



AFC 2.0

Procurement Update

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Overview

Review the scope of the project

Identify specific requirements that address MBTA's goals and create these project benefits

- Improved rider experience
 - More ways to pay
 - More ways to top up
- Accessibility improvements
- No cash on board
- All door boarding

Procurement Update

- System integrator (SI) procurement underway
 - Technical evaluation in process
 - Financial evaluation to follow
- Award SI contract in late fall
- Early works agreement will allow specific work to begin before financial close
- Commercial and financial close deadline March 2018
- Design-Build Entity (DB) procurement on track to award 6-8 months after SI Financial Close
- Revenue service commencement 2020

Customer Suggestions

ON A RECENT SURVEY, THE MBTA ASKED FOR CUSTOMER SUGGESTIONS ON HOW TO IMPROVE FARE COLLECTION: 44% OF THE ALMOST 800 COMMENTS WILL BE ADDRESSED DIRECTLY BY AFC 2.0.

“Make a single integrated way to pay for commuter rail, ferry, AND subway/bus.”

“Make it easier to reload online...**Imagine how easy it would be if there was an app to add money to your Charlie Card.**”

“Adopt proof of payment system for commuter rail and light rail systems. It would speed boarding.”

“I'd prefer not to have to pick up a new pass every month.”

“Start allowing users to pay via smartphone tap.”

“...make everyone use a Charlie Card rather than tickets or cash. When people get on without a card they either are let on free as it will take too long to put the money in the machine and they don't have correct change or they act like they don't understand what the driver is saying or they haven't enough on their fare ticket and the drivers let them on.”

“Updating cards on buses is time-consuming and non-intuitive. Riders should be able to pay using a credit/debit card.”

“No one seems to know how to get a plastic Charlie Card...**How about a vending machine that can provide the plastic card?**”

Technical Evaluation Topics

General Understanding and Approach

Team Organization and Qualifications

Accessibility and Language

- ✓ Improvements to gates, FVMs, website and app functionality, and call center

Management, Maintenance, and Reporting

Revenue Collection and Remittance

Implementation, Expansion, DB Oversight, and Testing

DB Plans and Specifications

Privacy

Application Programming Interfaces (APIs)

Devices, Readers

Fare Card and Order Fulfillment

System Capabilities and Information Security

Quantity Standards and Retail

- ✓ More ways to pay, purchase and reload
- ✓ Machines in more locations (including bus stops)
- ✓ Easier for users to manage their accounts
- ✓ Ensure equal access for all

Accessible Device Design

ALL CUSTOMER-FACING SYSTEM ELEMENTS MUST PROVIDE EQUAL ACCESS FOR PEOPLE WITH DISABILITIES.

System must comply with all applicable accessibility laws

- These laws govern system design, device design, and device placement
- Retail locations must meet key accessibility criteria
- Website and mobile app must meet guidelines for digital accessibility
- Language support
 - Wherever possible, devices will convey information through non-verbal means
 - Translations for customer interfaces must be available in languages spoken by more than 1% of the MBTA service area

Example: Gate accessibility improvements

- If the SI chooses to replace the gates, standard gates must be widened, and additional ADA gates will be installed where possible.
- The SI will provide an informational report describing a concept for a gate that can be operated without requiring user to physically present media for validation.

Accessibility is a key aspect of AFC 2.0 design, developed through extensive user testing.

Before You Ride

THE SI IS RESPONSIBLE FOR PROVIDING A SUFFICIENT NUMBER OF DEVICES AND POINT OF SALE (POS) LOCATIONS TO MEET THE NEEDS OF ALL USERS, AS WELL AS ONLINE AND PHONE OPTIONS.

Points of Sale

- Full-service fare vending machines (FVMs) are required to dispense standard fare cards; all physical points of sale (POS), which include retail locations, full-service FVMs, and limited functionality FVMs.
- The SI is responsible for meeting a “coverage principle” so that a physical point of sale is within a close walking distance of most users.
 - 95% of trips will be within 1,000 feet of a location that accepts cash at one end or the other of the trip, and
 - 98% must be within 2,000 feet at one end or the other.
- The proposals must include a description of a method of conveying information about the nearest POS for users with and without a smart phone

