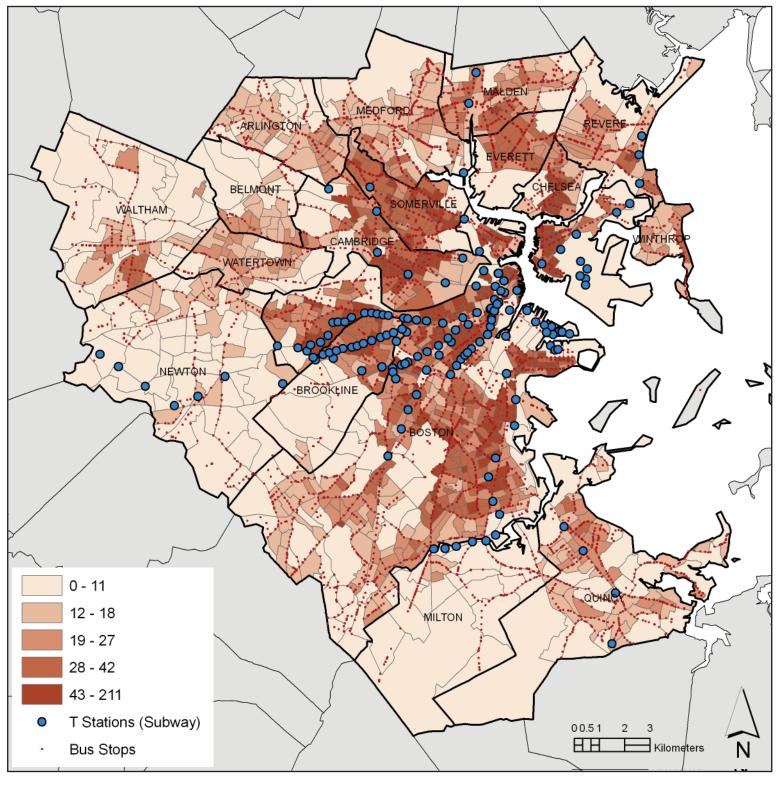
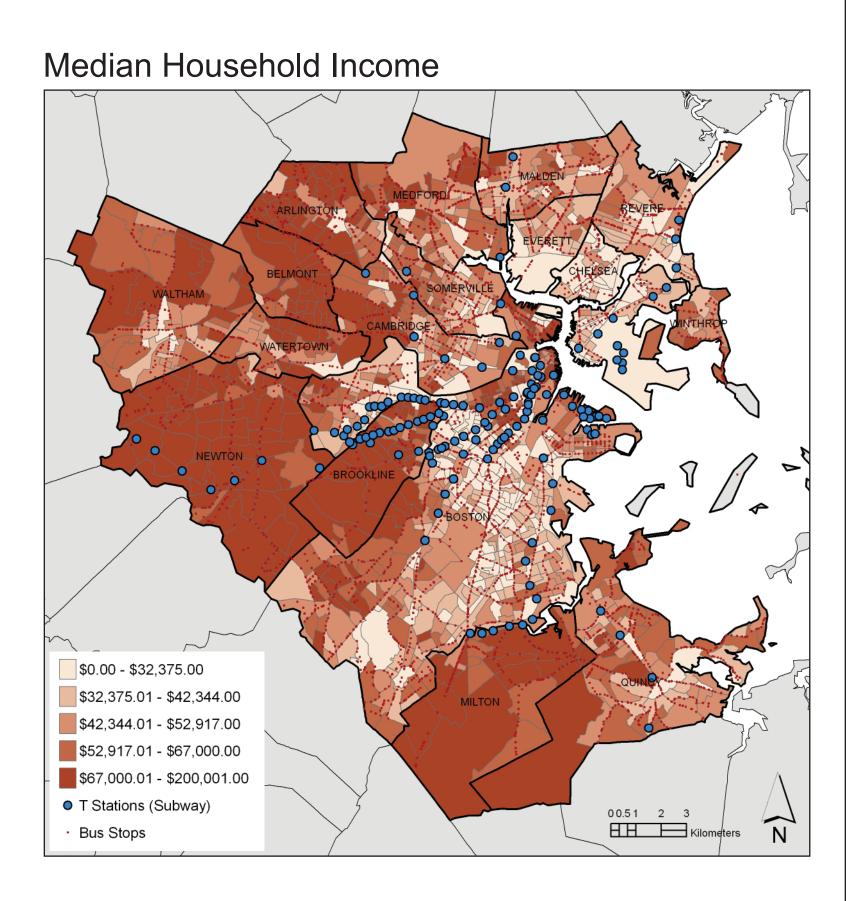
