CHAPTER 12: LINKING TRANSPORTATION AND ECONOMIC DEVELOPMENT

The economic competitiveness of the Greater Lowell region depends largely on the quality of our transportation system. The Northern Middlesex region is well served by the highway network provided through I-495, I-93 and Route 3, as well as the local street network. The relatively recent widening of Route 3 continues to generate economic benefits for the region, while also addressing critical traffic and safety issues. These transportation infrastructure improvements in the region have encouraged private investment in our member communities, thus generating state and local taxes and creating valuable private sector jobs. Private businesses are able to access labor, supply and customer markets through this efficient transportation network. Further public and private investment in the transportation network, including locally initiated projects such as the Middlesex Turnpike, fuels the growth of the Greater Lowell economy.

The Middlesex 3 Coalition has been formed as a result of such transportation improvements to address other transportation needs, and to encourage the public, private and non-profit sectors to work together in order to market available sites along Route 3, as well as promote the concept of Middlesex 3. Additional initiatives could be undertaken along I-495, similar to what has been undertaken in the MetroWest region, as well as along I-93, which provides a direct connection between Boston and New Hampshire.

SUPPORTING ECONOMIC DEVELOPMENT THROUGH TRANSPORTATION DEVELOPMENT

Within the introduction of this document, the goal established for the Economic Vitality component of the Regional Transportation Plan (RTP) reads as follows: Ensure that the transportation network supports economic development needs and accommodates future economic growth. This RTP, therefore, supports projects, programs and policies that:

- Advance corridor and community development and redevelopment opportunities to improve the region’s economy and enhance the quality of life;
- Prioritize transportation investments that serve targeted development sites;
- Advance strategies to support connections between key employment origins and destinations;
- Expand transit service to regional employment markets that are either underserved or not currently served;
• Improve bicycle and pedestrian access to employment, educational, health care, and recreational opportunities; and
• Connect multi-family and affordable housing with employment and educational opportunities.

In order to determine whether the transportation initiatives under the RTP meet the Economic Development Goals and Objectives, specific performance measures and targets have been established as follows:

• Number of businesses formed;
• Number of Affordable Housing facilities served by transit;
• New jobs created;
• Number of new transit routes to serve employment centers, health care facilities, and educational facilities;
• Percentage of population and places of employment within ¼ mile of transit stations;
• Increase percentage of population and places of employment within ¼ mile of transit stations by 5%, as compared to 2010; and
• Increase percentage of population and places of employment within ½ mile of bicycle facilities by 15%, as compared to 2010.

At the federal level, there has been increased discussion of tying together the transportation, economic development, community development, workforce development and environmental planning programs undertaken by regional planning agencies, MPOs, counties and local communities. The Economic Development Administration (EDA), for instance, has outlined measures by which regional planning agencies can tie together their planning efforts in other functional areas so that there is a more comprehensive approach to planning for sustainable development. Unfortunately, because of the specific needs of each federal funding agency, there is some difficulty in pulling these planning processes together, except on an experimental basis where two or three federal agencies come together for a single program initiative. The NMMPO has long recognized the need to support the transportation and economic development initiatives by combining these components within a single element in the UPWP for the past several years.

This chapter on the link between Transportation and Economic Development provides an overview on how each component supports the other to increase employment opportunities and enhance the quality of life in the region. While a description of the transportation planning process is available elsewhere in this document, this chapter will provide a summary of the economic development
planning processes that the region uses in working with the Greater Lowell Comprehensive Economic Development Strategy (CEDS) and Energy Advisory Committees and how those activities support the Economic Goals and Objectives for this RTP. Additionally, there will be a discussion on how the initiatives and projects within these planning documents, particularly the Regional Strategic Plan for Greater Lowell, the Greater Lowell Comprehensive Economic Development Strategy (CEDS) Update for 2010-2013 and the Siting of Renewable Energy Facilities within the Montachusett and Northern Middlesex Regions, are implemented. The implementation of these plans relies on numerous federal, state and local funding sources, including the federal and state highway and transit funds, public works funds from EDA and the Commonwealth (MassWorks) and the District Local Technical Assistance (DLTA) program supported by the Commonwealth of Massachusetts. There is even greater opportunity available to link transportation and economic development in the future.

