Report from the General Manager

Fiscal and Management Control Board
May 21, 2020
Agenda

1. Pilot and Project Updates
   a) Blue Line Acceleration Update
   b) Lynn Zone 1A Pilot

2. Ridership Update and MBTA Asset Overview

3. Transit in Reopening Context

4. Service – Phasing

5. Ride Safer
   a) Employee Protection
   b) Vehicle/Station/Facility Decontamination
   c) What We Ask of Our Riders

6. Supply & Demand
   a) Demand Management
   b) Vehicle Capacity Thresholds
   c) Supply-side Strategies
Pilot and Project Updates

Blue Line Acceleration Work
Commuter Rail Fare Pilot: Lynn Zone 1A
Blue Line Acceleration Work: May 18-31

Four Contractors and Eight Subcontractors
- Barletta Heavy Division: installation of new truck pad and full depth replacement
- Cannistraro: standpipe replacement
- Judlau: abatement work, painting and cleaning, signage installation, accessibility
- SPS: tunnel leak repairs, drainage force main replacement, spall removal, abandoned equipment removal

Six Internal MBTA Departments
- Maintenance of Way: restraining rail installation, rail replacement
- Signals: various maintenance items
- Fare Transformation: faregate overhaul
- Power: elevator floor replacements, various maintenance items
- Security: camera installation
- Capital Programs: project coordination
Blue Line Acceleration Work: May 18-31

Benefits

• Decrease rate of tunnel degradation and stray current risk

• Eliminate current speed restrictions from worn rail, increasing train speeds and shortening travel times

• Improve flood resilience and prevent water leaks and corrosion

• Accomplish work while ridership is low and there are fewer travelers to the airport
Commuter Rail Fare Pilot: Lynn Zone 1A

• Zone 1A fares will be temporarily accepted at Lynn Commuter Rail Station from May 22 through May 31 while Blue Line service between Bowdoin and Airport Stations is suspended

• The goal is to reduce crowding and promote social distancing on buses/shuttles during the service diversion

• Customers can show their CharlieCard or CharlieTicket to the conductor when traveling between North Station and Lynn
Ridership Update and MBTA Asset Overview
Weekday Ridership by Line and Mode – Indexed to Week of 2/24

Baseline: Average weekday from 2/24-2/28

- 3/10: State of Emergency Declared
- 3/17: Restaurants and bars closed, gatherings limited to 25 people, MBTA service reduced
- 3/24: Non-essential businesses closed
MBTA by the Numbers

Red Line
» 218 Vehicles » 22 Stations/Stops

Green Line
» 206 Vehicles » 66 Stations/Stops

Orange Line
» 120 Vehicles » 20 Stations/Stops

Blue Line
» 112 Vehicles » 12 Stations/Stops

Mattapan Line
» 10 Vehicles » 8 Stations/Stops

Bus
» 1,055 Vehicles » 7,690 Bus Stops
» 9 Garages » 175 Bus Routes
» 3,244 Bus Route Miles

Commuter Rail
» 90 Locomotives » 420 Coaches
» 137 Stations » 394 Track Miles
» 5 North Side Lines » 7 South Side Lines
» Operated by Keolis

Ferry
» 12 Boats (3 owned by the MBTA)
» 7 Terminals
» 3 Routes
» Operated by Boston Harbor Cruises
Transit in Reopening Context
As residents of Massachusetts, we are all in this together. Across all phases of reopening, please:

- Cover your face
- Wash your hands
- Socially distance
- Be vigilant for symptoms
- Stay home if you feel sick

High risk populations
As defined by the CDC
- High risk should work from home if possible, priority consideration for workplace accommodations
- High risk should work from home if possible, priority consideration for workplace accommodations
- High risk should work from home if possible, priority consideration for workplace accommodations
- High risk should work from home if possible; priority consideration for workplace accommodations (these could be adjusted depending on pending epidemiological evidence)

Gathering size
- Gatherings of <10 people
- Gatherings of <10 people
- To be determined based on trends
- To be determined based on trends
- To be determined based on trends

