

**TRANSPORTATION IMPROVEMENT PROGRAM**  
**FOR THE**  
**NORTHERN MIDDLESEX REGION**  
**FISCAL YEARS 2011-2014**

*As endorsed by the Northern Middlesex Metropolitan Planning Organization*

*Preparation of this report was funded under contract to the Massachusetts Department of Transportation, in cooperation with the Federal Highway Administration and the Federal Transit Administration.*



## **COMPOSITION OF THE NORTHERN MIDDLESEX METROPOLITAN PLANNING ORGANIZATION**

### **Voting Members:**

- Jeffrey B. Mullan, Secretary and Chief Executive Officer, MassDOT
- Luisa Paiewonsky, Highway Division Administrator, MassDOT
- James Silva, Chair, Northern Middlesex Council of Governments
- Patrick Murphy, City Councilor, City of Lowell
- Arthur Doyle, Chairman, Lowell Regional Transit Authority
- Patricia Wojtas, Chelmsford, Regional Transit Authority Advisory Board
- David Gay, Selectman, Town of Tewksbury

### **Ex Officio Non-Voting Members:**

- Federal Highway Administration
- Federal Transit Administration



**NORTHERN MIDDLESEX METROPOLITAN PLANNING ORGANIZATION**

**ENDORSEMENT OF THE FY 2011– 2014 TRANSPORTATION IMPROVEMENT PROGRAM  
FOR THE NORTHERN MIDDLESEX REGION**

This document will certify that the Northern Middlesex Metropolitan Planning Organization hereby endorses the the FY 2011-2014 Transportation Improvement Program for the Northern Middlesex Region. The TIP amendment is being endorsed in accordance with the 3C Transportation Planning Process and complies with the requirements set forth in the Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU).

And

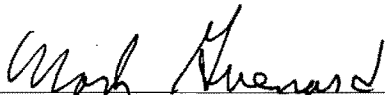
***Air Quality Conformity Determination***

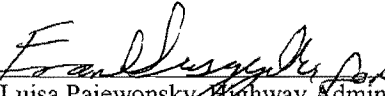
Whereas, the 1990 Clean Air Act Amendments (CAAA) require Metropolitan Planning Organizations within non-attainment areas and/or attainment areas with maintenance plans to perform air quality conformity determinations prior to the approval of transportation plans and transportation improvement programs, and at such other times as required by regulation;

Whereas, the air quality conformity analysis prepared for the 2011– 2014 Transportation Improvement Program also demonstrates air quality conformity of the Northern Middlesex 2007 Regional Transportation Plan, and that all regionally significant transportation projects in the 2011 – 2014 Transportation Improvement Program are contained in the 2007 Regional Transportation Plan, and that all regionally significant projects in the 2014 to 2030 timeframe of the Regional Transportation Plan are modeled in the 2011 – 2014 Transportation Improvement Program’s air quality conformity analyses;

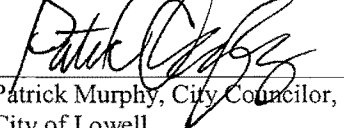
Whereas, the Northern Middlesex MPO has completed its review accordance with Section 176(c) (4) of the Clean Air Act as amended in 1990 [42 U.S.C. 7251 (a)}, and hereby certifies that the FFY 2011-2014 TIP is financially constrained and that the implementation of the Northern Middlesex 2007 Regional Transportation Plan satisfies the conformity criteria specified in both 40 CFR Part 51 and 93 (8/15/1997) and 310 CMR 60.03 (12/30/1994). Based on the results of the conformity analyses, the Northern Middlesex 2007 Regional Transportation Plan and FFY 2010-2013 TIP are consistent with the air quality goals of, and in conformity with, the Massachusetts State Implementation Plan;

Therefore, in accordance with 23 CFR Part 450 Section 322 (Development and content of the Metropolitan Transportation Plan) of the March 16, 2007 Final Rules for Statewide and Metropolitan Planning, the MPO hereby endorses the FFY 2011-2014 Transportation Improvement Program.


 9/7/10  
for Jeffrey B. Mullan, Secretary, Date  
Massachusetts Department of Transportation

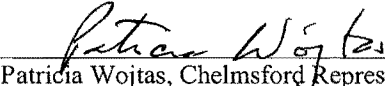
 9/7/2010  
Luisa Paiewonsky, Highway Administrator, Date  
Massachusetts Department of Transportation

\_\_\_\_\_  
James Silva, Chair, Date  
Northern Middlesex Council of Governments

 9/7/10  
Patrick Murphy, City Councilor, Date  
City of Lowell

\_\_\_\_\_  
Arthur Doyle, Chair, Date  
Lowell Regional Transit Authority

 9/7/10  
David Gay, Selectman, Date  
Town of Tewksbury

 9/7/2010  
Patricia Wojtas, Chelmsford Representative, Date  
Lowell Regional Transit Authority



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**PART A: OVERVIEW OF THE TRANSPORTATION  
PLANNING PROCESS**



## **1. Introduction**

The Transportation Improvement Program is a programming and management document containing all federally funded transportation projects planned in the Northern Middlesex region over the next four years. All transportation projects that will be funded under Title 23, U.S.C., or with Federal Transit Act funds, must be included in the document. In addition, projects requiring FHWA or FTA approval, but not funded under Title 23, U.S.C., or with Federal Transit Act funds, must also be listed in the TIP. Similarly, transportation projects funded with Federal funds from other federal agencies, as well projects funded with local and private monies should be described in the document for informational purposes, in order to reflect the integrated and intermodal nature of the metropolitan transportation planning process.

On August 10, 2005, President Bush signed into law the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). SAFETEA-LU addresses the many challenges facing our transportation system, such as improving safety, reducing congestion, increasing connectivity between modes and protecting the environment. In developing the FY 2011-2014 TIP, the MPO has considered the following planning factors as outlined in SAFETEA-LU:

- “Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity and efficiency;
- Increase the safety of the transportation system for all motorized and non-motorized users;
- Increase the ability of the transportation system to support homeland security and to safeguard the personal security of motorized and non-motorized users;
- Increase accessibility and mobility of people and freight;
- Protect and enhance the environment, promote energy conservation, improve the quality of life and promote consistency between transportation improvements and State and local planned growth and economic development patterns;
- Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
- Promote efficient system management and operation; and
- Emphasize the preservation of the existing transportation system.”

On March 16, 2007 the FHWA and FTA issued new joint regulations regarding statewide and metropolitan transportation planning. These new regulations address legislative requirements set forth in SAFETEA-LU.

## **2. TIP Organization**

FHWA and FTA jointly revised regulations for Statewide and Metropolitan Transportation Planning governing the development of metropolitan transportation plans and programs for urbanized areas. These regulations require that the TIP be updated every four years, and that the TIP include projects covering four years. This TIP covers Federal Fiscal Years 2011 through 2014.

The listing for each fiscal year is divided into a highway section and a transit section. Each listing includes a project description, estimated total cost, Federal funds to be obligated for each program year, sources of Federal and Non-Federal funds, and the fund recipient. In order for a project

to be considered for inclusion in the first four fiscal years of the TIP, a project or program must have an estimated advertising or implementation date within that fiscal year. At the request of Federal Highway, the regional targets reflect a 4% reduction compounded annually after the first fiscal year to reflect Year of Expenditure fiscal constraint.

### **3. TIP Development Process**

The development of a regional transportation improvement program is required by federal regulation as part of the transportation planning process. This process is carried out under the authority of the Northern Middlesex Metropolitan Planning Organization (NMMPO), which reviews and endorses all federal certification documents. The NMMPO is comprised of: the Chairman of the Northern Middlesex Council of Governments (NMCOG), the Chairman of the Lowell Regional Transit Authority (LRTA), the Secretary and Chief Executive of the Massachusetts Department of Transportation (MassDOT), and the Massachusetts Department of Transportation (MassDOT) Highway Division Administrator (MassDOT). In addition, the following are also members of the NMMPO: the chief elected official from the City of Lowell, elected to serve as the City's representative to NMCOG; a selectman elected to serve on the Council and further elected by the Council to serve as the Town's representative to the NMMPO; and an LRTA Advisory Board member representing a community within the Northern Middlesex MPO boundaries other than the City of Lowell, who may also be an elected official. A representative of the Federal Highway Administration (FHWA) and a representative of the Federal Transit Administration (FTA) will serve as ex-officio, non-voting members of the NMMPO.

The NMCOG staff serves as the planning staff of the NMMPO. In this capacity, NMCOG staff produces the TIP document in cooperation with the other three agencies comprising the NMMPO. The document is developed by updating information from the previous TIP, and with input solicited from the local communities, the LRTA, and the state and federal transportation agencies. Following local and public review, the document is submitted to the NMMPO for endorsement.

### **4. Project Prioritization**

The projects included in the TIP were scored utilizing the Transportation Evaluation Criteria developed by the state transportation agencies and the former Office for Commonwealth Development (OCD). The NMMPO staff applied the criteria to all highway projects (except bridge projects) considered to be viable for FFY 2011-2014. MassDOT staff applied the evaluation criteria to the bridge projects. The criteria take into consideration the following state policies:

- **Communities First:** emphasizes context sensitive design that protects and enhances the surrounding community and landscape while addressing mobility for all transportation modes. The purpose of this policy is to prevent sprawl, recognize the communities as transportation agency customers, avoid the costs associated with unnecessary widening and associated conflicts, free up additional funding to complete future construction projects, and to provide enhanced mobility for sustainable transportation modes (walking, bicycling, and public transportation).

- **Sustainable Development Principles:** The Commonwealth of Massachusetts shall care for the built and natural environment by promoting sustainable development through integrated energy and environment, housing and economic development, transportation and other policies, programs, investments, and regulations. The Commonwealth will encourage the coordination and cooperation of all agencies, invest public funds wisely in smart growth and equitable development, give priority to investments that will deliver good jobs and good wages, transit access, housing, and open space, in accordance with the following sustainable development principles. Furthermore, the Commonwealth shall seek to advance these principles in partnership with regional and municipal governments, non-profit organizations, business, and other stakeholders:

### **1. Concentrate Development and Mix Uses**

Support the revitalization of city and town centers and neighborhoods by promoting development that is compact, conserves land, protects historic resources, and integrates uses. Encourage remediation and reuse of existing sites, structures, and infrastructure rather than new construction in undeveloped areas. Create pedestrian friendly districts and neighborhoods that mix commercial, civic, cultural, educational, and recreational activities with open spaces and homes.

### **2. Advance Equity**

Promote equitable sharing of the benefits and burdens of development. Provide technical and strategic support for inclusive community planning and decision making to ensure social, economic, and environmental justice. Ensure that the interests of future generations are not compromised by today's decisions.

### **3. Make Efficient Decisions**

Make regulatory and permitting processes for development clear, predictable, coordinated, and timely in accordance with smart growth and environmental stewardship.

### **4. Protect Land and Ecosystems**

Protect and restore environmentally sensitive lands, natural resources, agricultural lands, critical habitats, wetlands and water resources, and cultural and historic landscapes. Increase the quantity, quality and accessibility of open spaces and recreational opportunities.

### **5. Use Natural Resources Wisely**

Construct and promote developments, buildings, and infrastructure that conserve natural resources by reducing waste and pollution through efficient use of land, energy, water, and materials.

## **6. Expand Housing Opportunities**

Support the construction and rehabilitation of homes to meet the needs of people of all abilities, income levels, and household types. Build homes near jobs, transit, and where services are available. Foster the development of housing, particularly multifamily and smaller single-family homes, in a way that is compatible with a community's character and vision and with providing new housing choices for people of all means.

## **7. Provide Transportation Choice**

Maintain and expand transportation options that maximize mobility, reduce congestion, conserve fuel and improve air quality. Prioritize rail, bus, boat, rapid and surface transit, shared-vehicle and shared-ride services, bicycling, and walking. Invest strategically in existing and new passenger and freight transportation infrastructure that supports sound economic development consistent with smart growth objectives.

## **8. Increase Job and Business Opportunities**

Attract businesses and jobs to locations near housing, infrastructure, and transportation options. Promote economic development in industry clusters. Expand access to education, training, and entrepreneurial opportunities. Support the growth of local businesses, including sustainable natural resource-based businesses, such as agriculture, forestry, clean energy technology, and fisheries.

## **9. Promote Clean Energy**

Maximize energy efficiency and renewable energy opportunities. Support energy conservation strategies, local clean power generation, distributed generation technologies, and innovative industries. Reduce greenhouse gas emissions and consumption of fossil fuels.

## **10. Plan Regionally**

Support the development and implementation of local and regional, state and interstate plans that have broad public support and are consistent with these principles. Foster development projects, land and water conservation, transportation and housing that have a regional or multi-community benefit. Consider the long-term costs and benefits to the Commonwealth.

Following the scoring of each project, the design status and readiness of document was then considered. Appendix A provides additional project level detail on the project evaluation process. In addition to the application of the evaluation criteria, each project was also screened to ensure that it meets the following:

- Requirements set forth in SAFETEA-LU, the Clean Air Act and Amendments, and the Americans with Disabilities Act.
- Is consistent with local, regional, and state plans; and
- Complies with Title VI/Environmental Justice requirements.

## 5. Public Participation Procedures

Title 23 CFR Section 450.324 and 310 CMR 60.03(6) h require adequate opportunity for public review and comment be provided during the development of the TIP. Section 450.316(b) establishes the outline for MPO public participation programs. The Northern Middlesex MPO Public Participation Plan is contained in Appendix B of this document.

The development of the TIP conforms to the requirements of the above sections. It guarantees public access to the TIP and all supporting documentation, provides for public notification of the availability of the TIP and the public's right to review the document and comment thereon, and provides a 30-day public review and comment period prior to the adoption of the TIP by the NMMPO. The document was circulated in accordance with the NMMPO's most recent Public Participation Plan.

A public notice was advertised in the Lowell Sun informing the public of its right to comment on the document. Notice was also posted in the Town and City Clerks' offices and on the NMCOG website. The public comment period for this document commenced on August 2, 2010 and a public meeting was held on August 17, 2010 at 6:30 pm. The public comment period concluded after 30 days on September 1, 2010. This allowed ample opportunity for public comment and review of the document prior to MPO action. These procedures comply with the associated federal requirements.

In accordance with the Public Participation procedures, the following organizations are given an opportunity to comment on the TIP. They receive notification on the opportunity to comment from NMCOG.

- **Citizens:**
  - Libraries
  - City/Town Clerks
  - Area Congressional Delegation
  - State Legislators
  - Interested Citizens
  - Local Neighborhood Organizations
  
- **Affected Public Agencies and Government Entities:**
  - MassDOT Executive Office (MPO Member)
  - MassDOT Highway Division (MPO Member)
  - LRTA (MPO Member)
  - FHWA (Ex-officio MPO Member)
  - FTA (Ex-officio MPO Member)
  - US Environmental Protection Agency
  - Massachusetts Department of Environmental Protection
  - Local Chief Elected Officials
  - Nashua Regional Planning Commission
  - Merrimack Valley Planning Commission
  - Metropolitan Area Planning Council
  - Montachusetts Regional Planning Commission

MassRides  
Local DPWs  
Local Planning Boards  
City/Town Engineers  
City/ Town Managers  
City/Town Conservation Commissions  
Lowell National Historical Park  
Middlesex Canal Commission  
Transportation Coordinators for Municipal School Departments

- **Representatives of Public Transportation Employees**  
Teamsters Local  
Amalgamated Transit Union
- **Freight Transportation Services:**  
United Parcel Service  
PanAm/Guilford Transportation  
U.S. Postal Service
- **Private Providers of Transportation:**  
Local Taxi Companies  
Private Transportation Providers Listed in the RTP
- **Representatives of Users of Public Transportation**  
Councils on Aging  
Local Senior Centers
- **Representatives of Users of Pedestrian Walkways and Bicycle Transportation Facilities**  
Friends of the Bruce Freeman Rail Trail  
Lowell Parks and Conservation Trust
- **Representatives of the Disabled**  
Northeast Independent Living Program  
Renaissance Club  
Greater Lowell Association for the Blind
- **Populations Traditionally Underserved by Existing Transportation Systems**  
Community Teamwork, Inc  
Coalition for a Better Acre  
ONE Lowell  
Lowell Transitional Living Center  
Cambodian American League of Lowell  
Cambodian Mutual Assistance Association

- **Agencies and Officials responsible for State and Local Planned Growth**  
 Local Planning Boards  
 City/Town Planners  
 Zoning Boards of Appeal  
 Northern Middlesex Council of Governments
  
- **Economic Development Interests**  
 Greater Lowell Chamber of Commerce  
 Greater Lowell CEDS Committee
  
- **Interested Community and Neighborhood Organizations**  
 Centerville Neighborhood Action Group  
 Downtown Neighborhood Association  
 Pawtucketville Citizens Council  
 Highlands Neighborhood Association  
 Back Central Neighborhood Association  
 Lower Highlands Neighborhood Association

## **6. TIP Amendment and Adjustment Procedures**

For purposes of project selection and programming, any project listed in the FY'11 portion of the TIP will be considered to have the concurrence of the NMMPO without further action required. Prioritization of projects is reflected in the placement of a project within Fiscal Years 2011-2014 of the TIP.

Based on the multi-year nature of the TIP, it is expected that there may be a need to modify the document more frequently than on an annual basis. In order to minimize constraints on programming projects, the endorsed TIP has NMMPO-adopted provisions which allow relatively minor adjustments to be made without formal MPO action. Minor adjustments may include such action as moving a project from FY '12 to FY '11, and may be accomplished through an agreed upon administrative adjustment. Significant changes, such as the addition or deletion of a project, require MPO action through the amendment process. Statewide and Metropolitan Transportation Planning regulations define an amendment as: "...a type of revision to a long-range statewide or metropolitan transportation plan, TIP, or STIP that is significant enough to require public review and comment, redemonstration of fiscal constraint, or a conformity determination". All actions on the TIP must be taken in accordance with the region's public participation program.

## **7. Relationship between the TIP, the Congestion Management Program and the Regional Transportation Plan**

The Regional Transportation Plan covers a period of twenty years and must be updated every four years. The overall transportation goals and policies articulated in the Plan ensure that individual projects are considered within the context of established regional goals, as required by Federal regulation. The region also maintains a Congestion Management Program to monitor operating conditions within the regional transportation network.

The TIP provides access to the funding necessary to transform the Plan's policies and goals into finalized projects and to address congestion issues identified through the Congestion Management Program. TIP projects are drawn directly from the Plan. In addition to being drawn from the Plan, projects may be derived from special studies, such as corridor studies and traffic impact studies. The transit portion of the TIP may also contain routine capital equipment replacement projects.

## 8. Description of Project Funding Categories

The explanations that follow outline the basic uses and requirements of each funding category contained in this TIP. Specific information related to a particular roadway's eligibility for these funds can be provided by NMCOG staff at (978) 454-8021. Questions regarding transit projects and funding are best directed to LRTA staff at (978) 459-0164.

