




INTRODUCTION AND CENTRAL VISION STATEMENT

The MPO has a vision for the region. This vision both anticipates the future and responds to current needs. It has guided the development of this long range transportation plan, *Paths to a Sustainable Region*, and all the other work the MPO conducts as part of its metropolitan transportation planning process. The vision draws a picture of the desired, future end-state for the region and its transportation network in 2035.

The timing for the development of *Paths to a Sustainable Region* is fortuitous. The science and art of metropolitan transportation planning is evolving. The challenges we face – limited fiscal resources; climate change; the pursuit of energy independence and of greater economic stability and prosperity; mobility needs; an aging population and aging infrastructure; cultural and environmental resources at risk – cannot be addressed without changes in how we view and grow our communities and our built environment and infrastructures. The challenges require that transportation planning truly incorporate additional perspectives. Land use planning, public health information, environmental protection measures, human services needs, and operations and maintenance approaches must be brought to the table and be integrally woven into metropolitan planning. In this way, the MPO can make investment decisions that are effective in addressing the region's challenges.

This vision has evolved over the span of many years of engagement in metropolitan transportation planning. This planning includes technical analysis and other studies of transportation needs in the region. It also involves listening to the public's views. It is founded on the federal planning factors as most recently laid out in one of the nation's key transportation laws, the *Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users* (SAFETEA-LU), and on other, more contemporary federal guidance. The vision also takes into consideration statewide planning and policy initiatives. Another key element is the current land use and demographic planning conducted by the region's comprehensive planning agency. Finally, this vision builds on



the MPO's longstanding priorities for transportation improvements, as detailed in its preceding long-range transportation plan (LRTP), JOURNEY TO 2030.

The following reflects the MPO's aspirations for the 2035 future end-state of the region.

Central Vision Statement

The Boston region will continue to be a major economic, educational, and cultural hub of New England. It will maintain its high quality of life due to its lively commercial and business enterprises, the strength of its institutions, and its healthy and pleasant environment, all supported by its well-maintained transportation system. Notably, there will be an ongoing transformation taking place in the region's communities. They will, more and more, be places in which people can have access to safe, healthy, efficient, and varied transportation options and find jobs and services within easy reach of affordable housing. The transportation options will include the transit, bicycle, and pedestrian modes, among others, and will reduce environmental impacts, improving air and environmental quality. The role of the region's transportation system in making the envisioned future possible will be a result of attentive maintenance, cost-effective management, and strategic investments in the system by the Boston Region MPO.

The next sections of this chapter describe the foundations of the MPO's vision for the region, spell out the vision and translate it into policies, which will set MPO priorities and guide MPO planning and decision making. These policies are further developed in later chapters of this LRTP into sets of steps the MPO will take in order to turn the policies into outcomes and to bring the vision to reality.

FOUNDATION OF VISIONS AND POLICIES

The MPO developed its visions and policies within the context of the following regulations, guidance, and planning activities.

Federal Framework

SAFETEA-LU Planning Factors

Over the years, the federal government has established specific guidance and standards for MPOs to use as they conduct metropolitan transportation planning in their regions. The federal planning factors are a product of this practice. The current planning factors were articulated in the most recent comprehensive federal re-authorization, the *Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy for Users* (SAFETEA-LU). In this legislation, the federal government authorized the federal surface-transportation programs for highways, highway safety, and transit for the five-year period 2005–09. Funding authorization was extended through continuing resolutions passed by Congress. In addition, SAFETEA-LU specified eight planning factors, listed below, that should be considered in all aspects of metropolitan transportation planning, including the development of visions, policies, objectives, performance measures, and evaluation criteria. The MPO has incorporated the planning factors in the development of its visions and policies. They are:

- 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 nonmotorized users.
- Increase the ability of the transportation system to support homeland security and to safeguard the personal security of all motorized and nonmotorized 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.
- Emphasize the preservation of the existing transportation system.

