



**Massachusetts Bay
Transportation Authority**

Forging Ahead: Service Proposal

Fiscal and Management Control Board

December 14, 2020

Agenda

- Revised approach to Forging Ahead service planning
- Ridership and Budget Update
- Complete summary of public comment
- New FY21 base service proposal by mode
- Next steps
 - Timeline for FY21 implementation and FY22 budget/service planning
 - Plan for Title VI Equity Analysis and Environmental Review
 - Plan for customer outreach on implementation
- Discussion on how the MBTA will re-add service and rebuild
- Board discussion and vote on FY21 service changes



Revised Approach to Forging Ahead Service Planning

- Based on **customer feedback during public engagement** AND additional **analysis of ridership**, the MBTA made adjustments to the November 9th service proposals
- The MBTA is focused on service changes that better **match service with current and likely near-term ridership**
 - Given the importance of adjusting base service levels for the current fiscal year, while ridership remains low relative to the amount of service being provided, staff have found ways to accelerate service adjustments so that **new commuter rail and ferry schedules can be implemented in January and new bus and rapid transit schedules in March**
 - The revised base service proposal being presented today provides 85-90% of pre-COVID bus service for 41% of pre-COVID bus ridership, 75-80% of rapid transit service for 22% of pre-COVID ridership, and 70% of commuter rail service for 13% of pre-COVID ridership
- Independent of the budget situation, the MBTA **should not be running more service than needed to support current and near-term likely ridership** for the remainder of FY21 and into FY22, so that the resulting budget savings are available to increase service frequency when needed
 - Savings from service cuts will be used to increase service frequency later, when warranted by ridership and revenue and, consistent with the timing of post-vaccine economic reopening, the return of ridership and availability of revenue to pay for additional service

