

# Forging Ahead: Service Planning

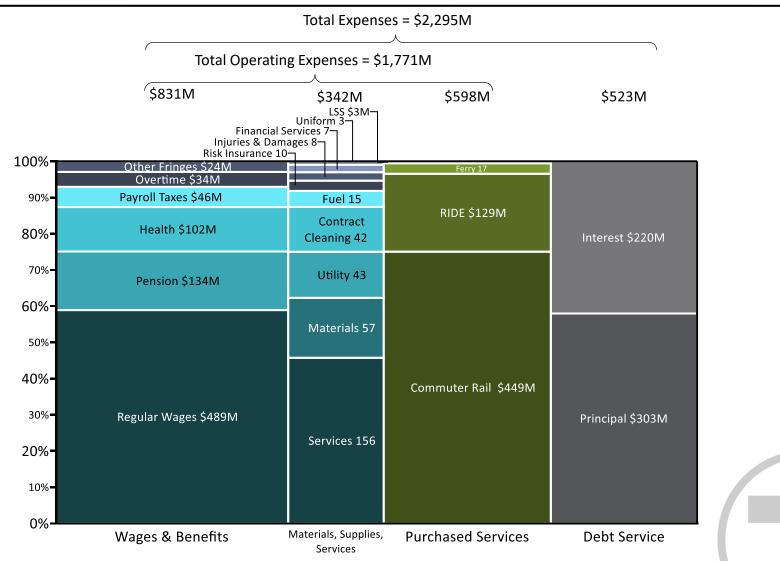
**Briefing Deck** 

# What is Forging Ahead?

- Forging Ahead is the process the MBTA is using to focus our operating and capital resources on the riders who depend most on the MBTA for frequent and reliable service.
- In order to do this we are:
  - Evaluating all internal spending to reduce expenditures
  - Assessing our capital program and reallocating a limited amount of funds from our capital budget to support our operating budget
  - Defining a core of **essential** transit services to prioritize and determining the costs needed to run them
- Out of this difficult situation, we are *forging* a more equitable and efficient transit system to move *ahead* economic recovery for Massachusetts.

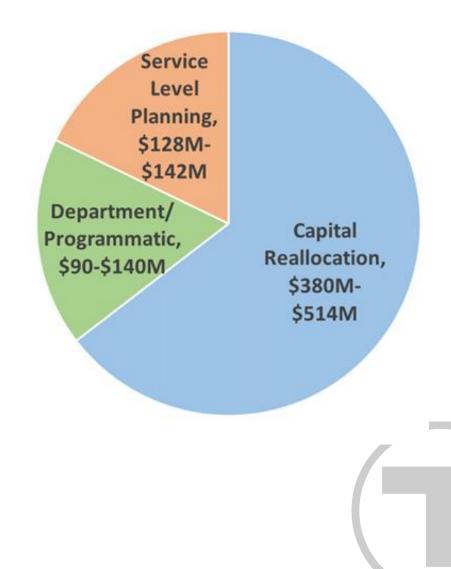
#### Overview of FY21 Total Budgeted Spending by Category

- Total FY21 budgeted spending is \$2,295M and can be categorized into four broad categories
  - 36% for wages and benefits, including pension payments
  - 15% for materials, supplies, and services
  - 26% for contracted purchased transit services like commuter rail, ferry, and the RIDE
  - 23% for debt service payments, a non-operating expense

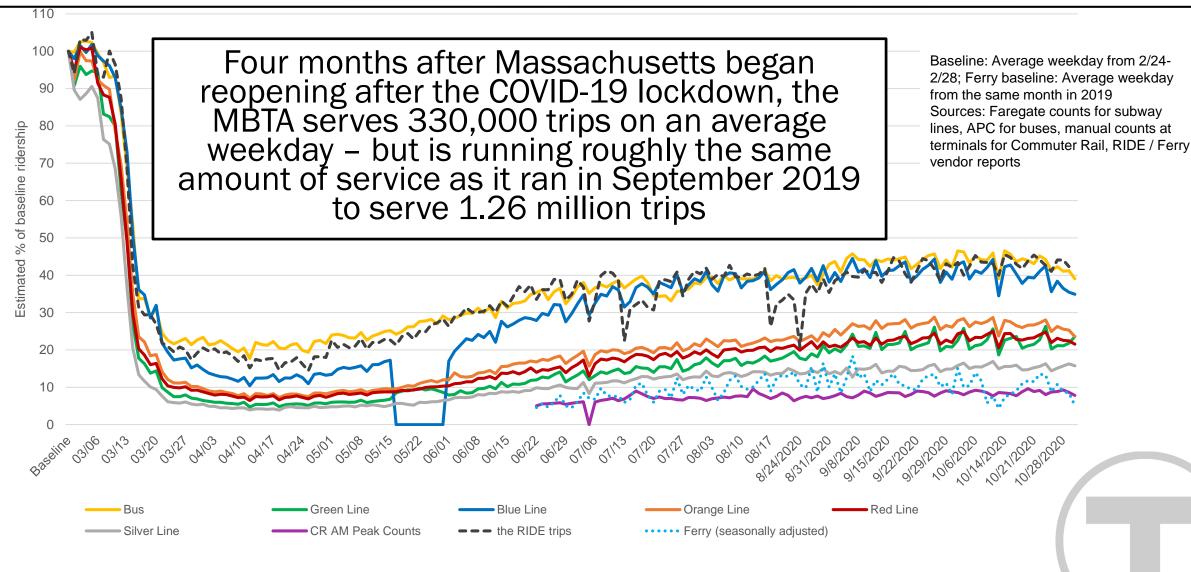


### Resolving the Budget Gap Summary

- Incorporating Scenario 3 Fare Revenue projection (as presented October 19th) FY22 budget gap projection at \$579M.
- Taking steps now in FY21 to build reserves and reduce the level of spending cuts next year
- With the FY22 budget gap estimate at the upper bound of the initially projected range, altering recommendations results in direct trade-offs among the approaches
- Lowering recommendations in any one of the approaches would mean raising recommendations among the other approaches in order to achieve budget balance
- All cost saving actions are estimates and may not reach full amounts listed

