included youth within the transportation planning process where they witnessed firsthand the value of civic engagement. The MPO is looking to grow this opportunity moving forward, including expanding outreach to scouting groups, schools, and other youth organizations across the region.

4.10.3 Findings

Recommendation: The MPO should formally document its public involvement evaluation methodology procedures in its PPP with qualitative and quantitative measures to evaluate and improve its process. Using this methodology, the MPO should regularly produce an evaluation of the effectiveness of its public involvement procedures that assesses the strategies and techniques employed and describe what worked well and what could be improved with recommendations for future efforts.

Recommendation: The MPO should expand outreach efforts to Title VI/EJ communities outside of Lowell, including residents of Independent Living Centers and disability advocacy organizations.

APPENDIX

Appendix A: On-Site Meeting Sign-In Sheet

NORTHERN MIDDLESEX METROPOLITAN PLANNING ORGANIZATION CERTIFICATION REVIEW

Wednesday, March 4, 2020

Attendance

	<u>Name</u>	<u>Representing</u>	<u>E-Mail Address</u>
1	Justin Howard	NMCOG	jhowardenmco.org
2	Gregg Lantos	Nashua RIF	gregg@nashuarif.org
3	Jam'K Alexander	FHWA	jamal.k.alexander@dot.gov
4	Graham Reich	LRTA	graham.reich@lra.com
5	Ali Bent	LRTA	asaraali@lra.com
6	Chris Curry	NMCOG	ccurry@nmco.org
7	DEREK SUCOSTAL	MASSDOT	derek.sucostal@state.ma.us
8	Chris Timmel	FHWA	Chris.Timmel@dot.gov
9	EVA BIRK	FHWA	EVA.BIRK@DOT.GOV
10	Brandon Wilcox	FHWA	brandon.wilcox@dot.gov
11	Ryan Bartlett	FTA	RyanBartlett@dot.gov
12	Leah Simon	FTA	leah.simon
13	Beverly Woods	NMCOG	bwoods@nmco.org
14	Margaret Outh (Peggy)	FTA	margaret.outh@dot.gov
15	Kristin Wood	FTA	kristin.wood@dot.gov
16	Pat Wojtas	NMCOG	
17	Matt Watkins	Nashua RIF	MattWatkins@nashuarif.org
18	Dave Bradley	LRTA	LowellRta@AOL.com
19	Constance Rymal	MassDOT	constance.Rymal@dot.state.ma.us
20	Scott Pederson	CTPS	spederson@ctps.org
21	Tegin Reich	CTPS	treich@ctps.org
22	Tony Komornick	MUPC	AKomornick@mupc.org
23	Tina Hooper	FHWA	(via conference call)
24	Greg Sobczynski	MassDOT	(via conference call)

Appendix B: On-Site Meeting Agenda

Northern Middlesex Metropolitan Planning Organization 2020 Transportation Planning Certification Review

Wednesday, March 4, 2020

40 Church Street, #200

Lowell, MA 01852

Conference Line

Phone: 877-873-8017; Access Code: 5061930#

Agenda

- 8:30 - 8:45** **Introductions & Opening Remarks**
- 8:45 - 9:15** **Northern Middlesex MPO Showcase**
- Activities/Accomplishments (MPO Staff)
- 9:15 - 9:45** **Organizational Structure and Governance**
- MPO Memorandum of Understanding
- 9:45 - 10:30** **Metropolitan Planning Process and Key Documents**
- Metropolitan Transportation Plan
 - Congestion Management Process
 - Performance-Based Planning and Programming
- 10:30 - 12:00** **Project Site Visit**
- 12:00 - 1:00** **Lunch Break**
- 1:00 - 1:45** **Metropolitan Planning Process and Key Documents (continued)**
- Transportation Improvement Program
 - Financial Planning and Project Programming
- 1:45 - 2:00** **Break**
- 2:00 - 2:45** **Coordinated, Cooperative, and Comprehensive Planning Process**
- Regional Coordination
 - Intermodal Coordination
- 2:45 - 3:00** **Break**
- 3:00 - 3:45** **Public Participation and Civil Rights**
- Public Participation Plan
 - Title VI, Nondiscrimination, EJ, and LEP
- 3:45 - 4:00** **Other Items and Certification Wrap-up**

