



**Massachusetts Bay
Transportation Authority**

Quarterly Ridership Update

Third Quarter FY19

June 3, 2019



Key Takeaways

Bus and Rapid transit ridership January to March 2019 increased slightly over January to March 2018, in part due to a more mild winter in 2019

Updates to performance dashboard (www.mbtackontrack.com)

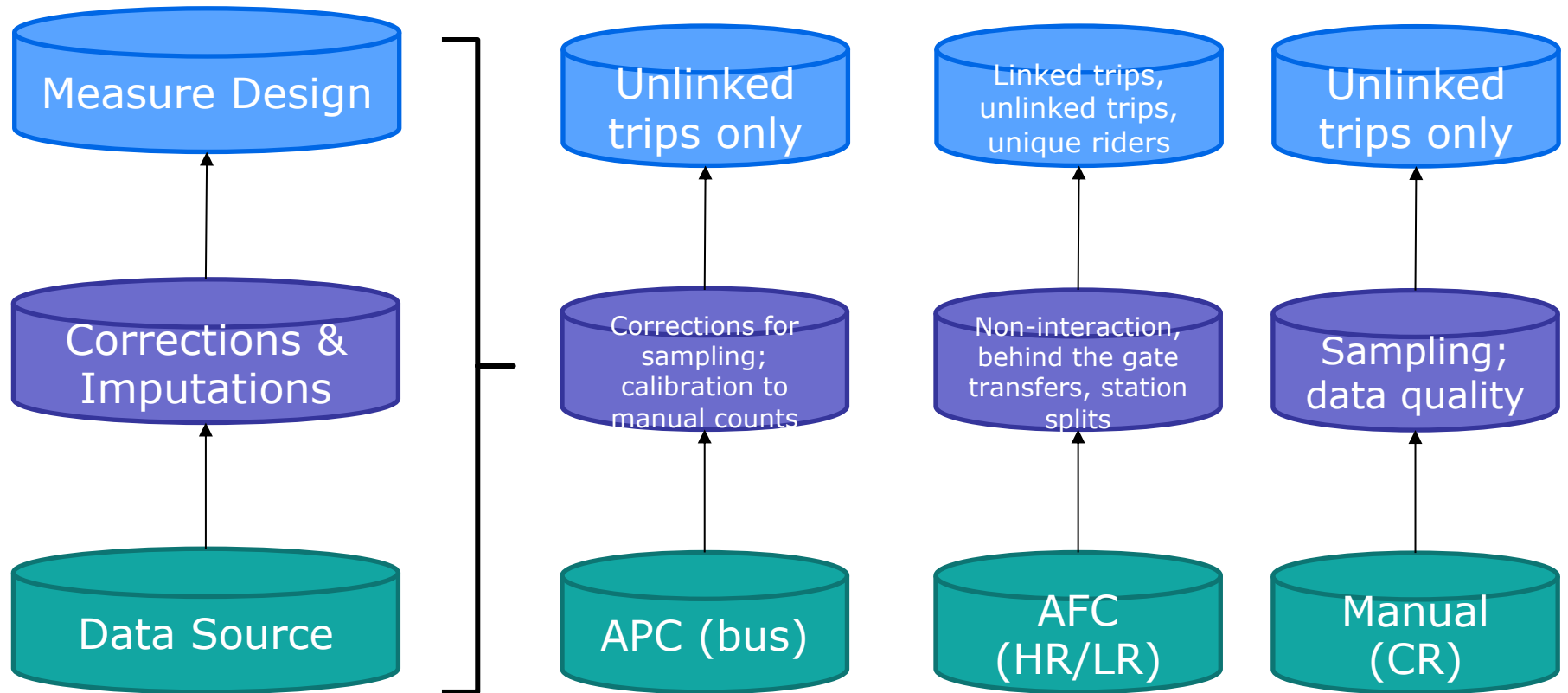
- 2018 ridership data
- The RIDE to the reliability section
- Differentiating between late and canceled commuter rail trains

