

Metro Future



MAKING A GREATER BOSTON REGION



REGIONAL PLAN



GOALS AND OBJECTIVES

Metropolitan Area Planning Council
May 2008

ABOUT THE METROFUTURE REGION GEOGRAPHY AND COMMUNITY TYPES

The MetroFuture Region of Analysis

MAPC is the regional planning agency for the people who live in work in 101 cities and towns of Metro Boston, and developed MetroFuture as the official regional plan for those 101 municipalities. While MAPC's official authority ends at our statutory boundaries, the forces that shape our region do not. For this reason, MAPC chose to analyze regional trends on a broader 164-municipality region used by the Boston MPO for transportation modeling. This scale of analysis provides a better understanding of the impacts of different growth patterns. In addition, many of the policies, tools and resources will be available to municipalities outside the MAPC region.

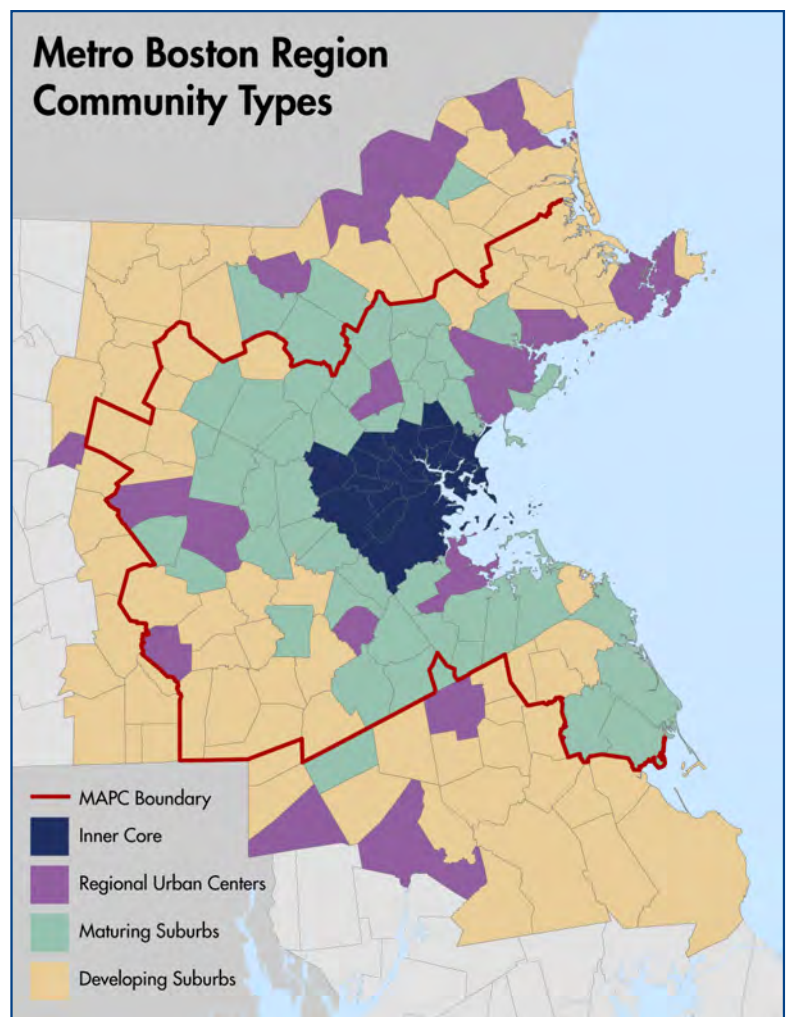
In this report, references to findings for "Metro Boston" or "regionwide" refer to the entire MetroFuture study area (164 municipalities.) When findings or recommendations refer to just the 101 municipalities, the text uses the term "MAPC Region."

Community Types

In order to understand how regional trends will affect the region's diverse communities over the coming decades, MetroFuture identified four basic community types. While each city and town is unique, communities within each type share important characteristics that will influence their development over the coming decades. The criteria used to define Community Types include land use and housing patterns, recent growth trends, and projected development patterns.

Many of the findings and recommendations in this report are described in terms of Community Types, and many of the recommendations refer to application in different Community Types. However, there is considerable variability even within community types, and the classifications are in no way determinative with regard to policy recommendations or allocation of resources.

In this report, findings or recommendations for "Urban" communities or municipalities refer to the Inner Core and the Regional Urban Centers. "Suburban" communities and municipalities include those in the Maturing Suburbs and Developing Suburbs.



Inner Core

These are the high density cities of Boston, Cambridge, Somerville, Revere, Everett, and Chelsea, as well as more residential “streetcar suburbs.” The Inner Core is essentially “built out” with little vacant developable land. Virtually all recent development has occurred through infill and reuse of previously developed land. Multifamily housing is a significant component of the housing stock, as is rental and subsidized housing. Most employment is concentrated in Downtown Boston and portions of Cambridge. Streetcar suburbs are built around village-scale commercial districts.

- 16 cities and towns, including the “streetcar suburbs” inside Route 128
- 1.3 million residents (31% of year 2000 population)
- Below average residential growth rates (6% projected if current trends continue)
- High density neighborhoods, multifamily housing, large immigrant populations

Regional Urban Centers

This group includes urban centers outside of the Inner Core. These communities are characterized by an urban-scale downtown core with multiple blocks of multi-story, mixed use buildings; moderately dense residential neighborhoods surrounding this core; and (in some cases) lower density single-family residential development beyond. Some of these communities are ‘built out,’ while others still have vacant developable land around the periphery of the community. Rental housing and multifamily structures comprise a significant component of the housing stock.

- 21 urban centers mostly outside Route 128
- 1.0 million residents (24% of year 2000 population)
- Below average residential growth rates (9% projected if current trends continue)
- Urban neighborhoods, large immigrant communities
- Some have large amounts of developable land

Maturing Suburbs

These municipalities are moderate-density residential communities with a dwindling supply of vacant developable land. Less than 25% of their land area is still developable. Less than 20% of their land area is devoted to commercial and industrial uses, although some of these towns comprise significant job centers. More than half of their housing units are owner-occupied single family homes.

