

CITY OF CALGARY  
**RECEIVED**  
IN COUNCIL CHAMBER  
DEC 16 2020  
ITEM: #7.2 TT2020-1260  
*Public*  
CITY CLERK'S DEPARTMENT

December 16, 2020

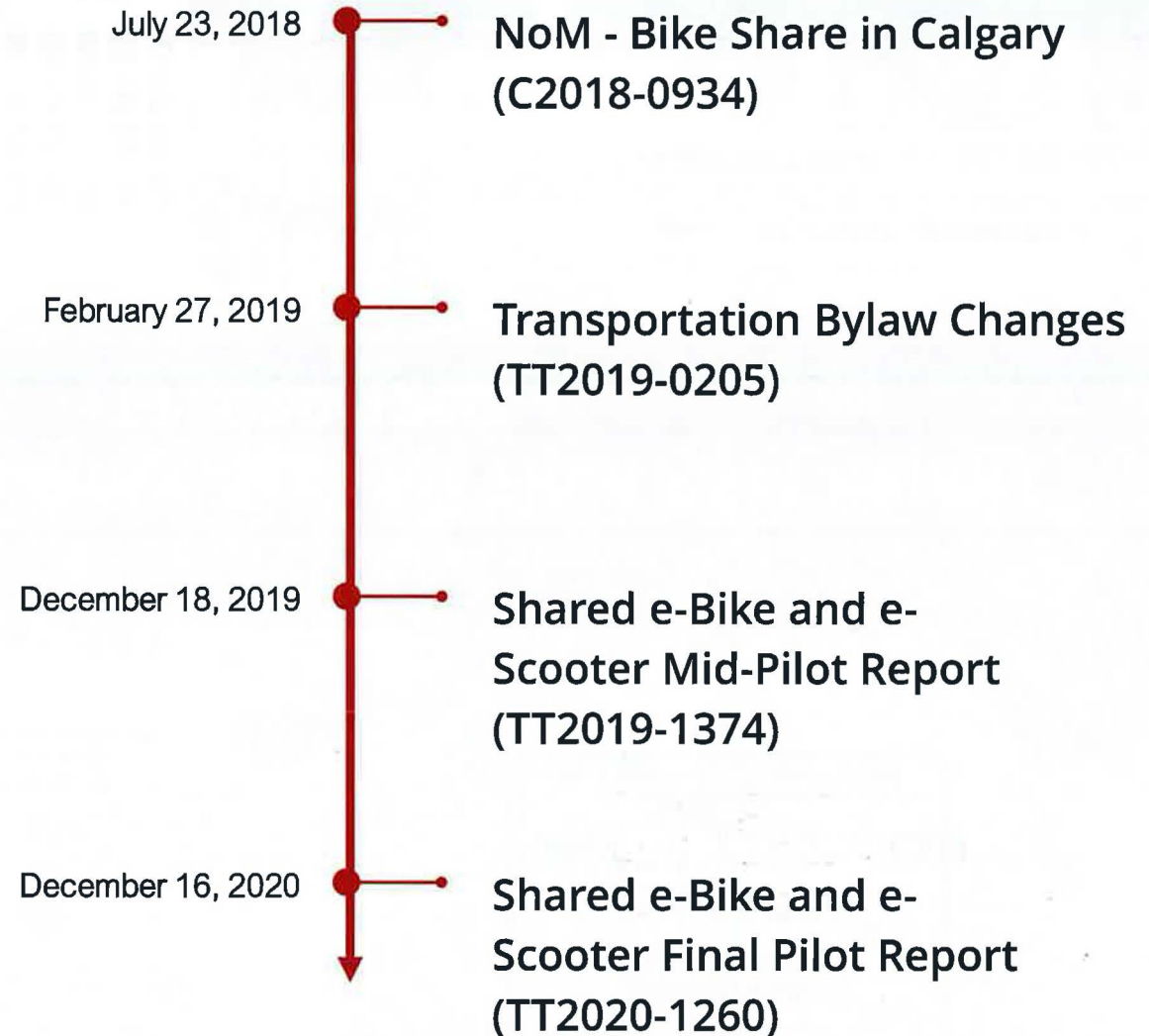
# Shared e-Bike and e-Scooter Final Pilot Report TT2020-1260



# Background

## Bike Share in Calgary NoM

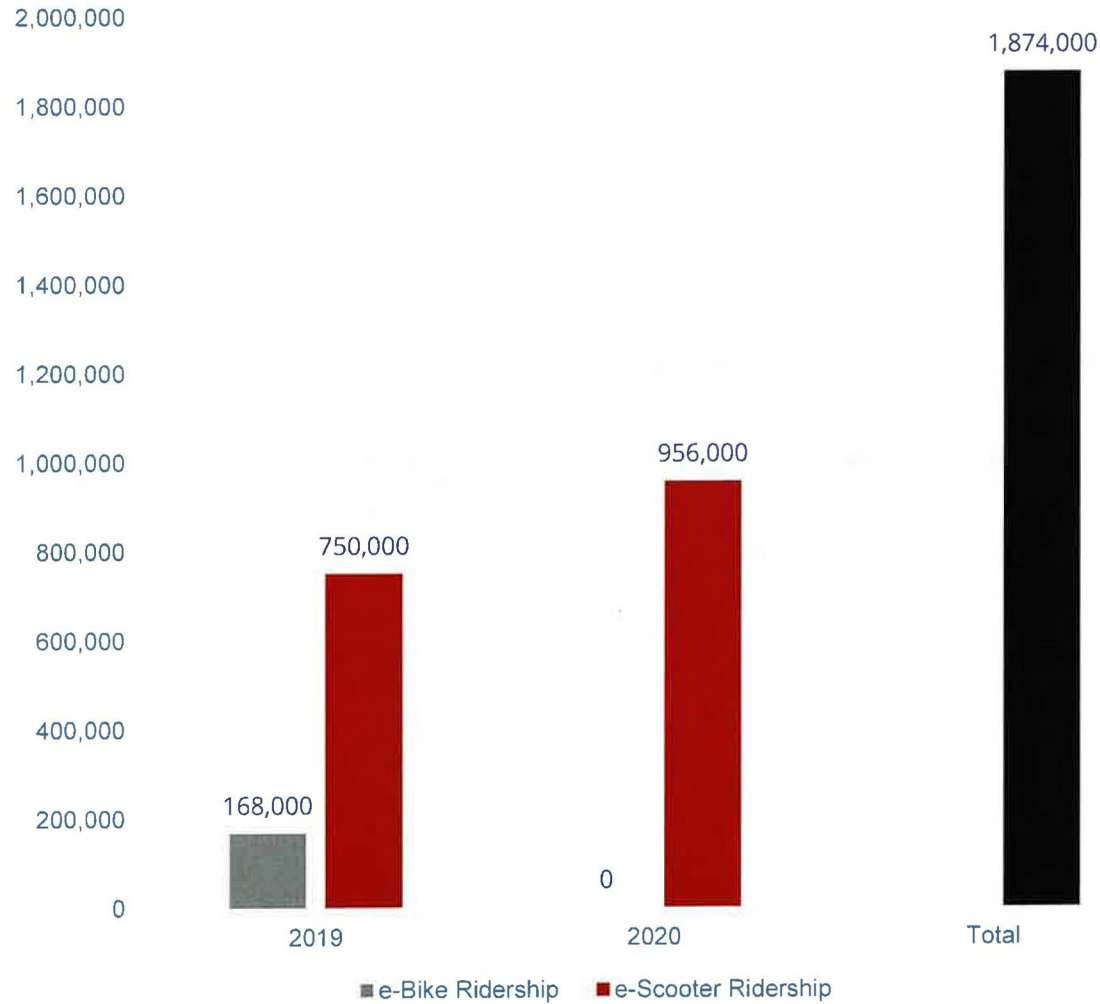
- Two-year pilot
- Program must be owned and operated by a 3<sup>rd</sup> party
- A permit and fee structure that covers administrative costs to regulate and manage the pilot program
- A pilot consisting of up to 10,000 bicycles, scooters or other personal mobility devices





# Ridership

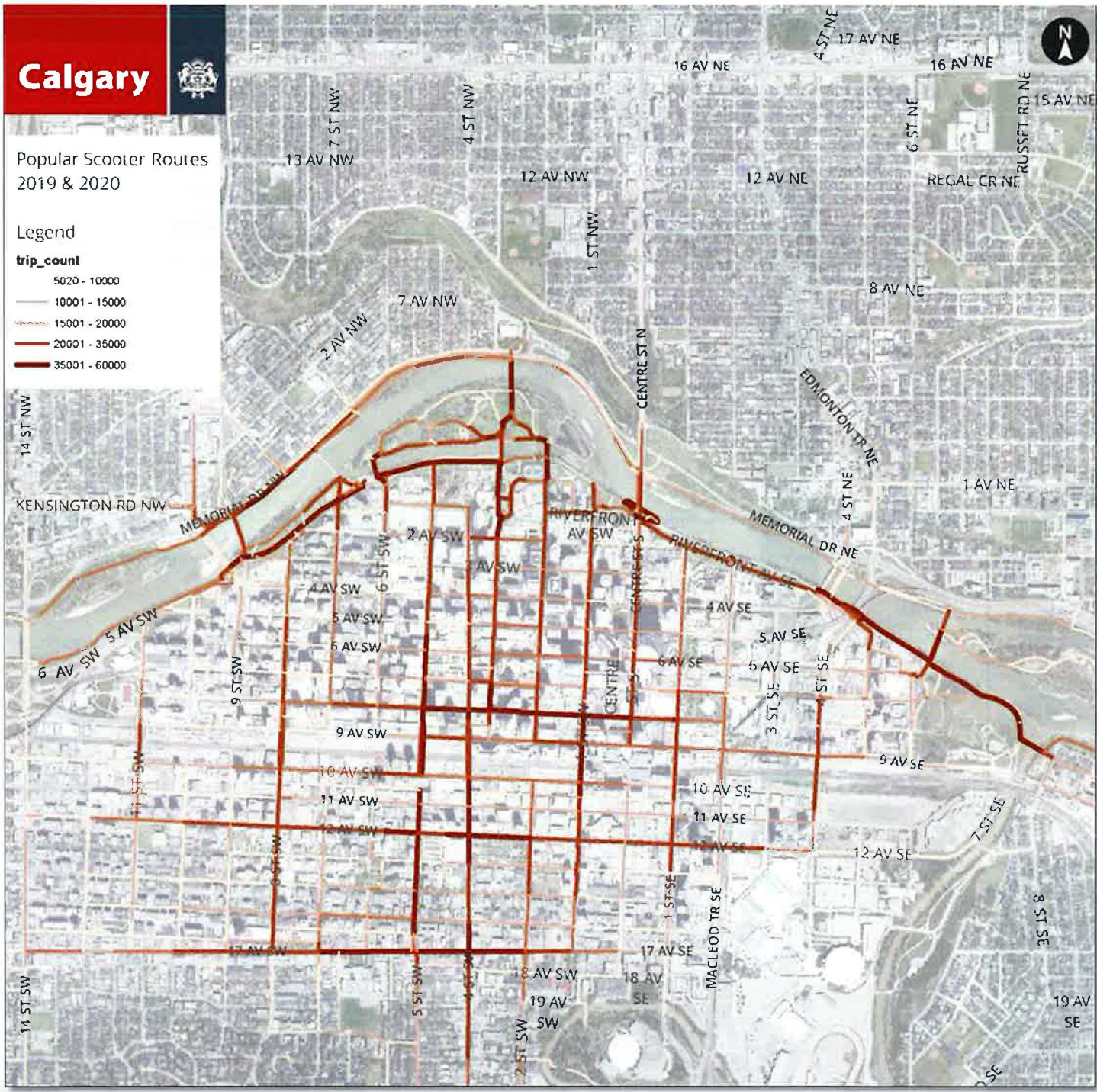
e-Bike and e-Scooter Ridership



Company	2019	2020
	500 e-Bikes 1,000 e-Scooters	1,300 e-Scooters
	500 e-Scooters	1,000 e-Scooters
	N/A	500 e-Scooters



Popular Scooter Routes  
2019 & 2020



Most Popular Destinations

- Stephen Avenue
- Kensington
- East Village
- 17th Avenue SW
- 4th Street SW
- Eau Claire

Most Popular Routes

- Bow River Pathway
- Stephen Avenue
- 17th Avenue SW
- 5th Street SW
- 12th Avenue S