In the long-term the MBTA is working to improve its ridership data quality



Ridership Estimation Review

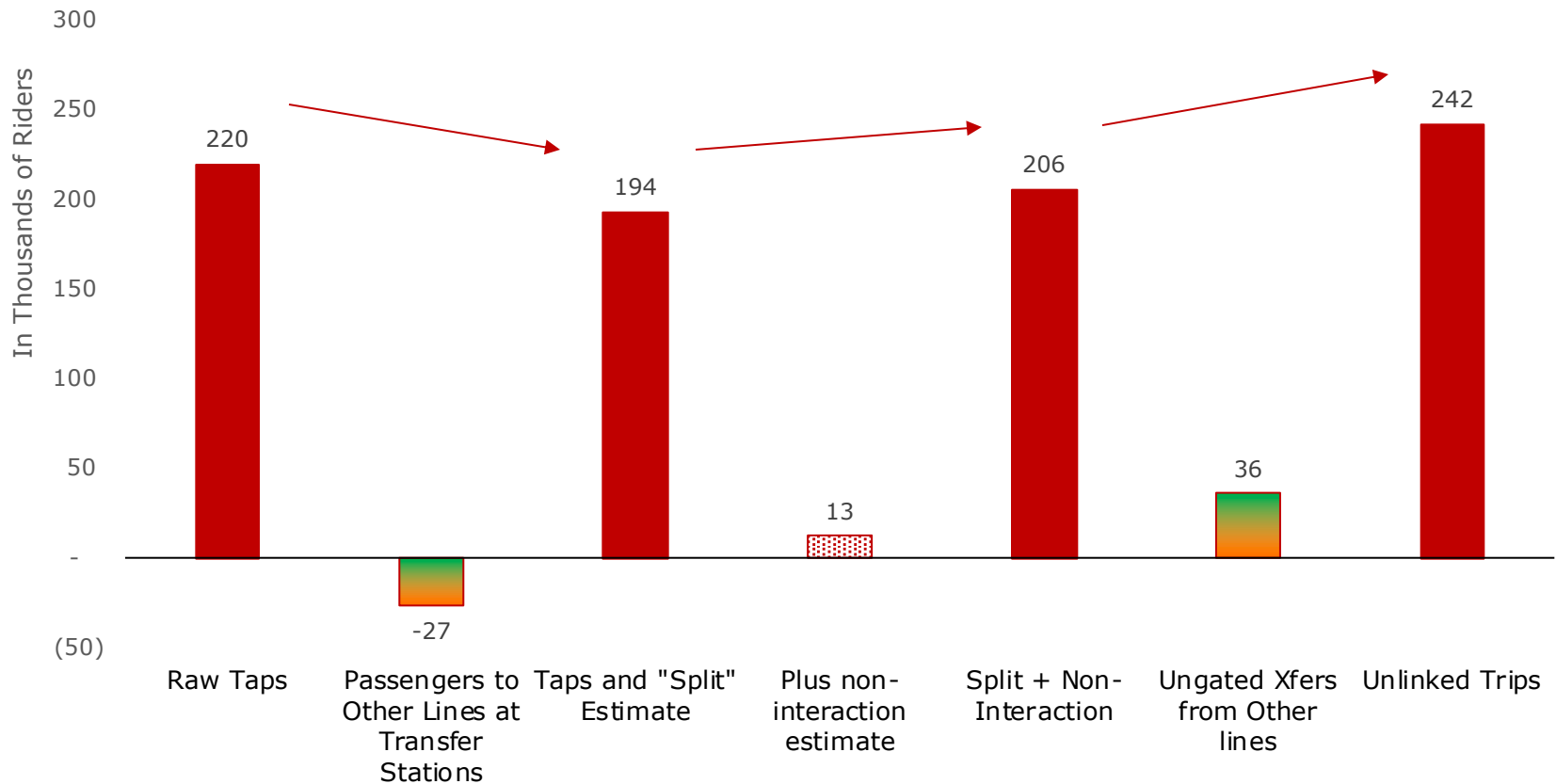
How data becomes ridership depends on the source and mode

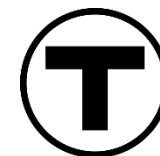




Ridership Estimation Example: Red Line

Average Weekday Ridership Calculation, Red Line (March 2019)





Ridership Reporting Review

The MBTA regularly reports ridership in four places

Report	Type of adjustments	Measure	Changes
NTD/APTA Monthly Raw Report	Adjusted data, using past year factors, impacted by data lag	Monthly total	No current changes
NTD Annual	Adjusted data, updated factors	Annual total	No current changes
MBTA Dashboard	Adjusted data, past year factors, updating continually for data lag	Average weekday by month	Adding 2018 data, standardized factors with NTD reporting
FMCB Quarterly reports	Adjusted data, past year factors	Average weekday by month or quarter	Changed to adjusted data from unadjusted tap data

