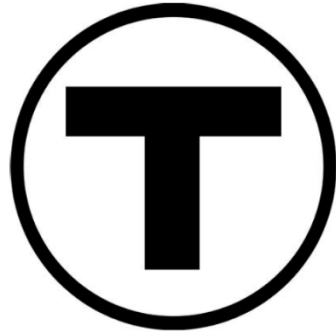




**Massachusetts Bay
Transportation Authority**

Report from the General Manager

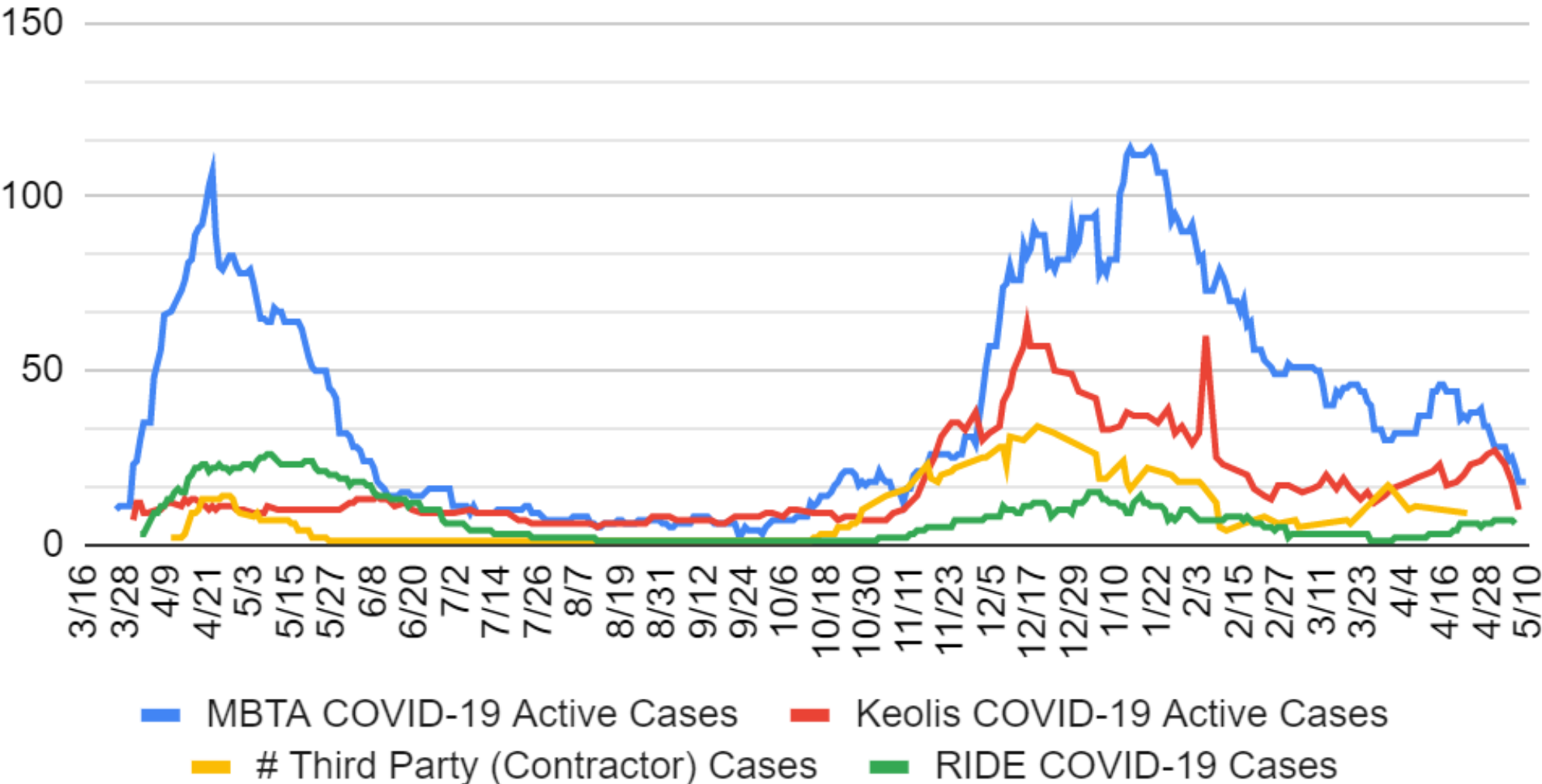
Fiscal and Management Control Board

May 10, 2021

COVID-19 & Ridership Update

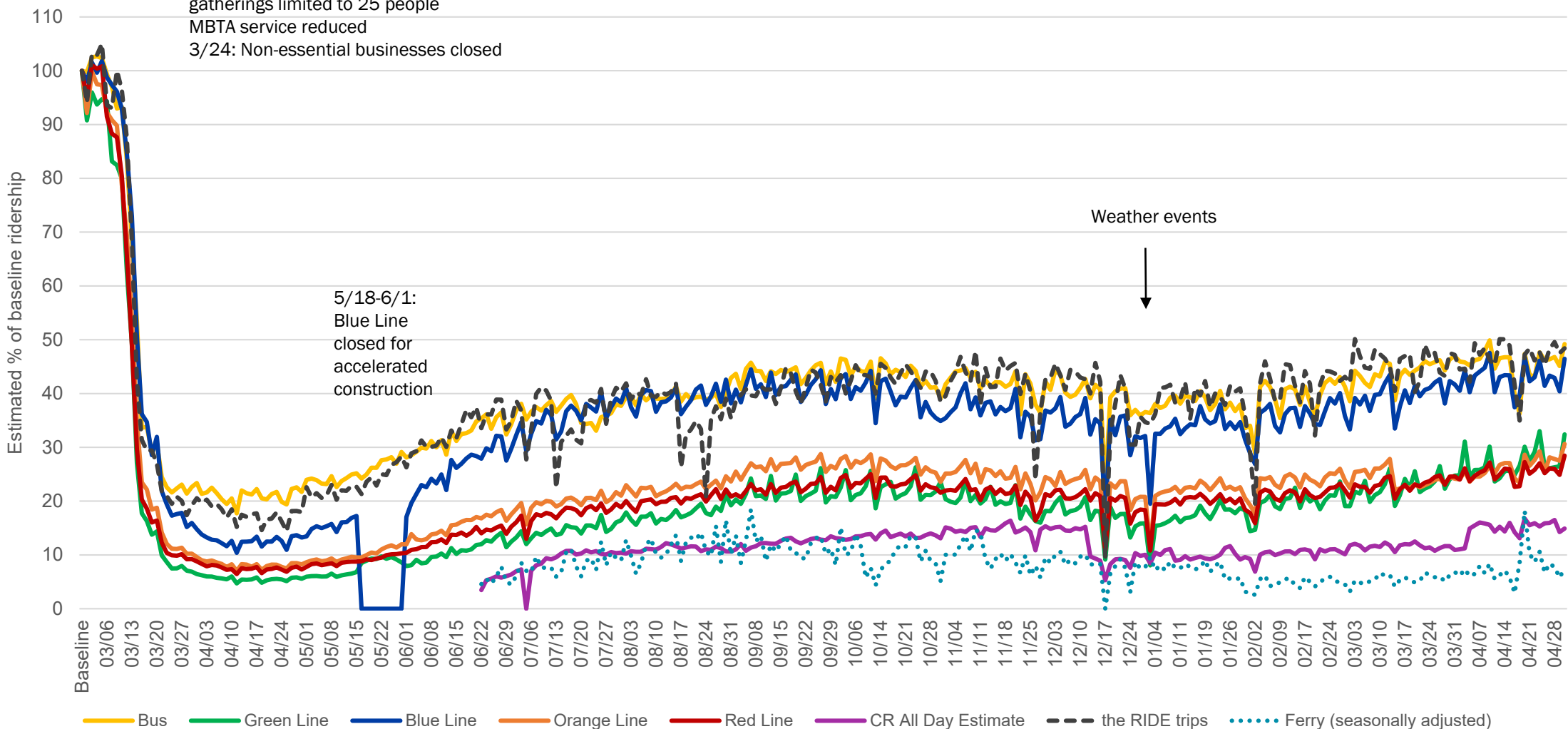


MBTA Active COVID-19 Cases



Weekday Ridership by Line and Mode - Indexed to Week of 2/24

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



Baseline

- Average weekday from 2/24-2/28
- Ferry baseline - Average weekday from the same month in 2019

Sources

- Faregate counts for subway lines
- APC for buses
- Manual counts for Commuter Rail
- Vendor reports for the RIDE/Ferry