SAFETEA-LU Focus on Multimodal Operational Efficiency

Federal guidelines, again promulgated in SAFETEA-LU, promote planning toward a desired system performance outcome rather than just responding to problems with a project-based approach. The tool for this paradigm shift is an objective-driven, performance-based approach. MPOs are asked to use objectives to focus attention on identified needs. MPOs are then to use performance measures to define success for an action considered to address those needs and to track the outcome.

In addition, management and operations strategies must be considered when identifying alternative actions to meet the identified needs. These strategies typically involve making better use of the existing, multimodal transportation network and are an effective and value-added way to improve mobility, safety, access to transit, and intermodal connections while reducing congestion for all modes in the region. They are typically a less costly “first line of defense” for improving system efficiency. These strategies do not rely on constructing new projects or expanding the transportation system and are likely to be more easily implemented.

Sustainable Communities Partnership

Additionally, President Obama has set a federal policy directive – the Sustainable Communities Partnership – for three federal agencies, the Department of Transportation, the Environmental Protection Agency, and the Department of Housing and Urban Development, to work together to promote and implement policies and programs that help address climate change and protect the environment while advancing the federal goals for transportation and housing. This partnership is a recognition that solving problems in any one of the three areas is related to and dependent on policies and actions in the other two. In other words, improving transportation relates directly to, and requires consideration of, both issues pertaining to housing and urban and economic development, and issues pertaining to the environment. Another overarching concern,



shared by the three agencies and requiring coordinated planning, is the need to continue taking steps to address and prepare for climate change.

For these reasons, the Sustainable Communities Partnership is promoting a set of livability principles to generate and support the kinds of planning and investments needed to evolve transportation and housing patterns that improve access to affordable housing and transportation options. MPOs are asked to use the livability principles listed below to guide the development of their regional vision.

Livability Principles

- Provide more transportation choices.
- Promote equitable, affordable housing.
- Enhance economic competitiveness.
- Target resources to existing communities.
- Coordinate and leverage federal policies and investment.
- Value unique characteristics of communities, no matter their size.

The goal is the integration of planning for housing, land use, and transportation, resulting in:

- Transportation options that include access to public transit and nonmotorized transportation facilities and infrastructure
- Affordable housing choices
- Environmental quality, including clean air, scenic, aesthetic, environmental, and historical resources
- Energy efficiency

Massachusetts Statewide Initiatives and Perspectives

The state transportation-reform legislation signed in June 2009 and implemented on November 1, 2009, created the Massachusetts Department of Transportation (MassDOT). The legislation restructured the state transportation agencies under MassDOT in order to improve operation, accountability, and efficiency in transportation. MassDOT is engaged in the following initiatives that add to the Boston region's transportation planning framework.

youMove Massachusetts

youMove Massachusetts is a statewide program undertaken by MassDOT to solicit feedback and views from users of the transportation system, particularly to provide insight into mobility gaps and challenges faced by people using the transportation system. This outreach work began in the fall of 2008 and is still underway. Public comments have been in the forms of letters, email messages, telephone calls, comments at public meetings, and messages through the program's interactive website.

Initially, MassDOT conducted numerous public workshops around the state, and more than 300 people participated. Since then, the website continues the outreach and is

currently the primary avenue for input in this program. The website allows participants to point out specific locations of transportation issues needing attention. More than 700 comments have been received through the website.

The comments can be organized into 10 core themes:

- 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 transportation funding and collect revenue equitably.
- Minimize environmental impact.
- Improve access to our transportation system.

Massachusetts Healthy Transportation Compact

The transportation reform legislation established the Healthy Transportation Compact. The Compact is an interagency group convened to address transportation needs, including mobility, while supporting communities by promoting public health and a clean environment. The Compact is led by the Secretaries of Transportation and of Health and Human Services, and includes the Secretary of Energy and Environmental Affairs, two senior transportation staff, and the commissioner of public health.

