Report to Civic Works Committee

To: Chair and Members

Civic Works Committee

From: Kelly Scherr, P.Eng., MBA, FEC

Deputy City Manager, Environment & Infrastructure

Subject: Participation in Provincial E-scooter Pilot

Date: June 21, 2022

Recommendation

That the on the recommendation of the Deputy City Manager, Environment and Infrastructure, the following actions be taken with respect to participation in the Province of Ontario's electric kick-style e-scooter pilot:

- a. This report **BE RECEIVED** for information;
- b. City Administration **BE AUTHORIZED** to advise the Province of Ontario that the City of London will be participating in the personal e-scooter portion of the Provincial pilot, subject to the approval of c., below, and will not be participating in the e-scooter share program, it being noted that the Provincial pilot ends December 2024;
- c. Civic Administration **BE AUTHORIZED** to update relevant municipal by-laws to incorporate e-scooters for personal use and bring back a report of proposed by-law amendments to the Civic Works Committee at a future meeting; and
- d. Civic Administration **BE DIRECTED** to monitor other municipalities involved with the Provincial e-scooter share program for the purpose of obtaining details pertinent to such plans as the Climate Emergency Action Plan, Mobility Master Plan, and The London Plan.

Executive Summary

The purpose of this report is to provide Committee and Council with background information and a synopsis of input on participation in the Province's electric kick-style e-scooter pilot. The Provincial e-scooter pilot includes both e-scooters for personal purchase and use, and e-scooter share services (i.e., similar to bike share services).

An e-scooter is a stand-up scooter powered by an electric motor. They are generally designed for use by adults with a large deck in the centre upon which the rider stands. They are a micromobility option (e.g., along with bike share and e-bike share) that is becoming more popular in many North American cities.

Several other Ontario municipalities are examining or participating in the Ontario escooter pilot, specifically:

A. Personal E-scooters Programs

- Ottawa, Hamilton, Windsor, York Region, Brampton and Mississauga allow personal e-scooters. The Region of Waterloo will allow them as of July 1, 2022.
- Toronto is currently not allowing either personal use or e-scooter share services.

B. E-scooter Share Programs

- Ottawa and Windsor have e-scooter share services in place. Windsor's system includes e-bikes.
- Hamilton, Brampton and Region of Waterloo (in partnership with cities of Cambridge, Kitchener and Waterloo), are working towards e-scooter share services.
- Mississauga is reviewing e-scooter share.

Contact was made with many of these municipalities in 2021 and 2022. In addition, details provided by e-scooter vendors and other on-line sources was reviewed by City staff.

In London, the public, City advisory committees, City service areas, and partner organizations' feedback was collected in the summer of 2021. In summary, a range of feedback was received. For the public, overall, those who have tried or own an escooter are supportive of allowing them in London. Generally, those who have no experience with e-scooters are not supportive.

This report includes recommendations for both options of the provincial pilot, personal e-scooters and e-scooter share systems:

- With respect to personal e-scooters; Civic Administration recommend that for the remainder of the provincial pilot (ends December 2024), allow e-scooters for personal use in the same locations where bicycles are allowed for adults (i.e., not on sidewalks) and update related by-laws. This option recognises that personal e-scooters are already in use in London, they provide an efficient transportation option for many Londoners, and they should be recognised in municipal by-laws. This option is referred to in the report as A-1. Allow Personal E-scooters and Update By-laws.
- With respect to e-scooter share programs; Civic Administration recommend not participating in the e-scooter share portion of the provincial pilot. Rather, it is recommended London proceed with monitoring and reviewing other municipalities' pilots to learn about their services' set-up and challenges, and how they dealt with by-law updates. This information will be used to inform the development of the Mobility Master Plan and the implementation of the Climate Emergency Action Plan and The London Plan. This option is referred to as B-3. Do Not Join the Provincial Pilot; Monitor and Review Other Municipalities' Pilots

Financial Impact/Considerations

This review, analysis and recommended direction has identified three main items with respect to financial considerations noting that the financial impact may occur in a different project as noted in number 3 below:

- A-1. Allow Personal E-scooters and Update By-laws
 Existing City staff resources will be used to review and address relevant municipal
 by-laws. There is no additional financial impact for City staff. During the Pilot,
 discussions will occur with London Police Services and Municipal Compliance staff
 from an enforcement perspective.
- 2. B-3. Do Not Join the Provincial Pilot; Monitor and Review Other Municipalities' Pilots Existing City staff resources will be used to monitor and review e-scooter share pilot programs and full-scale programs. There is no additional financial impact for City staff.
- 3. City staff still recommend proceeding with a bike share system, with a Request for Proposals (RFP) to be issued later in 2022. This matter will be the subject of a future Civic Works Committee report. The absence of e-scooters within the bike share system RFP may impact the financial aspects of a bike share system.

Linkage to the Corporate Strategic Plan

Municipal Council's 2019-2023 Strategic Plan for the City of London continues to recognize the importance of active transportation, cycling, and the need for a more sustainable, inclusive and resilient city. Personal and shared e-scooter use addresses four of the five Areas of Focus, at one level or another:

- Strengthening Our Community
- Building a Sustainable City
- Growing our Economy
- Creating a Safe London for Women and Girls

On April 23, 2019, the following was approved by Municipal Council with respect to climate change:

Therefore, a climate emergency be declared by the City of London for the purposes of naming, framing, and deepening our commitment to protecting our economy, our eco systems, and our community from climate change.

On April 12, 2022 Municipal Council approved the Climate Emergency Action Plan which includes Area of Focus 4, Transforming Transportation and Mobility.

Analysis

1.0 Background Information

1.1 Previous Reports Related to this Matter

Relevant reports that can be found at www.london.ca under Council meetings include:

- Proposed Approach to Review E-Scooters in London (January 7, 2020 meeting of Civic Works Committee (CWC), Agenda Item # 2.8)
- Cycling and Transportation Demand Management Upcoming Projects (March 30, 2021 meeting of CWC, Agenda Item # 2.12)
- 6th Report of the Accessibility Advisory Committee (July 27, 2021 meeting of Community and Protective Services Committee, Agenda Item # 4.2)
- 7th Report of the Transportation Advisory Committee (August 31, 2021 meeting of CWC, Agenda Items # 4.1 and 4.2)

1.2 Background

An e-scooter is a stand-up scooter powered by an electric motor. They are generally designed for use by adults with a large deck in the centre upon which the rider stands. They are a micromobility option (e.g., along with bike share and e-bike share) that is becoming more popular in many North American cities.



An e-scooter share system is a service in which electric motorized scooters are made available to use for short-term rentals. E-scooters can be either "docked" at racks or they can be dockless, meaning that they are dropped off and picked up from any location in a designated service area. The e-scooters are generally rented through a mobile app, although some system operators have provisions for those without mobile data access. They are meant for short point-to-point trips, first mile/last mile connections with transit, and recreational/ tourism uses.

Appendix A presents frequently asked questions and answers to help provide more context on e-scooter share services and how they are being used in other municipalities.

