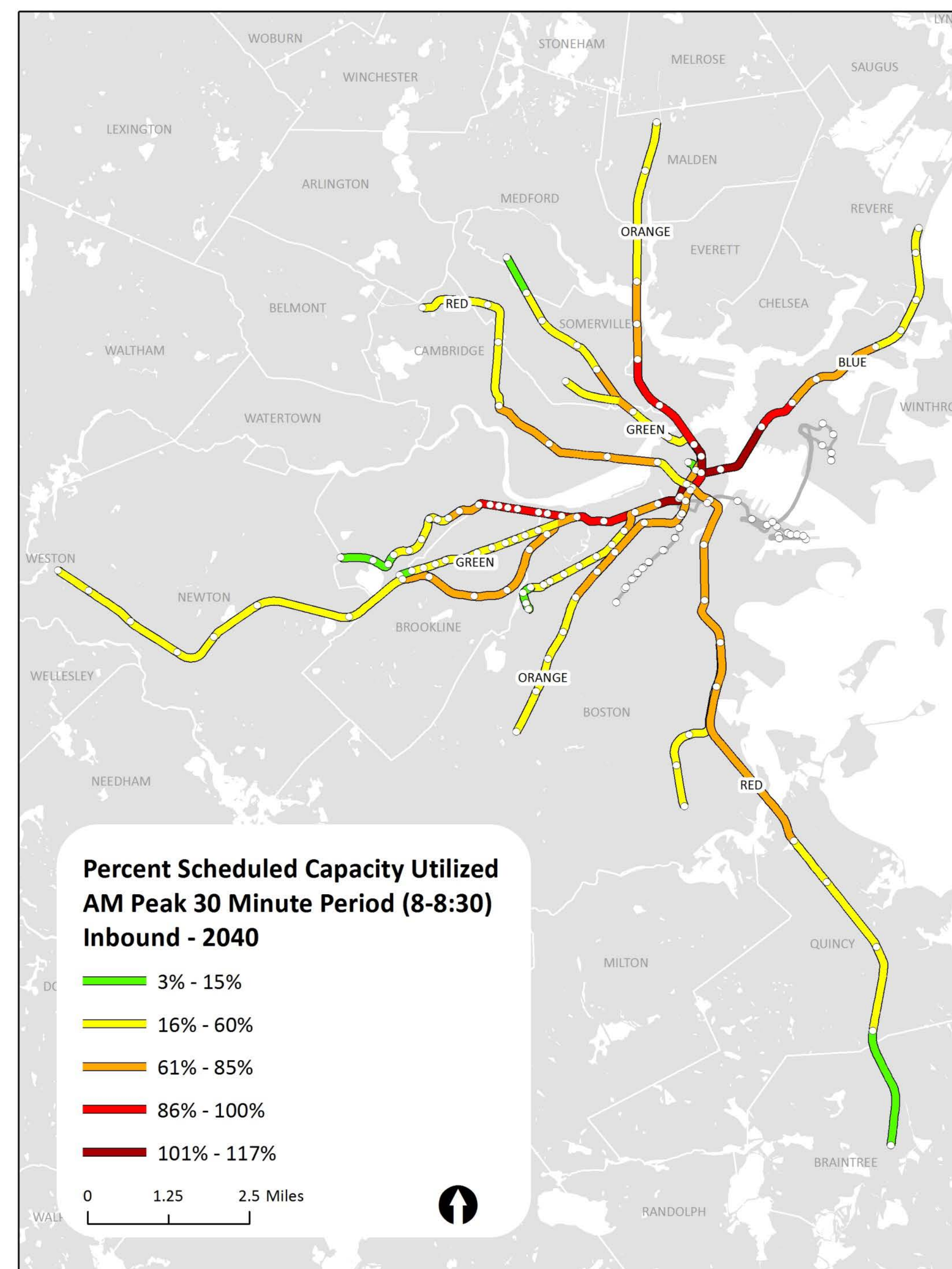


ADDRESSING OVERCROWDING; ACCOMMODATING GROWTH

As Boston's population and demand for public transportation grows, the MBTA increasingly faces challenges in providing enough service to meet demand, particularly during peak commuting periods when all vehicles are being utilized. Focus40 is gathering data on crowding experienced by today's customers, as well as what we can expect in the future as our region's cities and towns continue to plan for more growth. This analysis will help identify and prioritize the investments that will allow the MBTA to better support the region's growth.

