

North Shore Task Force (NSTF)

Identifying Transportation Needs, Construction Projects,
and Studies in Your Subregion



House of Seven Gables, Salem. Photo courtesy of MOTT

Beverly • Danvers • Essex • Gloucester • Hamilton • Ipswich • Manchester-by-the-Sea • Marblehead
Middleton • Nahant • Peabody • Rockport • Salem • Swampscott • Topsfield • Wenham

FALL 2022

WHAT TRANSPORTATION NEEDS DID THE MPO IDENTIFY IN NSTF COMMUNITIES?

The Boston Region Metropolitan Planning Organization (MPO) conducted an assessment of transportation needs in the Boston region to inform the MPO's Long-Range Transportation Plan (LRTP), Destination 2040. The MPO staff identified existing transportation conditions and made projections of future conditions and demand on the system. MPO staff also reached out to various subregional groups to discuss transportation needs and opportunities to improve transportation in the subregional communities. The resulting LRTP Needs Assessment serves as a tool for planning the region's future transportation network and prioritizing the MPO's limited funding for transportation projects and studies.

The information that follows highlights some of the transportation needs identified in the NSTF subregion based on MPO staff's analysis and past visits to NSTF communities. This information has been updated since fall of 2020 with comments that MPO staff heard during public engagement in fall 2021. Project and study information was also updated.

Projects Programmed in the Federal Fiscal Years (FFYs) 2023–27 TIP in the NSTF Subregion

TIP Identification Number	Project	Category	Municipality	Fiscal Year Programmed
S12124	Community Connections Program	Community Connections	Regionwide	2024
S12113	Transit Modernization Program	Transit Modernization	Regionwide	2025
608933	Rehabilitation of Central Street	Complete Streets	Peabody	2023
S12698	Bluebikes System Expansion	Community Connections	Salem	2023
608348	Reconstruction of Bridge Street	Community Connections	Beverly	2023
S12700	CATA On Demand Microtransit Service Expansion	Community Connections	Gloucester and Rockport	2023
609211	Independence Greenway Extension	Bicycle and Pedestrian	Peabody	2024
605743	Resurfacing and Related Work on Central and South Main Streets	Complete Streets	Ipswich	2024
610544	Multi-Use Path Construction of Independence Greenway at Interstate 95 and Route 1	Bicycle and Pedestrian	Peabody	2025
609437	Boston Street Improvements	Complete Streets Program	Salem	2026
610666	Rail Trail Construction	Bicycle and Pedestrian	Swampscott	2027

CATA = Cape Ann Transportation Authority. TIP = Transportation Improvement Program.

NSTF Transportation Projects in the TIP Universe of Projects

Project	Category	Municipality	Scored by the MPO
Resurfacing and Related Work on Route 127	Complete Streets	Beverly and Manchester-by-the-Sea	No
Reconstruction on Collins Street, from Sylvan Street to Centre and Holten Streets	Complete Streets	Danvers	Yes
Reconstruction of County Road, from South Main Street to East Street	Complete Streets	Ipswich	No
Argilla Road Adaptation Project	Complete Streets	Ipswich	No
Bridge Replacement, M-04-001, Village Street over Marblehead Rail Trail (Harold B. Breare Bridge)	Complete Streets	Marblehead	No
Pine Street—Central Street (Route 127) to Rockwood Heights Road	Complete Streets	Manchester-by-the-Sea	No
Bridge Replacement, M-02-001 (8AM), Central Street (Route 127) over Saw Mill Brook	Complete Streets	Manchester-by-the-Sea	No
Reconstruction of Bridge Street, from Flint Street to Washington Street	Complete Streets	Salem	No
Safety Improvements on Route 1A	Complete Streets	Wenham	No
Roadway Reconstruction on Larch Row and Dodges Row	Complete Streets	Wenham	No
Targeted Safety Improvements on Route 133 (John Wise Avenue)	Intersection Improvements	Essex	No
Riverwalk Project	Bicycle and Pedestrian	Peabody and Salem	No
Route 128 and Brimbal Avenue Interchange Project (Phase II)	Major Infrastructure	Beverly	No

TIP = Transportation Improvement Program.

