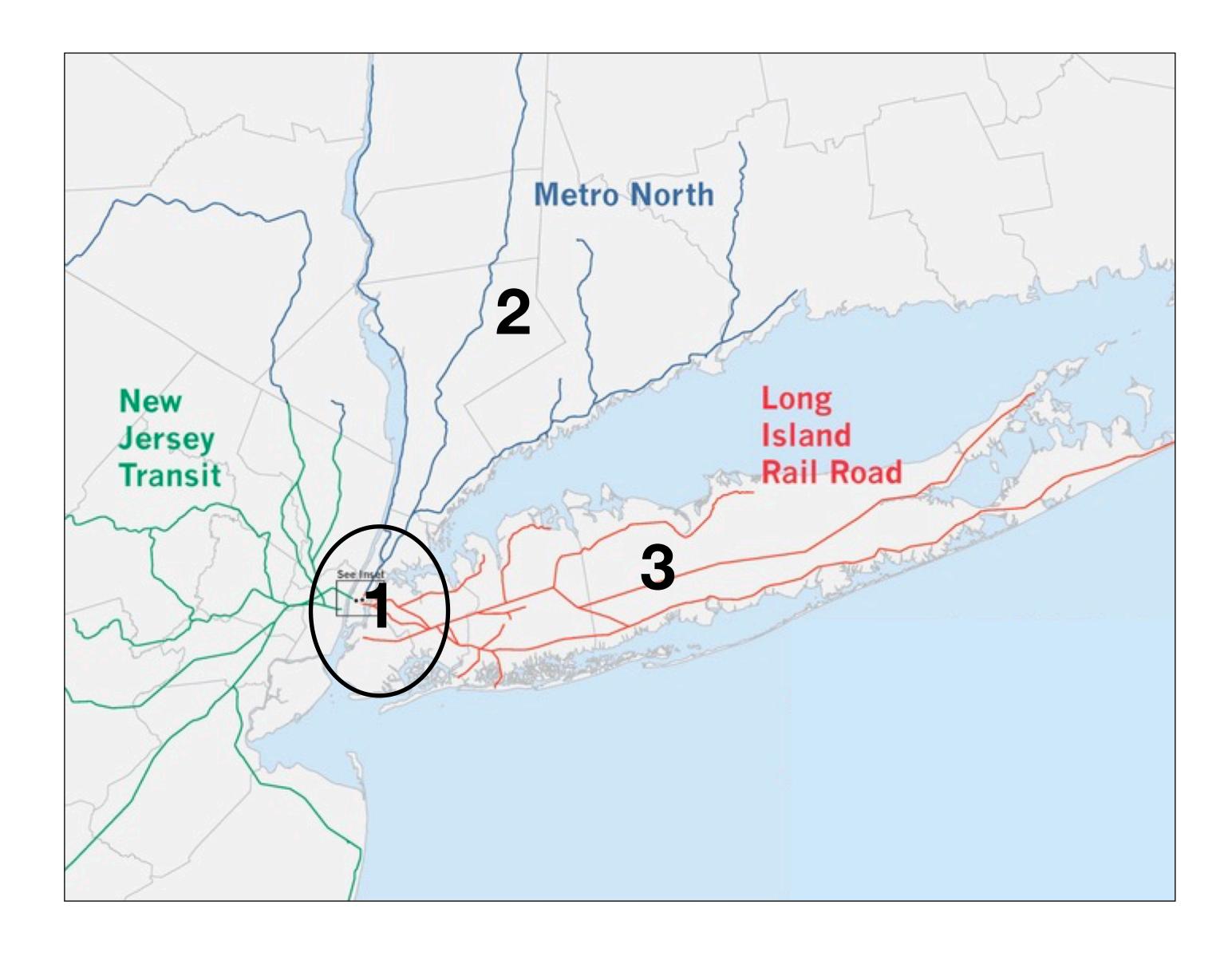
TrainTime Will Fisher Head of Special Projects, MTA

