

Commuter Rail AFC Integration

April 22, 2019





Commuter Rail Fare Gates: Background

- In 2017, Ernst & Young reviewed the Commuter Rail Operating Agreement and made recommendations to incentivize ridership and increase revenue.

- FMCB voted March 6, 2017 to approve the **Revenue Growth Proposal**:

“That the members of the Fiscal Management and Control Board (the “FMCB”) hereby approve and authorize the General Manager, or his designee, to execute in the name and on behalf of the Massachusetts Bay Transportation Authority (“MBTA”), the amendment presented to the FMCB this date and in a form to be approved by the General Counsel, to effectuate the Revenue Growth Proposal, under the Commuter Rail Operating Agreement Contract No. 159-12 dated February 5, 2014 between the MBTA and Keolis Commuter Services, LLC.”

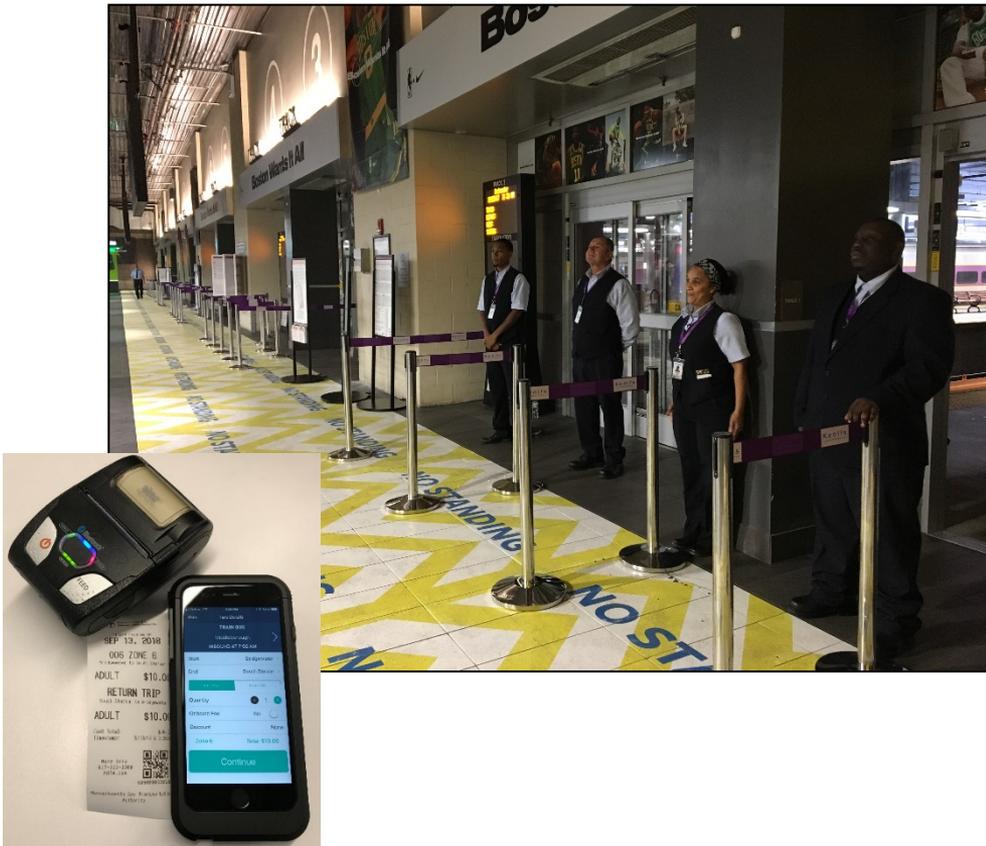
- “Construction and staffing of fare gates at North Station, South Station, and Back Bay Station” was a key component of the **Revenue Growth Proposal**.
- MBTA entered into a revenue sharing agreement with Keolis on July 1, 2017, which included all key components of the **Revenue Growth Proposal** the FMCB voted on.