In January 2020, the Province of Ontario launched a five-year e-scooter pilot program. It ends December 2024. The pilot is intended to evaluate the use of both personal and shared e-scooters, to examine their ability to safely integrate with other vehicle types and determine whether existing provincial rules of the road are adequate. As part of the pilot, Ontario municipalities first need to pass by-laws to define where e-scooters can operate and where they can be parked (e.g., setting up designated parking locations).

More information on the provincial pilot is available at http://www.mto.gov.on.ca/english/vehicles/electric-scooters.shtml

1.3 Experience Elsewhere

Several other Ontario municipalities are examining or participating in the provincial escooter pilot. This includes allowing personal escooters, allowing escooter share services, or both personal and escooter share. Activity in Ontario slowed down in 2020 and 2021 due to the pandemic. Recent activities include:

- Brampton ran a short-term, small-scale e-scooter share pilot project in one municipal park. In early 2022, Brampton approved allowing e-scooter share services with potentially three operators. Further details are expected this summer.
- Hamilton has passed by-laws to allow personal e-scooter use and shared e-scooter services. Shared services are planned for 2022 over a two-year period. Permits include a list of safety requirements for the operators.
- Mississauga has updated its by-laws allowing personal e-scooters and is seeking
 public input on their use. This is in response to the presence of personally owned escooters already in use in the city. Mississauga has not opted into the shared escooter portion of the provincial pilot. Feedback on the use of personal e-scooters
 will help the City determine whether a program of shared e-bikes and/or e-scooters
 should be pursued.
- Ottawa approved personal e-scooters and e-scooter share services in 2020. For the 2021 season, safety and accessibility features and innovations were prioritized in the e-scooter share selection process. In addition, the City's Accessibility Office participated in the evaluation process. Three companies were selected to provide services in 2021, including expanding to a satellite project outside of the central Ottawa area. Both services remain operational.
- Region of Waterloo (in 2019) ran an e-scooter share service on private property (specifically, property owned by the University of Waterloo). In 2021, Waterloo Region gathered feedback on the use of personal e-scooters and shared e-scooter service on public property. Personal e-scooters will be allowed as of July 1, 2022. E-scooter share will be part of a micromobility RFP, issued from the Region in partnership with cities of Cambridge, Kitchener and Waterloo. Service launch is planned for summer 2022.
- Toronto voted not to opt-in to the provincial pilot for either personal or shared escooters. The decision was informed by the potential impacts and implications that allowing e-scooters to operate in public spaces could have for pedestrians and people living with disabilities.
- Windsor approved an e-scooter share service within a defined area in the spring of 2021. The service area includes some slow zones (15 km/h) and no park zones. It also includes some e-bikes. The shared service area is different then where personal e-scooters are allowed.

In addition, several other Canadian municipalities provide e-scooter share services, including:

- Calgary and Halifax have e-scooter share services;
- Edmonton has e-scooter and bike share services;
- Kelowna allows personal e-scooters and has e-scooter and bike share services.
- Vancouver allows personal e-scooters; and
- Victoria and the Province of Manitoba are reviewing e-scooters.

2.0 Discussion and Considerations

2.1 Context

Two Requests for Proposals (RFPs) were issued in August 2020: one for proposals to run a bike share system in London, and one for proposals to run an e-scooter share system subject to Municipal Council approval for the use of e-scooters in London. As a result of the extenuating circumstances surrounding the pandemic, the City cancelled the RFPs in late 2020. City staff did learn more about the current state of the bike and e-scooter share service markets, including the operating cost benefits of providing both bikes and e-scooters as part of a coordinated micromobility service versus a bike-only system.

As a result, in spring 2021, City staff was directed to develop a new micromobility RFP that better meets the needs of Londoners and the City, pending Council approval to allow e-scooter use in London as part of the provincial pilot project. If Council approves not participating in the provincial e-scooter pilot, then a revised bike share RFP could be issued.

2.2 Input Received

Over the summer 2021, City staff requested input from Londoners (including businesses), partners, City advisory committees, and City service areas to help inform Council's choices for participation in the provincial pilot. The highlights presented below are separated between general feedback, feedback specific to personal e-scooters, and feedback specific to e-scooter share.

General Feedback

Public input on e-scooters was gathered primarily through the Get Involved platform. Overall, the Get Involved website had 804 visitors, and 743 feedback forms were completed.

The majority of questions and open-ended responses focused on e-scooter share. However, many open-ended responses apply to personal e-scooters too. Among all the respondents, the most noted concerns were:

- 1- Lack of safe infrastructure
- 2- Lack of clear regulation or enforcement for e-scooters
- 3- Being misused and improper storage

A. Personal E-scooters

Public

Get Involved respondents were asked a couple of questions in regards to e-scooters, which can be applied to personal e-scooters.

Out of 739 total responses to these two questions, 40 per cent of respondents said that they own, or may plan to own a personal e-scooter. Whereas 60 per cent stated that they do not own, or plan to own an e-scooter (as shown in Figure 1).

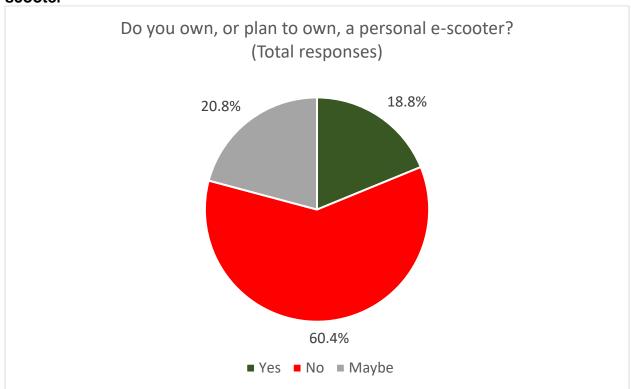


Figure 1: Breakdown of respondents who own or plan to own a personal escooter

Further details of public input on e-scooter share is in Appendix B.

City Advisory Committees

Feedback was received from the City's Accessibility Advisory Committee (ACCAC) and Transportation Advisory Committee (TAC).

ACCAC's key points about personal e-scooters included:

- Does not support allowing e-scooters in London; and
- Risks of accessibility, liability, lack of environmental benefits, and long-term costs outweigh any perceived benefits.

The Accessibility Advisory Committee's full report is available here: 6th Report of the Accessibility Advisory Committee (July 27, 2021 meeting of Community and Protective Services Committee, Agenda Item # 4.2)

TAC's key point about personal e-scooters was:

 Do not support allowing personal e-scooters in London. Need more study of public safety, liability and licensing.

The Transportation Advisory Committee's full report is available here: 7th Report of the Transportation Advisory Committee (August 31, 2021 meeting of CWC, Agenda Item # 4.1)

City Service Areas and Partners

There is recognition of the difficulty of limiting and enforcing the use of personal escooters. Unlike escooter share vehicles, geofencing and speed limits cannot be placed on personal escooters. Parking correctly can only be encouraged through the provision of visible, accessible racks or delineated escooter parking areas.