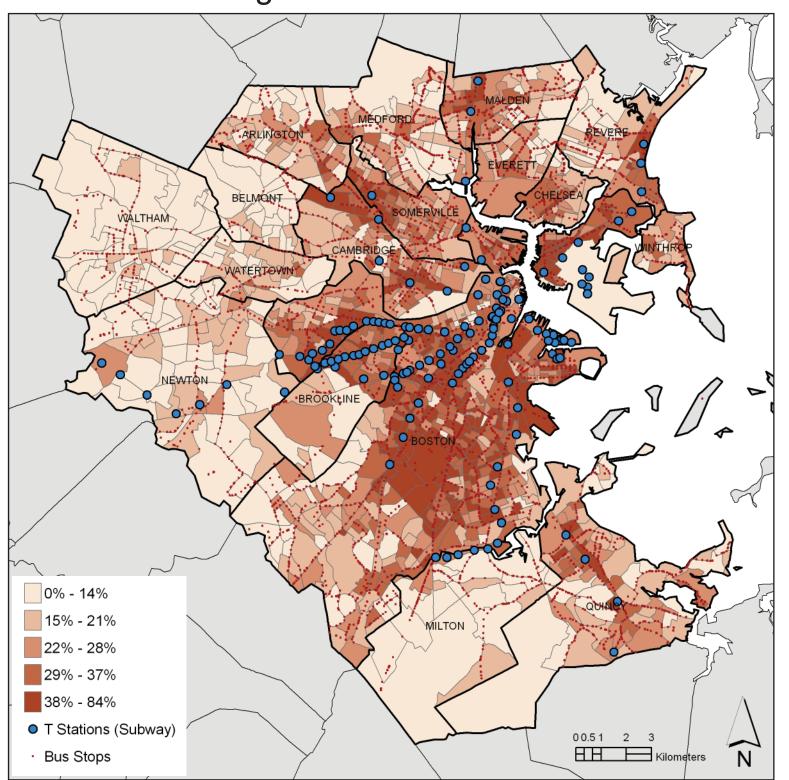
Boston Metro Area Public Transportation Needs

