

Transportation Report to
SPC on Transportation and Transit
2019 December 18

ISC: UNRESTRICTED
TT2019-1374

Shared e-Bike and e-Scooter Mid-Pilot Report

EXECUTIVE SUMMARY

The shared e-Bike and e-Scooter pilot has been popular among Calgarians and tourists with over 915,000 trips being recorded by over 150,000 unique users since the program started in October 2018. The pilot has attracted two companies to operate in Calgary.

While the pilot has been popular, there have also been concerns and complaints predominately surrounding where the devices are ridden, how they are parked, the behaviour of some riders and injuries involving the devices.

Administration has been able to collect location data regarding where the devices are being ridden and parked, and Calgarians' opinions on the pilot via 311s and surveys. The City has also collaborated with the University of Calgary's Cumming School of Medicine through the Urban Alliance to conduct one of Canada's first injury studies on shared e-Scooters.

From this data analysis, Administration is making a number of changes to the shared e-Scooter and e-Bike program including:

- Implementing low speed zones in high pedestrian areas
- Implementing designated parking zones in high demand parking areas
- Adopting bylaws to allow for better enforcement and address operational concerns
- Additional enforcement of rules and bylaws at strategic locations
- Offering education at key locations

All activities are funded through the fees collected from the shared mobility companies.

As directed in C2018-0934, Administration will report back in Q4 2020 with a final report on the pilot and further recommendations.

ADMINISTRATION RECOMMENDATION:

That the Standing Policy Committee on Transportation and Transit recommend that Council give three readings to the proposed bylaw to amend the Calgary Traffic Bylaw 26M96 (Attachment 3)

RECOMMENDATION OF THE STANDING POLICY COMMITTEE OF THE TRANSPORTATION AND TRANSIT, 2019 DECEMBER 18:

That Council:

1. Give three readings to the **Proposed Bylaw 1M2020** to amend the Calgary Traffic Bylaw 26M96 (Attachment 3); and
2. Develop and implement for the next phase (Spring 2020 –Fall 2020) of the e-scooter pilot, a dynamic fleet cap based on Trips per Vehicle per Day (TVD) and/or an Incentive Fleet Cap based on defined City goals.

PREVIOUS COUNCIL DIRECTION / POLICY

See Attachment 1.

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BACKGROUND

The shared e-Bike and e-Scooter pilot started in October 2018 with the company Lime deploying 500 e-Bikes in Calgary. There have been 165,000-recorded e-Bike trips from October 2018 to October 2019. In July 2019, shared e-Scooters were introduced to Calgary with the company Lime deploying 1,000 and the company Bird deploying 500. There have been 750,000-recorded e-Scooter trips from July 2019 to October 2019.

The pilot is a private sector venture and its operation is cost recovered via fees collected from the private shared mobility companies. Administration issues the permit for companies operating shared e-Bikes and e-Scooters in Calgary and can set a number of conditions to make the program better for all Calgarians. The following rules are currently in place for the pilot:

Where the devices are allowed to operate:

- e-Bikes follow current provincial operating conditions. Under the Traffic Safety Act, they are allowed to operate on roadways and in bike lanes. Under the Parks and Pathways Bylaw, they are allowed to operate on pathways.
- Lime and Bird were given an exemption by The Province of Alberta under the Alberta Traffic Safety Act, and are allowed to operate e-Scooters where The City designates. Shared e-Scooters from permitted companies can operate on sidewalks, bike lanes and on pathways. Personal e-Scooters can operate on pathways and private property.
- The City has not regulated the operational area of any of the devices. Any changes to a company's operating area has been solely the decision of the shared mobility company.

How fast the devices can go: The e-Scooters have a governor that controls the speed. They also have a geolocation tool that can change the speed of the device given its location. For example, a vehicle can slow down to 15 km/h if entering a busy pedestrian zone. e-Scooters are currently governed at a top speed of 20 km/h and e-Bikes are governed at a top speed of 23 km/h.

Where the devices can be parked: e-Bikes and e-Scooters may be parked in a secure, upright position in areas such as furniture zones of sidewalks, public bike racks and marked parking zones. On sidewalks without furniture zones, users are asked to give at least two metres of clearance for accessibility.