Relative to the work of this Compact, the Massachusetts Department of Transportation (MassDOT) has articulated its vision as: "...a strong commitment to pedestrian and bicycle access. Walking and bicycling move people out of single-occupant vehicles, reduce traffic congestion, and promote healthy lifestyles and a cleaner environment." In addition, the Compact's goals include:

- Promoting interagency cooperation on healthy transportation policy
- Increasing access to healthy transportation alternatives; these will reduce greenhouse gas emissions, increase opportunities for physical activity, and improve access to transportation services for persons with disabilities



- Increasing bicycle and pedestrian travel; advancing the Bay State Greenway Network
- Supporting implementation of “complete streets” in construction projects
- Developing and using health impact assessments to understand the impact of transportation projects
- Facilitating access to appropriate, cost-effective transportation services for individuals with disabilities
- Expanding the Safe Routes to Schools program

MassDOT Performance Management and Innovation



Commonwealth of Massachusetts legislative requirements established an Office of Performance Management and Innovation within MassDOT to report on the progress of transportation reform implementation and facilitate:

- Developing strategic plans for agencies’ program activities and performance goals
- Establishing program goals and measuring performance (including service delivery) against goals
- Publishing an annual performance “Score Card” on all modes of transportation
- Creating a website to document performance measures and results achieved
- Providing municipalities with access to MassDOT’s project information system

Part of the work plan of the Office of Performance Management and Innovation is to meet with MassDOT division administrators to select measures and develop strategies.

Limited Fiscal Resources: The Massachusetts Transportation Finance Commission Report and the D’Alessandro Report

Transportation Finance in Massachusetts: An Unsustainable System: Findings of the Massachusetts Transportation Finance Commission, March 28, 2007

The Massachusetts Legislature convened a Transportation Finance Commission in order to develop a long-term transportation finance plan for the Commonwealth. It was charged with identifying the:

- Transportation system’s capital and operating needs, for all modes
- Future state and federal funds likely to be available
- Funding shortfall
- Recommendations for meeting funding needs

The report identified extensive maintenance needs for both the roadway and transit systems that must be addressed. It also found that there was an approximate \$15 billion to \$19 billion shortfall between the funding available over the next 20 years and the cost of undertaking this maintenance. This estimate leaves no funds available for needed expansion or enhancement programs and projects.

Since this report, Governor Patrick and the Massachusetts Legislature have provided additional funding in two major areas: the Accelerated Bridge Program, a statewide program to strategically invest \$3 billion to achieve an important reduction in the number of structurally deficient bridges in the state, in 2008, and maintenance of Massachusetts Bay Transportation Authority (MBTA) transit services, in 2009. In addition, the reorganization of the transportation agencies resulting from the state transportation reform legislation is delivering more efficient operations and cost savings in transportation agencies and services. New fiscal management resulting from the reorganization is also resulting in cost savings.

The MBTA Review, November 1, 2009 (D'Alessandro Report)

The purpose of this report was to provide an independent review of the MBTA covering its finances, operations, and organization. The findings of the report were:


- The MBTA's finances are crippled by its structural operating deficit from its longstanding gap between expenses and revenues. The resulting debt and debt restructuring to balance the annual budget have left the MBTA with growing deficits.
- There are significant maintenance needs for the MBTA's aging infrastructure, and addressing them, to avoid safety and service problems, will add to the finance and deficit problems.

Prevalent Land Use Practices and Initiatives

Smart growth principles for land use are becoming more established in the Boston Region MPO area. Smart growth is a statewide policy that encourages compact, mixed-use development. This is important because the result is development decisions that yield efficiencies such as making better use of our existing infrastructures (water, sewer, under-used buildings, roadways, and transit) and creating conditions that favor increased non-single-occupant-vehicle transportation, such as transit, and active transportation, such as bicycling and pedestrian travel. Expected outcomes of smart growth development enhance the existing built environment and result in minimized environmental impacts, air quality improvements, and more energy efficiency, economic activity, and use of transit and the active transportation modes. The result is currently described as improved "sustainability."

