“Screens” briefing

Presentation to the Cambridge TAC

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Motivating questions*

- How does the MBTA decide what information to put on newer, more flexible types of screens?
- Are there new *types* of screens being developed for bus riders?
- Are E-Ink screens coming to more bus stops?

** posed by the City of Cambridge*

Motivating questions*

- How does the MBTA decide what information to put on newer, more flexible types of screens? **research**
- Are there new *types* of screens being developed for bus riders? **yes**
- Are E-Ink screens coming to more bus stops? **a few**

** posed by the City of Cambridge*

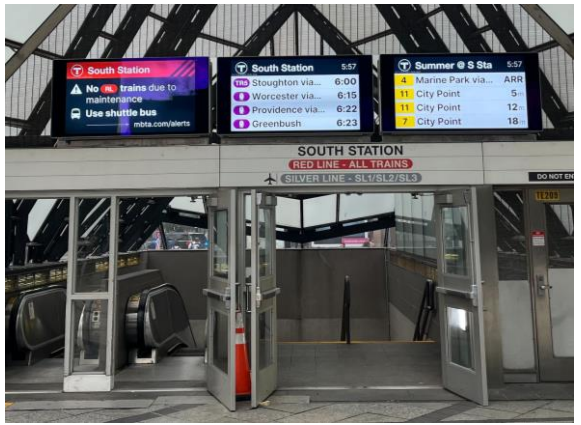
Screens

Supporting MBTA riders' real-time information needs at bus stops & rapid-transit stations.

700+ installed

400+ in-progress

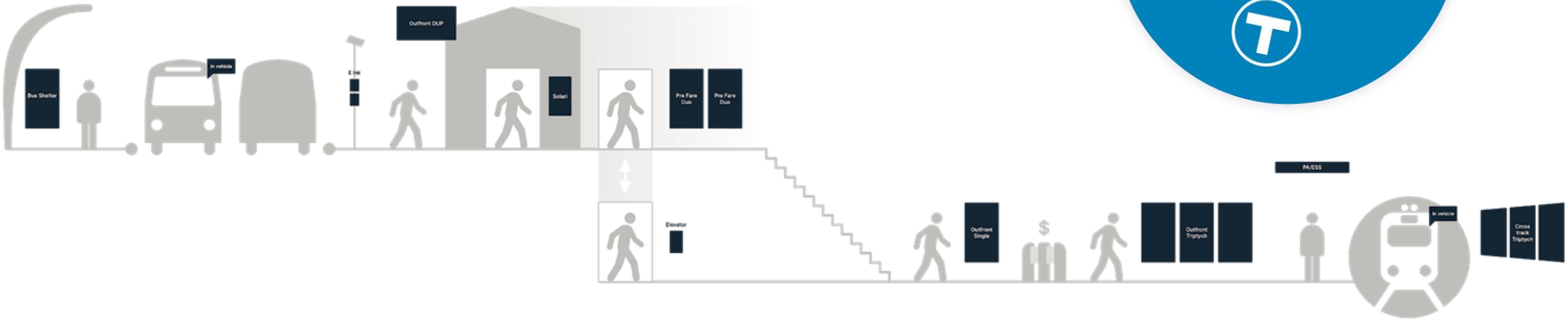
1 source of data



Our goal

Riders and the MBTA share this goal

Quality information in the right place, at the right time.



Addressing rider needs

Qualitative research to understand needs & iterate through concepts

Partnership with MBTA Operations to continually increase transit data quality & timeliness

Accessibility-first design to serve riders equitably

Our own, evolving principles

- separate real-time & advertising/PR
- “rider journey”-based design
- no dot-matrix LED screens
- two-way audio/visual-equivalence

The “rider journey”

Accessing the stop → Waiting at the stop → On the bus

Accessing the station → Entering the station → Waiting on the platform → On the train

Screens & the Bus Rider Journey

Countdown Clocks

Legacy LED screens in ~10 major busways

Rider Journey

Accessing the stop → Waiting at the stop → On the bus

Information

Bus departures

Status

Modernization effort underway; goals are to increase reliability, upgrade the screens, & fill gaps in availability.

