

**Hello,
Halifax**

**Active Transportation
Advisory Committee**

About Shared Micro-mobility Programs in Canada

Canadian municipalities are increasingly interested in “first kilometre / last kilometre” electric scooter and bike sharing programs dedicated to bringing affordable, environmentally friendly transportation solutions to them.

Shared micro-mobility programs operate in hundreds of cities worldwide. In Canada, they operate in dozens of cities including: Calgary, Edmonton, Okotoks, Red Deer, Ottawa, Hamilton, and Windsor.

In 2023: Hamilton, Oshawa, Brampton, Saskatoon, Vancouver (RFP), etc.

Introducing Shared E-scooters

Battery	36 V, 21.0 Ah 10S6P
Charge Time	5.8 hrs
Range	35 miles
Braking	Regen; Drum (front), disc (r)
Wheels	10" pneumatic
Top Speed	15 mph
Dimensions	47.7 in. x 19.3 in. x 46.8 in.
Lights	Front / Rear LEDs

Throttle-Brake Interlock

Automatic safety actions to protect against accidentally holding the throttle.

Dual Wiper Throttle

Automotive-grade functional safety and guaranteeing absolute speed-control accuracy

Enhanced Lighting

Anti-Theft Encryption

Enhanced encryption keeps our riders safe and helps deter theft

Autonomous Damage Sensors

Self-reporting damage sensors and automotive-inspired diagnostic technology

Status Indicator

Dynamic Stability Control Steering (DSCS)

Stabilizes out-of-control, sudden or erratic movements, guards against unsafe turns or over-corrections.

Seamless Screws

Protection against injury and theft with no exposed screws

Puncture-Proof Tires

10" tires feature puncture-proof tech, higher traction, and decreased vibration.

Skid Detection

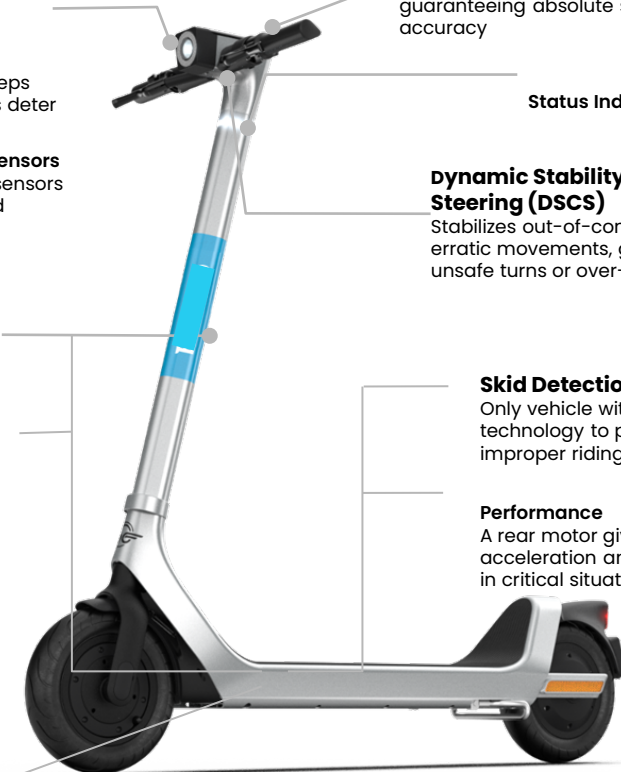
Only vehicle with skid detection technology to prevent improper riding behavior.

Performance

A rear motor gives faster acceleration and more control in critical situations.

Industry's Longest-Lasting Battery

Automotive-grade battery management system. Largest, safest, only operator with IP68 integrated battery



Tip Detection Technology

Anti-Tip Kick Stand

With a dual anti-tipping kickstand, this e-scooter stands on its own two feet.

Performance

AEB brings the vehicle to a stop in the event of a brake failure

Smart Geofencing



Geo-zone technology

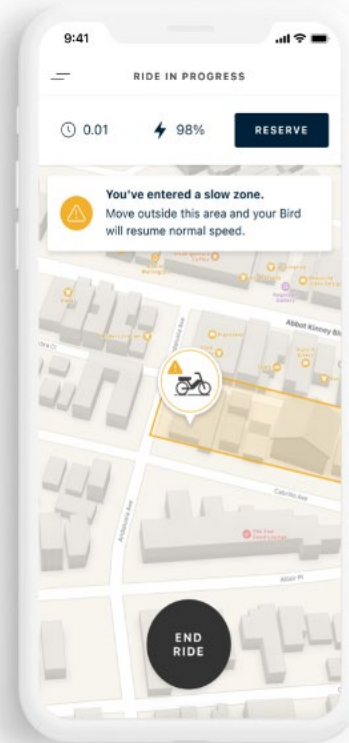
All vehicles are tracked with GPS.

