Bus Network Redesign Title VI Findings

MBTA Board of Directors
December 15, 2022

Better Bus Project
Making transit better together

Agenda

- Equity in the Bus Network Redesign

- Title VI Equity Analysis Results
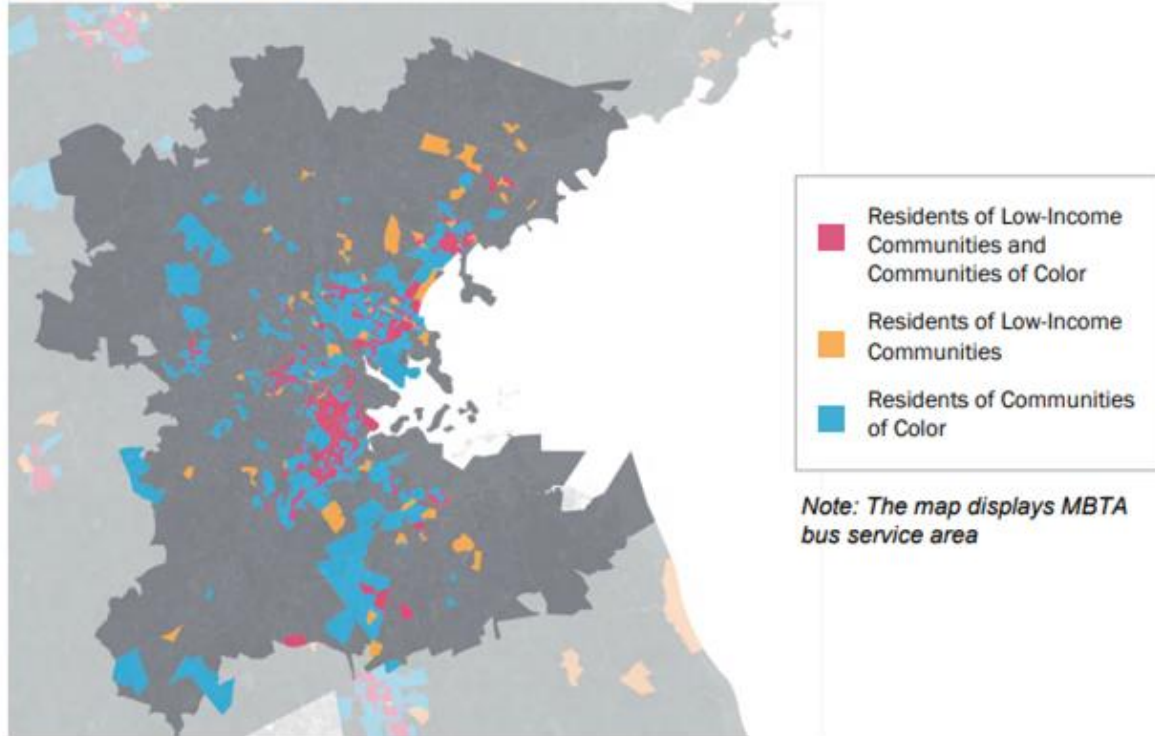
- Recommendation

