# Draft Network Coverage Results

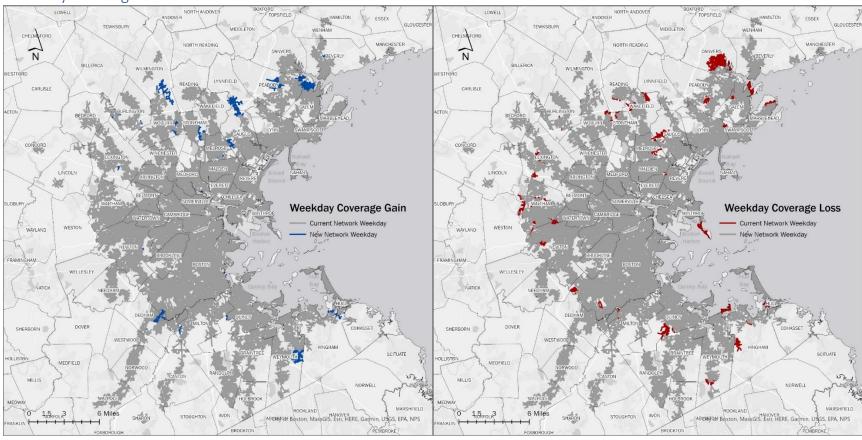
Bus Network Redesign | June 2022

Our Service Delivery Policy (SDP) coverage standard measures geographic access to transit for residents across the MBTA service area. Coverage is measured in two ways: base coverage, which evaluates access to any transit service, and frequent coverage, which evaluates access to frequent transit service. We evaluated both for the Bus Network Redesign, because the project aimed to keep the number of people with basic access to transit service consistent across the region (base coverage), while substantially increasing the number of people with access to frequent transit service (frequent coverage). More detail on the coverage measure is available in the MBTA Service Delivery Policy.

# Base Coverage

In the base coverage maps below, covered road segments are within ½ mile of stops with transit service at least once per day, within the entire coverage service area. Each set of maps includes one map of coverage gain in the new network (in blue) and one map of coverage loss in the new network (in red).

#### Weekday Coverage



Weekday coverage for the current network is 77.8% of residents in the service area living within ½ mile of transit service, and 77.3% for the new network, for a net loss of 0.6% or roughly 15,000 residents. Coverage for low-income households has a net loss of 0.4% or roughly 1,000 households, and coverage for residents of color has a net loss of 0.3% or roughly 3,000 residents, both smaller losses than overall. Municipalities with weekday coverage gains include Lynnfield, Salem, Weymouth, Woburn, and Wilmington. Municipalities with weekday coverage losses include Danvers, Hingham, Quincy, and Winthrop.

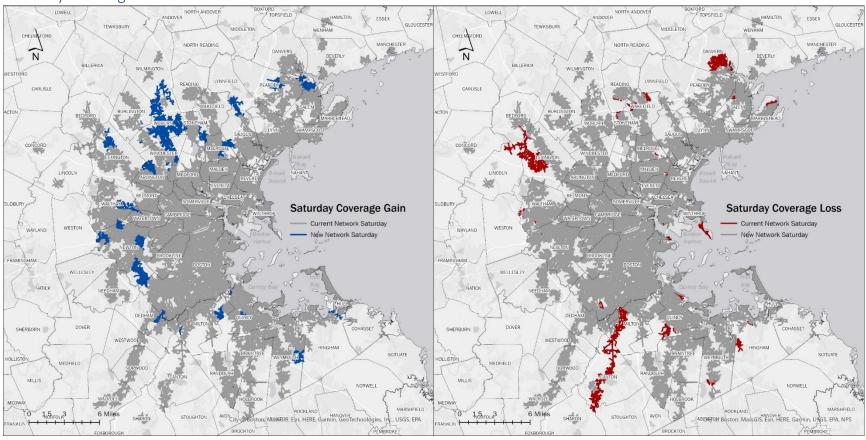
Importantly, coverage losses for residents do not reflect "stranded" riders, as not all residents in an area use the transit service. The map below shows bus stops in the current network that are not within ½ mile of a transit stop in the new network, and the number of average weekday boardings in 2021 at each group of stops.