This planning environment is the result of numerous executive orders, legislative actions, agency policies, and grant programs. Examples of those that are widely used across the region are:



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- Executive Order 385 of 1996, which directs that development and economic activity not contribute to sprawl. It gives assistance to regional and municipal planners, encouraging development where there is adequate infrastructure and where environmental resources are protected and impacts minimized.
 - The Transit-Oriented Development (TOD) Infrastructure and Housing Support Program (TOD Bond Program), which promotes TOD by providing funding for pedestrian, bicycle, and parking facilities in mixed-use developments that are near a transit station and meet affordability criteria.
 - The Chapter 40-R of 2004 Smart Growth Zoning Incentive Program, which provides incentives for municipalities to adopt zoning bylaws (smart growth zoning districts) that encourage smart growth, including development near transit services, municipal and commercial centers, and under-used properties. The associated Chapter 40-S Smart Growth School Cost Reimbursement provides for reimbursement to cover some public school cost increases (minus related increased revenues) incurred as a result of smart growth development
 - Programs undertaken by state agencies such as the MBTA, the Executive Office of Energy and Environmental Affairs, the Department of Housing and Community Development, and the Executive Office of Housing and Economic Development.

Regional Framework: MetroFuture

The Metropolitan Area Planning Council (MAPC) is the regional land use planning agency for the Boston Region MPO. MAPC works to advance contemporary planning practice and to achieve smart growth results through implementation of its land use plan for the region, MetroFuture.

MetroFuture lays out 65 goals for the future, covering topics such as sustainable growth, housing choices, community vitality, regional prosperity, transportation choices, and a healthy environment. There are 11 transportation goals:

- Expanding the transit system in both urban and suburban areas
- Increasing the transit travel mode share
- Providing options to avoid congestion
- More bicycling and walking for short trips
- Reduced vehicle miles traveled
- Prevention of additional congestion
- Improved accessibility for persons with disabilities
- Linking land use and transportation
- Providing adequate funding for transportation needs
- Bringing the infrastructure into a state of good repair
- Expanding access to the global marketplace through efficient freight transportation

To support this work, MAPC is implementing a \$4 million federal grant to fund a portion of its Metro Boston Consortium for Sustainable Communities. This consortium is an organization of more than 55 municipalities, 50 community-based organizations, state agencies, and numerous advocacy groups and institutions, including the Boston Region MPO. The goal is to implement smart growth in the Boston region and to move the region toward real sustainability. This program will accomplish this through several sets of activities, including: intensive local planning and zoning work in a few, varied types of communities; introducing new tools and models for planning; and supporting regional and state policies that foster sustainability. It will also promote its goal through education and advocacy.

The MetroFuture transportation and land use goals and the MPO's visions and policies are consistent and mutually supportive.

JOURNEY to 2030 Visions and Policies

In JOURNEY to 2030, this LRTP's predecessor, visions and policies were organized into eight topics:

- System preservation, modernization, and efficiency
- Mobility
- Environment
- Safety and security
- Regional equity
- Land use and economic development
- Public participation
- Finance

The visions and policies of JOURNEY to 2030 are the foundation of the MPO's new visions and policies for Paths to a Sustainable Region. However, in the new set, the structure of topics (listed in the following section) is slightly different in three ways.

First, climate change has been made a topic of its own. Second, to reflect current practice, the JOURNEY to 2030 topic of land use and economic development has been incorporated into the new topic of livability. Land use and economic development are among the cornerstones of livability and are prominent in the livability vision and policies.

Finally, public participation and finance are no longer singled out as individual topics. These activities are more closely related to operations than to policy. The MPO adopted a comprehensive public participation program in June 2007 and updated it in April 2010. It details how the MPO will maintain communication with and provide involvement for interested parties and members of the public, and it reflects input gathered during the development of JOURNEY to 2030. This program is integral to the MPO's day-to-day operations. MPO activities seek to provide opportunities for all residents and interests (including business, environmental, community, development, and transportation interests) to participate in the region's transportation planning.