- **Non-Federal Aid (NFA):** Non-Federal aid funds are typically state monies that are derived from various sources including the Transportation Bond Bill.
- **Bridge On and Off System (BR, BR-On & BR-Off):** Finances the replacement or repair of structurally deficient or functionally obsolete bridge structures. On-system bridge monies are used for bridges impacting roadways on the federal aid system. Off-system bridge monies are used for bridges that impact roadways that are not part of the federal aid system. These types of projects are funded with 80% federal money matched with 20% state money.
- **Surface Transportation Program-Enhancements (STP-E):** Enhancement funds are federal monies for non-traditional transportation projects such as bike paths, pedestrian projects, streetscapes, historic restoration of transportation structures, stormwater management programs, etc. Transportation enhancements are funded with 80% federal monies matched with 20% state monies.
- **Public Lands Highway Program (PLH):** PLH funds are available for any type of transportation project eligible for assistance under Title 23 U.S.C., that is within or adjacent to, or provides access to Federal Public Lands/Jurisdictions such as National Parks or military installations. These funds are 100% discretionary; no state or local match is required.
- **Surface Transportation Program (STP):** Funds obligated under this category may be expended for construction, reconstruction, rehabilitation, resurfacing and operational safety improvements for federal aid eligible roadways and bridges. STP funds may also be used for capital costs for transit projects eligible for assistance under the Federal Transit Act. STP funds are 80% federal monies requiring a 20% state match.
- **High Priority Project Funds (HPP):** High priority project funds are for specially earmarked projects contained in TEA-21 and SAFETEA-LU. These monies are 80% federal with a 20% state match required.
- **Congestion Mitigation Air Quality (CMAQ):** Programs and projects funded under this category must contribute to the attainment of National Ambient Air Quality Standards

(NAAQS) or must be included in the State Implementation Plan pursuant to the Clean Air Act of 1990 and subsequent amendments. These funds may be utilized for both roadway and transit projects. These are 80% federal monies requiring a 20% state match.

- **National Highway System (NHS):** NHS funds are used to finance construction projects on major roadways that have been designated highways of National Significance under the 1991 Surface Transportation Assistance Act. The purpose of the NHS funds are to provide an interconnected system of principal routes to serve major population centers, airports, and public transportation facilities, to meet national defense requirements, and to serve interstate and interregional travel. U.S. Route 3, I-495 and I-93 are the NHS eligible roadways in the Northern Middlesex region. NHS funds are 80% federal monies with a 20% state match required.
- **Highway Safety Improvement Program (HSIP):** Highway Safety Improvement Program funds are for the design and construction of highway projects that would reduce the number and severity of roadway crashes. Funding determination is based on crash data and engineering assessments of identified hazardous locations.
- **Section 5307:** Section 5307 funds are Federal Transit Administration monies used to finance capital, planning, operating and maintenance expenses for the Lowell Regional Transit Authority (LRTA) urban service area. The funding ratios and match requirements for each sub-category are as follows:
  - Funding for capital expenses: Federal 80%/State 20%
  - Funding for planning expenses: Federal 80%/NMCOG 20%
  - Funding for operating/preventive maintenance: Federal 35%/State 40%/LRTA 25% (varies annually)
- **Section 5309:** Section 5309 is a federal discretionary program financing capital expenditures. These monies are 80% federal requiring a 20% state match.
- **Section 5311:** Section 5311 monies finance operating expenses for the LRTA rural service area. Although these are federal monies, in Massachusetts the program is administered through the Massachusetts Department of Transportation (MassDOT). These are 50% federal monies with a 25% state match and a 25% local match.
- **Section 5310/Mobility Assistance Program (MAP):** This program finances capital expenses for private non-profit organizations to provide specialized transit services for the elderly and disabled. The Massachusetts MAP program extends these provisions to public non-profit agencies. These awards are approved on a project-by-project basis, funding only capital expenses for the acquisition of specific types of vans and base station equipment and may not be used for operating expenses. The program is funded with 80% MAP monies and 20% RTA CAP (Capital Assistance Program) funds or other local funds depending on the applicant.
- **Flexible funding:** In some cases funds allocated under the categories of Surface Transportation Program, National Highway System, and Congestion Mitigation Air Quality may be utilized for transit projects. All projects funded under this category are funded with

80% federal/20% state funds. Both CMAQ and STP funds are 100% flexible in that an MPO may elect to allocate any portion of these to transit projects. In addition the state may elect to transfer up to 20% of its Interstate Maintenance funds, 50% of its NHS funds, and 40% of its bridge funds to the STP program. Once transferred, any such funds are as flexible as STP funds.

## **9. 701 CMR 7.00 Use of Road Flaggers and Police Details on Public Works Projects**

In 2008, the Patrick Administration through the Massachusetts Department of Transportation (MassDOT) and the Executive Office of Public Safety and Security (EOPSS), revised the State's regulations for the use of road flaggers and police details on public works projects. The revised regulations now allow for the use of road flaggers instead police details on certain public works projects. MassDOT and EOPSS have developed guidelines outlining when the use of road flaggers is acceptable and when police details are needed. MassDOT intends to apply these guidelines to all transportation projects funded or constructed using state and federal funds. Therefore, any transportation project funded through the Transportation Improvement Program will be subject to the new regulations and guidelines regarding the use of road flaggers or police details during construction.

The Municipal Limitation referenced in the Regulation (701 CMR 7.0) is applicable only to projects where the Municipality is the Awarding Authority. For all projects contained in the TIP, the Commonwealth is the Awarding Authority. Therefore, all projects must be considered and implemented in accordance with the new regulation. By placing a project on the TIP, the Municipality is acknowledging that 701 CMR 7.00 is applicable to the project, and that construction will be fully compliant with the Regulation.

Additional information relative to guidance and implementation of the Regulation can be found at the following link on the MassDOT Highway Division website:

<http://www.massdot.state.ma.us/Highway/flaggers/main.aspx> .

**PART B: HIGHWAY AND TRANSIT PROJECT LISTINGS**



# 2011 Northern Middlesex MPO Transportation Improvement Program

August 3, 2010 - Draft Released  
September 2, 2010 - TIP Endorsed

\$	5,450,090	◀ Total Target Allocation
\$	4,570,428	◀ Maximum STP
\$	390,961	◀ Minimum HSIP
\$	488,701	◀ Minimum CMAQ

ID	Location	Project Description	Highway District	Funding Category	Earmark Details	Total Estimated Cost	Federal Funds	Non-Federal Match	TEC Score	Additional Information
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## ▶ Section 1A / Federal Aid Target Projects

### STP - Surface Transportation Program

603823	Tyngsborough	TYNGSBOROUGH- RELOCATION OF ROUTE 113 (PAWTUCKET BOULEVARD)	4	STP		\$2,916,250	\$2,333,000	\$583,250	7.51	Total project cost \$3,404,951
	Dunstable	Main St/RT 113 Retaining Wall	3	STP		\$900,000	\$720,000	\$180,000		
604068	Tewksbury	TEWKSBURY- SIGNAL IMPROVEMENTS AT EAST STREET & LIVINGSTON STREET	4	STP		\$752,289	\$601,831	\$150,458	7.01	Total project cost \$1,143,250
<b>STP Subtotal ▶</b>						<b>\$4,568,539</b>	<b>\$3,654,831</b>	<b>\$913,708</b>		<b>◀ 80% Federal + 20% Non-Federal Match</b>
<b>Fiscal Constraint Analysis ▶</b>						<b>-\$1,889</b>				

### HSIP - Highway Safety Improvement Program

604068	Tewksbury	TEWKSBURY- SIGNAL IMPROVEMENTS AT EAST STREET & LIVINGSTON STREET	4	HSIP		\$390,961	\$351,865	\$39,096	7.01	
						\$0	\$0	\$0	0.00	
<b>HSIP Subtotal ▶</b>						<b>\$390,961</b>	<b>\$351,865</b>	<b>\$39,096</b>		<b>◀ 90% Federal + 10% Non-Federal Match</b>
<b>Fiscal Constraint Analysis ▶</b>						<b>\$0</b>				

### CMAQ - Congestion Mitigation and Air Quality Program

603823	Tyngsborough	TYNGSBOROUGH- RELOCATION OF ROUTE 113 (PAWTUCKET BOULEVARD)	4	CMAQ		\$488,701	\$390,961	\$97,740	7.51	
						\$0	\$0	\$0	0.00	
<b>CMAQ Subtotal ▶</b>						<b>\$488,701</b>	<b>\$390,961</b>	<b>\$97,740</b>		<b>◀ 80% Federal + 20% Non-Federal Match</b>
<b>Fiscal Constraint Analysis ▶</b>						<b>\$0</b>				

**Total Federal Aid Target Funds Programmed ▶ \$5,448,201**  
**Total Target Fiscal Constraint Analysis ▶ -\$1,889**

## ▶ Section 1B / Federal Aid Bridge Projects

### BR - Bridge

601845	Lowell	LOWELL- BRIDGE DEMOLITION, L-15-021 & NEW BRIDGE CONSTRUCTION, L-15-095, UNIVERSITY (TEXTILE) AVENUE OVER THE MERRIMACK RIVER AND NORTHERN CANAL	4	BR		\$10,000,000	\$8,000,000	\$2,000,000	0.00	AC-Yr 2 total project cost \$44,000,000
						\$0	\$0	\$0	0.00	
<b>BR Subtotal ▶</b>						<b>\$10,000,000</b>	<b>\$8,000,000</b>	<b>\$2,000,000</b>		<b>◀ 80% Federal + 20% Non-Federal Match</b>
<b>Total Federal Aid Bridge Funds Programmed ▶</b>						<b>\$10,000,000</b>	<b>\$8,000,000</b>	<b>\$2,000,000</b>		

## ▶ Section 1C / Federal Aid Non-Target Projects

### Earmarks

	Lowell	Wood St/Rourke Bridge Study, MA120 Sec. 1702 HPP# 453	4	HPP (2005)		\$562,439	\$449,951	\$112,488	0.00	
	Lowell	Lowell - SAFE ROUTES TO SCHOOL (McAULIFFE ELEMENTARY SCHOOL)	4	SRTS		\$403,000	\$403,000	\$0	0.00	Safe Routes to School 100% federal
<b>Earmarked Subtotal ▶</b>						<b>\$965,439</b>	<b>\$852,951</b>	<b>\$112,488</b>		<b>◀ Funding Split Varies by Earmark</b>

### Other

						\$0	\$0	\$0	0.00	
						\$0	\$0	\$0	0.00	
<b>Other Subtotal ▶</b>						<b>\$0</b>	<b>\$0</b>	<b>\$0</b>		<b>◀ Funding Split Varies by Funding Source</b>
<b>Total Federal Non-Target Funds Programmed ▶</b>						<b>\$965,439</b>	<b>\$852,951</b>	<b>\$112,488</b>		

## ▶ Section 1D / Federal Aid Major & State Category Projects

### IM - Interstate Maintenance

						\$0	\$0	\$0	0.00	
						\$0	\$0	\$0	0.00	
<b>IM Subtotal ▶</b>						<b>\$0</b>	<b>\$0</b>	<b>\$0</b>		<b>◀ 90% Federal + 10% Non-Federal Match</b>

### NHS - National Highway System

						\$0	\$0	\$0	0.00	
						\$0	\$0	\$0	0.00	
<b>NHS Subtotal ▶</b>						<b>\$0</b>	<b>\$0</b>	<b>\$0</b>		<b>◀ 80% Federal + 20% Non-Federal Match</b>

### Other

						\$0	\$0	\$0	0.00	
						\$0	\$0	\$0	0.00	
<b>Other Subtotal ▶</b>						<b>\$0</b>	<b>\$0</b>	<b>\$0</b>		<b>◀ Funding Split Varies by Funding Source</b>
<b>Total Federal Aid Major &amp; State Category Funds Programmed ▶</b>						<b>\$0</b>	<b>\$0</b>	<b>\$0</b>		

## ▶ Section 2A / Non-Federally Funded Projects

						\$0	\$0	\$0	0.00	
						\$0	\$0	\$0	0.00	
<b>Non-Federally Funded Projects Subtotal ▶</b>						<b>\$0</b>	<b>\$0</b>	<b>\$0</b>		<b>◀ 100% Non-Federal</b>
<b>Total Non-Federally Funded Projects Programmed ▶</b>						<b>\$0</b>	<b>\$0</b>	<b>\$0</b>		

## ▶ Section 2B / Non-Federally Aided Bridge Projects

						\$0	\$0	\$0	0.00	
						\$0	\$0	\$0	0.00	
<b>Non-Federally Aided Bridges Subtotal ▶</b>						<b>\$0</b>	<b>\$0</b>	<b>\$0</b>		<b>◀ 100% Non-Federal</b>
<b>Total Non-Federally Funded Bridge Projects Programmed ▶</b>						<b>\$0</b>	<b>\$0</b>	<b>\$0</b>		

	Section 1: Total Federal Projects	Section 2: Total Non- Federal Projects	Total of All Projects	
<b>Total ▶</b>	<b>\$16,413,640</b>	<b>\$0</b>	<b>\$16,413,640</b>	<b>◀ Total Spending in Region</b>
Federal Funds ▶	\$13,250,608		\$13,250,608	◀ Total Federal Spending in Region
Non-Federal Funds ▶	\$3,163,032	\$0	\$3,163,032	◀ Total Non-Federal Spending in Region

**701 CMR 7.00 Use of Road Flaggers and Police Details on Public Works Projects / 701 CMR 7.00** (the Regulation) was promulgated and became law on October 3, 2008. Under this Regulation, the CMR is applicable to any Public works Project that is performed within the limits of, or that impact traffic on, any Public Road. The Municipal Limitation referenced in this Regulation is applicable only to projects where the Municipality is the Awarding Authority. For all projects contained in the TIP, the Commonwealth is the Awarding Authority. Therefore, all projects must be considered and implemented in accordance with 701 CMR 7.00, and the Road Flagger and Police Detail Guidelines. By placing a project on the TIP, the Municipality acknowledges that 701 CMR 7.00 is applicable to its project and design and construction will be fully compliant with this Regulation. This information, and additional information relative to guidance and implementation of the Regulation can be found at the following link on the MassDOT Highway Division website: <http://www.massdot.state.ma.us/Highway/flaggers/main.aspx>



# 2012 Northern Middlesex MPO Transportation Improvement Program

August 3, 2010 - Draft Released  
September 2, 2010 - TIP Endorsed

\$ 4,838,232 ◀ Total Target Allocation  
\$ 4,447,271 ◀ Maximum STP  
\$ 390,961 ◀ Minimum HSIP  
\$ - ◀ Minimum CMAQ

ID	Location	Project Description	Highway District	Funding Category	Earmark Details	Total Estimated Cost	Federal Funds	Non-Federal Match	TEC Score	Additional Information
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## Section 1A / Federal Aid Target Projects

STP - Surface Transportation Program										
602139	Tyngsborough	TYNGSBOROUGH- LOWELL- RESURFACING & RELATED WORK ON A SECTION OF ROUTE 113 (PAWTUCKET BOULEVARD)	4	STP		\$3,400,000	\$2,720,000	\$680,000	7.51	
604809	Westford	WESTFORD- RECONSTRUCTION OF ROUTE 110 AT BOSTON ROAD AND CARLISLE ROAD (MINOT'S CORNER)	3	STP		\$1,047,271	\$837,817	\$209,454	10.51	Total project cost \$3,725,000
<b>STP Subtotal</b>						\$4,447,271	\$3,557,817	\$889,454		◀ 80% Federal + 20% Non-Federal Match
<b>Fiscal Constraint Analysis</b>						\$0				

HSIP - Highway Safety Improvement Program										
604809	Westford	WESTFORD- RECONSTRUCTION OF ROUTE 110 AT BOSTON ROAD AND CARLISLE ROAD (MINOT'S CORNER)	3	HSIP		\$390,961	\$351,865	\$39,096	10.51	Total project cost \$3,725,000
<b>HSIP Subtotal</b>						\$390,961	\$351,865	\$39,096		◀ 90% Federal + 10% Non-Federal Match
<b>Fiscal Constraint Analysis</b>						\$0				

CMAQ - Congestion Mitigation and Air Quality Program										
<b>CMAQ Subtotal</b>						\$0	\$0	\$0	0.00	
<b>Fiscal Constraint Analysis</b>						\$0	\$0	\$0	0.00	
<b>Total Federal Aid Target Funds Programmed</b>						\$4,838,232	\$3,909,682	\$928,550		
<b>Total Target Fiscal Constraint Analysis</b>						\$0				

## Section 1B / Federal Aid Bridge Projects

BR - Bridge										
601845	Lowell	LOWELL- BRIDGE DEMOLITION, L-15-021 & NEW BRIDGE CONSTRUCTION, L-15-095, UNIVERSITY (TEXTILE) AVENUE OVER THE MERRIMACK RIVER AND NORTHERN CANAL	4	BR-AC		\$11,000,000	\$8,800,000	\$2,200,000	0.00	AC-Yr 3 Total Project cost \$44,000,000
602932	Lowell	LOWELL- BRIDGE REPLACEMENT, L-15-058, VFW HIGHWAY OVER BEAVER BROOK	4	BR		\$5,000,000	\$4,000,000	\$1,000,000	0.00	
<b>BR Subtotal</b>						\$16,000,000	\$12,800,000	\$3,200,000		◀ 80% Federal + 20% Non-Federal Match
<b>Total Federal Aid Bridge Funds Programmed</b>						\$16,000,000	\$12,800,000	\$3,200,000		

## Section 1C / Federal Aid Non-Target Projects

Earmarks										
<b>Earmarked Subtotal</b>						\$0	\$0	\$0	0.00	
<b>Other</b>						\$0	\$0	\$0	0.00	
<b>Other Subtotal</b>						\$0	\$0	\$0	0.00	
<b>Total Federal Non-Target Funds Programmed</b>						\$0	\$0	\$0		

## Section 1D / Federal Aid Major & State Category Projects

IM - Interstate Maintenance										
<b>IM Subtotal</b>						\$0	\$0	\$0	0.00	
<b>NHS - National Highway System</b>						\$0	\$0	\$0	0.00	
<b>NHS Subtotal</b>						\$0	\$0	\$0	0.00	
<b>Other</b>						\$0	\$0	\$0	0.00	
<b>Other Subtotal</b>						\$0	\$0	\$0	0.00	
<b>Total Federal Aid Major &amp; State Category Funds Programmed</b>						\$0	\$0	\$0		

## Section 2A / Non-Federally Funded Projects

<b>Non-Federally Funded Projects Subtotal</b>						\$0	\$0	\$0	0.00	
<b>Total Non-Federally Funded Projects Programmed</b>						\$0	\$0	\$0		◀ 100% Non-Federal

## Section 2B / Non-Federally Aided Bridge Projects

<b>Non-Federally Aided Bridges Subtotal</b>						\$0	\$0	\$0	0.00	
<b>Total Non-Federally Funded Bridge Projects Programmed</b>						\$0	\$0	\$0		◀ 100% Non-Federal