All report unlinked passenger trips (UPT) by mode



Ridership Estimates in the Future

Long-term: Shift all modes to APC in order to more directly measure ridership

- Green Line – new cars will be equipped with APCs; preliminary data collection in progress
- Orange/Red Line – new cars will be equipped with APCs
- Commuter Rail – APCs being installed

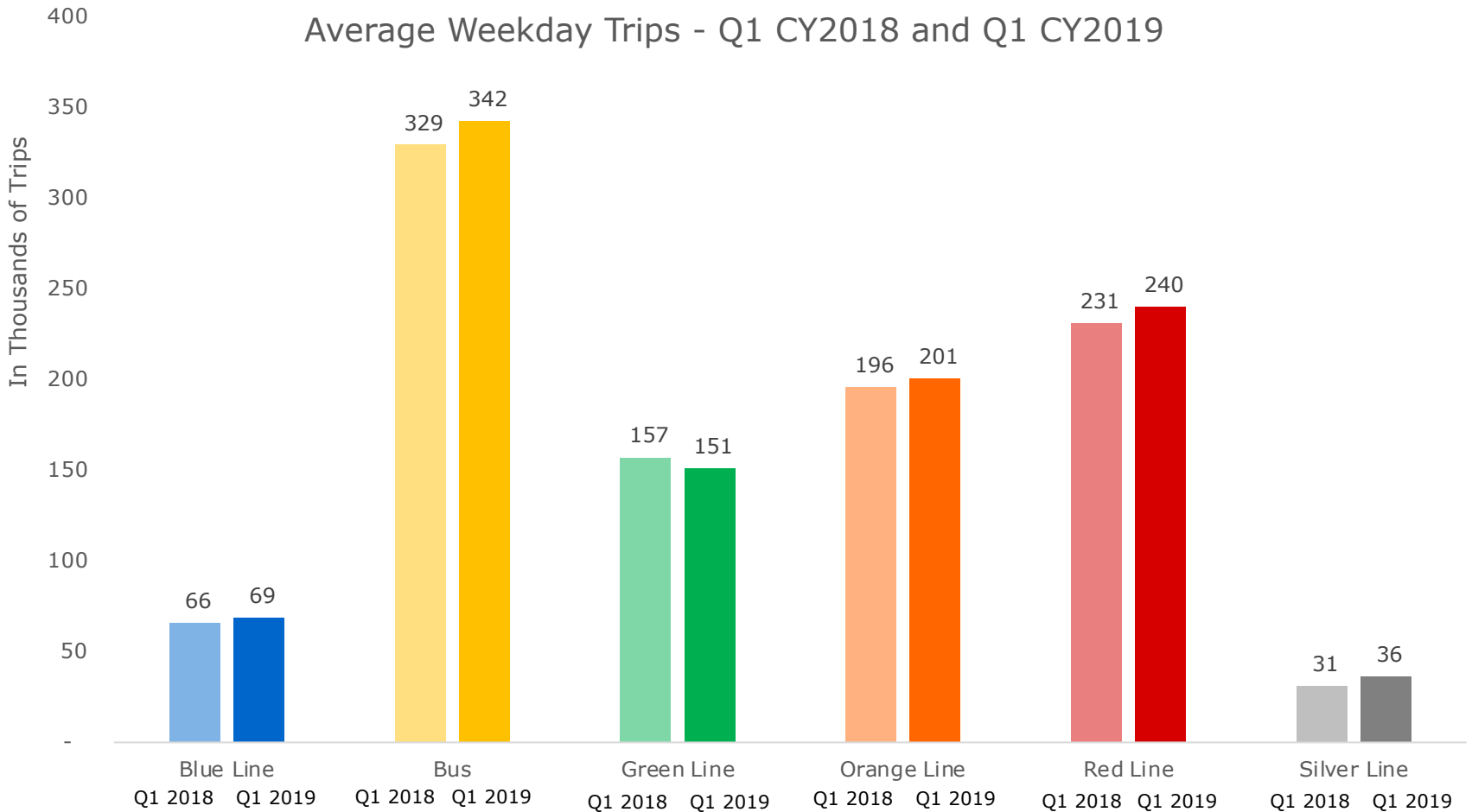
When the switch from AFC to APC happens, there will be a methodological break in ridership estimation.