How many devices can be operated: Under the Notice of Motion, 10,000 devices may operate in Calgary. An operator may only provide up to 1,000 e-Scooters and 1,500 e-Bikes. In the summer of 2019, there were 500 shared e-Bikes and 1,500 shared e-Scooters approved to operate in Calgary.

INVESTIGATION: ALTERNATIVES AND ANALYSIS

Using a variety of data sources along with information from other jurisdictions, Administration conducted a data-led decision-making process to address concerns about the pilot. The data from the pilot can be found in Attachment 2.

Public Engagement Survey: The City conducted a shared e-Scooter and e-Bike survey from September 23rd to October 6th, 2019 to understand what citizens thought about the e-Bike and e-Scooter pilot. More than 9,200 Calgarians submitted their opinions on the pilot.

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311 Calls: There were 281 311s logged regarding shared e-Scooters and e-Bikes from July 2019 to October 2019. The most common 311 concerns were:

- Sidewalk Riding (109) - 39%
- Bad/Inconsiderate Behavior (77) - 28%
- Parking concern (60) – 21%
- Other (35) – 12%

e-Scooter Injuries: Using the fees collected from the shared mobility companies, The City commissioned a study by the University of Calgary's Cumming School of Medicine looking at e-Scooter injuries that required an ambulance. The e-Scooter injuries arriving by ambulance group was studied because it provided a more detailed look into how, why, when and where people were being injured, as opposed to people self-reporting at the emergency department. The data shows that there were 33 e-Scooter injuries that required ambulances during the period of July 8th to October 1st, 2019.

Further information can be found in Attachment 2.

Actions to mitigate issues

To address concerns, predominately related to the operation of shared e-Scooters, Administration is taking the following steps for the next phase (Spring 2020 –Fall 2020) of the pilot:

1. Implementing low speed zones in high pedestrian areas

Some areas see higher levels of e-Scooter volumes and 311s than others. These areas are primarily along busy retail corridors such as 4 Street SW in Mission and 17 Ave SW in the Beltline. Administration is working with the Business Improvement Areas (BIA's) and Business Revitalization Zones (BRZs) in those areas to establish lower speed zones in the corridors. The speeds will initially be dropped from 20 km/h to 15 km/h, with the ability to drop the speed of the device further if concerns persist. The zones will be implemented prior to the spring 2020 deployment of the e-Scooters.

2. Implementing designated parking zones in high demand parking areas

Some areas have more 311 complaints and a higher demand for parking. To help encourage better parking behaviors, Administration will be implementing designated parking areas in specific locations. Administration is working with the BIAs and BRZs on the exact locations of the designated parking areas and will have the zones installed prior to the deployment of e-Scooters in spring 2020. The designated zones will be funded by the fees collected from the shared mobility companies. Designated parking areas will be marked on the sidewalk or in former curbside micro-stalls.

3. Adopting Bylaws to allow for better enforcement and address operational concerns

There is a lack of clarity when it comes to the enforcement e-Scooters. Since they are a new transportation technology, current laws and bylaws do not expressly identify and define e-Scooters and how to enforce them. In addition, a number of operational items within Calgary's Traffic Bylaw need to be addressed for e-Scooter operations to take place legally. The amendments to the Traffic Bylaw are in Attachment 3.

4. Enforcing rules and laws at key locations

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Some locations had higher 311 volumes regarding inappropriate e-Scooter behaviour. Bad behaviours included going too fast for the environment, swerving between pedestrians, and near misses of pedestrians. Administration will look to strategically enforce rules and laws at these locations.

5. Offering education at key locations

From field visits and 311 data, Administration has identified a number of locations where educating e-Scooter users could be beneficial for safety and comfort of users and non-users. All signage and education efforts will be funded by the e-Scooter fees collected from the shared mobility companies.

Addressing sidewalk riding concerns

While users and non-users prefer not to have e-scooters on the sidewalks or the roadway, the pathway network and cycling infrastructure is not robust enough to connect people to their destinations. Either roadways or sidewalks are required to make that connection. Given the greater weight and speed differential between e-Scooters and cars, compared with e-Scooters and pedestrians, and the speed and design of the roadways in the main areas of use (i.e. the downtown) it was preferred to have e-Scooters remain on sidewalks. The lowering of e-Scooter speeds, education and enforcement at strategic areas are meant to help mitigate pedestrian, e-Scooter conflicts.