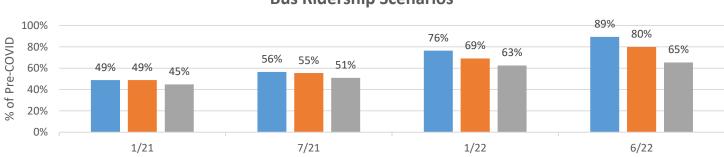


### Our ridership fell significantly and is slowly recovering



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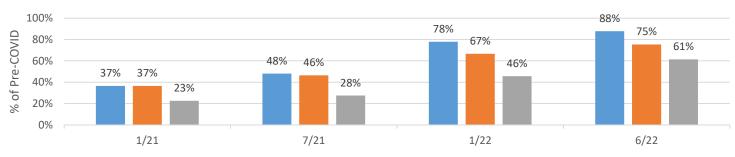
## Planning for an uncertain future

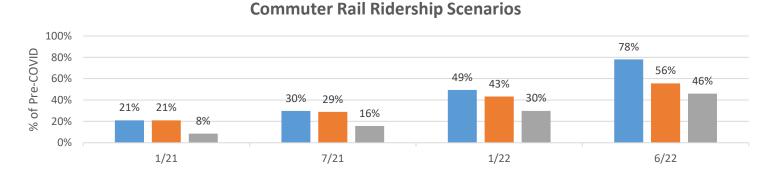


MBTA ridership return will vary ٠ depending on future of local travel, vaccine timing, and economic recovery

- Ridership did not decrease the ٠ same amount across modes, lines, and routes; and will not be uniform in how it returns either
- When we build back, we can use ٠ our planning via Bus Network Redesign and RailVision to better serve our riders and communities

#### **Rail Ridership Scenarios**





#### **Bus Ridership Scenarios**

Scenario 2 Scenario 3 Scenario 1

## Forging Ahead is an Iterative Process

- Forging Ahead is about defining and protecting core essential services
  - Need to reduce services with lower ridership and invest savings in Core Essential Services
- MBTA is seeking feedback on proposals
- Most service changes will go into effect in Spring/Summer 2021
- We will add back services in an iterative way in response to ridership and demand
  - The MBTA revisits its service levels on a regular basis and will continue to do so
  - Bus and commuter rail were already undergoing transformation processes, and service will be added based on ridership and in line with the redesign plans

### **Preserving Essential Services**

| Mode                             | Highly Transit Critical   | Less Transit Critical   |
|----------------------------------|---|---|
| High Ridership<br>Potential FY22 | Blue Line, Orange Line, Red Line, Green Line<br>(trunk), Mattapan line, many bus routes,<br>Fairmount CR line | Some bus routes   |
| Low Ridership<br>Potential FY22  | Some bus routes, some Commuter Rail service,<br>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)

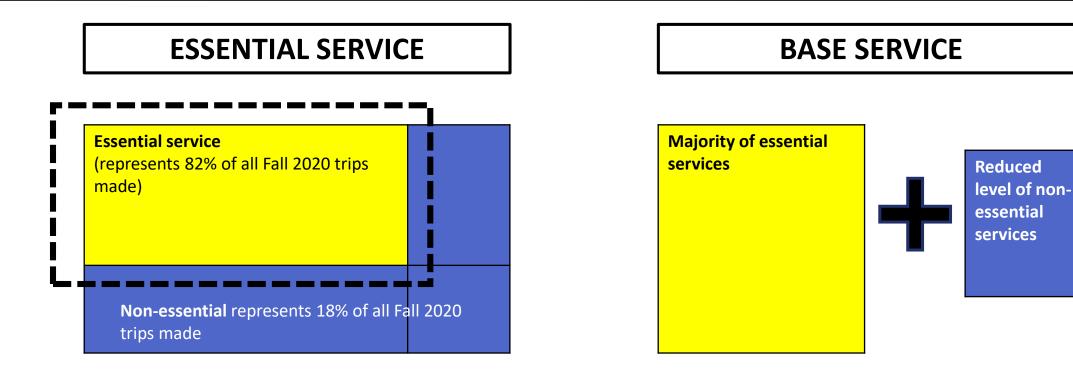
\*Charlestown Ferry was initially considered as part of essential service, but after further examination, has been moved to low ridership based on further review of Fall 2020 ridership

### Service Change Implementation Timeline

| Mode          | Presentation of<br>proposed<br>service changes | Public<br>engagement        | Contingent vote<br>on service<br>changes | Implementation<br>start               | Ability to adjust<br>service as part of<br>Service Planning<br>(new schedules) |
|---------------|--|-----------------------------|--|---------------------------------------|--|
| Commuter Rail |  |                             |  | January & May                         | <b>Twice</b> a year (Oct /<br>May)   |
| Ferry         |  | November &<br>December 2020 | December 7 <sup>th</sup><br>FMCB meeting | March                                 | <b>Twice</b> a year  |
| Rapid Transit | November 9 <sup>th</sup><br>FMCB meeting       |                             | (Contingent on<br>acceptance of Title VI | March                                 | <b>Four</b> times a year<br>(Mar, Jun, Sep, Dec)                               |
| Bus           |  |                             |  | analysis and<br>Environmental Review) | Late June  |
| The RIDE      |  |                             |  | As impacted by other changes          | As impacted by other changes   |

# **Proposed Service Changes**

#### What is base service?



Essential services are the services that serve high transit critical populations AND have high ridership potential Base service is the proposed new service level, which is the majority of essential service and a reduced level of non-essential services

#### **Base Service Proposal**

- "Base Service" represents quality service for all essential services, as well as a reduced amount of nonessential service that is still viable for many of those who depend on it. For many using essential services, service will continue to look very similar to Pre-COVID.
- Due to lower ridership, service reductions are not expected to significantly increase crowding. And we will adjust service quarterly or semi-annually (based on mode) to continue to match resources with where/when there is ridership or need
- 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. booking 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)
  - Reduced frequency on remaining Bus Routes, including smaller service area and consolidated routes

### Most Service is Preserved

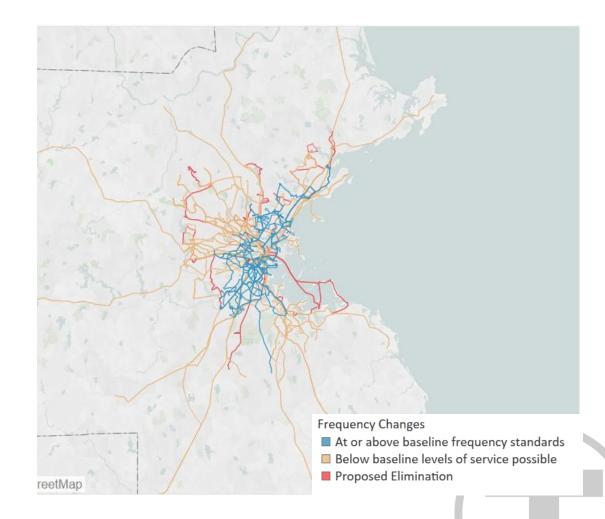
#### Current Weekday trips (Sept. 2020):