- 50 towns, generally along Route 128
- 1.0 million residents (24% of year 2000 population)
- Average residential growth rates (11% projected if current trends continue)
- Mostly moderate density neighborhoods
- Dwindling supply of unprotected developable land

Developing Suburbs

These are less-developed towns with large expanses of vacant developable land. Most have recently experienced high rates of growth, primarily through large lot single-family homes. Some towns have a locally-significant stock of rental units and units in modestly-sized multifamily structures. Many of these towns have a well-defined, mixed use town center. Others have town centers with historical and civic significance but no commercial or neighborhood function. The extent of economic development varies but is generally quite limited.

- 77 towns, generally along I-495 and on the North and South Shores
- 900,000 residents (21% of year 2000 population)
- Above average residential growth rates (19% projected if current trends continue)
- Some have strong town centers and moderate density neighborhoods, others are more rural
- Large supply of vacant land available for development

THE FUNDAMENTALS: DEMOGRAPHIC, ECONOMIC, AND GLOBAL TRENDS

Steady—but Slow—Growth

Based on historic trends in birth rates, mortality, and migration, we expect **546,000 new residents by 2030**, an increase of almost 13%. This is in line with recent U.S. Census projections for Massachusetts, but much slower than the projected national growth rate of 28%. **Average household size may decrease** from 2.6 to 2.4 people per household.

What it means:

- The region will need to build **349,000 new housing units**.
- **Slow growth could turn into no growth** if more people move out of the region or fewer immigrants move in.

An Aging Region

As the Baby Boomers move into their 60s and beyond, the **over-55 population will increase by 78%**. In 2030 one-third of our residents will be 55 or older. Meanwhile, all other age groups will shrink—including school-age children.

What it means:

- The demand for senior housing will remain strong, and there will be increased demand for senior services and transit.
- If more seniors decide to retire elsewhere due to high housing costs in the region, the projected population growth may evaporate.
- Region-wide, the **school-age population may decline** by 6%.

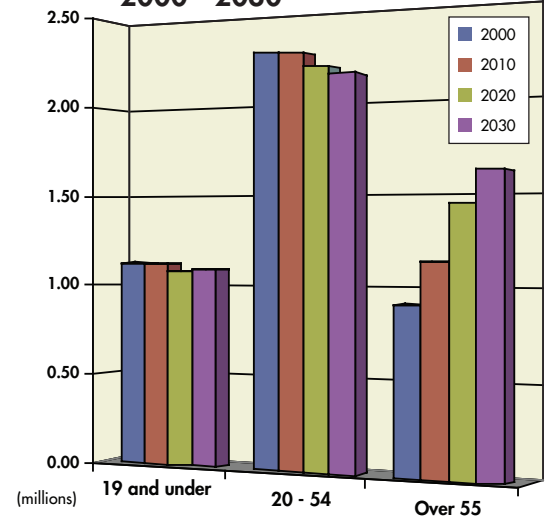
Increasing Diversity and Segregation

Our region will become more diverse over the coming years. By 2030, we expect that 31% of the region will be Black, Hispanic, Asian, or another non-White race. If recent trends continue, most growth in non-White populations may be confined to a dozen urban cities, and the racial mix of the region's suburbs will change very little. International **immigration is a key part of our region's growth**, since it makes up for the loss of population to other states. By 2030, almost one-quarter of our region will be foreign-born. Many immigrants have a bachelor's degree and arrive prepared to work in high-skill jobs; others have little education and come seeking new opportunities.

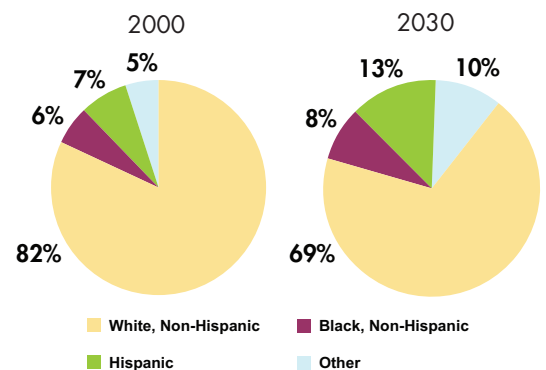
What it means:

- Failure to provide housing opportunities for lower-income families in suburban communities will worsen regional segregation.
- The increasing number of children from homes where English is not the primary language will create **challenges for many public school systems**.
- Post-9/11 immigration restrictions, if extended or tightened, may create long-term declines in immigration among skilled workers and students.
- High housing costs or a sluggish economy may drive more residents to move to other states, depleting the region's supply of skilled labor.

Population by Age, MetroFuture 2000 - 2030



Population Diversity in Metro Boston, 2000 - 2030



Moderate Economic Growth

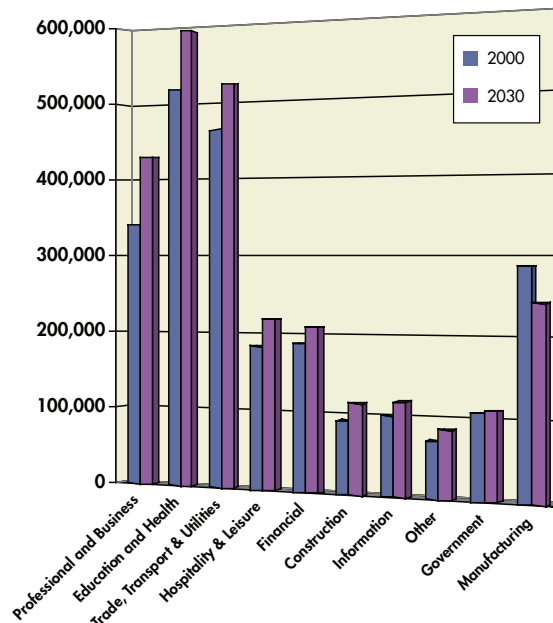
MAPC projections suggest that the region's economy may add 293,000 jobs from 2000 to 2030, an increase of 12.4%. A closer examination indicates that some sectors will grow more than others. Half of the net new jobs are expected to be in **Professional & Business Services and Education & Health Services**. Manufacturing is the only sector expected to decline, mirroring national trends; **we may lose 46,000 manufacturing jobs**, a decrease of 16%.