Better
Bus
Project

Making transit
better together

Great Bus Service
SERVES THE PEOPLE WHO NEED IT THE MOST

Low-Income Communities and Communities of Color in the MBTA Bus Service Area

Residents of Low-Income Communities and Communities of Color

Residents of Low-Income Communities

Residents of Communities of Color

Note: The map displays MBTA bus service area

Not Residents of Low-Income Communities or Communities of Color

Residents of Low-Income Communities and Communities of Color, Low-Income Communities, and Communities of Color
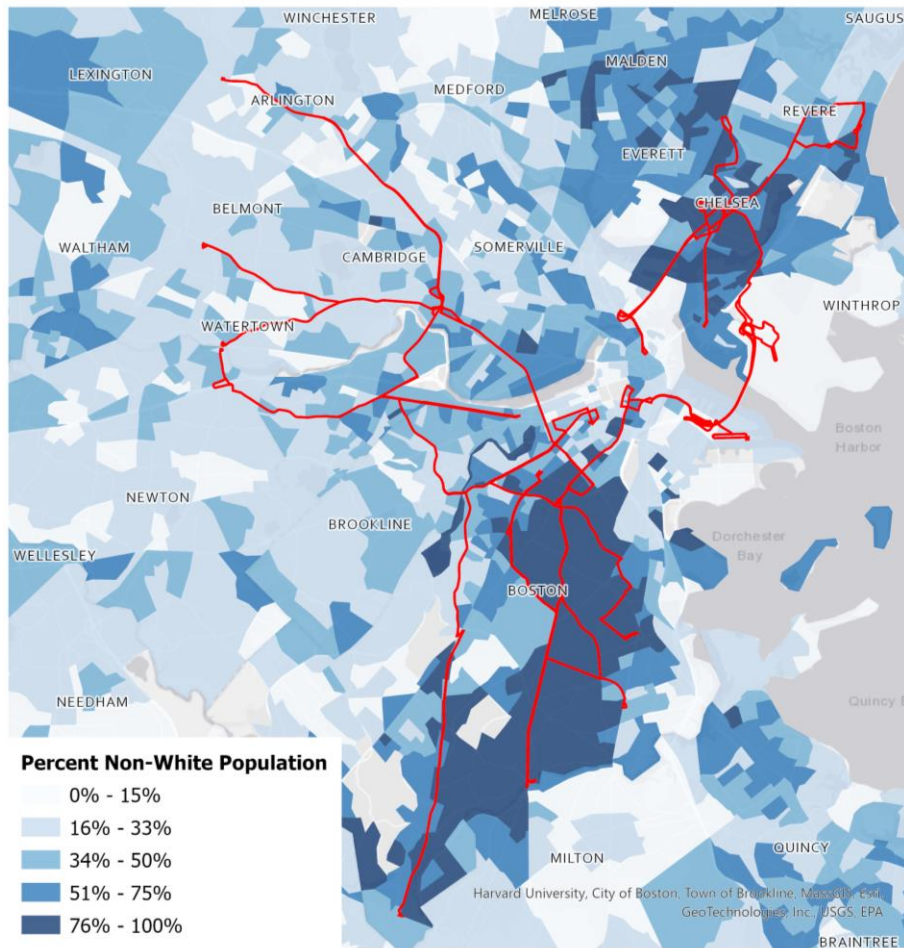
LBS data identifies trips made by our protected populations – even if they aren't traveling to/from home
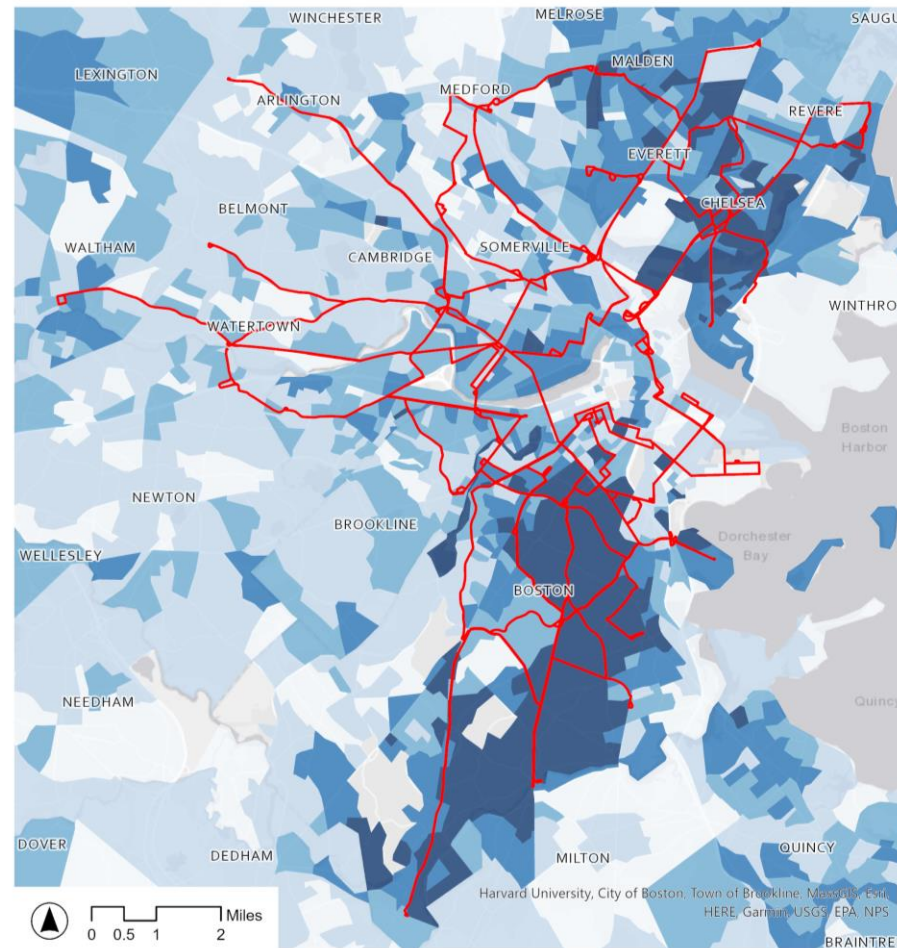
We prioritized trips made by these groups when allocating resources and redesigning the bus network