E-Ink

Solar-powered electronic ink (E-Ink) displays

Rider Journey

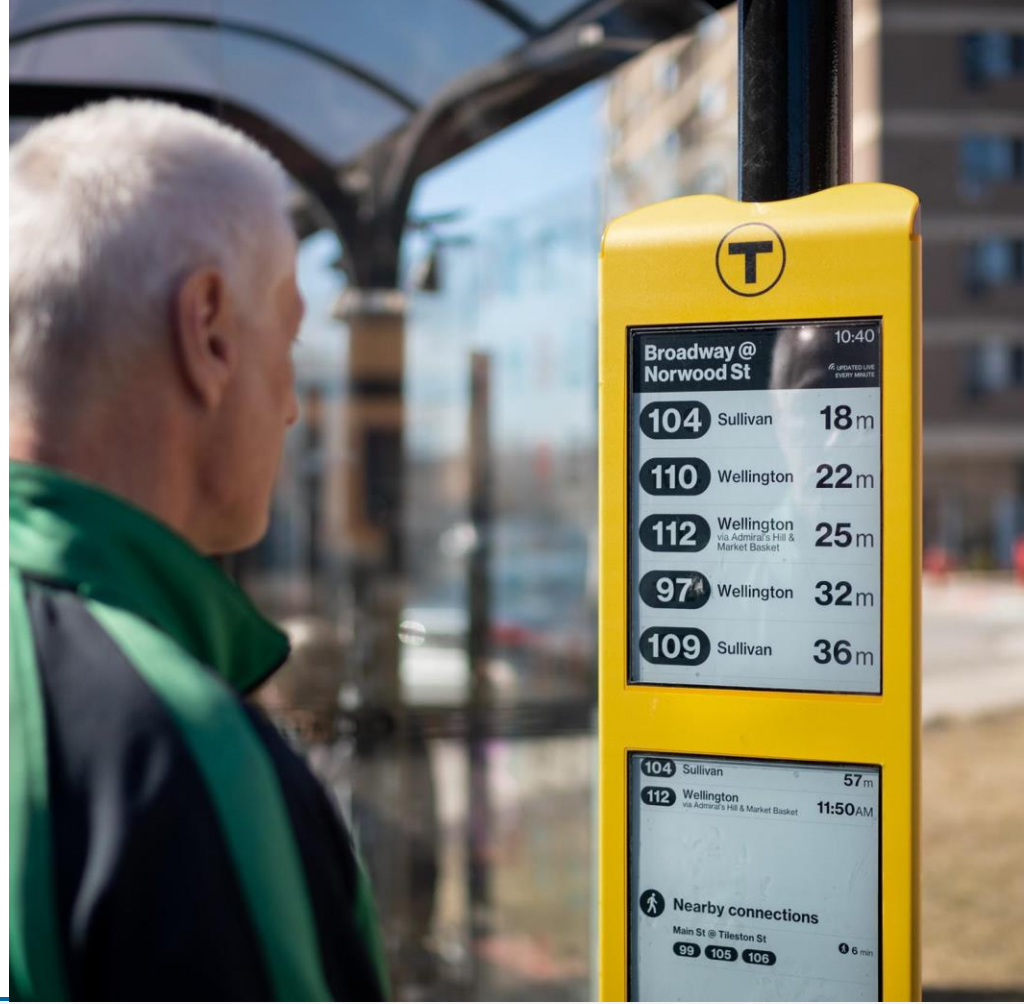
Accessing the stop → **Waiting at the stop** → On the bus

Information

Bus arrivals & major service alerts

Status

34 screens installed, ~50 additional funded through “Street Furniture” program; no funded expansion plans beyond that



Bus E-Ink Anatomy

Major disruptions that result in no service at this stop take over the screen

Time-ordered arrivals are the primary formation

“Flex zone” includes secondary & tertiary information like subway service status, low-priority alerts, & PSAs