Appendix C: Notification Letter



U.S. Department
of Transportation

Federal Highway Administration
MA Division
55 Broadway, 10th Floor
Cambridge, MA 02142-1093
617-494-3657
617-494-3355 (fax)

Federal Transit Administration
Region I
55 Broadway, Suite 920
Cambridge, MA 02142-1093
617-494-2055
617-494-2865 (fax)

December 9, 2019

Stephanie Pollack
Secretary and Chief Executive Officer
Massachusetts Department of Transportation
10 Park Plaza, Suite 3170
Boston, MA 02116

Subject: Northern Middlesex Metropolitan Planning Organization Planning Certification Review

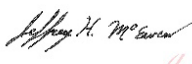
Dear Secretary Pollack:

Fixing America's Surface Transportation (FAST) Act continues the requirement for certification of the transportation planning process in urbanized areas with populations exceeding 200,000. The Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) jointly conduct these reviews on a four-year cycle for each Metropolitan Planning Organization (MPO) within these areas. The purpose of these reviews is to certify the cooperative planning process conducted by the MPO, State, and operators of public transportation. Our approach is to provide an open forum for the exchange of information and ideas that will serve to identify effective practices, as well as opportunities for improvement.

The FHWA and FTA will conduct their next joint certification review of the Northern Middlesex MPO scheduled for March 4, 2020. This review will be located at the Northern Middlesex Council of Governments (COG), 40 Church Street #200, Lowell, MA 01852. All participants in the planning process are encouraged to attend.

If you have any questions, please feel free to contact Christopher Timmel, FHWA Community Planner, at (617) 494-3487 or Leah Sirmin, FTA Community Planner, at (617) 494-2459.

Sincerely,


Digitally signed by JEFFREY H
MCEWEN
Date: 2019.12.11 12:17:02
-05'00'

Jeffrey H. McEwen, P.E.
Division Administrator
Federal Highway Administration



Peter Butler
Regional Administrator
Federal Transit Administration

cc: David Mohler, Executive Director, Office of Transportation Planning
Bryan Pounds, Manager of MPO Activities, Office of Transportation Planning
Beverly Woods, Executive Director, Northern Middlesex COG
Justin Howard, Transportation Program Manager, Northern Middlesex COG
James Scanlan, Administrator, Lowell Regional Transit Authority

Appendix D: Public Meeting Notice



U.S. Department
of Transportation

Federal Highway Administration
MA Division
55 Broadway, 10th Floor
Cambridge, MA 02142-1093
617-494-3657
617-494-3355 (fax)

Federal Transit Administration
Region I
55 Broadway, Suite 920
Cambridge, MA 02142-1093
617-494-2055
617-494-2865 (fax)

Public Involvement Session Notice

Time: 2:00 PM – 3:00 PM

Date: Wednesday, February 26, 2020

**Location: Northern Middlesex Council of Governments
40 Church Street, Suite 200
Lowell, MA 01852**

**Come share your views about the transportation planning process in the
Northern Middlesex region!**

Every four years, the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) are required to review the metropolitan transportation planning process conducted by the Northern Middlesex Metropolitan Planning Organization, Massachusetts Department of Transportation, Lowell Regional Transit Authority, and its local municipal partners in order to certify that they are carrying out the process in accordance with all applicable Federal requirements.

As part of this review, the Federal agencies would like to hear from members of the public on their views of how the metropolitan transportation planning process is conducted in the region.

