June 18, 2024

# **Shared Micromobility Program Overview**

#### **AGENDA**

- Program Background
- Ridership and Impact
- Upcoming Legislation and Next Steps

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# CITY OF ATLANTA CD DEPARTMENT OF TRANSPORTATION

Mayor Andre Dickens
ATLDOT Commissioner Solomon Caviness IV

# What is shared micromobility?

Shared transportation rental services that provide users with short-term access to small, often electric, vehicles for personal transport.

Most often, this term refers to bikeshare and scootershare that can be docked or dockless



**Capital Bikeshare; Washington DC** 



**Scooter Corral; Santa Monica, CA** 



### **Docked and Dockless Shared Micromobility**



**Bluebikes; Boston, MA** 



**Lime E-Scooters; Atlanta, GA** 

Advantages	Things to Consider	Advantages	Things to Consider
Organization and Order: Docking stations provide a designated place for vehicles, reducing clutter on sidewalks and public spaces.	<b>Limited Flexibility</b> : Users must start and end their trips at docking stations, which might not always be conveniently located.	Reduced Infrastructure Needs: Do not require the construction of docking stations, which saves materials and energy and reduces the initial environmental footprint.	<b>Public Space Clutter</b> : Vehicles can be left anywhere, potentially blocking sidewalks, entrances, and public spaces, leading to clutter and accessibility issues
Reliability and Availability: Users know where to find and return vehicles, which can be more predictable than searching for dockless options.	<b>Higher Infrastructure Costs</b> : Establishing docking stations requires significant investment in infrastructure.	<b>Scalability</b> : It's easier to scale up the number of vehicles without needing to install new docks, allowing for rapid expansion of the service.	Locating Vehicles: Users may have to spend time finding an available vehicle, which can be spread out and less predictable than docked systems
Reduced Vandalism and Theft: Secure docking stations can deter vandalism and theft, as vehicles are locked when not in use.	Space Constraints: Docking stations take up a bit more public space	Flexibility and Convenience: Users can start and end their trips almost anywhere, increasing the convenience and accessibility of the service	Higher Rates of Vandalism and Theft: Vehicles left unattended are more vulnerable to vandalism and theft



# Timeline of Shared Micromobility in Atlanta

**2016**: Relay Bike Share launches with 100 bikes and 10 stations

May 2018: Dockless e-scooters by Bird were deployed on ROW without permits or permissions. Many additional scooter companies followed

July and August 2019:

Mayor Bottoms halts additional permits and instates a 9pm device curfew

**2021**: Permitted three operators and 2,000 devices per operator

December 2022:

Relay Bike Share and City of Atlanta mutually agree to terminate contract 2024: ATLDOT developing RFP/new program model to replace annual permit model; Bike share RFI went live in May

2017: Relay Bike Share expands to 500 bikes and 65 stations

January 2019: City of Atlanta Department of City Planning launches first dockless shared micromobility permits (seen as a pilot) with no cap permitting as many as 9 companies and 12,700 devices 2020: Permitted four operators and program halted from April until June during the COVID-19 pandemic; ATLDOT created and took over program management

2022: Shared
Micromobility
Coordinator hired and
legislation passed to
extend the annual
permits for two years

2023: Shared
Micromobility
Program hits record
post-COVID ridership
of 2.1 million rides
and extends curfew
to 12am



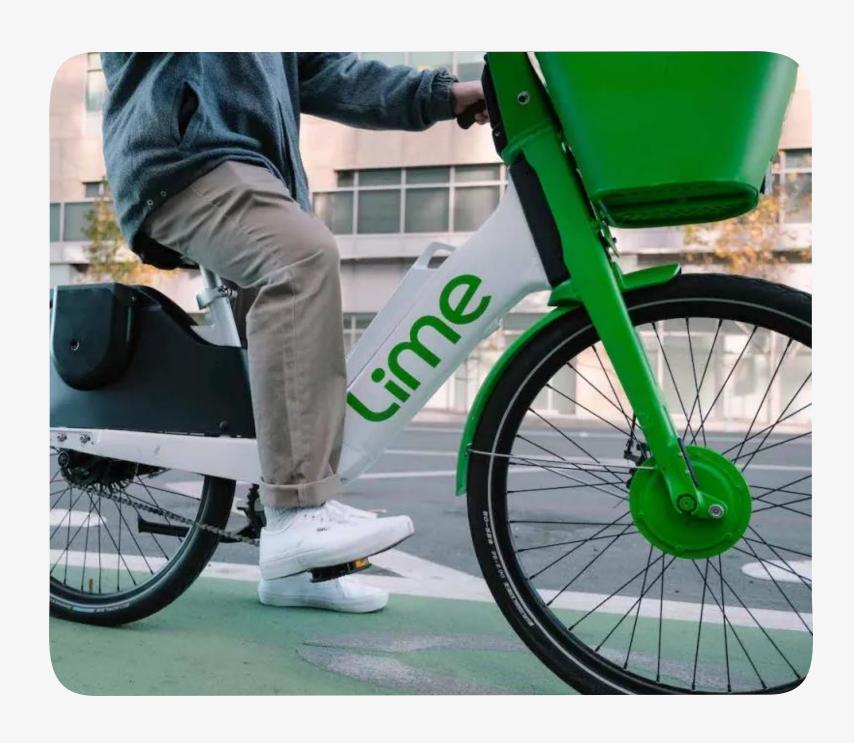
# **Relay Bike Share History**



- Owned and operated by Cyclehop (under contract by the City of Atlanta) in March 2015; NTP was in June 2016
- 5-year contract extension in 2020
- Relied on user fees and sponsorship for funding; no public funding
- Sponsor was Georgia's Own Credit Union; ceased sponsorship in 2020
- Maximum number of bikes deployed was 500 and 68 stations in 2017
- By 2022, there were 68 stations and an average of 300 bikes deployed



# Dockless Shared Micromobility in Atlanta



- Dockless shared micromobility program is a fully privately-owned and operated system with no public subsidy
- Permitted vendors follow program guidelines established by the City through the municipal code and Administrative Regulations established for the program
- Vendors pay ATLDOT an annual permit and sub-permit fee to operate on City ROW
- Vendors have 2 hours to respond to 311 requests for parking infractions