Transportation Studies Conducted in the NSTF Subregion through the Unified Planning Work Program (UPWP)

- [Future of the Curb Phase 2 in Salem \(FFY 2021\)](#)
- [Transportation Recovery Guidebook for Commercial Business Districts in Marblehead and Ipswich \(FFY 2021\)](#)
- Safety and Operations Analysis at Selected Intersections
 - [Route 1A and Cherry Street/Monument Street/Arbor Street in Wenham \(FFY 2018\)](#)
 - [Route 114 \(Andover Street\) at Esquire Drive and Violet Road in Peabody \(FFY 2016\)](#)
- Addressing Priority Corridors from the LRTP Needs Assessment
 - [Route 1A–Vinnin Square in Marblehead, Swampscott, and Salem \(FFY 2016\)](#)—
Resulted in MassDOT Project #607761, Intersection and Signal Improvements at Route 1A (Paradise Road) at Swampscott Mall, programmed in FFY 2021
- Subregional Roadway Study Locations
 - [Route 127/127A in Gloucester and Rockport \(FFY 2013\)](#)

Read more studies on the [Boston Region MPO's Recent Publications webpage](#).

Regionwide Transportation Studies

- [How to Operate a Successful Community Shuttle](#)
- [Pedestrian Report Card Assessment Interactive Database](#)
- [New Emerging Metrics](#)



Rockport. Photo courtesy of MOTT.

Transportation Needs Identified through Public Engagement in the NSTF Subregion

The comments below include transportation needs identified during the development of the LRTP Needs Assessment and new comments heard during the MPO's public engagement activities in fall 2021. **The new comments are in blue.**



Roadway

- Bridge Conditions
 - Upgrade the nineteenth century bridges over the Saugus River by Riverworks.
 - Address the deteriorating Harold B. Breare Bridge over the Marblehead Rail Trail.
- Create Complete Streets on Congress and Lafayette Streets in Salem.
- Congestion
 - **Improve safety and congestion at Interstate 93 Exit 46.**
 - Address severe peak hour congestion on Route 62 (east/west corridor).
 - Address grade crossings in Chelsea to increase speed along the corridor.
- Improve accessibility of the street network.



Transit

- Regionwide Needs
 - **Create first- and last-mile connections to all train stations in the NSTF subregion.**
 - **Establish inter-regional transit options for reducing single-occupancy vehicle travel within the region.**
- Destination Access
 - **Provide beach transport to eliminate parking lots on dunes and other resource areas.**
 - Improve transit to the North Shore Community College's Danvers campus.
 - Provide first- and last-mile connections to destinations in the subregions by using excess commuter rail capacity.
 - Support connectivity to hospitals, especially for patients, visitors, and employees without cars.



- **Electrify commuter rail.**
- Support making Beverly Depot a mobility hub for bike sharing, ride sharing, and car sharing in an organized way.
- New Services
 - Add Blue Line options to Lynn or Salem.
 - Add a second ferry to Salem, Marblehead, and Beverly for tourism and connections to work.
 - Facilitate connections to the Blue Line in Revere and the Silver Line in Chelsea.
 - Support the North–South rail link: increase frequency; expand service; add new stops; and increase efficiency.
 - Support a microtransit operation between Salem, Peabody, and Danvers.
 - Increase frequency of the North Shore TMA’s Wave Shuttle service.
- Workforce Transportation
 - Provide more connections for Salem residents to employment centers.
 - Provide more transportation access for younger workers who are living outside of the city (due to high rents) and using public transportation to get to work.
 - Support commuters traveling at off-peak commuting hours who do not have access to cars and cannot work from home.
 - Provide first- and last-mile links for employees from Lynn, with a specific focus on Cherry Hill Manufacturing employees, and connections to the commuter rail at the Beverly Depot.
 - Encourage developers to join a transportation management association (TMA) or fund solutions themselves.