When riders enter a designated geo-zone, vehicles follow set rules.

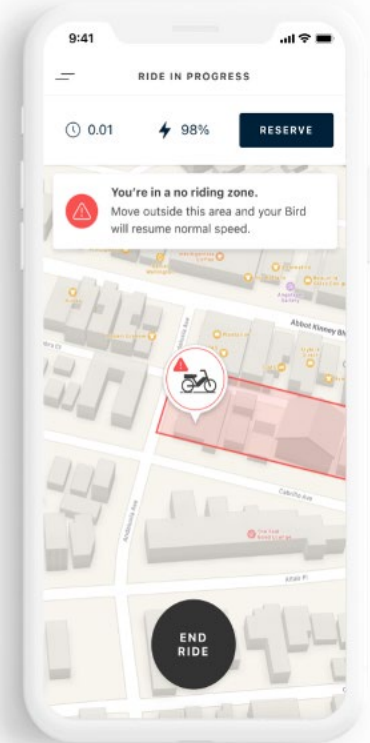
Vehicles will slow down or stop, and riders are notified by a vehicle sound and an in-app notification.

*Most Canadian cities have set scooters to a maximum of 20 km/h and slow down zones for highly pedestrianized areas of the City are generally set at 15 km/h.

Slow Zone

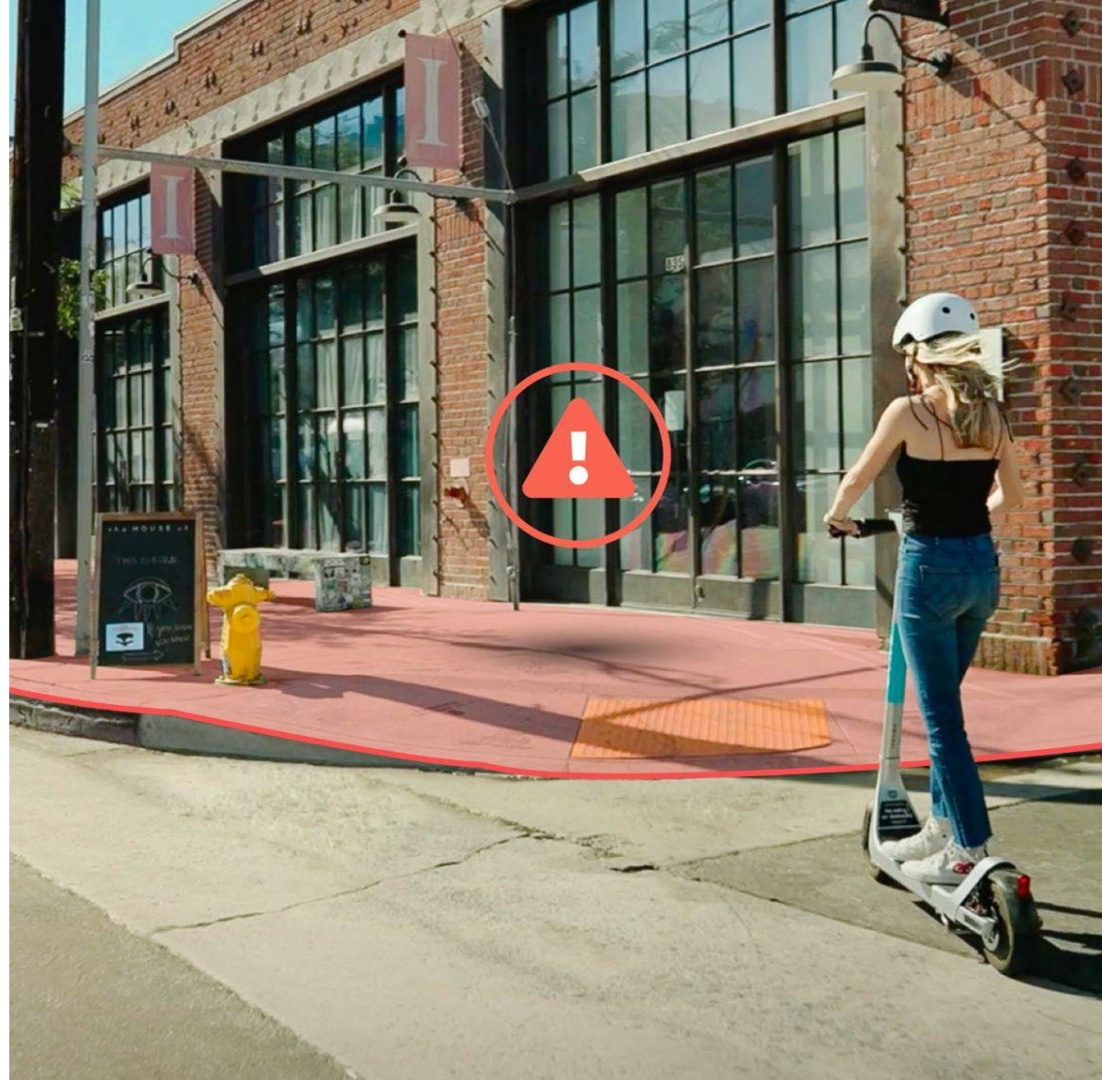


No Ride Zone and/or No Park Zone



Smart Sidewalk Protection