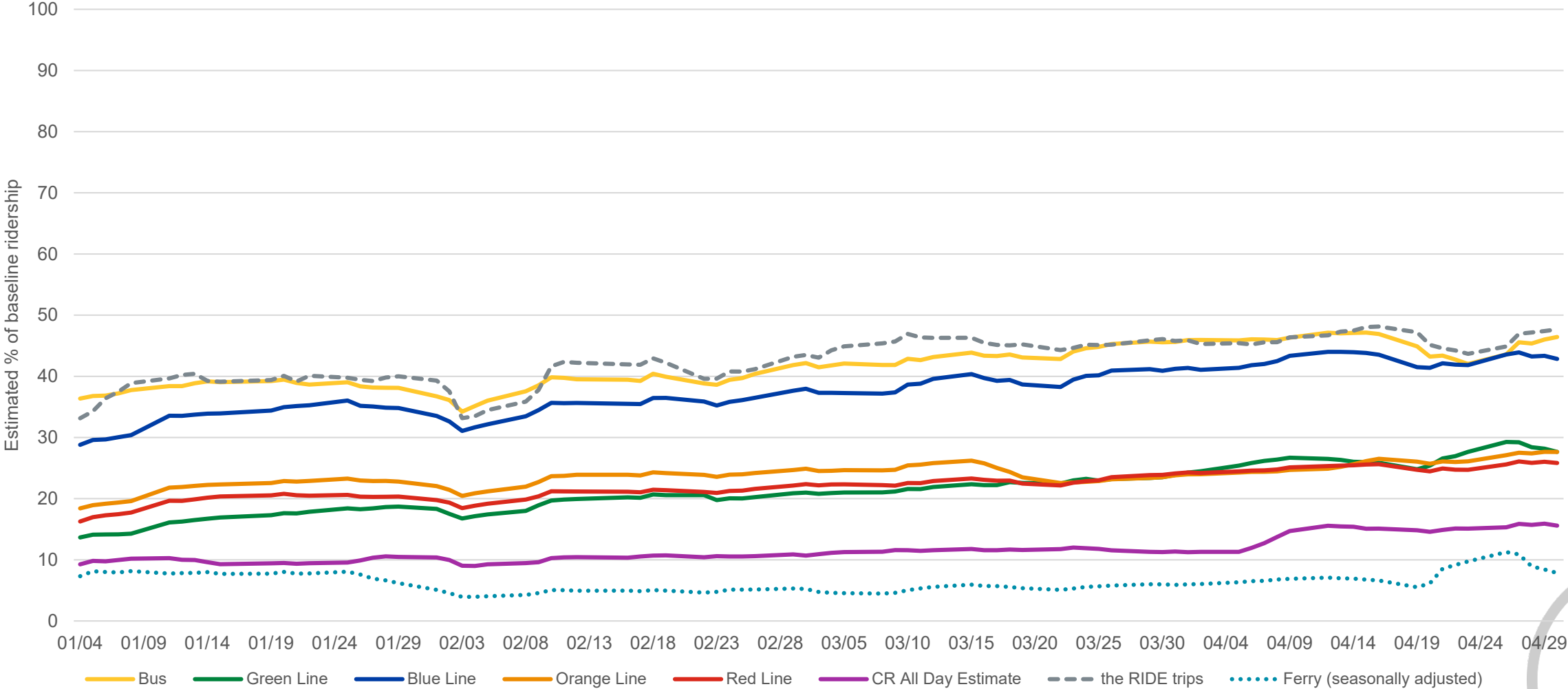
Notes

- Recent data preliminary



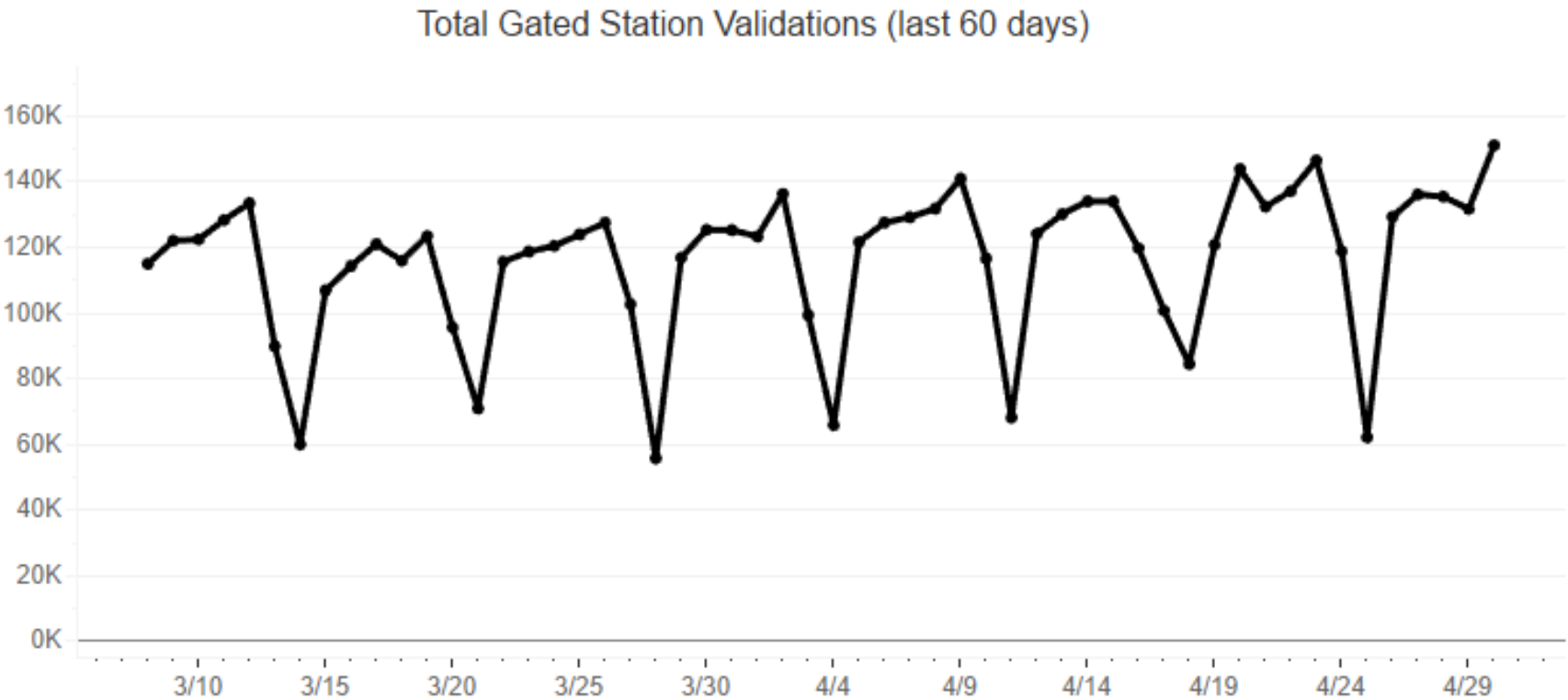
Weekday Ridership by Line and Mode Since 1/1/21

Indexed to Week of 2/24 – 5-Day Rolling Average



Gated Rapid Transit Stations

Line	Change in validations: April 2019 weekday average vs. weekday average for Apr 26 – 30, 2021
Blue Line	-58%
Green Line*	-75%
Orange Line	-72%
Red Line	-74%
Silver Line	-82%
Total Gated Stations	-72%