## **Current Permit Structure and Administrative Regulations**

- Annual Permit
  - Each permitted vendor pays a per-device annual permit fee
  - Operators awarded an annual permit are required to launch 350 of each device type with an Annual Permit
  - Annual fee is \$12,000 annually for up to 500 devices and additional per device fee for devices over 500 is \$50 per device annually
- Sub Permit
  - Expands Operator fleet sizes for a specific number of devices, device types, and time-period
  - Per Device fees for any Devices permitted through a Sub-Permit will be prorated at a rate of \$4.17 per Device per month
- Administrative Regulations
  - Can be updated by ATLDOT as appropriate
  - Establishes administrative zones and geofencing requirements
  - Sets operating guidelines, device standards, mobile app standards, data sharing requirements, enforcement, partnerships, and community engagement guidelines
- Equity Requirements
  - Establishes three equity zones based on ATLDOT's Communities of Concern
  - Requires 2% of operator's total fleet to be in each Equity Zone (6% of total fleet)



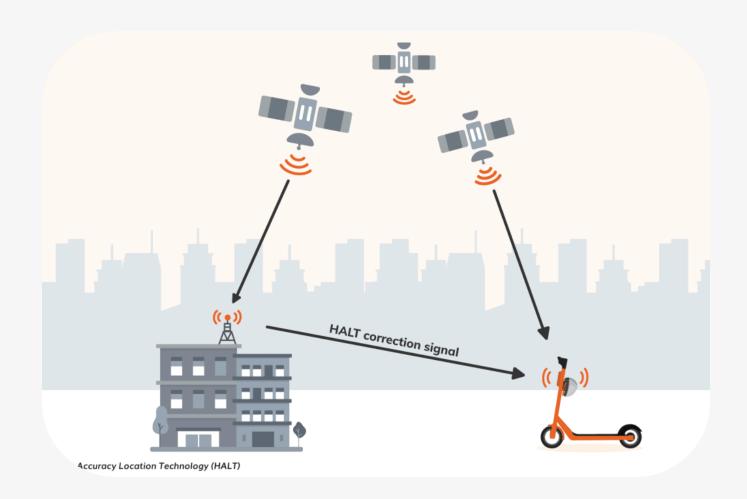
# **Current Permitted Vendors and Devices Offered**





# Geofencing and GPS Overview

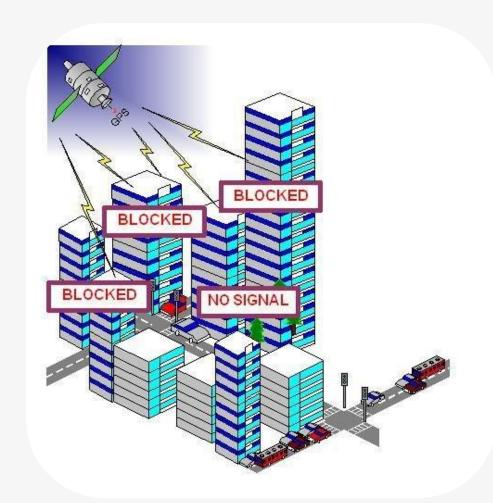
- Geofencing is a virtual tool in which software uses GPS or similar technology to remotely control the movement of vehicles, either in a pre-programmed way, or in real time
- Geofencing uses GPS and cellular data to define virtual boundaries that trigger certain actions when crossed
- Types of geofencing available for dockless shared micromobility:
  - No Ride Zone
  - No Parking Zone
  - Slow Zone/Speed Restrictions
  - Virtual Parking Area





### **Urban Canyon Effect**

- When using GPS receivers in street canyons with tall buildings, the shadowing and multipath effects may contribute to poor GPS signal reception
- In a city's urban canyon, there are fewer satellites visible due to the tall buildings, causing the GPS signal at ground level to be degraded



#### **Other Geofencing Notes**

- Works most accurately for static devices (ex. parking areas)
- If used for moving devices, the best application for slow zones or no ride geofencing is for large areas that don't need a lot of discernment – large parks (ex. Piedmont Park), large linear multimodal corridors (ex. Beltline); temporary large events
- The more nuanced and specific the line drawn, the less accurate the geofence tends to be leading to serious safety issues for riders due to GPS drift (up to 150ft-300ft past the fence line)



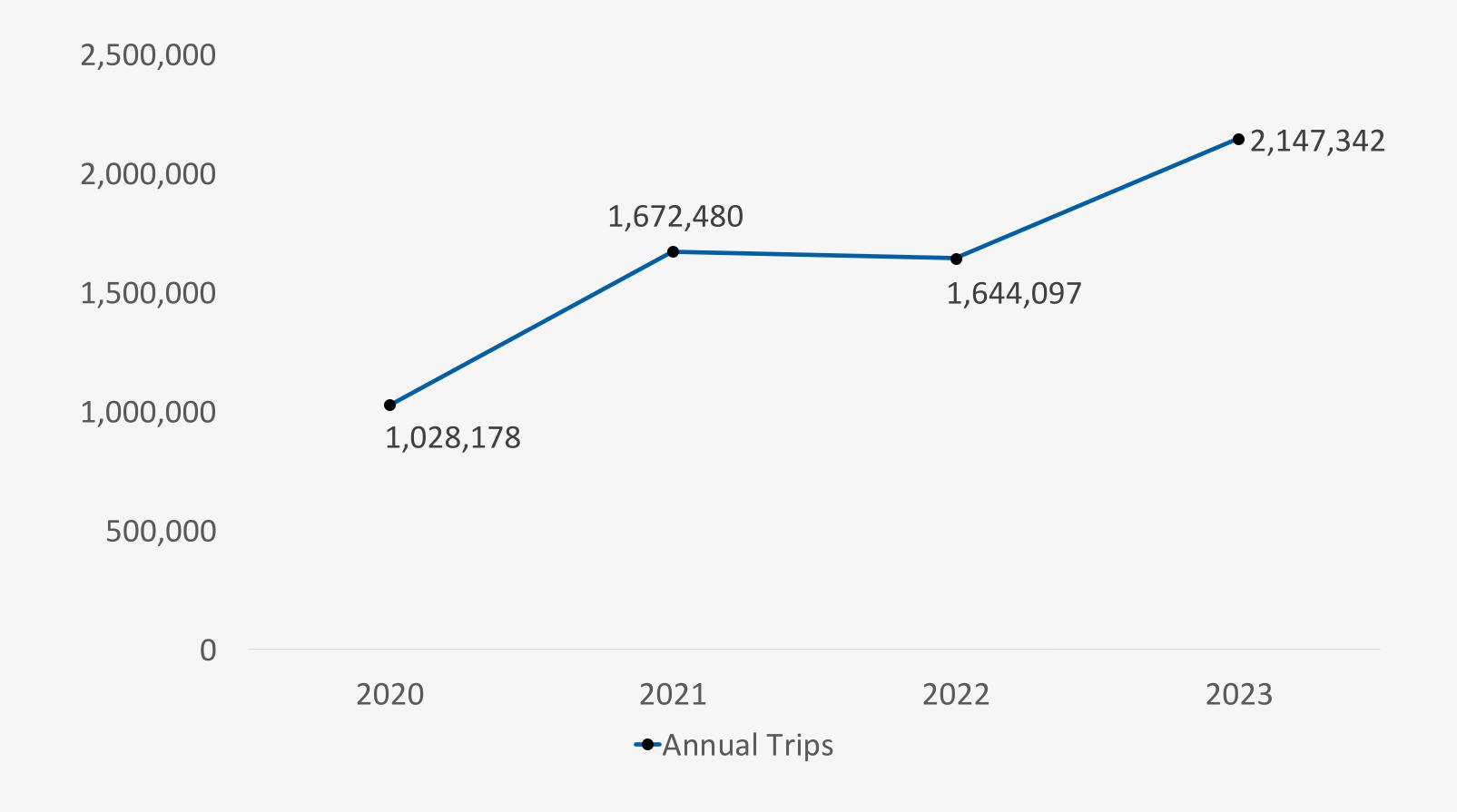
### **ATLDOT's Current Geofencing Policies**

