Better Bus Project

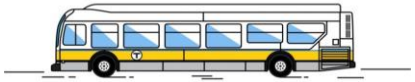
Making transit better together

Bus Network Redesign

Arlington Select Board

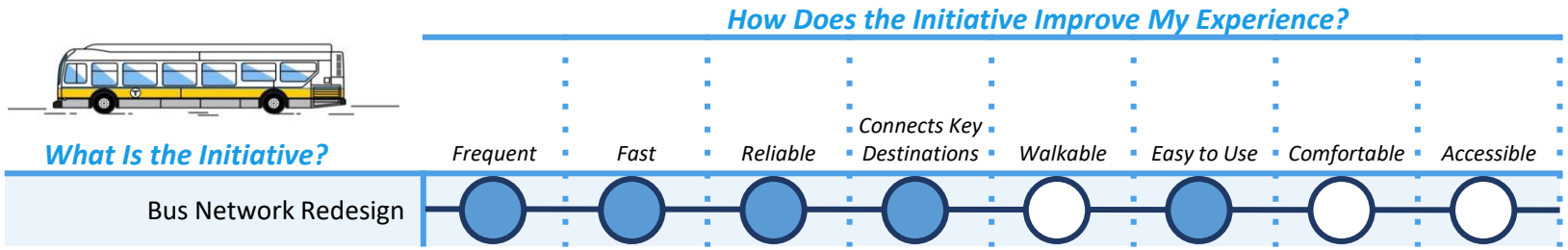
August 9, 2021

The Better Bus Project



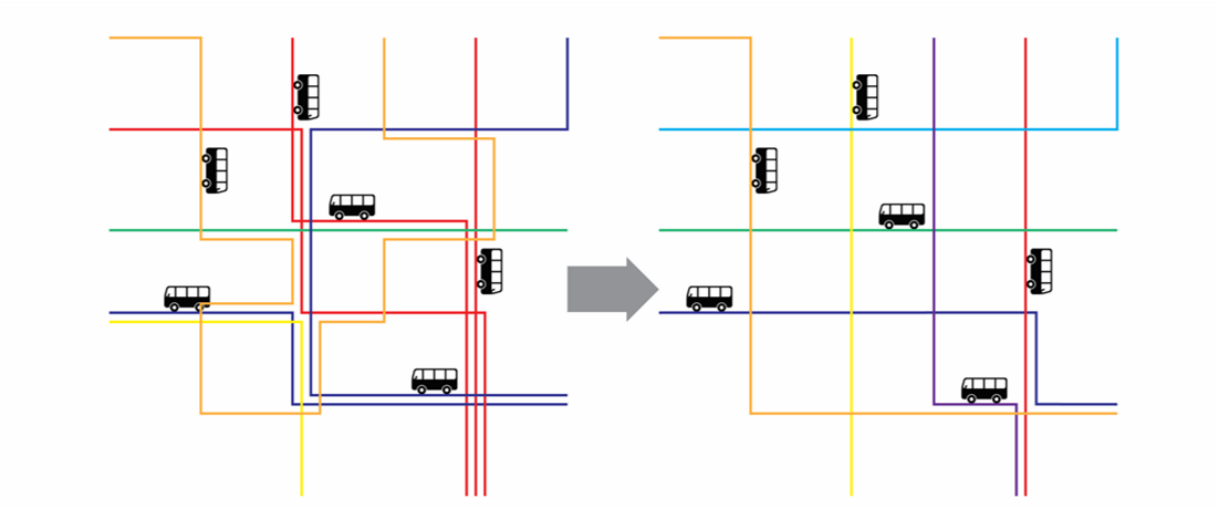
What Is the Initiative?	How Does the Initiative Improve My Experience?							
	Frequent	*Fast*	*Reliable*	*Connects Key Destinations*	*Walkable*	*Easy to Use*	*Comfortable*	*Accessible*
Bus Transit Priority	●	●	●	○	○	○	○	○
Bus Network Redesign	●	●	●	●	○	●	○	○
2019 Route Changes	●	●	●	●	○	●	○	●
Bus Stops: Accessibility Improvements, Shelters, and Amenities	○	○	○	●	●	●	●	●
Bus Modernization: Fleet and Facilities	●	○	●	○	○	○	●	●
Improved Passenger Information: E-Ink Signs	○	○	○	○	○	●	○	○
Bus Operations: Skate—Mobile Dispatching	●	○	●	○	○	○	○	○

The Bus Network Redesign



A complete re-imagining of the MBTA's bus network to better reflect the travel needs of the region and create a better experience for current and future bus riders.