The MPO works cooperatively with municipalities and other interested parties in the region to find solutions for the region's transportation issues. It reviews and updates its processes and tools for outreach in order to improve and expand these opportunities for participation. The document that sets forth the program is available on the MPO website at www.bostonmpo.org.

Finance is no longer singled out as a vision and policy topic. Fiscal constraint, planning in an environment of limited financial resources, and financial responsibility are basic principles of MPO operations. Efficiently and effectively applying financial resources to meet the region's transportation needs is the rule for programming. The MPO must match investments with identified regional needs and must fund the services, programs, and projects that are most effective and financially feasible for addressing those needs. In



addition, the MPO works with implementing agencies and municipal project proponents to better estimate and contain project costs as well as considers the cost of the transportation system's maintenance and operations when selecting projects.

In the new set of vision and policy topics, "transportation equity" is a new term for the topic "regional equity," not a new topic. Transportation equity is the MPO's ongoing work focused on understanding the transportation needs of minorities, individuals with low incomes, those of limited English proficiency, the elderly, youth, and persons with disabilities in the region. The MPO conducts outreach to gather information on these needs and considers them in its planning and programming.

VISIONS AND POLICIES FOR PATHS TO A SUSTAINABLE REGION, AND THE POLICIES FOR ATTAINING THEM: AN APPROACH EMPHASIZING A SUSTAINABLE TRANSPORTATION SYSTEM AND A HEALTHY REGION

Paths to a Sustainable Region has been developed within the planning framework and context discussed above. Particular challenges in the region include limited fiscal resources, climate change, energy conservation, the pursuit of greater economic prosperity, mobility needs, improving access to destinations, an aging population, an aging infrastructure, and cultural and environmental resources at risk.

Areas for new or additional emphasis in MPO planning are:

- Linking land use planning and transportation planning
- Working with limited financial resources

- Using a management and operations approach
- Protecting air quality and the environment
- Preserving and maintaining the transportation system
- Increasing transit and other “healthy transportation” mode shares
- Helping build sustainable communities

This LRTP is an opportunity to grapple with these challenges. The first step was to articulate a vision for 2035 for the region’s transportation network and its communities. In this LRTP, the visions are descriptions of the end state resulting over time from the MPO’s current and future actions.

The policies were derived from the visions. They are specific statements to guide transportation decision making in order to reach the envisioned future.

The MPO has established seven basic visions and seven correlating sets of policies to implement them. The visions and policies pertain to the following topics:

- System preservation, modernization, and efficiency
- Livability
- Mobility
- Environment
- Transportation equity
- Climate change
- Safety and security

System Preservation, Modernization, and Efficiency

Vision: The regional transportation system will be maintained to a state of good repair and will operate with maximum efficiency. It will be reliable and modern and will provide improved mobility regionwide. Automobile dependency will be reduced, and the transit system will serve more people. Modernization of the existing system will provide access and accessibility throughout for all; additions to the transportation system will also be fully accessible for persons of all abilities.

Efficiencies and operational improvements will come through ongoing system preservation, use of intelligent transportation systems (ITS) and other technologies, management and operations strategies, and a balanced program of strategic investments.



Innovative approaches will reduce auto dependency and actively promote other modes of transportation.

Expansion of the system will come through strategic investments.

Policies: Maximizing efficiency, reliability, mobility, and accessibility with our existing infrastructure and within current and ongoing fiscal constraints will require following a program of strategic, needs-based investments. To accomplish this, the MPO will put a priority on programs, services, and projects that:

- Develop low-cost strategies; pursue alternative funding sources and mechanisms
- Use ITS, new technologies, transportation systems management, and management and operations; turn to technology before expansion
- Bring all elements of the transportation network into a state of good repair and maintain them at that level; set funding levels to make this possible
- Maintain bridges and roads
- Support the increase of Chapter 90 (the grant program to fund municipalities' highway capital improvements) funding so that local road maintenance can remain focused on that program

These policies relate directly to the following federal planning factors:

- Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.
- Promote efficient system management and operation.
- Emphasize the preservation of the existing transportation system.