Bicycle

- Bikeshare
 - **Create a regional bike share system.**
 - Add more bike-sharing infrastructure to transportation improvement projects.
- Bicycle Connectivity
 - Connect the Peabody Bikeway to downtown Peabody and to Salem Depot over Route 1. Add a link to the Border to Boston Trail.
 - Expand the regional bike network to promote mode shift, including a connection to Peabody and Beverly.
- Shared-Use Paths
 - Add connections to the Wakefield–Lynnfield Rail Trail in Lynnfield.
 - Connect the Swampscott section of the Northern Strand Community Trail to Lynn
 - Create a bike path over Route 1.



Land Use and Technology

- Improve transportation technology compatibility.
- Create a means for easy and predictable switching between various transportation modes.



Parking

- Expand parking near transit stations. Transit park-and-ride lots are more than 85 percent in use at the following stations:
 - Newburyport/Rockport Line: Swampscott, Beverly Depot, and Manchester
 - Haverhill Line: North Wilmington
 - Lowell Line: Wilmington
- Suggest designated Uber and Lyft drop-off and pick-up areas with queuing.



Resiliency

- Alternative Routes
 - **Create alternative routes around roads that may be flooded by sea level rise.**
 - Install an alternative corridor for Apple Street in Essex with resiliency measures against storms.
- **Expand resilient transportation infrastructure for climate adaptation.**
- Elevate low-lying sections of Route 97 in Wenham that were identified as high-priority actions in the Town's Municipal Vulnerability Preparedness program report and Hazard Mitigation Plan.

Study Ideas and Opportunities in the NSTF Subregion



Roadway

- Study Route 129 (Humphrey Street) in Swampscott.
- Study the Route 133 corridor in Essex.
- Study the Route 114 Connector in Salem and Beverly, and analyze where people with low incomes live and work.
- Study mobility and access to Route 128 from the Cummings properties.



Transit

- **Study how pandemic-induced work patterns impact prior transit goals (e.g., transit ridership and carpooling).**
- Create a comprehensive transit study for corridors in Peabody, Salem, and Danvers, similar to the Peabody Trolley Study.
- Study intra-regional and reverse commuting on the commuter rail.

- Explore connectivity between Peabody and Salem Depot, the North Shore Mall, and business parks.
- Conduct a linear corridor study along the Newburyport/Rockport Line.
- Develop first- and last-mile solutions between the commercial area of Route 128 and the Manchester commuter rail station.



Bicycle

- Develop a bicycle master plan in collaboration with Cape Ann Mass in Motion (comprised of the Towns of Gloucester, Rockport, Essex, and Manchester-by-the-Sea).



Pedestrian

- Provide technical assistance to identify bicycle and pedestrian connections to Peabody's planned Riverwalk and its Safe Routes to Schools target areas.
- Provide technical assistance for bicycle and pedestrian improvements in specific corridors in the Cape Ann area.



Land Use and Technology

- Study opportunities to increase employment close to the commuter rail or encourage employers to relocate.
- Explore the redevelopment of downtown Beverly with transit.
- Develop a database for transportation projects as one quick resource (including local priorities).
- Study the effects of autonomous vehicles (AVs); for example, the potential for increased traffic from individual ownership and more information on how quickly AVs will arrive in suburban and rural areas.
- Research the potential for AV parking without congestion increases.



Equity

- Explore a senior shuttle program in Swampscott.
- Explore opportunities for a Complete Streets project for Congress Street to support walkability and bikeability for low-income, minority, limited English proficient, and transit-dependent residents in Salem.
- Explore accessible taxis and ride-share services, and the expansion of Council on Aging van hours.
- Explore how to provide more accessible transportation for those who cannot transfer into a vehicle.

Transportation Needs Identified in the *Destination 2040* Needs Assessment

Location of Identified Need	Municipality	MassDOT-Identified HSIP Crash Cluster (all modes)	Intersects MPO Staff-Identified Truck Crash Cluster(s)	Intersects Massachusetts Top Crash Location(s)	MassDOT Pedestrian Crash Cluster	Priority Congested Location
Route 62 (Elliot Street) near Route 128	Danvers	●	●			
Route 1 (Newburyport Turnpike) at Route 1 Connector	Peabody	●	●	●		
Downtown Salem (Washington, New Derby, and Lafayette Streets, and surrounding streets)	Salem				●	
Route 128, Exit 26	Peabody					●

Note: MassDOT-identified HSIP crash clusters, MPO staff-identified truck crash clusters, and MassDOT Top Crash Locations were identified using crash data collected from 2013–15. Pedestrian crash clusters were identified using data on crashes involving pedestrians collected from 2006–15. More information on these locations is available in the Safety Chapter of the *Destination 2040* Needs Assessment report, while the Capacity Management and Mobility chapter of that report provides details about MPO staff-identified Priority Congested locations.

