AFC 2.0
Update to the
Fiscal & Management Control Board

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Today's AFC 2.0 Update

- New project website
- Device prototypes in test lab
- User Testing
- New Team Members
- Plans for supporting cash payments
- Policy Outreach Updates

New project website

Visit www.mbta.com/AFC2 to learn more about the project, including:

- How does the contract with Cubic work?

- What are the benefits of AFC 2.0?

- How is the MBTA addressing public concerns about the changes?

- How can I get involved?

Device prototypes in test lab

- Test lab is set up

- Includes early prototypes for each type of device

- Demonstrations of hardware and software for MBTA

- Hands on review of designs

MBTA Lab in Boston
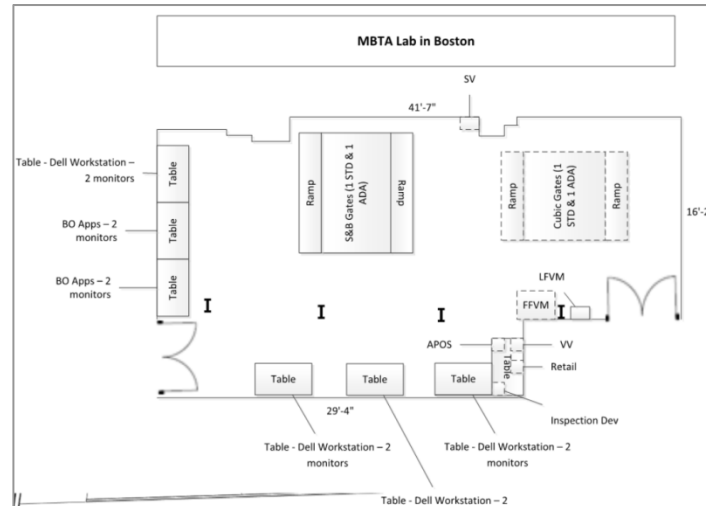
User testing

Why?

Make sure that the system we're designing and building works for the people who need to use it.

Who?

- Testing with people representative of real users.
- Customers who are diverse:
  - racial,
  - geographic,
  - socio-economic,
  - education,
  - age,
  - language, and
  - ability.
- Staff who will need to use the system in their roles.
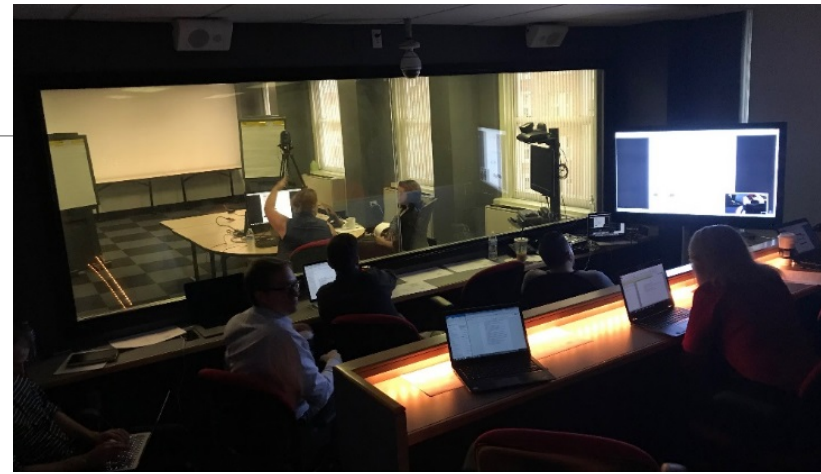
What?

- Prototypes of the hardware and the software.
- Tasks that resemble real life scenarios.
- Real people performing the tasks.
- Researchers, Cubic designers and engineers and MBTA staff observing.
- Taking note of things they struggle with.

When?

- Before we build
- So that we can modify the design to be responsive to user feedback

New Team Members

Heather Hume joins the team this week as Director of Transition. Heather has been with the MBTA for 8 years overseeing major initiatives such as the Better Bus Project and Workforce Modernization. In coordination with the Project Team, Heather will:

- Execute full customer transition from AFC 1.0 to AFC 2.0

- Work closely with Customer Experience to develop and implement external/internal project communication plans for awareness and engagement

- Develop and implement employee training programs

- Develop organizational transformation plans for all internal processes

- Facilitate pilot participation

Mike McGinn joined the team as the Manager of Fare Inspection Design
- Mike spent the last ten years working for City Year building partnerships with dozens of Boston Public Schools to help improve attendance, literacy, and math proficiency rates.
- He joins the AFC 2.0 team to design a fare inspection process that is equitable, fair, and efficient.