Online Top Up

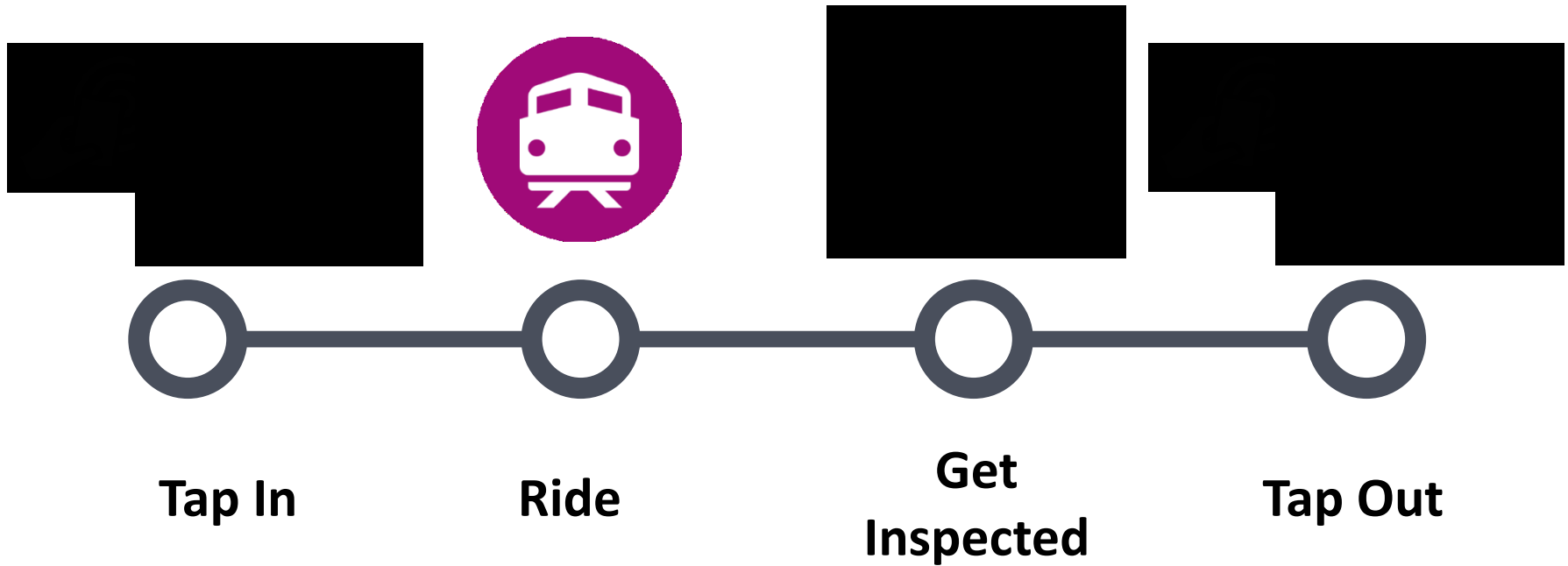
- The systems integrator (SI) will deliver an easy to use website and mobile app with account administration capability, including top up
- Website and mobile app must meet reqs for digital accessibility

Call Center Software

- The SI will deliver updated call center software that will meet accessibility and language requirements and make top up via phone easier.

Removing cash from buses is paired with an expansion of reload options to improve access for the unbanked or underbanked.

Sample Trip: Commuter Rail



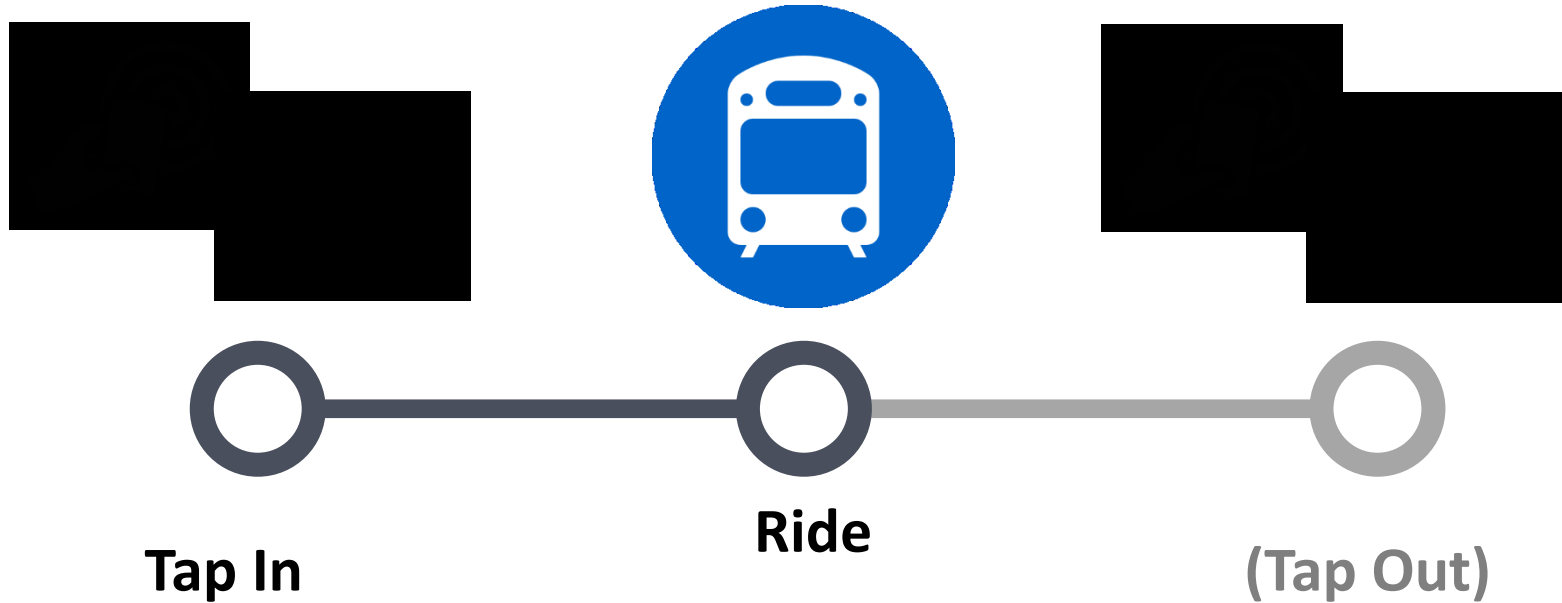
Fare card
NFC phone
(or wearable)
Contactless
credit card

