City of Calgary Pilot Project Review Summary

The excerpts below are referenced from the 'Shared e-Bike and e-Scooter Final Pilot Report", Transportation Report to Standing Policy Committee on Transportation and Transit, December 16, 2020.

REPORT RECOMMENDATIONS

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

REPORT HIGHLIGHTS

- 1.9 million trips and over 200,000 unique users were recorded during the two-year shared e-Bike and e-Scooter pilot that ran from October 2018 to October 2020. The company Lime, which is currently in over 130 cities globally, found that during summertime months in 2019 and 2020, their e-Scooters recorded more trips per vehicle in Calgary than any other city in the world.
- The pilot was operated and funded by three shared micromobility companies. City Administration created the pilot regulations, provided oversight and evaluated the pilot.
- Micromobility services (e.g. shared e-Scooters and e-Bikes) funded by the private sector provide additional mobility options and recreation to Calgarians. Changes to the program are required to address Calgarians' concerns.
- What does this mean to Calgarians? Calgarians will have private sector micromobility options after the pilot.
- Why does this matter? Shared micromobility offers Calgarians and visitors a quick, convenient and easy private-sector mobility option.
- Throughout the pilot, the City consulted with stakeholders and applied best practices from other jurisdictions across North America. Information was collected such as health data from Canada's first injury study on shared e-Scooters and public engagement data from two citizen surveys with over 17,000 responses.
- Three issue themes emerged: user behaviour, parking, and safety. Changes were made during the pilot to address them. Further modifications are required including:
  - A visible numerical identification number on each shared e-Scooter.
  - Allowing companies to be fined directly for improperly parked e-Scooters.
  - Allowing e-Scooters to operate on lower-classification roadways.
  - Limiting the amount of e-Scooters to 2019 levels.
  - Dedicated company funding and incentives for e-Scooter parking.
  - Requiring and evaluating companies' safety plans and strategies.
- Strategic Alignment to Council's Citizen Priorities: A city that moves.

PREVIOUS COUNCIL DIRECTION

In July 2018, Council unanimously approved a Notice of Motion directing administration to conduct a two-year pilot for bike share by September 2018 that would include:

- An intake process for interested operators to participate.
- Data sharing requirements with permitted operators.
- A pilot consisting of up to 10,000 bicycles, scooters or other personal mobility devices.
- A performance-based system for permitted operators to gradually increase their fleet size, within set pilot limits.
- A permit and fee structure that covers administrative costs to regulate and manage the pilot program.
- Any other permit conditions to be imposed on bike share operators to ensure that the safety and convenience of roadway and sidewalk users is not unduly impacted.
- The Notice of Motion further directed administration report back to Council through the Standing Policy Committee on Transportation and Transit to:
    - Review the existing bylaw rules governing mobility devices such as scooters, skateboards, roller skates and personal mobility devices with electric motors and to bring forward any necessary bylaw amendments to facilitate the use of such devices no later than Q1 2019.
    - Provide an update on the pilot in Q4 2019.
    - Provide a final report with potential further recommendations no later than Q4 2020.

RIDERSHIP

	2019	2020
Lime	500 e-bikes 1,000 e-Scooters	Lime chose to remove their e-Bikes in 2020 1,300 e-scooters
Bird Canada	500 e-Scooters	1,000 e-Scooters
Roll	N/A	500 e-Scooters
Number of trips per year	918,000	956,000
Operating Days	110	162
Number of unique riders	200,000+	
Total # of trips during the pilot	1,874,000	

DESTINATIONS

- Approximately 55% of shared e-Scooter and e-Bike trips ended in a Business Improvement Area or Business Redevelopment Zone.

ROUTES

- Approximately 60% of e-Scooters and e-Bikes used the pathway network or cycling infrastructure to get to their destinations.
- The rest of the volume of the trips (40%) took place on sidewalks and/or roadways.
- The most popular routes in the city were along the river path, commercial areas, and in the cycle track network.
- A map showing the most popular routes was shown.

311 CALLS AND CORRESPONDENCE WITH CITIZENS

- Total of 769 logged 311 service requests.
- The two most common complaints were around rider behaviour/conflict with pedestrians and parking.
- In areas with the most complaints, the City implemented geofenced slow speed zones.

