Baltimore Dockless Vehicle Program   3/19/25

SPIN

Lime

dot
DEPARTMENT OF TRANSPORTATION
BALTIMORE CITY

Tyler Smith – Dockless Vehicle Program Manager

Born and raised in Baltimore City

Economics and Political Science: William and Mary

Worked 5 years as a bike courier and trainer in WDC

Worked 10 years as a field bike mechanic (FBM), FBM manager, crane operator, station operations manager for Motivate, operator of Capital Bikeshare

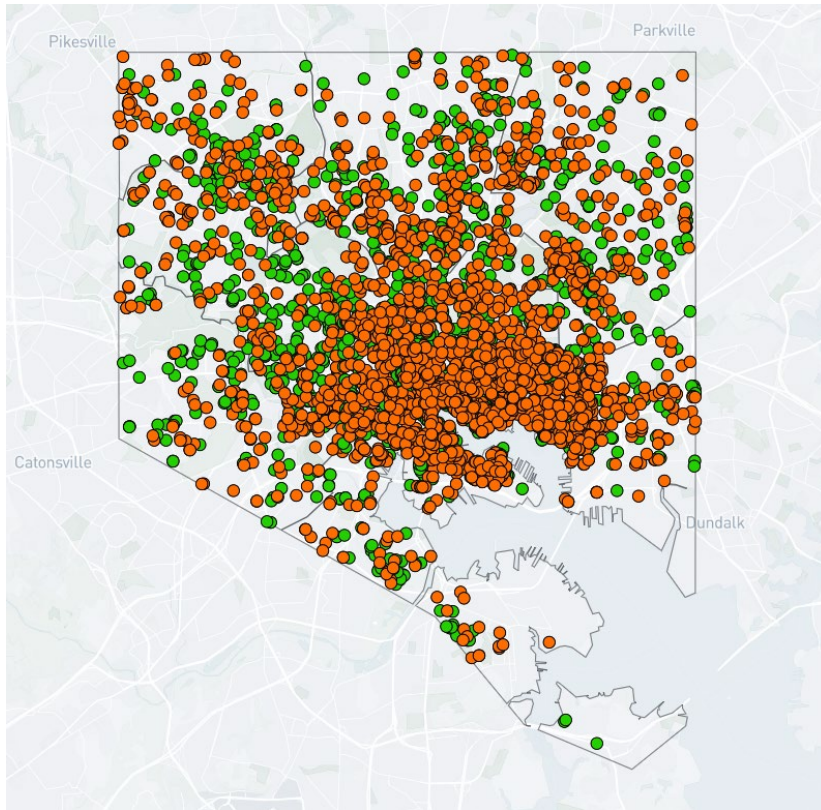Performed over 45,000 bike inspections

Wrote "How to Inspect a Bike," "Dock Level Laser Test," and other training materials for Capital Bikeshare

Worked with local transportation officials to site, plan traffic control, and schedule installation of stations

Led team that installed over 200 bikeshare stations

Regular mechanic sweeper for Baltimore Bike Party

- Set clear expectations for Operators
- Grow and standardize the Access program
- Ensure the entire fleet of vehicles are safe and operable
- Provide transportation alternatives to the entire city of Baltimore
- Routinely check for compliance regarding fleet condition, vehicle distribution, and issue response times
- Ensure Scooters and Bikes are viable solutions where gaps exist in public transit
- Work with stakeholders to address concerns about the program

