

TO:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON JANUARY 7, 2020
FROM:	KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR ENVIRONMENTAL & ENGINEERING SERVICES AND CITY ENGINEER
SUBJECT:	PROPOSED APPROACH TO REVIEW E-SCOOTERS IN LONDON

RECOMMENDATION

That on the recommendation of the Managing Director, Environmental & Engineering Services and City Engineer, the following actions **BE TAKEN** with respect to the potential role of electric kick-style (e-scooters) in London:

- a) The following report containing preliminary details on e-scooters and the new provincial pilot program, announced November 27, 2019, permitting their use **BE RECEIVED** for information;
- b) Civic Administration **BE DIRECTED** to prepare a plan and initiate a process to determine how a Pilot Project might be undertaken in London including the advantages and disadvantages of a program, key stakeholder input (e.g., Middlesex London Health Unit, London Police Services), potential restrictions on where scooters may be used, amendments that would be required to City by-laws, how this would apply to a personal (owned) scooter versus a scooter-sharing program, and seek community input; and
- c) Civic Administration **BE AUTHORIZED** to modify the Bike Share Request for Proposal (RFP) process to also obtain the most current details from scooter-sharing system operators and separate pricing and/or operating arrangements to potentially implement a Pilot Project in London; it being noted that Bike Share and scooter-sharing details will be handled separately and reviewed during the RFP process.

PREVIOUS REPORTS PERTINENT TO THIS MATTER

Relevant reports that can be found at www.london.ca under City Hall (Meetings) include:

Bike Share System for London: Update and Next Steps (August 12, 2019 meeting of the Civic Works Committee (CWC), Item # 2.5)

COUNCIL'S 2019-2023 STRATEGIC PLAN

Municipal Council has recognized the importance of active transportation, cycling, overall mobility and climate change in its 2019-2023 - Strategic Plan for the City of London as follows:

Strengthening our Community

Londoners have access to the supports they need to be successful and Londoners have access to the services and supports that promote well-being, health, and safety in their neighbourhood and across the city:

- Improve the health and well-being of Londoners
- Promote pedestrian safety and active transportation

Building a Sustainable City

London has a strong and healthy environment and Londoners can move around the city safely; London's growth and development is well planned and sustainable over the long term; and easily in a manner that meets their needs:

- Advance sustainability and resiliency strategies
- Increase community knowledge and action to support the environment
- Increase access to transportation options

Growing our Economy

London is a leader in Ontario for attracting new jobs and investments:

- Increase partnerships that promote collaboration, innovation and investment

Leading in Public Service

Londoners experience exceptional and valued customer service:

- Increase community and resident satisfaction of their service experience with the City

BACKGROUND

PURPOSE

The purpose of this report is to:

- provide Committee and Council with details on the newly released e-scooter pilot program by the Province of Ontario;
- seek Council approval to prepare a plan and initiate a process to determine how a Pilot Project might be undertaken in London including the various parameters associated with such an undertaking; and
- seek Council approval to modify the Bike Share Request for Proposal (RFP) process to also obtain the most current details from scooter-sharing system operators and separate pricing and/or operating arrangements to potentially implement a Pilot Project in London.

CONTEXT

What are e-Scooters?

An e-scooter is a stand-up scooter powered by an electric motor. They are generally designed with a large deck in the centre on which the rider stands.



They are a new micro-mobility option (along with bike share and e-bike share) that is becoming more popular in many North American cities. These vehicles are generally rented through a mobile app or kiosk, and are picked up and dropped off in the public right-of-way within a designated service area. They are meant for short point-to-point trips.

Anecdotal evidence from the U.S. suggests that scooters have attracted a segment of riders who previously did not use bike share. In other cases, the popularity of e-scooters especially in some of the largest bike share markets in the United States, notably New York, Boston, and Philadelphia, have regulations that to date have restricted scooter companies from launching operations. Within an eighteen month period, e-scooters have been launched in numerous North American cities with a wide range of positive and negative experiences.