# Key Issues

## User Behaviour



## Parking



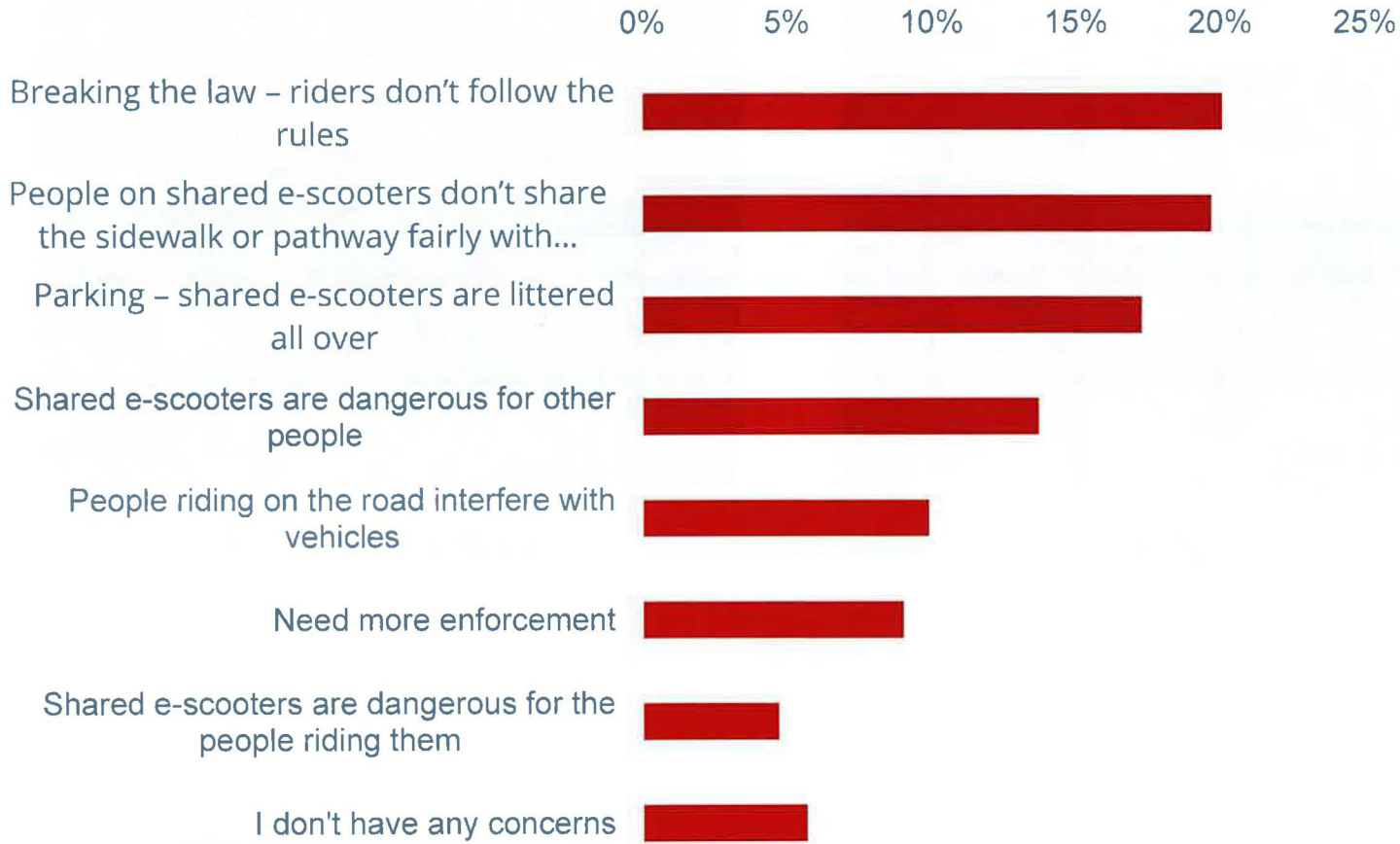
## Safety



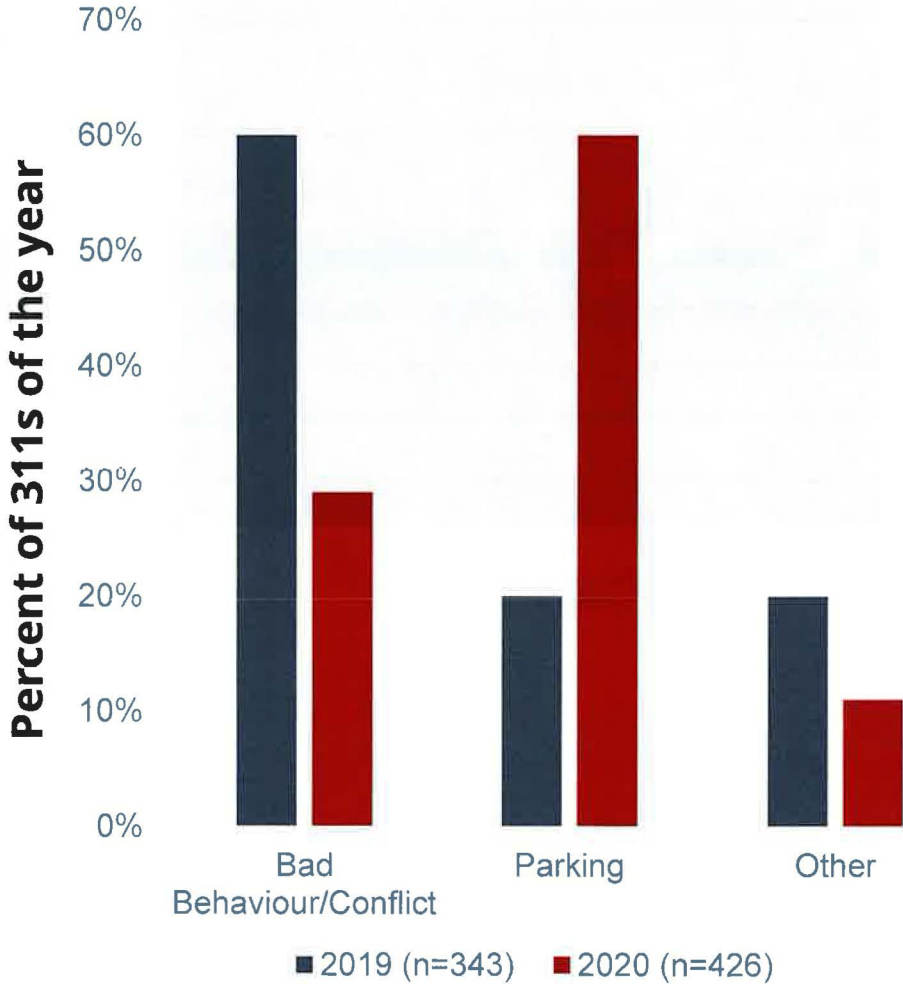
Image credit - The Verge

# User Behaviour - Key Data

## 2020 Citizen Survey



## 311 e-Scooter Data

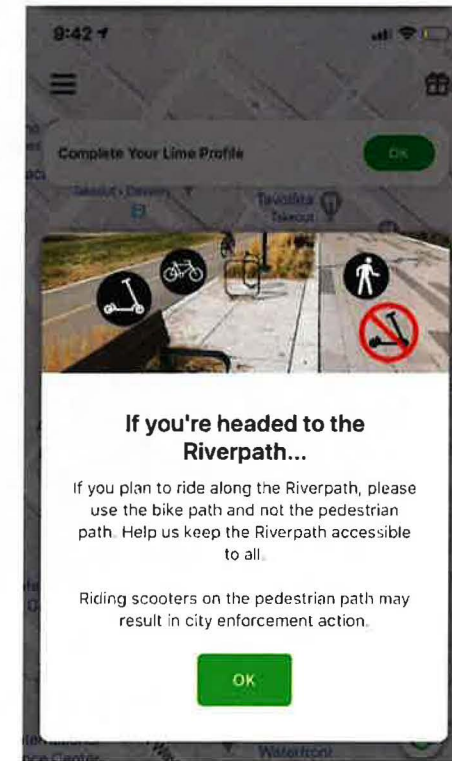


# User Behaviour - What we have done



## 39 Bylaw Tickets

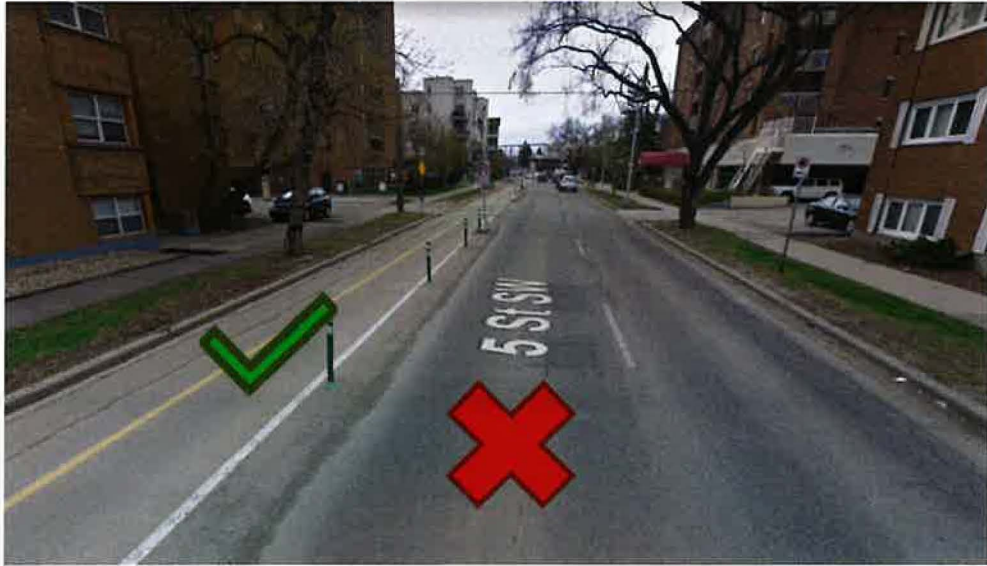
311s in Slow Speed Zones		
Slow Speed Zone	2019	2020
Kensington	12	2
Stephen AV	5	2
Inglewood	1	3
4 ST SW (Mission)	9	4
<b>Total</b>	<b>27</b>	<b>11</b>





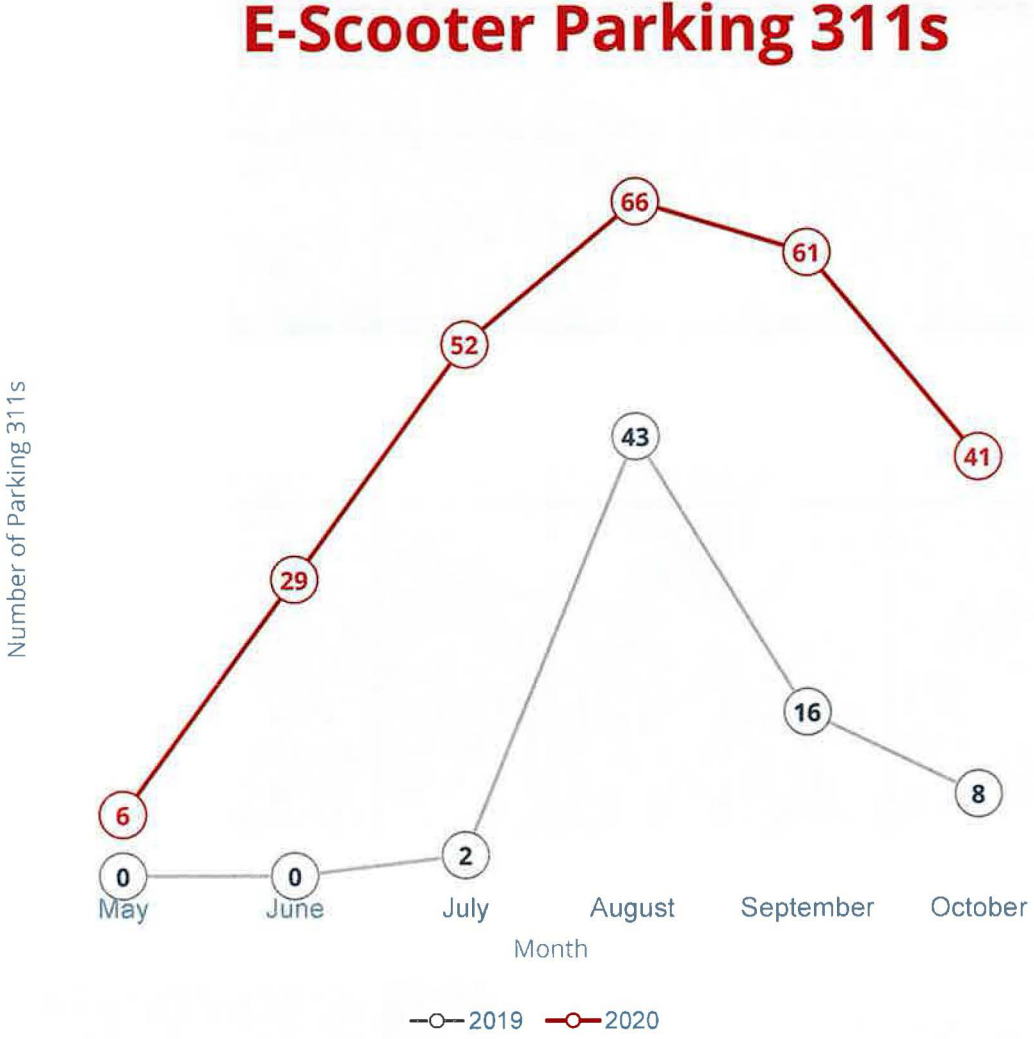


# User Behaviour – What we will do

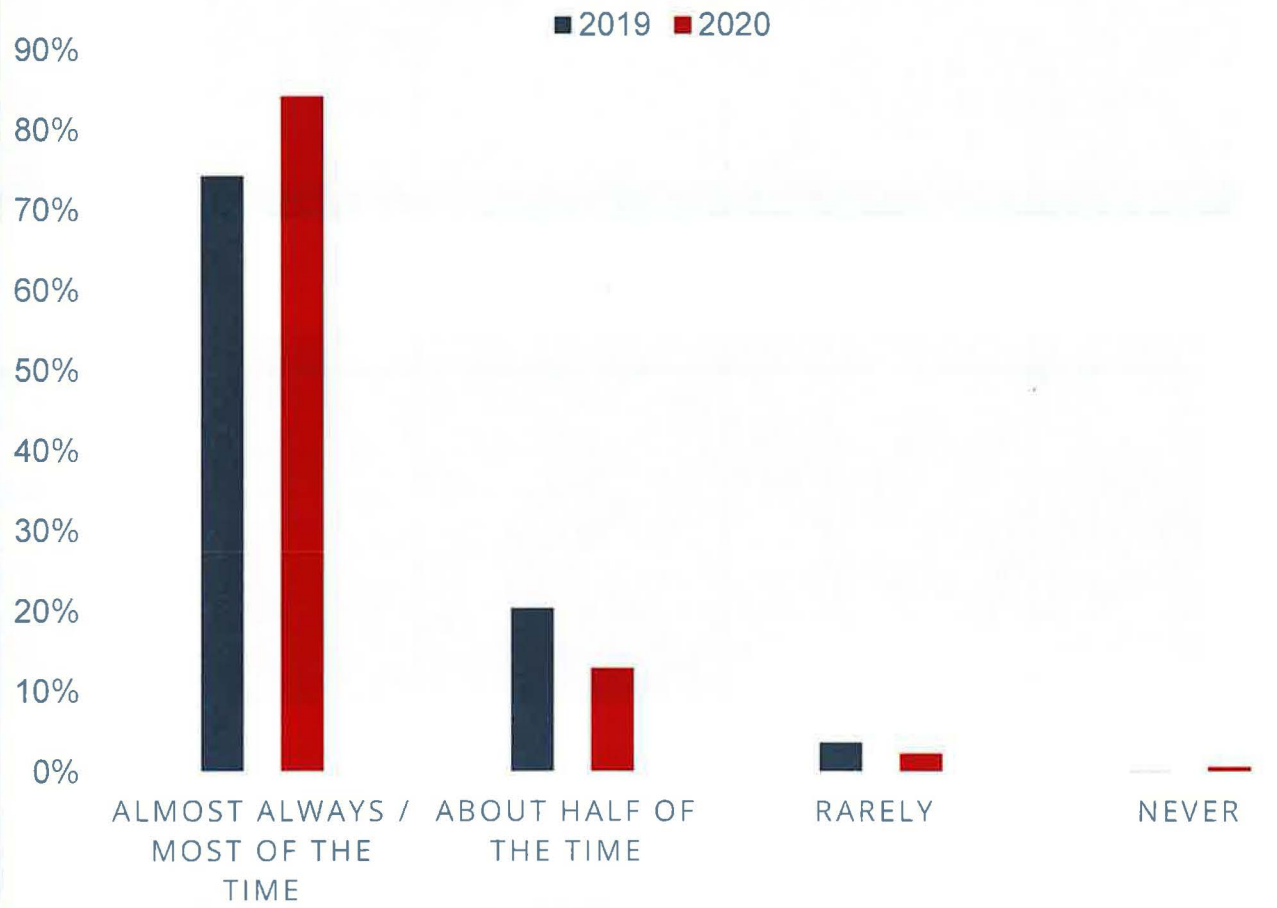


# Parking - Key Data

## E-Scooter Parking 311s

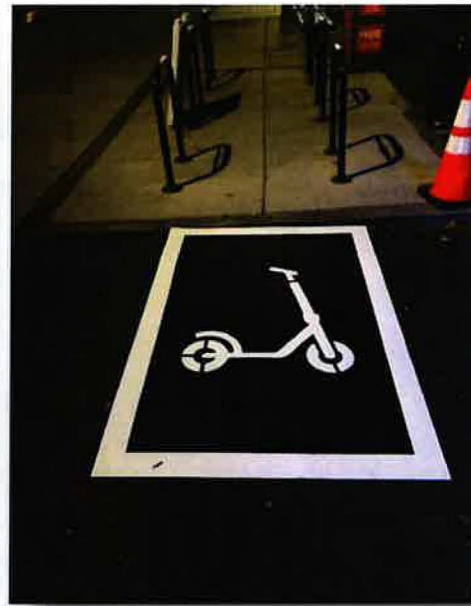


## Ability for users to find an e-Scooter





## Parking - What we have done



- 30 Zones Tried
- 2.5% of users ended trips in zones
- 10% of scooters deployed by companies in zones



