Massachusetts Bay Transportation Authority

Bus Network Redesign Update

Fiscal and Management Control Board

February 24, 2020

Caroline Vanasse

Better Bus Project

Meeting Purpose

- The Bus Network Redesign will identify high priority/high frequency corridors to prioritize transit priority needs and capital budgeting considerations

- We would like to get Board input on early action service principles today in order to advance partnerships with municipalities that will set the Bus Network Redesign up for success
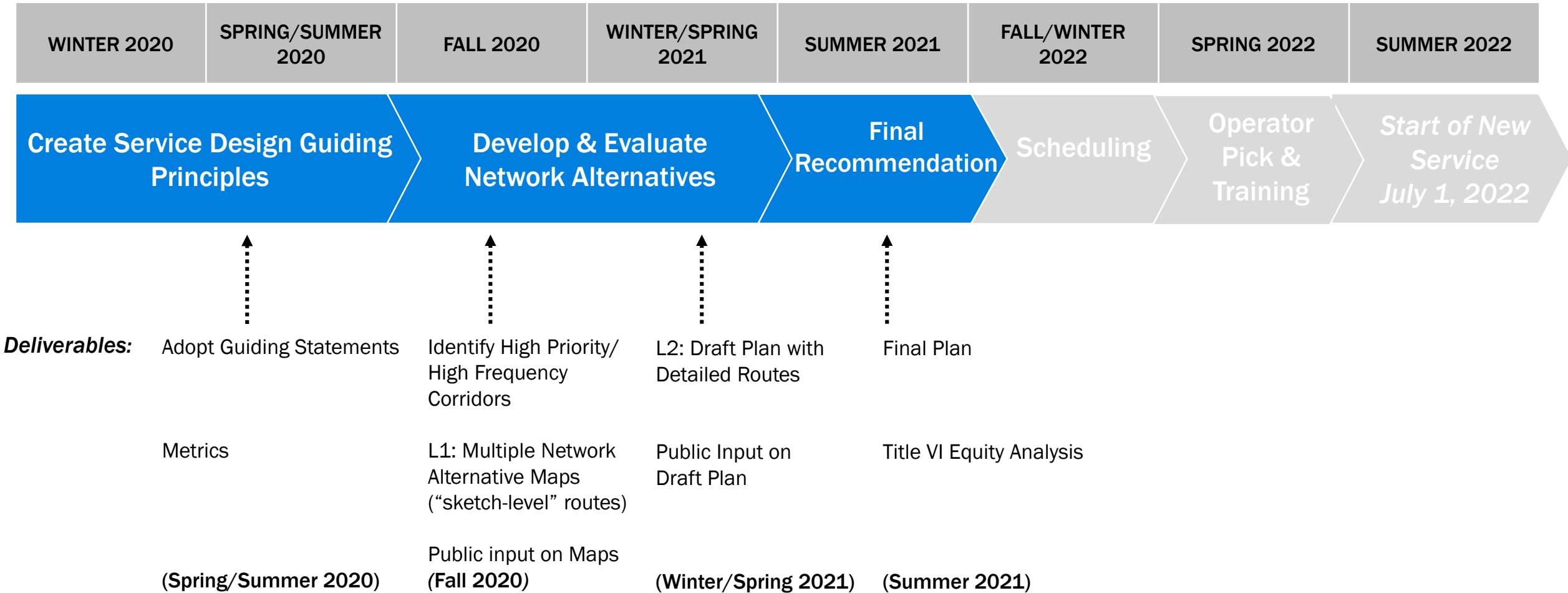
Project Timeline Overview

Budget & CIP Planning:

FY21-25 CIP Planning → Preliminary Planning for BNRD Requirements		FY22 Budget & FY22-26 CIP Planning → Preliminary discussion for FY23 budget impacts	FY22 Budget & FY22-26 CIP Vote (Spring 2021)		FY23 Budget & FY23-27 CIP Planning	FY22 Budget & FY22-26 CIP Vote	Start FY23 Budget

WINTER 2020	SPRING/SUMMER 2020	FALL 2020	WINTER/SPRING 2021	SUMMER 2021	FALL/WINTER 2021/2022	SPRING 2022	SUMMER 2022

Create Service Design Guiding Principles → Develop & Evaluate Network Alternatives → Final Recommendation → Scheduling → Operator Pick & Training → *Start of New Service July 1, 2022*

