



Better
Bus
Project

Making transit
better together

Bus Network Redesign

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Cambridge Transit Advisory Committee
June 2, 2021

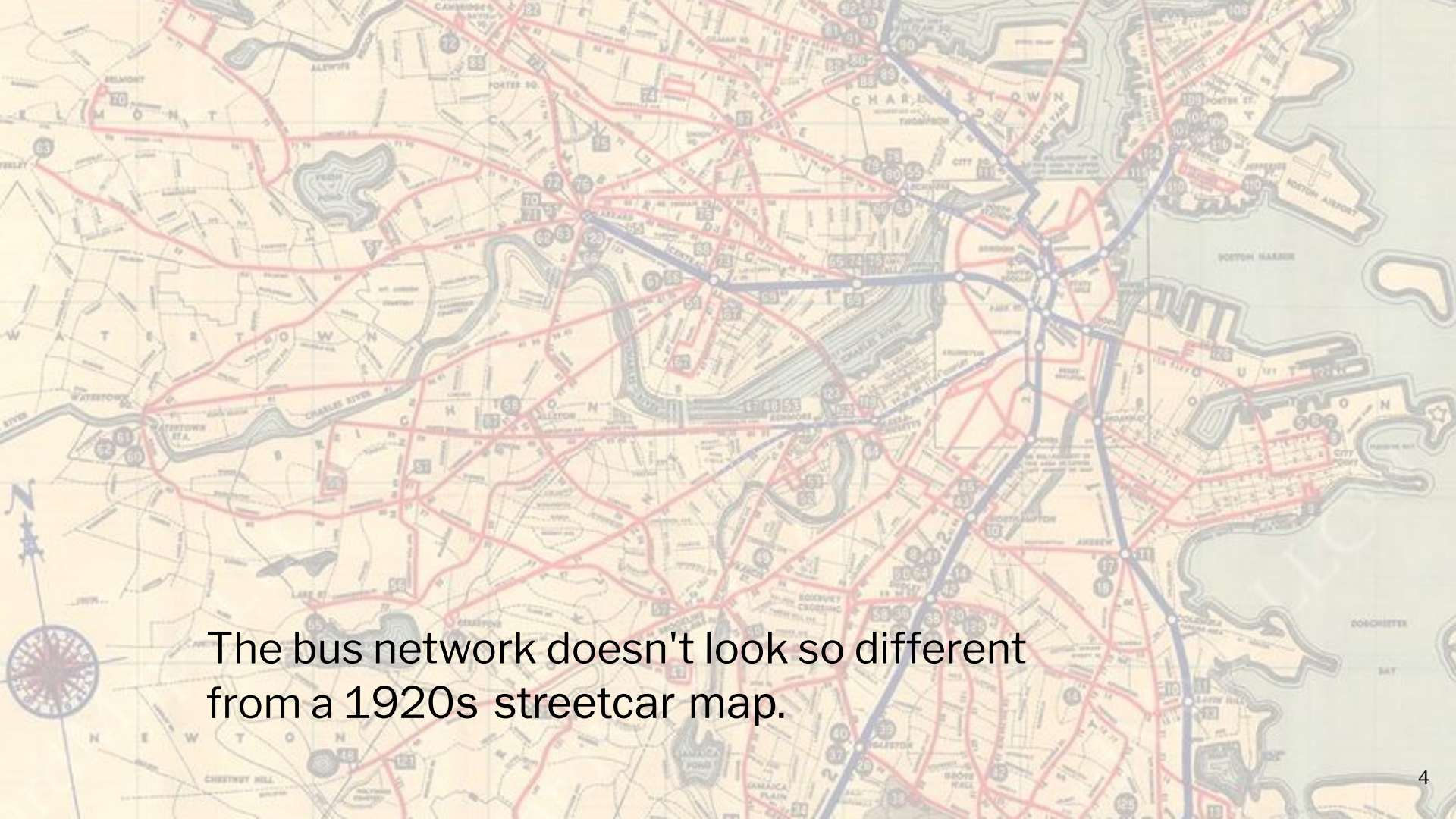


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Greater Boston has experienced significant changes in recent years, while the bus network has stayed largely the same.

New employment districts have emerged, demographics have shifted, congestion has increased, and **travel patterns have changed.**





The bus network doesn't look so different from a 1920s streetcar map.

Riders tell us the
network does not
work for them.



We're making bus service better for you.