188 Tickets in  
3 Month Period



## Parking - What we will do

**1,500  
Permitted  
e-Scooters**



**Fine Companies Directly**



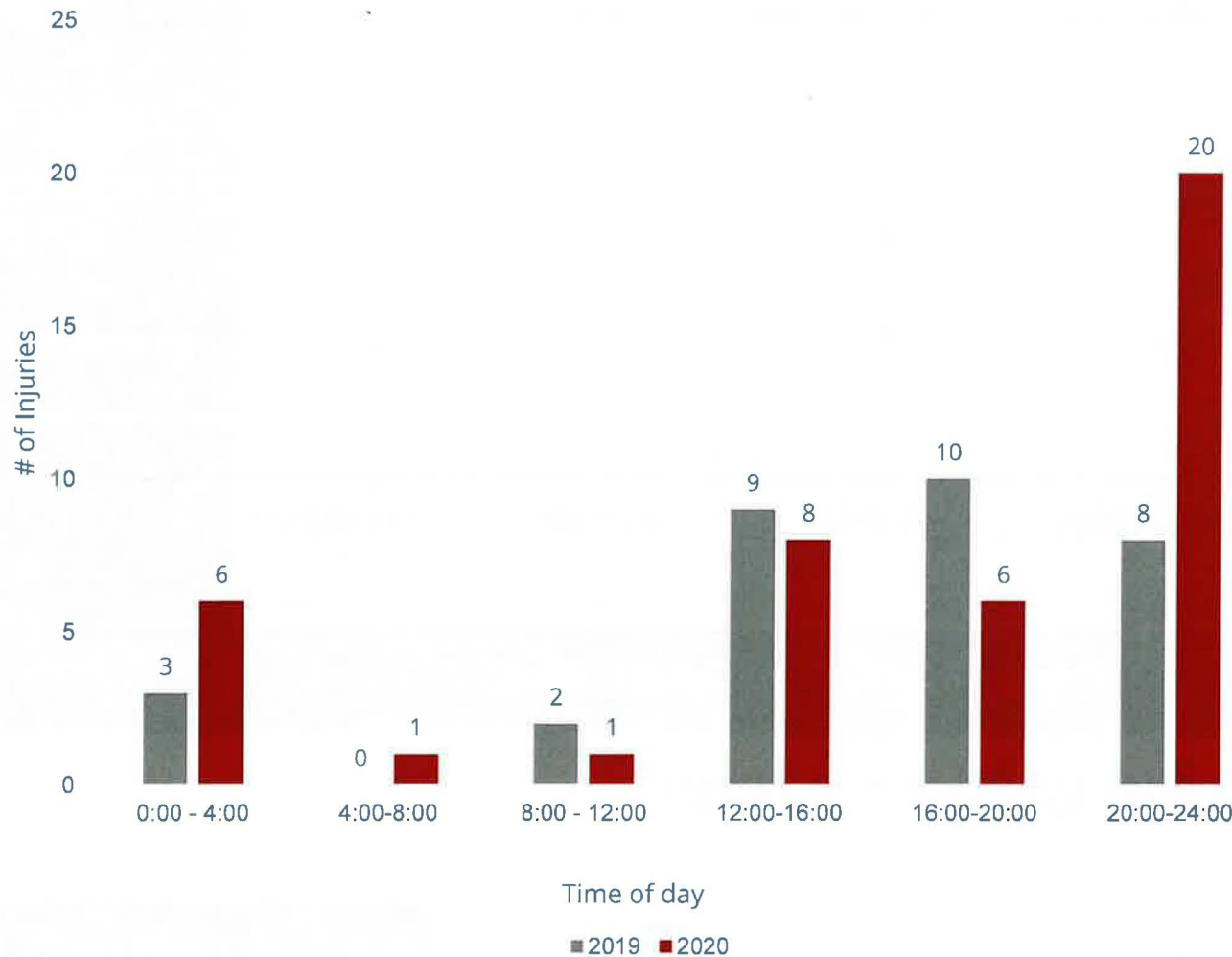
*Parking in a Smart Beacon parking area*

**\$20 per device fee to build  
device infrastructure +  
working with the  
companies to incentivize  
better parking**



## Safety – Key Data

### Injuries Requiring EMS – Time of Day



- 71 out of 75 people injured during the pilot were riding on an e-Scooter; three incidents involved pedestrians and one incident involved a person cycling
- The average age of a person injured was 35 years.
- Common causes of injuries occurred due to losing control, removing a hand or foot while in motion, and environmental hazards in the built environment such as riding over gravel, potholes or transitioning over a curb.
- Alcohol was a factor in at least 28 of the injuries
- There were 0 fatalities and 0 admissions to the ICU



## Safety – Key Data

### Injuries Requiring EMS – Comparison

Type	2019 (July 8 to October 31)				2020 (May 22 to September 30)			
	E-Scooter	Bicycle	Vehicle	Motorcycle	E-Scooter	Bicycle	Vehicle	Motorcycle
Emergency	33	197	502	103	42*	484	617	166
ICU	0	4	17	3	0	3	11	5
Fatality**	0	1	3	0	0	3	4	1
Surgery	8	33	51	35	24	109	79	57

\*There were an additional 25 e-Scooter injuries requiring EMS that did not contain detailed patient records in 2020.

\*\*Fatality numbers do not include those who died on site. There were no e-Scooter fatalities.

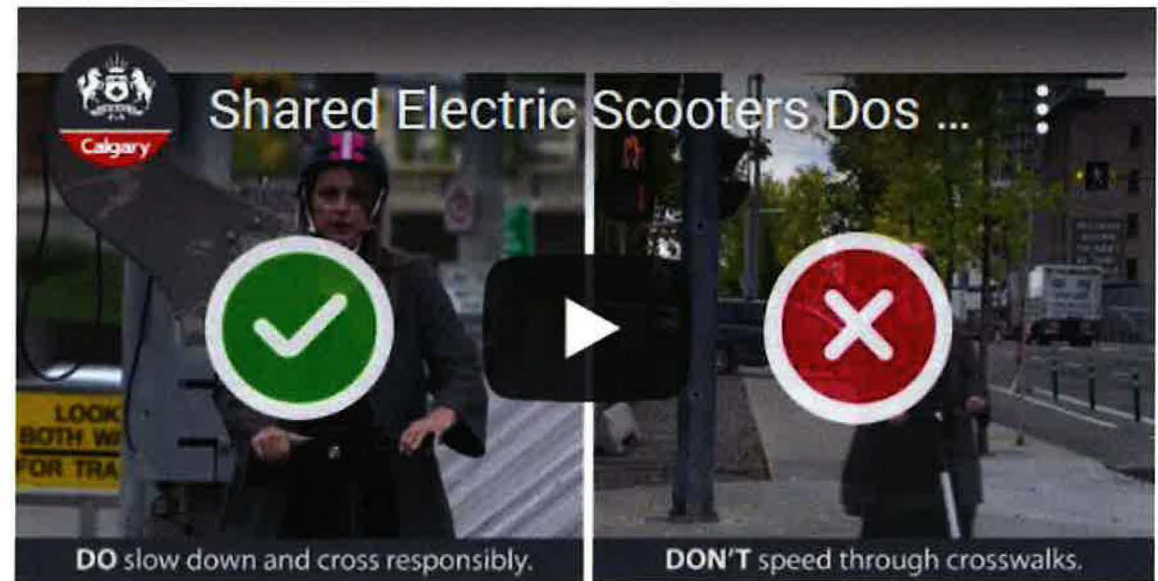
## Safety – What we have done

### Safety video

Watch this video to learn a few safety tips you should know while scooting on Calgary's sidewalks, pathways and bicycle lanes.



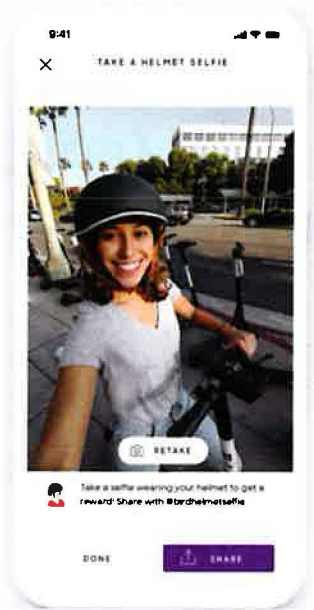
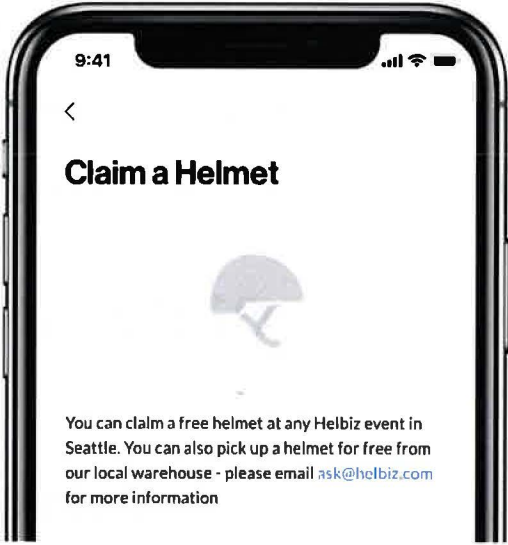
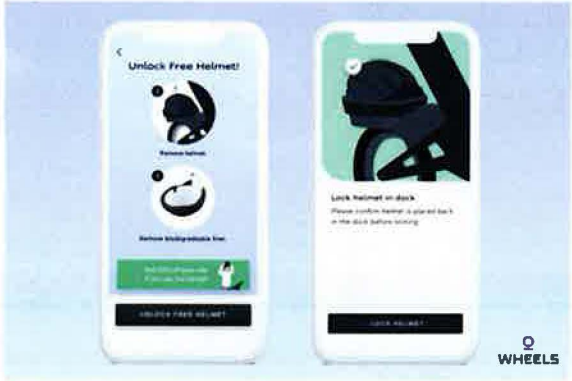
Bird Canada – Distributing Free Helmets in 2019



## Competitive Process

**Seattle** - Attach a description and illustrative images of the helmet distribution plan:

- incomplete= disqualified
- complete=0
- complete, incentivizes use while riding=1
- complete, requires use while riding, examples from other cities=2-3







## Going forward – Program Funding

### Current: Permit Fee Based

\$60 per e-Scooter

+ Security Deposit

*2-year pilot*

\$163,000 Costs

\$177,000 Revenues

### Future: Permit + Trip Fee

\$0.15 per Trip

\$20 per device per operating year for  
infrastructure

+ Security Deposit

*Future Costs Estimate – per year*

\$60,000 Staff Time + \$30,000 Infrastructure

Will need 400,000 rides per year + 1,500  
devices



## Summary of Changes

- Requiring a unique identification number on every device
- Allowing shared e-Scooters on low speed / low volume roadways
- Limiting the number of e-Scooters to 2019 levels (1,500 Devices)
- Allowing The City to issue parking fines directly to the companies
- Taking in company funding to allow for more parking infrastructure
- Moving to a permit fee + per trip fee to fund the program



### **RECOMMENDATION(S):**

That the Standing Policy Committee on Transportation and Transit recommend that Council:

1. Allow private sector operation of shared micromobility services with the conditions that:
  - a) Operators must cover City administrative costs to regulate and manage the program; and
  - b) Obtain City permission and follow all requirements in order to operate
2. Give three readings to the proposed bylaw to amend the Calgary Traffic Bylaw 26M96 (Attachment 3)





## Current Fee Schedule

### D. Fee Schedule

A summary table of the fees is provided below.

Fee Type	Fee Amount	Fee Information
Application for Permit	\$600 per application \$300 per re-application.	<ul style="list-style-type: none"> <li>Fees due at time of application</li> <li>Re-applications are for requests to increase fleet sizes</li> </ul>
Street use Permit	\$50 per Electric Scooter based on approved fleet size	<ul style="list-style-type: none"> <li>Due before a Permit is issued or when fleet size increases</li> </ul>
Electric Scooter education and encouragement	\$10 per Electric Scooter	<ul style="list-style-type: none"> <li>Due before a Permit is issued or when fleet size increases</li> </ul>
Security deposit	\$25 per Electric Scooter to a maximum of \$15,000 per Permit Holder	<ul style="list-style-type: none"> <li>Due before a Permit is issued or when fleet size increases</li> </ul>



## E-Scooter Caps

City	State	Per Operator Scooter Cap
Alexandria	VA	200
Arlington	VA	675
Atlanta	GA	2,000
Austin	TX	4,500
Charlotte	NC	400
Chicago	IL	250
Cincinnati	OH	400
Cleveland	OH	400
Columbus	OH	500
Dallas	TX	4,000
Denver	CO	684
Indianapolis	IN	1,000
Kansas City	MO	1,000
Los Angeles	CA	6,500
Louisville	KY	450
Memphis	TN	900
Miami	FL	744
Milwaukee	WI	750
Nashville	TN	500
Oakland	CA	1,000
Orlando	FL	200
Phoenix	AZ	300
Portland	OR	525
Salt Lake City	UT	600
San Antonio	TX	1,000



