

3. 2021 ELECTRIC KICK SCOOTER STRATEGY AND PILOT REPORT
RAPPORT SUR LA STRATÉGIE ET LE PROJET PILOTE DE 2021 RELATIFS
AUX TROTINETTES ÉLECTRIQUES

COMMITTEE RECOMMENDATIONS AS AMENDED

That Council:

1. Receive the results of 2021 season for the shared Electric Kick Scooter Pilot Program, as outlined in this report;
2. Approve the continuation of Ottawa's shared Electric Kick Scooter Pilot Program in 2022 with the proposed changes described in this report;
3. Approve the implementation of a competitive procurement process to select and enter into an Agreement with up to two successful proponents of the process;
4. Approve the proposed changes to fee structure of Ottawa's Shared Micromobility Framework as outlined in this report;
5. Approve the amendments to the City's Electric Kick-Scooter By-law No. 2020-174 as outlined in this report and in Document 9;
6. Direct staff to report back to Transportation Committee and Council at the conclusion of the 2022 pilot season for consideration of future pilot seasons;
7. to support the success of this e-scooter pilot program, direct staff to implement these additional requirements for e-scooter operators to receive a permit to make their e-scooters available for hire from the City's right-of-way, to further clarify those that staff will already be including in the RFP process and agreements with the providers:
 - a. Require all e-scooter providers to implement technologies and strategies to ensure all users receive approval from the e-scooter

- platform before releasing the device (end of trip); and
- b. Require all e-scooters providers to GEO-FENCE City sidewalks within their GPS technologies to stop the e-scooter from operating if sidewalk riding is detected; and**
- c. Require all e-scooter providers to include strategies and technologies to address the illegal violations of e-scooters traveling in wrong directions on City streets, and;**
- 8. Approve that staff recommend to the Ministry of Transportation to obtain set fines for moving violations created under Ontario Regulation 389/19.**

RECOMMANDATIONS DU COMITÉ TELLES QUE MODIFIÉES

Que le Conseil :

- 1. Prenne connaissance des résultats de la saison 2021 du programme pilote de partage de trottinettes électriques de la Ville, énoncés dans le présent rapport;**
- 2. Approuve la poursuite en 2022 du programme pilote de partage de trottinettes électriques d'Ottawa, y compris les changements proposés décrits dans le présent rapport;**
- 3. Approuve la mise en œuvre d'un processus d'approvisionnement concurrentiel et conclure des ententes avec un maximum de deux soumissionnaires retenus;**
- 4. Approuve les changements proposés au barème tarifaire du cadre de services partagés de micromobilité d'Ottawa, énoncés dans le présent rapport;**
- 5. Approuve les modifications au Règlement 2020-174 sur les trottinettes électriques, énoncées dans le présent rapport et dans le document 9;**
- 6. Enjoigne au personnel de rendre compte au Comité des transports et**

au Conseil au terme de la saison 2022 du projet pilote, pour déterminer si le projet doit être reconduit.

7. Que, pour assurer le succès de ce projet pilote, le Conseil demande au personnel d'ajouter les exigences ci-après à celles déjà imposées aux fournisseurs de trottinettes électriques qui demandent un permis les autorisant à offrir leurs trottinettes électriques sur les emprises de la Ville, et de clarifier celles qui sont déjà prévues dans le processus de demande de propositions et dans les ententes à signer avec les fournisseurs :
 - a. Exiger des fournisseurs qu'ils mettent en place des technologies et des stratégies pour s'assurer que tous les utilisateurs reçoivent l'approbation de la plateforme de trottinettes électroniques avant de pouvoir libérer l'appareil (après utilisation);
 - b. Exiger des fournisseurs qu'ils fassent un géorepérage par GPS des trottoirs de la ville afin de pouvoir immobiliser les trottinettes électriques qui s'y aventurent;
 - c. Exiger des fournisseurs qu'ils se dotent de stratégies et de technologies pour traiter les infractions consistant à rouler à contresens dans les rues de la ville à trottinette électrique; et,
8. Approuve que le personnel recommande au ministère des Transports d'établir des amendes pour les infractions de circulation dans le Règlement de l'Ontario 389/19.

DOCUMENTATION / DOCUMENTATION

1. Acting Director's report, Transportation Planning, Planning, Real Estate, and Economic Development Department, dated 18 February 2022 (ACS2022-PIE-TP-0001).

Rapport du Directeur par intérim, Planification des transports, Direction générale de la planification, de l'immobilier et du développement économique, daté le 18 février 2022 (ACS2022-PIE-TP-0001).

2. Extract of draft Minutes, Transportation Committee, 2 March 2022.
Extrait de l'ébauche du procès-verbal, Comité des transports, le 2 mars 2022.

Subject: 2021 Electric Kick Scooter Strategy and Pilot

Report File Number: ACS2022-PIE-TP-0001

Report to Transportation Committee on 2 March

2022 and Council 9 March 2022

**Submitted on February 18, 2022 by Jeff McEwen, Acting Director, Transportation
Planning, Planning, Real Estate and Economic Development**

**Contact Person: Heidi Cousineau, Program Manager, Neighbourhood Traffic
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613-580-2424, 33355, Heidi.Cousineau@Ottawa.ca

Ward: Citywide

**Objet : Rapport sur la stratégie et le projet pilote de 2021 relatifs aux
trotinettes électriques**

Dossier : ACS2022-PIE-TP-0001

Rapport au Comité des

transports le 2 mars 2022

et au Conseil le 9 mars 2022

**Soumis le 18 février 2022 par Jeff McEwen, Directeur par intérim, directeur par
intérim, Planification des transports, Direction générale de la planification, de
l'immobilier et du développement économique**

Personne ressource : Heidi Cousineau, Gestionnaire de

programme, 613-580-2424, 33355, Heidi.Cousineau@Ottawa.ca

Quartier : À l'échelle de la ville

REPORT RECOMMENDATIONS

That the Transportation Committee recommend that Council:

- 1. Receive the results of 2021 season for the shared Electric Kick Scooter Pilot Program, as outlined in this report;**
- 2. Approve the continuation of Ottawa's shared Electric Kick Scooter Pilot Program in 2022 with the proposed changes described in this report;**
- 3. Approve the implementation of a competitive procurement process to select and enter into an Agreement with up to two successful proponents of the process;**
- 4. Approve the proposed changes to fee structure of Ottawa's Shared Micromobility Framework as outlined in this report;**
- 5. Approve the amendments to the City's Electric Kick-Scooter By-law No. 2020-174 as outlined in this report and in Document 9; and**
- 6. Direct staff to report back to Transportation Committee and Council at the conclusion of the 2022 pilot season for consideration of future pilot seasons.**

RECOMMANDATIONS DU RAPPORT

Que le Comité des transports recommande ce qui suit au Conseil :

- 1. Prendre connaissance des résultats de la saison 2021 du programme pilote de partage de trottinettes électriques de la Ville, énoncés dans le présent rapport;**
- 2. Approuver la poursuite en 2022 du programme pilote de partage de trottinettes électriques d'Ottawa, y compris les changements proposés décrits dans le présent rapport;**
- 3. Approuver la mise en œuvre d'un processus d'approvisionnement concurrentiel et conclure des ententes avec un maximum de deux soumissionnaires retenus;**

4. Approuver les changements proposés au barème tarifaire du cadre de services partagés de micromobilité d'Ottawa, énoncés dans le présent rapport;
5. Approuver les modifications au Règlement 2020-174 sur les trottinettes électriques, énoncées dans le présent rapport et dans le document 9; et
6. Enjoindre au personnel de rendre compte au Comité des transports et au Conseil au terme de la saison 2022 du projet pilote, pour déterminer si le projet doit être reconduit.

EXECUTIVE SUMMARY

The second season of the City of Ottawa's shared Electric Kick Scooter Pilot ran from May 28, 2021, to November 30, 2021. During this time, over 127,000 unique riders took more than 492,000 rides on the fleet of 1,200 shared e-scooters provided by three qualified providers selected by the City of Ottawa: Neuron Mobility, Bird Canada, and Lime.

This report evaluates the 2021 season and provides recommendations to improve the program. If Council approves the continuation of this pilot program, these changes will be made to improve the 2022 season. The new season could start as early as May 15, depending on the weather conditions and following the conclusion of street sweeping operations, and run until November 15, 2022.

Assumption and Analysis

As was observed in the first pilot season in 2020 (Transportation Committee February 3, 2021 ([ACS2021-TSD-PLN-0002](#)), shared e-scooters provided residents with a convenient, physically distanced mobility option that some residents used to replace short car trips during the 2021 pilot season. Throughout the season, an average of 2,600 trips per day were completed. During the busier part of the season, July and August, daily e-scooter usage averaged approximately 3,200 trips on weekdays and around 4,400 trips on weekends, with some weekends as high as 5,500 daily trips. The average trip distance and duration was about two kilometres and just over fourteen minutes. A low rate of injuries involving the e-scooters were also reported during this season.

Having access to the shared e-scooters allowed some residents an alternative mode of travel to run errands, attend appointments, get to and from shopping, local businesses, and work or school. Some riders reported that they felt safer using e-scooters if they were traveling alone. Others reported using them to connect to other forms of transportation or completing journeys, and to reduce carbon emissions.

It is recognized that improper riding and mis-parking of e-scooters can have an impact on accessibility and safety. Although the percentage of complaints related to e-scooters in relation to the total number of rides is very low, these issues remain a top concern when assessing the effectiveness of the shared e-scooter pilot program.

Staff recommend improvements if the pilot program is to continue in 2022. The changes will help mitigate problems related to sidewalk riding, inappropriately parked scooters, and improve issues reporting, monitoring, and enforcement. The goal is to have a program that respects and ensures a safe environment for pedestrians, while providing residents with access to an alternative mode of transportation that helps reduce car- dependency.

The changes include:

1. Limiting the number of shared e-scooter providers to a maximum of two, selected through a competitive procurement process with a reduced combined total fleet size to 900 maximum e-scooters.
2. Amending the fee structure in the agreements with the e-scooter providers, to fund additional resources required to effectively manage the program, while remaining revenue neutral in accordance with the City's User Fees and Charges Policy.
3. Strengthening agreements with the e-scooter providers aimed at enforcing a high compliance approach to improper riding behaviour and mis-parking.
4. Streamlining the mechanisms used to report and track issues or concerns.
5. Moving forward with sound emission improvements for shared e-scooters in operation.

Financial Considerations

The 2021 pilot was designed to be revenue neutral, with fees collected from the e-scooter providers covering the program costs, as described in the Council

approved Shared Micromobility Framework (2020). The 2022 pilot season will also be revenue neutral, with improvements to the program to be funded through a revised fee structure.

Public Consultation / Input

During the 2021 pilot, staff consulted with specific ward Councillors where the shared e- scooters were deployed and the Accessibility Advisory Committee (AAC).

Business

Improvement Areas (BIAs) were notified of the second season and consulted for potential preferred parking locations within their districts. Staff assembled a

multi-departmental working group and an external accessibility stakeholder working group to discuss on-going concerns and issues during the pilot season. Feedback from Councillors, the working groups, the AAC, and residents (through 3-1-1, the City's

e-scooter e-mail account and the end-of-year survey), along with staff experience have contributed to the development of recommendations for a future pilot season.

RÉSUMÉ

La seconde saison du programme pilote de partage de trottinettes électriques de la Ville d'Ottawa s'est déroulée du 28 mai 2021 au 30 novembre 2021. Pendant cette période, plus de 127 000 usagers ont fait plus de 492 000 déplacements sur l'une des

1 200 trottinettes électriques fournies par trois fournisseurs qualifiés et sélectionnés par la Ville d'Ottawa : Neuron Mobility, Bird Canada et Lime.