Please attend the public meeting conducted by FHWA and FTA, to be held during the regularly scheduled Northern Middlesex MPO meeting. If you are unable to attend, you may also submit your comments or observations in writing by March 6, 2020 to:

FHWA: Jeffrey McEwen, Division Administrator
55 Broadway, 10th Floor, Cambridge, MA 02142
Email: chris.timmel@dot.gov

FTA: Peter Butler, Regional Administrator
55 Broadway, Suite 920, Cambridge, MA 02142
Email: leah.sirmin@dot.gov

Please note that the meeting location is accessible via the Lowell Regional Transit Authority (<http://lrta.com/>) and the MBTA Commuter Rail (<http://mbta.com/>).

This meeting is accessible to people with disabilities and those with limited English proficiency. Accessibility accommodations and language services will be provided free of charge, upon request, as available. Please contact Justin Howard at 978-454-8021 Extension 121 for more information.

Appendix E: Public Meeting Attendance

NORTHERN MIDDLESEX METROPOLITAN PLANNING ORGANIZATION

NMCOG, 40 Church St., Unit 200, Lowell, MA

Wednesday, February 26, 2020 - 2:00PM

Attendance

	<u>Name</u>	<u>Representing</u>	<u>E-Mail Address</u>
1	Justin Howard	NMCOG	jhoward@nmco.org
2	KEVIN O'CONNOR	LRTA	
3	Pat Wojtas	NMCOG	
4	Tom Boni	LRTA	
5	PAUL STARRATT	WESTFORD	pstarratt@westfordma.gov
6	Chris Timmel	FWHA	CHRIS.TIMMEL@DOT.GOV
7	Leah Simm	FTA	leah.simm@dot.gov
8	STEPHEN JAHNE	Crewsford MA	STANNUCE.TWISS@CREWSFORD.US
9	Kelly Beatty	IDA - MA	kbeatty@darksky.org
10	Derek Shooster	MASSDOT	DEREK.SHOOSTER@STATE.MA.US
11	Constance Raphael	MASSDOT	Connie.Raphael@dot.state.ma.us
12	Timothy Paris	MASSDOT	Timothy.Paris@dot.state.ma.us
13	ERIC SACERNO	TYNGSBOROUGH	
14	Kevin Hardiman	Tewksbury	khardiman@tewksburyma.gov
15	Chris Cury	NMCOG	
16	Ali Bent	LRTA	asa@allt@lta.com
17	Graham Reich	LRTA	graham.reich@lta.com
18	Madsen Vance	City of Lowell	mrvance@lowellma.gov
19	Chris Hayes	City of Lowell	chhayes@lowellma.gov
20	EWare	Draut	eware@drautma.gov
21	Alana Galan	NMCOG	agalane@nmco.org
22	FRANK SESZYNSKI	MASSDOT	FRANK.SESZYNSKI@STATE.MA.US
23			
24			

Appendix F: Public Comments

Public Input Summary

FHWA and FTA jointly led a public involvement session as part of the NMMPO's regular monthly meeting on February 26, 2020 to hear from the public on how they feel the metropolitan planning process is working in the Northern Middlesex region. After providing an overview of the TMA certification review process, FHWA and FTA opened it up to the public to share their comments. A mix of seven residents and municipal and agency employees representing four communities across the region spoke. All who made comments related to the planning process commended the NMCOG staff's support and technical assistance across a variety of projects and needs (e.g., corridor studies, data collection efforts, public outreach, master plans). NMCOG was credited for being professional, transparent, and a great liaison to MassDOT and LRTA. One resident who spoke commented on roadway lighting practices and his desire to see the region and State follow national best practices in this area moving forward.

The Review Team also received a letter from another municipality providing positive feedback on the MPO and the assistance it provides to the municipality.

Appendix G: Previous Findings and Disposition

The last certification review for the NMMPO planning area of the Boston, MA-NH-RI urbanized area was conducted in December 2016. The joint FHWA/FTA certification letter was issued on March 23, 2017, subject to the resolution of a corrective action included with the transmission of the final report on May 4, 2017. As of January 2019, the corrective action was resolved. FHWA and FTA jointly issued a letter on April 23, 2020 acknowledging resolution and officially recertifying the transportation planning process. The 2017 Certification Review corrective action and recommendations and their dispositions are summarized below.