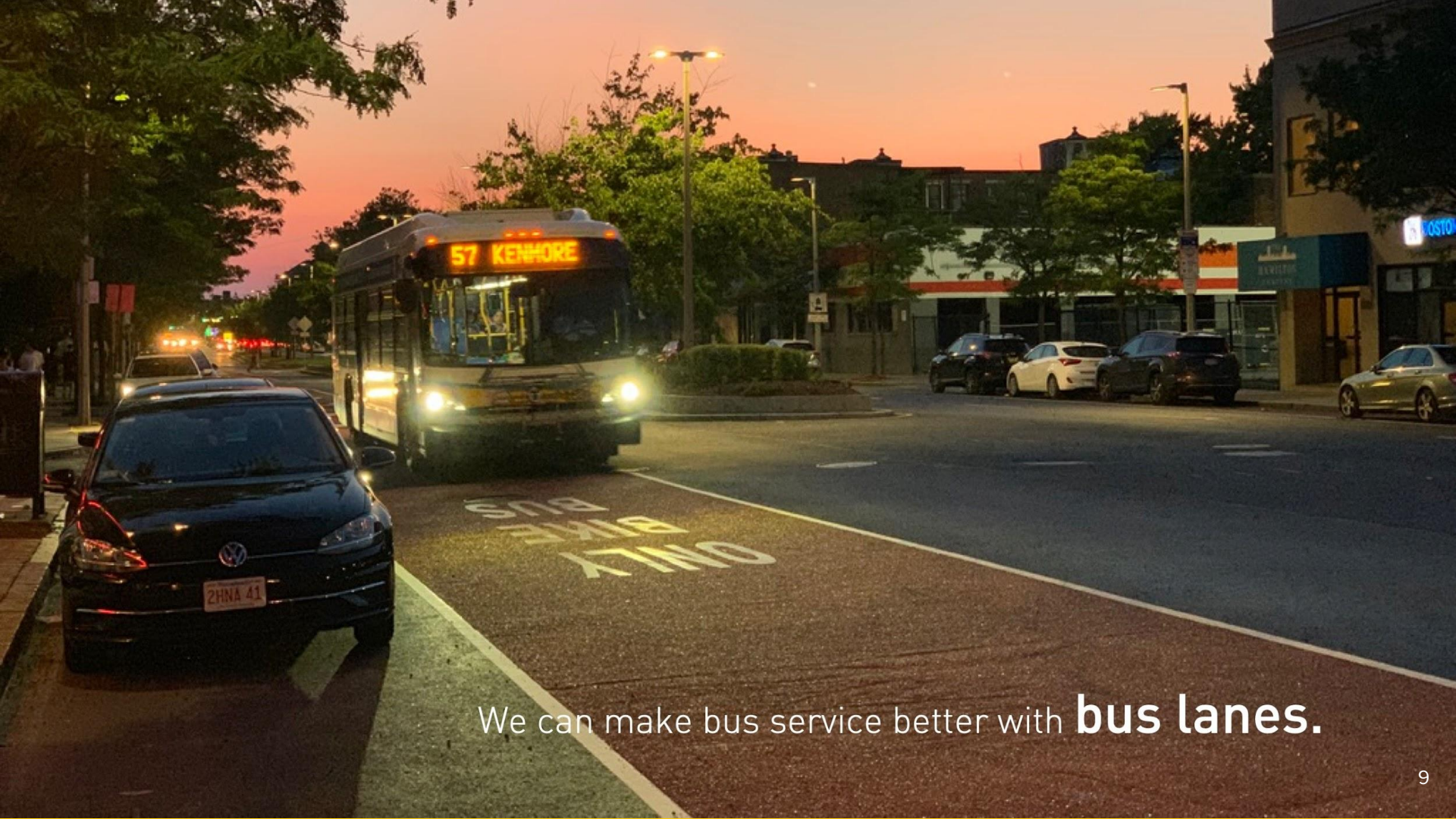
In the Better Bus Project, riders said the bus network is infrequent, unreliable, slow, indirect, and overly focused on peak service.

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**This is a
once-in-a-generation
attempt
to transform the
network for the
people who depend
on it.**