Christina Marin serves as finance manager for AFC 2.0. As Deputy Director of Treasury Services and P3 Finance, her role straddles the MBTA finance department and the AFC project office.
- Christina spent the last four years evaluating state and local governments' creditworthiness as an analyst for S&P Global.
- Prior to that, she's worked as a journalist, consultant, and nonprofit director.

How we will ensure access for cash users

Overview of AFC 2.0 Point of Sale Strategy

What we're hearing

- The public wants the operational benefits achieved through all-door boarding and the removal of cash onboard.

- However, there is significant concern about the potential impact of the removal of cash payments onboard on low-income and transit dependent customers.

Goal: Make buses and trolleys faster and more dependable while increasing access and not disadvantaging cash users.
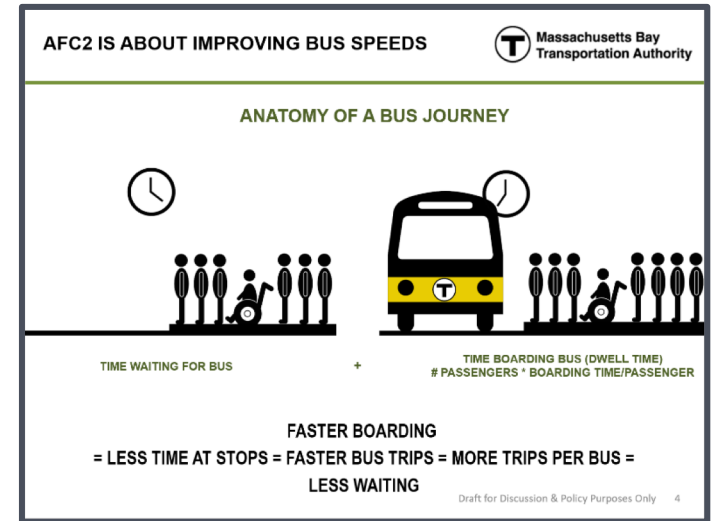
Excerpt from June 27, 2016 AFC2 Update to FMCB

Ways to add value to accounts in AFC 2.0

New ways to pay will decrease number of users needing physical points of sale:

- Website
- Mobile app
- Interactive Voice Response
- Call center agent
- Increased options for employer or school

Point of Sale Network*

	Station FVM	Bus Stop FVM	Retail	Agency Partners	Call Center	Smartphone	Online
	$ C	$ C	$ C	$ C	C	C	C
What method best serves each community?							

All of the Points of Sale will take cash

$ Cash accepted

C Credit/debit accepted

How we're locating Points of Sale

POINTS OF SALE INCLUDES FARE VENDING MACHINES AND RETAIL

Cubic

1. Quantity Standards

Where are most people going / coming from?

Input: Ridership data using OD modeling data

MBTA

2. Public Input

Where do people want to buy cards and add money?

Input: Feedback from communities most impacted and municipal representatives

MBTA

3. Data Analysis

Where are the people who need points of sale the most?

Input: Senior / TAP usage, cash usage, low-income neighborhoods

Point-of-Sale (POS) Network

Formal **Title VI** equity analysis

Annual Re-Evaluation
(required in Cubic contract and MBTA creating proposed process for public input)

1. Quantity Standards for Points of Sale

THE QUANTITY STANDARDS ARE WHAT CUBIC IS CONTRACTUALLY REQUIRED TO PROVIDE REGARDING POINTS OF SALE (RETAIL OR FARE VENDING MACHINE). THERE ARE TWO PARTS: REQUIRED LOCATIONS + GENERAL RIDERSHIP COVERAGE.