Le présent rapport propose une évaluation de la saison 2021 et fournit des recommandations visant à améliorer le programme. Si le Conseil approuve la poursuite de ce programme pilote, les changements proposés seront apportés pour améliorer le programme en 2022. La nouvelle saison pourrait débuter dès le 15 mai, en fonction des conditions météorologiques et après la fin des opérations de balayage des rues, et se poursuivre jusqu'au 15 novembre 2022.

Hypothèse et analyse

Comme on a pu l'observer lors de la première saison du programme pilote en 2020

(Comité des transports, le 3 février 2021 ([ACS2021-TSD-PLN-0002](#)), les trottinettes électriques se sont avérées un mode de transport pratique et propice à la distanciation physique, qui a été utilisé en 2021 par certains résidents pour remplacer de courts trajets en voiture. Tout au cours de la saison, 2 600 déplacements en moyenne ont été effectués chaque jour. Pendant la période la plus active de la saison, c'est-à-dire en juillet et août, on a compté en moyenne 3 200 déplacements en trottinette électrique en semaine et environ 4 400 déplacements la fin de semaine, parfois même jusqu'à 5 500 déplacements quotidiens. La distance et la durée moyennes des déplacements étaient d'environ deux kilomètres et d'un peu plus de 14 minutes. Par ailleurs, un nombre très faible de blessures causées par des trottinettes électriques a été signalé au cours de cette saison.

L'accès aux trottinettes électriques a permis à certains résidents d'utiliser un moyen de transport écologique pour faire leurs courses, aller à des rendez-vous ou encore se rendre dans les commerces locaux, au travail ou à l'école. Certains usagers ont indiqué se sentir plus en sécurité s'ils se déplacent uniquement en trottinette électrique.

D'autres ont déclaré les utiliser pour se rendre vers d'autres moyens de transport ou terminer un déplacement, et pour réduire les émissions de carbone.

Il est admis que la conduite inappropriée et le stationnement inadéquat des trottinettes électriques peuvent avoir des répercussions sur l'accessibilité et la sécurité. Bien que le pourcentage de plaintes relatives aux trottinettes électriques soit faible par rapport au nombre total de déplacements, ces problèmes restent une préoccupation de premier plan si l'on évalue l'efficacité du programme pilote de trottinettes électriques en libre-service.

Le personnel recommande donc des améliorations si ce programme pilote devait se poursuivre en 2022. Les changements apportés contribueront à atténuer les problèmes de circulation sur les trottoirs et de stationnement inapproprié des trottinettes, et aideront à améliorer le signalement et le contrôle des problèmes, et l'application de la réglementation en la matière. L'objectif est de compter sur un programme qui respecte et garantit un environnement sûr pour les piétons, tout en offrant aux résidents un moyen de transport écologique qui contribue à limiter la dépendance à l'automobile.

Voici les changements qui seront apportés :

1. Limiter à deux le nombre maximal de fournisseurs de trottinettes électroniques, qui seront sélectionnés par le biais d'un processus d'approvisionnement concurrentiel, pour un parc total combiné de 900 trottinettes au maximum.
2. Modifier le barème tarifaire dans les ententes avec les fournisseurs de trottinette électronique, de manière à financer les ressources supplémentaires requises pour gérer efficacement le programme, tout en évitant les incidences sur les recettes, conformément à la politique municipale sur les droits et redevances d'utilisation.
3. Renforcer les ententes conclues avec les fournisseurs de trottinette électronique afin de mettre en place une approche stricte en matière de lutte contre la conduite inappropriée et le stationnement inadéquat.
4. Simplifier les mécanismes de déclaration et de suivi des problèmes.
5. Mettre en place des améliorations efficaces face aux émissions de son des trottinettes électroniques en fonctionnement.

Considérations d'ordre financier

Le programme pilote de 2021 a été conçu de manière à éviter les incidences sur les recettes, les droits perçus par les fournisseurs de trottinette électronique devant couvrir les frais encourus, comme le décrit le cadre de services partagés de micromobilité (2020) approuvé par le Conseil. La saison pilote de 2022 n'aura aucune incidence sur les recettes, les améliorations au programme devant être financées grâce à un barème tarifaire révisé.

Consultation publique et commentaires

Au cours du programme pilote, le personnel a consulté les conseillers des quartiers où étaient déployées les trottinettes électriques en libre-service et le Comité consultatif sur l'accessibilité (CCA). Les représentants des zones d'amélioration commerciale (ZAC) ont été avisés de l'existence de la seconde saison et ont été consultés au sujet des emplacements des places de stationnement devant être privilégiés dans leur secteur. Le personnel a constitué un groupe de travail

représentant plusieurs directions générales et un groupe de travail de parties prenantes externes provenant du secteur de l'accessibilité, afin de discuter des préoccupations et des problèmes constatés au cours de la saison pilote. Les commentaires des conseillers municipaux, des groupes de travail, du CCA et des résidents (par l'intermédiaire du 3-1-1, du compte courriel des trottinettes électroniques et du sondage de fin d'année), conjugués à l'expérience des membres du personnel, ont contribué à la formulation de recommandations pour une prochaine saison pilote.

BACKGROUND

In January 2020, the Province of Ontario initiated a five-year pilot program for electric kick scooters allowing municipalities to opt in if they choose to permit them within their jurisdiction. In June 2020, Council enacted the Electric Kick Scooter By-law

No. 2020-174, authorizing the use of e-scooters (private and shared) on roads, pathways, parks, and other property under the control of the City. Council also approved the Electric Kick Scooter Strategy and Pilot Project as well as conditions and fee structure related to Bike Sharing and Electric Kick Scooter Sharing Agreements with Service Providers ([ACS2020-PIE-RHU-0007](#)). The first season of Ottawa's shared e-scooter pilot ran from July 16, 2020, to October 31, 2020, with a total fleet of 600 e-scooters provided by three companies (Bird Canada, Lime and Roll).

For the 2021 season (TRC February 3, 2021, [ACS2021-TSD-PLN-0002](#)), the City undertook a competitive procurement process that included a Request for Proposal (RFP). As a result, the City entered into agreements with three companies (Neuron Mobility, Bird Canada, and Lime) to provide a combined fleet size of 1,200 e-scooters. In line with the 2020 pilot, the 2021 pilot Agreements regulated fleet size, fees, speed, geofencing, time of use, and parking.

Throughout the 2021 season, staff monitored ridership levels, origin-destination patterns, parking, e-scooter utilization, incidents, and complaints. Staff tracked resident and Councillor feedback through 3-1-1 and the City's e-scooter e-mail account, weekly data reports from the e-scooter providers and City data collection activities. In collaboration with the e-scooter providers, many in-service issues were addressed through operational changes, increased public education/awareness

campaigns and communication activities, and regular meetings with external and internal stakeholder groups.

It is recognized that mis-parking and improper riding are top concerns related to impact on safety and on accessibility when assessing the effectiveness of the shared e-scooter pilot program in Ottawa. Although the number of complaints compared to the total number of rides is very low (less than 0.5 per cent of total rides), the end-of-season survey revealed that not all incidents of mis-parking or improper riding were reported.

Therefore, improving the program to minimize the accessibility impacts is a necessity for moving forward with a third season.

DISCUSSION

2021 Pilot Season

This report provides an assessment of the second season of the e-scooter pilot. This assessment is based upon staff observations, monitoring of trip and parking data, 3-1-1 reports, e-mails from residents, responses to the City's e-scooter end-of-season survey, ongoing communication with participating ward Councillors, consultation with key external stakeholders and participating City Departments, feedback from the Ottawa Police Services and By-law and Regulatory Services, and final reports from the three shared e-scooter operators.

E-Scooter Program Characteristics

The program ran from May 28 to November 30, 2021. Shared e-scooters were available to rent from 6 AM to 11 PM each day. It operated with a fleet of 1200 e-scooters provided by three companies: Neuron Mobility (470), Bird Canada (410) and Lime (320). Shared e-scooters were available in an expanded deployment area centered around the

inner urban core of the city, as depicted in Figure 1 below.

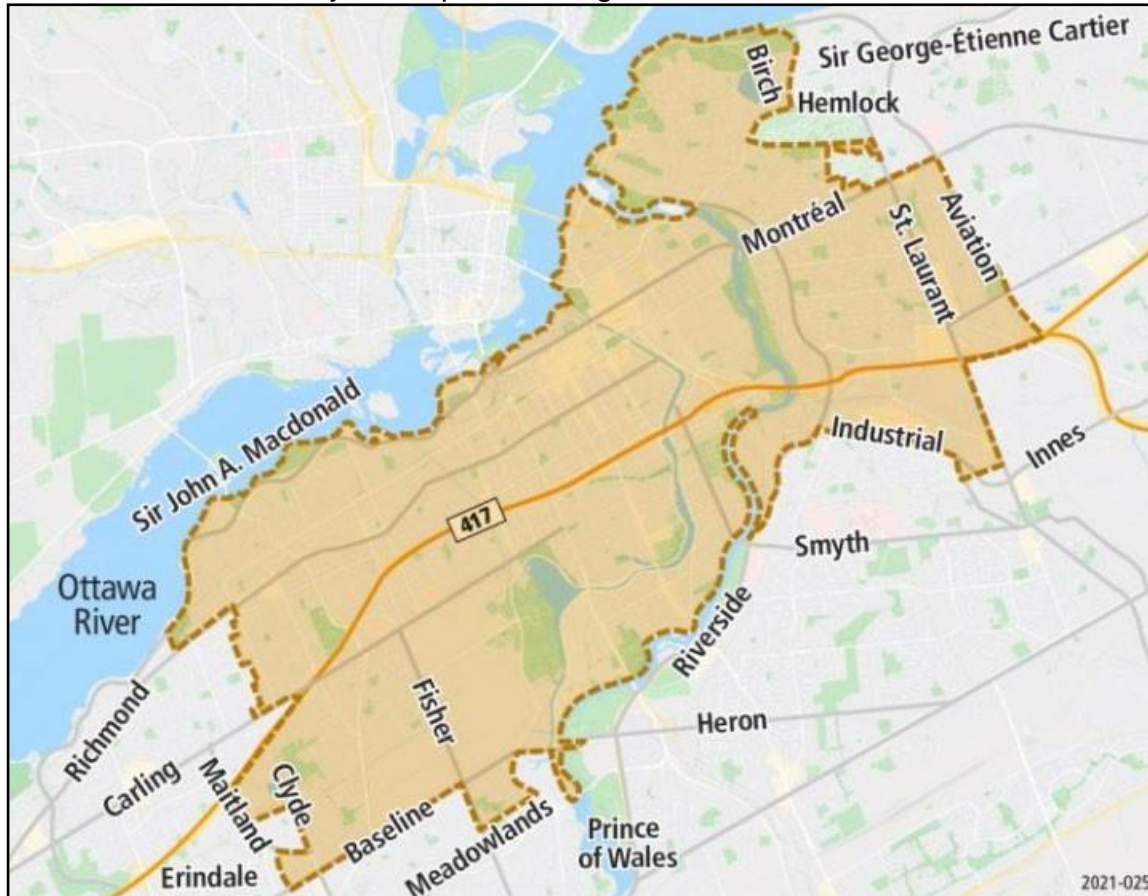


Figure 1: 2021 Season Deployment Area

As per the first season and in accordance with the City of Ottawa's Electric Kick-Scooter By-law, shared e-scooters were allowed to be parked in the City's right of way in the furniture zones next to trees, light poles, street furniture and bike parking while maintaining a continual throughway clearance for pedestrian traffic. Parking was also allowed in designated demarcated parking locations that the City installed later in the season. Some localized areas were geofenced as "no parking zones" which prohibited rides from ending in these areas.