Professional and Business Services: 89,000
Education and Health Services: 77,000
Transportation, Trade, and Utilities: 57,000
Leisure and Hospitality: 35,000
Manufacturing: -46,000

What it means:

- The loss of manufacturing jobs creates a need for workforce retraining.
- Gains in Education and Health Services suggest that the region will remain a national leader in this field, though rising costs and infrastructure limits could constrain the growth of academic and medical institutions.
- The Leisure and Hospitality Sectors may not grow as fast if unattractive development detracts from the New England character that brings tourists to the region.

Employment by Sector, MetroFuture 2000 – 2030



Global Trends

Increasing demand for oil and depletion of supplies is likely to drive up energy prices. **Global warming** may alter the region's temperature and rainfall patterns, and will increase the demand for renewable energy. Modernization of China, India, and a host of other countries will increase **international economic competition** and off-shoring of jobs at all skill levels.

What it means:

- Energy efficiency and leadership in renewable energy technologies may help to protect the region from energy price spikes and can provide a major growth industry.
- Gas prices may rise enough to affect the cost of goods from outside the region, making local food production more important.

THE METROFUTURE VISION

The MetroFuture plan is built on a positive and inclusive vision for a Greater Boston Region. That vision, created by the thousands of people who have participated in the process, reflects the special character of Metro Boston and the diverse values of the people who live and work here. The 65 specific goals of MetroFuture define how this plan would balance the various elements of that vision, and the objectives associated with each goal will allow the region to assess whether we are moving toward a brighter future.

MetroFuture's vision for a Greater Boston Region comprises a constellation of unique cities and towns, full of character and rich in culture. A regionally-minded population will make decisions based on informed civic engagement, political leadership, and proactive planning. The region will see growing regional diversity as an asset that can make the lives of all groups richer, and the region more attractive. The region will have more housing options that meet the diverse needs, especially those of seniors and families. Great schools in every community will help to create an educated populace, to provide opportunity, and to drive the economy. All people will live in healthy and safe communities, with local governments that have the resources they need to provide the services people expect. The region will retain its special landscape, unique to New England, and its environmental integrity, with healthy water, clean air, working farms, quiet forests, and beautiful coastlines. The region's economy will be strong, supported by a well maintained transportation system that provides people with different ways to get around. Communities work together to find common solutions for common problems.



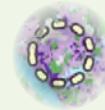
Metropolitan Core

- Job growth built around medical and educational institutions, and other major industries
- Improved schools, safety, parks attract families and retirees
- Build on role as the "hub" of the regional transportation network



Regional Hubs

- Rebirth of industrial cities and downtowns
- Focused growth in major suburban economic centers
- Best prospects for new transit outside of Metro Core



Suburban Centers

- Maximize potential of major town centers and existing transit
- Mixed-use growth expands housing choice and tax revenue
- New local bus connections and bike/pedestrian paths



Transportation Corridors

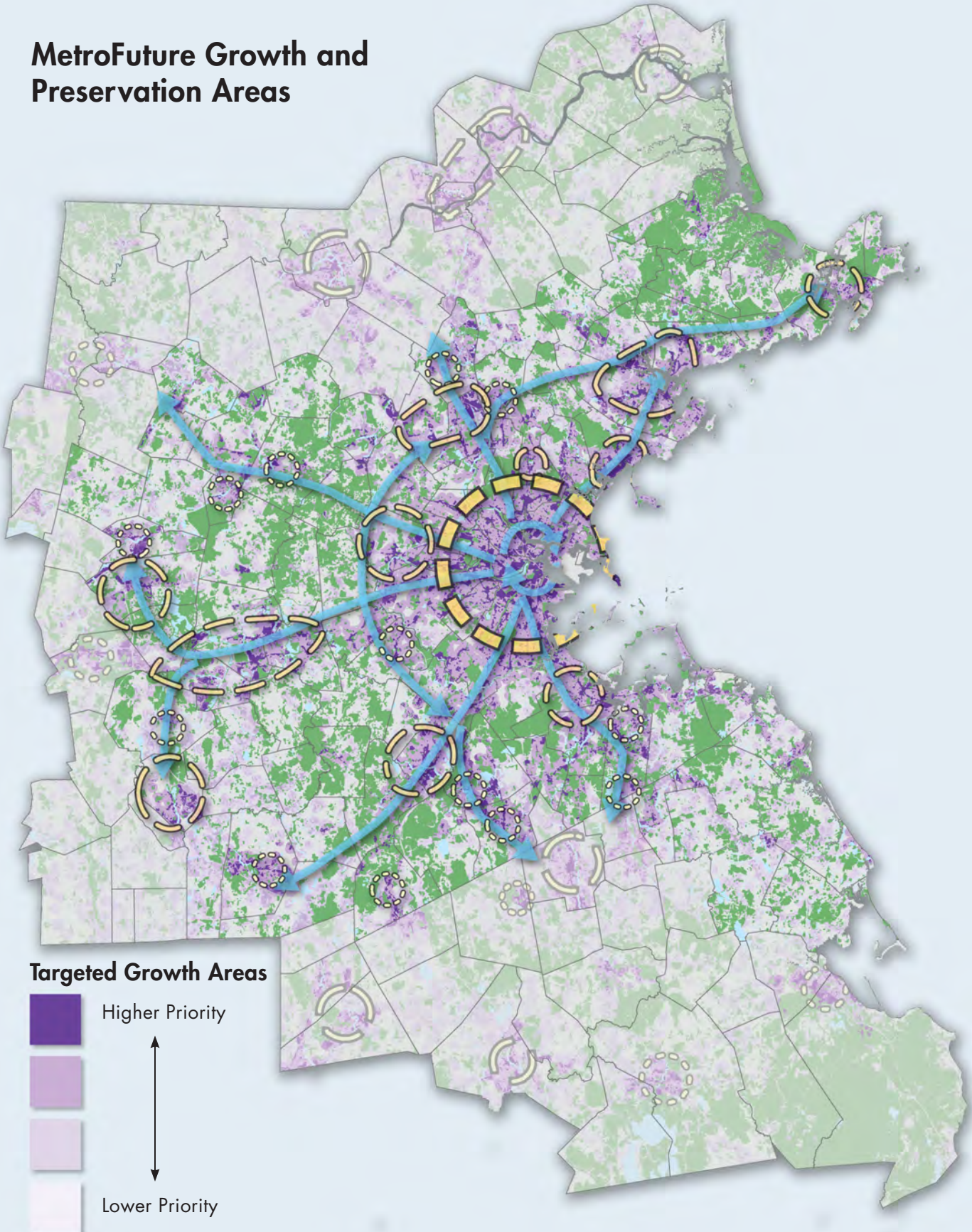
- Multi-modal investments to support growth
- New transit allows people to circulate around MetroCore, as well as "in and out."