SPIN

2,800 e-scooters

150+ e-bikes

Lime

1,425 e-scooters

75 seated e-scooters

500 e-bikes

Total Number of Trips
1,623,111
Total Scooter Trips
1,516,865
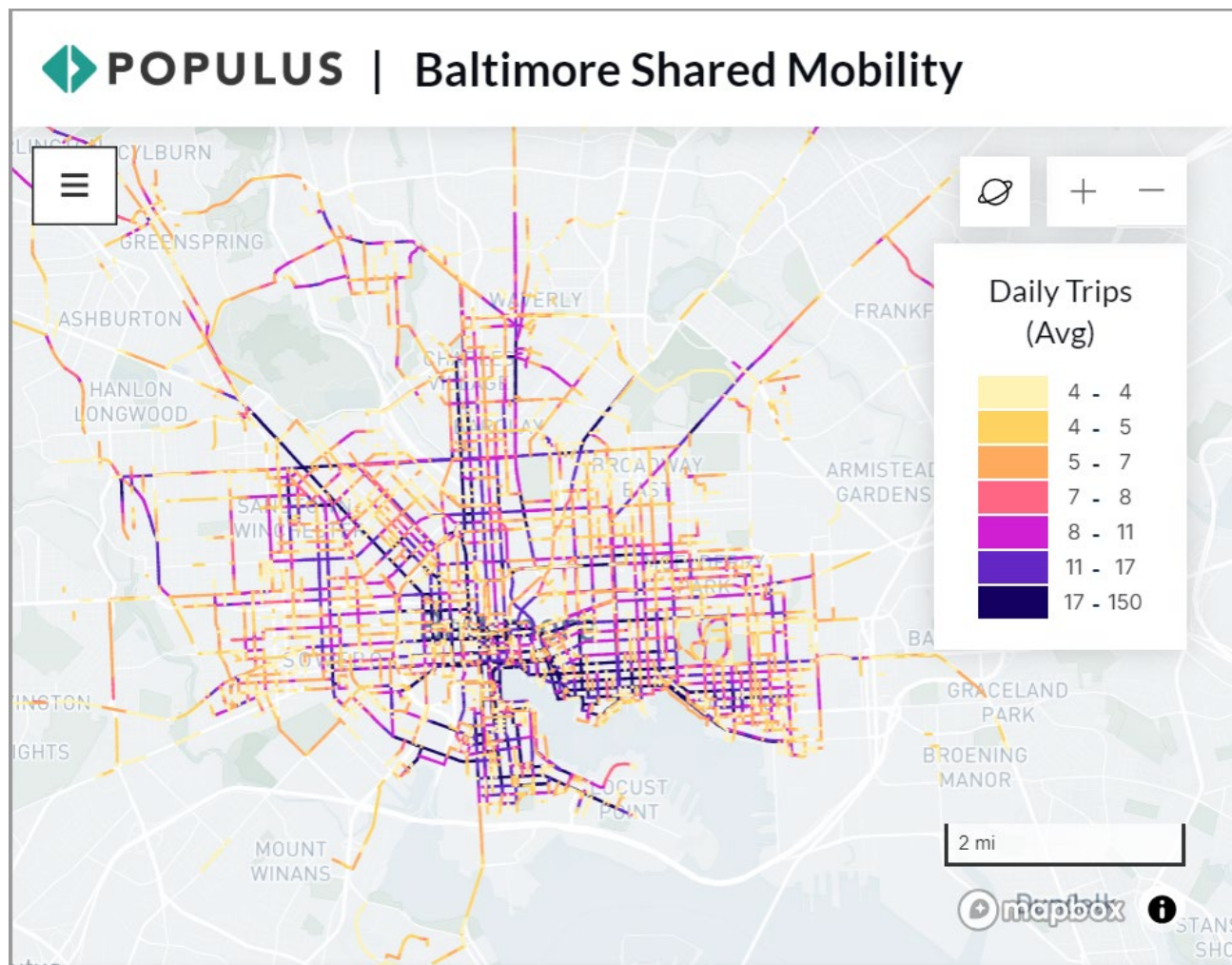Total Ebike Trips
106,246
Total Trips Distance
1,780,299 mi
Total Trips Duration
17,326,818 mins
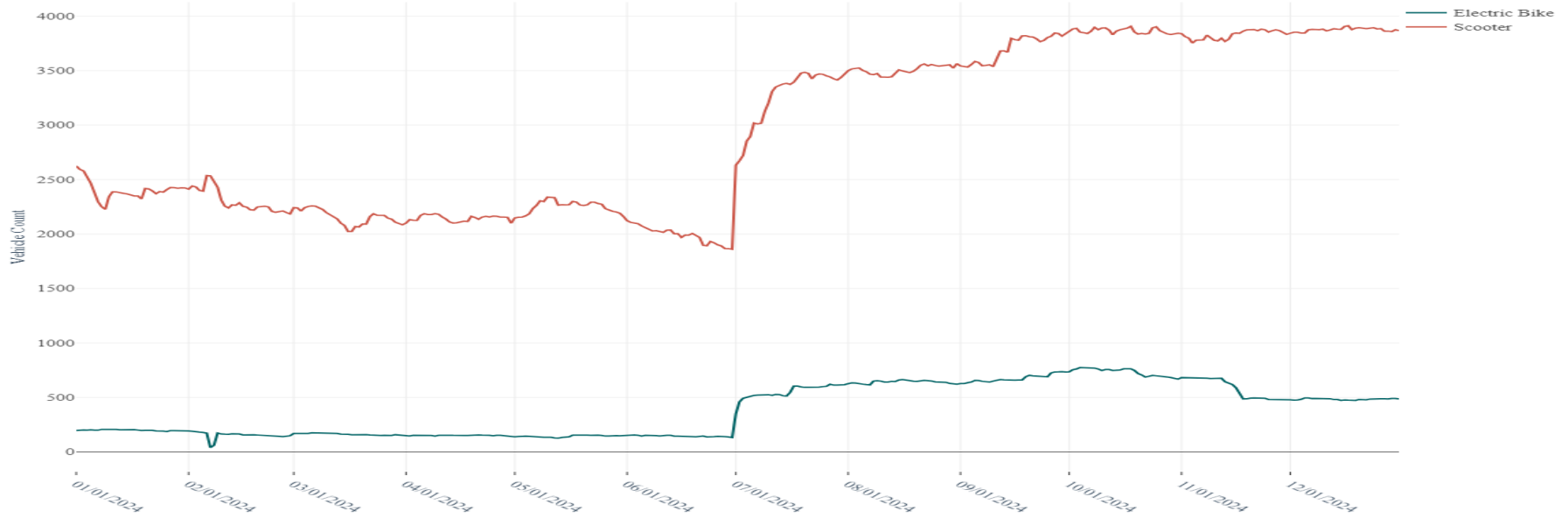Average Trip Distance
1.11 mi
Median Trip Distance
0.83 mi
Average Trip Duration
10 mins 40 secs
CO_2 Savings
73,115 - 97,916 kg-CO_2eq