Travel
- Stay at home advisory
- Safer at home advisory
- Business and recreational travel discouraged
- To be determined based on trends
- Travel resumes, continue to observe social guidance

- All travelers to MA urged to self-quarantine for 14 days
- All travelers to MA urged to self-quarantine for 14 days
- All travelers to MA urged to self-quarantine for 14 days
- Lodging restricted to essential workers only
- Lodging open with restrictions

Degree of certainty given the progression of COVID-19
Most certain Least certain
All public health criteria included in this document are subject to change. As research and data on this novel coronavirus continue to develop, this plan can and will be updated to reflect the latest science and data.

REOPENING AND FIGHTING COVID-19

On May 18, the Baker-Polito administration issued the Safer At Home Advisory:

Cover – Wash – Distance – Vigilance

✓ People over the age of 65 and people who have underlying health conditions – who are at high risk for COVID-19 – should continue to stay home except for essential errands such as going to the grocery store and to attend to healthcare needs

✓ All residents are advised to leave home only for healthcare, worship and permitted work, shopping, and outdoor activities

✓ All residents are REQUIRED to cover their face when they cannot maintain six feet of social distance in public

✓ All residents are advised to wash their hands frequently for at least 20 seconds with soapy water

✓ All residents are advised to be vigilant, monitor for symptoms and stay home if you feel sick

What Safer At Home Means

• Only leave home for health care, permitted work, shopping, and outdoor activities

• When going to the pharmacy ask if you can fill your prescriptions for 90 days if possible; for some medications this is not allowed. If you are at high-risk, try to use a mail-order service

• Don’t participate in close contact activities such as pick-up sports games

• Use remote modes of communication like phone or video chat instead of visiting friends or family who are high risk for COVID-19

• Refrain from visiting nursing homes, skilled nursing facilities, or other residential care settings

• Parents should limit play dates for children
Many trips should not and will not re-start in Phase One or Two

- Airport travel down by 95%
- Telemedicine reducing need for health care travel
- Convention center, Fenway and large venues closed until Phase 4
- Boston Public Schools closed
- Colleges and universities closed
- Museums and attractions closed
- Restaurants and bars not open yet
Work from Home should remain the norm in metro Boston (and statewide) for many months

Niraj Shah, CEO, Wayfair:
"During the month of March, Wayfair’s corporate employees and sales and service team members across the Commonwealth successfully transitioned to working from home. We plan to allow employees to continue working from home during the coming months to protect the health and well-being of our employees, and to help ensure safe and seamless access to public transportation and other community support systems for those who need them most."

Roger Crandall, CEO, MassMutual:
“An important thing MassMutual can do in Boston, is not have our people taking space [on the T] from people who need to go to their workplace to get paid and have their companies function.”
Transit Riders Are Likely to Return Cautiously

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<th></th>
<th>YES</th>
<th>NO</th>
<th>UNDECIDED</th>
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<td>Would you be comfortable riding buses, subways and commuter</td>
<td>18.0%</td>
<td>79.2%</td>
<td>2.8%</td>
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<td>trains when it is allowed?</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Would you be comfortable riding buses, subways and commuter</td>
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<td>56.6%</td>
<td>2.2%</td>
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<td>trains if there were an effective treatment but NOT a vaccine for</td>
<td></td>
<td></td>
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<tr>
<td>COVID-19?</td>
<td></td>
<td></td>
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<td>If there were a vaccine for COVID-19, would you be comfortable</td>
<td>72.4%</td>
<td>25.4%</td>
<td>2.2%</td>
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<td>riding buses, subways and commuter trains?</td>
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IBM Institute for Business Value polled 25,000 US consumers in April, 2020 “and found shifting attitudes toward personal mobility, event attendance, retail, and remote work. . . . More than 20% of respondents who regularly used public transit said that they no longer would, with a further 28% saying they would use public transportation less often.”