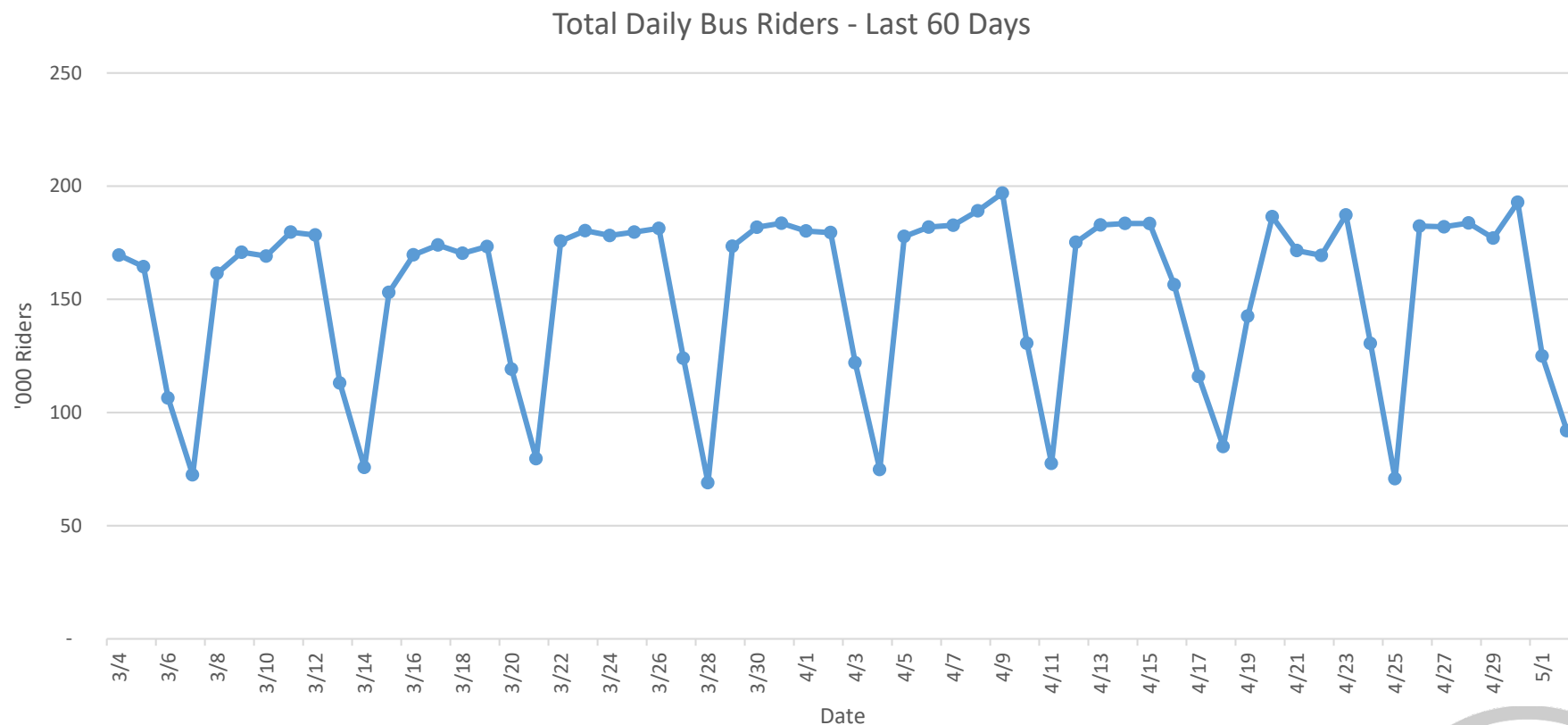


Gated validations data by line and station are available in this [public folder](#) and continue to be updated on the [Data Blog](#). The data is also continuously updated and visualized on the [MassDOT Mobility Dashboard](#).



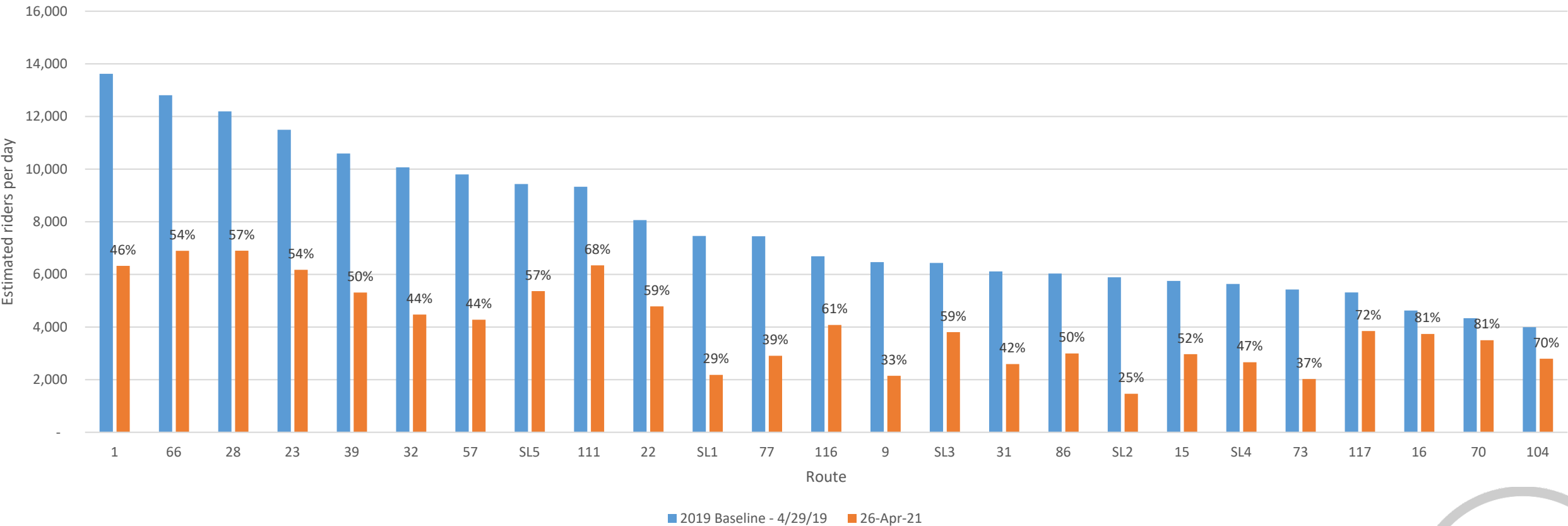
Bus Ridership Trends

- Ridership estimated from APCs.
- Ridership for the most recent days is continuously revised as information on dropped trips is received.
- Route-level ridership has a higher level of uncertainty due to run-as-directed trips that are not in the schedule.