**REGIONAL STRATEGIC PLAN FOR GREATER LOWELL**

NMCOG received funding from the Massachusetts Executive Office of Housing and Economic Development (EOHED) in 2010 to develop and complete a Regional Strategic Plan (RSP) for the Northern Middlesex region. This state initiative to “increase local and regional planning capacity in the areas of economic development, housing and resource preservation” helped NMCOG update its previous regional policy plan, 2020 Vision: Planning for Growth in the Northern Middlesex Region, which was completed in 1999. The RSP provides guidance to local and regional decision-makers on land use, infrastructure investment, environmental resource protection and housing and economic development policy. Within the document there are various strategies for advancing housing initiatives and economic development through cooperative efforts between local, state and regional levels of government, as well as increased interaction and coordination with federal agencies.

The RSP fully supports the Sustainable Development Principles established by the Commonwealth as follows:

1. Concentrate Development and Mix Uses
2. Advance Equity
3. Make Efficient Decisions
4. Protect Land and Ecosystems
5. Use Natural Resources Wisely
6. Expand Housing Opportunities
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 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

10. Plan Regionally

The Planning and Approval processes for this document were fairly straightforward. Two SWOT (Strengths, Weaknesses, Opportunities and Threats) sessions were held at UMass Lowell and in Tewksbury in November 2010. After initially discussing the proposed Land Use Reform Act (LUPA), participants were then able to identify the specific strengths, weaknesses, opportunities and threats for the region and its individual communities. Draft goals were developed and discussed at the second SWOT session, and input was received on the priority development and priority preservation areas in the region. Additional meetings were then held with community staff to finalize the data, and presentations were made at several NMCOG Council meetings. Based on input received throughout the plan development process, goals were formulated and organized into four subject areas: land use, economic development, housing and natural, cultural and environmental resources. The specific economic development goals were as follows:

- Create a regional economic development framework that supports the efforts of private industry, local communities and agencies, educational institutions, federal and state agencies and private foundations to create jobs and improve the quality of life in the region;
- Create higher-skilled, higher wage jobs within industry clusters – biotech, nanotech, high technology, “green” industries, and emerging technology – to diversify the regional economy and focus on the global economy;
- Utilize a combination of economic development and redevelopment strategies that reflects the character of each community and addresses infrastructure barriers (roads, wastewater capacity, telecommunications, etc.) to future economic growth; and
Increase the supply of skilled workers for industry in the region through the integration of economic development and workforce development strategies.

Once the final RSP was developed, presentations were made before the Lowell City Council and the Boards of Selectmen in each of the suburban communities. By early 2012 every community had approved and adopted the RSP. The Regional Strategic Plan for Greater Lowell can be accessed at http://nmcog.org/Regional_Strategic_Plan_Website.htm.

GREATER LOWELL COMPREHENSIVE ECONOMIC DEVELOPMENT STRATEGY (CEDS) DOCUMENTS

The partnership between NMCOG and the Economic Development Administration (EDA) began with the submission of the Greater Lowell Comprehensive Economic Development Strategy (CEDS) for 2004-2008. This document represented the Five-Year CEDS for the Greater Lowell region and was followed by subsequent Annual Updates that built upon the initial document. The economic development framework for the Greater Lowell region was established through the development and implementation of this CEDS document. Initially, NMCOG staff held a Kick-Off Session at Lowell City Hall and nine additional public meetings to receive input from economic development stakeholders in the region. Six CEDS Committee meetings were subsequently held for additional input and feedback on the draft Needs Analysis, Vision and Action sections of the CEDS document. Goals and Objectives related to Economic Development, Workforce Development, Education, Affordable Housing, Racial and Ethnic Diversity, Pockets of Distress, Regional Transportation System, Quality of Life, Technology and Financial Investments were established. NMCOG staff then identified short-term (up to 18 months), intermediate (2-4 years) and long-term (5+ years) CEDS Priority Projects that supported these goals and objectives. Chief among these projects were the highway and transit projects identified within the Transportation Improvement Program (TIP) and Regional Transportation Program (RTP). It was generally recognized that the development of infrastructure, particularly related to transportation, was a critical component to a growing economy.

When the five-year period had ended, NMCOG received another Short-Term Planning grant from EDA to develop the Greater Lowell Comprehensive Economic Development Strategy (CEDS) for 2009-2013. This document built upon the initial work that the previous CEDS activities had fostered. In order to receive public input, NMCOG staff held two SWOT (Strengths, Weaknesses, Opportunities and Threats) sessions and six CEDS Committee meetings. A new set of Goals and Objectives was approved by the Greater Lowell CEDS Committee and established as follows:
1. **Economic Development** – Develop a regional economic development framework that supports the efforts of private industry, local communities and agencies, educational institutions, federal and state agencies and private foundations to create jobs and improve the quality of life in the region.

2. **Workforce Development** – Increase the supply of skilled workers for industry in the region through the integration of the economic development and workforce development systems.