- 82% of weekday trips on essential services
- 18% of weekday trips on non-essential services
- 3% of current weekday trips will lack access or have to divert due to proposed changes (span, eliminations, station closures, short-turns)

# Base service represents (weekly service hours vs. pre-COVID):

- 85% of Bus
- 70% of Rapid Transit
- 65% of Commuter Rail
- 0% of Ferry

Under this proposal 78.5% of households in the MBTA service area have MBTA service within ½ mile compared to 82% previously



## **Commuter Rail Ridership**

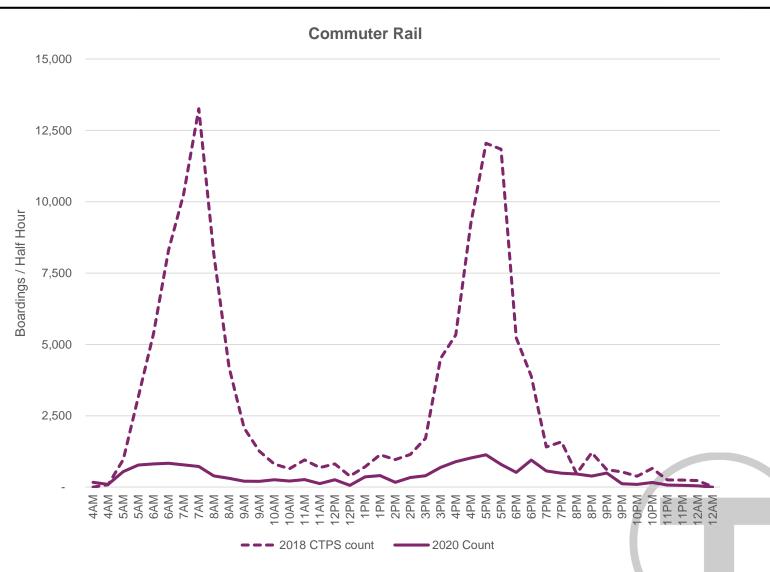
- Approximately 13% of normal ridership, or ~16,000 daily riders (but during AM Peak, ridership is only 8.5% of normal)
- Running ~85% of regular service in Sept/Oct 2020 (435 trains vs. 505)
- Starting Nov 2, 2020, "smoothing" service throughout day and running 544 trains

#### Weekend Boardings:

~14K (vs. 31K in 2019)

#### Weekday Boardings after 9pm

|           | 2019 | 2020 |
|-----------|------|------|
| Boardings | 2929 | 939  |
| Percent   | 2.3% | 5.9% |



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- Stop all service after 9 PM (Fairmount closer to 10 PM)
- Stop all weekend service (Fairmount replaced by bus)
- Decrease weekday peak service and some midday service, reducing from 505 trains (Fall 2019) to 430 trains
- Close 6 (out of 141) stops based on low ridership, operational impacts, and availability of alternatives
- Specific service levels by line to take into account ridership patterns from adjusted Fall 2020 schedules (more balanced service throughout day)

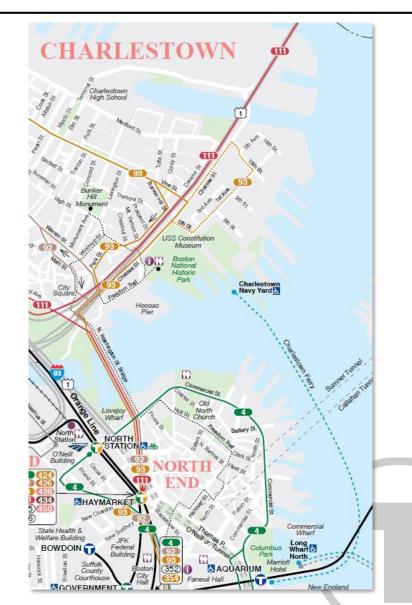
## Ferry Ridership

- Ridership is approximately 12% of pre-COVID ridership (803 riders)
- Ferry is currently running 112 trips a day (approximately 75% of pre-COVID service)
- This is equivalent to 7 riders per trip

| Ferry                  | September ave<br>ride | %    |     |
|------------------------|-----------------------|------|-----|
|                        | 2019                  | 2020 |     |
| Hingham (F1)           | 4,183                 | 279  | 7%  |
| Hingham/<br>Hull (F2H) | 1,350                 | 314  | 23% |
| Charlestown<br>(F4)    | 1,230                 | 210  | 17% |
| Total                  | 6,763                 | 803  | 12% |

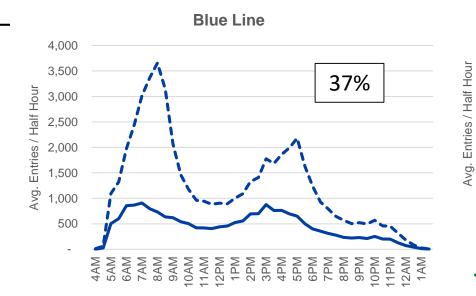
Continue to operate **0%** of pre-COVID service hours

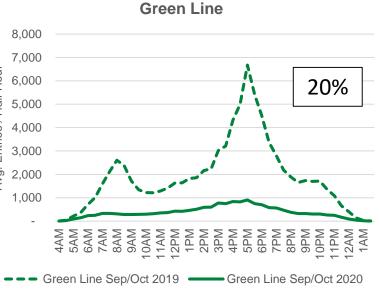
- Stop all Ferry service (F1, F2H, F4)
- Charlestown/Boston service (F4) flagged as potentially essential service, but due to very low COVID ridership, and highly redundant service on Bus Route 93 (an essential Bus route), propose stopping F4 service
- Bus Route 93 currently has minimal crowding and can support the diverted riders (will review as part of quarterly Service Planning process)



## Rapid Transit Ridership

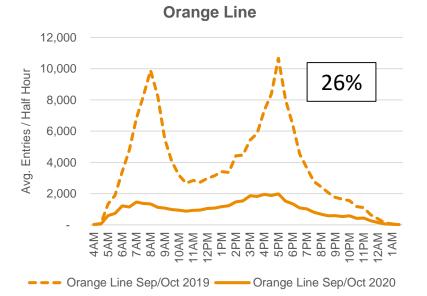
- Heavy Rail and Green Line trunk: ~120,000 gate entries on weekdays, 24% pre-COVID
- Running close to 100% of pre-COVID service



