



Massachusetts Bay Transportation Authority

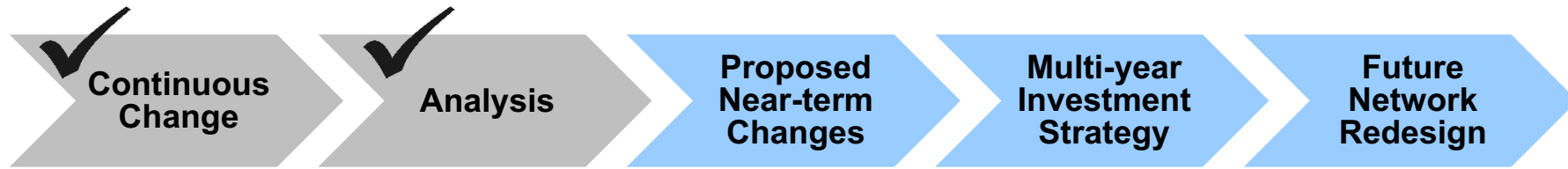
Better Bus Project Update

FMCB, May 6, 2019

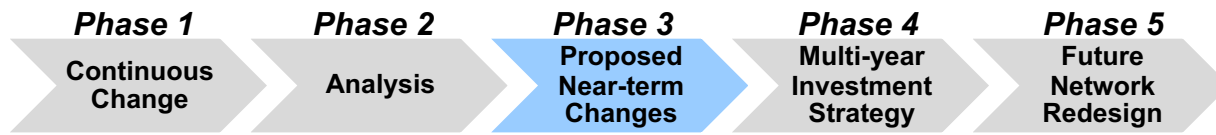
Better Bus Project.



Better Bus Project Process Map: Update

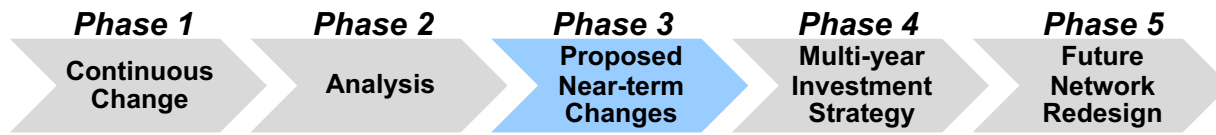


	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
Products/ Actions	<ul style="list-style-type: none"> ✓ Early Morning Pilot ✓ Late Night Pilot ✓ SL3 Service Expansion ✓ Dedicated Bus Lanes ✓ Transit Signal Prioritization ✓ Signal Optimization ✓ Addition Resources ✓ Dropped Trip Task Force ✓ Quarterly Goals 	<ul style="list-style-type: none"> ✓ 1st Round Public/ Stakeholder/Operator Outreach ✓ Review existing service ✓ Jan 28: Release State of the System Report ✓ Jan 28: Release Market Analysis 	<ul style="list-style-type: none"> ✓ Ongoing: Municipal and State Officials Outreach ✓ Jan 28: Release near-term service proposals ✓ Jan 28 to Mar 13: 2nd Round Public/ Stakeholder Outreach ✓ Apr: FMCB Vote: Go/No-Go • Early-May: Build new schedules & routes • Fall: Begin implementation 	<ul style="list-style-type: none"> ✓ Jan 28: Release Route Profiles ✓ Feb 25: Discuss Multi-year Investment Strategies for FY20 ✓ Mar: Finalize FY20 resource request ✓ Apr: Selection of FY20 investment level by the FMCB Board • May: Discuss peak expansion • Summer: Begin implementation 	<ul style="list-style-type: none"> ✓ Nov: RFP posted & Internal Task Force convened to develop network level goals/metrics • May: External Task Force convened • FY20+21: Network Alternatives & Evaluation • FY21 onwards: Implementation & roll-out



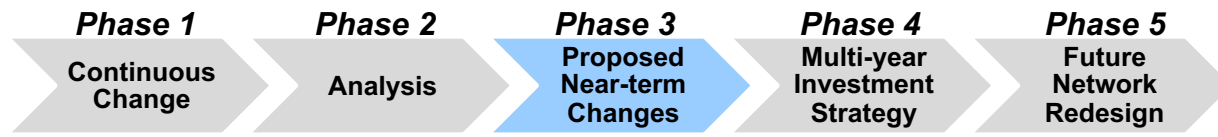
Agenda

- Review Equity Analysis findings and **seek Board acceptance of the findings**
- Review and discuss **Key Performance metrics** for monitoring impact and success of Better Bus Project proposals
- **Review process for incorporating additional public feedback** into future quarterly changes and/or Network Redesign