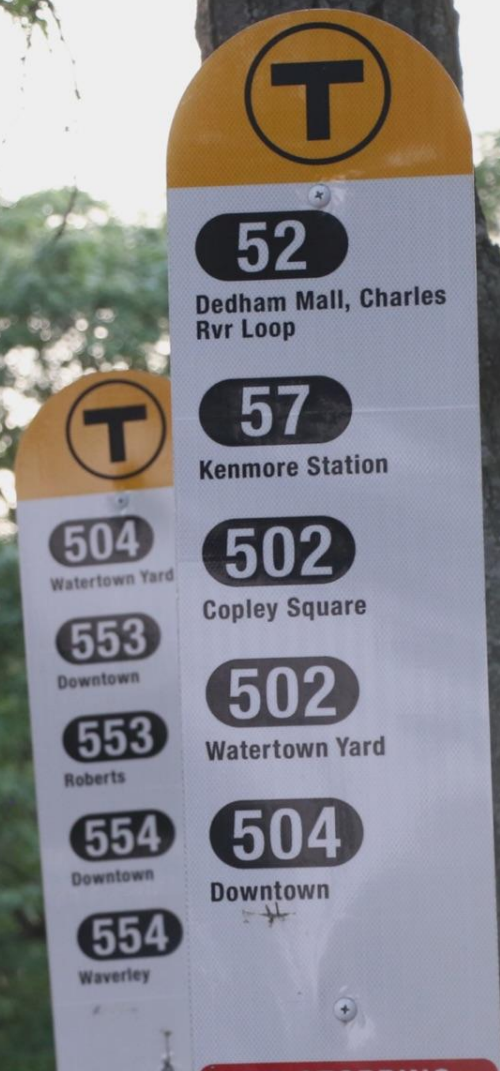


Greater Boston needs **better bus service.**

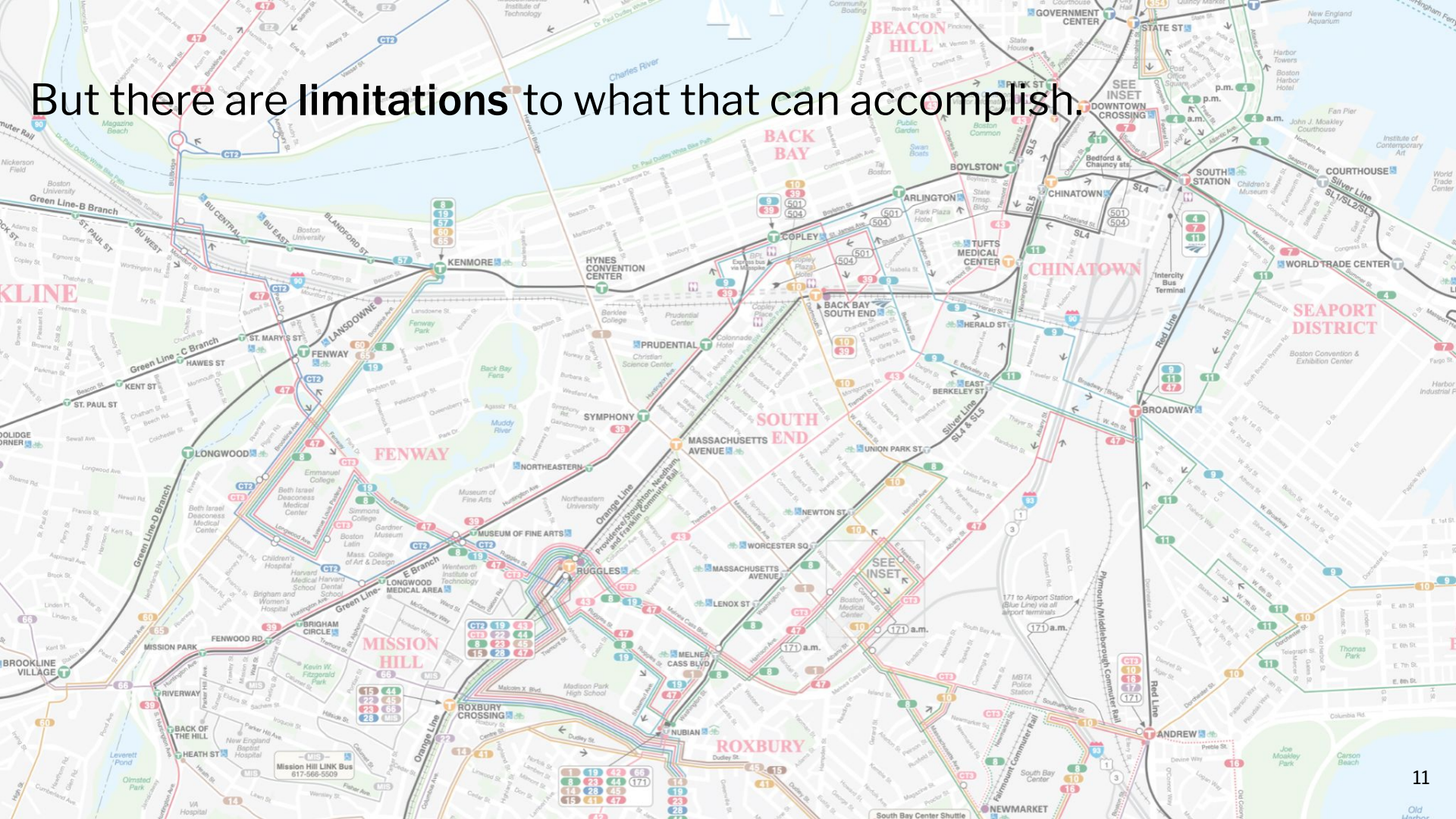


We can make bus service better with **bus lanes.**

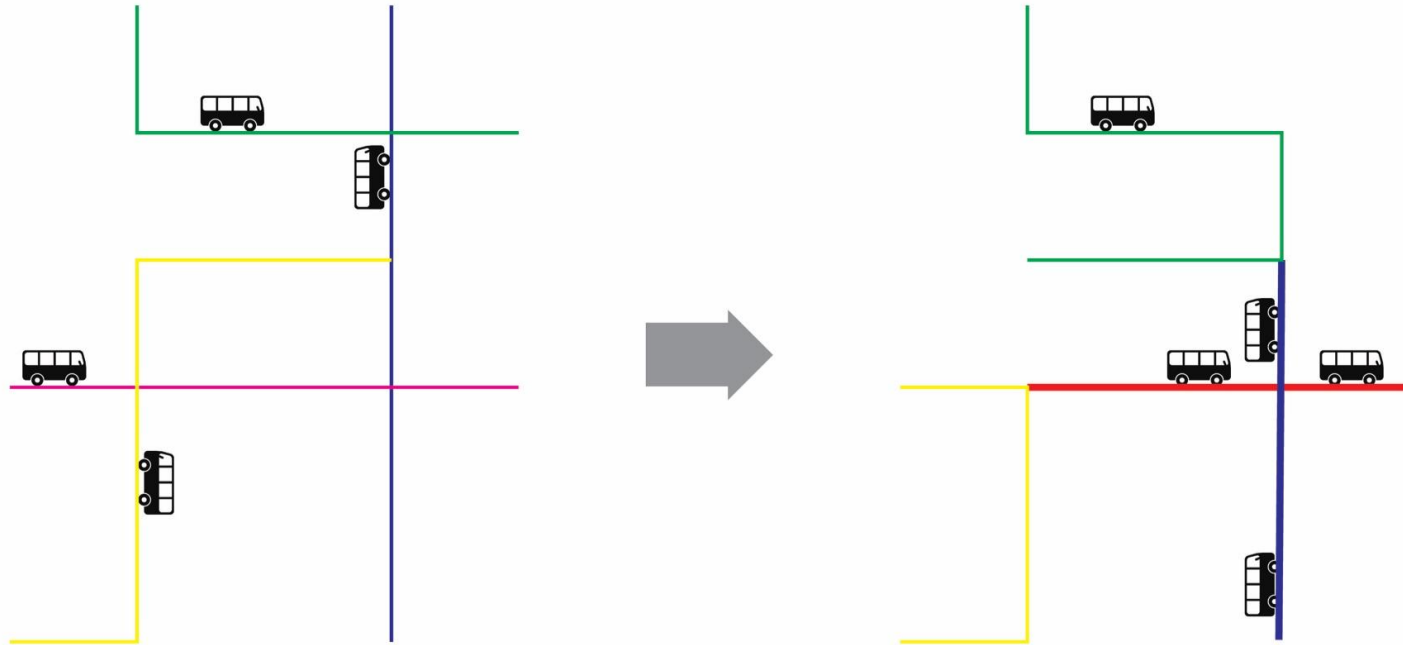
We can make bus service better by redesigning individual routes.



