

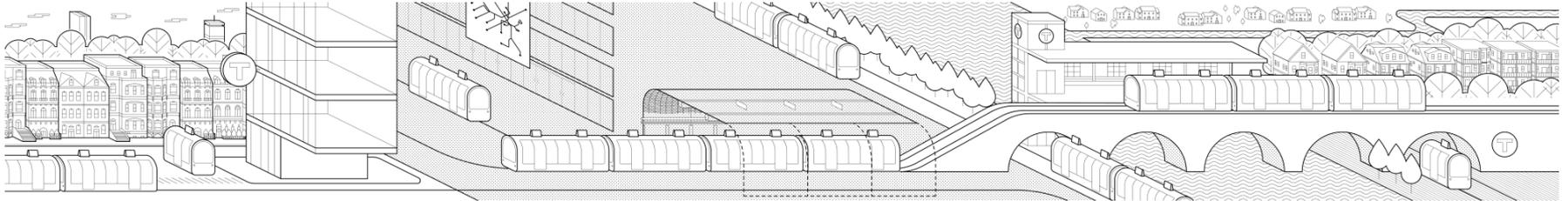
FOCUS40 UPDATE PART II

November 6, 2017
FMCB Presentation

Focus40 Overview

A 25-year plan for how the MBTA can meet the needs of Greater Boston in 2040.

- Required by the MBTA enabling legislation
- A road map of investments to feed future MBTA Capital Investment Plans



- **Programs:** Highlight the key investments that will allow the existing system to best serve the region over the long-term
- **Places:** Identify where new or expanded service may be necessary to support the economic competitiveness of the region in 2040
- **Policies:** Articulate how system expansion and resiliency should be pursued in order for the MBTA to most strategically support the needs of the region over the long-term

Review – Focus40 Part I

The October 2 presentation to the FMCB explained the **Focus40 process, goals, and framework for recommendations**: programs, places, and policies.

A focus was on previewing the approach to **programs**.

Overview – Focus40 Part II

Today, staff seeks to present the scenario planning approach to identifying strategic recommendations and receive feedback/direction from the FMCB on the approach to the places and policies piece of the recommendations framework.

Key Questions:

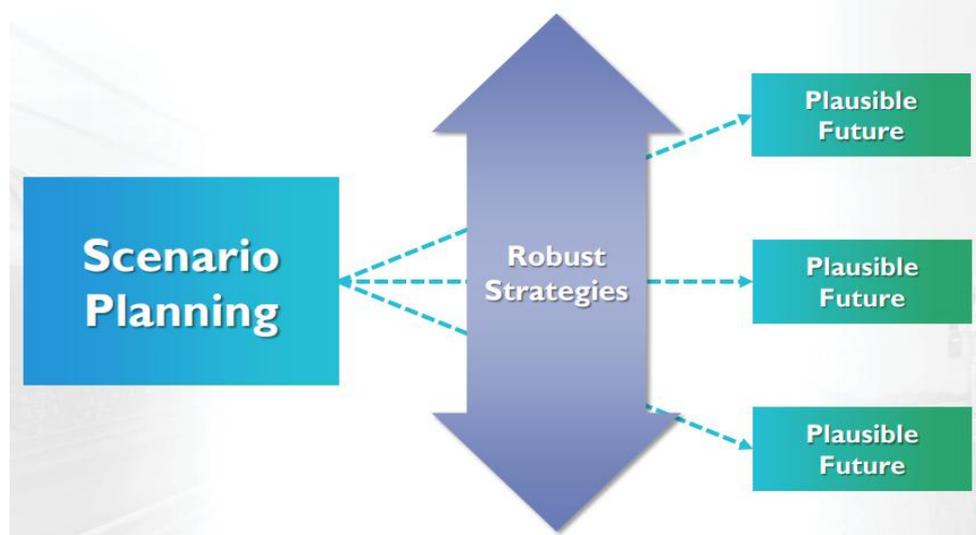
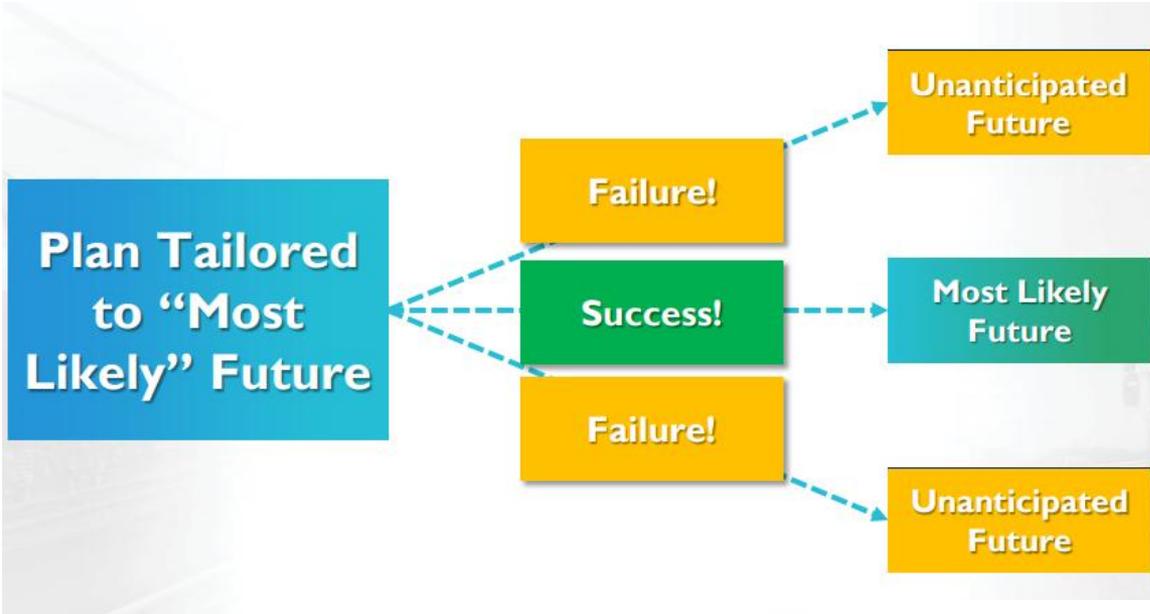
- How should Focus40 speak to where, when, and how the MBTA should be improving or adding new services?
- What else should the MBTA think about when making investment decisions?

