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Subject: Shared E-scooter Pilot Program – Update

Contact: Fernanda Duarte Peixoto Soares, Project Manager, Active Transportation, Integrated City Planning

Report Number: Planning, Bld & Growth Mgt-2024-146

RECOMMENDATIONS:

1. That the report from Fernanda Duarte Peixoto Soares, Project Manager, Active Transportation, Integrated City Planning, to the Planning and Development Committee Meeting of April 22, 2024, re: **Shared E-scooter Pilot Program – Update** be received.

OVERVIEW:

- This report provides a summary of the Shared E-scooter Pilot Program performance to date as well as, identifies challenges and issues experienced after one full season.
- In its first season (April 3rd to November 12th), there were approximately 200,000 electric scooter trips taken by 110,000 different users of the Shared Pilot Program. The 3 operators, Bird, Neuron and Scooty collectively deployed 750 e-scooters per day on average and covered over 415,000 kilometres travelled.
- The average trip length was 2.12 kilometres and average trip duration was 15 minutes.
- Estimated CO2 savings ranged from 10 to 14 tons-CO2eq, contributing to achieving the City's target of 30% reduction in GHG emissions by 2030 as established by the Brampton Grow Green Environmental Master Plan.
- Based on the parking trial results shared by operators, for the 2024 season a hybrid parking model that uses both designated parking and a free-floating parking model will be tested.
- The City of Brampton will resume the e-scooter pilot program this Spring with the commitment of continuing to prioritize active transportation programs and projects to build more connected communities and provide more sustainable transportation options for everyone.

BACKGROUND:

At its February 2, 2022 meeting, Committee of Council directed staff to proceed with a pilot project to implement and subsequently assess the uptake and impact of a shared electric kick-style scooter system in the City. A request for proposal process was used to select Neuron Mobility Limited, Bird Canada Incorporated, and Scooty Mobility Incorporated as successful shared electric scooter (e-scooter) companies to operate in the City for the pilot program.

Brampton's Shared E-Scooter Pilot Program aligns with the principles guiding the update of our Transportation Master Plan which is focused on achieving Brampton's 2040 Vision to be "a mosaic of safe, integrated transportation choices and new modes, contributing to civic sustainability, and emphasizing walking, cycling, and transit".

The program supports mobility and accessibility, addresses transportation equity, provides additional travel options that are sustainable, while placing Brampton at the forefront of the next generation's shift to new ways of moving and getting around the City.

The two-year Shared E-Scooter Pilot Program launched on April 3rd, 2023. and this report provides a summary of the program's performance, challenges addressed, and issues experienced after one full operating season, as well as providing next steps for the upcoming season.

CURRENT SITUATION:

In its first season (April 3rd to November 12th), there were approximately 200,000 electric scooter trips taken by 110,000 different users of the Shared Pilot Program. The 3 operators, Bird, Neuron and Scooty collectively deployed 750 e-scooters per day on average and covered over 415,000 kilometres travelled (see Attachment 1).

Each operator has their own deployment strategy for balancing the supply of e-scooters throughout the City based on their business models and demand. Deployments are usually focused on parks, transit corridors, mobility hubs and popular destinations like Downtown Brampton, recreational and community centres, libraries, and other community amenities.

Operators reported that the most popular starting and ending locations were Chinguacousy Park, Professors Lake Recreation Centre, Creditview Sandalwood Park, Heart Lake Conservation Area, Loafer's Lake and Downtown Brampton.

Data also suggests that a significant portion of trips are taken to and from transit stations and transit stops, which supports the case for micromobility as a viable and sustainable mode to address "first and last mile" transit connections. Another transit integration opportunity that transpired was a partnership between Metrolinx and one of

the operators, that permitted deployment of vehicles in designated parking areas at Bramalea GO Station, Brampton GO Station and Mount Pleasant GO Station, under an exclusive arrangement.

The most popular routes used by riders during the first season are illustrated on the map in Attachment 2.

Additional key performance metrics following the first operating season of the Shared E-Scooter Pilot Program include:

- Average **trip length** was 2.12 kilometres.
- Average **trip duration** was 15 minutes.
- Estimated **CO₂ savings** ranged from 10 to 14 tons-CO₂eq, contributing to achieving the City's target of 30% reduction in GHG emissions by 2030 as established by the Brampton Grow Green Environmental Master Plan (Brampton's car-dependency and transportation accounts for almost 60% of community-wide GHG emissions).

E-scooter Parking trial

The original conditions under which all operators were required to perform included the following parking rules:

- E-scooters may be parked in roadway boulevards, along sidewalks, in parks and adjacent to pathways as long as they do not obstruct or interfere with pedestrian travel;
- All parked e-scooters must remain in an upright position with both wheels in contact with the ground; and
- Parked e-scooters must be locked to a fixed object like a bicycle rack, urban furniture or in a designated parking area ('lock-to' parking model).