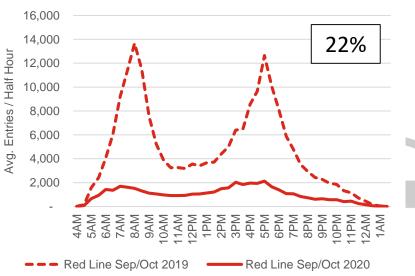


Sept/Oct 2020 Boardings after midnight Blue: 134 Green: 155 Red: 247 Orange: 237

(On average, <20 riders per trip that starts after midnight)







Continue to operate **70%** of pre-COVID service hours

- Stop all service after midnight (versus 1 AM currently), but no changes to start of service
- Reduce frequency by 20% across all lines, though may vary line by line and by time of day based on ridership patterns
  - Will be reviewed and adjusted as part of quarterly Service Planning process
  - Implementation timeline may be adjusted based on state and federal guidelines for social distancing
- Stop E Line Service at Brigham Circle, diverting E Line riders (at 5 stops along 0.8 miles) to Route 39
  - Route 39 service would be increased and crowding will be reviewed as part of quarterly Service Planning process

## **Bus Ridership**

Bus 171,000 boardings on weekdays, 25,000 which is 41% pre-COVID Significant variation on route by 20,000 route basis, e.g. Route 111 at >60% and SL2 at 20% Close to pre-COVID service levels Boardings / Half Hour 15,000 system-wide, but distributed differently to account for different ridership patterns and support Fall 2020 10,000 social distancing **Boardings after** midnight 21 Routes have more significantly All bus: 1,748 more service than pre-COVID to 5,000 help prevent crowding (e.g. Routes 22, 23, 66, 111, 116/117, 109) --- 2019 - 2020 

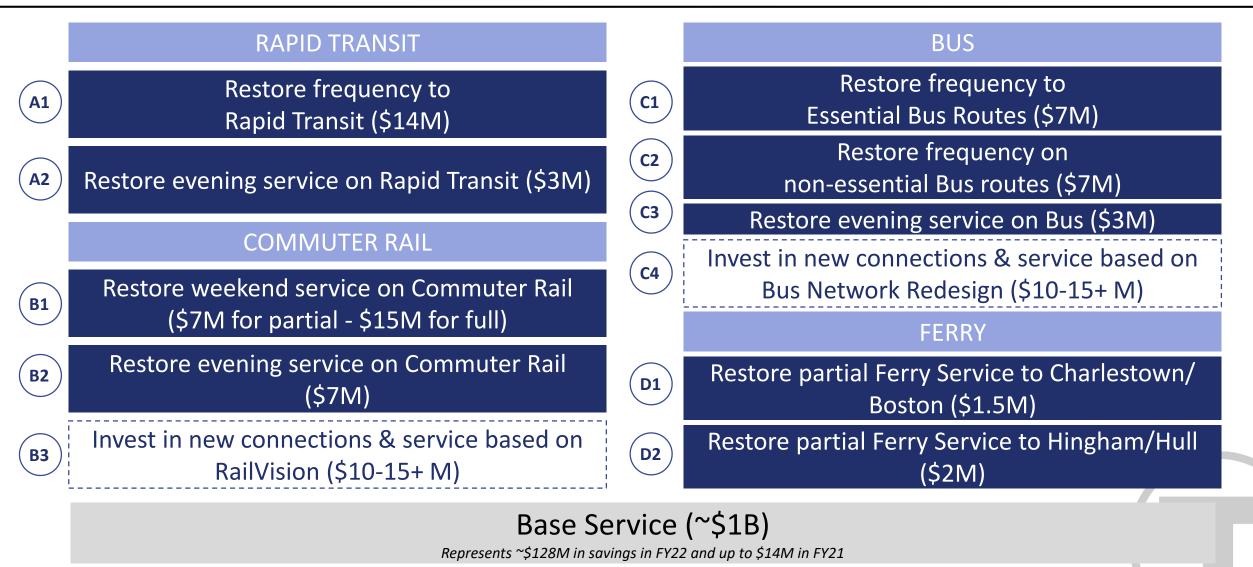
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- Stop all service after midnight, but no changes to start of service or days of operation
- Reduce frequency on essential and non-essential routes:
  - Reduce frequency on essential routes by 5% on average system-wide. Reduction will vary route by route and by time of day (in some cases likely no change vs. pre-COVID service levels for routes like 111, 116/117, 109, etc.; for others potentially 20-30%), all based on ridership
  - Reduce frequency on non-essential routes by 20% on average system-wide. Reduction will also vary route by route and by time of day
- Out of 169 MBTA routes, consolidate 14 routes, shorten 5 routes, and eliminate 25 routes. Of those eliminated:
  - 7 routes within ¼ mile of alternative bus or rapid transit, so no riders are stranded
  - 12 routes serve non-transit critical, low ridership trips ("bottom right box")
  - 6 routes serve high transit critical riders, but have very low ridership and have significant, but not fully alternative options
- Eliminate suburban subsidy program which partially funds 5 additional services (Bedford, Beverly, Burlington, Lexington, and Mission Hill), but fewer than 200 avg. weekday riders
- About 1.1% of pre-COVID RIDE trips would be shifted from ADA to Premium; no changes to overall geographic coverage area, though hours of operation may change based on changes to other modes. Lengthen scheduling window from 30 to 40 minutes.
- All operating routes will continue to be reviewed for crowding and adjusted as part of quarterly Service Planning process, including social distancing guidelines

# **Prioritizing Building Back**

- Service Packages are thematic groupings of service additions to "base service", meant to enable policy-level discussion on returning service
- Public process and Board input provide prioritization and highlight if any other packages should be considered
- If more funding is available in December (based on other trade-offs made or external events), can add service packages to base services
- Understanding preferences and prioritization of Board and Public will also be useful if additional funding available in Spring 2021 to make service decisions faster

### Service Packages to add back to Base Service



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### Proposed service packages