FVM Required Locations

- **Start by installing fare vending machines everywhere AFC 1.0 machines are currently**

- **Install at select additional CR stations** (All Zone 1A stations + Highest inbound ridership)

- **Add select Surface Light Rail** (Green Line, Mattapan trolley)

- **Add Silver Line stops** (Every stop on SL1, SL4, SL5)

- **Add high ridership bus stops**

- **86 current locations → 178 required locations (106% increase)**

Ridership Requirements (FVM or Retail)

- Cover **95%** of trips in the system within **1000 feet**

- Cover **98%** of trips in the system within **2000 feet**

Required locations before ridership analysis

Legend:
- ● Current FVM
- ● AFC 2.0: FVM required

0   0.5   1   2   Miles
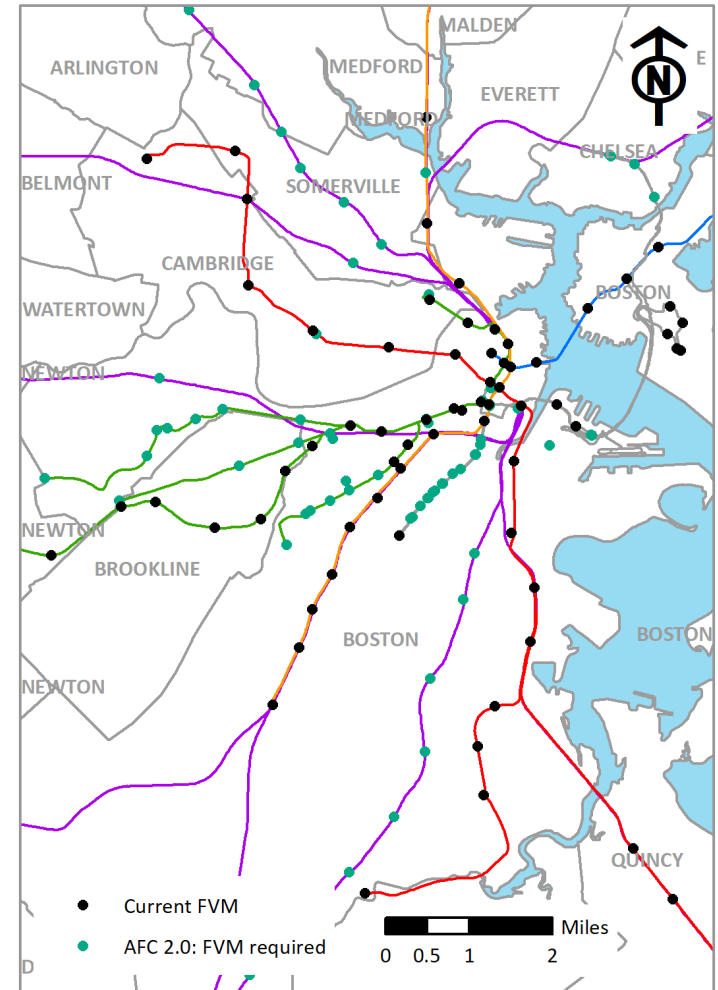
2. Public Input

- Focus groups with community organizations and riders
  - Focused on seniors, persons with disabilities, cash users, low-income, limited English speakers, and youth

- Online Tool for Public Input on AFC 2.0 Points of Sale
  - www.mbta.com/afc2-locations

- Meetings with municipal officials and elected representatives
  - Senior Centers/Elder Services/Councils on Aging
  - School Committees
  - Planning/Zoning
  - Housing
  - Youth Commissions
  - Health & Human Services
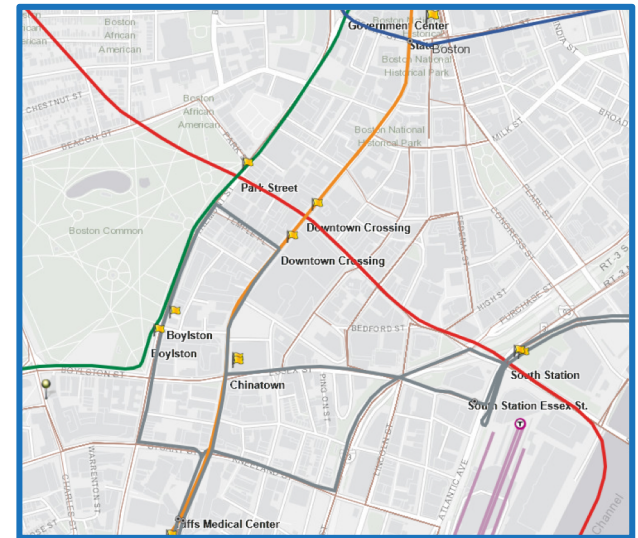
Tool for Public Input on AFC 2.0 Point of Sale

3. Data Analysis

Data Analysis

Using data on current usage of:

- cash onboard

- Senior Pass, T.A.P. cards, students

- bus/surface Green Line only riders

- late night/early trips

- Census data (e.g., low-income communities)

This analysis will help us find and prioritize high need locations.