Recap: Equity Analysis context

- The MBTA is required by the FTA to **evaluate the impacts on minority and/or low-income populations** when there is a **proposed “major” service change** to any fixed-route services
- There are multiple factors that can elevate a service change to be considered a “major” service change, and once ‘triggered’, **an equity analysis must consider concurrently all proposed changes in the aggregate**
- An equity analysis will evaluate the degree of adverse effects, and evaluate if the effects of the major service change may result in **disparate and/or disproportionate impacts on minority or low-income populations**
- For major service changes, the **MBTA’s threshold** for determining adverse effects cause disparate/disproportionate impacts is **20%**



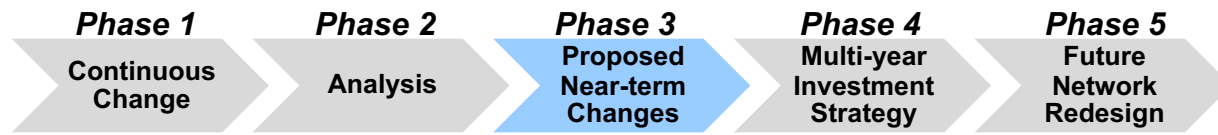
Equity Analysis outcome for Near-Term proposals & 45 additional Operators

Equity analysis based on revised package of BBP Proposals finds no **disparate impact/benefit** or **disproportionate burden/benefit**

Equity Analysis now includes **impact of 45 additional Operators** as being discussed and implemented concurrently

	Revenue Vehicle Hours (in weekly RVH)	Route Length (in weekly Miles)
Disparate Impact/Benefit		
Absolute Change (Minority / Nonminority)	No Disparate Benefit Ratio: 665 / 550 > 80%	No Disparate Impact Ratio: -428 / -669 < 120%
Relative Change (Minority / Nonminority)	No Disparate Benefit Ratio: 3.1% / 2.1% > 80%	No Disparate Impact Ratio: -6.3% / -6.6% < 120%
Minority Share of Change / Minority Share of Existing	No Disparate Benefit Ratio: 55% / 45% > 80%	No Disparate Impact Ratio: 39% / 40% < 120%
Disproportionate Burden/Benefit		
Absolute Change (Low-Income / Non-Low-Income)	No Disproportionate Benefit Ratio: 549 / 666 > 80%	No Disproportionate Burden Ratio: -426 / -671 < 120%
Relative Change (Low-Income / Non-Low-Income)	No Disproportionate Benefit Ratio: 2.9% / 2.4% > 80%	No Disproportionate Burden Ratio: -6.5% / -6.4% < 120%
Low-Income Share of Change / Low-Income Share of Existing	No Disproportionate Benefit Ratio: 45% / 41% > 80%	No Disproportionate Burden Ratio: 39% / 39% < 120%

Note: The ratio used to identify disparate impacts and benefits cannot be calculated when one group benefits and the other is burdened. If the protected group benefits and the non-protected group does not, there is no disparate impact or benefit.



Key Performance Metrics to monitor Better Bus Project proposals

Key Performance Metrics

- Track implementation status of 36 proposals and 45 new bus operators (as well as impact of any priority infrastructure)
- Use data to measure system-level performance and individual route proposal performance:
 - SDP Measures
 - Other supporting metrics (e.g. run-time deficits, ridership)

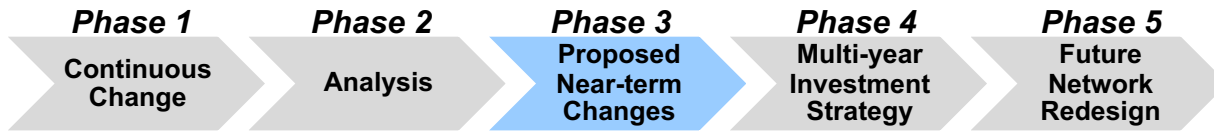
Evaluation Questions

- Understand if we accomplished our goal in implementing the proposal
- Assess impacts and if additional changes are warranted

Tentative Reports to the FMCB

- Implementation: September 2019 & December 2019
- Performance: May 2020 & January 2021*

*For January 2021, plan would be to report out to whichever format the Board consists of at that time



How MBTA will summarize and incorporate feedback

All feedback from customers, advocates, municipalities, elected officials:

Comments on specific proposed route changes

Comments on other routes & service overall

1

Better Bus Project – Phase 3 summary document

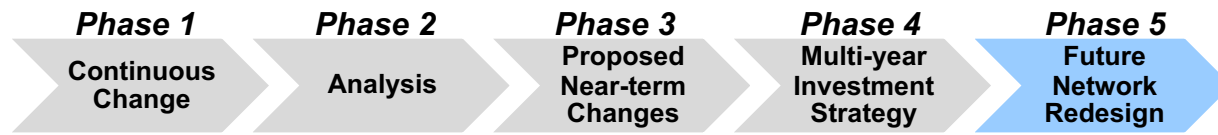
Targeting publishing mid-May

2

Service Planning team: Quarterly changes as part of continuous change

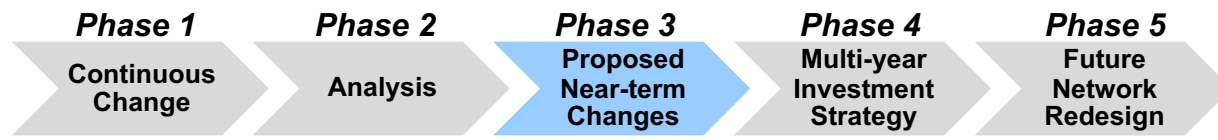
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Network Redesign team: Potential demonstrations / new service pilots



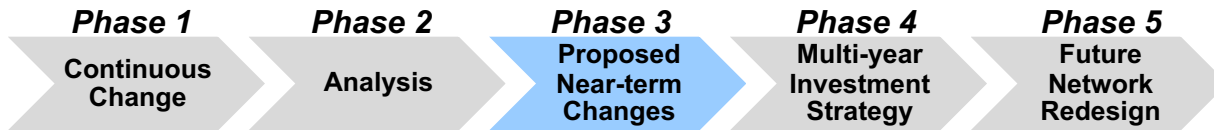
Network Redesign demonstrations / pilots

- **Network Redesign demonstrations** are different than External Transit pilots in that they:
 - Do not require an external sponsor
 - Do not follow same timeline (may take less or more time to refine and review)
 - May pilot new service and/or other changes (e.g. bus lanes, routing changes, model corridors, etc.)
- **Concepts for Network Redesign demonstrations will come from multiple sources** and the process to review, design, and implement is being developed to respond to FMCB's March 25 discussion
 - Example sources: Origin/Destination data analysis, deferred BBP proposals and public input, internal ideas, etc.



Key Next Steps

Date	Meeting/Deliverable Release
✓ Dec 10	<i>FMCB Presentation – Part 1 Work Plan Review, Overview of State of System and Market Analysis</i>
✓ Jan 14	<i>FMCB Presentation – Part 2 Overview of Near-term Change Proposals</i>
✓ Jan 28 to Mar 13	<ul style="list-style-type: none"> • Kick off Round 2 of public engagement • Release Market Analysis • Release State of the Bus System Report • Release Near-term Change Proposals • Release Route Profiles
✓ Feb 11	<i>FMCB Presentation – Part 3 Discuss Multi-year Investment Strategies for FY20</i>
✓ March	Action: <i>FMCB Propose FY20 Budget</i>
✓ April	Action: <i>FMCB Vote on Package for Near-Term change proposals</i>
May	<i>FMCB Presentation – Draft FY20-24 CIP</i>
June	Action: <i>MassDOT Board vote on FY20-24 CIP</i>



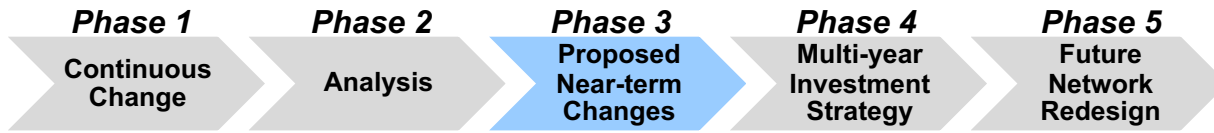
Appendix: Final proposal package

CT1/1	4	5/16	Add 35 ★	36 ★	SL2
37	44	52	64	70/70A	9
72/74/75	89 ★	90 ★	92	95 ★	34/34E
106	111	120	134	201/202	59 ★
220 ★	222	225	411	424	60 ★
428	435	441/442/ 448/449	455/459	501/502/ 503/504 ★	350