Technology to safely slow e-scooters to a stop on select sidewalks with a history of bicycle riding on them



Parking Strategies

Image of parked e-scooters in street furniture zone of a sidewalk





Municipalities across Canada permit street furniture zone parking (areas of the sidewalk that do not block the pedestrian thoroughfare).

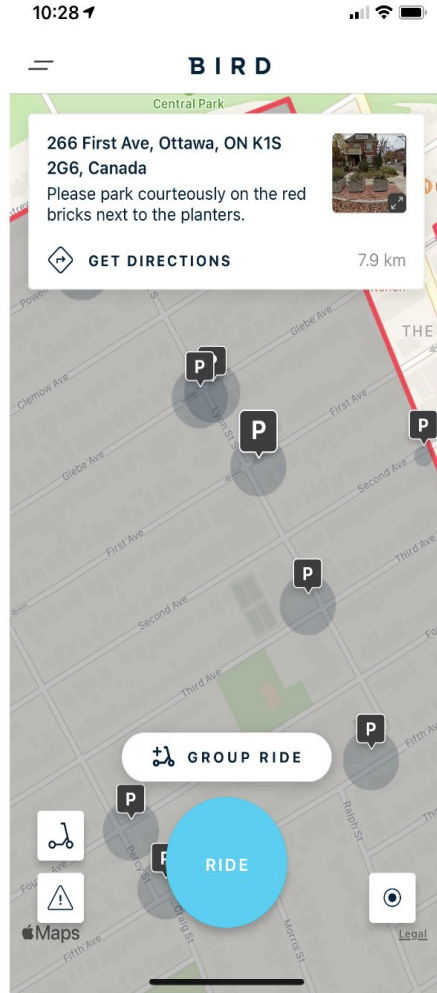
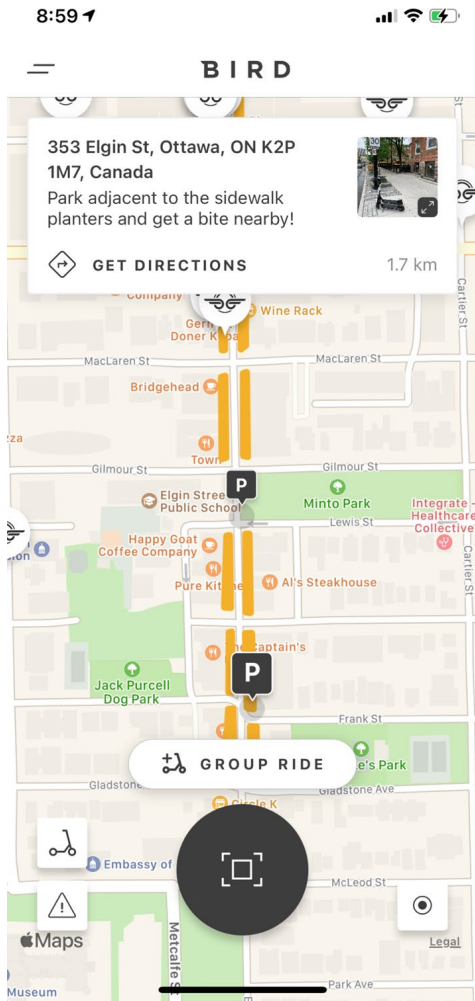
Canadian municipalities have then subsequently "layered" on or added additional parking options to the general "street furniture" parking model.

