

## CHAPTER 3: TRANSPORTATION PLANNING PROCESS

Transportation planning is a collaborative process that involves government agencies, non-profit organizations, elected officials, advocacy and special interest groups, the business community and the public. Key transportation planning activities that are undertaken on an ongoing basis include the following:

- Monitoring existing operating conditions;
- Tracking demographic trends, including population, employment, income, race, age, gender and persons with special transportation needs;
- Identifying current and future transportation needs for all modes of transportation;
- Completing planning studies that analyze transportation problems and propose solutions;
- Developing capital improvement programs and operational strategies that address transportation needs;
- Assessing the impacts of transportation improvements on the environment and climate change;
- Evaluating transportation equity for low-income, Limited English Proficiency (LEP) and minority populations;
- Evaluating the public health and social impacts of transportation decisions, projects and priorities;
- Integrating local planning and economic development initiatives with the regional transportation planning process; and
- Soliciting public input throughout the planning process.

The U.S. Department of Transportation (USDOT), Federal Highway Administration must certify that a 3C planning process is being carried out on all transportation projects receiving federal funding. Part of the certification involves the preparation of three documents: the Unified Planning Work Program (UPWP), the Long Range Regional Transportation Plan (RTP), and the Transportation Improvement Program (TIP). NMMCOG staff carries out the administrative and technical functions related to the NMMPO, including the preparation of the three federally required certification documents.

In metropolitan areas with more than 50,000 people, the Metropolitan Planning Organization (MPO) provides the forum for collaboration and decision-making on transportation issues. The Northern Middlesex Metropolitan Planning Organization (NMMPO) is the policymaking body for the Greater Lowell area, and is required by federal law to carry out a continuing, cooperative and

comprehensive planning process that is called the 3C planning process. These three elements of the 3C planning process are described as follows:

- Continuing: Planning must be maintained as an ongoing activity and should address both short-term needs and the long-term vision for the region;
- Cooperative: The process must involve a wide variety of interested parties through a public participation process; and
- Comprehensive: The process must cover all transportation modes and be consistent with regional and local land use and economic development plans.

The membership of the NMMPO consists of the following members outlined in Table 3.1. The Secretary of MassDOT acts as Chairman of the MPO. A copy of the region’s MPO Memorandum of Understanding (MOU) is included in Appendix < .

**Table 3.1: Northern Middlesex MPO Member Structure**

<b>NMMPO Voting Members</b>
Chairman of the Northern Middlesex Council of Governments (NMCOG)
Chairman of the Lowell Regional Transit Authority (LRTA)
Secretary of Transportation and the Chief Executive Officer of the Massachusetts Department of Transportation (MassDOT)
Administrator of the Highway Division of MassDOT
Chief elected official from the City of Lowell who serves as the City’s representative to NMCOG
Selectman elected to serve on the Council and further elected by the Council to serve as that town’s representative to the Northern Middlesex MPO
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
<b>NMMPO Non Voting Ex-Officio Members</b>
Federal Highway Administration
Federal Transit Administration

**ROLES AND RESPONSIBILITIES OF PARTICIPATING AGENCIES**

The following sections discuss the primary agencies involved in the transportation planning process for the Northern Middlesex region. These agencies comprise the NMMPO membership and function at the regional, state and federal levels of government to ensure that the transportation needs of the region are met for all modes of transportation.

## NORTHERN MIDDLESEX COUNCIL OF GOVERNMENTS

The Northern Middlesex Council of Governments (NMCOG) was created under Chapter 40B of the General Laws of Massachusetts and is one of thirteen regional planning agencies (RPAs) in the Commonwealth. NMCOG serves its member communities in an advisory capacity by studying and making recommendations regarding transportation, economic and community development, housing, land use, historic preservation, municipal service delivery, zoning, environmental and energy issues. NMCOG's policy-making body, comprised of three members from each community (one Planning Board member, a Board of Selectmen member or City Councilor, and an alternate), provides local representation and policy guidance to the Council's staff of professional planners. The Council's planning district includes Billerica, Chelmsford, Dracut, Dunstable, Lowell, Pepperell, Tewksbury, Tyngsborough and Westford (see Map 1.1 on Page 3). NMCOG functions as the regional transportation planning agency for the Greater Lowell area and serves as technical staff to the NMMPO.