- Slow zone on the Atlanta Beltline and Piedmont Park at 12mph during peak times
- No parking zones throughout the Eastside Beltline Corridor and a current parking evaluation is ongoing to improve parking issues on the trail
- Geofenced deployment parking areas throughout city
- No Ride Zones established for large events or at the request of APD
- Private property owners cannot utilize no ride geofencing unless approved by program administrator; slow zones are encouraged as an option
- Privately owned roads can impose their own geofencing restrictions – GWCC, Atlantic Station, Emory Campus





# Ridership Data (2020-2023)





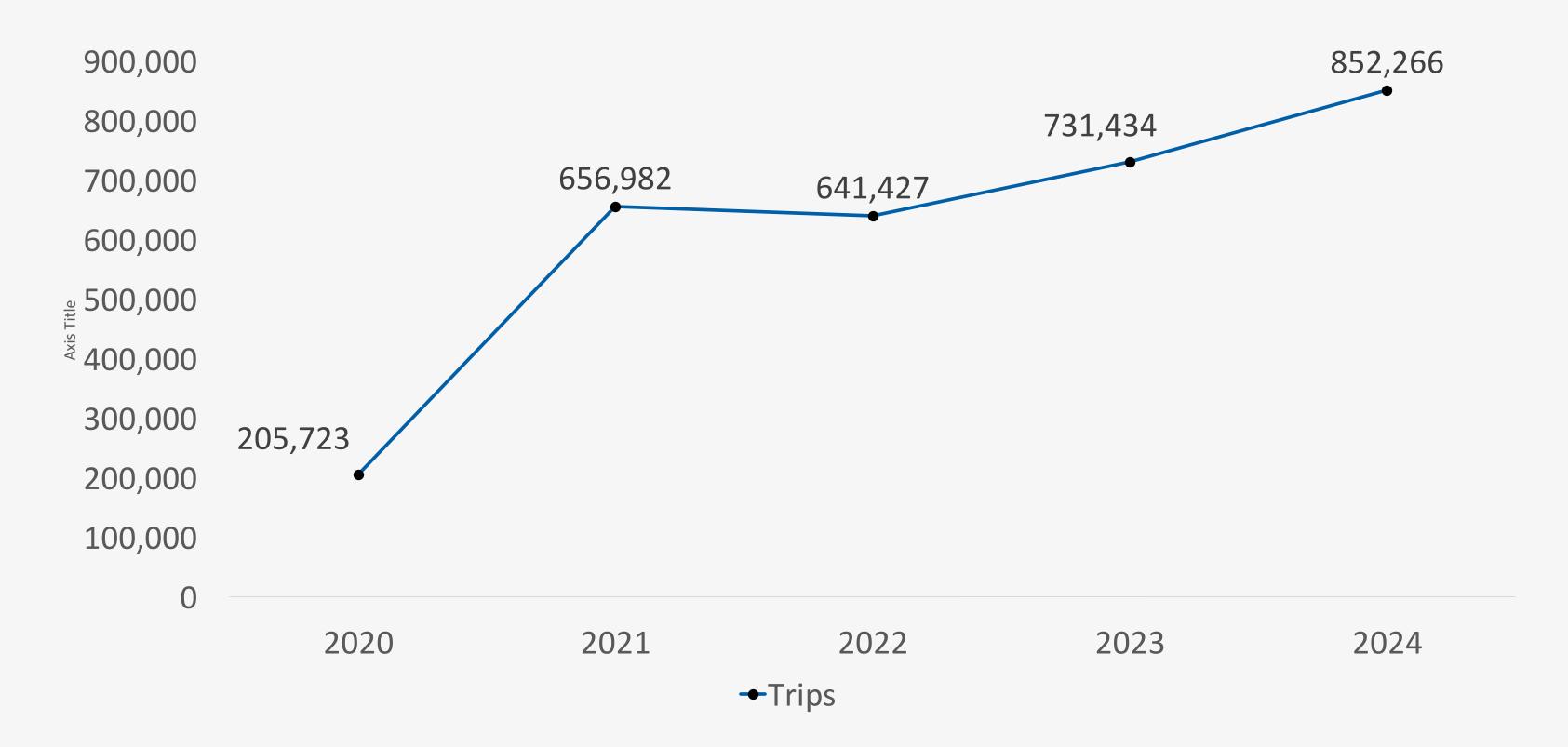
# Atlanta Shared Micromobility Ridership Metrics 2023

2023 Metrics	Totals for 2023	
2023 Ridership (Jan-Dec)	2,147,342 trips	
Median Trips per Day	5,567 trips	
Total Distance Traveled	2,428,511 miles	
Median Trip Distance	0.8 miles	
Hour with Highest Ridership	5:00pm-6:00pm	
Highest Ridership Month	September	
E-Bike Ridership	125,724 trips	