June 15, 2023

Introduction MTA service area



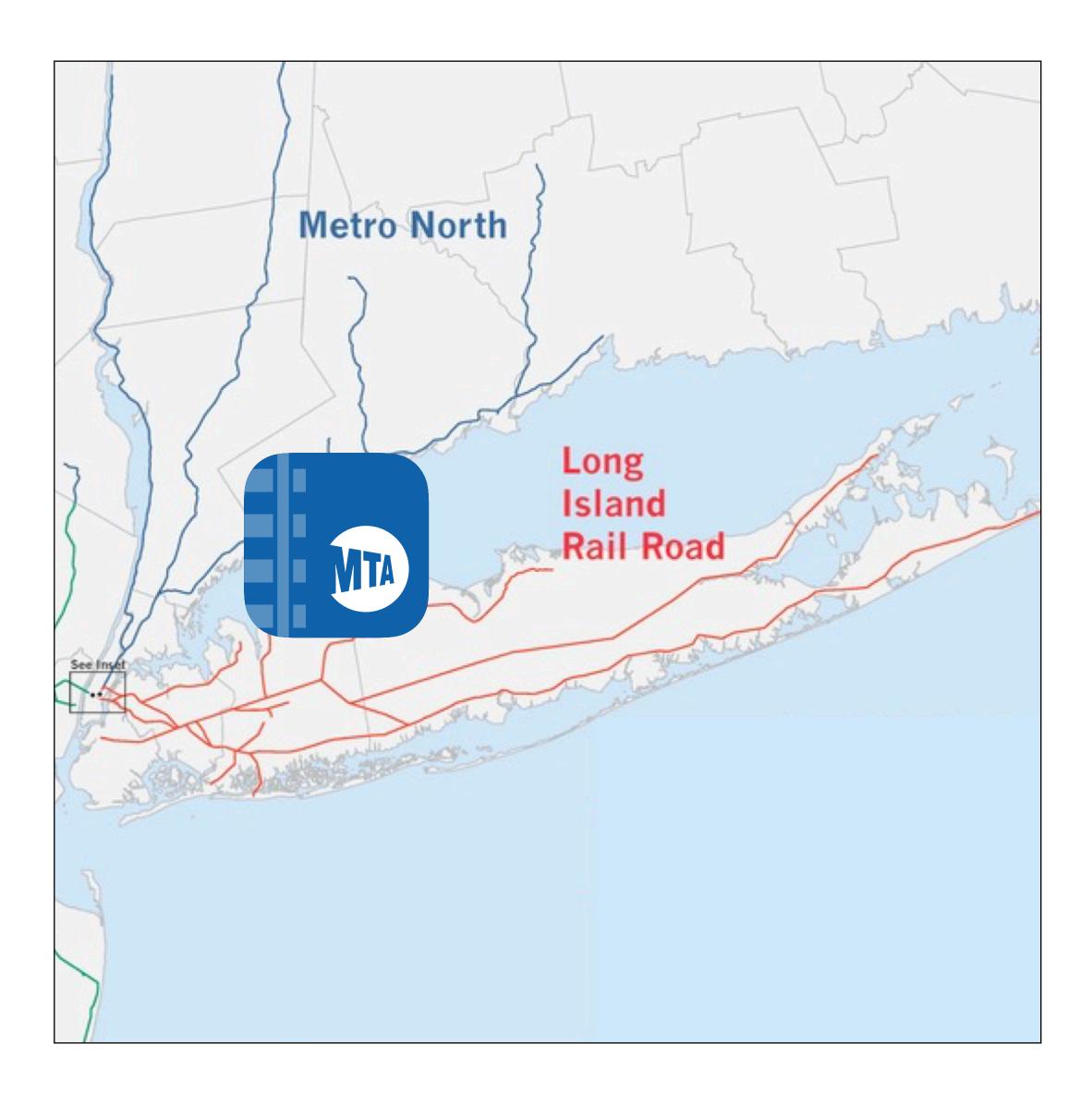
Introduction State in early 2022

Needed multiple apps to take the train



Introduction Single app

Largest agency app in the country

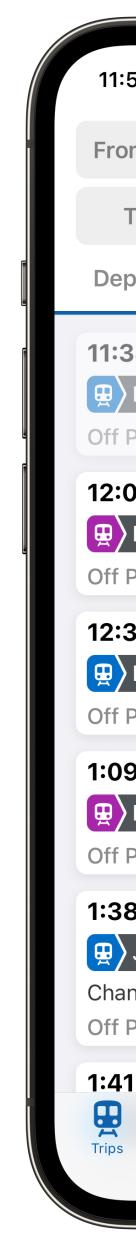


Single TrainTime app August 2022

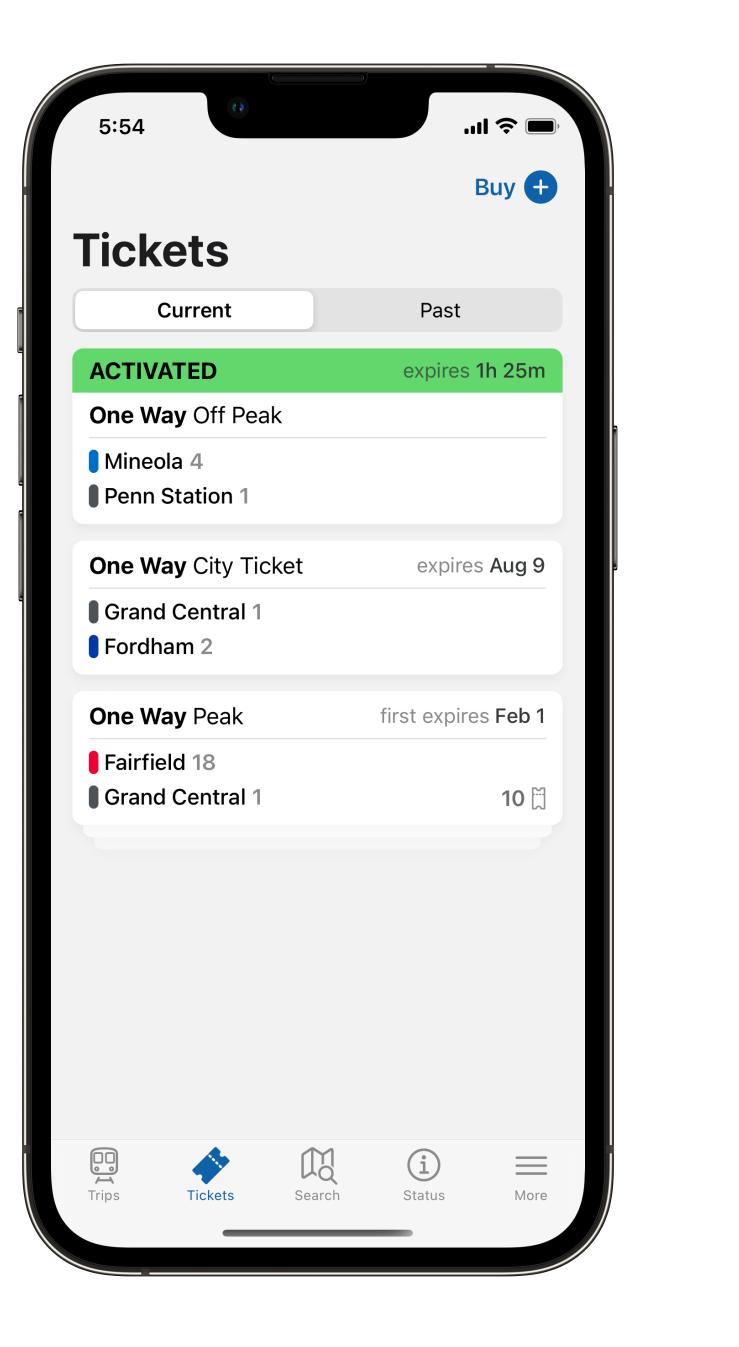


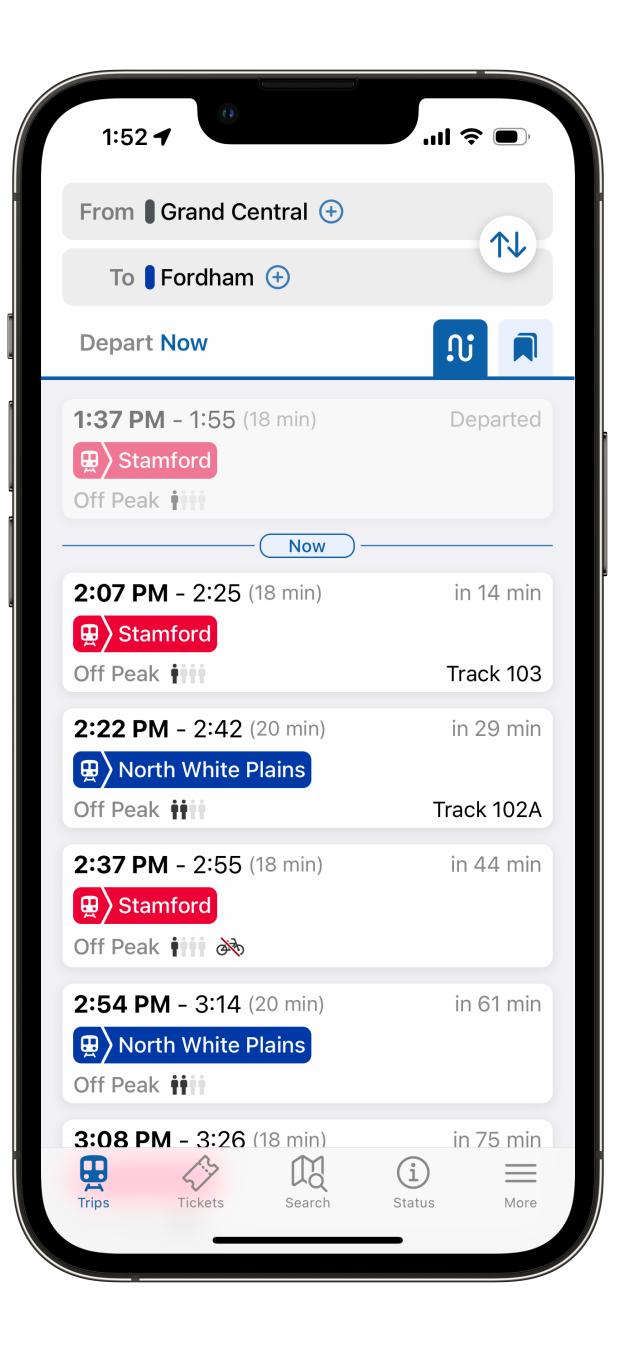
Core flows Trip planning and tickets

• Every user uses at least one of these

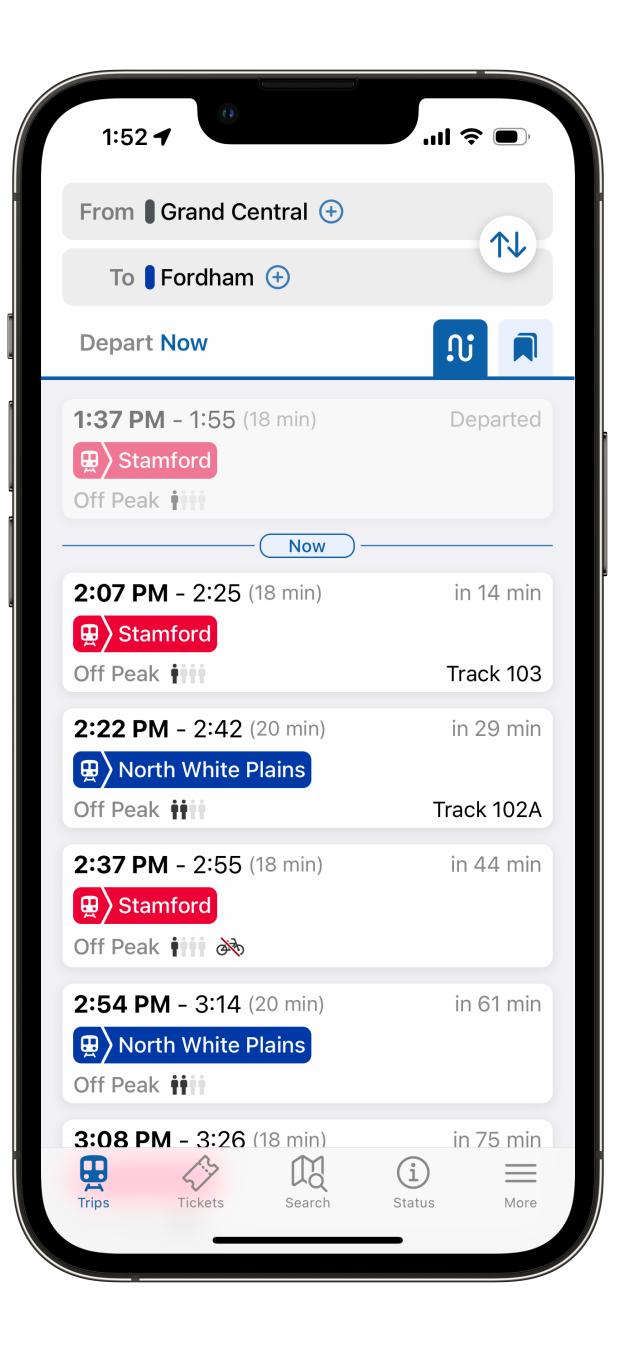


:59	'''I 🏷 🗩
om 🛿 Hicksville	
To Penn Station	
epart Now	
38 AM - 12:31 (53 min) Penn Station	
Peak †††	Departed
06 PM - 12:52 (46 min) Penn Station	Track 1
Peak 🛉	in 8 min
38 PM - 1:31 (53 min) Penn Station	Track 1
Peak ††††	in 39 min
9 PM - 1:53 (44 min) Penn Station	Track 1
Peak ††††	in 70 min
8 PM - 2:25 (47 min) Jamaica > 😟 Penn Station ange at Jamaica	Track 1
Peak †† ††	in 2 hrs
1 PM - 2:34 (53 min)	Track 1
Tickets Search St	tatus More