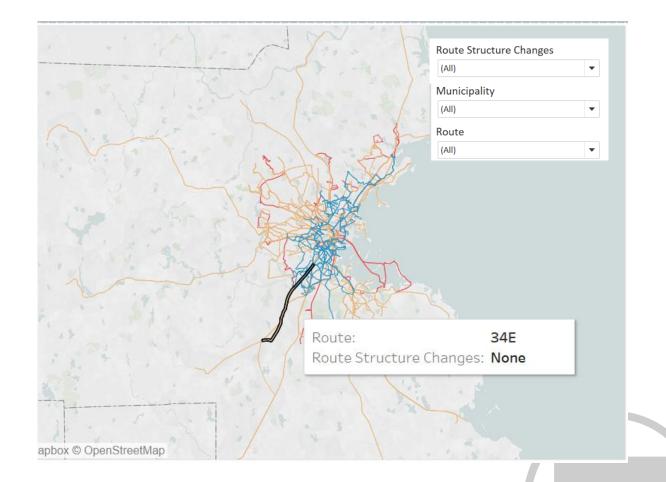
|                | Service Package   | Daily Riders impacted<br>(Sept. 2020)   | Annual cost                 |             | Additional details   |
|----------------|---|---|-----------------------------|-------------|--|
| A1             | Restore frequency to Rapid Transit  | ~120,000<br>Frequency   | \$14M                       | •           | Rapid Transit to 90% of pre-COVID frequency  |
| A2             | Restore evening service on Rapid Transit  | 733<br>Lack of Access   | \$3M                        | •           | Rapid Transit operates past midnight   |
| B1             | Restore weekend service on Commuter Rail  | ~14,000 (weekend)<br>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<br>Lack of Access   | \$7M                        | •           | Commuter Rail operates past 9 PM   |
| В3             | Invest in new connections & service based on RailVision for <b>Commuter Rail</b>  | N/A   | \$10-15+M                   | •           | New Commuter Rail Service patterns (e.g. midday service)   |
| C1             | Restore frequency to essential <b>Bus</b> routes  | ~130,000<br>Frequency   | \$7M                        | •           | Essential bus frequency to 100% of pre-COVID, and potentially restore RIDE scheduling window to 30 minutes (bus service may still be adjusted based on crowding)   |
| C2             | Restore frequency on non-essential B <b>u</b> s routes  | ~31,000<br>Frequency  | \$7M                        | •           | Non-Essential bus frequency to 90% of pre-COVID (service may still be adjusted based on crowding)  |
| C3             | Restore evening service on <b>Bus</b>   | 1,748<br>Lack of Access   | \$3M                        | •           | Bus routes operate past midnight (not all routes, but those that operate past midnight pre-COVID)  |
| C4             | Invest in new connections & service based on <b>Bus</b> 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 (may need to be paired with bus priority investments)  |
| D1             | Restore partial <b>Ferry</b> to Charlestown/Boston  | 210<br>Divert   | \$1.5M                      | •           | Restore partial Ferry service to Charlestown/Boston (no weekend service)   |
| D2             | Restore partial <b>Ferry</b> to Hingham/Hull  | 593<br>Lack of Access   | \$2M                        | •           | Restore partial Ferry service to Hingham/Hull (local only, may not serve all Boston stops, no weekend service)   |
| C3<br>C4<br>D1 | routes       Restore evening service on Bus         Invest in new connections & service based on Bus Network Redesign         Restore partial Ferry to Charlestown/Boston | Frequency<br>1,748<br>Lack of Access<br>N/A<br>210<br>Divert<br>593<br>Lack of Access | \$3M<br>\$10-15+M<br>\$1.5M | •<br>•<br>• | on crowding)<br>Bus routes operate past midnight (not all routes, but those that operate past midnight<br>pre-COVID)<br>New bus routes to provide better access and/or service for transit critical<br>riders. May partially address eliminated or consolidated routes (may need to be<br>paired with bus priority investments)<br>Restore partial Ferry service to Charlestown/Boston (no weekend service)<br>Restore partial Ferry service to Hingham/Hull (local only, may not serve all<br>Boston stops, no weekend service) |

# Public Engagement

# Public Engagement Online Tools

#### https://www.mbta.com/forgingahead

- Interactive map to look up proposed changes by route or town
- Comment form to provide feedback on proposed changes and prioritization of service return
- Email: publicengagement@mbta.com
- Public comment period closes December 4, 2020



### **Public Meetings**

Metrowest November 10 Tuesday - 6:00pm - 8:00pm

Minuteman November 12 Thursday - 6:00pm - 8:00pm

Boston and Milton November 14 Saturday - 1:00pm - 3:00pm

Inner Core November 17 Tuesday - 6:00pm - 8:00pm Mystic River November 18 Wednesday - 6:00pm - 8:00pm

**Systemwide** (Official Public Hearing) **November 19** Thursday - 6:00pm - 8:00pm

South Shore November 23 Monday - 6:00pm - 8:00pm

North Shore November 24 Tuesday - 6:00pm - 8:00pm Bristol November 30 Monday - 6:00pm - 8:00pm Merrimack Valley December 1 Tuesday - 6:00pm - 8:00pm Systemwide

(Final Meeting) December 2 Wednesday - 6:00pm - 8:00pm

# Appendix

### **Overview of Service Changes**

- The MBTA is providing more service than its revenues can support and its ridership justifies so today staff will propose adjusting service levels to a new, temporary "Base Service" that will gradually be implemented in CY 2021. This Base Service realigns service to match current ridership patterns while also preserving and protecting service for those who depend most critically on the MBTA for frequent and reliable service by reducing primarily non-essential services.
- The vast majority of MBTA service will continue and the service changes are not permanent. The MBTA will periodically realign service to match current and future ridership patterns, when durable revenue is available for pay for such service.
- No increases in fares are being proposed.
- The proposed service adjustments are not final and an extensive public engagement process begins today. On Tuesday the MBTA will hold the first of 11 virtual public meetings, which will continue through December 3, to accept public feedback on the proposed service changes. Online feedback is also being accepted, allowing riders to comment on proposed changes to the services that they use.
- The FMCB is scheduled to vote on the changes on December 7, so that planning can begin for gradually making the changes in 2021.
- While some service changes on Commuter Rail and Ferry could take place as early as January, the changes to Rapid Transit would be made in the spring and to Bus in the summer. This will allow the MBTA to adjust the proposed basic service if warranted by changes in ridership and if additional, durable revenue becomes available.