Bus Ridership Top Routes

Daily Bus Ridership YOY, Week of 4/29/19 vs. Week of 4/26/21, Top Routes by Ridership



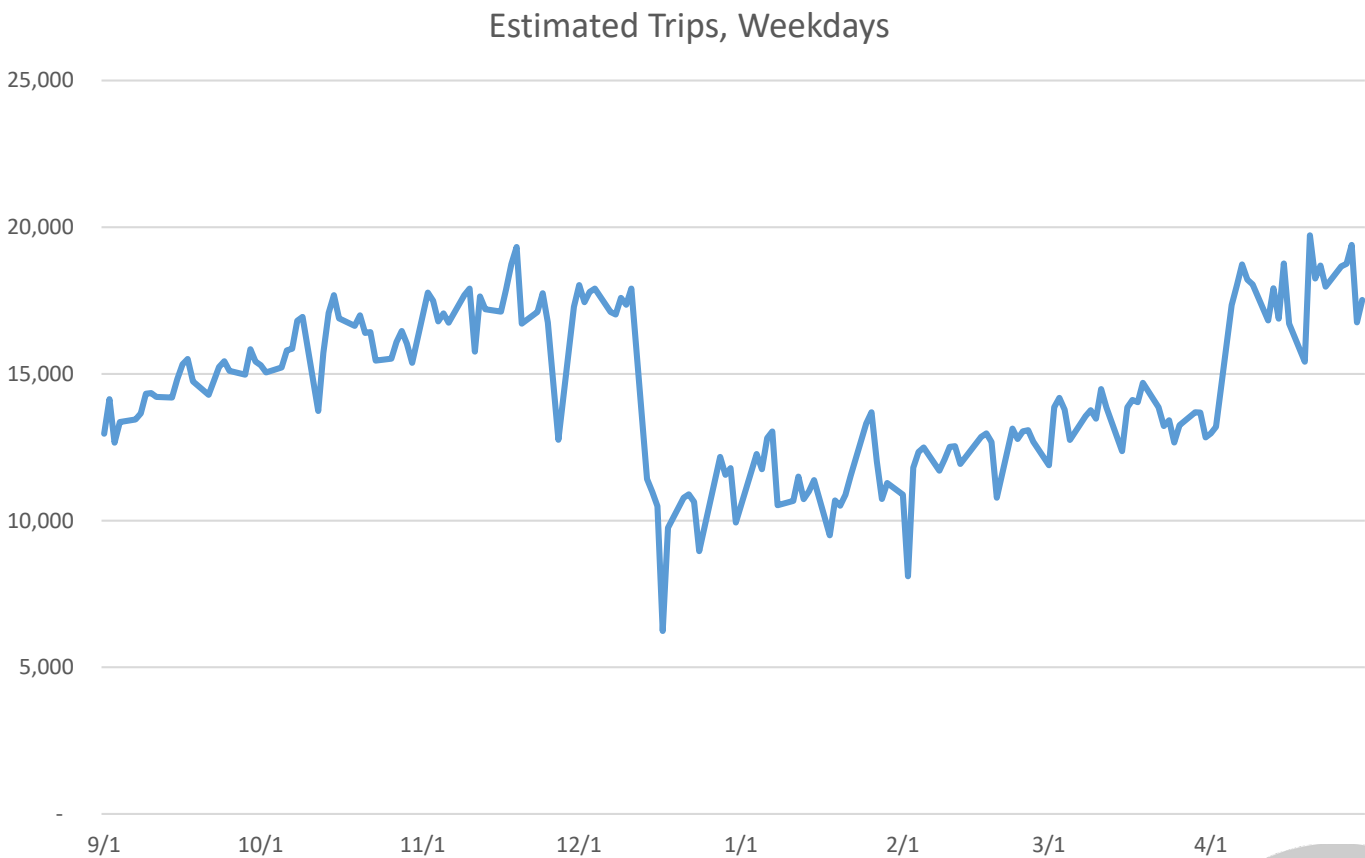
*This chart displays average daily ridership by week, representing the most recent week available. The included routes represent the current top 20 as well as the top 20 routes pre-COVID.



Commuter Rail Ridership (through 4/16)

- Chart **to the right** shows total estimated trips for each weekday since September 2020.
- Chart **below** shows a snapshot of estimated all-day ridership by line, compared with 2018 CTPS counts. The time period is the last 5 non-holiday weekdays (4/26 – 4/30)
- The current baseline comparison is approx. 120,300 trips, putting the period of 4/26 – 4/30 at 15.1% of pre-pandemic normal (not adjusting for Fitchburg shuttling).