Agenda

1. Review of process to date
 - Scenario Planning
2. What we heard
3. Approach to thinking about additional investment in new or improved services
 - Places
 - Policies
4. Next Steps

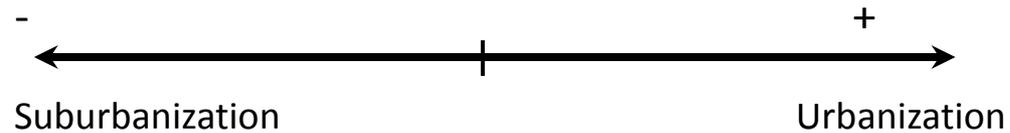
FOCUS40 SCENARIO PLANNING

Redefining Scenario Planning

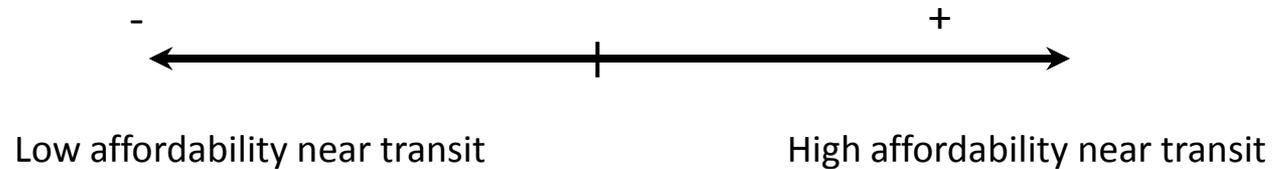


Future Scenario Driving Trends

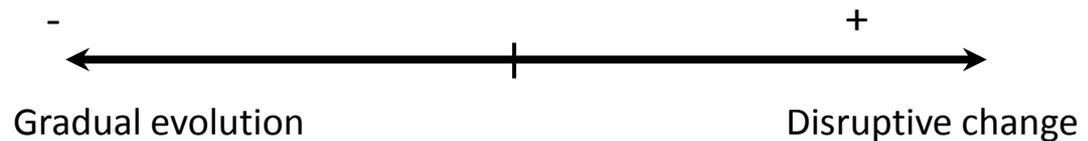
Urbanization



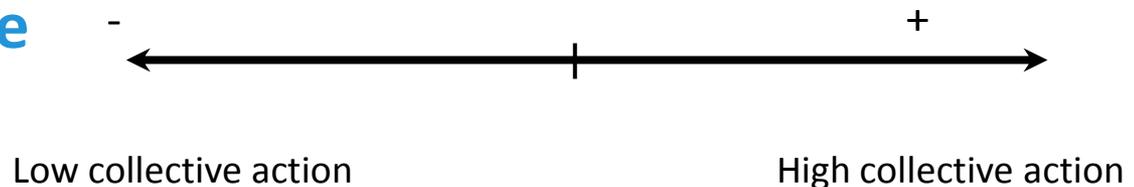
Affordability



Technology



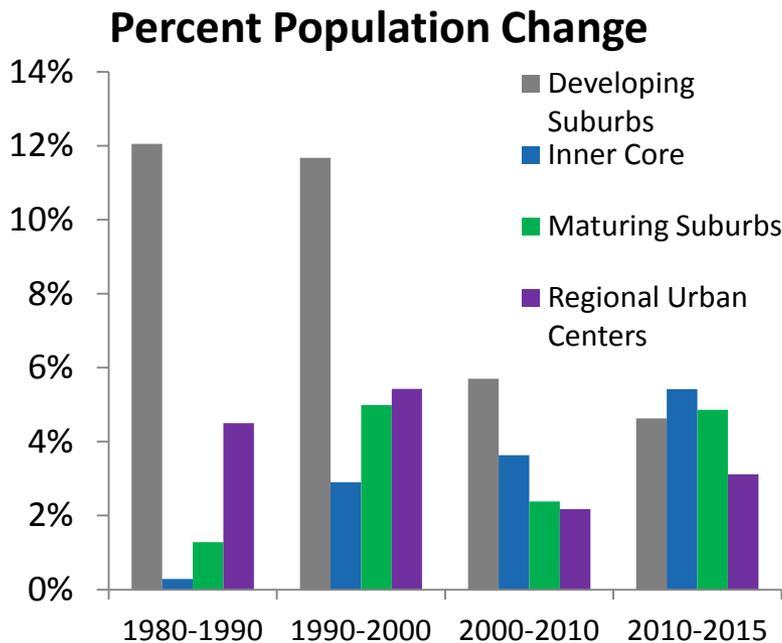
Climate Response



URBANIZATION

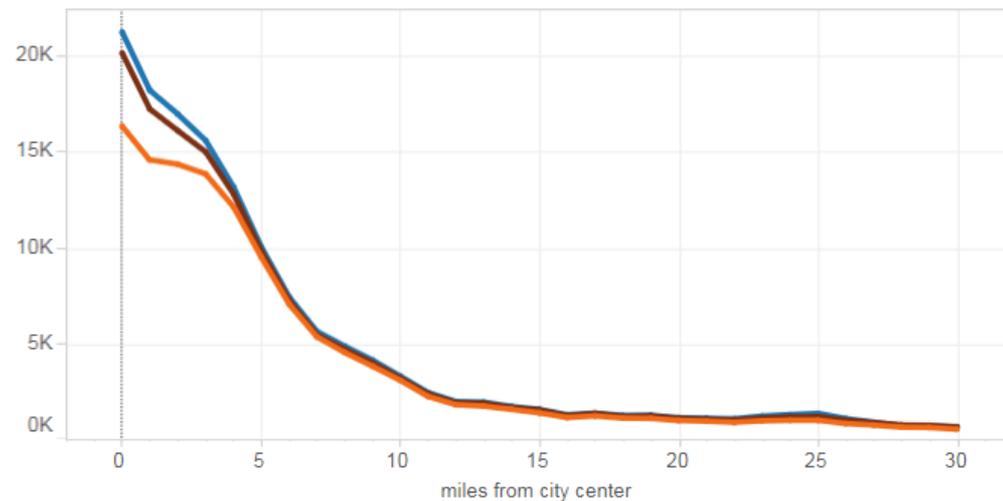
Population Trends

- The Inner Core is the only geography that had a steadily increasing growth rate since 1980. It now has the highest growth rate, but it is comparable to developing and maturing suburbs.
- Population density has only increased within 4 miles of downtown since 1990.



Metropolitan Area Planning Council, Census and American Community Survey Data (1980 – 2015)

Population Density - persons per square mile



UVA Demographics Research Group

Demographics Research Group, Weldon Cooper Center for Public Service at the University of Virginia

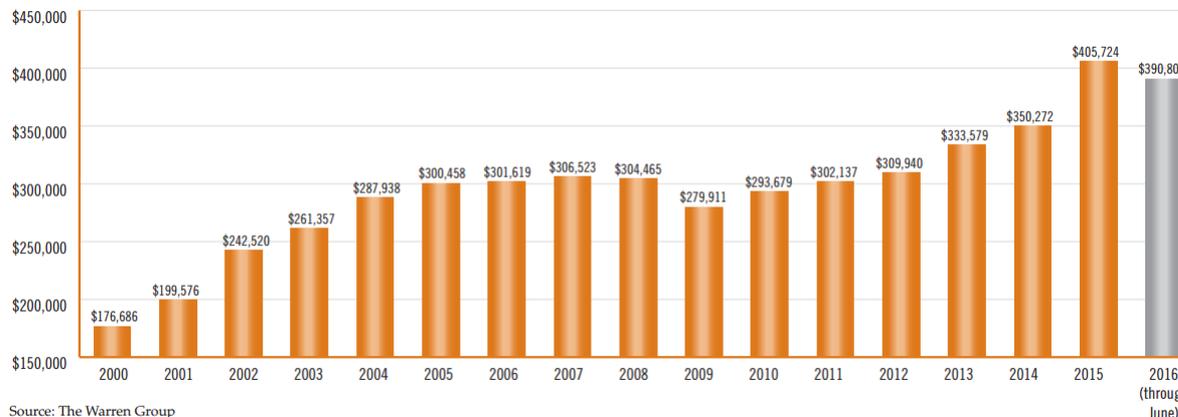
AFFORDABILITY

Housing Costs

In the past decade, housing production in the MBTA service area has failed to keep pace with population growth. As a result, housing costs throughout the region have continued to rise, especially in Greater Boston, further exacerbating income inequality issues.

- Since 2000, median single family home prices in the Five County region, as defined by the Greater Boston Housing Report Card, have increased by 64% and median condominium prices in the Five County region have increased by over 120% (Figure 2).
- As a result of high housing costs, many Greater Boston residents spend a sizeable amount of income on rent, mortgage payment, utilities and other housing-related expenses. Half of the Boston region's renters are housing cost-burdened and nearly a third (31%) of homeowners are housing cost-burdened, meaning they pay more than 30% of their income to rent, mortgage or other home-related payments. (MAPC State of Equity Report)

Annual Median Price of Condominiums in Five-County Greater Boston Region, 2000 - 2016