E-scooters were not permitted to be ridden on sidewalks or on the National Capital Commission (NCC) pathways. NCC pathways and parks were geofenced which stopped shared e-scooters from entering these areas. Where feasible, providers also set up sidewalk "no ride zones" on main corridors to minimize sidewalk riding.

The operating speed of the shared e-scooters was limited to 20 kilometres per hour. To ensure the comfort and safety of other transit customers, e-scooters were geofenced to maximum 12 kilometres per hour on multiuse pathways through transit stations.

Discussions between the providers and the University of Ottawa also resulted in a speed limit of 15 kilometers per hour throughout the campus.

All shared e-scooters were outfitted with mandatory bells, kick stands, front and rear lights, and brakes in accordance with the provincial pilot regulation.

E-scooter Trip Characteristics

In 2021, more than 127,000 unique riders took approximately 492,000 rides. A total of 985,000 kilometres were travelled throughout the deployment area.

On average, approximately 2,600 trips were completed daily. In July and August, the busiest part of the season, e-scooter daily trips averaged approximately 3,200 on weekdays and 4,400 on weekends with some weekends as high as 5,500 trips.

Table 1 provides the average breakdown per month for the 2021 season.

Month	Average E-Scooter Trips per Day	Average E-Scooter Trips per Day (Weekdays only)	Average E-Scooter Trips per Day (Weekends only)
June	2,689	2,435	3,387
July	3,608	3,161	4,701
August	3,563	3,333	4,124
September	3,231	2,846	4,290
October	2,117	2,105	2,142
November	651	632	703
Season Average	2,630	2,403	3,190

Table 1: Monthly Trip Averages

For comparison, the shorter 2020 season which had a smaller fleet size of 600

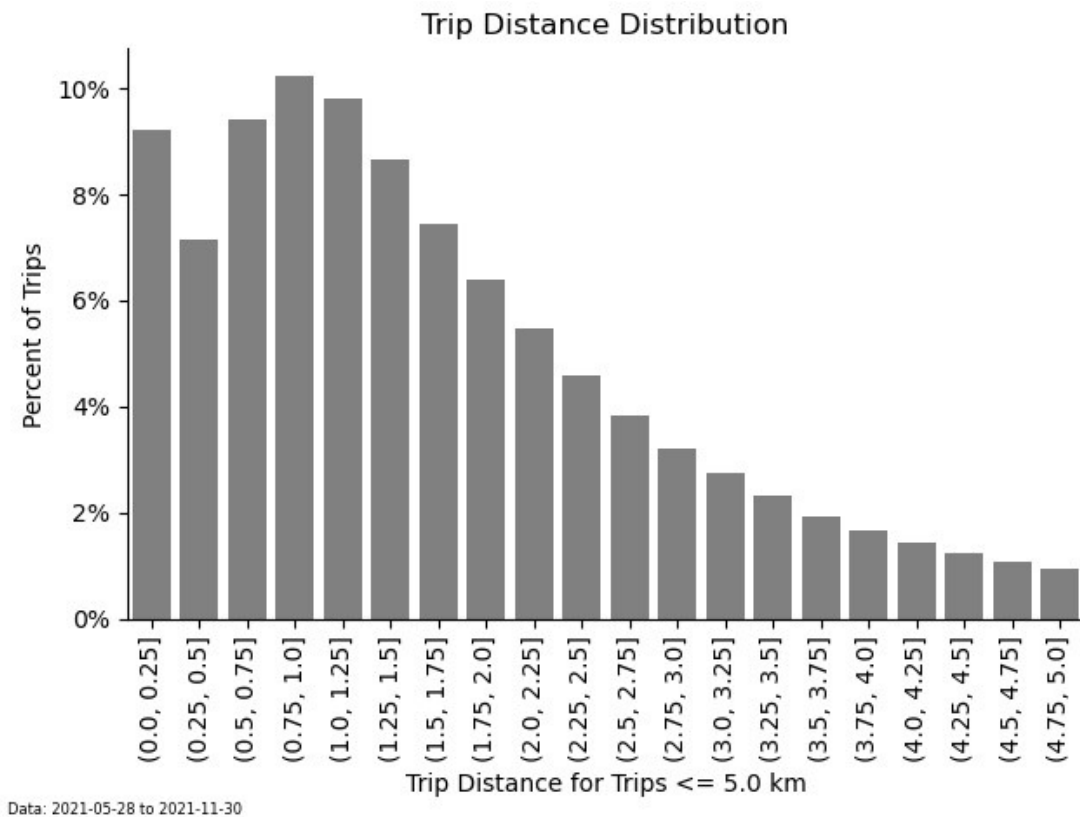


Figure 3: Trip Distance Distribution, 2021

See Document 1 “2021 Shared E-Scooter Season Data Analysis” for graphs of *Trip Duration and Trip Speed*.

Trip Purpose

Staff conducted an online end-of-season survey which provided insight on the benefits and issues associated with e-scooters. The survey ran from November 3 to December 1, 2021. There was a total of 1,732 respondents (down from 4,448 respondents in 2020). Survey results indicated that 38 per cent of respondents rode an e-scooter in 2021; and 23 per cent of respondents rode during both 2020 and 2021 seasons. Only 3 per cent rode an e-scooter in 2020 but did not in 2021; and 16 per cent of respondents were new to riding e-scooters in 2021.

Table 2 provides survey results on the most common reason for riding an e-scooter in both 2020 and 2021.

What were the most common reasons you used a shared e-scooter? (select all that apply)	2020	2021
Get to/from social activities	49%	63%
For fun/leisure	76%	57%
Get to/from dining	33%	49%
Run errands/appointments	36%	48%
Get to/from shopping/local business	34%	47%
Get to /from work	18%	34%
To try out the service	51%	34%
Get to/from school	5%	12%
Other	1%	3%

Table 2: Reasons for E-scooter Usage

Other reasons that respondents reported using e-scooters included: connecting to and from other transportation modes, completing a journey, to reduce vehicle emissions, exploring Ottawa as a tourist or to show friends around, and to get to the gym. As shown in Table 2, over last year, there was an increase in ‘utility’ type trips and there was a decrease in trips for fun or leisure or to just try them out. See Document 6, “City of Ottawa E-Scooter Survey Results”, for complete survey results.

Time of Day Usage

Figure 4 below illustrates the time-of-day e-scooters were used during the 2021 season.

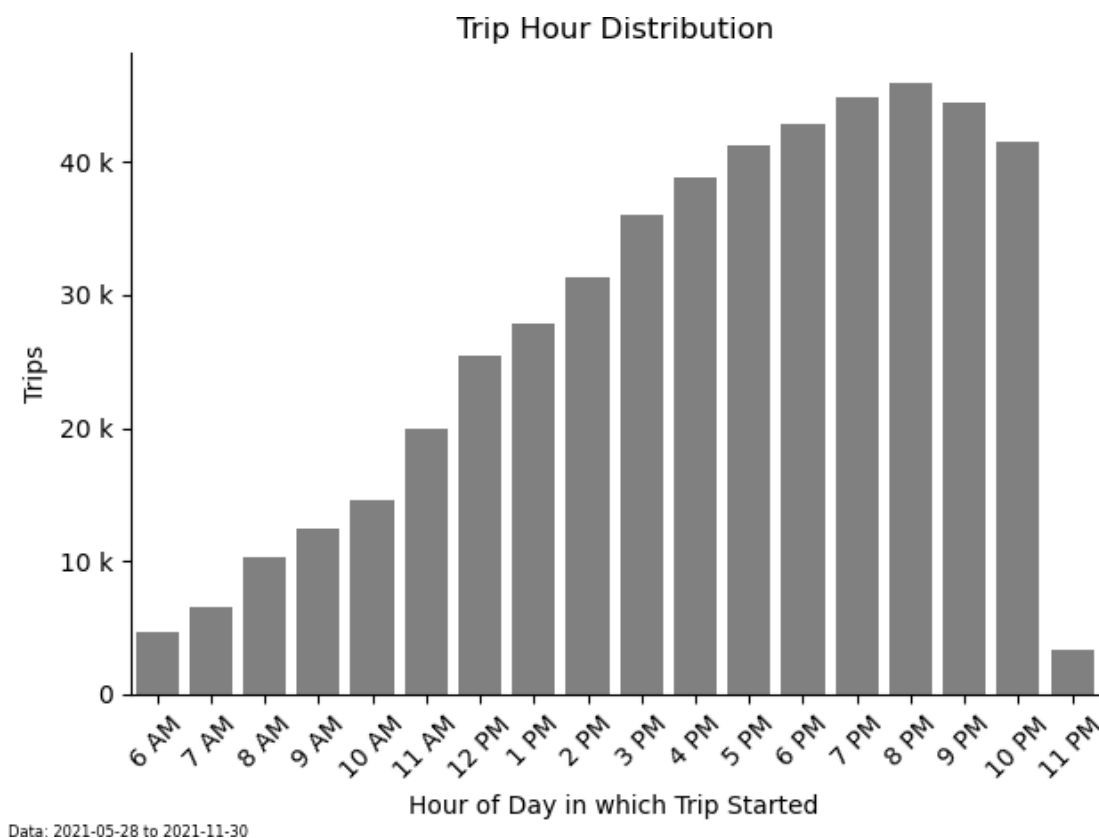


Figure 4: Trips by Hour

E-scooters were available for rent from 6 AM to 11 PM, a total of 17 hours. The most popular period to travel was between 12 PM to 10 PM with a peak between 6 PM to 9 PM.

There have been requests in both the 2020 and 2021 seasons to have the e-scooter services available for 24 hours. These requests came from the service providers and a few residents. Providers have a financial prerogative and some riders have indicated interest in having the service available to commute home after late night shift work.

However, an expansion of e-scooter service hours has not been a major theme in the feedback received during the 2021 pilot. At Transportation Committee in February 2021, staff committed to investigate 24-hour e-scooter availability in other cities. A

literature review was undertaken of North American cities with e-scooter programs, on usage, safety, and where possible time of day. Research revealed a mix of restricted service availability and 24-hour service availability. The literature also highlights the lack of safety equipment, lack of user experience, and drug/alcohol use as major contributing factors to e-scooter injuries. There are on-going concerns about an increased level of risk if scooters were allowed to operate 24-hours. Therefore, for the City of Ottawa's pilot program, the current limited e-scooter service availability is appropriate. See Document 2, "Time of Day Service Availability Literature Review".

Demand for E-Scooters

The high volume of 492,000 trips during the 2021 pilot season indicates that there is a demand for the e-scooter program. Not only did the total number of trips increase in 2021 compared to 2020 (although 2021 had a longer season with 79 additional days), the increase in average daily rates of e-scooter trips described above confirms an increase in demand since the previous season.

Residents have expressed their support for the pilot through emails that reflected upon the e-scooters being easy, invaluable, convenient, fun, an alternative to using a car and how the e-scooters support physical distancing during the pandemic.

The number of daily trips versus the average number of available e-scooters was analyzed to see if there was a trend that could help inform future decisions about fleet size threshold. Figure 5 below provides a summary of e-scooter utilization (trips per scooter per day) during the 2020 and 2021 seasons.