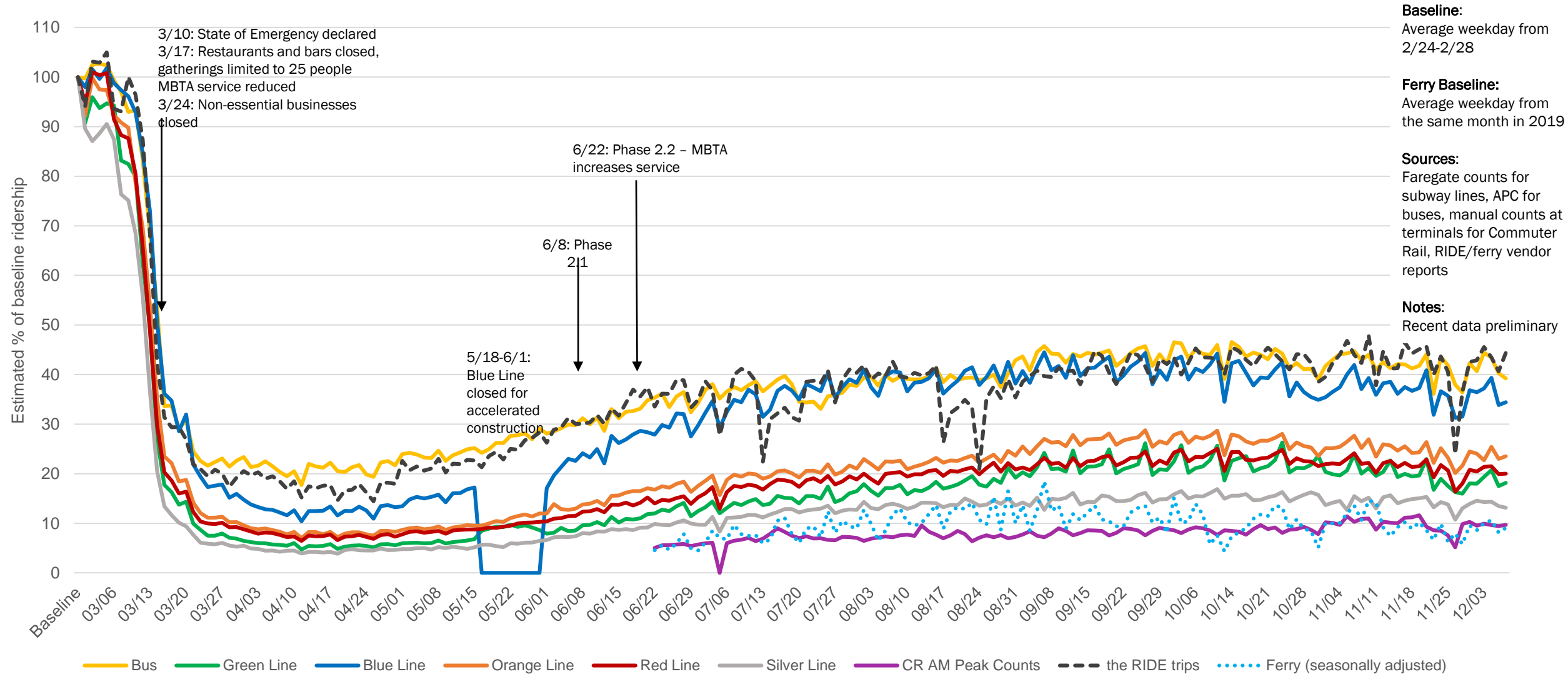


Revised Approach to Forging Ahead Service Planning

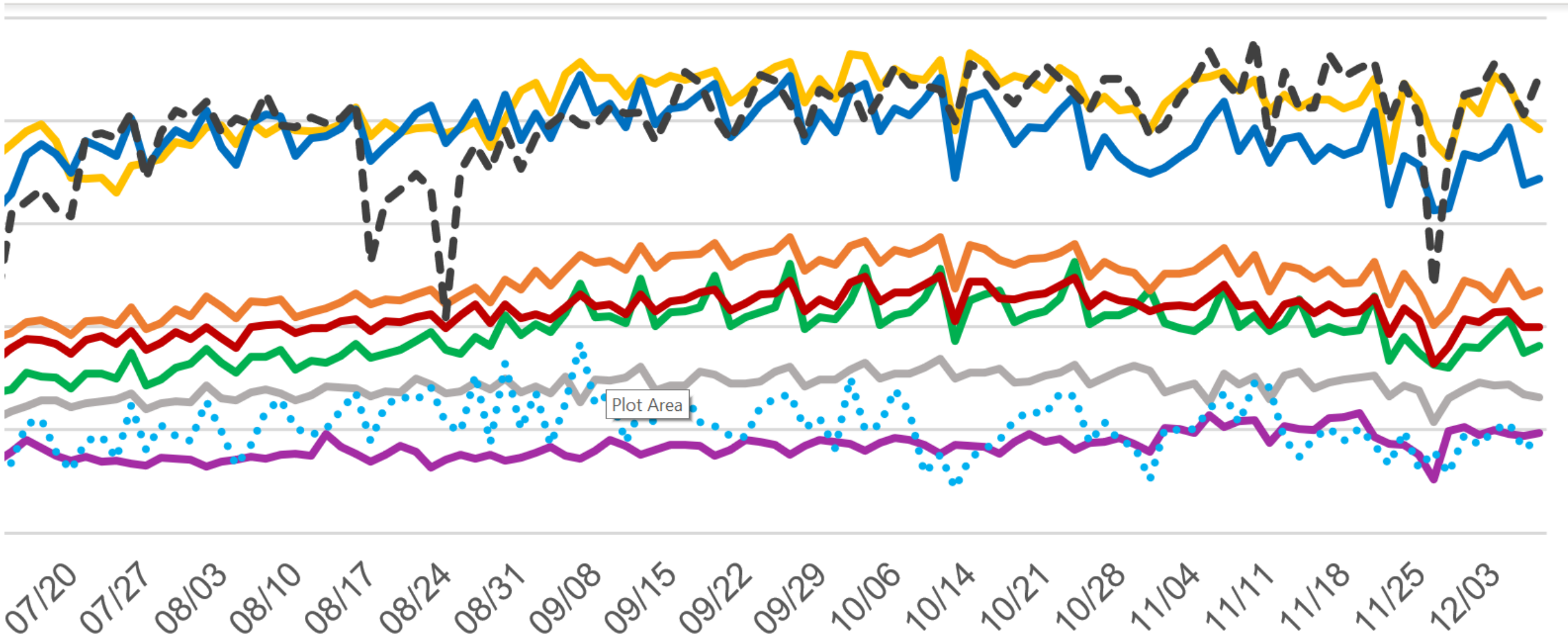
- The new base service levels proposed today, consistent with feedback from the public and from stakeholders, focus on **maintaining more services while reducing frequency to match ridership needs**
 - The revised base service maintains more hours of operation (span) and access to service (reducing the number of planned routes eliminated entirely) and avoids some of the service changes that would have required customers to divert to alternative services
 - **Changing service primarily by reducing service frequency will make it easier to restore service** when warranted by ridership and revenue, as restoration will primarily involve increasing service frequency
- In designing and implementing the revised, proposed FY21 base service, staff has put a **premium on flexibility and optionality so that the MBTA is well-positioned to increase service frequency when appropriate**, consistent with the timing of post-vaccine economic reopening, the return of ridership and availability of revenue
 - While layoffs remain on the table, the MBTA is actively working with our major unions to assess all available options for implementing service changes and achieving budget savings while positioning the MBTA to bring back service with its current trained and experienced workforce
- No additional service adjustments are being proposed today for FY22 (beginning July 1, 2021)
 - We will know more about the FY22 outlook by March, in terms of factors influencing both ridership demand and state and federal funding, and will **plan for FY22 service levels during the budget process** in the spring



Weekly Ridership by Line and Mode – No Major Inflection Points



Weekly Ridership by Line and Mode – Close-up of Recent Drop-Off



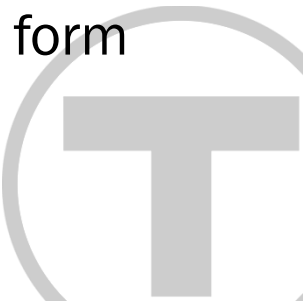
FY21 Budget Outlook & Funds Available for FY22 Budget Gap

- Identifying current FY21 budget projection and the Operating Budget Deficiency target , available to partially offset the FY22 budget challenge
- **\$54M projected budget gap** , identified with the October revision to the FY21 Budget fare revenue projections.
- **\$79M budget challenge** after COVID-19 spending and overtime exposures above budget
- **\$301M in identified solves** in FY21 including capital funding reallocation, passing capital salaries proposal into law, and department/programmatic cost-saving and revenue initiatives
- **\$92M in sales tax revenue upside**, reflects updated State Sales Tax Projection,
 - \$52M, in increased sales tax, above the guaranteed Base Revenue Amount (BRA)
 - Includes \$40M Sales Tax Acceleration
- Service level planning cost savings and impact to FY22 budget challenge will be calculated following FMCB decisions

Description Figures in \$M	FY21
Budget Gap (October Revision)	-54
<i>COVID-19 Spending</i>	<i>-13</i>
<i>Overtime</i>	<i>-12</i>
Subtotal of Identified Risks	-25
Budget Challenge (Gap + Risks)	-79
<i>Federal Formula Funds</i>	<i>171</i>
<i>Capital Salaries</i>	<i>66</i>
<i>Department/Programmatic</i>	<i>64</i>
<i>Service Level Planning (Net)</i>	<i>TBD</i>
Subtotal of Identified Solves	301
<i>Sales Tax Upside & Acceleration Proposal</i>	<i>92</i>
Potential Funds Available for FY22	314

We contacted and heard from many stakeholders

- 10 public meetings and 1 public hearing: 2,010 attendees
- Community liaison outreach
 - 266 community organizations contacted
 - 39 organizations informed us that they shared information with their members
 - 30 organized supplemental community meetings; 3 held in Chinese and 2 in Spanish
- Public comments 6,723+
 - 3,839 comments from online forms
 - 407 comments from official public meetings
 - 179 comments from community meetings
 - 1,463+ emails via public engagement email, representing 834 individuals, 569 form emails and 60 delegation letters



Summary of Public Feedback

- We received feedback about specific changes, on the prioritization, and on the process
- Feedback on the proposals varied by channel
 - Commenters at public meetings prioritized span and access
 - In the online comment tool prioritization of service packages frequency on essential bus and rapid transit rank highest
- General Comments
 - Perception that changes are occurring as people return to work
 - Concern that future schedules with reduced frequency will align with essential workers schedules as well as school schedules especially for reverse commuting and weekend essential workers
 - Concerns about the MBTA's commitment to the environment and mitigating climate change
 - Concerns over the MBTA's commitment to transit oriented development