## LOWELL REGIONAL TRANSIT AUTHORITY

The Lowell Regional Transit Authority (LRTA) has statutory responsibility for providing mass transportation under the provisions of Chapter 161B of the Massachusetts General Laws. The LRTA service area includes the following communities: Acton, Billerica, Carlisle, Chelmsford, Dracut, Dunstable, Groton, Lowell, Maynard, Pepperell, Tewksbury, Townsend, Tyngsborough and Westford (see Map 6.1 in Chapter 6, page 97). A chief elected official or designee from each member community serves on the LRTA Advisory Board.

## MASSACHUSETTS DEPARTMENT OF TRANSPORTATION

In June 2009 Chapter 25 of the Acts of 2009, "An Act Modernizing the Transportation Systems of the Commonwealth of Massachusetts" was signed into law. The transportation reform legislation integrated all Massachusetts transportation agencies and authorities into a new MassDOT. A five-member Board of Directors appointed by the Governor oversees the organization. MassDOT is administered by a Secretary of Transportation, who is appointed by the Governor to serve as the agency's Chief Executive Officer. MassDOT is comprised of four divisions: Highway, Mass Transit, Aeronautics and the Registry of Motor Vehicles (RMV), in addition to an Office of Planning and Programming.

## FEDERAL HIGHWAY ADMINISTRATION AND FEDERAL TRANSIT ADMINISTRATION

An annual certification process through FHWA and FTA ensures that the State and the NMMPO are adhering to the 3C transportation planning process in accordance with federal requirements. Approval of federally-aided transportation projects requires the planning process to be “cooperative, comprehensive, and continuing.” As previously discussed, FHWA and FTA are ex-officio non-voting members of the NMMPO.

## RELATIONSHIP BETWEEN THE RTP, TIP AND UPWP

The Regional Transportation Plan (RTP) is one of three federally required certification documents produced by the NMMPO. The other two documents are the Unified Planning Work Program (UPWP) and Transportation Improvement Program (TIP). The UPWP describes the planning studies and activities to be performed by the NMMPO each fiscal year. RTP projects and recommendations are often proposed as a solution to a transportation problem or deficiency that was identified through a study performed as part of the UPWP.

The Transportation Improvement Program (TIP) is a financially-constrained four-year listing of all federally-funded and regionally significant projects with the region. TIP projects must be drawn from a conforming RTP. In Massachusetts, the TIP is updated annually.

## STATE POLICIES

The 2009 restructuring of transportation agencies in Massachusetts led to a comprehensive re-evaluation of statewide policies and initiatives that impact transportation decision-making. The information below outlines the policy initiatives that have been implemented by MassDOT and other state agencies, such as the Executive Office of Energy and Environmental Affairs (EOEEA), the Executive Office of Health and Human Services (EOHHS), and the Executive Office of Housing and Economic Development (EOHED).

## youMOVE MASSACHUSETTS AND weMOVE MASSACHUSETTS INITIATIVES

The *youMove Massachusetts* initiative was launched by the Commonwealth of Massachusetts to develop a high-level, statewide vision of transportation through an extensive public outreach campaign. As part of this process, MassDOT developed ten core themes for the future of the Commonwealth’s transportation system as noted in the text box on the next page.

In 2014 MassDOT released *weMove Massachusetts: Planning for Performance* (WMM), the Commonwealth's Long Range Transportation Plan. The Plan summarized MassDOT's new approach to multimodal capital planning and the use of scenario planning. WMM contains a Planning for Performance tool that incorporates important MassDOT policy initiatives, such as mode shift and sustainability, into the capital planning process. The tool can be used to calculate the performance outcomes resulting from different funding levels available to MassDOT. It also allows customers and stakeholders to understand the impacts of investment or disinvestment in the transportation system. In the future, MassDOT will use the tool to update and refine investment priorities.