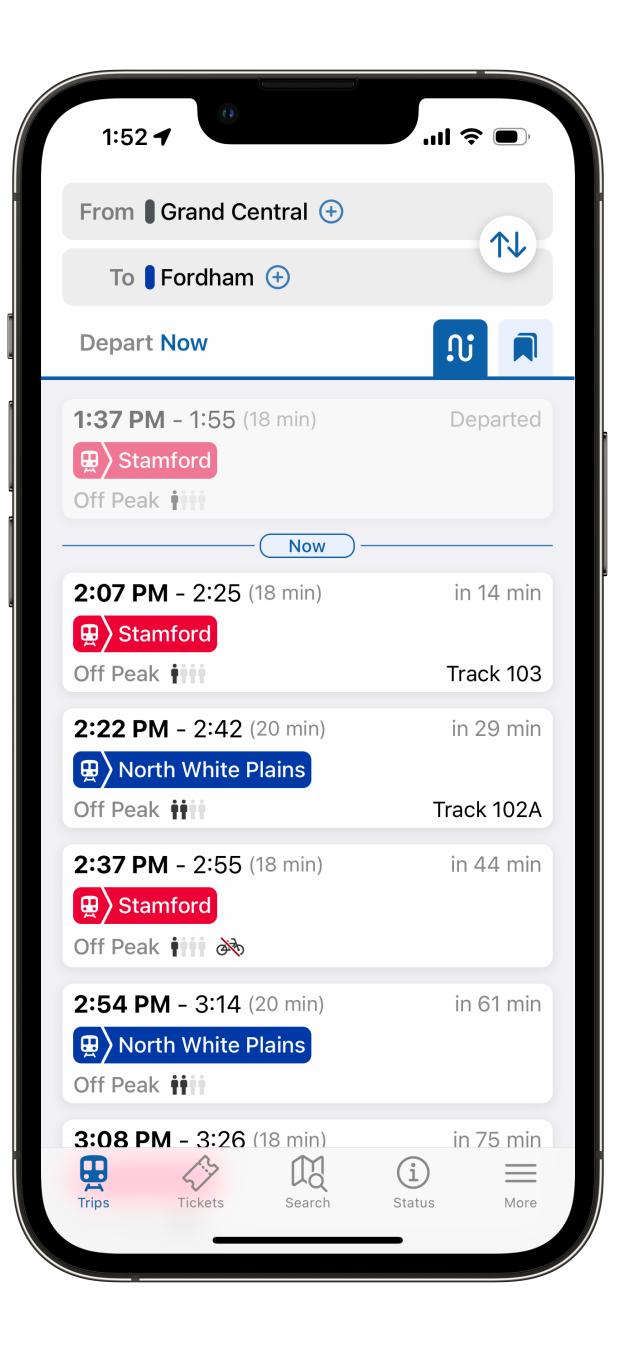




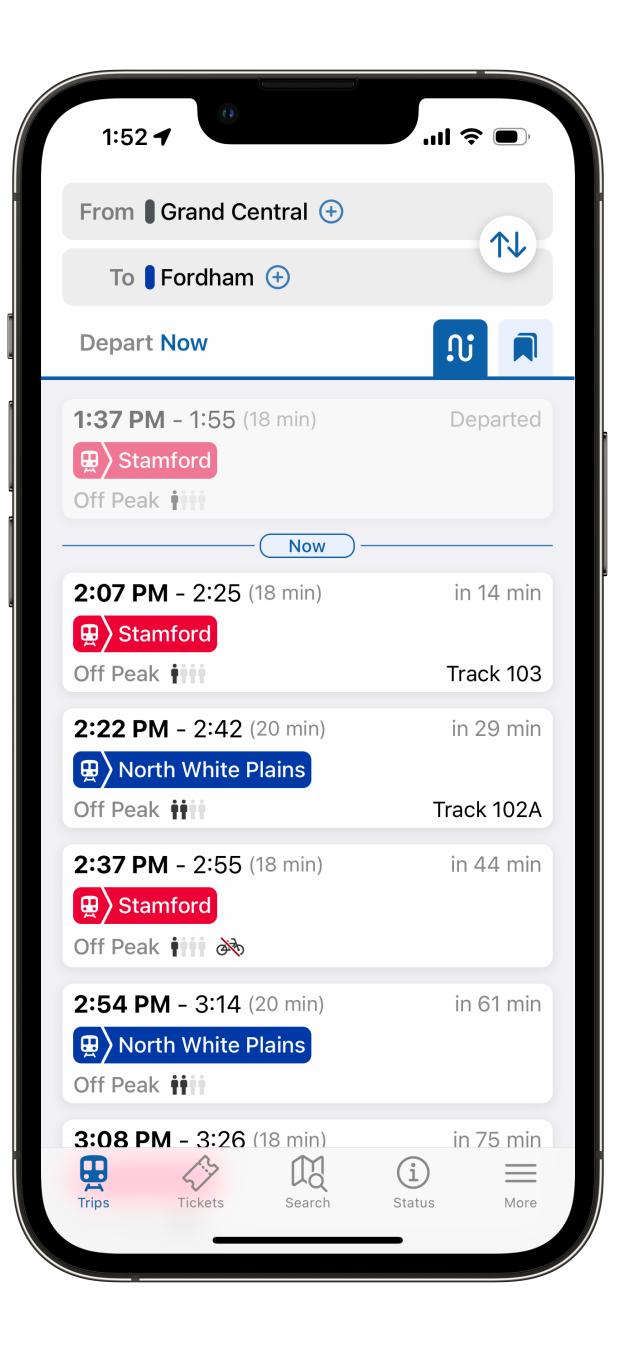
• Home screen



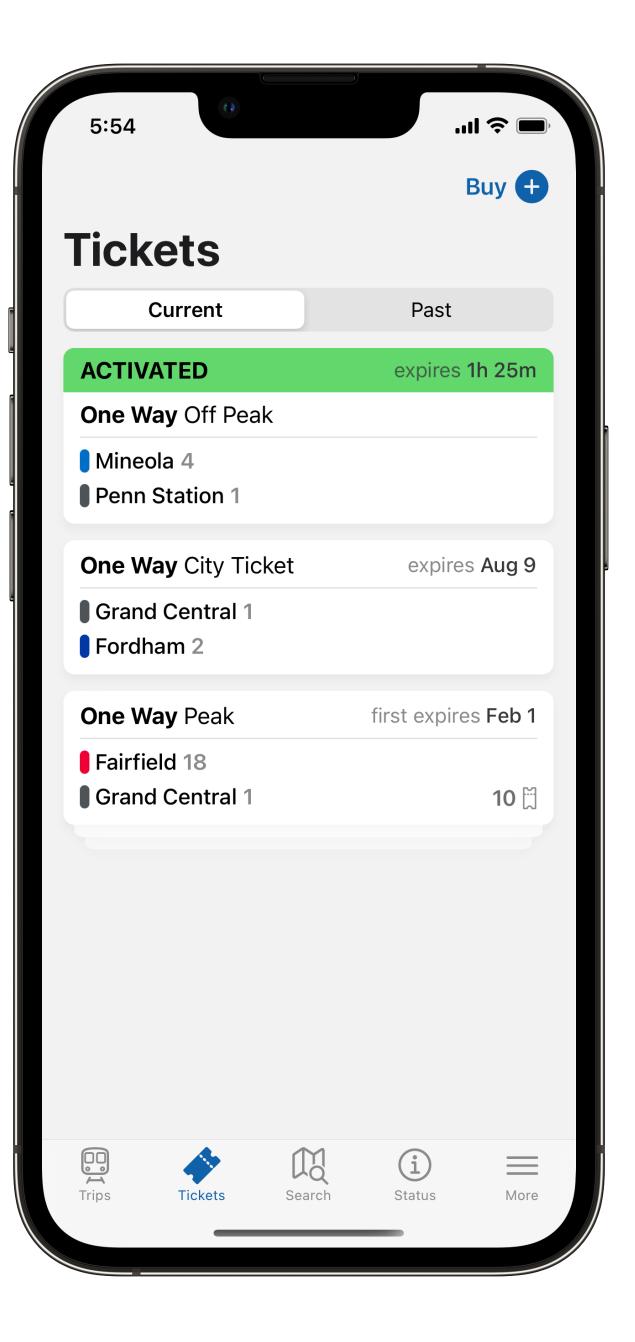
- Home screen
- Offers station-station planning



- Home screen
- Offers station-station planning
- 50% of users don't click through

