



# **veo**

## **in Cedar Rapids**

**2022**  
**Annual**  
**Report**

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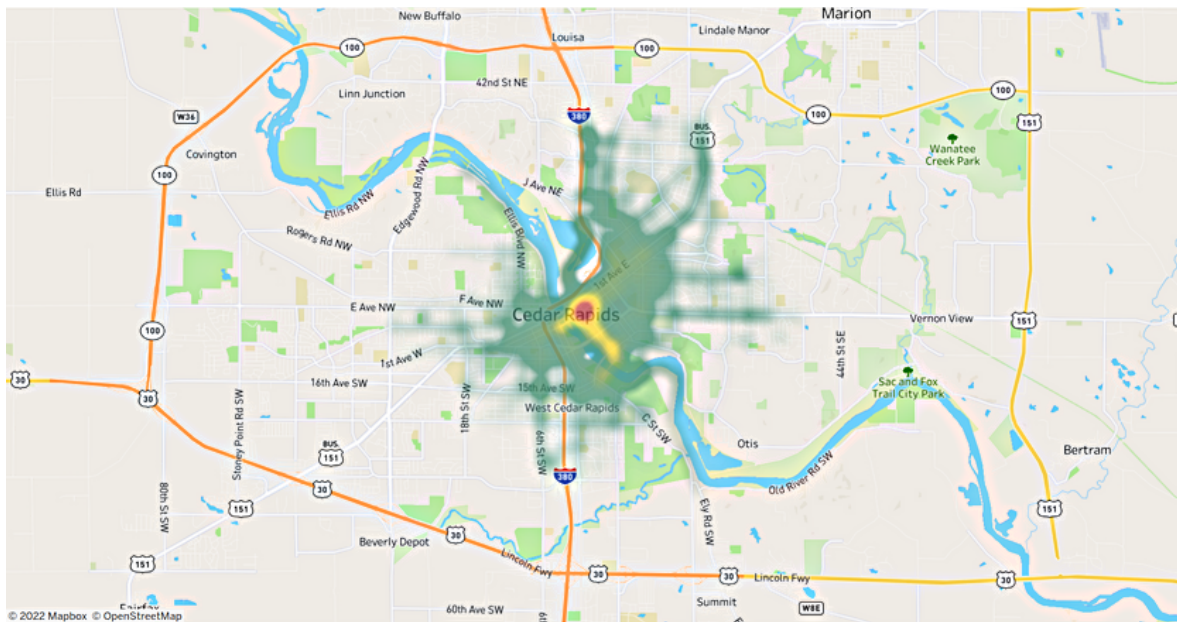
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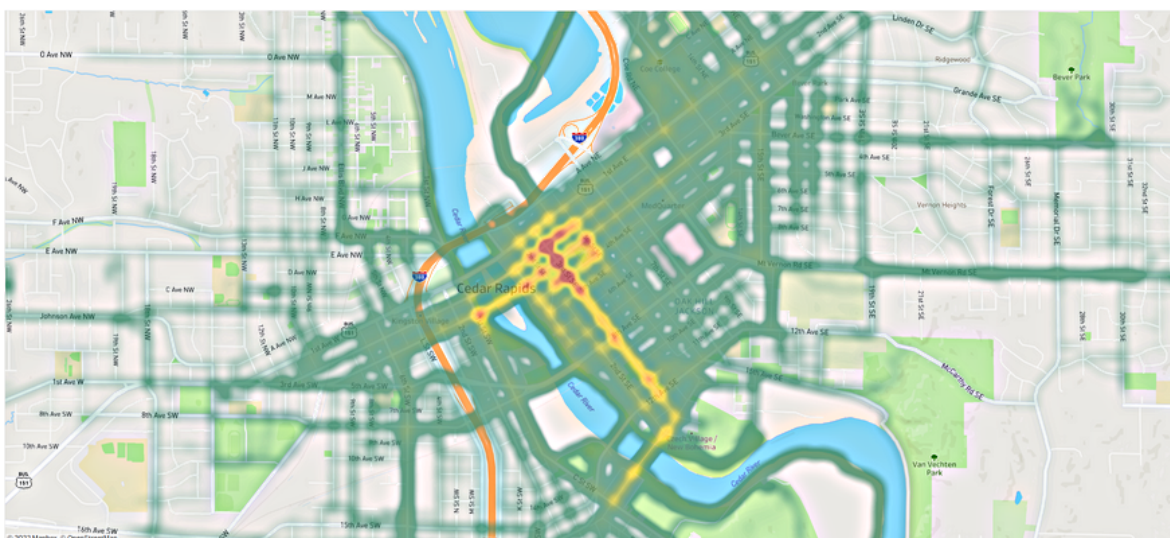
# Heat Maps

These maps illustrate where riders are taking the most trips throughout Cedar Rapids. Each heat map includes all GPS points from a ride, and areas that are ridden through more frequently than others would be the brightest red, giving us an idea of the most popular areas where rides are occurring.

## 01. Rides from April to October

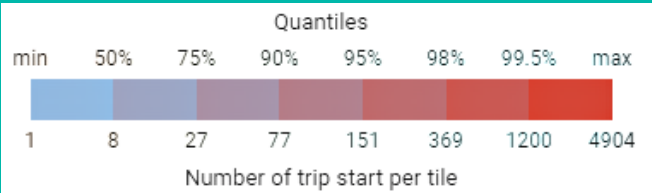
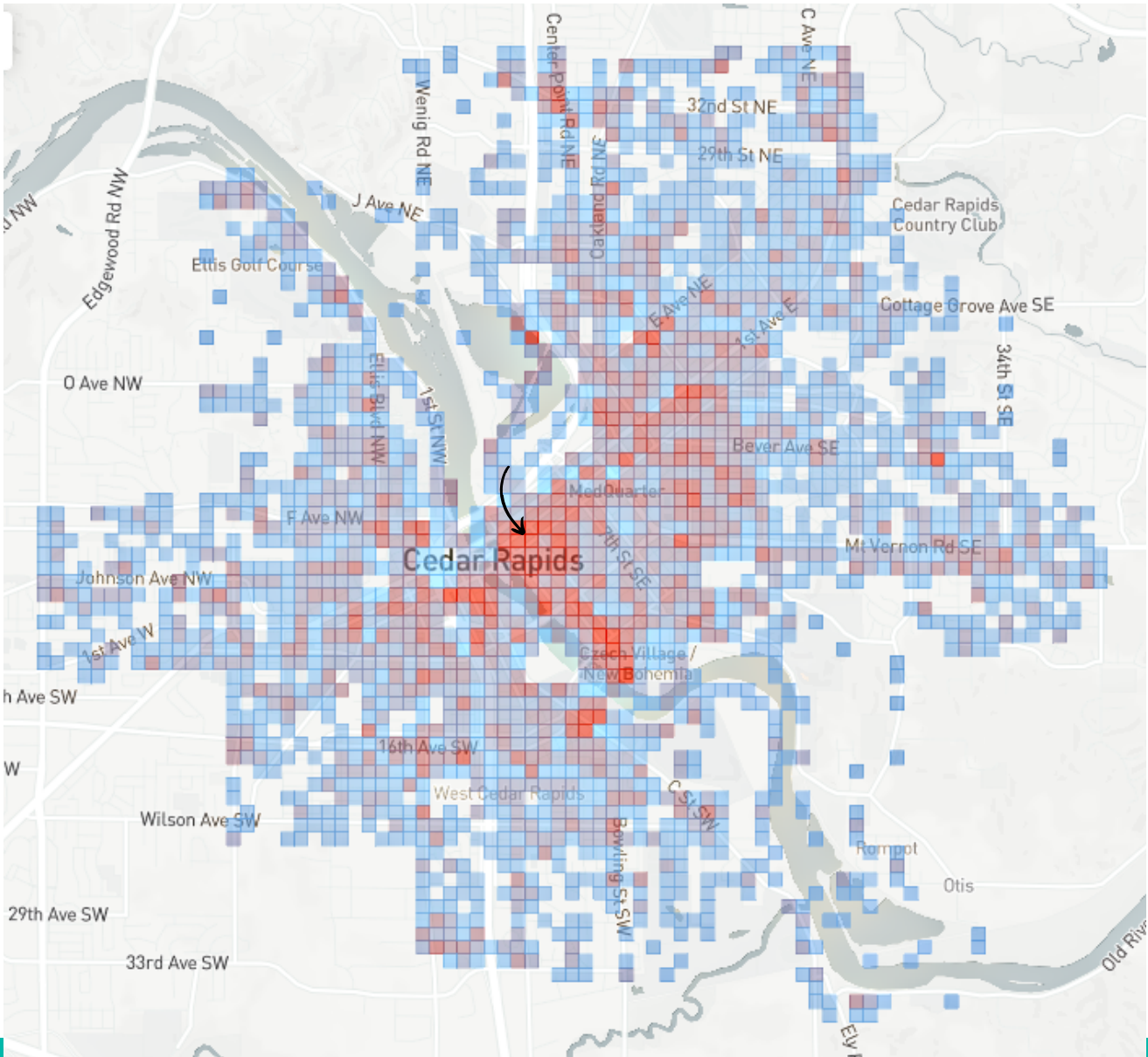