Source: Consulting.us

SOURCE: Suffolk University PRC/WGBH/Boston Globe Poll of Massachusetts residents conducted April 29-May 2, 2020
WORKING TOGETHER TO REOPEN

Until a treatment or vaccine for COVID-19 is available, life will not return to normal. We each have a collective responsibility to ensure that reopening proceeds smoothly and safely. Everyone must follow public health directives and use common sense to protect yourself, your family, your neighbors, and vulnerable populations across the Commonwealth.

**Individuals**
- Cover your face
- Wash your hands
- Socially distance
- Be vigilant for symptoms
- Stay home if you feel sick

**Employers**
- Set business practices that adhere to the Mandatory Workplace Safety Standards and Sector-Specific Protocols for your industry

**Employees**
- Abide by employer practices that adhere to the mandatory safety standards and sector specific protocols

**Government**
- Set standards in the interest of public health
- Invest in necessary capabilities
- Communicate to and educate the public
- Regularly track and report COVID-19 data
- Expand testing capacity

**Health system**
- Monitor progression to ensure sufficient system capacity to meet needs

All public health criteria included in this document are subject to change. As research and data on this novel coronavirus continue to develop, this plan can and will be updated to reflect the latest science and data.
TRANSIT (I)

The MBTA has been and will continue to implement measures to slow the spread of COVID-19 across the system to keep employees and riders safer.

While public transportation unavoidably creates some risk of transmission, the MBTA, riders and employers can significantly reduce that risk by working together:

- Riders are required to wear masks and must make efforts to distance. Riders are asked to avoid riding transit if they are exhibiting symptoms of COVID-19.
- Employers are encouraged to stagger schedules and implement work from home policies to reduce demand, especially during rush hours.
- The MBTA will continue to take protective and preventative measures such as frequently disinfecting and cleaning vehicles and stations and providing protective supplies to workers.

To mitigate risk while providing appropriate levels of service, the MBTA will:

- Support the transit needs of essential workers and those returning to the workplace in Phase 1 while continuing with limited service to maximize employee and rider safety.
- Ramp up to a modified version of full service by Phase 3, although social distancing efforts will limit effective capacity on vehicles even after full service schedules are restored.
- Actively communicate public health guidance and schedule adjustments in-station, online, and over social media.

REOPENING MASSACHUSETTS  All public health criteria included in this document are subject to change. As research and data on this novel coronavirus continue to develop, this plan can and will be updated to reflect the latest science and data
Service

Phasing
Fairmount Line Pilot
# Phasing

<table>
<thead>
<tr>
<th>Phase</th>
<th>Current state: Stay at home</th>
<th>Phase 1: Start</th>
<th>Phase 2: Cautious</th>
<th>Phase 3: Vigilant</th>
<th>Phase 4: New normal</th>
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<tbody>
<tr>
<td><strong>Bus</strong></td>
<td>Adapted Saturday schedule</td>
<td>Unchanged</td>
<td>Additional service for high demand bus routes as staffing permits</td>
<td>Resume full 2020 schedule, as staffing permits. Add service to high demand routes.</td>
<td>Resume FY20 full schedule/ possible peak addition**</td>
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<tr>
<td><strong>Subway / Blue</strong></td>
<td>Adapted Saturday schedule</td>
<td>Unchanged</td>
<td>FY20 full schedule</td>
<td>FY20 full schedule</td>
<td>FY20 full schedule</td>
</tr>
<tr>
<td><strong>Subway/ Red</strong></td>
<td>Saturday schedule</td>
<td>Unchanged</td>
<td>Increased service (shorter time between trains)</td>
<td>FY 20 full schedule</td>
<td>FY20 full schedule</td>
</tr>
<tr>
<td><strong>Subway/ Orange</strong></td>
<td>Saturday schedule</td>
<td>Unchanged</td>
<td>Increased service (shorter time between trains)</td>
<td>FY 20 full schedule</td>
<td>FY20 full schedule</td>
</tr>
<tr>
<td><strong>Green Line</strong></td>
<td>Saturday schedule</td>
<td>Unchanged</td>
<td>Increased service (shorter time between trains)</td>
<td>FY20 full schedule as staffing permits</td>
<td>FY20 full schedule</td>
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<tr>
<td><strong>Commuter Rail</strong></td>
<td>Reduced schedule</td>
<td>Unchanged</td>
<td>Additional trains including off-peak on Fairmount Line</td>
<td>Modified FY20 full schedule*</td>
<td>Modified FY20 full schedule*</td>
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<tr>
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<td>Unchanged</td>
<td>Reopen with reduced service</td>
<td>FY20 full schedule</td>
<td>FY20 full schedule</td>
</tr>
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</table>