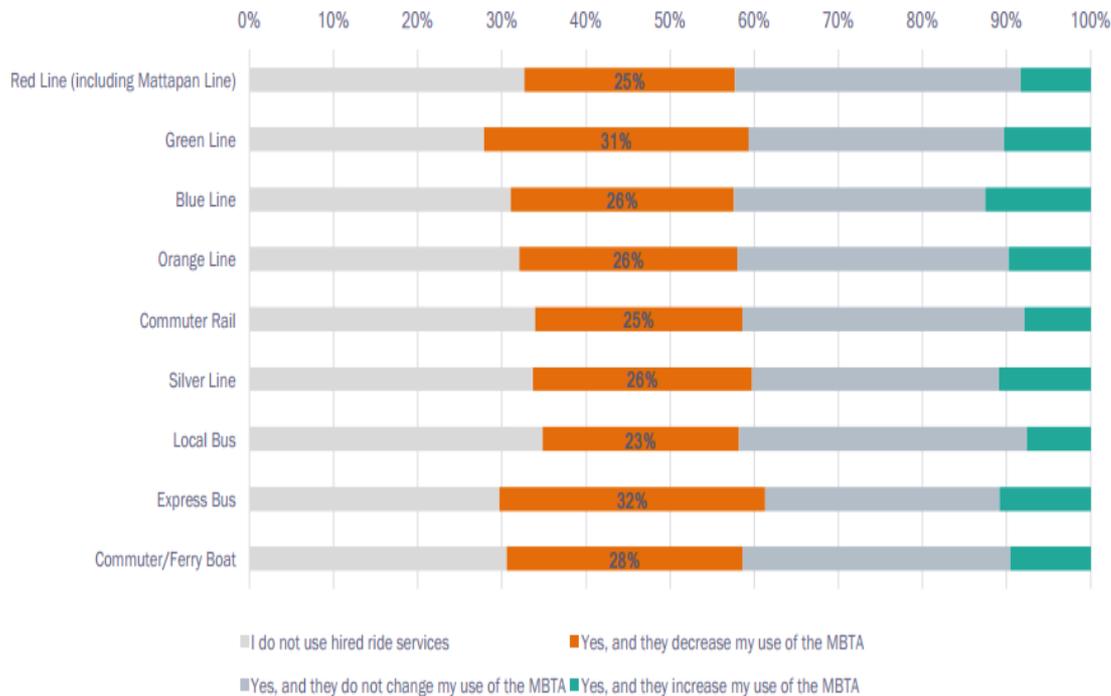
Source: The Warren Group

Source: The Greater Boston Housing Report Card, The Boston Foundation, 2016.

TECHNOLOGY

New Mobility Options & Technology

- Approximately 30% of passengers report that using TNC services reduces their use of the MBTA



MBTA 2017 Intercept Customer Satisfaction Survey

CLIMATE ACTION

Growing Concern over Climate Change

- From 1940 to 2015, the number of days per year over 90 degrees doubled from 7 days to 14 days (Figure 1).
- In the past three years, the concern about climate change among Massachusetts residents increased: three-quarters say they're concerned that in the coming decade the state will experience coastal flooding, extreme heat waves, and sea level rise as a result of climate change. And 82 percent fear Massachusetts will be hit by more powerful storms.

Figure 1: Number of days per year above 90°



PLAUSIBLE FUTURES



Formally adopted scenario of Boston MPO



Low and moderate income households are living in increasingly auto-oriented suburbs

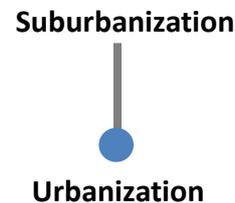
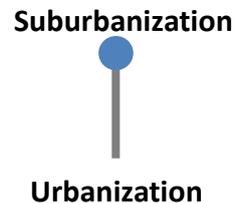
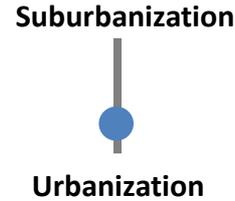


Technology changes are adopted quickly and radically change the transportation landscape



Strong commitment by the Commonwealth to invest in GhG reduction and resiliency measures

DRIVING TRENDS Urbanization



Affordability

Low Affordability Near Transit



Low Affordability Near Transit



Low Affordability Near Transit



Low Affordability Near Transit



High Affordability Near Transit

Technology

Gradual Evolution



Gradual Evolution



Gradual Evolution



Gradual Evolution



Disruptive Change

Climate Action

Low Collective Action



Low Collective Action



Low Collective Action



Low Collective Action



High Collective Action

Plausible Futures: Potential MBTA Strategies

These futures still require the same core reliability and modernization improvements to the system, but certain types of investments become more important:



- New or improved crosstown connections
- Improve access to/from Commuter Rail
- Core capacity increases



- Improve access to Commuter Rail network
- Increase speed and frequency of Commuter Rail
- More modest core capacity increases