## 02. A closer look



# Ride start locations

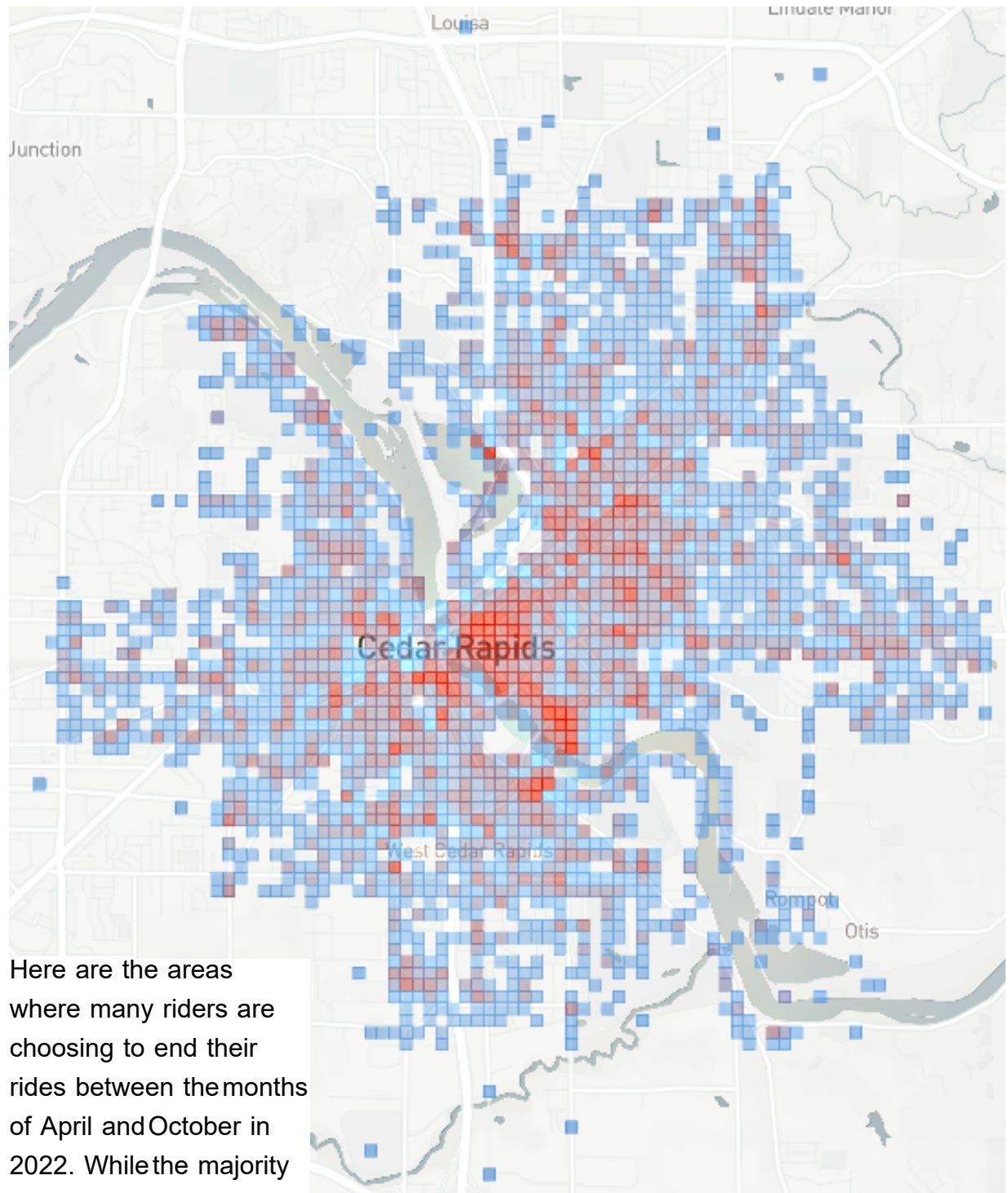
These maps illustrate where riders are starting and ending their rides. Areas with darker shades of red indicate a higher frequency of ride starts and ends occurring there.



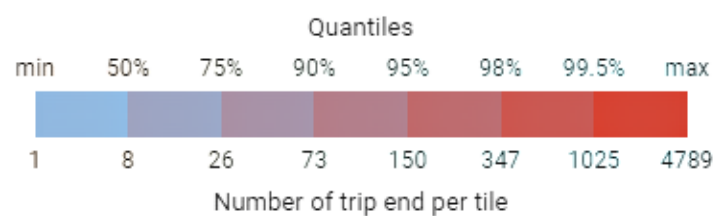
Here are the areas where many riders are choosing to start their rides between the months of April and October in 2022. The small arrow above is pointing to a quantile with nearly 5,000 ride starts.



## Ride end locations

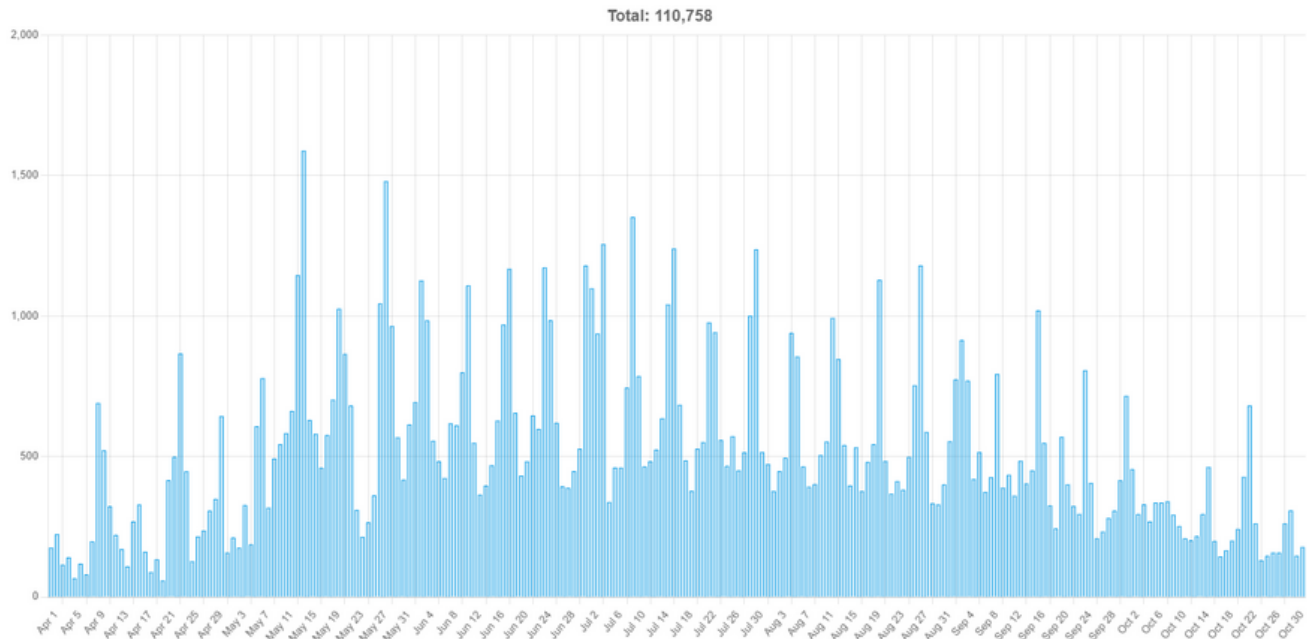


Here are the areas where many riders are choosing to end their rides between the months of April and October in 2022. While the majority of rides end in downtown Cedar Rapids, you'll notice that some riders are ending their trips in the outer neighborhoods.