# Ridership Data 2020-2024

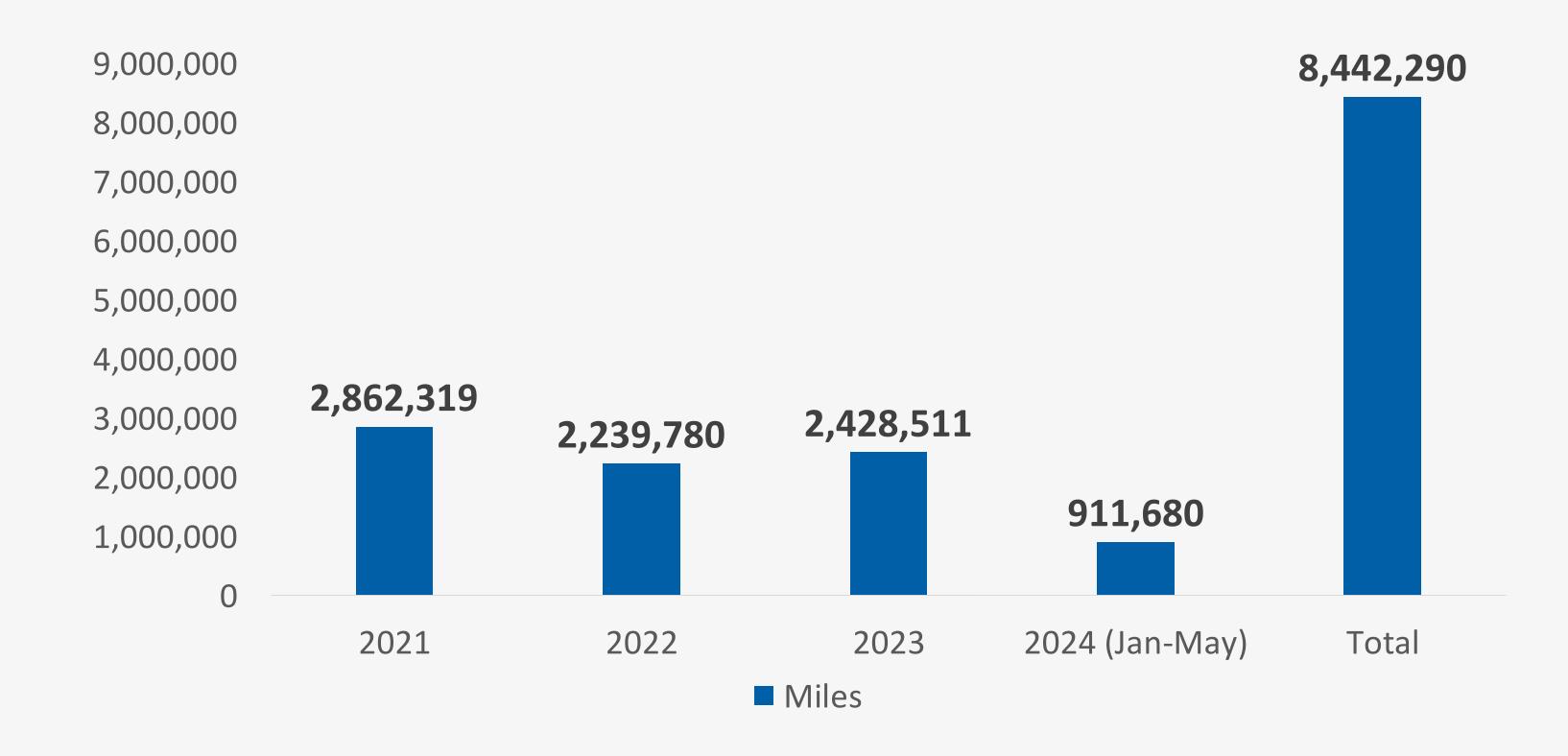
(January 1 - May 31)





# **Annual and Total Trip Distance**

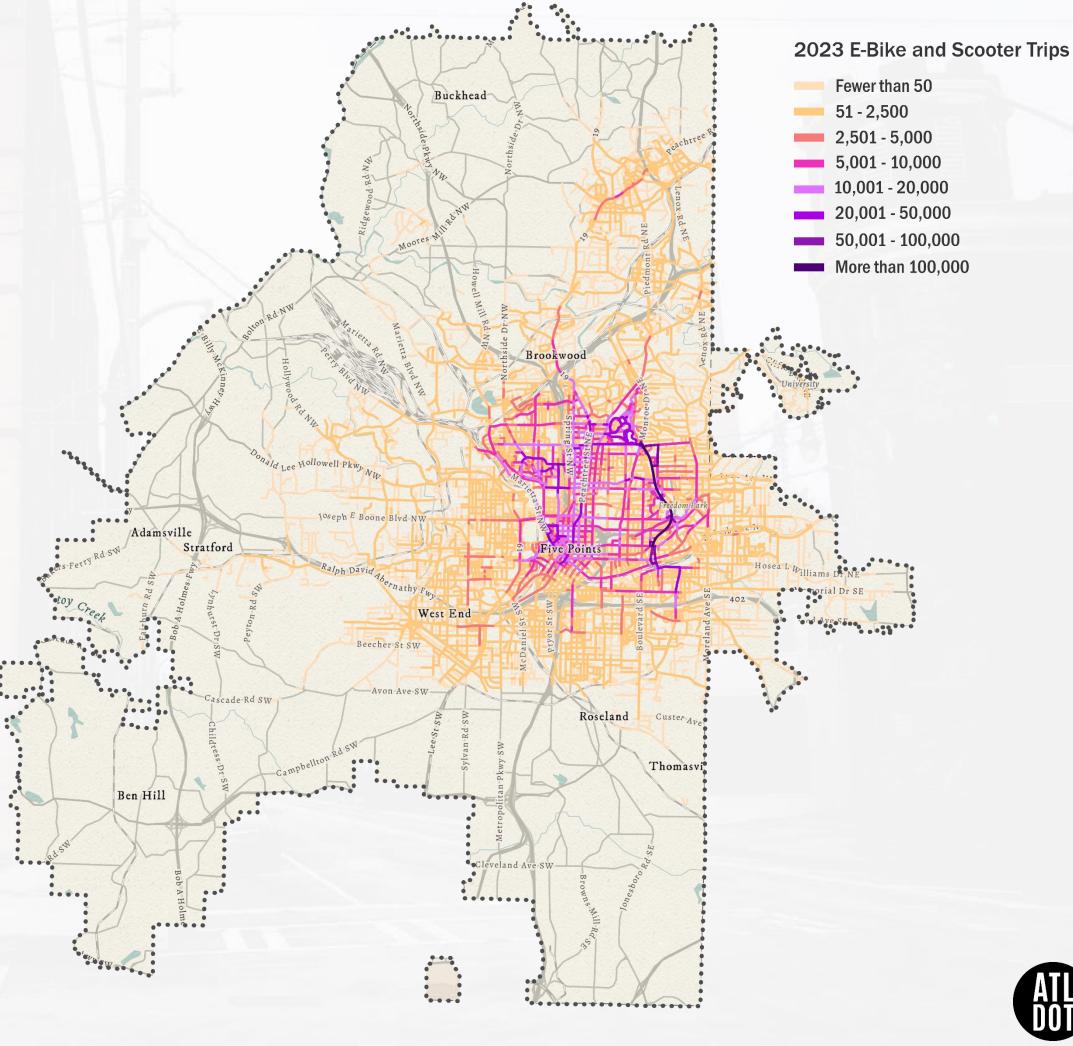
(January 2021 – May 2024)