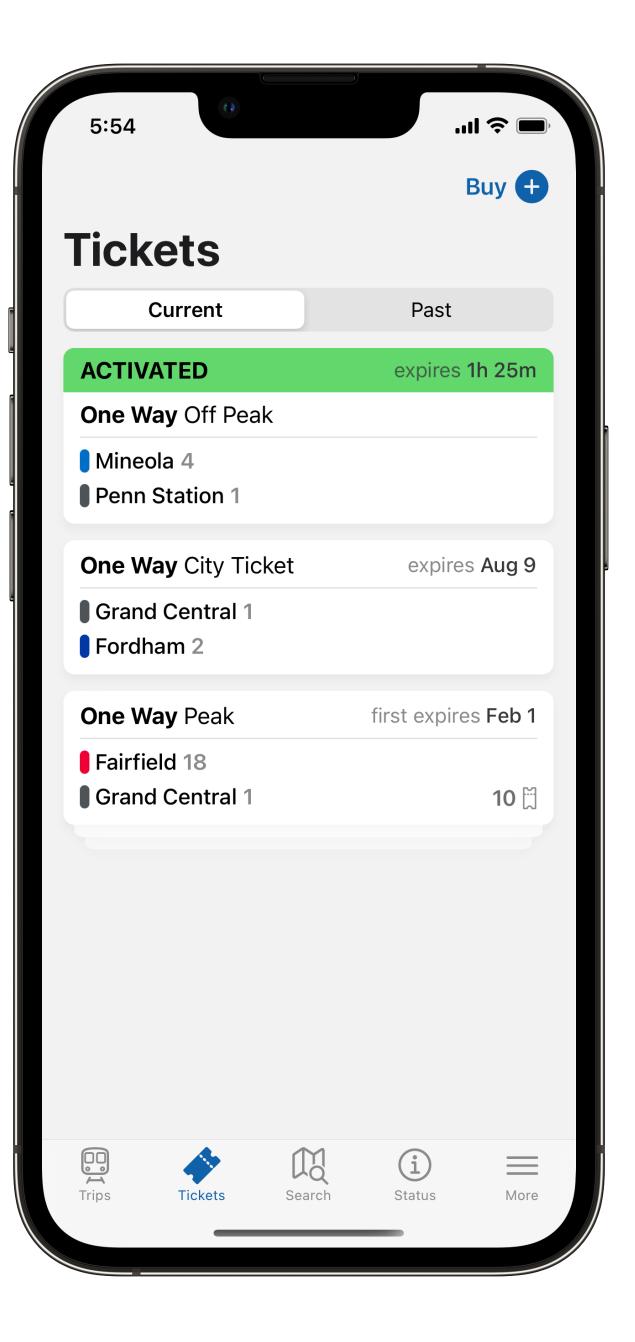


TicketsSecond screen



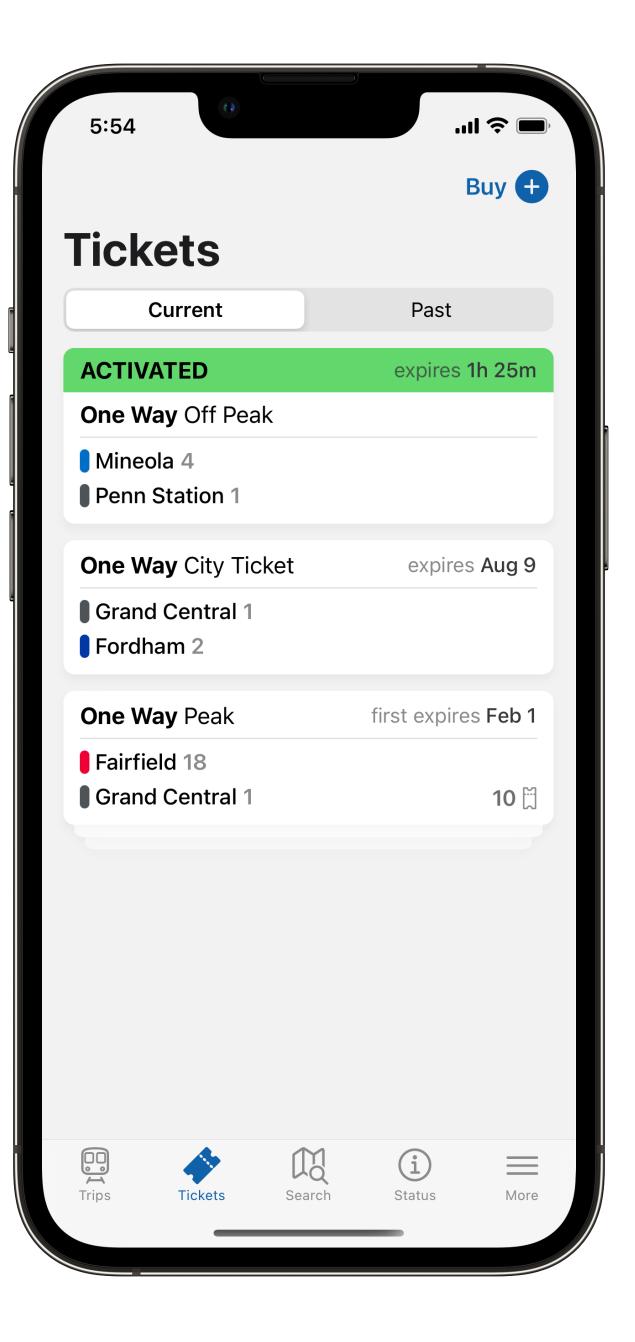
TicketsSecond screen

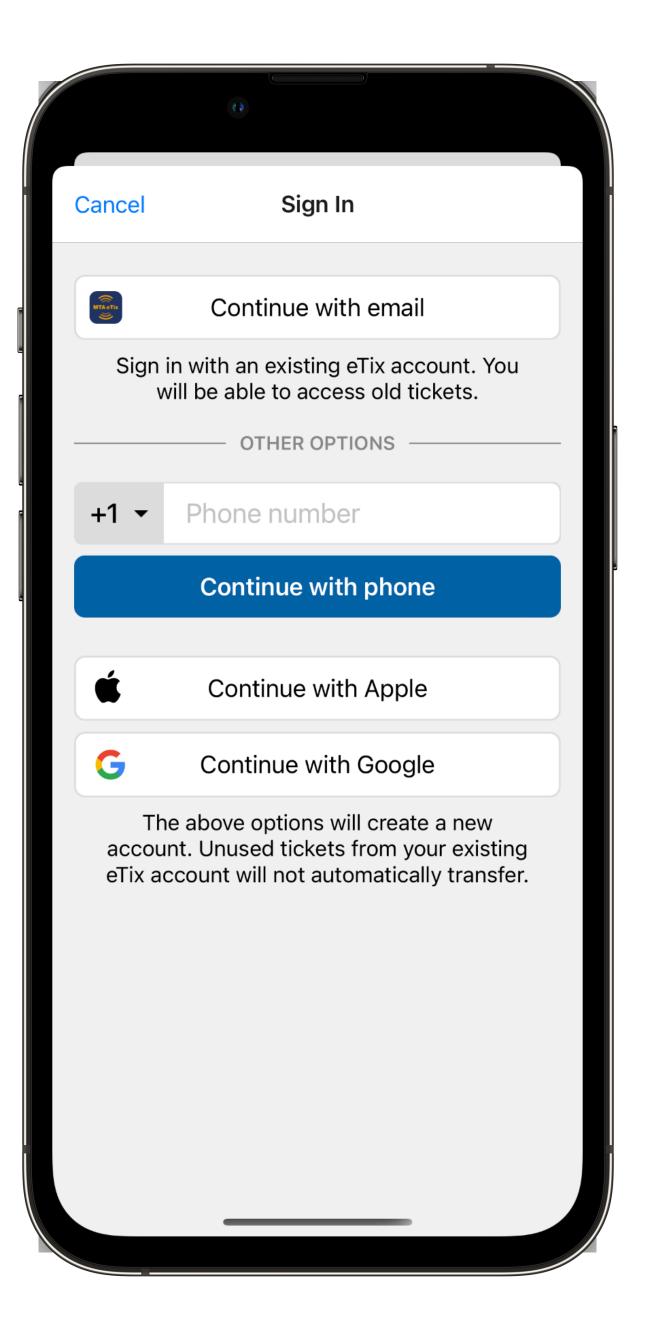
• Showing the wallet



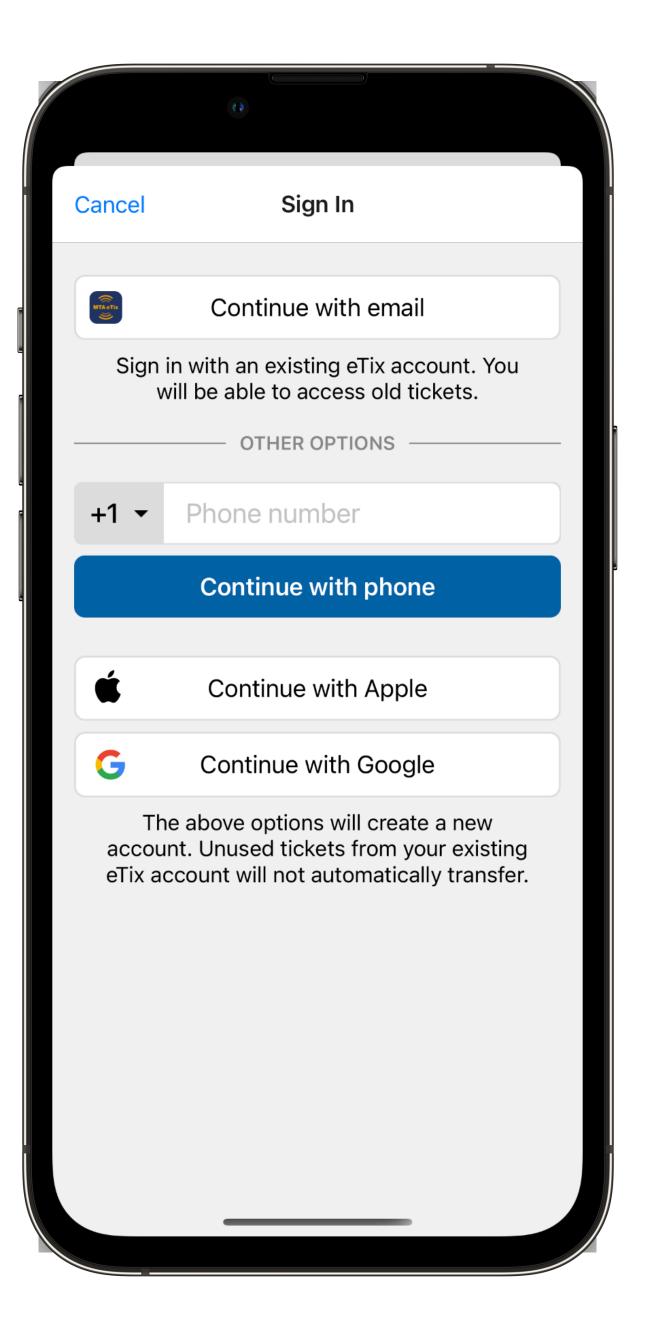