HSIP = Highway Safety Improvement Program. MassDOT = Massachusetts Department of Transportation.
MPO = metropolitan planning organization.

FINDINGS FROM THE BOSTON REGION MPO'S REGIONWIDE SURVEY ON TRANSPORTATION PRIORITIES FOR TIP CRITERIA

Clean Air/Sustainable Communities

Participants advocated for dramatically reducing emissions and pollution and recommended improving pedestrian and bicycle safety, increasing pedestrian and bike connectivity, and promoting equitable transportation mobility to achieve this goal. Respondents also called for stronger assessments on air pollution and for addressing the disproportionate health effects on low-income and minority communities living near high-emission roadways. They also voiced support for projects that reduce the number of personal vehicles on the road and for enhancing tree canopy coverage and green space. Additionally, participants advocated for smart growth, transit-oriented development, supporting active transportation, and prioritizing non-car modes.

Safety

Participants primarily focused on improving pedestrian and bike safety through expanding pedestrian and bike infrastructure, bringing sidewalks up to Americans with Disabilities Act accessibility standards, increasing connectivity to transit, and reducing auto speeds to prevent accidents. Participants voiced their support for maintaining and expanding the transit system to increase mode shift away from single-occupancy vehicles and to increase bike and pedestrian safety. Many also voiced support for separated bike facilities to make it easier and safer for anyone to bike—not only experienced bicyclists. They advocated for shifting of spending to focus on Vision Zero projects, improving dangerous crossings, installing light-up crosswalks, and fixing poorly timed lights and poorly painted crosswalks. They also advocated for safe and convenient walkable routes to access jobs, services, and schools. Many advocated for prioritizing areas that primarily serve equity populations, fixing broken sidewalks, and reducing conflicts between pedestrians crossing the street and turning vehicles.

System Preservation and Modernization

Participants were asked about maintaining and improving existing sidewalks, roads, and bridges. Many responded by focusing on improving overall safety rather than the maintenance and improvement of specific elements of roadways. When asked about maintaining the existing transit system, many said it was their top priority. Participants advocated for making the transit system reliable, functional, clean, safe, and dependable to increase ridership and reduce congestion. They advocated for transit expansion and prioritizing dedicated bus lanes. They supported investing in maintenance of the transit system and voiced support for equitable transportation mobility. Creating connections to jobs and services through transit options was also identified as important as was implementing more multimodal infrastructure.

Capacity Management and Mobility

Many participants advocated for creating new connections in the bike network and enhancing connections to the transit system. Participants voiced support for more separated shared-use paths to increase bike usage. They saw increased bike infrastructure as a tool to reduce emissions, reduce congestion, and promote public health by enhancing exercise and recreation options. Many respondents highlighted the idea of implementing more dedicated bus lanes as a way to increase reliability, enhance access to jobs and services, increase equity in the transit system, and reduce emissions. Participants said that dedicated bus lanes have a high impact for less investment and can be more flexible to meet community needs. Bus frequency and reliability can increase ridership and reduce the number of single-occupancy vehicles on the road. Bus lanes can also be combined with bike lanes, which increase mobility options for residents. To reduce congestion, participants called for more parking at commuter rail stations, enhancing walking options to commuter rail stations, and increased safety for walking and biking. They advocated for prioritizing person throughput rather than vehicle throughput. To reduce congestion and conflicts with pedestrians and bicyclists, participants suggested implementing curb allocation policies for trucks and delivery vehicles.

