

Dockless Vehicle Committee

April 13, 2022



Agenda

April Agenda – Q4

1. Permit Cycle
2. Data Updates
 - Ridership numbers
 - Data requests
 - Corral analysis
3. Discussion
 - Survey Results
 - Rules & Regulation updates for 2022
4. Presentations (MOVED ON AGENDA)
 - Updates from vendors
5. Looking Ahead
 - Potential Regulation: Personal Delivery Devices
 - Q4 Events

DVC is now quarterly with monthly newsletters.

Email dot-community@baltimorecity.gov to receive emails.

Permit Cycle

2021 Permit

- 1-2 companies will be eligible for renewal based on:
 - BCDOT Ratings - Compliance ratings, warnings and citations issued
 - Community Ratings - 311, complaints, community survey

Quarterly

- DVC meetings
- Compliance Review
- Fleet Increase applications (2021 Permit Increases: Link +100, Spin +300)

Permit Revisions

- Q2 - DVC reviewed first draft
- Q3 - Survey completed
- **Q4- R&R public comment**

2022 Permit

- **Renewal(s) to be announced April 29, 2022**
- Application open May 2-20, 2022
- Permits to be award June 6 and active July 1, 2022

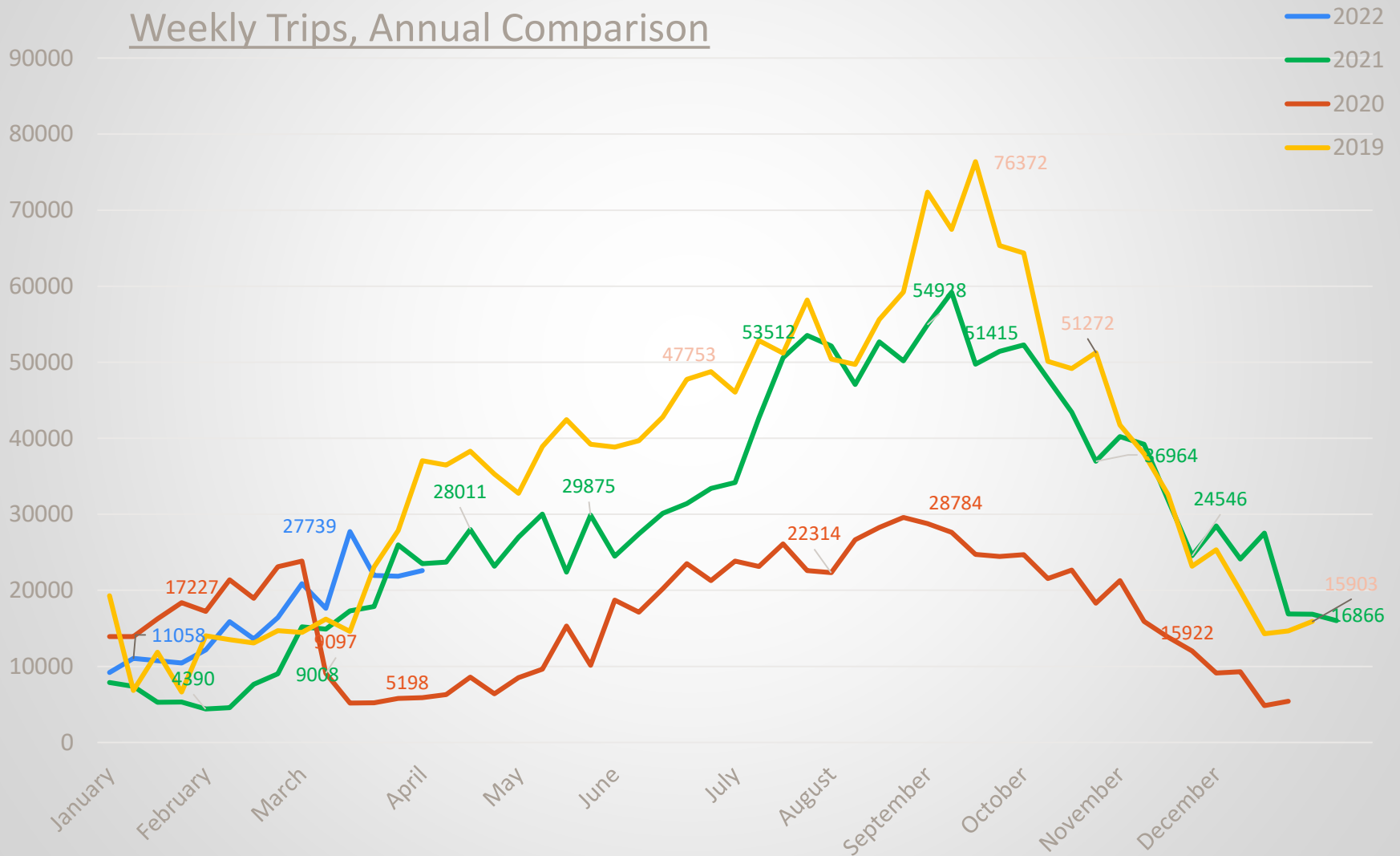
Future Permits

- 2023: Anticipating 2 permits and a possible RFP for supporting services (adaptive vehicles, e-bikes, equitable outreach)

Dockless Data Updates

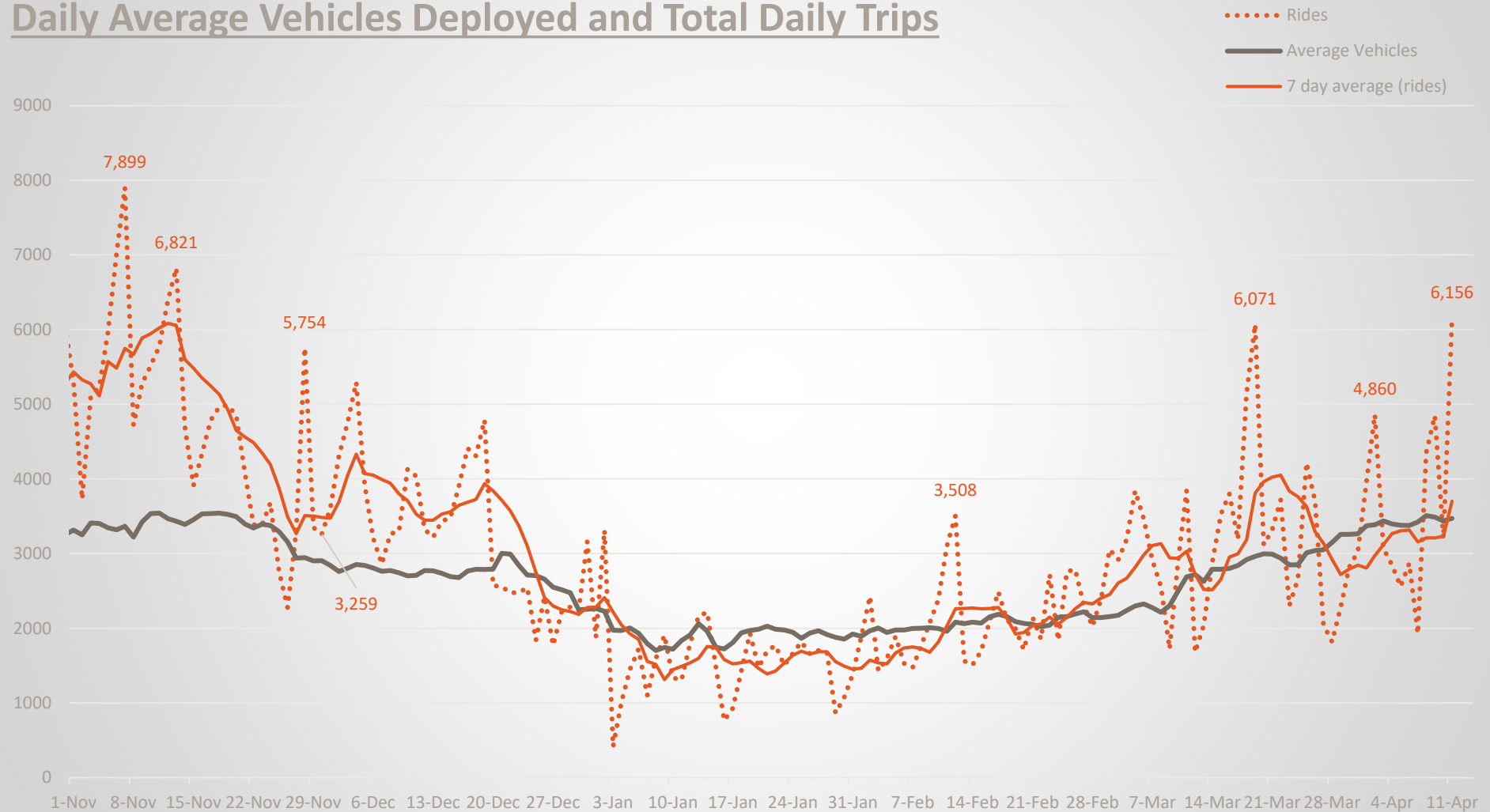
There was a 72% increase in rides in 2021 compared to 2020

