

Accessibili-T

**Making Boston's Public Transit
Easier on Those with Disabilities**

Kit TeSelle, CAS '23

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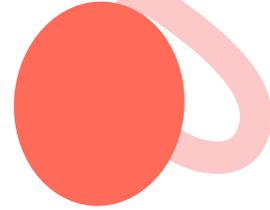
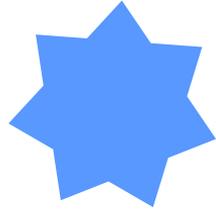
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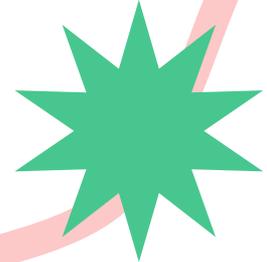
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Feedback & What's Next

01



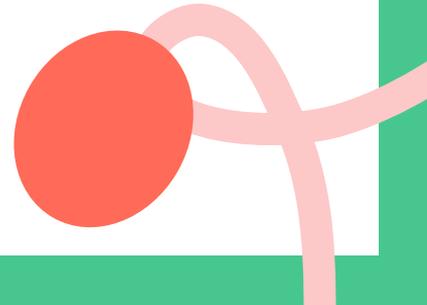
**The project
in a nutshell**



MBTA's current accessibility info available online

- * Trip Planner
- * Public transportation trainings
- * "How-to" videos

**All of which require extensive preparation,
all just to ride the bus or train!**



You *cannot* use these resources to

01

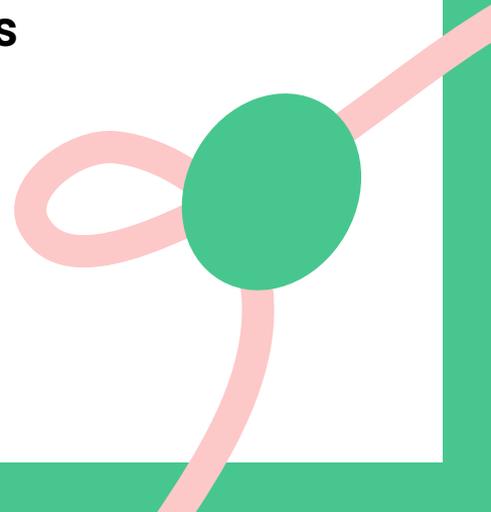
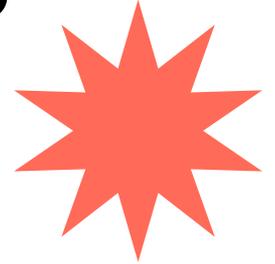
Check station statuses on a whim

02

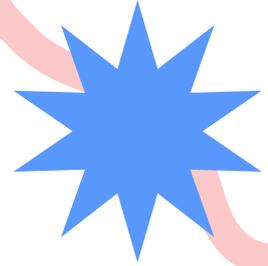
Get real-time updates about your local stops

03

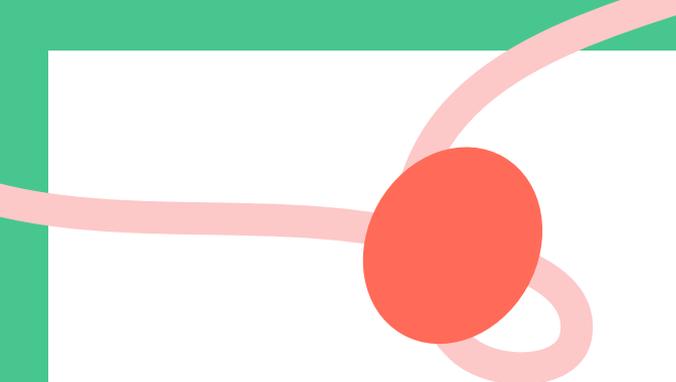
See arrival times in the same place as
accessibility resources



The aim of Accessibili-T



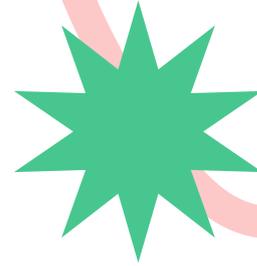
- ✳ Keep useful resources in one easily reachable place
- ✳ Receive feedback from riders that may be facing accessibility issues on their commute
- ✳ Assist out of town visitors in navigating stations and seamlessly utilizing Boston's public transit system
- ✳ One-step reporting that can be done right from a user's mobile device
- ✳ Promote quicker resolution of issues by the MBTA



02

**Why is a new app
necessary?**

People want to be in-the-loop



Sarah Jo @sarahjosmith · Mar 28



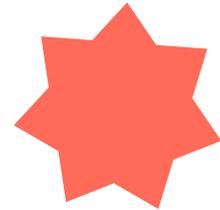
@MBTA how is it not an ADA violation to have both the escalator AND elevator out of service at Kendall?