Between January 2021 and May 2024,
Atlanta's dockless shared micromobility trips
equaled more than 36 trips to the moon, 341
trips around the Earth, or 386,074 trips
around the completed BeltLine

# Highest Ridership Corridors in 2023

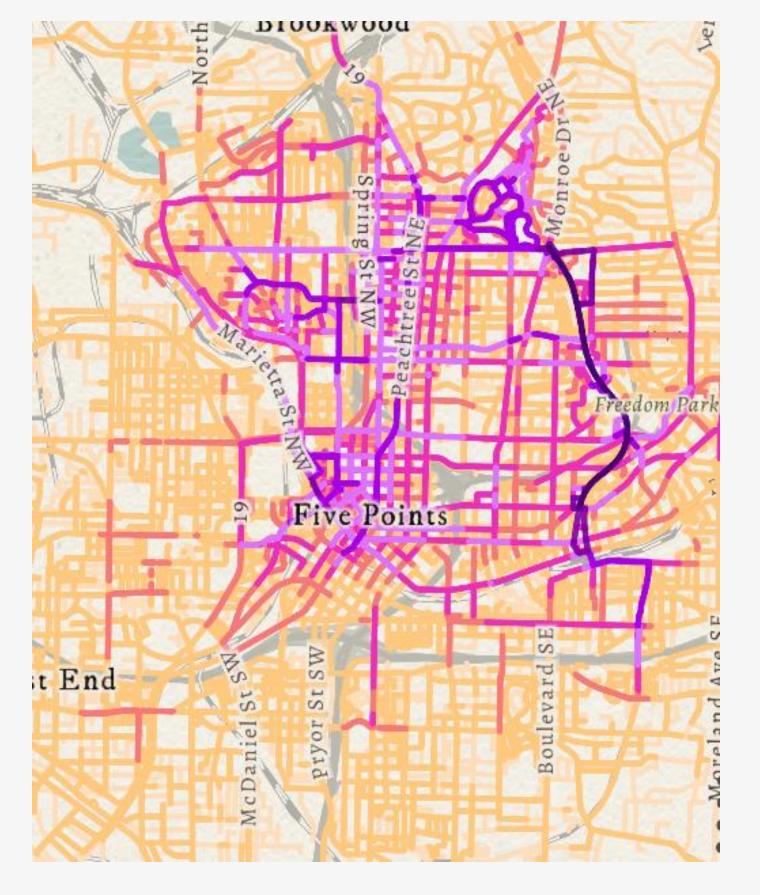




# Highest Ridership Segments in 2023

Atlanta BeltLine Eastside Trail
Irwin Street Northeast
Sampson Street Northeast
Krog Street Northeast
McGruder Street Northeast
Virginia Avenue Northeast
Ponce de Leon Place Northeast
5th Street Northwest
Monroe Drive Northeast
Greenwood Avenue Northeast
Kanuga Street Northwest
Marietta Street Northwest

10th Street Northeast
Peachtree Street Northeast
Ferst Drive Northwest
Andrew Young International Boulevard
Centennial Olympic Park Drive Northwest
Monroe Drive Northeast
Baker Street Northwest
Estoria Street Southeast
PATH Parkway
Fowler Street Northwest
North Avenue Northwest
Techwood Drive Northwest



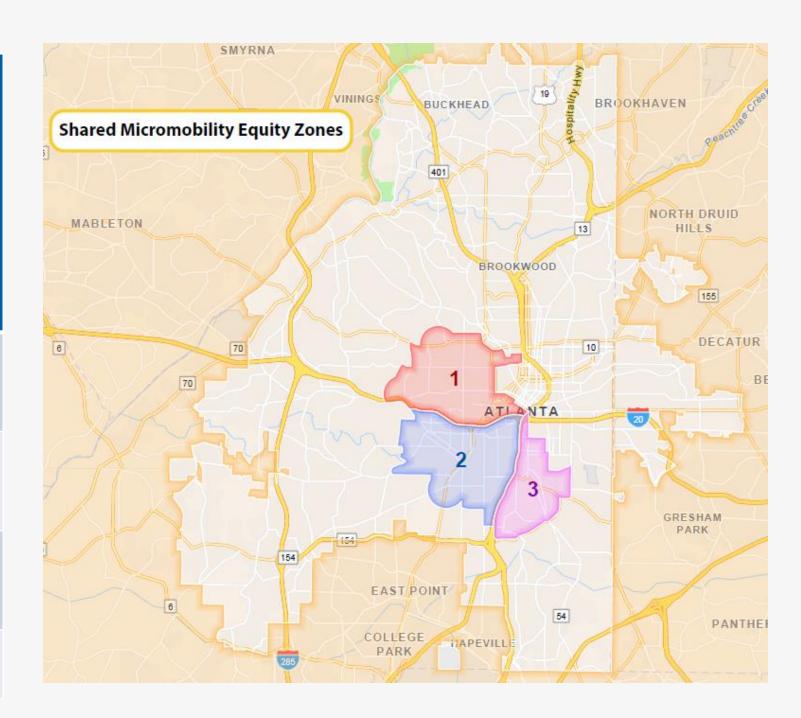


# **Equity Zones**

**Zones** within the City to ensure devices are distributed to geographic areas determined to include higher concentrations of communities potentially subject to equity and environmental justice issues

Permitted Operators are required to deploy a minimum of 2% of their Permitted fleet per day across each equity zone

Equity Zone	Number of Trips (January 2022-May 2024)	% of Total Atlanta Trips (January 2022-May 2024)
Equity Zone 1	215,010	5%
Equity Zone 2	82,703	2%
Equity Zone 3	40,235	1%
Total	337,948	8%







# **Curfew Background**

- Prior to 2019 curfew, shared dockless devices operated 24/7
- Multiple shared e-scooter serious crashes and fatalities in 2019 led to Atlanta's mayor changing the curfew to 9pm in August 2019
- Operating hours from 2019 to Dec 2022 were 4am-9pm
- Multiple requests from the public to extend hours (third shift workers; service industry workers; construction; and more)
  - In survey, many want 24/7 availability back
- City Council resolution extended hours in December 2022 from 9pm to midnight



# Trips from 9pm-Midnight since Dec 2022 Curfew Extension

Hour	Trips	% of Total Trips
9pm-10pm	158,224	5.50%
10pm-11pm	132,928	4.70%
11pm-12am	101,605	3.60%
Total	392,757	13.80%