Revenue Share Agreement: Key Components

Goal: Bring MBTA commuter rail revenue generation and fare collection in line with worldwide best practices

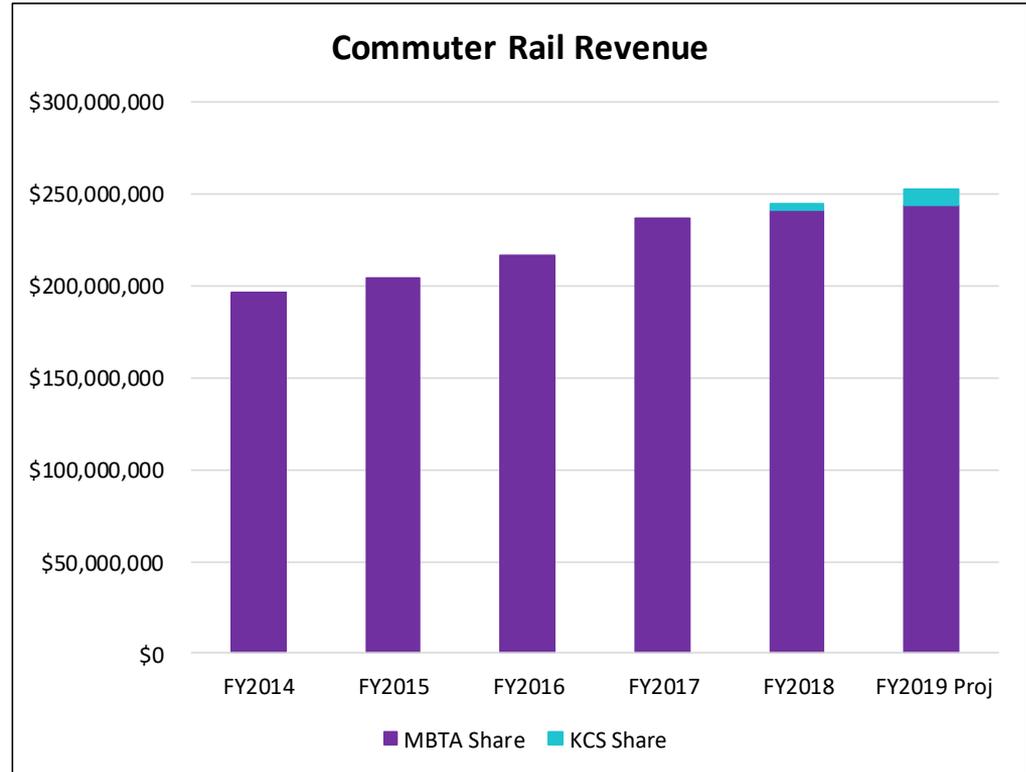
Activity	Status
Hire Revenue Analysis team to manage revenue and sales initiatives	COMPLETED ✓
Staff Boston terminal stations with Ticket Verification Agents	COMPLETED ✓
Implement marketing campaign	COMPLETED ✓
Provide conductors with Portable Ticket Devices	COMPLETED ✓
Construct and staff fare gates at Boston terminal stations	IN PROCESS





Revenue Share Agreement: Progress to Date

- Since July 2017 Keolis and MBTA have launched a series of initiatives to increase CR revenue:
 - Enhanced revenue collection – staffed ticket checks at three main stations
 - Improved on board sales – credit card sales now accepted
 - Increased marketing – particular focus on leisure and discretionary travel
- Commuter rail revenue was \$244.7M in FY 2018, a 3% increase over FY 2017
 - MBTA share: \$241.3M
 - Keolis share: \$3.4M





Commuter Rail Fare Gates: Estimated Potential Revenue

- MBTA used 2018 ridership counts and fare media assumptions to extrapolate potential revenue.
- Actual revenue collected in FY 2018 was \$244.7M.
- Comparing actual revenue to potential revenue reveals estimated \$10M-\$20M in lost revenue.
 - Estimated lost revenue represents 4%-8% of potential revenue
 - International industry standard is about 3% fare revenue “leakage” in even the most airtight, gated systems
- Around 90% of commuter rail journeys pass through the three hub stations so we expect fare gates will significantly reduce ticketless travel from the current level.
- Expectation is that the fare gates will recover some, but not all, of the estimated lost commuter rail revenue, because only the three Boston terminal stations will be gated.
- We expect additional revenue recovery with the implementation of AFC 2.0, when there will be tap-in/tap-out fare validators at all stations.