Further details of City service area and partners' input on personal e-scooters is in Appendix C.

B. E-scooter Share

Public Public

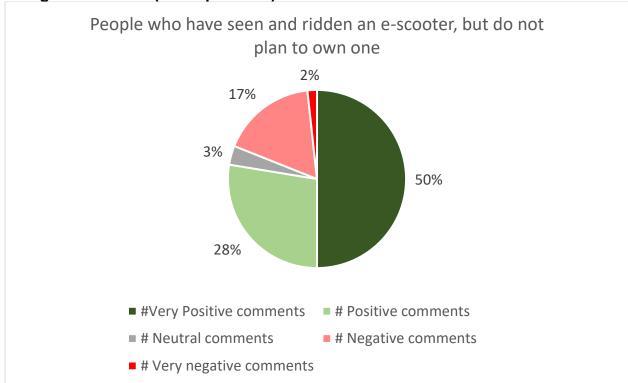
There does seem to be a general split in opinion between those who have seen or tried e-scooters in other cities and those who have not.

An analysis was conducted of the public feedback received, which included analysing respondents impressions. Three main groups were defined:

- 1- People with full experience (have seen and used e-scooter share program)
- 2- People with partial experience (have either seen or used e-scooter share program)
- 3- People without any experience (have neither seen nor used e-scooter share program)

The majority (over 75 per cent) of respondents in the first group (people with full experience) had a very positive or positive impression about e-scooters (see Figure 2).

Figure 2: Impressions from respondents who have both experienced seeing or riding an e-scooter (full experience)



The group of people who have only seen an e-scooter (belongs to the second group) expressed negative impressions. Respondents of this group mostly expressed their concerns based on their experience seeing an e-scooter where an incident happened or where parking was a nuisance.

The majority of respondents in the group with no experience with an e-scooter had negative or very negative impressions (see Figure 3). Since this group of people do not have direct experience with an e-scooter, their negative impression may be suggestive of 'fear of the unknown' or the impact of media stories on people's perception.

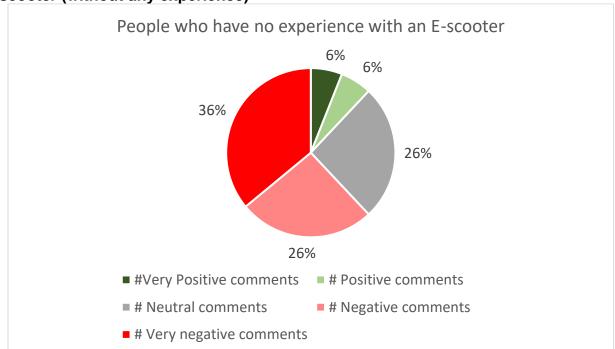


Figure 3: Impressions from respondents who have never seen or ridden an escooter (without any experience)

City Advisory Committees

Feedback was received from the City's Accessibility Advisory Committee (ACCAC) and Transportation Advisory Committee (TAC).

ACCAC's key points included:

- Does not support allowing e-scooters in London; and
- Risks of accessibility, liability, lack of environmental benefits, and long-term costs outweigh any perceived benefits.

TAC's key point about e-scooter share was:

- Support approval of a multi-stage 3rd party docked e-scooter share pilot that closely follows the Province's guidelines for municipalities. This should be accompanied by budget to cover a coordinator to oversee the pilot, additional staff and operating expenses, and enhanced enforcement;
- Allow shared e-scooters in bike lanes, pathways, and quiet residential streets;
- The pilot should be monitored closely. Western and Fanshawe should be invited; and
- Thorough public outreach plans should be developed.

City Service Areas and Partners

There were many common themes that came from service area or partner organizations' input for e-scooter share. These included:

- A docked e-scooter system is preferred;
- Ensure e-scooters are prohibited from sidewalks (this is in line with provincial best practices for municipalities); and
- Need to clarify enforcement (both jurisdiction and resourcing).

There was also a lot of input received that was not consistent across service areas and partners, or was at odds (i.e., support for their use from some and opposition to their use from others). This was not surprising as e-scooters have the potential to affect City services, partner services and their customers in many ways.

Due to the pandemic, the Middlesex London Health Unit was unable to provide feedback. Instead, they directed City staff to a couple of Public Health Ontario escooter resources.

2.1 City Staff Recommendations

Based on the research, experience in other municipalities, and local input from Londoners, partner organizations, and City service areas, there are several options for proceeding under the two choices provided by the Provincial pilot:

A. Personal E-scooters

A-1. Allow Personal E-scooters and Update By-laws

For the remainder of the provincial pilot (about two and half years), allow e-scooters for personal use in the same locations where bicycles are allowed for adults (i.e., not on sidewalks) and update related by-laws.

A-2. Allow Personal E-scooters with Restrictions

Allow e-scooters for personal use only on streets posted at 50 km/h or less and on dedicated bike lanes and cycle tracks (i.e., not on sidewalks, not on the Thames Valley Parkway and multi-use pathways).

A-3. Do Not Join Provincial Pilot; Learn from Other Municipalities

No participation in provincial pilot for personal e-scooters in London but learning from other municipalities' pilots.

City Staff Recommendation

Based on the feedback received, City staff recommend that Council move forward with Option A-1. This includes updating relevant municipal by-laws as well as a review of enforcement needs and resourcing.

This option recognises that personal e-scooters are already in use in London, they provide an efficient transportation option for many Londoners, and they should be recognised in municipal by-laws. Increased education and a review of enforcement will be important to address as part of next steps.

B. E-scooter Share

B-1. Full E-scooter Pilot Participation

Proceed with 250 e-scooters for a two-year pilot project within defined areas of London. Geofencing would be used to limit speeds on multi-use pathways and the Thames Valley Parkway. Parking would be situated in on-street hubs and specified locations on public property determined by the City and the service operator.

E-scooters would not be allowed on sidewalks. Available measures to prohibit their use on sidewalks (e.g., geofencing and/or sidewalk riding detection) would be a requirement within the Request for Proposals.

The Full e-scooter pilot would be accompanied by an education and awareness campaign for users and to ensure Londoners know where to expect e-scooters operating and understand the rules in place.

Enforcement requirements and resourcing would need to be determined and involve the City of London, the London Police Service, and Western Campus Police.

B-2. Restricted E-scooter Pilot Participation

Proceed with 250 e-scooters for a two-year pilot project within defined areas of London including further user restrictions. Parking would be situated in on-street hubs and specified locations on public property determined by the City and the service operator.

E-scooters would not be allowed on sidewalks, multi-use pathways, or the Thames Valley Parkway with the help of riding detection and/or geofencing being a requirement within the Request for Proposals.

The restricted pilot would be accompanied by an education and awareness campaign for users and to ensure Londoners know where to expect e-scooters operating and understand the rules in place.

Enforcement requirements and resourcing would need to be determined and involve the City of London, the London Police Service, and Western Campus Police.

