South Shore Committee (SSC)

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

Winter 2019
WHAT TRANSPORTATION NEEDS DID THE MPO IDENTIFY IN SSC 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. 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 tables that follow highlight some of the transportation needs identified in the SSC subregion based on MPO analysis, and the lists below highlight needs identified from past visits to SSC communities for the Needs Assessment. For more information, please refer to the Destination 2040 Needs Assessment report and applications on our website at bostonmpo.org/lrtp.

### Transportation Needs Identified in the Destination 2040 Needs Assessment

<table>
<thead>
<tr>
<th>Location of Identified Need</th>
<th>Municipality</th>
<th>MassDOT-Identified HSIP Crash Cluster (all modes)</th>
<th>Intersects MPO Staff-Identified Truck Crash Cluster(s)</th>
<th>Intersects Massachusetts Top Crash Locations</th>
<th>Priority Congested Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interstate 93 (northbound) at Route 37 (Granite Street)</td>
<td>Braintree</td>
<td>●</td>
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<tr>
<td>Route 37 (Granite Street) at Forbes Road</td>
<td>Braintree</td>
<td>●</td>
<td>●</td>
<td>●</td>
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<tr>
<td>Interstate 93 (southbound) at ramps to Route 3</td>
<td>Braintree</td>
<td>●</td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Route 3 (southbound) at ramp to Union Street</td>
<td>Braintree</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>I-93 Southwest Expressway</td>
<td>Braintree</td>
<td>●</td>
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<tr>
<td>Route 3, Southeast Expressway approach</td>
<td>Braintree</td>
<td>●</td>
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<tr>
<td>Union Street Rotary at ramp to Route 3 (southbound)</td>
<td>Braintree</td>
<td>•</td>
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<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Route 37 (critical urban freight corridor)</td>
<td>Braintree</td>
<td>•</td>
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<tr>
<td>Route 3 northbound at ramp to Derby Street</td>
<td>Hingham</td>
<td>•</td>
<td>•</td>
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<td></td>
</tr>
<tr>
<td>Route 3A</td>
<td>Hingham</td>
<td>•</td>
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<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Interstate 93 at Derby Street</td>
<td>Hingham</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>Route 3, Southeast Expressway approach</td>
<td>Weymouth</td>
<td>•</td>
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<td>•</td>
</tr>
<tr>
<td>Route 3A</td>
<td>Weymouth</td>
<td>•</td>
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<tr>
<td>Route 18 (Main Street) at West Street</td>
<td>Weymouth</td>
<td>•</td>
<td>•</td>
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<tr>
<td>Route 18 (Main Street) at Pond and Pleasant streets</td>
<td>Weymouth</td>
<td>•</td>
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<td>•</td>
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<tr>
<td>Route 3 at ramps to Route 18 (Main Street) (Exit 16)</td>
<td>Weymouth</td>
<td>•</td>
<td>•</td>
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<td>•</td>
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<tr>
<td>Route 18</td>
<td>Weymouth</td>
<td>•</td>
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</tbody>
</table>

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. 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 South Shore Committee Subregion

<table>
<thead>
<tr>
<th>TIP Identification Number</th>
<th>Project</th>
<th>Category</th>
<th>Municipality</th>
<th>Federal Fiscal Year Programmed</th>
</tr>
</thead>
<tbody>
<tr>
<td>608007</td>
<td>Corridor Improvements and Related Work on Justice Cushing Highway (Route 3A) from Beechwood Street to Henry Turner Bailey Road</td>
<td>Complete Streets</td>
<td>Cohasset, Scituate</td>
<td>2023</td>
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<tr>
<td>605168</td>
<td>Intersection Improvements at Route 3A/Summer Street Rotary</td>
<td>Complete Streets</td>
<td>Hingham</td>
<td>2024</td>
</tr>
<tr>
<td>606501</td>
<td>Reconstruction of Union Street (Route 139)</td>
<td>Complete Streets</td>
<td>Holbrook</td>
<td>2021</td>
</tr>
<tr>
<td>601607</td>
<td>Reconstruction of Atlantic Avenue and Related Work</td>
<td>Complete Streets</td>
<td>Hull</td>
<td>2022</td>
</tr>
</tbody>
</table>