Implementation of Commuter Rail Fare Gates

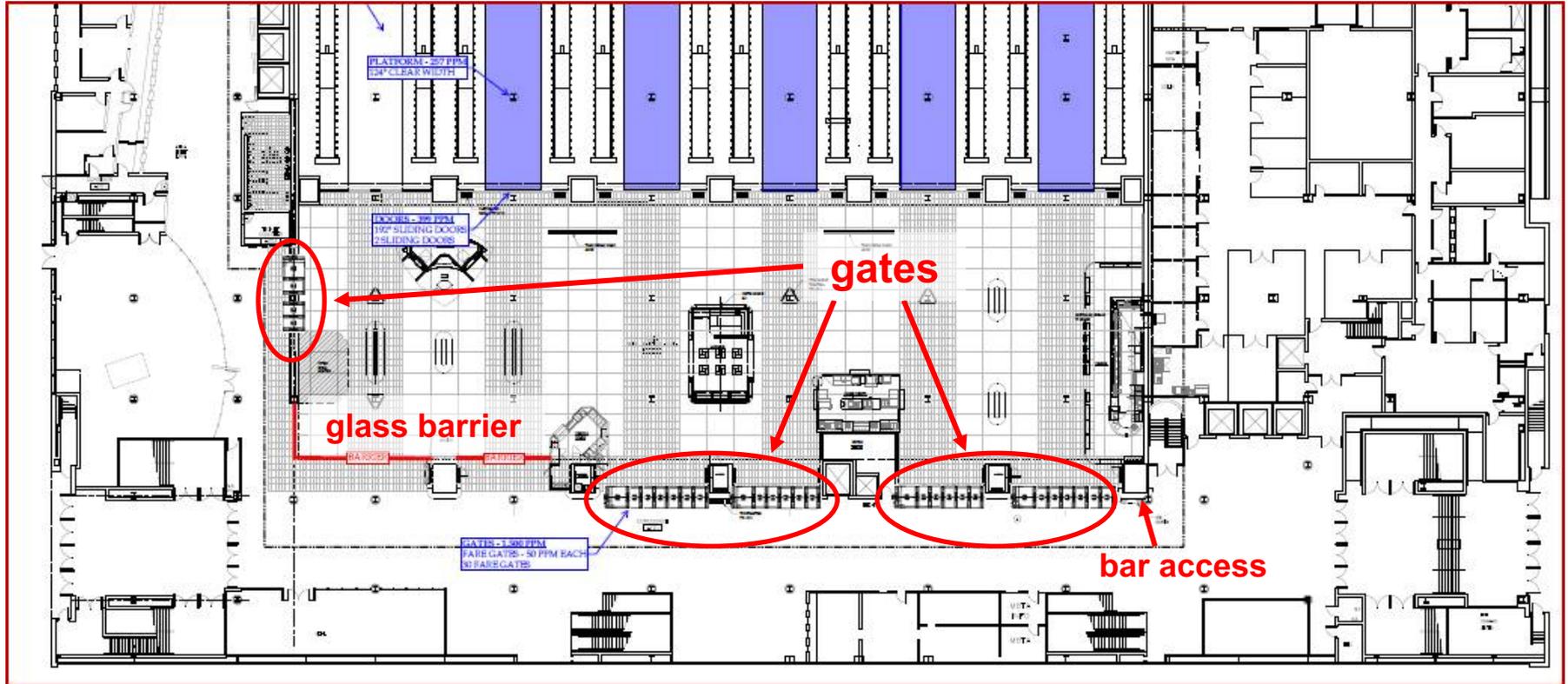
- Target to install gates during calendar year 2020
- Gate installation funded through the commuter rail revenue share agreement
- Fare gates will accept existing commuter rail fare media and most Amtrak tickets
- Keolis will staff gates to assist passengers with using the gates and purchasing tickets
- Passengers without tickets will be required to purchase a valid ticket
- Ticket checks by conductors and revenue staff will continue after the gates are installed
- The commuter rail gates will be transitioned to AFC 2.0 in future as part of the AFC 2.0 program



[Artistic rendering]



Planned Gate Configuration: North Station



Preliminary and subject to change



Pedestrian Flow Modeling and Analysis

- Keolis and MBTA reviewed multiple options for each station and used pedestrian flow analysis to identify best options for passenger experience
- Pedestrian flow models used a range of passenger loads with 3% year-on-year ridership growth assumed through 2022
- Keolis engaged specialist consultants to:
 - Ensure compliance with NFPA-130,
 - Review and analyze pedestrian flow modeling and gate array options,
- Gate options use industry standard assumptions and best practices from other networks (i.e. staffing gates whenever in use)



North Station – AM peak pedestrian flow model



Commuter Rail Fare Gates – Why the delay?