POPULUS | Baltimore Shared Mobility

Daily Trips (Avg)

- 4 - 4
- 4 - 5
- 5 - 7
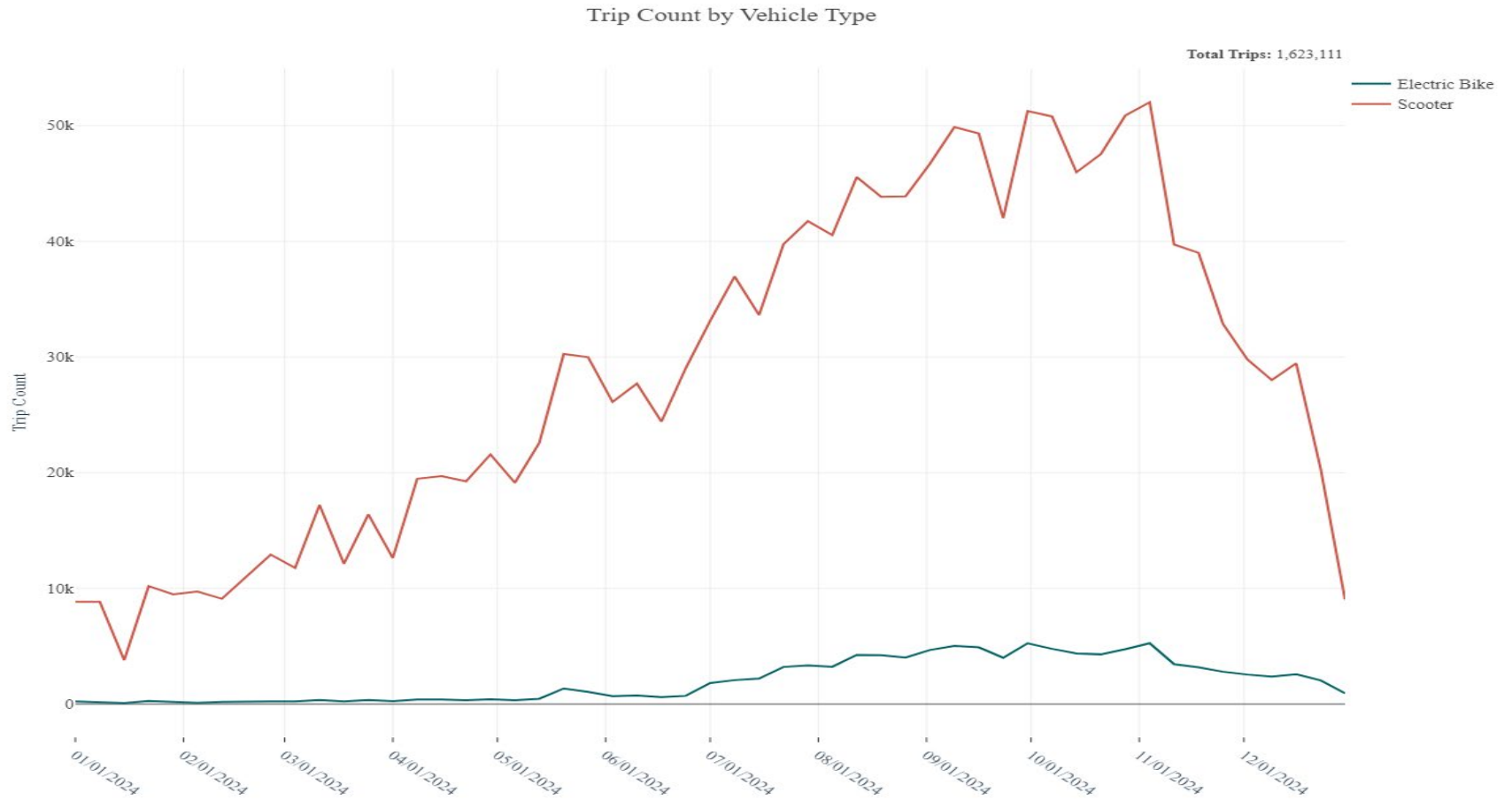- 7 - 8
- 8 - 11
- 11 - 17
- 17 - 150