# Atlanta is a Global Shared Micromobility Powerhouse

- NACTO's latest report (2022) announced Atlanta as a top 10 city for shared micromobility ridership in 2022 with 1.5 million trips.
  - Atlanta is the smallest city per capita in the Top 10
  - Atlanta ranks 5<sup>th</sup> in overall ridership per capita
- Bird and Lime both rank Atlanta as a Top
   10 market in the United States



# FY23 Revenue Supporting Safety and Mobility

Annual Permit Number	Type of Permit Fee/Fine	Amount
SDMD-2023-A1	Annual Permit Fee	\$12,000.00
SDMD-2023-A2	Annual Permit Fee	\$37,000.00
SDMD-2023-A1-S1	Sub-Permit Fee	\$28,147.50
SDMD-2023-A2-S1	Sub-Permit Fee	\$21,179.43
SDMD-2023-A1-S2	Sub-Permit Fee	\$28,147.50
SDMD-2023-A2-S2	Sub-Permit Fee	\$23,769.00
SDMD-2023-A1-S3	Sub-Permit Fee	\$28,147.50
SDMD-2023-A2-S3	Sub-Permit Fee	\$25,020.00
SDMD-2023-A1-S4	Sub-Permit Fee	\$28,147.50
SDMD-2023-A2-S4	Sub-Permit Fee	\$25,020.00
Total		\$256,578.43



# **Survey Data Summary**

- Most common use cases for shared micromobility trips: recreation, connecting to parks, visiting businesses, and transit connectivity
- Respondents chose infrastructure improvements as critical to eliminating barriers of use
- Designated parking areas, ex. corrals, are suggested to improve parking issues and improve reliability issues
- Respondents chose a hybrid model of bike share as the overall preference to docked or dockless models
- Respondents highlighted expanded service areas outside of Atlanta and 24/7 access to devices as key to more accessibility
- Respondents shared neighborhoods where they would like to see more deployment
- Full report will be available on ATLDOT website soon





Survey results showed 30% of shared micromobility trips replaced car trips

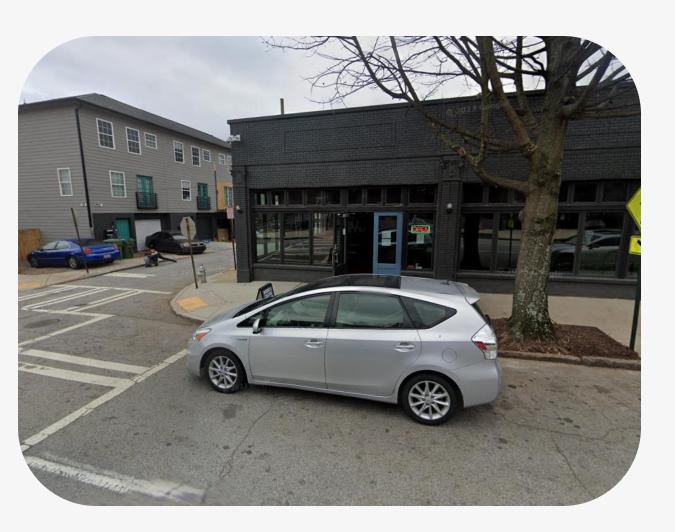
Based on 2023 ridership, that would equate to 645,000 car trips replaced by shared micromobility in Atlanta





# Micromobility Corrals

What problem(s) are we trying to solve?







**Intersection Safety** 

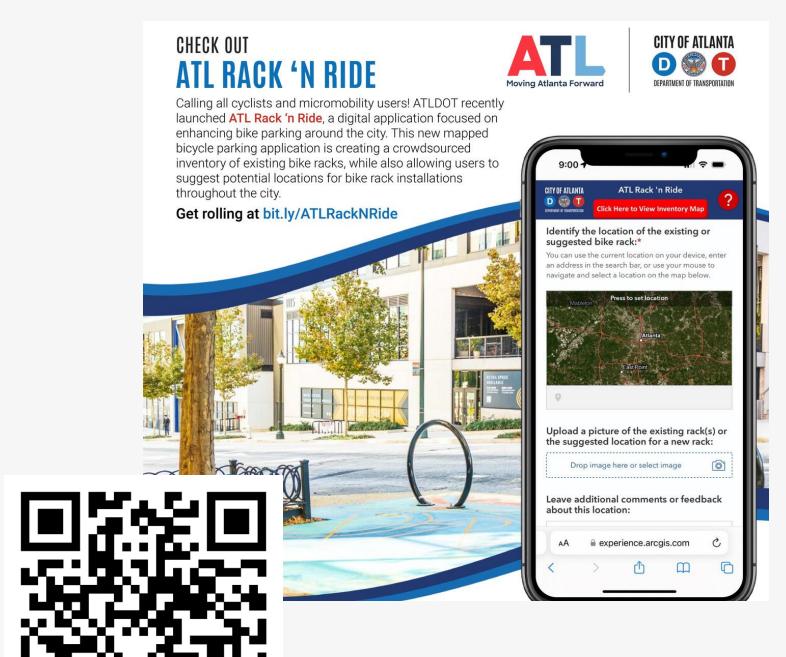
Shared Micromobility
Parking Needs

Personal Bike Parking

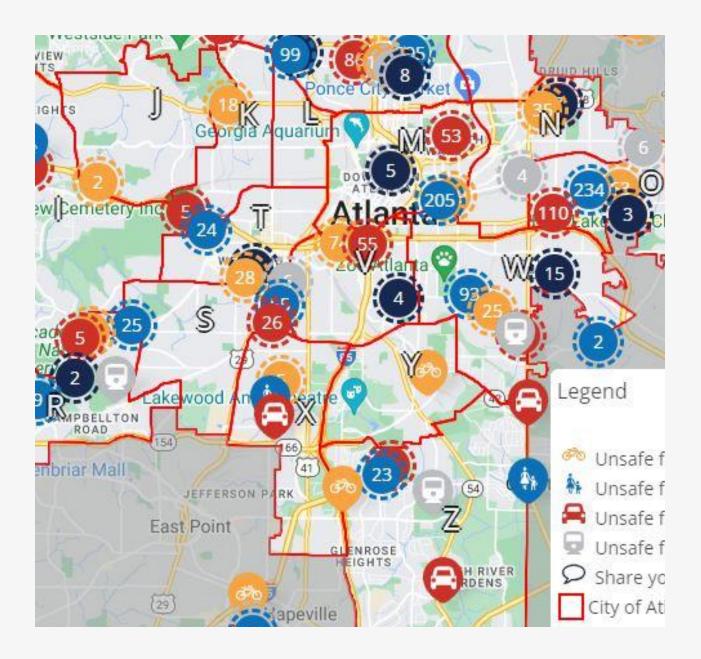


# Data-Driven Approach

How did the team determine locations?