Are e-Scooters Legal to Ride in Ontario?

As of January, 2020, the Province of Ontario is permitting e-scooters on Ontario roads ([Province announces e-scooter pilot](#)) as part of a five-year pilot program. This would apply to both privately-owned e-scooters for personal use as well as those used for fleet and micro-mobility systems. Additional details are provided in the Discussion section below and Appendix A.

Where Else are e-Scooters?

E-scooters are still new to Canada. To date, e-scooter use in micro-mobility applications in Ontario has been limited to pilot projects on private property, most notably at the University of Waterloo (Waterloo) and in the Distillery District in Toronto.

Elsewhere in Canada, Kelowna, Edmonton, Calgary, and Montréal have permitted the use of e-scooters as part of their broader micro-mobility system. Their experience is limited, but presents some learnings for London.

The U.S. has seen a proliferation of privately-operated services over the last eighteen months. According to the National Association of City Transportation Officials (NACTO), e-scooters accounted for approximately half of all micro-mobility trips in the U.S. in 2018. This is up from almost zero the year before. The rapid growth in e-scooters is driven by a handful of venture-capital funded start-ups such as Bird, Lime, and Spin, as well as the new e-scooter divisions of Uber and Lyft.

Why Include e-Scooters in the Bike Share RFP Process for London?

The timing of the provincial announcement on piloting the use of e-scooters in Ontario coincided with the pending release of the Council-approved RFP process for a bike share system service provider, which was being planned for early release in December 2019.

Given the recent American experience with the evolution of their micro-mobility systems towards e-scooters, and the fact that many of the potential respondents to the City's bike share RFP also operate e-scooter based systems, City staff believe it is advantageous to include the option for e-scooters within the RFP process. This will allow the opportunity to obtain the most current details from scooter-sharing system operators and separate pricing and/or operating arrangements to potentially implement a Pilot Project in London.

Addressing the Need for Action on Climate Change

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.

An e-scooter share program will help deepen London's progress towards meeting its greenhouse gas (GHG) emission reduction targets through the promotion of e-scooters and the accompanying walking to the scooters as a viable option to driving for short trips, as well as "first/last mile" trips to public transit.

DISCUSSION

Ontario E-Scooter Pilot Program

On November 27th, 2019, the Province announced details on a five year e-scooter pilot program for Ontario effective January 1, 2020. The pilot is intended to evaluate the use of e-scooters over the pilot period to examine their ability to safely integrate with other vehicle types and determine whether existing provincial rules of the road are adequate. The key elements of the pilot include:

- Municipalities must pass a by-law to allow them on municipal roads
- 5-year pilot
- Maximum speed 24 km/h
- Maximum weight 45 kilograms
- Maximum power output 500 watts
- Minimum operating age 16 years old
- No passengers allowed
- No cargo may be carried
- No baskets allowed
- Riders must stand at all times
- Bicycle helmet required for those under 18 years old
- No pedals or seat allowed
- Must have 2 wheels and brakes
- Must have horn or bell
- Must have one white light on front, one red light on rear and reflective material on sides
- Maximum wheel diameter 17 inches (43 cm)
- All [Highway Traffic Act \(HTA\)](#) rules of the road will apply to the operation of e-scooters like bicycles
- Penalties in [HTA s. 228\(8\)](#) will also apply to violations of pilot regulation (fine of \$250 to \$2,500)
- Not allowed on controlled access highways

Municipal Role

As part of the pilot, municipalities will need to pass by-laws to allow e-scooter use and determine where they can operate most safely. Municipalities that choose to permit their use would be responsible for deciding such things as allowing or prohibiting them on municipal roads and/or park pathways, expressways, and how e-scooters would be managed in their municipality.

In addition to clearly defining where e-scooters can operate, municipalities must also define where the scooters can be parked (e.g., setting up designated parking locations). This will help prevent them from being left on the road or sidewalk obstructing traffic or pedestrians or being a nuisance on private property. Designated parking locations provide control over their use and reduce interference with the public. Specifically:

- Establish overnight responsibility for e-scooter non-parking compliance,
- Decide who receives the penalty if e-scooter is not parked in a designated location or left stranded, and
- Decide a penalty structure to apply if the e-scooter is not returned to its parking location.