E-scooter riders can still park in the street furniture zone of sidewalks but in key areas of the City, additional parking options exist to improve proper parking outcomes.



Images of parking for e-scooters in Canadian cities: street furniture zone parking, painted box with/without bollards on sidewalk/road, and a moveable mat for e-scooter parking





Digital "P" Preferred Parking Spots

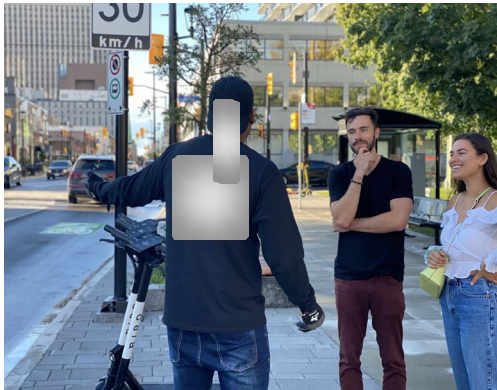
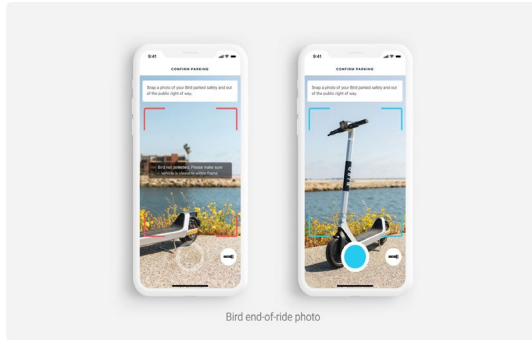
Preferred parking spots have no physical infrastructure but can be added to e-scooter company apps to direct riders to park in "preferred" areas of the City.

These preferred parking spots are not mandatory for a rider to use but supplementary to permitted street furniture zone parking - they are designed to assist riders make better parking decisions in key areas of a city.

The digital "P" in-app parking spots provide riders with a picture of the parking area and description, including route-by-route guidance to the parking location.

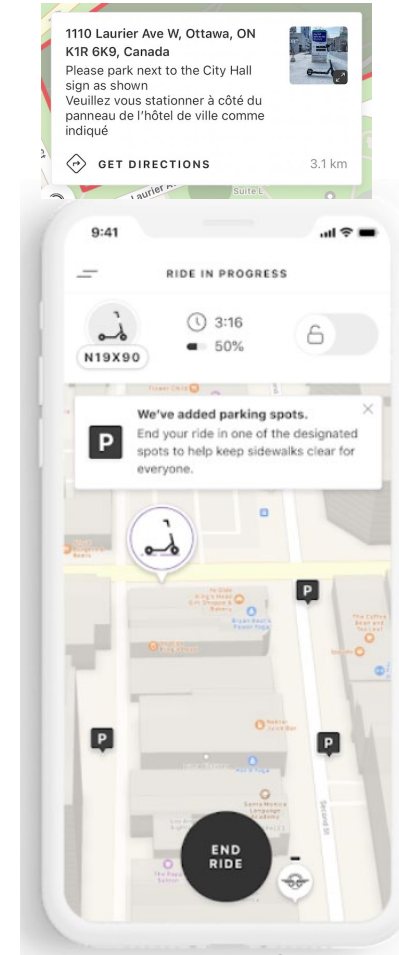
Screenshots of images from E-scooter company app showing preferred parking spots shown in app with "P"

Parking of e-scooters



Ottawa

- ✓ In-app rider education
- ✓ Street Patrols by E-scooter company staff - 15 minute response times
- ✓ “Preferred Parking” spots (these are located digitally in-app with instructions for how to locate and park to facilitate good parking)
- ✓ Some cities provide supplemental Designated Parking spots that are located throughout the City (i.e. painted box, mat, etc.).
- ✓ End of Ride photos to verify parking compliance
- ✓ Geo-fencing for no-park zones
- ✓ Warnings, fines, suspensions by E-scooter company for misparking.