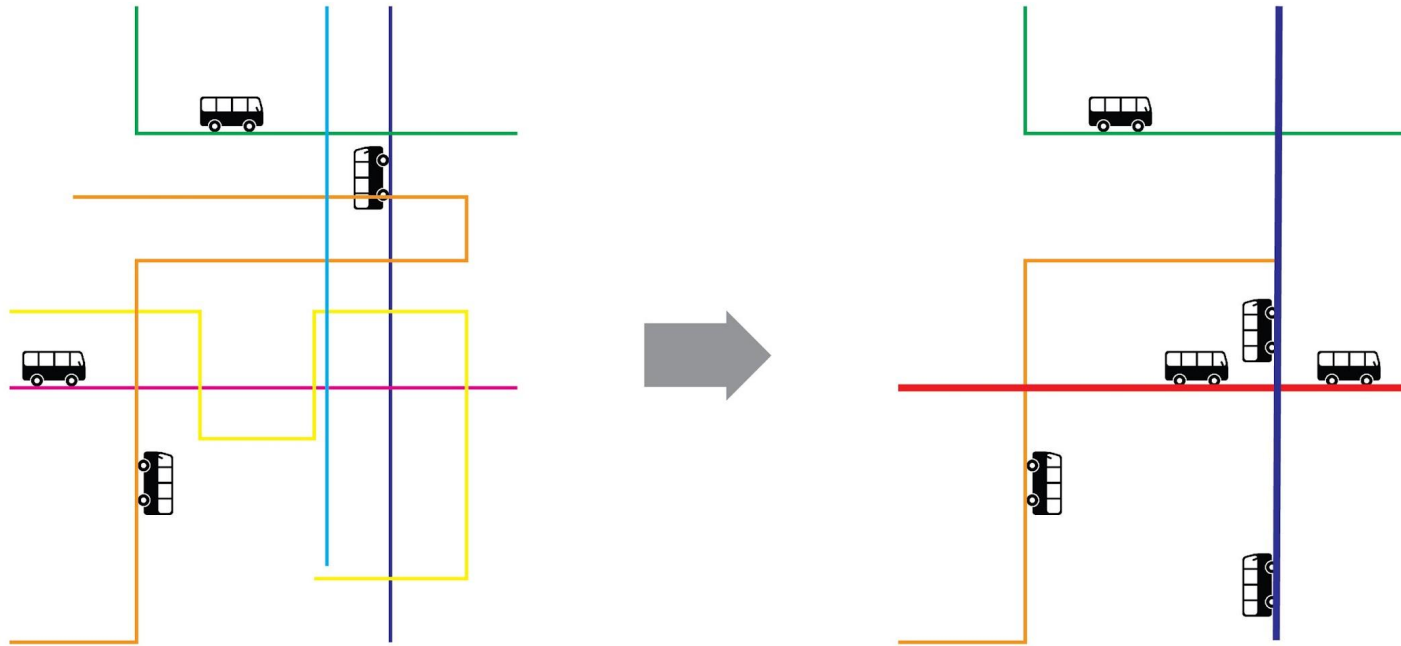
But there are limitations to what that can accomplish.



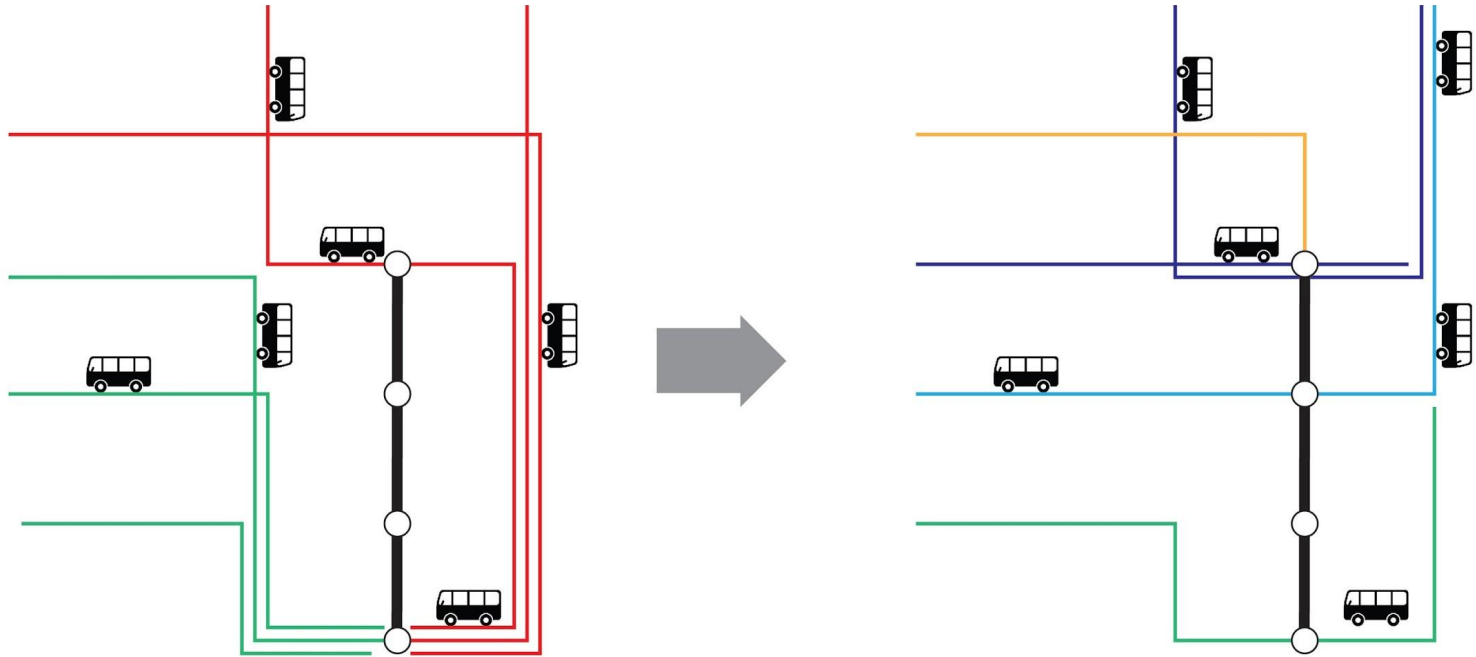
A network redesign can **focus service into core areas.**