Weekly Trips, Annual Comparison



Data Updates

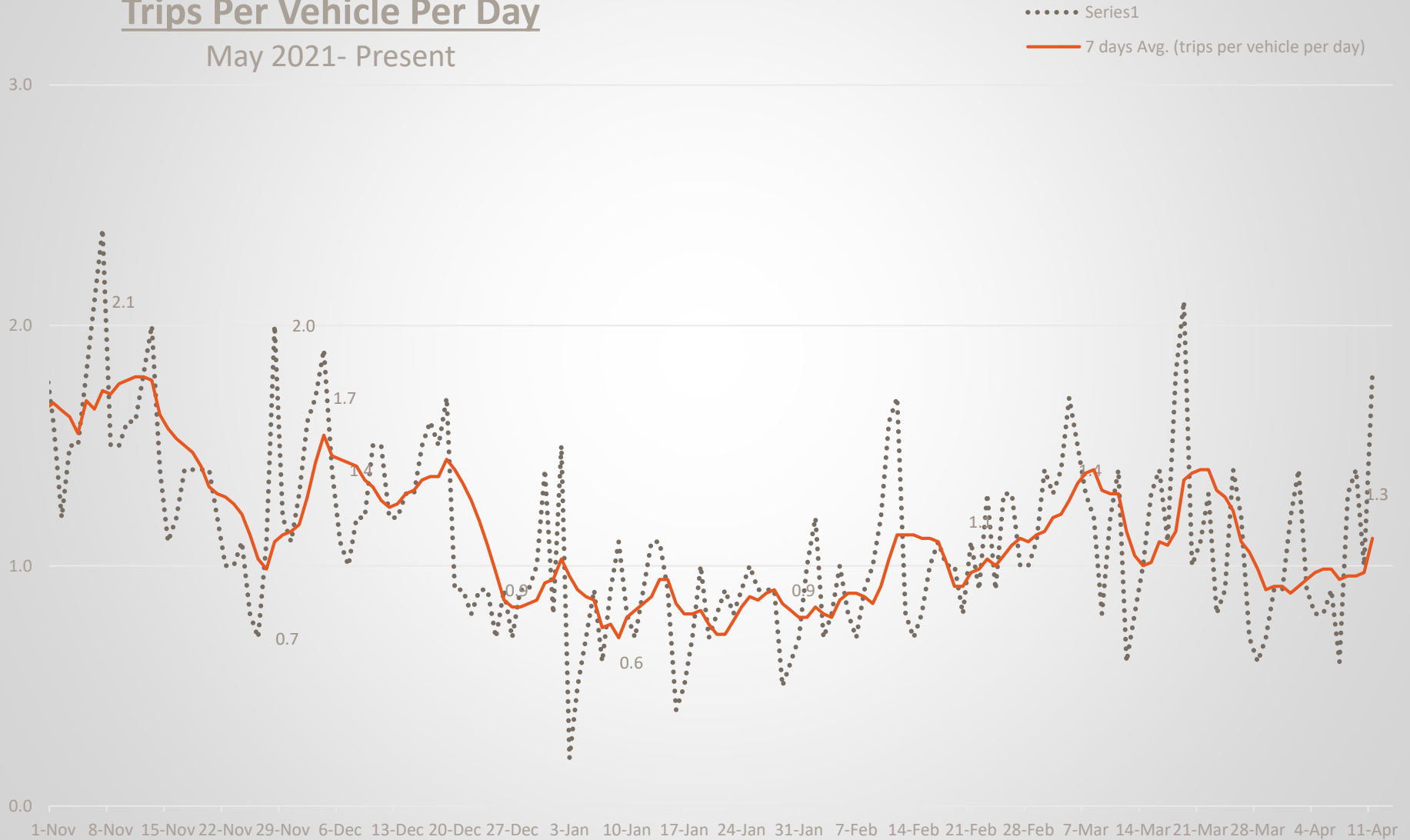
Daily Average Vehicles Deployed and Total Daily Trips



Data Updates

Trips Per Vehicle Per Day

May 2021- Present



Updates: Ridership

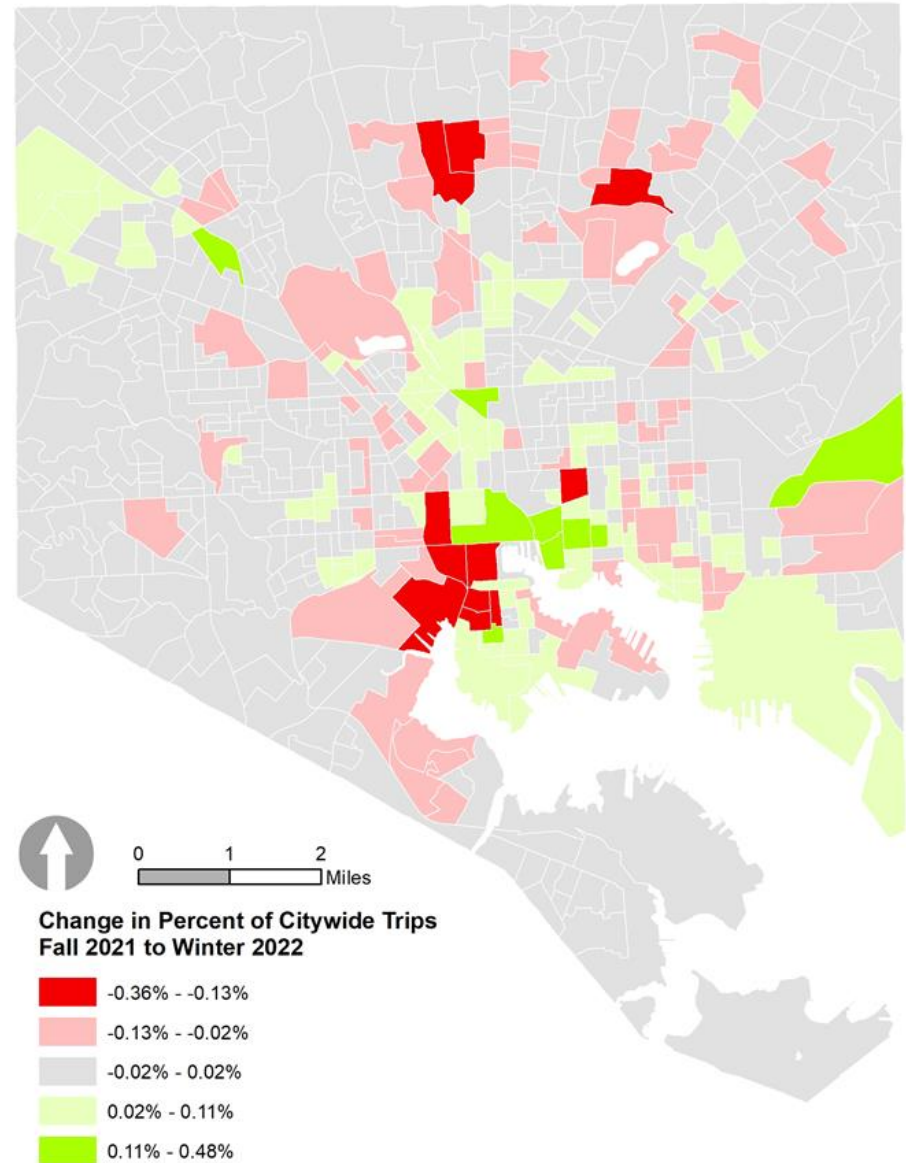
Ridership share Oct-Dec vs. Jan – March

Growth

- Downtown
- NW Metro

Decline

- Universities
- Stadium (M&T)
- Areas of vandalism (reduced deployments)
 - Cherry Hill
 - SW
 - East Baltimore (Jonestown)