	Estimated Daily Ridership, Weekdays (4/26-4/30/21)	Estimated % of 2018 Weekday CTPS Counts (all day)
Fairmount Line	701	26%
Fitchburg Line	0	0%
Framingham/Worcester Line	2583	14%
Franklin Line	1453	12%
Greenbush Line	701	11%
Haverhill Line	1340	19%
Kingston/Plymouth Line	709	12%
Lowell Line	1555	14%
Middleborough/Lakeville Line	1313	19%
Needham Line	709	11%
Newburyport/Rockport Line	3295	22%
Providence/Stoughton Line	3788	15%

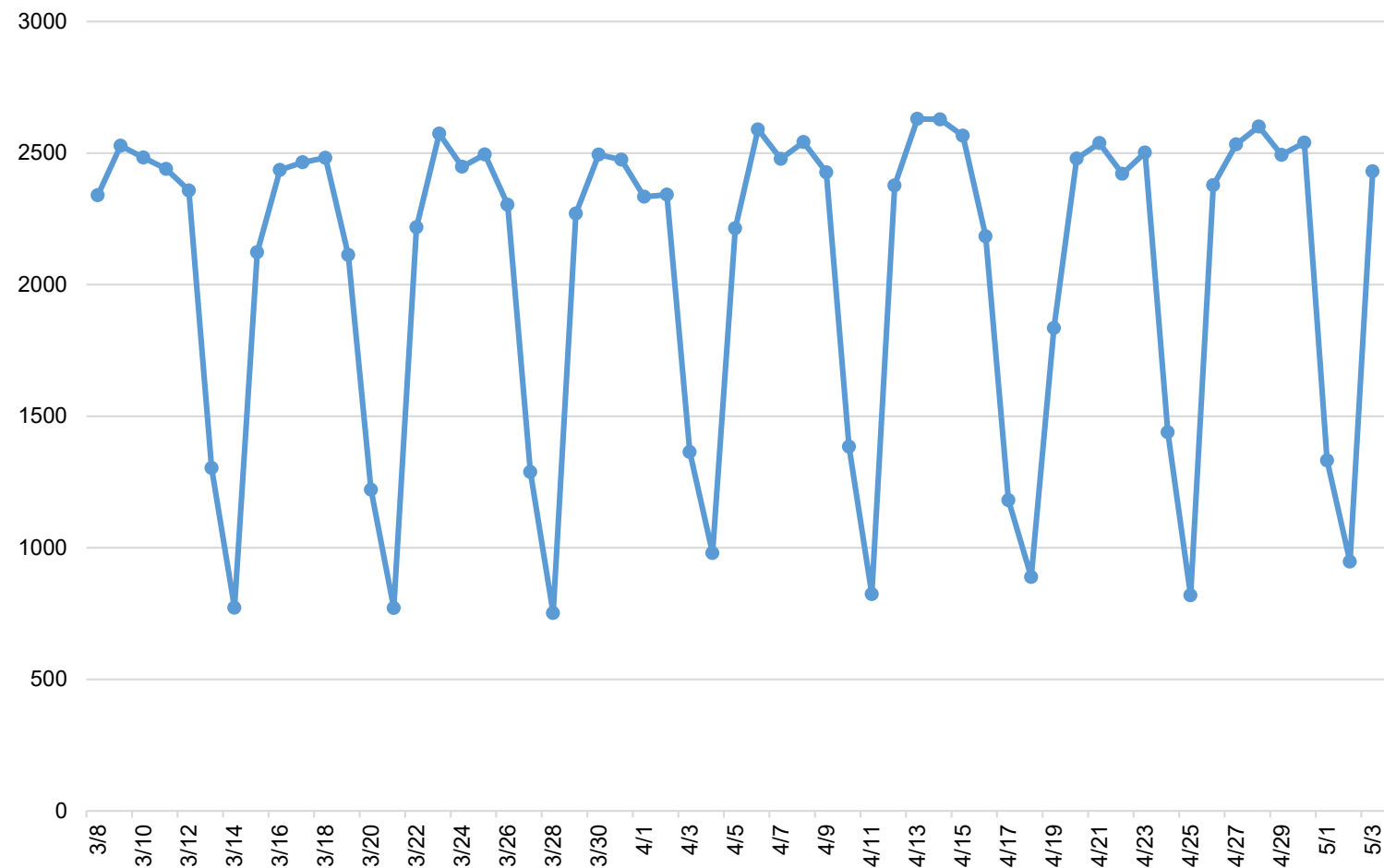


Ridership totals are aggregated from a combination of on-board conductor counts, counts of trains arriving at terminals, and automated passenger counters on-board trains.



The RIDE

The RIDE Trips per Day



- The RIDE reported an average of 2,509 trips per weekday last week.
- This about 1% higher than the previous week and 52% lower than the baseline (2/24/20 - 2/28/20).
- Recent ridership may be revised.



Capital Projects Update



North Side ATC Activities and Progress

- **The North Side ATC Program is proceeding to meet FRA requirements.**
 - Successfully completed ATC implementation on 30 miles of the Fitchburg Line between North Station and Littleton/I-495
 - This segment of the line was taken out of service with busing for 2-months in March and April to expedite this work
 - Commuter Rail service was restored as scheduled on May 3rd
 - ATC on the remainder of the Fitchburg Line will be completed by the end of 2021
 - ATC on the Lowell Line will be completed by the end of May 2021
 - Currently busing between North Billerica and Lowell May 3rd to May 21st to expedite the final segment of the work
 - Detailed schedule to complete commissioning of ATC on the remaining lines is under development



B Branch 7-Week Full Access Closure | April – June 2021



- ✓ Reduce the overall project schedule
- ✓ Minimize disruption in service
- ✓ Utilize resources more efficiently

40%
Acceleration
Progress**

54%	4 New Platforms 13/24 Concrete Slabs (6 Per)
45%	+ Track Replacement 2,250 ft/5,000 ft
0%	+ Intersections Upgraded 0/2 Intersections