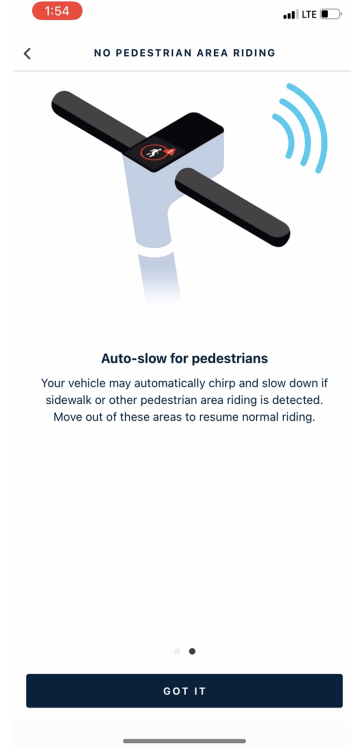
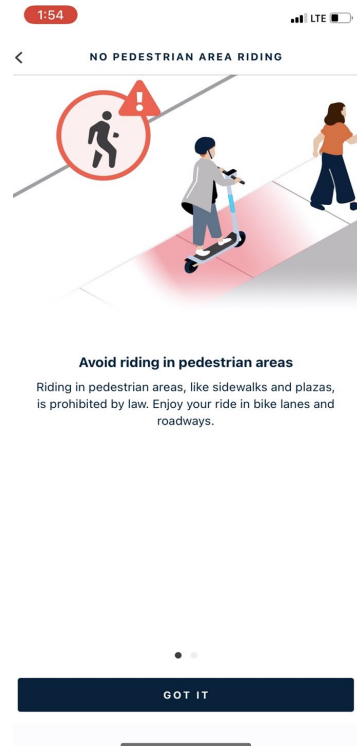
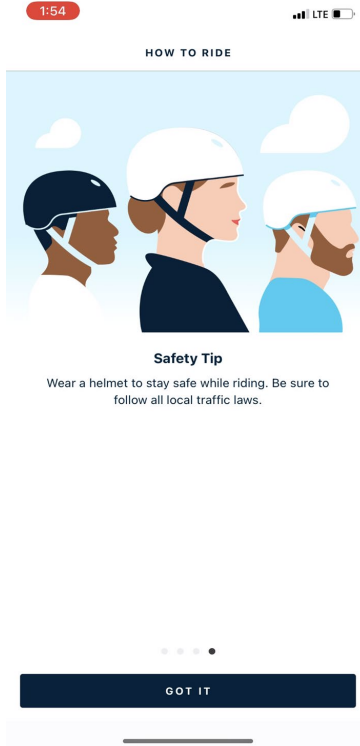
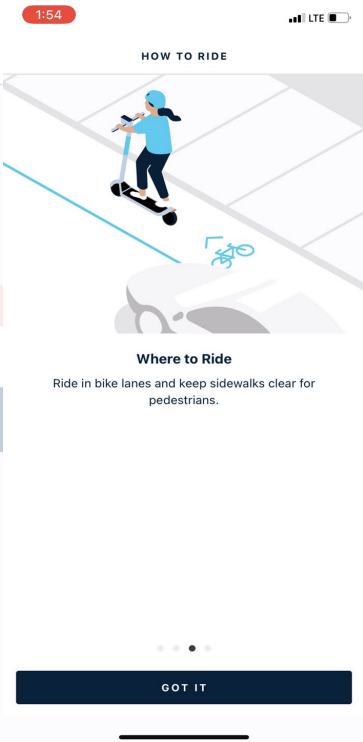
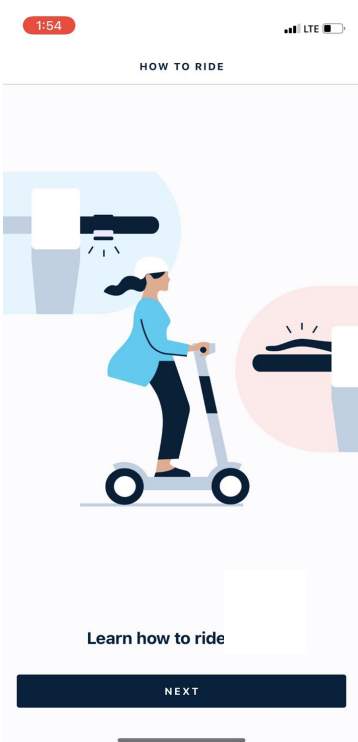