What is a bus network redesign?



A network redesign generally serves the **same neighborhoods and streets**, but it connects them in **different ways to make a network that is better for riders.**

What can you expect?

- A **more equitable network** that better serves transit-critical populations.
- A network that’s **simpler and easier to understand**.
- More **high frequency corridors**.
- Better **connections** to major local and regional destinations.
- A focus on **all-day service** with more buses in the midday, evening, and weekends.

Measuring success

Is the MBTA providing transit critical populations w/ equitable transit service?

EQUITY

Is the MBTA connecting people to the places that are most important to them?

ACCESS

Is the MBTA a good choice for making these trips?

COMPETITIVENESS

Transit-critical populations: low-income populations, people of color, seniors, people with disabilities, or people who live in households with few or no vehicles

How are we measuring travel demand?

Location-Based Services (LBS) data

- Describes trips (origin-destination pairs) made on **all modes** (not just transit).
- This data captures and is representative of **all types of trips**.
- Is anonymized and unlinked from cell phone numbers and individuals to preserve privacy.
    - Able to make inferences about which trips are made by low-income, people of color, and people in zero and low vehicle households

LBS data allows us to identify places that we don't currently serve but that have high travel demand.

Approach to designing the network: corridors to routes

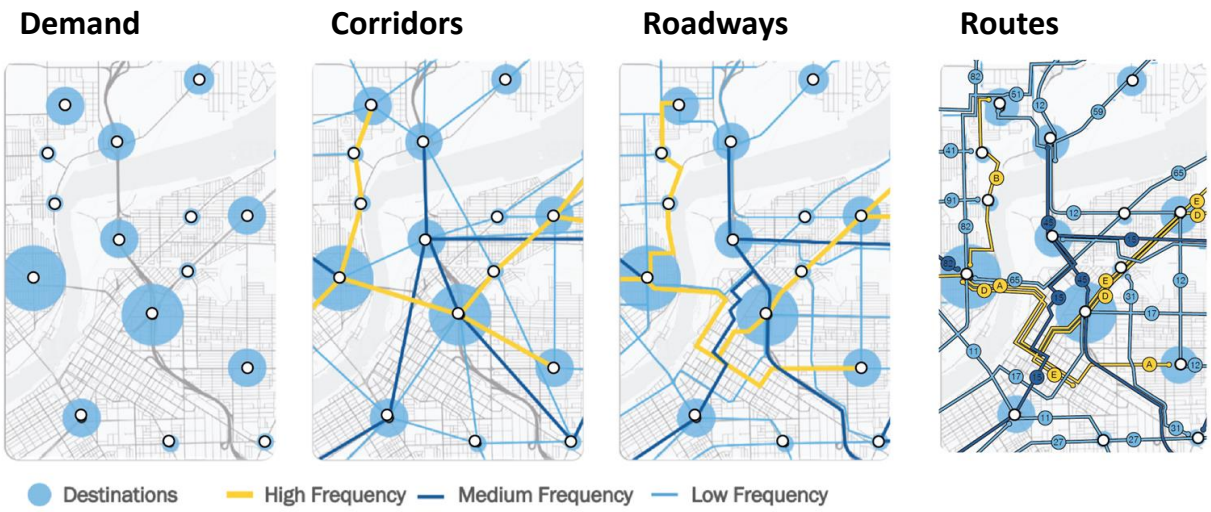
Travel demand data (location based services data) is being used to assess travel in the region.

Corridors connect areas of demand.

Corridors with high travel demand made by equity populations are identified as **High Frequency Corridors** that warrant high frequency service.

Corridors are applied to **roadways** to identify where to prioritize investments in bus infrastructure.