Full report available at mbta.com/forging-ahead-comments



Prioritizing Service Packages

- Online comment tool priorities for service packages based on importance to the region
- Riders consistently prioritize the restoration of the services that they personally used
- Common Priorities
 - High Priority: **Essential Services** - Most riders across modes rate the restoration of **Rapid Transit** and **Essential Bus** service as extremely important
 - Low Priority: **Suspended Modes** - Few riders who didn't use **Ferries** or the **E Line** believe their restoration is extremely important

Percent of Respondents Who Believe Restoring Service is “Extremely Important” to the Region by MBTA Modes

	Rapid Transit			Commuter Rail			Bus				Ferry	
	Frequency	Evening Service	E Line Service to Heath Street	Weekend Service	Evening Service	RailVision	Essential Bus Frequency	Non-Essential Bus Frequency	Evening Service	Bus Network Redesign	Hingham/Hull	Charlestown/Boston
Rapid Transit Riders (n = 539)	64%	55%	30%	43%	44%	35%	61%	36%	49%	31%	19%	19%
E-Line Riders (n = 50)	56%	53%	75%	51%	51%	27%	49%	24%	39%	22%	18%	16%
Essential Bus Riders (n = 264)	69%	58%	28%	46%	46%	36%	72%	46%	58%	35%	21%	22%
Non-Essential Bus Riders (n = 227)	53%	41%	21%	27%	31%	22%	72%	55%	49%	25%	12%	12%
Commuter Rail Riders (n = 474)	51%	46%	30%	62%	64%	31%	46%	31%	38%	26%	21%	22%
Ferry Riders (n = 182)	35%	31%	25%	20%	28%	22%	29%	18%	23%	16%	51%	75%
Average Across Modes	64%	54%	30%	45%	47%	34%	64%	41%	51%	31%	20%	20%

Forging Ahead Online Feedback Form 1,500 responses as of 11/29/20

Draft for Discussion & Policy Purposes Only




Framework for Proposing Modifications

Type	Proposed Changes
Lack of Access	Some bus route elimination, Hingham/Hull ferry elimination, suburban subsidies, commuter rail stop closures
Lack of Span	Late night bus, Late night rapid transit, evening commuter rail, weekend commuter rail
Divert to alternative route	Charlestown ferry, E Line stopping at Brigham Circle, some bus route eliminations
Less Frequency	Commuter rail weekdays, rapid transit, bus



- Based on feedback and analysis, believe priority for modifying base service is focusing on **access & span**, specifically for transit critical riders,
- Thus using public feedback to identify **behaviors and travel trends of transit critical riders that would lose access and span**
- **Examples include:**
 - Bus Routes with higher stranding based on current ridership (number and durability vs. pre-COVID)
 - Municipalities losing all MBTA modal options
 - Need for 2nd and 3rd shift medical workers to have access to some transit, especially across Boston harbor
 - Services where large number of current users may represent a larger portion of 0-1 car households than pre-COVID ridership

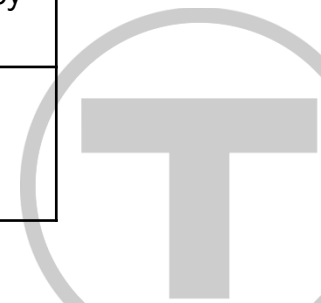
Bus – Changes to Base Service

What we heard		What we changed
<p>Maintaining access is more important than frequency; limit the number of current riders who are stranded (greater than ½ mile from bus or rapid transit)</p>		<ul style="list-style-type: none"> • Do not suspend routes with larger number of Fall 2020 riders stranded (>30). Keep some access for: <ul style="list-style-type: none"> • Malden/Melrose: Continue some service on 131 (peak only) and 136 (combine with 137) • Quincy: Continue to operate 230 between Braintree and Quincy Center • Hull: Continue some service on 714 • Canton: Continue some service on 716 • Maintain the Suburban Subsidy program, which partially funds service in five communities (Bedford, Beverly, Burlington, Lexington, and Mission Hill (Boston))
<p>Though a low number of riders, believe that riders using system after midnight are likely to be essential workers</p>		<ul style="list-style-type: none"> • Continue to operate bus service after midnight, though may reduce some frequency
<p>Route elimination with will significantly negatively impact people with disabilities and Seniors</p>		<ul style="list-style-type: none"> • Continue to operate some service on route 43 (Roxbury & South End, Boston) as even though within ½ mile of alternative rapid transit or bus, concerns raised about accessibility and access to Tufts Medical Center




Bus – Proposed FY21 Base Service

Fall 2020 ridership (vs. pre- COVID)	Projected ridership for July 2021 (vs. pre-COVID)		FY21 Scheduled service hours	
	Scenario 3	Scenario 2	Modified Proposal for 12/14	Original proposal (11/9)
41%	51%	55%	85-90% est.	85%

Type of Service Change	Modified proposal for 12/14	What changed vs. 11/9
Hours of operation (span)	<ul style="list-style-type: none"> No change to hours of operation 	<ul style="list-style-type: none"> Service after midnight will continue
Route elimination/ consolidation (access)	<ul style="list-style-type: none"> Suspend 20 routes, consolidate 16, shorten 4, and a few routes will operate peak only (many of changes already in effect as part of COVID schedules) Continue suburban subsidies to 5 communities 	<ul style="list-style-type: none"> 5 Bus Routes (43, 131, 136, 714, 716) proposed to remain included in base service 1 bus route (230) proposed to continue to run to Quincy Center
Frequency	<ul style="list-style-type: none"> 20% frequency reduction system-wide non-essential routes 5% frequency reduction system-wide essential routes 	<ul style="list-style-type: none"> No proposed changes



Rapid Transit – Changes to Base Service



What we heard		What we changed
The Blue Line is currently at capacity at some times, especially in the AM		<ul style="list-style-type: none">• Only reduce Blue Line frequency (time between trains) by up to 5% during lower ridership times, and review on regular basis
Stopping the E Line at Heath Street will significantly negatively impact people with disabilities and Seniors, and makes access to the VA Medical Center more challenging		<ul style="list-style-type: none">• Continue to operate the E Line to Heath Street, serve all stops
Though a low number of riders, believe that riders using system after midnight are likely to be essential workers		<ul style="list-style-type: none">• Continue to operate rapid transit service after midnight, though may reduce some frequency

Rapid Transit – Proposed FY21 Base Service

Fall 2020 ridership (vs. pre- COVID)	Projected ridership for July 2021 (vs. pre-COVID)		FY21 Scheduled service hours	
	Scenario 3	Scenario 2	Modified Proposal for 12/14	Original proposal (11/9)
24%	28%	46%	75-80% (est.)	70%