Rapid Transit



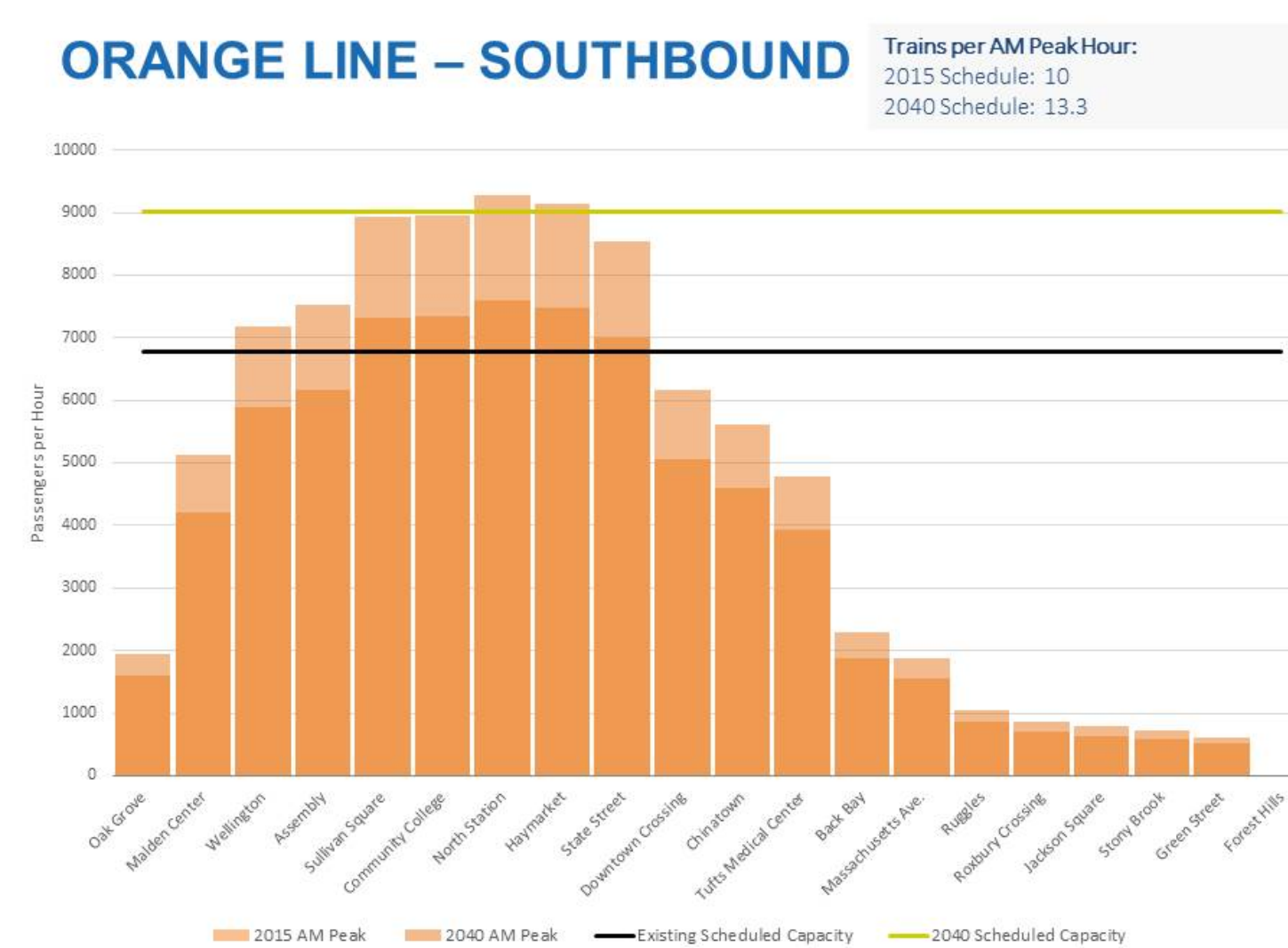
How do we predict ridership?

Future ridership projections are based on predictions of where people are going to live and work in 2040. Focus40 is using population and employment forecasts generated by the Metropolitan Area Planning Council along with some updated information provided from municipalities. These projections are then translated into potential demand for transit using a Federal Transit Administration model that looks at where people work and live and the relative costs of various modes – driving, biking, walking.

Since the future cannot be predicted with certainty, identifying a range of possible outcomes can help better inform our planning work. Using data and input collected earlier in the process, Focus40 is developing additional scenarios to better understand how a range of potential futures may impact demand for transit, and alter the investment strategies necessary to meet that demand.