	Section 1: Total Federal Projects	Section 2: Total Non- Federal Projects	Total of All Projects	
<b>Total</b>	\$20,838,232	\$0	\$20,838,232	◀ Total Spending in Region
Federal Funds	\$16,709,682	\$0	\$16,709,682	◀ Total Federal Spending in Region
Non-Federal Funds	\$4,128,550	\$0	\$4,128,550	◀ Total Non-Federal Spending in Region

**701 CMR 7.00 Use of Road Flaggers and Police Details on Public Works Projects / 701 CMR 7.00** (the Regulation) was promulgated and became law on October 3, 2008. Under this Regulation, the CMR is applicable to any Public works Project that is performed within the limits of, or that impact traffic on, any Public Road. The Municipal Limitation referenced in this Regulation is applicable only to projects where the Municipality is the Awarding Authority. For all projects contained in the TIP, the Commonwealth is the Awarding Authority. Therefore, all projects must be considered and implemented in accordance with 701 CMR 7.00, and the Road Flagger and Police Detail Guidelines. By placing a project on the TIP, the Municipality acknowledges that 701 CMR 7.00 is applicable to its project and design and construction will be fully compliant with this Regulation. This information, and additional information relative to guidance and implementation of the Regulation can be found at the following link on the MassDOT Highway Division website: <http://www.massdot.state.ma.us/Highway/flaggers/main.aspx>



# 2013 Northern Middlesex MPO Transportation Improvement Program

August 3, 2010 - Draft Released  
September 2, 2010 - TIP Endorsed

\$ 4,797,423 ◀ Total Target Allocation  
\$ 3,624,540 ◀ Maximum STP  
\$ 390,961 ◀ Minimum HSIP  
\$ 781,922 ◀ Minimum CMAQ

ID	Location	Project Description	Highway District	Funding Category	Earmark Details	Total Estimated Cost	Federal Funds	Non-Federal Match	TEC Score	Additional Information
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## ▶ Section 1A / Federal Aid Target Projects

### STP - Surface Transportation Program

604809	Westford	WESTFORD- RECONSTRUCTION OF ROUTE 110 AT BOSTON ROAD AND CARLISLE ROAD (MINOT'S CORNER)	3	STP		\$1,113,885	\$891,108	\$222,777	10.51	Total project cost \$3,725,000
						\$0	\$0	\$0	0.00	
<b>STP Subtotal ▶</b>						\$1,113,885	\$891,108	\$222,777		◀ 80% Federal + 20% Non-Federal Match
<b>Fiscal Constraint Analysis ▶</b>						-\$2,510,655				

### HSIP - Highway Safety Improvement Program

604809	Westford	WESTFORD- RECONSTRUCTION OF ROUTE 110 AT BOSTON ROAD AND CARLISLE ROAD (MINOT'S CORNER)	3	HSIP		\$390,961	\$351,865	\$39,096	10.51	Total project cost \$3,725,000
						\$0	\$0	\$0	0.00	
<b>HSIP Subtotal ▶</b>						\$390,961	\$351,865	\$39,096		◀ 90% Federal + 10% Non-Federal Match
<b>Fiscal Constraint Analysis ▶</b>						\$0				

### CMAQ - Congestion Mitigation and Air Quality Program

604809	Westford	WESTFORD- RECONSTRUCTION OF ROUTE 110 AT BOSTON ROAD AND CARLISLE ROAD (MINOT'S CORNER)	3	CMAQ		\$781,922	\$625,538	\$156,384	10.51	Total project cost \$3,725,000
						\$0	\$0	\$0	0.00	
<b>CMAQ Subtotal ▶</b>						\$781,922	\$625,538	\$156,384		◀ 80% Federal + 20% Non-Federal Match
<b>Fiscal Constraint Analysis ▶</b>						\$0				
<b>Total Federal Aid Target Funds Programmed ▶</b>						\$2,286,768	\$1,868,511	\$418,258		
<b>Total Target Fiscal Constraint Analysis ▶</b>						-\$2,510,655				

## ▶ Section 1B / Federal Aid Bridge Projects

### BR - Bridge

601845	Lowell	LOWELL- BRIDGE DEMOLITION, L-15-021 & NEW BRIDGE CONSTRUCTION, L-15-095, UNIVERSITY (TEXTILE) AVENUE OVER THE MERRIMACK RIVER AND NORTHERN CANAL	4	BR-AC		\$11,000,000	\$8,800,000	\$2,200,000	0.00	AC-Yr 4 Total Project cost \$44,000,000
						\$0	\$0	\$0	0.00	
<b>BR Subtotal ▶</b>						\$11,000,000	\$8,800,000	\$2,200,000		◀ 80% Federal + 20% Non-Federal Match
<b>Total Federal Aid Bridge Funds Programmed ▶</b>						\$11,000,000	\$8,800,000	\$2,200,000		

## ▶ Section 1C / Federal Aid Non-Target Projects

### Earmarks

						\$0	\$0	\$0	0.00	
						\$0	\$0	\$0	0.00	
<b>Earmarked Subtotal ▶</b>						\$0	\$0	\$0		◀ Funding Split Varies by Earmark

### Other

						\$0	\$0	\$0	0.00	
						\$0	\$0	\$0	0.00	
<b>Other Subtotal ▶</b>						\$0	\$0	\$0		◀ Funding Split Varies by Funding Source
<b>Total Federal Non-Target Funds Programmed ▶</b>						\$0	\$0	\$0		

## ▶ Section 1D / Federal Aid Major & State Category Projects

### IM - Interstate Maintenance

605586	Westford	WESTFORD- INTERSTATE MAINTENANCE & RELATED WORK ON I-495	3	IM		\$3,998,400	\$3,598,560	\$399,840	0.00	
						\$0	\$0	\$0	0.00	
<b>IM Subtotal ▶</b>						\$3,998,400	\$3,598,560	\$399,840		◀ 90% Federal + 10% Non-Federal Match

### NHS - National Highway System

						\$0	\$0	\$0	0.00	
						\$0	\$0	\$0	0.00	
<b>NHS Subtotal ▶</b>						\$0	\$0	\$0		◀ 80% Federal + 20% Non-Federal Match

### Other

						\$0	\$0	\$0	0.00	
						\$0	\$0	\$0	0.00	
<b>Other Subtotal ▶</b>						\$0	\$0	\$0		◀ Funding Split Varies by Funding Source
<b>Total Federal Aid Major &amp; State Category Funds Programmed ▶</b>						\$3,998,400	\$3,598,560	\$399,840		

## ▶ Section 2A / Non-Federally Funded Projects

						\$0	\$0	\$0	0.00	
						\$0	\$0	\$0	0.00	
<b>Non-Federally Funded Projects Subtotal ▶</b>						\$0	\$0	\$0		◀ 100% Non-Federal
<b>Total Non-Federally Funded Projects Programmed ▶</b>						\$0	\$0	\$0		

## ▶ Section 2B / Non-Federally Aided Bridge Projects

						\$0	\$0	\$0	0.00	
						\$0	\$0	\$0	0.00	
<b>Non-Federally Aided Bridges Subtotal ▶</b>						\$0	\$0	\$0		◀ 100% Non-Federal
<b>Total Non-Federally Funded Bridge Projects Programmed ▶</b>						\$0	\$0	\$0		

	Section 1: Total Federal Projects	Section 2: Total Non- Federal Projects	Total of All Projects	
<b>Total ▶</b>	\$17,285,168	\$0	\$17,285,168	◀ Total Spending in Region
Federal Funds ▶	\$14,267,071	\$0	\$14,267,071	◀ Total Federal Spending in Region
Non-Federal Funds ▶	\$3,018,098	\$0	\$3,018,098	◀ Total Non-Federal Spending in Region

**701 CMR 7.00 Use of Road Flaggers and Police Details on Public Works Projects / 701 CMR 7.00** (the Regulation) was promulgated and became law on October 3, 2008. Under this Regulation, the CMR is applicable to any Public works Project that is performed within the limits of, or that impact traffic on, any Public Road. The Municipal Limitation referenced in this Regulation is applicable only to projects where the Municipality is the Awarding Authority. For all projects contained in the TIP, the Commonwealth is the Awarding Authority. Therefore, all projects must be considered and implemented in accordance with 701 CMR 7.00, and the Road Flagger and Police Detail Guidelines. By placing a project on the TIP, the Municipality acknowledges that 701 CMR 7.00 is applicable to its project and design and construction will be fully compliant with this Regulation. This information, and additional information relative to guidance and implementation of the Regulation can be found at the following link on the MassDOT Highway Division website: <http://www.massdot.state.ma.us/Highway/flaggers/main.aspx>



# 2014 Northern Middlesex MPO Transportation Improvement Program

August 3, 2010 - Draft Released  
September 2, 2010 - TIP Endorsed

\$ 4,571,426 ◀ Total Target Allocation  
\$ 3,398,543 ◀ Maximum STP  
\$ 390,961 ◀ Minimum HSIP  
\$ 781,922 ◀ Minimum CMAQ

ID	Location	Project Description	Highway District	Funding Category	Earmark Details	Total Estimated Cost	Federal Funds	Non-Federal Match	TEC Score	Additional Information
<b>Section 1A / Federal Aid Target Projects</b>										
<b>STP - Surface Transportation Program</b>										
604964	Lowell	LOWELL- SIGNAL & INTERSECTION IMPROVEMENTS AT VFW HIGHWAY, BRIDGE STREET & LAKEVIEW AVENUE	4	STP		\$1,492,367	\$1,193,894	\$298,473	0.00	Total project cost \$2,665,250
604907	Dracut	DRACUT- RECONSTRUCTION OF ARLINGTON STREET, FROM BROADWAY ROAD (ROUTE 113) TO METHUEN STREET (APPROX. 7500 FT)	4	STP		\$1,906,176	\$1,524,941	\$381,235	0.00	A/C Year one, total project cost \$6,452,301
<b>STP Subtotal</b>						\$3,398,543	\$2,718,834	\$679,709		◀ 80% Federal + 20% Non-Federal Match
<b>Fiscal Constraint Analysis</b>						\$0				
<b>HSIP - Highway Safety Improvement Program</b>										
604964	Lowell	LOWELL- SIGNAL & INTERSECTION IMPROVEMENTS AT VFW HIGHWAY, BRIDGE STREET & LAKEVIEW AVENUE	4	HSIP		\$390,961	\$351,865	\$39,096	0.00	
<b>HSIP Subtotal</b>						\$390,961	\$351,865	\$39,096		◀ 90% Federal + 10% Non-Federal Match
<b>Fiscal Constraint Analysis</b>						\$0				
<b>CMAQ - Congestion Mitigation and Air Quality Program</b>										
604964	Lowell	LOWELL- SIGNAL & INTERSECTION IMPROVEMENTS AT VFW HIGHWAY, BRIDGE STREET & LAKEVIEW AVENUE	4	CMAQ		\$781,922	\$625,538	\$156,384	0.00	
<b>CMAQ Subtotal</b>						\$781,922	\$625,538	\$156,384		◀ 80% Federal + 20% Non-Federal Match
<b>Fiscal Constraint Analysis</b>						\$0				
<b>Total Federal Aid Target Funds Programmed</b>						\$4,571,426	\$3,696,237	\$875,189		
<b>Total Target Fiscal Constraint Analysis</b>						\$0				
<b>Section 1B / Federal Aid Bridge Projects</b>										
<b>BR - Bridge</b>										
601845	Lowell	LOWELL- BRIDGE DEMOLITION, L-15-021 & NEW BRIDGE CONSTRUCTION, L-15-095, UNIVERSITY (TEXTILE) AVENUE OVER THE MERRIMACK RIVER AND NORTHERN CANAL	4	BR-AC		\$11,000,000	\$8,800,000	\$2,200,000	0.00	AC-Yr 5 Total Project cost \$44,000,000
<b>BR Subtotal</b>						\$11,000,000	\$8,800,000	\$2,200,000		◀ 80% Federal + 20% Non-Federal Match
<b>Total Federal Aid Bridge Funds Programmed</b>						\$11,000,000	\$8,800,000	\$2,200,000		
<b>Section 1C / Federal Aid Non-Target Projects</b>										
<b>Earmarks</b>										
						\$0	\$0	\$0	0.00	
<b>Earmarked Subtotal</b>						\$0	\$0	\$0		◀ Funding Split Varies by Earmark
<b>Other</b>										
						\$0	\$0	\$0	0.00	
<b>Other Subtotal</b>						\$0	\$0	\$0		◀ Funding Split Varies by Funding Source
<b>Total Federal Non-Target Funds Programmed</b>						\$0	\$0	\$0		
<b>Section 1D / Federal Aid Major &amp; State Category Projects</b>										
<b>IM - Interstate Maintenance</b>										
606174	Chelmsford/Lowell	CHELMSFORD- LOWELL- TEWSKURY- INTERSTATE MAINTENANCE & RELATED WORK ON I-495	4	IM		\$10,948,000	\$9,853,200	\$1,094,800	0.00	
<b>IM Subtotal</b>						\$10,948,000	\$9,853,200	\$1,094,800		◀ 90% Federal + 10% Non-Federal Match
<b>NHS - National Highway System</b>										
						\$0	\$0	\$0	0.00	
<b>NHS Subtotal</b>						\$0	\$0	\$0		◀ 80% Federal + 20% Non-Federal Match
<b>Other</b>										
						\$0	\$0	\$0	0.00	
<b>Other Subtotal</b>						\$0	\$0	\$0		◀ Funding Split Varies by Funding Source
<b>Total Federal Aid Major &amp; State Category Funds Programmed</b>						\$10,948,000	\$9,853,200	\$1,094,800		
<b>Section 2A / Non-Federally Funded Projects</b>										
						\$0	\$0	\$0	0.00	
<b>Non-Federally Funded Projects Subtotal</b>						\$0	\$0	\$0		◀ 100% Non-Federal
<b>Total Non-Federally Funded Projects Programmed</b>						\$0	\$0	\$0		
<b>Section 2B / Non-Federally Aided Bridge Projects</b>										
						\$0	\$0	\$0	0.00	
<b>Non-Federally Aided Bridges Subtotal</b>						\$0	\$0	\$0		◀ 100% Non-Federal
<b>Total Non-Federally Funded Bridge Projects Programmed</b>						\$0	\$0	\$0		
<b>Section 1: Total Federal Projects</b>						\$26,519,426	\$0	\$26,519,426		◀ Total Spending in Region
<b>Section 2: Total Non-Federal Projects</b>						\$22,349,437	\$0	\$22,349,437		◀ Total Federal Spending in Region
<b>Total</b>						\$4,169,989	\$0	\$4,169,989		◀ Total Non-Federal Spending in Region

**701 CMR 7.00 Use of Road Flaggers and Police Details on Public Works Projects / 701 CMR 7.00** (the Regulation) was promulgated and became law on October 3, 2008. Under this Regulation, the CMR is applicable to any Public works Project that is performed within the limits of, or that impact traffic on, any Public Road. The Municipal Limitation referenced in this Regulation is applicable only to projects where the Municipality is the Awarding Authority. For all projects contained in the TIP, the Commonwealth is the Awarding Authority. Therefore, all projects must be considered and implemented in accordance with 701 CMR 7.00, and the Road Flagger and Police Detail Guidelines. By placing a project on the TIP, the Municipality acknowledges that 701 CMR 7.00 is applicable to its project and design and construction will be fully compliant with this Regulation. This information, and additional information relative to guidance and implementation of the Regulation can be found at the following link on the MassDOT Highway Division website: <http://www.massdot.state.ma.us/Highway/flaggers/main.aspx>



**FY 2011 Transit Project Listing**

FFY	RTA	PROJECT	DESCRIPTION	FUNDING CATEGORY	FEDERAL AMOUNT	TOTAL AMOUNT
2011	LRTA	Capital Assistance	Bus and bus facilities	FY '09 §5309 carryover	\$1,150,000	\$1,437,500
2011	LRTA	Capital Assistance	Bus and bus facilities	FY '09 §5309 carryover	\$225,720	\$282,150
2011	LRTA	Operating Assistance	Transit and Facility Services	§5307	\$1,183,463	\$2,366,926
2011	LRTA	Planning Assistance	NMCOG contract	§5307	\$ 60,000	\$ 75,000
2011	LRTA	Capital Assistance	Preventive Maintenance	§5307	\$658,655	\$823,319
2011	LRTA	Capital Assistance	Bus and facilities/spare parts	§5307	\$ 120,000	\$150,000
2011	LRTA	Operating Assistance	Section 18 rural assistance	§5311	\$ 7,773	\$15,546
2011	LRTA	Capital Assistance	5 lift and radio equipped vehicles	§5310	\$90,600	453,000
2011	LRTA	Capital Assistance	Bus and bus facilities	FY '10 §5307 carryover	\$439,893	\$879,786
2011	LRTA	Capital Assistance (Nashua)	Bus and bus facilities	FY 10 §5307 carryover	\$581	\$726
2011	LRTA	JARC	Expanded Holiday service	Boston UZA	\$36,704	\$73,408
2011	LRTA	JARC	Tewksbury Saturday service	Boston UZA	\$30,535	\$61,070
2011	LRTA	JARC	Pheasant Lane Mall Saturday only Seasonal	Boston UZA	\$3,986	\$7,972
2011	LRTA	Capital Assistance	Supervisory Vehicle	§5307	\$28,000	\$35,000
2011	LRTA	Capital Assistance	Bike Racks	§5307	\$40,000	\$50,000

**FY 2012 Transit Project Listing**

FFY	RTA	PROJECT	DESCRIPTION	FUNDING CATEGORY	FEDERAL AMOUNT	TOTAL AMOUNT
2012	LRTA	Operating Assistance	Transit and Facility Services	§5307	\$1,183,463	\$2,366,926
2012	LRTA	Planning Assistance	NMCOG contract	§5307	\$60,000	\$ 75,000
2012	LRTA	Capital Assistance	Preventive Maintenance	§5307	\$952,540	\$1,190,675
2012	LRTA	Capital Assistance	Bus and facilities/spare parts	§5307	\$80,000	\$100,000
2012	LRTA	Operating Assistance	Section 18 rural assistance	§5311	\$7,773	\$15,546
2012	LRTA	Capital Assistance	5 lift and radio equipped vehicles	§5310	\$90,600	\$453,000
2012	LRTA	Capital Assistance	Replacement Of 4 Cut-a-way transit buses	§5307	\$225,720	\$282,150

**FY 2013 Transit Project Listing**

FFY	RTA	PROJECT	DESCRIPTION	FUNDING CATEGORY	FEDERAL AMOUNT	TOTAL AMOUNT
2013	LRTA	Operating Assistance	Transit and Facility Services	§5307	\$1,183,463	\$2,366,926
2013	LRTA	Planning Assistance	NMCOG contract	§5307	\$60,000	\$75,000
2013	LRTA	Capital Assistance	Preventive Maintenance	§5307	\$952,540	\$1,190,675
2013	LRTA	Capital Assistance	Bus and facilities/spare parts	§5307	\$ 80,000	\$100,000
2013	LRTA	Operating Assistance	Section 18 rural assistance	§5311	\$7,773	\$15,546
2013	LRTA	Capital Assistance	5 lift and radio equipped vehicles	§5310	\$90,600	\$453,000
2013	LRTA	Capital Assistance	Replacement Of 4 Cut-a-way transit buses	§5307	\$225,720	\$282,150
2013	LRTA	Capital Assistance	Replacement Of 6 fixed route transit buses	§5309	\$1,600,000	\$2,000,000