Population Density (Residents Per Acre)



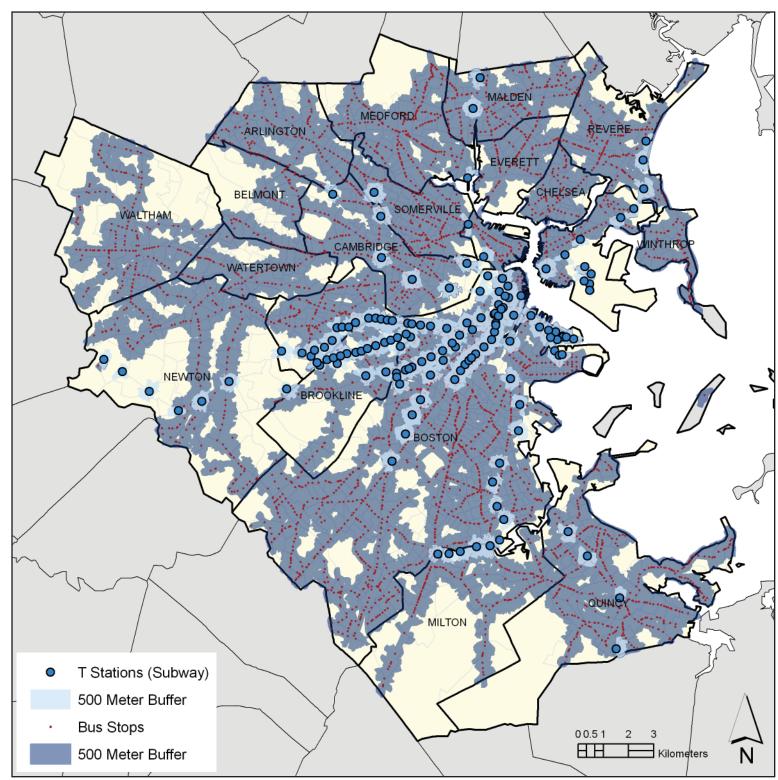


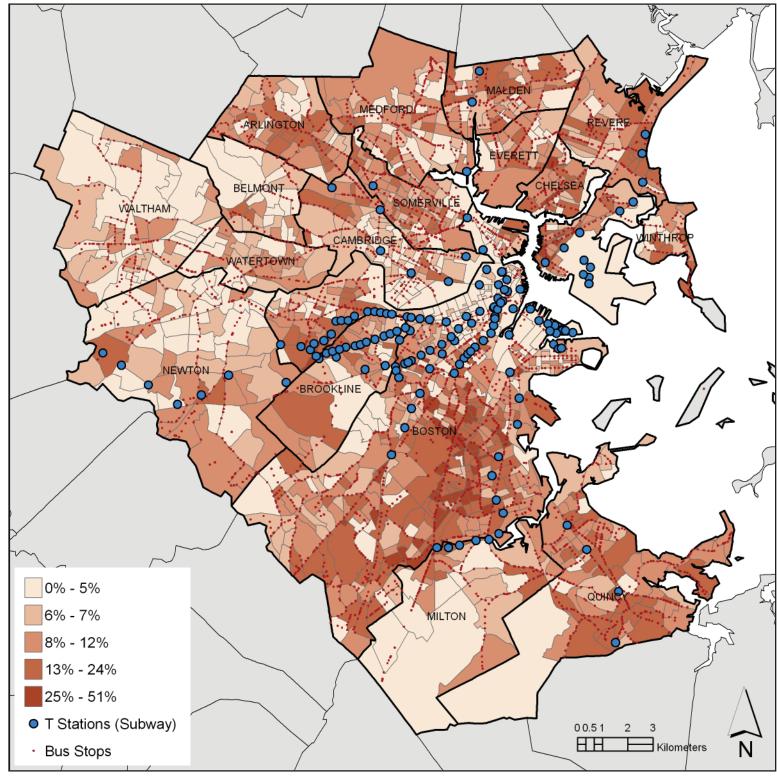
Commuters Using Public Transit

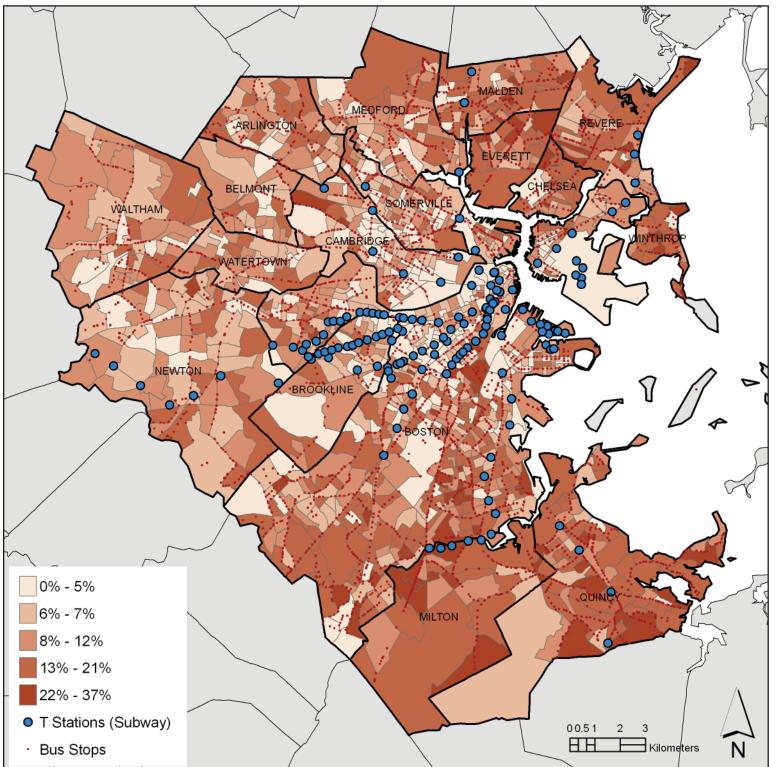


Projection: NAD1983 State Plane Massachusetts Mainland FIPS 2001 Data Courtesy of Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts Executive Office of Energy and Environmental Affairs, 2000