# Commercial Areas



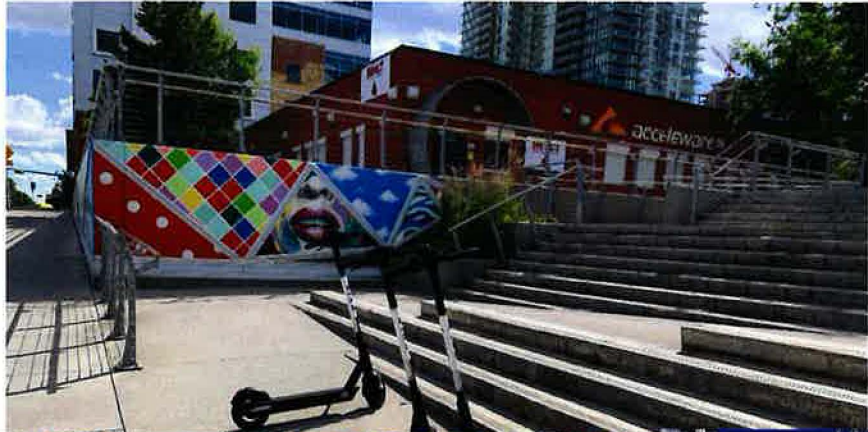
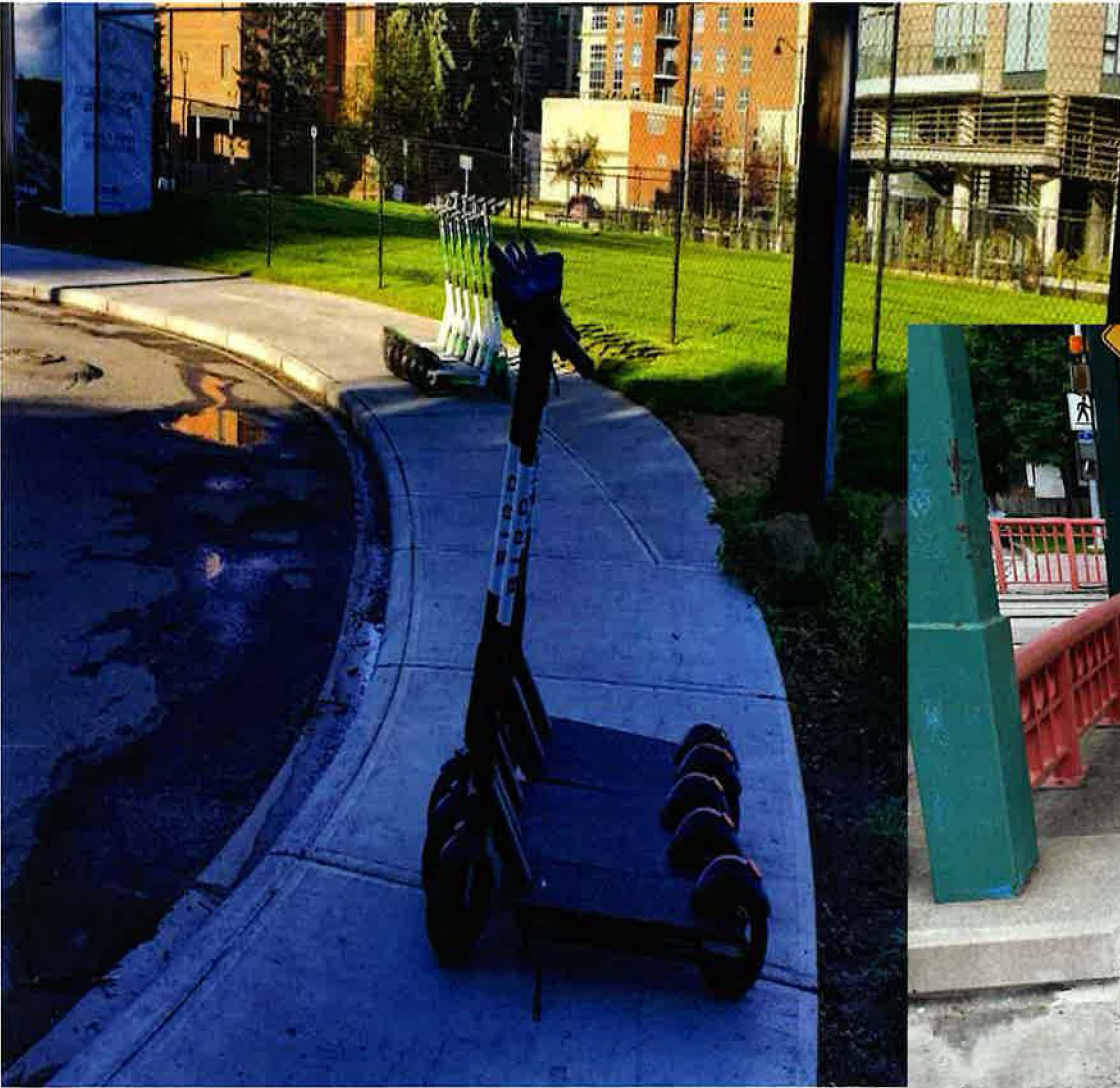




## Bad Parking Example



# CADPAC RING





## Current Rules

The City of Calgary is committed to providing convenient, accessible and efficient transportation choices that support the movement of people and goods throughout our city.

✔ We wear helmets.

✔ We park scooters with care in the furniture zones.

✘ We don't park scooters against buildings.

✘ We don't park scooters on the sidewalk path or bicycle and travel lanes.

✔ We ride in the exclusive bicycle lane or on the sidewalk.

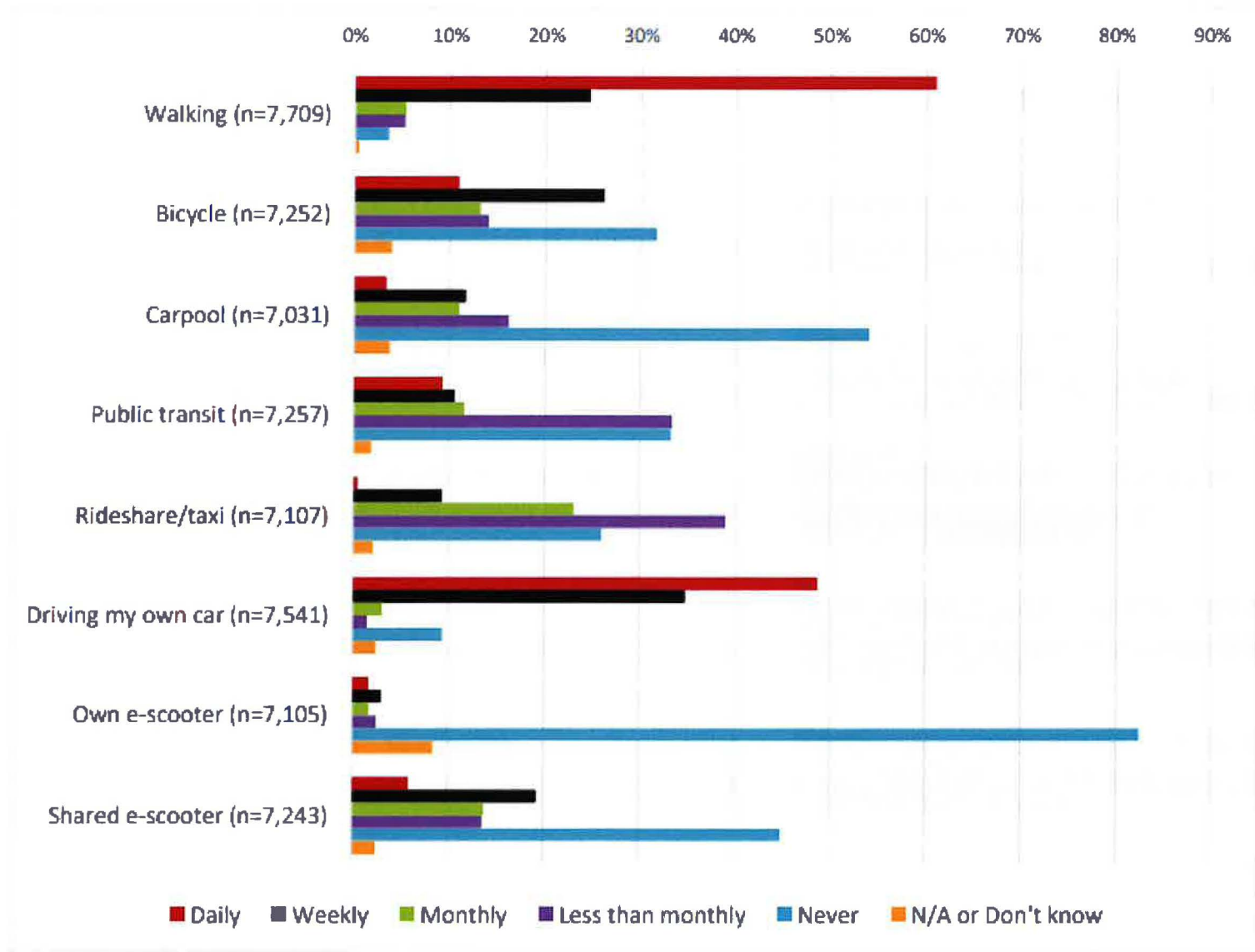
✘ We don't ride scooters on the roadway.



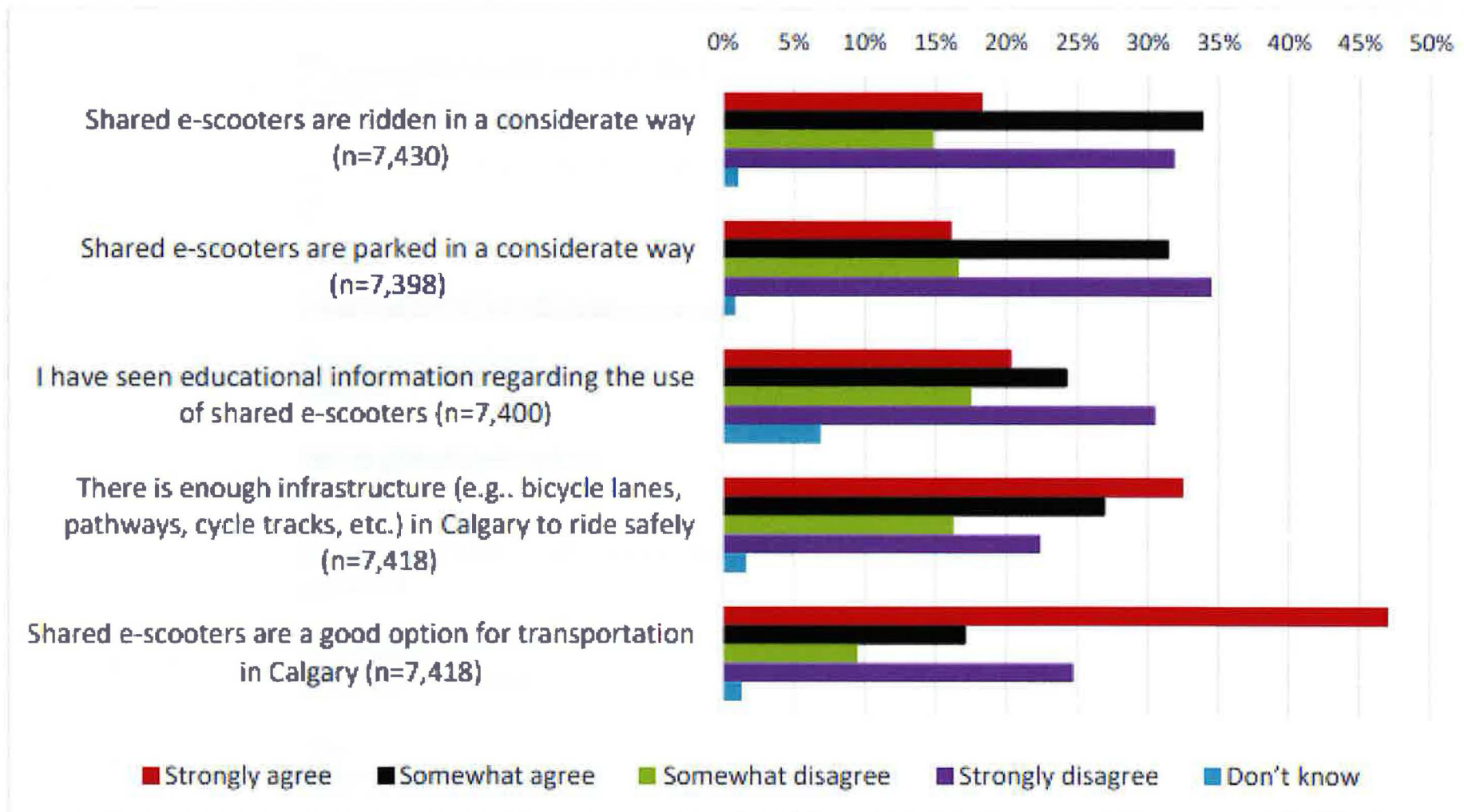
## 2020 - What we heard report



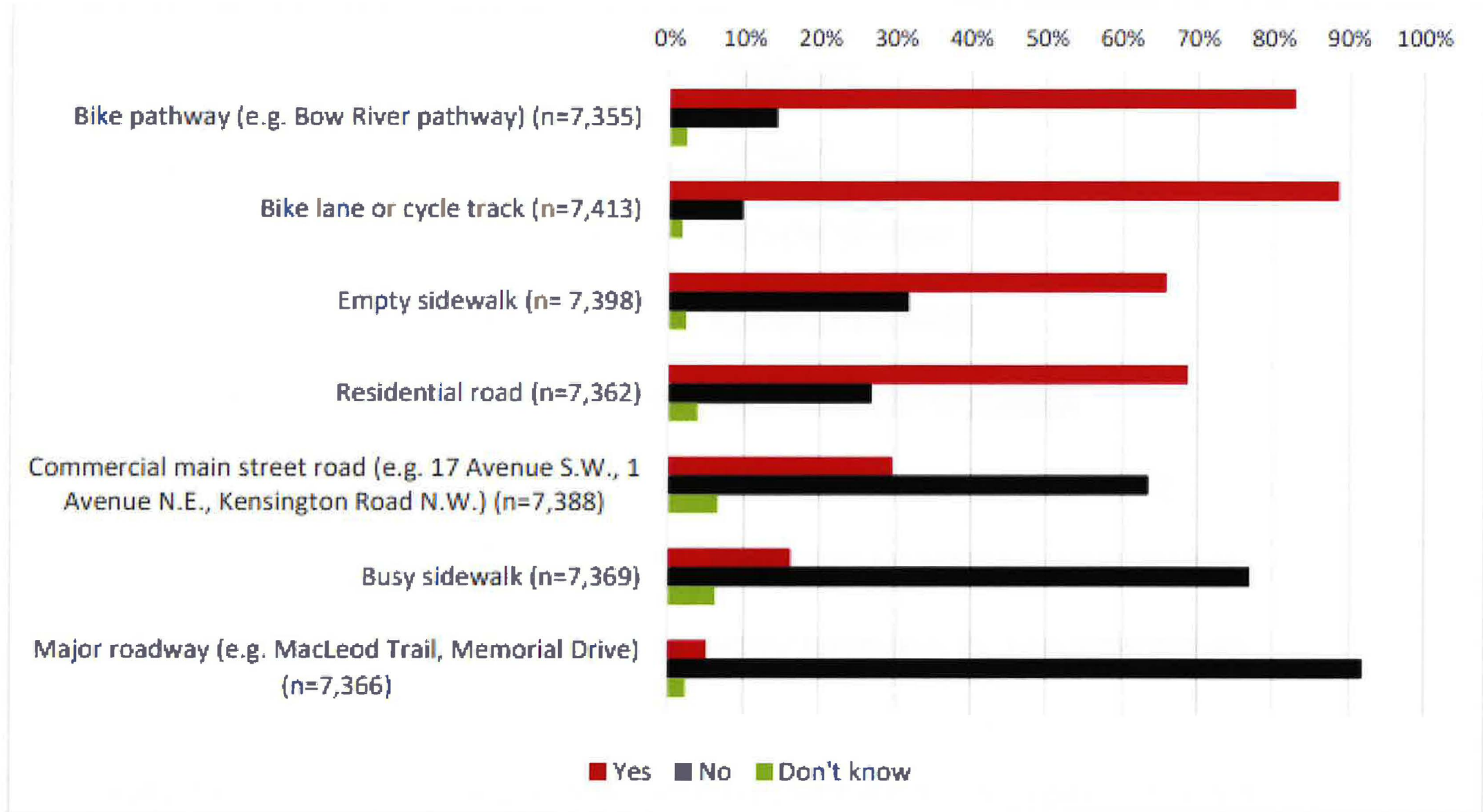
1. In general, how often do you travel using the following?