**Degree of certainty given the progression of COVID-19**

| Most certain | Least certain |

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* FY20 schedule modified, where feasible, to reflect changed travel patterns in COVID-19 new normal and workforce availability

** MBTA has 60 buses on order so possible peak additions could add those buses to schedule, dependent on workforce availability
Fairmount Line Pilot

• Service
  • Pilot will provide eight additional weekday trips
  • Trips times chosen in coordination with City of Boston based on likely demand and operational feasibility

• Fares
  • If the FY21 fare and transfer change vote is passed:
    • Free transfers between Fairmount Line trips within Zone 1A and rapid transit will be permitted at South Station
    • “Step-up” transfers between Fairmount Line trips within Zone 1A and bus trips will be permitted on CharlieCards

• Priority Metrics
  • Ridership
  • Subsidy
  • Equity
  • Travel time savings
  • Customer Experience
  • On-time Performance
  • Safety

• COVID-19 Impact
  • Will launch when Commuter Rail service returns to normal
  • Will run for a full year from start date
  • Marketing for the pilot ready to launch when start date known

Approximate Schedule

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<thead>
<tr>
<th></th>
<th>Readville</th>
<th>South Station</th>
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<td>9:25am</td>
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<td>3:05pm</td>
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<td>3:53pm</td>
<td>4:23pm</td>
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<table>
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<tr>
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<th>Readville</th>
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<td>9:15am</td>
<td>9:45am</td>
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<tr>
<td>6:50pm</td>
<td>7:20pm</td>
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<td>12:00am</td>
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Ride Safer

Employee Protection
Vehicle/Station/Facility Decontamination
What We Ask of Our Riders
Employee Protection: Face Coverings

• Governor Baker has issued an executive order requiring the use of face coverings in public places, including on all MBTA vehicles, stations, and stops.
  • The order went into effect on May 6 and applies to both MBTA customers and employees.
  • A “face covering” can be anything that covers your face, nose, and mouth, such as a scarf.
• The MBTA has launched a public awareness campaign called “Ride Safer” to spread the word about the order and encourage customers to wear face coverings.
• How will the MBTA enforce the order at stations and on vehicles?
  • The only exception to the order is for people unable to wear a mask due to a medical condition. MBTA employees are specifically prohibited from asking riders about medical conditions.
  • While we expect customers to comply, the MBTA will not refuse service to people who are not wearing face coverings.
Employee Protection: Personal Protective Equipment

Face Coverings
- Received 1,100,000 masks last week, which are being verified to meet KN95 standard
- Second mask kitting session scheduled for Tuesday, May 13
  - 60,000 KN95 masks to be kitted to cover all employees physically reporting to work
- Procurement of 125,000 cloth masks in process to provide front line employees with 10 masks each and office staff with 5 each
- Face shields in the process of being ordered for employees that cannot socially distance
  - 15,000 to be donated by P&G/Gillette
  - 3,000 to be ordered for OHS
  - 1,000 compatible with hard hats

Hand Sanitizer
- Expected delivery of wall-mounted hand sanitizer dispensers and Refill bladders have been delayed; Procurement is coordinating with the vendors to try to get these orders delivered as soon as possible
- Hand sanitizer filling continues at Everett, with a pair of 275-gallon drums in use for filling personal size containers
Employee Protection: Health Testing

- Employees continue to be screened for fevers at bus and rail facilities.
- In addition to the testing site at Foxboro, the MBTA is now offering free, voluntary testing for employees at sites in Lowell and West Springfield.
Enhanced Decontamination Protocols