Throughout the first season and with the help of operators, staff monitored the lock-to parking compliance. Evidence from the 2023 season showed that the current lock-to model is not working in Brampton with an overall compliance rate of around 60% throughout the season.

Based on a comparison of our low compliance rate against information from other Canadian markets, that experience an average compliance rate of 97% (Hamilton, Calgary and Ottawa); staff directed operators to trial the use of two alternate parking solutions. Within smaller areas of the City, the following two parking solutions were tested to investigate whether a change to the parking model would result a higher compliance rate:

- *Designated parking model* - operators established designated parking areas within a parking zone. These parking areas were identified to the end user within the operators' app, and riders were forced to end their rides at these parking locations. Riders were not required to lock the scooter at the end of their ride.
- *Free-flow parking model* – the second test allowed users within a defined area to end their rides wherever they choose, as long as they park within the furniture zone and do not obstruct the pedestrian right of way. Again, riders under this test were not required to lock the scooters.

Across all operators, results from the parking trial showed an overall 95% compliance rate within the free-flow parking areas and a 97% compliance rate within the designated parking zones. This means that riders correctly parked vehicles 95% of the time in the furniture zone and out of the pedestrian right of way when they did not have to lock their vehicle to anything. Also, riders parked correctly within the designated parking zones (geofences area) when required to, 97% of the time.

For the 2024 operating season, staff is tweaking the Program to trial a hybrid parking model that uses both designated parking and a free-floating parking model. In high pedestrian traffic areas with high e-scooter demand, such as Chinguacousy Park, Downtown Brampton, Sheridan College, Professor's Lake and others, operators will be required to set up virtual parking corrals and clearly indicate these in their apps to direct users to end their trips at these locations. Transit terminals and stops are also be included in the designated parking strategy in order to mitigate mis-parked e-scooters around these locations and to guarantee transit accessibility.

These corrals will restrict riders to end their rides only in pre-determined locations. This approach aims to limit the clutter of vehicles in areas with high pedestrian traffic and reduce mis-parking complaints.

Outside of areas identified with high pedestrian traffic, such as the examples noted above, staff is proposing a free-floating parking model to provide riders with more flexibility and convenience. A free-floating parking model will allow riders to end their rides at their destination and not have to worry about finding something to lock to. It is expected that this change will make the service easier for riders to use and help promote connections to transit and complete transportation gaps in the City.

Staff believe that the proposed program change will adequately address and decrease parking issues moving forward, as many of complaints reported were related to riders locking their vehicles to private property or parking in non-compliant areas with high pedestrian traffic.

311 Data

Throughout the year, members of the public were able to report improperly parked e-scooters and any other concerns regarding the Pilot Program through 311 calls and the program email escooters@brampton.ca.

With the support and collaboration of the Community Services team, staff was able to collect and analyze data from 311 calls.

A total of 337 calls were received by 311 over the course of the 2023 Shared Pilot Program operating season, representing an average of 11% of the overall service requests received by 311 related to 'Litter, Debris and Obstruction' and 'Sidewalk Parking Infraction' during the extent of the season (see Attachment 3).

Attachment 3 also shows that the number of calls/complaints per the total number of trips received throughout the course of the season fell between 0.003 and 0.001.

It is also noteworthy to report that all operators fulfilled the required response time of under one hour (averaging between 30-45 minutes) to address issues from the public.

Staff also tracked all emails received related to the pilot and responded to them accordingly. Many messages were related to parking on private property and concerns about safety. Approximately 20% of the messages were from residents asking for information and/or complimenting the program by reporting their personal experience as users.

Partnerships

Toronto Metropolitan University

As part of the pilot program evaluation, the City has partnered with Toronto Metropolitan University (TMU) professor Dr. Raktim Mitra to assist with his research titled *Shared e-scooter programs and opportunities for equitable transportation in suburban communities*. The research aims to provide insight to municipalities like the City of Brampton, intended to assist in the development of strategies and solutions aligned with provincial goals related to shared e-scooter policy in Ontario.

The City and TMU were successful in securing funding through the Mitacs Accelerate Program which will match City funding to hire two summer student interns involved with Dr. Mitra's research.

Last summer, the first student intern assisted with the program rollout, undertook community engagement events, and established a data collection protocol to examine user behaviour. This year, another student intern will examine who is using e-scooters, and when, where and for what purposes, with a specific focus on sustainable and equitable transportation outcomes.

The City expects to directly benefit from this opportunity and gain critical new insights to inform the future sustainability of the city's E-scooter Pilot Program and help with the delivery of a possible permanent program in the future.

Transportation Association of Canada

The City also partnered with the Transportation Association of Canada (TAC) to collaboratively produce a study relating to Shared Micromobility Services in Canadian Communities, along with 15 other municipalities/agencies.

This project, expected to be finalized by May 2024, will synthesize and document the experiences of Canadian agencies, so that they may be shared with others that are studying, planning, implementing, or managing shared micromobility services. It will capture and communicate lessons learned from Canadian stakeholders about the various types of shared micromobility services, their roles within the growing spectrum of mobility options, where key opportunities exist for each, and how they can make transportation systems more efficient, effective, equitable, safe, and sustainable.