Total Vehicles in 2024: AVG scooters =2,940 & AVG e-bikes =387

Vehicle Count by Vehicle Type

Ridership in 2024 = 1,623,111 new record for the system!

Trip Count by Vehicle Type

Total Trips: 1,623,111

— Electric Bike
— Scooter

Average Utilization of 1.36 for scooters and 0.61 for e-bikes

Utilization by Vehicle Type
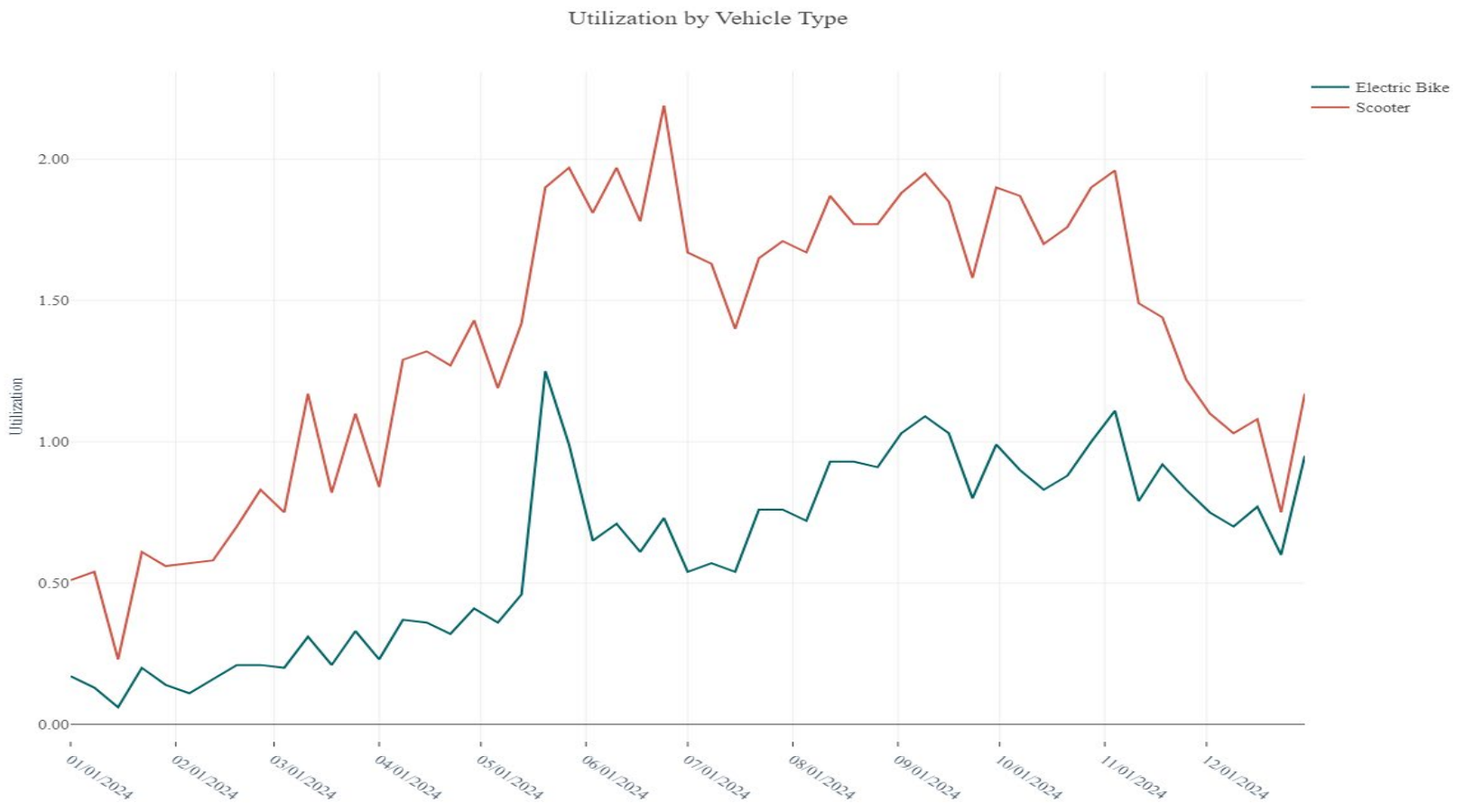
BCDOT established a way for residents to report poorly parked (or "misparked") scooters or e-bikes via the city's 311 system.