B-3. Do not Join the Provincial Pilot; Monitor and Review Other Municipalities' Pilots

Under this scenario, City staff would learn from other Ontario municipalities' pilots and their municipal by-law updates. The City would wait until the end of the provincial pilot to do anything related to e-scooter share. E-scooter operators would not be allowed to provide a shared service during this time.

City staff would maintain and strengthen relationships with staff in other Ontario municipalities that have e-scooter share services in place to learn from them. City staff would also participate in e-scooter discussions through the North American Bikeshare Association (NABSA).

City Staff Recommendation

Based on the feedback received and further analysis, City staff recommend proceeding with Option B-3. There are enough municipalities in Ontario engaged or soon to be engaged that London can learn from others over the remainder of the pilot period. These learnings can be used to help inform the development of the Mobility Master Plan and the implementation of the Climate Emergency Action Plan.

To date, the input received was helpful in outlining the issues and risks experienced in other municipalities. At this point, the risks outweigh the benefits. E-scooter share operators have been making technological changes to their services to address many concerns, but the geofencing technology is still not precise enough to avoid accessibility risks.

3.0 Financial Impact/Considerations

This review, analysis and recommended direction has identified three main items with respect to financial considerations noting that the financial impact may occur in a different project as noted in number 3 below.

- A-1. Allow Personal E-scooters and Update By-laws
 Existing City staff resources will be used to review and address relevant municipal
 by-laws. There is no additional financial impact for City staff. During the Pilot,
 discussions will occur with London Police Services and Municipal Compliance staff
 from an enforcement perspective.
- 2. B-3. Do not Join the Provincial Pilot; Monitor and Review Other Municipalities' Pilots Existing City staff resources will be used to monitor and review e-scooter share pilot programs and full-scale programs. There is no additional financial impact for City staff.

3. City staff still recommend proceeding with a bike share system, with a Request for Proposals (RFP) to be issued later in 2022. This matter will be the subject of a future Civic Works Committee report. The absence of e-scooters within the bike share system RFP may impact the financial aspects of a bike share system.

4.0 Key Issues and Considerations

The key consideration with the provincial e-scooter pilot is that it applies to both personal and shared e-scooters. They need to be dealt with separately as the City has no control over the availability of e-scooters for personal purchase and use. They are already being used in London. These scooters cannot be regulated like e-scooter share vehicles.

Both personal and shared e-scooters can present another transportation option for Londoners, students and visitors making short trips within the service area. They can also provide a fun way to explore central neighbourhoods.

Concerns of safety, accessibility and equity are valid as evidenced in other municipalities. For personal e-scooters, it is up to the rider to be conscientious. For e-scooter share services, the design of the service must take into account who would benefit the most, who is the system designed for, how to ensure equitable access, and whose mobility and accessibility is being affected by their use.

Operators are deploying new technologies to address and alleviate some of the safety and accessibility concerns raised by pedestrians and those with disabilities, such as using improved geofencing technology to slow down or stop an e-scooter from restricted areas, or ensuring the e-scooter emits a standardized noise. Municipalities are trying to address safety concerns by making it easier for the public to report misparked e-scooters, putting in place rules for operators to quickly address misparked e-scooters, and include financial penalties as part of any agreement.

The Provincial pilot has about two and half years left (pilot closes end of 2024). This timeframe allows for the review and updates to municipal by-laws to address personal e-scooters and time to assess uptake by Londoners. It also allows for City staff to monitor and learn from other municipalities' shared e-scooter systems.

Conclusion

The provincial e-scooter pilot runs until the end of 2024. Participating in the pilot for personal e-scooters is an opportunity for the City of London to provide another transportation option to many Londoners. It also supports the City's Climate Emergency Action Plan goals by offering a zero-emission transportation option.

The two options of the pilot need to be dealt with separately.

Personal e-scooters are already in use in London. This needs to be recognised and addressed. This can be accomplished with the staff recommendation of Option 1: Allow personal e-scooters and update relevant by-laws.

With the concerns about safety, equity and accessibility, an e-scooter share program should not be permitted at this time. The staff recommendation of Option 3: Monitor and review experience in other municipalities will provide opportunities for City staff to continue to learn about e-scooter share systems including testing operational systems.

These other municipalities will be providing data to the Province. The Province will then determine whether a permanent framework is warranted. This includes making a long-term decision on whether e-scooters are permanently allowed on Ontario roads. This will need to be considered in London at that time for both personal e-scooter and e-scooter share.

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Recommended by: Kelly Scherr, P.Eng., MBA, FEC, Deputy City Manager,

Environment & Infrastructure

Appendix A: General E-Scooter Share FAQs

Appendix B: E-scooter Get Involved Feedback Analysis

Appendix C: City Service Area and Partners E-scooter Key Points

APPENDIX A General E-scooter Share Frequently Asked Questions

The following frequently asked questions (FAQs) and corresponding general answers are based on details from other municipalities' e-scooter share programs. The FAQs are organized into the following categories:

- **User experience:** How e-scooter riders interact with the system;
- **Safety:** The measures in place to ensure e-scooter riders and other road and sidewalk users remain safe;
- Legislation: The division of responsibilities between a municipality and the escooter operator;
- Financial: Cost to e-scooter riders and taxpayers; and
- Operations: The selection of the e-scooter operator and evaluation of the project.

User Experience

· What is an e-scooter?

- The Electric Kick-Scooter Pilot Project from the Ontario Ministry of Transportation defines an e-scooter as a vehicle with two wheels oriented longitudinally in the direction of travel with a platform for standing between the two wheels. The vehicle has a steering handlebar that acts directly in the steerable wheel and an electric motor not exceeding 500 watts that provides a maximum speed of 24 km/h. In Ontario, an e-scooter must be equipped with lights and a bell.
- E-scooters vary in their precise shape depending on the manufacturer. An example is shown below:



Source: Bird

What features are e-scooters required to have?

 In Ontario, e-scooters require an electric motor, brakes, a handlebar, lights, and a bell or horn.

Where can e-scooters be ridden?

The Ontario provincial pilot project allows for municipalities to regulate where both private and shared e-scooters can be ridden. Typically, in other municipalities, riding is permitted in bike lanes, low volume and low speed roads, and multi-use pathways. Riding is typically not permitted on sidewalks to ensure pedestrian safety.

Who can ride an e-scooter?

The Ontario provincial pilot project allows for riders over the age of 16.
 Helmets are mandatory for riders under 18 years of age.

Where are e-scooters typically parked?

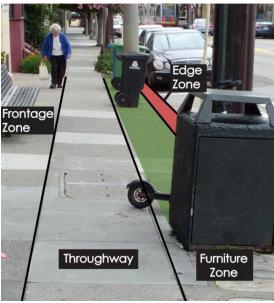
 Owners of personal e-scooters tend to keep them in their possession rather than leaving them outside unattended, given that these scooters are collapsible and easily portable. E-scooters that are operated as part of a shared micromobility system are generally required to be parked in designated parking areas, which can be marked in areas such as existing on-street parking spaces, or in the "furniture zone" of a sidewalk. The furniture zone of a sidewalk is the part of the sidewalk closest to the road that does not impede pedestrian movement.