Distance to Public Transit

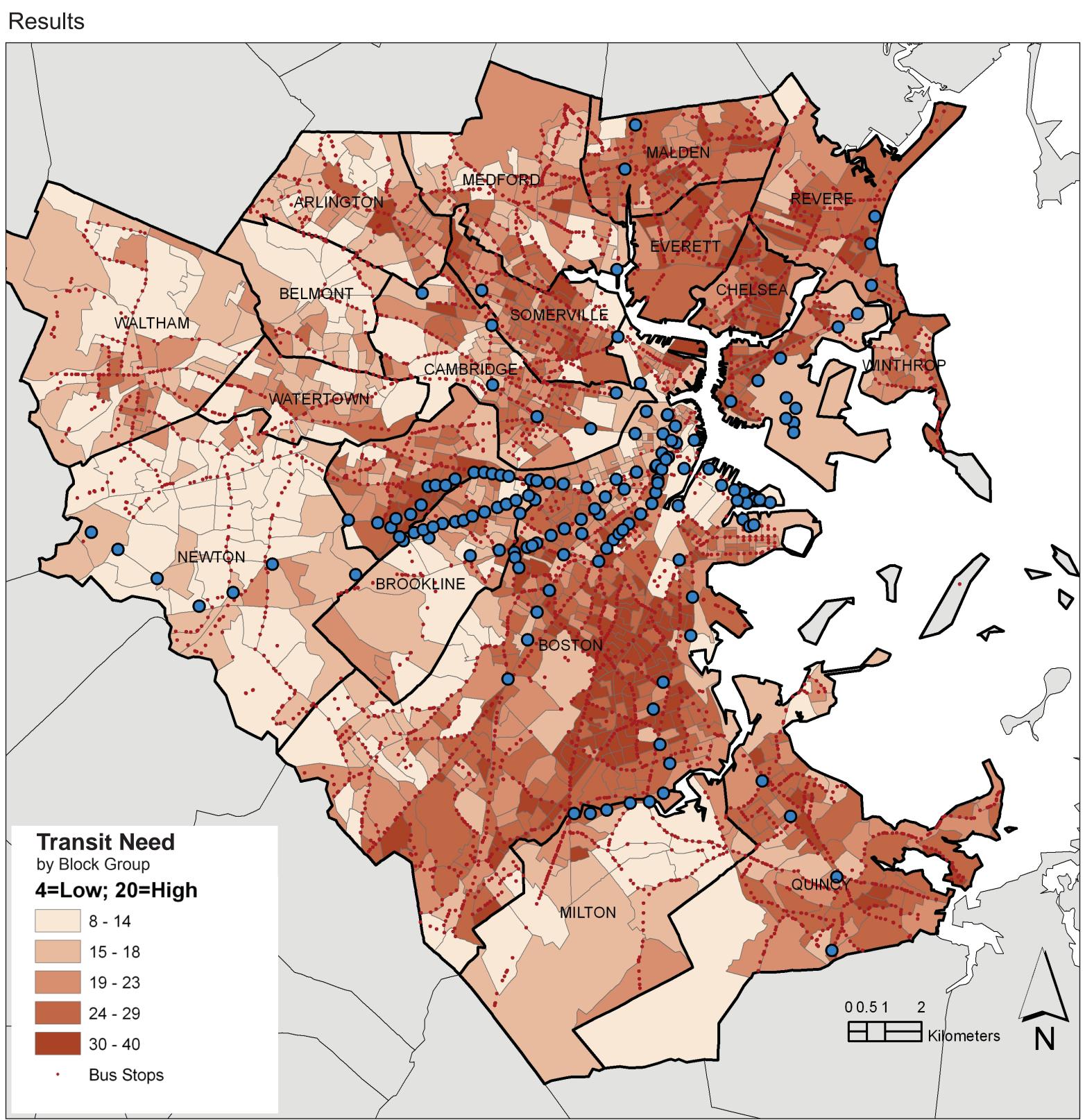




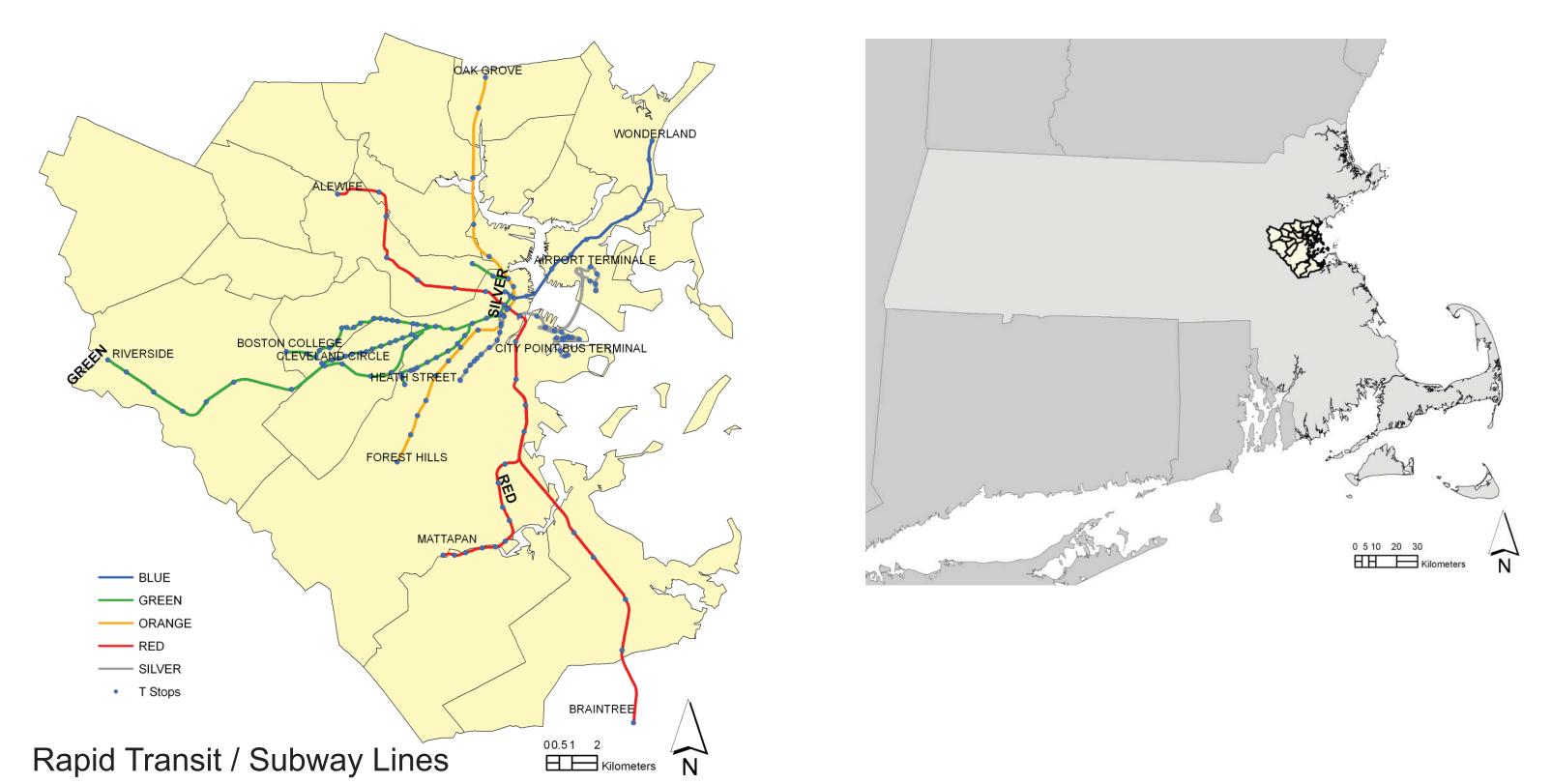


Public Transport Commutes Longer than 45 Minutes

Commutes Longer than 45 Minutes - Other Means



This study examines what areas in Metro Boston need additional or improved public transit. Each census block group was given a ranking according to the combination of six factors (left). Areas with high population density, low median income, long commutes, and long distances to transit stops achieved higher 'need' scores. According to the results, although sustainable suburbs are an important goal, more urban areas still have the greatest transportation needs.