Type of Service Change	Modified proposal for 12/14	What changed vs. 11/9
Hours of operation (span)	<ul style="list-style-type: none"> No change to hours of operation 	<ul style="list-style-type: none"> Service after midnight will continue
Route elimination/ consolidation (access)	<ul style="list-style-type: none"> No change to operating footprint 	<ul style="list-style-type: none"> Continue E Line to Heath Street
Frequency	<ul style="list-style-type: none"> 20% frequency reduction to Green, Orange, and Red Line Up to 5% reduction to Blue Line 	<ul style="list-style-type: none"> Continue 95% of Blue Line service

Commuter Rail – Changes to Base Service

What we heard		What we changed
Maintaining access is more important than frequency; there are essential riders who need the Commuter Rail on the weekend		<ul style="list-style-type: none">• Maintain some weekend service on the higher ridership and/or Transit Critical Commuter Rail lines (Providence, Worcester, Middleboro, Newburyport/Rockport and Fairmount), and only suspend the lower ridership lines
Cedar Park stop (on Haverhill line) serves a large walkshed and a community with lower car ownership		<ul style="list-style-type: none">• Continue to serve Cedar Park stop



Commuter Rail – Proposed FY21 Base Service

Fall 2020 ridership (vs. pre- COVID)	Projected ridership for July 2021 (vs. pre-COVID)		FY21 Scheduled service hours	
	Scenario 3	Scenario 2	Modified Proposal for 12/14	Original proposal (11/9)
13%	16%	29%	70% (est.)	65%

Type of Service Change	Modified proposal for 12/14	What changed vs. 11/9
Hours of operation (span)	<ul style="list-style-type: none"> End weekday service at 9 PM 	<ul style="list-style-type: none"> No Change
Route elimination/ consolidation (access)	<ul style="list-style-type: none"> Maintain partial weekend service Worcester, Providence, Newbury/Rockport, Middleboro and Fairmount; suspend on low ridership lines Close 5 stations 	<ul style="list-style-type: none"> Partial weekend service on high ridership and transit critical lines Continue to serve Cedar Park stop
Frequency	<ul style="list-style-type: none"> Reduce peak and offpeak service 	<ul style="list-style-type: none"> No Change

Estimated Commuter Rail Weekend Ridership


Line	FY18 weekend ridership (Sat + Sun)	Oct. & Nov. 2020 weekend ridership (Sat + Sun)	% of pre-COVID ridership
Providence	7,660	2,370	31%
Newburyport	4,550	2,200	48%
Worcester	5,060	2,160	43%
Middleborough	1,920	990	52%
Haverhill	1,290	800	62%
Fitchburg	2,930	790	27%
Fairmount	500	670	134%
Franklin	2,180	590	27%
Kingston	1,680	550	33%
Lowell	1,890	500	26%
Greenbush	810	420	52%
Needham	660	270	41%
TOTAL	31,130	12,310	40%

Providence, Newburyport, Worcester, Middleboro and Fairmount represent 2/3 of all weekend ridership

Notes: FY18 ridership synthesized from mTicket data and CTPS counts; 2020 estimates based on conductor counts



Ferry – Changes to base service

What we heard		What we changed
<p>Maintaining access is more important than frequency, some essential workers rely on Hingham/Hull ferry, and it will be easier to tell when to ramp up frequency if at least minimal service continues to operate</p>		<ul style="list-style-type: none">• Continue to operate some Hingham/Hull weekday ferry service, exact schedule still to be determined and if all Boston stops will be served, though service may be limited to peak/commuter hours (but will still serve both Hingham and Hull)



Ferry – Proposed FY21 Base Service

Fall 2020 ridership (vs. pre- COVID)	Projected ridership for July 2021 (vs. pre-COVID)		FY21 Scheduled service hours	
	Scenario 3	Scenario 2	Modified Proposal for 12/14	Original proposal (11/9)
12%	16%	29%	>0%, exact service TBD	0%

Type of Service Change	Modified proposal for 12/14	What changed vs. 11/9
Route elimination/ consolidation (access)	<ul style="list-style-type: none"> Suspend Charlestown and Hingham direct service 	<ul style="list-style-type: none"> No Change
Frequency	<ul style="list-style-type: none"> Reduce weekday Hingham/Hull ferry 	<ul style="list-style-type: none"> Maintain partial Hingham/Hull weekday service (<i>also qualifies as access change</i>)

Service Proposal for 12/14

Mode	Fall 2020 ridership (vs. pre-COVID)	Projected ridership for July 2021 (vs. pre-COVID)		FY21 Scheduled service hours		FY21 Service Proposal	
		Scenario 3	Scenario 2	Modified Proposal for 12/14	Original proposal (11/9)	Modified proposal for 12/14	What changed vs. 11/9
Bus	41%	51%	55%	85-90% est.	85%	<ul style="list-style-type: none"> No change to hours of operation Suspend 20 routes, consolidate 16, shorten 4 20% frequency reduction system-wide non-essential routes 5% frequency reduction system-wide essential routes 	<ul style="list-style-type: none"> Service after midnight 6 Bus Routes (43, 131, 136, 230, 714, 716) Suburban subsidies to 5 communities
Rapid Transit	24%	28%	46%	75-80% (est.)	70%	<ul style="list-style-type: none"> No changes to hours of operation or footprint 20% frequency reduction to Green, Orange, and Red Line Up to 5% reduction to Blue Line 	<ul style="list-style-type: none"> Service after midnight Continue 95% of Blue Line service E Line to Heath Street
Commuter Rail	13%	16%	29%	70% (est.)	65%	<ul style="list-style-type: none"> Maintain partial weekend service Worcester, Providence, Newburyport/Rockport, Middleboro and Fairmount; suspend on low ridership lines End weekday service at 9 PM Reduce peak and weekday service Close 5 stations 	<ul style="list-style-type: none"> Continue to serve Cedar Park stop Partial weekend service on high ridership and transit critical lines
Ferry	12%	16%	29%	>0%, exact service TBD	0%	<ul style="list-style-type: none"> Suspend Charlestown and Hingham direct service Reduce weekday Hingham/Hull ferry 	<ul style="list-style-type: none"> Maintain partial Hingham/Hull weekday service
The RIDE	38%	40%	46%	No changes	No change	<ul style="list-style-type: none"> Adjust scheduling window from 30 to 40 minutes Adjust ADA to Premium based on fixed route changes Adjust hours of operation of Premium service to match Commuter Rail span 	<ul style="list-style-type: none"> Changes only reflect changes made to other modes