FVMs will be
located within
the station or
within close
walking distance
for cash top up.

Station validators will be installed at all Commuter Rail stations to support tap in and tap out.

FVMs must be located at all Zone 1A stations and a point of sale (FVM or retail) must be located at stations that account for 50% of weekday inbound boardings.

Sample Trip: Subway



Fare card
NFC phone
(or wearable)
Contactless
credit card

FVMs will be
located within
the station for
cash top up.

This option will be
supported by the AFC
2.0 system.

Sample Trip: Bus or Green Line



Board Through the Rear Door

There are also requirements for POS to be located near the highest ridership stop of every bus route, every bus rapid transit stop, and most green line stops.

Tap In

Fare card
NFC phone (or wearable)
Contactless credit card

Cash is not accepted on board, but a point of sale is req. within close walking distance of most trips.

Ride

Points of sale (POS), which include FVMs and retail locations, will accept cash, and will be located within close walking distance of either end of most Green Line and bus trips:

- 95% of trips will be within 1,000 feet of a location that accepts cash, and
- 98% will be within 2,000 feet

Support Fare Policy: Current and Future

THE SYSTEM MUST SUPPORT ALL FARES UNDER THE MBTA'S CURRENT FARE POLICY AND ENABLE FUTURE CHANGES TO FARE POLICY BASED ON TRANSIT INDUSTRY BEST PRACTICES.

Support and improve current fare policy

- Support the MBTA's current fare policy
- Allow integration with other transit providers, including Transit Management Associations, Transportation Network Companies, and Regional Transit Authorities
- Improve on the way current fare policy is implemented
 - All media options will be supported by all devices, on all modes of transport, and for all fare products
 - System functionality to make it easier to manage reduced fare entitlements

Enable future changes to fare structures

- As MBTA fare policy changes in the future, the system integrator (SI) must reconfigure the system to support:
 - Best value: Charge for pass when equivalent number of single trips is reached
 - Fare partnerships: Joint fares for multiple agencies
 - Tap out: Supported by reader installation at exit points
 - Discounts

AFC 2.0 will improve the implementation of current fare policy and support future change, such as regional integration.

Customer Suggestions II

ON A RECENT SURVEY, THE MBTA ASKED FOR CUSTOMER SUGGESTIONS ON HOW TO IMPROVE FARE COLLECTION: 44% OF THE ALMOST 800 COMMENTS WILL BE ADDRESSED DIRECTLY BY AFC 2.0.

“I would love to be able to use my phone instead of a separate object.”

“Stop allowing riders to pay with cash on board at stations where you can purchase a Charlie Ticket/Card”

“An easier way to check the balance of the cash stored on the card would be helpful.”

“Add more places to get MBTA passes.”

“You should be able to add money to your Charlie Card online.”

“PUT NEW FARE BOXES ON THE BUSES!!!! THE CURRENT SYSTEM TAKES TOO MUCH TIME FOR PEOPLE WHO ARE PAYING CASH!!”

“...why not have monthly pass media be renewable? This appeals to the environmentalists.”

“Make passes from the machine more durable.”