June 14 Early Access & Weekends continues through fall 2021

***Pause** = No B Branch work will be performed during the week of May 10-16

**Total Acceleration Progress represents the value of completed work including other elements (e.g., Demolition)

Recent Project Completions

- **Ruggles Phase 1**

- Built a new 800-ft Commuter Rail platform to serve Track 2
- Allows more trains to stop at Ruggles and prevents the “Back Bay Detour” (people riding the OL back from Back Bay to Ruggles after commuting inbound)
- Platform opened early April 2021

- **North Station Terrazzo Floors**

- Part of our Wayfinding and Station Improvements project for 5 stations (DTX, Haymarket, State, Chinatown, North Station)
- Approximately 40,000 sq ft of floor replaced with terrazzo (see attached photos).
- Project Completion: April 2021



New floors at North Station



Recent Project Completions

- **Aquarium Headhouses**

- Project upgraded 3 headhouses and the emergency egress to protect against flooding.
- Temporary flood barriers were installed at each of the head houses to be deployed when necessary.
- Project won a BSCES Sustainability Award that will be given in September 2021
- Projected Completion: March 2021

- **Winchester Center Station Demolition**

- Demolition work is being performed to prepare the station for a full re-build (the full station re-build project will be advertised shortly).
- This involves the demolition of canopies, some ramps, and part of the platforms.
- The station closed in February 2021.
- Project Completion: May 2021



Aquarium Headhouse



Upcoming Project Completions

- **Park Street Wayfinding**
 - Upgrades to the station include updated lighting and signage throughout the station, replacement of all wayfinding signs, and reopening the Temple Place stairs on Tremont Street.
 - Project Completion: August 2021
- **Oak Grove Elevators**
 - Replaced the existing elevator and added 3 new elevators, including one at the Washington Street entrance which was previously inaccessible.
 - Washington Street elevator went into service on January 31, 2021
 - Project Completion: December 2021