TicketsSecond screen

- Showing the wallet
- Most important: frictionless login and checkout

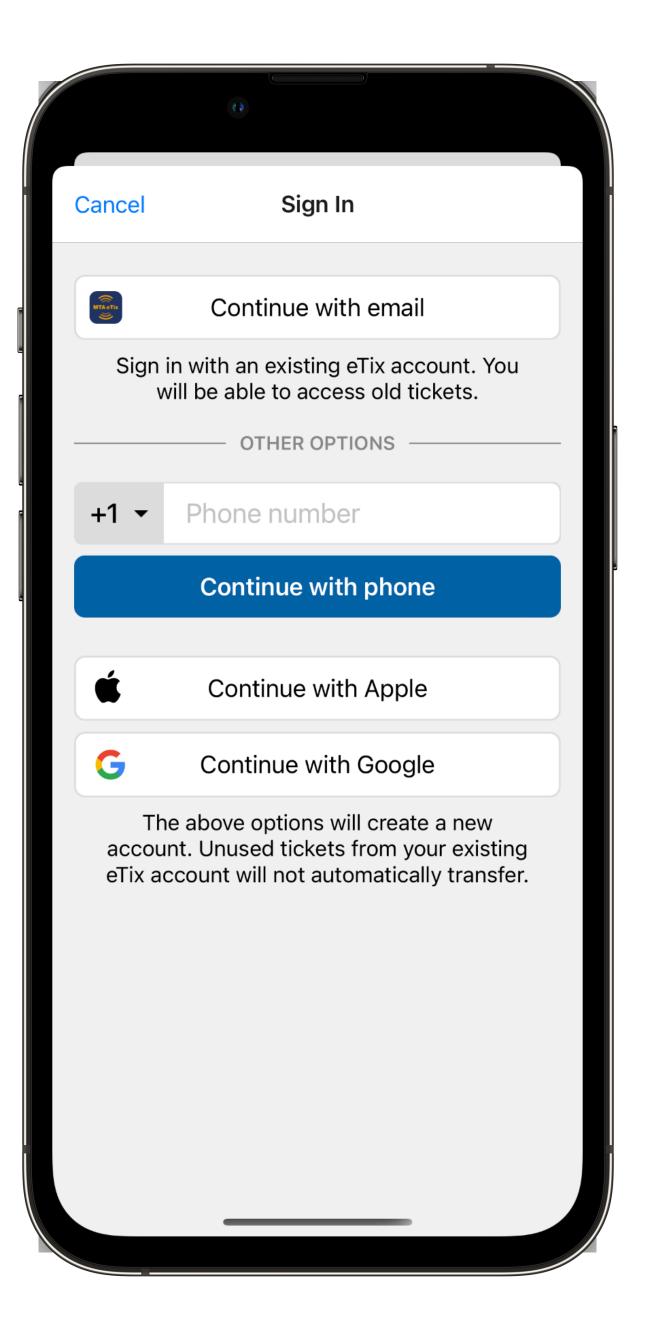




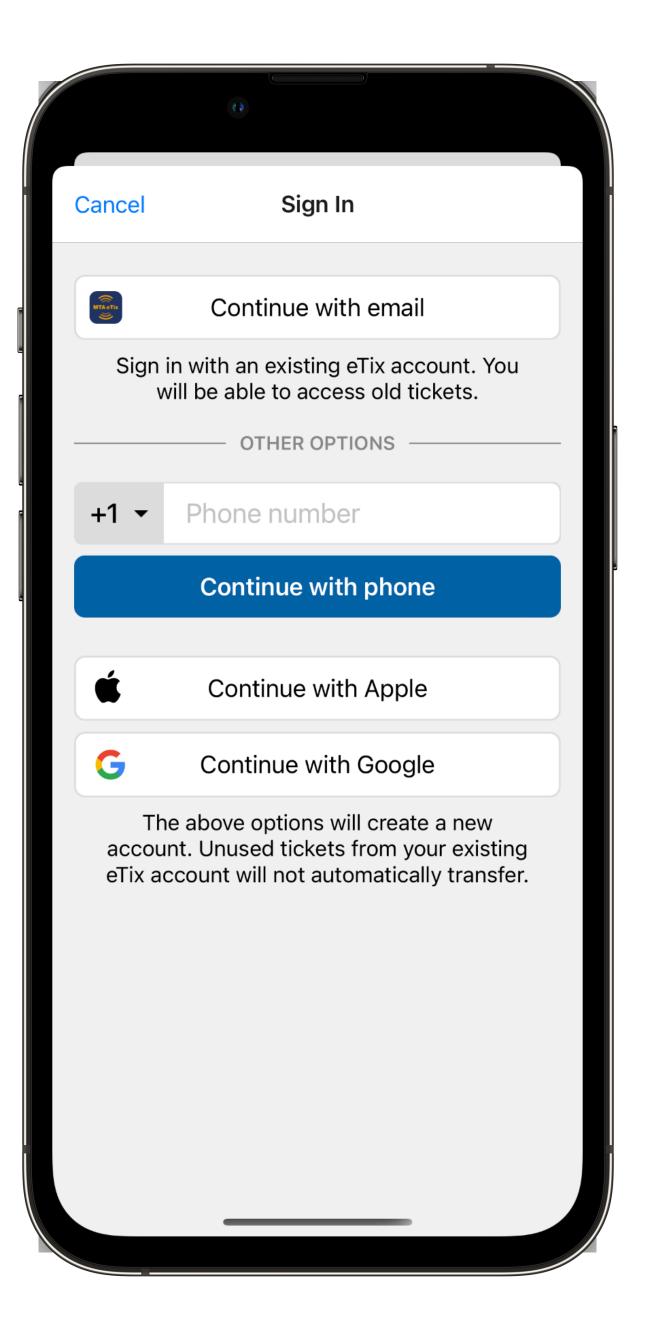
• Phone number (SMS)