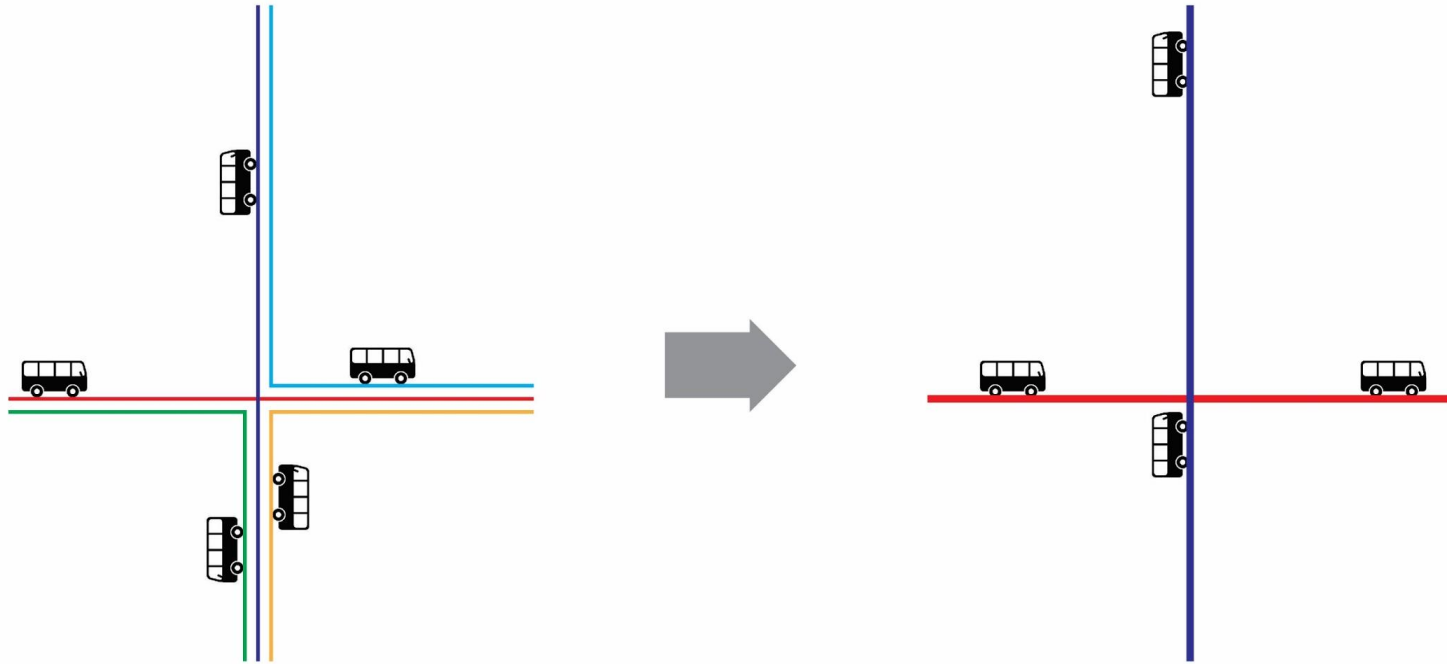
A network redesign can **focus service into corridors.**