BNRD Equity Results

Existing High Frequency Bus Network

Percent Non-White Population

- 0% - 15%
- 16% - 33%
- 34% - 50%
- 51% - 75%
- 76% - 100%

**Proposed High Frequency Bus Network**

Access to High-Frequency Service in the New Network:

- **95,000 residents of color** gain access

- **55% residents of color** (up from 42%)

- **29,000 low-income households** gain access

- **49% low-income households** (up from 36%)

Ongoing Monitoring of Equity in Service

- Annual Service Delivery Policy Report
  - Outlines Service Availability and Quality Standards, including span, frequency, coverage, accessibility, reliability, comfort, and network quality.
  - Each standard has an **equity check**, where we check the performance of the overall network against our standard, and then the performance for low-income riders and our riders of color, to check for differences
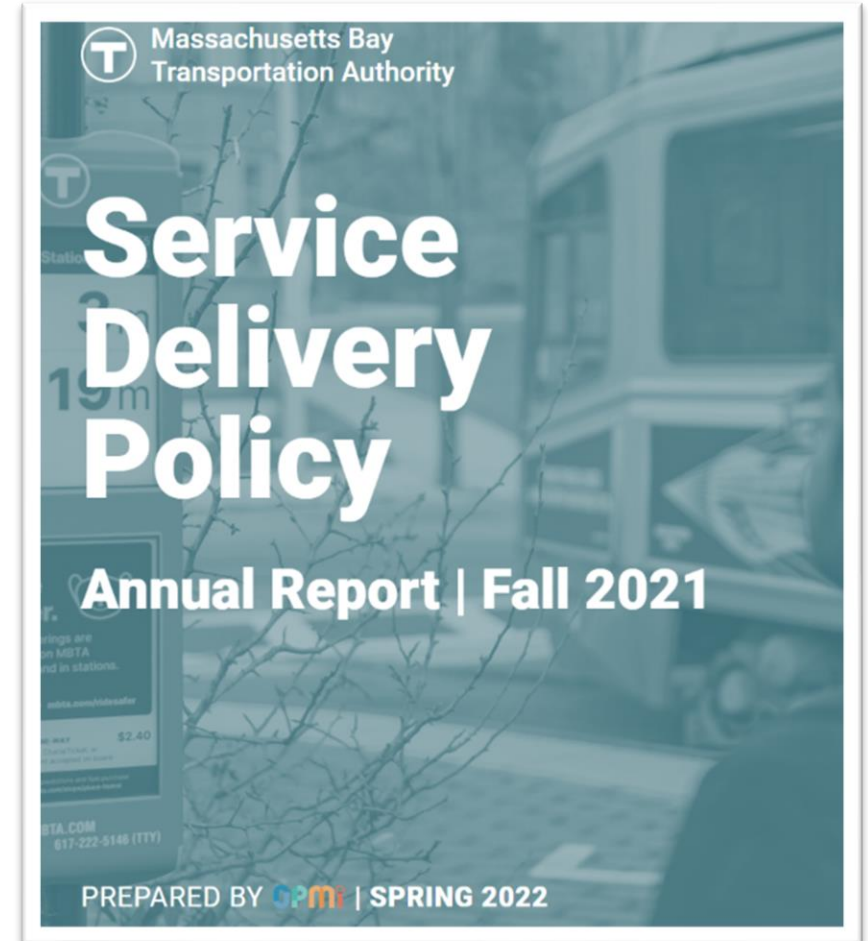
Title VI Equity Analysis