Cash boardings at bus, Green Line, & trolley fareboxes

Cash Farebox Boardings

- 0 - 1366
- 1366 - 5081
- 5081 - 13570
- 13570 - 50579
- 50579 - 163167
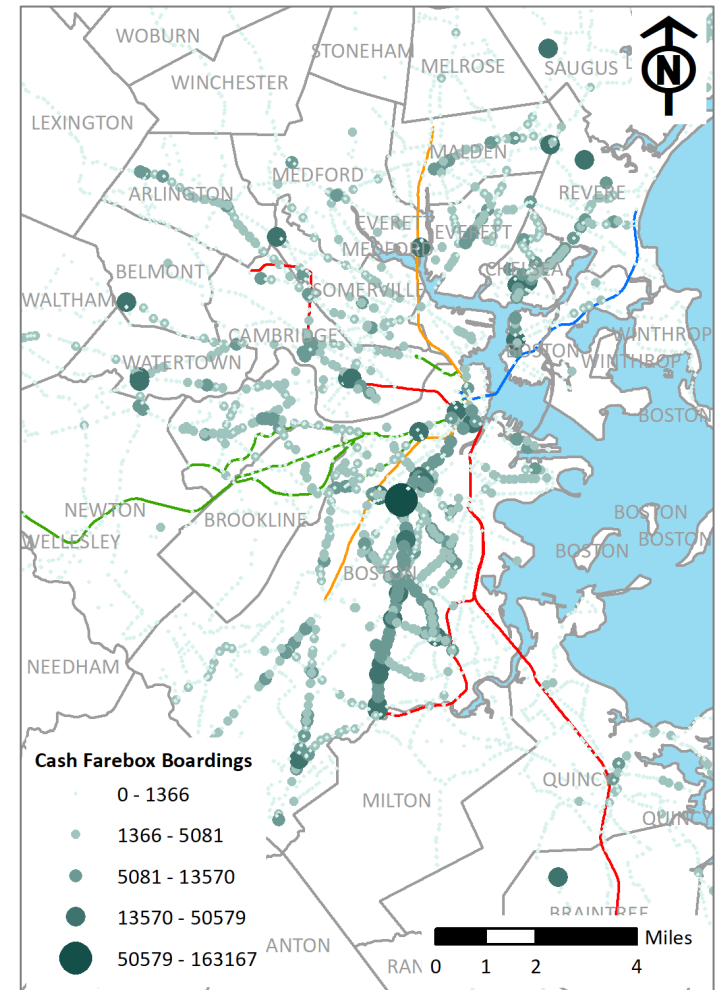
How does this all come together?

- The data analysis will be compared to Cubic's proposal for locations to identify potential holes based on where we expect riders will need points of sale the most.

- We will use this and the public input to prioritize any additional FVMs in the reserve allocation in the contract.

- We will conduct a Title VI equity analysis of proposed network to ensure equity of access.

- We are developing a process for annual reevaluation and public input.

Status of Physical POS Network Planning

	Type of POS	Responsible	Status
Required Locations	FVMs	Cubic	**Complete**
Ridership Coverage	Retail + FVMs	Cubic	**In Progress**
Supplemental Locations	FVMs	MBTA	**In Progress**

2019 Policy Outreach Plan

THE OUTREACH ACTIVITIES AND EVENTS LISTED WILL INFORM THE DEVELOPMENT OF POLICY DELIVERABLES

Policy Focus Areas

- **Privacy Policy**
  - Deliverables: Principles for data privacy, revised privacy policy
    Outreach: late Spring 2019

- **Access to Fare Cards and Sales Locations**
  - Deliverables: Point-of-sale network map, plan for reevaluating the POS network, program plan for distributing fare cards without a cost
    Outreach: ongoing

- **Fare Inspections**
  - Deliverables: Principles for fare inspections, fines and adjudication process
    Outreach: Kickoff in April 2019

- **Fare Structures and Products**
  - Deliverables: Initial tariff, future possible fare structures
    Outreach: Initial tariff in April 2019