#### Themes of YouMove Massachusetts

- Improve Transportation System Reliability
- Focus More Attention on Maintaining Our Transportation System
- Design Transportation Systems Better
- Encourage Shared Use of Infrastructure
- Increase Capacity by Expanding Existing Facilities and Services
- Create a More User-Friendly Transportation System
- Broaden the Transportation System to Serve More People
- Provide Adequate Funding and Collect Revenue Equitably
- Minimize Environmental Impacts
- Improve Access to Our Transportation System

### GLOBAL WARMING SOLUTIONS ACT

The Global Warming Solutions Act (GWSA) of 2008 mandates the reduction of greenhouse gas (GHG) emissions to 80 percent below 1990 levels by 2050. It also requires the Secretary of Energy and Environmental Affairs to set a legally enforceable GHG emissions limit for 2020 of between 10 percent and 25 percent below 1990, and to issue a plan for achieving those reductions, while growing the clean energy economy.

The Commonwealth set the GHG emissions limit at the statutory maximum of 25 percent and released the *Clean Energy and Climate Plan for 2020*, which contained a portfolio of policies designed to meet the limit. The portfolio included established and new measures that reduce energy waste, save

money, and stimulate the adoption of clean energy technologies, thereby creating jobs at the same time GHG emissions are being reduced. It is estimated that 42,000 to 48,000 jobs will result from full implementation of the plan in 2020.

## GreenDOT

On June 2, 2010, MassDOT introduced the GreenDOT Policy Directive, a comprehensive environmental responsibility and sustainability initiative that is intended to “green” the state’s transportation system. The following are the principal goals of the GreenDOT policy directive:

- Reduce greenhouse gas (GHG) emissions;
- Promote the healthy transportation options of walking, bicycling, and public transit; and
- Support smart growth development.

GreenDOT was derived from the following laws, directives, executive orders and policies, which are used as the tools to implement the above goals:

- Climate Protection and Green Economy Act (Chapter 21N of the MGL)
- Green Communities Act (Chapter 169 of the Acts of 2008)
- Healthy Transportation Compact (Section 33 of Chapter 25 of the Acts of 2009)
- Leading By Example (Executive Order 488)
- The “Complete Streets” design standards of the 2006 MassDOT Highway Division Project Development and Design Guide, as amended.

In 2012 MassDOT published the GreenDOT Implementation Plan, which serves as the framework for embedding the sustainability principles of GreenDOT into the core business practices of MassDOT. The plan is designed to be a usable guide for MassDOT and its partners to work collaboratively toward leading the nation in sustainable transportation. The Plan centers around sixteen sustainability goals organized under seven sustainability themes, as illustrated in Table 3.2 on the next page.

**Table 3.2: Sustainability Themes and Goals of GreenDOT**

Sustainability Theme	Sustainability Goals
Air	Reduce Greenhouse gas emissions
	Improve statewide air quality
Energy	Consume less energy
	Increase reliance on renewable energy
Land	Minimize energy and chemicals used in maintenance
	Enhance ecological performance of MassDOT impacted land
Materials	Improve life-cycle impacts of investments
	Purchase environmentally preferred products
Policy/Planning	Build green facilities for MassDOT
	Design a multi-modal transportation system
	Promote healthy transportation and livable communities
	Triple mode share of bicycling, transit and walking
Waste	Achieve zero solid waste disposal
	Reduce all exposure to hazardous waste
Water	Use less water
	Improve ecological function of water systems

Source: 2012 GreenDOT Implementation Plan, Mass DOT

A key tenet of GreenDOT is a statewide mode shift that triples the share of travel by bicycling, transit, and walking by 2030. This mode shift goal, if fulfilled, could foster improved quality of life by enhancing our environment and preserving capacity on our highway network. It would also allow other travel options to absorb some of the travel demand that is increasingly contributing to highway congestion and slowing the potential for economic growth.