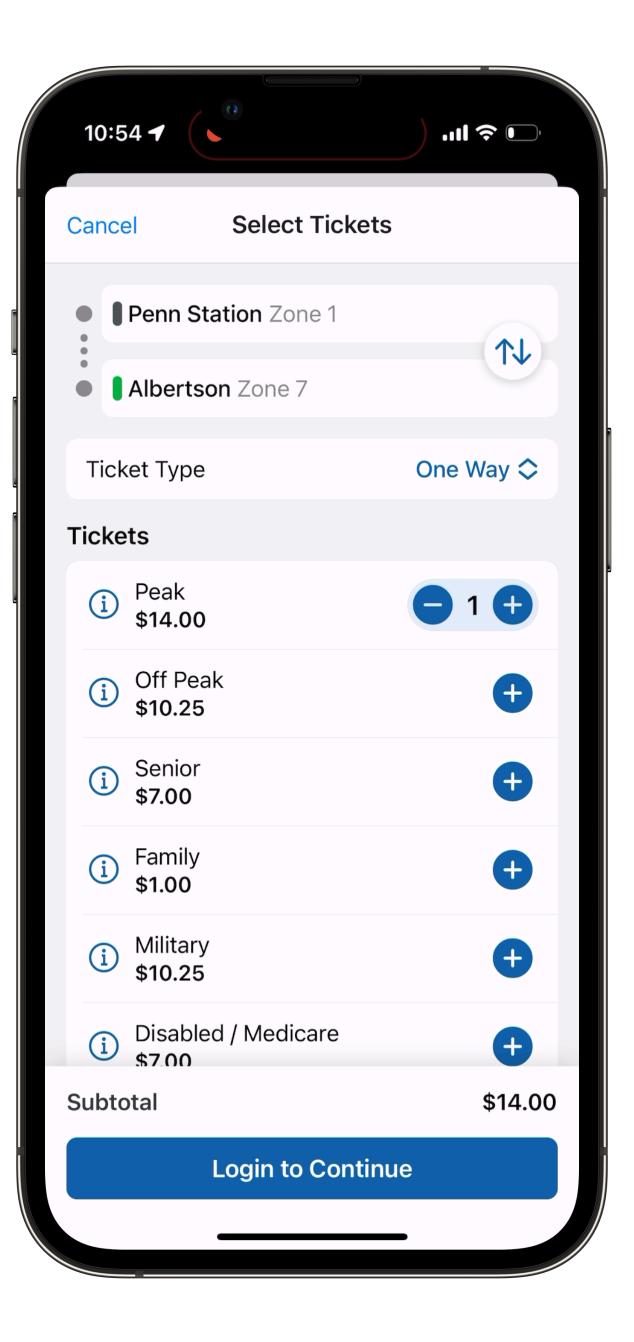
- Phone number (SMS)
- Google



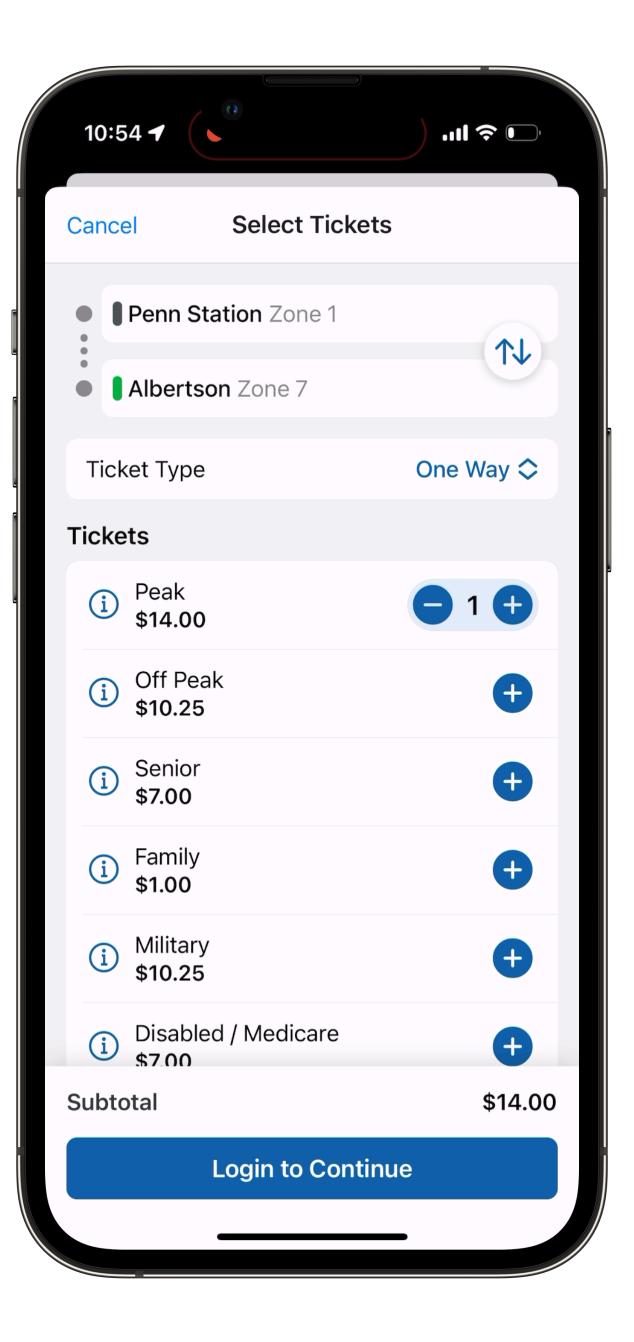
- Phone number (SMS)
- Google
- Apple



Demo

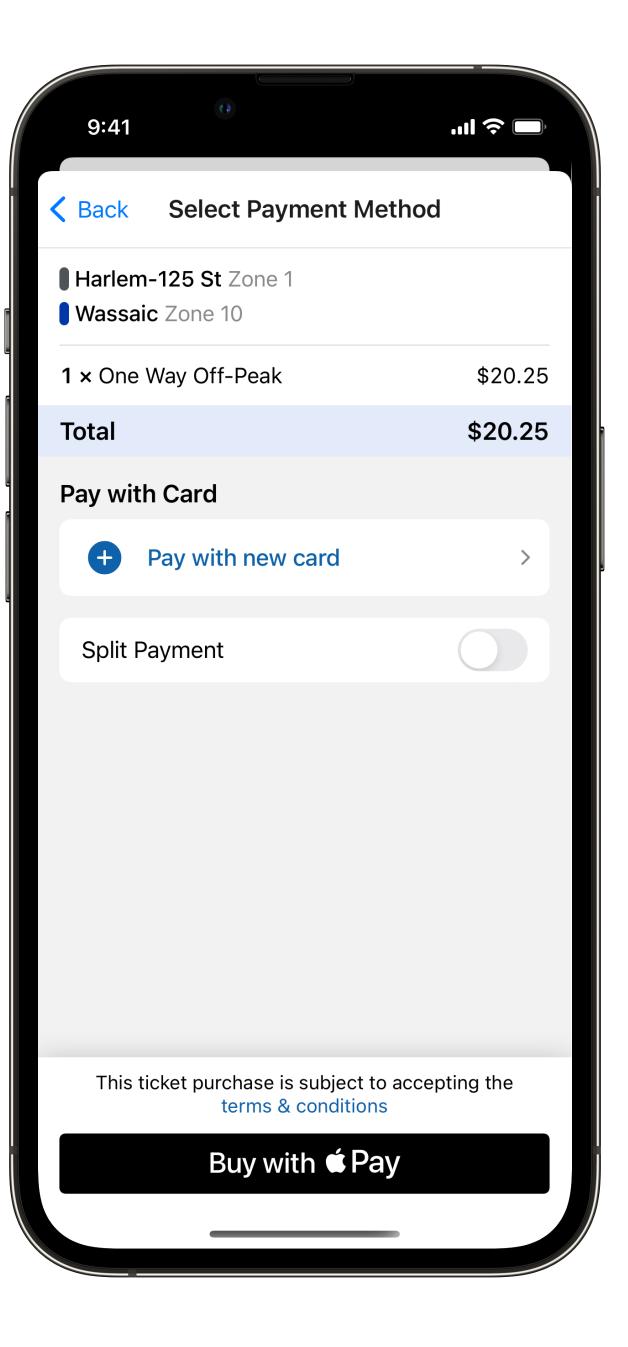


Demo



Tickets Checkout

Offer Apple Pay and Google Pay



What works well? Core flows

What works well? Core flows

Concentrate on the core flows

What works well? Core flows

- Concentrate on the core flows
- UX not UI

Trip planning Highly customized for the business

i and i a	
12:40 -	•••• LTE
From Grand Central Terminal	Ť.
To Stamford	
Depart Now	
12:37 PM – 1:50 (73 min)	Track 30
Off Peak	At Station
1:04 PM – 1:55 (51 min)	Track 108
Off Peak	in 23 min
1:37 PM – 2:50 (73 min)	Track 112
Off Peak	in 56 min
2:04 PM – 2:55 (51 min)	Track 17
Off Peak	in 83 min



Trip planning Highly customized for the business

- Official connections
- Unofficial connections
- Stations where you can doubleback