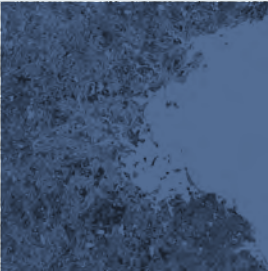
Priority Conservation Areas

- Areas with significant natural, scenic, agricultural, and recreational values

MetroFuture Growth and Preservation Areas



The MetroFuture scenario for growth and development will help to bring us closer to that vision. Key elements of the scenario described below, organized by the six topic areas that structure the remainder of this chapter.



Sustainable Growth Patterns

MetroFuture envisions great changes in the region's growth patterns. Instead of being dispersed across the region, more growth would occur in the region's city and town centers, bolstered by improvements to schools, safety, and parks. Many fast-growing suburbs would grow more slowly while expanding housing choices through more small homes and townhouses. In rural areas, increased land protection, working farms, and clustered homes would help to preserve traditional landscapes. Region-wide, more growth would occur through the reuse of vacant commercial and industrial sites, both large and small. More mixed use developments (for example, housing located above shops) would help to revitalize local business districts. More new jobs would be located closer to where people live, where there is existing infrastructure, and where employees have more commuting choice. Consistent planning, zoning, and design guidelines would expedite high-quality developments that improve community character and the economy.



Housing Choices

New housing in the region would favor a wide range of housing types. New apartments, townhouses, and condominiums in urban neighborhoods and town centers would create more choices for the retiring population of Baby Boomers, helping more of them to stay in their community and freeing up supplies of existing single family homes. In cities both large and small, an increased supply of urban "starter homes" (lofts, condominiums, two-families) would help to attract and retain young professionals and their families. An increased emphasis on smaller and more affordable homes, both rental and ownership, would help residents who either don't need or can't afford large single family homes. Over half of the region's new moderately priced housing would be in suburban towns, providing more opportunities for lower income families to live anywhere in the region, and helping to reduce regional segregation.



Community Vitality

More cities and towns would save money, raise revenue locally, and control their fiscal destinies. Savings would accrue through statewide insurance programs and multitown collaboration on purchasing and basic services such as emergency dispatch and animal control. Increases in state aid would target those communities with the largest expenses for new growth under the plan. Many smaller towns would see slower growth rates and would therefore have less need to build new schools and infrastructure. Municipalities would have incentives and technical support to ensure that zoning and land use decisions reflect local and regional goals. A strong regional food system—linking farmers, distributors, markets, and consumers—would improve access to healthy and local food. Well-designed developments, improved sidewalks, and more bicycle paths would provide more opportunities for residents to have an active lifestyle. With more healthy food, a cleaner environment, and improved parks, more families—especially those in urban areas—could lead healthier lifestyles.



Prosperity

MetroFuture would help the region to remain competitive in the global knowledge economy. Dramatic public education improvements, more adult education opportunities, and a stronger network of community colleges would create a skilled workforce that will drive economic growth. Support services such as child care assistance would enable more people to join the labor force. More job growth would occur through redevelopment of existing commercial and industrial areas, aided by proactive planning policies that would reduce time spent in permitting. Fewer new jobs would be located in currently undeveloped "greenfields." New office space in town centers would attract small businesses and micro-enterprises, enhancing the region's creative economy.

Getting Around

With more new jobs and houses in cities, town centers, and commercial districts, more people could walk or take transit for work and play. Local buses and “feeder” service to commuter rail stops would increase transportation choices in suburban communities. Increased population and ridership in urban areas would drive service improvements, including increased frequency and new services. Less money would be spent on expanding major highways and interchanges, in favor of improvements and programs that would provide more alternatives to driving. Local traffic in town centers and downtown areas might increase with new jobs and housing, so pedestrian improvements and “traffic calming” will be used to make it more convenient for people to conduct errands on foot or by bicycle. An expanded network of bicycle and pedestrian routes and trails would provide better access to regional open spaces.



Energy, Air, Water, and Wildlife

New technologies and practices would ensure conservation and sustainable use of natural resources. Smaller, more efficient housing units, increased renewable energy production, and less reliance on the automobile will be major drivers in the reduction of the region’s greenhouse gas emissions. Comprehensive water conservation and reuse would reduce demand on public water supplies, while innovative wastewater and stormwater techniques would improve the health of local water resources. Greater energy efficiency would protect the region from spikes in energy costs and would support new industries and job growth. Perhaps more importantly, our local environment would be healthier and Metropolitan Boston would be doing its fair share to curb global climate change.



HOW THIS CHAPTER IS ORGANIZED

The remainder of this chapter includes a narrative description of the MetroFuture scenario, along with a description of all the goal and objectives that support that scenario. The scenario description runs continuously on the left-hand (even-numbered) pages, and the goals are presented on the right-hand (odd-numbered pages).

The MetroFuture Scenario is a narrative description of what the region would be like in 2030 if MetroFuture is implemented. Specific goal statements are embedded in this narrative and are highlighted. A detailed description of each goal can be found on the facing page.