**FY 2014 Transit Project Listing**

<b>FFY</b>	<b>RTA</b>	<b>PROJECT</b>	<b>DESCRIPTION</b>	<b>FUNDING CATEGORY</b>	<b>FEDERAL AMOUNT</b>	<b>TOTAL AMOUNT</b>
2014	LRTA	Operating Assistance	Transit and Facility Services	§5307	\$1,183,463	\$2,366,926
2014	LRTA	Planning Assistance	NMCOG contract	§5307	\$ 60,000	\$ 75,000
2014	LRTA	Capital Assistance	Preventive Maintenance	§5307	\$952,540	\$1,190,675
2014	LRTA	Capital Assistance	Bus and facilities/spare parts	§5307	\$ 80,000	\$ 100,000
2014	LRTA	Operating Assistance	Section 18 rural assistance	§5311	\$ 7,773	\$15,546
2014	LRTA	Capital Assistance	5 lift and radio equipped vehicles	§5310	\$90,600	\$ 453,000
2014	LRTA	Capital Assistance	Replacement Of 2 Cut-a-way transit buses	§5307	\$ 184,800	\$ 231,000
2014	LRTA	Capital Assistance	Replacement Of 3 replacement transit buses	§5309	\$1,000,000	\$1,250,000

**Future highway projects identified through the transportation planning process:  
(For informational purposes only - a funding source has not been identified for these projects)**

<b>PROJECT DESCRIPTION</b>	<b>COMMUNITY</b>	<b>PROJECT I.D.#</b>	<b>TOTAL COST</b>
Boston Road/Lexington Road/Glad Valley Drive intersection reconstruction	Billerica	N/A	\$600,000
Yankee Doodle Bike Path design	Billerica	N/A	\$150,000
Yankee Doodle Bike Path construction	Billerica	N/A	\$1,000,000
Reconstruct the intersection of Salem and Andover Roads	Billerica	N/A	\$1,600,000
Westford Street reconstruction	Chelmsford	N/A	\$812,000
Arlington Street/Montraup Street intersection improvements	Dracut	N/A	\$400,000
Nashua Road/Lakeview Ave. reconstruction and intersection improvements	Dracut	602200	\$1,900,000
Arlington Street reconstruction	Dracut	604907	\$6,452,310
Hildreth, Sladen and Old Road intersection improvements	Dracut	602201	\$300,000
Lowell Connector improvements/reconstruction	Lowell	604694	\$750,000
Merrimack River Crossing EIS/EA for permanent river crossing	Lowell	N/A	\$1,500,000
Reconstruction of Rt. 113 Retaining wall	Dunstable	N/A	\$800,000
East Street reconstruction and related improvements	Tewksbury	N/A	\$1,500,000
Whipple Road reconstruction project	Tewksbury	NA	\$8,600,000
Main Street over Salmon Brook	Dunstable	N/A	\$1,600,000
Intersection improvements at Route 110 and Tadmuck Road	Westford	N/A	\$600,000
Reconstruction of Allen Road	Billerica	601426	\$4,500,000
Rehabilitation of Boston Road	Billerica	605178	\$6,810,735

## **PART C: FEDERAL REQUIREMENTS**



## **1. Certification of the 3C Planning Process**

This will certify that the Comprehensive, Continuing, Cooperative Transportation Planning Process for Fiscal Years 2010 and 2011 being undertaken by the Northern Middlesex Metropolitan Planning Organization is addressing major issues facing the region and is being conducted in accordance with the requirements of:

1. 23 U.S.C. 134, 49 U.S.C. 5303, and this subpart;
2. Sections 174 and 176 (c) and (d) of the Clean Air act, as amended (42 U.S.C. 7504, 7506 (c) and (d) and 40 CFR part 93;
3. Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d-1) and 49 CFR part 21;
4. 49 U.S.C. 5332, prohibiting discrimination on the basis of race, color, creed, national origin, sex, or age in employment or business opportunity;
5. Section 1101(b) of the SAFETEA-LU (Pub. L. 109-59) and 49 CFR part 26 regarding the involvement of disadvantaged business enterprises in USDOT funded projects;
6. 23CFR 230, regarding the implementation of an Equal Employment Opportunity Program on Federal and Federal- aid Highway construction contracts.
7. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) and 49 CFR parts 27, 37, and 38;
8. The Older Americans Act, as amended (42 U.S.C. 6101) prohibiting discrimination on the basis of age in programs or activities receiving Federal financial assistance;
9. Section 324 of title 23 U.S.C. regarding the prohibition of discrimination based on gender; and
10. Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794) and 49 CFR part 27 regarding discrimination against individuals with disabilities.
11. Anti-lobbying restriction found in 49 U.S.C. Part 20. No appropriated funds may be expended by the recipient to influence an officer or employee of any agency, a Member of Congress, in connection with the awarding of any Federal contract.

The currently endorsed Unified Planning Work Program, Regional Transportation Plan, and Transportation Improvement Program, together with any amendments, were developed in accordance with FHWA/FTA regulations governing the implementation of SAFETEA-LU, and EPA regulations governing the implementation of the Clean Air Act Amendments of 1990, and fully incorporate the applicable requirements of the Civil Rights Act of 1964 and the Americans with Disabilities Act of 1990.

## **2. Certification of Private Enterprise Participation in the Transportation Planning Process**

The Metropolitan Planning Organization (MPO) for the Northern Middlesex region, a part of the Boston Urbanized area, hereby certifies that the local process for the involvement of the private sector in transportation planning activities has been followed.

### **3. Certification of Air Quality Conformity**

In accordance with Section 176(c) (4) of the Clean Air Act as amended in 1990, the MPO for the Northern Middlesex region has completed its review and hereby certifies that the 2011-2014 Transportation Improvement Program has been developed from a conforming transportation plan and conforms with 40 CFR Parts 51 and 93 (August 15, 1997) and 310 CMR 60.03 issued on December 30, 1994. All of the projects within the NMCOG TIP are included in the Regional Transportation Plan, and all Plan projects that require work to be started within the time frame of the TIP are included in the TIP.

As the projects in the TIP come from the conforming regional transportation plan, and all regionally significant projects for 2011-2014 (both federal and non-federal aid) are programmed in the TIP, the same air quality analysis utilized for the RTP can be used for the TIP. Therefore, this TIP, in combination with the TIPs from other MPOs in the nonattainment area, is found to be in conformance.

### **4. Certification of Compliance with the Regional Public Participation Plan**

In accordance with the requirements of SAFETEA-LU and the Clean Air Act Amendments, the Northern Middlesex Metropolitan Planning Organization hereby certifies that this document was prepared in accordance with the Public Participation Plan developed by the Northern Middlesex MPO in May 1994 and most recently revised in February 2010. A copy of the Public Participation Plan is contained in Appendix B.

### **5. Regional Financial Summary**

The TIP must be a financially constrained document, and must also be consistent with the Regional Transportation Plan and planning process. The TIP must be updated at least every four years. Approval responsibility rests with the Metropolitan Planning Organization and the Governor. Table 1 outlines the federal spending levels for each fiscal year for the highway program as well as the region's programming target. Table 2 contains similar information for the transit program.

Title 23 CFR section 450.324 and 310 CMR 60.03(9) requires the TIP to be "financially constrained by year to include a financial plan that demonstrates which projects can be implemented using the current revenue sources and which projects are to be implemented using proposed revenue sources (while the existing transportation system is being adequately operated and maintained)." Moreover, regulations have further defined financial constraint so as to exclude a state's unspent federal balances. Projects can only be programmed up to an amount that the Congress is expected to allow the state to spend in any individual fiscal year.

The financial plan contained herein is financially constrained, and indicates that the Northern Middlesex Metropolitan Planning Organization's Transportation Improvement Program reflects the highway program emphasis on maintenance and operations of the current roadway and bridge system, with the ability to provide for additional capital improvements. Only projects for which funds can be expected have been included.

**TABLE 1**  
**Federal Highway Funding Totals by Funding Category**  
(w ith state match)

<b>FEDERAL AID CATEGORY</b>	<b>FFY 11</b>	<b>FFY 12</b>	<b>FFY 13</b>	<b>FFY 14</b>
Surface Transportation Program	\$4,570,428	\$4,447,271	\$3,624,539	\$3,398,542
CMAQ	\$488,701	\$0	\$781,922	\$781,922
HSIP	\$390,961	\$390,961	\$390,961	\$390,961
Interstate Maintenance	-0-	-0-	\$3,998,400	\$10,948,000
Bridge	\$5,000,000	\$7,000,000	\$7,000,000	\$8,000,000
Total	\$10,450,090	\$4,838,232	\$15,195,822	\$16,519,425

**TABLE 2**  
**Federal Transit Funding Totals by Funding Category**  
(Does not include matching funds)

<b>FEDERAL AID CATEGORY</b>	<b>FFY 11</b>	<b>FFY 12</b>	<b>FFY 13</b>	<b>FFY 14</b>
Section 5307-Capital Assistance	\$148,000	\$305,720	\$305,720	\$264,800
Section 5307- Preventive Maintenance	\$658,655	\$952,540	\$952,540	\$952,540
Section 5307- Operating Assistance	\$1,183,463	\$1,183,463	\$1,183,463	\$1,183,463
Section 5307- Planning	\$60,000	\$60,000	\$60,000	\$60,000
Section 5309-Capital	0	0	\$1,600,000	\$1,000,000
Section 5310-Capital Assistance	\$90,600	\$90,600	\$90,600	\$90,600
Section 5311-Operating	\$7,773	\$7,773	\$7,773	\$7,773
Section 5309-Capital/FY '09 carryover	\$1,375,720	0	0	0
Section 5307-Capital/FY '10 carryover	\$439,893	0	0	0
Section 5307-Capital (Nashua) /FY '10 carryover	\$581	0	0	0
JARC	\$71,225	0	0	0

**TABLE 3  
Status of FFY 2010 Transit Projects**

<b>FFY</b>	<b>RTA</b>	<b>Project</b>	<b>Description</b>	<b>Funding Category</b>	<b>Federal Amount</b>	<b>Total Amount</b>	<b>Anticipated Implementation</b>
2010	LRTA	Capital Assistance	Bus and bus facilities	FY '09 §5309 carryover	\$1,150,000	\$1,437,500	MA-04-0041 Pending
2010	LRTA	Capital Assistance	Bus and bus facilities	FY '09 §5309 carryover	\$225,720	\$282,150	MA-04-0042 Pending
2010	LRTA	Operating Assistance	Transit and Facility Services	§5307	\$1,183,463	\$2,366,926	Ongoing MA-90-X560
2010	LRTA	Planning Assistance	NMCOG contract	§5307	\$ 60,000	\$ 75,000	Complete MA-90-X560
2010	LRTA	Capital Assistance	Preventive Maintenance	§5307	\$952,540	\$1,190,675	Ongoing MA-90-X560
2010	LRTA	Capital Assistance	Bus and facilities/spare parts	§5307	\$ 80,000	\$100,000	Ongoing MA-90-X560
2010	LRTA	Operating Assistance	Section 18 rural assistance	§5311	\$ 7,773	\$15,546	Pending
2010	LRTA	Capital Assistance	5 lift and radio equipped vehicles	§5310	\$288,000	360,000	Complete MAP 36
2010	LRTA	Capital Assistance	Bus and bus facilities	FY '09 §5307 carryover	\$860,331	\$1,075,414	Complete Filed under MA-90-X588
2010	LRTA	Capital Assistance (Nashua)	Bus and bus facilities	FY '09 §5307 carryover	\$582	\$728	Complete Filed under MA-90-X588
2010	LRTA	JARC	Expanded Holiday service	FFY '2007 Boston UZA	\$35,599	\$71,198	Ongoing
2010	LRTA	JARC	Tewksbury Saturday service	FFY '2007 Boston UZA	\$29,245	\$58,490	Ongoing

**TABLE 4:  
FTA FUNDING FOR FFY 2011**

<b>FTA FUNDING PROGRAM</b>	<b>ESTIMATED FOR FFY 2011</b>	<b>PROGRAMMED TIP AMOUNTS FOR FFY 2011</b>	<b>BALANCE FOR FFY 2011</b>
Section 5307			
5307 Operating Assistance	\$1,183,463	\$1,183,463	-0-
5307 Planning	\$60,000	\$60,000	-0-
5307 Capital Assistance	\$148,000	\$148,000	-0-
5307 Preventive Maintenance	\$658,655	\$658,655	-0-
Subtotal	\$2,050,118	\$2,050,118	-0-
Capital carryover	\$439,893	\$439,893	-0-
Capital carryover (Nashua)	\$581	\$581	
Subtotal	\$440,474	\$440,474	-0-
Total	\$2,490,592	\$2,490,592	-0-
Section 5309			
5309 Capital	0	0	-0-
Subtotal	0	0	-0-
Capital carryover '09	\$1,375,720	\$1,375,720	-0-
Subtotal	0	0	-0-
Total	\$1,375,720	\$1,375,720	-0-
Section 5310			
Programmed	\$90,600	\$90,600	-0-
Total	\$90,600	\$90,600	-0-
Section 5311			
Programmed	\$7,773	\$7,773	-0-
Total	\$7,773	\$7,773	-0-
JARC			
Programmed	\$71,228	\$71,228	-0-
Total	\$71,228	\$71,228	-0-
<b>GRAND TOTALS</b>	<b>\$3,945,313</b>	<b>\$3,945,313</b>	<b>-0-</b>

**TABLE 5:  
FTA FUNDING FOR FFY 2012**

<b>FTA FUNDING PROGRAM</b>	<b>ESTIMATED FOR FFY 2012</b>	<b>PROGRAMMED TIP AMOUNTS FOR FFY 2012</b>	<b>BALANCE FOR FFY 2012</b>
Section 5307			
5307 Planning	\$60,000	\$60,000	-0-
5307 Capital Assistance/ Bus and facilities/ spare parts	\$80,000	\$80,000	-0-
5307 Operating Assistance	\$1,183,463	\$1,183,463	-0-
5307 Capital Assistance /Preventive Maintenance	\$952,540	\$952,540	
5307 Capital Assistance/ replacement of 4 cut-a-way buses	\$225,720	\$225,720	
subtotal	\$2,501,723	\$2,501,723	-0-
Capital carryover	0	0	-0-
subtotal	0	0	-0-
Total	\$2,501,723	\$2,501,723	-0-
Section 5309			
5309 Capital	0	0	-0-
subtotal	0	0	-0-
Capital carryover	0	0	-0-
subtotal	0	0	-0-
Total	0	0	-0-
Section 5310			
5310 Capital Assistance	\$90,600	\$90,600	-0-
Total	\$90,600	\$90,600	-0-
Section 5311			
5311 Operating Assistance	\$7,773	\$7,773	-0-
Total	\$7,773	\$7,773	-0-
<b>GRAND TOTALS</b>	<b>\$2,600,096</b>	<b>\$2,600,096</b>	<b>-0-</b>

**TABLE 6:  
FTA FUNDING FOR FFY 2013**

<b>FTA FUNDING PROGRAM</b>	<b>ESTIMATED FOR FFY 2013</b>	<b>PROGRAMMED TIP AMOUNTS FOR FFY 2013</b>	<b>BALANCE FOR FFY 2013</b>
Section 5307			
5307 Planning	\$60,000	\$60,000	-0-
5307 Capital Assistance	\$80,000	\$80,000	-0-
5307 Operating Assistance	\$1,183,463	\$1,183,463	-0-
5307 Capital Assistance /Preventive Maintenance	\$952,540	\$952,540	
5307 Capital Assistance/ replacement of 4 cut-a-way buses	\$225,720	\$225,720	
subtotal	\$2,501,723	\$2,501,723	-0-
Capital carryover	0	0	-0-
subtotal	0	0	-0-
Total	\$2,501,723	\$2,501,723	-0-
Section 5309			
5309 Capital	\$1,600,000	\$1,600,000	-0-
subtotal	\$1,600,000	\$1,600,000	-0-
Capital carryover	0	0	-0-
subtotal	\$1,600,000	\$1,600,000	-0-
Total	\$1,600,000	\$1,600,000	-0-
Section 5310			
5310Capital Assistance	\$90,600	\$90,600	-0-
Total	\$90,600	\$90,600	-0-
Section 5311			
5311 Operating Assistance	\$7,773	\$7,773	-0-
Total	\$7,773	\$7,773	-0-
<b>GRAND TOTALS</b>	<b>\$4,200,096</b>	<b>\$4,200,096</b>	<b>-0-</b>

**TABLE 7:  
FTA FUNDING FOR FFY 2014**

<b>FTA FUNDING PROGRAM</b>	<b>ESTIMATED FOR FFY 2014</b>	<b>PROGRAMMED TIP AMOUNTS FOR FFY 2014</b>	<b>BALANCE FOR FFY 2014</b>
Section 5307			
5307 Planning	\$60,000	\$60,000	-0-
5307 Capital Assistance	\$80,000	\$80,000	-0-
5307 Operating Assistance	\$1,183,463	\$1,183,463	-0-
5307 Capital Assistance /Preventive Maintenance	\$952,540	\$952,540	
5307 Capital Assistance/ replacement of 2 cut-a-way buses	\$184,800	\$184,800	
subtotal	\$2,460,803	\$2,460,803	-0-
Capital carryover	0	0	-0-
subtotal	0	0	-0-
Total	\$2,460,803	\$2,460,803	-0-
Section 5309			
5309 Capital	\$1,000,000	\$1,000,000	-0-
subtotal	\$1,000,000	\$1,000,000	-0-
Capital carryover	0	0	-0-
subtotal	0	0	-0-
Total	\$1,000,000	\$1,000,000	-0-
Section 5310			
5310 Capital Assistance	\$90,600	\$90,600	-0-
Total	\$90,600	\$90,600	-0-
Section 5311			
5311 Operating Assistance	\$7,773	\$7,773	-0-
Total	\$7,773	\$7,773	-0-
<b>GRAND TOTALS</b>	<b>\$3,559,176</b>	<b>\$3,559,176</b>	<b>-0-</b>

The overall TIP, and each fiscal year contained herein, is financially constrained to the annual federal apportionment reasonably expected to be available during the appropriate time frame. Projections of federal resources are based upon the apportionments of the federal authorizations contained in SAFETEA-LU, as allocated to the region by the state or as allocated among the various MPOs according to federal formulae or MPO agreement and adjusted to reflect obligational authority or priority. The projects programmed for this region meet the funding estimates of federal funds available in each year as shown in Table 9. These estimates were provided by the Massachusetts Department of Transportation and refined as part of the State Transportation Improvement Program development process and the MOU for the Statewide Road and Bridge Program.