Livability

Vision: All residents will have the capability of moving affordably between where they live, work, get services, and play using healthy transportation options that promote a healthy lifestyle. Multimodal transportation will serve business, residential, and mixed-use centers. Transportation investments will focus on existing activity centers, including sites of economic activity and adequate public infrastructure, where density will be encouraged. These centers of community activity will grow in population density and diversity of uses. This density and mixed-use activity will better support new and increased transit services. Investments in bicycle and pedestrian facilities and in accessibility improvements will support

healthy lifestyle choices and increase mobility for everyone, including people with disabilities. Community centers will thrive with the implementation of “complete streets” and context-sensitive design principles; urban design changes in community centers will create more human-scale and aesthetically pleasing community environments. The design of the transportation network will protect cultural, historical, and scenic resources, community cohesiveness, and quality of life.

The transportation network will play its part as a foundation for economic vitality. Energy use will be managed efficiently and alternative energy sources used.

Policies: To make livability a hallmark of communities in the MPO region and to achieve mobility, foster sustainable communities, and expand economic opportunities and prosperity, the MPO will put a priority on programs, services, and projects that:

- Are consistent with MetroFuture land use planning; this means supporting transportation projects serving: already-developed locations of residential or commercial/industrial activity; locations with adequate sewer and water infrastructure; areas identified for economic development by state, regional, and local planning; and areas with a relatively high density of development
- Support health-promoting transportation options, such as bicycle and pedestrian modes, and activities that reduce single-occupant-vehicle use and overall vehicle-miles traveled
- Expand, and close gaps in, the bicycle and pedestrian network; promote a “complete streets” philosophy
- Support transportation design and reasonably priced enhancements that protect community cohesiveness, identity, and quality of life



These policies relate directly to the following federal planning factors:

- Support the economic vitality of the metropolitan area, especially enabling global competitiveness, productivity, and efficiency.
- 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.



Mobility

Vision: People in most areas of all corridors in the region will have access to transportation to jobs, education and training, health services, and social and recreational opportunities. This includes persons with disabilities, the elderly, youth, minorities, and persons with low incomes or with limited English proficiency. More communities will have more transportation options, both motorized and nonmotorized. The transportation infrastructure will accommodate freight and commercial

activity as well as passenger needs. Freight will be moved efficiently by all freight modes.

The transportation system and services will be reliable. Delays, congestion, and travel time will be reduced. Transit ridership and use of sustainable options will be increased. The system will meet people's needs; funding decisions will be guided by attention to customer service. Existing transit, bicycle, and pedestrian facilities will be linked in a network.

Policies: To improve mobility for people and freight, the MPO will put a priority on programs, services, and projects that:

- Strengthen existing and create new connections within and between modes
- Improve access to transit by all persons and the accessibility of transit for persons with disabilities
- Improve the frequency, span, and reliability of transit services
- Expand the transit, bicycle, and pedestrian networks while focusing bicycle investments (lanes and paths) on moving people between activity centers and linking with transit
- Integrate payment methods for fares and parking across modes
- Support transportation demand management, Transportation Management Associations, shuttles, and carpooling
- Address capacity constraints and bottlenecks in the existing roadway system using low-cost approaches (transportation system management strategies, management and operations strategies, ITS, and new technologies) before expansion

These policies relate directly to the following federal planning factors:

- Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.
- Increase accessibility and mobility of people and freight.
- Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.

- Promote efficient system management and operation.

Environment

Vision: Human and environmental health will be considered in transportation decision making. With transportation investments targeted to areas of existing development, many greenfields will be preserved, many brownfields will be restored and reused, and water and sewer infrastructure and other utilities will be more cost-effectively maintained. Air quality will be improved as the full range of regulated vehicle emissions (carbon monoxide, nitrogen oxides, volatile organic compounds, and particulates) and carbon dioxide are reduced to required and/or targeted levels. The transportation project design process will avoid or minimize negative impacts to wetlands, soil, water, and other environmental resources. Context-sensitive design principles will be implemented to protect communities' cultural, historical, and scenic resources, community cohesiveness, quality of life, and aesthetic environments.