Stations and Facilities

• Disinfecting touch points in high-traffic facilities twice a day
• Disinfecting touch points on surfaces such as handrails, fare gates, and fare vending machines in subway stations once every four hours
• Hired additional vendors for disinfecting using chemical fogging, electrostatic sprayers and manual disinfecting wipes/solutions

Bus and Rail Vehicles

• Decontaminating all revenue vehicles nightly with disinfecting wipes
• Performing mid-day decontamination at layover locations daily by wiping down operator cabs and high-touch locations
• Wiping down cab, farebox, and entrance for first/second shift bus pullbacks
• Performing electrostatic fogging for 100% decontamination every 2 weeks of all bus vehicles
• Isolating and electrostatic decontamination of any vehicle reported as operated by an employee who tested positive for COVID-19
What We Ask of Our Riders: Social Distancing As Feasible

Policy: Messaging in stations, bus terminals, and vehicles to encourage social distancing

- Currently developing signage for station and vehicles
- Will provide guidance; not space by space markings
- Determining what level of E&M and outside contractor assistance is needed to execute
- Will focus on high volume locations
What We Ask of Our Riders: In-Station Digital Screens

Wear a mask or face covering.

Ride Safer. Protect your health and the health of those around you.

We’re committed to public health on public transportation.
What We Ask of Our Riders: Social Media

- **Current Status for Essential Travel Only:**
  - **MBTA**
  - Subway: Reduced service
  - MBTA.com: Coronavirus
  - MBTA-CT: Reduced service
  - MBTA-CT: No service
  - MBTA-CT: Service Available, new booking protocols
  - MBTA-CT: Bus and trolley services resumed
  - MBTA-CT: Bus and trolley services resumed

- **Ride Safer**
  - Protect your health and the health of those around you.
  - Wash hands often:
    - Avoid touching your eyes, nose, mouth
    - Clean things that are frequently touched
    - Cover your mouth if you sneeze/cough
    - Stay home if sick
    - Think ahead
  - Tips & info: mass.gov/COVID19

- **MBTA**
  - @MBTA - May 11
  - Effective E/D, everyone is required to wear a face covering while on the T. We continue to:
    - Disinfect high-contact areas in stations
    - Disinfect vehicles daily + sanitizing touchpoints midday
    - Board buses & trolleys via rear doors
    - Promote social distancing
    - Open station doors

- **GM Update**
  - 4/25 1.8k views
  - Watch for more from GM @spofoak
Demand

Demand Expectations & Management
Employee Availability
Demand Expectations

• Reopening plan is phased
  • Major demand drivers like large events, higher ed, BPS, and air travel will not be present over the summer

• Traffic will come back before transit

• Do not expect a major jump in demand in aggregate
  • May see jumps on specific routes
Demand Management: A Partnership to Reshape Commuting Patterns in Metro Boston

- Reduce all commuting, addressing both potential transit crowding and renewed traffic congestion
  - Telecommuting options – WFH, partial WFH
- Spreading the peak to reduce both traffic congestion and transit crowding at “rush hour”
  - Staggered start/end times
  - Alternate work week schedules (7 days work weeks, more weekend work)
- Provide alternatives to both transit and single-occupant vehicle commuting
  - Carpooling/vanpooling/shared vehicle modes for longer trips
  - Cycling and walking for shorter trips
- Incentivize switching from overcrowded mode/routes to modes/routes where excess capacity exists
  - Communicate real-time traffic congestion and transit crowding information so commuters can make smarter decisions about how to commute on any given day
  - Fare policy initiatives
Employee Availability Is Key Driver of Service Availability

- The MBTA has **6,385 employees**, including 2,683 operators of passenger vehicles.
- The MBTA has 171 overall positive cases among employees:
  - 54 confirmed active cases
  - 113 recoveries
  - 1 Loss of Life
- The MBTA has 1,000+ cumulative leaves related to COVID-19.