- ⦿ Coordination with other projects underway, including AFC 2.0 and the South Station Air Rights project
- ⦿ Review of relevant documents, such as leases, contracts, licenses, and side agreements, where there were potential conflicts or challenges that needed to be resolved
- ⦿ Understanding the technical issues associated with the fare gates available on the market and integration with the MBTA system
- ⦿ Reconciling procurement and construction timeframes with the timelines of AFC 2.0 and the Keolis contract



Note: Image for example purposes only – not a depiction of the actual gates



Commuter Rail Fare Gates – Progress and Next Steps

Where are we now?

- ◉ MBTA has reviewed proposed fare gate configurations and pedestrian flow simulations
- ◉ We have identified the minimum technical requirements that fare gate suppliers must meet
- ◉ Keolis is in discussions with suppliers about the procurement of fare gates
- ◉ MBTA legal and real estate departments working to amend leases and agreements at the three stations as necessary

What still needs to happen?

- ◉ Keolis to obtain permits and approvals, including from MA Department of Public Safety
- ◉ Keolis and MBTA to meet with property managers at the three stations and amend leases as necessary
- ◉ Keolis to procure fare gates that meet MBTA's requirements
- ◉ Keolis to install fare gates in calendar year 2020

Appendices





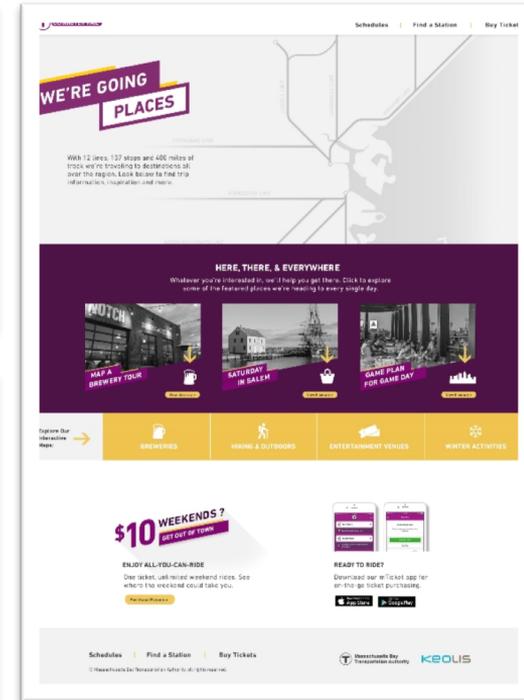
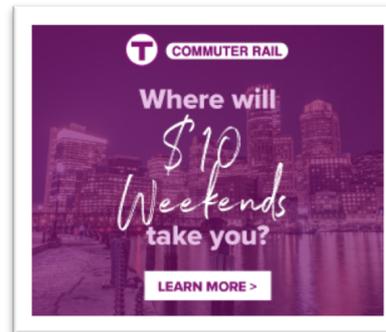
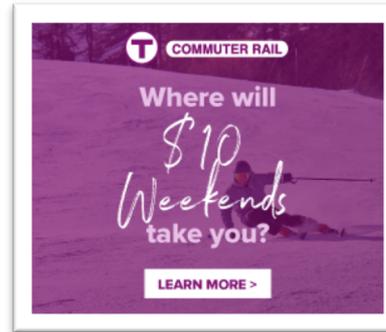
2018 Marketing Success

- Garnered over 70M Impressions with marketing activity in 2018
- App downloads increased by 12% over 2017
- Weekend app usage* up 43% over 2017 (exceeding weekday growth of 34%)
- 17% increase in weekend sales across all modes of payment**

*Active devices

**Weekend sales + \$10 weekend sales made on any day

Creative examples:





Revenue Share Structure

From	To	Share	Description
\$0	Revenue Baseline	100% MBTA	Baseline Revenue - Current Commuter Rail Revenue Stream
Revenue Baseline	\$7M	100% KCS	OPEX Repayment
\$7M	\$9M	100% KCS	CAPEX Repayment
\$9M	\$10M	100% MBTA	MBTA \$1M Return
\$10M	\$16M	50/50 MBTA/KCS	First Revenue Share Tier
\$16M	\$20M	40/60 MBTA/KCS	Second Revenue Share Tier
\$20M	\$30M	25/75 MBTA/KCS	Third Revenue Share Tier
	\$30M and above	50/50 MBTA/KCS	Fourth Revenue Share Tier