Transportation Equity

Transportation equity was one of the most selected priorities in both the online survey and focus groups. To promote more equitable transportation mobility, participants supported many of the other priorities mentioned previously with a focus on directing resources to those most overburdened by transportation emissions and underserved by a lack of adequate transportation options. They called for enhancing transportation opportunities to jobs, food stores, educational institutions, services, and locations where there are civic engagement opportunities. They advocated for safer connections to transit options and increased transit reliability. Expanding and fixing sidewalk infrastructure was also frequently mentioned. Many suggested prioritizing projects near affordable housing, supporting transit-oriented development, and incorporating more public health criteria in project evaluations.

Economic Vitality

To increase economic vitality, participants called for more transportation access to jobs, services, and small businesses with increased transit, bicycle, and pedestrian infrastructure. Expanding the transit system was frequently mentioned as well as incorporating greater consideration for affordable housing and inclusionary zoning. Participants also advocated for supporting projects that serve multiple municipalities and maximizing mobility for all using the most efficient means possible. They also emphasized the need for climate resiliency and safety to enhance access to jobs and services.

SELECTED FINDINGS FROM THE BOSTON REGION MPO'S REGIONWIDE NEEDS ASSESSMENT

Safety Needs

- Identify fatal and serious roadway crash factors and countermeasures.
- Consider capital investment, education, enforcement, and other approaches to improve safety.
- Address the MassDOT-identified Top 200 high crash intersections in the Boston region (a total of 66), such as those on Route 9 in Framingham, Route 107 in Lynn and Salem, and Route 16 in Chelsea, Everett, and Medford.
- Improve pedestrian connections at intersections, especially in top-ranking pedestrian crash cluster locations, including those in the downtown areas of Chelsea, Lynn, Quincy, Boston, and Framingham.
- Expand well-maintained and connected sidewalk and bicycle networks.
- Develop separated shared-use paths for pedestrians and bicyclists.
- Address top-ranking bicycle crash cluster locations, including those in Boston, Cambridge, and Somerville.
- Modernize obsolete interchanges, such as the Interstate 90 and Interstate 95 interchange in Weston and the interchange of Interstate 95 and the Middlesex Turnpike in Burlington, to reduce truck crashes.
- Incorporate Complete Streets design and traffic-calming principles in roadway projects.
- Identify strategies to manage roadway user priority, parking, and curb space.
- Identify and invest in priority transit state-of-good-repair and modernization projects, such as positive train control and rapid transit vehicle upgrades.
- Monitor advancements in autonomous vehicle technology and analyze the safety impacts of autonomous vehicle deployments, particularly in the Boston region.

System Preservation and Modernization Needs

- Maximize the number of bridges in the region considered to be in good condition and minimize the number of bridges considered to be in poor condition.
- Monitor the MassDOT Pavement Management Program.
- Identify the location of sidewalks and their condition, specifically sidewalks around transit stations.
- Support investments that improve the accessibility of transit stations, bus stops, and paratransit services.
- Support investments that upgrade transit fleets, facilities, and systems to provide more efficient, reliable, and sustainable service.
- Support climate vulnerability assessments and invest in projects and programs resulting from these processes.

- Improve connections between intermodal facilities and the regional road network.
- Improve resiliency of the region's transportation system to prepare for existing or future extreme conditions, such as sea level rise and flooding.

Capacity Management and Mobility Needs

- Reduce congestion on expressways, interchanges, and arterials.
- Reduce congestion at bottleneck locations on the regional roadway network.
- Continue to monitor car sharing as it is poorly integrated with other modes and not accessible in all areas.
- Continue to monitor transit demand management (TDM) services.
- Research strategies for TDM as relatively few municipalities in the Boston region have TDM ordinances.
- Reduce congestion on regional roadways to facilitate the movement of freight.
- Reduce conflicts between automobiles and delivery trucks that are competing for curb space.
- Improve access to transit service that runs frequently and increase capacity at park-and-ride lots that are at or approaching capacity.
- Improve the reliability of bus service as bus speeds are projected to decline due to increased congestion; the introduction of more dedicated bus lanes could be a potential solution.
- Address increased transit delays resulting from the system's aging rapid transit infrastructure.
- Address crowding on rapid transit lines and bus routes; according to a 2040 no-build planning scenario, crowding is projected to increase to unacceptable levels in some locations.
- Address the need for sufficient MBTA garage space to fully modernize and expand the fleet.
- Examine off-peak and reverse-commute options between suburban areas and the Boston Central Business District as the commuter rail mostly serves peak-period travel.
- Identify challenges to making first- and last-mile connections, which are major barriers to transit usage.
- Expand pedestrian and bicycle infrastructure so that residential areas and employment locations are close to facilities that are conducive to regular use.
- Connect the disjointed elements of the bicycle network to create a cohesive network.
- Create a comprehensive inventory of existing sidewalk data, including sidewalk coverage and condition.