GreenDOT sets a goal of reducing greenhouse gas emissions by more than 2 million tons by 2020, a reduction of about 7.3 percent below 1990 transportation sector emission levels. Mobile source emissions in 2020, if left unchecked, would increase by 19 percent over 1990 levels. To counter this trend, the GreenDOT initiative, along with other state and federal government policies, are expected to reduce 2020 transportation emissions by almost 30 percent below this “business as usual” level.

The GreenDOT initiative will achieve the greenhouse gas reductions through a range of measures. In cooperation with the RPAs, MassDOT will set statewide greenhouse gas reduction targets, and meet these targets by balancing highway system expansion projects with other projects that support smart growth development and promote public transit, walking and bicycling. Examples include transit and

rail projects, complete streets planning that incorporates bicycle and pedestrian accommodations, and investments in greener, more efficient fleet vehicles and renewable power.

## SUSTAINABLE DEVELOPMENT PRINCIPLES

The Commonwealth of Massachusetts has adopted ten sustainable development principles to care for the built and natural environment through integrated energy and environment, housing and economic development, and transportation policies, programs, investments, and regulations. The Commonwealth encourages the coordination and cooperation of all agencies in investing public funds in “smart growth” and equitable development, giving priority to investments that will create good jobs and wages and provide access to transit, housing and open space. Furthermore, the Commonwealth strives to advance these principles in partnership with regional and municipal governments, non-profit organizations, businesses and other stakeholders. The ten principles are listed in Table 3.3 on the next page.

**Table 3.3: Sustainable Development Principles for the Commonwealth**

Sustainable Development Principles	Descriptions
<b>Concentrate Development and Mix Uses</b>	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.
<b>Advance Equity</b>	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.
<b>Make Efficient Decisions</b>	Make regulatory and permitting processes for development clear, predictable, coordinated, and timely in accordance with smart growth and environmental stewardship.
<b>Protect Land and Ecosystems</b>	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.
<b>Use Natural Resources Wisely</b>	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.
<b>Expand Housing Opportunities</b>	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.
<b>Provide Transportation Choice</b>	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.
<b>Increase Job and Business Opportunities</b>	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.
<b>Promote Clean Energy</b>	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.
<b>Plan Regionally</b>	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.

Source: Massachusetts Executive Office of Energy and Environment

## THE HEALTHY TRANSPORTATION COMPACT

The Healthy Transportation Compact is an inter-agency initiative whose members include the Secretaries of Transportation, Health and Human Services, and Energy and Environmental Affairs, as well as the MassDOT Highway and Transit Administrators, and the Commissioner of Public Health. As a key requirement of the 2009 transportation reform legislation, the compact is designed to facilitate transportation decisions that balance the needs of all transportation users, expand mobility, improve public health, support a cleaner environment and create stronger communities.

The Compact focuses on the following tasks:

- Promote interagency cooperation to implement state and federal policies and programs;
- Reduce greenhouse gas emissions, improve access to services for persons with mobility limitations and increase opportunities for physical activities;
- Increase bicycle and pedestrian travel and facilitate implementation of the Bay State Greenway Network;
- Work with the Massachusetts Bicycle and Pedestrian Advisory Board (MABPAB) to effectively implement a policy of complete streets for all users, consistent with the current edition of the Project Development and Design Guide;
- Implement health impact assessments for use by planners, transportation administrators, public health administrators and developers;
- Expand service offerings for the Safe Routes to School program;
- Initiate public-private partnerships that support healthy transportation with private and non-profit institutions;
- Establish an advisory council with private and non-profit advocacy; and
- Develop goals for the Compact and measure progress toward these goals.