Maps and Charts throughout the document depict current conditions, Current Trends projections, and/or MetroFuture projections

THE METROFUTURE SCENARIO

Housing Choices

Alongside local initiatives to provide more diverse housing choices, all communities will actively address and reduce the region's growing diversity. **There will be less regional integration as all municipalities increasingly reflect MetroFuture's growing diversity.** Cities and towns will create demographic differences from one another, but these differences will become much less extreme. Communities that have been falling behind the region's diversity will instead be catching up. The urban neighborhoods become areas attractive to middle-class families, cities will also become more balanced in their ethnicity. All residents will have the opportunity to live near people of other races and origins.

Change in Non-White Population, 1990-2030 (Population, % change)

Non-White Population, 2030 (Population, %)

Home Purchase Loan Applications, Denial Rates by Race/Ethnicity, 2006

THE METROFUTURE GOALS AND OBJECTIVES

There will be less regional segregation for all municipalities increasingly reflect MetroFuture's growing diversity. By 2030, the region's population will be more diverse than ever before. The region's population will be more diverse than ever before. The region's population will be more diverse than ever before. The region's population will be more diverse than ever before.

Low-income households will be able to find affordable, modern, conveniently located housing, in suburbs as well as cities, and they will be able to avoid displacement. Low-income households will find a diversified mix of affordable housing, creating a variety of housing options. Residents of urban areas will have greater choices of housing, and they will be able to remain in their communities and avoid a possible future displacement. Housing programs will be coordinated with services so that households will be effectively relocated from the region.

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Objectives:

- 1. The number of low-income households in the region will increase by 25% by 2030.
- 2. The number of low-income households in the region will increase by 25% by 2030.
- 3. The number of low-income households in the region will increase by 25% by 2030.

The MetroFuture Goals are the specific and measurable “end state” outcomes that MetroFuture seeks to achieve. There are 65 discrete Goal Statements.

The Goals Annotations provide more detail on each goal, including current conditions, MetroFuture projections, and Current Trends projections, where available

Objectives are specific quantitative targets or milestones, generally based on available data, that can be used to determine whether a goal has been achieved. Unless otherwise noted, the time horizon for all objectives is the year 2030.



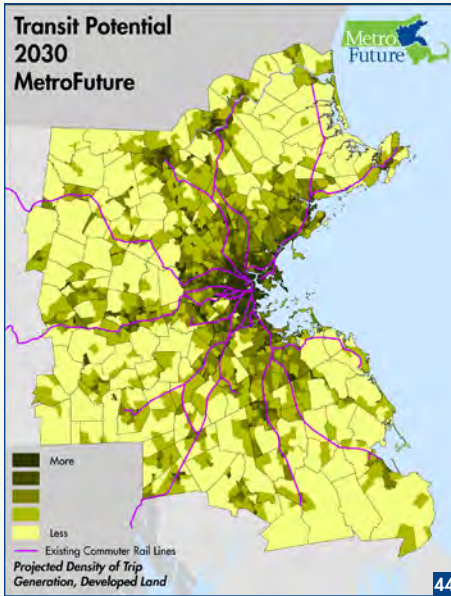
THE METROFUTURE SCENARIO

People Will Have More Transportation Choices

The MetroFuture land use plan will be accompanied by an improved transportation system that will provide more choices for residents and businesses. The region will not be free of traffic congestion, but people will have more choices for how to get around; innovative transportation solutions will ensure access and quality of life. Most significantly, **44 an expanded transit system will provide better service to both urban and suburban areas, linking more homes and jobs.** Bus and rail lines will serve more areas than they do today, supported by transit-friendly land use that makes the most of public investments. New suburban transit services will not provide universal coverage but will provide connections to job centers and along key corridors, where growth is focused and where predictable commuting patterns can be served more efficiently.

New and old residents will find transit service that meets their needs, with higher frequencies, better customer service, and reverse commute services. Thanks to shuttles and demand responses services, the region would also see less of the “last mile” problem that exists mostly in suburban areas: jobs and homes just a mile away from transit stops are effectively inaccessible due to the lack of sidewalks or local transit. Traditional transit services will also be supplemented by more informal transportation services such as car sharing and internet-based carpooling. The system will also work more efficiently and reliably due to consistent maintenance and well designed bus lanes and intelligent transportation services. As a result, **45 more people will use transit for work and personal services.**

By 2030, the age of chronic commuting headaches in the region will have faded, because **46 commuters will have more options to avoid congestion.** Rush hour traffic on major highways will remain a challenge, but MetroFuture prioritizes transportation alternatives that create more choices, rather than expensive highway expansion projects that have a limited impact on long-term congestion. More workers will be able to find housing choices near work or transit options, so fewer will have to drive long distances. Workers will have better information on transportation access and commuting options when they decide where to locate. Coupled with a higher quality of life in urban areas, this information will encourage people to live in urban hubs where they have better access to more jobs nearby or via transit. Employers will use a similar approach, locating in areas where there workers will have more transportation options for commuting. Employers and employees will make greater use of flextime, telecommuting, and nontraditional work arrangements.



44 An expanded transit system will provide better service to both urban and suburban areas, linking more homes and jobs.

MetroFuture would make transit a more attractive option by improving service on existing lines and by extending the reach of service to new locations that can support it with transit-friendly land uses (new, old, or a mix of the two).

Regionwide, approximately two-thirds of current residents and jobs are within a mile of the MBTA system. MetroFuture focuses more than two thirds of new housing units and jobs near existing train stops and bus routes.

By focusing growth in developed areas, MetroFuture also increases the number of locations that have a “critical mass” of people, jobs, and destinations sufficient to support some sort of transit service. With additional growth in cities, town centers, and employment centers, an increasing share of the region’s residents and jobs would be at or near transit-supportive densities by 2030: (32% at densities greater than 30 residents & jobs per developed acre at the TAZ level, compared to 30% in 2000; and 53% at densities above 15 residents & jobs per developed acre, compared to 49% in 2000.) However, the existing transit system does not serve all these areas. Under MetroFuture, by 2030, there would be 575,000 residents and jobs at densities above 15 persons per acre, but in locations beyond the reach of the existing transit system.