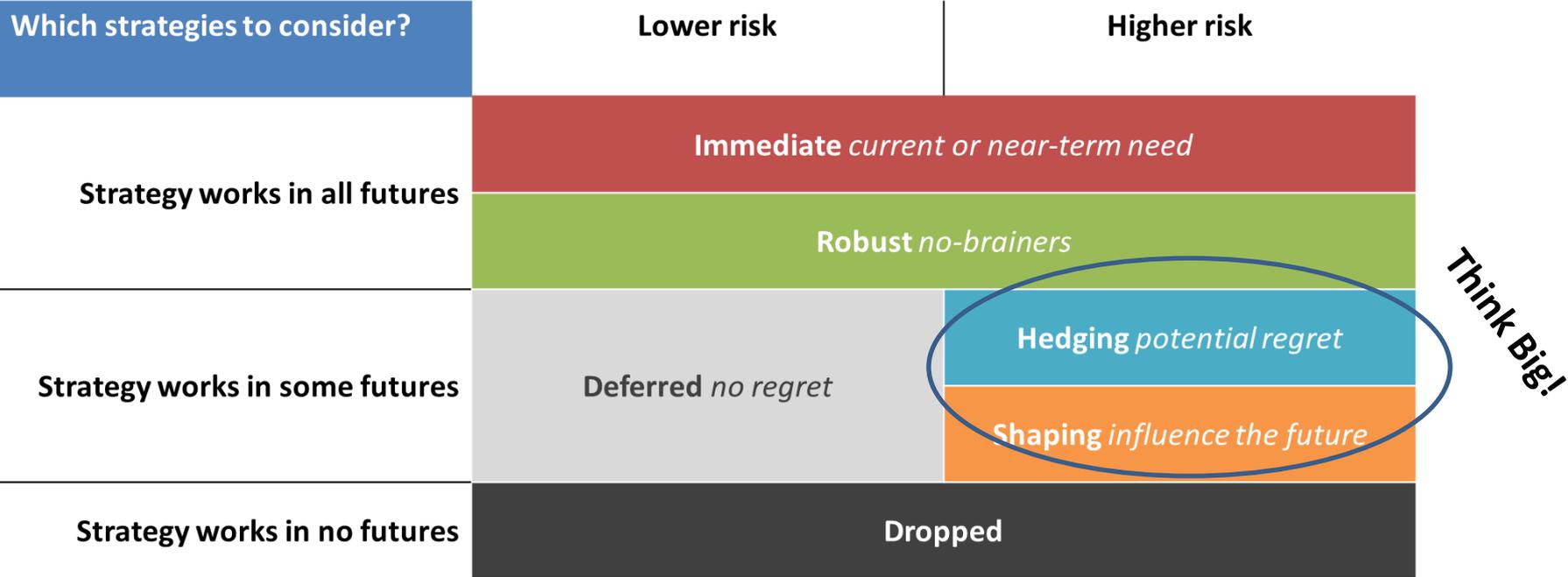


- Embrace Mobility as a Service model
- Provide dedicated ROW for autonomous buses or shuttles
- Rethink parking structures
- Increase core system speeds and frequency to remain relevant



- Accelerate transition to no emission vehicles
- Partial or full electrification of Commuter Rail
- Large scale resiliency investments
- Significant core capacity increases