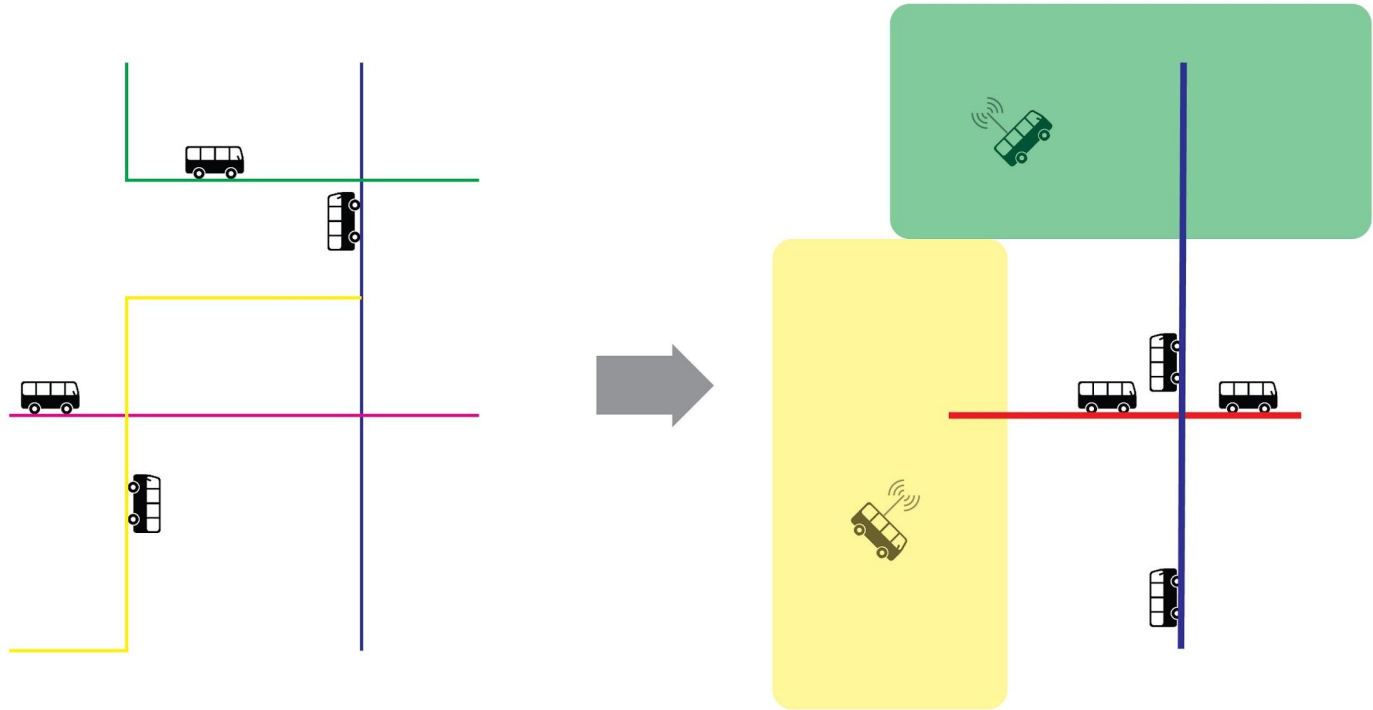
A network redesign can **connect more riders to rapid transit.**



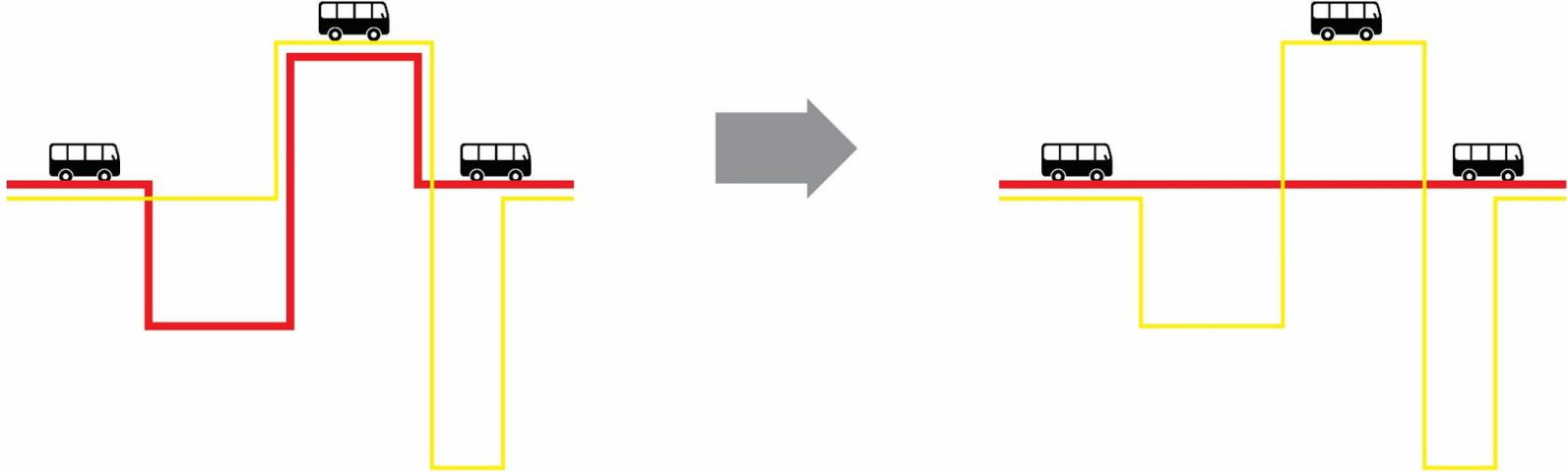
A network redesign can **increase frequency**.



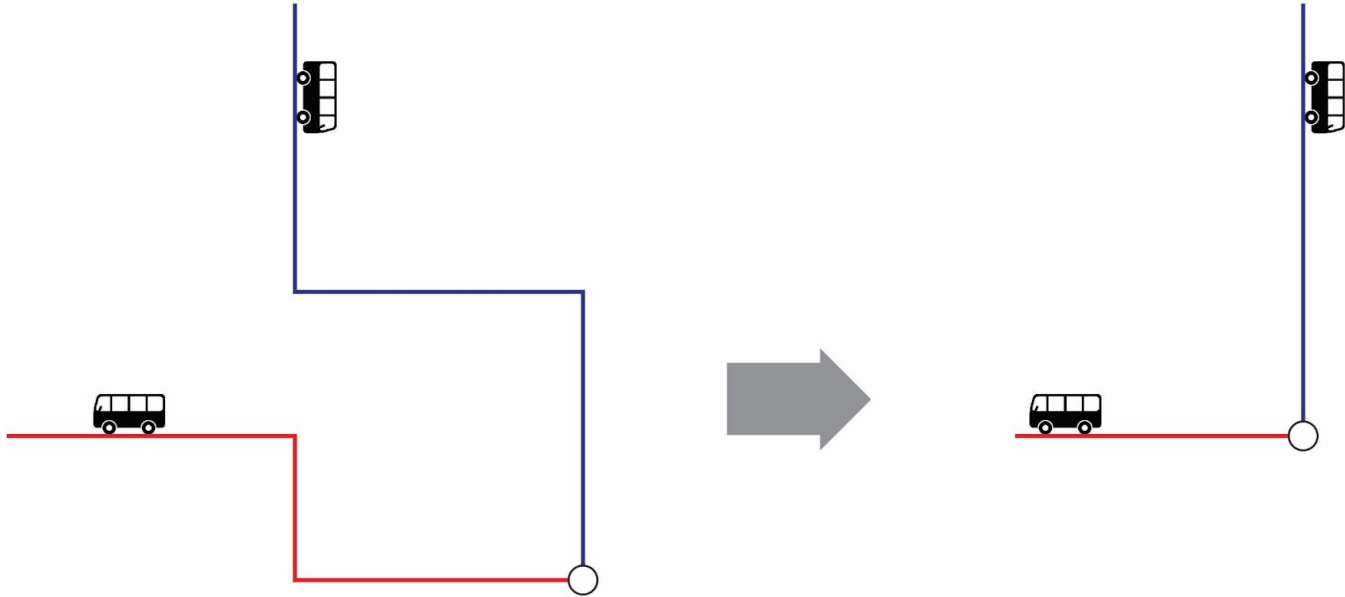
A network redesign **can introduce new services.**