The main project deliverable will be a concise but comprehensive report that will:

- Synthesize collected information into a set of guiding principles addressing considerations such as supportive built forms and densities, coverage, accessibility, equity, supportive destinations, and device placement/availability.
- Identify opportunities and challenges associated with alternative approaches and suggest priority approaches for different contexts where warranted.
- Integrate or reference existing resources (e.g. publications from National Association of City Transportation Officials and North American Bikeshare & Scootershare Association) as appropriate for a Canadian audience.

Provincial Electric Scooter Pilot

In January 2020, the Province began the five-year pilot project allowing municipalities to regulate the use of electric kick-scooters. Municipalities that opted to join the provincial pilot agreed to monitor all collisions involving e-scooters on roads within the municipality and provide semi-annual written reports to the Ministry of Transportation Ontario (MTO).

The MTO is leading an initiative to better coordinate data collection across Ontario's e-scooter pilot program. The City has responded to an MTO questionnaire relating to data collection and participated in a workshop with participating municipalities which provided a forum for municipal partners to discuss best practices with each other and work toward standardized methods of data collection and program evaluation.

The information collected will be used to improve data-sharing across municipalities, optimize program requirements, and produce meaningful insight that can inform local policy and program decisions.

Ontario's emerging vehicle pilot projects continue to grow through the rising participation of local governments and their communities and will likely be extended beyond its initial deadline of November 2024.

Collision and Injury Data

One of the requirements of the Provincial Electric Scooter Pilot is for participating municipalities to remit incident/collision and injury-related data upon request. The source of incident/collision data for pedestrians and cyclists in Peel is currently limited to police collision data (from Motor Vehicle Accident Reports), which does not capture the full scope of pedestrian and cycling injuries.

To address the current gap in incident/injury data, the City has partnered with the City of Mississauga, the Region of Peel and Peel Public Health in requesting that cycling and electric scooter collision data be included in a Ministry of Health funded research program. This research will be undertaken in collaboration with Institute for Clinical Evaluative Sciences (ICES), led by Dr. Alison Macpherson, through an Applied Health Research Question (AHRQ). The AHRQ is a question posed by a health system policy maker in order to obtain research evidence to inform planning, policy and program development that will benefit the entire Ontario health system.

The study is close to having a final product ready to be shared, pending review of the data received from the ICES. The research findings will be used by the Region of Peel and partner organizations to improve safety and service delivery for vulnerable road users in Peel, through initiatives such as the E-scooter Pilot Program.

Next Steps

The following is a summary of action items and/or milestones anticipated in the lead up to the second season in May 2024:

- Determine the 2024 Season launch date (suggestion: May 1st);
- Report back to the Ministry of Transportation;
- Retain a micromobility data management service to support fleet services and operations compliance;
- Hire a TMU summer intern through the Mitacs program; and
- Continue to work with operators and partners to improve the assessment and evaluation of the program.

CORPORATE IMPLICATIONS:

Financial Implications

There is no financial impact resulting from the adoption of the recommendations in this report.

STRATEGIC FOCUS AREA:

The Shared E-scooter Pilot Program supports and furthers the City's following strategic focus areas by providing a sustainable and accessible transportation option:

- **Health & Well-being:** Focusing on citizens' belonging, health, wellness, and safety.
- **Transit & Connectivity:** Focusing on transportation and a connected infrastructure that is safe, convenient, efficient, and sustainable.
- **Growing Urban Centres & Neighbourhoods:** Focusing on an economy that thrives with communities that are strong and connected.
- **Environmental Resilience & Sustainability:** Focusing on nurturing and protecting our environment for a sustainable future.

CONCLUSION:

The Shared E-scooter Pilot Program has exceeded expectations in ridership numbers and the feedback received from the community has been positive. Since April, residents and visitors alike have embraced the convenience and eco-friendly nature of the e-scooter initiative, contributing to the program's overall success.

The significant number of rides starting and ending at transit terminals and stops indicates that the program appears to be addressing an existing transportation gap in the City by providing transit users with an alternate mode to complete their first and last mile. In a survey conducted by one of the operators, 40% of users reported using e-scooters mostly to connect to public transit.

The City of Brampton will resume the e-scooter pilot program this Spring testing the hybrid parking strategy that uses both designated and free-floating parking model, with the commitment of continuing to prioritize active transportation programs and projects to build more connected communities and provide more sustainable transportation options for everyone.

During the extent of the pilot, City staff will continue to closely monitor the program and adjust as appropriate to support the safety and well-being of all road users. Once the pilot project is complete, summary recommendations will be brought to Council for consideration.

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Attachments:

- Attachment 1 – Shared Electric Scooter Monthly Performance Statistics
- Attachment 2 – Most travelled routes by e-scooters
- Attachment 3 – Summary of 311 calls related to the Pilot Program