# Seasonal Stats

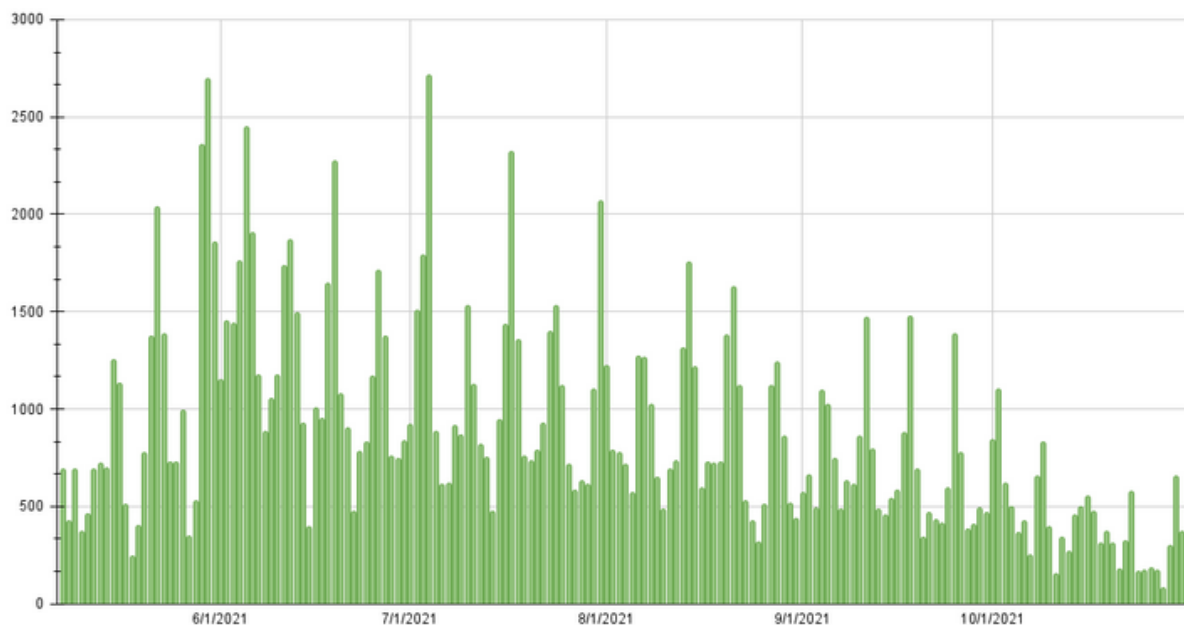
## April - October 2022 Number of Trips



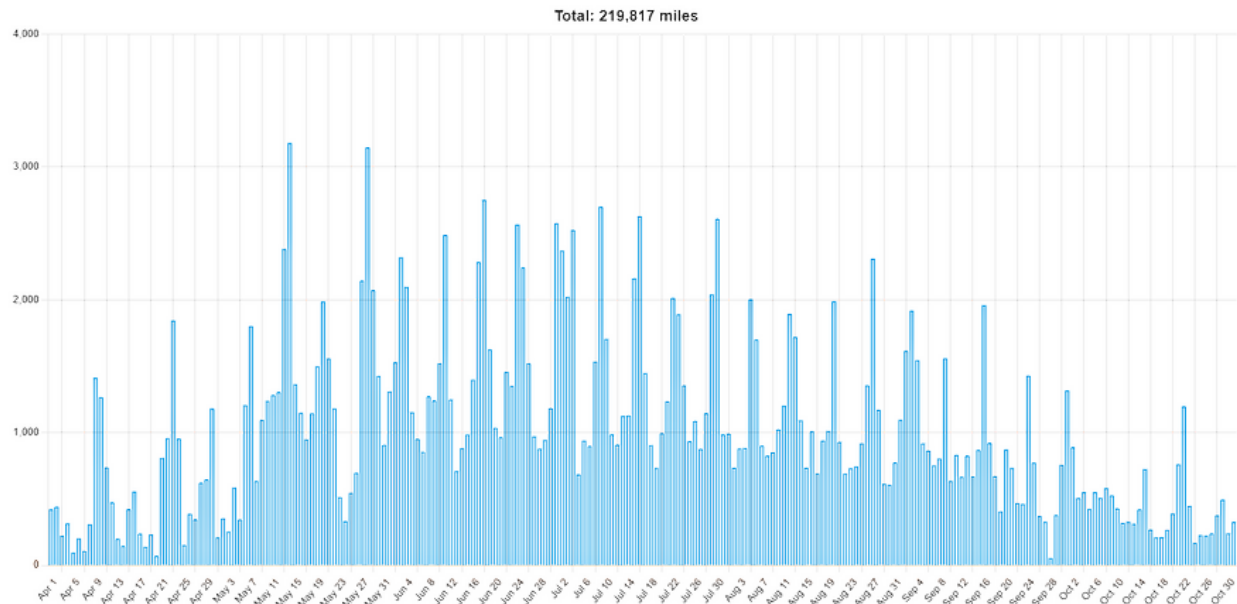
## What did 2021 look like?