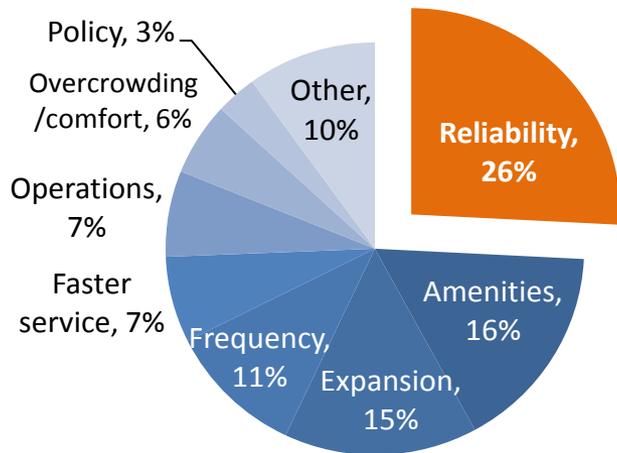
Decision-Making Using Scenarios



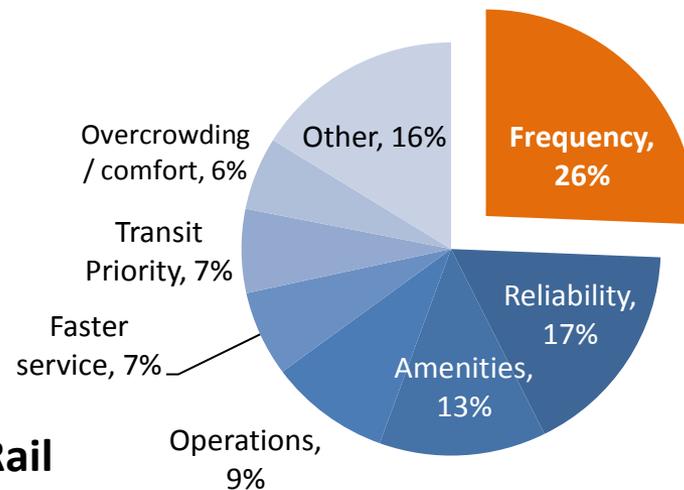
ENGAGEMENT INSIGHTS

What we Heard by Mode

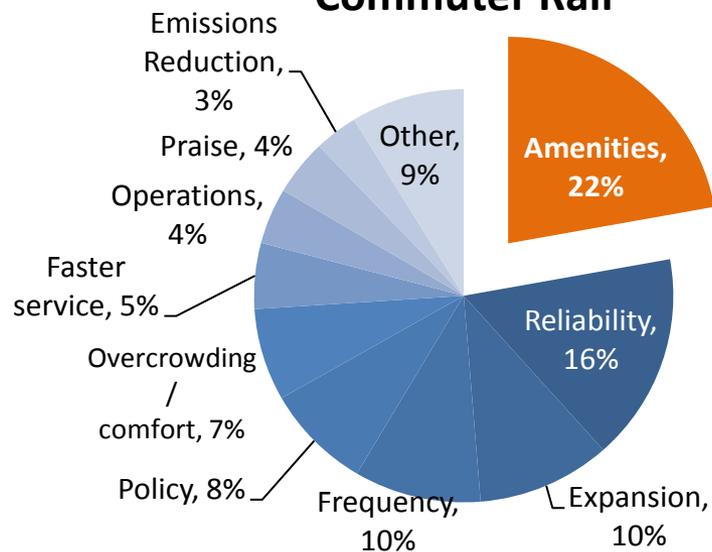
Rapid Transit



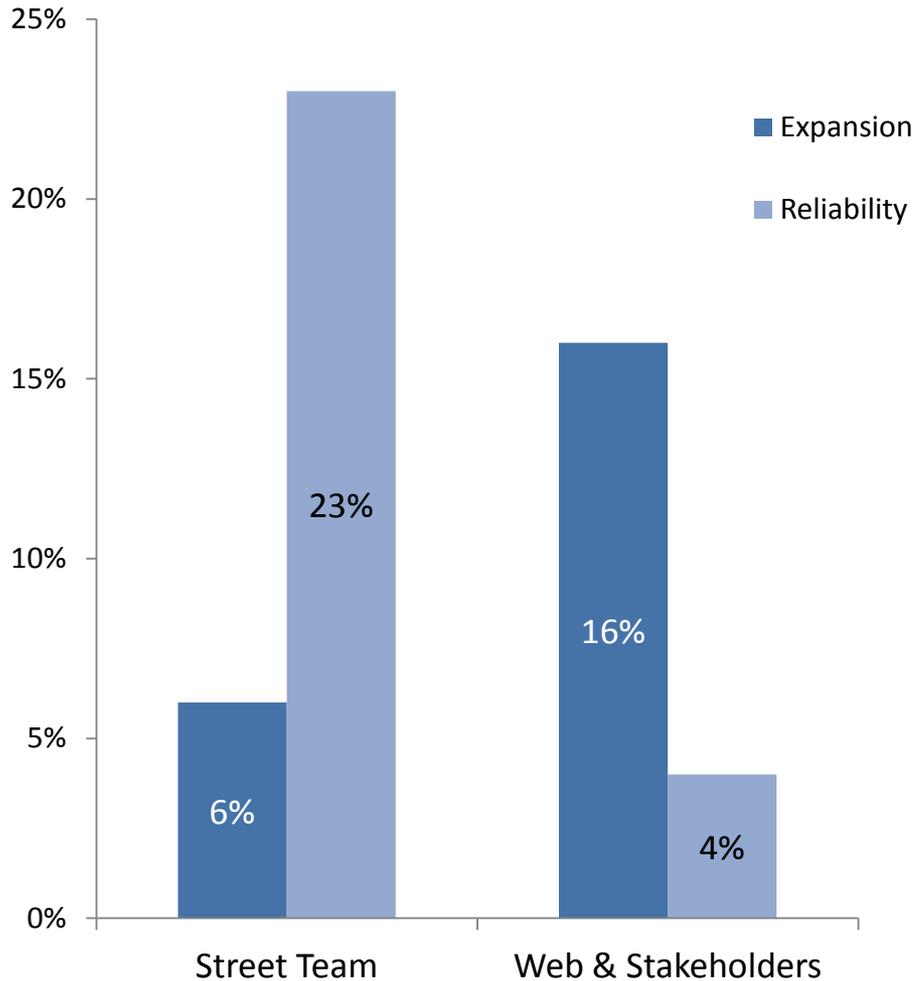
Bus



Commuter Rail



What we Heard...



“Focus investments on improvements to the existing system”

“Make buses faster, more reliable, and on time!”

“I want to see better reliability and on-time service across the system”

PLACES AND POLICY

Places and Policies: Where and How

At the same time that Focus40 seeks to emphasize the importance of a well-functioning core system, it should also recommend