Short-term: Improvements to source data and factors

- Improve underlying AFC data for the AFC-based estimates
- Improve corrective factor methodology
 - Use updated factors for FY2019 National Transit Database submission



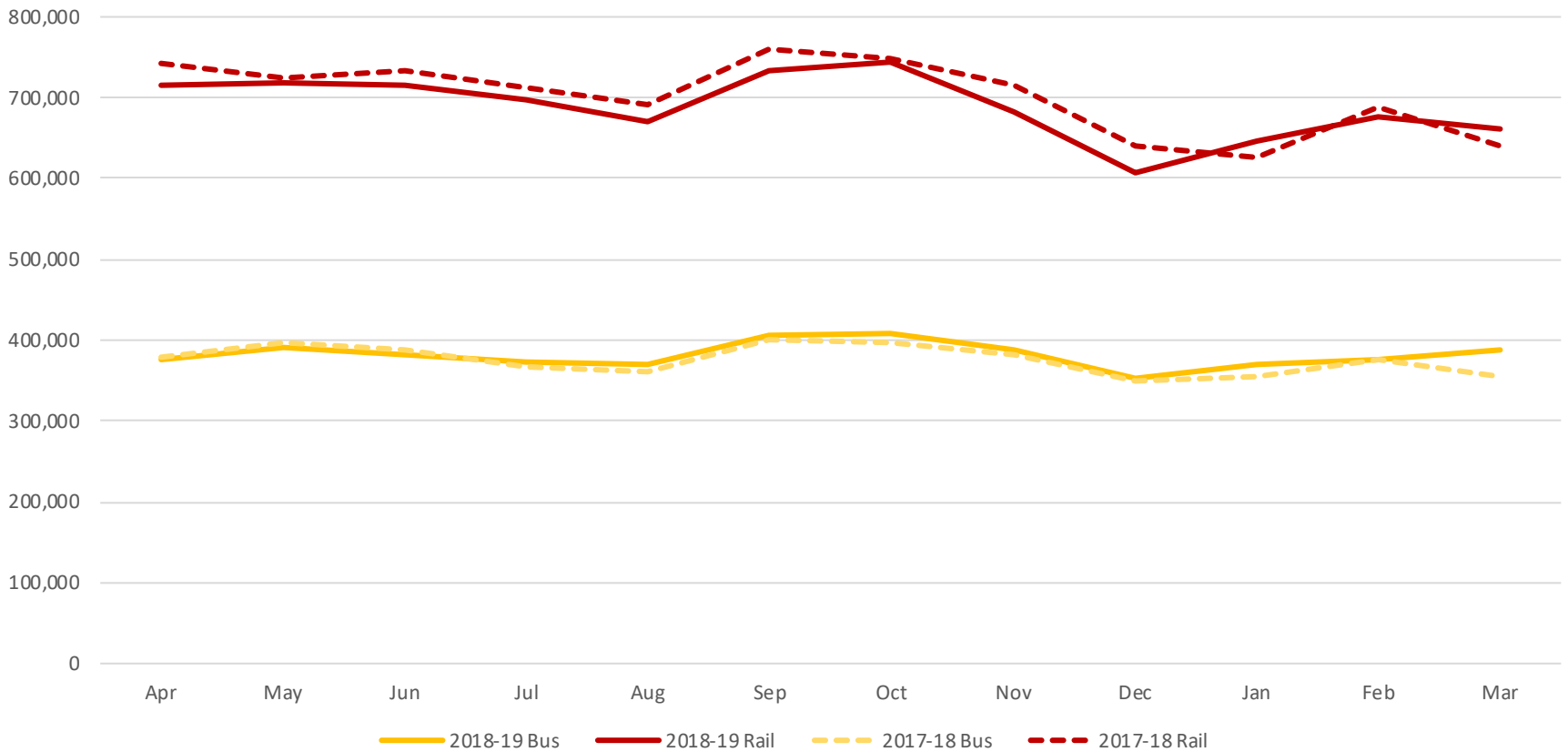
Quarterly Update: Q1 CY2019 vs Q1 CY2018