NMMPO 2017 Certification Findings (as of December 2019)

Finding	Corrective Actions/ Recommendations	Action	Disposition
<p>Metropolitan Transportation Plan Future updates of the MTP should include a full discussion of projected transportation demand over the life of the plan, and how implementation of the plan will impact that demand and the transportation system within the region.</p>	Recommendation	As the NMMPO's Regional Transportation Plan is updated, a discussion of projected transportation demand, and how plan implementation will affect that demand, will be included.	<p>Included in FFY 2020 Northern Middlesex Regional Transportation Plan.</p> <p>This recommendation has been achieved.</p>
<p>Financial Planning The TIP should demonstrate financial constraint by showing a direct comparison of available revenue to expenditures for programmed projects. This should be shown for both highway and transit projects and includes all reasonably expected sources of revenue.</p>	Recommendation	The FFY 2020-2024 TIP addresses this recommendation and demonstrates financial constraint by showing a direct comparison of available revenue to expenditures.	<p>The FFY 2020-2024 TIP was endorsed by the NMMPO on May 22, 2019 and went into effect October 1, 2019.</p> <p>This recommendation has been achieved.</p>
<p>Financial Planning The tables within the MTP's financial plan should clearly document revenue and expenditures in a consistent manner so a reader can compare the two, including within the various categories such as highway, transit operating, and transit capital.</p>	Recommendation	The financial plan will be reviewed and updated in the upcoming RTP Update, to more clearly document revenue and expenditures. As always, the NMMPO staff will continue to work with FHWA and FTA to implement federal regulations.	<p>Included in FFY 2020 Northern Middlesex Regional Transportation Plan.</p> <p>This recommendation has been achieved.</p>

<p>Additionally, expenditures shown in the financial plan should clearly match the costs of projects proposed in the plan's recommendations.</p>			
<p>Air Quality MassDOT should revise the current Air Quality MOU in coordination with MPOs, the Department of Environmental Protection (DEP), and providers of public transportation, with the intent to recognize the reorganization of the various transportation agencies under the MassDOT umbrella. This agreement was signed in 1996 and should be revised to recognize the roles of all agencies in fulfilling the requirements, including those in 23 CFR 450.314(c) & (d).</p>	<p>Recommendation</p>	<p>The NMMPO will work collaboratively with MassDOT, DEP and Public Transportation Providers to revise the current Air Quality MOU. Responsibility for this action ultimately lies with MassDOT, but the NMMPO staff will assist with this effort. The Target date is an arbitrary goal at this point. Further discussion with State and regional partners will lead to a more specific target date.</p>	<p>The Air Quality MOU has been updated.</p> <p>This recommendation has been achieved.</p>
<p>List of Obligated Projects The MOU should be defined to explain the joint responsibility and collaborative role between the MPO, MassDOT and LRTA in completing the annual listing of obligated projects.</p>	<p>Recommendation</p>	<p>NMMPO staff will work with MassDOT and the LRTA to update the MPO MOU, so that it clearly outlines the joint responsibility and collaborative roles of the three entities in refining and reporting on the annual listing of obligated projects.</p>	<p>MPO staff have discussed this with LRTA and MassDOT partners.</p> <p>This recommendation <u>has not</u> been achieved.</p>
<p>List of Obligated Projects The list of obligated projects should contain all the required elements and projects as required in 23 CFR 450.334</p>	<p>Recommendation</p>	<p>The NMMPO will work with LRTA and MassDOT to update the listing of obligated projects so that it includes both highway and transit projects, TIP project cost amounts, Federal funding obligated during the preceding year, federal funding remaining, and funding available for subsequent years. The list will also include a description of each project.</p>	<p>The 2019 Annual listing of Federally Obligated Projects is available on the NMCOG website. MPO staff collaborated with LRTA, MassDOT, the City of Lowell and Federal partners to develop the report.</p> <p>This recommendation has been achieved.</p>