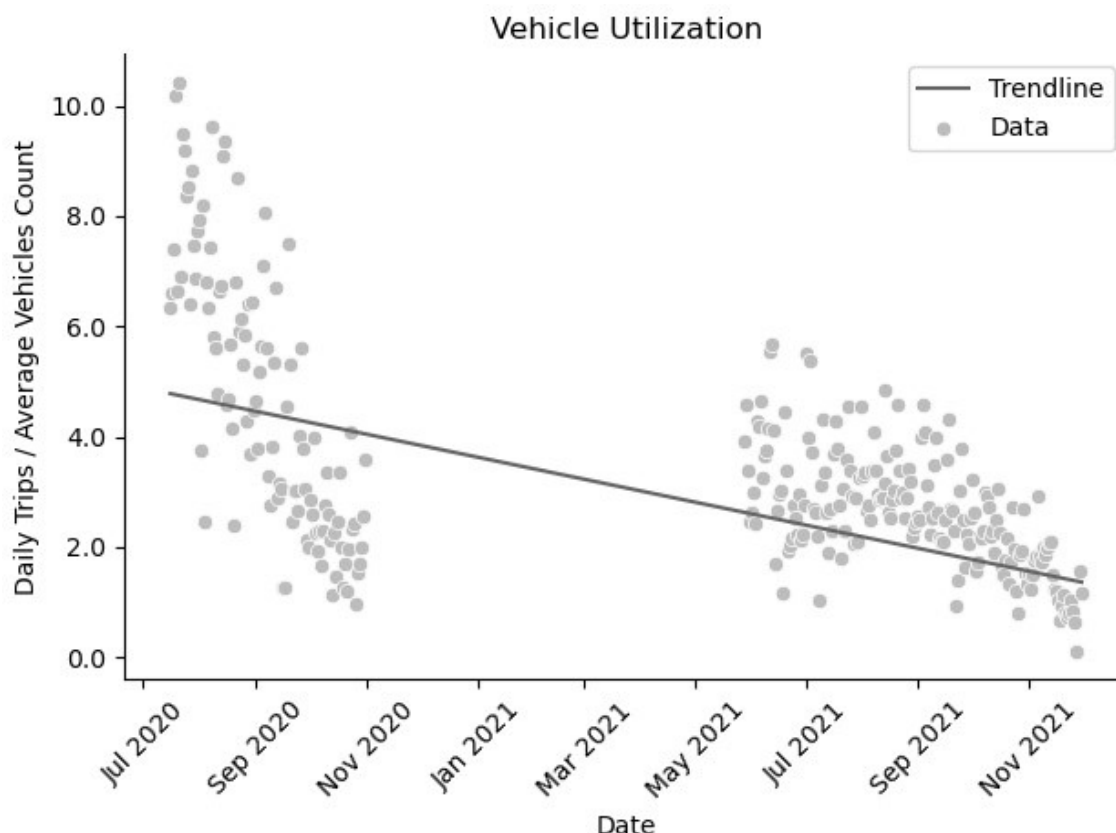


Figure 5: 2020 and 2021 Vehicle Utilization

There was a decrease in daily usage rate per scooter in 2021 (compared to 2020), from 4.69 to 2.64; however, the fleet size was doubled from 600 to 1200, therefore the overall average daily total number of trips did increase.

Alignment with Mobility Objectives

E-scooters advance the City's broader goals of providing more sustainable mobility choices for residents as well as supporting Green House Gases (GHG) reduction goals by offering alternatives to automobile travel.

Seventy-four per cent of 660 respondents to the 2021 E-Scooter Survey who rode e- scooters noted that the introduction of e-scooters changed the way they travelled.

Table 3 below illustrates the response in 2021 to the question of "How did e-scooters change the way you travel?", compared to 2020. Respondents could select all that applied.

Did the introduction of shared e-scooters change the way you travel?	2020	2021	Difference
I walked more	29%	40%	11%
I walked less	35%	26%	-9%
I biked more	6%	16%	10%
I biked less	9%	12%	3%
I took transit more	6%	19%	13%
I took transit less	27%	24%	-3%
I drove more (as a driver)	1%	0%	-1%
I drove less (as a driver)	46%	60%	14%
I drove more (as a passenger)	0%	1%	1%
I drove less (as a passenger)	32%	49%	17%
Other	7%	6%	-1%

Table 3: E-scooters changing transportation choices, a comparison of the 2020 and 2021 seasons

Survey results indicate that many shorter trips by e-scooter replaced a trip that would have been taken by automobile. Sixty per cent of respondents indicated that they drove less as a driver and 49 per cent indicated that they drove less as a passenger.

Of the respondents who rode e-scooters, 658 responded to the follow-up question “Why did you take an e-scooter rather than another mode of transportation?”. Thirty-nine per cent reported taking an e-scooter to avoid the cost and inconvenience of parking a car.

Document 6, “City of Ottawa E-Scooter Survey Results”, outlines the complete survey results.

Facilitating Transit and Multimodal Trips

One of the goals for introducing e-scooters was to facilitate first and last kilometre transit trips. As was the case during the 2020 season, transit ridership during the pilot period was significantly below normal due to the COVID-19 pandemic. This likely impacted the use of e-scooters for the first and last kilometre of transit trips.

According to trip data measured by counting individual e-scooter trips starting or ending close to transit stations within the e-scooter operating area, approximately 4 per cent (approximately 7,680 trips) of all trips were combined with transit trips. This represents an increase compared to the 2020 season which saw approximately 2 per cent (approximately 4,760 trips) of all e-scooter trips combined with transit trips. First/last kilometre trips to/from transit stations averaged between 1.5 and 3 kilometres; with longer distance trips tending to occur at stations further from downtown.

Many survey respondents indicated that at least one of their e-scooter trips was transit linked. The questions in the survey resulted in very similar responses relating to transfers and multimodal trips between the 2020 and 2021 seasons. Thirty-three per cent of survey respondents reported taking a shared e-scooter to connect to or from another form of transportation at least once. This is similar to the rate from the 2020 e-scooter survey (35 per cent). Ninety-two per cent of respondents who reported connecting to another mode indicated that they connected to transit (bus or train). This is also similar to the rate from the 2020 e-scooter survey (89 per cent).

Health and Mobility Considerations

From Table 3, the survey indicated that 40 per cent reported that they walked more with the introduction of e-scooters. This is up from 29 per cent in 2020.

Individual comments in the survey and e-mails from riders demonstrate that e-scooters continue to provide greater mobility. Similar to the first season, riders who would have walked otherwise, were able to travel further with an e-scooter to access additional shops and services, accomplish their daily tasks more efficiently and conveniently, reach destinations that may not be convenient by transit, and feel more comfortable with evening travel options. One respondent commented in the survey that they felt safer using the e-scooter at night to and from the O-train station. Other comments included that e-scooters were an environmentally friendly mode of transportation while allowing for social distancing during the pandemic.

Support for Local Businesses

Trip data demonstrates that 45 per cent of e-scooter trips started in a Business Improvement Area (BIA) and 42 per cent ended in a BIA. This indicates that shared e-scooters brought residents and visitors to local businesses and supported Ottawa's economic recovery during the COVID pandemic.

Of the survey respondents who visited local restaurants and businesses, 26 per cent indicated that they typically spent over 100 dollars, 19 per cent spent between 50 and 100 dollars, and 17 per cent spent between 21 and 50 dollars. The remaining 38 per cent indicated they spent less than 20 dollars or responded with "Other".

The shared e-scooters also supported tourism as respondents noted that the e-scooters were a convenient option for them to get around and explore. Respondents also indicated that they took their visiting family members and friends by e-scooter when touring Ottawa and visiting local business areas.

Feedback

The City received feedback throughout the season through a variety of means including the City's E-scooter program e-mail account (escooter@ottawa.ca), 3-1-1, from Councillors as well as through social media and traditional media. Tables 4 and 5 below provide a summary of the complaints and/or inquiries received by the City directly.

E-scooter Program E-mail Complaints* / Inquiries: May 28 to November 31, 2021	
E-mail total	422
Complaints within e-mails	633
Unique individuals	161

**Complaints were mostly about mis-parking, accessibility concerns and poor riding behaviour.*

Table 4: Email Complaints / Inquiries

3-1-1 Complaints / Inquiries: May 28 to December 31, 2021	
Transfers to Vendor	17
Information Requests	38
Service Requests	93
Total	143

Note that some "Information Requests" were also captured as "Transfers to Vendors".

Table 5: 3-1-1 Complaints / Inquiries

Many complaints or inquiries were sent to the providers directly. The providers could be contacted via their customer service phone number, a local e-mail address that went directly to the local operations team or through their apps as mandated in the Service Agreements. Each e-scooter had an English and French sticker with the company's contact information and one provider had a QR code on each of their e-scooters, allowing residents to report issues directly to them without requiring their app. Table 6 provides a summary of the complaints / inquiries received by each provider.

Provider	Mis-Parking	Sidewalk Riding
Bird Canada	89	8
Lime	215	2
Neuron	1,139	0
Total	1,443	10

Table 6: Provider Complaints / Inquiries

It should be noted that the above data only reflects incidents that were reported. Most respondents to the end-of-season survey noted that they did not report either mis- parked scooters or occurrences of sidewalk riding.

The City also received valuable feedback through engagement with an Accessibility Stakeholder group established specifically for this pilot, the City's Accessibility

Advisory Committee as well as from staff in the City's Accessibility Office. A summary of the feedback collected through these consultations is described further below.

Finally, as described throughout this report, the City received feedback through the end- of-season survey.

Issues Management During the 2021 Pilot Season

Staff collaborated with a multi-department staff working group (bi-weekly), the external accessibility stakeholder working group (monthly), with e-scooter operators (daily) and Ward Councillors' offices (as needed) to improve practices, address issues and innovate throughout the 2021 season to better serve residents.

The following section describes the key issues encountered and actions taken to address them.

Mis-parked E-Scooters

Issue: The primary issue of the 2021 season was the mis-parking of e-scooters. The Electric Kick-Scooter By-law permits e-scooters to be parked within the furniture zone next to trees, light poles, street furniture and bike parking while maintaining a continual thoroughway clearance for pedestrian traffic. The challenges in the 2021 season included streets in the e-scooter deployment area with narrow sidewalks or no furniture zones, a lack of user compliance in the furniture zone areas; and the allowance of up to one hour for providers to respond to mis-parked e-scooters. E-scooters left obstructing path of movement on sidewalks, or off to the side of narrow sidewalks, blocking bus stops or pedestrian crossings are a safety concern for all pedestrians, and in particular people with low vision or who are blind, the elderly, wheelchair or other mobility device users and strollers.

According to the end-of-season survey, 83 per cent of respondents encountered mis-parked e-scooters (69 per cent in 2020), of which 77 per cent left them where they were and only 16 per cent reported them to the City or e-scooter providers.

Action Taken in 2021: City staff and the providers worked to increase public awareness of where to correctly park e-scooters. City-led awareness initiatives included communications through social media posts as well as a video and poster campaign.

Provider-led initiatives included education events (scoot safe, helmet giveaway), hang tags on each of the scooters with proper parking guidelines, in-app messaging and an industry coordinated messaging campaign including a mid-season survey of e-scooter users. They also had foot patrols interacting with riders, proactively correcting mis-parked e-scooters and responding to complaints of mis-parked e-scooters. The providers audited the required end-of-ride photos leading to fines or suspensions for repeated infractions. There were also incentives for riders to park in preferred parking locations that were identified in the providers apps and the five physically designated parking locations that the City installed later in the season. Some new localized “no parking zones” were established in all providers’ apps to address specific concerns that were raised. Problem areas were identified by City staff on walkabouts as well as a review of resident and Councillor complaints. These areas were discussed at weekly meetings with the providers to develop localized parking solutions. As the season progressed there was improved parking compliance as evidenced through less complaints and on-site observations of key corridors conducted by City staff (see data summaries in Document 1). However, City staff recognize the need for improvements as any improperly parked e-scooter is an accessibility concern.

Sidewalk Riding

Issue: The City does not permit e-scooters to be ridden on sidewalks however sidewalk riding has been reported and observed. Although the number of complaints decreased over the course of the season, which could be attributed to several awareness blitzes and initiatives, the issue remained. Residents and stakeholders have voiced concerns about safety and discomfort when encountering e-scooters operating on sidewalks.