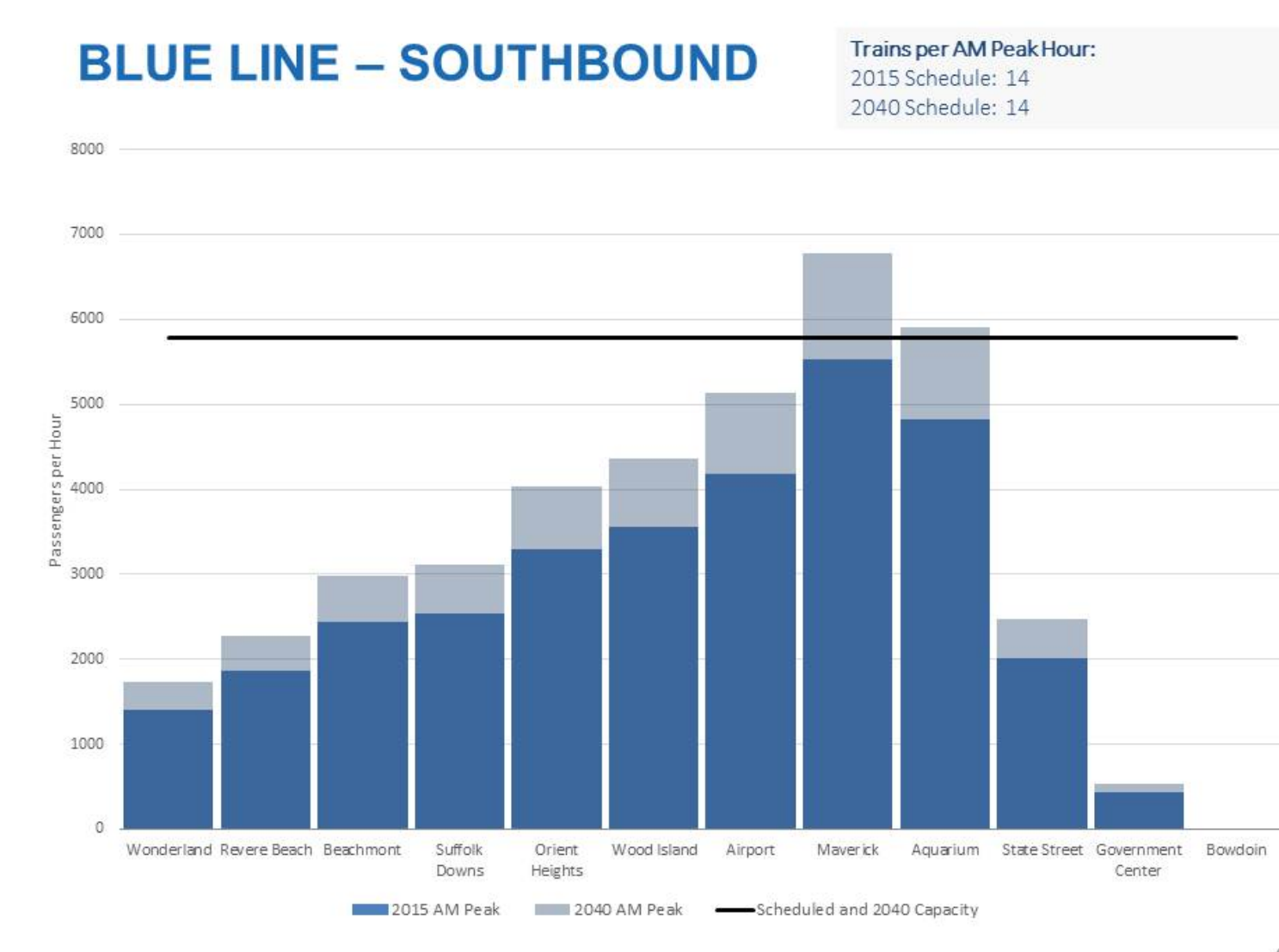
Orange Line

Southbound service is severely overcrowded in the AM peak today. However, the MBTA's procurement of a new and larger Orange Line fleet will allow for service every 4.5 minutes (compared to every 6 minutes today). While this increase in frequency will improve overcrowding significantly in the near term, ridership projections for 2040 indicate that it will not solve the issue.