**TIP** = Transportation Improvement Program.

### Transportation Studies Conducted in SSC Subregion through the Unified Planning Work Program

- **Safety and Operations Analysis at Selected Intersections**
  - Route 37 (Franklin and Granite Streets) and West Street in Braintree (Federal Fiscal Year [FFY] 2013)
  - North/South Franklin Street (Route 37) and Union Street/Plymouth Street (Route 139) in Holbrook (FFY 2013)
  - Weymouth Street and Pine Street/Sycamore Street in Holbrook (FFY 2010)

- **Addressing Safety, Mobility, and Access on Subregional Priority Roadways**
  - Summer Street in Harbor Area in Hingham (FFY 2016)
  - Summer Street in Residential Area in Hingham (FFY 2016)
  - Multiuse Trails: Long Term Improvement Alternative in Hingham (FFY 2016)
  - George Washington Boulevard in Hull (FFY 2016)
  - Transit Services and Cycling to Nantasket Beach in Hull (FFY 2016)

- **Community Transportation Technical Assistance Program for Summer Street/Rockland Street Road Diet in Hingham (FFY 2018)**

- **Subregional Roadway Study**
  - Route 3A in Cohasset and Scituate (FFY 2013)—moving forward as project #608007
  - Summer Street and George Washington Boulevard in Hingham and Hull (FFY 2015)—moving forward as project #605168
Transportation Needs Identified through Outreach in the SSC Subregion

Roadway
- Improve Route 3A
  - Improve congestion and pedestrian connectivity along Route 3A in Cohasset especially to Massachusetts Bay Transportation Authority (MBTA) station and schools
  - Move forward with Route 3A Rotary redesign in Hingham
  - Improve pedestrian infrastructure on Route 3A in Hull
  - Paint lines, trim foliage, and install sidewalks in Weymouth
- Experiment with more road diets to increase safety throughout the subregion
- Improve Kilby Street intersection in Hingham
- Improve Derby Street exit onto Route 3 to prevent people driving in the breakdown lane
- Enforce 25 mph speed limits
- Fix traffic signal timings on Route 37 and South Shore Plaza to improve congestion
- Improve culverts and trim vegetation in Norwell

Transit
- Implement first- and last-mile connection between the Cohasset train station and downtown Cohasset
- Provide a bus from Hull to Hingham that stops at the Hingham District Court. Currently, a bus goes by but does not stop at the courthouse
- Increase ferry service from Hingham and Hull throughout the day and evenings including more regular service to and from Logan Airport
- Expand transportation options for older adults and low-income populations in Hull
- Create more connections to different points in Hull from the commuter rail station
- Extend 220 bus route to the beach in the summer
- Expand Weymouth Council of Aging bus service

Pedestrian
- Expand pedestrian connection between Sohier Street and Stop and Shop in Cohasset. Currently it does not connect to the train station

Parking
- Increase parking at Quincy Adams, Quincy Center, and Hingham stations

Land Use and Technology
- Share more information about older adult and healthcare transportation services in the subregion
• Act on sea level rise study that determined the infrastructure that should be addressed first
• Incorporate coastal zone management

**Study Ideas and Opportunities in the SSC Subregion**

**Roadway**
- Study Route 53 corridor in Norwell from Route 228 to Route 123
- Study the Summer Street/Lincoln Street intersection in Hingham to recommend roadway improvements to increase safety, manage increasing development, and reach Americans with Disabilities Act compliancy
- Study north district of Route 3A and the transit/development potential of the area
- Study the full Route 53 corridor through the subregion
- Research the intersection of Route 123 and Route 228, known as Queen Anne’s corner

**Transit**
- Research a last-mile connection between the Hull ferry stop and Nantasket Beach
- Explore seasonal trolley options between Hingham train station, Derby Street shops, and the Hingham ferry stop
- Research connectivity options for subregional downtowns and attractions on the South Shore
- Explore connecting Quincy Center bus to Nantasket Junction

**Bicycle**
- Research regional bike network opportunities, especially as an option for transportation/commuting and not just recreation

**Land Use and Technology**
- Explore temporary evacuation bridge implementation during emergencies

**SELECTED FINDINGS FROM BOSTON 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 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 Interstate 90 (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 autonomous vehicle (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 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 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 the effects 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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