3. **Education** – Increase the educational and workforce skills of primary, secondary and college students to meet the current and future needs of industry.

4. **Affordable Housing** – Create more affordable and market-rate housing throughout the region to ensure that businesses can expand and relocate to the region with the assurance that their workforce will be able to own, lease or rent quality housing.

5. **Regional Transportation System** – Develop the infrastructure needed to build upon the strengths of the regional highway system and the public transportation networks to enhance access to the economic centers of the region.

6. **Infrastructure** – Build upon the existing sewer, water, telecommunication and public utility infrastructure to increase capacity so that private businesses and homeowners can grow in the future.

7. **Financial Investments** – Target federal, state, local, non-profit and private funds to those projects that create jobs and improve the quality of life in the neighborhoods.

8. **Quality of Life** – Maintain the community character in the region by preserving and protecting the region’s natural, cultural and historic resources and encouraging concentrated development.

As with the previous Five-Year CEDS documents, NMCOG staff identified major regional development projects, as well as specific short-term (up to 18 months), intermediate (2-4 years) and long-term (5+ years) CEDS Priority Projects that supported these goals and objectives. The major development projects included Hamilton Canal, Lowell Junction, District Local Technical Assistance (DLTA) projects, Tyngsborough Town Center Revitalization, Downtown Lowell Renaissance Plan, Pepperell Paper Mill Site Redevelopment Project, Middlesex Turnpike Corridor Development and Woburn Street Corridor. For the most part, each of these major development projects had a transportation component as part of the project. The CEDS Priority Projects provided an update on the status of these projects since the Greater Lowell Annual CEDS Update for 2008 was completed and identified an updated list of the short-term, intermediate and long-term projects that advanced the Goals and Objectives identified in the Five-Year CEDS.
The *Greater Lowell Comprehensive Economic Development Strategy Update for 2010-2013* was built off the Five-Year CEDS document for 2009-2013. While the same Goals and Objectives were utilized, there were different major development projects and CEDS Priority Projects in the updated document. The major regional development projects in 2013 were the Middlesex Village/Wood Street – Rourke Bridge Study, Tewksbury Master Plan, Hamilton Canal, Hamilton Crossing, Tanner Street Initiative, Middlesex Turnpike, five corridor studies (Woburn Street in Billerica, Lowell and Tewksbury; Route 38 in Tewksbury; Route 133 in Tewksbury; East Street in Tewksbury; and Minot’s Corner/Route 110 in Westford), the MassWorks projects, the Chelmsford and Dracut Town Center Studies and the UMass Lowell projects. The Hamilton Canal Development District and Tanner Street Initiative (now the Ayer City Urban Renewal Plan) in Lowell, Middlesex Turnpike Phase 3 in Billerica, and the Route 38 Corridor Improvements in Tewksbury stand out as examples of the strong link and interdependency between transportation and economic development. The implementation of these four projects is likely to result in more than 4,000 permanent jobs. In addition there were a number of economic development projects under the District Local Technical Assistance (DLTA) program funded by the Department of Housing and Community Development (DHCD) that have integral transportation components as well. These major regional development projects, combined with the CEDS Priority Projects, provide the means by which the Goals and Objectives are addressed and the regional economy is fortified. Within the *Greater Lowell CEDS Update for 2010-2013*, seventy (70) short-term priority projects were identified. The importance of transportation funding for these economic development projects cannot be overestimated.

**SITING OF RENEWABLE ENERGY FACILITIES WITHIN THE MONTACHUSETT AND NORTHERN MIDDLESEX REGIONS**

In 2012 the Montachusett Regional Planning Commission (MRPC) and NMCOG received an EDA technical assistance grant to develop the *Siting of Renewable Energy Facilities within the Montachusett and Northern Middlesex Regions*. The principal purpose of this document was to summarize the existing renewable energy facilities (wind, photovoltaics, geothermal, hydropower, and biomass, as well as LEED certified) in the two regions, identify barriers to locating additional renewable energy facilities in the area and make recommendations on the steps that the regional planning agencies, working with their member communities and the renewable energy industry, could take to increase the private investment dedicated to renewable energy facilities in the two regions. NMCOG worked with the newly established Greater Lowell Energy Advisory Committee on this project and hosted three of the six workshops held as part of this effort. Access and transportation
issues, such as the capacity of bridges and the regional road network, were identified as major barriers to the siting of renewable energy facilities in both regions. NMCOG will prepare a follow-up Action Plan to implement the recommendations that apply directly to the Northern Middlesex region.

