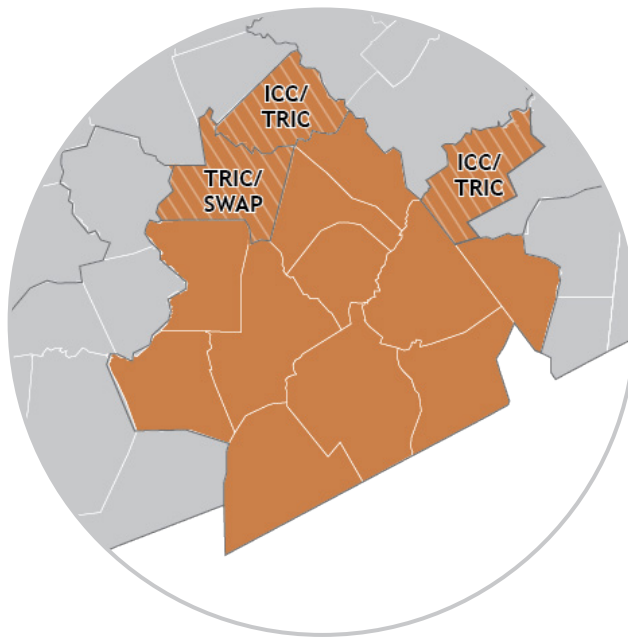


Three Rivers Interlocal Council (TRIC)

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



Fall 2019



Canton • Dedham • Dover • Foxborough • Medfield • Milton • Needham • Norwood • Randolph • Sharon • Stoughton • Walpole • Westwood

WHAT TRANSPORTATION NEEDS DID THE MPO IDENTIFY IN TRIC COMMUNITIES?

The Boston Region Metropolitan Planning Organization (MPO) conducted an assessment of transportation needs in the Boston region to inform the MPO’s current Long-Range Transportation Plan (LRTP), *Destination 2040*, adopted in August 2019. 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 their transportation needs and opportunities to improve transportation in their communities. The resulting LRTP Needs Assessment serves as a tool for planning the region’s future transportation network, and for prioritizing the MPO’s limited funding for transportation projects and studies.

The tables that follow highlight some of the transportation needs identified in the TRIC subregion based on MPO analysis, and the lists below highlight needs identified from past visits to TRIC communities for the Needs Assessment. For more information, please refer to the *Destination 2040* Needs Assessment report and interactive applications on our website: bostonmpo.org/lrtp.

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)	Truck Crash Cluster	Priority Congested Location
Interstate 93 at Route 138 (Washington Street)	Canton	●	●		
Interstate 93 and 95 Interchange	Canton	●			●
Route 138	Canton	●			●
Interstate 95 at Route 135	Dedham	●	●		
Interstate 93 (northbound) at ramp to South Main Street	Foxborough	●	●		
Route 109/27	Medfield				●
Interstate 93 (near ramps to Granite Avenue)	Milton	●	●		

Location of Identified Need	Municipality	MassDOT-Identified HSIP Crash Cluster (all modes)	Intersects MPO Staff-Identified Truck Crash Cluster(s)	Truck Crash Cluster	Priority Congested Location
Interstate 93 at Granite Avenue (Exit 11)	Milton	●	●		
Interstate 95 at ramps to Neponset Street	Norwood	●	●	●	
US 1	Norwood	●			●
Interstate 93 Southeast Expressway	Randolph	●			●
US 1	Walpole	●			●
East Street Rotary at East and Canton Streets	Westwood	●			
Interstate 95 (northbound) at ramps to East Street	Westwood	●	●		
US 1	Westwood	●			●

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.

Projects Programmed in the 2020–24 TIP in the Three Rivers Interlocal Council Subregion

TIP Identification Number	Project	Category	Municipality	Federal Fiscal Year Programmed
605857	Intersection improvements at Route 1 and University Avenue/ Everett Street	Intersection Improvements	Norwood	2022
607899	Pedestrian improvements along Bussey Street	Complete Streets	Dedham	2023
606130	Intersection improvements at Route 1A and Upland Road/Washington Street and Prospect Street/Fulton Street	Intersection Improvements	Norwood	2021
606635	Reconstruction of Highland Avenue, Needham Street and Charles River Bridge	Major Infrastructure	Needham/ Newton	2020
602261	Reconstruction on Route 1A (Main Street)	Complete Streets	Walpole	2020

TIP = Transportation Improvement Program.

Transportation Studies Conducted in TRIC Region through the Unified Planning Work Program

- Safety and Operations Analysis at Selected Intersections:
 - North Meadows Road (Route 27) and West Street in Medfield (federal fiscal year [FFY] 2020)
 - Neponset Valley Parkway and Brush Hill Road/Milton Street in Milton (FFY 2011)
 - High Street and Nahatan Street/Pond Street in Westwood (FFY 2014)
 - Central Street and Pearl Street in Stoughton (FFY 2010)
- Addressing Priority Corridors from LRTP Needs Assessment
 - Route 28 in Milton (FFY 2020)
 - Route 138 in Canton and Milton (FFY 2017 and 2018)

Transportation Needs Identified through Outreach in the TRIC Region

Roadway

- Improve Route 138 corridor using recommendations from the Central Transportation Planning Staff report (2017–18)
- Increase Complete Streets options and shuttles/transit services in anticipation of aging population and development east of Route 138
- Move forward with the Route 139 project in Stoughton and 24-inch water main needs
- Build roadway to potential mall development in Sharon
- Improve Interstate (I)-93 and Route 138 interchange in Canton
- Fix bridges over Charles River at the town line with Millis
- Reconstruct Main Street (Route 109) incorporating better lights, bike lanes, sidewalks, aesthetic features and underground utilities
- Coordinate traffic impact studies across towns and the region
- Improve Route 1 and Everett Street intersection to connect grocery stores, shopping areas, University Station, and the 34E bus