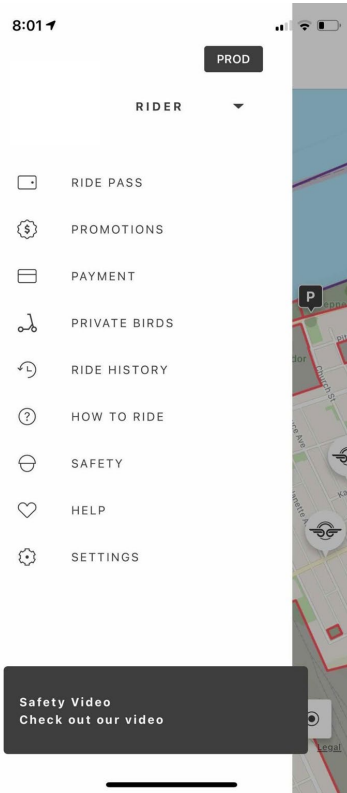
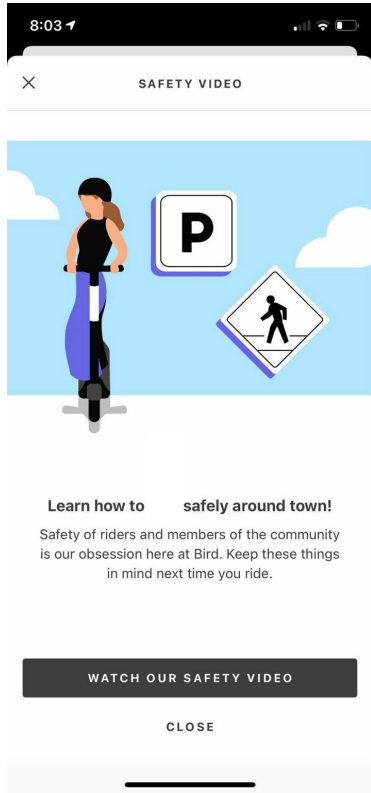
Safety First



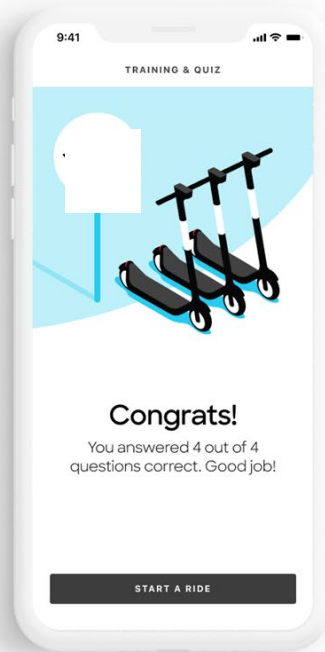
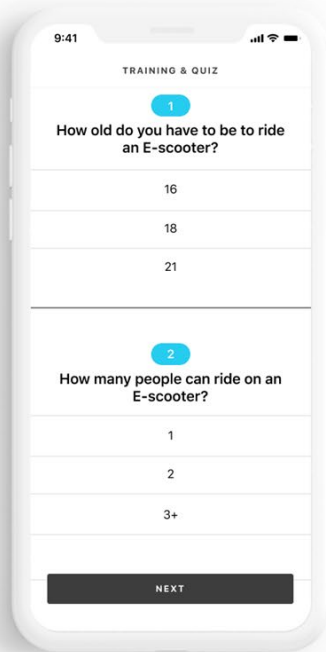
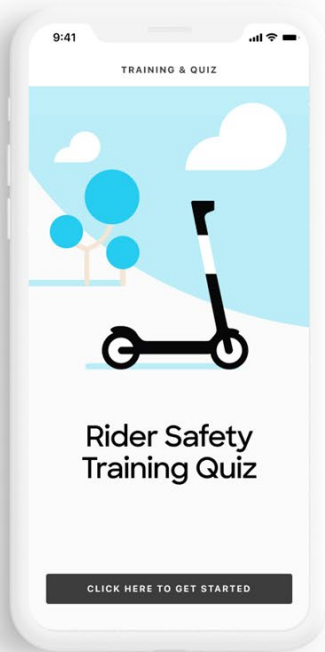
In-app Rider Education