Base service at a glance:

Sept. 2020 ridership: 12% of pre-COVID rider. 65% of pre-COVID service hours \$45M annual savings vs. FY21 budget Fairmount Line

## Commuter Rail Base Service

|  | FY21 Budgeted service   | FY22 Base Service   | <b>2017 Service Delivery Policy</b><br>(only applicable for essential service)                           |
|--|---|---|--|
| Hours of<br>operations<br>(varies by line) | <ul> <li>5/6:00 AM until 1:00 AM<br/>(weekdays) – all lines in operation</li> </ul> | <ul> <li>5/6:00 AM until 9:00 PM<br/>(weekdays only) – all lines in<br/>operation</li> </ul>                    | <ul> <li>7:00 AM – 10:00 PM (weekdays)</li> <li>8:00 AM – 6:30 PM (Saturdays)</li> </ul>                 |
| Frequency of trains                        | <ul> <li>505 trains (Fall 2019); 544 trains<br/>(Fall 2020)</li> </ul>              | <ul> <li>430 trains, rebalanced across<br/>lines</li> </ul>   | <ul> <li>3-4 trips in peak direction</li> <li>Every 3 hours in each direction all other times</li> </ul> |
| Weekend service                            | Saturday & Sunday service   | <ul> <li>No weekend service (Fairmount<br/>Line replaced by bus)</li> </ul>                                     | Saturday service only  |
| Additional<br>customer impacts             |   | <ul> <li>~6 station closures (low foot traffic, operational time savings)</li> <li>Shorter trainsets</li> </ul> |  |

### **Commuter Rail details**

#### Ridership impacts (based Sept. 2020 ridership):

- Lack of Access (loss of weekend and post-9PM service): ~15,000 weekend riders
- Divert/Lack of Access: <50 riders
- Less frequency service: ~16,000 daily riders

#### **Consequences/impacts from reducing service to base service level:**

- Will take at least 1-2 years to re-hire and re-train workforce when returning service, potentially longer to expand locomotive and coach fleet size
- Savings do not include additional cost to mothball assets (up to 100 coaches and 8 locomotives)
- Closure of Needham Facility

#### **Total gross savings:**

- Up to \$8M in FY21
- \$45M in FY22

### **Potential Station Closures**

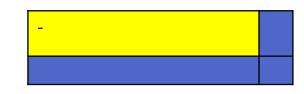
| Station            | Line      | City/To<br>wn | <b>2018</b><br><b>Boardings</b><br>(inbound) | <b>2020</b><br><b>Boardings</b><br>(inbound) | Reason                        | Closest alternative (all the same Commuter Rail zone)          |
|--------------------|-----------|---------------|--|--|-------------------------------|--|
| Plimptonville      | Franklin  | Walpole       | 12   | <5   | Low ridership, not accessible | Walpole, 1.8mi – 345 parking spaces<br>(only ~15 cars/day)     |
| Prides<br>Crossing | Rockport  | Beverly       | 12   | <5   | Low ridership, not accessible | Beverly Farms, 1mi – 25 parking spaces*                        |
| Silver Hill        | Fitchburg | Weston        | 11   | <5   | Low ridership, not accessible | Kendal Green, 2.1mi – 57 parking spaces*                       |
| Hastings           | Fitchburg | Weston        | 18   | <5   | Low ridership, not accessible | Kendal Green, .8mi - 57 parking spaces*                        |
| Plymouth           | Plymouth  | Plymouth      | 21   | <10  | Operational improvements      | Kingston, 2.4 mi – 1,030 parking spaces (very low utilization) |
| Cedar Park         | Haverhill | Melrose       | 98   | ~20  | Low ridership, not accessible | Wyoming Hills, .6 mi – ~30 parking spaces*                     |

Stations selected due to low ridership, operational impacts, and availability of alternatives

\* Parking lots operated by non-MBTA affiliates or local authorities, so utilization data unavailable

Base service at a glance:Sept. 2020 ridership: 12% of pre-COVID rider.0% of pre-COVID one-way trips\$13M annual savings vs. FY21 budget

#### Ferry Base Service



|                     | FY21 Budgeted service  | FY22 Base Service | <b>2017 Service Delivery Policy</b><br>(only applicable for essential service)                                |
|---------------------|--|-------------------|---|
| Services            | <ul> <li>Charlestown/Boston (F4)</li> <li>Hingham/Hull Local (F2H)</li> <li>Hingham/ Boston direct (F1)</li> </ul> | No ferry service  |   |
| Hours of operations | <ul> <li>5:40 AM until 9:33 PM<br/>(weekdays)</li> <li>5:40 AM until 10:48 PM<br/>(Friday only)</li> </ul>         | No ferry service  | <ul> <li>7:00 AM – 10:00 PM<br/>(weekdays)</li> <li>8:00 AM – 6:30 PM (Saturdays<br/>– seasonally)</li> </ul> |
| Frequency of trains | <ul> <li>F1: 36 trips</li> <li>F4: 78 trips</li> <li>F2H: 38 trips, +2 Friday only</li> </ul>                      | No ferry service  | <ul> <li>3 trips in peak direction</li> <li>Every 3 hours all other times</li> </ul>                          |
| Weekend service     | <ul> <li>F2H: 32 trips Saturday, 28<br/>trips Sunday (seasonal)</li> <li>F4: 34 trips Sat/Sun (annual)</li> </ul>  | No ferry service  | Saturday seasonally   |

### Ferry details

#### Ridership impacts (based Sept. 2020 ridership):

- Lack of Access: 593 riders (though within 5-15 minute drive of Commuter Rail Greenbush stations)
- Divert: 210 riders

#### **Consequences/impacts from reducing service to base service level:**

- Loss of skilled labor
- Savings do not include additional cost to maintain MBTA assets (4 ferry boats and Hingham facility)
- May take significant time to re-procure new ferry contracts when re-starting service, and may be more costly due to perceived additional risk by market

#### **Total gross savings:**

- Up to \$3.5M in FY21
- \$13M in FY22

Base service at a glance:Sept. 2020 ridership: 24% of pre-COVID rider.70% of pre-COVID service hours\$32M annual savings vs. FY21 budget

## Rapid Transit Base Service

| FY21 Budgeted service  |   | FY22 Base Service<br>(may adjust based on ridership)                        | <b>2017 Service Delivery Policy</b><br>(only applicable for essential service)                            |                                    |
|--|---|---|---|------------------------------------|
| Services       • All Rapid Transit Lines (7 days / week)   |   | <ul> <li>All Rapid Transit Lines (7 days /<br/>week)</li> </ul>             |   |                                    |
|  | varies by line) Saturdays) & Saturdays) & Saturdays |   | <ul> <li>6:00 AM to midnight (weekdays &amp; Saturdays)</li> <li>7:00 AM to midnight (Sundays)</li> </ul> |                                    |
| ns   | Red (trunk)   | • 4 ½ min. peak / 7 min. off-peak   | • 5 ½ min. peak / 8 ½ min. off-peak   | Every 10 minutes at peak           |
| of trains  | Orange  | • 6 ½ min. peak / 10 min. off-peak  | • 8 min. peak / 12 ½ min. off-peak  | • Every 15 minutes all other times |
|  | Blue  | • 4 ½ min. peak / 9 ½ min. off-peak   | • 6 min. peak / 12 ½ min. off-peak  |                                    |
| SupposeBlue• 4 ½ min. peak / 9 ½ min. off-peakGreen (branches, once GLX<br>opens)• 6 min. peak (7 ½ with GLX) / 9 min.<br>off-peak (10 min. with GLX)Mattapan• 5 min. peak / 7 ½ min. off-peak |   | <ul> <li>9 ½ min. peak / 13 min. off-peak<br/>(assumes GLX open)</li> </ul> |   |                                    |
| Fre  | Mattapan• 5 min. peak / 7 ½ min. off-peak           |   | • 6 min. peak / 7 ½ min. off-peak   |                                    |
| Addit  | ional customer impacts                              |   | <ul> <li>E Line service terminate at<br/>Brigham Circle (transfer to Route<br/>39)</li> </ul>             |                                    |