Blue Line

Southbound ridership grows between East Boston and downtown. With no increase in capacity planned, conditions will likely progress from crowded to overcrowded between Maverick and State Street in 2040.

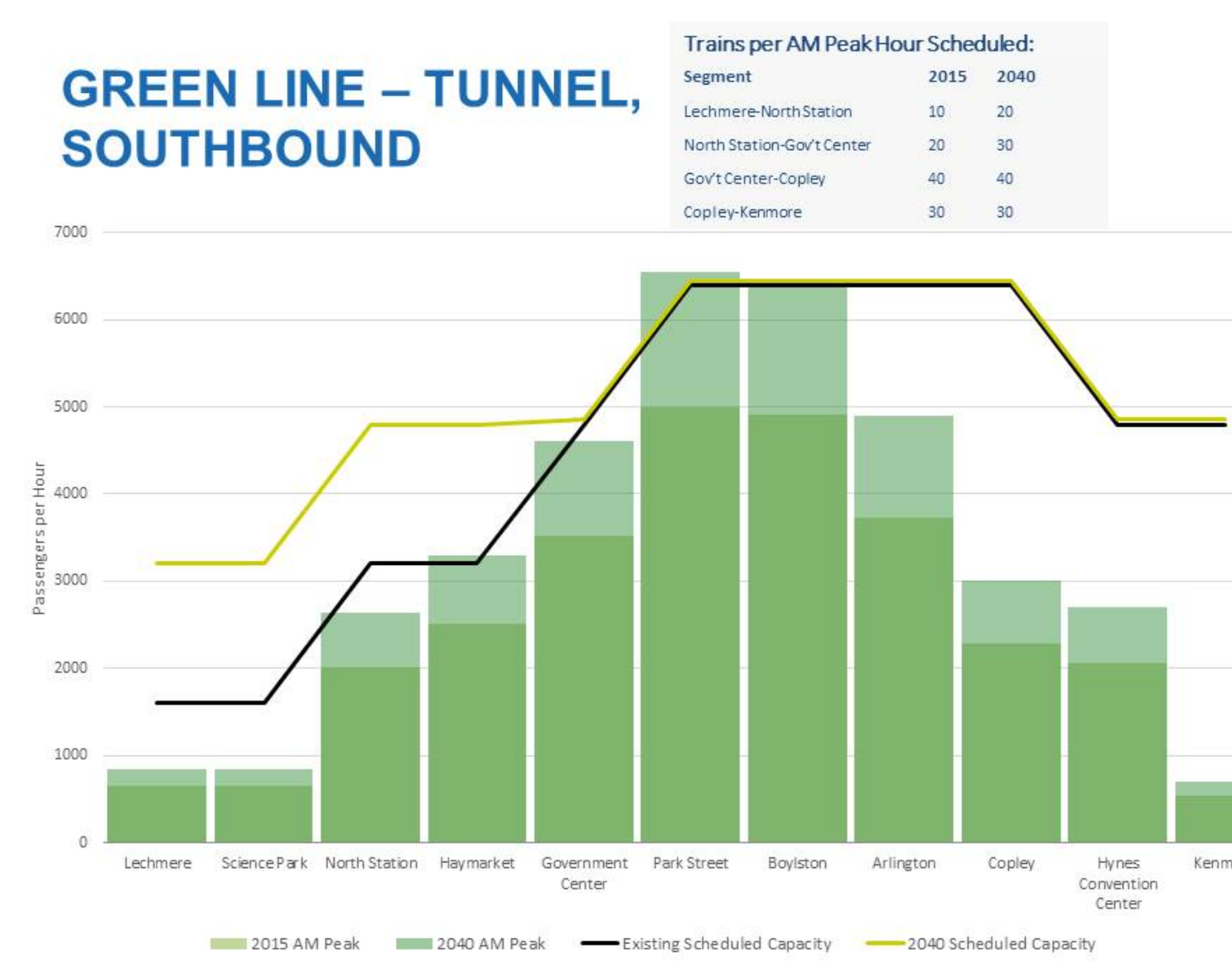


How do we determine what is over capacity?

During rush hour, buses and trains are often full. But when does crowding become an unacceptable level of service? For the 2017 Service Delivery Policy, the MBTA conducted extensive outreach to understand what customers deem acceptable and unacceptable in various circumstances and developed standards based on their findings. These standards were used in this analysis of existing and future conditions.