Implementation timeline

Mode	Take effect January (decision in December)	Take effect March / April (decision in December)	Takes effect June / July (decision in early March)	Takes effect later (pending ridership)
Bus		<ul style="list-style-type: none"> Frequency adjustments Suspend 9 routes (1 delay until GLX) 	<ul style="list-style-type: none"> Any changes that are not completed in March/April Potential other adjustments pending social distancing 	<ul style="list-style-type: none"> Implement consolidated or suspended Somerville bus routes once College Ave. Branch of GLX opens
Rapid Transit		<ul style="list-style-type: none"> Reduce peak and off-peak service on Red, Orange, Green lines Minor modifications to Blue Line service 	<ul style="list-style-type: none"> Potential further frequency adjustments pending social distancing Review Blue Line 	<ul style="list-style-type: none"> Additional Green Line frequency changes with opening of GLX
Commuter Rail	<ul style="list-style-type: none"> Reduced Winter schedules (incl. reduced weekend service), planning add'l service to Lynn, Brockton, and Fairmount 	<ul style="list-style-type: none"> Revised schedules, including stopping service at 9 PM 		
Ferry	<ul style="list-style-type: none"> Suspend Charlestown and Hingham direct services Reduce Hingham/Hull service 			
The RIDE		<ul style="list-style-type: none"> Scheduling window change ADA coverage area impacted by fixed route changes Hours of operation for Premium Service 		

Note: Bus, Commuter Rail and Rapid Transit implementation timelines accelerated in response to public feedback and internal operating changes

Integrated timeline for internal & external activities

	January	February	March	April	May	June/July 1
Service Adjustments (customer facing)	<ul style="list-style-type: none"> • Commuter Rail: reduced Winter schedules including reduced weekend service • Ferry: Suspend Charlestown and Hingham direct services; reduce Hingham/Hull service 		<ul style="list-style-type: none"> • Bus: frequency adjustments, some route restructuring/suspension • Rapid Transit: reduce peak and off-peak service on Red, Orange, Green lines; minor modifications to Blue Line service • The RIDE: Most changes • Commuter Rail: Revised schedules, including stopping service at 9 PM 			<ul style="list-style-type: none"> • Bus: Remainder of frequency adjustments and route restructuring • Rapid Transit: Potential further frequency adjustments
FY22 Budget Planning	<ul style="list-style-type: none"> • Detail November results, updates as needed 	<ul style="list-style-type: none"> • Detail December results • Policy guidance for FY22 Budget 	<ul style="list-style-type: none"> • Preliminary view of FY22 budget 		<ul style="list-style-type: none"> • Statutory deadline for preliminary itemized FY22 budget followed by submission to Advisory Board 	<ul style="list-style-type: none"> • Statutory deadline for final itemized FY22 budget
FY22 Service Planning		<ul style="list-style-type: none"> • Finish Title VI equity analysis • Update quarterly ridership projections • Revise scenarios based on updated data 	<ul style="list-style-type: none"> • Finish environmental review • Finalize plan for June/July Bus & Rail service changes • Decide on any additional service adjustments based on updated scenarios 		<ul style="list-style-type: none"> • Update quarterly ridership projections • Finalize plan for Fall service changes 	

Continued Outreach on Forging Ahead Implementation

- **Following today's Board vote on Forging Ahead proposals:**
 - *Winter 2021*
 - Community Liaisons will circle back to community organizations previously contacted to inform them of changes to proposals
 - Outreach to inform riders impacted by early implementation service reductions
 - *Spring 2021*
 - Outreach to inform riders impacted by Spring rating changes
 - Outreach to inform riders impacted by Summer rating changes
- **Outreach to include:**
 - New schedules available on website and print versions at stations
 - Posters on vehicles and in stations
 - Signage at bus stops and digital screens in stations
 - In-person outreach (as possible based on COVID)
 - Outreach to community organizations and local elected officials
 - All outreach in multiple languages based on rider demographics



Title VI Service Equity Analysis

- A Title VI Equity Analysis is triggered by a major service change defined in the MBTA's Disparate Impact/Disproportionate Burden policy, for both service increases and decreases
 - In this policy all changes proposed at the same time are analyzed together
- We propose to conduct an equity analysis on the Base Service proposal adopted today compared to pre-COVID service
 - The analysis will be brought to the Board in February for approval and to mitigate any potential disparities as part of the FY22 budget
- Given that service will be added back incrementally, we will conduct another equity analysis a year from now and compare it to pre-COVID service levels
- Our commitment is that service at the end of the recovery will be more equitable than before COVID (as measured by percent of service hours serving minority and low-income populations)



Environmental Review

- A service reduction of more than 10% is subject to an Environmental Notification Form initiating review pursuant to MEPA
- This review is only triggered by a permanent reduction of service levels
- The review will be done before we implement an over 10% reduction in service (compared to pre-COVID)
- The public will have the opportunity to comment on the ENF before the Secretary of EEA issues a Certificate of Adequacy



The Approach to Adding Back Service

- Because most FY21 service changes involve frequency (rather than access or span), we can **monitor ridership and know if ridership is increasing to the point where additional service is needed**
 - FY21 service levels assume the need for social distancing and therefore can accommodate growing ridership after social distancing is no longer required based on public health guidance
 - The proposed FY21 base service level provides 85-90% of pre-COVID bus service for 41% of pre-COVID bus ridership, 75-80% of rapid transit service for 22% of pre-COVID ridership, and 70% of commuter rail service for 13% of pre-COVID ridership, accommodating ridership growth
- In addition to ridership, **staff will monitor other data sources** including passenger surveys, employer surveys, roadway data, general travel data (LBS), economic recovery planning
 - Planning scenarios will be refined and revised as necessary and ridership will be compared to scenario projections to understand which scenario most accurately predicts future ridership
 - Every month we will show the Board where ridership is compared to the scenarios
- The **timing of service restoration will depend on public health guidance** (including guidance on the continued need for social distancing) and the timing of the Commonwealth's post-vaccination re-opening plan
- **FY22 service levels will be planned beginning in February/March** as part of FY22 budget process



Proposed Vote

WHEREAS, on March 10, 2020, a state of emergency was declared in Massachusetts due to the outbreak of a novel coronavirus (COVID-19), which was characterized as a pandemic by the World Health Organization on March 11, 2020; and

WHEREAS, as a result of the world-wide pandemic, nationwide public transit use sharply declined over the next nine months, including ridership on all modes of transportation provided by the Massachusetts Bay Transportation Authority (“Authority”); and