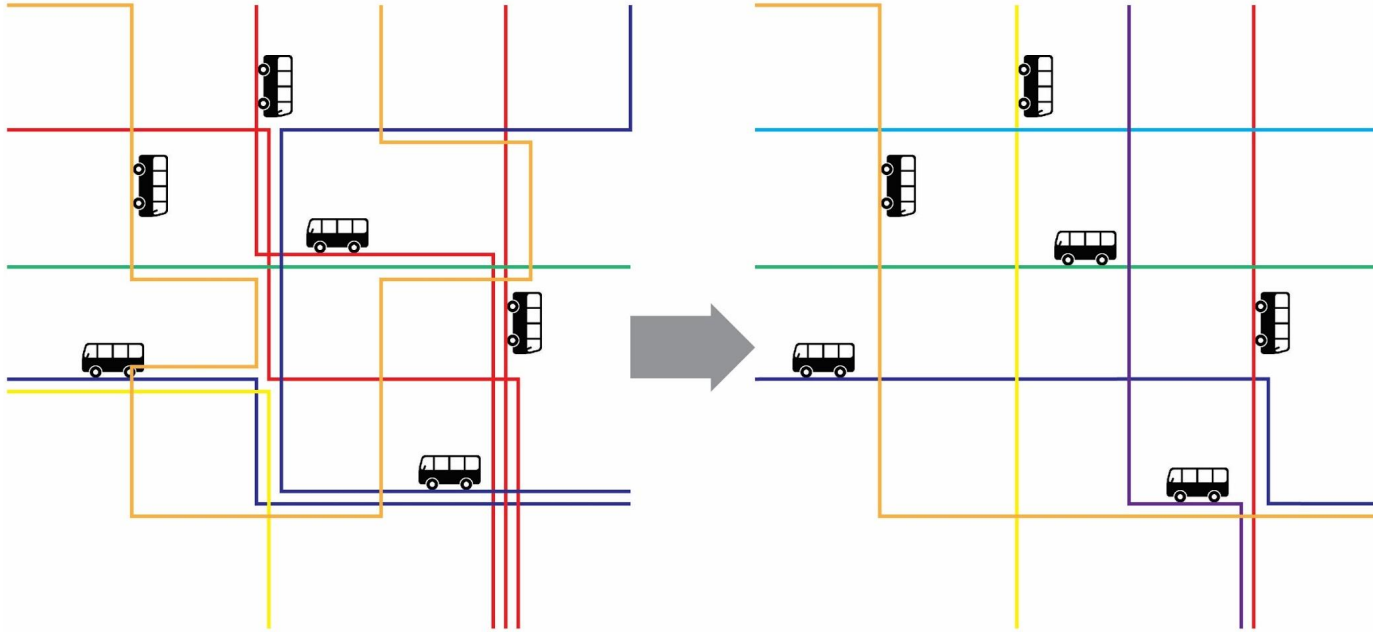
A network redesign can **straighten routes**.



A network redesign can **make trips more direct.**



A network redesign can **make the system more legible.**



COVID underscored how essential the bus is to the region



- During the COVID-19 pandemic, bus ridership was **more durable than any other mode, retaining up to 4x more of its riders than Commuter Rail or Ferry.**
- **Ridership during the pandemic has been less focused on the traditional peak times** around 8 AM and 5 PM on weekdays and more focused on off-peak travel . These new travel patterns merit a new network that better serves all trip types throughout the day.
- Within the MBTA's network and the Commonwealth's Mobility Marketplace, **the bus is the most flexible and resilient mass transit mode** and one which, with consistent stewardship and investment, can be made more robust, resilient, and reliable for all customers.
- **It is essential that our bus network adapt to change.**

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How do we do this right?

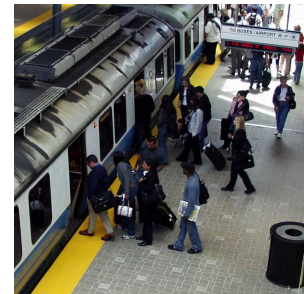
In order to achieve the vision, the entirety of the MBTA route system is on the table for study.



