

Appendix A: LMA Bus Circulation Study – Relevant Studies Review

The Longwood Medical Area (LMA) Bus Circulation Study aims to identify the routings, circulation patterns, and stop and layover facility locations within the LMA. An initial step for the LMA Bus Circulation Study involved reviewing previously conducted studies, plans, and projects relevant to the design and circulation of the LMA. The goal of this review of previous planning work is to build on the recommendations from past studies and to coordinate with ongoing and interrelated projects and plans in the LMA.

This memo summarizes key findings across all 14 studies reviewed; it also lists and summarizes individual studies.

Review of Relevant Plans and Studies

The study team reviewed a total of 14 studies, which were grouped into three categories based on the type of plan and the potential implications for the LMA Bus Circulation Study:

1. Ongoing Plans and Projects in or Near the LMA
2. Ongoing Regional Plans and Projects
3. Past Studies and Plans

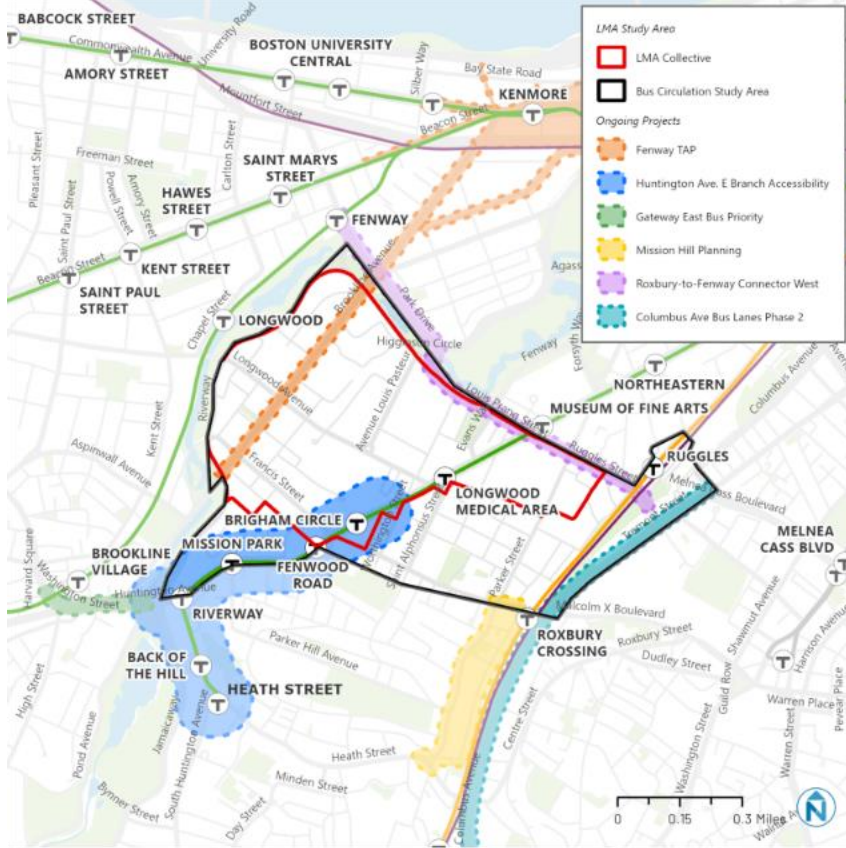
These categories allow us to thoroughly examine each study, plan, and project in coordination with similar ones based on when they were done and whether they were specific to the greater LMA region or not.

Ongoing Studies and Projects In or Near the LMA

There are 6 active studies and plans that are adjacent to and/or directly impact the LMA, including several being led by the City of Boston and MassDOT.

Review of Previous Plans and Studies
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Figure 1 LMA and Major Active Studies and Projects



Source: Nelson\Nygaard Consulting Associates

Figure 1 Summary of Active Studies / Plans Near the LMA

Name	Applicable agency	Summary and LMA-Specific Takeaways
<i>Fenway Transportation Action Plan</i>	BPDA	<i>This effort will make near-term investments to three design areas (Kenmore Square, Brookline Avenue, and Van Ness Street/Ipswich Street) in the Fenway neighborhood. Investments will focus on safety, comfort, and connectivity. The FTAP identifies bus priority as an opportunity on Brookline Avenue.</i>
<i>Tremont/Columbus Phase 2 Bus Lane Project</i>	BTD/MBTA	<i>The MBTA is extending the existing center-running bus lanes on Columbus Ave north from Jackson Square to Ruggles Station; this project will also include improvements to bus stops and shelters along Columbus Ave and Tremont St and more reliable bus service adjacent to the LMA study area.</i>