WHEREAS, Authority ridership is currently significantly lower than pre-pandemic ridership; and

WHEREAS, the Authority initiated the Forging Ahead process in an effort to focus its limited operating and capital resources on transit-critical riders, who have most depended on and who have most continued to use the Authority’s services during the COVID-19 pandemic; and

WHEREAS, the Forging Ahead process evaluated all Authority services, and based its analysis on transit critical riders’ usage of Authority services and on COVID-19 ridership patterns, defining essential services as those with both serving high transit critical populations and with high ridership, as well as feedback from the public; and

WHEREAS, the Authority’s public process regarding Forging Ahead included ten virtual public meetings and one virtual public hearing, direct outreach with hundreds of community groups, and the collection of nearly 7,000 written comments from the public; and

WHEREAS, the proposed service changes are considered a major service change pursuant to the Federal Transit Administrator (FTA) Title VI Circular 4702.1B, triggering a Service Equity Analysis (the “Equity Analysis”) to determine whether the implementation of the proposed service changes will result in disparate impacts to minority populations or disproportionate burdens to low-income populations; and

WHEREAS, once completed, the results of the Equity Analysis will be presented to the Board for approval; and

WHEREAS, the proposed service changes have been reviewed by the MBTA Advisory Board; and

WHEREAS, the proposed service changes shall be the subject of an environmental notification form pursuant to M.G.L. ch. 30, §§ 61 and 62H.



Proposed Vote (cont.)

It is hereby VOTED:

That the following service changes are approved for Fiscal Year 2021, consistent with the presentation to the Fiscal and Management Control Board (“FMCB”) at the FMCB meeting of December 14, 2020 entitled “Forging Ahead: Service Proposal,” and subject to (a) the Authority’s submission of an environmental notification form as required under M.G.L. c. 161A, s. 5(d), and (b) the Authority’s completion of a Title VI Equity Analysis regarding the service changes and the FMCB’s approval of such Equity Analysis, provided however that any service changes implemented before the completion of such Equity Analysis are temporary and subject to further review and approval by the FMCB.

Bus	<ul style="list-style-type: none">• Suspend 20 routes, consolidate 16, shorten 4, and a few routes will operate peak only (many of changes already in effect as part of COVID schedules)• 20% frequency reduction non-essential routes• 5% frequency reduction essential routes
Rapid Transit	<ul style="list-style-type: none">• 20% frequency reduction to Green, Orange, and Red Line• Up to 5% reduction to Blue Line
Commuter Rail	<ul style="list-style-type: none">• Maintain partial weekend service on the Worcester, Providence, Newburyport/Rockport, Middleboro and Fairmount branches; suspend weekend service on all other branches• End weekday service at 9 PM• Reduce peak and weekday service• Close 5 stations (Plimptonville, Prides Crossing, Silver Hill, Hastings, Plymouth)
Ferry	<ul style="list-style-type: none">• Suspend Charlestown and Hingham direct service• Reduce weekday Hingham/Hull ferry service
The RIDE	<ul style="list-style-type: none">• Adjust scheduling window from 30 to 40 minutes• Adjust ADA routes to Premium routes based on fixed route changes• Adjust hours of operation of Premium service to match Commuter Rail span

Appendix



Non-Service Departmental/Programmatic Savings Detail

- **\$129M** in total departmental/programmatic opportunities between FY21 and FY22 under Scenario 2 in FY22, \$9M reduction from Scenario 3 due to RIDE projections and credit card transaction fees
 - **\$38M - Headcount freeze** that allows all backfills with provisions to ensure safety priorities are met
 - **\$37M - Refinance parking bonds** in April 2021 to reduce net interest payments
 - **\$15M - RIDE projections** based lower ridership, fewer service hours, and fuel prices
 - **\$17M - Fuel savings effort** to take advantage of current pricing relative to budgeted assumptions (FY22 savings may overlap with service level planning estimates)
 - **\$9M - Overhead cost savings of parking operations** through technology
 - **\$6M - Wholesale fixed price electricity contract** update
 - **\$4M - Credit card transaction fees on commuter rail** reduced due to lower ridership and lower volume
 - **\$1M - Ordering fewer CharlieCards** to align with demand
 - **\$1M - Paused unaffiliated staff merit pay program for FY20**
- All estimates will continue to be refined throughout FY22 budget development

Category (\$M)	FY21	FY22	Total
Headcount freeze	19	19	38
Refinance parking bonds	-	37	37
RIDE projections	15	-	15
Fuel savings	17	-	17
Parking operations overhead	4	5	9
Electricity contract	2	3	6
Credit card transaction fees	4	-	4
CharlieCard orders	1	-	1
Unaffiliated staff merit pay	1	-	1
All other	1	1	2
Total	64	65	129

Savings figures are estimates and may not be realized at the levels targeted



Scenario Comparison: FY22 Budget Outlook & Risk (12/7 Slide))

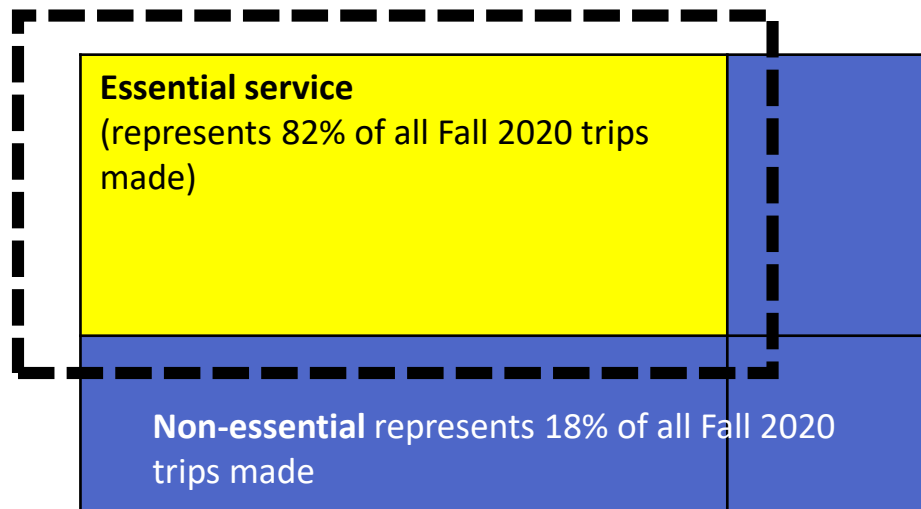
- Budget challenge in FY22 ranges from \$577M-\$652M under Scenario 2 and Scenario 3 assumptions
 - \$347M-\$279M in fare revenue in FY22 based on Scenario 2 and 3 respectively before any service changes
 - \$75M budget variation includes fare and own source revenue updates
- Maximum savings of \$276M from FY21 to offset the budget gap
 - Range of \$236M-\$276M after incorporating \$40M in one-time sales tax acceleration in FY21
- Holding steady on the cost savings target and assuming all other budget factors are held constant, between \$13M and \$75M available to reduce the proposed service level changes in FY22
 - In Scenario 2 \$94M in net service savings could be reduced to \$19M
 - In Scenario 3 \$98M in net service savings could be reduced to \$85M