### May - October 2021 Number of Trips

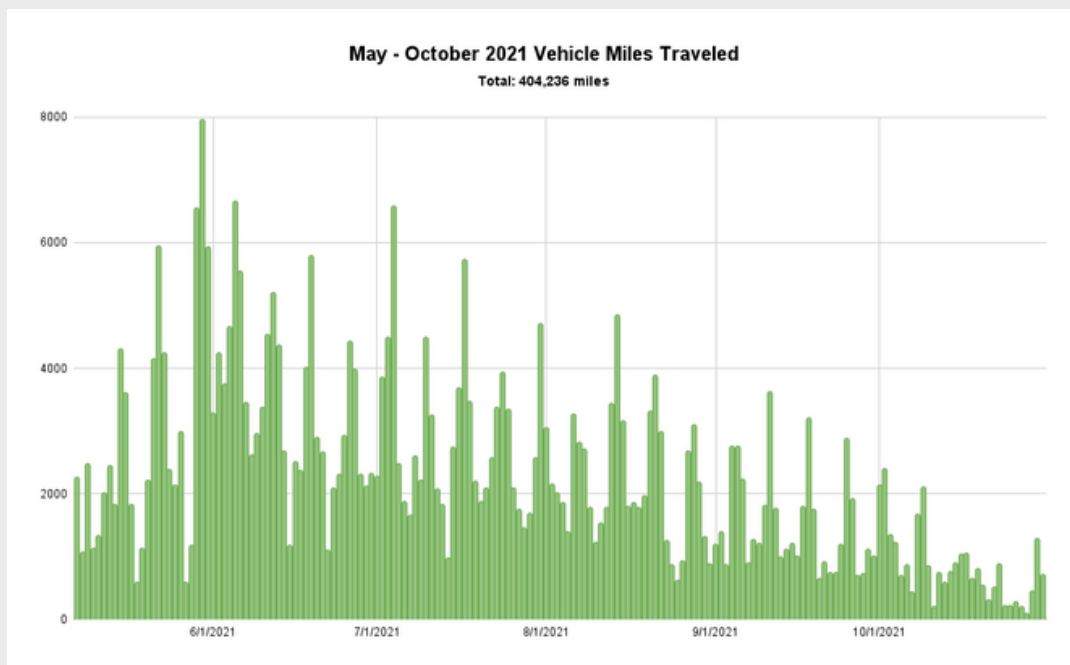
Total: 156,733



## April - October 2022 Vehicle Miles Traveled



## What did 2021 look like?

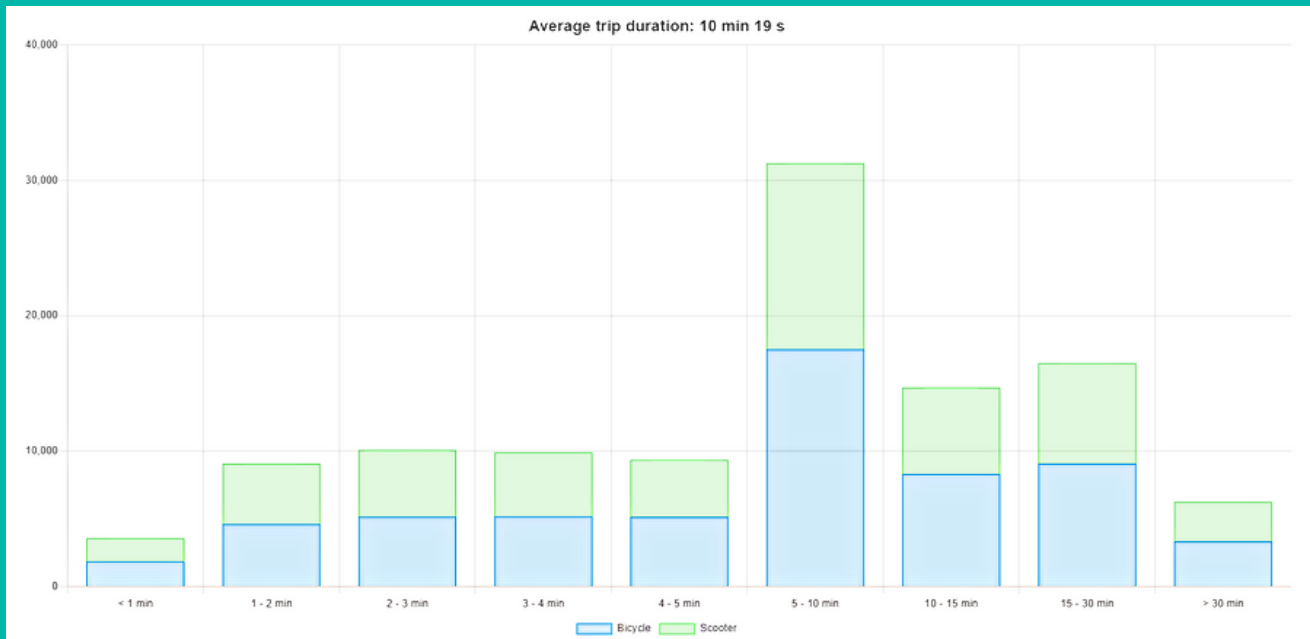


## Why do we see these differences?

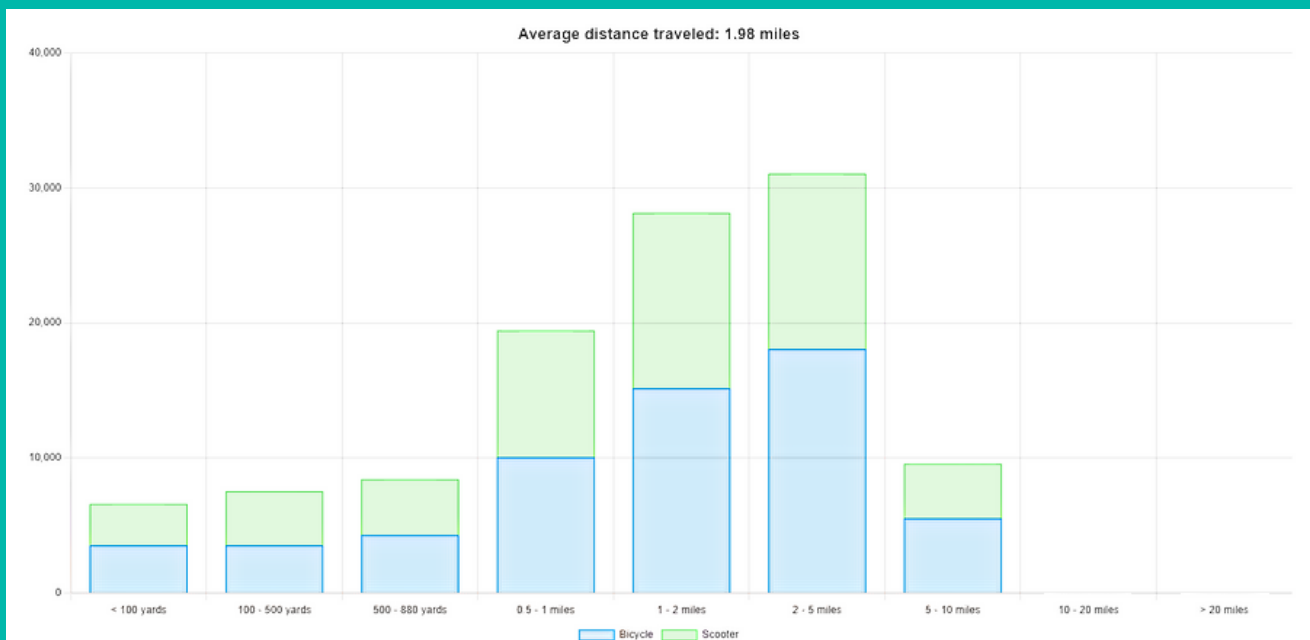
There is a marked decrease in number of trips and vehicle miles traveled between 2021 and 2022. While there are several reasons markets see these kinds of decreases, one probable factor in Cedar Rapids is the introduction of ID verification, which requires users to navigate additional steps before they are able to start their first ride, hindering some potential riders from successfully completing the sign-up process.

# Seasonal Stats

## April - October Trips by duration



## April - October Trips by distance

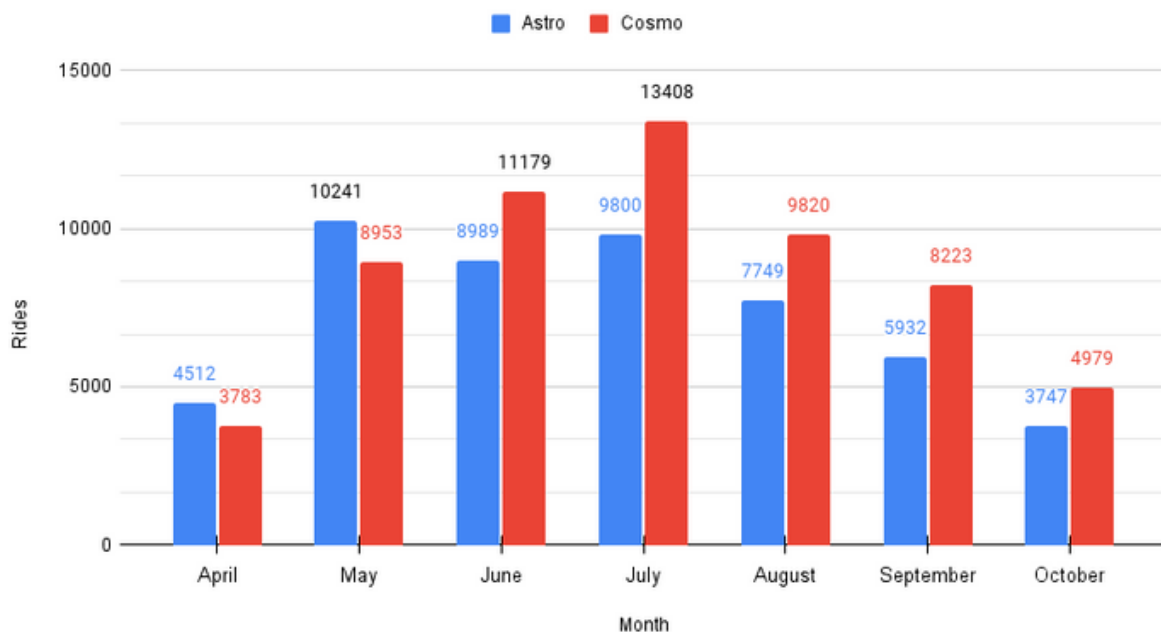


# Seasonal Stats

## Cosmos versus Astros

Cedar Rapids is home to both the Astro, Veo's stand-up scooter, and the Cosmo, Veo's sit-down scooter. The Astro was Veo's first fully electric vehicle and features large tires and a wide standing deck. The Cosmo, which is designed with a low center of gravity and a cushioned seat, creates an easy and stable riding experience while sitting. Here's a look at the number of rides taken each month on Astros and Cosmos in Cedar Rapids.

2022 Astro versus Cosmo Rides



Veo's 2022 ridership survey, which analyzed the behaviors and needs of more than 1,600 riders across 30+ markets, showed that the majority of riders over the age of 25 prefer a seated scooter over a standing scooter. In Cedar Rapids, nearly 10,000 more rides were taken on Cosmos than Astros in 2022, as illustrated above.



# Access Stats

Veo Access is an affordable way to use Veo in Cedar Rapids through discounted rates. To qualify, riders need to demonstrate eligibility or participation in any local, state, or federal assistance program.

Veo Access Members pay \$5/month and receive:

- \$0 in device unlock fees
- 30-minute daily ride with no per-minute fee
- Discounted per-minute fee of \$0.20/minute beyond the free 30-minute daily ride

Here is a breakdown of Veo Access ridership in Cedar Rapids this year.