Source: City of Calgary



Source: San Francisco Municipal Transportation Agency

How are e-scooter batteries that are part of an e-scooter share system recharged?

- Operators of an e-scooter based shared micromobility system are responsible for recharging e-scooters. Charging typically takes place overnight.
- Some operators enable individual system users to recharge scooters in exchange for a discount on their trips.

When are e-scooters that are part of an e-scooter share system usually used?

 E-scooters are not designed for use in the snow and are generally only used in the early spring to late fall. Some municipalities have introduced time of day limits for increased safety, restricting e-scooter use overnight when visibility is low.

Are there fines for improper use?

- Some municipalities have introduced fines for improper use as part of their escooter by-laws. Examples include fines for multiple riders on a single escooter and using the e-scooter to carry cargo.
- Additionally, individual operators of e-scooter share systems often have the ability to fine users for improper parking or theft, or take more serious action (i.e., removing them from the service entirely).

How are COVID-19 protocols followed for e-scooters that are part of an e-scooter share system?

- Given the shared nature of e-scooters, different riders would inevitably use the same scooter in a short period. Operators are responsible for managing and defining their COVID-19 protocols. For some systems, riders are encouraged to wipe scooters with their own wipes between uses.
- Since e-scooters are not used in an enclosed environment, the risk of transmission is anticipated to be relatively low.

Safety

· Are helmets required when riding an e-scooter?

 Helmets are encouraged for all riders and, according to provincial legislation, are required for riders under the age of 18. Users must provide their own helmets.

Are there risks associated with riding e-scooters?

E-scooters are motorized vehicles which require caution and responsibility from riders. The power and speed limits on e-scooters ensure speeds remain below a threshold where serious injury from scooter use alone is likely. To mitigate the risk of injury, only one rider is permitted per scooter and towing of trailers or cargo is prohibited. E-scooter share systems in other jurisdictions have shown a low number of reported injuries.

Are e-scooters legal in Ontario?

 E-scooters are legal in Ontario under a provincial pilot project designed to evaluate their suitability for urban mobility. Municipalities must pass by-laws to approve e-scooter use in areas under their jurisdiction.

How fast can e-scooters travel?

To meet the requirements of the Ontario Ministry of Transportation, escooters must travel no faster than 24 km/h. Some municipalities have further lowered this speed limit for rider safety and to comply with speed limits on multi-use pathways or other locations shared with pedestrians.

In other communities, how is the safety of pedestrians on sidewalks and safe operation on multi-use pathways ensured?

- Operators of personally owned e-scooters can be required to follow the same rules as bicycles, such as prohibitions of their use on sidewalks and staying within posted speed limits on multi-use pathways.
- Placing restrictions on where shared e-scooters can operate and limiting their speed or even making them come to a stop are options. However, technological restrictions are not possible for personal use e-scooters.
- Municipalities can prioritize pedestrian safety by banning the use of escooters on sidewalks, as well as further limiting shared e-scooter speed or completely disabling the electric motor in areas with high pedestrian activity.
- In municipalities permitting shared e-scooters to use multi-use pathways, operators can use GPS-based "geofencing" (defined through geographic boundaries) to automatically restrict e-scooter speeds to match multi-use pathway speed limits of 15-20 km/h.
- Shared service operators can also add features such as "acoustic signaling devices" designed to ensure vision impaired residents can hear the otherwise silent shared electric-scooters coming, a "lock-up" mechanism that requires customers to lock e-scooters to bike racks or utility poles when they are done riding, and high-contrast colours on shared scooter handlebars to help low-vision residents recognize potential obstacles.

In other communities, how are users of mobility devices or other accessibility aids accommodated?

- To comply with provincial law, e-scooters require a bell to communicate with other road users.
- Given the emerging nature of e-scooters, and accessibility issues being cityspecific, consultation with local stakeholders helps inform accessibility considerations of any e-scooter program.
- The e-scooters authorized under provincial legislation in Ontario are limited to models where standing is required.

In other communities, how is the correct parking of e-scooters that are part of an e-scooter share system ensured? And that they do not topple over?

- Depending on the specific operator, users are typically reminded of safe and legal parking practices when using the e-scooter app. Ending a trip often requires a photo to verify scooter location and orientation.
- o Some jurisdictions have also implemented fines for improper parking.
- Some models of e-scooters use a double kickstand which can help to reduce e-scooters toppling over.

In other communities, how are issues or concerns regarding an e-scooter share system handled?

- Concerns related to specific operator issues like technical problems with the scooter and payment are typically addressed in the user app of a specific operator.
- Concerns related to municipal matters like parking, safety, and enforcement are usually reported to a number or email.

In other communities, how is theft and vandalism of scooters that are part of an e-scooter share system mitigated?

 Shared e-scooters are equipped with GPS devices, allowing the operators to track the location of each e-scooter in their fleet.

Legislative

What is a municipality's role in allowing an e-scooter share system to operate?

The Ontario E-Scooter Pilot requires a municipality to pass a by-law to permit scooter use and parking on municipal property, such as sidewalks, pathways, and trails. By-laws also define an operating area for e-scooters, and areas where e-scooters are prohibited. A limit on the number of operators and/or escooters can be included.

What are e-scooter share operators responsible for?

Operators are responsible for the day-to-day operations of their systems. This
includes purchasing e-scooters, deploying the fleets of e-scooters, developing
the apps typically used to access e-scooters, charging, maintenance, and
rebalancing.

Can you prohibit where e-scooters are allowed to operate?

- Operators of personally-owned e-scooters are required to follow the rules set out for them by the municipality
- In some cities, e-scooters that are part of an e-scooter share system have been restricted in areas with high pedestrian activity.

Financial

How much do shared e-scooters cost?

 E-scooter operators are responsible for setting their own prices. The cost to ride is typically a flat fee plus a variable fee based on the time the e-scooter is in use.

Can a private/non-shared e-scooter be purchased?

 Yes, the provincial legislation allows for privately owned e-scooters to be used in municipalities that authorize their use. A municipal council must first decide if private e-scooters are allowed and where they can be operated.

Do e-scooter share operators offer subsidies for low income riders?

Some e-scooter share operators provide subsidies.

E-scooter Share Operations

How are e-scooter share operator selected?

Operators are either selected using a competitive request for proposals (RFP) process or governed through a business licencing arrangement.

Can there be a limit on the number of operators?

 Yes, many cities allow only a single operator. Other cities have allowed multiple operators.

• Is there a limit on the number of e-scooters provided in the system?

 RFP requirements or licencing systems often set a minimum and/or maximum on the number of e-scooters allowed in the system.

• In other communities, how is e-scooter share bunching addressed?

- Bunching occurs when e-scooters are not evenly distributed across the service area, resulting in no access in some parts of the service area and an oversupply in others.
- Operators are typically responsible for redistributing e-scooters to prevent bunching.

• How do e-scooters interface with transit in other communities?