Public Outreach

Project Timeline (Planning)

WINTER 2020	SPRING/SUMMER 2020	FALL 2020	WINTER/SPRING 2021	SUMMER 2021	FALL/WINTER 2022	SPRING 2022	SUMMER 2022

Create Service Design Guiding Principles › **Develop & Evaluate Network Alternatives** › **Final Recommendation** › Scheduling › Operator Pick & Training › *Start of New Service July 1, 2022*

Deliverables:

Adopt Guiding Statements

Metrics

(Spring/Summer 2020)

Identify High Priority/ High Frequency Corridors

L1: Multiple Network Alternative Maps ("sketch-level" routes)

Public input on Maps **(Fall 2020)**

L2: Draft Plan with Detailed Routes

Public Input on Draft Plan

(Winter/Spring 2021)

Final Plan

Title VI Equity Analysis

(Summer 2021)

Early Action Service Principles

Through the Network Redesign, the MBTA will target the region's high demand travel corridors for increased frequency or areas where there is a need to more equitably provide transit service based on the Service Delivery Policy for increased frequency:
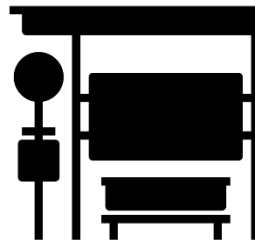
- Existing high demand/over capacity MBTA corridors
- High demand travel corridors with infrequent or no MBTA bus service

In order to achieve these goals, the MBTA <u>requires</u> municipalities to partner with us to make investments in:

Transit Priority

Bus Stops & Amenities (Including Space for Fare Vending Machines)

Accessible Path of Travel & Multimodal Connections

<u>The MBTA will only increase service where these investments are in place</u>

Input on Early Action Service Principles

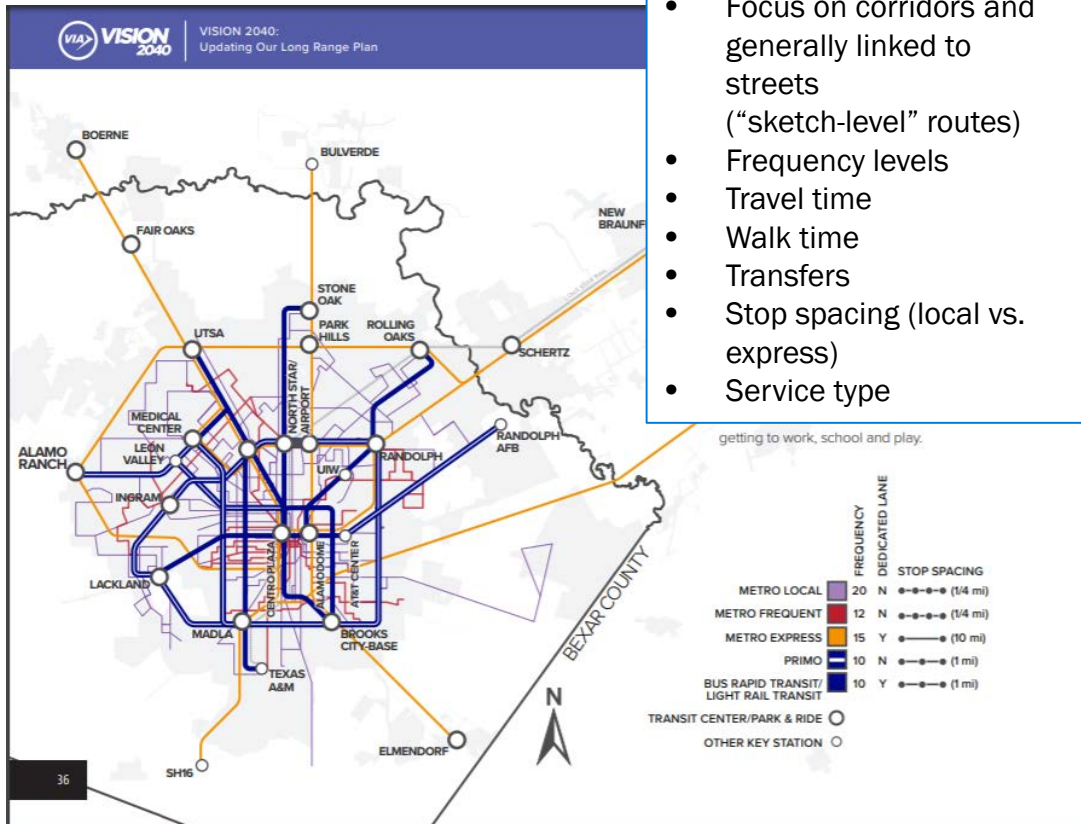**The MBTA will meet the needs of these high demand corridors by:**