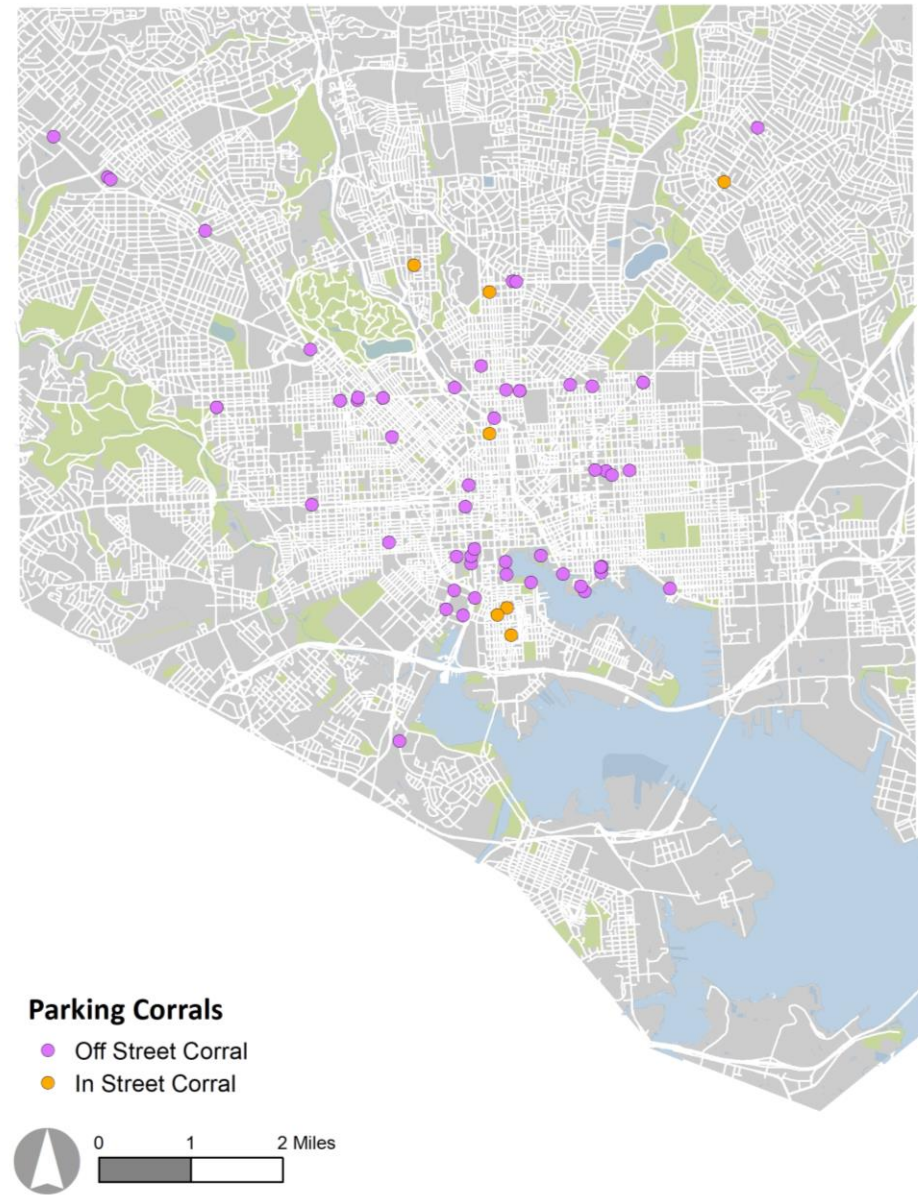


Updates: Corrals

BCDOT Corrals installed to date

Corral Design: paint or thermoplastic, bike racks, sign

Corrals appear in app and some permit holders issue a ride credit.

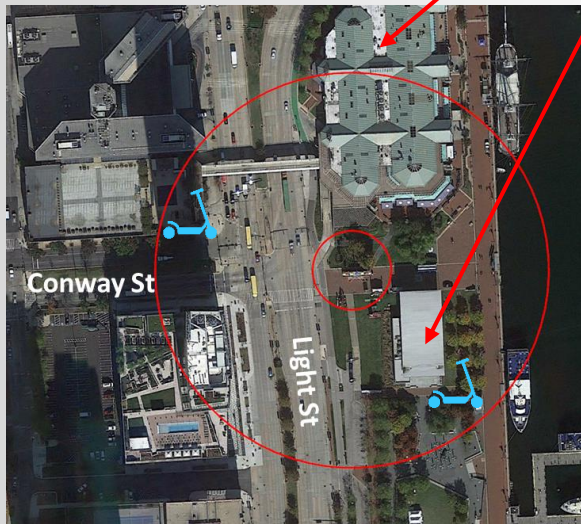


Updates: Corrals

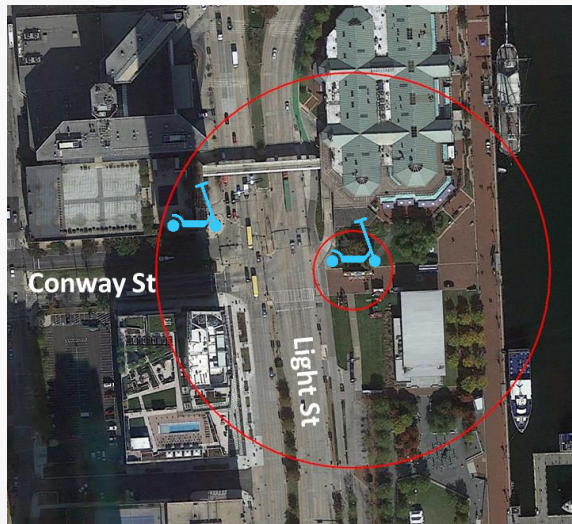
Corral Analysis

What is 20m:100m Parking Ratio?

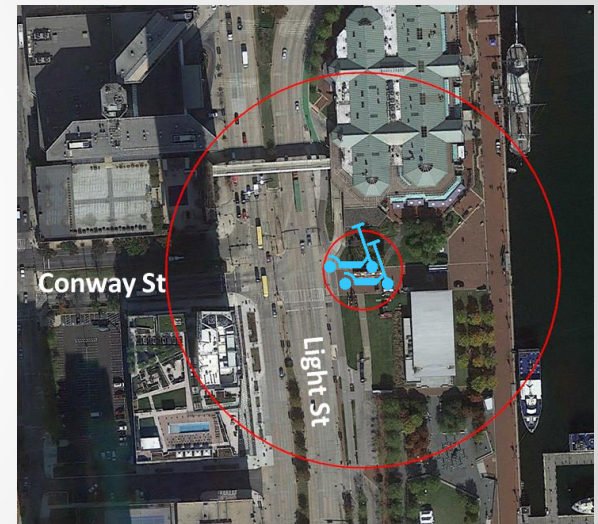
Harborplace
Visitor Center



20m:100m
Parking
Ratio = 0



20m:100m
Parking
Ratio = 0.5

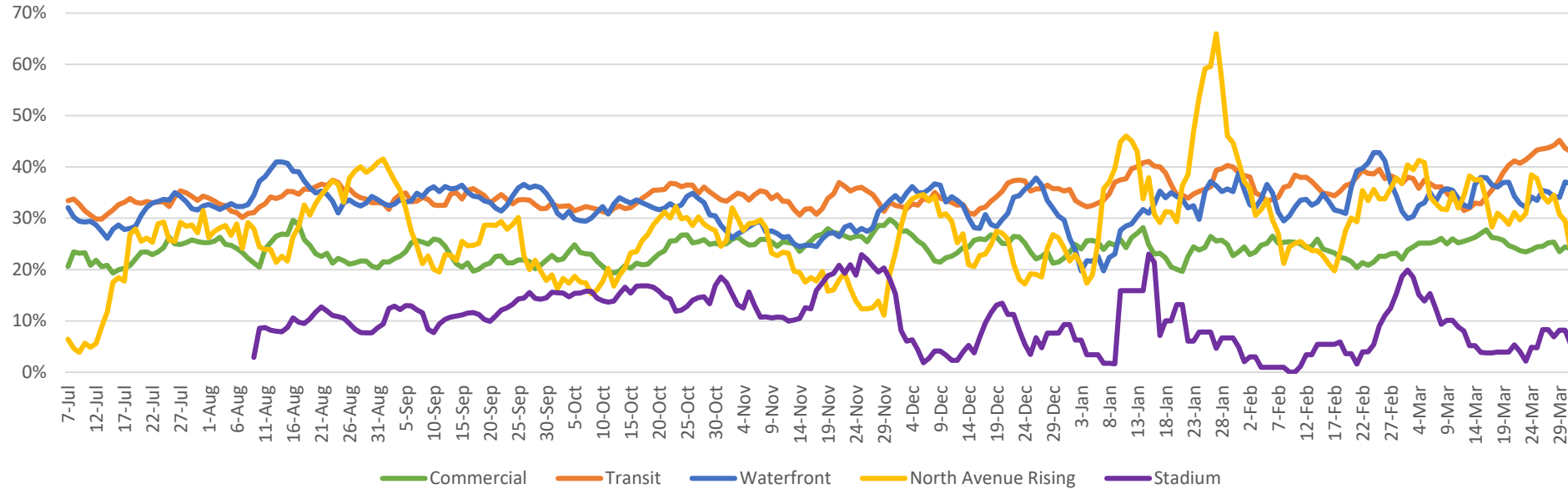


20m:100m
Parking
Ratio = 1

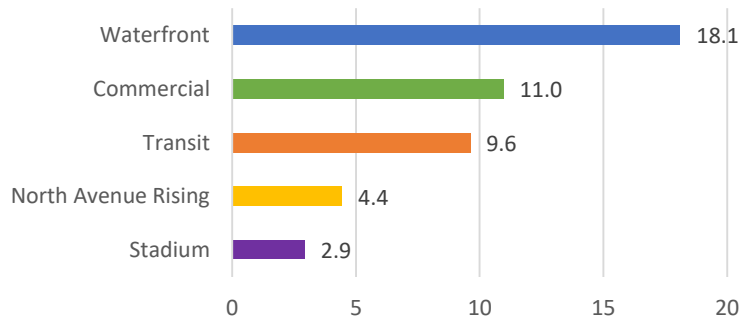
Updates: Corrals

Corral Analysis – By Category

Average 20m:100m Parking Ratio by Corral Type (7-Day Average)