i and i a	
12:40 -	•••• LTE
From Grand Central Terminal	Ť.
To Stamford	
Depart Now	
12:37 PM – 1:50 (73 min)	Track 30
Off Peak	At Station
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Off Peak	in 23 min
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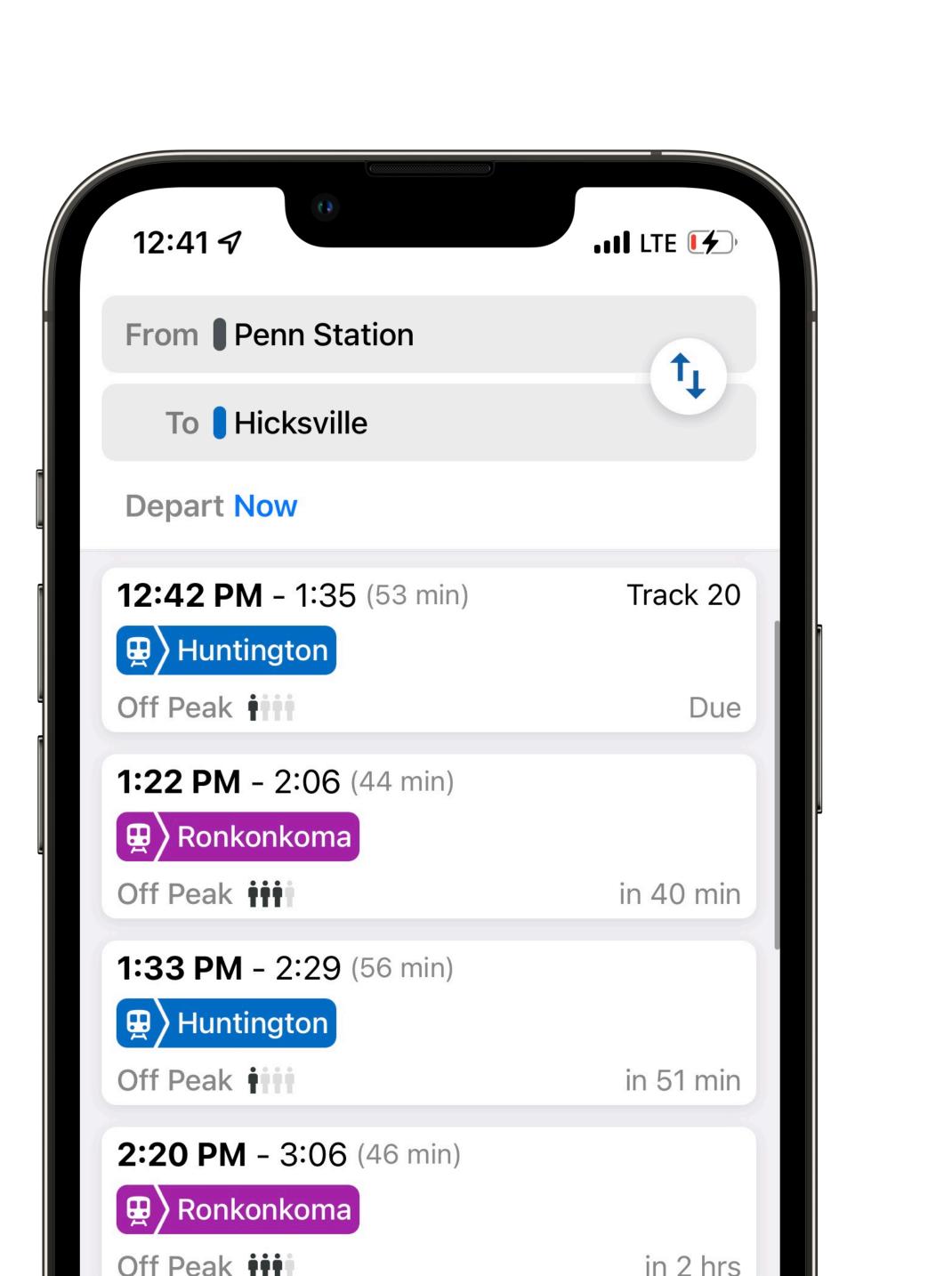
Realtime crowding First in North America

- Accurate to within 5 people
- Updates every 10 seconds



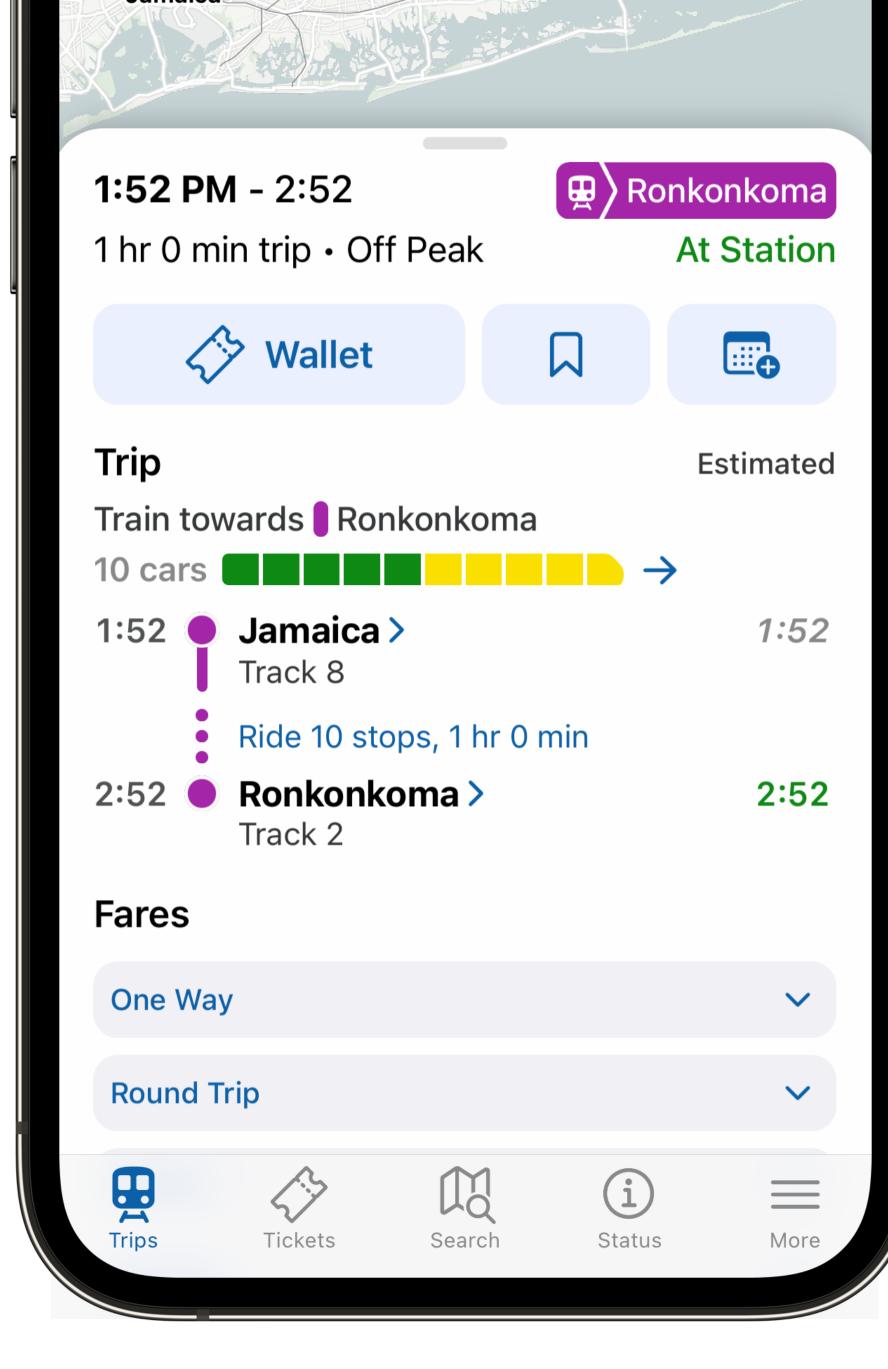
Historical crowding Based on sensor data