Routes are the service that run in corridors. Corridors with bus infrastructure can be shared by multiple routes in order to optimize investments and improve connections.



High Frequency Corridors

The Bus Network Redesign will identify High Frequency Corridors that warrant frequent service and improved infrastructure -- the first step in creating a vision for a better passenger experience.

Service

- Corridors will offer all day 7 day a week frequent and reliable service
- Corridors with bus infrastructure can be shared by multiple routes in order to optimize investments and improve connections
- Minimum frequency (15 min morning to early evening, 7 days a week)
- Minimum span of service (early morning to past midnight)

Infrastructure

- Corridors will have extensive bus priority, building on existing/planned projects and identifying additional corridors for investment
- More bus stop amenities

Passenger Information

- Corridors will be presented to the public (through route nomenclature, on maps, at stops, etc.) as distinct from the regular local bus network

9

Bus Network Redesign 5-year implementation timeline

Project		CY 2021	2022	2023	2024	2025	2026
Bus Network Redesign	Planning	Draft network (Fall-Winter 2021/2022)	Adopt final network Commit to full implementation				
	Infrastructure		Transit Priority, Bus Stop Installation, Busway Modifications, Signage				
	Service		Rolling route changes				

We are planning for 3-5 phases of implementation for the Bus Network Redesign that will potentially be rolled out by geography. Implementation timing will depend on structure of the new network, staff and public outreach capacity, and the ability to implement bus priority.

The Redesign is coordinated with other initiatives to maximize benefit to riders

Fleet & Facilities
We need to replace old buses, and we need new facilities to operate them, to expand, and to electrify.

Service informs fleet & facility needs

Provides fleet to run the service

Bus Network Redesign
We need a new network that goes where people need it to go when they need it and is easier to understand.

A better rider experience

Ensures expanded fleet is used to provide <u>more</u> service

Tells us where we need priority

Enables high frequency corridors

Bus Priority
We need transit priority infrastructure to keep buses moving through traffic.

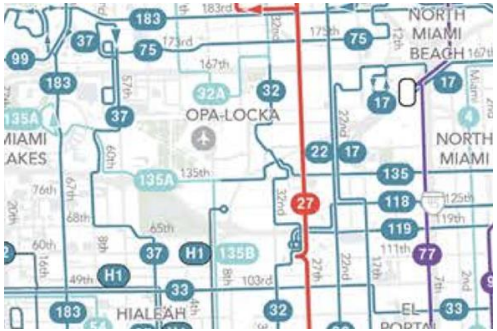
Other key projects include:
Accessible bus stops (PATI)
Modern bus stop amenities
Fare Transformation
Improved rider information
Dispatching tools
...and more

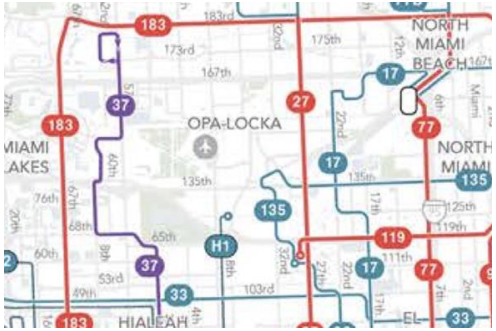
Change will be hard

We can make the network better for the vast majority of current riders – but to make that happen many people's trips will change, and some will get worse.

In Houston – where the number of riders with all-day existing service tripled and ridership grew by 17% -- the public complaints in the 5 months before implementation outnumbered positive comments 330 to 1.

To truly transform the network, we will need to take on tradeoffs, and we're using everything we've heard from riders to think through that.





Example from Miami:
shorter walks to the bus (top)
or more frequent service(bottom)

Our commitments

1. **Equity***, first and foremost
2. Truly **transformational change**—no nitpicking at small margins
3. A better network **for the people who ride today**
4. Extensive stakeholder **engagement**
5. Implementation in the **near-term** (in phases, starting 2022)
6. Integrate service changes with **bus priority** and other **infrastructure improvements** to maximize benefits

***Equity is defined as improving access and quality of service for transit-critical populations**
(low-income populations, people of color, seniors, people with disabilities, or people who live in households with few or no vehicles)

We need your help to achieve this vision!