Average Daily Destinations Per Corral

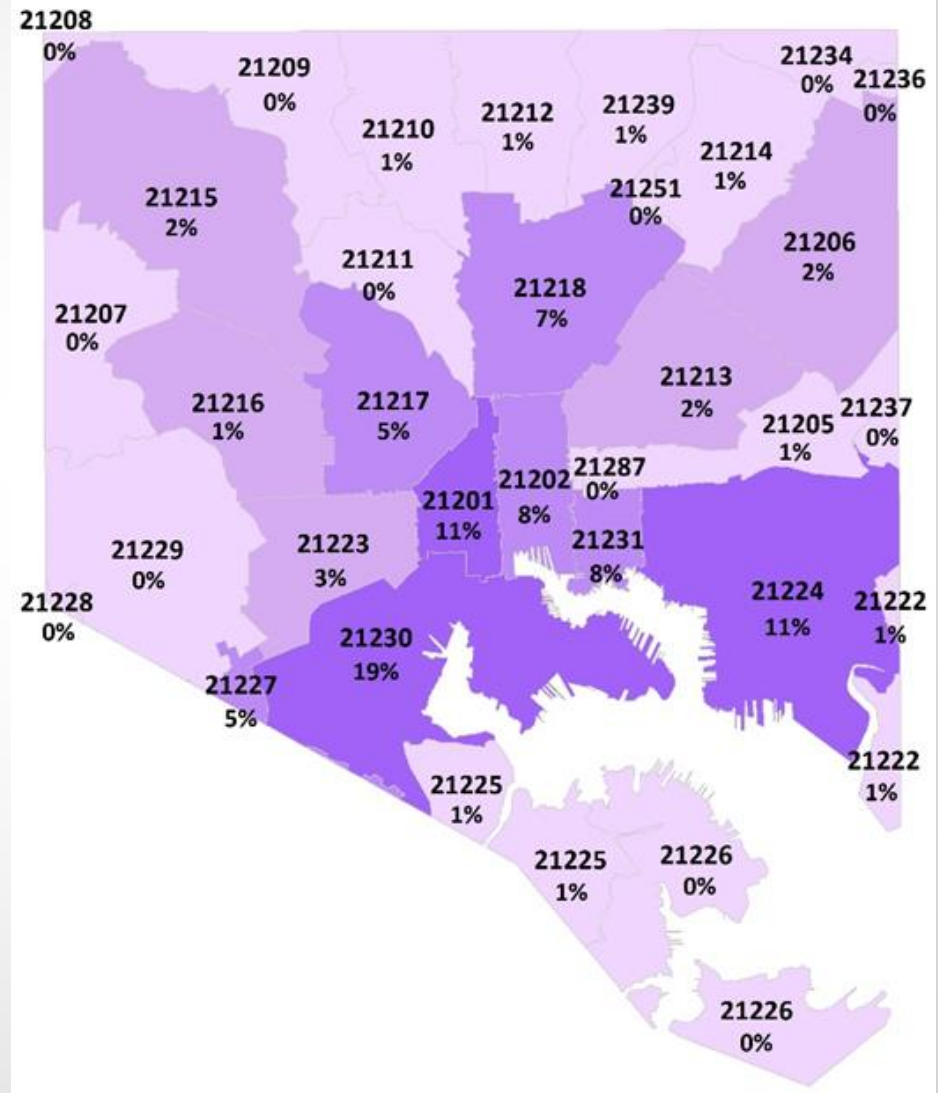


Discussion: Survey Results

The annual rider survey was open from January 15, 2022 to March 5, 2022

- Released through the provider mobile phone applications and via notifications to users
- 783 responses, 762 (97%) from people who actively ride
- 194 responses (24.7% of total responses) from riders who have low-income, text to unlock, and/or cash payment plans

76% of riders said the program has improved over the past year.



Discussion: Survey Results

How has your use of transportation changed as a direct result of dockless vehicles?	Use Less Often	Same	Use More Often	Do Not Use
Driving in my own car	36.30%	23.50%	7.10%	33.10%
Riding as a passenger with a friend or family member in their car	31.20%	43.80%	8.30%	16.70%
Taxi, Uber/Lyft, or informal taxi	55.50%	25.40%	7.40%	11.70%
Riding my own bike	17.60%	21.00%	5.50%	55.90%
Using my personal scooter or other small vehicle (such as a moped or motorized skateboard)	10.30%	13.40%	5.10%	71.20%
Walking	35.90%	44.00%	16.40%	3.70%
MTA bus, Charm City Circulator, Light rail, Metro Subway, university shuttle bus, or other train	23.90%	26.60%	10.40%	39.10%
Water taxi	10.30%	15.70%	4.20%	69.80%

64 riders reduced the number of cars they own as a direct result of using dockless vehicles.

Discussion: Survey Results

How could Baltimore City DOT improve the Dockless Vehicle Program? *	Has low-income, text to unlock, or cash payment plan	
	No	Yes
Build more connected, safe, and comfortable bike lanes	24.4%	17.3%
Make existing bike lanes safer/more comfortable	16.3%	14.7%
Improve maintenance and enforcement of existing bike lanes	14.7%	15.1%
Allow companies to provide more dockless scooters	12.5%	12.5%
Change street design and/or increase enforcement to slow down cars	11.4%	11.0%
Build designated parking for dockless bikes and scooters	7.9%	11.8%
Require companies to provide more dockless bikes	7.3%	8.8%
Create more PSAs and messaging directed to drivers about safety	3.7%	6.3%
Create more safety tips for riders	1.8%	2.6%
Total	100.0%	100.0%

* Respondents could select up to 3 ranked choices. All three choices from each respondent are weighted equally in this analysis.

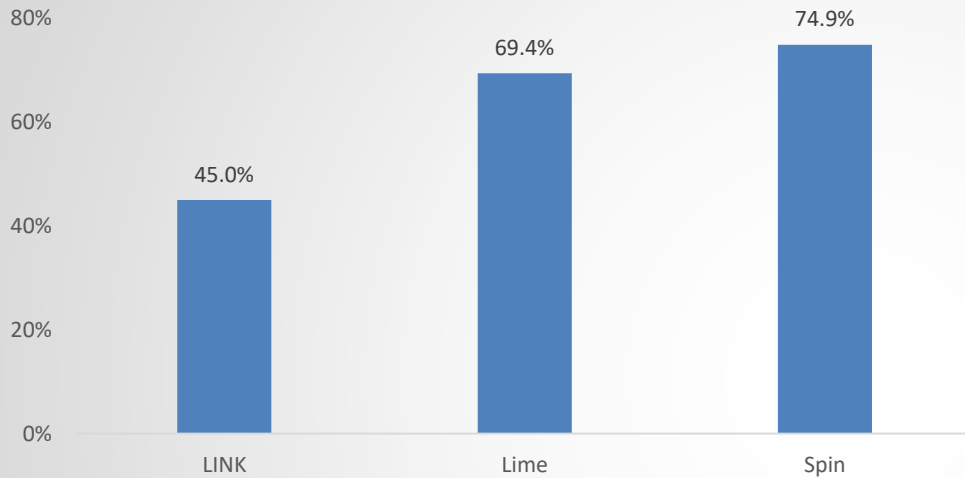
Discussion: Survey Results

How could the Permit Holders improve the Dockless Vehicle Program?*	Has low-income, text to unlock, or cash payment plan	
	No	Yes
Provide more vehicles for rent	22.1%	21.5%
Better vehicle maintenance	19.9%	15.4%
Make vehicles available in more neighborhoods	17.0%	12.3%
Reduce rental cost	16.7%	15.7%
Provide more dockless bikes, specifically	6.1%	3.8%
Improve vehicle design to make them safer	4.8%	4.4%
Fix app issues	3.9%	6.1%
Provide new vehicles which fit my size or physical needs	3.8%	6.8%
More responsive customer service	1.8%	2.7%
Make rental easier without a smartphone	1.4%	4.4%
Make rental easier without a credit card	1.4%	4.1%
Have more instructions in the app about learning to ride safely	0.6%	1.4%
Have more safety events	0.5%	1.4%
Total	100.0%	100.0%