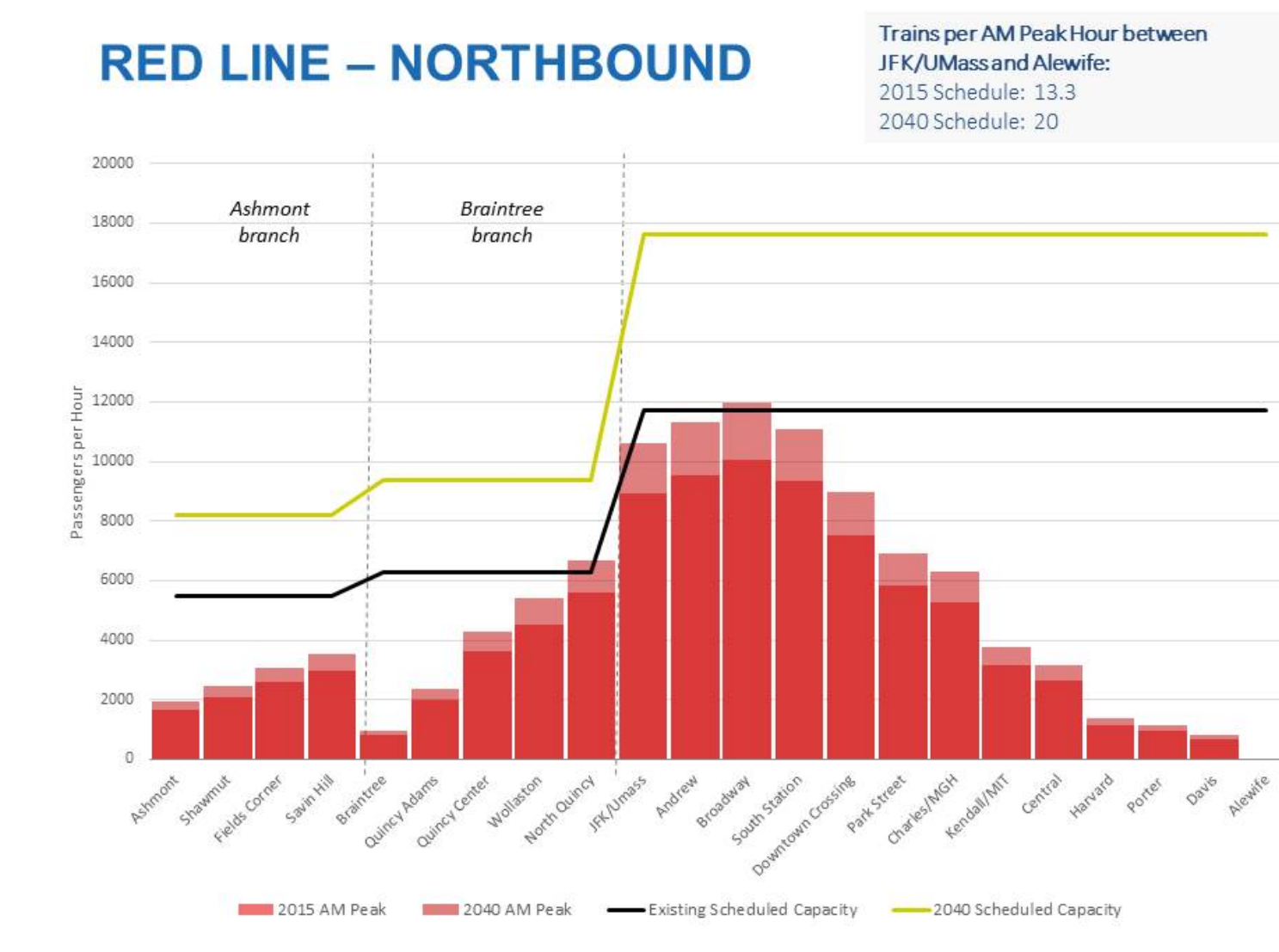
Green Line

Southbound service through the tunnel today is crowded but does not reach full capacity in the AM peak. By 2040, development along the Green Line will increase ridership to the extent that southbound trains between Government Center and Arlington will be overcrowded.