Rack n Ride App



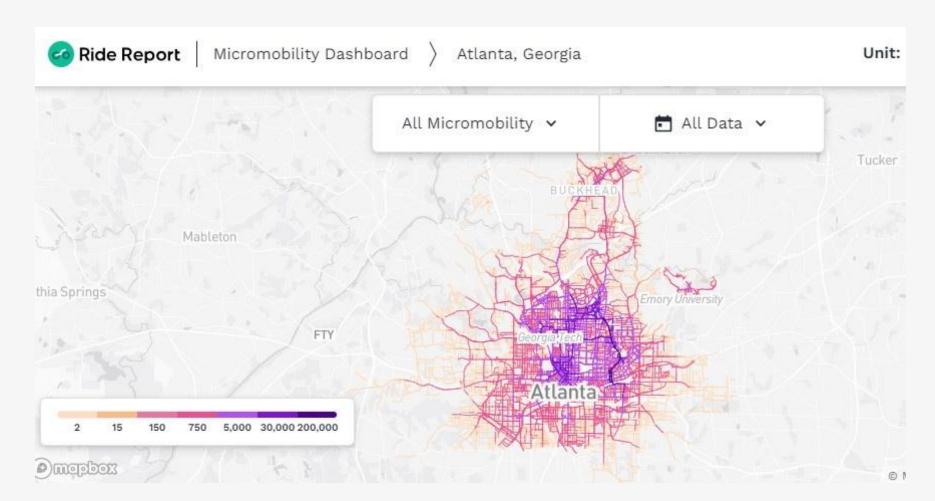
Vision Zero Community Input Map



# **Shared Micromobility Data**



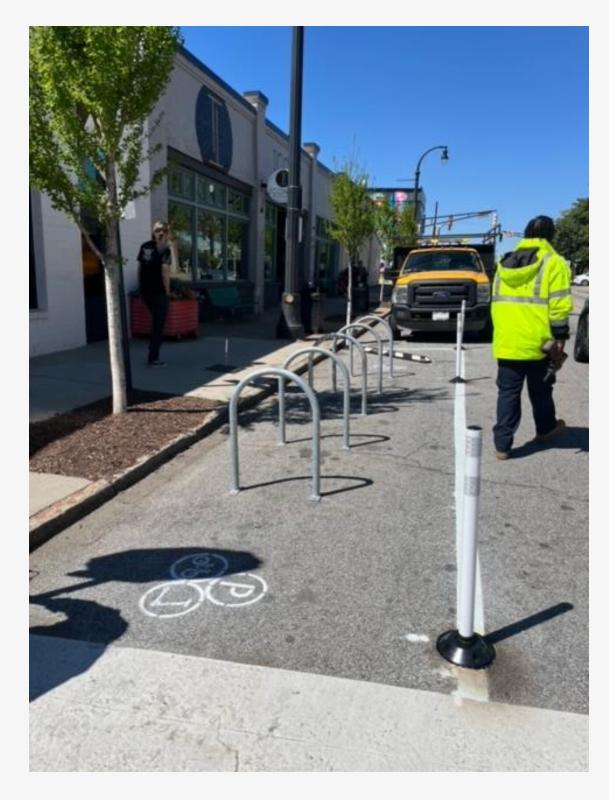
Shared Micromobility
Survey Data



Ride Report Data



# Micromobility Corrals



**Georgia Avenue and Reed Street; Summerhill** 



**Edgewood Avenue and Howell Street; Old Fourth Ward** 



## RFP Timeline

- Legislation to extend current permit program for up to one calendar year
- RFP draft is nearing completion making final decisions on fee types, equity program, and developing parking and deployment areas map
- Ensuring next iteration of program will support World Cup efforts or other large events
- Legal and Procurement have been informed of the RFP and are working on steps to make the process smooth once Scope of Work is delivered
- Legal working on draft of code language changes to reflect a switch from permit program to contract model



# **Dockless Shared Micromobility RFP**

- Transition from permit model to RFP/Contract
- Goals:
  - Industry best practices
  - 3-year contract with 2 optional renewal years
  - 1 or 2 operators; much easier to manage than 3 or more with current staff capacity
  - Move from more of a "pilot" model to permanent program
  - Ensures longer-term relationship with vendor and improves vendor investment in City
  - Update fee structure to reflect best practices and charge appropriately for ROW use
  - More control over fees, parking areas, equity program, and more due to contractual obligations and lessons learned from permit
    - Equity pricing and designated deployments in updated equity area
    - More formal geofenced deployment zones across the city, especially in in-demand neighborhoods that requested more devices





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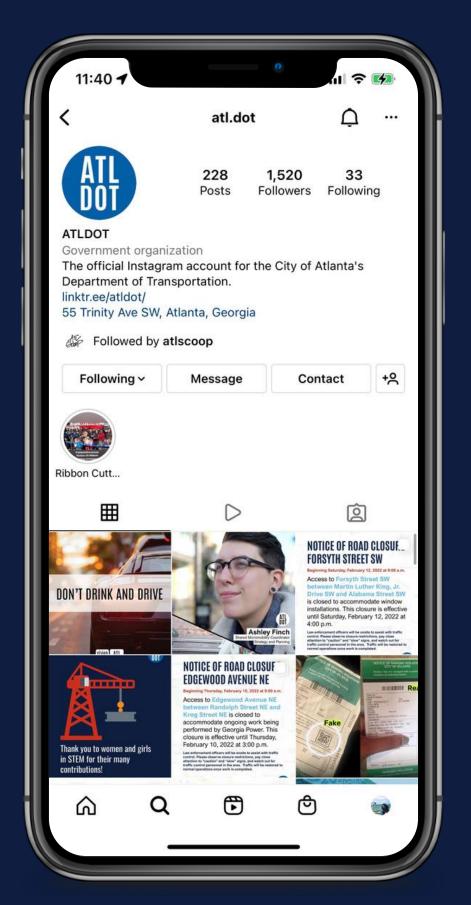