Heavily traveled corridors (e.g. Mass Ave., Blue Hill Ave.) will **remain key bus corridors**



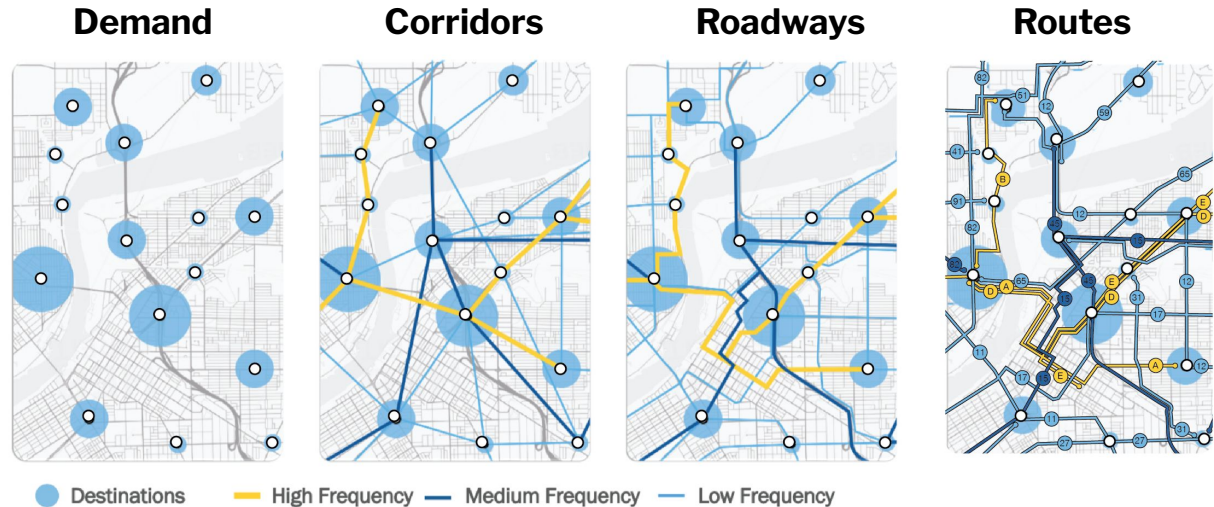
Public input and an understanding of the region's travel patterns will inform the changes



Bus service will not be evaluated in a vacuum, and we will consider **relationship to other MBTA modes**

We're redesigning the entire network

- A data-driven blank slate redesign
- Based on everything we've heard from riders since the Better Bus Project started
- Using travel data to capture all the trips people are taking
- A lot of engagement with many stakeholders (e.g., municipalities)



Measuring success

Where are people going?



TRAVEL DEMAND

Is transit connecting people to where they need and want to go?



ACCESS

Is transit a good option?



COMPETITIVENESS

(relative to car-based options in terms of frequency, travel time, transfers, and walk distance)

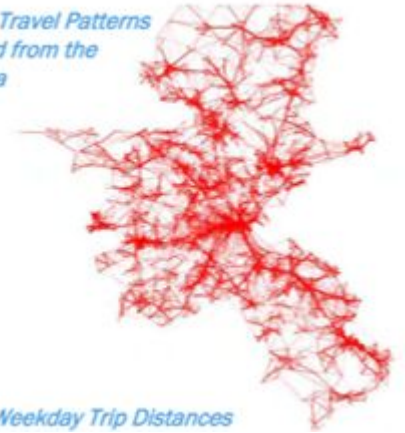
Our metrics will become part of the MBTA's Service Delivery Policy and focus on evaluating service and access improvements for transit-critical populations (low-income populations, people of color, seniors, people with disabilities, or people who live in households with few or no vehicles)

Using Location Based data to understand travel demand

Location Based Services (LBS) data helps us understand how people are moving across the region (approximately 20 million trips daily!)

- 12 months of travel data across ALL modes (not just transit)
- Anonymized & unlinked from cell phone numbers and individuals
- Representative of many different demographics
- From a range of applications (multi-language, lifestyle, travel, news, etc.) via location tracking opt-ins
- Is validated against local conditions, the National Household Travel Survey, etc.

*General Travel Patterns
Exhibited from the
LBS Data*



Average Weekday Trip Distances

Municipal partnerships are key

- 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.

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**This isn't a long-range
plan... we want a
better network on
the street starting
next year.**

Better Bus Project 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				
Fleet & Facilities	Facilities			North Cambridge retrofit	Quincy		Arborway
	Fleet		80 Hybrid	35 BEB 80 Hybrid	80 BEB	40 BEB 40 Hybrid	80 BEB

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.

What our proposal will look like

We haven't drawn the maps, but we know they will show:

1. A **simpler** and **easier-to-understand** network
2. More **high-frequency** corridors
3. **Better connections** to major regional destinations and local destinations
4. Focus on **all-day service** (better midday, evening, and weekend service)

What will you see & what's next?

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)

All informed by what we heard in BBP!

Bus Network Redesign Upcoming Public Outreach

June- July 2021

July - Oct 2021

Nov 2021 - Jan 2022

Phase 1: Travel Survey

- Does the MBTA take you to the places that you need or want to go?
- Is riding the MBTA a good option for you when you need to get somewhere?

Phase 2: Policy Choices

Discussion on the policy choices and types of improvements to better meet the needs of the rider.

Phase 3: Draft bus network map

- What do you think about these bus routes?
- Is anything missing?

Goals of Outreach

Confirm travel patterns and preferences of current and potential riders.

Design service strategies and metrics based on input in this phase and previous BBP outreach phases.

Inform public about the types of trade-offs and service strategies we are examining.

Build awareness of project goals and implementation timeline.

Gather input on proposed new bus network map.

Revise network map based on input in this phase.

First public meeting next week - June 8th! [mbta.com/bnrdmeeting](https://www.mbta.com/bnrdmeeting)

Appendix



There are many, many levers to improve bus service—but they need to be pulled at the same time for maximum impact.