Other 'best practice' details have been listed by the Ministry of Transportation Ontario (Appendix A).

Some Opportunities (Advantages) with E-Scooters

E-scooters continue to increase in popularity due to factors such as a reduction in the user's carbon footprint (i.e., lower greenhouse gas emissions), improved mobility around congested cities, and reduced costs when compared with traditional modes of

transportation such as the car. E-scooters can be purchased privately and most recently there has been a significant growth in scooter-sharing systems. Some advantages with e-scooters include:

- **Quicker commuting times** - one of the biggest appeals of e-scooters is they can take you to a destination faster than walking and in congested areas, depending on facilities, at the same pace or faster than other modes of transportation. E-scooters are filling a void with multi-modal system where they assist with what is known as the 'first/last mile' travel.
- **Lower operational costs** - Compared to a car, e-scooter costs are substantially reduced for fuel, parking, maintenance, etc.
- **More affordable than many other vehicles** – the purchase price is substantially lower than automobiles, is lower than many bicycles and electric bicycles, and from a scooter-sharing system perspective, can be more competitive than bike-sharing.
- **Eco-friendly vehicles** – e-scooters do not burn gasoline, a major contributor to greenhouse gas (GHG).
- **Generally easy to learn** - as long as personal balance is not an issue, e-scooters for many would be easy to learn. There is no need to pedal or shift gears. A person steps on the deck of the e-scooter and twists the throttle to control its speed.
- **Reduced parking challenges** – (if rules are properly followed) as the units are very compact, many can fit into a given space.

Some Challenges (Disadvantages) with E-Scooters

There are a few potential problems that can arise with e-scooter-sharing systems as evidenced in other North American communities. These problems also apply to personal e-scooters.

The rapid growth of scooters initially caught many cities off-guard. Early systems launched with limited regulation and oversight. The scooters themselves have suffered from very high vandalism and theft rates. Moreover, scooters have raised safety concerns. Riders are often unclear on which traffic laws to obey as e-scooters are neither motorized vehicles, bicycles, or pedestrians. Cities have responded by creating new permitting processes for e-scooters that provide greater regulation of the quantity, location, specifications of scooter equipment deployed, etc.

Operators and municipalities continue to address these potential problems as they arise and ensure the evolution of these systems addresses potential problems before launch. Other potential challenges include:

- **Improper parking of scooters** - this applies to dockless systems. E-scooters blocking sidewalks or ending up on private property can lead to community backlash.
- **Safety of rider** – more personal injuries have occurred with e-scooters than bike-share systems. However, the latest generation of scooters are more robust and feature larger wheels in response to injury concerns. The Province of Ontario has set the e-scooter helmet law to apply to those riders under the age of 18 (noting that scooter riders must be 16 or older).
- **Safety of others** - concerns have been raised about the impact on pedestrians including persons with disabilities, joggers, cyclists, and motorists from riders that do not follow e-scooter rules. Further, e-scooters being driven in areas that are already congested with other forms of active transportation can create additional challenges.
- **Theft and vandalism** - this varies extensively by system. If scooters are seen strewn about or broken, it invites additional damage or theft.

- **E-scooter maintenance** - equipment being regularly broken, non-functioning, or dirty. E-scooter systems have a small window of opportunity to leave a good impression on riders. Systems that fail to meet the expectation of users will struggle to build or maintain ridership.
- **Ineffective rebalancing** - operators have to constantly move scooters around to ensure they do not all end up in one part of the service area. Some systems have zone based goals (e.g., during a 24 hour period, at least 10% of the fleet should be available in one of four areas). Rebalancing is a big cost driver, so it's a balancing act between setting strict standards and ensuring a program can actually operate in a cost effective manner.