Better Bus Project
Making transit better together

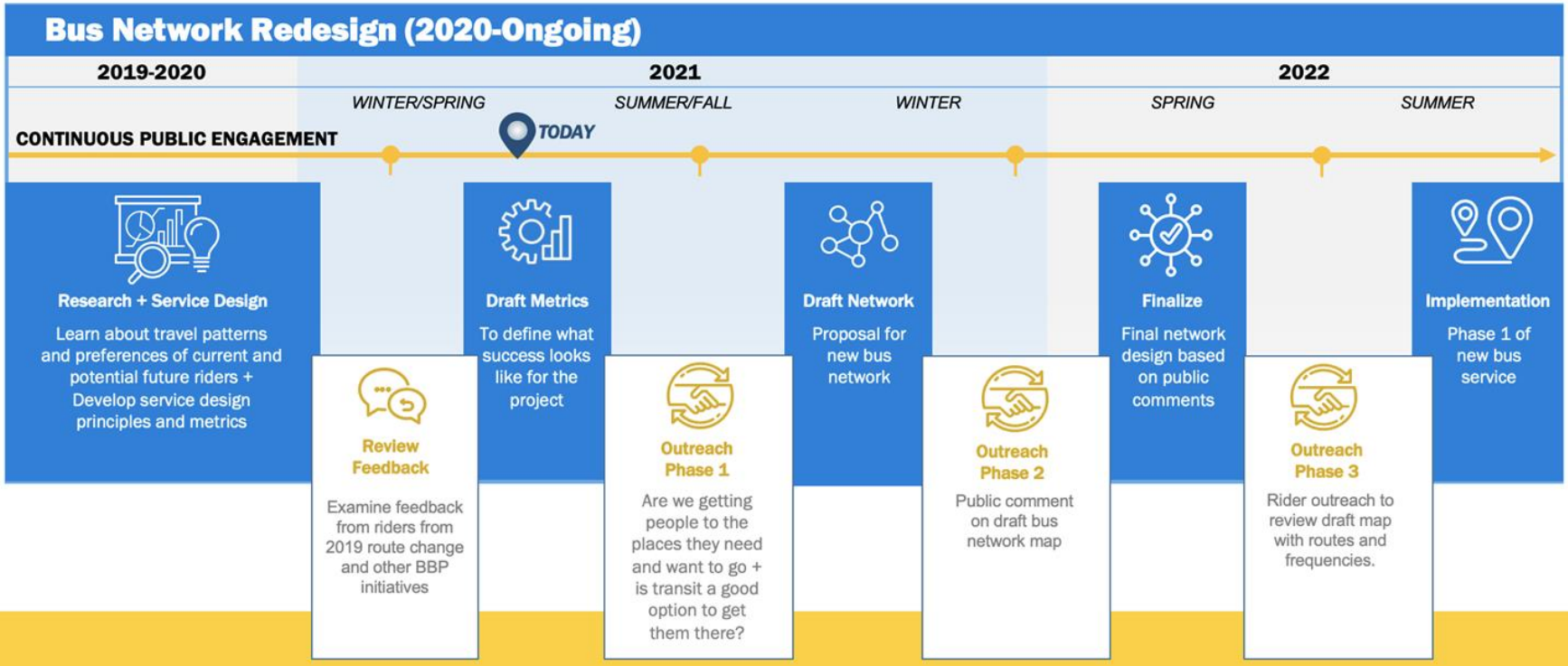
Municipal partnerships are key to success

- To increase service in congested corridors we need effective transit priority.
- Increased service will also require new and expanded layover locations.
- We will need bus shelters and accessible bus stops in new locations.
- We will need new and upgraded garages to operate this service.

The MBTA will only increase service in congested corridors where partnerships with municipalities and other roadway owners result in the infrastructure to provide that service.

Bus Network Redesign Public Outreach Timeline

Learn more: www.mbta.com/busnetworkredesign



Questions?

Better Bus Project
Making transit better together