Bus Shelters

LCD screens in upgraded bus shelters

Rider Journey

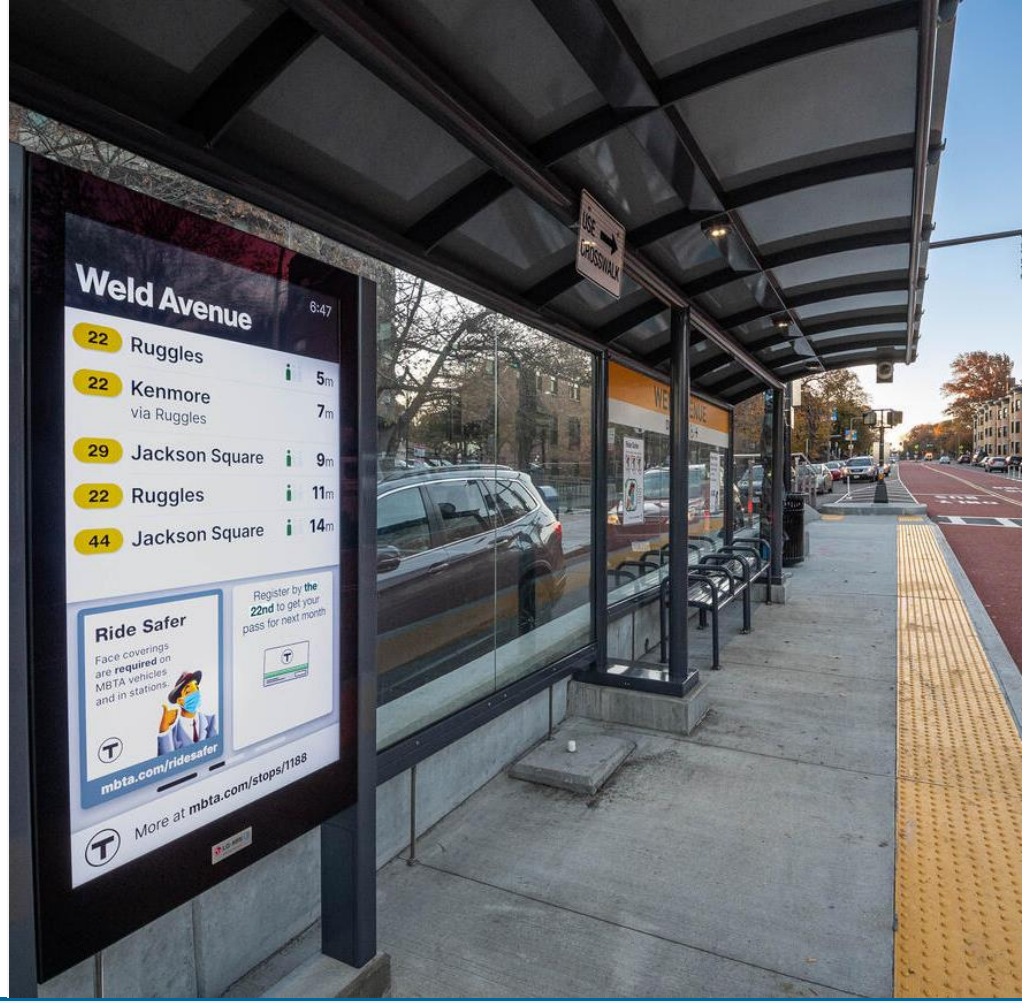
Accessing the stop | **Waiting at the stop** | On the bus

Information

Bus arrivals, major service alerts, & PSAs

Status

Eight screens installed; will likely be added to all future center-running bus lane projects; some opportunistic additions, too



Cust. Info Displays

Floor-mounted LCD screens in waiting areas of major busways

Rider Journey

Accessing the stop → **Waiting at the stop** → On the bus

Information

Multi-modal departures & bus-related maps

Status

12 legacy screens being rolled into new, “Customer Information Display” program at major busways

Not a Screen

Static sign at bus stops to direct riders to official real-time info

Rider Journey

Accessing the stop → **Waiting at the stop** → On the bus

Information

Where/how to get real-time info

Status

First pilot in planning stages

Passenger Info

Real-time enabled LCD screens on future bus fleets

Rider Journey

Accessing the stop → Waiting at the stop → **On the bus**

Information

Live route map, ETAs, & major disruptions

Status

First pilot in planning stages

Sample image from Hamburg, Germany

Screens & the Subway Rider Journey

DUPs

Overhead-mounted LCD screens for advertising & real-time info

Rider Journey

Accessing the station → Entering the station → Waiting on the platform → On the train