The plan also seeks to address the “last mile” problem that exists where homes and jobs that are near (within two miles) transit stops but not

within walking distance. With new fixed route or demand response service, all residents and workers near transit could access the station with no more than a 5-minute walk to the station or to connecting service.

Objectives:

- All Traffic Analysis Zones with a density of 15 persons per developed acre will be served by fixed-route transit.
- All residents and employees who live or work within two miles of a commuter rail station will have access (5-minute walk) to bus or other services providing connections to that station.
- In each municipality, average commuting time by transit to the municipality where the largest share of residents work will be equal or better than commuting time by car.
- The region will fully implement all transit projects in the State Implementation Plan (SIP.)

Key implementation strategies: 1, 12, and 4

Supporting implementation strategies: 11, 6, and 5

45 More people will use transit for work and personal trips.

MetroFuture would more than double the number of trips made on transit, through expansion and improvements to the existing system; creation of more suburban transit services; land use plans and site designs that promote transit use; and a steady increase in gas prices

Central Transportation Planning Staff transportation modeling results indicate that MetroFuture could increase the number of transit trips by at least 50%. MetroFuture has established a more ambitious goal of more than doubling the regional transit mode share, from 6.3% to 13.8%, based on the expectation that the region would pursue more ambitious improvements to transit and land use than accounted for in the CTPS model.

Applied to a growing number of trips overall, this mode split means that the number of total transit trips regionwide would increase by 150%, from 900,000 to 2.2 million. Since many commuter trips are easier to serve with transit due to their predictability, the relative increase in the number of commuter trips made via transit would be even greater (200% increase).

If Current Trends continue, transit mode share would increase slowly, to just 7.8%. People will find transit to be increasingly inconvenient, due to the dispersal of land uses, poor service quality, and lack of access.

Objectives:

- Regional mode share for public transit would increase from 6.3% to 13.9%.
- The number of people who take transit to work will triple.
- The region would see 2.2 million daily trips transit ridership.

Key implementation strategies: 1, 12, 11, 6, and 5

Supporting implementation strategies: 8

46 Commuters will have more options to avoid congestion.

An increasing share of workers would avoid congestion through transit, flextime, telecommuting, carpooling, and other nontraditional work and commuting arrangements. The greater share of new jobs and housing near transit will make it more likely that people can commute via transit, even when they change jobs. Congestion and related delay hours would not decline for rush-hour auto commuters; but more workers would be using alternative modes or other work options, so that the delay hours per person or per employee would decline.

Currently, 34% of the region’s workers spend more than a half hour in their car to get to work; and 7% spend more than an hour in the car.

Objectives:

- Fewer than 34% of the region’s workers will have an auto commute that takes more than 30 minutes.
- The proportion of people walking or biking to work will increase from 17% to 25%.
- The proportion of commuters who carpool will double.
- There will be an increase in the number of jobs within one hour via transit for the region’s residents.
- There will be an increasing proportion of workers who telecommute at least one day per week.
- Total annual delay of 23 hours (2005 delay) per person will not increase.

Key implementation strategies: 1, 12, and 10



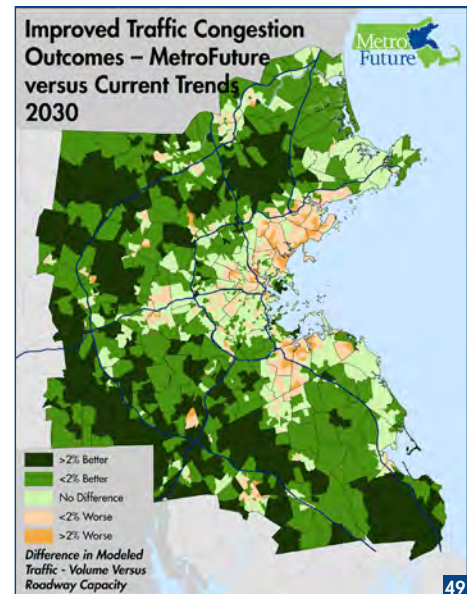
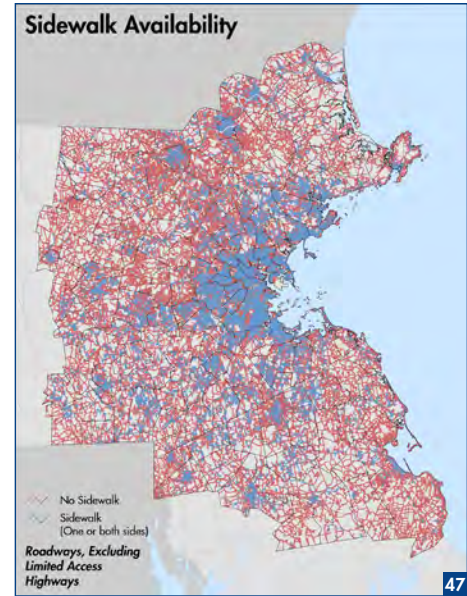
THE METROFUTURE SCENARIO

Residents will also use their cars less for errands and local trips. In urban neighborhoods, town centers, and new compact growth areas, people will find a connected network of sidewalks and paths. With more concentrated growth patterns, people will live closer to shops and services, and shops and services will be clustered together in revitalized town centers. Instead of making many short, fuel-inefficient trips by car, **47 most people will choose to walk or bike for short trips** to school, convenience shopping, or even to the gym! An increase in walking and biking access will help to mitigate demand for parking in commercial districts; and parking requirements will be less of a constraint on economic development; with less land devoted to parking, more land can be used for economic development. With shorter trips for shopping and work, increased transit service, and more people choosing to walk or bicycle, **48 the average person will drive fewer miles every day.**

As a result, people will spend less time in the car, less money on gas, and more time with their families and communities.

With a concentration of growth in existing town and city centers, **49 outlying areas will see little increase in traffic congestion.** The region's lower density suburbs will experience less commercial and residential development; but they will also have less traffic congestion and fewer people driving around.

Those who cannot or do not want to drive will find more places where they can live without owning a car; in particular, **50 people with disabilities will find it easier to get around the region.** All elements of the transit system will be fully accessible.