<p>Self-Certifications The MPO should ensure its self-certification compliance statement is consistent with the 23 CFR 450.336. The MPO should also consider either giving a periodic presentation to discuss the self-certifications or creating a supplement for their members that explains their applicability, or both.</p>	<p>Recommendation</p>	<p>The FFY 2020-2024 TIP includes the self-certification compliance statement. As TIPs are developed each year, staff will discuss the compliance statement with the NMMPO members.</p>	<p>FFY 2020-2024 TIP self-certification compliance statement is consistent with 23 CFR 450.336.</p> <p>This recommendation has been achieved.</p>
<p>Congestion Management Process The MPO should evaluate the effectiveness of each strategy on improving congestion for the roadways identified in the CMP. The CMP should include an implementation schedule with responsible parties and potential funding sources. The MPO should monitor the implementation of strategies in improving congestion performance within the region.</p>	<p>Recommendation</p>	<p>In the next CMP update, staff will evaluate strategy effectiveness, and include an implementation schedule outlining responsible parties and potential funding sources. The implementation of strategies will be monitored on an ongoing basis to track performance in the region.</p>	<p>MPO staff are currently reviewing INRIX data available and updating databases. Monitoring of completed projects will be included in reporting. The FFY 2020 Regional Transportation Plan includes CMP reporting.</p> <p>Work has begun, but this recommendation <u>has not</u> been achieved.</p>
<p>MPO Organizational Structure The MPO should revise its MOU to ensure consistency with the number of voting members and signatories required for endorsements, specifically with regard to MassDOT officials. The MPO should also document its review to reaffirm or revise the MOU “at least every three years.” If there is consensus among the parties, the frequency may be revised to “at least every four years,” as suggested during the on-site discussion.</p>	<p>Recommendation</p>	<p>The NMMPO has targeted Summer 2019 for completion of the MOU update. NMMPO MOU revisions will update the signatories for endorsement information to reflect current practice. The updated MOU will document the recurring review and update schedule, as suggested by USDOT.</p>	<p>MPO staff have discussed this with LRTA and MassDOT partners.</p> <p>This recommendation <u>has not</u> been achieved.</p>

<p>Inter-Agency Agreements and Consultation MassDOT, Northern Middlesex and Montachusett MPOs should coordinate with the New Hampshire DOT and the MPOs and public transportation providers serving the Nashua UZA to establish a planning agreement that reflects the results of the 2010 Census and meets the requirements of 23 CFR 450, Subpart C. Minimally, the resulting agreement shall address the division of responsibilities related to the coordination concerns referenced in the regulations. More specifically and to an appropriate extent, the agreement should address the following areas: financial plans; annual listing of obligated projects; data collection/sharing and analysis, including planning assumptions related to population growth, employment, and land use; coordinated decisionmaking, i.e., for key transportation assets/services spanning MPO and State boundaries; dispute resolution; congestion management process; performance-based planning/reporting/and target-setting.</p>	<p>Recommendation</p>	<p>The NMMPO will work with MRPC, the City of Nashua, NRPC, NHDOT, and MassDOT to develop an MOU as required in 23 CFR 450, subpart C, as outlined in USDOT’s recommendation.</p>	<p>Work is underway to address this recommendation. MPO staff have discussed this update with NRPC. Still need to discuss with other regional partners. This MOU may mirror the recently updated Boston UZA MOU update.</p> <p>Work has begun, but this recommendation <u>has not</u> been achieved.</p>
<p>Title VI Notice and Complaint Procedures The MPO should ensure the designation of its Title VI Specialist is consistent in all public notices, program documentation, and its web site. Further, the MPO should consult the MassDOT Title VI Specialist for assistance in revising its complaint process based on the above observations and discussion. The MPO should ensure that its complaint process and form are consistent and accessible. Accordingly,</p>	<p>Recommendation</p>	<p>The NMCOG website has been updated to reflect the official notice to beneficiaries designation of Justin Howard as Title VI Specialist. All future public notices and program documentation will reflect this change.</p> <p>MassDOT is currently revising their complaint process templates and will provide</p>	<p>Each task has been completed and notices, complaint forms and translations are all available on the NMCOG website.</p> <p>This recommendation has been achieved.</p>