Formerly, the only way to get one of the dockless vehicle operators to come move one of their vehicles was by calling the company directly.

Now, with 311 able to handle such requests, residents can use a system they are already familiar with, and BCDOT has better visibility into the nature and other details of the requests.

We encourage residents using the app to include photos whenever possible. That way the recovery team can be more confident that they are moving the scooter or e-bike that was reported.

311 Service Request

Service Request

Description: TRM-LIME Scooter & E-Bike Complaint

Request Id: 1171880
311 Id: 24-01092304

Priority: Medium
Status: CLOSED

Initiated By: MIDDLEWARE, BCIT
Date: 12/29/2024 9:00 AM

Problem Details: 2 scooters blocking sidewalk and handicapped ramp.

Assignment

Due Date: 12/29/2024 3:00 PM

Dispatch To:
Date:

Completion

Invest. Complete? ☑

Actual Start: 12/29/2024 10:30 AM
Date Completed: 12/29/2024 10:52 AM

Work Needed? No
[Create Work Order]

If work is needed you MUST create a Work Order!

Closed By: ▓▓▓▓▓▓▓▓
Date: 12/29/2024 10:52:47 AM

Date:

Cancel Reason:
Cancelled By:

Comments

Comments:
[Sort ▼]

> ▓▓▓▓▓▓▓▓   12/29/2024 10:52 AM
> Scooters have been properly relocated away from the handicap ramp.

> ▓▓▓▓▓▓▓▓   12/29/2024 10:30 AM
> Dispatching team members to retreive/move

Requester Information

Name: ▓▓▓▓▓▓▓▓
Phone Number: ▓▓▓▓▓▓▓▓
Email: ▓▓▓▓▓▓▓▓
Followup Call?: No
Called?: No

[Edit Caller Info]

Escalation

Escalated?:

Council Member:
Date of Escalation:

Next Steps:

Projected Completion Date:

Incident Information

Address: E 28TH ST and ST PAUL ST, Baltimore City, 21218

Location Details:

Sector: SECTOR 1
Zip Code: 21218

Council District: 12

X: -8,528,814.667
Y: 4,767,897.773

Attachments

Custom Fields

Hundreds of service requests have been completed since 311 went live on 12/9/24.

Both Operators have been completing not only addressing the issue, but also reporting it closed with comments within the 24-hour window.

Operators are reporting missing Link scooters when they are discovered during process.

Operators are monitored for compliance with city requirements for:

1) An even distribution of vehicles across districts. No more than 25% in any one District and no less than 5%.
2) Meeting the daily 4-vehicle deployment requirement in each of the 12 equity zones which are placed in transportation hubs or in traditionally underserved locations where there are gaps in the transit network.
3) No more than 5% of vehicles can be in the same place for more than 5 days.
4) The overall condition of the available vehicles as verified by vehicle inspections which are focused on safety and rideability.