Clean Air and Sustainable Community Needs

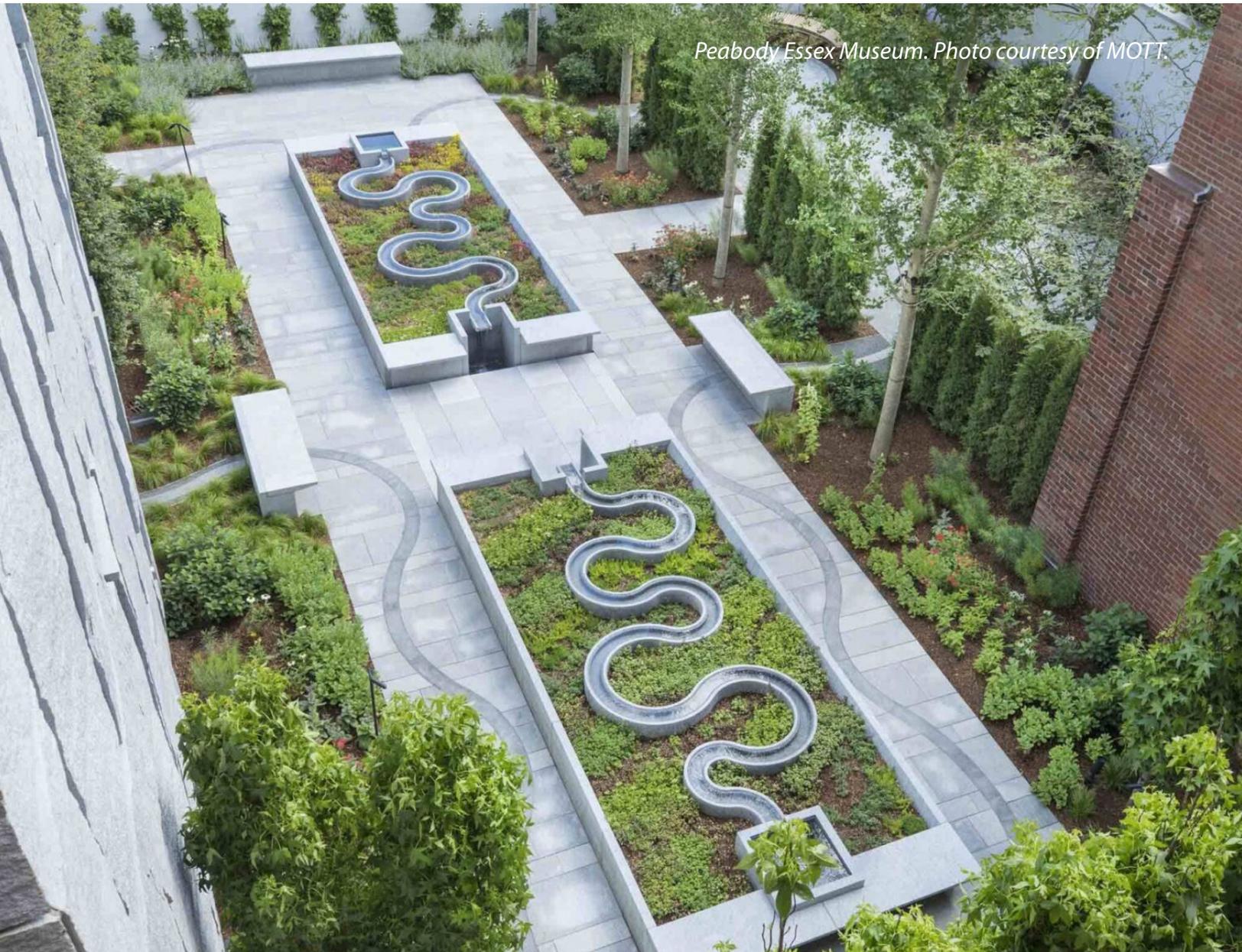
- Reduce carbon dioxide emissions by means of MPO-funded transportation projects and programs that help meet the requirements of the Global Warming Solutions Act, particularly by supporting projects that help to reduce vehicle-miles traveled.
- Prioritize transportation projects that meet the Green Communities certification and assist municipalities in meeting or maintaining these certifications.
- Provide data and assistance to municipalities for developing municipal greenhouse gas inventories and energy reduction plans.
- Reduce volatile organic compounds, nitrogen oxides, carbon monoxide, and particulate matter emissions by means of MPO-funded transportation projects and programs (particularly those that help to reduce vehicle-miles traveled) and help maintain the air quality standards in the region.
- Identify projects and programs that can meet criteria established to protect wetlands, cultural resources, open space, and wildlife.
- Ensure that project designs incorporate infrastructure to reduce storm water pollution and provide resilience in the event of natural hazard events (for example, flooding or winter storms).