In accordance with Title VI of the Civil Rights Act and the FTA's guidance, the MBTA evaluates major service and fare changes for Disparate Impacts on minority riders or Disproportionate Burdens on low-income riders.

- **Service Equity:** How does the change in the amount of service provided to low-income or minority riders compare to the change in the amount of service provided to all other riders?

- **Fare Equity:** How does the change in average fare paid by low-income or minority riders compare to the change in average fare paid by all riders?

- Central Transportation Planning Staff (CTPS) was contracted to complete this Title VI Equity Analysis. The complete memo can be found here

Title VI – Service Equity Overview

How does the change in the amount of service provided to low-income or minority riders compare to the change in the amount of service provided to all other riders?

- We calculate key ratios on Revenue-Vehicle Hours and Route Length to meet our federal regulation and internal policy.
  - <u>Relative Change:</u> Compares % change in service for low-income or minority riders to % change in service for all other riders
  - <u>Share of Change:</u> Compares the share of the total change for low-income or minority riders to the share of existing service for these riders
  - <u>Absolute Change:</u> Compares nominal change in service for low-income or minority riders to nominal change in service for all other riders

Title VI – Service Equity Results

How does the change in the amount of service provided to low-income or minority riders compare to the change in the amount of service provided to all other riders?

Ratio	Minority (Disparate Impact)	Low-Income (Disproportionate Burden)
Relative Change	✓ RVH: 1.06x > 0.80x ✓ Route Length: 1.15x < 1.20x	✓ RVH: 1.06x > 0.80x ✓ Route Length: 1.07x < 1.20x
Share of Change	✓ RVH: 1.06x > 0.80x ✓ Route Length: 1.07x < 1.20x	✓ RVH: 1.03x > 0.80x ✓ Route Length: 1.06x < 1.20x
Absolute Change	✓ RVH: 0.99x > 0.80x ✓ Route Length: 0.86x < 1.20x	✗ RVH: 0.65x < 0.80x ✓ Route Length: 0.62x < 1.20x

There is a not a potential DI or DB finding from this analysis on 11 of 12 key ratios

Title VI – Fare Equity Overview

How does the change in average fare paid by low-income or minority riders compare to the change in average fare paid by all riders?

Note that for BNRD, our fare levels remain unchanged, however we conduct this analysis as some riders may shift between subway and local bus (which charge different fares), due to changes in the bus map.

- We calculate key ratios to meet our internal policy and federal regulation. In the case of a decrease in fares, we must ensure that these ratios are greater than 0.90x
  - <u>Relative Change:</u> Compare the % change in fares for low-income or minority riders to the % change in fares for all riders

Title VI – Fare Equity Results

How does the change in average fare paid by low-income or minority riders compare to the change in average fare paid by all riders?

Ratio	Minority (Disparate Impact)	Low-Income (Disproportionate Burden)
Relative Change	✓ 1.0x > 0.9x	✓ 1.8x > 0.9x

There is not a potential DI or DB finding from this analysis

Public Meeting & Next Steps

On Thursday, December 8, we held a virtual public meeting to discuss equity in BNRD, including the Title VI analysis. The meeting had <u>91 attendees</u> and we received <u>57 comments</u>.

- Key Themes
  - <u>Methodology:</u> Attendees sought to understand how we used data to create map, including for non-Title VI populations, such as Seniors
  - <u>Map:</u> Comments on specific routes, as in previous public outreach

- The MBTA will continue to lead with equity in BNRD implementation, meaningfully engage with riders, and prioritize transit-critical populations.