an increased focus on improving transit services **where more and better service is necessary to support the economic competitiveness of the region in 2040, under plausible future scenarios.**

Through the Places Typologies and an Expansion Policy, Focus40 hopes to release a clear framework that explains where, what, and how the MBTA should think strategically about investing in expanding the MBTA's existing footprint.

We seek input from the Board on:

- The overall approach to thinking about expansion
- The places
- The elements of an expansion policy

Places

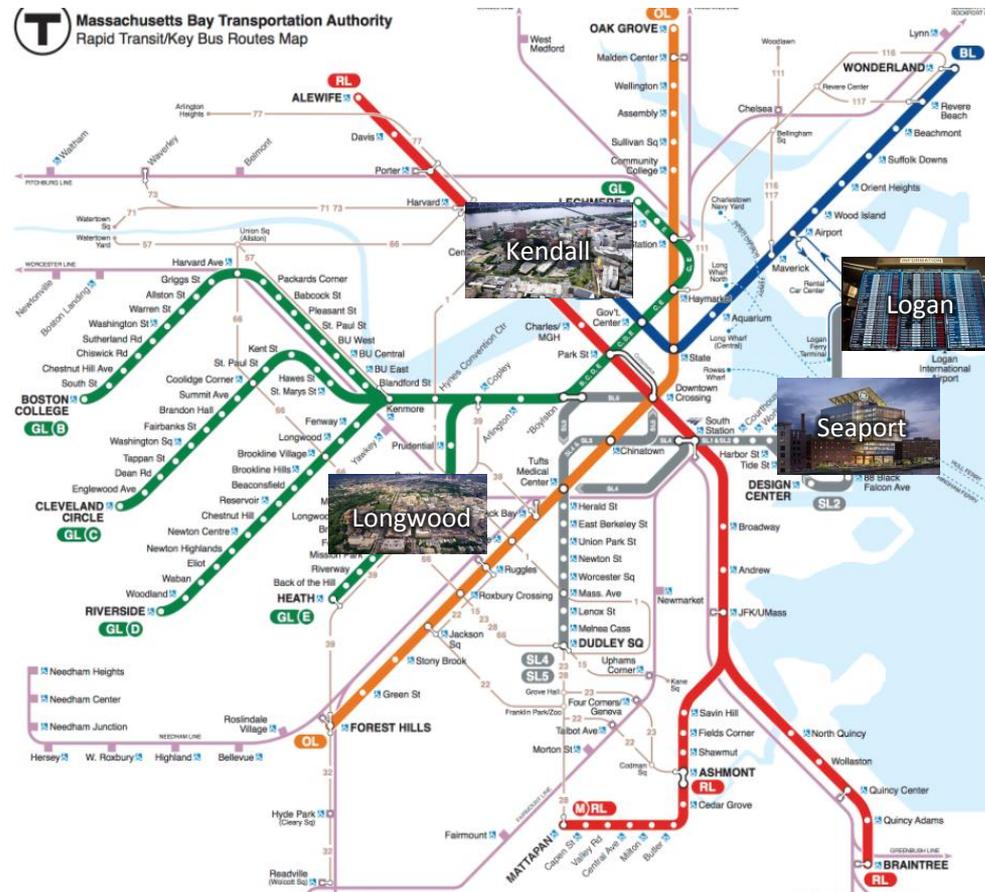
Typology Approach - Focus on Categories of Places Where:

- Improved service could address a clear transportation need and help support broader goals for the region.
- Many elements indicate that they can support higher quality transit
- There is a demonstrated transportation need today that is likely to grow.

Using a scenario planning framework, these are the least risky places to invest in better transit and also have the greatest potential benefits

Major Employment/Destination Districts

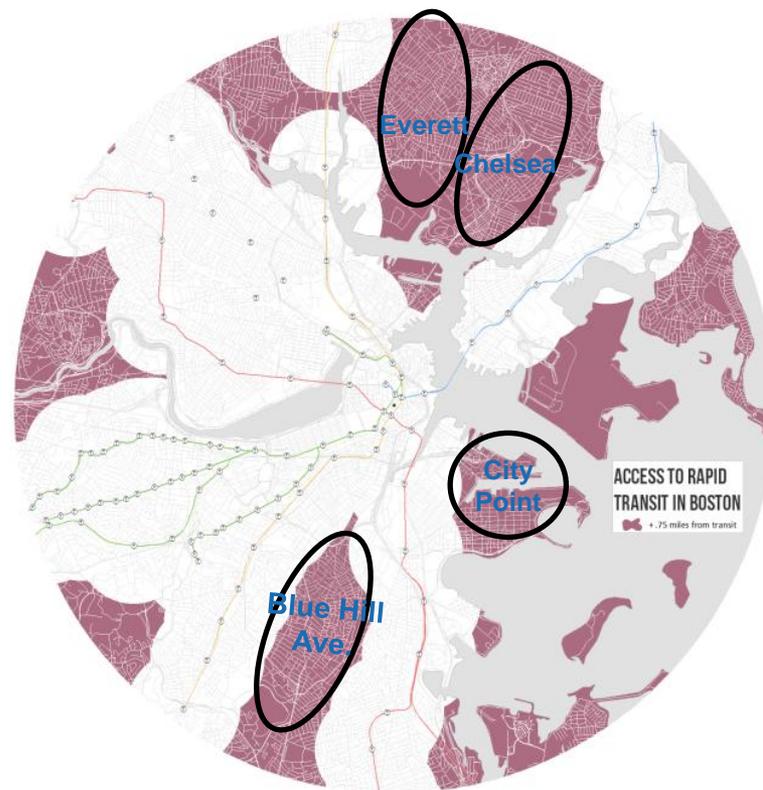
A growing region will need business districts well served by multiple transit options in order to widen the labor pool that can access jobs by transit. Today, there are several growing business districts that are just beyond the densest part of the rapid transit network, resulting in longer commutes, the overloading of existing MBTA services, and the presences of multiple shuttle providers.



Dense Inner Core Neighborhoods Not Adequately Served by Existing Transit

In 2040 the region will need more affordable residential areas with direct and frequent connections to the inner core's major employment centers and destinations

- Many nearby residential areas lack direct access to rapid transit and are served only by bus or Commuter Rail.
- Many are lower-income communities
- Better transit and affordability would improve access to job opportunities and livability