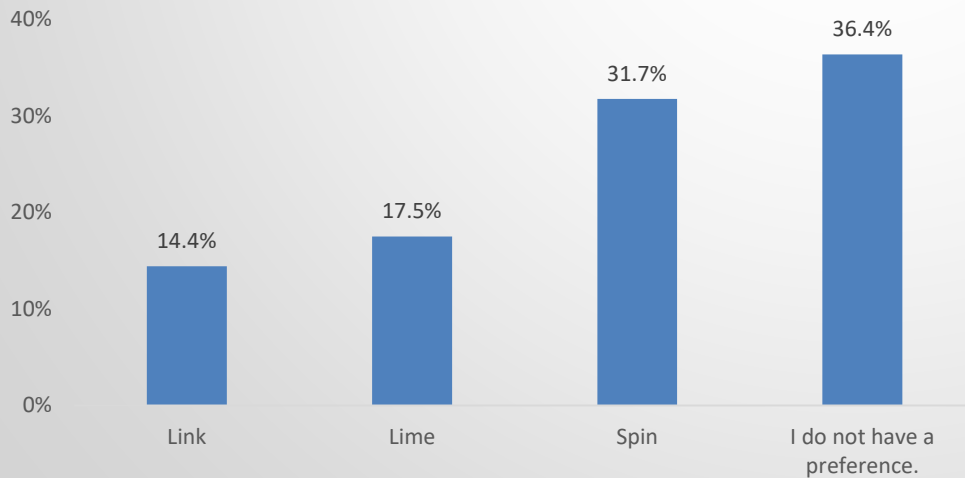
* Respondents could select up to 3 ranked choices. All three choices from each respondent are weighted equally in this analysis.

Discussion: Survey Results

Which brand have you used in the past 6 months?



Do you prefer one brand over the other brands?



Discussion: Rules and Regulations

The Baltimore City Department of Transportation (BCDOT) is accepting public comment on proposed changes to the regulations for Dockless Vehicle Permits. The public comment period will last from March 15, 2022 until April 15, 2022. The full text of the proposed Rules and Regulations can be found online at: <https://transportation.baltimorecity.gov/regulations-public-comment>

Process for annual revision:

Q1 Internal BCDOT review and review of national policy examples

Q2 Review with DVC stakeholder group

Q3 Rider survey for users of the service

Q4 Public comment for 30 days open to general public

Public may submit comment online, by emailing DOT_PublicComments@baltimorecity.gov, leaving a voicemail at (410)545-3212, or mailing comments to:

DOT Shared Mobility

417 E Fayette Street

Room 559

Baltimore, MD 21202

Discussion: Rules and Regulations

Proposed Change

Fleet size: The maximum number of companies will be reduced from four (4) to three (3)

Reason for change:

- Trips per vehicle per day – currently below 2 for half of the year
- Allow companies to have a big enough fleet/market share to make operations viable
- Responsiveness and managing responsiveness/compliance
 - 30 warnings and 9 citations issued this permit year

Future Goals (2023 and beyond)

- Reduce to 2 permits
- Supplement service with an RFP for additional services (adaptive vehicles, e-bike maintenance, outreach, etc.)

Do you think Baltimore should limit permits to ensure better service or should we allow an open permit to all? Why?

Menti.com code **4870 2427**

<https://www.menti.com/985tpdmq6p>



Discussion: Rules and Regulations

Proposed Change

Parking requirements: Changes include the ability for BCDOT to initiate parking picture checks for users who violate parking laws.

Reason for change:

- Best practices:
 - Some smaller/non-profit bike shares use EVERY photo
 - Some dockless programs require a % be reviewed
- Community demand - call for repercussions for problem riders
- Considered lock-to but there is not adequate parking available for locking vehicles.

Are there other ways to mitigate problem parking?

Menti.com code **4870 2427**

<https://www.menti.com/985tpdmq6p>



Discussion: Rules and Regulations

Proposed Change

Vehicle standards: Vehicles will be allowed up to 100 lbs in weight to accommodate more e-bicycles into the program.

Reasons for Change:

- E-bicycle and adaptive vehicles weigh more than e-scooters
- Maintain a limit for vehicles which are expected to use bicycle facilities

Discussion: Rules and Regulations

Proposed Change

Data reporting formats: Formats will be upgraded to MDS 1.0 and require tracking of vandalized vehicles.

Reasons for Change:

- Update to more recent data feed
- Tracking vandalized vehicles in order to validate BPD assistance and deployment pauses.

Do you have other ideas to mitigate vandalism?

Discussion: Rules and Regulations

Changes to be enacted through Enforcement of Standard Operating Procedures (not R&R)

- Permit holders will not be permitted to deploy outside of a parking corral on any block face which contains an official parking corral designated by BCDOT, assuming there is room for additional vehicles.
- Citations to the permit holders may also be issued if vehicles are not remotely shut down after the first report of an issue by a mobile application user.
- Quarterly Compliance overview will be shared with the DVC. This will summarize permit holder compliance to deployment, vehicle inspections, and other regulations.

Discussion: Rules and Regulations

Submit Public Comment by Friday April 15!!

The full text of the proposed Rules and Regulations can be found online at:

<https://transportation.baltimorecity.gov/regulations-public-comment>

Email DOT_PublicComments@baltimorecity.gov

Public comment report and any changes will be published before permit application period.

Permit Holder Updates

2021-2022 Permit Holders

Lime – Drew Lake and Matias Longo

- Active since 2018 Pilot
- 2000 vehicles, e-scooters and e-bikes



Spin – Breanna Bledsoe

- Active since 2019 Pilot
- 1800 e-scooters



Link by Superpedestrian – No presentation provided

- Active in Baltimore since 2021
- 1100 e-scooters, launching adaptive fleet





BALTIMORE, MD – April 13, 2022



DRC AGENDA

1. Team in Baltimore
2. Ridership Patterns and Data
3. Reporting, Sidewalk and Public Right of Way (PROW)
4. Parking and Corrals
5. Upcoming Programs and Features