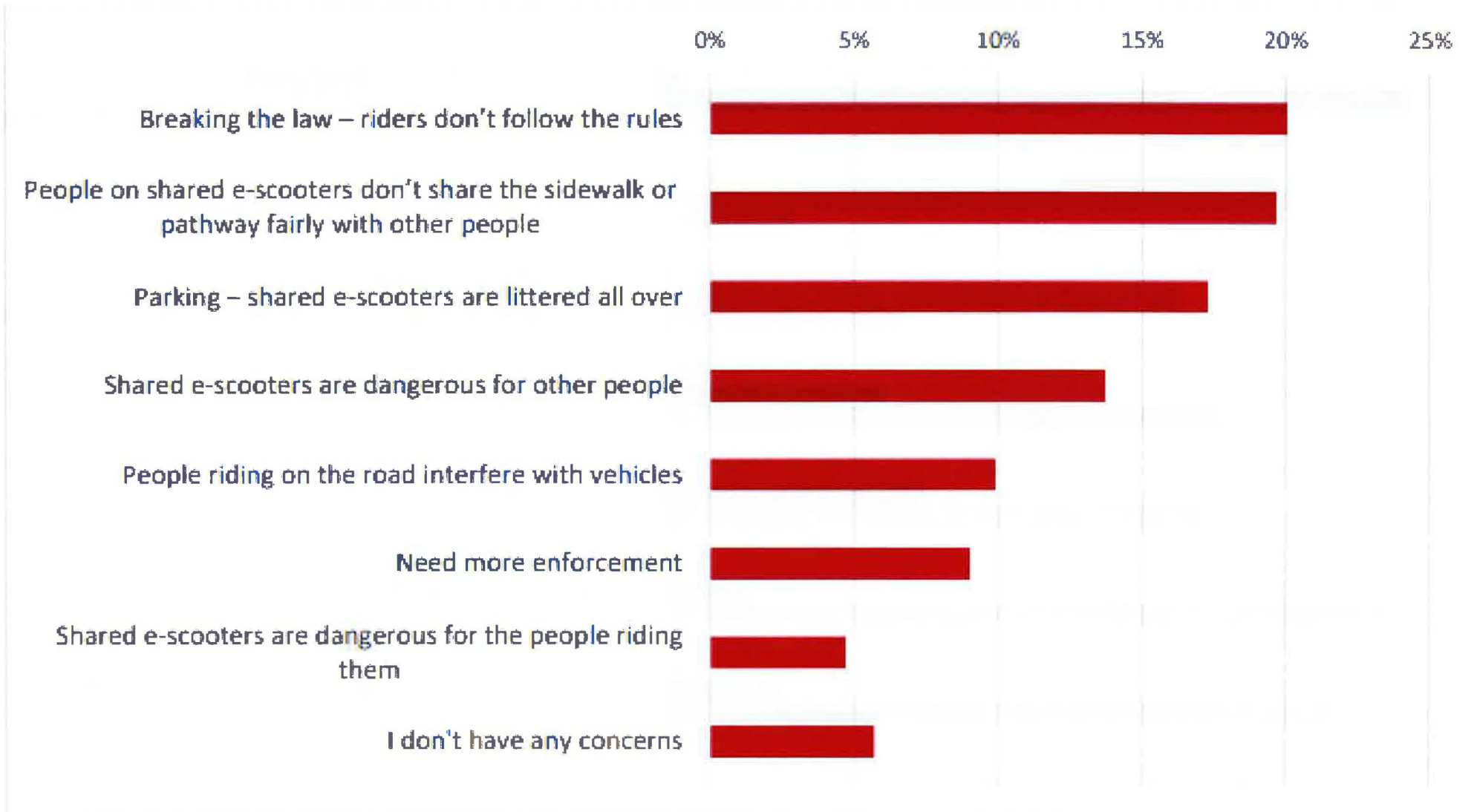
2. Thinking about the day to day use of shared e-scooters, how much do you agree or disagree with the following statements:



### 3. Should people be allowed to ride shared e-scooters in the following locations?

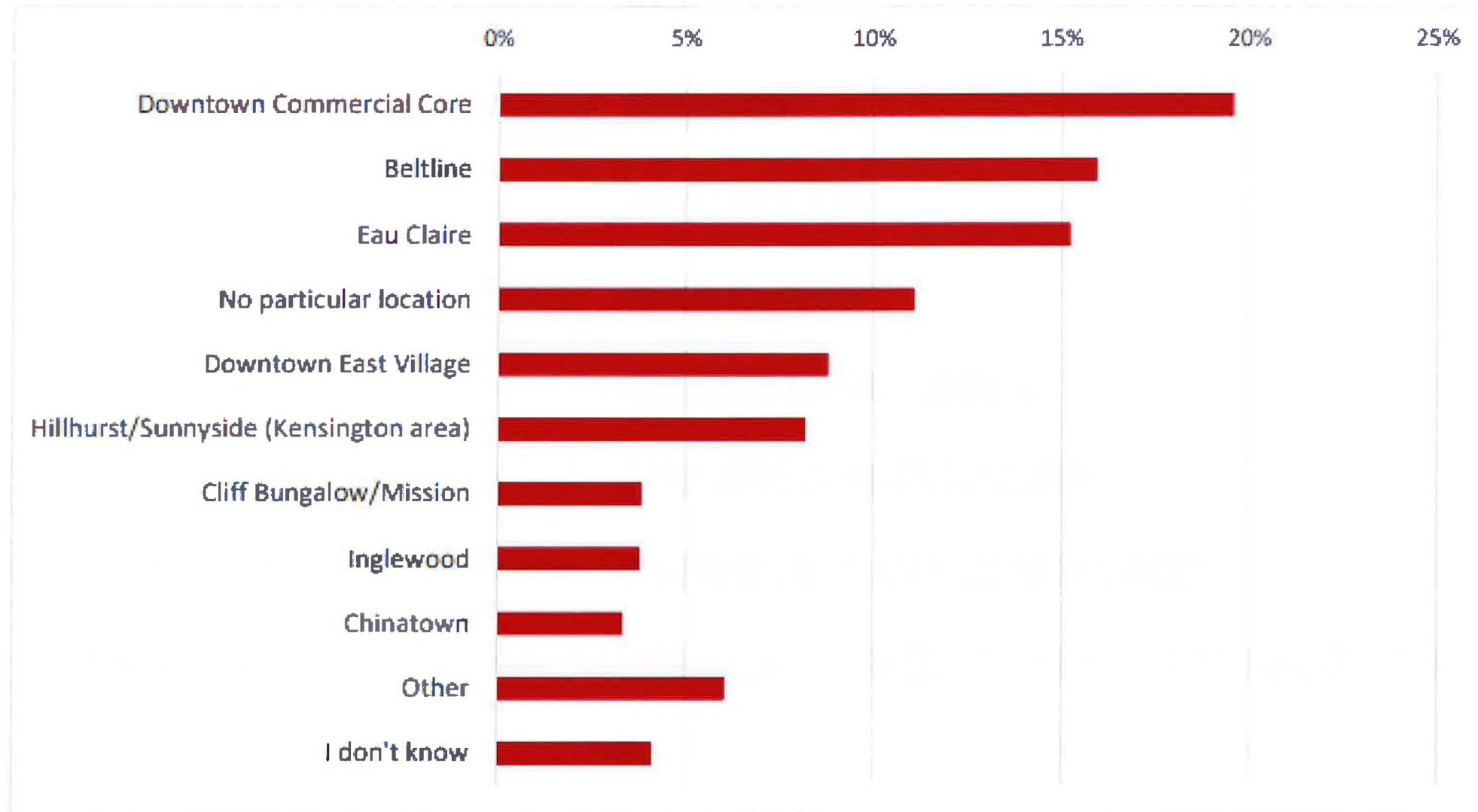


## 4. What are your top concerns with shared e-scooters? Please select up to three (3). (n=6,875)

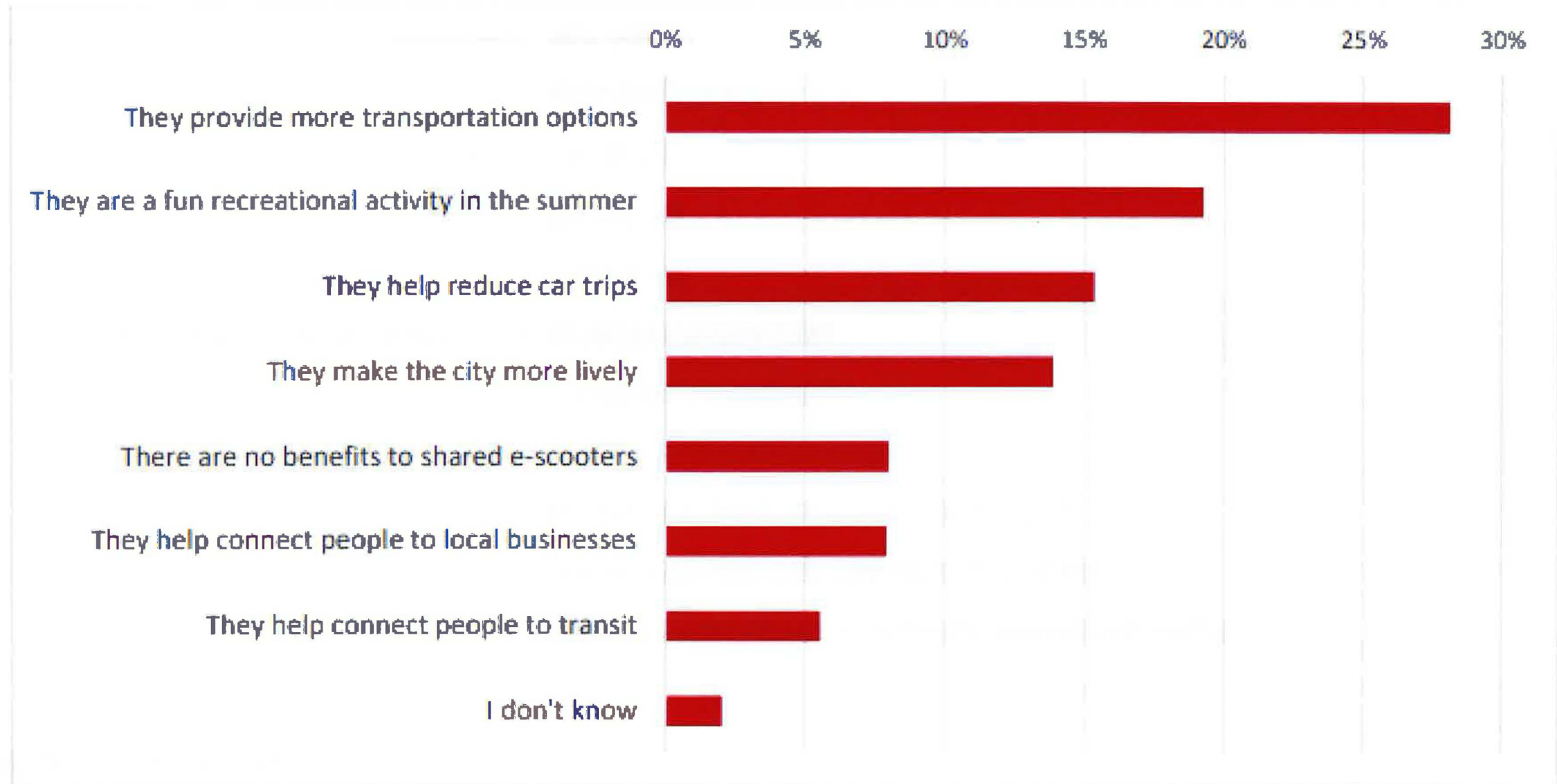




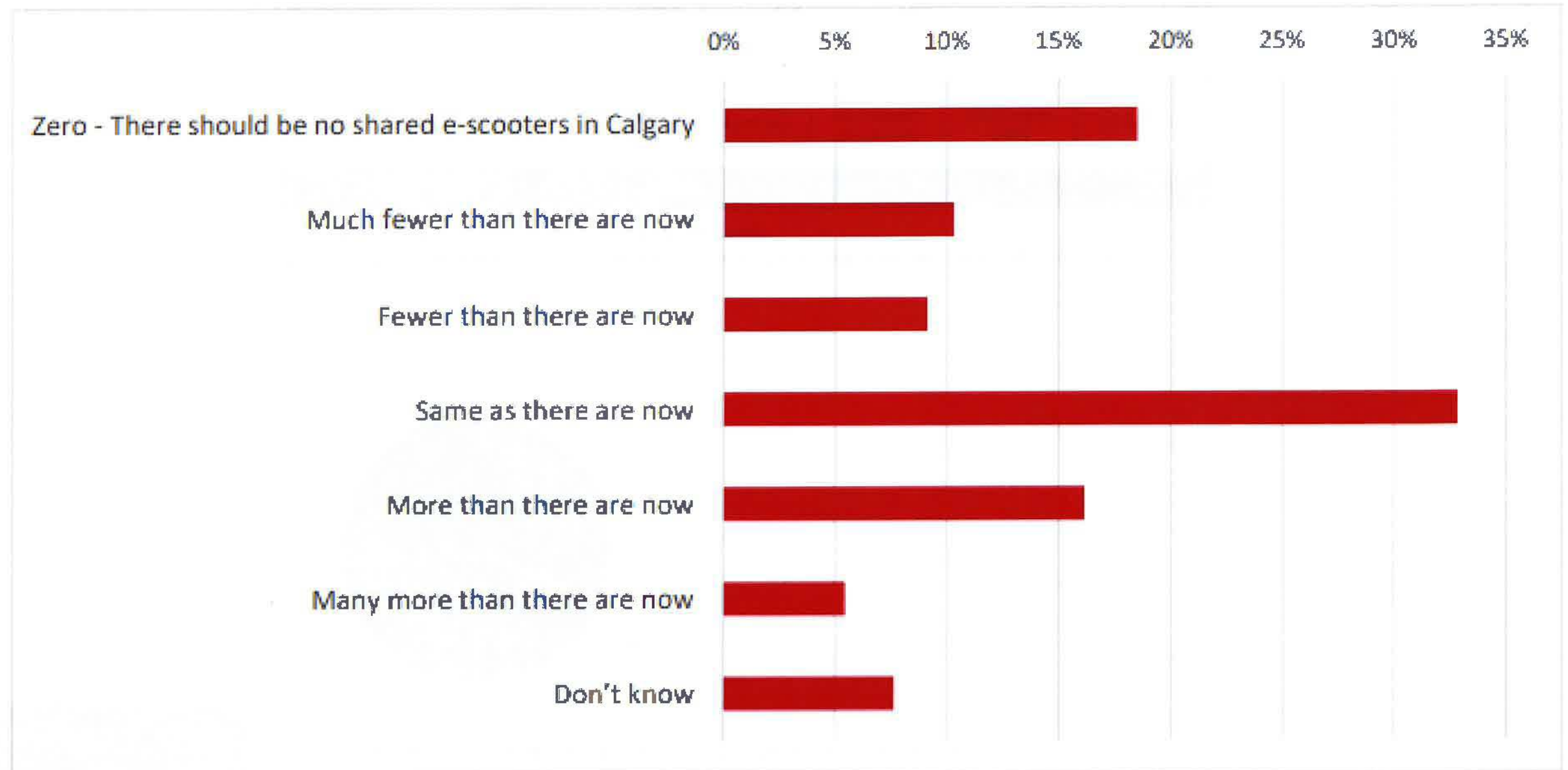
5. What are the main areas where you have experienced these concerns? Choose up to three (3).  
(n=6,562)