**CREATING ECONOMIC OPPORTUNITY**

As previously discussed, the region’s transportation network must be well managed and maintained to ensure the continued economic vitality of the region. Transportation projects create jobs and can be linked to workforce development programs that help underserved populations obtain and maintain jobs in the transportation sector. Transportation infrastructure improvements can have a dramatic impact on neighborhoods and provide support for healthy main streets, town centers and central business districts.

The Ladders of Opportunity program is a White House initiative focused on building economic opportunities for low-income populations. The USDOT is committed to building ladders of opportunity by providing affordable transportation options and by improving residents' quality of life through access to education, health care and employment. The USDOT recognizes that transportation and economic opportunity are interconnected: transportation costs are the second largest expense for American households, and low-income households are less likely to own a car compared to higher income households. In addition, unreliable transit and unsafe streets can interfere with access to jobs and other essential services.

The USDOT and FHWA promote policies and activities that encourage economic development through transportation. This concept is strongly tied to Environmental Justice, as transportation has the potential to improve economic opportunities for minority and low-income communities. FHWA offers two tools through the Strategic Highway Research Program that can help agencies promote economic development.

Through its Ladders of Opportunity initiative, the USDOT has focused on enhancing opportunities for all Americans by investing in transportation projects that: connect communities to centers of employment, education, and services; and that stimulate long term job growth, especially in economically distressed areas. The NMMPO strongly supports these initiatives and is committed to working with its transportation and economic development partners to ensure that the region’s low income and minority communities are afforded access to the programs that facilitate access to employment, education and other essential services.
The NMMPO will continue to work with providers of public transportation, as part of the transportation planning process, to identify transportation connectivity gaps in accessing essential services. Through the UPWP tasks, the NMMPO staff will continue to identify gaps in the connectivity of the transportation system and outline infrastructure and operational solutions that provide the public, especially the traditionally underserved populations, with adequate access to employment, education and health care. The effectiveness of the public participation process for engaging transportation disadvantaged communities in the transportation decision-making process will be evaluated in the upcoming months as the region updates its Public Participation Plan. The Section 5310 Coordinated Human Service Public Transportation Plans will be updated during FY 2016, and NMMPO staff will continue to assess the safety and condition of pedestrian and bicycle facilities, including compliance with the Americans with Disabilities Act.

CONCLUSION

The link between transportation and economic development in the Northern Middlesex region is well documented. It would be impossible to develop an economic development strategy or CEDS document for the region without including a robust transportation component. Similarly, it would be foolish to create a Regional Transportation Plan (RTP) without an active economic development component. The economic vitality of the Northern Middlesex region depends upon the active implementation of transportation projects throughout our communities. For these reasons, the NMMPO has established the Transportation and Economic Development Prioritization and Coordination Study as part of the annual UPWP. To illustrate the tie-ins between the aforementioned economic development documents and the transportation work plan for our region, the following projects have been identified under this year’s work element:

- Hamilton Canal District (Lowell)
- Ayer City Urban Renewal Plan (Lowell)
- Middlesex Turnpike Phase 3 (Billerica/Bedford)
- Route 38 Corridor Improvements (Tewksbury)
- Boston Road Revitalization Project (Billerica)
- Vinal Square and Town Center Improvements (Chelmsford)
- Chapter 43D projects (Dracut and Westford)
- Lowell’s Privately-Owned Bridges (Lowell)
- Route 3 Exit 36 Southbound Ramp Study (Tyngsborough)
- Route 110 and Route 40 Corridor Improvements (Westford)
• Economic Development Self-Assessment Tool (EDSAT)/Economic Development Strategies (Billerica, Dracut, Pepperell, Tyngsborough and Westford)
• Northeast Energy Direct Pipeline Proposal (Dracut and Tewksbury)
• Siting of Renewable Energy Facilities in the Montachusett and Northern Middlesex Regions

Many of the above economic development initiatives have been discussed in greater detail in previous sections of this document. NMMPO staff will continue to work with its member communities to target the Priority Development Areas, Economic Opportunity Areas, Priority Development Sites and other state designated economic development areas for transportation infrastructure support. These transportation investments will provide direct connections between employment centers and their employees, facilitate the delivery of goods and services to the development sites, and allow businesses to efficiently transport their goods to market. NMCOG and the NMMPO staff will build upon the corridor studies previously developed and identify community development and redevelopment opportunities that enhance economic growth. Transit service in the region will be examined to determine whether changes need to be made to better serve the changing regional employment markets. Bicycle and pedestrian access to employment, educational, healthcare and recreational opportunities will be improved. Residents of multi-family and affordable housing in the region will be connected with employment and educational opportunities so as to improve their economic condition and quality of life.