Stakeholder Engagement, Research and Communication

Stakeholder engagement was taken prior and throughout the pilot.

- The Government of Alberta was engaged in order to develop a process in which e-Scooters could be permitted on city infrastructure.
- Shared Mobility Companies were engaged to develop a successful pilot that worked for Calgarians and the companies.
- BIAs and BRZs were engaged to understand the issues and opportunities their areas saw with e-Bikes and e-Scooters.
- Researchers at the University of Calgary's Cumming School of Medicine were engaged to understand how, why, when and where e-Scooter injuries were occurring.
- Citizens of Calgary were engaged via survey to understand what they thought about the e-Scooter and e-Bike pilot, and how the users of the pilot were using the devices.
- Bylaw Services, Law and Calgary Police Services were engaged to understand the issues they are seeing and the actions required for better enforcement and education.
- City of Montreal and City of Edmonton were engaged to understand their e-Scooter programs and how people in their cities were responding.
- Administration presented and consulted with the Advisory Committee on Accessibility to understand the issues with the e-scooter and e-bikes as they relate to accessibility.

Strategic Alignment

The e-Bike and e-Scooter pilot helps support the Council priorities of "A city that moves" and "A healthy and green city" by providing more mobility options for Calgarians and tourists, along with

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reducing the amount of car trips and tailpipe emissions. It also supports the Municipal Development Plan (MDP) - Key Direction #5: Increase mobility choices by creating a multi-modal transportation system and by increasing mobility choices for citizens.

Social, Environmental, Economic (External)

Social: Increased transportation options expand citizens' ability to take part in a variety of economic and social activities. Shared mobility options allow both citizens and tourists in Calgary to sightsee, socialize with family and friends, and visit many local businesses and attractions.

Environment: The survey results show that 1/3 of e-Scooter trips were replacing a car trip. e-Scooters and e-Bikes are electrically powered and do not have tail pipe emissions.

Economic: Over 50% of e-Scooter and e-Bike trips ended in a BIA or BRZ, showing that people are using the devices to largely access local business, which supports the local economy. The shared mobility companies hire full time, part time and contracted local staff to support their operations in Calgary.

Financial Capacity

Current and Future Operating Budget:

The operating cost for the shared mobility pilot is fully funded by each permitted operator. No additional funding is being requested with this update report.

Current and Future Capital Budget:

The capital cost for the shared mobility pilot is recovered by permit fees paid by each permitted operator. As permitted operators expand fleets or new operators apply for a permit, The City will collect new fees to fund additional capital expenditures as it relates to the pilot, such as the designated parking zones. No additional funding is associated with this update report.

Risk Assessment

Data from Alberta Health Services (AHS) shows that there has been a number of injuries associated with e-Scooter usage. The AHS data shows that serious e-Scooter injuries almost always occur to the rider and occur at a rate of 1 patient admitted to hospital per 100,000 rides. However, there are many more non-admitted e-Scooter injuries, at a rate of 1 per 1,500 rides. The City will continue to work with the U of C Cumming School of Medicine to monitor injury rates.

With Calgary having high e-Scooter ridership, it is expected that more e-Scooter companies will be attracted to Calgary and will deploy more e-Scooters in a similar geographic area. This increase in the number of e-Scooters could lead to an increase in the physical and visual clutter caused by the devices. The implementation of the designated parking zones should help mitigate some of the clutter. Administration has the ability to restrict how many devices are in a defined geographic area and can work with the shared mobility companies on strategically deploying the devices as to reduce their concentration.

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REASON(S) FOR RECOMMENDATION(S): e-Scooters and e-Bikes provide mobility options for Calgarians. However, a number of safety and comfort concerns need to be addressed for those both using the devices, and for the other users in their environment. Using data and working with the mobility companies, Administration is able to make strategic decisions to address the issues that arose in the first half of the pilot. Administration will monitor the next half of the pilot to see what difference the changes made, and then make a recommendation for the future of shared mobility in Q4 2020.

ATTACHMENT(S)

1. Attachment 1 – Previous Council Direction / Policy
2. Attachment 2 - Shared e-Bike and e-Scooter Data
3. Attachment 3 – Proposed Text of a Bylaw to amend Bylaw 26M96, the Calgary Traffic Bylaw
4. **Attachment 4 –Public Submissions**