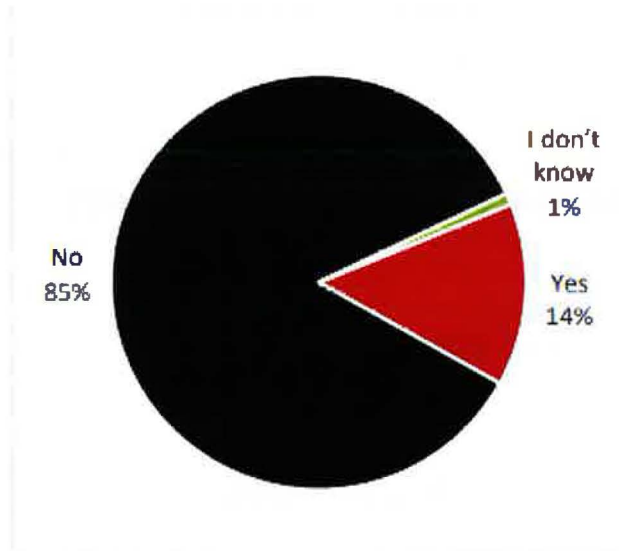
6. What are the benefits of shared e-scooters in Calgary? Choose up to three (3). (n=7,252)



7. What do you think is the ideal number of shared e-scooters in Calgary? (n=7,232)



8. Have you tried to contact the companies which operate the shared e-scooters? (n=7,237)

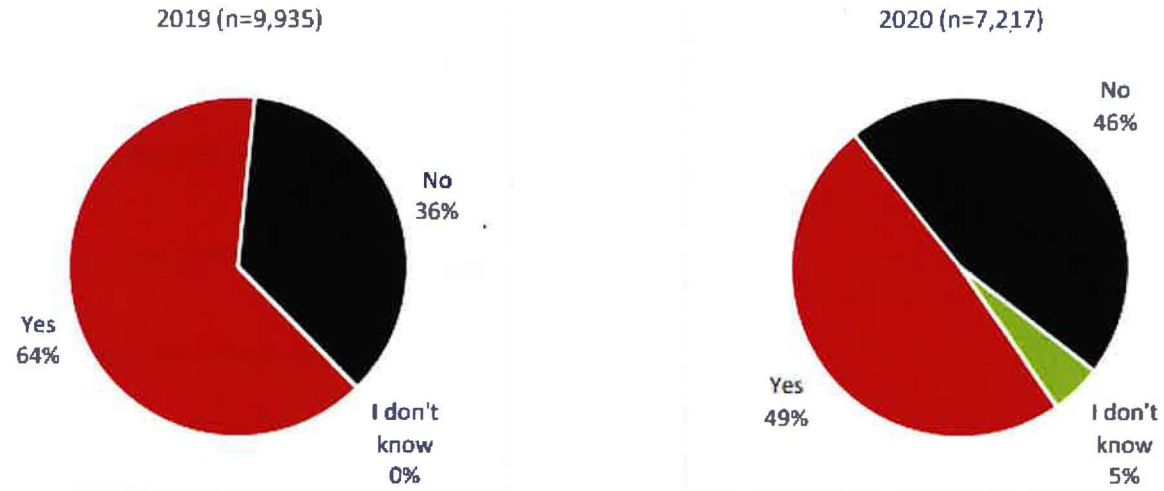


Questions 9-14: Have you contacted the following shared e-scooter company, and if yes, how satisfied would you say you were with the response you received?<sup>1</sup>

Satisfaction of participants who answered "Yes"						
Company	Very satisfied	Somewhat satisfied	Neither satisfied nor dissatisfied	Somewhat dissatisfied	Very dissatisfied	Don't know
Bird (n=419)	46%	13%	5%	7%	26%	1%
Lime (n=850)	40%	16%	8%	10%	24%	1%
Roll (n=67)	32%	5%	8%	11%	36%	9%

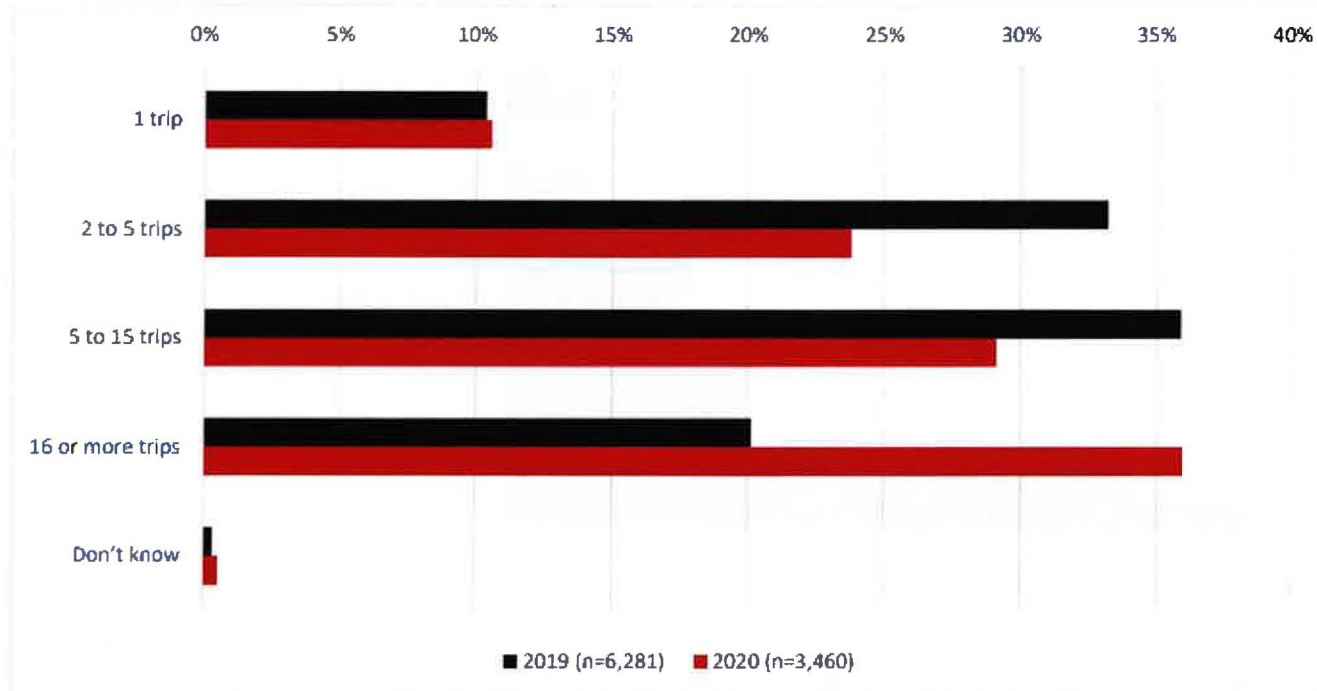


15. Have you used a shared e-scooter that is a part of Calgary's Shared E-Scooter pilot?

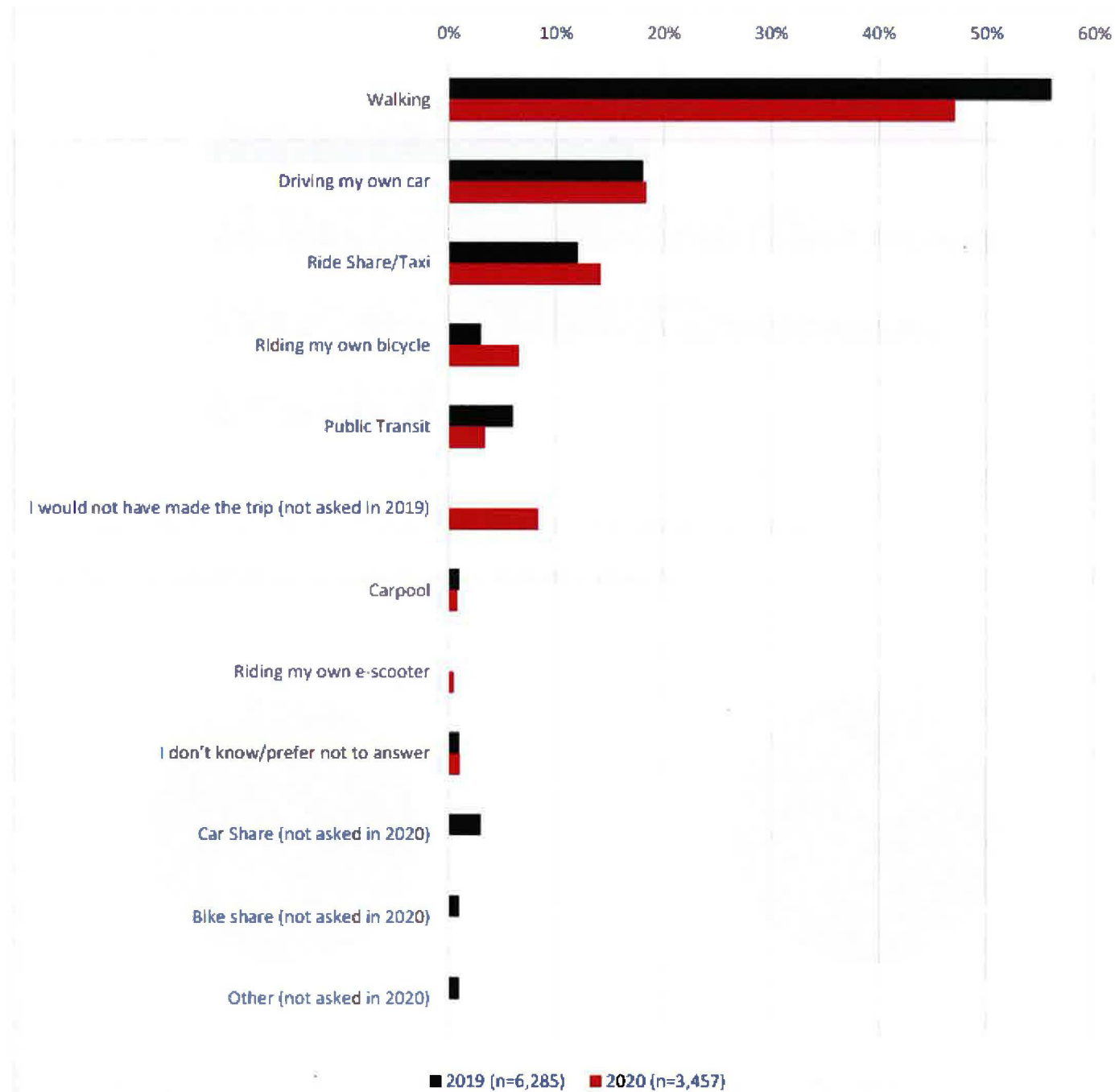


**Section 2: Participants who have used a shared e-scooter**

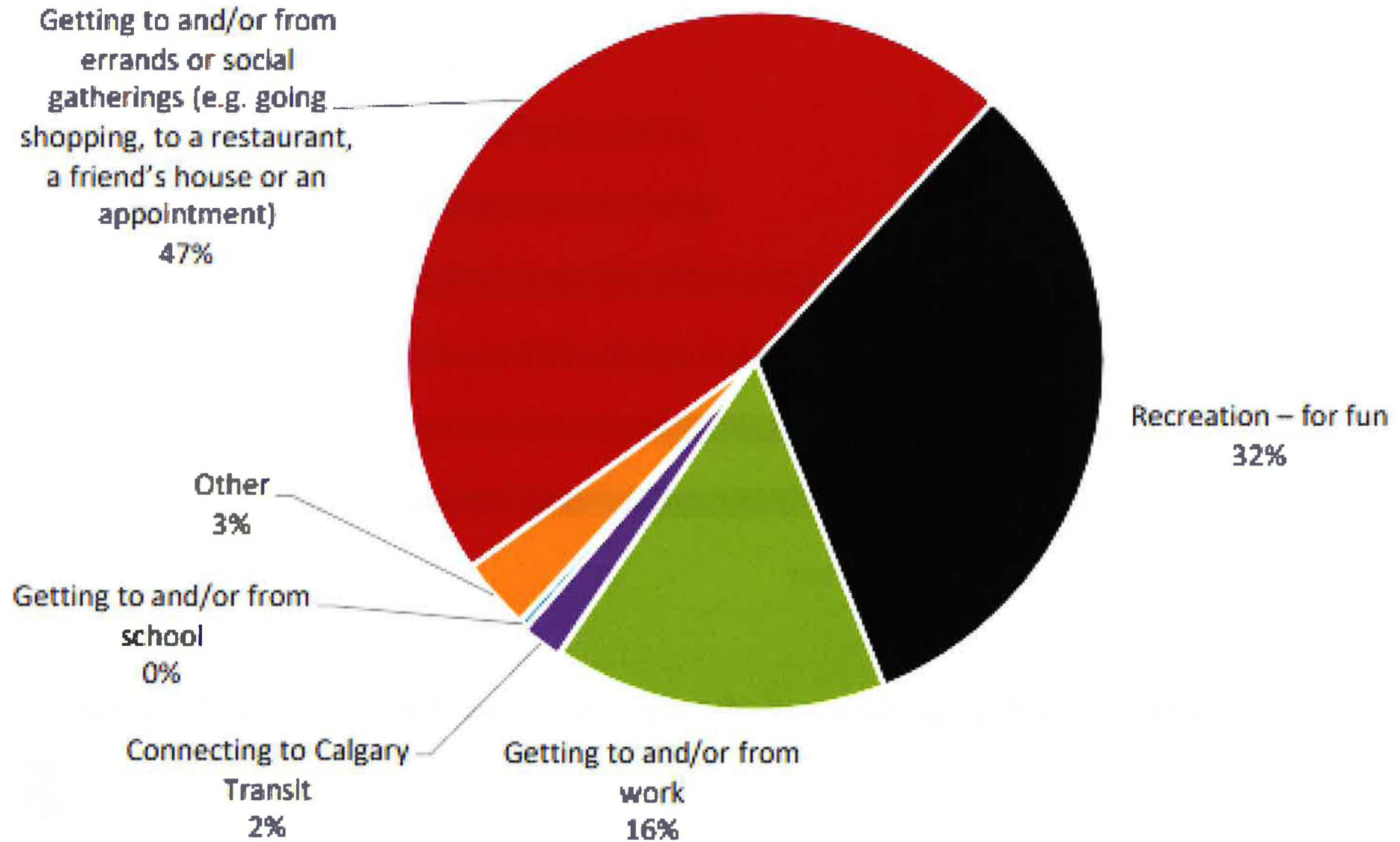
16. How many times have you made a trip by a shared e-scooter in Calgary?