Central/Downtown

123,281 Total Events

24.3% of Total Events
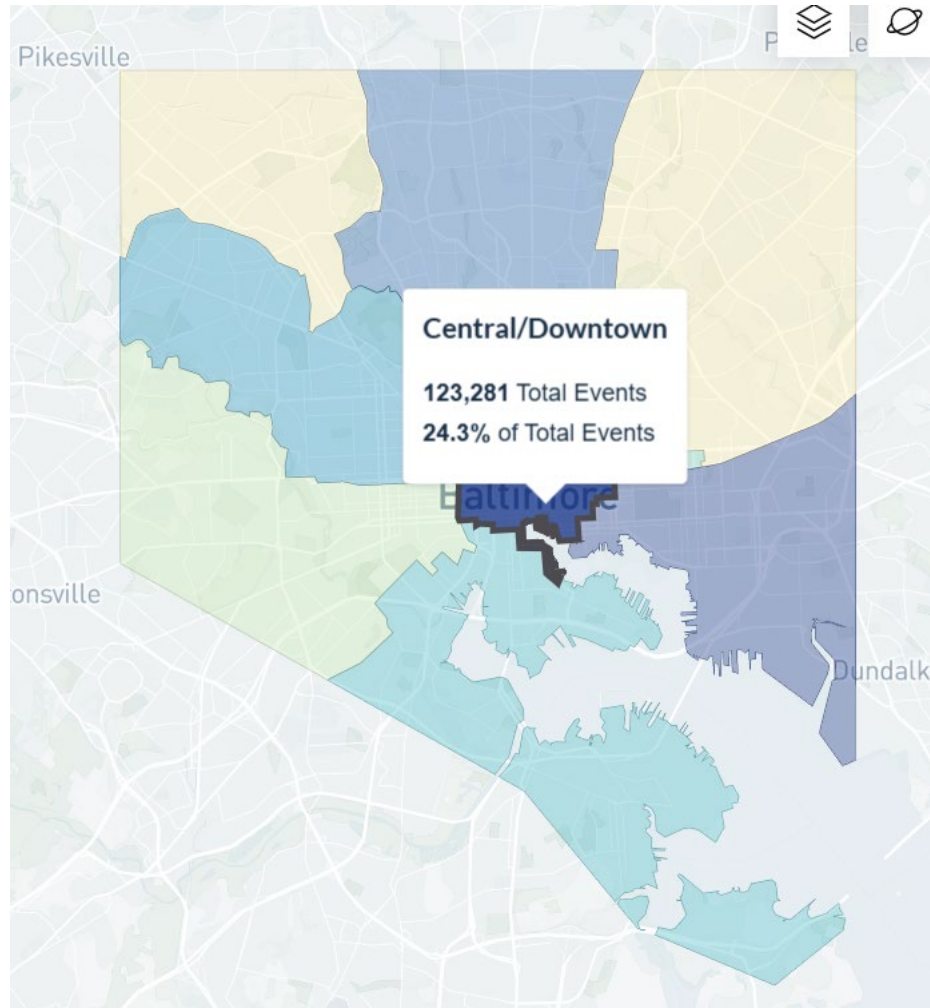
Inspection Points

OPERATIONAL Table- Riding test for safe operations (one or more issue = non-compliant vehicle)

Operational brakes, wheels, tires, bell, pedals, seat, seat post clamp (holds and is adjustable) handlebars, kickstand, front/rear lights, acceleration, governor, lock (if applicable)

No loose, very broken, sharp parts or exposed live wires on areas of vehicle that customers touch as well as the battery (affecting operations or safety)

Overall, vehicle is safe and rideable: Vehicle starts, turns, stops, is rentable, is reportable.

Vehicle Misparked? Y/N (note only)

No-Operation, No-Parking, Slow Zone work as expected (note only)

APPEARANCE Table- Visual stickers are noncompliant only if missing or illegible (2 or more issues = non-compliant vehicle)

No unsightly broken or damaged parts that do not pose a significant safety or operational risk. (Issues already counted in Operational Table are not double counted here)

Tactile decal present and legible

Name of company (16-point font) and Unique identifier # (1 inch) present and legible

Telephone # and website address present and legible

No official 3rd party advertising

No excessively dirty, soiled, or biohazard-covered vehicles

Cosmetic vandalism or graffiti on vehicle (note only)

Operators that fail to meet the compliance requirements face a first warning.

They must pass the next 2 subsequent compliance checks to have that warning rescinded.

If the same violation type (deployment compliance vs inspection compliance) recurs within the next 2 checks, a 2nd warning is issued.

If the same violation type recurs within the next 2 checks, a citation is issued, resulting in fines as well as the loss of automatic permit renewal for the next permit year.

BUILDING EQUITY IN MICRO-MOBILITY: FIVE YEARS OF DOCKLESS VEHICLES IN BALTIMORE CITY

Over the years there has been a concerted effort by BCDOT and dockless operators in Baltimore City to promote income-qualified Access Programs and ensure distribution expands beyond Baltimore's "White L." A few existing programs and policies include:

- Generous Access Program offered by Spin: 4 rides per day (under 30 minutes) are free for income-qualified residents.

- All Operators are required to offer at least a 70% discount to qualified riders.

- Partnerships with local organizations promote Access Program.

- Operators that maintain program compliance earn fleet increases as well as automatic renewal of their permit.

- Program requires balanced deployment of vehicles & guarantees vehicles are available daily at equity-focused transportation hubs.