25% of bus operators are not available on a typical day over the last week; primarily due to COVID-19 related leave.
Crowding

Service Availability and Ridership
Crowding Standards
Supply-side Strategies
Service Availability and Ridership Determine Crowding

- If 50% of ridership returns, but social distancing expectations lower vehicle capacity to 20 per bus rather than 56:
  - 1200+ trips per weekday, or 9% of all weekday trips, would be over capacity
  - 51% of crowded trips would be on key bus routes (KBRs) – despite KBRs accounting for only 34% of total trips
  - 13% of KBR trips would be over capacity
  - There would be 3,800 excess passengers per weekday over capacity, which would take 200+ new bus trips to address
Crowding Definitions Set in the Service Delivery Policy

• The MBTA has a standard for comfort as measured by vehicle load for each fleet in its Service Delivery Policy.

• This standard is used as part of the MBTA’s service planning process to allocate resources. For buses, we calculate the standard quarterly and report back on it annually.

• Due to the need for social distancing, we propose to temporarily change the crowding standard by lowering the vehicle load threshold for each fleet.

• We will use this new standard for:
  • Service planning and operational decision-making
  • Providing regular updates on crowding to inform passenger travel decisions
Setting a New Crowding Standard

• In order to set a vehicle load standard, we considered:
  • Requirement for face covering on the MBTA
  • CDC and WHO guidance
  • Practices by other transit agencies

<table>
<thead>
<tr>
<th>Vehicle</th>
<th>No of Seats</th>
<th>SDP Peak Load (pax)</th>
<th>3 ft (~1 meter) (pax)</th>
<th>Percent of peak load</th>
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<tbody>
<tr>
<td>40' Bus</td>
<td>(31) 37 – 40</td>
<td>56</td>
<td>20</td>
<td>36%</td>
</tr>
<tr>
<td>60' Bus</td>
<td>38 – 57</td>
<td>80</td>
<td>31</td>
<td>39%</td>
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<tr>
<td>Green Line trolley</td>
<td>44 – 46</td>
<td>100</td>
<td>46</td>
<td>46%</td>
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<tr>
<td>Red Line car</td>
<td>50 – 63</td>
<td>161-165</td>
<td>66</td>
<td>40%</td>
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<tr>
<td>Orange Line car</td>
<td>58</td>
<td>141</td>
<td>62</td>
<td>44%</td>
</tr>
<tr>
<td>Blue Line car</td>
<td>35</td>
<td>86</td>
<td>42</td>
<td>49%</td>
</tr>
</tbody>
</table>

Note: each Red, Blue, and Orange line train have 6 cars
Similar methodology to be used for Mattapan and Commuter Rail fleet, for ferry to use 50% of max load
Using Crowding Standards

• **Communicating Crowding to Passengers**
  - We conducted a survey of riders to determine what information and when they need to receive it in order to best inform trip making
    - Passengers are interested in both recent historic data when trip-planning and real-time data while waiting for a bus
  - Early results indicate that passengers want us to provide descriptions of crowding levels with multiple categories
  - Our data and customer technology teams are analyzing the feasibility of providing crowding information and the best way to display it

• **Internal Planning**
  - Track crowding and reallocate capacity as feasible
  - Develop other strategies to shift modes

• **Enforcement**
  - Logistically difficult
  - Important equity issues

Example Design

Pre-trip planning recent data (London)
Supply-side Strategies

• Analysis of ridership patterns and projected crowding based on different ridership return rates.
• Prioritize service levels where we see current higher rates of ridership and where we expect demand to be greatest using demographic data
  • Decay of ridership provides plausible returning ridership scenarios
• Plan for ‘Run-as-Directed’ supply to address crowding where feasible
• Examine operational tactics to address crowding (e.g. short turns on the Blue Line)
• Plan proactively to address dropped trips and protect Key Bus Routes
• Increase available supply via adding off-peak service, including mid-day
• Examine Supply Redistribution (e.g. longer headways on low ridership routes; temporary suspension of low ridership routes)
• Examine Supply Substitution – use of incentives and real time information where supply is available on other modes
• Increase Throughput on Bus – more dedicated bus lanes
To Our Essential Workforce:

THANK YOU!