New Washington Street elevator at Oak Grove

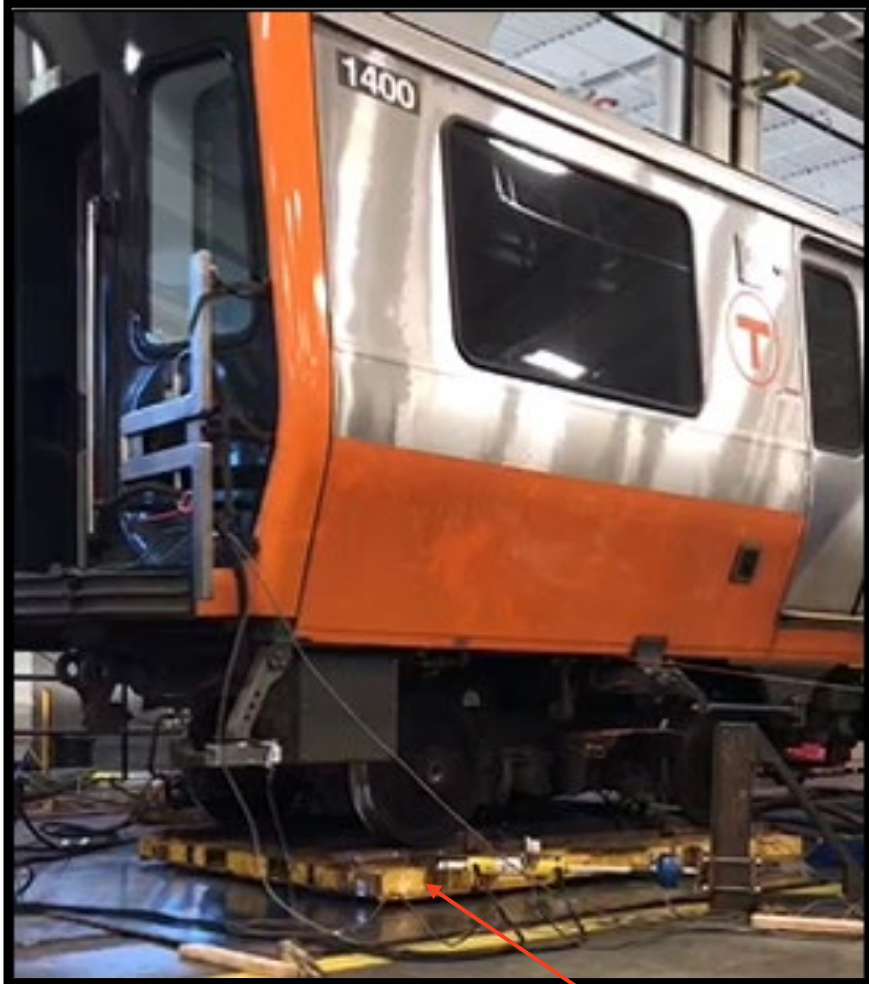


Orange Line Update



Orange Line Incident Investigation Update

Air Table Rotational Force Test Conducted at
Wellington Car House

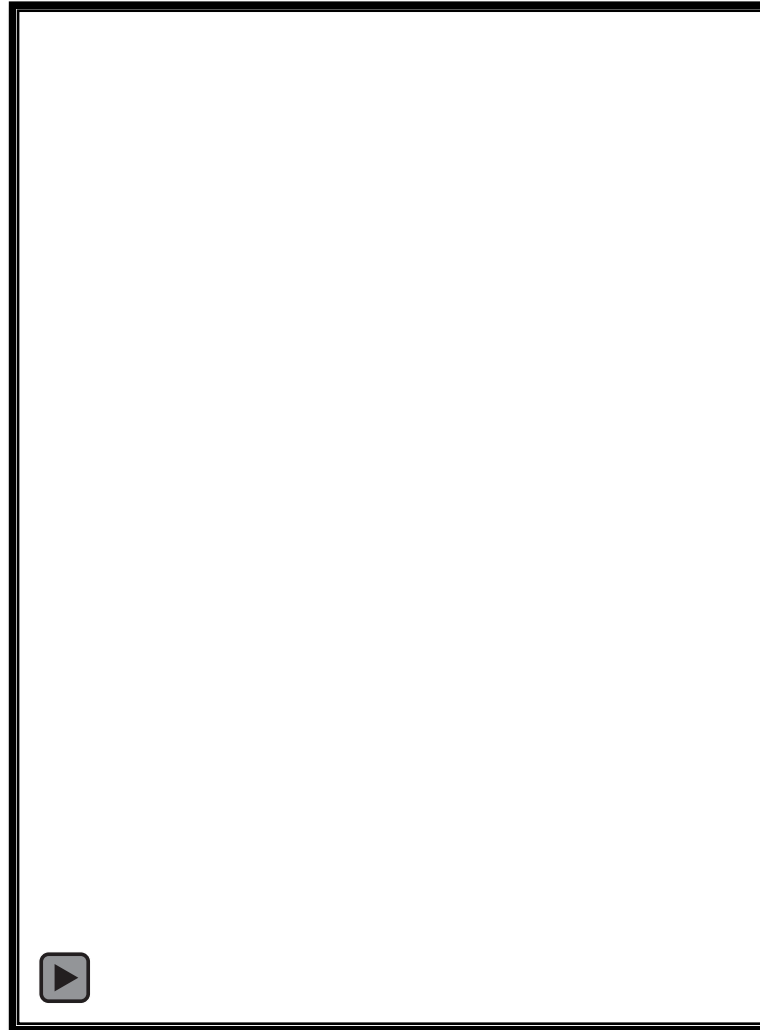


Derailment Investigation Continues:

- Extensive testing and computer modeling has been completed by a combination of CRRC, MBTA, specialized engineering consultants and numerous component engineers.
- During the investigation, it was found that the low speed force to rotate the truck frame (allowing the truck to turn) increased in direct correlation with cars with higher mileage.