- Introduction of 500 e-bikes to the market in 2024 by Lime.
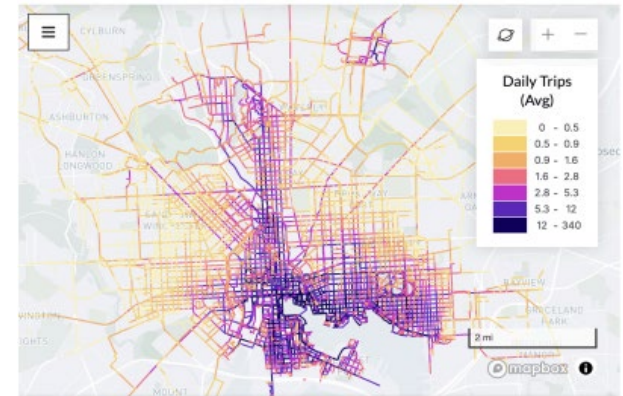
2019 Ridership
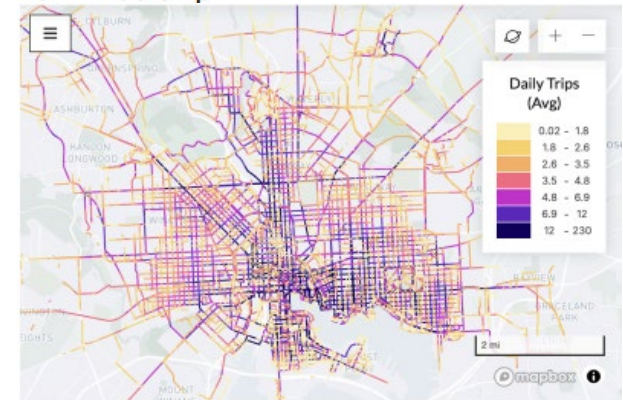
2024 Ridership

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Public-Facing Map Here: Spin Access Program: Lime Access Program:

Feature Update: Throttle e-Bike

Thumb-operated Throttle
Riders have the option to accelerate via the throttle

Check out the new throttle feature on Lime e-bikes!

Scooter Display in a No Parking Zone

Geofencing in the Micromobility Sphere

Establishes Various Zones to manage rider behavior:

1) No Operation Zones

2) No Parking Zones

3) Slow Zones

4) Parking Corrals

Note: Zones may be combined!