Current Transportation Initiatives

The Massachusetts Executive Office of Transportation (EOT) manages several initiatives for the MBTA. These projects will, pending their approval and completion, provide more efficient and accessible transportation to several of the underserved areas identified in this study. However, many of these projects have been in the pipeline for many years with little action. Boston's planners and government officials should take note of the growing transit use in such areas to ensure that projects move forward and address the needs of all neighborhoods.

Green Line Extension

This project will extend the Green Line past Lechmere Station in Cambridge, through Somerville, and into Medford. Its end point in Medford is currently under discussion. The project will include construction of approximately six new transit stations in densely populated areas of Somerville and Medford that are currently underserved, as seen in the map to the left.

Red Line/Blue Line Connector

Currently, the Red and Blue lines are the only rapid transit lines that do not connect to one another. To transfer from Red to Blue or vice versa, riders must take either the Green or Orange lines one stop at the Park Street or Downtown Crossing stops, respectively. Connecting the two lines would involve extending the Blue Line from Bowdoin Station to the Charles/Massachusetts General Hospital Red Line station. This project will not necessarily extend service to underserved areas, but it will improve system efficiency.

Route 39 Corridor Transit Enhancements

The Route 39 Bus runs from Back Bay Station to Forest Hills Station in Jamaica Plain. It is the second most heavily traveled bus route in Boston.¹ The route replaces part of the Green Line Route E that used to extend to the Arborway but has "temporarily" stopped at Heath Street since 1985. Controversy surrounds the options of retaining the current bus service and removing the old Green Line tracks versus the restoration of the line as it existed before 1985.² In the meantime, the EOT and MBTA are studying possible improvements for the Route 39 Bus, including station improvements and consolidation of stops to improve efficiency.

Silver Line Phase 3

Phase 3 of the Silver Line is the last part of the MBTA's Bus Rapid Transit project. This line will provide service from Dudley Square and lower Roxbury through the South End, Chinatown, downtown, the South Boston Waterfront, and Logan Airport.³ The southern end of the Silver Line project will be key for areas of Roxbury which are currently underserved. However, according to the data in this poster's featured study, the MBTA could extend the Silver Line further south in order to provide additional service to underserved areas in Boston/ Roxbury.

The Urban Ring

The Urban Ring⁴ would enable circumferential transit service between the spokes of the MBTA's subway lines. A study on the Urban Ring was completed in 2001 and identified a potential corridor and three phases for the project, starting with limited-stop express crosstown busses, the CT1, CT2, and CT3. After the 2001 study and a 2004 environmental impact report, however, there has been no progress on the initiative.

MBTA Program for Mass Transportation

The MBTA regularly updates its Program for Mass Transportation,⁵ which serves as a system master plan/capital plan. Although the plan was originally meant to identify potential transit expansion projects, "...because the Commonwealth [of Massachusetts] has committed to funding the expansion projects required as mitigation for the Central Artery project, and because the MBTA is currently facing a \$2.7 billion backlog of maintenance projects, the 2008 PMT will also focus on system preservation projects. This will help the MBTA bring existing assets into a state of good repair, better serving customers by improving the reliability, accessibility, and safety of service." As a result, needed improvements will not take place until the current budget crisis is solved.

Sarah J. Spicer Tufts University, UEP Introduction to GIS December 2008

I. Fact sheet at http://www.eot.state.ma.us/downloads/Rte39FactSheet.pdf

3. http://www.mbta.com/about_the_mbta/t_projects/default.asp?id=107 4. http://www.eot.state.ma.us/default.asp?pgid=content/urbanRingMtg&sid=about

^{2.} See http://btwt.org/about/.

^{5.} http://www.bostonmpo.org/bostonmpo/pmt/index.html