**4,729 Total Rides**

**110 Customers**

**71 New Members**

**1.4 Median Ride Distance (miles)**

**6 Median Ride Length (minutes)**



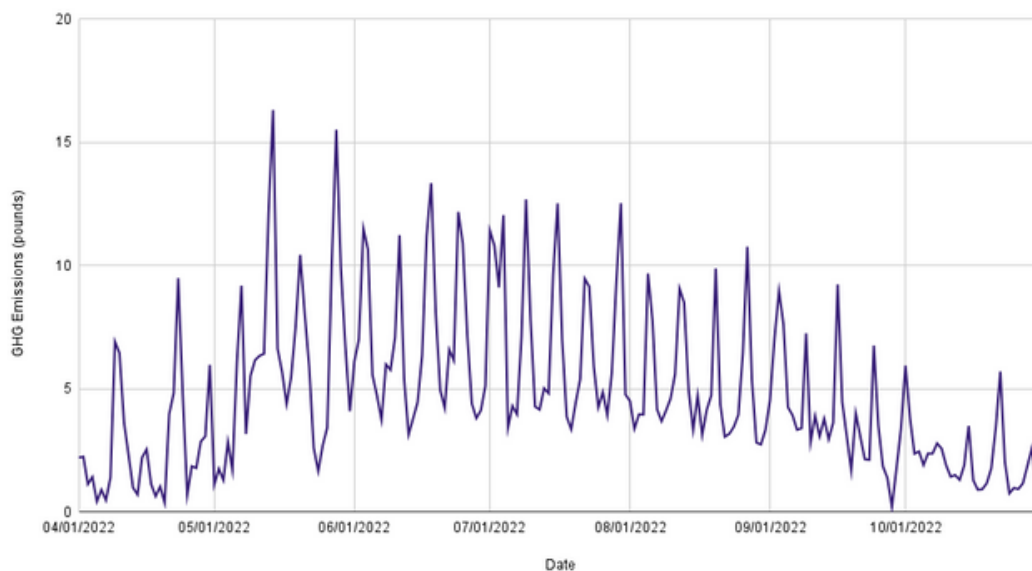
# Environmental KPIs

Greenhouse gas (GHG) emissions have become an important key performance indicator of a company's environmental impact. To give you a sense of the environmental impact of Veo vehicles in Cedar Rapids, we compared the fleet's GHG emissions to the emissions of a 2022 Toyota Camry, which gets about 27 miles per gallon when driving in the city.

Between April 1 and October 31, over five hundred Veo scooters traveled **219,817 miles** in Cedar Rapids. The operations of that fleet produced about **1,035 pounds of greenhouse gases**, the equivalent of consuming **53 gallons of gas**.

In comparison, a 2022 Toyota Camry would produce **162,827 pounds of greenhouse gas emissions** covering the same amount of miles, which is the equivalent of consuming **8,350 gallons of gas**.

Veo's Fleet GHG Emissions



# Key Customer Service Terms

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## **Questions**

Questions from customers range from inquiries about Veo's geofence, deposits and pricing, the user agreement or liability, safety, and other miscellaneous inquiries.

## **All Violations**

Veo's local operations team cites customers for improper parking or vehicle use. This category refers to all citations recorded in a month, including customer violations and/or fines that are waiting for review, rejected, approved, or reverted.

## **Approved Violations**

Each month, the local operations manager reviews all customer violations and approves those that are legitimate instances of improper parking or vehicle use.

## **NRZ Complaints**

These complaints are typically submitted by users to report dissatisfaction with Veo's service area or a "no-ride zone" (NRZ) they may have encountered while riding.

## **Stray Vehicles/Vehicles obstructing sidewalk**

These complaints typically refer to reports from non-customers about vehicles they want removed from an area or vehicles blocking an accessway or sidewalk.

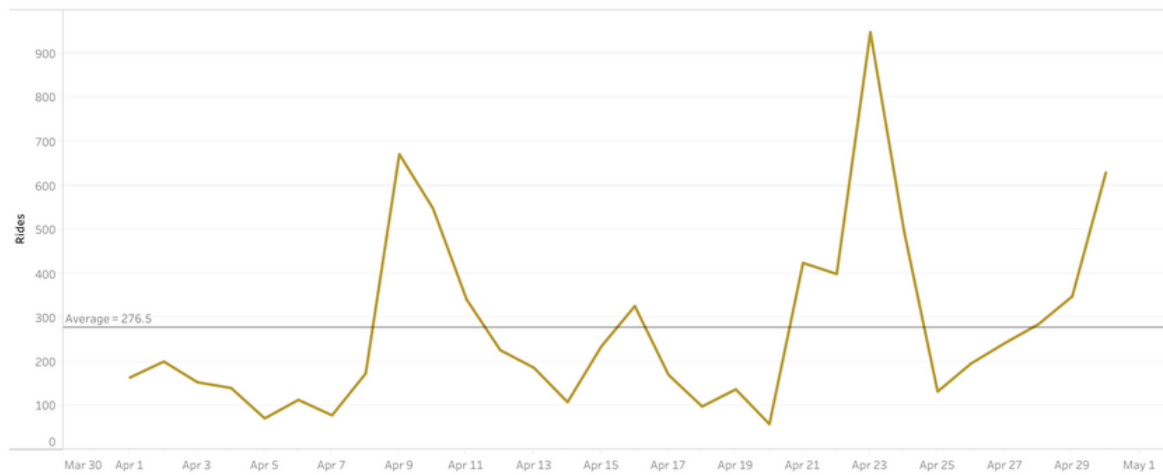


# Monthly Deep Dives

April 2022

Rides	Rides per day per vehicle	Average Fleet Size	Average Ride Miles	Average Ride Minutes	Total Ride Minutes	Total Miles
8,504	.57	487.37	2.26	12.23	101,487	18,783

## 01. April Rides by Day



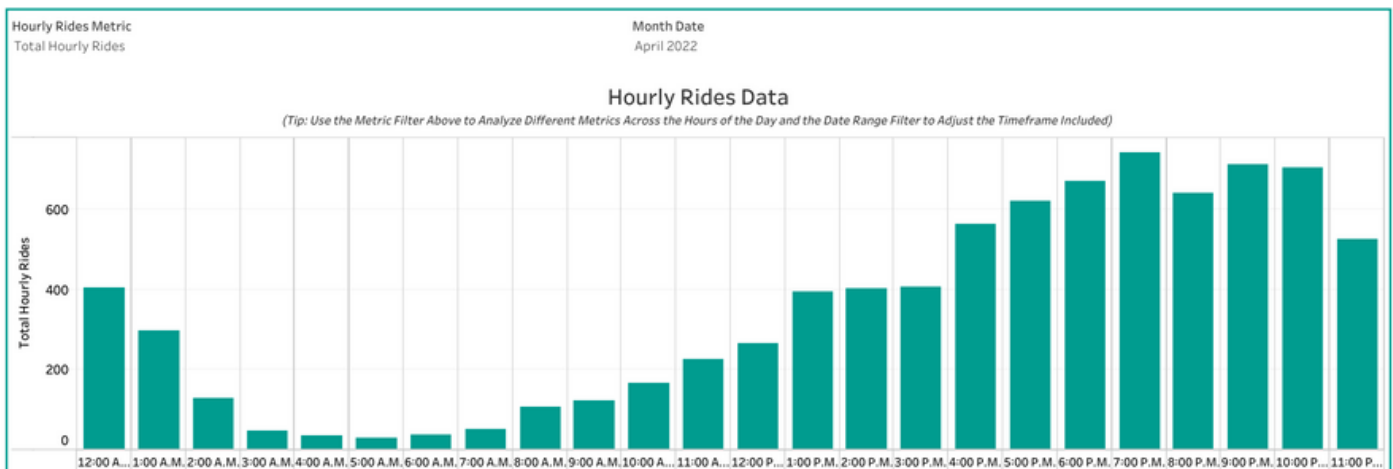
## Customer Service

Questions	All Violations	Approved Violations	NRZ Complaints	Stray Vehicles	Vehicles obstructing sidewalk
45	55	19	2	28	3