According to the end-of-season survey, 79 per cent of all survey respondents encountered sidewalk riding, of which 67 per cent did not report to the City, the providers or the police and 64 per cent felt uncomfortable and unsafe. Thirty-one per cent of respondents believe that riding behaviour has improved since the 2020 season and 30 per cent believe that it improved over the course of the 2021 season alone.

Action Taken in 2021: City staff and the providers worked to correct sidewalk riding through geofencing of key corridors where feasible and increasing public awareness of the rules through both City-led and provider-led initiatives. The providers added

stencils or placed stickers in large print near or on the foot board of the e-scooters indicating “no sidewalk riding”. City-led messaging campaigns included the installation of wind signs in key deployment areas, social media posts (Twitter and Facebook) and a video and poster campaign. Provider-led initiatives included in-app messaging, education events (scoot safe, helmet giveaway, etc.), foot patrols, mid-season survey of e-scooter riders, and a coordinated industry wide messaging campaign. The providers also demonstrated a decreased tolerance for sidewalk riding which resulted in rider suspensions from their apps when this behaviour was witnessed by their staff. The Ottawa Police Services also conducted monthly enforcement ‘blitzes’ targeting poor riding behaviour. Problem areas were identified by a review of feedback from Councillors and residents and discussed at weekly meetings with the providers. Finally, providers have piloted various sidewalk riding technologies on e-scooters at various times throughout the season however this technology was new and still under development during the 2021 season. The City installed Miovision cameras to collect data which also indicated decreased sidewalk riding in certain locations as the season progressed (see Document 1, “2021 Shared E-Scooter Season Data Analysis” for Miovision data).

Sound Emissions

Issue: Accessibility stakeholders have concerns around interactions with e-scooters that do not have any sound emission to notify pedestrians that a motorized vehicle may be approaching or is in the vicinity. Standards for micromobility device sound emissions have not yet been developed nor implemented across the industry worldwide. There are therefore few resources available. Ottawa may be the first city in North America to pilot sound emissions. This includes many challenges to work through such as the sound itself, frequency/amplitude/pitch/volume of the sound with different e-scooter operating speeds and street contexts, and when e-scooters should or should not emit a sound.

Piloted sounds were tested but resulted in concerns for riders that included frustration with a constant noise and belief that there might be something wrong with the e-scooter.

Action Taken in 2021: Two of the providers, Neuron Mobility and Bird Canada, piloted sound emissions on a small portion of their overall e-scooter fleet size. City staff engaged the accessibility stakeholder group to assess the sound emission pilots. Two in-person demonstrations of different sound emissions took place. Although consensus was not reached with respect to the type of sound, stakeholders

provided valuable feedback that will inform future recommendations. More information about the pilots can be found in the providers end-of-season reports located in Document 3 and 5.

Issue Reporting

Issue: The variety of ways one could submit a general inquiry or report an issue, which included through the City or to each of the e-scooter providers directly, provided many options for individuals to choose but made it challenging for data collection and reporting consistency. These challenges include a lack of sufficient details, an overlap in data sources, and multiple data formats that are not easy to work with. It also made it challenging to verify and confirm if e-scooter providers were meeting the requirements of their service agreement with respect to response times to address an identified concern. It was also noted that there were delays when residents chose an e-mail channel to contact the City. Based on current operating resources, phone calls to 3-1-1 are prioritized over e-mails which are not responded to immediately, making this a less efficient mechanism to report concerns that require a timely response. These delays were also noted when residents chose to report issues, to the e-scooter program's e-mail account or directly to ward Councillors.

Action Taken in 2021: The City requested the addition of local e-mail addresses specifically for the provider's local operational teams (as opposed to routing via their corporate-wide customer service accounts) to enable improved communication links and timeliness. In addition to the in-app reporting systems each provider was mandated to have, one of the e-scooter providers also included a QR code on each scooter, allowing residents to report issues directly to them without requiring their app. Each provider also added stickers to their e-scooters with their contact information written in Braille.

Effective Injury Prevention and Reported Injuries

Effective Injury Prevention

As noted in the 2020 E-scooter report, Ottawa Public Health's E-Scooter Injury Epidemiology study (Electric Kick Scooter Strategy and Pilot Project, Document 3) cautioned that introducing e-scooters could result in injury rates significantly beyond those experienced by people walking or cycling. Staff acted to mitigate this injury risk in the 2021 season in the following ways:

- **Reducing Speed Limits:** While the provincial pilot permits e-scooters to operate at a maximum speed of 24 kilometres per hour, Ottawa's Electric Kick-Scooter By-law required the providers to reduce the vehicle speed limit to 20 kilometres per hour. Providers were also required to implement geofencing to further reduce the speed to 12 and 15 kilometres per hour within certain areas and high pedestrian corridors (such as around transit stations or streets within the University of Ottawa campus) for rider safety and to comply with speed limits on multi-use pathways shared with pedestrians.
- **Time of Day Limits:** Through the 2021 Service Agreements, shared e- scooters were permitted to operate from 6 AM until 11 PM. This time limit was implemented in both the 2020 pilot and 2021 pilot to reduce the risk of injury from night riding when visibility is reduced.
- **Communication with Transit Operators:** Transit Services Department embedded an e-scooter user awareness into the new bus operator training in 2020. It is about sharing the road with e-scooters and adapting to their operating habits on the roadways and added vulnerability. This training includes all new bus operators. In addition, during the spring safety campaign, transit operations are reminded of the increase in vulnerable road users (e- scooters users included) during the spring and summer months.
- **Public outreach – Education and Helmet Giveaways:** COVID-19 protocols required staff and operators to refine the operator funded education and helmet giveaway initiatives. Operators increased in-app education and provided one-on-one, physically distanced in-person education on safe and courteous e-scooter riding and parking in locations of high ridership, such as Elgin Street, Bank Street, Preston Street, the Glebe, and the ByWard Market. Providers were also able to hold helmet give-away events and one provider included helmets on each e-scooter for riders to use, with incentives to help encourage their use.

Reported Injuries

Staff are aware of 44 verified incidents, 16 of which are noted to have received medical attention. There were also 27 unverified incidents which may or may not have required medical attention. A verified incident is when the rider provides details on the incident when the provider follows-up directly with them, whereas an unverified incident is when the rider does not respond or provide additional details when the provider follows-up.

Prior to April 2021, e-scooter injuries were coded in hospital data systems as W05.00 “Fall involving wheelchair”. This coding was updated on April 1, 2021, to W02.08 “Fall involving other specified sport equipment”. This code includes all falls from a scooter, including electric, motorized, and non-motorized vehicles used for sports, leisure, or locomotion (i.e., not exclusive to e-scooters). The data indicates that year over year, the W05.00 has not significantly changed, however, the W02.08 code has seen an increase in 2020 and 2021. Forty-four incidents were recorded for 2021 although the date is only from April to June. This is the latest data set available. The Hospital data is released quarterly and is typically lagged by eight-10 months. See Document 7, “Ottawa Public Health - Summary of e-scooter relevant emergency department visits at Ottawa hospitals”.

Table 7 illustrates the data from 2016 to 2021 under the W02.08 code (which is not exclusive to e-scooters).

Age	2016	2017	2018	2019	2020	2021*
16-19	5	4	6	12	8	6
20-24	3	5	6	7	9	9
25-29	2	6	2	2	5	11
30-34	0	2	2	3	7	1
35-39	2	3	2	2	5	5
40-44	2	1	1	4	5	3
45-49	4	2	0	2	2	3
50-54	2	3	3	1	5	1
55-59	3	0	0	3	2	5
Total	23	26	22	36	48	44

*Data is only for April to June 2021.

Table 7: Ottawa Public Health – Summary of e-scooter relevant emergency department visits at Ottawa hospitals

Localized Solutions

ByWard Market

During the 2021 season, the ByWard Market continued to be one of the busiest areas for the start and end of e-scooter trips. From the start of the season, e-

scooters were only permitted on York Street and all other streets in the ByWard Market area were geofenced as “no ride zones”. The York Street recommendation was carried forward from the 2020 season. York Street allowed riders access to and from the ByWard Market. From there the e-scooters could be parked and riders could continue to explore the area by foot.

Glebe and Golden Triangle Neighbourhoods

During the 2021 season, there were increasing number of complaints that e-scooters were being mis-parked in residential areas with no furniture zones. Many complaints highlighted the Glebe (east and west of Bank Street) and the Golden Triangle neighbourhoods. Staff requested that these areas be implemented with “no parking zone” geofencing. Essentially, this prohibited e-scooter rides ending in these zones. If an e-scooter was left in a “no parking zone”, the rider was charged a running fee of 20 minutes, which more than doubled the cost of a typical ride (averaging just over 14 minutes). After this, the provider was notified by a back-end alert system that they have an e-scooter in a “no parking zone” to collect. The 20 minutes of idle was implemented as a time allowance to the rider because the e-scooter provider had no way of knowing remotely whether a rider was idling for a valid reason or whether the e-scooter was abandoned. After implementation of these ‘no parking zones’, complaints for mis- parking in these areas decreased. There was however an increase of complaints from riders that e-scooters were harder to find. For the 2022 e-scooter season, staff recommend that these areas be geofenced and this tool potentially be extended to other areas where there are no furniture zones as required. Providers would however be asked to also locate appropriate parking locations within the right of way, such as sufficiently sized bulb-outs, that could be identified through geofencing (or other technologies) as a preferred parking location in their app, within the larger no parking zone areas so that the convenience of parking close to a destination would not be lost.

Lansdowne

Providers can reach out to organizations and develop agreements for operations outside of the City infrastructure and right of ways. Bird Canada for instance formed an agreement with Lansdowne Retail Limited Partnership where they were the only provider permitted to operate on Ottawa Sports and Entertainment Group (OSEG) operated property at Lansdowne.

By-law and Regulatory Services and Ottawa Police Service Support

The City's Electric Kick-Scooter By-law (No. 2020-174) regulates the operation and use of electric kick-scooters in the city. It reinforces the provincial regulation and establishes parking regulations and includes set fines for various infractions like riding on a sidewalk or parking where not permitted. Enforcement of any 'moving violations' (like riding on a sidewalk) is undertaken by the Ottawa Police Service and By-law and Regulatory Services has the ability to enforce other provisions of the by-law

Ontario Regulation 389/19 under the *Highway Traffic Act* (HTA) allows for cities to pilot the use of e-scooters in Ontario. Provincial regulations specific to pilot projects prohibit the use of simplified offence notices for moving violations (such as a speeding ticket) under the HTA. Charges related to the misuse of e-scooters under the HTA would require significantly more administrative effort and time than a typical traffic offence notice. While the use of e-scooters is still considered a pilot project under the HTA, the City's by-law remains the best enforcement avenue.

By-law and Regulatory Services

In both the 2020 and 2021 e-scooter seasons, the shared e-scooter providers were responsible for monitoring and relocating mis-parked e-scooters. By-law and Regulatory Services would investigate some violations at the request of Road and Parking Services or Transportation Planning. Some service requests were however directed immediately to By-law and Regulatory Services in error, and as a result, 14 calls were received by them in 2021. All calls were investigated and resulted in verbal warnings or "patrol negatives" meaning the officer attended but the e-scooter or alleged violation were no longer present. In instances where calls were sent to By-law and Regulatory Services in error, those calls were re-directed to 3-1-1 for response. To introduce enforcement by By-law and Regulatory Services in a future pilot, additional resources are required. Staff recommendations for additional enforcement activities are discussed further in this report.