- *In Spring 2023, the MBTA is updating the DI/DB Policy. We will revise elements of the policy that have not functioned properly to ensure equity, such as the Absolute Change ratio.*

Recommendation

WHEREAS, on November 17, 2022, the Massachusetts Bay Transportation Authority ("MBTA") Board of Directors approved certain service changes, and the potential mode-shift and fare changes they may induce for implementation beginning in Fiscal Year 2023 (the "Redesigned Bus Network"); and

WHEREAS, the Redesigned Bus Network contains service changes and potential fare changes that will last longer than six months; and

WHEREAS, the Redesigned Bus Network includes service changes and potential fare changes requiring, pursuant to Federal Transit Administration ("FTA") Title VI Circular 4702.1B, a Service Equity Analysis and a Fare Equity Analysis (the "Title VI Equity Analysis"), to determine whether the implementation of the proposed service and potential fare changes will have a discriminatory impact based on race, color, or national origin, will result in disparate impacts to minority populations or disproportionate burdens to low-income populations; and

WHEREAS, the Title VI Equity Analysis has been completed for the service and potential fare changes in accordance with the Authority's Disproportionate Impact/Disproportionate Burden Policy; and

WHEREAS, the Title VI Equity Analysis demonstrates that the Redesigned Bus Network will not result in discriminatory impacts on race, color, or national origin, disparate impacts to minority populations, disparate benefits to nonminority populations, disproportionate burdens to low-income populations, or disparate benefits to non-low-income populations; and

WHEREAS, the MBTA Board of Directors has considered and reviewed the Title VI Equity Analysis;

On a motion duly made and seconded, it is by roll call VOTED that: The Board of Directors hereby approves the Title VI Equity Analysis for the Redesigned Bus Network.
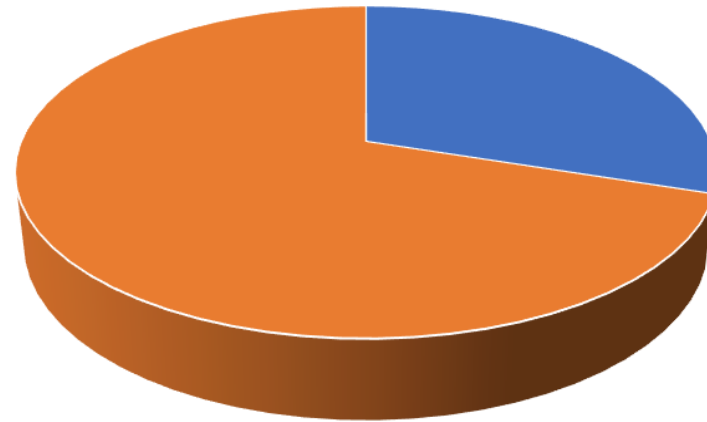
Appendix

Challenge with Absolute Change Ratio

The Absolute Change Ratio compares total change for low-income or minority riders to change for all other riders.

What absolute equity measure wants
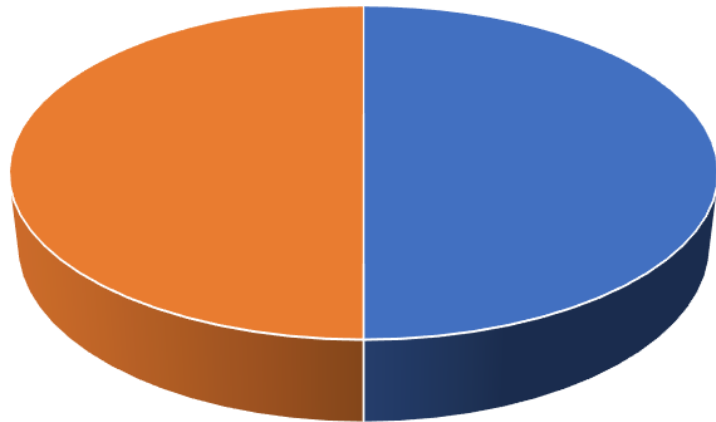
Regardless of relative population sizes

In Spring 2023, the MBTA is updating the DI/DB Policy. We will revise elements of the policy that have not functioned properly to ensure equity, such as the Absolute Change ratio.