 E-scooters can be a way to provide first and last-mile transportation to and from transit stops within the e-scooter share service area.

How are e-scooter share pilots monitored and evaluated in other communities?

- As part of the provincial pilot project, shared e-scooter programs must be monitored and evaluated. Participating municipalities report on pilot findings to the Province to help inform next steps.
- This involves a quantitative analysis of the trips taken by e-scooter, as well as user surveys and other stakeholders.

How is data collected by e-scooter companies governed?

 A data sharing agreement between the operator and a municipality is generally a requirement in the RFP. Information privacy is a component of this agreement, ensuring that no personal data beyond what is required for the system to operate is collected, and any personal data is anonymized before analysis.

APPENDIX B E-scooter Get Involved Feedback Analysis

Overall Insights

In this analysis of the Get Involved feedback form, two sections are provided to determine the impression and opinions of respondents about e-scooters. The first section determines the impressions, and the second section provides detailed information based on open-ended responses.

For analyzing impressions of respondents 3 main groups were defined:

- 1. **People with full experience** (have seen and used e-scooter share program).
- 2. **People with partial experience** (have either seen but have not used a e-scooter share program).
- 3. **People without any experience** (have neither seen nor used e-scooter share program).

The majority of respondents in the first group had a very positive or positive impression about e-scooters (over 75%). While for the second and the third group, a mix of impressions was observed.

The group of people who have only seen an e-scooter (belongs to the second group) expressed negative impressions. Respondents of this group mostly expressed their concern based on their experience seeing an e-scooter where an incident happened or was a nuisance.

The majority of respondents in the group with no experience with an e-scooter had negative or very negative impressions. Since this group of people do not have operating experience with an e-scooter, their negative impression can be suggestive of 'fear of unknown' or perceptions obtained by reading or hearing negative stories.

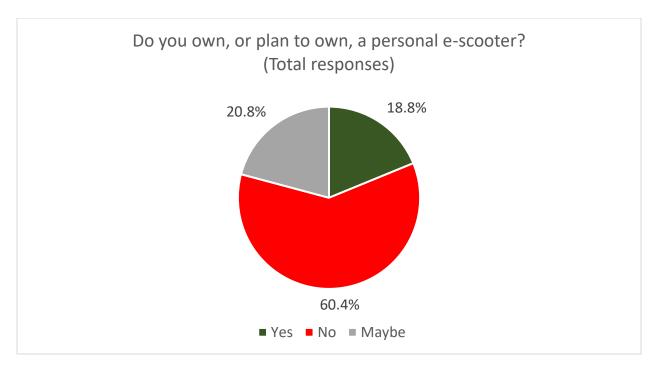
Among all the respondents the most noted concerns are:

- 1. Lack of safe infrastructure
- 2. Lack of clear regulation or enforcement for e-scooters
- 3. Being misused and improper storage

A. Feedback Form Analysis for Personal E-scooters

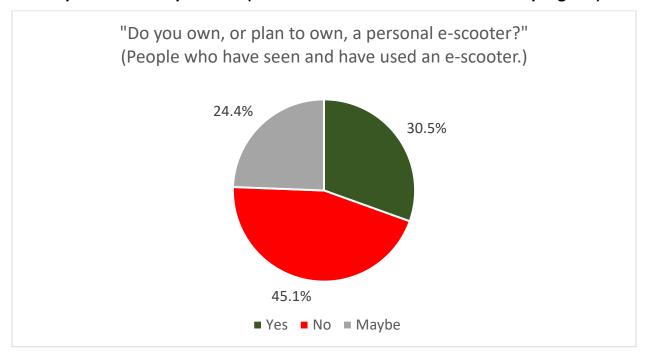
The Get Involved respondents were asked a couple of questions in regard to escooters, which can be applied to personal escooters, and the analysis in this section can provide useful insights into public opinion regarding escooters.

Out of 739 total responses, almost 40% of respondents said that they own, plan or may plan to own, a personal e-scooter. Whereas 60% stated that they do not own, or plan to own an e-scooter.



This question was also analyzed based on respondents' experience; considering whether the respondent have seen and or have used an e-scooter. The following three charts indicate the break down of total responses based on a person's experience:

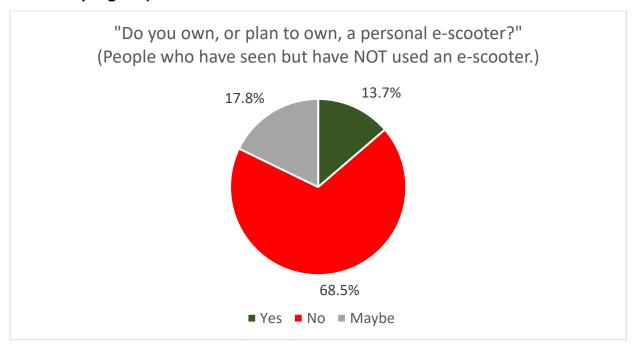
1. People with full experience (have seen and used e-scooter share program)



People with a full experience have the most positive opinion towards personal e-scooters. 55% of respondents stated that they own, plan or may plan to own, a personal e-scooter in future. The positive responses in this segment of respondents can be an indication of the positive impact of the e-scooter ridership on people's attitudes towards e-scooter. People who have seen and ridden a personal e-scooter mentioned that they found e-scooters a convenient and entertaining way to commute for short trips and in the open-ended responses they requested the City to launch the e-scooter share program as soon as possible. However, this group has some concerns about:

- 1. Lack of enforcement
- 2. Lack of safe infrastructure
- 3. Theft and vandalism

2. People with partial experience (have either seen but have not used a e-scooter share program)



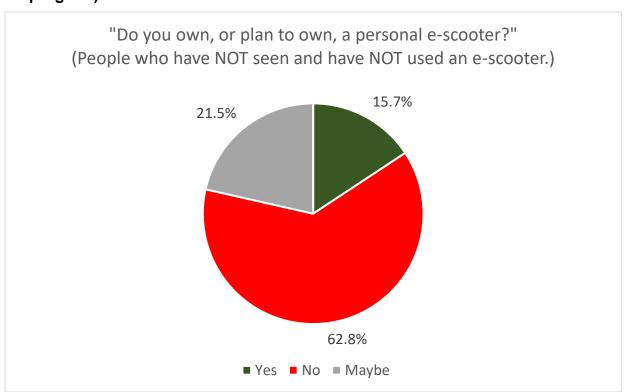
The most negative comments were identified in the group of respondents who have seen but have not used an e-scooter share program. They can be referred as observers, with 68.5% negative comments regarding personal e-scooter ownership. The responses in this group are beneficial for identifying the potential pros and cons of e-scooters with likely the most unbiased judgement, since this group has experienced observing other e-scooter riders without having an experience riding one themselves.

Their most significant concerns in order of priority are:

- 1. Being misused and improper storage
- 2. Jeopardizing pedestrian safety
- 3. Lack of enforcement

However, this group acknowledged that e-scooters are convenient, environmentally friendly, and affordable.