Policies: To protect the environment and minimize impacts from transportation, the MPO will put a priority on programs, services, and projects that:

- Improve transportation in areas of existing development, which will reduce pressure to develop greenfields and possibly support development that will clean up brownfields for productive use
- Promote energy conservation, fleet management and modernization, and high-occupancy travel options to reduce fuel consumption and emissions of pollutants
- Protect community character and cultural resources
- Protect natural resources by planning early to avoid or mitigate impacts on stormwater or groundwater and on other resources
- Protect public health by reducing air pollutants, including fine particulates; avoid funding projects that increase exposure of at-risk populations to ultrafine particulates
- Lower lifecycle costs from construction to operation
- Increase mode share for transit and nonmotorized modes
- Promote energy conservation and use of alternative energy sources
- Promote a context-sensitive design philosophy, consistent with the MassDOT Highway Division design guidelines

Transportation agencies will work with environmental and cultural resource agencies to achieve these ends.

These policies relate directly to the following federal planning factor:

- 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.



Transportation Equity

Vision: Low-income and minority residents, as well as the elderly, youth, and persons for whom English is a second language (ESL populations), will enjoy, on a level equitable with others, mobility and access to affordable transportation options that connect them with jobs, educational institutions, and services. Environmental burdens from transportation facilities and services (existing and future) will be minimized for these persons; low-income and minority persons will not be inequitably burdened. Expansion projects will address regional needs.

Policies: To provide for the equitable sharing of the benefits and burdens of transportation investments among all residents of the region,

the MPO will put a priority on programs, services, and projects that:

- Continue outreach to low-income and minority residents and expand data collection and analysis that include the elderly, youth, and ESL populations in order to identify these residents' transportation needs
- Continue to monitor system performance
- Address identified transportation equity issues and needs related to service and to removing or minimizing burdens (air pollution, unsafe conditions, community impacts)
- Track implementing agencies' actions responding to transportation needs identified in MPO outreach and analysis related to transportation equity; encourage action to address needs
- Strengthen avenues for involvement of low-income and minority persons in decision making
- Reduce trip times for low-income and minority neighborhood residents and increase transit service capacity
- Give priority to heavily used transit services over new, yet-to-be-proven services

These policies relate directly to the following federal planning factors:

- Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.
- Increase accessibility and mobility of people and freight.
- Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.

Climate Change

Vision: The production of greenhouse gas (GHG) emissions by the transportation sector in this region will be reduced to levels that contribute appropriately to the statewide targets set by the Massachusetts Global Warming Solutions Act. The MPO region will have joined with other entities in Massachusetts and the Northeast to slow and perhaps prevent the onset of serious climate change effects. The MPO, in consultation and cooperation with state and federal agencies planning action on GHG reduction, will have adopted GHG reduction goals and taken the steps necessary to meet them. Critical elements of the region's transportation infrastructure that may be vulnerable to the impacts of climate change will have been identified and protected.

Policies: To meet the targets for reducing GHG emissions, the MPO will put a priority on programs, services, and projects that:

- Implement action to meet defined targets for reducing vehicle-miles traveled (VMT); tie transportation funding to VMT reduction
- Support stronger land use and smart growth strategies
- Increase transit, bicycle, and pedestrian options
- Invest in adaptations that protect critical infrastructure from effects resulting from climate change
- Encourage strategies that utilize transportation demand management
- Promote fleet management and modernization, idling reduction, and alternative fuel use
- Contribute to reduced energy use in the region; energy use will be part of the environmental impact analysis of all projects



These policies relate directly to the following federal planning factor:

- 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.



Safety and Security

Vision: All modes of the transportation network, passenger and freight, will provide transportation that is safe, personally and operationally, to the maximum feasible degree. The number and severity of crashes will have been reduced. State-of-the-practice ITS measures and surveillance communication systems will have been deployed on the transit system to minimize vulnerability to security breaches. Transit malfunctions will have been reduced.