- **Adjusting Service Levels Based on Effective Partnerships:** MBTA will <u>only</u> increase service in congested corridors where MBTA/municipal partnerships result in implementation of effective transit priority

- **Prioritizing Improvements w Enhanced Accessible Paths of Travel and multimodal connections:** MBTA will prioritize increased service where the sidewalk network meets current standards for accessibility and also enhances and creates multimodal connections.

- **Creating Bus Stops that Improve Safety, Operations, and Rider Experience:** MBTA will prioritize increased service where municipalities partner to update bus stops to improve operations and safety, make accommodations for future fare vending machines, shelters, and other potential amenities.

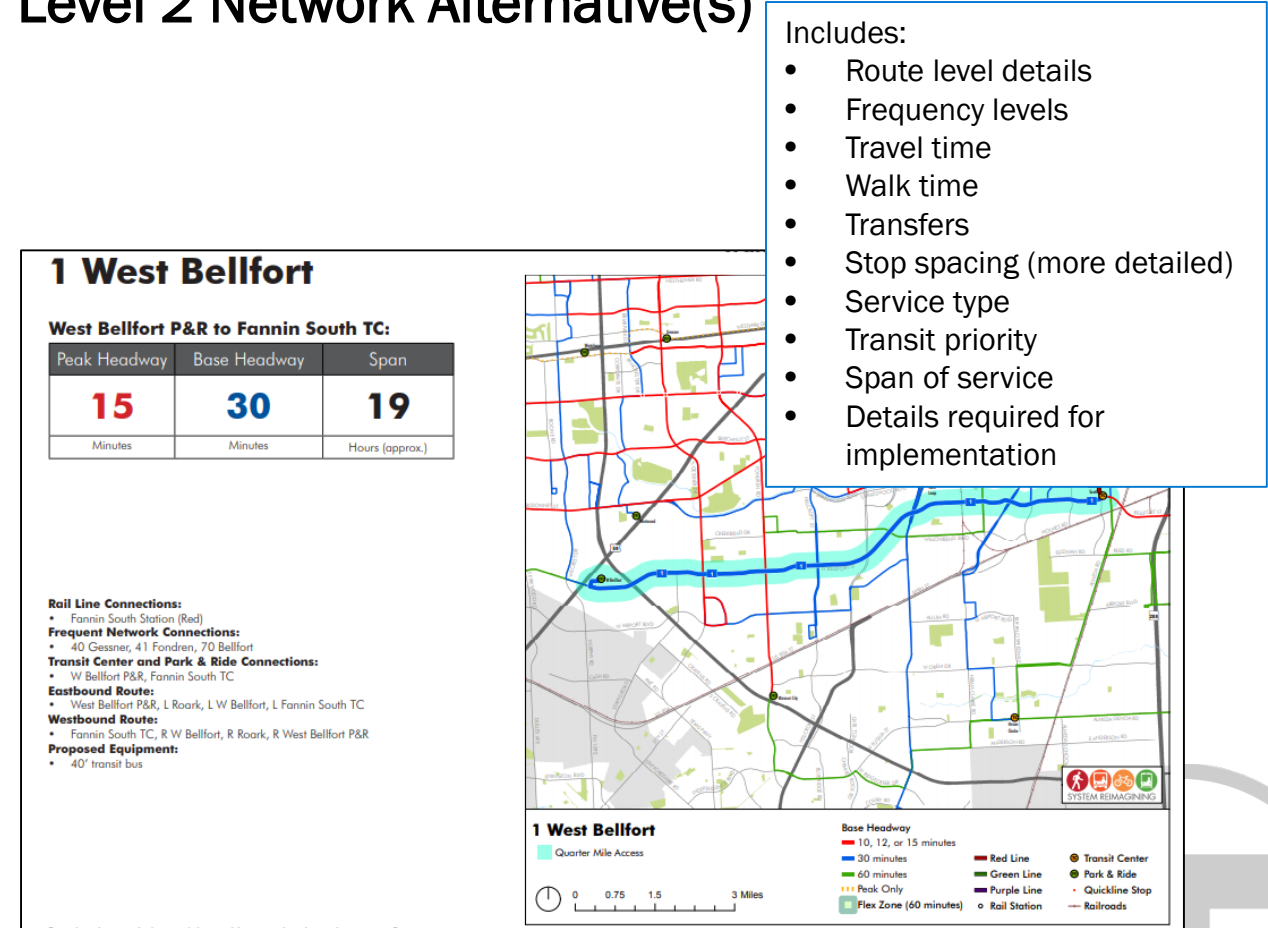**Question for FMCB: Do you agree these are the right principles?**