BradyBeagle @BradyBeagle · Mar 29



@mbta day 2. NO elevator, NO escalator at Kendall outbound side. NO announcement, NO help from MBTA staff. Clearly ongoing, yet no alert on the website. 🙄🙄🙄. Well done MBTA. Well done





Michael Moxley @BostonMoxley · Feb 1, 2022

Annual shout out to the @MBTA for their abandoned and vandalized benches which I have to shovel around because they don't. #jamaicaplain



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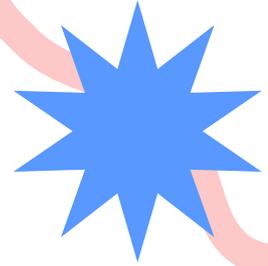
LM @literallily · Mar 20

This is ridiculous @MBTA 20+ minute waits at Oak Grove and not a single indoor seat at this brand new station. Pathetic.



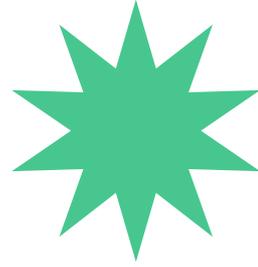
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Disability is a spectrum

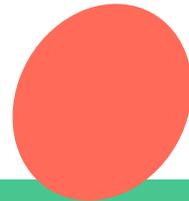


- * Most of MBTA's accessibility efforts are geared towards those with wheelchairs or other mobility issues
- * Even then, many stops do not have benches, escalators, or stair railings
- * People with non-mobility-related disabilities (blind, HOH, elderly individuals) may have trouble determining if a stop is accessible to them

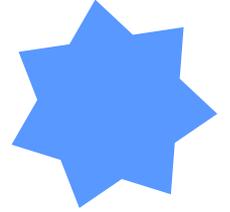
03



**What are the features
of the app?**



Primary Features



Self-reporting

Station features

Bus stop grading system

Customizable routes

Station maps

Self-Reporting on Accessibili-T

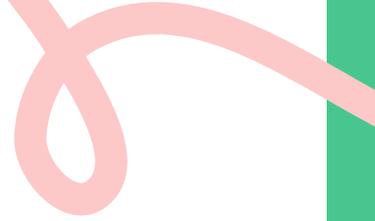
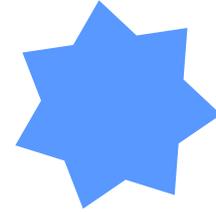


- * Broken amenities (benches, auditory/visual signaling, elevators)
- * Unplowed snow (bus stops)
- * Slippery floors/stairs
- * Noise levels (both speakers AND crowd noise)
- * Users may contact 311 or MBTA Maintenance Control Center (MCC) with a form embedded in the app itself

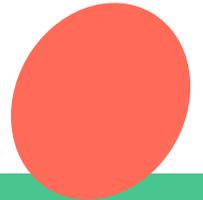
Station features

- * Users may choose which amenities they are interested in seeing for all stops (i.e. a user with hearing impairment may want to know which stops have visual signalling)
- * Users may see self-reported updates (i.e. "14 hours ago: broken elevator reported by Accessibili-T user")
- * Reports non-accessibility-related amenities such as shelter coverings and trash cans

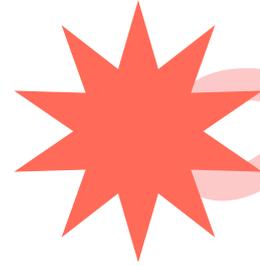
Bus stop grading system



- * Top graded stops (A) have benches, shelter, a map, and lighting
- * Mid graded stops (B-D) may have one of two of the above amenities
- * Low graded stops (F) only contain a sign indicating which buses pick-up at the given stop