## MASS IN MOTION

Mass in Motion is a program administered by the Executive Office of Health and Human Services (EOHHS) that promotes wellness by stressing the importance of sound nutrition and physical activity. The program awards grants to communities to undertake wellness initiatives through measures such as developing policies and regulations that support nutrition and physical activity, creating a healthier environment for residents, and working with schools to promote a healthier lifestyle for youth.

## REGIONAL PLANS AND POLICIES

Transportation issues are regional in nature and cannot always be addressed by a single jurisdiction. The development of the Regional Transportation Plan has considered the policy recommendations and projects outlined in the region's primary planning documents, including the *Regional Strategic Plan for Greater Lowell*, the *Greater Lowell Comprehensive Economic Development Strategy*, and the region's *Hazard Mitigation Plan*.

## REGIONAL STRATEGIC PLAN

In 2011 NMCOG adopted the *Regional Strategic Plan for Greater Lowell*, utilizing funding provided by the Executive Office of Housing and Economic Development. The Regional Strategic Plan (RSP) assists NMCOG and its member communities in planning for future development initiatives and for the preservation of important natural resources and open space. The RSP offers recommendations relative to housing, economic development and the protection of open space and environmentally sensitive resource areas. The RSP focuses on smart growth and sustainable development principles that promote compact growth in those areas with available infrastructure, and which foster the protection and preservation of the region's most valuable environmental and cultural resources. The Plan identifies locations in each community where growth is appropriate based on zoning, infrastructure, access and environmental impacts.

The goals of the RSP are outlined below and the Regional Transportation Plan has been developed to ensure consistency with these goals:

### LAND USE GOALS

- Use land efficiently and protect sensitive resource areas by directing growth to priority development areas and locations with adequate infrastructure;
- Support the transformation of key underutilized lands, such as "brownfields", to productive uses that complement the community and enhance existing neighborhoods;
- Incentivize redevelopment activities through land use tools, streamlined permitting and economic incentives;
- Minimize the environmental impact of future development by encouraging mixed-use and compact development patterns, and by promoting the use of low impact development techniques; and

- Use capital facilities and infrastructure efficiently and in a manner that is consistent with the region’s natural features, respectful of the character of its communities and neighborhoods, and that builds upon the economic strengths of each community.

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#### ECONOMIC DEVELOPMENT GOALS

- 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 address 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.

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#### HOUSING GOALS

- 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;
- Encourage mixed-use development that ties together residential and commercial uses in city and town centers and mill districts throughout the region;
- Increase housing options available to families, young couples, single adults, seniors, artists, students, the disabled, veterans, and other groups so that they may live and work in the Greater Lowell region;
- Address expiring affordability restrictions<sup>1</sup> as a means of maintaining the region’s stock of affordable housing; and
- Encourage the location of future housing in areas served by public transit.

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<sup>1</sup> Affordability restrictions are often established for 15-30 years and expire over time.

## NATURAL, CULTURAL AND ENVIRONMENTAL RESOURCES GOALS

- Care for the natural environment by protecting and restoring natural systems, conserving habitat, improving water quality, and reducing air pollution, thereby ensuring that all residents, regardless of social and economic status, live in a healthy environment;
- Promote the use of innovative, environmentally-sensitive development practices, including design, materials, construction, and on-going maintenance;
- Encourage the use of low impact development techniques and other best management practices (BMPs) for managing stormwater;
- Preserve, protect and enhance the region's remaining agricultural lands;
- Support agricultural, farmland and aquatic uses that enhance the local food system and increase its capacity to produce fresh and minimally processed foods;
- Preserve significant historic, visual and cultural resources, including public views, landmarks, archaeological sites, historic and cultural landscapes, and areas of special character;
- Improve public access to the region's waterways, water bodies and open spaces; and
- Promote the production and use of alternative energy.