Baltimore Team



Brandon Day
Operations Coordinator



Matias Longo
Sr. Operations Manager

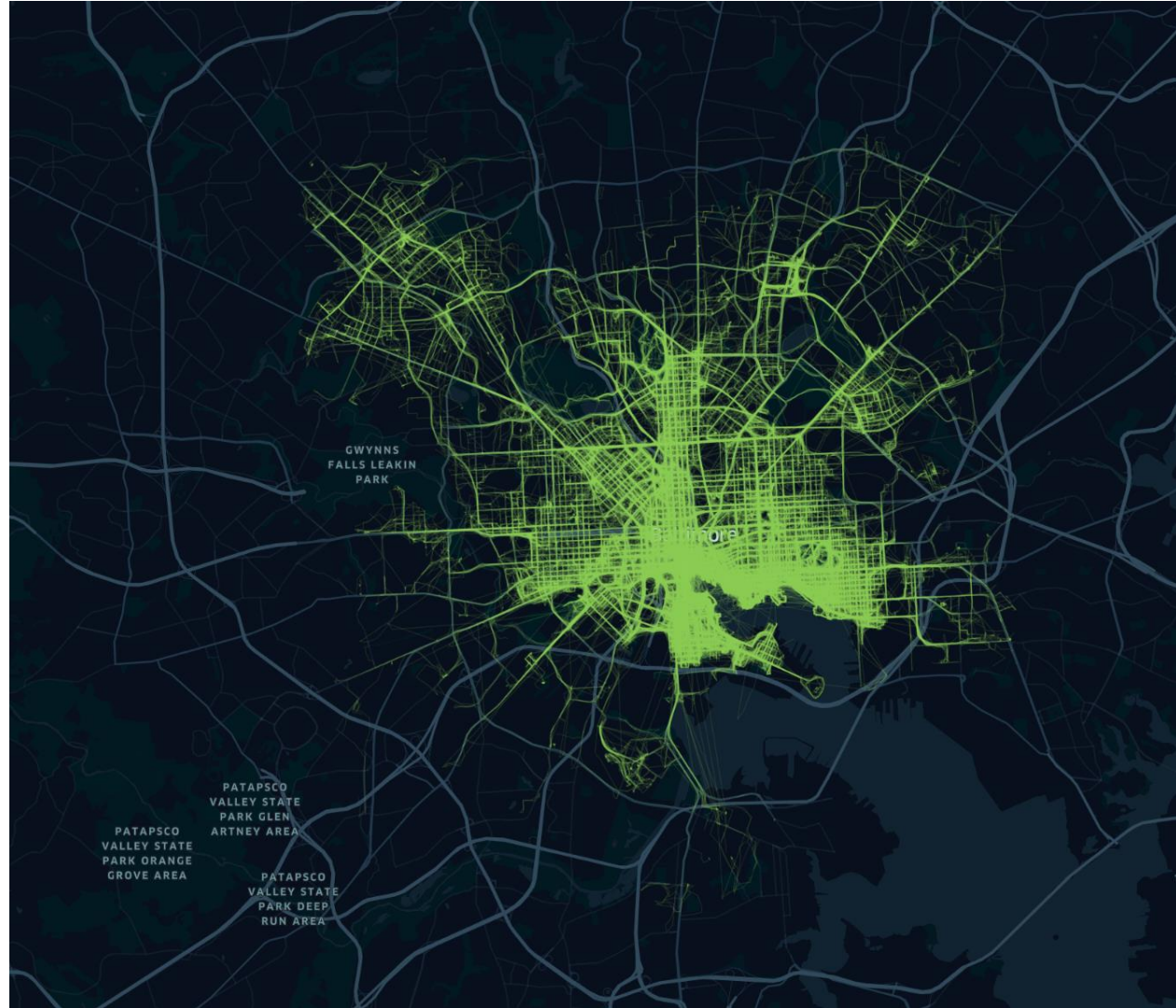


Drew Lake
RGM - Mid-Atlantic



Overview of Ridership (March)

Where People are Riding



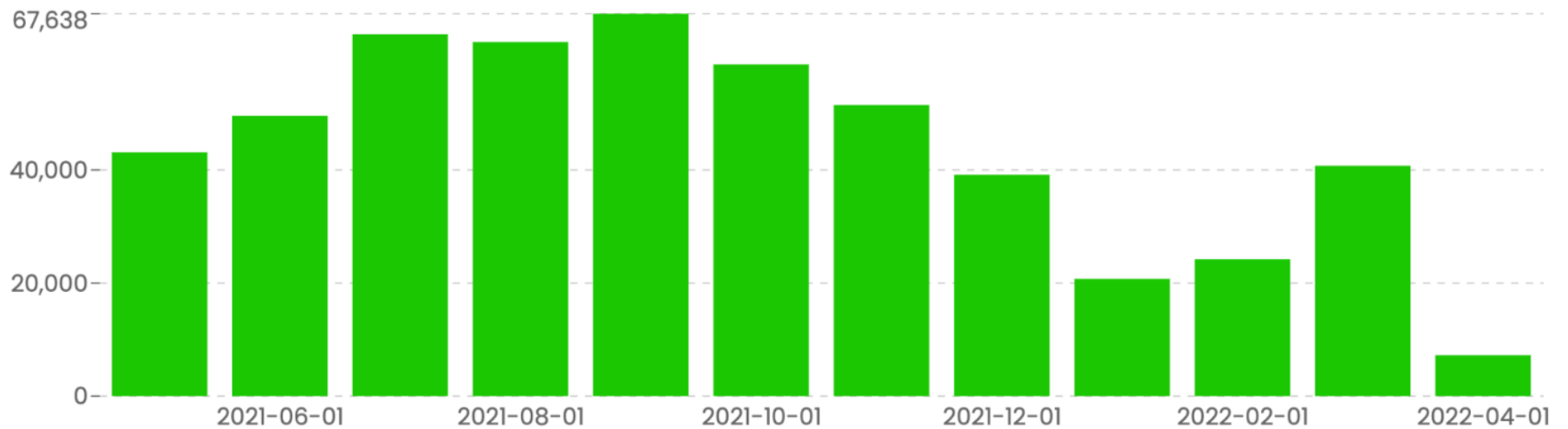
Baltimore Ridership

- 2,561,532 rides on scooters and e-bikes
- 371,313 unique riders
- 2,494,966 miles ridden in Baltimore
- .7 miles and 7 minutes

Month	Rides
August	62,644
September	67,638
October	58,672
November	51,507
December	39,178
January	20,175
February	24,192
March	40,754
April	...



Baltimore Ridership



Reporting Features

- Via the Lime app
- Phone (or text): 1-888-LIME-345
- Website: <http://www.li.me>
- Email: support@li.me
- Social: @limebike

Call Lime at 1.888.546.3345



Braille shown in yellow will be transparent

A screenshot of the 'Report Damage' screen in the Lime app. The screen has a black border and rounded corners. At the top, there is a back arrow on the left and a close 'X' button on the right. The title 'Report Damage' is centered. Below the title, the text 'Problem?' is followed by a paragraph: 'Tell us what happened so Lime can improve the safety of our service in your community.' Below this is a section with a Lime Bike icon and the text 'Lime Bike' followed by a right arrow. The next section is titled 'What part appears broken?' and features an image of a Lime Bike with numbered callouts (1-11) pointing to various parts. Below the image is a list of 10 items, each with a checkbox and a number: 1. Battery, 2. Brake, 3. Handlebar, 4. Basket, 5. QR Code, 6. Frame, 7. Seat, 8. Kickstand, 9. Wheel, 10. Pedals.

In-App Reporting Module



Overview of CX

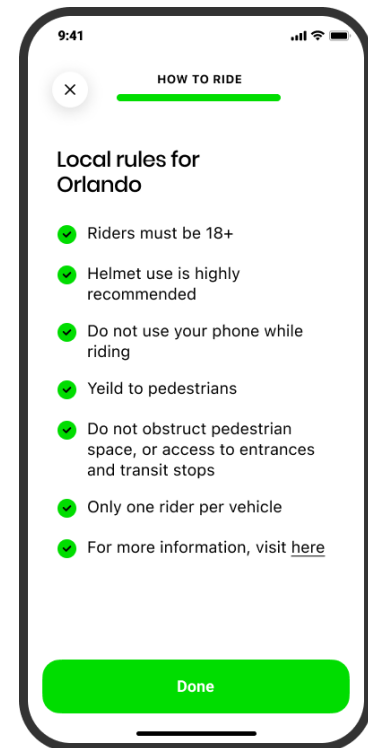
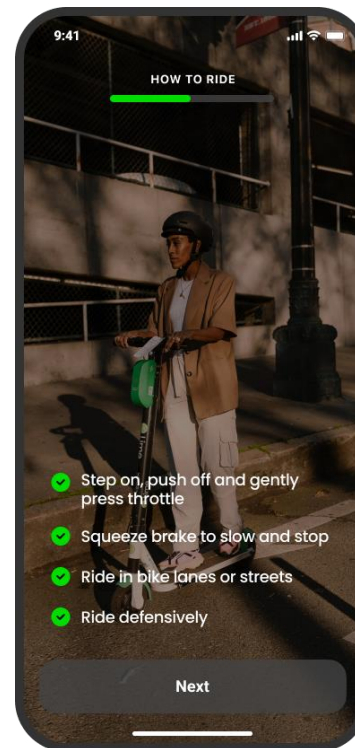
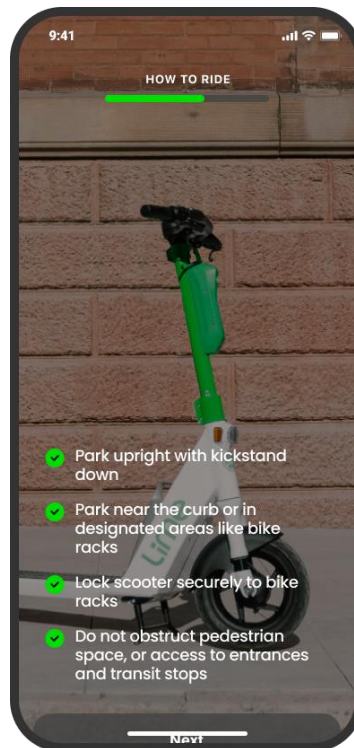
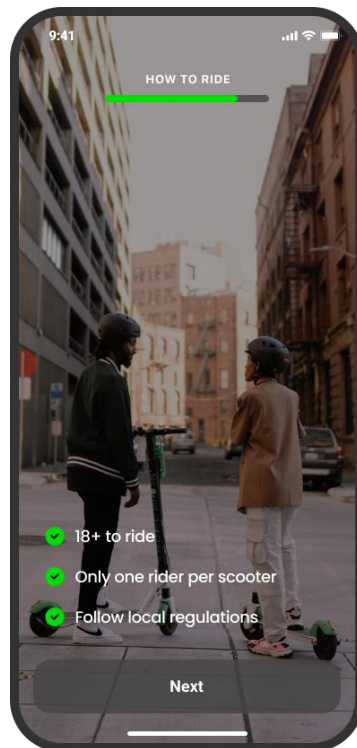
Customer Service