<p>the MPO should also translate its complaint process in the five prominent languages spoken throughout the planning area. Lastly, the MPO should consider using MassDOT's template complaint form. The form is available for download from MassDOT's Title VI SharePoint website and has been translated in full into the top ten (10) languages spoken in the Commonwealth.</p>		<p>this information to the NMMPO.</p> <p>The NMMPO will translate its complaint form in the five prominent spoken languages.</p>	
<p>Title VI and Nondiscrimination Data Collection and Analysis The MPO is encouraged to continue expanding its data collection and analysis to encompass all persons protected under Title VI, the Environmental Justice Order 12898, and other nondiscrimination authorities. The MPO should consistently use a comprehensive set of demographic data in its equity analysis.</p>	<p>Recommendation</p>	<p>The NMMPO will continue to review and improve its equity analysis methodologies and data sets and include this work in the FFY 2020 UPWP.</p>	<p>Equity analysis for TIP and UPWP were reviewed as these documents were developed in the Spring 2019.</p> <p>This recommendation has been achieved.</p>
<p>Title VI and Nondiscrimination Data Collection and Analysis In addition to the use of comprehensive demographic layers, the MPO should strategize enhancements to its equity analysis to identify any nexus between the region's demographics and transportation needs. For example, the MPO may consider comparing the condition and quantity of assets to the level of funding in each municipality. The MPO should also expand the time period covered by its equity analysis.</p>	<p>Recommendation</p>	<p>The NMMPO has included work on the expansion of equity analysis methods in the FFY 2020 UPWP. The NMMPO will expand the time period covered in its equity analysis in upcoming documents.</p>	<p>Equity analysis for TIP and UPWP were reviewed as these documents were developed in the Spring 2019.</p> <p>This recommendation has been achieved.</p>
<p>Limited English Proficiency Based on the above observations, the MPO should continue to develop and make readily</p>	<p>Recommendation</p>	<p>The NMMPO will contact MassDOT Civil Rights staff for continued guidance on translation of vital documents and outreach</p>	<p>The NMCOG website has been updated to reflect more explanation of certification</p>

<p>available translations of its vital documents, including printed or printable outreach materials. Additionally, the MPO should more clearly state its language assistance measures in a way that distinguishes the translation and availability of documents under the safe harbor provision from its overarching obligation to provide meaningful access. The MPO should also update its Four-factor Analysis to more specifically identify all resources and a capacity to provide language assistance services. The MPO's language assistance measures stated later in its LAP should be consistent with its resources and the requirements.</p>		<p>materials. The NMMPO proposes to provide a more detailed explanation of certification documents on the website, which is capable of being translated via google translation services. The NMMPO proposes to translate executive summaries of certification documents into Spanish, Portuguese, Chinese, Vietnamese and Khmer.</p>	<p>documents. This is translatable through Google Translate.</p> <p>Language Assistance measures and Four Factor analysis has been addressed in the Title VI update for FFY 2018.</p> <p>The NMMPO has prepared a 2018 Title VI update to MassDOT, addressing latest guidance and recommendations from MassDOT Civil Rights.</p> <p>This recommendation has been achieved.</p>
<p>Environmental Mitigation The Review Team recommends that the MPO include more robust discussions of the environmental resources presented in the region including the threats and potential mitigation strategies. The Review Team also recommends that the MPO map projects included in the MTP related to the locations of the various regional environmental resources and use that information to help inform potential mitigation strategies.</p>	<p>Recommendation</p>	<p>The Regional Transportation Plan includes recommended projects and their impact on environmental resources including wetlands, wetlands 100 ft. buffer, the Rivers Protection Act 200-ft Riverfront Area, vernal pools, and priority habitats for rare species. Projects were also mapped to see if they fall within 100 feet of FEMA's 1% annual chance floodplain. The NMMPO will review a methodology for identifying environmental mitigation as the next RTP is updated. Documentation of natural and historic resources will be provided to ensure comprehensive review.</p>	<p>The FFY 2020 RTP includes discussion of environmental resources and maps recommended projects.</p> <p>This recommendation has been achieved.</p>