17. Thinking about your most recent shared e-scooter trip, if you hadn't used a shared e-scooter, how would you have traveled instead?

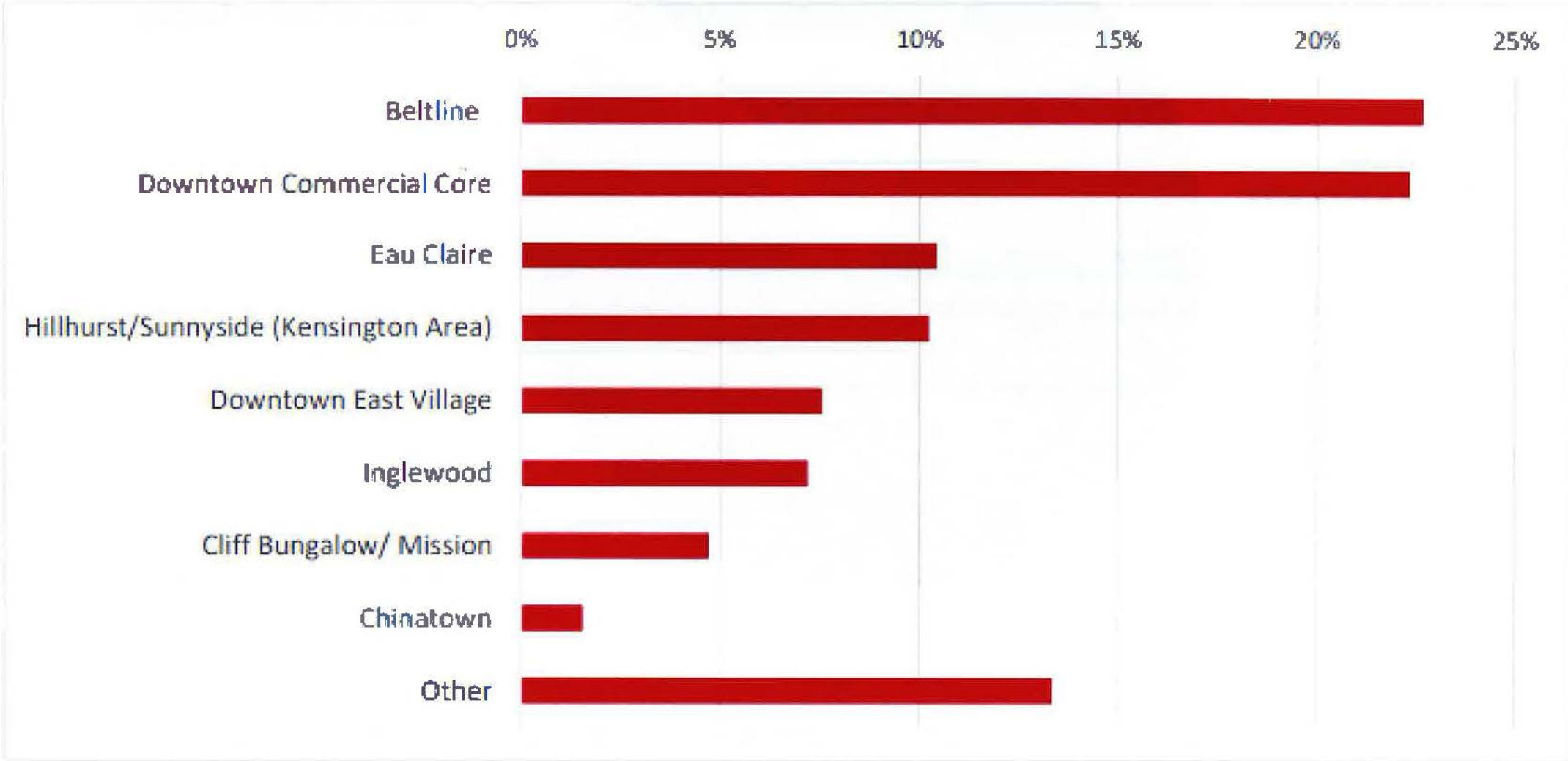


18. Thinking about your most recent shared e-scooter trip, what was the purpose of the trip? (n=3,460)





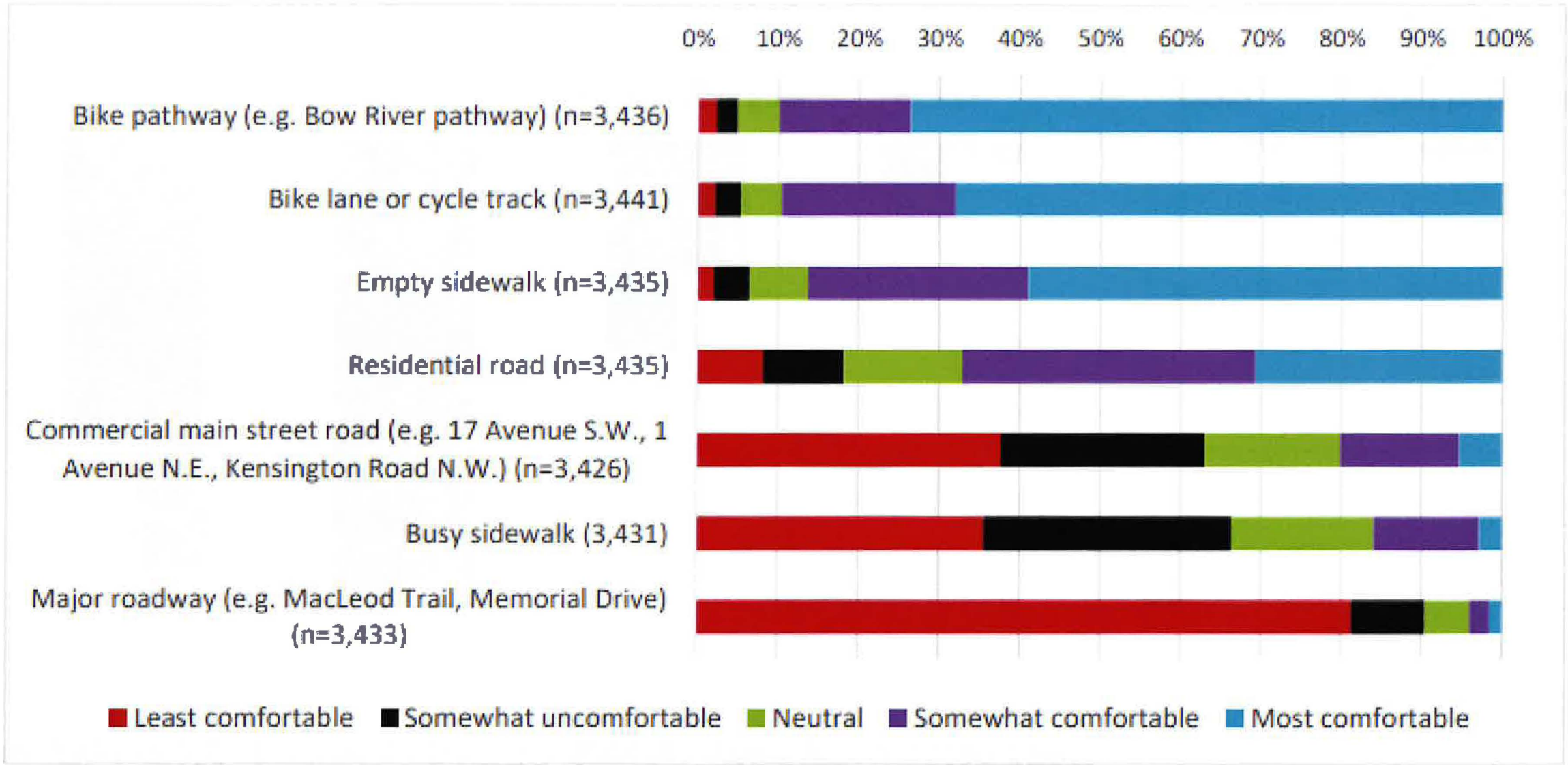
19. Thinking about your most recent shared e-scooter trip, which community did you end your trip in?  
(n=3,402)



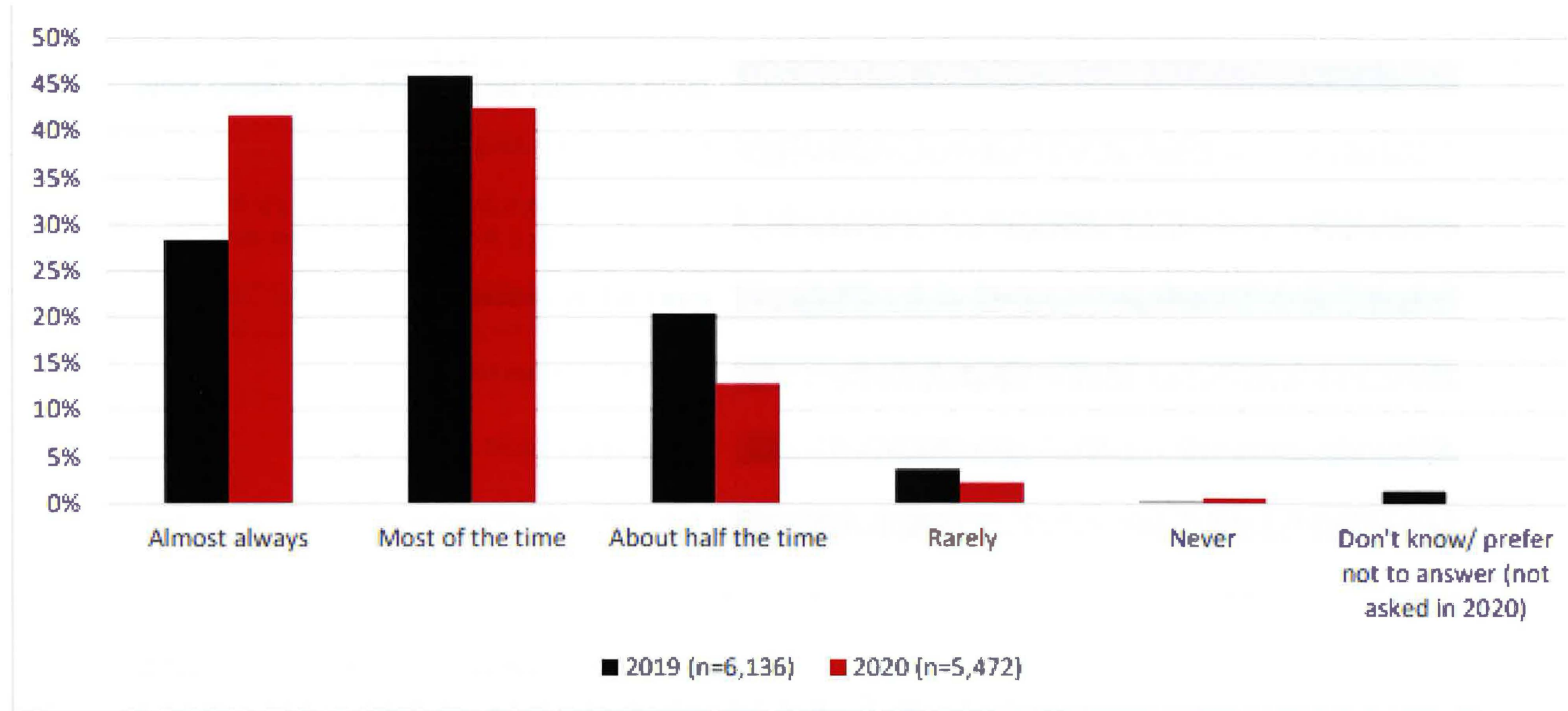




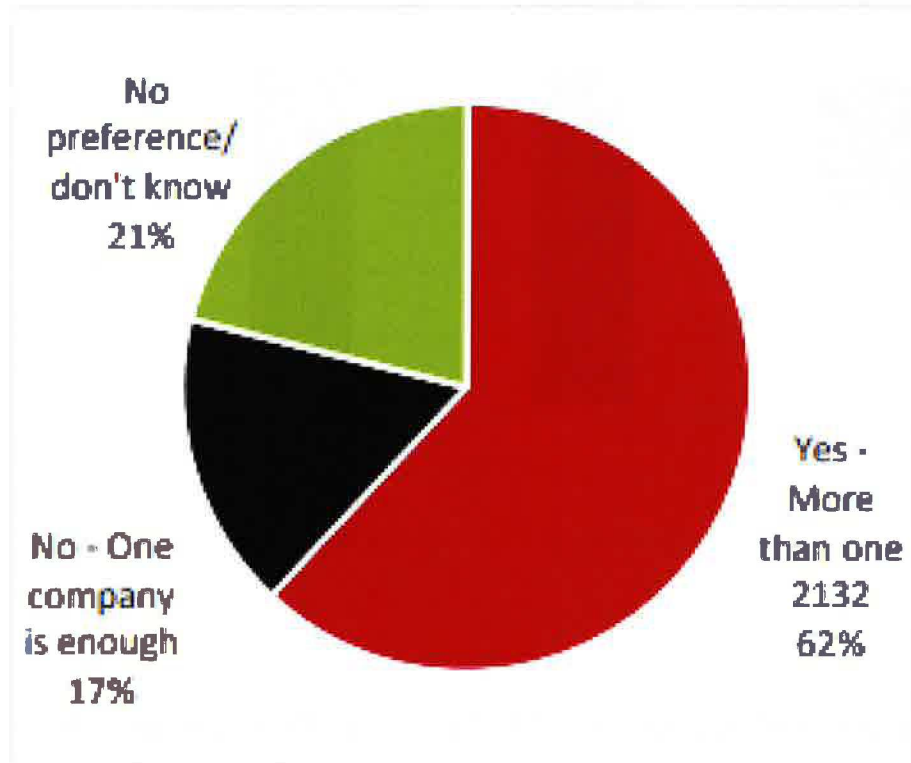
20. From 1 to 5, 1 being the least comfortable and 5 being the most comfortable place to ride a shared e-scooter, please rate your comfort with the following:



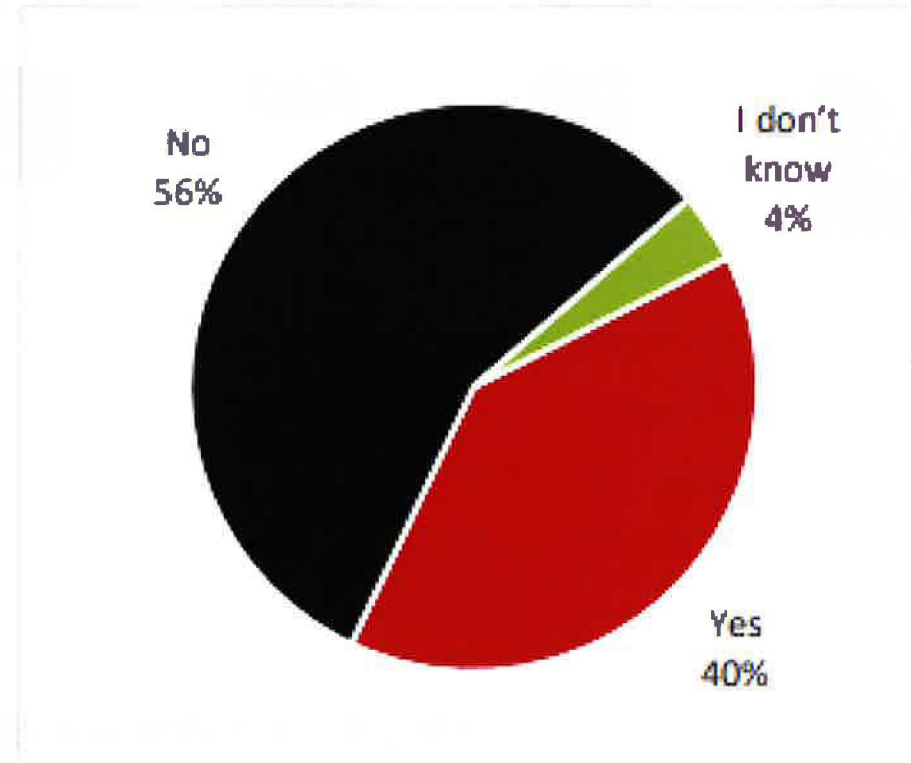
## 21. How often could you find a shared e-scooter when you wanted one?