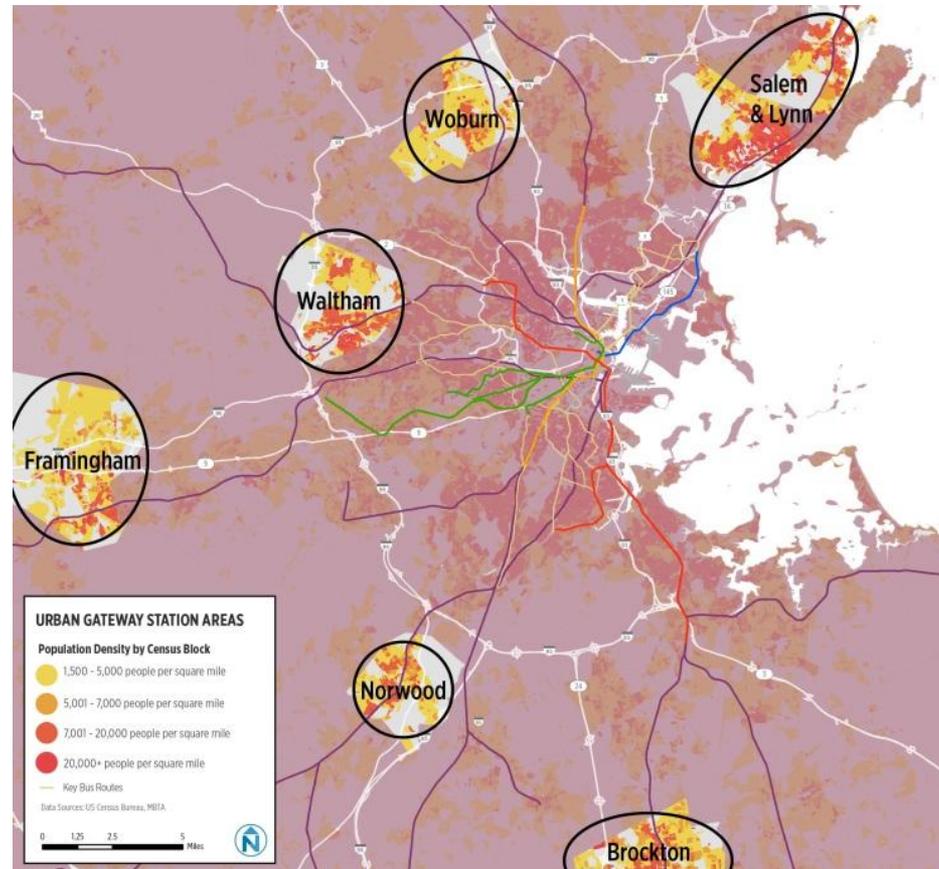


Silver Line Gateway, coming next year to Chelsea, will greatly increase accessibility of Chelsea to the airport and jobs in the Seaport.

Urban Gateways

Meeting regional affordability and GhG reduction goals will require further integration of denser, more urban communities just beyond the reach of the rapid transit system and frequent bus network. This typology includes:

- Moderate-intensity balance of residential and commercial development either built or permitted
- Large population of low-income residents
- Served by commuter rail and often functioning as a hub for local MBTA or regional transit authority bus service.
- ❖ Many of these areas are actually denser than areas with rapid transit access and appear to have a higher transit propensity than what is currently provided



Are there other place types Focus40 should examine?

Expansion Policy

- Through the Places Typologies and a new Expansion Policy, Focus40 hopes to establish a clear framework for where, when, and how the MBTA would consider potential system and service expansions.
- In the places identified by the Focus40 process as the best suited to benefit from and leverage higher levels of investment in public transit, potential expansions will be reviewed and evaluated within the framework of the principles laid out on the next two slides.
- For the purposes of this policy, ‘expansion’ means an increase in the size, scope, or reach of the physical MBTA system and the services it provides, and not an expansion in capacity that can be generated by greater efficiency or modernization of the current system.

Expansion Policy

Proposed Policy Elements:

- **Are there willing and capable partners ready to collaborate with the MBTA on the expansion effort?**

The MBTA cannot work alone to expand its physical footprint. Municipalities and/or developers must be partners in expansion by contributing street space or funding, and/or implementing transit-supportive policies.

- **Is there a clear transportation need that can be effectively served by more or better public transit of the type that the MBTA is able to provide?**

Going forward, all expansion projects will begin with the articulation of a defined transportation need – a significant regional mobility gap that that MBTA is well-positioned to fill, or a corridor in which the demand for transit is overwhelming available services – that has been identified through data-driven analysis.

- **Has the expansion proposal been subjected to a rigorous cost-benefit analysis, one that has demonstrated that the anticipated mobility benefits can be gained for a cost that makes sense?**

In keeping with the Focus40 goal of investing in places where public transit can produce the greatest benefits – both for mobility and for other policy goals – the MBTA will focus its efforts on service/system expansions that can move the greatest numbers of people for the lowest cost.

Expansion Policy

Proposed Policy Elements:

- **Does the expansion proposal have a clearly defined scope, with easily explained objectives?**

From the earliest stages of planning, all MBTA expansion projects will have a clear, straight-forward, and easy to explain mission statement. Large and complex projects can only be successful with a shared understanding of their underlying purpose; projects cannot advance efficiently and cost-effectively if they are trying to address a disparate list of goals and needs.

- **Have other, simpler, lower-cost solutions been tried, prior to considering an expansion of service or infrastructure? Have they proven sufficiently successful that a higher level of investment by the MBTA would provide measurable benefits?**

The MBTA should always seek to address identified transit needs with the lowest-cost effective solutions, and should build in flexibility to allow for further expansion only if and when the initial solutions prove themselves overmatched by the demonstrated demand for transit capacity.

- **Can the proposed new service or infrastructure provide important co-benefits that can meet other policy goals?**

In places where corridor municipalities can be willing partners to expand housing, encourage job growth, increase density, or build infrastructure that supports walking, bicycling, and transit use, the MBTA should evaluate whether a higher level of transit service could energize regionally beneficial growth.

Next Steps

Late 2017

Continue stakeholder engagement and finalize programs, places, and policies

Early 2018

Joint Board Meeting on programs and specific recommendations
Solicit public feedback on draft plan: web, survey

Spring 2018

Final public event & release

APPENDIX

Proposed Investment Programs

System-Wide

- Customer Experience
- Accessibility
- Climate Resiliency
- Emissions Reduction

Bus

- Silver Line 2040
- Bus Network Redesign
- Better Bus Infrastructure

Water Transportation • Paratransit • Commuter Rail

- Water Transportation 2040
- Paratransit 2040
- Commuter Rail Connections
- Commuter Rail Transformation

Rapid Transit

- Red Line 2040
- Orange Line 2040
- Green Line 2040
- Blue Line 2040