<p>Performance-Based Planning and Programming The Review Team recommends that the MPO, MassDOT, and providers of public transportation evaluate the existing MOU for any necessary updates regarding the roles and responsibilities for performance data, information sharing, target selection, and performance reporting.</p>	<p>Recommendation</p>	<p>As the NMMPO updates its MOU with MassDOT and the LRTA, this recommendation will be addressed.</p>	<p>Boston UZA MOU includes discussion of performance based planning and programming responsibilities of each agency.</p> <p>This recommendation has been achieved.</p>
<p>Inter-Agency Agreements and Consultation MassDOT, in cooperation with the States, MPOs and transportation providers within the Boston UZA, shall revise the existing Boston UZA MOU (or create a new agreement) reflective of the 2010 Census. Minimally, the resulting agreement shall address the division of responsibilities related to the coordination concerns referenced in the regulations. More specifically and to an appropriate extent, the agreement should address the following areas: financial plans; annual listing of obligated projects; data collection/sharing and analysis; coordinated decisionmaking, i.e., for key transportation assets/services spanning MPO and State boundaries; dispute resolution; congestion management process; performance-based planning/reporting/and target-setting. This corrective action shall be taken within 18 months from the date of this report.</p>	<p>Corrective Action</p>	<p>NMMPO staff have worked with other MPOs, State and Federal partners within the 2010 Boston UZA to revise the existing Boston UZA MOU. The MOU was completed and endorsed by the MPO on October 24, 2018.</p>	<p>The Boston UZA MOU update has been completed and was endorsed by the NMMPO on October 24, 2018.</p> <p>This corrective action has been achieved.</p>

Appendix H: Federal Review Team

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Appendix I: List of Acronyms

3C: Continuing, Cooperative, and Comprehensive
ADA: Americans with Disabilities Act
AQ: Air Quality
CFR: Code of Federal Regulations
CMP: Congestion Management Process
CTPS: Central Transportation Planning Staff
DOT: Department of Transportation
EJ: Environmental Justice
FAST: Fixing America’s Surface Transportation Act
FFY: Federal Fiscal Year
FHWA: Federal Highway Administration
FTA: Federal Transit Administration
ISTEA: Intermodal Surface Transportation Efficiency Act
LEP: Limited-English-Proficiency
LOS: Level of Service
LRTA: Lowell Regional Transit Authority
M&O: Management and Operations
MARPA: Massachusetts Association of Regional Planning Agencies
MassDOT: Massachusetts Department of Transportation
MBTA: Massachusetts Bay Transportation Authority
MOU: Memorandum of Understanding
MPA: Metropolitan Planning Area
MPO: Metropolitan Planning Organization
MTP: Metropolitan Transportation Plan (also known as “Long-Range Transportation Plan” or “Regional Transportation Plan”)
MVRTA: Merrimack Valley Regional Transit Authority’s
MVPC: Merrimack Valley Planning Commission
NRPC: Nashua Regional Planning Commission
NMCOG: Northern Middlesex Council of Governments
NMMPO: Northern Middlesex Metropolitan Planning Organization
NPMRDS: National Performance Measures Research Data Set
PBPP: Performance Based Planning and Programming
PPP: Public Participation Plan
SAFETEA-LU: Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
STIP: Statewide Transportation Improvement Program
TAC: Technical Advisory Committee
TAM: Transit Asset Management
TAMP: Transportation Asset Management Plan
TEC: Transportation Evaluation Criteria
TIP: Transportation Improvement Program
TMA: Transportation Management Area
TSM: Transportation System Management
U.S.C.: United States Code
UPWP: Unified Planning Work Program

USDOT: United States Department of Transportation
UZA: Urbanized Area
VMT: Vehicle Miles of Travel





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