Design Outputs of L1 & L2 Network Maps
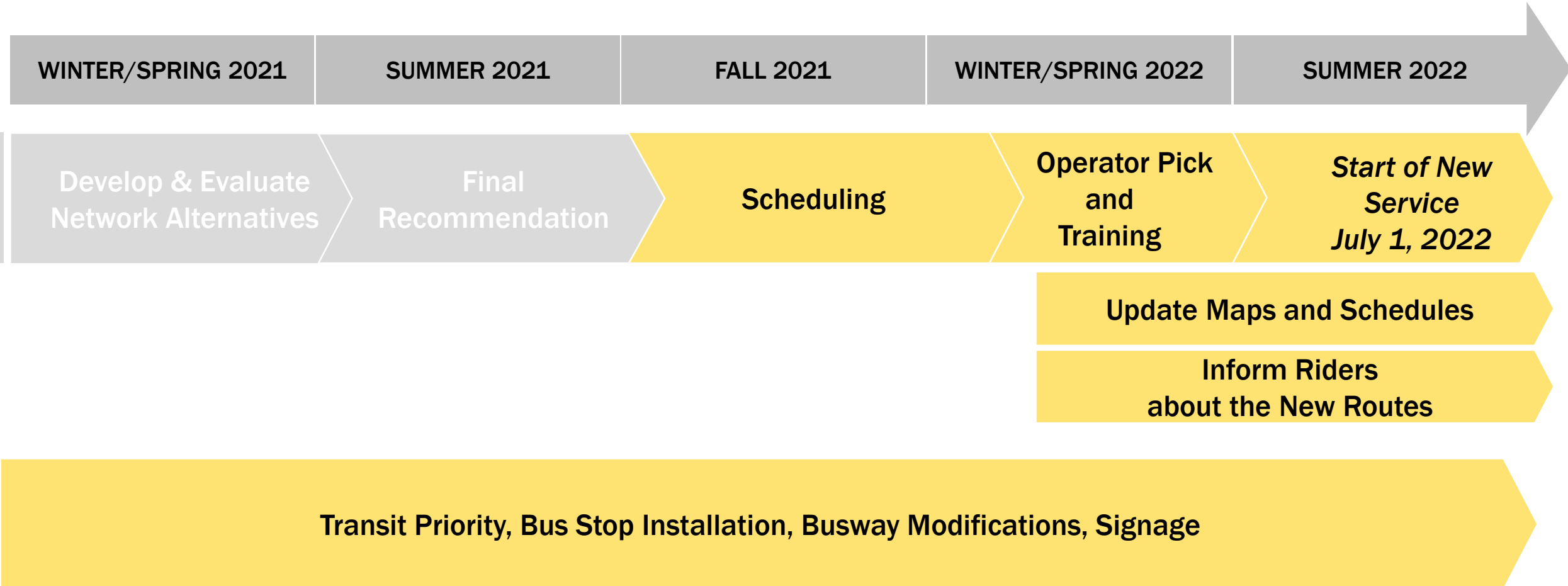
Level 1 Network Alternatives

Includes:
- Focus on corridors and generally linked to streets ("sketch-level" routes)
- Frequency levels
- Travel time
- Walk time
- Transfers
- Stop spacing (local vs. express)
- Service type

Example: San Antonio

Level 2 Network Alternative(s)

Includes:
- Route level details
- Frequency levels
- Travel time
- Walk time
- Transfers
- Stop spacing (more detailed)
- Service type
- Transit priority
- Span of service
- Details required for implementation