Description Figures in \$M	Scenario 2 in FY22	Scenario 3 in FY22	Variance
Budget Gap	(509)	(584)	75
<i>COVID-19 Spending</i>	(58)	(58)	-
<i>Overtime</i>	(10)	(10)	-
Subtotal of Identified Risks	(68)	(68)	-
Budget Challenge (Gap + Risks)	(577)	(652)	75
<i>Federal Formula Funds</i>	209	209	-
<i>Capital Salaries</i>	68	68	-
<i>Department/Programmatic</i>	65	74	(9)
<i>Service Level Planning (Net)</i>	94	98	(4)
Subtotal of Identified Solves	436	449	(13)
Estimated Balance in FY22	(141)	(203)	62
<i>FY21 Maximum Potential Cost Savings</i>	276	276	-
<i>Implementation Risk</i>	(60)	(60)	-
Available to Add Back Service	75	13	62

**Estimates are based on 12/7 presentation assumptions of \$14M in FY21 service level savings and \$40M in sales tax revenue upside

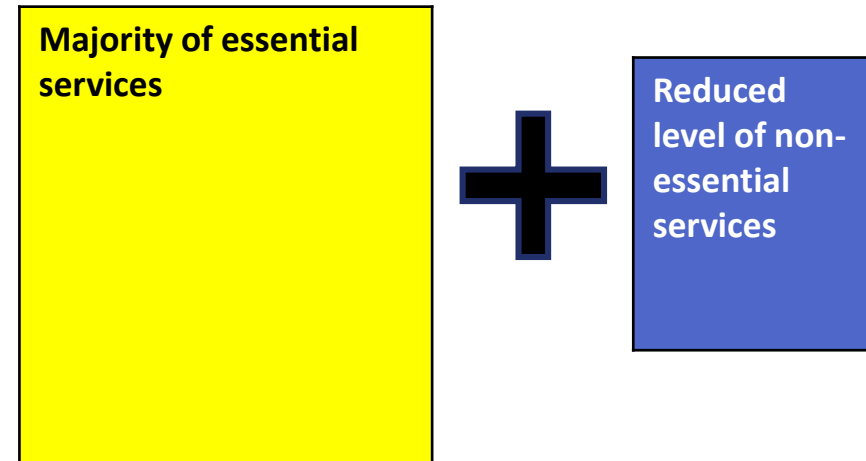
What is base service?

ESSENTIAL SERVICE



Essential services are the services that serve high transit critical populations AND have high ridership potential

BASE SERVICE



Base service is the proposed new service level, which is the majority of essential service and a reduced level of non-essential services



Preserving Essential Services

Mode	Highly Transit Critical	Less Transit Critical
High Ridership Potential FY22	Blue Line, Orange Line, Red Line, Green Line (trunk), Mattapan line, many bus routes, Fairmount CR line	Some bus routes
Low Ridership Potential FY22	Some bus routes, some Commuter Rail service, Charlestown ferry*	Hingham/Hull ferry, some bus routes, some Commuter Rail service

- Goal of this framework is to preserve service at or above Service Delivery Policy levels for all services in the High Ridership and High Transit Critical quadrant
- Service Delivery Policy was approved by FMCB in 2017 and quantifies MBTA's target minimum acceptable service level by mode across multiple metrics (incl. hours of operation, frequency, crowding)

*Charlestown Ferry was initially considered as part of essential service, but after further examination, has been moved to low ridership based on further review of Fall 2020 ridership



Service Proposal Evolution

Mode	11/9 Proposal	“Add Backs”			Revised proposal for 12/14
	Base Service (key elements)	Service additions to 11/9 proposal	Est. modal service hours (%)	Riders impacted	Modified base service
Bus	<ul style="list-style-type: none"> End service at midnight 25 routes eliminated, consolidate 14, shorten 5 20% non-essential reduction 5% essential reduction End suburban subsidy 	Service after midnight	1%	1,748 (span)	<ul style="list-style-type: none"> No change to hours of operation Suspend 20 routes, consolidate 16, shorten 4 20% reduction non-essential 5% essential reduction
		Routes 43, 131, 136, 230 (to Quincy Center), 714, 716	1-2%	236 (access)	
		Continue suburban subsidy	<1%	159 (access)	
Rapid Transit	<ul style="list-style-type: none"> End service at midnight 20% off-peak reduction 20% peak reduction E line short turn 	Service after midnight	2%	733 (span)	<ul style="list-style-type: none"> No changes to hours of operation 20% reduction to Blue, Green, and Orange Lines 5% reduction to Blue Line
		15% Blue Line service	1%	~19,000 (frequency)	
		E Line to Heath Street	3%	1,000 (divert)	
Commuter Rail	<ul style="list-style-type: none"> End weekend service Weekday service at 9 PM Reduced peak and midday Close 6 stations 	Cedar Park open	-	20 (access)	<ul style="list-style-type: none"> Reduce weekend service; suspend on low ridership lines End weekday service at 9 PM Reduce peak and weekday Close 5 stations
		Partial weekend on 5 lines (Providence, Worcester, Middleboro, Newburyport/Rockport, and Fairmount)	5%	8,390 (span)	
Ferry	Suspend all Ferry service	Partial Hingham/Hull on weekdays	>0%, exact TBD	593 (access)	<ul style="list-style-type: none"> Suspend Charles. and Hingham direct Reduce Hingham/Hull weekday ferry
The RIDE	<ul style="list-style-type: none"> Adjust scheduling window from 30 to 40 minutes Adjust ADA to Premium based on fixed route changes Hours of operation 	As impacted by other changes	None	None	<ul style="list-style-type: none"> Adjust scheduling window from 30 to 40 minutes Adjust ADA to Premium based on fixed route changes Hours of operation (potentially larger gap between ADA and Premium)