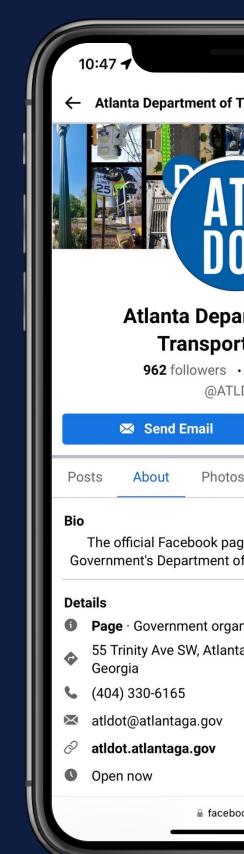
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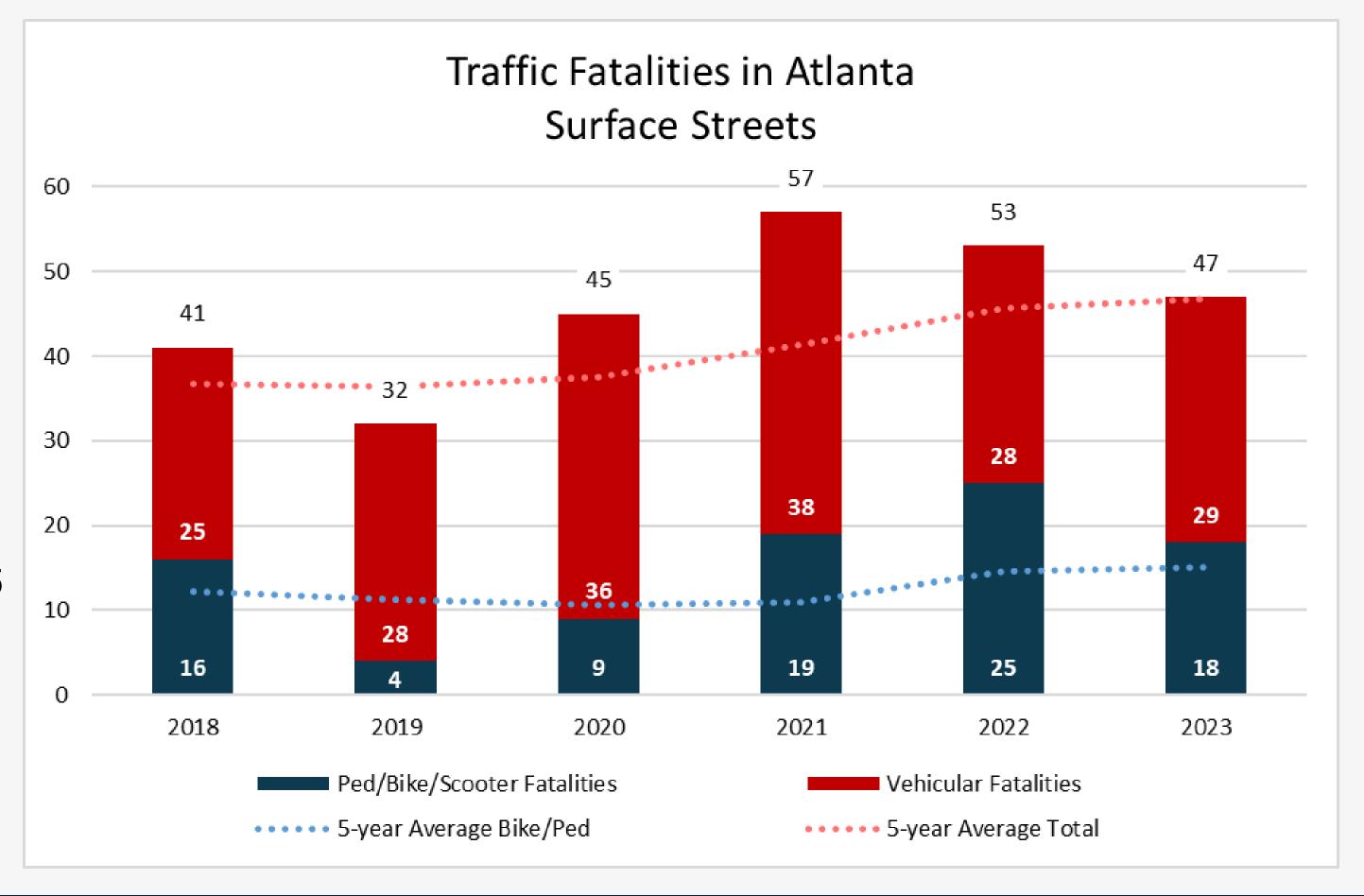


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# Data by Mode

- ☐ Surface Street Fatalities peaked in 2021
- □ Vulnerable Road
   User fatalities in
   2022 peaked at 25
   or 47% of all
   surface street
   fatalities

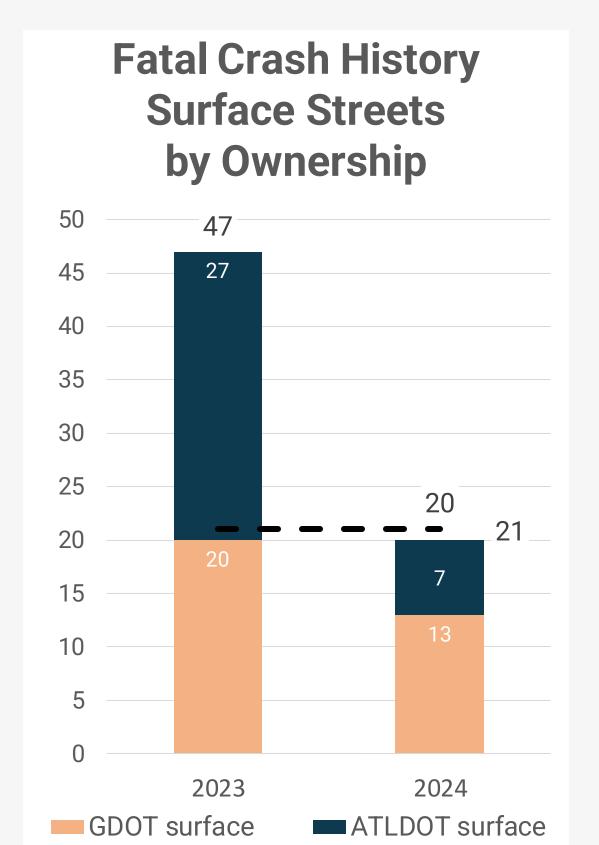






# **2024 Data**

- 2023 Year to Date
  - Total fatalities slightly below 2023
  - Vulnerable Road
     Users are a higher percentage in 2024
- □ Vulnerable Road Users
  - Of the 29 total in the past 18 months
    - o 25 pedestrians
    - o 3 scooter riders
    - 1 cyclist
  - 2 of the 3 scooter fatalities were on shared devices



- 2023 To-Date