**TABLE 8**  
**FFY 2011-2014 Transportation Improvement Program Financial Plan**  
**For the Northern Middlesex**  
**Metropolitan Planning Organization**

<b>FISCAL YEAR</b>	<b>FEDERAL TARGET</b>	<b>FEDERAL AMOUNT PROGRAMMED WITH REGIONAL TARGET FUNDS (FHWA RELATED CATEGORIES ONLY)</b>
2011	\$5,450,090	\$4,548,201
2012	\$4,838,232	\$3,400,000
2013	\$4,797,422	\$4,000,000
2014	\$4,571,425	\$2,665,250

**TABLE 9**  
**PROJECTS COUNTED TOWARD THE FFY 2011-2014 FEDERAL AID REGIONAL TARGETS**

<b>FISCAL YEAR</b>	<b>PROJECT DESCRIPTION</b>	<b>COMMUNITY</b>	<b>PROJECT I.D.</b>	<b>AMOUNT PROGRAMMED</b>
<b>2011</b>	Pawtucket Blvd. Relocation (Year 2 AC)	Tyngsborough	603823	\$3,404,951
<b>2011</b>	Rt. 113 Retaining wall	Dunstable		\$900,000
<b>2011</b>	East and Livingston signal	Tewksbury	604068	\$1,143,250
<b>TOTAL</b>				<b>\$5,448,201</b>
<b>2012</b>	Resurfacing Pawtucket Blvd.	Tyngsborough	602139	\$3,400,000
<b>2012</b>	Reconstruction of Rt. 110 at Boston Road	Westford	604809	\$1,438,232
<b>TOTAL</b>				<b>\$4,838,232</b>
<b>2013</b>	Reconstruction of Rt. 110 and Boston Rd (Minot's Corner)	Westford	604809	\$2,286,768
<b>TOTAL</b>				<b>\$2,286,768</b>
<b>2014</b>	Signal and intersection improvements at Bridge St. and VFW Highway	Lowell	604964	\$2,665,250
<b>2014</b>	Reconstruction of Arlington St from Broadway Rd (Rt. 113) to Methuen St.(Year 1 AC)	Dracut	604907	\$1,906,176
<b>TOTAL</b>				<b>\$4,571,426</b>

Financial constraint of the total state program will be depicted in the FFY 2011-2014 State Transportation Improvement Program. Funding levels for Fiscal Years 2011-2014 have been developed cooperatively between the State and regional members of the MPO, as part of the MPO

process in TIP development, and in accordance with the MOU for the Statewide Road and Bridge program.

The financial plan contained herein is fiscally constrained and indicates that the Northern Middlesex Metropolitan Planning Organization's Transportation Improvement Program reflects the highway program emphasis on the maintenance and operation of the current roadway and bridge system, with the ability to provide additional capital improvements.

## **6. System Preservation, Operations and Maintenance**

Since the enactment of ISTEA in 1991, fiscal constraint has encompassed operation and maintenance of the system, as well as capital projects. Outside the transportation planning process, there also is a Federal requirement that states adequately maintain projects constructed under the Federal-aid Highway Program. System level operating and maintenance costs and revenues must be reflected in the financial plan that accompanies and supports the TIP/STIP. Estimated regional operating and maintenance expenditures for FY 2011 are provided in Tables 10-12 based upon past expenditures for SFY 2008, SFY 2009, and SFY 2010.

**TABLE 10  
SUMMARY OF NON FEDERAL AID OPERATING AND MAINTENANCE EXPENDITURES  
FOR THE NORTHERN MIDDLESEX REGION**

<b>Section I – Non Federal Aid Maintenance Projects: State Bond Funds</b>				
<b>Program Group/ Sub Group</b>	<b>SFY 2008 NFA Expenditures</b>	<b>SFY 2009 NFA Expenditures</b>	<b>SFY 2010 NFA Expenditures</b>	<b>Estimated SFY 2011 NFA Expenditures (TBD)</b>
<b>01- Bridge Repair and Replacement</b>				
New Bridge (Excluded)	----	----	----	
Bridge Replacement (Excluded)	----	----	----	
Bridge reconstruction/rehab	\$2,088	\$442,296	\$17,675,893	
Drawbridge maintenance	\$95,364	\$90,990	\$141,167	
Structure maintenance	\$3,185,224	\$2,089,999	\$5,790,420	
<b>02 – Bridge Painting</b>				
Painting – Structural	\$0	\$49,812	\$0	
<b>03 – Roadway Reconstruction</b>				
Highway relocation (Excluded)	----	----	----	
Highway reconstruction: Added Capacity (Excluded)	----	----	----	
New Construction (Excluded)	----	----	----	
Highway reconstruction - restoration and rehab	\$108,569	\$62,498	\$8,820	
Highway reconstruction – No added capacity	0	0	0	
Highway reconstruction – Minor widening	0	0	0	
<b>04 – Roadway Resurfacing</b>				
Resurfacing	\$500,030	\$419,860	\$406,463	
<b>05 – Intersection and Safety</b>				
Impact Attenuators	\$22,738	\$20,825	\$12,512	
Safety Improvements	\$7,885	\$5,037	\$0	
Traffic Signals	\$76,242	\$220,362	\$45,827	
<b>06 – Signs and Lighting</b>				
Lighting and Electrical	\$48,980	\$46,366	\$55,642	
Sign installation/upgrading	\$22,533	\$22,172	\$47,644	
Structural Signing	\$16,833	\$22,835	\$0	
<b>07 – Guard rail</b>				
Guard rail and fencing	\$118,882	\$78,171	\$109,438	
<b>08 – Maintenance</b>				
Catch Basin Cleaning	\$144,412	\$152,806	\$263,226	
Crack Sealing	\$18,310	\$15,416	\$0	
Landscape and Roadside Development	\$83,246	\$88,907	\$0	
Mowing and Spraying	\$0	\$2,619	\$0	
Pavement Marking	\$112,617	\$143,516	\$142,137	
Sewer and Water	\$33,694	\$29,094	\$0	
Process/Recycle/Trnsprt Soils	\$0	\$0	\$0	

<b>Section I – Non Federal Aid Maintenance Projects: State Bond Funds</b>				
<b>Program Group/ Sub Group</b>	<b>SFY 2008 NFA Expenditures</b>	<b>SFY 2009 NFA Expenditures</b>	<b>SFY 2010NFA Expenditures</b>	<b>Estimated SFY 2011 NFA Expenditures</b>
<b>09 – Facilities</b>				
Chemical Storage Sheds	\$0	\$4,790	\$0	\$0
Vertical Construction	\$0	\$0	\$0	\$0
10 – Bikeways (Excluded)				
<b>11 – Other</b>				
Miscellaneous/No Prequal	\$0	\$17,983	\$64,015	\$0
Asbestos				
Demolition	\$0	\$0	\$0	\$0
Drilling and Boring				
<b>Section I Total</b>	<b>\$4,597,650</b>	<b>\$4,026,355</b>	<b>\$24,763,204</b>	<b>0</b>

<b>Section II – Non Federal Aid Highway Operations – State Operating Budget Funding</b>				
12- Snow and Ice Operations and Materials	\$4,115,703	\$3,065,363	\$2,905,936	0
13 – District Maintenance (mowing, litter management, sight distance clearing, etc.)	\$782,000	\$691,003	\$703,728	0
<b>Section II Total</b>	<b>\$4,897,703</b>	<b>\$3,756,366</b>	<b>\$3,609,664</b>	<b>0</b>
<b>Grand Total NFA</b>	<b>\$9,495,353</b>	<b>\$7,782,721</b>	<b>\$28,372,868</b>	<b>0</b>

**TABLE 11  
SUMMARY OF FEDERAL AID OPERATING AND MAINTENANCE EXPENDITURES  
FOR THE NORTHERN MIDDLESEX REGION**

<b>Section I – Federal Aid Maintenance Projects</b>				
<b>Program Group/ Sub Group</b>	<b>SFY 2008 NFA Expenditures</b>	<b>SFY 2009 Federal Aid Expenditures</b>	<b>SFY 2010 Federal Aid Expenditures</b>	<b>Estimated SFY 2011 Federal Aid Expenditures</b>
<b><i>01- Bridge Repair and Replacement</i></b>				
New Bridge (Excluded)	----	----	----	
Bridge Replacement (Excluded)	----	----	----	
Bridge reconstruction/rehab	\$727,557	\$203,199	\$1,866,086	
Structure maintenance	0	0	0	
<b><i>02 – Bridge Painting</i></b>				
Painting –Structural	0	0	0	
<b><i>03 – Roadway Reconstruction</i></b>				
Highway relocation (Excluded)	----	-----	----	----
Highway reconstruction: Added Capacity (Excluded)	----	----	----	----
New Construction (Excluded)	----	----	----	-----
Highway restoration and rehabilitation	0	0	0	0
Highway reconstruction – No added capacity	\$714,292	\$498,386	\$498,881	
Highway reconstruction – Minor wid	\$3,502,351	\$1,371,365	\$1,502,587	\$0
<b>Section I – Federal Aid Maintenance Projects</b>				
<b>Program Group/ Sub Group</b>	<b>SFY 2008NFA Expenditures</b>	<b>SFY 2009 Federal Aid Expenditures</b>	<b>SFY 2010 Federal Aid Expenditures</b>	<b>Estimated SFY 2011 Federal Aid Expenditures</b>
<b><i>04 – Roadway Resurfacing</i></b>				
Resurfacing	\$687,020	\$3,324,072	\$210,709	\$
<b><i>05 – Intersection and Safety</i></b>				
Impact Attenuators	\$2,199	\$3,446	\$0	
Safety Improvements	0	0	0	0
Traffic Signals	\$1,331,947	\$1,159,906	\$166,496	\$
<b><i>06 – Signs and Lighting</i></b>				
Lighting and Electrical	0	0	0	0
Sign installation/upgrading	\$83,990	\$44,951	\$4,422	
<b><i>07 – Guard rail</i></b>				
Guard rail and fencing	\$17,294	\$53,934	\$0	
<b><i>08 – Maintenance</i></b>				
Contract Highway Maintenance	\$3,011	\$1,220	\$0	\$
Landscape and Roadside development	\$0	\$5,347	\$0	\$0
Pavement Marking	\$0	\$35	0	\$0
<b><i>09 – Facilities</i></b>				
Vertical Construction	\$68,880	\$6,103	\$24,994	
<b><i>10 – Bikeways (Excluded)</i></b>				
	----	----	----	----
<b><i>11 – Other</i></b>				
Intelligent Transportation Systems	\$0	\$28,669	\$112,696	\$0
Miscellaneous/No Prequal	\$86,537	\$62,107	\$16,753	
Reclamation	0	0	0	0
<b>Section I Total</b>	<b>\$7,163,180</b>	<b>\$6,766,087</b>	<b>\$4,378,630</b>	<b>\$</b>

<b>Section II – Federal Aid Highway Operations</b>				
<i><b>II - Other</b></i>				
ITS Operations –I-93 HOV Lane Operation and Towing	\$0	\$0	\$0	\$0
ITS Operations – Traffic Operations Center (South Boston)	\$0	\$0	\$0	\$0
<b>Section II Total</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Grand Total FA</b>	<b>\$7,163,180</b>	<b>\$6,766,087</b>	<b>\$4,378,630</b>	

**TABLE 12: OPERATING AND MAINTENANCE SUMMARY TABLE FOR  
THE LOWELL REGIONAL TRANSIT AUTHORITY**

**STATE FISCAL YEAR 2010**

The numbers below represent actual numbers for the previous year, the current year budget/forecast approved by the LRTA Advisory Board, and projections for the out-years as used in the Program Preview meetings with the State. These numbers indicate that there are sufficient revenues projected to meet the operating needs of the LRTA.

<b>Operating Revenue</b>	<b>SFY 2011</b>	<b>SFY 2012</b>	<b>SFY 2013</b>	<b>SFY 2014</b>	<b>SFY 2015</b>
Farebox	\$,1072,311	\$1,095,557	\$1,122,946	\$1,151,019	\$1,179,975
Section 5307	\$1,842,118	\$1,900,000	\$2,189,403	\$2,244,138	\$2,300,242
Section 5311	-0-	-0-	-0-	-0-	-0-
CMAQ/TDM	-0-	-0-	-0-	-0-	-0-
Fully Funded*	-0-	-0-	-0-	-0-	-0-
Jobs Access/ Reverse Commute	\$158,979	\$158,979	-0-	-0-	-0-
Advertising	\$90,000	\$92,250	\$94,556	\$96,920	\$99,343
Interest Income	\$35,000	\$37,750	\$39,544	\$40,382	\$42,267
Rental Income	\$995,000	\$1,000,875	\$1,033,472	\$1,043,809	\$1,064,904
State Contract Assistance**	\$2,951,362	\$2,951,362	\$2,951,362	\$2,951,362	\$2,951,362
Local Assessment	\$2,108,431	\$2,161,142	\$2,215,170	\$2,270,549	\$2,327,313
Other: operation and maintenance of No. Billerica station and other miscellaneous revenues	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000
<b>TOTAL</b>	<b>\$9,266,202</b>	<b>\$9,437,915</b>	<b>\$9,686,453</b>	<b>\$9,838,179</b>	<b>\$10,005,406</b>

<b>Operating Expenses***</b>	<b>SFY 2011</b>	<b>SFY 2012</b>	<b>SFY 2013</b>	<b>SFY 2014</b>	<b>SFY 2015</b>
<b>TOTAL</b> (see description below)	<b>\$9,266,202</b>	<b>\$9,437,915</b>	<b>\$9,686,453</b>	<b>\$9,838,179</b>	<b>\$10,005,406</b>

\* Federally funded refers to contract work, often to Human Service Agencies

\*\* Operating assistance provided by the State

\*\*\* Description of Operating Expenses: Salaries and wages; fringe benefits; legal, accounting and professional services; promotion/marketing; insurance; equipment leases and rentals; real property leases and rentals; non-capitalized maintenance/repair; fuel costs; tire costs; office supplies and equipment; interest expense; utilities; management fees; travel and training; and other miscellaneous expense items.

**7. Regionally Significant Transportation Projects**

There are two regionally significant projects in Northern Middlesex; the Middlesex Turnpike Phase III in Billerica and Bedford and the I-93 Tri-Town Interchange, "Lowell Junction," in Tewksbury, Andover and Wilmington. However neither of these projects is programmed in the FY 2011-2014 Transportation Improvement Program for the Northern Middlesex region.

**8. Statewide Infrastructure Projects**

The following projects are statewide in nature. For informational purposes, the project listing is provided in Table 13 below. This information will also appear in the FFY 2011-2014 Massachusetts State Transportation Improvement Program.

**TABLE 13:  
STATEWIDE INFRASTRUCTURE ITEMS FOR FFY 2011-2014**

	<i>FFY 2011</i>		<i>FFY 2012</i>		<i>FFY 2013</i>		<i>FFY 2014</i>	
	Federal Funds	Total Cost	Federal Funds	Total Cost	Federal Funds	Total Cost	Federal Funds	Total Cost
Statewide Infrastructure Program	\$4,800,000	\$6,000,000	\$1,200,000	\$1,500,000	\$4,800,000	\$6,000,000	\$4,800,000	\$6,000,000
Statewide Safety Program	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Statewide HSIP Program	\$4,500,000	\$5,000,000	\$2,250,000	\$2,500,000	\$4,500,000	\$5,000,000	\$4,500,000	\$5,000,000
Statewide Safe Routes to Schools Program	\$3,500,000	\$3,500,000	\$3,500,000	\$3,500,000	\$3,500,000	\$3,500,000	\$3,500,000	\$3,500,000
Statewide CMAQ	\$10,000,000	\$12,500,000	\$7,600,000	\$9,500,000	\$5,000,000	\$6,250,000	\$5,000,000	\$6,250,000
Statewide Transportation Enhancements	\$2,800,000	\$3,500,000	\$2,800,000	\$3,500,000	\$400,000	\$500,000	\$400,000	\$500,000
Statewide Recreational Trails	\$626,400	\$783,000	\$626,400	\$783,000	\$626,400	\$783,000	\$626,400	\$783,000
Statewide ITS Including I-91 in '10+' '11	\$9,300,000	\$11,625,000	\$5,100,000	\$6,375,000	\$5,000,000	\$6,250,000	\$5,000,000	\$6,250,000
Statewide Design And ROW	\$0	\$0	\$0	\$0	\$2,400,000	\$3,000,000	\$2,400,000	\$3,000,000
Statewide Interstate Maintenance	\$63,000,000	\$70,000,000	\$63,000,000	\$70,000,000	\$63,000,000	\$70,000,000	\$63,000,000	\$70,000,000
Statewide NHS Preservation	\$11,600,000	\$14,500,000	\$9,600,000	\$12,000,000	\$7,343,000	\$9,178,750	\$7,343,000	\$9,178,750
Statewide Railroad Grade Crossings	\$400,000	\$500,000	\$400,000	\$500,000	\$400,000	\$500,000	\$400,000	\$500,000
Statewide Transit	\$25,000,000	\$31,250,000	\$20,000,000	\$25,000,000	\$0	\$0	\$0	\$0
Statewide Bridge Repl./Rehab program	\$97,186,662	\$121,483,328	\$93,436,662	\$116,795,828	\$97,186,662	\$121,483,328	\$97,186,662	\$121,483,328
Statewide Bridge Inspection	\$5,000,000	\$6,250,000	\$5,000,000	\$6,250,000	\$5,000,000	\$6,250,000	\$5,000,000	\$6,250,000
Statewide Bridge Preservation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Award adjustments, change orders, pv changes Etc	\$35,000,000	\$43,750,000	\$35,000,000	\$43,750,000	\$35,000,000	\$43,750,000	\$36,000,000	\$45,000,000
Planning	\$18,400,000	\$23,000,000	\$18,400,000	\$23,000,000	\$18,400,000	\$23,000,000	\$18,400,000	\$23,000,000
Regional Major Infrastructure	\$32,000,000	\$40,000,000	\$32,000,000	\$40,000,000	\$32,000,000	\$40,000,000	\$32,000,000	\$40,000,000
<b>Total Statewide Infrastructure Items:</b>	<b>\$323,113,062</b>	<b>\$393,641,328</b>	<b>\$299,913,062</b>	<b>\$342,453,828</b>	<b>\$284,556,062</b>	<b>\$345,445,078</b>	<b>\$277,356,062</b>	<b>\$346,695,078</b>

## 9. TEA-21 Projects

The following projects were contained in TEA-21 as either a High Priority project or under Section 3030. The Route 3 Transportation Improvement Project has been programmed in previous TIP documents. The Lowell-Nashua-Manchester Commuter Rail Extension will be programmed in the New Hampshire STIP. It is mentioned here for informational purposes.

- Route 3 North Transportation Improvement Project from Route 128/I-95 in Massachusetts to the New Hampshire state line: contained in TEA-21 as a High Priority Project for \$6.15 million
- Extension of the MBTA Commuter Rail from Lowell, Massachusetts to Nashua, Manchester and Concord, New Hampshire- contained in Section 3030 of TEA-21 with no funding amount specified.

## 10. Previously Advertised Projects

Table 14 below provides a listing of projects advertised by Mass Highway from 1990 to 2009 for the Northern Middlesex region.