Customizable routes



- * Users may input their commute or other regular routes from one location to another
- * Notifications alert the user at a chosen time if there are any station alerts or self-reports on their route
- * The app may suggest different routes based on accessibility needs that may not be met by certain stops

Station Maps

- * Station maps would provide out of town visitors with disabilities some assistance in getting around a new city
- * It may be daunting for someone not familiar with the MBTA to get around using public transit, whether they are disabled or not



K.B @KB81676104 · Mar 29



The MBTA does not offer human to human assistance for helping disabled folks plan trips. Hi everyone, I'm a disabled out of state MBTA newbie planning my first trip to Boston - any advice or resources would be much appreciated! :)



3



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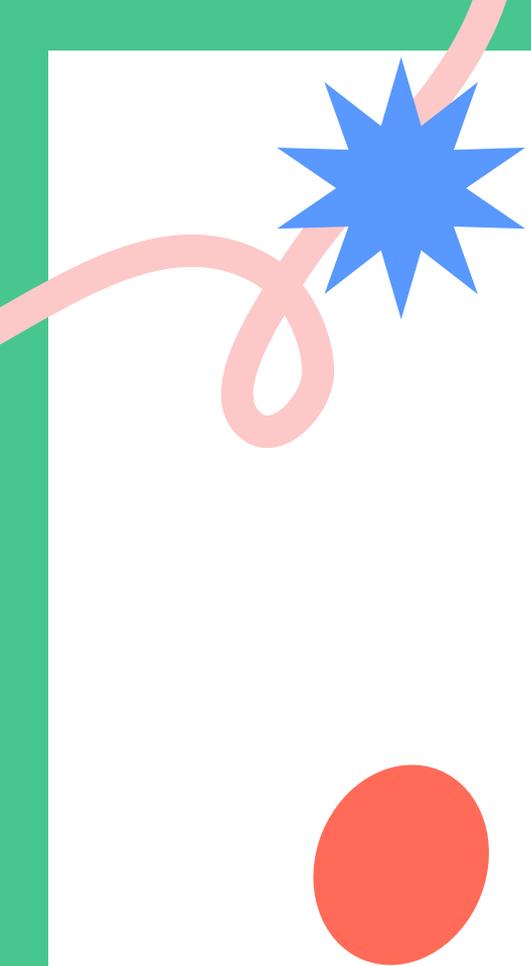


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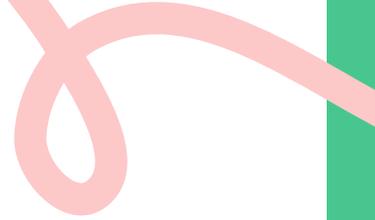
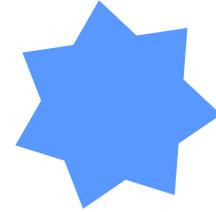




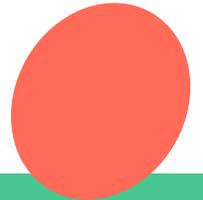
04

**Feedback &
What's Next?**

My meeting with MBTA System-Wide Accessibility



- ✦ On April 4, 2023, I met with three individuals that work with accessibility on the MBTA with my main contact being **Jennifer Ross, Deputy Director of Customer Engagement**
- ✦ Several suggestions regarding “self-reporting” feature
- ✦ Involvement of 311 and MBTA’s Maintenance Control Center (MCC)
- ✦ Discussed the lack of an official MBTA app and endorsement of third-party apps
- ✦ Concerns surrounding user participation

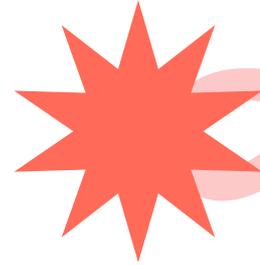


Response to Critique

- * Self-reported issues would first be pushed to 311 or MBTA MCC and shown in the app as an issue that is pending repair
- * Reporting kiosks at stations are a long term goal for solving user participation
- * Users would receive an update when their reported issue is resolved



What's next?



- * I am unable to complete this project on my own since I am not an app developer nor do I have experience doing so
- * EE538: Research for Environmental Agencies is taught every semester at BU
- * Today, I leave this project unfinished, but with the hope that one day a future EE538 student may bring it to fruition

Thanks!

Do you have any questions?

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