Ottawa Police Service

The Ottawa Police Service (OPS) does not have the resources to allocate officers to perform e-scooter enforcement daily. OPS's traffic unit has been able to carry-out monthly blitzes where they issued warnings or fines under the City's By-law. Initially they were focusing on using the opportunities to educate the riders with a warning, but with the implementation of the highly visible messaging on each of the scooters

part way through the season, more fines were issued. At the end of the season, they reported 14 tickets (up from nine in 2020) and 10 warnings (up from five in 2020) for moving violations under the City's by-law, with set fines ranging from \$80 to \$150 depending on the infraction.

COVID Protocols

To address public health concerns during the pandemic, e-scooter providers were required to include Ottawa Public Health guidelines on COVID Wise practices (sanitizing hands, staying home if sick, maintaining physical distancing) in-app and to sanitize their e-scooter fleet daily. During the provincial lockdown early in the season, in-app messaging notified riders that the e-scooter was supporting essential trips only. This notice was taken down once lockdown restrictions were lifted.

Riders reported choosing e-scooters instead of ride-hailing, taxis or carpooling because they felt that they were safer to be physically distanced during the pandemic.

Regional Partners

National Capital Commission

In 2020 and 2021, the National Capital Commission (NCC) did not participate in the e- scooter pilot. Through effective geofencing, shared e-scooters were prevented from operating on NCC pathways and roadways.

The NCC has approved its revised policy on the use of electric-powered vehicles and the use of e-scooters will continue to be prohibited in 2022. However, the NCC recognizes that there are situations of overlapping transportation infrastructure and ownership that may require more flexible geographic permissions such as the Corkstown Bridge, Pretoria Bridge, Adawe Bridge and others. The NCC has expressed a willingness to work with the City to establish a list of potential thoroughfares within the shared e-scooter deployment area, to prevent users from being unexpectedly locked out of e-scooter access when passing over a property boundary.

Ville de Gatineau

In 2020 and 2021, the Ville de Gatineau did not participate in the e-scooter pilot. Through effective geofencing, shared e-scooters were prevented from travelling to and operating in Gatineau per their request. They have indicated that they have no plans to pursue an e-scooter program in 2022. Geofencing will be used again in future seasons.

Recommendations for 2022 Season

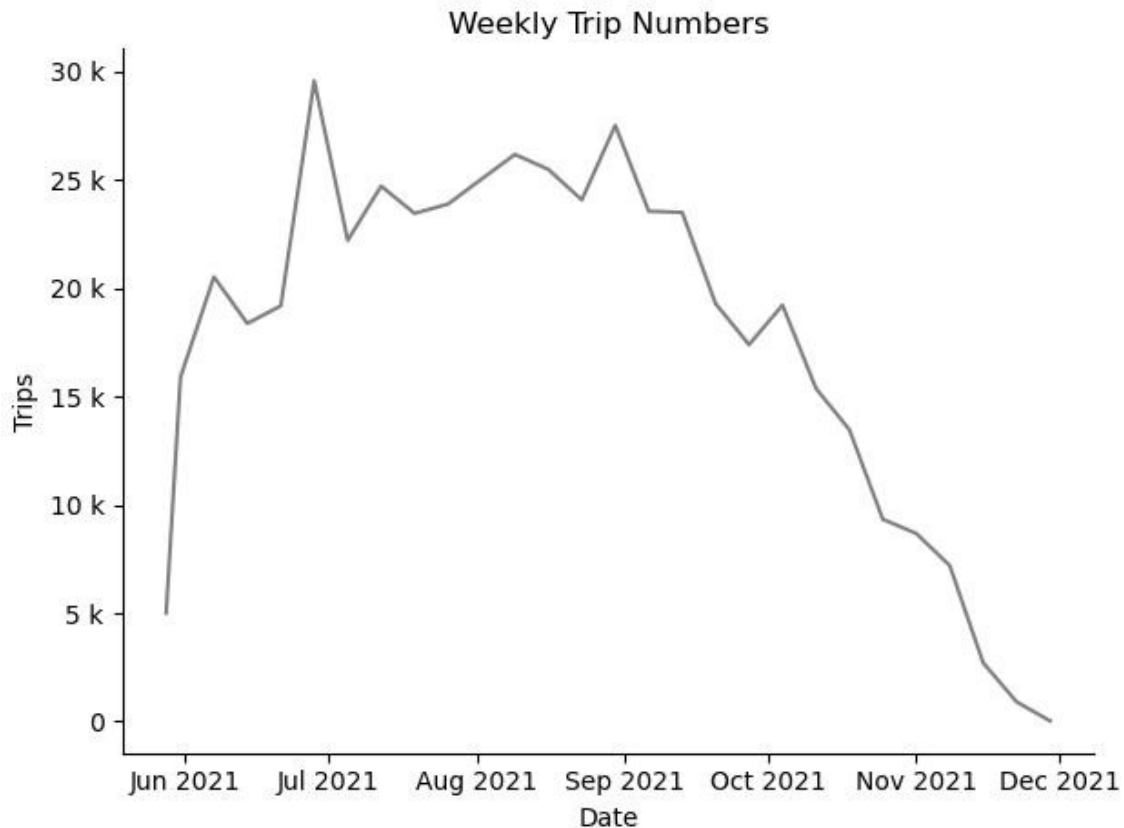
Based on the high number of e-scooter trips, including those that replace car trips, the support for local business and the increased mobility choices, staff recommend continuing the pilot in 2022 with some modifications. In addition to those mitigation measures already in place, the following sections explain the significant changes that are recommended.

Season

Staff recommend a full 2022 season from as early as May 15 to November 15, to meet higher rider demand during the warmer months. The May 15 launch would allow for a comprehensive competitive procurement process should Council approve the 2022 pilot season. It would be contingent on weather and the completion of spring street sweeping operations. The 2021 pilot was extended until November 30; however, trip data indicates a significant decline in trips from October averaging 2,011 daily trips to an average of 650 daily trips in November (ref. Figure 6 below). The providers were also removing some of their fleet towards the end of the season due to lower usage rates.

Ending the season by November 15 (weather permitting), will provide staff with sufficient time to wrap up the season, analyze data and report to Transportation Committee in the first quarter of 2023. This could help launch the program earlier in April if a 2023 pilot season was pursued.

E-scooter usage during winter conditions is not recommended.



Competitive Procurement Process

Staff recommend using a competitive procurement process to identify a maximum of two qualified e-scooter providers, down from three providers in the 2021 season. Having less than three services providers is consistent with industry standards in other jurisdictions comparable to the size and population of the City of Ottawa. Limiting the number of e-scooters providers operating in Ottawa is proposed to:

- Simplify reporting of issues;
- Decrease staff resource time on managing the program;
- Increase provider accountability;
- Reduce the potential for sidewalk clutter due to multiple competing providers;
- Offer residents more consistent service; and
- Incentivize eligible providers by allowing larger fleet sizes for service excellence,

including fast response times to mis-parked e-scooters and innovative rider education.

The Request for Proposal (RFP) will continue to be based on the City's Micromobility System Framework established in 2020 and will include refined criteria that will define the City's higher standards that proponents are expected to meet, including the provision that the newest proven technologies and innovations must be "Day One" ready. Proponents may submit a proposal for consideration and evaluation by the City. Newest technologies and sound emissions must be demonstrated as part of the evaluation process. If they do not meet the City's standards, they would not be considered further. The City will select up to two successful proponents to operate a shared e-scooter fleet for the 2022 season. The selection criteria are expected to include elements such as:

- Detailed effective issues management plan;
- Deployment and effective geofencing plans;
- Experience and staffing levels of local operational team;
- Safety record;
- Illustrated communications and outreach/education plan;
- Demonstrated newest technologies for sidewalk detection and improved parking;
- Demonstrated sound emissions;
- Plan for low GHG emissions operations (e.g., equipment used to retrieve scooters and for battery charging);
- App functionality and ease of use; and
- Innovation.

Fleet Size

Staff recommend that the combined total fleet size be reduced to 900 e-scooters (down from the 1,200 in 2021) to improve the overall operations of the program and reduce potential issues. The new fleet size takes into consideration e-scooter demand observed in 2021 and issue management considerations. Observations during the 2021 season showed that there were many e-scooters that were parked for long durations (i.e., multiple days in some cases) without being ridden. Too many

parked e-scooters contribute to overall sidewalk clutter, a common complaint in the 2021 season.

In discussions with the providers, it is felt that aiming for three to four trips per scooter per day is an appropriate target for the size and population of the City of Ottawa. The reduced utilization rates observed in 2021 support the recommendation to reduce the fleet size. This approach will address the lack of availability observed in the 2020 season and reduce the potential for street clutter with too many parked e-scooters not in use.

In a future season, fleet size could potentially be tied with observed utilization rates (daily rides per scooter) with increases permitted only if utilization rates reach a defined threshold as well as imposed reductions as utilization decreases.

Each provider will be given opportunity to operate up to 450 e-scooters each. If only one provider meets the selection criteria, they will be given the opportunity to operate up to 700 e-scooters with the potential to increase up to 900 later in the season. This increase would be at the City's discretion after demonstrated successful operations and the provider's proposal demonstrating their capabilities of managing a much larger fleet size (i.e., proportionate staffing levels to meet required response times etc.).

The agreement will include the City's discretion to decrease the total fleet size, if necessary, at any time throughout the season. Staff also recommend that the agreement include provisions to allow the City to either cap e-scooter deployment in specific areas of the City (such as potentially in the ByWard Market) if deemed necessary or to set minimum daily deployments in certain areas to help address equity concerns. These are common practice in other jurisdictions with shared e-scooter programs.

Deployment Area

Staff recommend that the same central minimum deployment area included in the 2021 season be carried over for the 2022 season. If there is ward Councillor and/or BIA interest and the providers are meeting the City's standards, a larger deployment area still within the City's urban core could be considered. Expanding the deployment area much greater than that would require additional staff time and resources for public outreach, communication, and issues management.

Staff recommend that the 2022 season not include the provision for service to a

satellite community. This will enable staff to observe the operations of the pilot over a controlled area before expanding the program.

Fee Structure

As previously reported in the “Ottawa’s Electric Kick Scooter Strategy and Pilot Project” Report in May 2020 ([ACS2020-TSD-PLN-0003](#)), it is estimated that one to two FTEs, for at least seven to nine months per year, are needed to run a shared e-scooter program coupled with significant and ongoing support from operational staff from multiple departments. To-date, the management of the pilot has been run from existing staff resources.

City expenses directly related to the delivery of the pilot are intended to be recovered from administrative, vehicle and communication fees paid by the e-scooter providers. The original fee structure for the e-scooter pilot was approved by Transportation Committee and Council in June 2020 ([ACS2020-PIE-RHU-0007](#)). At the conclusion of the initial pilot year, staff committed to continuing to monitor costs in 2021 and review the fee structure again at the conclusion of the 2021 season.

The 2021 season allowed for the recovery of season costs for elements such as signage, a subscription to a data monitoring platform, City-led communication and education activities, and some support staff time. As the pilot program and expectations have evolved considerably during the 2021 season, staff recommend that the overall fee structure be revised to support additional efforts with respect to program improvement, staff resources and furthering commitments made to the accessibility community. Specifically, staff have identified the following needs that will increase financial pressure on the program costs:

- Funding of resource capacity dedicated to e-scooter enforcement with By-law and Regulatory Services;
- Seasonal support staff in Transportation Planning;
- Increased amount of physically demarcated parking areas within the City right of way (i.e., resources to implement signage and pavement markings, etc.) and off-setting of lost revenues from potential on-street parking spaces;

On-going recurring costs include:

- Subscription to a data monitoring platform
- City Communication products
- City data collection activities

Staff recommend the following amendments to the fee schedule:

Description of Fee	Amount in 2021	Recommended Amount in 2022
Vehicle Fee	\$50 per vehicle per season	\$100 per vehicle per season
Communications and Engagement Fee	\$10 per vehicle per season	\$20 per vehicle per season
Compliance Fee	Not applicable	\$130 per vehicle per season
Non-refundable application fee to operate a shared micromobility program within the City of Ottawa	\$5000	\$10,000
Non-refundable application fee to request for increase to existing fleet	\$2000	\$5000
Station Encroachment Fee	\$250 per station	\$250 per station

Table 8: Proposed Fee Schedule

The following departments were consulted in developing these fees, and provided estimates based on expected service volumes:

- Public Works – Roads and Parking Services, Traffic Services
- Planning, Real Estate and Economic Development – Transportation Planning,
- Emergency and Protective Services – By-law and Regulatory Services
- Innovative Client Services – Information Technology Services

The proposed application fees will cover administrative costs related to the

intake, analysis, processing, and finalizing of the service agreements.