**TABLE 14  
PREVIOUSLY ADVERTISED PROJECTS IN THE NORTHERN MIDDLESEX REGION**

COMMUNITY	PROJECT DESCRIPTION	AD DATE	BID AMOUNT
Pepperell	Reconstruct Mill Street Bridge	7/10/10	\$2,036,514
Chelmsford	Parkhurst Road (ARRA)	6/26/10	\$2,106,153
Lowell	Route 38 Resurfacing	9/19/09	\$2,839,920
Westford	Intersection signal installation at Rt. 110 and Rt. 225 (ARRA)	6/20/09	\$2,458,181
Lowell	Rehabilitation of 6 Rt. I-495 Bridges	11/22/08	\$34,392,000
Lowell	Improvements to Hunts Falls and Rotary Bridges over the Merrimack River	9/27/08	\$10,844,655
Tyngsborough	Rehabilitation of Rt. 113 and 3A bridges over the Merrimack River	9/27/08	\$16,394,304
Lowell	Morton St Bridge over B&M railroad	9/20/08	\$2,316,137
Westford	Intersection Improvements at Rt. 110 and Powers Rd.	9/6/08	\$2,458,181
Lowell	Reconstruction of Thorndike, Gorham and Central St	9/22/07	\$3,516,924
Lowell	Signal and Intersection improvements at Rt. 110, Plain St and Pearl St.	8/25/07	\$512,840
Chelmsford/Lowell/Westford	Bruce Freeman Rail Trail	4/7/07	\$4,238,998
Westford	I 495 Resurfacing	2/27/07	\$6,668,617
Lowell	Bridge betterment Wood St. ext. over the Merrimack River	10/28/06	

<b>COMMUNITY</b>	<b>PROJECT DESCRIPTION</b>	<b>AD DATE</b>	<b>BID AMOUNT</b>
Billerica	Cook Street and Alexander Road	09/20/06	\$5,134,920
Billerica	Andover Road Bridge	09/21/06	\$807,812
Billerica	Concord Road improvements	07//02/05	\$401,160
Chelmsford	Princeton Street Bridge	08/06/05	\$2,147,700
Chelmsford	I-495 resurfacing	03/01/06	\$2,809,882
Chelmsford	Resurfacing of the Lowell Connector	06/12/06	\$518,400
Chelmsford	Intersection improvements at Dalton Road/ Rte 4 and Parkhurst Road/Route 4	09/22/06	\$266,688
Pepperell	Groton Street Bridge over the Nashua River	09/11/06	\$4,953,560
Dracut	Lakeview Avenue	08/27/05	\$2,629,920
Billerica	Route 4 Bridge over the Concord River	09/24/05	\$4,229,715
Chelmsford	Route 4 intersection improvements at Parkhurst Road and at Dalton Road	09/30/05	\$1,745,437
Billerica	Concord Road reconstruction, Phase 1	9/04	\$3,822,222
Tewksbury	Intersection improvements at Main and Shawsheen	7/04	\$1,279,244
Dracut	Lakeview Avenue Bridge over canal	8/07/04	\$574,422
Westford	I-495 ramp/Boston Road intersection improvements	9/03	1,200,000
Lowell	Aiken Street Bridge over the Northern Canal	2/02	640,000
Lowell	Resurfacing of the Lowell Connector	09/25/06	\$800,000
Lowell, Chelmsford, Westford	Bruce Freeman Bike Path	9/29/01	2,721,400
Chelmsford	Central Square Improvements	9/22/01	
Lowell	Lincoln Street Bridge reconstruction	6/17/00	2,716,589
Tyngsborough	Construction of temporary bridge over the Merrimack River	6/1/02	4,822,082
Billerica	River Street Bridge replacement	6/9/01	2,151,957
Chelmsford, Lowell Tewksbury	I-495 resurfacing	9/23/02	1,719,721
Billerica	George Brown Bridge	2/10/01	6,212,160
Lowell	School Street Bridge	11/11/00	2,903,641
Tewksbury, Andover, Wilmington	Resurfacing and related work on a section of I-93	12/18/93	\$3,598,828
Tewksbury, Andover, Methuen	Sign replacement and updating on I-93	5/12/90	554,414
Billerica, Bedford, Burlington, Chelmsford	Resurfacing and related work on a section of Route 3	11/09/91	1,678,434
Billerica	Safety improvements at three locations	11/03/90	1,204,519
Billerica	Concord Road Bridge over Route 3	5/18/91	1,086,946

<b>COMMUNITY</b>	<b>PROJECT DESCRIPTION</b>	<b>AD DATE</b>	<b>BID AMOUNT</b>
Billerica	Resurfacing and related work on Route 129	12/31/93	368,362
Billerica	Pollard Street Bridge over Concord River	12/24/94	1,691,407
Billerica	Resurfacing and related improvements on a section of Route 4	12/31/93	244,158
Billerica, Chelmsford	Resurfacing and related improvements on a section of Route 3A	10/19/96	436,756
Billerica	Treble Cove Road Bridge over Route 3	12/13/91	998,216
Billerica	Replacement of Gray Street Bridge over the B&M railroad	10/16/93	995,700
Billerica	Reconstruction of Tower Farm Road and a section of Route 3A	12/18/93	547,880
Billerica	Safety improvements at Boston Road, Pollard and Floyd Sts.	12/16/95	1,288,323
Burlington to Tyngsborough	Traffic sign replacement along Route 3	11/18/95	1,973,279
Chelmsford	Micro resurfacing on a section of Route 110	12/7/96	249,864
Chelmsford, Lowell	Sign replacement along the Lowell Connector	8/13/94	460,218
Chelmsford, Lowell, Tyngsborough, Westford	Resurfacing and related work along Route 3	10/26/91	6,482,642
Chelmsford	Reconstruction of the Princeton Street Bridge over the B&M	2/8/97	1,071,252
Chelmsford, Lowell	Safety improvements at 4 locations	7/14/90	\$944,430
Chelmsford, Lowell	Resurfacing and related work on a section of Route 3A	11/1/97	287,982
Chelmsford, Tyngsborough	Resurfacing and related work on a section of Route 3A	1/25/97	808,803
Chelmsford	Safety improvements at Vinal Square	10/23/93	152,205
Chelmsford, Lowell, Tewksbury and Westford	Bridge betterment at 12 locations on I-495	8/11/90	1,792,200
Chelmsford	Rest Area construction on I-495 northbound	12/27/97	1,988,299
Chelmsford	Traffic safety improvements and signals at the intersection of North Road and Princeton Blvd.	11/5/94	494,965
Chelmsford	Bridge betterment at 4 locations on I-495	8/15/92	1,327,837
Chelmsford	Construction of Rest Area on I-495 southbound	10/31/98	3,165,573
Dracut	Phineas Street Bridge replacement over Beaver Brook	9/25/93	1,875,761

<b>COMMUNITY</b>	<b>PROJECT DESCRIPTION</b>	<b>AD DATE</b>	<b>BID AMOUNT</b>
Dracut	Intersection improvements- Bridge St./Cross/and Marsh Hill Road	12/9/95	\$670,000
Dracut/Methuen	Resurfacing and related work on Route 110	12/2/95	243,172
Dracut	Resurfacing and related work on Route 113	11/14/92	737,413
Dracut, Lowell	Resurfacing and related work on Route 110	8/1/92	451,596
Pepperell/Groton	Bridge replacement on Route 119/111 over the Nashua River	12/27/97	1,915,897
Pepperell, Groton, Littleton	Resurfacing of a section of Route 119	11/27/93	\$1,553,350
Westford, Littleton	Resurfacing and related work on I-495	8/25/07	\$7,426,540
Westford, Littleton	Bridge betterment-- 3 bridges on I-495	8/18/90	442,485
Westford, Littleton	Resurfacing on Powers Road	12/21/91	242,290
Lowell, Tewksbury	Reconstruction of a section of Route 38	12/18/93	852,216
Lowell	Resurfacing - the Lowell Connector and Industrial Avenue	8/13/94	99,772
Lowell	Traffic signal improvements at the intersection of VFW Highway and Aiken Street	10/03/92	154,637
Lowell	Safety improvements at three locations on Route 38	12/25/93	446,706
Lowell	Lundberg Street Bridge replacement M	12/31/94	1,179,626
Lowell	Plain Street Bridge replacement	12/12/92	813,949
Lowell	YMCA Drive/Hale Street Bridge replacement over the railroad	12/24/94	1,448,503
Lowell	Reconstruction and widening of a section of Pawtucket Blvd.	4/28/90	3,429,541
Lowell	Wilder Street Bridge reconstruction	12/2/95	391,258
Lowell	Safety improvements at 2 locations	9/26/92	246,970
Lowell	Roadway reconstruction and signalization at three locations	3/21/98	720,075
Lowell	Safety improvements at 2 locations	8/21/92	\$200,357
Lowell	Safety improvements at Monument Sq.	5/29/93	731,248
Lowell	Installation of signals and related work at 3 locations	12/28/91	299,857
Lowell	Reconstruction of School Street viaduct	10/17/92	5,047,576
Lowell	Bridge Street Bridge over Merrimack	12/26/98	2,720,266
Lowell	Jefferson Street Bridge replacement	2/21/98	248,246
Lowell	Aiken Street Bridge reconstruction	1/4/97	7,012,976
Lowell	Walker Street Bridge reconstruction	5/30/92	146,560

<b>COMMUNITY</b>	<b>PROJECT DESCRIPTION</b>	<b>AD DATE</b>	<b>BID AMOUNT</b>
Lowell	Moody Street Bridge rehab over the Western Canal	12/25/93	292,700
Lowell	Rourke Bridge rehab over the Merrimack River	8/29/92	189,500
Lowell	Bridge Street Bridge rehab	11/26/94	2,081,543
Lowell	Resurfacing and related work on a section of the VFW Highway and Route 113	12/24/94	1,724,035
Lowell	Boylston Street Bridge replacement over the B&M	9/14/96	1,146,397
Lowell	Safety improvements at the intersection of Rogers Street and Nesmith Street	10/7/95	223,924
Lowell	Safety improvements at the intersection of Aiken St./Lakeview and W. Sixth St.	8/31/91	\$152,927
Pepperell	Reconstruct Driveways, wheelchair ramps and sidewalks on Main Street	7/21/90	49,866
Pepperell	Replace Prescott Street Bridge over the Nissitissitt River	5/1/93	586,956
Tewksbury	Traffic signal update at 2 locations on Route 38	5/18/91	260,342
Tewksbury	Safety improvements at the intersection of Main Street and Pleasant Street	5/18/91	278,392
Tewksbury	Bridge Deck replacement on the Route 38 over the B&M	10/13/90	919,951
Tewksbury	Roadway reconstruction on a section of Route 133	3/1/97	1,395,367
Tewksbury	Route 38 Bridge replacement over the Shawsheen River	12/30/95	814,649
Tewksbury	Resurfacing and related work on a section of Route 38	9/10/94	258,947
Tyngsborough	Resurfacing of a section of Middlesex Road	12/17/94	280,315
Tyngsborough	Reconstruction of the intersections of Middlesex Road with Kendall Road and Westford Road	8/21/93	318,449
Tyngsborough	Resurfacing and related work on a section of Route 3A	9/30/95	283,099
Tyngsborough	Roadway reconstruction and related work on a section of Lakeview Avenue and Parham Road	12/24/94	1,068,591
Tyngsborough	Locust Avenue Bridge repair over Route 3	4/8/95	\$323,739

<b>COMMUNITY</b>	<b>PROJECT DESCRIPTION</b>	<b>AD DATE</b>	<b>BID AMOUNT</b>
Tyngsborough	Signalization of the intersection of Westford Road/Dunstable Road and Middlesex Road and Locust Ave.	5/10/97	254,994
Westford	Safety improvements and signalization at the intersection of Route 40, Depot Street and Tyngsborough Road	3/9/94	260,502
Westford	Reconstruction of Route 110	3/03/90	880,674
Westford	Graniteville Road Bridge replacement	7/13/91	156,400

## 11. Air Quality Conformity Determination

### Northern Middlesex Metropolitan Planning Organization

#### FFY 2011-2014 Transportation Improvement Program

##### Background

The Commonwealth of Massachusetts is classified as serious nonattainment for ozone, and is divided into two nonattainment areas. The Eastern Massachusetts ozone nonattainment area includes Barnstable, Bristol, Dukes, Essex, Middlesex, Nantucket, Norfolk, Suffolk, and Worcester counties. Berkshire, Franklin, Hampden, and Hampshire counties comprise the Western Massachusetts ozone nonattainment area. With these classifications, the 1990 Clean Air Act Amendments (CAAA) required the Commonwealth to reduce its emissions of volatile organic compounds (VOCs) and nitrogen oxides (NO<sub>x</sub>), the two major precursors to ozone formation to achieve attainment of the ozone standard.

**In April 2002, the cities of Lowell, Waltham, Worcester and Springfield were re-designated to attainment for carbon monoxide with EPA-approved limited maintenance plans. In April 1996, the communities of Boston, Cambridge, Chelsea, Everett, Malden, Medford, Quincy, Revere, and Somerville were classified as attainment for carbon monoxide (CO). Air quality conformity analysis must still be completed in these communities, as they have a carbon monoxide maintenance plan approved into the state implementation plan (SIP). The year 2010 carbon monoxide motor vehicle emission budget established for the Boston CO attainment area with a maintenance plan is 228.33 tons of carbon monoxide per winter day.**

The CAAA also required Metropolitan Planning Organizations (MPOs) within nonattainment areas to perform conformity determinations prior to the approval of their Regional Transportation Plans (RTPs) and Transportation Improvement Programs (TIPs). The most recent prior conformity determination occurred in the summer of 2007, when the Federal Highway Administration (FHWA) – in consultation with the Environmental Protection Agency (EPA New England) and the Massachusetts Department of Environmental Protection (DEP) – confirmed that all 13 of the RTPs for the year 2007 in Massachusetts were in conformity with the Massachusetts State Implementation Plan (SIP). A brief summary of major conformity milestones in recent years is as follows (more details are provided in the 2007 RTPs and related documents):

Between 2003 and 2006, several new conformity determinations were made that were triggered by various events, including: The 2003 regional transportation plans, a change in designation from the one-hour ozone standard to an eight-hour ozone standard, and various changes to regional TIPs that involved reprogramming transportation projects across analysis years.

In 2007, air quality analyses were conducted on behalf of all the 2007 Regional Transportation Plans (RTPs), the purposes of which were to evaluate the RTPs' air quality impacts on the SIP. Conformity determinations were performed to ensure that all regionally significant projects were included in the RTPs. The Massachusetts Department of Transportation found the emission

levels from the 2007 Regional Transportation Plans to be in conformance with the SIP. Each MPO had certified (and continues to certify) that all activities outlined in its Plan and its TIP:

- will not cause or contribute to any new violation of any standard in any area;
- will not increase the frequency or severity of any existing violation of any standard in any area; and,
- will not delay the timely attainment of any standard or any required interim emission reductions or other milestones in any area.

On April 2, 2008, EPA found that the 2008 and 2009 motor vehicle emissions budgets in the January 31, 2008 Massachusetts 8-hour ozone State Implementation Plan (SIP) revision were adequate for transportation conformity purposes. The submittal included 2008 and 2009 motor vehicle emission budgets for the Boston-Lawrence-Worcester (Eastern Massachusetts) and Springfield (Western Massachusetts) 8-hour ozone nonattainment areas. Massachusetts submitted these budgets as part of the 8-hour ozone attainment demonstration and reasonable further progress plan for both nonattainment areas, and as a result of EPA's adequacy finding, these budgets are required to be used for this and future conformity determinations.

### **Conformity Test**

The conformity test is to show consistency with the emissions budgets set forth in the SIP, and to contribute to reductions in CO nonattainment areas. In addition, the format of the conformity test is determined by evolving regulations. These regulations set specific requirements for different time periods depending on the timeframe of the Commonwealth's SIP submittals to EPA. These periods are defined as follows:

***Control Strategy Period:*** Once a control strategy SIP has been submitted to EPA, EPA has to make a positive adequacy determination of the mobile source emission budget before such budget can be used for conformity purposes. The conformity test in this period is consistency with the mobile source emission budget.

***Maintenance Period*** is the period of time beginning when the Commonwealth submits and EPA approves a request for redesignation to an attainment area, and lasting for 20 years. The conformity test in this period is consistency with the mobile source emission budget.

Horizon years for regional and state model analyses have been established following 40 CFR 93.106(a) of the Federal Conformity Regulations. The years for which the regional and state transportation models were run for emission estimates are shown below:

- 2007: Milestone Year – This year is now being used by the statewide travel demand model as the new base year for calculation of emission reductions of VOCs and NOx.
- 2017: Milestone Year and Analysis Year: This year is used to show conformity with the 2009 emission budgets for ozone precursors in eastern Massachusetts

- 2020: Analysis Year
- 2030: Horizon Year – last forecast year of the regional transportation plan

**Changes in Project Design since the Last Conformity Determination Analysis**

The Commonwealth requires that any change in project design from the previous conformity determination for the region is identified. Changes that have occurred since the last conformity determination in 2009 are as follows:

- The modeled base year has changed from 2000 to 2007.
- A new analysis year has been included in the conformity determination. An air quality analysis has been completed for 2017. This complies with the conformity guidelines for no more than ten years between analysis years (2007 base to 2017 analysis year).
- Emission factors have been developed for 2017 using Mobile 6.2 with inputs approved by DEP and EPA.
- New HPMS adjustment factors have been developed for the new 2007 base year.

As stated in EPA guidance, all areas of serious ozone and carbon monoxide nonattainment must use FHWA’s Performance Monitoring System (HPMS) to track daily vehicle-miles of travel (VMT) prior to attainment to ensure that the state is in line with commitments made in reaching attainment of the ambient air quality standards by the required attainment dates. MassDOT provided HPMS information to DEP. DEP used this information in setting mobile-source budgets for VOC, NOx, and CO in all SIP revisions prior to 1997. DEP has since revised its VOC and NOx budgets using transportation-demand model runs. However, the models must still be compared to HPMS data since HPMS remains the accepted tracking procedure as outlined in the regulations.

The conformity regulations require that all model-based VMT be compared with the HPMS VMT to ensure that the region is in line with VMT and emission projections made by DEP. An adjustment factor that compares the 2007 HPMS VMT to the 2007 transportation model VMT has been developed. This adjustment factor is then applied to all modeled VOC and NOx emissions for the years 2017 through 2030 to ensure consistency with EPA-accepted procedures.

Add your region’s factor according to the spreadsheet:

$$\frac{2007 \text{ HPMS } 6,570,000 \text{ VMT}}{2007 \text{ Modeled } 7,489,431 \text{ VMT}} = 0.877 \text{ Adjustment factor for Northern Middlesex Region for VOC and NOx}$$

HPMS adjustment factors, calculated on a regional basis, are applied to the model output of future scenarios, and they change as base-year models are updated or improved, or as HPMS data is revised or updated.