3. People without any experience (have neither seen nor used e-scooter share program)



This group of respondents is comprised of individuals who have not seen or used an escooter. Since the respondents of this group have not had a real-life experience with escooters, their opinion can be potentially be a reflection of what they have heard about escooters through media and or other people. This section can provide beneficial insights about how the disseminated information can impact perceptions.

63% of individuals in this group stated that they do not own or plan to own a personal escooter. This group was concerned about:

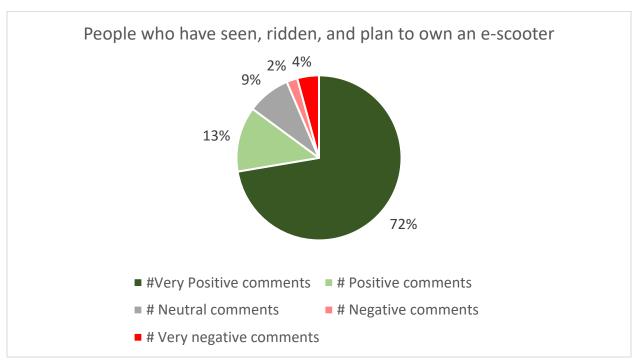
- 1. Lack of enforcement
- 2. Safety of pedestrians
- 3. Stated that they are not interested in this program

However, a smaller portion of respondents mentioned that is being entertaining, environmentally friendly, and they are keen to try e-scooter share program.

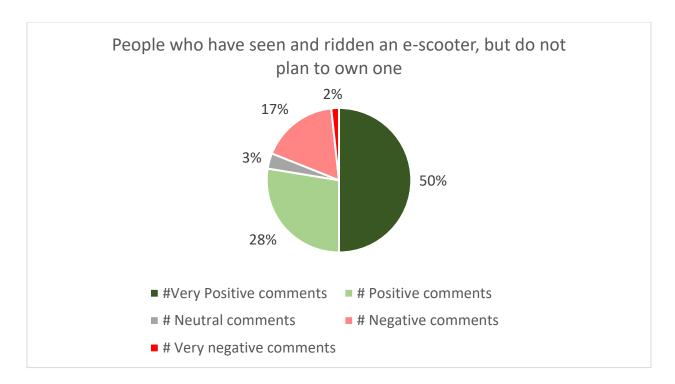
B. Feedback Form Analysis for E-scooter Share Program

1. People with full experience (have seen and used e-scooter share program)

The 'people with experience' group constitute of respondents who have both experienced seeing or riding an e-scooter.

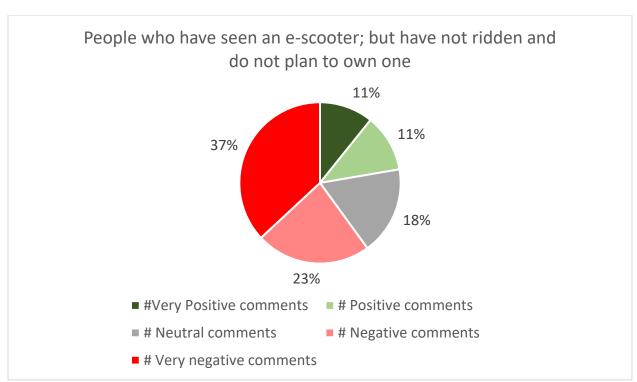


Very Positive and Positive comments were received from 85% of the respondents who have seen, ridden and plan to own an e-scooter. With respect to respondents that have seen and ridden an e-scooter but do plan own (figure on next page), 78% had Very Positive and Positive comments.



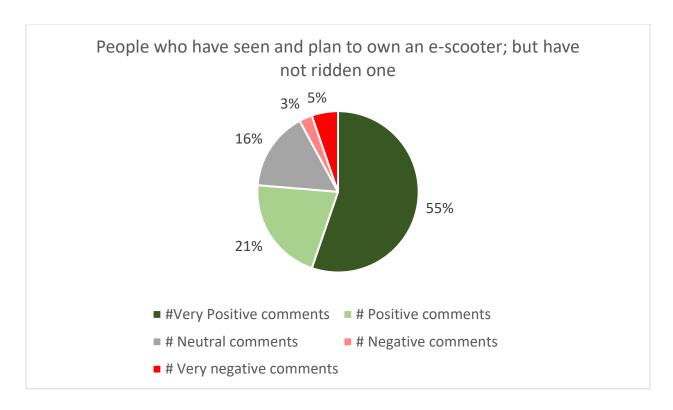
2. People with partial experience (have either seen but have not used a e-scooter share program)

This group constitutes people who have either experienced seeing or riding an escooter.



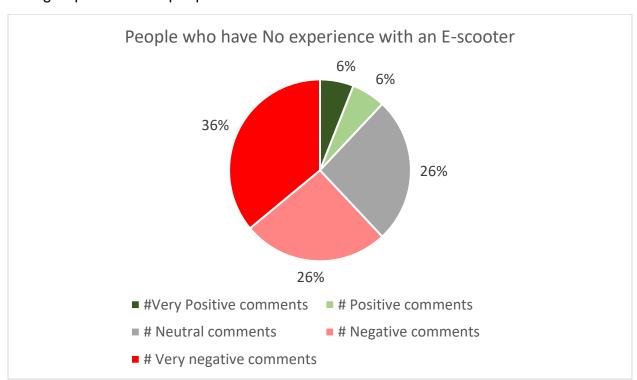
With respect to people who have seen an e-scooter; but have not ridden and do not plan to own one, Very Positive and Positive comments were received from 22% with Very Negative and Negative comments being larger at 60%.

The reverse occurred for respondents who have seen and plan to own an e-scooter, but have not ridden one (figure on next page); Very Positive and Positive comments remained high at 76% and Very Negative and Negative comments were 8%.



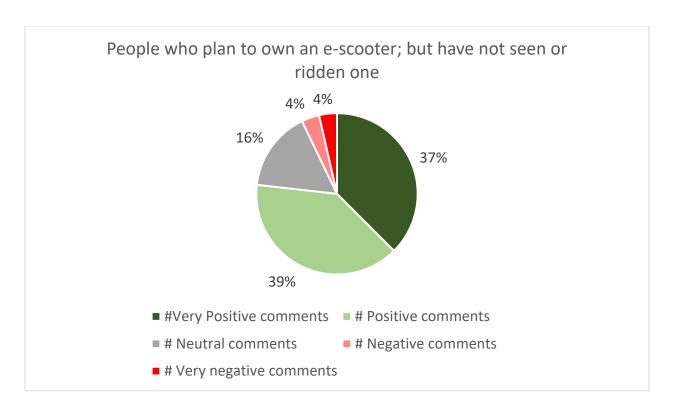
3. People without any experience (have neither seen nor used e-scooter share program)

This group constitutes people who have never seen or ridden an e-scooter.



With respect to people without any experience, Very Positive and Positive comments were received from 12% with Very Negative and Negative comments being larger at 72%.

With respect to people without any experience but plan to own an e-scooter (figure on next page), Very Positive and Positive comments were received from 76% with Very Negative and Negative comments being larger at 8%.