Educational Video



Safety Quiz



in-app safety quiz

In-person Rider Training/Education



Calgary

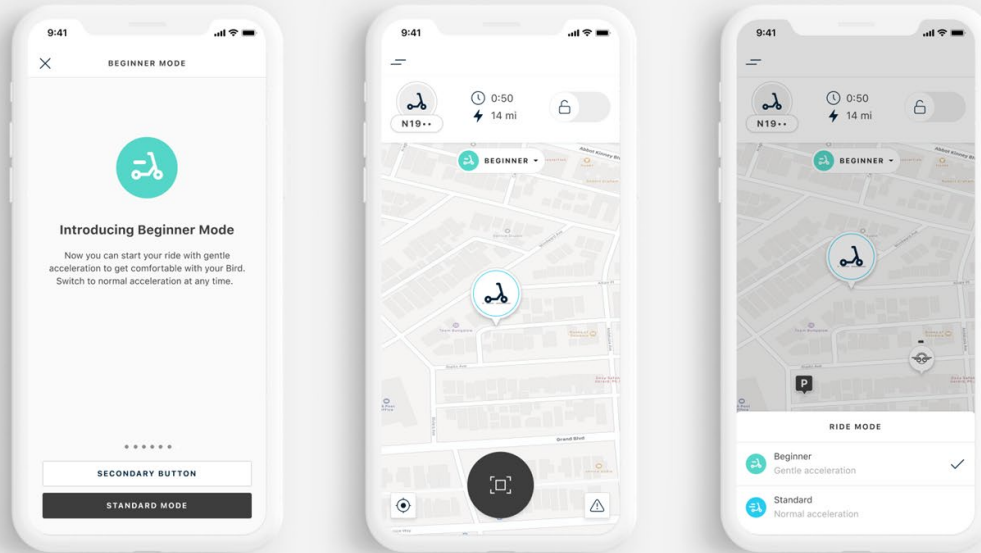
Uniformed staff physically patrols on foot key areas of the City identified in collaboration with City staff. To date, **Canada's Safe Streets Team** has had thousands of conversations and interactions with local riders to educate them on local rules in cities in which we operate.

- ✓ Providing residents an opportunity to test ride an e-scooter at no cost
- ✓ Educating residents on safe and responsible riding including local rules like no sidewalk riding in Ottawa
- ✓ Free helmets given away to local residents



Ottawa

Beginner Mode



Beginner Mode



Beginner Mode automatically **softens** a shared scooter's acceleration, allowing riders to **slowly work their way up** to full speed.

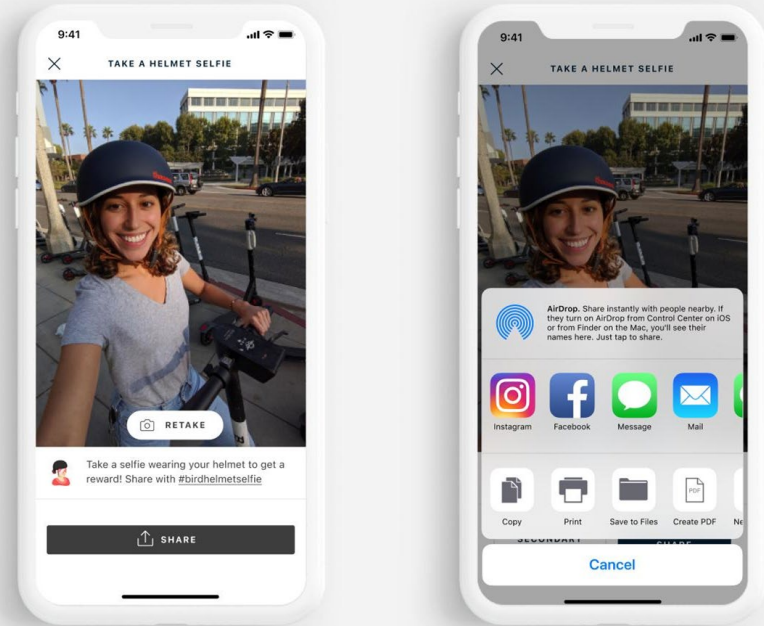
This can be mandated for first # of rides and at a lower maximum speed.

Helmet Selfies

Riders are asked to **take a selfie**. Riders who demonstrate helmet usage can receive **incentives** such as future ride credits.