Planned Outreach Activities and Events

- Project Website

- Fare Inspection Event

- Focus Groups

- Municipal Working Sessions

- Partner Organization Workshops

- Subject Matter Workshops

- Community Meetings/Events

- Policy Development Working Group

- Public Advisory Meeting

- FMCB Briefings

Upcoming Events

- **Joint Community Meetings (February – March)**
  - Alongside the Better Bus Project and Fare Proposal

- **Municipal Working Sessions (February – March)**

- **Public Advisory Meeting (March)**

- **Policy Development Working Group Meeting (March)**

- **Kickoff Event for Fare Inspection Outreach (April)**– The objectives for the event include:
  - Partnering with community organizations, elected officials and other transit agencies to identify the key issues
  - Developing a framework for the principles of MBTA fare inspections
 - Gathering input on further outreach strategies

Ongoing community meetings and focus groups

AFC 2.0 Outreach Evaluation Metrics

The AFC 2.0 Policy Outreach initiative will be evaluated on the following metrics:

- **Geographic** - Are we visiting a variety of locations that encompass the full service area?

- **Modal** – Are we engaging customers who ride all modes of transit?

- **Population** – Are we identifying and engaging populations who may be impacted by changes in the system, including seniors, people with disabilities, cash users, low-income users, limited English speakers, and youth?

Feedback is recorded and tracked to determine how we can address it now or in the future.
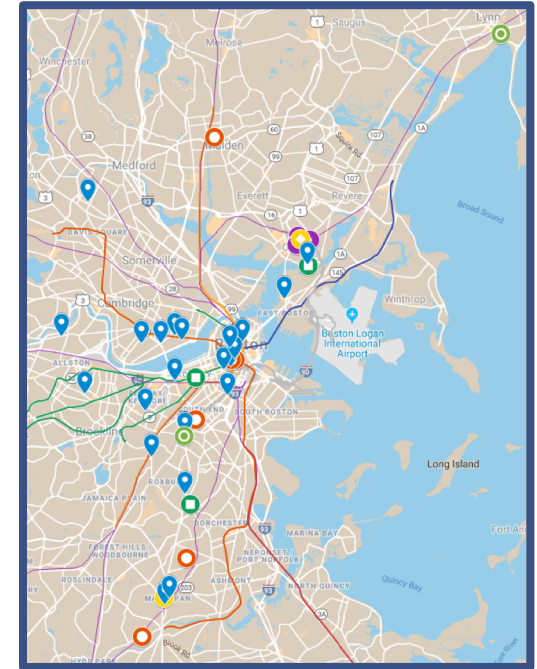
Outreach Locations Attended or Planned as of February 1, 2019

Upcoming presentations

Upcoming updates to the FMCB will include:

- AFC 2.0 on Commuter Rail

- Tariff changes for initial rollout

- Fare modeling and future potential fare structures

- Outreach strategy for fare inspections

- Update on point of sale network

- Privacy policy revision

Appendix

User testing: Lessons learned to date

WE HAVE ALREADY MADE CHANGES TO THE SYSTEM DESIGN BASED ON EARLY USER TESTING SESSIONS. FOR EXAMPLE:

What we learned	What we changed
The original payment card reader was impossible for users with limited manual dexterity to use	Replaced component with a new, user-friendly payment card reader
The design of ticket return tray made it hard to reach and grab the card and receipt	Raised height of tray, adjusted spring on door so that it opens wider
Users expect a screen to be a touch screen	All fare vending machines will have touch screens to make selections
Corporate customers need to be able to map the data in our system (who they buy passes for) to the data in their systems (such as payroll)	Added a field to allow employee IDs to be tracked
Website registration process was confusing	Modified registration screens to make it clearer that users can login with existing social accounts or create a new Charlie account
The reader on the transition gate was hard to reach for seated users	Moved the reader on the accessible transition gate to a lower position

Things we are looking to explore further

UPCOMING USER TESTING SESSIONS WILL FOCUS ON EXPLORING THE FOLLOWING ISSUES:

- Do customers understand how to tap their mobile app when boarding?
- Is the flow for conducting fare inspections and issuing citations fast enough for real world scenarios?
- Is it easy to reach all the different parts of the fare vending machine (following changes to their positioning during the design process)?
- Do the fare vending machine screens make it easy for users to quickly make product selections?
- Is it easy to reload the mobile app using cash at fare vending machines and retail?
- Do retailers understand how to sell all of our different fare products?
- Are the vehicle validators bright enough (following changes to dim them to reduce the power draw)?