SUMMARY

Request for Proposal Process

City staff recommend modifying the bike share RFP to allow proponents to submit details, operational requirements and pricing for up to three separate categories:

1. Bikes exclusively
2. E-scooters pilot project exclusively
3. A combination of both bikes and e-scooters (pilot project)

This presents the advantage of potentially having more operators submit proposals. City staff will keep these categories separate in the scoring process (i.e., bike share, e-scooter share, and a combination bikes and e-scooters).

This approach will allow City staff to both complete the Business Case for a Bike Share System in London, including a recommended vendor, and also provide thorough details on the potential for e-scooters in London following the provincial government's pilot program details and any additional changes Council wishes to make for local operations.

The actual implementation process for a Bike Share system will be a function of the Business Case, the actual pricing of the service, the outcome of the multi-year budget process and Council's decision on next steps.

E-scooter Pilot Project Scope Review

As e-scooters will be new to London, City staff will complete a thorough engagement with internal service areas and divisions (e.g., Transportation Planning & Design, Parks & Recreation, Risk, Legal, By-law Enforcement, Information Technology, etc.) as well as local partners and stakeholders (e.g., Middlesex-London Health Unit, London Police Services, Advisory Committees) for their input into the scope of a proposed e-scooter pilot project in London.

A plan will be developed to determine how a e-scooter pilot project could be undertaken to address and/or mitigate the disadvantages noted earlier in this staff report, what data will need to be collected and by whom, potential restrictions and/or limitations on where scooters may be used during the proposed e-scooter pilot project, and identify the current City by-laws that would need to be amended to permit the use of e-scooters.

The plan will also determine how the local e-scooter pilot project would apply to a personally-owned e-scooters versus a scooter-sharing program.

The plan will allow City staff to gather best practice and advice to arrive at an e-scooter pilot project that suits the context of London and all modes of transportation sharing the rights-of-way.

To accomplish both items above, the current timetable needs to be adjusted as follows

Activity	Tentative Timeframe
Modify RFP	January 2020
Release RFP	Early February 2020
Start E-scooter Pilot Project Scope Review	Early February 2020
RFP Closing Date	Late March 2020
Complete Bike Share Business Case and Potential Implementation Strategy	Late April/Early May
Prepare Update on E-Scooter Pilot Program Scope Review	May/June 2020
CWC & Council review of Business Case, RFP recommendation and E-scooter Review	May/June 2020
Complete E-scooter Pilot Project Scope Review and submit to CWC & Council	Fall
Tentative Implementation	Late summer/fall 2020 or spring 2021

PREPARED BY:	PREPARED BY:
ALLISON MILLER, M.C.P., MCIP, RPP COORDINATOR, TRANSPORTATION DEMAND MANAGEMENT	JAMIE SKIMMING, P.ENG. MANAGER, COMMUNITY ENERGY INITIATIVES
PREPARED AND SUBMITTED BY:	RECOMMENDED BY:
JAY STANFORD, M.A., M.P.A. DIRECTOR, ENVIRONMENT, FLEET, & SOLID WASTE	KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR - ENVIRONMENTAL & ENGINEERING SERVICES & CITY ENGINEER

Appendix A Best Practices Ontario E-scooter Pilot Program – Increasing Mobility Options

- c Scott Stafford, Managing Director, Parks & Recreation
- Andrew MacPherson, Division Manager, Parks Planning & Operations
- Doug MacRae, Director, Roads & Transportation
- Garfield Dales, Division Manager, Transportation Planning & Design

APPENDIX A

Best Practices – Ontario E-scooter Pilot Program – Increasing Mobility Options

Pilot framework for permitting the use of electric kick-style scooters (e-scooters) on Ontario roads. Municipalities that want to allow e-scooters to operate on their roads must pass by-laws to permit their use and to determine what is best for their communities.