## Riders

Total Unique	2,444
Total New	287

## 02. April Rides by Hour

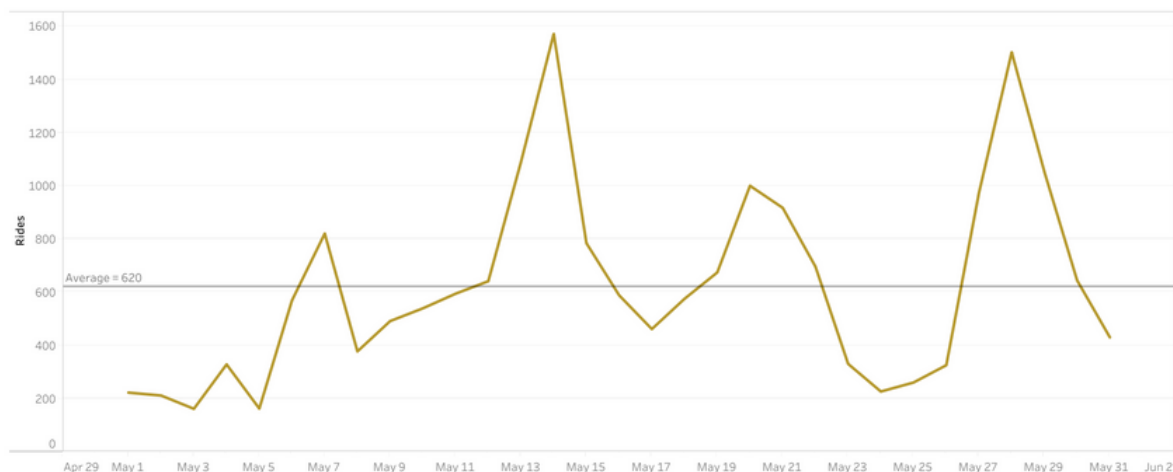


# Monthly Deep Dives

May 2022

Rides	Rides per day per vehicle	Average Fleet Size	Average Ride Miles	Average Ride Minutes	Total Ride Minutes	Total Miles
19,833	1.17	530.81	2.50	13.55	260,376	47,982

## 01. May Rides by Day



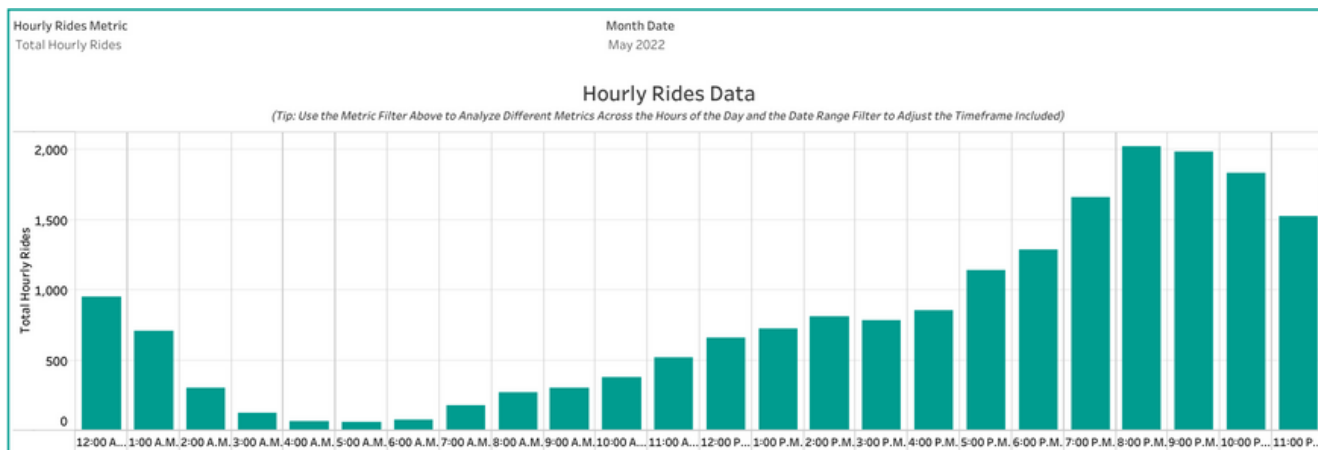
## Customer Service

Questions	All Violations	Approved Violations	NRZ Complaints	Stray Vehicles	Vehicles obstructing sidewalk
51	28	7	2	31	9

## Riders

Total Unique	4,389
Total New	1,347

## 02. May Rides by Hour





# Monthly Deep Dives

June 2022

Rides	Rides per day per vehicle	Average Fleet Size	Average Ride Miles	Average Ride Minutes	Total Ride Minutes	Total Miles
20,983	1.10	612.93	2.65	13.83	279,187	53,573

## 01. June Rides by Day



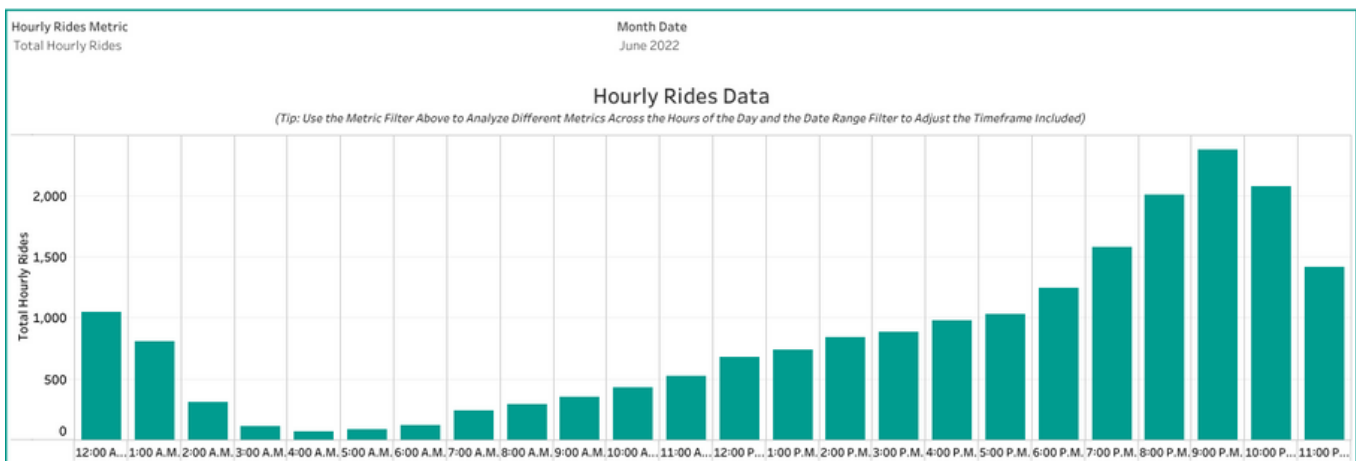
## Customer Service

Questions	All Violations	Approved Violations	NRZ Complaints	Stray Vehicles	Vehicles obstructing sidewalk
68	50	10	7	28	9

## Riders

Total Unique	4,683
Total New	1,505

## 02. June Rides by Hour

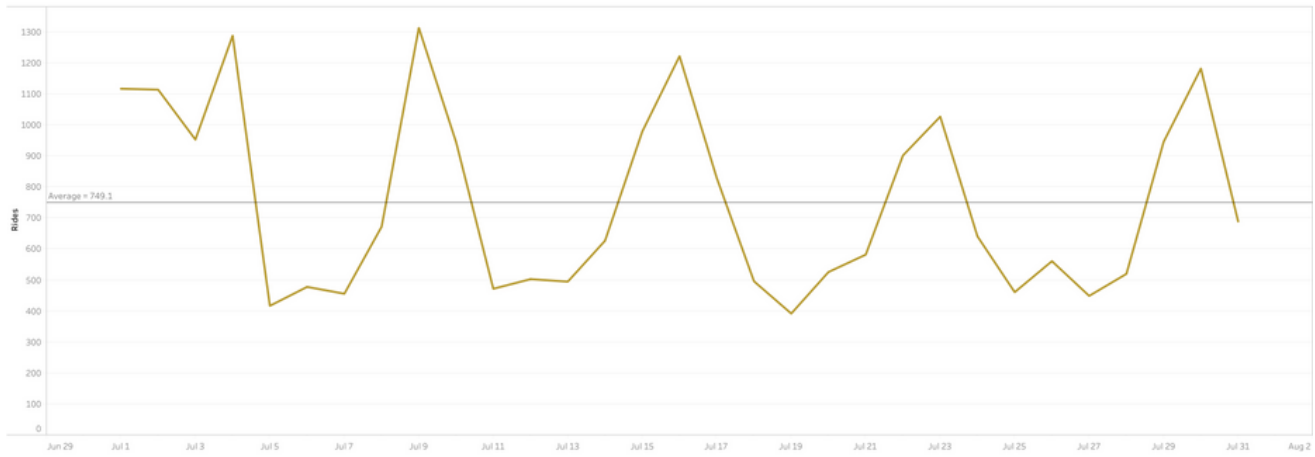


# Monthly Deep Dives

July 2022

Rides	Rides per day per vehicle	Average Fleet Size	Average Ride Miles	Average Ride Minutes	Total Ride Minutes	Total Miles
24,025	1.25	599.39	2.50	12.88	299,106	57,953