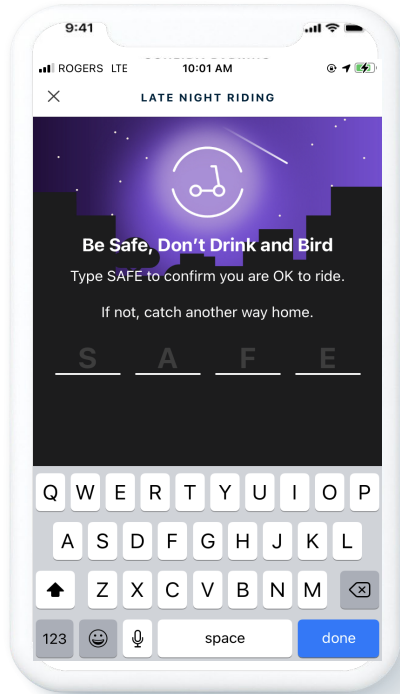
Riders can also share their selfie via social media to help promote broader adoption and use of helmets.

A shared helmet can also be attached to the e-scooter and locked/unlocked via Bluetooth from the shared e-scooter company app if desired by City.



Bird Helmet Selfie

Safe Start

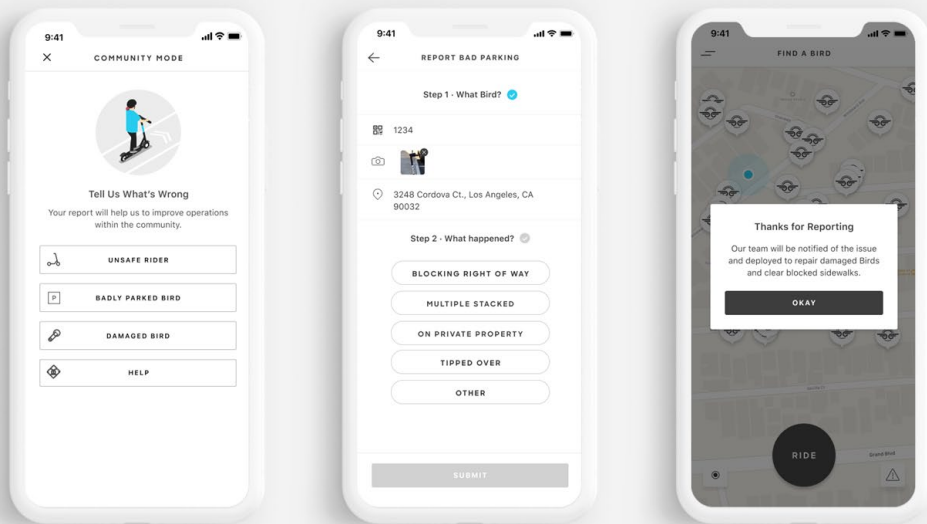


An in-app checkpoint is **designed to discourage** people from riding under the influence.

During late night hours, riders attempting to unlock an e-scooter are asked to verify that they can safely ride by correctly entering a keyword into the app.

Those who are unable to type the keyword correctly are encouraged to choose an **alternative method of transportation**, such as a taxi or ride-hailing service.

In-app Reporting

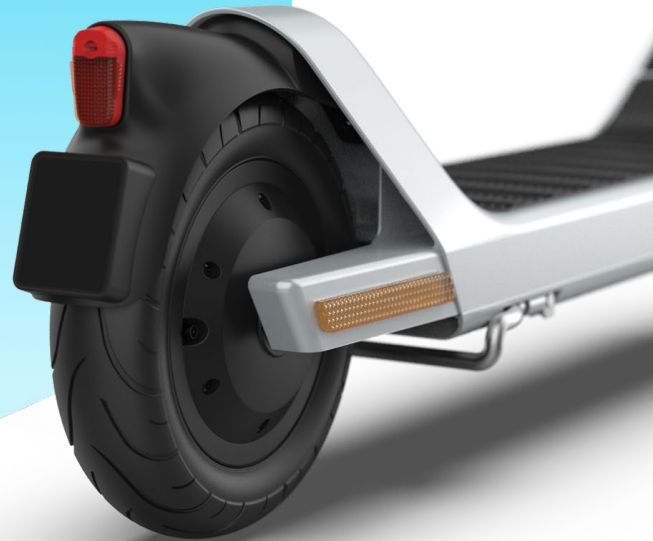


help center available to both riders and non-riders

In-app reporting is a reporting feature that allows anyone - whether or not they ride that company's e-scooter - to **report instances where an e-scooter is parked improperly, damaged, etc.**

These reports help shared e-scooter companies take appropriate action such as deploying staff to reposition or remove a vehicle, or taking further disciplinary action as needed.

Thank you.



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