The Communications and Engagement fee will cover costs related to raising awareness of the program and promotion of desired rider behaviours (ex: no sidewalk riding, safe riding conduct).

The new Compliance Fee is intended to cover operational costs associated with increased enforcement activities undertaken by the City, including re-locating and removing mis-parked e-scooters if providers fail to address.

The Vehicle Fee is intended to cover all remaining operational costs associated with the program including signage, analysis and reporting, contract administration, issue management and vendor management.

The station encroachment fee shall only be charged for small physical structures placed in the right of way (ex: docking stations) if required, and not for delineated parking areas.

The collection of these fees shall not release permitted shared e-scooter providers from additional requirements (ex: educational, operational) detailed in the agreement with the City of Ottawa.

Regarding the insurance and security requirements, staff will be following best practices recommended by Supply Services.

Under the proposed fee structure, there are estimated gross revenues of approximately

\$245,000 with a fleet size of 900 vehicles. A review of best practices in other jurisdictions was undertaken. Although each jurisdiction manages the fee structure for shared micromobility devices differently and it is challenging to compare directly, this new total gross revenue/fleet size is comparable to other jurisdictions of similar size and population as the City of Ottawa.

If the amended fee structure is approved, staff will monitor the amended fee structure throughout the 2022 season and report back to committee and council on the performance of the amended fee structure in early 2023. The City may choose to amend this fee schedule at their discretion for future seasons, if applicable.

Recommendations to Address Identified Concerns

Parking

Newest Technology: Providers have various improved technologies on newer generations of e-scooters that provide more precise location-based information to e-scooter users. One of these technologies was piloted in Ottawa on a small fleet of new generation e-scooters in 2021. See Document 3, "Bird Canada Final Report and Pilot Results". The test indicated 100 per cent accuracy. Staff recommend the City mandate that any shared e-scooters permitted to operate in Ottawa have this level of technology in a 2022 season and that the virtual preferred parking locations be set up before the season begins. These technologies must be demonstrated and proven to work as part of the competitive provider selection process.

In-app No Parking Zones: Staff recommend that providers build into their app specific "no parking zones" from day one of operations. This would include small residential streets that do not have furniture zones such as in the Glebe and Golden Triangle neighbourhoods, as implemented later in the 2021 season. Working collaboratively with the providers, preferred parking areas (either in-app identified or physically demarcated) should be identified before the season launches within any large "no parking zones" to balance the accessibility concerns and the convenience of the program for riders. This may require a 'phased in' launch of the season with fleet increases/deployment area increases as localized parking solutions are developed.

Physical Parking Locations: In 2021, the City sought to identify and demarcate physical parking locations for e-scooters. Areas with heavy e-scooter use or a high frequency of parking issues were targeted, and both on-street and sidewalk locations (outside the path of travel) were considered. In doing so there were challenges (agreement from local BIAs and/or ward Councillors, availability of City resources to install signage and pavement markings etc.). Seventeen potential parking locations were shortlisted, ten were ultimately recommended and five were implemented prior to the end of the season. Staff recommend that a series of physical locations be set up and implemented before any future pilot season begins to relieve pressures in specific areas. In total, it is expected that up to twenty of these locations could be established. This may require a gradual expansion of e-scooter deployment areas as localized parking measures are implemented.

Higher E-Scooter Parking Compliance: Staff recommend a higher standard for e-scooter parking compliance. The one-hour allowance for e-scooter providers to respond to mis-parked e-scooters allocated in the first two seasons would be replaced with a 15- minute response time allowance. The RFP would rate potential providers based on how much time and staffing they commit to responding to issues. By-law and Regulatory Services would be empowered to impound or fine the providers for any observed mis- parked e-scooter without warning. This would motivate e-scooter providers to increase their own proactive management of e-scooter parking to minimize fees associated with the retrieval of impounded vehicles. In addition, language in the agreement with the providers would state that a failure to meet this requirement could lead to, at the City's discretion, imposed reductions in fleet or even full removal of permit to operate in the City's right of way. Finally, the agreement would mandate a better verification of proper parking by the providers be required to demonstrate that the scooter is parked properly before the ride is considered complete. As part of the selection process, the providers' parking compliance mechanisms will be closely reviewed to assess the adequacy of the mechanisms and deterrent measures to address mis-parking incidents.

Introduce Enforcement by By-law and Regulatory Services (BLRS): In the addition to the compliance measures that the e-scooter providers must carry out, staff recommend increased proactive enforcement by BLRS staff. The addition of seasonal By-law Officers dedicated to e-scooter enforcement during the shared e-scooter season would help uphold the 15-minute response times by the providers. These officers would be creating Service Requests, collecting data, reporting issues, and monitoring the providers' response times. They would be re-locating and removing mis-parked e- scooters if providers fail to do so and they would be taking enforcement actions, including issuing fines or impounding any mis-parked e-scooter at any time, regardless of the 15-minute response time allowance. This would help ensure that providers manage their operations to minimize the potential for impoundment and fines. The additional resources required to introduce enforcement would be supplemented by the hiring of seasonal staff (summer students) within BLRS, funded by the pilot program fees as described above.

Update to City By-law: Updates to the Electric Kick Scooter By-law No. 2020-174 are recommended to clarify language to facilitate enforcement activities related to parking. Document 9 includes a draft amending by-law to revise certain provisions with an added provision to authorize impoundment of e-scooters.

Sidewalk Riding

Newest Technology: Staff recommend that the City mandates that the newest generation of e-scooter from any provider be deployed in Ottawa at 100 per cent capacity of their fleet to ensure the newest sidewalk detection technologies are being used. The providers must demonstrate that these technologies are proven and effective. They must also demonstrate that they would be deployed immediately upon starting the season (i.e., not to be phased-in throughout the season). Failure to meet these criteria may lead to the termination of the agreement. This may require a gradual expansion of e-scooter deployment areas as required geofencing layers to manage these technologies are implemented.

2021 Pilot Adaptations: Staff recommend that large print stencils / stickers highlighting “no sidewalk riding” be implemented on all e-scooters prior to launch of a 2022 season. This was an effective step in the 2021 season to convey the regulation to all riders and residents. It also provided Ottawa Police Services with a message / tool to help with enforcement during their enforcement blitzes.

Education: Staff recommend the continuation of mandatory in-app user training modules before riders can begin using a shared e-scooter for any future pilot season. Proposals from potential providers would be rated based on additional in-app educational measures (e.g., periodical mandatory quizzes or training modes which reduce speeds for first time users).

Higher Compliance: Staff recommend a higher standard for e-scooter riding behaviour compliance. In addition to the technologies and education strategies, the RFP would rate potential providers based on how much time and staffing they commit to addressing this issue. In addition, language in the service agreements with the providers would state that a failure to meet this requirement could lead to, at the City’s discretion, imposed reductions in fleet or even full removal of permit to operate in the City’s right of way.

Enforcement by Ottawa Police Service (OPS): Staff recommend that the Ottawa Police Service continue to undertake enforcement “blitzes” targeting sidewalk riding at the beginning of the season and throughout at high ridership times of day/weekends to help educate and enforce the “no sidewalk riding” policy. This will be done in conjunction with intelligence gained from ride data, complaints, and staff observations.

As described above, recommended amendments and clarifications to the City's existing by-law will also help the OPS with enforcement activities. These proposed amendments are based on feedback from the OPS.

Sound Emissions

Mandatory Sound Emission: Staff recommend that providers be required to have a continuous sound emitter (in addition to the mandatory manual bell) on all e-scooters during any future pilot season that must be in operation immediately. This sound emitter would be based on international standards and pending Transport Canada standards for larger electric vehicles, known as an "Acoustic Vehicle Alerting System" (AVAS). AVAS standards detail the frequency range and amplitude of sounds emitted. Staff intend to leverage and apply these standards to shared e-scooters. The City would provide specific criteria about the sound parameters such that the AVAS sound would be as similar as possible across the industry in Ottawa. There are currently no national/international standards for micromobility devices and the City would be demonstrating a global leadership role in this area. Recognizing that the City is leading the industry to push this technology in advance of any worldwide standard, the providers would be required to have the capabilities to adjust the sound parameters during the season as more refinement is undertaken and the sounds are monitored for effectiveness.

Education: To decrease sound emission confusing among e-scooter users, staff recommend providers advise users on why the e-scooters are emitting a sound. There should also be advisory notification to the accessibility community about the sound emissions.

Issue Reporting

Improved reporting processes: Staff recommend changes to the processes used to collect inquiries and complaints and to track all data associated with these complaints. These new processes are still in development with the City's Innovative and Client Services Department. Due to the on-going efforts to replace the City's Lagan system this year, these changes are targeted to be finalized by the time a 2022 shared e-scooter season would launch. The update would essentially consist of a new dedicated e-form specific to e-scooters, such that residents can self-report any concerns directly to one platform. The development of the e-form would allow for the collection of more consistent details related to the nature of the complaint. All communication methods, either through the City (such as the City's website or app)

or through the providers directly (their apps or other contact methods) would be funneled through one platform for better tracking. Providers would be required to submit data via this platform for any complaints or inquiries that they receive directly. All communications to residents would encourage the use of the e-form and discourage the use of e-mail. 3-1-1 agents would continue to receive inquiries by phone, and this data would be tracked with the data from the e-form platform. This system would automate the redistribution of the reported concerns to the appropriate City department. Most concerns, such as mis-parking, could be directed to By-law and Regulatory Services who would then forward the complaints directly to the e-scooter providers as appropriate to action. This will allow By-law and Regulatory Services to have access to all Service Requests to aid with the monitoring and enforcement activities.

2021 Pilot Adaptations: Staff recommend that stickers with correct contact information written in braille be implemented on all e-scooters prior to a future season launch. In addition, similar messaging in large font/tactile print be included for residents who cannot read braille. Finally, staff recommend that the service agreement also include provisions for the addition of other measures deemed beneficial once the final reporting process review currently underway has been completed such as the potential to include QR codes on each e-scooter to aid with the reporting of issues.

FINANCIAL IMPLICATIONS

Fees collected from the E-Scooter Providers cover operational costs including elements such as signage, a subscription to a data monitoring platform, City-led communication and education activities, and seasonal staff time to implement and monitor the pilot.

Existing operational budgets cover staff support from multiple departments.

Planning, Real Estate and Economic Development (PRED) and By-law and Regulatory Services have both identified the need for additional resources to support this program. If Council approves the recommendations, these additional resources would be funded by the Program's revised fee structure. The 2022 budget for the program revenues is based on the existing fee structure and is listed as cost recoverable. Following Council's approval of the revised fee structure, a budget adjustment of Transportation Planning's 2022 operating budget in the amount of \$158,000 is required for additional operating expenses offset by the corresponding

increase in revenue.

LEGAL IMPLICATIONS

There are no legal impediments to Committee and Council's approval of the recommendations of this report.