## 01. July Rides by Day



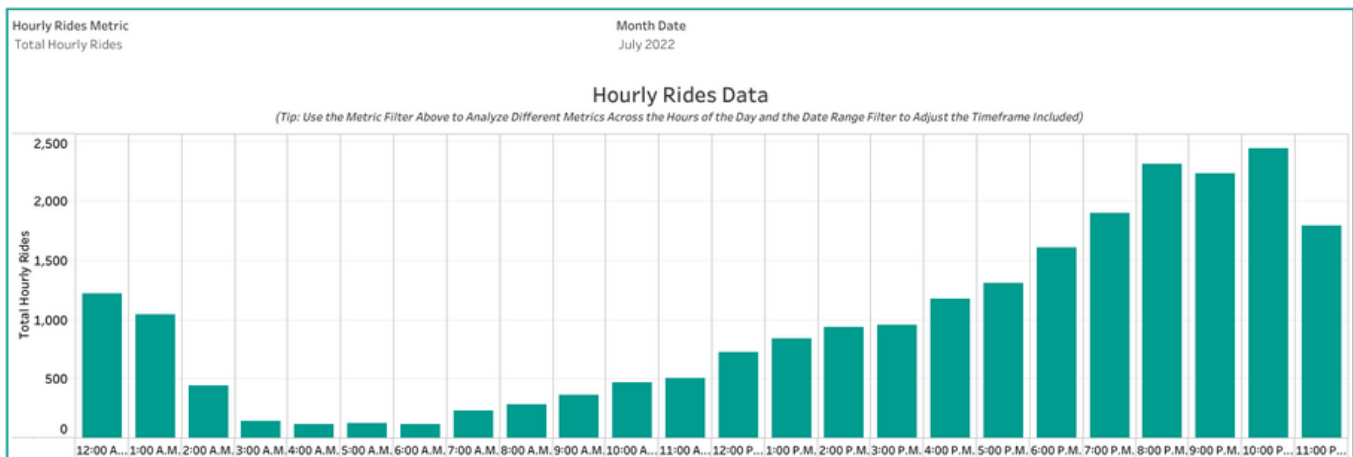
## Customer Service

Questions	All Violations	Approved Violations	NRZ Complaints	Stray Vehicles	Vehicles obstructing sidewalk
56	37	1	5	38	4

## Riders

Total Unique	5,132
Total New	1,634

## 02. July Rides by Hour



# Monthly Deep Dives

August 2022

Rides	Rides per day per vehicle	Average Fleet Size	Average Ride Miles	Average Ride Minutes	Total Ride Minutes	Total Miles
18,018	1.05	542.69	2.26	11.68	205,355	39,757

## 01. August Rides by Day



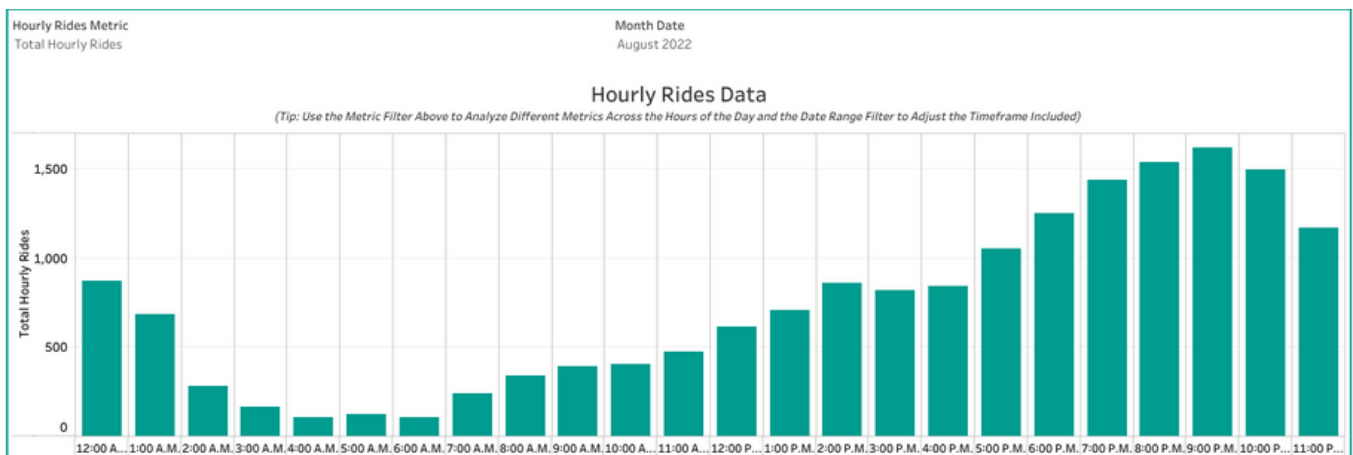
## Customer Service

Questions	All Violations	Approved Violations	NRZ Complaints	Stray Vehicles	Vehicles obstructing sidewalk
43	17	12	4	42	9

## Riders

Total Unique	3,693
Total New	972

## 02. August Rides by Hour



# Monthly Deep Dives

September 2022

Rides	Rides per day per vehicle	Average Fleet Size	Average Ride Miles	Average Ride Minutes	Total Ride Minutes	Total Miles
14,776	0.85	557.57	2.10	10.95	155,071	29,668

## 01. September Rides by Day



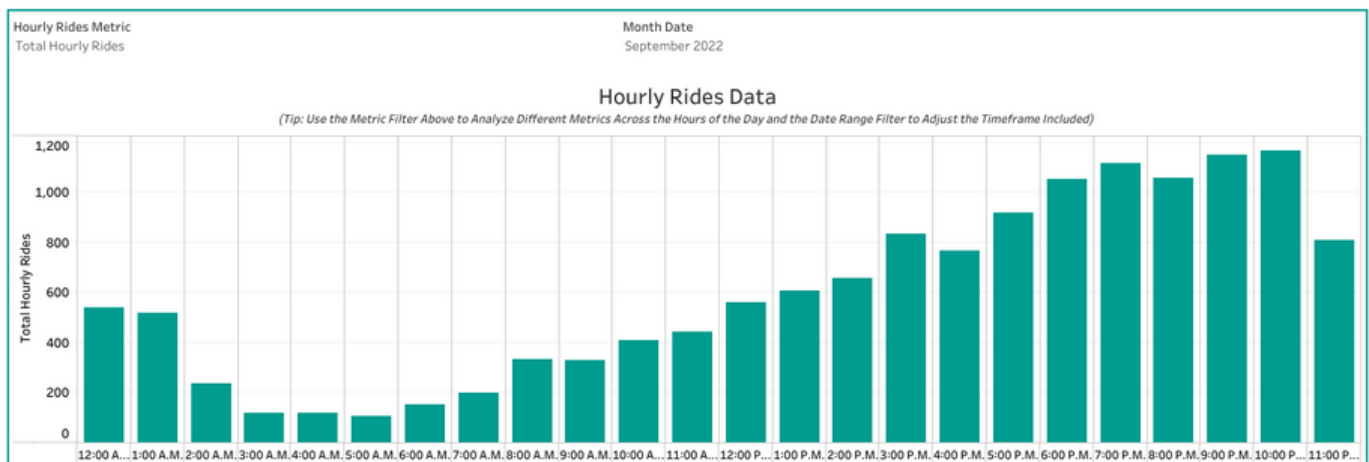
## Customer Service

Questions	All Violations	Approved Violations	NRZ Complaints	Stray Vehicles	Vehicles obstructing sidewalk
49	28	16	1	27	7

## Riders

Total Unique	2,999
Total New	771

## 02. September Rides by Hour



# Monthly Deep Dives

October 2022

Rides	Rides per day per vehicle	Average Fleet Size	Average Ride Miles	Average Ride Minutes	Total Ride Minutes	Total Miles
8,979	0.56	503.74	1.80	9.30	81,139	15,671