#### Town of Billerica Beverly Town of Lynnfield Town of Reading Town of Burlington Town of Bedford Town of Woburn Town of Lexington Town of Belmont Chelsea Somerville Boston Center Natick Dedham Town of Town of North Weymouth Scituate TOWN, PERE, City of Boston, MassGIS, Esri, HERE, Garmin, GeoTechnologies, Inc., USGS, EPA Town of

#### Stranded Stops (Half Mile) with Highlights

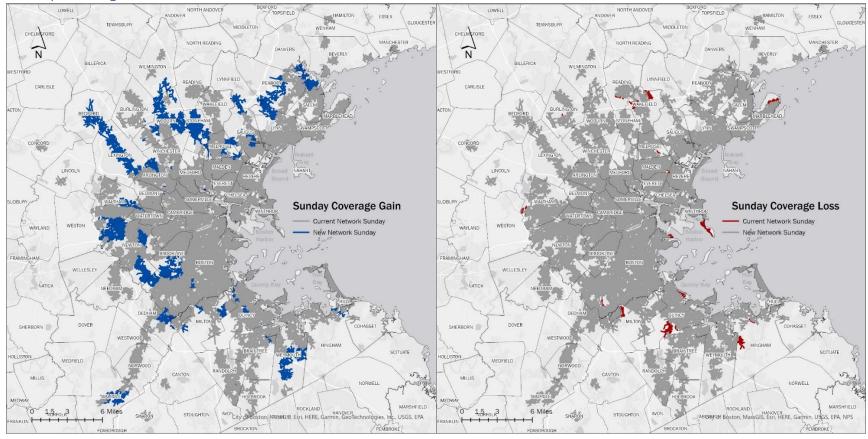
The 10 groups of stops total 78 stranded boardings, with the highest concentrations on the 712 and 713 buses in Winthrop (41 boardings) and the 238 bus in Quincy (25 boardings).

#### Saturday Coverage



Saturday coverage for the current network is 73.6% of residents in the service area living within ½ mile of transit service, and 76.0% for the new network, for a net gain of 2.4% or roughly 63,000 residents. Coverage for low-income households has a net gain of 1.8% or roughly 6,000 households, and coverage for residents of color has a net gain of 1.6% or roughly 15,000 residents, both smaller gains than overall. Municipalities with Saturday coverage gains include Lynnfield, Newton, Salem, Wilmington, Winchester, and Woburn. Municipalities with Saturday coverage losses include Canton, Danvers, Lexington, and Milton.

#### Sunday Coverage

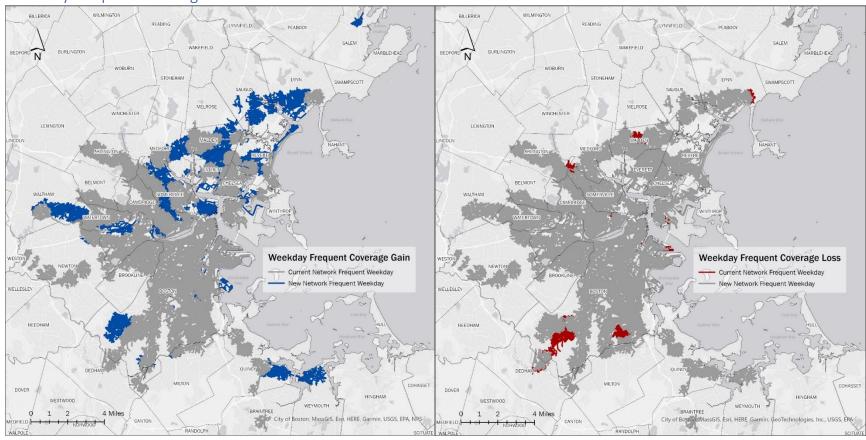


Sunday coverage for the current network is 69.4% of residents in the service area living within ½ mile of transit service, and 76.0% for the new network, for a net gain of 6.6% or roughly 173,000 residents. Coverage for low-income households has a net gain of 5.1% or roughly 17,000 households, and coverage for residents of color has a net gain of 4.8% or roughly 46,000 residents, both smaller gains than overall. Municipalities with Sunday coverage gains include Arlington, Bedford, Boston, Brookline, Lynn, Lynnfield, Newton, Peabody, Salem, Stoneham, Walpole, Waltham, Weymouth, Wilmington, and Woburn. Municipalities with Sunday coverage losses include Hingham, Quincy, and Winthrop.