Year-Over-Year Comparison

Average Weekday Trips, By Month, Year-over-Year





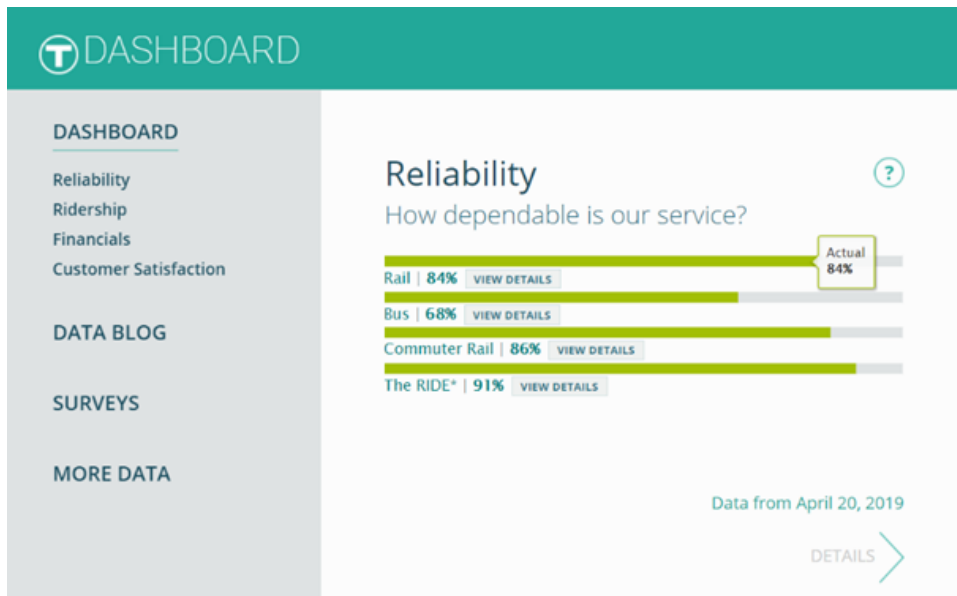
Updating ridership data on www.mbtabackontrack.com

- Reconciling all ridership data sources and scaling factors
- Ridership on the www.mbtabackontrack.com dashboard will be updated with consistent and stable annual scaling factors for missing data, non-interaction, station splits, and behind the gate transfers.
- Dashboard ridership numbers will be reported monthly and available back to January 2016. The updates will be on a two-month lag (June data will be available in September).
- Underlying data is consistent with data reported to National Transit Database, and summarized as average weekday unlinked trips.



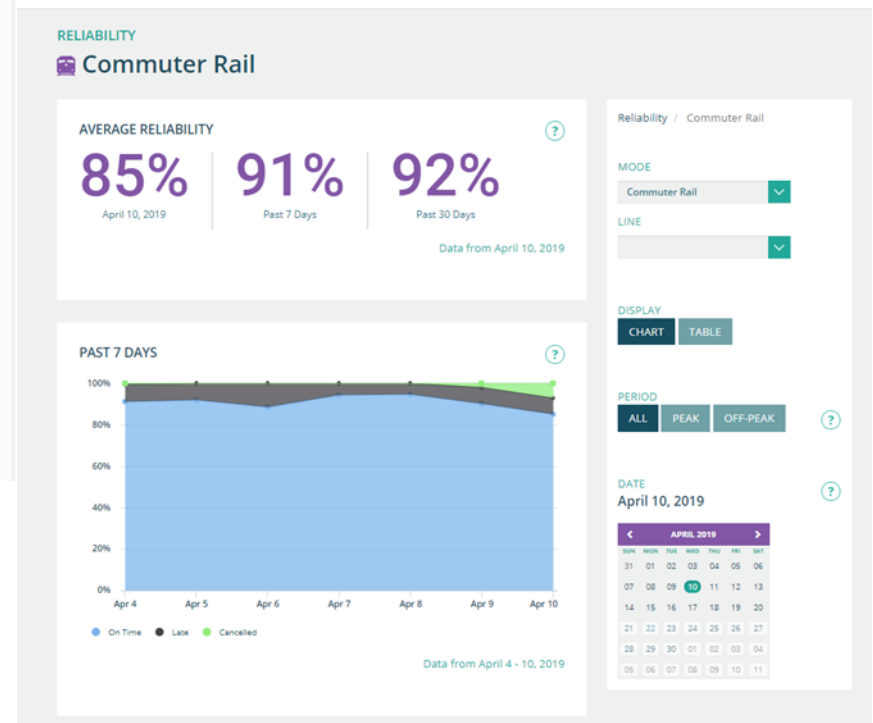
Additional Changes to MBTA Back on Track dashboard

Adding The RIDE to reliability section



- Measured as the percentage of completed trips where customers were picked up no later than 15 minutes after the scheduled pickup time
- Data posted daily for 7 days prior

Differentiating between late and canceled trains in Commuter Rail reliability





Appendix



2016-2018 NTD and Back on Track measure comparison

Average Weekday vs Monthly Total Ridership Patterns
January 2016 - December 2018