- Requirements from the City
- Complaints
- Types of Complaints
- Resolution

Month	Complaints
August	146
September	475
October	390
November	310
December	269
January	123
February	134
March	189
April	71



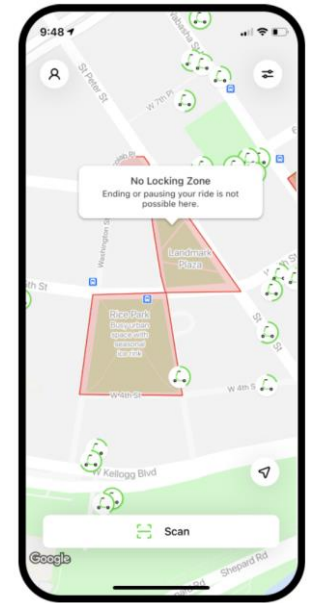
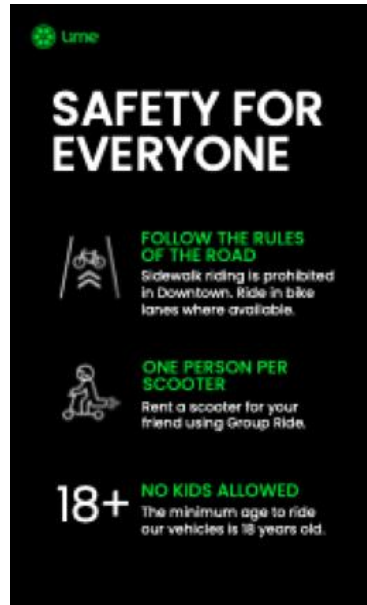
BEGIN USER FLOW FOR SCOOTERS + BIKES



Parking Features

On vehicle and in-app parking education, such as:

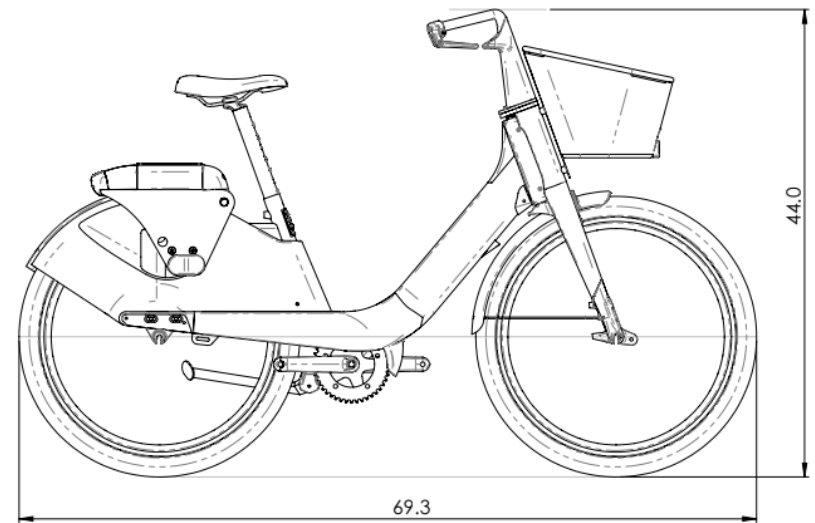
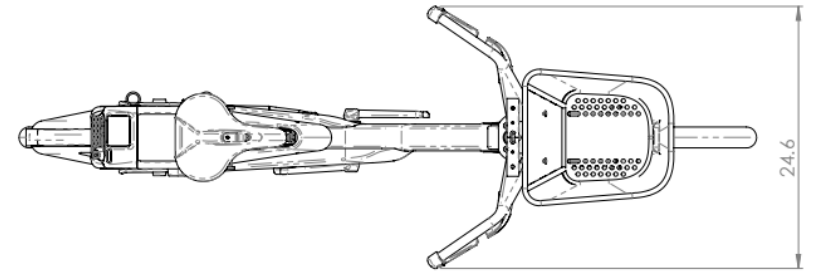
- Hangtags with safety information on one side, and reminding riders of the parking rules on the other side.
- Screen that indicates no parking zones.



Designed from the ground up with safety, comfort and sustainability in mind

Lime ES-200 E-Scooter



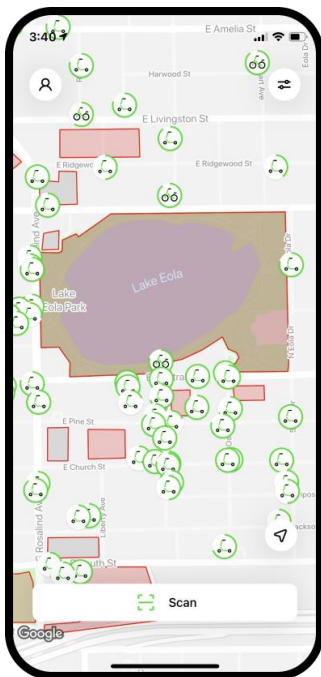


Dimensions:

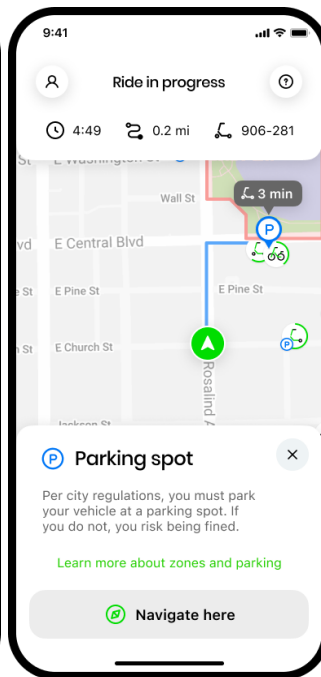
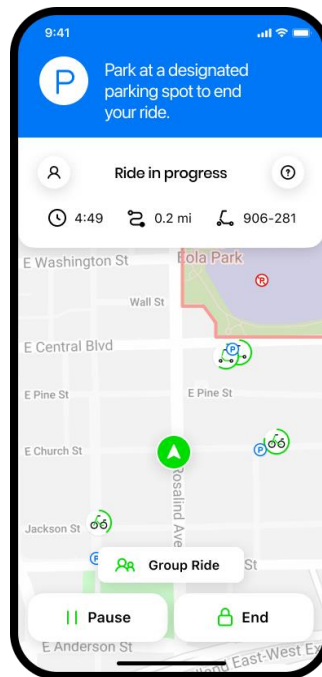
Length	Width	Height	Weight
69.3 inches	24.6 inches	44 inches	70 lbs



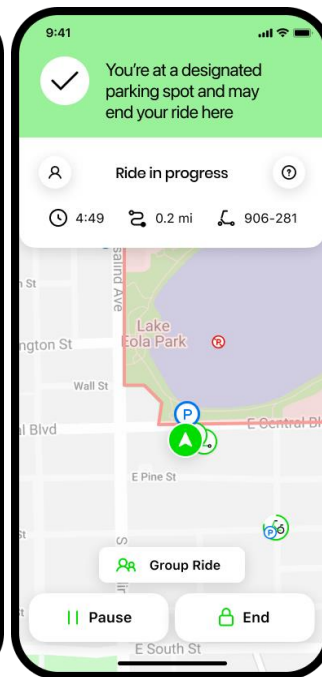
UPCOMING FEATURES



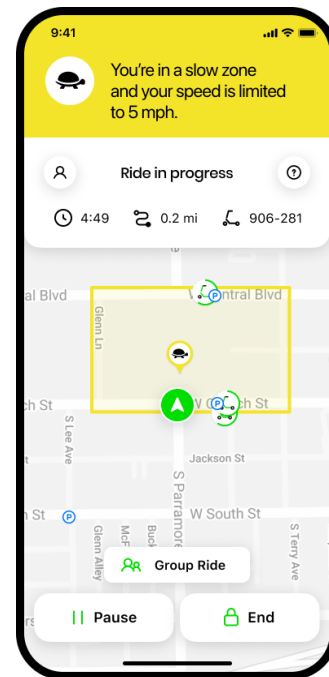
Zones Today



Preferred Parking



Event-Day Slow Zones



Zones in 2022





BALTIMORE, MD – April 13, 2022



SPIN

Dockless Vehicle Committee

April Updates

Baltimore City Department of Transportation
April 13, 2022



Our mission is to create
a world full of 15-minute cities.