No operation zones

- Shuts down power entirely on vehicle.
- Rider sees red icon on dashboard interface indicating that it is bad to ride there.
- Are also by definition No Parking zones.
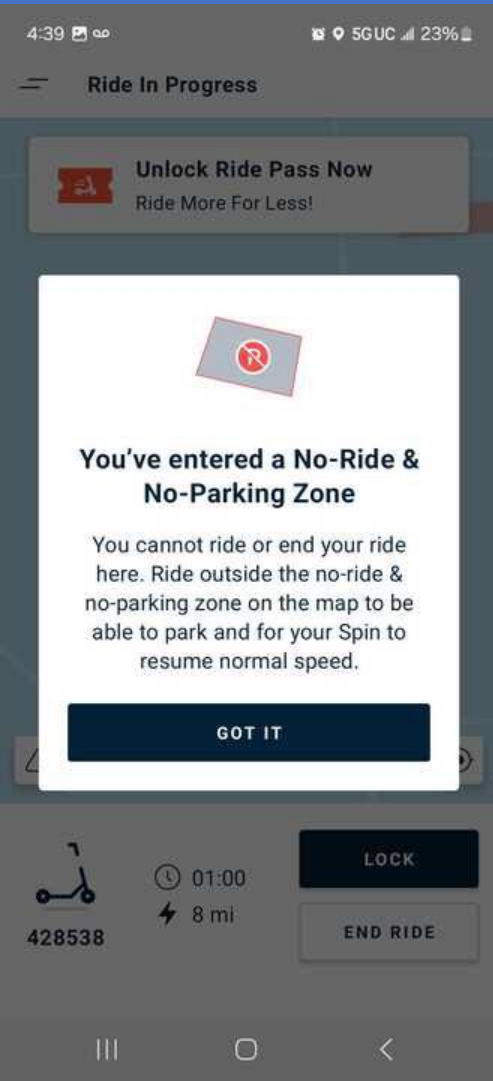- Example on the left is Oriole Park at Camden Yards surrounding sidewalk areas in red.
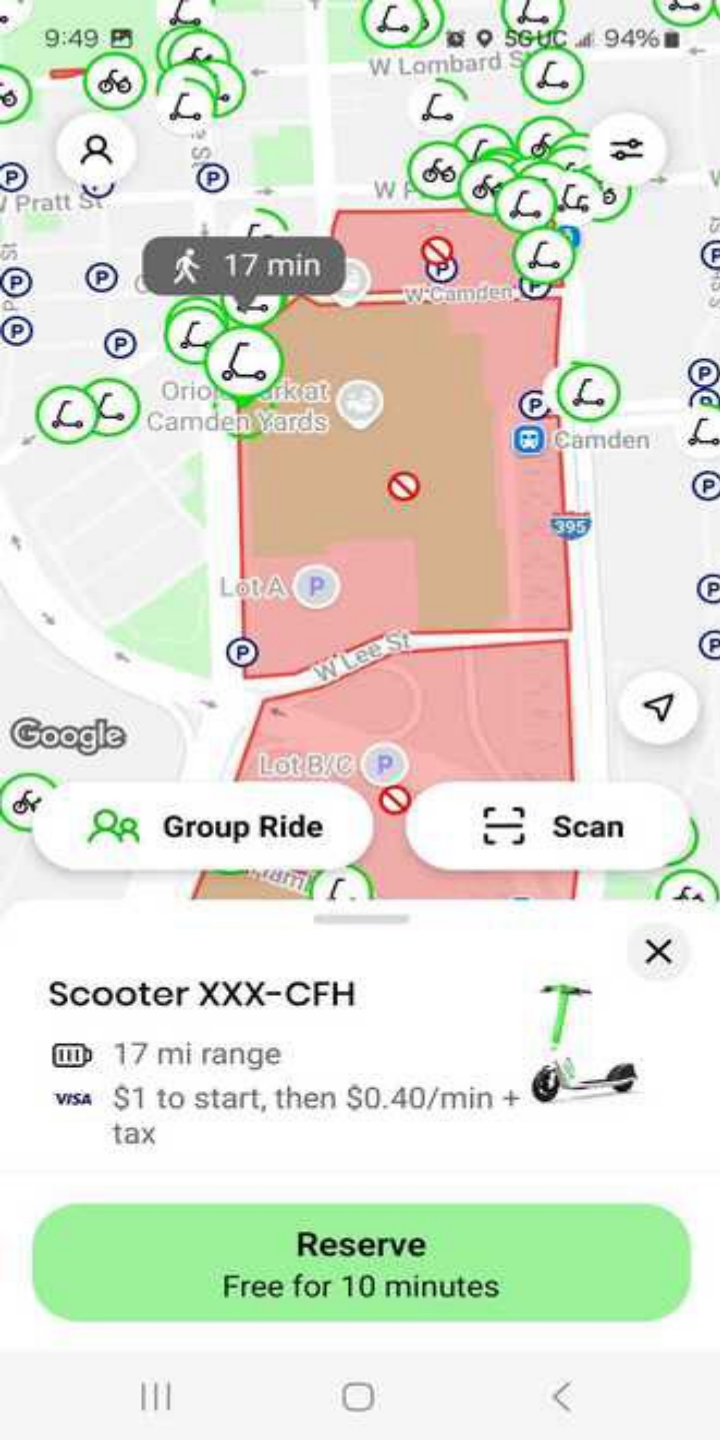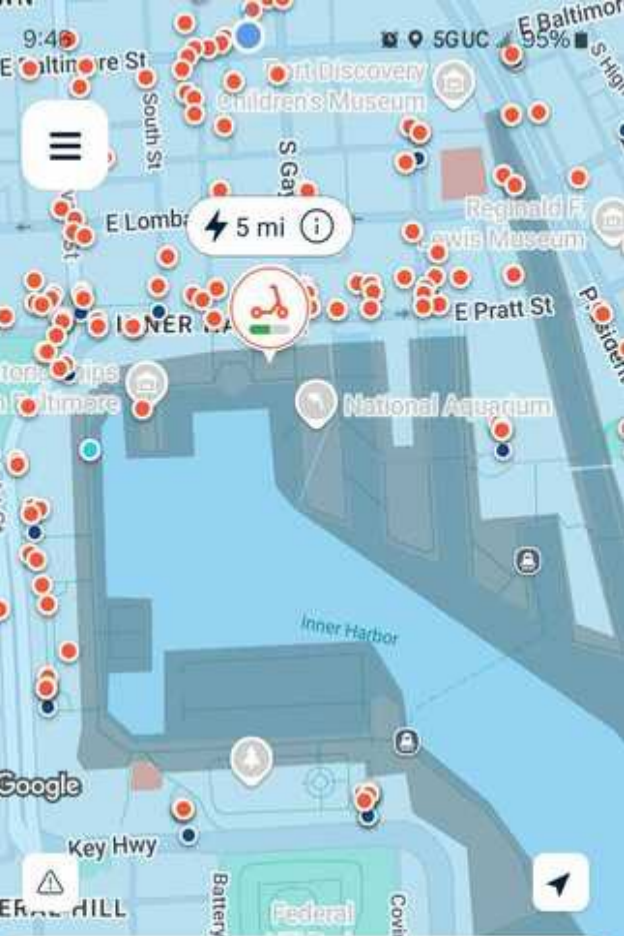
Slow Zone

Shown in dark blue on the pedestrian walkways around the inner harbor

Slow Zones Cap vehicle speed at 8 mph

No Parking Zones

Areas where a vehicle ride cannot end.

Corrals aka preferred, discounted Parking Locations

Parking areas which provide fare reduction when riders park within it.

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