APPENDIX C City Service Area and Partners E-scooter Key Points

The following table is a synopsis of the points raised by those City service areas and City partner organizations who were asked to comment on an e-scooter discussion guide and feedback questions.

Service Area and Divisions/Sections	Summary of Key Points, Questions and Comments
Risk Management	Personal and Shared:Safety for all users of the road/sidewalk and pathways is
	the ultimate goal.
	Shared:
	 Limiting use to specific facilities, locations, speeds and penalties for misuse seem to the be the way forward.
	 Starting as a pilot project, can adjust and modify accordingly if any challenges develop.
Transportation	Personal:
Planning & Design	Restrict from sidewalks like bikes.
	 Allow on streets posted at 50km or less, bike lanes and cycletracks.
	 If speed is regulated, allow on pathways and Thames Valley Parkway (TVP).
	Shared:
	 Service area should be core neighbourhoods and University to leverage the presence of safe cycling facilities and short trips.
	 No restrictions on streets posted at 50 km or less, bike lanes or cycletracks. Restrict speed on pathways and TVP to 15 km/hr.
	 Docked scooters would be ideal system. Do they reduce emissions by shifting car trips? This needs to be studied. Note that there is a reduced # of students at Western in
	summer.
Road Operations	Personal and Shared:
·	No change in service level. No bare pavement in winter. Shared:
	Service provider handles all operations.
Legal Services	Preliminary observations provided on both personal and shared e-scooter programs.
Anti Racism Anti	Personal:
Oppression	 Have already heard from residents about potential impact, speed and disruption that these scooters have had in the community. Keeping them off sidewalks vital for community safety.
	Shared:
	 Will be vital that the pilot ensures adequate reporting and removal of e-scooters that prevent community mobility. City needs to ensure adequate community feedback for challenges.
	 The placement of parked scooters with a gendered, accessibility and equity lens will be vital. Parking should be in well lit and clear areas with curb cuts. The location

Service Area and Divisions/Sections	Summary of Key Points, Questions and Comments
	of e-scooter parking should also consider safety concerns.
	 Understanding who uses e-scooters, how they use them, and who may not be using them and why will be vital.
	 An analysis of usership from an equity perspective. What is the demographic most likely to benefit from the program?
	 Who are stopped most frequently for violations and how this may impact usership?
Municipal Compliance	Personal and Shared:
	 Don't have authority to stop e-scooters on pathways/TVP. Anticipate complaints regarding abandoned scooters, use of scooters in non-permitted areas and speed of scooters on established pathways. Needs to be clarity on jurisdiction and resourcing when planning for anticipated complaints and expected
	compliance responses.
Parks Planning and Operations	 City currently receives complaints that the pathways cannot handle the current volume of use, and the existing pathway system is not designed to accommodate additional motorized uses. Expanding the range of users could trigger the need for significant city-wide investment (depending on scale and scope) to expand the multi-use pathway system and TVP beyond its existing footprint, which would need to incorporate all applicable studies and approvals. This expansion may be possible in some areas but will prove impossible in other sections, which could fragment the system. User conflict a concern. Thames Valley Parkway and other multi-use pathways are designated as a "recreational trail" and from a legal perspective, are maintained to a different standard than City sidewalks which are a higher standard than the pathway system. We would not want to trigger a higher service standard in order to accommodate for the safe use of e-scooters. Such a change in designation would result in significant operational, cost, and legal
	ramifications.
	Personal:
	 Concerns have been raised with regard to user conflict between pathway users who are walking or running vs those who are cycling or on scooters. Restrict use from public parks (including all multi-use pathways multi-use paths (MUPS) and TVP). Challenge we face is that there is only so much capacity the system can sustain.
	Shared:
	 Preference is that use is restricted in all public parks (MUPS and TVP). If it were implemented, does this service area consider where the limits land on pathways? Are there natural / safe stopping points at the limits of the area? If restricted,

Service Area and Divisions/Sections	Summary of Key Points, Questions and Comments
	 how would the Thames Valley Corridor be incorporated into this service as a non-permitted zone? Prefer docked system, not located in parks. Concerns with introducing e-scooters to parks, especially if they will not be docked as they will be left scattered throughout parks causing significant maintenance and operational issues.
Planning and	Personal and Shared:
Development	 The London Plan policy 310 states that "Mobility choices such as transit usage, walking, and cycling all require physical activity. This physical effort exerted in active forms of mobility is an excellent way to keep children, adults, and seniors physically fit and generally healthier. However, to reasonably expect people to choose these forms of mobility, we need to offer viable and attractive mobility options. This will happen only if we are deliberate in the way that we plan our mobility infrastructure." The London Plan policy 313 states that, "Through the plans and actions we take to design and build our mobility infrastructure, we will: 7. Provide strong linkages between key origins and destinations within our city including the Downtown, Transit Villages, employment areas, major institutions, and major open spaces. Personal: To ensure personal e-scooters are a viable transportation option, we would like to see as few restrictions on their use as possible.
	Enforcement difficult. Shared:
	 Suggest some extensions in service area. As few restrictions as possible. Do not have a strong preference for docked or dockless. Our strong preference is for dedicated parking to occur within vehicle parking spaces, either on-street or in City lots. Provide more details on preferred locations for docking/charging stations. Talked to Detroit BIA about their scooter share program and incentives for users.
Tourism London	Personal and Shared:
	 Dedicated parking spaces, public education, safe locking and parking places. Personal: Restrictions should be similar to the restrictions in place for cyclist. Allow on dedicated bike lanes, cycle tracks, multi-use pathways, TVP, etc. Shared: Locations where visitors can access them. Provide examples. Expand outside of downtown if successful. Should use be restricted at city parks or areas where there is high pedestrian traffic? e.g., restrict to perimeter when Victoria Park festivals. Docked preferred.

Service Area and Divisions/Sections	Summary of Key Points, Questions and Comments
	 Parked in a high visibility, well lit area which potential cameras for security; high traffic areas; near LTC stops. Need to ensure they not impeding on pedestrian traffic. Great option for travelers to city.
Downtown London	Shared surveys with membership. No further comments at this time.
London Police Service	Personal and Shared: • Theft and abandonment issue. Personal:
	 Enforcement big issue to deal with. Who is enforcing? Ask needs to be detailed. Shared: Less concerned about shared services.
Middlesex London Health Unit	Not able to comment as resources tied up with the pandemic. Provided Public Health Ontario resources.
London Transit Commission	 Personal and Shared: Restricted on sidewalks like bikes. Shared: Preference for docked.
Western University	 Note: Participation on Western property in the provincial pilot is not up to the City of London. Personal and Shared: Not a high priority since pandemic. Have a shared space hierarchy COVID affecting how students use transit. By-law enforcement on campus. Personal: Currently, no policies for campus. Treated as a bike until there are too many and they need a policy. More scooter use observed. Shared: Geofencing on campus an option
	 Prefer docked system Interested in looking at agreement.