Transit

- Expand bus/shuttle service on Route 1 and 1A in Dedham, Westwood, Walpole
- Increase opportunities for first- and last-mile access to the commuter rail stations in Canton
- Encourage employers to work with the Massachusetts Bay Transportation Authority (MBTA) to provide shuttle buses to the MBTA stations
- Add on demand bus or shuttle service within towns and to adjacent towns
- Explore public private partnerships with Uber and Lyft
- Expand transit options and infrastructure in the subregion
- Expand Council on Aging shuttle services
- Provide sheltered bus stops on the Washington Street corridor for the 716 bus route in Canton
- Coordinate between agencies to increase job access, reverse commute options, and transit-oriented development
- Increase transit options for veterans, high school students, and employees of local businesses
- Enhance first- and last-mile options for employees of local businesses near the Canton interchange
- Coordinate private and public funding to supply transportation options
- Improve lighting at transit stations for passengers with low vision

- Reduce the gap between the train and the platform and make it consistent across the network
- Improve bus service from Stoughton to Brockton for workers, for the elderly to senior centers, and for youth to services
- Encourage the MBTA to adopt the Acton shuttle model
- Manage increased travel from new housing developments with transit support
- Provide travel options for commuters not traveling to Boston
- Incorporate a bus route on Main Street (Route 27) in Sharon
- Create places for buses to pull over on Route 138

Pedestrian

- Expand pedestrian infrastructure in the subregion
- Improve downtown pedestrian-friendly infrastructure
- Establish pavement maintenance for paths and sidewalks as damaged pavement can interfere with trips and can be a safety hazard

Bicycle

- Expand bike infrastructure in the subregion
- Improve bicycle and pedestrian facilities on major roads and at unsafe locations
- Add more bike racks at select locations
- Complement Complete Streets projects with Zagster bike sharing opportunities
- Increase bike connections in Canton between employers, housing, and transit on Route 138

Parking

- Create parking management system at park-and-rides lots and transit stations
- Expand parking near transit stations. Transit park-and-ride lots are more than 85 percent in use at the following stations:
 - Providence/Stoughton Line: Canton Center, Canton Junction, Sharon, Stoughton
 - Franklin Line: Endicott, Walpole
 - Needham Line: Hersey, Highland, Needham Heights, Needham Junction

Land Use and Technology

- Expand bike, pedestrian and transit options for multifamily, elderly, and low-income housing developments
- Provide subsidies for autonomous vehicle (AV) infrastructure
- Study development impacts in Walpole, Foxborough, Wrentham, and Canton

Study Ideas and Opportunities in the TRIC Region

Roadway

- Develop a traffic plan for Routes 27, 138, and 139 in downtown Stoughton
- Reroute through-traffic around downtown Stoughton to allow for development of resident-friendly higher density downtown development, and take advantage of existing train service
- Analyze Route 1 corridor and recommend first- and last-mile connections to relieve congestion and provide alternative transportation options
- Research intersection improvements for the redevelopment of the State Hospital property in Medfield to create better downtown connections
- Connect traffic impact studies across towns and subregion

Transit

- Study first- and last-mile connections in Dedham for Route 1 corridor study
- Research reverse commute opportunities in the subregion, especially by bus because employment rate is low
- Research light rail systems in other cities, especially in non-United States cities that have modern, well-functioning subway systems
- Compare housing costs in the city with transportation costs outside of the city to support more transit-oriented development for low and moderate income
- Add additional studies around the needs and solutions related to first- and last-mile connections
- Create financial incentives for companies to pass through to their employees to change the commuting habits of single-occupant vehicle drivers

Pedestrian

- Conduct walkability assessments in Dedham Square
- Work with local merchants to help increase people walking to local businesses

Land Use and Technology

- Study Medfield State Hospital planning consultants' recommendation for autonomous mini-buses for moving people throughout the State Hospital campus
- Analyze pooling Uber and Lyft funds to look at regional microtransit for first- and last-mile studies

SELECTED FINDINGS FROM BOSTON MPO'S REGION-WIDE 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 Massachusetts Department of Transportation (MassDOT)-identified Top 200 high crash intersections in the Boston region (66 total), 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 downtown areas in 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 I-90 and I-95 interchange in Weston and the I-95 Middlesex Turnpike interchange 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. For instance, positive train control and rapid transit vehicle upgrades
- Monitor advancements in AV technology and analyze the safety impacts of AV 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 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 facilitates 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 from MPO-funded transportation projects and programs to help meet the requirements of the Global Warming Solutions Act, particularly 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 in developing their greenhouse gas inventories and energy reduction plans
- Reduce volatile organic compounds, nitrogen oxides, carbon monoxide, and particulate matter emissions from MPO-funded transportation projects and programs (particularly those that help to reduce vehicle-miles traveled) to 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 infrastructure to reduce storm water pollution and impacts from natural hazard events (for example, flooding or winter storms) is incorporated in project design

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 bikeshare facilities in the Inner Core for some 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) between job-rich centers, such as Longwood Medical Area, the Seaport, suburban job centers, and underserved neighborhoods
- Provide new transit service between low-income suburban residential communities 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 the ability to access transportation may be affected

Economic Vitality Needs

- Administer infrastructure improvements to support growth in the priority development areas, including improving equitable access to employment and housing via public transit, walking, and biking options
- Arrange better commuter rail scheduling including more frequent, reliable off-peak, late-night, and weekend service 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



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