## 01. October Rides by Day



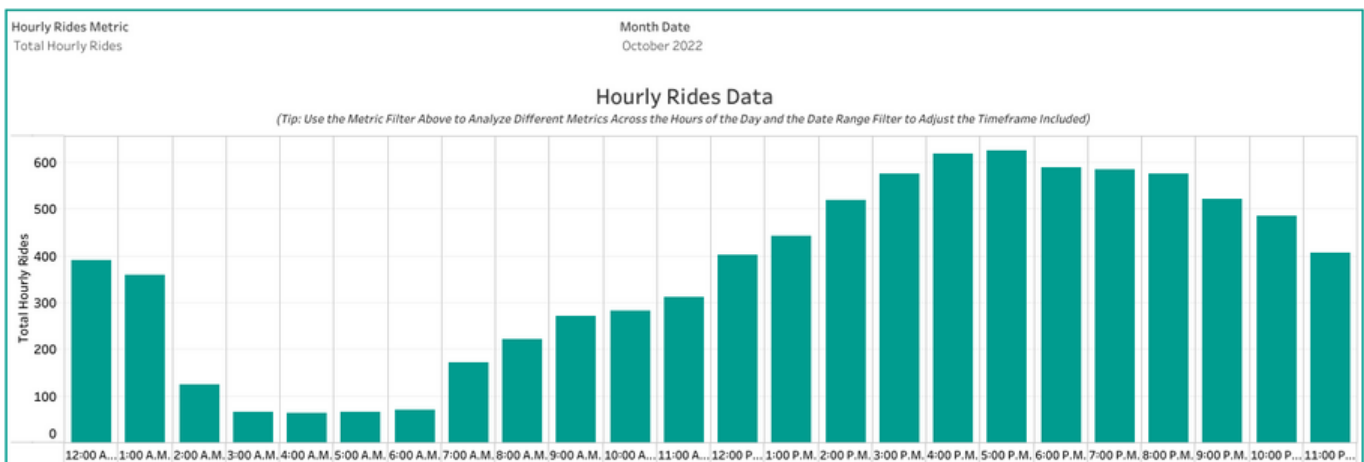
## Customer Service

Questions	All Violations	Approved Violations	NRZ Complaints	Stray Vehicles	Vehicles obstructing sidewalk
23	8	1	0	12	1

## Riders

Total Unique	1,953
Total New	344

## 02. October Rides by Hour





# Challenges and Opportunities

## Challenges: Inactive Vehicles

A key challenge in Cedar Rapids is balancing the number of inactive vehicles parked in outer neighborhoods with the needs of riders who rely on micromobility devices for travel beyond downtown. To better address this discrepancy, Veo's Cedar Rapids operations team added 30-40 labor hours each week, and almost exclusively focused on battery replacement and redeployment of inactive vehicles.

**Operational changes resulted in a 72.5% decrease in complaints about stray vehicles from customers and residents between August and October.**

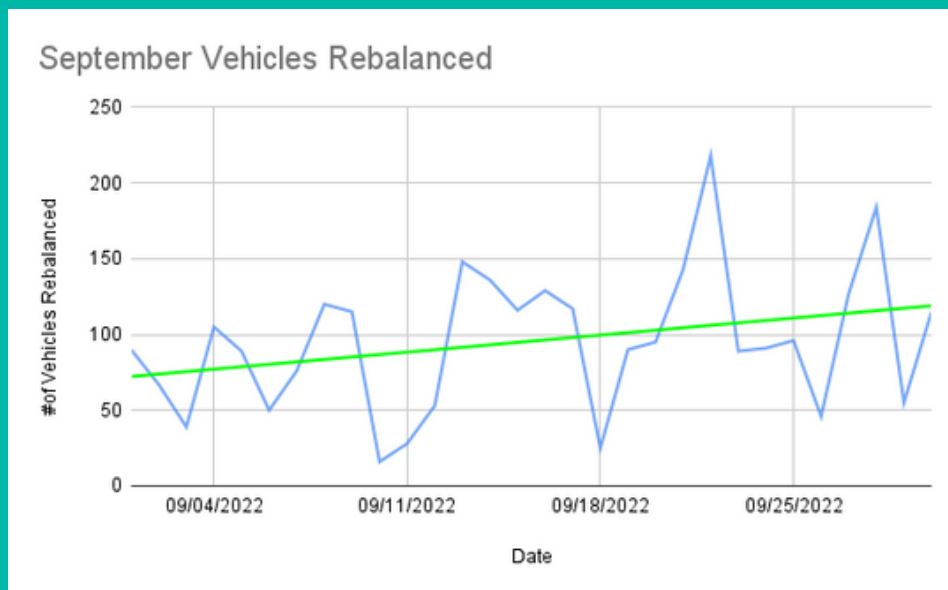
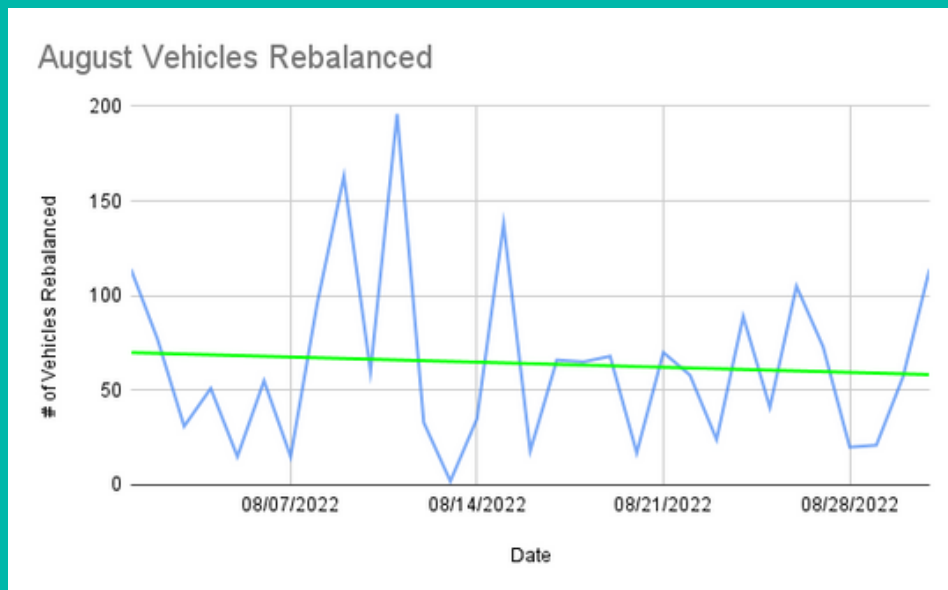
## Opportunities

There remains an opportunity to develop a deeper understanding of residents' needs and to tailor our program to more effectively meet those needs. In Cedar Rapids, we are prioritizing vehicle deployment in dense areas, even as many riders choose to take trips to the city's outer neighborhoods. We are also continuously analyzing key deployment hubs in outer neighborhoods so that we can more strategically deploy vehicles where riders need them.



# Measuring Progress: Inactive Vehicles

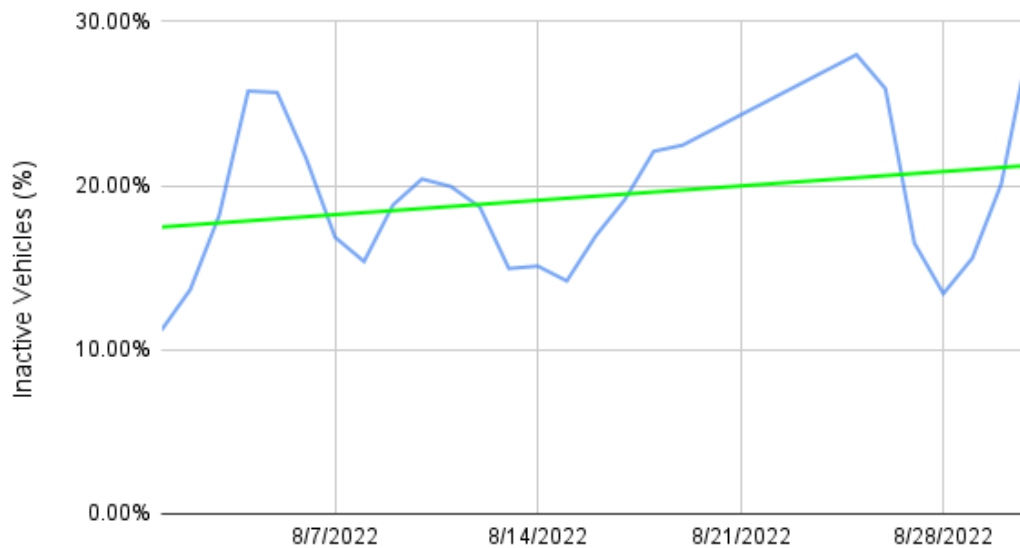
In response to feedback from residents and local officials, Veo's on-the-ground operations team increased the daily number of vehicles it "rebalanced." In other words, the team devoted more labor hours to picking up and redeploying vehicles to more popular areas. The data below illustrates the increased operational focus on rebalancing vehicles between August and September.



# Measuring Progress: Outcomes

In response to our operational improvements, the percentage of vehicles that were inactive for 72+ hours declined in the month of September. This change is illustrated in the graphs below.

## August Inactive Vehicles



## September Inactive Vehicles

