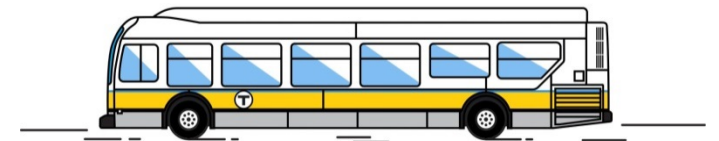


BUS NETWORK REDESIGN

July 23, 2019



Better
Bus
Project

Agenda

1. Review Key Policy Statements
2. Provide process updates:
 - Bus Network Redesign Metrics
 - Bus Network Redesign Demonstration Projects
 - Public Outreach Approach

Bus Network Redesign Overview

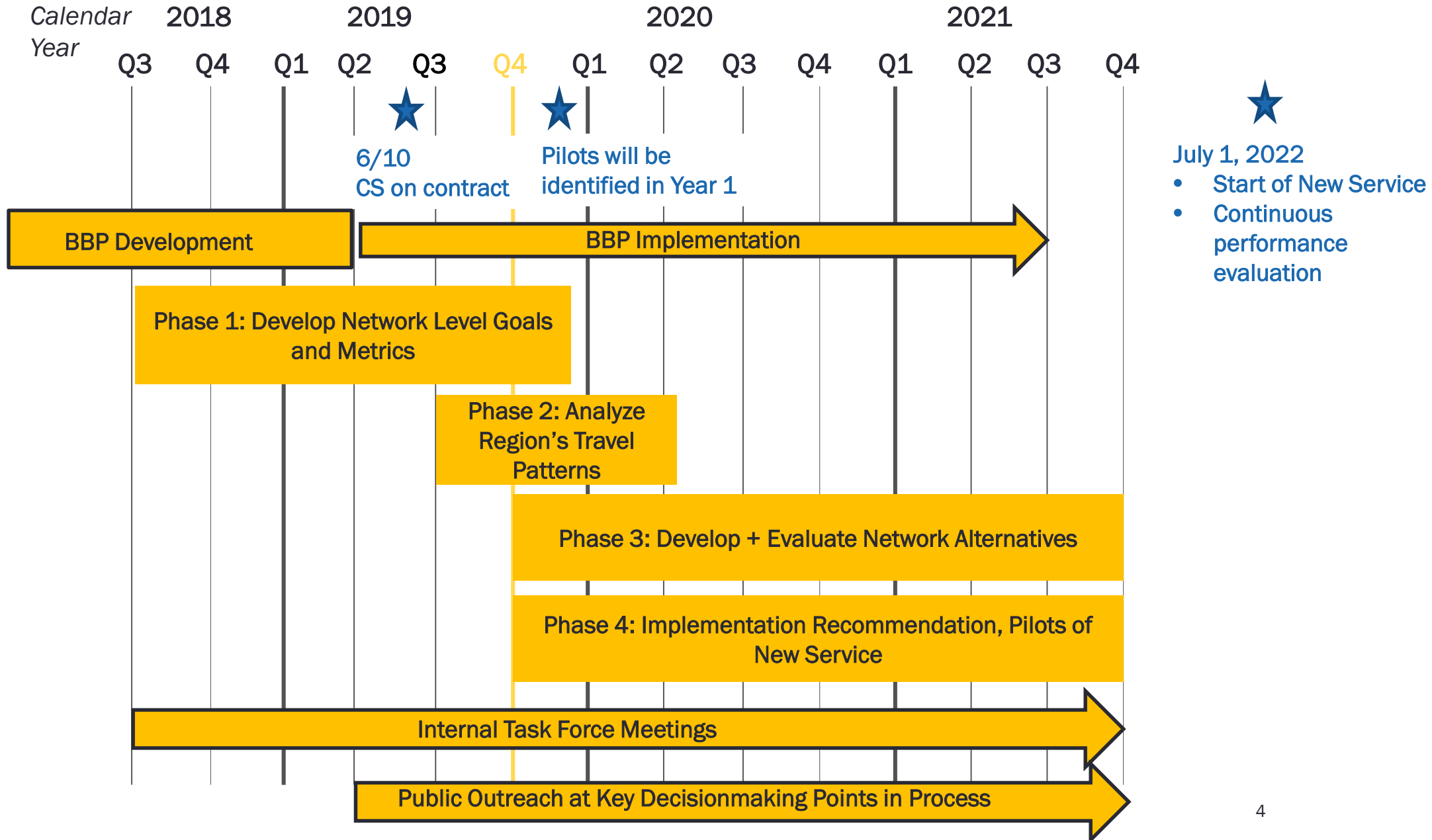
The MBTA bus network carries 1/3 of our customers but has not changed drastically since mid-20th century.