22. Do you prefer to have multiple operators to choose from when deciding which shared e-scooter to ride? (n=3,441)



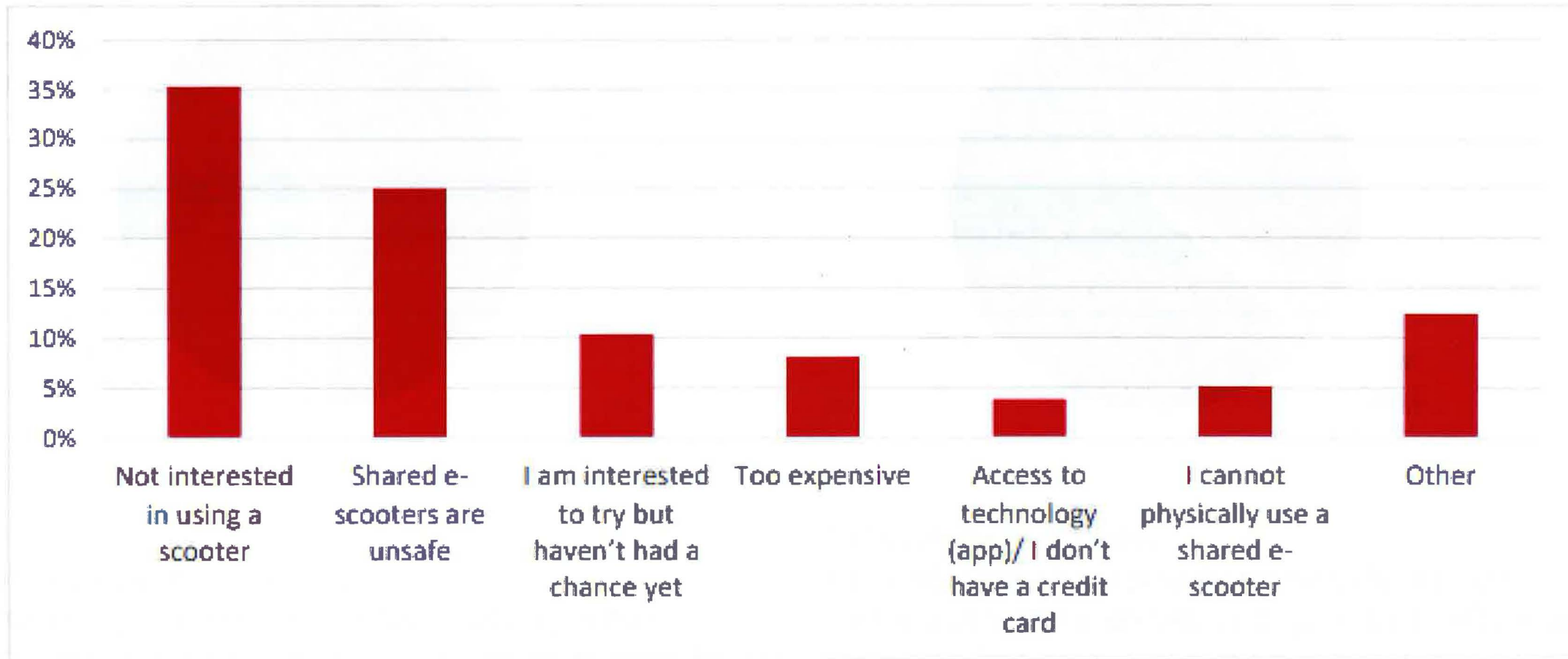
23. Have you ridden a shared e-scooter that has had maintenance issues (e.g. brakes or lights not working, quality of device not as high as you expected)? (n=3,444)





**Section 3: Participants who have not used a shared e-scooter**

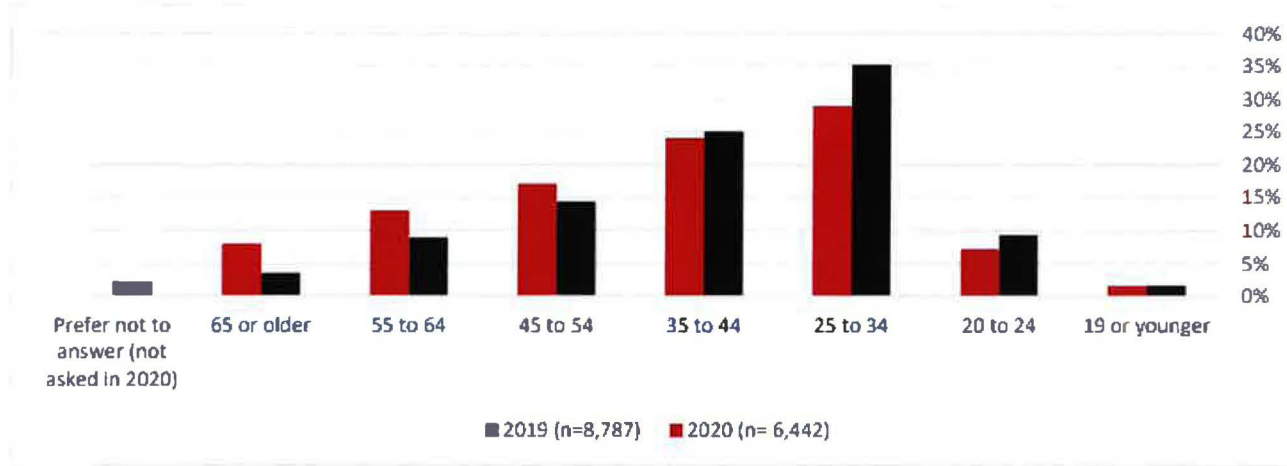
24. Why haven't you tried a shared e-scooter? Select all that apply. (n=5,159)





## Section 4: Demographics

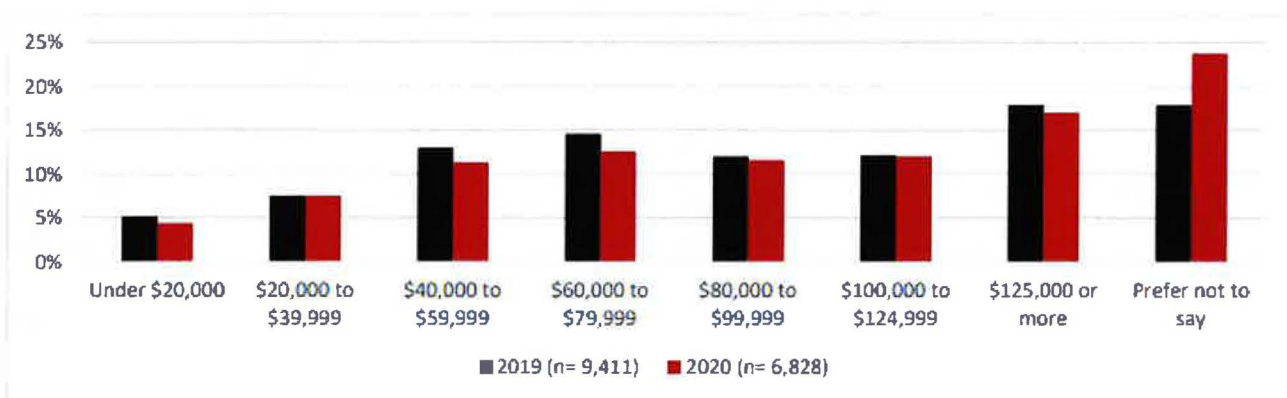
### Age Range



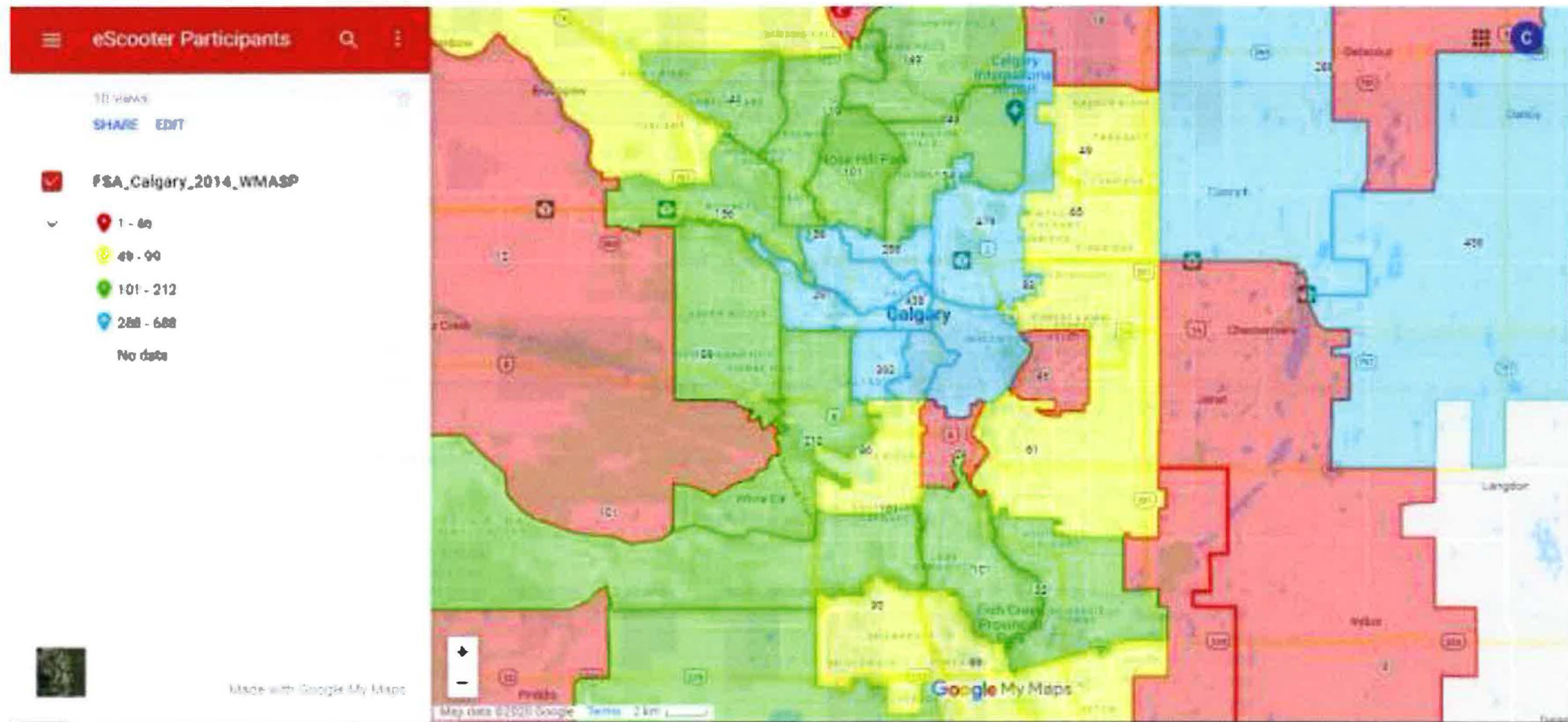
### Gender



### Income



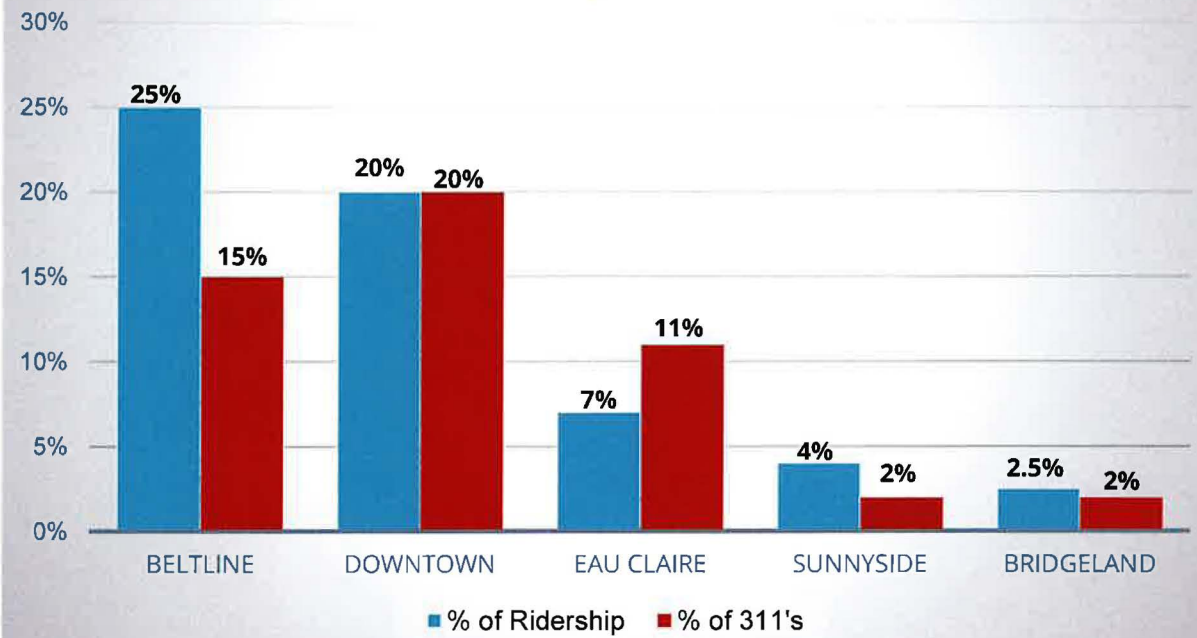
## First 3 digits of postal code



Link to interactive map: [www.google.com/maps/d/viewer?mid=1keF9LHFkkmx55LBeGKy-yVRdyPNODhmz&hl=en&usp=sharing](https://www.google.com/maps/d/viewer?mid=1keF9LHFkkmx55LBeGKy-yVRdyPNODhmz&hl=en&usp=sharing)



### 2019: % of Ridership vs. 311 Complaints



### 2020: % of Ridership vs. 311 Complaints