Information

Train arrivals & major disruptions only

Status

54 screens at 13 stations to date; 26 more screens at 4 more stations in progress; real-time info gets 25% ”share of voice” & all unsold space

Elevator Screens

LCD screens dedicated to real-time elevator status information

Rider Journey

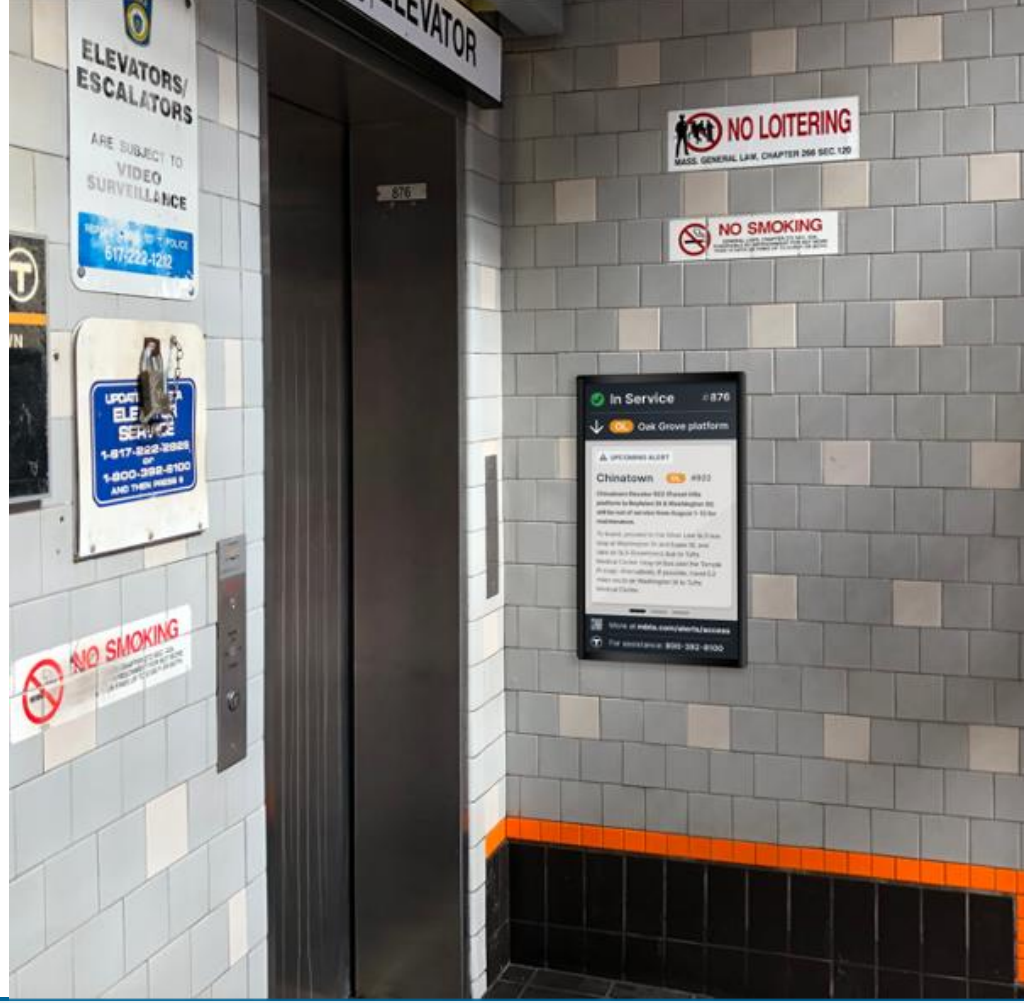
Accessing the station → Entering the station → Waiting on the platform → On the train

Information

Elevator outages that affect trips from here

Status

First pilot in planning stages



Cust. Info Displays

Floor-mounted LCD screens in lobbies dedicated to real-time info

Rider Journey

Accessing the station → **Entering the station** → Waiting on the platform → On the train