Since that time:

- Demographics have shifted
- New destinations have emerged and many communities have transformed
- Travel patterns have changed alongside new mobility options such as ridesharing and bike share
- Traffic congestion has increased
- Ridership has declined

In order to respond to this changing context, the Network Redesign will recommend a new network that meets today's regional needs.

Timeline



Key Policy Statements – Planning Horizon

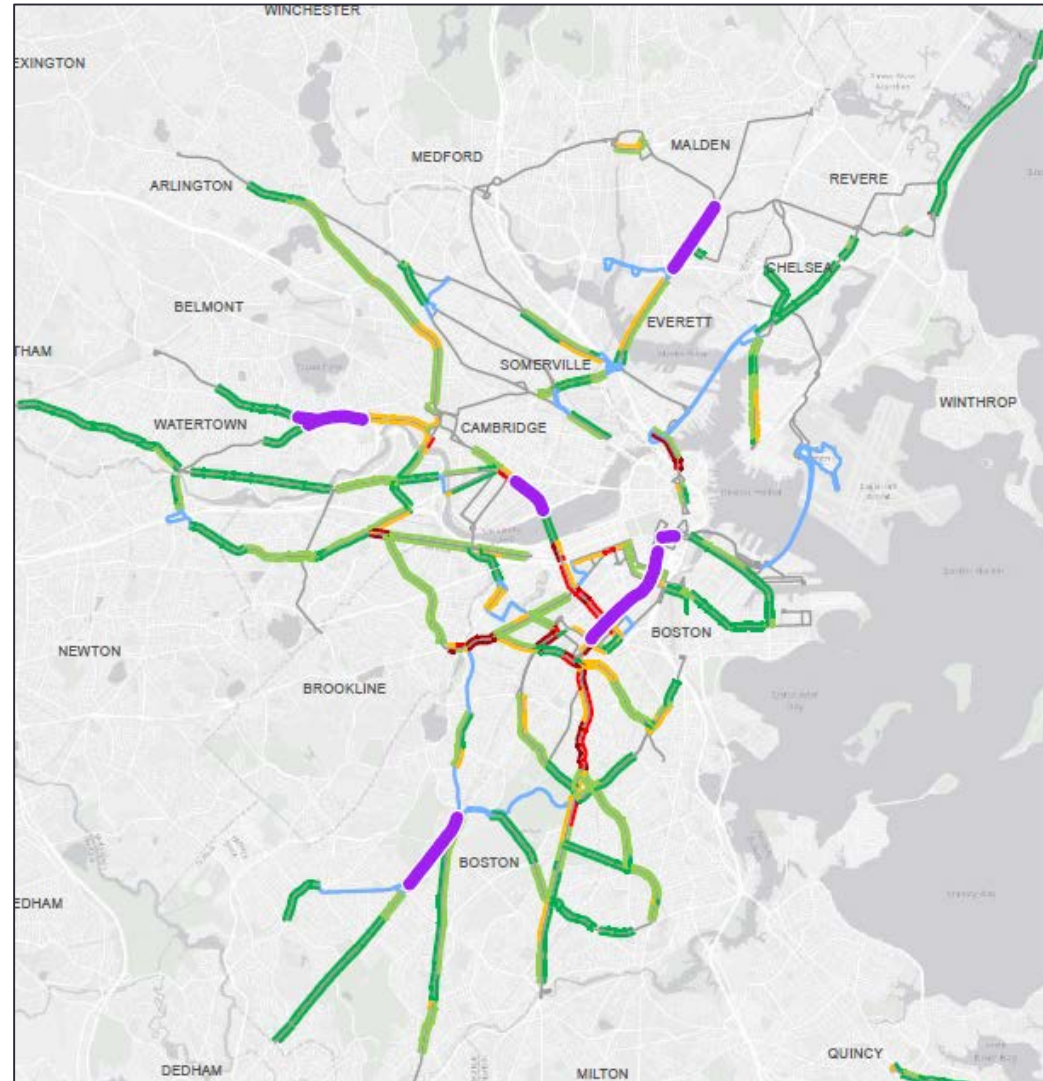
Land Use: The BNRD will rely on trip-making data based on today’s land use. However, regionally adopted 2030 land use projections will be used to identify major growth areas to consider in the process. State adopted regional housing creation plans will also be considered when developing network designs, particularly when that growth is targeted in transit-friendly areas.