Provincial Requirements	<p>Vehicle and Safety Requirements:</p> <ul style="list-style-type: none"> • Must be electric • No pedals or seat allowed • Must have horn or bell • Must have front and back light • Must have 2 wheels and brakes • Maximum wheel diameter 17 inches • Maximum weight 45 kg • Maximum power output 500W that can provide a maximum speed of 24 km/h • Must be parked in municipally approved parking area(s) <p>Municipalities are required to remit incident/collision and injury-related data to the province upon request.</p>	<p>Operator and Safety Requirements:</p> <ul style="list-style-type: none"> • No drugs or alcohol permitted when operating an e-scooter (consequences under the Criminal Code of Canada may apply) • Must be age 16 or older • Bicycle helmet required for those under age 18 • Riders must stand at all times • No passengers allowed • No cargo may be carried • No baskets • Must not be operated on sidewalks • Not for commercial use
Municipal Considerations	Municipalities that want to allow e-scooters to operate within their boundaries may wish to consider the points outlined below:	
Parking	<p>Municipalities should clearly define where e-scooters can park (e.g. setting up designated parking locations, using corrals). This will help prevent them from being left on the road obstructing traffic or being a nuisance on private property. Designated parking locations provides control over their use and reduces interference with the public.</p> <p>E-scooter parking locations should not block access to businesses, fire doors, or be located outside of restaurants and bars, etc. This will help prevent a hazardous situation.</p> <p>Municipalities should:</p> <ul style="list-style-type: none"> • Establish overnight responsibility for e-scooter non-parking compliance. • Decide who receives the penalty if e-scooter is not parked in a designated location or left stranded. • Decide a penalty structure to apply if e-scooter is not returned to its parking location. • Establish overnight responsibility for e-scooter non-parking compliance. • Decide who receives the penalty if e-scooter is not parked in a designated location or left stranded. • Decide a penalty structure to apply if e-scooter is not returned to its parking location. 	
Operating Parameters	<p>Based on experiences in other jurisdictions, municipalities should develop operating parameters for e-scooter companies and riders. E-scooters should not be allowed to operate on sidewalks – sidewalks are for pedestrians, including persons with disabilities. Municipalities should clearly communicate with companies about their expectations and requirements around contracts, permits, licences, operating agreements, etc.</p> <p>Municipalities to decide:</p> <ul style="list-style-type: none"> • Should a permit be required for an e-scooter business? If yes, clearly define performance standards that companies must adhere to and violation terms. • Where should e-scooters be allowed to travel (e.g. bike paths, parks, trails, etc.)? • Who is responsible for removing e-scooters that are left stranded, damaged or deemed unsafe? • Should there be a limit on the number of e-scooters allowed in certain areas to combat congestion? • How will e-scooters integrate with other road users (e.g. pedestrians, cyclists, and people using personal mobility devices)? 	
Interoperability/ Synergies	<p>Municipalities should:</p> <ul style="list-style-type: none"> • Consider how e-scooters can enhance connectivity, mode choice and multimodal access to jobs, housing, goods and services. • Identify ways for e-scooters to help reduce local vehicular congestion and improve air quality. • Where feasible, ensure safe, convenient and adequate e-scooters access/storage at transit stops and stations. 	
Liability	<ul style="list-style-type: none"> • Municipalities should require e-scooter companies to indemnify the municipality and hold appropriate insurance requirements. • Municipalities should determine the appropriate insurance coverage - the type and coverage amounts. 	
Offences	<p>Similar to bicycles, Ontario Highway Traffic Act (HTA) rules of the road apply to the operation of e-scooters in Ontario. Penalties in HTA s. 228(8) also apply to violations of pilot regulation (fine of \$250 to \$2,500). By-law offences may also apply. There are serious consequences for an e-scooter operator impaired by drugs, alcohol or both. Additional consequences under the Criminal Code of Canada may apply.</p>	
More information	<p>This document is a guide only. For official purposes, please refer to the Ontario Highway Traffic Act and regulations. For more information, please visit Ontario.ca/transportation. You may also refer to the American Association of Motor Vehicle Administrators' (AAMVA) Electric Dockless Scooters Whitepaper, and the National Association of City Transportation Officials' (NACTO) Guidelines for Regulating Shared Micromobility.</p>	