# Frequent Coverage

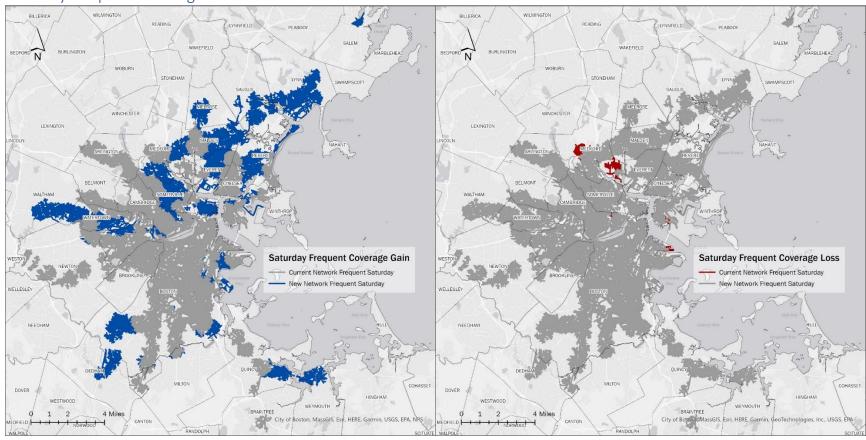
In the frequent coverage maps below, covered road segments are within ½ mile of stops with *frequent* transit service, defined as every 15 minutes or less from 6AM to 10PM, within the entire coverage service area. Frequent service can be delivered by a single frequent route, or by multiple routes that create frequent service at the stop. Frequent coverage definitions for the Bus Network Redesign (BNRD) differ from the SDP in two ways: frequent service is defined as 15 minutes or less for all day types (rather than 20 minutes on weekends) to match BNRD frequent service standards, and the calculation is out of all residents in the service area (rather than only in dense areas) to catch all residents who might be gaining or losing frequent service. Each set of maps includes one map of coverage gain from the new network (in blue) and one map of coverage loss from the new network (in red).

## Weekday Frequent Coverage



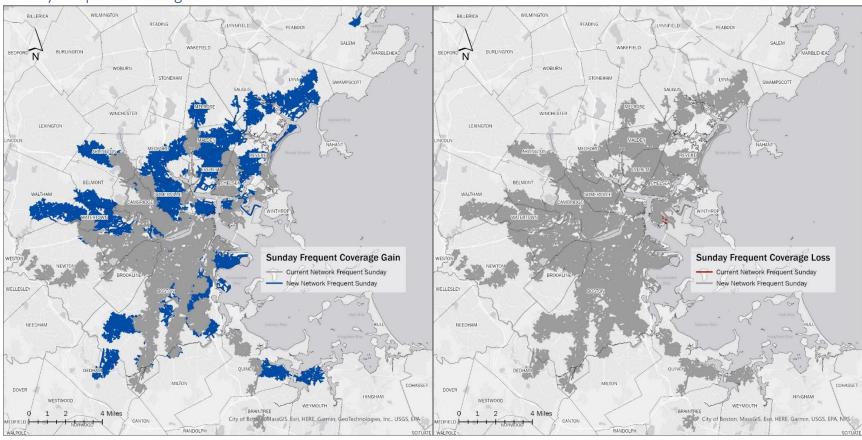
Weekday frequent coverage for the current network is 37.6% of residents in the service area living within ½ mile of frequent transit service, and 45.2% for the new network, for a net gain of 7.6% or roughly 200,000 residents. Coverage for low-income households has a net gain of 8.1% or roughly 27,000 households, and coverage for residents of color has a net gain of 8.5% or roughly 82,000 residents, both greater gains than overall. Municipalities with weekday frequent coverage gains include Boston, Everett, Lynn, Malden, Medford, Quincy, Revere, Salem, Saugus, Somerville, Waltham, Watertown, and Weymouth. Municipalities with weekday frequent coverage losses include Boston and Malden.

### Saturday Frequent Coverage



Saturday frequent coverage for the current network is 32.6% of residents in the service area living within ½ mile of frequent transit service, and 46.3% for the new network, for a net gain of 13.7% or roughly 359,000 residents. Coverage for low-income households has a net gain of 15.4% or roughly 51,000 households, and coverage for residents of color has a net gain of 16.5% or roughly 159,000 residents, both greater gains than overall. Municipalities with Saturday frequent coverage gains include Boston, Chelsea, Dedham, Everett, Lynn, Malden, Medford, Melrose, Quincy, Revere, Salem, Saugus, Somerville, Waltham, Watertown, and Weymouth. Municipalities with Saturday frequent coverage losses include Medford.

#### Sunday Frequent Coverage



Sunday frequent coverage for the current network is 27.6% of residents in the service area living within ½ mile of frequent transit service, and 46.2% for the new network, for a net gain of 18.6% or roughly 488,000 residents. Coverage for low-income households has a net gain of 20.8% or roughly 68,000 households, and coverage for residents of color has a net gain of 22.5% or roughly 217,000 residents, both greater gains than overall. Municipalities with Sunday frequent coverage gains include Arlington, Belmont, Boston, Chelsea, Dedham, Everett, Lynn, Malden, Medford, Melrose, Quincy, Revere, Salem, Saugus, Somerville, Waltham, Watertown, and Weymouth. No municipalities lose significant Sunday frequent coverage.