## GREATER LOWELL COMPREHENSIVE ECONOMIC DEVELOPMENT STRATEGY

In 2014 NMCOG adopted the *Greater Lowell Comprehensive Economic Development Strategy (CEDS) Update for 2010-2013*. This document built upon previous five-year economic development “blueprints” for the Greater Lowell region. The 2010-2013 CEDS Update included Comprehensive Needs Analysis, Vision, Action Plan and Evaluation sections required by the Economic Development Administration (EDA) of the U.S. Department of Commerce (DOC). The CEDS provided new information regarding current economic conditions, past activities in terms of project development, goal attainment and capacity building, a revised project priority list and new activities for the next program year.

The connection between transportation and economic development is woven throughout the 2010-2013 CEDS Update. A discussion of topics such as alternative transportation modes and facilities, such as bicycle and pedestrian paths, and environmental issues, such as air quality, closely ties the CEDS to the RTP and TIP. In addition, many of the TIP projects are included on the CEDS Priority Project List. The transportation projects listed in the CEDS are essential to upgrading the infrastructure in the region, in order to encourage economic growth and the maintenance of the region's quality of life. The Evaluation section outlines the criteria by which progress on the CEDS

“grass-roots” planning process, goal attainment and project development will be assessed on a qualitative and quantitative basis.

With each new CEDS document, NMCOC attempts to integrate more completely the transportation and economic development planning processes, to promote regional economic development and transportation projects, and to support local economic development and transportation initiatives. These efforts have resulted in the creative use of the limited federal, state, local and private funding sources to further the economic development and transportation goals and objectives for the region.

#### HAZARD MITIGATION PLAN FOR THE NORTHERN MIDDLESEX REGION

The development of a regional mitigation plan before disaster strikes results in the most efficient and effective means of reducing the loss of life and property. Mitigation helps to minimize or prevent damage to structures, infrastructure, and other resources. The regional nature of the Plan helps to ensure that mitigation initiatives, measures and strategies are coordinated across municipal boundaries. Ultimately, such regional integration improves the ability of the local communities to implement post-disaster recovery projects in a cooperative and coordinated manner.

The *Hazard Mitigation Plan for the Northern Middlesex Region* identifies several mitigation projects that are transportation-related, such as the reconstruction of structurally deficient bridges, traffic improvements along evacuation routes and near critical facilities, and improvements to reduce roadway flooding. It is important that the RTP consider the Hazard Mitigation Plan recommendations in order to protect the region’s residents and infrastructure in the event of a natural disaster.

As an update to the 2006 Plan, NMCOC prepared the 2014 *Hazard Mitigation Plan* which contains an inventory and assessment of natural hazard risks, a vulnerability analysis based on the geographic location of critical infrastructure and facilities, and an existing protection matrix for the region and its nine member communities. This Plan, unlike the 2006 Plan, takes into account the potential impacts of climate change. Through discussions with local officials and the region’s Multi Hazard Community Planning Team, a list of hazard mitigation actions and projects has been developed for future implementation. The 2014 Draft Plan is now under review by the Federal Emergency Management Agency (FEMA).

## LOCAL PLANS AND POLICIES

Data and project information used to develop the Regional Transportation Plan was drawn from municipal Master Plans, Open Space and Recreation Plans, GIS sources, Housing Production Plans, local bylaws and ordinances, and Economic Development Plans. Transportation's purpose is moving people and goods from one place to another, but transportation systems also affect community character, the natural and human environment, and economic development patterns. A transportation system can improve the economy, shape development patterns, and influence quality of life and the natural environment.

Development density and location influences the regional travel patterns, and access to the transportation system can influence land use and development trends. For example, a connected system of streets in an area with high residential densities and a mix of land uses can facilitate pedestrian and bicycle travel, and provide the critical population threshold needed to efficiently operate public transportation. However, low-density dispersed land use patterns can encourage travel by single-occupancy vehicles.

The projects and policies set forth in the Regional Transportation Plan have been reviewed for consistency with goals and recommendations established in local plans and policy documents, as described above. The NMMPO and the local communities have a shared interest in managing the region's transportation resources and promoting livable communities.

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