PARKING

- The 2020 e-Scooter citizen survey indicated parking was the third top concern.
- The City worked with the e-Scooter providers to implement a $10 company fine to users who parking their e-Scooters improperly starting in August 2020.
- In response to concerns around improperly parked e-Scooters, the City implemented 30 “Share and Go Parking Zones” in 2020. These zones were created as a go-to place to find an e-Scooter or to end a ride.

PUBLIC ENGAGEMENT SURVEY

- The City conducted two public engagement surveys that took place from September 23 to October 6, 2019 (9,900 responses) and September 16 to October 7, 2020 (7,200 responses) to understand what citizens thought about the shared e-Bike and e-Scooter pilot.
    - In 2019, most riders took between five to 15 trips.
    - In 2020, people who had used an e-Scooter 16 or more times increased in 2020.
    - In 2020, e-Scooter rider survey participants felt most comfortable riding the shared e-Scooters on pathways, empty sidewalks and bike lanes/cycle tracks. Residential roads were not as comfortable, but were preferred to busy sidewalks, commercial main streets, and major roadways, which were ranked the least comfortable.
    - Most in favor of shared e-Scooters being permitted to use bike lanes, bike pathways and cycle tracks. Residential roads and empty sidewalks were also acceptable, but sidewalks with many pedestrians were not.
    - Approximately a third of survey respondents indicated that they would have used a vehicle (either personal, taxi, or rideshare) had an e-Scooter not been available.
    - In 2020, 8% of survey respondents said they would not have made the trip had an e-Scooter not been available.
    - The most common purpose (47%) for an e-Scooter trip in 2020 was getting to and/or from errands or social gatherings, such as going shopping or to an appointment, or visiting a restaurant or friend’s house. The second most common purpose (32%) for an e-Scooter trip was for fun/recreation. The third most common purpose (16%) was getting to and/or from work.
    - In 2019, the amount of people who could find an e-Scooter “almost always” or “most of the time” was 75%. In 2020, this increased to 85%. In 2019, 20% of people could find an e-Scooter “about half the time” while in 2020 this number

changed to 13%. In both 2019 and 2020, less than 5% stated rarely or never being able to find an e-Scooter.

- Public survey respondents (both riders and non-riders) in 2020 cited eScooter riders not following the rules and not sharing the sidewalk or pathway with others as their top two concerns. The danger to others, abandonment of shared e-Scooters after use, interference with traffic, and the need for more enforcement also rated high in the survey.

SAFETY AND E-SCOOTER INJURIES

The City used the funds collected from the shared mobility companies to commission a study with Alberta Health Services and the University of Calgary Cumming School of Medicine. This study aimed to better understand who, how, when, and why people were being injured on shared e-Scooters. The study took place from July 8, 2019 to October 31, 2019 and from May 22, 2020 to September 30, 2020.

This study retrospectively reviews paper medical records of all patients presenting to Adult Emergency Departments in Calgary who arrive via emergency medical services (EMS) with the term “scooter” included in the triage note. One research assistant reviewed each paper chart in the secure Health Records Office and transcribed de-identified data onto the Case Report Form.

The University of Calgary Research Team reviewed 75 detailed patient records using this methodology. This was a purposeful selection of people who had the most severe types of injuries.

The key findings from the study include:

- 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.
- Females accounted for 55% of injuries, while males accounted for 45%.
- 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.
- In 2019, the majority of injuries were evenly distributed between 12:00 p.m. and 12:00 a.m.
- In 2020, the amount of injuries occurring between 8:00 p.m. and 12:00 a.m. increased compared with 2019.
- In three out of 75 instances, the injured was known to be wearing a helmet.
- Six out of 75 were double riding; five in 2019 and one in 2020.
- Of the patients where alcohol intoxication was suspected, 28 patients had blood alcohol detected.
- Twenty out of 75 injured were admitted to the hospital, with 32 injuries requiring surgery within 30 days.
- There were zero fatalities and zero admissions to the ICU.

FINANCIAL SUMMARY

Line Item	Revenue	Costs
Company Fees (security deposits not included)	$177,000	
Staff Time		$120,000
Infrastructure (Parking Zones)		$15,000
AHS/U of C Medical Study		$6,000
Enforcement and Education		$11,000
Data Analysis (Internal and External)		$11,000
Totals	$177,000	$163,000

* Fees to remove e-Scooters from the river were paid for by the company's security deposits.