Red Line

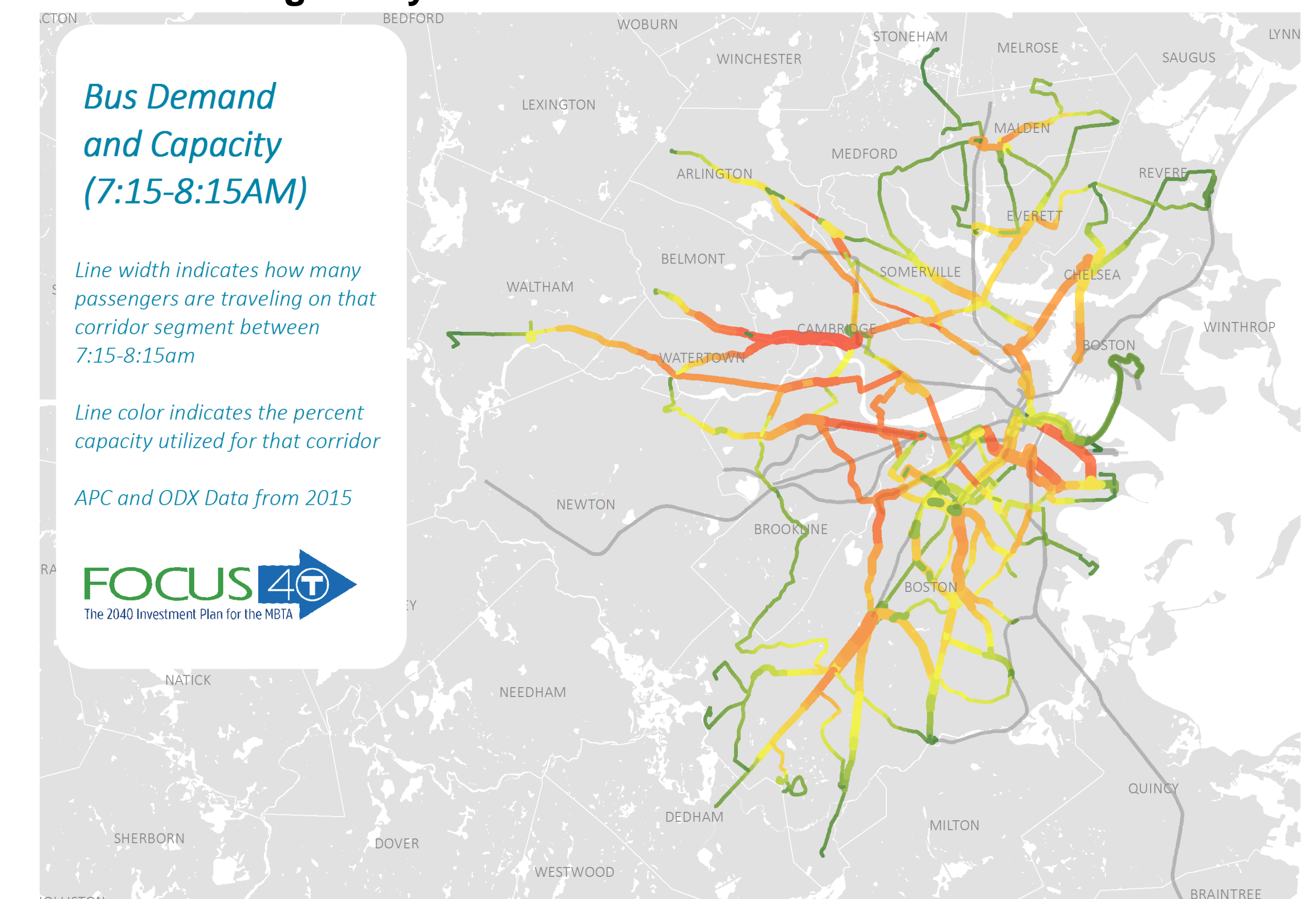
The 50% increase in capacity from the new fleet of Red Line cars and shorter headways helps reduce crowding conditions northbound in the AM peak. No line segment reaches above the 85% threshold.



Bus

- 17 MBTA bus routes currently operate above total capacity during peak periods.
- Another 16 operate at 90+% of capacity, which means that many individual trips are overcrowded.
- To address current overcrowding, the MBTA would need 35 additional buses.

Bus Crowding Today



Note: This map includes the highest ridership MBTA bus routes

Bus Crowding in 2040

- Systemwide bus demand is projected to grow by 14% through 2040, even with higher growth likely in already overcrowded corridors.*
- Given these projections, the MBTA will need to deploy 65 additional buses through 2040 to keep pace with projected demand.
- Improvements to bus service or adjustments to routes may impact ridership and crowding estimates.

* Ridership growth estimated using FTA STOPS model. Projected growth on the bus mode is applied uniformly across routes.

Additional Buses to Serve Demand