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<i>Huntington Avenue/South Huntington Avenue/E-Branch Accessibility Project</i>	<i>BTD/MBTA</i>	<i>The Boston Transportation Department, working closely with the MBTA's E Branch Accessibility Upgrades project, is focusing on multimodal upgrades within the street network and provision of bus transit priority within the larger MBTA study area.</i>
<i>Gateway East Bus Priority</i>	<i>Town of Brookline</i>	<p><i>Project by the Town of Brookline to implement dedicated bus lanes in Gateway East on Washington Street. The pilot lane is west of the LMA study area.</i></p> <p><i>Features include:</i></p> <ul style="list-style-type: none"> ▪ <i>Bus-only lanes serve MBTA routes 60, 65, and 66, carrying nearly 15,000 daily riders.</i> ▪ <i>Emergency vehicles and LMA shuttles will also be permitted to use the bus lane.</i>
<i>Green Links, including Fenway Multiuse Path and Roxbury-Fenway Connector</i>	<i>City of Boston</i>	<i>A separated, low-stress bicycle connection between Ruggles Station near the Southwest Corridor to Huntington Avenue is being implemented through the 500 Huntington Ave development project.</i>
<i>Mission Hill Transportation Planning</i>	<i>City of Boston/BTD</i>	<p><i>The Boston Transportation Department is working on safety and accessibility improvements for all road users traveling on Terrace Street and Parker Street in the Mission Hill neighborhood.</i></p> <ul style="list-style-type: none"> ▪ <i>Will aim to address community concerns including narrow sidewalks, gaps in comfortable walking and biking connections to transit, frequent cut-through traffic, limited street amenities (e.g., trees, street furniture, lighting)</i>

Ongoing City/Region-wide Plans and Projects

Three ongoing regional projects – the MBTA’s Bus Network Redesign Implementation efforts, the MBTA’s Transit Priority Vision, and the City of Boston’s update to its long-range transportation plan (GoBoston) – were also reviewed and summarized (see Figure 3).

Review of Previous Plans and Studies

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Figure 3. Summary of Ongoing Regional Projects

Name	Applicable Agency	Summary and LMA-Specific Takeaways
<i>Bus Network Redesign (BNR)</i>	MassDOT/MBTA	<p><i>BNR, adopted by the MBTA Board in November 2022, impacts in the Fenway, Kenmore, and LMA which focuses on increasing region-wide access to jobs in the LMA. BNR proposes:</i></p> <ul style="list-style-type: none"> ▪ <i>75% increase in service</i> ▪ <i>6 proposed vs. 2 current high-frequency routes, improved connections from the greater region to LMA jobs.</i> ▪ <i>estimated 200,000 more residents across the region with faster, frequent service to the LMA</i>
<i>Transit Priority Vision</i>	MBTA	<p><i>The Bus Priority Vision report, published in 2023, outlines where we want to build transit priority to have the biggest impact on improving bus speed and reliability, and where we're currently in progress implementing transit priority projects. Many of these projects are in support of the Bus Network Redesign with new bus lanes, queue jumps and TSP locations.</i></p> <p><i>Brookline Avenue was identified as a priority corridor for transit priority.</i></p>
<i>GoBoston</i>	City of Boston	<p><i>Boston's long-range transportation plan, first completed in 2017 as GoBoston 2030, is currently undergoing an update. Of note:</i></p> <ul style="list-style-type: none"> ▪ <i>One priority project is listed in the plan that increases bus service in the LMA is the LMA to JFK Rapid Bus via Dudley and Uphams: quality transit connecting the LMA with Roxbury, Dorchester, the Fairmount Indigo Line, and the Red Line.</i>

Past Studies and Plans

Nelson\Nygaard reviewed five relevant prior plans, which were completed between 2010 and 2022. Several of these studies are precursors to the LMA Bus Circulation Study.

Review of Previous Plans and Studies

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Figure 4. Summary of Past Studies and Plans

Name	Year	Applicable Agency	Summary and LMA-Specific Takeaways
<i>Longwood Transportation Framework</i>	2022	<i>Longwood Collective (MASCO)</i>	<p><i>Comprehensive study in 2022 of the LMA by Longwood Collective.</i></p> <ul style="list-style-type: none"> ▪ <i>Framework is a tool for the purpose of evaluating transportation projects that will impact the LMA - establishes principles, goals, and metrics to guide project evaluations.</i> ▪ <i>Limited public transportation capacity limits mode shift</i> <p><i>These findings justify the need for this bus circulation study.</i></p>
<i>Longwood Medical and Academic Area Bus Study</i>	2011	MASCO	<p><i>This study was a review of MBTA and shuttle services to and through the study. It proposed several improvements to MBTA routes CT2, CT3, 47, and 66.</i></p>
<i>Route 9 Corridor Study</i>	2020	<i>CTPS/Boston Region MPO</i>	<p><i>Route 9 was studied as part of the MPO's series of Subregional Priority Roadways studies – they identify safety, mobility, access, and other transportation-related concerns on specific roadways identified by subregional planning groups as requiring improvements. Short- and long-term improvements are recommended for the study roadways.</i></p> <p><i>The Route 9 Corridor study area does not overlap with the LMA study area, but some of the roadway and bus stop improvements may impact bus routes that run in the LMA study area.</i></p>
<i>Urban Ring</i>	2010	MassDOT/MBTA	<p><i>Originally a state-proposed 25-mile-long transit project that would run in a roughly circular corridor just outside of central Boston, passing through Boston, Brookline, Cambridge, Chelsea, Everett, Medford, and Somerville.</i></p> <p><i>As of 2010, project is no longer under active sponsorship by MassDOT.</i></p>
<i>Roxbury, Dorchester, and Mattapan Transit Needs Study</i>	2010	MassDOT/MBTA	<p><i>Review of transit needs in three of Boston's neighborhoods. A new branch of the Green Line was proposed to service these neighborhoods.</i></p> <p><i>The study also proposed extending Route 28 to Brigham Circle to serve the LMA.</i></p>