Example: Houston

Project Timeline (Implementation Phase 1)

WINTER/SPRING 2021	SUMMER 2021	FALL 2021	WINTER/SPRING 2022	SUMMER 2022

Develop & Evaluate Network Alternatives → Final Recommendation → Scheduling → Operator Pick and Training → *Start of New Service July 1, 2022*

Update Maps and Schedules

Inform Riders about the New Routes

Transit Priority, Bus Stop Installation, Busway Modifications, Signage

Note: Planning for 3-5 phases of implementation that go beyond what is displayed on timeline

Public Outreach Approach & Upcoming Meetings

**Better Bus Project Open House ft. BNRD
Tuesday, March 10
5:30 PM – 8:00 PM
Bruce C. Bolling Municipal Building Lobby**

Engagement Type	Purpose	Timeline
External Task Force Meetings	Provide feedback on the process, including public outreach strategies and data analysis	Bi-Monthly
Municipal Meetings	Engage municipalities throughout process	Monthly
BBP Event Series Part 1	**Educate and inform public of redesign process and other related MBTA bus initiatives**	**Spring/Summer 2020**
Targeted Outreach	To go where people are in a variety of settings; Based on missing data and diversity of experience	Beginning Spring 2020 – Spring 2021
BBP Event Series Part 2	Gather input on service design alternatives (L1)	Fall 2020
BBP Event Series Part 3	Gather input on service design alternatives (L2)	Winter/Spring 2021

Appendix

Input on Early Action Service Principles (more detailed version)

Where

- **Target Areas for More Service in Existing Corridors:** Existing corridors identified as the highest demand bus corridors in the network will be targeted for potential increases in MBTA bus service.

- **New Corridors for Targeted Service:** Future corridors that do not exist today or existing high productivity corridors that do not meet existing or future need based on Service Delivery Policy or future identified land uses, need to be implemented in conjunction with bus priority if known delay exists.

How/What

- **Adjust Service Levels Based on Effective Partnerships:** Corridors with planned or implemented bus priority projects warrant additional service only when bus priority resolves medium to high delay in high ridership corridors per the MBTA and CTPS bus corridor analysis. If these areas do not see effective bus priority implemented they will not receive an increase in MBTA service and may be subject to schedule adjustments to reflect worsening roadway delay.

- **Enhance/Maintain Multimodal Connections:** Make corridors as accessible as possible by ensuring sidewalk network meets current standards, and enhance and create multimodal connections.

- **Create Bus Stops that Improve Safety, Operations, and Rider Experience:** Update bus stops to improve operations and safety, which may include construction, adjusting parking, relocating stops, or stop removal to meet existing operational and safety standards, with only limited exceptions. May also require additional specifications such as space for future fare vending machines, shelters, and other potential amenities.
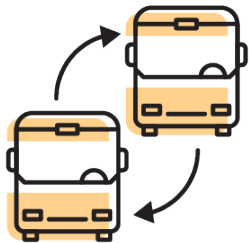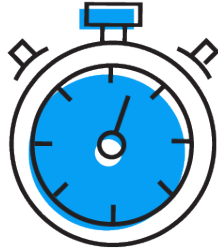
Service Design Framework

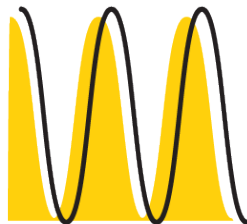## What is the impact of different service design types?