The milestone and analysis year transportation model networks are composed of projects proposed in this 2011-2014 TIP. Projects in these networks consist of all in-place “regionally significant” projects that can reasonably be expected to be completed by a given analysis/horizon year with consideration of available funding commitments. This project group would include, but not be limited to, regionally significant projects where at least one of the following steps has occurred within the past three years:

- Comes from the first year of a previously conforming TIP,
- Completed the NEPA process, or
- Currently under construction or are undergoing right-of-way acquisition

The Commonwealth requires that any changes in project design from the previous conformity determination for the region be identified. The last conformity determination was performed on the 2007 Regional Transportation Plan.

A complete listing of future regionally significant projects for the entire Eastern Massachusetts Ozone Non-Attainment Area is provided below:

### **Regionally Significant Projects Included in the Transportation Models for the Eastern Massachusetts Ozone Non-Attainment Area**

<b>Analysis Year</b>	<b>Community</b>	<b>Project Description – Boston Region</b>
2017	Bedford	Middlesex Turnpike Improvements Phase 3 – widening Plank St. to Manning
2017	Boston	East Boston Haul Road/Chelsea Truck Route (new grade separated roadway)
2017*	Boston	Fairmount Line Improvements, including new stations
2017*	Boston	Russia Wharf Ferry Terminal
2017	Boston Logan Airport	Consolidated Rental Car Facility (Boston Logan Airport)
2017	Canton	I-95 (NB)/Dedham Street Ramp/Dedham Street Corridor (new ramp with widening on Dedham St. from I-95 to University Ave.)
2017	Concord, Lincoln	Route 2/Crosby's Corner (grade separation)
2017	Hanover	Route 53 Final Phase (widening to 4 lanes between Rt 3 and Rt 123)
2017	Hudson	Route 85 (capacity improvements from Marlborough TL to Rt 62)
2017	Marshfield	Route 139 Widening (to 4 lanes between School St. and Furnace St.)
2017	Quincy	Quincy Center Concourse, Phase 2 (new roadway: Parking Way to Hancock
2017	Revere	Wonderland Parking Garage
2017	Salem	Bridge Street (widening to 4 lanes between Flint and Washington St.)
2017*	Regionwide	1000 Additional Park and Ride Spaces
2017	Somerville	Assembly Square Orange Line Station
2017	Somerville	Assembly Square Roadways (new and reconfigured)
2017*	Somerville, Cambridge	Green Line Extension from Lechmere Station to College Avenue
2017	Weymouth, Hingham, Rockland	South Weymouth Naval Air Station Access Improvements
2017	Weymouth	Route 18 Improvements (widening between Rt 3 and Rt 139)
2017	Woburn	Montvale Avenue (widening between Central St. to east of Washington St.)
2020	Boston	Sullivan Square Improvements
2020	Braintree	Braintree Split - I-93/Route 3 Interchange
2020	Somerville, Medford	Green Line Extension from College Ave. to Mystic Valley Parkway (Route 16)
2020	Wilmington	Tri-Town Interchange (new “Lowell Junction” interchange on I-93 between Route 125 and Dascomb Rd.)
2020	Woburn	New Boston Street Bridge (reestablish connection over MBTA Lowell line)
2030	Boston	Rutherford Avenue (new 4 lane bypass road)
2030	Canton	I-95/I-93 Interchange (new direct connect ramps)
2030	Framingham	Route 126/135 Grade Separation
2030	Malden, Revere, Saugus	Route 1 (widening from 4 to 6 lanes between Copeland Circle and Rt. 99)
2030	Newton, Needham	Needham Street/Highland Avenue (includes widening Charles River Bridge)
2030	Reading, Woburn, Stoneham	I-93/I-95 Interchange (new direct connect ramps)
TBD*	Boston	Red Line/Blue Line Connector – Design Only
<b>Analysis Year</b>	<b>Community</b>	<b>Project Description - Cape Cod Region</b>

2020	Barnstable	Barnstable Airport Access
2020	Barnstable	Yarmouth Rd. /Rt 28 (widening to 4 lanes) with Hyannis Rotary improvements
2030	Bourne	Bourne Rotary Long-Term Improvements
2030	Bourne, Sandwich	Bourne-Sandwich Parkway (widening to 4 lanes)
<b>Analysis Year</b>	<b>Community</b>	<b>Project Description - Central Massachusetts Region</b>
2020	Charlton, Oxford	Route 20 Widening
2020	Auburn, Shrewsbury, Worcester	Route 20 Widening – selected locations
2020	Worcester	I-290 / Vernon St. / Kelley Square (new interchange and square realignment)
2030	Millbury, Sutton	Route 146 Improvements – add frontage roads to create limited access roadway between a new interchange (at Boston Rd.) and existing I-90 interchange
<b>Analysis Year</b>	<b>Community</b>	<b>Project Description – Martha’s Vineyard Region</b>
n/a	n/a	None
<b>Analysis Year</b>	<b>Community</b>	<b>Project Description – Merrimack Valley Region</b>
2017	Amesbury	Route 110 from I-495 to I-95 (widen from 2 lanes to 4)
2017	Georgetown	Georgetown Industrial Park Access Road from Route 133
2017	Lawrence	I-495 over Merrimack River (widening and add new ramps)
2020	Andover	Burt Road extension – improve access to Route 125
2020	Andover	Tri-Town Interchange (new “Lowell Junction” interchange on I-93 between Route 125 and Dascomb Rd.) and I-93 widening to 4 lanes in each direction from new interchange/current “lane drop” area to I-495.
2020	Lawrence	Route 114 (widening from I-495 to Waverly Road)
2020	Methuen	Route 110/113 (Methuen Rotary – new interchange ramps at I-93)
2020	Newburyport, Amesbury	I-95 over Merrimack River (Whittier Bridge widening from 6 to 8 lanes)
2030	Andover, Methuen	I-93 – widening to 4 travel lanes in each direction from I-495 to NH line
2030	Newburyport	Hale Street Industrial Park access from I-95
<b>Analysis Year</b>	<b>Community</b>	<b>Project Description – Montachusett Region</b>
2017	Fitchburg	New Wachusett Commuter Rail Station
2020	Athol	New Interchange on Route 2 at South Athol Road
2020	Fitchburg, Leominster, Sterling	Routes 12 and 13 (various improvements to on and off ramps)
<b>Analysis Year</b>	<b>Community</b>	<b>Project Description – Nantucket Region</b>
n/a	n/a	None
<b>Analysis Year</b>	<b>Community</b>	<b>Project Description – Northern Middlesex Region</b>
2017	Billerica	Middlesex Turnpike Improvements Phase 3 – widening Plank St. to Manning
2020	Tewksbury	Tri-Town Interchange (new “Lowell Junction” interchange on I-93 between Route 125 and Dascomb Rd.)
<b>Analysis Year</b>	<b>Community</b>	<b>Project Description – Old Colony Region</b>
2020	Abington	Route 18 - Widening to 4 Lanes from Route 139 to Highland Place
2020	Brockton	Route 123 - Widen from Route 24 to Linwood Street
2030	Bridgewater	Route 24 - Add Northbound Slip Ramp from Route 104 WB to Route 24 NB
2030	Brockton	Main Street, Warren Avenue, Spring Street, West Elm Street, Belmont Street - Reestablish Two-Way Circulation
2030	Kingston, Plymouth	Route 3 - Widening from 4 to 6 Lanes between Hingham and Rt 44
2030	Plymouth	Route 25 - Add New Interchange Before Exit 1 and connect to Bourne Road
2030	Plymouth	Route 3 - Add NB Off-ramp to Plimouth Plantation Hwy. and SB On/off Ramp to Camelot Dr.
2030	Plymouth	Route 3 - Add Northbound on-Ramp at Long Pond Road (Exit 5)
2030	West Bridgewater	Route 106 - Widening from 2 to 4 Lanes between Route 24 and Route 28

<b>Analysis Year</b>	<b>Community</b>	<b>Project Description – Southeastern Massachusetts Region</b>
2017	Fall River, Somerset	New Brightman Street Bridge - capacity improvements to 4 lane divided facility
2020	Dartmouth	Route 6 (Faunce Corner Rd) / I-195 Interchange - Bridge Widening to 5 Lanes
2020	Freetown	Route 24 - New Interchange (Exit 8 ½)
2020	Mansfield	Route 140 / I-495 New Southbound On-Ramp
2020	Middleborough	Route 44 - Widening from Rt 24 to Rt 58 and Remove Middleboro Rotary
2030	Fall River	Route 79/Davol Street (interchange improvements and new traffic circulation)
2030	New Bedford	Kings Highway - Corridor Widening
2030	Taunton	Route 24 / 140 - Interchange Reconstruction
2030	Taunton, Raynham	Route 24 - Widening from Route 140 to I-495

Note: \* = Listed as SIP Commitment (State Implementation Plan)

### **Air Quality Conformity Analysis**

Additional specific information regarding the analysis and modeling methods, latest planning assumptions, and consultation procedures are all detailed in the 2007 RTP . The emissions from the following MPOs have been combined to show conformity with the SIP for the Eastern Massachusetts Ozone Nonattainment Area:

- Cape Cod MPO
- Central Massachusetts MPO
- Merrimack Valley MPO
- Boston MPO
- Montachusett Region MPO
- Northern Middlesex MPO
- Old Colony MPO
- Southeastern Region MPO
- Martha's Vineyard Commission\*
- Nantucket Planning and Economic Development Commission\*

\* These regions do not contain any official urbanized areas, but are considered to be MPOs for planning purposes.

Using the latest planning assumptions, the Massachusetts Department of Transportation, Office of Transportation Planning, estimated the emissions for VOC and NOx for all areas and all MPOs through a combination of the statewide and selected regional travel demand models (and with assistance from MPO staff). The VOC mobile source emission budget for 2009 and beyond for the Eastern Massachusetts Nonattainment Area has been set at 63.50 tons per summer day and the 2009 (and beyond) mobile source budget for NOx is 174.96 tons per summer day. As shown in Tables 1 and 2, the results of the air quality analysis demonstrate that the VOC and NOx emissions from all Action scenarios are less than the VOC and NOx emissions budgets for the Eastern Massachusetts Nonattainment Area:

**TABLE 15**  
**VOC Emissions Estimates for the Eastern Massachusetts Ozone Nonattainment Area**  
**(all emissions in tons per summer day)**

<b>Year</b>	<b>Northern Middlesex MPO Action Emissions</b>	<b>Eastern MA Action Emissions</b>	<b>Budget</b>	<b>Difference (Action – Budget)</b>
2007	n/a	86.558	n/a	n/a
2017	1.8145	41.389	63.50	-22.111
2020	1.6937	34.293	63.50	-29.207
2030	1.5744	32.157	63.50	-31.343

**TABLE 16**  
**NOx Emissions Estimates for the Eastern Massachusetts Ozone Nonattainment Area**  
**(all emissions in tons per summer day)**

<b>Year</b>	<b>Northern Middlesex MPO Action Emissions</b>	<b>Eastern MA Action Emissions</b>	<b>Budget</b>	<b>Difference (Action – Budget)</b>
2007	n/a	234.850	n/a	n/a
2017	2.9369	66.418	174.96	-108.542
2020	2.2104	50.694	174.96	-124.266
2030	1.4190	34.259	174.96	-140.701

This conformity determination analysis has been prepared in accordance with EPA’s final conformity regulations. The air quality analyses outlined in this document demonstrate that the implementation of the TIP satisfies the conformity criteria where applicable and is consistent with the air quality goals in the Massachusetts SIP. Specifically, the Northern Middlesex MPO has found the

emission levels from this FY 2011-2014 TIP – in combination with the emission levels from the other MPOs in its nonattainment area – demonstrate conformity with the SIP. Therefore, the FFY 2011 - 2014 Transportation Improvement Program (TIP) is in conformity with the SIP where required.

**APPENDIX A: Status of FY 2010 Lowell Regional Transit Authority  
Projects**



FFY	RTA	Project	Description	Funding Category	Federal Amount	Total Amount	Anticipated Implementation
2010	LRTA	Capital Assistance	Bus and bus facilities	FY '09 §5309 carryover	\$1,150,000	\$1,437,500	MA-04-0041 Pending
2010	LRTA	Capital Assistance	Bus and bus facilities	FY '09 §5309 carryover	\$225,720	\$282,150	MA-04-0042 Pending
2010	LRTA	Operating Assistance	Transit and Facility Services	§5307	\$1,183,463	\$2,366,926	Ongoing
2010	LRTA	Planning Assistance	NMCOG contract	§5307	\$ 60,000	\$ 75,000	Complete
2010	LRTA	Capital Assistance	Preventive Maintenance	§5307	\$952,540	\$1,190,675	Ongoing
2010	LRTA	Capital Assistance	Bus and facilities/spare parts	§5307	\$ 80,000	\$100,000	Ongoing
2010	LRTA	Operating Assistance	Section 18 rural assistance	§5311	\$ 7,773	\$15,546	Pending
2010	LRTA	Capital Assistance	5 lift and radio equipped vehicles	§5310	\$288,000	360,000	Complete
2010	LRTA	Capital Assistance	Bus and bus facilities	FY '09 §5307 carryover	\$860,331	\$1,075,414	Complete
2010	LRTA	Capital Assistance (Nashua)	Bus and bus facilities	FY '09 §5307 carryover	\$582	\$728	Complete
2010	LRTA	JARC	Expanded Holiday service	FFY '2007 Boston UZA	\$35,599	\$71,198	Ongoing
2010	LRTA	JARC	Tewksbury Saturday service	FFY '2007 Boston UZA	\$29,245	\$58,490	Ongoing
2010	LRTA	JARC	Expanded Rt. 110 /Westford Service (year 1)	FFY '2007 Boston UZA	\$275,612	\$551,224	Ongoing
2010	LRTA	JARC	Expanded Rt. 110 /Westford Service (year 2)	FFY '2008 Boston UZA	\$815	\$1,630	Ongoing
2010	LRTA	Capital Assistance	Solar Project at 100 Hale St.	ARRA (TIGGER)	\$1,500,000	\$3,637,000	MA-77-0001 Ongoing
2010	LRTA	Capital Assistance	Bus and bus facilities	ARRA (Flex FHWA to FTA)	\$ 477,002	\$ 477,002	Flex Complete
2010	LRTA	Operating Assistance	100% Operating Assistance under ARRA (10% of apportionment)	ARRA	\$ 477,002	\$ 477,002	MA-66-0006 Ongoing



## **APPENDIX B: PUBLIC PARTICIPATION PLAN**



# PUBLIC PARTICIPATION PLAN FOR THE NORTHERN MIDDLESEX REGION

**January 2010**

Prepared for:

Northern Middlesex Metropolitan Planning Organization

By:

Northern Middlesex Council of Governments

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## **I. THE TRANSPORTATION PLANNING PROCESS AND THE ROLE OF THE NORTHERN MIDDLESEX METROPOLITAN PLANNING ORGANIZATION**

Federal funding for planning and implementing transportation projects requires that projects be derived through a continuing, comprehensive and cooperative (3C) planning process. The Northern Middlesex Metropolitan Planning Organization (NMMPO) is the body charged with carrying out the 3C process in the Northern Middlesex region. The NMMPO is comprised of the Chairpersons of the Northern Middlesex Council of Governments (NMCOG) and the Lowell Regional Transit Authority (LRTA), the Secretary of the Massachusetts Department of Transportation (MassDOT) who serves as the MPO chair, and the Administrator for the Highway Division of MassDOT. In addition, the following are also voting members: the chief elected official from the City of Lowell elected to serve as the City's representative to NMCOG, a selectman elected to serve on the Council and further elected by the Council to serve as that town's representative to the NMMPO, and an LRTA Advisory Board member representing a community within the NMMPO boundaries other than the City of Lowell, who may also be an elected official. A representative from the Federal Highway Administration (FHWA) and a representative from the Federal Transit Administration (FTA) serve as ex-officio, non-voting members of the MPO.

The Northern Middlesex Council of Governments, formed under Chapter 40B of the General Laws of Massachusetts, is one of thirteen regional planning agencies in the Commonwealth. NMCOG's policy board is comprised of three representatives from each member community: a chief elected official; a planning board member; and an alternate. NMCOG serves as the technical staff to the NMMPO and administers the public participation process for this decision-making body.

FHWA and FTA must certify that a 3C process is being carried out on all transportation projects receiving federal funding. This certification process requires the preparation of three documents: the Regional Transportation Plan (RTP), the Transportation Improvement Program (TIP), and the Unified Planning Work Program (UPWP). The NMCOG carries out the technical and administrative functions of the NMMPO, including the preparation of these three documents.

## **II. OVERVIEW OF THE PUBLIC PARTICIPATION PROCESS**

Public participation is an integral and vital part of the overall transportation planning process. The information, viewpoints and perspectives provided through the public involvement process help guide decision makers and leads to a more meaningful and comprehensive planning process. The goals of the public involvement plan are as follows:

- Solicit and respect the viewpoints of all transportation constituents;
- Provide multiple opportunities for public involvement that are open, meaningful and inclusive, and that consider needs for accessibility, scheduling, informational materials format and the language needs of those with limited English proficiency;
- Provide a predictable process that is understandable with notification provided well in advance (30 days for the TIP, UPWP, and RTP; 45 days for the Public Participation Plan);
- Periodically evaluate new tools for improving, update and refining the NMMPO's existing public process; and

- Strive to increase public participation and improve outreach to minority, low-income, elderly, youth, and accessibility-challenged communities.

The NMMPO conducts an ongoing consultation process with low-income and minority residents and with groups representing their interests, such as the Coalition for a Better Acre (CBA) and ONE Lowell. NMMPO staff also meets regularly with economic development interests and other groups charged with providing community support, job training, housing and other services in neighborhoods with high percentages of low-income and minority residents. The information gathered during these sessions is incorporated into the transportation planning process and considered during the development of the certification documents. To further address the needs of low-income and minority households who may face challenges accessing employment and other services, notices will be posted at the Kennedy Transit Hub/ Gallagher Terminal, as well as at the Social Security Office, the Department of Employment Security, the WIC office, Community Teamwork, Inc., and at the Department of Transitional Assistance Office.

The NMMPO also consults with the other four MPOs within the Boston Urbanized Area (UZA): the Boston MPO, the Merrimack Valley MPO, the Old Colony MPO, and the Southeastern Massachusetts MPO. This consultative process is standard for all federally required certification documents. The NMCOG website: [nmcog.org](http://nmcog.org) is the primary location for up-to-date information about NMMPO activities. Furthermore, NMMPO documents and meeting notices are posted on this website and NMMPO technical staff can be contacted through email links provided on the website. Public notification is also provided through newspaper advertising, press releases, flyers, correspondence and email messages. All NMMPO activities are conducted at locations that are accessible to people with disabilities.

### **III. Title VI and Environmental Justice Requirements**

Certification documents and other reports and informational materials are available on the NMCOG website, on CD or in printed format. The NMMPO develops materials that are easily understood and clear. Maps, graphics and visualization techniques are utilized to assist in this effort. Federal regulations include requirements that reasonable efforts be made to address Title VI, Executive Order 12898 (Environmental Justice) and Executive Order 13166 (Limited English Proficiency).