Steps will have been taken to protect the viability of transportation infrastructure critical to emergency response and evacuations necessitated by natural hazards and man-made threats.

Policies: To provide for maximum transportation safety and to support security in the region, the MPO will put a priority on programs, services, and projects that:

- Implement actions stemming from all-hazards planning
- Maintain the transportation system in a state of good repair
- Use state-of-the-practice safety elements; address roadway safety deficiencies (after safety audits) in order to reduce crashes; and address transit safety (this will include following federal mandates)
- Support incident management programs and ITS
- Protect critical transportation infrastructure from both natural hazards and human threats; address transit security vulnerabilities; upgrade key transportation infrastructure to a “hardened” design standard
- Improve safety for pedestrians and cyclists; ensure that safety provisions are incorporated into shared-use corridors
- Reduce the severity of crashes, especially via measures that improve safety for all
- Promote safety through supporting the reduction of base speed limits (in municipalities) to 25 miles per hour and through education about and enforcement of rules of the road, for all modes that use the roadways
- Improve the transportation infrastructure to better support emergency response and evacuations

All-hazards planning will continue, with MPO participation, and the MPO will take appropriate action on the recommendations of that work.

These policies relate directly to the following federal planning factors:

- Increase the safety of the transportation system for all motorized and nonmotorized users.
- Increase the ability of the transportation system to support homeland security and to safeguard the personal security of all motorized and nonmotorized users.

NEXT STEPS: OBJECTIVES AND PERFORMANCE MEASURES

Guided by its visions and policies, and by the needs identified in the region, the MPO will begin developing objectives for the roadway and transit components of the region's transportation system. The Congestion Management Process and other studies and data will be used to identify transportation needs for the roadway system, which also serves the bus transit, bicycle, and pedestrian modes. These needs and other technical knowledge will be used for the identification of objectives and performance measures for the region's roadways and bicycle and pedestrian system. Input for transit needs will come from the MBTA's December 2009 Program for Mass Transportation and the Authority's ongoing program of monitoring its performance. This ongoing program is based on the MBTA Service Delivery Policy, which establishes transit service objectives and standards. The MPO transit objectives and performance measures will be derived from all of these MBTA sources.

USE OF THE VISIONS AND POLICIES IN DECISION MAKING

The visions and policies, in addition to having guided the selection of the projects and programs in this LRTP, will be integrated into the MPO's ongoing planning process, providing direction for MPO strategies and work, including technical support, studies, programs, and other improvements. Because the MPO adopted the visions and policies early in the LRTP-development process, it began applying them to its work even before this LRTP was completed. The LRTP begins the discussion of objectives and of the performance measures that will be used to track progress toward them.

The MPO is using the visions and policies to guide two of its other key planning documents. It has applied them in updating its Transportation Improvement Program (TIP) project evaluation criteria for use in the development of the FFYs 2012–15 TIP and subsequent TIPs. The visions and policies are guiding development of the annual Unified Planning Work Program (UPWP), as well, which lists the studies and programs that the MPO undertakes.

Current programs in operation at the MPO that advance the visions are:

- Transportation Equity Program, which gathers information on the transportation needs of low-income, minority, elderly, ESL, youth and elderly persons
- Coordinated Human Services Transportation planning, which identifies needs for transportation supporting human services
- Bicycle and pedestrian planning, which includes conducting bike counts and other studies and providing technical assistance to municipalities and organizations seeking to improve these facilities

- Clean Air and Mobility Program, which funds locally developed and implemented projects pertaining to infrastructure, to transportation systems management/ transportation demand management, or to transit and using funds in the federal Congestion Mitigation and Air Quality Improvement funding category
- Livable Community Workshops, which provide information and technical resources to municipalities and organizations seeking to improve the sustainability and livability of their neighborhoods
- Coordinated Local Assistance, which provides technical assistance and ideas for low-cost solutions to municipalities seeking to solve locally identified problems