Coordinating with Upcoming MBTA Capital Investments: The BNRD will assume coordination with:

- Fully funded and committed investments per the FY 2020-24 Capital Investment Plan, including the Green Line extension (GLX) and increased capacity from the Red Line/Orange Line program

Key Policy Statements – Municipal Partnerships

- BNRD will assume the 14 miles of bus priority identified through the Better Bus Project will be implemented.
- Network designs may assume additional transit priority infrastructure beyond these 14 miles, provided that proposed service levels support it and cities and towns have been notified.
- BNRD will focus on the entire MBTA-exclusive service area.



Key Policy Statements – Fleet and Facilities

- While the implementation phase will include a fleet and facility assessment, the planning phase will focus on service and not be bound by:
 - Existing facility locations
 - Existing fleet size
 - Operating assignment rules
 - Future conversion to zero emission fleet

Key Policy Question – Budget

We assume that additional operating and fleet resources beyond today's resources become available.

- BNRD will present network alternatives to MBTA leadership that demonstrate overall network performance and outcomes at different funding levels so tradeoffs can be clearly understood.
- As part of this process, BNRD will evaluate the suitability of alternative service delivery models already in use by the MBTA while also exploring additional approaches.

PROCESS UPDATES

Approach to Developing Metrics: Connecting to the Service Delivery Policy

The Service Delivery Policy addresses service planning, service availability, and service quality measures (primarily at the route level).

Service planning measures: what routes should we have?

- Cost-efficiency
 - Base Coverage
 - **Serving demand**
 - **Connectivity**
- } Route
} Network

Service availability measures: How much service do we provide on the routes we established?

- Minimum Frequency
 - Minimum Span of Service
 - Accessible
- } Route
} Network

Service quality measures: How good are we doing at providing service?

- Reliability
 - Comfort
 - Safety
 - Communication
- } Route
} Network

As part of the Bus Network Redesign, network-level metrics related to connectivity and serving demand will be created.

Approach to Developing Metrics

Regional connectivity needs to define two components of access: for whom and to what?
Serving demand means making transit a viable option for any trip we choose to serve

Through the last three years of engaging with stakeholders, we have identified the following factors of making transit a viable option:

- Trip time
- Frequency
- Cost
- Span of service
- Reliability
- Comfort
- Simplicity of Network
- Transfers
- First/Last Mile Connections; Coverage
- Communications

Connectivity for whom and to what:
Existing riders

- Riders that previously used the system but no longer do today
- Environmental Justice communities
- People with mobility issues

Potential riders

- People who do not use the system but could given proximity to MBTA
- People whose tripmaking patterns are not served by MBTA

Demonstration Projects (Pilots)

The FMCB asked project team to identify demonstration projects by end of 2019

Demonstration Projects will be identified in the following ways:

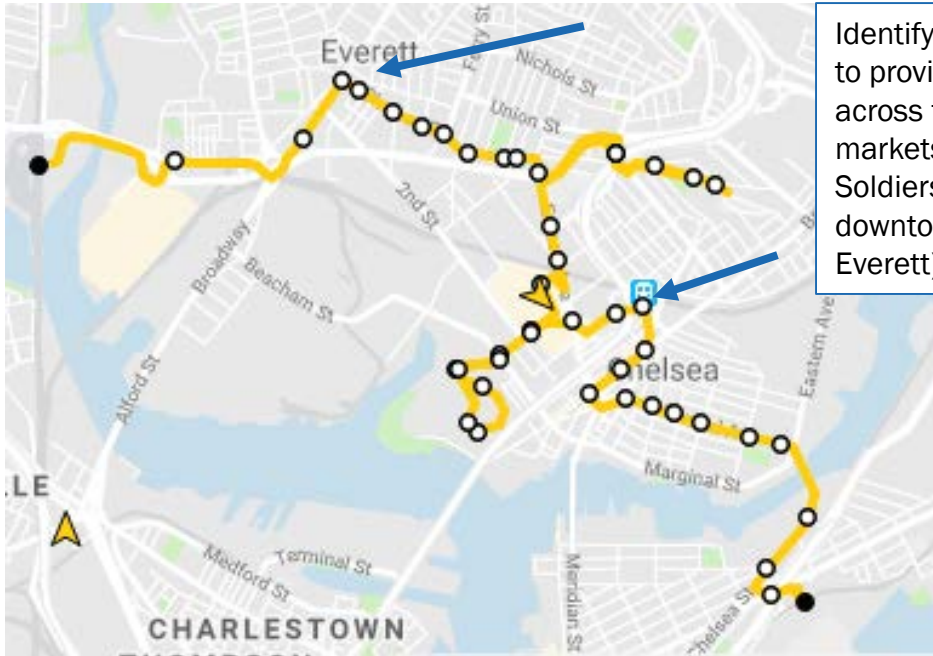
- Better Bus Project
- Origin-Destination dataset
- Submissions from online intake form (available on <https://www.mbta.com/policies/service-pilot-process> today)