 Help customers pick a train that is less crowded



Realtime crowding First in North America

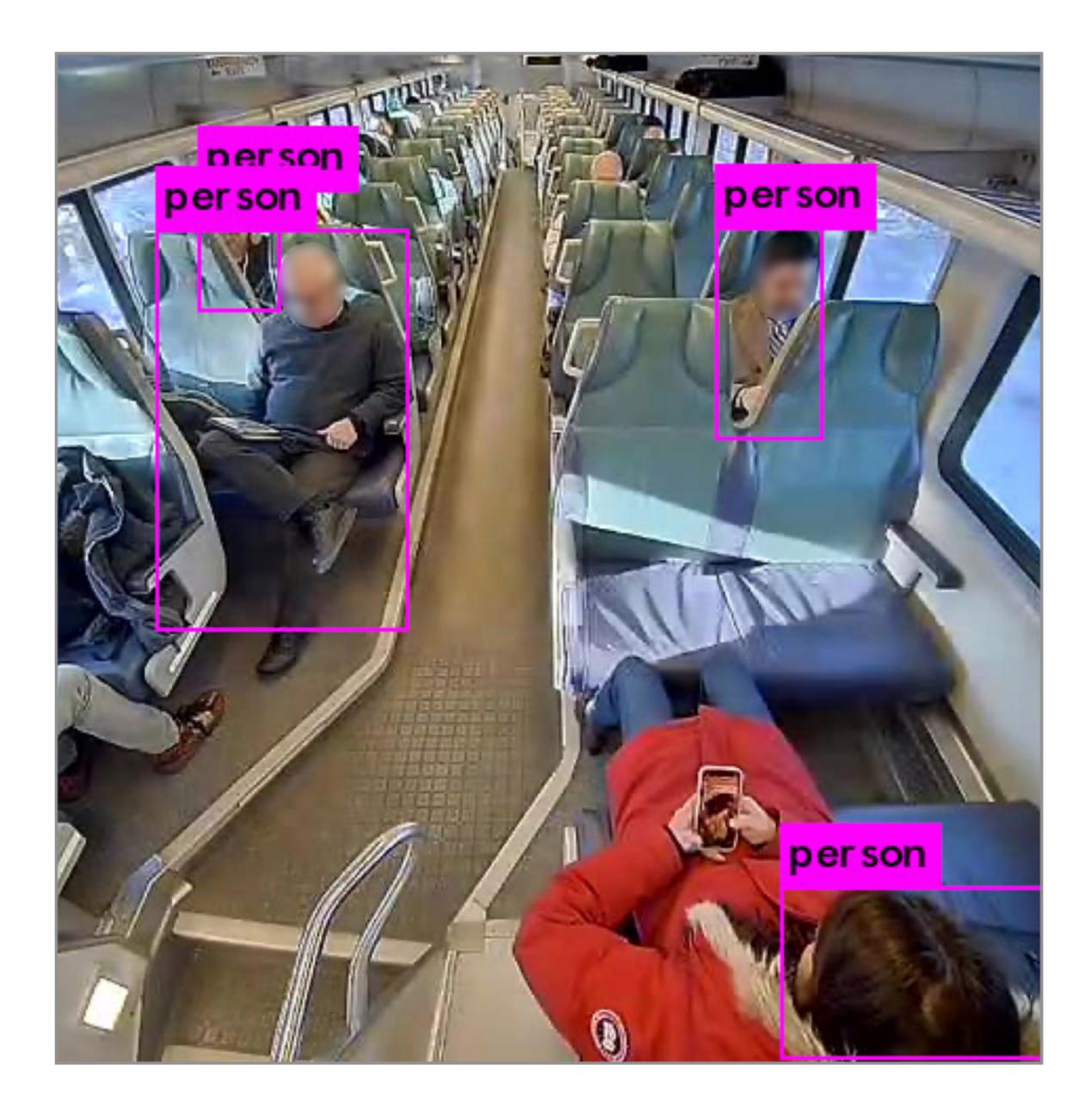
• Help customers find an empty car





Crowding data Three different sources

- 1. People counting from security cameras
- 2. Infrared sensors above doorways
- 3. Pressure sensors from car



Crowding data Three different sources

- 1. People counting from security cameras
- 2. Infrared sensors above doorways
- 3. Pressure sensors from car



Crowding data Three different sources

- 1. People counting from security cameras
- 2. Infrared sensors above doorways
- **3. Pressure sensors from car**





What works well? Realtime features

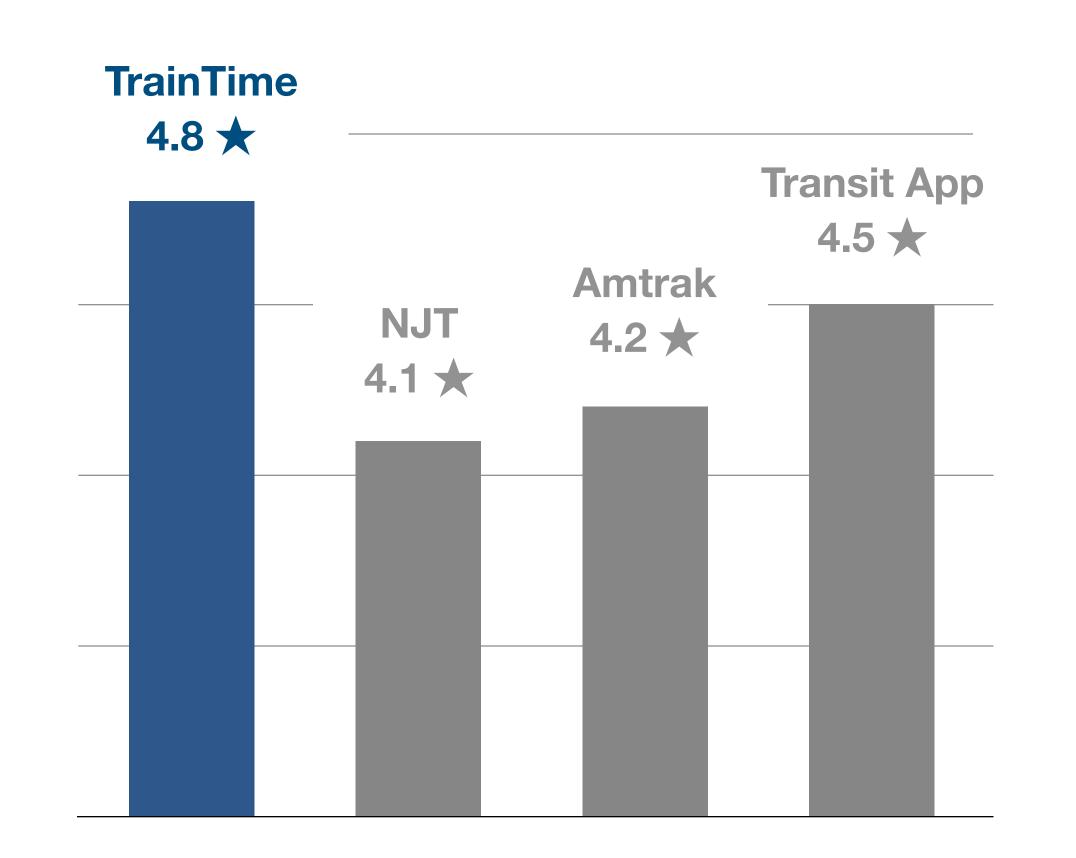
What works well? Realtime features

Good data, not good algorithms

What works well? Realtime features

- Good data, not good algorithms
- Make the data accessible and easy to understand

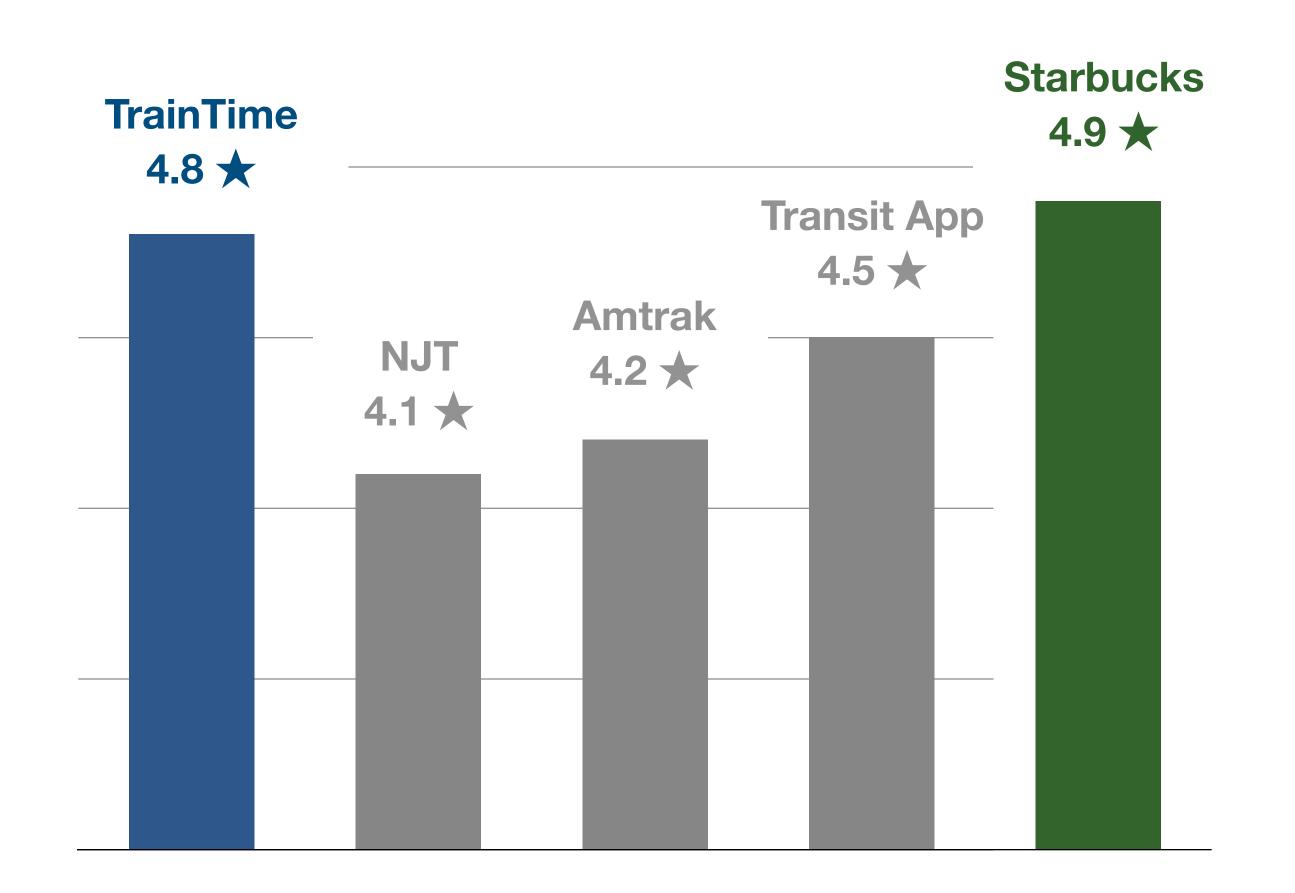
Feedback Quantitative





Other transit apps

Feedback Quantitative





Other transit apps

Feedback Qualitative

Is this a transit app?! 7d ago $\star \star \star \star \star$ Just wanted to say whoever headed up the MTA app

overhaul did amazing! The ux is lovely. 10/10

Ratio of passengers in a given car using TrainTime



TrainTime Will Fisher wfisher@mtahq.org

June 15, 2023