METROFUTURE GOALS AND OBJECTIVES

47 Most people will choose to walk or bike for short trips.

MetroFuture would double the share of trips made by walking or biking. This would come about through greater connectivity of sidewalk and path networks; better maintenance of sidewalks and bike paths; and closer proximity of new housing, shops, services and schools. At least 200 miles of new off-road multi-use paths would be built in the MAPC region alone.

With improved sidewalks, safety, and site design, MetroFuture seeks to achieve a regional walk/bike share of 25%. (The CTPS transportation model projects that MetroFuture land use patterns alone could increase the regional walk/bike share from 16.7% in 2000 to 18.9% in 2030, without any major changes in pedestrian connections, site design, or gas prices.) People would make nearly 4 million trips by foot or bike each day, a 68% increase from 2000. Most of this increase would result from walking or biking for the shortest trips, which are often the most fuel-inefficient.

Currently, 66% of the region's streets and roads (excluding limited access highways) have no sidewalk. 69% of the MAPC region population lives more than 1 mile from an off-road multi-use path. If Current Trends continue, more of the region's growth would be in low-density areas with the most dispersed destinations (shops, services, and schools) and the lowest proportion of roadways with sidewalks. The mode share for walking and biking would increase only slightly, from 16.7% to 17.7%.

Objectives:

- 25% of all trips will be made on foot or by bicycle.
- 60% of region's streets and roads (not limited access highways) will have sidewalks on at least one side of the road.
- There will be at least 200 miles of new off-road multi-use paths in the MAPC region.
- There will be a steady reduction in the rate (per bicyclist mile) of auto-bike crashes that result in death and bodily harm.
- There will be a steady reduction in the rate (per pedestrian mile) of auto-pedestrian crashes that result in death or bodily harm.

Key implementation strategies: 12, 6, and 5

Supporting implementation strategies: 7

48 The average person will drive fewer miles every day.

MetroFuture's emphasis on alternative modes would allow the region's residents to rely less on

their cars, with a goal of reduce the regionwide automobile mode share from 77% in 2000 to 61% by 2030. The greatest improvements would be made in urban areas, where fewer than half of all trips would be auto trips (down from 56% currently). Regionwide, even as the number of residents and jobs grows by 13% and 11%, respectively, MetroFuture would reduce the actual number of vehicle trips and the total miles traveled by 5%. The vehicle miles traveled per person would decline by 15%. Thanks to proximity of shops, convenience of transit, and availability of car-sharing services, more households would be able to live with a single car, and many could live well with no car at all.

Currently, the region's residents and workers drive 107 million miles per day for commuting, work, delivery, and personal trips; equivalent to 25 miles per person per day. If Current Trends continue, the number of vehicle miles travelled would increase faster than population and jobs. The region's residents and workers would be driving an additional 17 million miles each day, an increase of 16% overall, and 5% per person after accounting for population growth.

Objectives:

- There will be a 15% reduction in per-capita vehicle miles traveled by automobiles registered in the region.
- There will be a steady reduction in the number of cars per resident.
- An increasing proportion of the region's households, distributed equally across income levels, will have no car.

Key implementation strategies: 12, 6, and 5

49 Outlying areas will see little increase in traffic congestion.

MetroFuture focuses growth in urban communities and developed suburban areas with the infrastructure to support it. Other portions of the region will see slower growth rates than they would under Current Trends and, as a result, slower increases in congestion.

CTPS model results indicate that regionwide average congestion levels (measured in terms of vehicles/roadway capacity, at the TAZ level) would increase slightly from 55.5% in 2000 to 58.7% in 2030 under MetroFuture land use patterns. The increase in congestion would be markedly less than would occur if Current Trends continue (would increase to 59.2%, even with lower overall growth rates than MetroFuture). The improvements would be most significant in the Developing Suburbs, where average congestion levels would be 4% less under MetroFu-

ture than under Current Trends. Assessed at the Traffic Analysis Zone level, 75% of the region's area would have lower levels of congestion under MetroFuture than under Current Trends.

The MetroFuture land use plan and emphasis on transit and walkability would fully mitigate increased density in suburban growth centers. Suburban employment hubs and town and village centers would see 40% more new housing than they would if Current Trends continue, but would have comparable or lower levels of average congestion. Meanwhile, suburban areas outside of growth centers would experience average congestion 1 – 2% lower than they would if Current Trends continue.

Objectives:

- Traffic congestion (roadway volume/capacity) will not increase by more than 10% across all suburban municipalities.

Key implementation strategies: 1, 12, 5, and 7

50 People with disabilities will find it easier to get around the region.

MetroFuture's emphasis on compact development, alternative transportation, and social services would make it easier for people with disabilities to get around in Metro Boston. People with limited mobility would be able to physically access most new housing, regardless of whether it was created specifically for disabled populations. Application of Universal Design principles would help to ensure that homes, workplaces, public spaces, and information are usable by the widest range of people operating in the widest range of situations without special or separate design.

Objectives:

- All transit stations and vehicles (MBTA and RTAs) will be fully handicapped accessible.
- 100% of municipalities will be served by demand response service with average response times less than 30 minutes.

Key implementation strategies: 12

Supporting implementation strategies: 5



THE METROFUTURE SCENARIO

Like all public infrastructure, transportation investments can either enable or curtail continued dispersal of jobs and homes. In order to make the most efficient use of limited transportation resources, **51 regional transportation planning will be linked with sustainable land use planning.** In order to support MetroFuture's plan for focused growth (and all its appurtenant housing, environmental, social, and fiscal benefits), transportation resources must be similarly focused. Resources are limited, and investments must be targeted to locations where the investment is needed most and will have the greatest impact. The benefits of these investments would be judged not by increase in lane miles or capacity, but by improved accessibility, diversity transportation options (mode choice), economic and environmental benefit to the Commonwealth, alignment with state policy, and long term effectiveness. Municipalities would have increased responsibility for allocation of transportation funding, providing them with incentives to consider long-term transportation impacts when making land use decisions.