2012 - A car-centric city



2020 - The vision of a 15 minute city

Our Values



We Do The
Right Thing



We Act Like
Owners



We Default
to Trust



We Embrace
Diversity



We Work on the
Road Ahead

SPIN

:15 MIN CITY



Be the #1 choice for cities and campuses



Own the Bike Lane



Run an affordable and reliable service that keeps people coming back



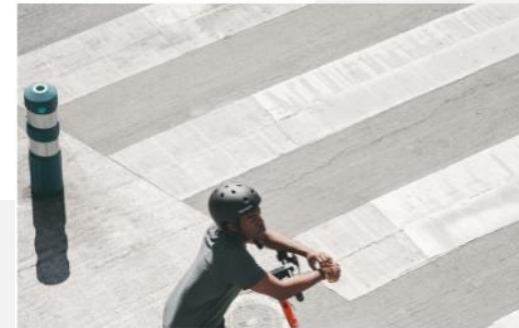
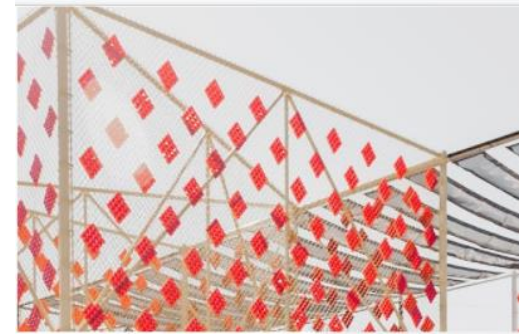
Build a company that reflects the communities and riders we serve



Give markets the tools they need to win

Company History

- **2017** Founded in San Francisco, California
- **2018**
 - Transitioned from bikes to scooters
 - Announced our Partnership Promise
 - Joined Ford
- **2019**
 - Won major U.S. markets like Washington, D.C. and San Francisco, CA
 - Launched first e-scooter docking stations in the U.S.
- **2020**
 - Expanded to the UK
- **2021**
 - Expanded to Canada
 - Launched new modes: E-bike, 3-wheeled vehicle
 - Launched mobility-as-a-service pilot in Pittsburgh, PA
 - First to pilot at-scale sidewalk detection technology
- **2022** **Spin** joins TIER



E-bike



Baltimore Updates

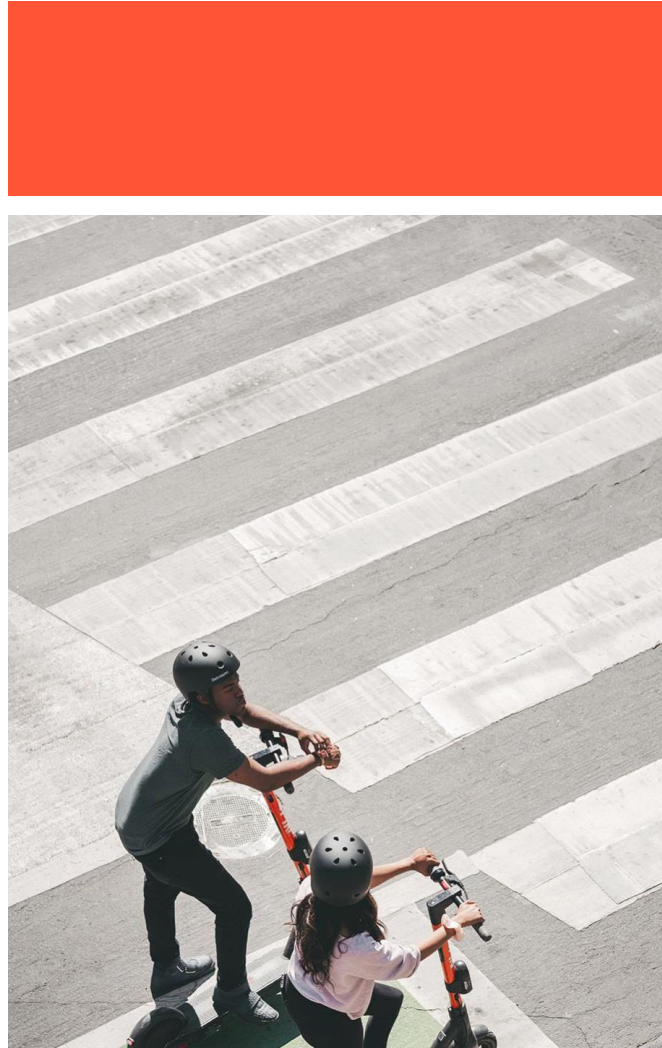
- We are excited to have one of the largest fleets in Baltimore, serving more residents and visitors with 1,800 e-scooters throughout the city
- Since launching in Baltimore in 2019, we've had over 170k users take over 1.3 million trips
- In August 2020, we launched our Preferred Parking Spot program, which incentivizes safe, acceptable parking throughout Baltimore
- In 2022, we established a research partnership with John Hopkins Carey Business School students to gather feedback on our SPIN Access equity program, and provide recommendations on how to build robust and economically viable equity programs across all markets
- We are also proud of our investments in Baltimore through:
 - Our Everyday Heroes Program, which provided discounted rides to essential healthcare workers. To date, we have given thousands of rides in Baltimore - sunset in 2022
 - Exceeding 25 monthly Spin Access user signups, our equity program that provides discounted rides to low-income Baltimore residents
 - Devoting staff resources to attend and supply events such as Bikemore, Highlandtown Artwalk, and NFL games



John Hopkins Partnership - The Challenge:

Design behavioral change strategies that help Spin and the City of Baltimore to understand how to build a robust and economically viable equity program that reaches as many people as possible.

Spin also hopes to apply learnings from this project more broadly, enabling better equity outcomes across cities where it operates.

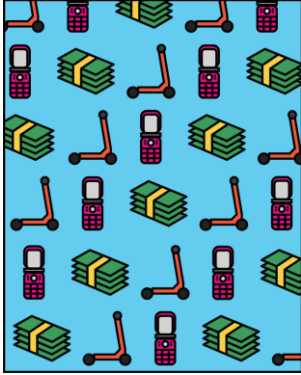


Spin's Equity Goals



01

Increase access to micromobility options for underserved communities



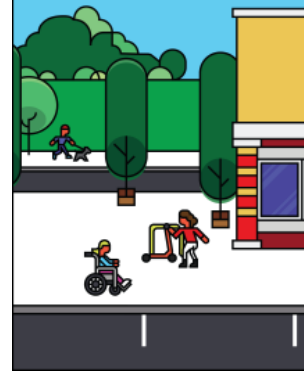
02

Reduce financial and technological barriers to using our service



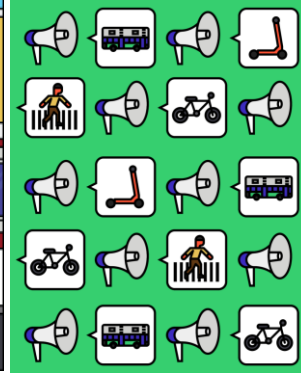
03

Make our streets safe, livable, and just for everyone who uses them



04

Ensure our service does not impede movement in the public right-of-way



05

Highlight transportation needs and voices of underserved communities in local policy and planning processes



06

Prioritize mobility partnerships and investments which also advance local social and economic initiatives



Spin Access seeks to reduce barriers to riding scooters.



Ride with a discount

Riders who are enrolled in any local, state, or federal low-income program can enroll for Spin Access at www.spinaccess.com.

Ride without a

smartphone Riders who don't have a smartphone, or have limited data plans, can unlock our scooters through SMS.

Ride without a credit card

Unbanked or cash preferred riders can add credit to their Spin account with cash.



Spin Access riders are looking for the same core value propositions as every other Spin rider — time savings, agency, and the joy of independent movement. **Our interviews, observations and design research led us to focus on five improvements to make our service work for everyone:**



Active Inclusion

Show respect for the local context and the diversity of riders to demonstrate that scooters are for everyone.



Easy Enrollment

Make applying for the Spin Access discount as easy as possible.



Price Transparency

Make the cost of a scooter ride predictable and easy to understand.



Reliable Availability

Make scooters a reliable option by providing consistent vehicle coverage.



Low-Tech Redundancies

Ensure that people with limited access to the internet, smartphones, and credit cards are not left behind.

SPIN

Thank you!

For more info, contact breanna.bledsoe@spin.pm



spin.app

Looking Ahead

Potential New Micromobility Regulations:

- Personal Delivery Devices

Q4 Large Events:

- Orioles Games!
- First Thursdays

Community Events:

- April 23: Trails Opening Day and Baltimore Cyclovia
- May 9-15: Baltimore Bike Week
- May 16-22: Bike to Work Week
- June 4: Charles Street Promenade
- Other events?

Next Meeting:

- July 13, 2022

Data/Analysis Requests?