Note: All off-peak frequencies shown are weekday and Saturday

### Rapid Transit details

#### Ridership impacts (based Sept. 2020 ridership):

- Lack of Access: 733 riders (due to loss of post-midnight service)
- Divert: <1,000 riders (E Line riders to Route 39 after Brigham Circle towards Heath Street, expected to add Route 39 service to support)
- Frequency: ~120K riders, but will still be within Service Delivery Policy standards

#### **Consequences/impacts from reducing service to base service level:**

- Loss of skilled labor
- Will take more than a year to re-hire and re-train labor when returning service levels

#### **Total gross savings:**

- Up to \$3M in FY21
- \$32M in FY22 (pending adjustment to implementation timeline based on state and federal social distancing guidelines)

Base service at a glance:Sept. 2020 ridership: 41% of pre-COVID rider.85% of pre-COVID service hours\$38M annual savings vs. FY21 budget

#### Bus overview

65% of Pre-COVID service hours

|   | FY21 Budgeted service         | FY22 Base Service  | 2017 Service Delivery Policy*  |
|---|-------------------------------|--|--|
| Services                                | • 169 routes                  | <ul> <li>~140 routes</li> </ul>  | (only applicable for essential service)  |
| Hours of operations<br>(varies by line) | Varies significantly by route | <ul> <li>All bus service stops at midnight, but early<br/>bird service will continue on essential routes</li> </ul>  | <ul> <li>Weekdays &amp; Saturdays: 6:00 AM to midnight for Key Bus Routes (KBR); 7/8:00 to 6:30/7:00 PM for Local Routes</li> <li>Sundays: 7:00 AM to midnight for KBR; 10:00 AM to 6:30 PM for Local</li> </ul> |
| Frequency                               | Varies significantly by route | <ul> <li>~80 essential routes operate within existing<br/>Service Delivery Policy, including crowding<br/>standards</li> <li>~60 non-essential routes that come 20-30%<br/>less frequently than pre-COVID</li> </ul> | <ul> <li>Peak: Every 10 min. for KBR, every 30 min. for Local</li> <li>Off-Peak weekday: Every 15-20 for KBR, every 60 min for Local</li> <li>Weekends: Every 20 min for KBR, every 60 min for Local</li> </ul>  |
| Additional customer<br>impacts          |                               | <ul> <li>19 routes consolidated or restructured</li> <li>25 routes eliminated, but only &lt;1,700 pre-<br/>COVID riders stranded (&lt;0.5% of Pre-COVID<br/>ridership)</li> </ul>                                    |  |

\*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

### **Bus details**

#### Ridership impacts (based Sept. 2020 ridership):

- Lack of Access:
  - 1,697 riders (Sept. 2019 ridership), less than 0.5% of all bus ridership, due to greater than ½ mile from alternatives, **likely** closer to fewer than 700 riders (conservatively)
  - 1,748 riders due to service stopping at midnight
- Divert: <6,000 riders
- Frequency:
  - ~31K riders, likely not within SDP (non-essential routes)
  - ~130K riders, service still within SDP (essential routes)

#### **Consequences/impacts from reducing service to base service level:**

- Loss of skilled labor
- Will take more than a year to re-hire and re-train labor when returning service levels

#### **Total gross savings:**

- No savings in FY21
- \$38M in FY22

### Appendix: List of all essential bus routes

| High Tra | High Transit Priority & High Ridership Potential (Key Bus Routes and Silver<br>Line Routes in gray) |    |    |     |     |     |     |
|----------|---|----|----|-----|-----|-----|-----|
| 1        | 21  | 32 | 42 | 69  | 105 | 120 | 504 |
| 8        | 22  | 33 | 44 | 83  | 106 | 121 | СТ3 |
| 9        | 23  | 34 | 45 | 85  | 108 | 202 | SL1 |
| 10       | 24  | 35 | 47 | 86  | 109 | 210 | SL2 |
| 11       | 26  | 36 | 50 | 89  | 110 | 215 | SL3 |
| 14       | 27  | 37 | 51 | 91  | 111 | 240 | SLW |
| 15       | 28  | 38 | 57 | 93  | 114 | 411 | CT2 |
| 16       | 29  | 39 | 64 | 97  | 116 | 424 | SL5 |
| 17       | 30  | 40 | 65 | 99  | 117 | 429 | SL4 |
| 19       | 31  | 41 | 66 | 104 | 119 | 455 |     |

|                     | <b>2017 Service Delivery Policy*</b><br>(only applicable for essential service)  |
|---------------------|--|
| Hours of operations | <ul> <li>Weekdays &amp; Saturdays: 6:00 AM to midnight for<br/>Key Bus Routes (KBR); 7/8:00 to 6:30/7:00 PM for<br/>Local Routes</li> <li>Sundays: 7:00 AM to midnight for KBR; 10:00 AM<br/>to 6:30 PM for Local</li> </ul> |
| Frequency           | <ul> <li>Peak: Every 10 min. for KBR, every 30 min. for<br/>Local</li> <li>Off-Peak weekday: Every 15-20 for KBR, every 60<br/>min for Local</li> <li>Weekends: Every 20 min for KBR, every 60 min for<br/>Local</li> </ul>  |