Timeline: Demonstration projects agreed to by FMCB in late 2019 would be on street in Summer 2020 rating.*

*Note: Some concepts may need to go into a design process before being implemented.

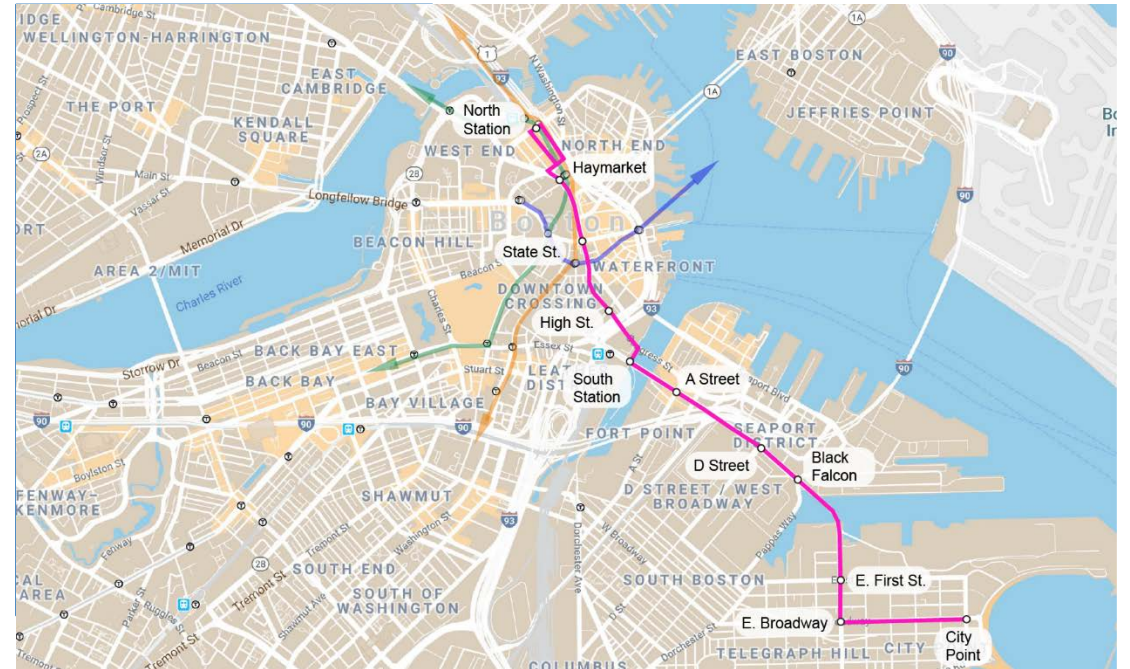
Demonstration Project Examples

112 Improvements



Identify better approach to providing service split across two different markets (Admirals Hill + Soldiers Home and downtown Chelsea and Everett)

Congress Street Bus Corridor



Using Location-Based Data To Reimagine The Bus System

- **Cambridge Systematics** has been hired to conduct a trip-making analysis of the Boston region based on location-based data from 2018
- Data are anonymized and cannot be linked to cell phone numbers or individuals
- Data come from a range of applications (multi-language, lifestyle, travel, news, etc.) where people have opted in for location-tracking and is representative of different demographic groups
- The data capture 12 months of travel



Next Six Months

1. Publicize Demonstration Project intake form on website
2. Continue to meet with internal and external task forces to refine network-level metrics and plan for additional public workshops
3. Review results of trip-making analysis
4. Present draft network-level metrics to leadership in fall
5. Present selected demonstration projects to FMCB by end of 2019
6. Plan for public meeting in late 2019

Public Outreach Approach to Develop Metrics

Engagement Type	Timeline
Monthly External Task Force Meetings	May 2019 – December 2019
Monthly Municipal Meetings	Ongoing
Public Workshops	Starting Fall 2019
Online Feedback Form on Metrics	Fall 2019
Public Meeting	December 2019