Recap of 11/9/20 Base Service Proposal

- **All essential services at or above Service Delivery Policy (SDP) for frequency, span and crowding**
 - Fairmount Line
 - All Rapid Transit
 - Bus Routes (~80 routes)
 - RIDE with policy changes (e.g. scheduling window)
- **Reduced level of non-essential services based on demand and alternatives**
 - Reduced peak service on all other Commuter Rail lines (no weekend or evening service, reduced midday service, six closed stops)
 - Reduced frequency on remaining Bus Routes, including smaller service area and consolidated routes
 - All ferry suspended



Types of Impacts on Riders

- Lack of Access/Span: most severe impact, but impacts fewer riders
 - Due to elimination of all service within 1/2 mile
 - Due to changes so that service is not available at the hour a passenger wishes to travel or on that day of the week
- Divert to Alternative Service: Impact greatest on seniors/people with disabilities
 - Need to use alternative service within 1/2 mile
- Less Frequent service: Less severe, but impacts more riders
 - Less frequent service still within Service Delivery Policy
 - Less frequent service that could be below Service Delivery Policy



Original proposed service packages

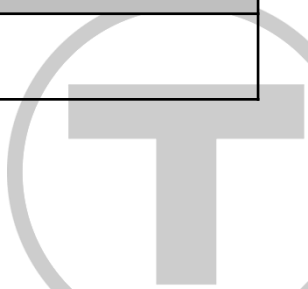
Exact service patterns may change as part of normal service planning cycles to reflect changing ridership patterns

Service Package		Daily Riders impacted (Sept. 2020)	Annual cost (Gross)	Additional details
A1	Restore frequency to Rapid Transit	~120,000 Frequency	\$14M	• Rapid Transit to 90% of pre-COVID frequency
A2	Restore evening service on Rapid Transit	733 Lack of Access	\$3M	• Rapid Transit operates past midnight
A3	Restore E Line to Heath Street	~1,000 Divert	\$2M	• Restore 5 stops to E line, terminate at Heath Street vs. Brigham Circle
B1	Restore weekend service on Commuter Rail	~14,000 (weekend) Lack of Access	\$7-15M	• Partial (\$7M) on some lines or full weekend service on all lines (\$15M)
B2	Restore evening service on Commuter Rail	939 Lack of Access	\$7M	• Commuter Rail operates past 9 PM
B3	Invest in new connections & service based on RailVision for Commuter Rail	N/A	\$10-15+M	• New Commuter Rail Service patterns (e.g. midday service)
C1	Restore frequency to essential Bus routes	~130,000 Frequency	\$7M	• Essential bus frequency to 100% of pre-COVID, and potentially restore RIDE scheduling window to 30 minutes <i>(bus service may still be adjusted based on crowding)</i>
C2	Restore frequency on non-essential Bus routes	~31,000 Frequency	\$7M	• Non-Essential bus frequency to 90% of pre-COVID <i>(service may still be adjusted based on crowding)</i>
C3	Restore evening service on Bus	1,748 Lack of Access	\$3M	• Bus routes operate past midnight <i>(not all routes, but those that operate past midnight pre-COVID)</i>
C4	Invest in new connections & service based on Bus Network Redesign	N/A	\$10-15+M	• New bus routes to provide better access and/or service for transit critical riders. May partially address eliminated or consolidated routes <i>(may need to be paired with bus priority investments)</i>
D1	Restore partial Ferry to Charlestown/Boston	210 Divert	\$1.5M	• Restore partial Ferry service to Charlestown/Boston (no weekend service)
D2	Restore partial Ferry to Hingham/Hull	593 Lack of Access	\$2M	• Restore partial Ferry service to Hingham/Hull (local only, may not serve all Boston stops, no weekend service)

List of all essential bus routes

High Transit Priority & High Ridership Potential (Key Bus Routes and Silver Line Routes in gray)							
1	21	32	42	69	105	120	504
8	22	33	44	83	106	121	CT2
9	23	34	45	85	108	202	CT3
10	24	35	47	86	109	210	SLW
11	26	36	50	89	110	215	SL1
14	27	37	51	91	111	240	SL2
15	28	38	57	93	114	411	SL3
16	29	39	64	97	116	424	SL4
17	30	40	65	99	117	429	SL5
19	31	41	66	104	119	455	

Note: Route 68 initially included in essential services (as serves essential trips), but as multiple alternatives exist with ¼ mile, proposed suspending route



All bus routes with major structural changes or suspensions

Consolidated Routes	Restructured routes (shortened)
62 & 76	553
84 & 78	554
88 & 90 (w/ GLX)	556
136 & 137	558
214 & 216	
352 & 354	
501 & 503	
502 & 504	
Restructured & consolidated routes will continue to operate, but with lower frequency	

Suspended routes			
Within ¼ mile of bus or rapid transit	High transit critical, very low ridership, redundant options available on portion of most routes	Low transit critical, low ridership)	
55	18	52	505
68	170	72	710
80 (w/ GLX)	221	79	
325	428	212	
326	434	351	
456		451	
		465	

Note: Routes 131 and 67, potentially among others, proposed to operate peak only spans

Service Delivery Policy - Frequency & Span

		Commuter Rail	Ferry	Rapid Transit	Bus – Key Bus Routes	Bus – Local Routes*
Frequency	AM & PM Peak	3-4 trips in peak direction	3 trips in peak direction	Every 10 minutes	Every 10 minutes	Every 30 minutes
	All other weekday periods	Every 3 hours in each direction	Every 3 hours	Every 15 minutes	Every 15-20 minutes	Every 60 minutes
	Saturday	Every 3 hours in each direction	-	Every 15 minutes	Every 20 minutes	Every 60 minutes
	Sunday	-	-	Every 15 minutes	Every 20 minutes	Every 60 minutes
Span of Service	Weekday	7:00 AM – 10:00 PM	7:00 AM – 6:30 PM	6:00 AM - midnight	6:00 AM - midnight	7:00 AM – 7:00 PM
	Saturday	8:00 AM – 6:30 PM	8:00 AM – 6:30 PM (seasonal)	6:00 AM – midnight	6:00 AM – midnight	8:00 AM – 6:30 PM*
	Sunday	-	-	7:00 AM – midnight	7:00 AM – midnight	10:00 AM – 6:30 PM*

*Commuter or Community Route Standard not shown; Minimum span only standard for high-density areas. There is no span standard for low-density areas on weekend