*Title VI of the Civil Rights Act of 1964 states that “no person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subject to discrimination under any program or activity receiving federal financial assistance.” All federal agencies which provide financial assistance for any program are authorized and directed by the United States Department of Justice to apply provisions of Title VI to each program by issuing applicable rules, regulations, or requirements.*

*Executive Order 12898, issued in 1994, expanded the impact of the 1964 Civil Rights Act and responded to the concern that everyone within the United States deserves equal protection under the country’s laws; thus the concept known as “environmental justice” was developed. The Executive Order organized and*

*explained in detail the Federal government's commitment to promote environmental justice. Each Federal agency was directed to review its procedures and to make environmental justice part of its mission by identifying and addressing the effects of all programs, policies, and activities on minority populations and low-income populations.*

The U.S. Department of Transportation issued its order to address Environmental Justice in Minority Populations and Low-Income Populations in 1997. As partners of DOT, MPOs are expected to embrace the principles of environmental justice as well. The USDOT Order states, in part, that *"In undertaking the integration with existing operations ...DOT (and by extension MPOs) shall observe the following principles:*

- (1) Planning and programming activities that have the potential to have a disproportionately high and adverse effect on human health or the environment shall include explicit consideration of the effects on minority populations and low-income populations. Procedures shall be established or expanded, as necessary, to provide meaningful opportunities for public involvement by members of minority populations and low-income populations during the planning and development of programs, policies, and activities (including the identification of potential effects, alternatives, and mitigation measures).*
- (2) Steps shall be taken to provide the public, including members of minority populations and low-income populations, access to public information concerning the human health or environmental impacts of programs, policies, and activities, including information that will address the concerns of minority and low-income populations regarding the health and environmental impacts of the proposed action."*

The RTP for the Northern Middlesex Region created outlines the process utilized by the NMMPO to ensure compliance with these requirements. Title VI and Environmental Justice concerns are typically raised during project development, it is important to recognize that the law applies directly to the planning process. As a result, the following measures are being undertaken in the Northern Middlesex region to ensure conformity to this law.

A demographic profile of the metropolitan area has been developed that includes identification of socio-economic groups, including low-income and minority populations as covered by the Executive Order on Environmental Justice and Title VI provisions.

- A process has been developed to assess the distribution of impacts on different socio-economic groups for the investments identified in the Northern Middlesex Regional Transportation Plan and Northern Middlesex Transportation Improvement Program. This methodology utilizes income information and race information available from the 2000 U.S. Census. The objective of the analysis is to ensure that the needs of low income and minority populations are identified in the regional planning process for the Northern Middlesex region. This Public Outreach Plan includes strategies for engaging minority and low-income populations in the transportation decision-making process.

- A methodology has been constructed to determine if proposed transportation investments and strategies are appropriate for low-income and minority areas. This process includes evaluation of the social, economic and environmental effects of the proposed alternative. In the event a proposed improvement is found to have negative impacts, appropriate mitigation will be developed to offset any adverse effects.
- Projects are considered with respect to their potential impacts, with the goal of not impacting any single community or group (positively or negatively) more than another.

Executive Order 13166, issued in 2000, also expanded the impact of the 1964 Civil Rights Act and responded to the concern that persons with limited English proficiency deserve equal participation in the transportation planning process. In accordance with the Executive Order, the U.S. DOT issued *Policy Guidance Concerning Recipient's Responsibilities to Limited English Proficient (LEP) Persons*, which is modeled after the U.S. Department of Justice's general LEP policy guidance document. As described in the guidance, DOT recipients are required to take reasonable steps to ensure meaningful access to their programs and activities by LEP persons. The guidance applies to all DOT funding recipients, which include MPOs.

The US DOT guidance outlines four factors recipients should apply to the various kinds of contacts they have with the public to assess language needs and decide what reasonable steps they should take to ensure meaningful access for LEP persons:

1. The number or proportion of LEP persons eligible to be served or likely to be encountered by a program, activity, or service of the recipient or grantee.
2. The frequency with which LEP individuals come in contact with the program.
3. The nature and importance of the program, activity, or service provided by the recipient to people's lives.
4. The resources available to the recipient and costs.

The NMCOG website is currently being re-designed with a focus upon making the web site more accessible to those with limited English speaking skills and those with specific disabilities. The NMMPO staff will be working with the LRTA to determine what improvements can be made to the LRTA web site to improve access to those with limited English proficiency and other disabilities.

#### **IV. Outreach Efforts**

The most recent revisions to the Public Participation Plan were initiated as a result of requirements set forth in SAFETEA-LU. SAFETEA-LU highlights the need to develop MPO public participation plans "in consultation with all interested parties", and stresses the importance of establishing and maintaining an inclusive and interactive process. On February 14, 2007, the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) jointly released final rules governing the transportation planning process in metropolitan areas. Included in these rules are specific criteria that must be followed in developing and amending Regional Transportation Plans (RTP) and Transportation Improvement Programs (TIPs). Section 450.316 of these final rules entitled "Interested parties, participation, and consultation", requires that all MPOs develop a Public Participation Plan (PPP) that "defines a process for providing citizens" includes various specified

groups, “reasonable opportunity to be involved in the metropolitan transportation planning process.” These specified groups include but are not limited to:

- Public Agencies
- Representatives of Public Transportation Employees
- Freight Shippers
- Providers of Freight Transportation Services
- Representatives of Users of Public Transportation
- Representatives of Users of Pedestrian Walkways and Bicycle Transportation
- Representatives of the Disabled

NMMPO Public Participation Plan distribution list includes the following stakeholders and interested parties:

- **Citizens:**
  - Libraries
  - City/Town Clerks
  - Area Congressional Delegation
  - State Legislators
  - Interested Citizens
  - Local Neighborhood Organizations
  
- **Affected Public Agencies and Government Entities:**
  - MassDOT-Executive Office (MPO Member)
  - MassDOT- Highway Division (MPO Member)
  - LRTA (MPO Member)
  - FHWA (Ex-officio MPO Member)
  - FTA (Ex-officio MPO Member)
  - US Environmental Protection Agency
  - Massachusetts Department of Environmental Protection
  - Local Chief Elected Officials
  - Nashua Regional Planning Commission
  - Merrimack Valley Planning Commission
  - Metropolitan Area Planning Council
  - Montachusetts Regional Planning Commission
  - MassRides
  - Local DPWs
  - Local Planning Boards
  - City/Town Engineers
  - City/ Town Managers
  - City/Town Conservation Commissions
  - Lowell National Historical Park
  - Middlesex Canal Commission
  - Transportation Coordinators for Municipal School Departments

- **Representatives of Public Transportation Employees**  
Teamsters Local  
Amalgamated Transit Union
- **Freight Transportation Services:**  
United Parcel Service  
PanAm/Guilford Transportation  
U.S. Postal Service
- **Private Providers of Transportation:**  
Local Taxi Companies  
Private Transportation Providers Listed in the RTP
- **Representatives of Users of Public Transportation**  
Councils on Aging  
Local Senior Centers
- **Representatives of Users of Pedestrian Walkways and Bicycle Transportation Facilities**  
Friends of the Bruce Freeman Rail Trail  
Lowell Parks and Conservation Trust
- **Representatives of the Disabled**  
Northeast Independent Living Program  
Renaissance Club  
Greater Lowell Association for the Blind
- **Populations Traditionally Underserved by Existing Transportation Systems**  
Community Teamwork, Inc  
Coalition for a Better Acre  
ONE Lowell  
Lowell Transitional Living Center  
Cambodian American League of Lowell  
Cambodian Mutual Assistance Association
- **Agencies and Officials responsible for State and Local Planned Growth**  
Local Planning Boards  
City/Town Planners  
Zoning Boards of Appeal  
Northern Middlesex Council of Governments
- **Economic Development Interests**  
Greater Lowell Chamber of Commerce  
Greater Lowell CEDS Committee  
Lowell Plan  
Lowell Development Finance Corporation  
Tyngsborough Economic Development Committee  
Billerica Plan

Greater Lowell Workforce Investment Board  
Chelmsford Business Association  
University of Massachusetts Lowell  
Merrimack Valley Venture Forum  
Merrimack Valley Economic Development Council  
Middlesex Community College  
Massachusetts Office of Business Development  
MassDevelopment  
Billerica Development and Finance Corporation

The NMMPO also receives input from other ad hoc groups established as part of the overall planning process. Based upon the extensive experience of the NMCOG and LRTA staffs and the valuable input of their Board members, the MPO is well-informed regarding the needs, values and issues of the low-income and minority populations in the region. The MPO is quite sensitive to addressing the needs of low-income and minority populations within the financial constraints faced by the MPO and to ensuring that these community groups are not negatively impacted by the transportation decisions made for the region.

Besides receiving input from representative groups, such as Community Teamwork, Inc. (CTI), OneLowell, the Coalition for a Better Acre (CBA) and various neighborhood associations, NMCOG receives feedback from its minority and low-income representatives on the Greater Lowell Comprehensive Economic Development Strategy (CEDS) Committee, which reviews regional development on a comprehensive basis. NMCOG has also benefited from the comments received at its public meetings related to the development of the Affordable Housing Productivity Plans in Dracut and Billerica, the economic development component of the Westford Master Plan Update, the Economic Development and Comprehensive Development Plans in Tyngsborough and the Comprehensive Master Plan in Tewksbury. NMCOG has also received input through its CEDS “grass-roots” planning process and will continue to receive input as it finalizes the *Annual CEDS Update*. These activities are all in addition to the regular transportation planning processes.

## **V. DEVELOPMENT OF THE PUBLIC PARTICIPATION PLAN**

The Public Participation Plan is the document that outlines the public involvement and notification requirements and methods that apply to the development of the TIP, UPWP, RTP, Section 5307 Grant Applications, and the Public Participation Plan itself. This Public Participation Plan incorporates the provisions of the Intermodal Surface Transportation Efficiency Act (ISTEA), the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21), the Safe, Accountable, Flexible, Efficient, Transportation Equity Act – A Legacy for Users (SAFETEA-LU), Executive Order 12898 on Environmental Justice, and Federal Highway Administration/Federal Transit Administration Joint Planning Regulations (23 CFR Part 450 and 49 CFR Part 613).

As required by Federal legislation, a forty-five (45) day comment period shall be provided prior to adopting the public participation plan. The following procedures and policies delineate the proposed public participatory process for the Northern Middlesex MPO.

- A. Notice of the availability of the Public Participation Plan and a Public Meeting Notice providing an opportunity for public comment shall be published in the Lowell Sun, as well as other local news media, and posted at the Town and City Clerk offices. The Public Meeting Notice and Plan will also be posted on the NMCOG web site at: [.nmcog.org](http://nmcog.org) . A notice and link will also be provided on the LRTA website at: [.lrta.com](http://lrta.com) .
- B. Copies of the Public Participation Plan shall be forwarded to the NMMPO members and all stakeholders and interested parties described in Section II above.
- C. During the 45-day public comment period, a public meeting shall be held to receive comments. Comments may also be submitted in writing, through conventional mail, by email or fax.
- D. Upon completion of the comment period, public comments shall be incorporated into the Public Participation Plan. The NMMPO will then be asked to endorse the Plan.
- E. Future substantive changes or amendments to the Public Participation Plan will require an additional 45-day public comment period.

All of the stakeholders identified in Section IV above were afforded the opportunity to participate in the development of the Public Participation Plan. Two public meetings were conducted relative to the draft Public Participation Plan, on May 11, 2007 and June 6, 2007. Comments were received from the City of Lowell, University of Massachusetts Lowell, NMCOG, and the Billerica Plan. These comments have been incorporated into the final PPP.

## **VI. THE REGIONAL TRANSPORTATION PLAN**

All future transportation projects funded in part or entirely with federal monies must be drawn from a conforming Regional Transportation Plan. The Regional Transportation Plan is updated every four years, as presently required by Federal regulation. The RTP is developed in consultation with the agencies and officials responsible for other planning activities within the metropolitan area that are affected by transportation (including state and local planned growth, economic development, environmental protection, airport operations, and freight movements, as set forth in 23 CFR 450.316 (3)(b)). The following procedures and policies will be utilized to ensure adequate public review of the draft RTP document:

- A. Notice of the availability of the Regional Transportation Plan and a Public Meeting Notice providing an opportunity for public comment shall be published in the Lowell Sun, as well as other local news media, and posted at the Town and City Clerk offices. The Public Meeting Notice and Plan will also be posted on the NMCOG web site at: [.nmcog.org](http://nmcog.org). A notice and link will also be provided on the LRTA website at: [.lrta.com](http://lrta.com) .

- B. Copies of the Regional Transportation Plan shall be forwarded to the NMMPO members and all stakeholders and interested parties described in Section II above.
- C. During the 30-day public comment period, a public meeting shall be held to receive comments. Comments may also be submitted, in writing, through conventional mail, email or by fax. A consultative process will also be provided for environmental permitting agencies and advocacy groups.
- D. Upon completion of the comment period, public comments shall be incorporated into the Regional Transportation Plan as appropriate. The NMMPO will then be asked to endorse the Plan.
- E. Future substantive changes or amendments to the Regional Transportation Plan will require an additional 30-day public comment period.

## **VII. THE TRANSPORTATION IMPROVEMENT PROGRAM**

The Transportation Improvement Program (TIP) is the official programming document for transportation projects in the region. Upon NMMPO approval, the regional TIP is incorporated into the Statewide Transportation Improvement Program. The TIP is updated annually and may be amended more often if necessary. The RTP is developed in consultation with the agencies and officials responsible for other planning activities within the metropolitan area that are affected by transportation (including state and local planned growth, economic development, environmental protection, airport operations, and freight movements, as set forth in 23 CFR 450.316 (3)(b)). The following procedures and policies will be utilized to ensure adequate public review of the draft TIP document:

- A. Notice of the availability of the TIP and a Public Meeting Notice providing an opportunity for public comment shall be published in the Lowell Sun, as well as other local news media, and posted at the Town and City Clerk offices. The Public Meeting Notice and the TIP will also be posted on the NMCOG web site at: [.nmcog.org](http://nmcog.org). A notice and link will also be provided on the LRTA website at: [.lrta.com](http://lrta.com).
- B. Copies of the TIP shall be forwarded to the NMMPO members and all stakeholders and interested parties described in Section II above.
- C. During the 30-day public comment period, a public meeting shall be held to receive comments. Comments may also be submitted, in writing, through conventional mail, email or by fax.
- D. Upon conclusion of the comment period, public comments shall be incorporated into the Transportation Improvement Program, as appropriate. The NMMPO will then be asked to endorse the TIP.

- E. Future substantive changes or amendments to the Transportation Improvement Plan will require an additional 30-day comment period. Future substantive changes or amendments to the Transportation Improvement Plan will require an additional 30-day comment period. However, at their discretion, the NMMPO may vote to abbreviate the public comment period, for no less than 10 days, when extraordinary circumstances arise. If the MPO elects to abbreviate the comment period, all other procedures for the comment period will be followed as stated above.

## **VIII. THE UNIFIED PLANNING WORK PROGRAM**

The Unified Planning Work Program (UPWP) describes the scope and budget for the work tasks and transportation planning activities of the NMMPO staff for the coming year. The UPWP is updated annually and endorsed by the MPO. The following procedures and policies will be utilized to ensure adequate public review of the draft UPWP document:

- A. Notice of the availability of the UPWP and a Public Meeting Notice providing an opportunity for public comment shall be published in the Lowell Sun, as well as other local news media, and posted at the Town and City Clerk offices. The Public Meeting Notice and UPWP will also be posted on the NMCOC web site at: [nmcog.org](http://nmcog.org). A notice and link will also be provided on the LRTA website at: [lрта.com](http://lрта.com).
- B. Copies of the UPWP shall be forwarded to the NMMPO members and all stakeholders and interested parties described in Section II above.
- C. During the 30-day public comment period, a public meeting shall be held to receive comments. Comments may also be submitted, in writing, through conventional mail, by email or by fax.
- D. At the completion of the comment period, public comments shall be incorporated into the Final UPWP. The NMMPO will then be asked to endorse the document.
- E. Future substantive changes or amendments to the UPWP will require an additional 30-day comment period.

## **IX. SECTION 5307 GRANTS**

The TIP public review process will satisfy the opportunity for the public hearing requirement for most routine, traditional Section 5307 grants, per Section 5307 Circular C-9030.1B. Any Section 5307 grant that requires completion of an environmental analysis, or involves specific controversies or complications (such as issues relating to land acquisition, environmental factors such as Section 106, or 4(f) not addressed at the TIP stage, or having inadequate description at the TIP stage) will be required to follow the Section 5307 hearing process as well. These situations will be handled on a case-by-case basis between FTA and the grantee. It is expected that the majority of Section 5307 grant public hearing requirements shall be satisfied by the NMMPO TIP public involvement process.

The Lowell Regional Transit Authority, as the FTA Section 5307 applicant/recipient, has consulted with the NMMPO and concurred that the public involvement process adopted by the NMMPO for the development of the TIP satisfies the public hearing requirements that pertain to the development of the Program of Projects for regular Section 5307, Urbanized Area Formula grant applications, including the provision for public notice and the time established for public review and comment.


For FTA projects that are not routine, i.e. Section 5307 applications that require an environmental assessment or environmental impact statement, the public involvement provided for herein for TIP review is not sufficient. Additional public involvement, as presented in the joint FHWA/FTA environmental regulations, 23 CFR Part 771 will be required by FTA for grant approval.

#### **X. Public Participation Plan Annual Review**


The Public Participation Plan shall be reviewed annually for effectiveness and compliance with federal and state regulations and policies. Any necessary refinements shall be approved and implemented by the NMMPO as expeditiously as possible.

**NORTHERN MIDDLESEX METROPOLITAN PLANNING ORGANIZATION**

ENDORSEMENT OF THE NORTHERN MIDDLESEX METROPOLITAN PLANNING ORGANIZATION'S PUBLIC PARTICIPATION PLAN AMENDMENT OF JANUARY 27, 2010

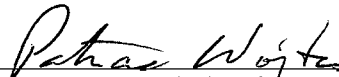
 1-27-2010

Jeffrey B. Mullan, Secretary, Date  
Massachusetts Department of Transportation

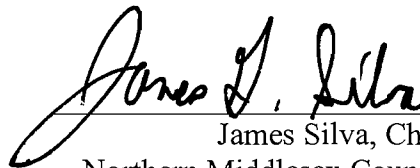
 1-27-2010 for

Luisa Paiewonsky, Highway Administrator, Date  
Massachusetts Department of Transportation

Arthur Doyle, Chair, Date  
Lowell Regional Transit Authority

 1-27-2010

Patricia Wojtas, Chelmsford Representative, Date  
Lowell Regional Transit Authority

 1/27/10

James Silva, Chair, Date  
Northern Middlesex Council of Governments

Patrick Murphy, City Councilor, Date  
City of Lowell

 1/27/10

David Gay, Selectman, Date  
Town of Tewksbury