Great Bus Service
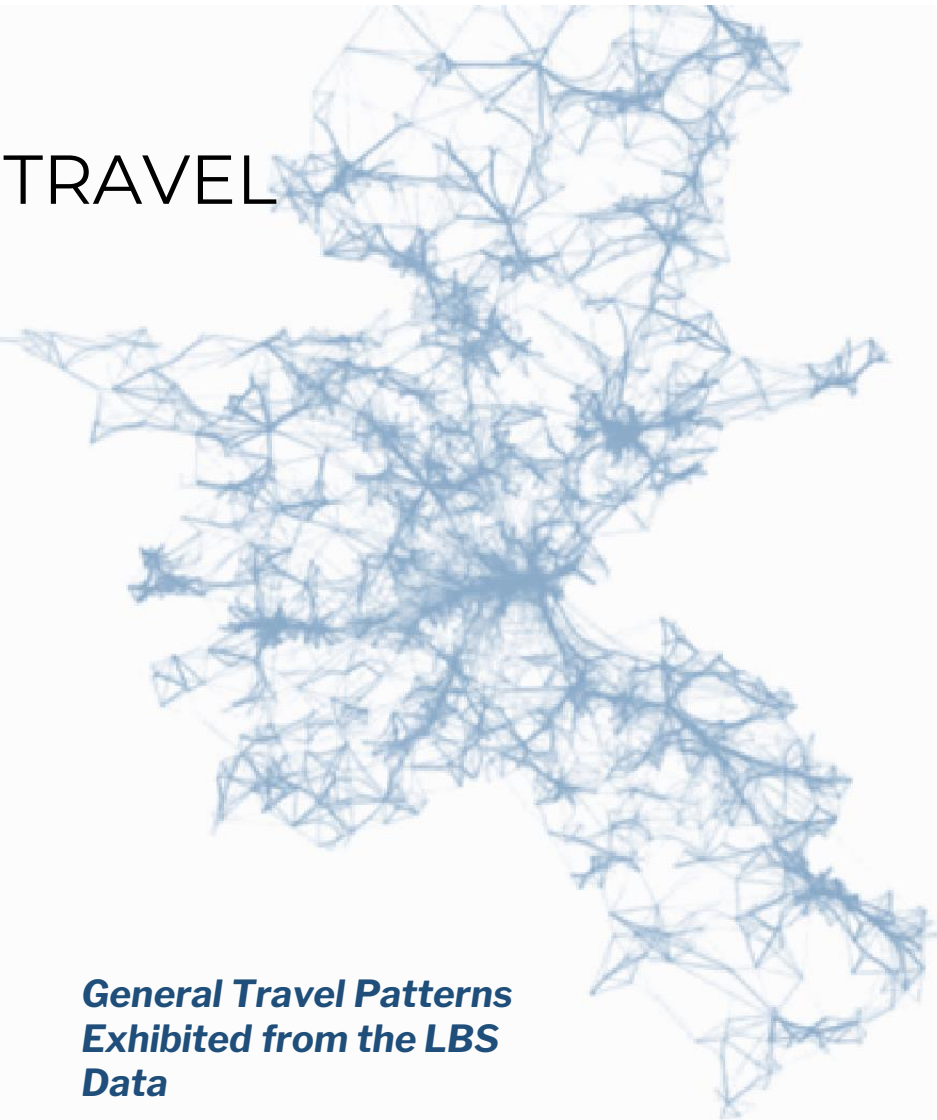## GOES WHERE PEOPLE WANT TO TRAVEL

How do we know where people want to travel?

Using Location-Based Services data about where people actually travel – even if not currently served by the MBTA

- *Describes trips on **all modes***

- *Represent **all types of trips** (i.e. work, social, medical, etc.)*

- *Anonymized and unlinked from cell phone numbers to **preserve privacy***

Public survey about travel destinations

General Travel Patterns Exhibited from the LBS Data

We've listened to our riders
WE HAVE HEARD FROM YOU THAT GREAT BUS SERVICE:

Goes where people want to travel, when they need it

Is simple to use and understand

Is fast, frequent, and reliable

Serves the people who need it the most