Target Implementation in Fall 2019 and Winter 2019-20

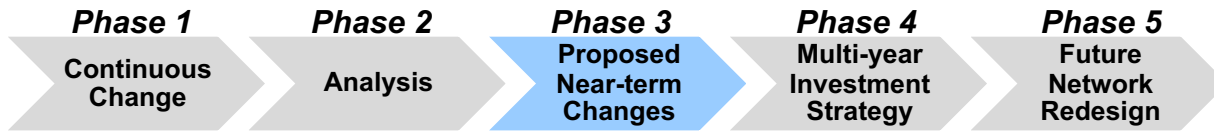
Implement After Resolving Contingency

★ Revised vs. original proposal



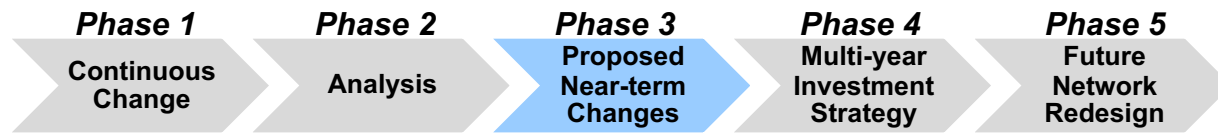
Appendix: Details of Revised Proposals

<p>Add 35</p>	<p>Would coordinate implementation with Route 34, 52 changes (serving Dedham Mall at Stop & Shop bus stop location only). Not included in the original list of 47 proposals.</p>
<p>36</p>	<p>Shorten most trips from Millennium Park to VA Medical Center due to school closure</p>
<p>59</p>	<p>Preserve some lifeline service to Eliot St</p>
<p>60</p>	<p>Preserve Chestnut Hill Mall stop; need new stop at/near Chestnut Hill Square</p>
<p>89</p>	<p>Preserve some peak and school service at Clarendon Hill</p>
<p>90</p>	<p>Preserve direct connection to Sullivan</p>
<p>95</p>	<p>Test potential demand by alternating trips between Arlington Center & Playstead Rd.</p>
<p>220</p>	<p>Preserve some lifeline service to Hingham Center Loop</p>
<p>501/502/ 503/504</p>	<p>Implement only during PM peak when 501/503 serve both sides of Newton Corner</p>



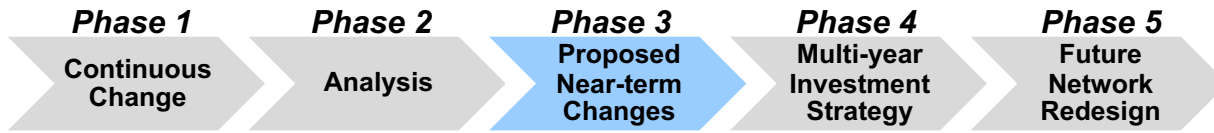
Appendix: Details of contingencies to be resolved

<p>SL2</p>	<p>Work with Massport to improve lighting, safety, and accessibility of path of travel from 88 Black Falcon to Drydock Ave @ Black Falcon Ave stop</p>
<p>9</p>	<p>Need for relocated bus stop, multiple options under review in order to mitigate safety concerns with stop on W. Broadway</p>
<p>34/34E</p>	<p>Requires coordination with Legacy Place</p>
<p>59</p>	<p>MassDOT will soon be starting a reconstruction project of Needham Street. Necessary to understand full implications of project before deciding to implement proposal now or wait until the project is completed in 2022</p>
<p>60</p>	<p>Requires coordination for a new bus stop to serve Chestnut Hill Square</p>
<p>350</p>	<p>City of Burlington must build a new sidewalk to allow for a bus stop</p>



Appendix: Common Themes Heard via Public Feedback

- **Reliability and frequency** most demanded metrics
- **Accessibility should not be lost**, but either met or improved, and busway access should be maintained as much as possible
- In favor of additional connectivity, but **not always with trade-off of less frequency**
- **Mostly in favor of proposed routing changes** if frequencies could be **maintained** or improved
- Key to **maintain connectivity to high-demand destinations** like hospitals, malls, and transit hubs
- Generally unwilling to walk greater distances in exchange for improved frequencies, citing safety, accessibility, and time as concerns
- Many riders valued their one-seat rides and **opposed being required to make a transfer**, even to high-frequency services
- Strong desire to **consolidate bus stops**



Appendix: Outreach since January 28

Between Open Houses, Street Teams and MBTA Community Meetings, staff had over 2,500 in-person interactions

Type of Event	Number of Meetings
Community Meetings	8
Open Houses (at stations)	7
Street Teams (at stations)	6
Briefings	50+

Online Feedback

Type of Feedback	Number of Comments
Online Feedback Form	2,854
Emails/Letters	284