\*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

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

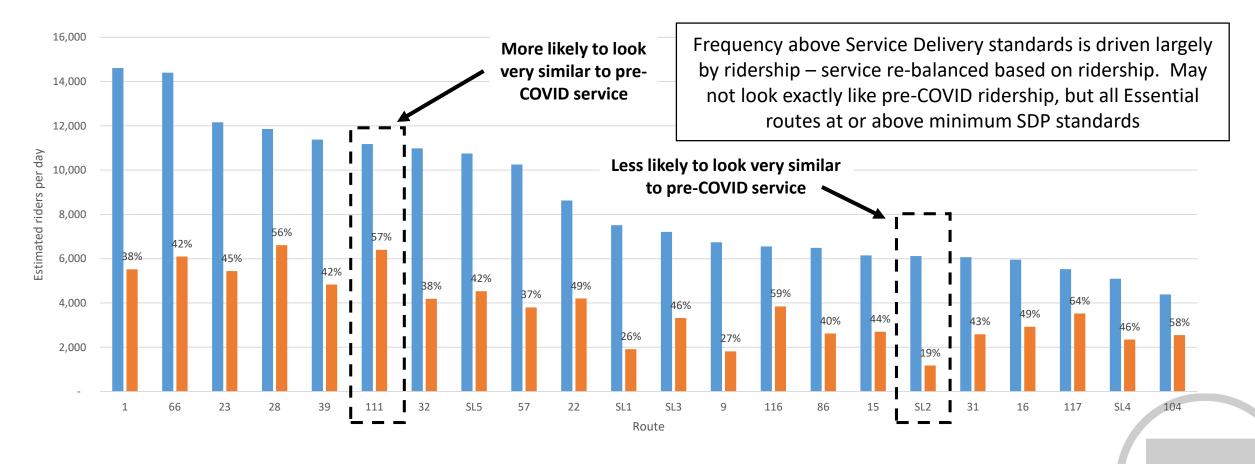
#### Appendix: All bus routes with major structural changes or eliminations

|  | Restructured routes<br>(shortened) | Eliminated routes                        |   |                                     |                       |  |  |
|--|------------------------------------|--|---|-------------------------------------|-----------------------|--|--|
| Consolidated Routes  |                                    | Within ¼ mile of bus<br>or rapid transit | High transit critical, very<br>low ridership, redundant<br>options available on<br>portion of most routes | Low transit critical, low ridership |                       |  |  |
| 62 & 76  | 553                                | 43                                       | 18  | 52                                  | 505                   |  |  |
| 84 & 78  | 554                                | 55                                       | 170   | 72                                  | 710                   |  |  |
| 88 & 90 (w/ GLX)   | 556                                | 68                                       | 221   | 79                                  | 714                   |  |  |
| 214 & 216  | 558                                | 80 (w/ GLX)                              | 428   | 131                                 | Suburban<br>subsidies |  |  |
| 352 & 354  | 230                                | 325                                      | 434   | 136                                 |                       |  |  |
| 501 & 503  |                                    | 326                                      | 716   | 212                                 |                       |  |  |
| 502 & 504  |                                    | 456                                      |   | 351                                 |                       |  |  |
| Restructured & consolidated routes will continue to operate, but stop at |                                    |  |   | 451                                 |                       |  |  |
|  |                                    |  |   | 465                                 |                       |  |  |

midnight and with lower frequency

#### Appendix: What 5% frequency reduction looks like on Essential Services

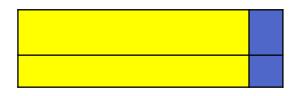
Daily Bus Ridership YOY, 10/21/19 vs. 10/19/20, Example Essential Routes by Ridership



VOY Baseline - 10/21/19 19-Oct-20

#### Nearly 99% of pre-COVID trips are unaffected

### Appendix: The RIDE



|   | Lever   | Pre-COVID trips impacted  |  | Gross Savings | Risks / Consequences   |   |  |
|---|---|---|--|---------------|--|---|--|
|   |   | Annual  | Avg. daily   | (\$M) FY22    |  |   |  |
| • | Increase scheduling window from 30 to 40 minutes  | All riders  |  | \$0.4 - \$1.2 | •  | Some trips may be booked 40 minutes from request time instead of current 30 minutes   |  |
| • | Changes to ADA/Premium service<br>area based on fixed route<br>eliminations/restructuring | ~18,000<br>impacted<br>(assume of<br>that, ~4,000<br>trips no<br>longer made) | ~50 trips<br>impacted<br>(assume of<br>that, ~11<br>trips no<br>longer made) | \$0.3 - \$0.5 | •  | Of 1.5M pre-COVID weekday trips, approx. 18,000 would<br>shift from ADA to premium service<br>Of these, it's estimated customers would avoid taking<br>4,000 trips due to the higher premium fare, leaving 14,000<br>trips shifted to premium service<br><b>Dependent on final package of service changes for fixed</b><br><b>route</b> |  |
| • | Changes to ADA/Premium service<br>to fully adhere fixed route times of<br>service         |   |  | •             | Start/stop of RIDE service adjusted to fully match times of<br>service of other MBTA modes (e.g. Bus/Rapid transit<br>stopping at midnight, Commuter Rail at 9 PM) |   |  |

| RIDE | fares | per | trip: |
|------|-------|-----|-------|
|------|-------|-----|-------|

- Premium \$5.60
- ADA \$3.35

## Appendix: Service Delivery Policy - Frequency & Span

|                 |                              | Commuter Rail                   | Ferry                           | Rapid Transit         | Bus – Key Bus<br>Routes | Bus – Local<br>Routes* |
|-----------------|------------------------------|---------------------------------|---------------------------------|-----------------------|-------------------------|------------------------|
|                 | AM & PM Peak                 | 3-4 trips in peak direction     | 3 trips in peak direction       | Every 10 minutes      | Every 10 minutes        | Every 30 minutes       |
| Frequency       | All other weekday<br>periods | Every 3 hours in each direction | Every 3 hours                   | Every 15 minutes      | Every 15-20<br>minutes  | Every 60 minutes       |
| Frequ           | 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<br>PM           | 7:00 AM – 6:30<br>PM            | 6:00 AM -<br>midnight | 6:00 AM -<br>midnight   | 7:00 AM – 7:00<br>PM   |
|                 | Saturday                     | 8:00 AM – 6:30<br>PM            | 8:00 AM - 6:30<br>PM (seasonal) | 6:00 AM –<br>midnight | 6:00 AM –<br>midnight   | 8:00 AM – 6:30<br>PM*  |
|                 | Sunday                       | -                               | -                               | 7:00 AM –<br>midnight | 7:00 AM –<br>midnight   | 10:00 AM – 6:30<br>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 Draft for Discussion & Policy Purposes Only

#### Potential Gross Annual Savings from Service Packages

- Identified \$128M in potential gross annual savings from service reductions
- Additional \$14M in gross savings possible through enacting some service changes prior to the start of FY22
- \$70.1M (55%) of savings come from MBTA operated modes
- Savings are gross of fare revenue impacts and do not include additional measures being evaluated outside of direct service operations departments
- Savings are based off of current FY21 budgeted levels, which will be adjusted for expected growth rates for FY22