Information

Disruptions that could affect a trip from here

Status

Installed at 10 stations; funded plan for expansion to all heavy-rail stations

Countdown Clocks

Legacy LED screens at ~95 stations & stops

Rider Journey

Accessing the station → Entering the station → Waiting on the platform → On the train

Information

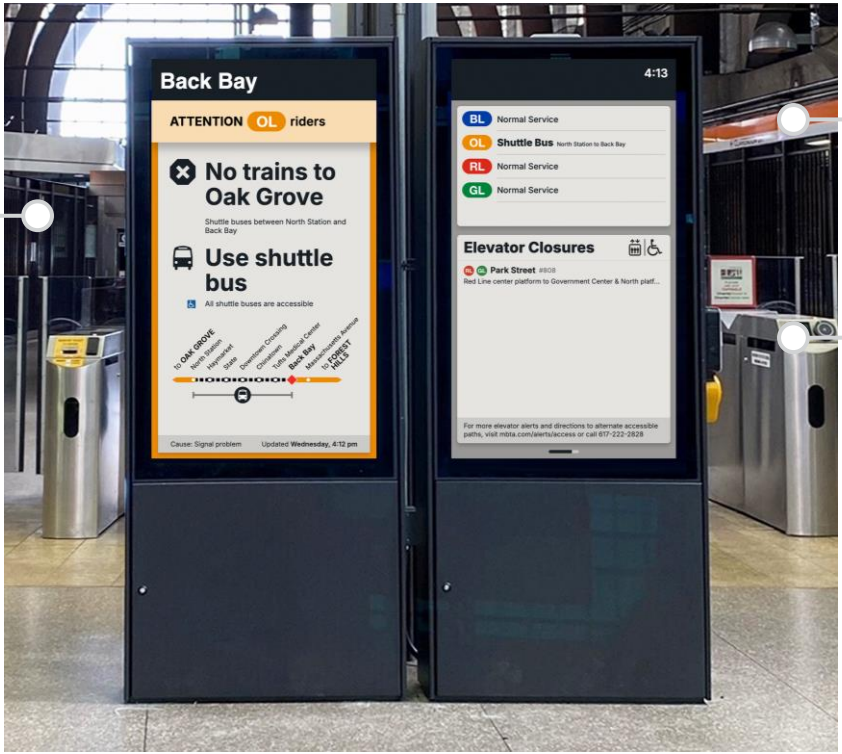
Train arrivals, disruptions, & ad-hoc messages

Status

Modernization effort underway; goals are to increase reliability, upgrade the screens, & fill gaps in availability.

Subway CID Anatomy

Major disruptions on the current line



Summary of service status on all subway lines

Real-time list of elevator outages system-wide

E-Ink

Solar-powered electronic ink (E-Ink) displays

Rider Journey

Accessing the station → Entering the station → **Waiting on the platform** → On the train

Information

Train arrivals, major service alerts, & PSAs

Status

29 screens installed; ~65 scheduled for installation in CY24

Passenger Info

Real-time enabled passenger info on future subway fleets

Rider Journey

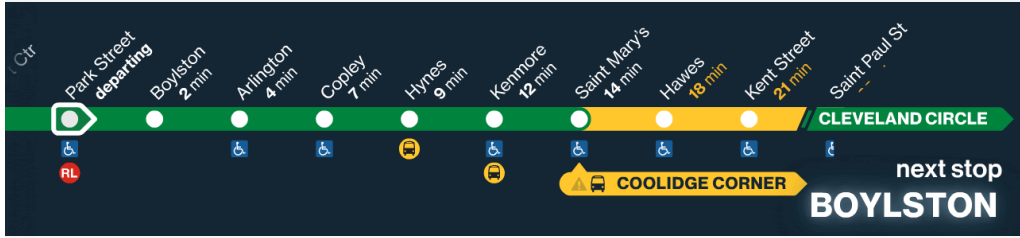
Accessing the station → Entering the station → Waiting on the platform → On the train

Information

Service disruptions, elevator outages, & more

Status

Early-stage planning only



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9m
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Thank you