The region will allocate limited resources more effectively, but the pie will also be larger since **52 the transportation system will be reliably funded and transportation agencies will demonstrate accountability to the public.** Rational decision-making and transparent/efficient project delivery will generate public support for expanded revenue sources. The MBTA will be free of crippling debt and benefit obligations, so it can focus on providing high quality service. Municipalities will use a diversity of revenue streams to make transportation improvements, including traditional public revenue sources, tolling, congestion pricing, impact fees, value capture tools, and other innovative approaches to leverage private capital. Local governments will also have more freedom to generate local funds for transportation improvements.

The public will have little appetite for increased revenue if they are not confident that it will be spent efficiently. Publicly available performance analysis of project delivery will increase accountability across transportation agencies, from programming to project delivery. With reliable funding streams and greater accountability to the public, **53 transportation projects will be designed and built cost-effectively.**

With a renewed regional focus on focused growth near existing infrastructure, more transportation resources will be directed to maintenance or improvements that enhance safety and provide transportation choice. **54 Roads, bridges, and railways will be safe and well-maintained.** Maintenance of both passenger and freight facilities will ensure that **55 the region's businesses will access the global marketplace through an efficient freight transportation network.** More of Metro Boston's commerce would be directed onto its rail and port systems, reducing congestion, emissions, and the costs for goods imported into the region. Focused growth of housing and employment in suburban locations would make it more efficient for delivery and distribution companies to access new growth.

51 Regional transportation planning will be linked with sustainable land use planning.

The MetroFuture region would use limited transportation resources wisely. Land use impacts will be clearly quantified using up-to-date information and modeling tools. Priority will be given to those projects that support a land use plan that will efficiently utilize new transportation capacity to support sustainable growth.

Objectives:

- No Federal Aid and Non-Federal Aid resources will be allocated to transportation projects with a land use rating that is in the bottom third of the MPO Universe of Projects.
- No transportation projects over \$50 million will be programmed without a comprehensive corridor land use plan.
- Funding for community-based transit such as shuttle services and on-demand services will be at least 5% of the total transportation budget.
- Funding for sidewalks, bike paths, and rail trails and transportation demand management programs will be at least 5% of the total transportation budget.
- Funding for expansion of transit network (subways, bus, and commuter rail) will be a greater proportion of the region's transportation budget than is spend on roadway expansion projects.

Key implementation strategies: 1, 12, 11, 5, and 2

Supporting implementation strategies: 10 and 9

52 The transportation system will be reliably funded and transportation agencies will demonstrate accountability to the public.

MetroFuture would supplement traditional transportation revenue sources with tolling, congestion pricing, impact fees, value capture tools, and other innovative approaches to leverage private capital. Long-range transportation plans and annual programs would be constrained by realistic financial assumptions; fewer projects would be paid for by borrowing from anticipated future revenues.

Under the current tax and tolling system, road users do not pay for themselves. Massachusetts pays for 52% of its highway system with bonds; only 15% is paid for by gas tax revenue (48th nationally) and 6.5 % through tolls.

Objectives:

- The region will complete 95% of maintenance targets annually.

- 95% of roadway maintenance and transit maintenance funding will be allocated according to the priorities of a comprehensive transportation asset management system.
- There will a steady decrease in the MBTA debt service costs.
- A growing share of transportation funding in the region will come from user fees and value capture tools.

Key implementation strategies: 3, 12, and 4

Supporting implementation strategies: 2

53 Transportation projects will be designed and built quickly and cost-effectively.

Transportation projects will be chosen in an efficient, transparent manner, and those choices will be based on realistic estimates of costs and revenues. Fewer projects would suffer delays due to unforeseen cost increases or revenue decreases, which will in turn help to improve public perception of transportation projects.

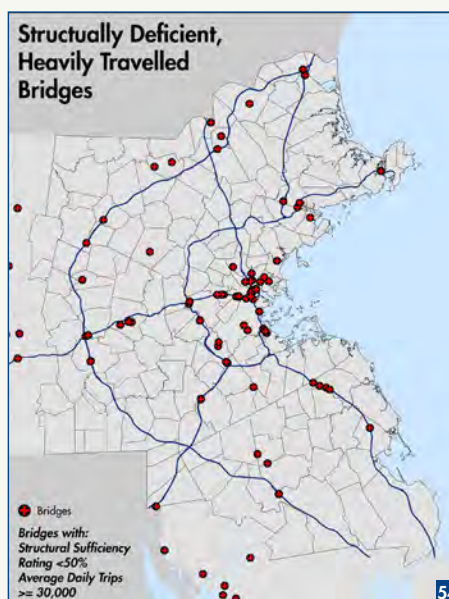
Objectives:

- 90% of transportation infrastructure projects will be complete on time and within budget.

Key implementation strategies: 12

54 Roads, bridges, and railways will be safe and well maintained.

With a renewed focus on growth in developed areas where infrastructure is available, more funding would be allocated to maintenance or improvements (including safety enhancements and multimodal adaptation) of existing transportation assets.



In Metro Boston, there are currently 120 structurally deficient bridges that carry over 30,000 vehicle trips each day. 40 of these bridges carry over 60,000 vehicles per day, and a dozen carry over 100,000 vehicle trips per day. Statewide, 18% of bridges under the jurisdiction of the Department of Conservation and Recreation are structurally deficient, as are 16% of city and town bridges.

Objectives:

- At least 70% of state-maintained roads will be in good repair.
- 90% of auto crashes will be cleared from the roadway within 90 minutes.
- The number of structurally deficient bridges will not increase.
- All municipalities will have a pavement management system in place.

Key implementation strategies: 3 and 12

55 The region's businesses will access the global marketplace through an efficient freight transportation network.

Metro Boston's businesses will compete in the global marketplace thanks to efficient movement of goods and people on a well-maintained system of railways, roadways, ports, and airports.

Currently, trucks move 94% of the freight transported in Massachusetts (nationally, that figure is 78%.)

Objectives:

- 15% of the region's freight will travel by rail.
- The Port of Boston will be fully connected to the regional rail network.

Key implementation strategies: 12 and 11

Supporting implementation strategies: 4