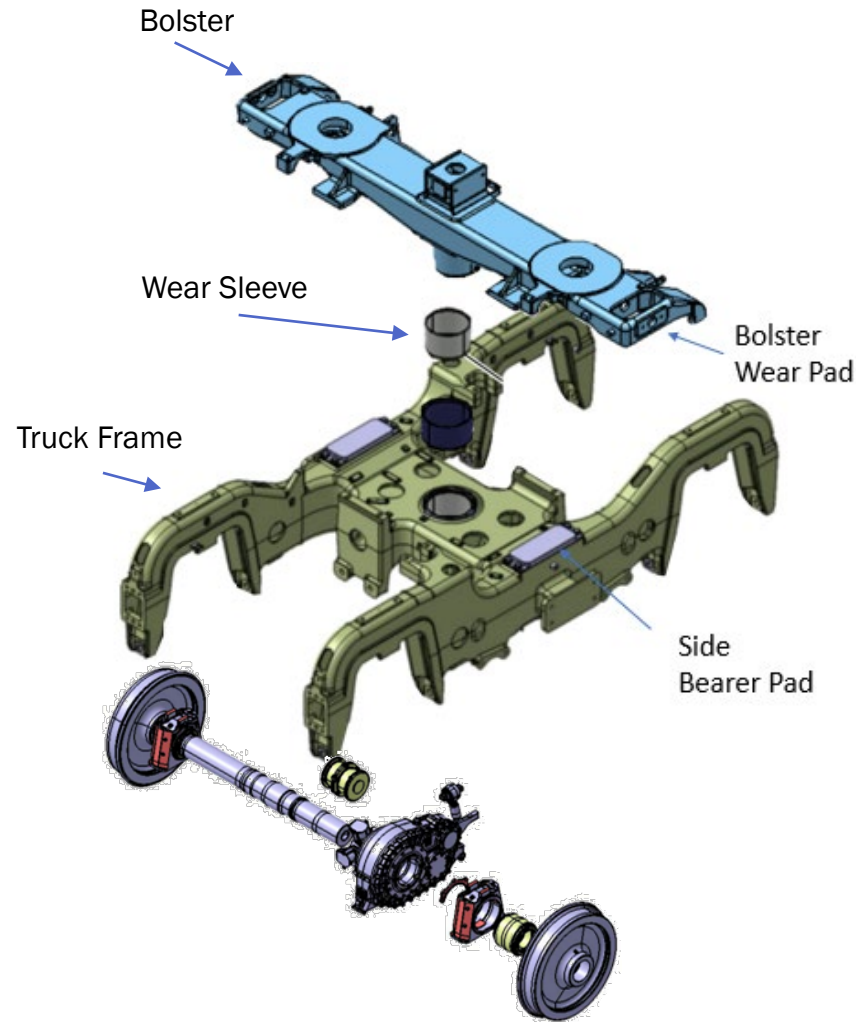
Orange Line Incident Investigation Update



Video of Rotational Testing



New Orange Line Incident Investigation Update



Derailment Investigation Continues:

- Engineers are currently investigating to identifying the root cause of the increased rotational force.
- Immediate focus is on property changes of the bearer pads.
- Microscopic materials analysis is underway to help identify root cause.
- New Red and Orange line cars will remain out of service until engineers have identified the root cause of increased rotational force.