MINIMIZE
WALK DISTANCE

MINIMIZE
TRAVEL TIME
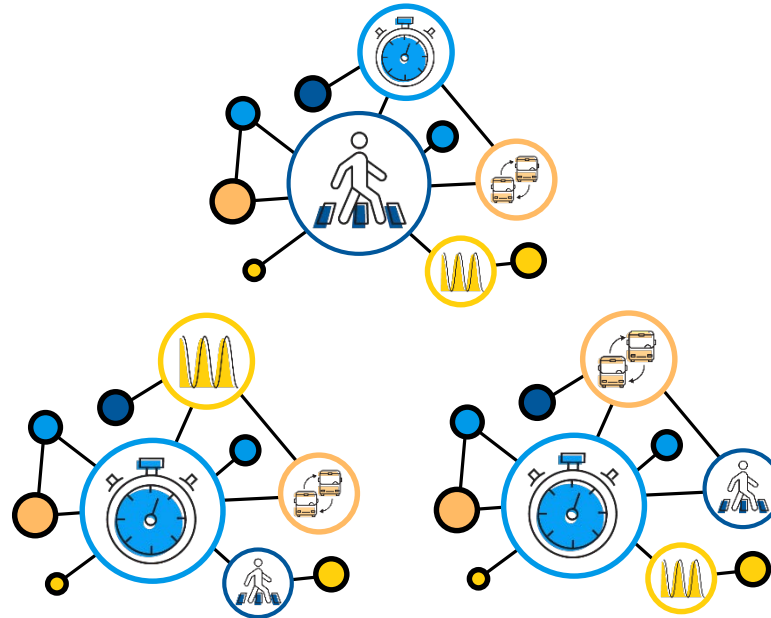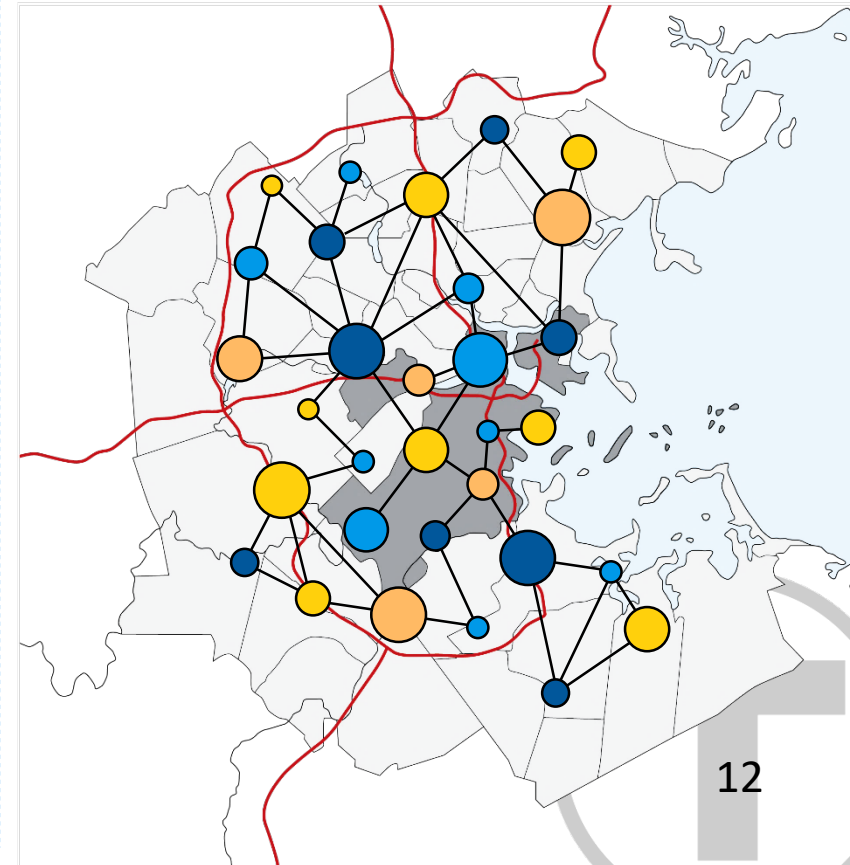
MINIMIZE
TRANSFERS

MAXIMIZE
FREQUENCY

LEVEL 1 (FALL '20):
What is the best combination of service design types?

LEVEL 2 (SPRING '21):
What is the network that best serves the needs of the region?

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Designing Service for Successful Implementation

All alternatives will be created with a baseline assumption of what resources are reasonable to expect in the first year of implementation.

Fleet Constraints | Each alternative will be completed 'semi-resource unconstrained', where there will be some reasonable limit on the number of vehicles.

On-Street Constraints | Layover space, facility accommodations, busable streets, and other physical space constraints will help guide where bus service currently can go, or where there is work to accommodate route changes.

Transit Priority| There will be a baseline expectation for transit priority investments beyond what we currently have planned. The alternatives will help identify priority areas for more transit priority investments.

Phasing Implementation & Identifying Capital Needs | There will be a phased approach and timeline that rolls out network elements *when* resources are available (i.e., operators, buses, facilities, etc.). Capital investments will also be identified early on as part of this process.