Transportation Equity Needs

- Address the lack of transit service for transportation equity (TE) populations compared to service available to non-TE populations.
- Increase reliability of rapid transit and bus service for populations whose only option is transit.
- Address inadequate access to safe bicycle facilities for elderly and youth populations.
- Increase docked bike-share facilities in the Inner Core for communities with a high share of low-income or minority populations.
- Increase off-road active transportation routes in communities with a high share of TE populations that live near congested roadways.
- Improve coordination of schedules, routes, and services between towns and the MBTA and other regional transit authorities.
- Expand transit service (late night, early morning, and reverse-commute service) between job-rich centers, such as Longwood Medical Area and the Seaport in Boston, suburban job centers, and underserved neighborhoods.
- Provide new transit service between low-income residential communities in the suburbs and suburban job centers.
- Consider building transit-oriented developments that provide affordable housing near transit hubs and employment centers to meet the needs of TE populations.
- Improve sidewalks and street crossings, especially around schools, so that they are safe for children and elderly adults.
- Document potential exposure of TE populations to climate change impacts and determine how their ability to access transportation may be affected.

Economic Vitality Needs

- Administer infrastructure improvements to support growth in the priority development areas, including by improving equitable access to employment and housing via public transit, walking, and biking options.
- Arrange better commuter rail schedules to include more frequent and reliable off-peak, late-night, and weekend service and to support reverse commuting, especially for service workers.
- Coordinate with regional transit authorities to address the needs of customers who travel between different regional transit authority service areas.
- Provide funding sources to connect regional transit authority services.



Peabody Essex Museum. Photo courtesy of MOTT.

WELCOME. BEM VINDA. BIENVENIDO. AKEYI. 欢迎. 歡迎.

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To request special accommodations, or if you need this information in another language, contact the MPO at 857.702.3700 (voice), 617.570.9193 (TTY) or civilrights@ctps.org (please allow 14 days).



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Si necesita esta información en otro idioma, por favor contacte la Boston Region MPO al 857.702.3700.

简体中文 (Simplified Chinese)

如果需要使用其它语言了解信息，请联系波士顿大都会规划组织 (Boston Region MPO) 《民权法案》第六章专员，电话 857.702.3700.

繁體中文 (Traditional Chinese)

如果需要使用其他語言瞭解資訊，請聯繫波士頓大都會規劃組織 (Boston Region MPO) 《民權法案》第六章專員，電話 857.702.3700.

Kreyòl Ayisyen (Haitian Creole)

Si yon moun vle genyen enfòmasyon sa yo nan yon lòt lang, tanpri kontakte Espesyalis Boston Region MPO Title VI la nan nimewo 857.702.3700.

Português (Portuguese)

Caso estas informações sejam necessárias em outro idioma, por favor, contate o MPO da Região de Boston pelo telefone 857.702.3700.

Tiếng Việt (Vietnamese)

Nếu quý vị cần thông tin này bằng một ngôn ngữ khác, vui lòng liên lạc Boston Region MPO theo số 857.702.3700.



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