COMMENTS BY THE WARD COUNCILLORS

Feedback from Ward Councillors who had shared e-scooters in their ward was collected throughout the season as well as during briefing sessions held at the conclusion of the 2021 season. Councillors indicated that their ward office was overwhelmed with complaints from residents throughout the season. The most common complaints were mis-parking and some sidewalk riding. Other feedback from Ward Councillors included:

- Councillors expressed concerns for sidewalk riding.
- Councillors expressed concerns for parking, related to sidewalks and boulevards outside of the path of travel.
- Councillors expressed support that additional enforcement measures by City staff are proposed but questioned if By-law and Regulatory Services resources could accommodate the additional work.
- Councillors have concerns with what additional enforcement tasks specifically City staff would be able to carry-out.
- Councillors were looking to streamline enforcement by utilizing mechanisms used by Ottawa Police Services to issue fines.
- Councillors expressed support for a more user friendly and accessible mechanism for residents to submit complaints or inquiries about the e-scooter program.
- Councillors expressed concern about the requirement for constant sound emissions creating additional noise pollution and appreciated that there would be provisions to refine the sounds.
- Councillors had questions about the effectiveness and precision of geofencing technologies and how they can be used better to manage

issues where inappropriate riding behaviour has been observed, especially in areas where there may be a lack of dedicated active transportation facilities.

- Councillors inquired about expanding the deployment area, especially around transit facilities outside of the City's urban core.

Comments from Councillor Fleury:

"We need to better manage this project internally at the City. Specifically, coordinating complaints and enforcement, in real-time, in order to ensure an effective response.

Having multiple providers to report issues to and no teams internally to enforce rules has been part of the main challenges with this pilot. We need to receive feedback directly in order to hold the companies accountable to fixing issues and track all feedback and responses. We cannot fully understand the impact of this project and respond, if we are not made aware of all feedback, concerns and complaints from residents. The current model sees residents reporting individually to providers as well as the City. This needs to be centralized.

We need to enforce our rules and bylaws when providers do not respond appropriately to issues within the acceptable timeframe. For example: Parking and riding issues. We need City staff to be able to respond on behalf of our residents when no one else will - Especially when it comes to accessibility and safety issues. We need to create a system that penalizes the companies who do not react in a timely and appropriate manner. For example, shopping carts are currently seized by Public Works staff. This could also apply to e-scooters. Units would be held by the City until a financial penalty is paid by the offending company. We must ensure ALL e-scooter parking is compliant with our sidewalk accessibility objectives (parking validation images for each ride) with immediate consequences to offending companies and riders and immediate action by the City to resolve.

We need require geo-fencing of all sidewalks within the core areas such as Rideau Street, ByWard Market, Laurier Ave etc. and ensure that every company's GPS system has appropriate vehicular lane direction within their systems.

We need to make sure that policing authorities have the same HTA tools as they would for motor vehicles and bikes as it relates to easily ticketing e-scooter infractions.

This pilot can be successful in Ottawa if the appropriate measure for parking and riding are in place.”

ADVISORY COMMITTEE(S) COMMENTS

The City’s Accessible Advisory Committee has passed a motion advising City Council to not conduct any more pilots that would allow e-scooters, to decline any further participation in the Provincial e-scooter pilot, to take measures to restore the prohibition on the use of e-scooters (shared and private) and to dedicate resources towards enforcement of the prohibition. The complete motion states:

WHEREAS, in Ontario, the use of e-scooters is prohibited, subject to any pilot projects adopted under *O.Reg 389/19 – Pilot Project – Electric Kick-Scooters*.

WHEREAS the Accessibility Advisory Committee (AAC) has been actively engaged on the question of trialing e-scooters in Ottawa, including during the 2020 and 2021 pilot projects;

WHEREAS the AAC has consistently raised concerns about the serious safety risks that e-scooters pose to disabled pedestrians and seniors in Ottawa;

WHEREAS the AAC has considered the results of the 2020 and 2021 pilot projects;

WHEREAS the results of the 2020 and 2021 pilot projects demonstrate that, despite efforts by City staff and e-scooter providers, the safety risk posed by e- scooters cannot be properly managed or regulated;

WHEREAS e-scooters are inherently dangerous to disabled pedestrians and seniors in Ottawa;

WHEREAS the presence of e-scooters in Ottawa represents a barrier to accessibility and reduces disability inclusion;

WHEREAS the presence of e-scooters in Ottawa will not move the city towards full accessibility by 2025;

THEREFORE BE IT RESOLVED THAT The AAC advises City Council not conduct any more pilots that would allow e-scooters to be used in any public

places in Ottawa, whether the e-scooter is owned by, borrowed by, or rented by the rider;

THEREFORE BE IT ALSO RESOLVED THAT the AAC advises City Council to decline any further participation in *O.Reg 389/19 – Pilot Project – Electric Kick- Scooters*;

THEREFORE BE IT ALSO RESOLVED THAT the AAC further advises City Council and city staff to take any measure necessary to restore the prohibition on the use of e-scooters in any public places effective immediately, whether the e- scooter is owned by, borrowed by, or rented by the rider; and

THEREFORE BE IT ALSO RESOLVED THAT the AAC further advises City Council and city staff to dedicate adequate, ongoing resources for the real-time enforcement of the prohibition on the use of e-scooters in any public places in Ottawa.

CONSULTATION

Internal Consultation

Staff in numerous service areas have been involved in a Working Group during the 2021 season to provide input and subject matter expertise, helping to address issues as they arise. Throughout the season and at most meetings, the main topics discussed included parking strategies, communication and education strategies, as well as a review of existing accessibility concerns and data updates from each department. City teams include: Transportation Planning, the Corporate Accessibility Office, Roads and Parking Services, Traffic Services, Legal Services, Service Ottawa (3-1-1) and Service Transformation (Open Data), Ottawa Police Services, By-law and Regulatory Services, Right of Way Management, Safer Roads Ottawa, Transit Customer Systems and Planning Service, Ottawa Public Health Injury Prevention, Ottawa Public Health Epidemiology, Parks and Facilities Planning Services, Information Technology Services, BIA and Ottawa Markets Liaisons. The working group typically met bi-weekly to monthly and held smaller subject specific meetings as needed.

Updates to Ward Councillors

On May 28, emails were sent to the effected ward Councillors including key messages, deployment maps and the public service announcement announcing the launch of the season. Updates about the pilot were sent to Councillors on June 11, July 7, September 21, and November 5, 2021. Staff met with various Councillors throughout the season as questions emerged. Briefing sessions were held on January 25, February 4, and February 11, 2022, to provide highlights of the 2021 shared e-scooter season and the proposed recommendations for Council consideration of a future season.

Accessibility Advisory Committee (AAC)

The AAC convened two special meetings to receive a presentation from staff and provide feedback.

The first meeting was held on December 14, 2021 and included a presentation which described highlights of the 2021 season and actions taken in 2021 to address identified concerns. Staff also provided a summary of feedback received, highlighting the comments from the Stakeholder Working Group throughout the season. Staff also presented items still under consideration for a potential future pilot season. There were six public delegates who shared their experiences and opinions at this meeting and eight (including the CNIB) who submitted written feedback which centered around the dangers and barriers that e-scooters pose on residents including the elderly, the blind or people who have low vision, hearing loss, or reduced mobility, and children. Highlighted comments included:

- E-scooters left in the middle of sidewalks or sticking out of the furniture zone creates tripping hazards / barriers.
- Sidewalk riding in combination with not seeing or hearing them increases the risk of getting hit and being injured.
- Not seeing e-scooters approach creates issues in situations where interactions occur such as getting on and off buses and at crosswalks.
- For residents who are blind, they are unable to step out of the way of an approaching e-scooter, when being passed, especially on the sidewalk, because they cannot hear them coming.

- There is a concern that the shared e-scooters will be tampered with and ridden to Gatineau where they are prohibited.
- The technology and policies imposed by the providers is not satisfactory and the Accessibility Advisory Committee should recommend no future pilot be pursued by the City.
- Other municipalities have opted out of the Provincial pilot, Ottawa should too.

The second meeting was held on February 1, 2022 and included a presentation which described the actions taken since the previous meeting with the AAC in December, highlights of key data from the 2021 season as well as the key draft recommendations for the shared e-scooter program moving forward. There were seven public delegates who shared their experiences and opinions at this meeting and two (including the CNIB) who submitted written feedback. The concerns shared at this meeting were very similar to those presented at the first AAC meeting described above. In addition, a delegate from the Accessibility for Ontarians with Disabilities Act Alliance included the following written comment:

“We call on the Ottawa Accessibility Advisory Committee to press Ottawa City Council to categorically reject the proposal by Ottawa City staff that Ottawa conduct a third "pilot project" in 2022 with e-scooters. The report that Ottawa City staff are presenting today, set out below, demonstrates that e-scooters endanger people with disabilities, seniors, children and others”.

A member of the AAC expressed an interest in the e-scooter program since they provide an option for travel to those that cannot walk far, find biking to be inaccessible and driving a car around downtown to be a challenge. They also expressed interest in having the program expanded to other areas of the City.

At the end of the meeting, as described above, the AAC voted on a motion to recommend to Transportation Committee and Council that the City not proceed with a third year of the shared e-scooter program given that not all of their issues have been fully addressed in the first two years of the pilot.

External Accessibility Stakeholder Consultation

Staff assembled an external working group. Participation in the group was informed by the Corporate Accessibility Office who also attended the meetings. Participating

agencies included the City of Ottawa's Accessibility Advisory Committee (AAC), Canadian Council of the Blind (CCB), Alliance for Equality of Blind Canadians (AEBC), Canadian Council of the Blind (CNIB), and the Ottawa Disability Coalition (ODC), which represents 20 community agencies. More than five meetings were held with the Community stakeholders' group to discuss the project progress and how to address the issues throughout the season which centered around the themes of parking, sidewalk riding, sound emissions, enforcement and complaint reporting. Meetings were held virtually and three were held outside at various city locations in-person for both braille and sound emission demonstrations with the three e-scooter providers.

In general, this group remain opposed to e-scooters operating on city streets. Staff heard that members of the Stakeholder group were frustrated with the time required to implement improvements or measures and, although they appreciate the City's efforts to address safety and accessibility issues, they feel that there are still significant concerns because of frequent rule infractions related to mis-parking and sidewalk riding. Stakeholders observed that there was a lack of enforcement and that the processes to issue a complaint were onerous and cumbersome. It was also noted that sound emission is essential, should be consistent across the industry and should be distinct from other sounds like the accessible pedestrian signal sounds. It was felt that none of the sounds tested this year were considered effective. Lastly, it was expressed that there should be regulations for private e-scooters as well.

Consultation with CNIB

On November 18, 2021, the CNIB Foundation hosted a townhall, in conjunction with the Alliance for the Equality of Blind Canadians (AEBC), and the Canadian Council of the Blind (CCB), for Ottawa residents with sight loss to share their experiences and concerns with e-scooters and accessibility. City staff and ward Councillors were invited to attend. See Document 10 - Ottawa E-scooter Pilot CNIB Report

Participants' feedback centred on three main concerns: dangerous parking, sidewalk riding, and enforcement and reporting of by-law violations. Participants reported regularly finding e-scooters on sidewalks, either blocking the pedestrian path of travel or blocking Audible Pedestrian Signal (APS) buttons, and that the presence of e-scooters are a tripping hazard and make participants feel unsafe. All townhall participants reported experiences involving e-scooters being ridden on sidewalks, contributing to participants unwillingness to go out and to increased isolation. All

participants expressed that there was a lack of enforcement of the e-scooter by-law provisions on the part of the City and the service providers.

Until their concerns and recommendations provided in Document 10 are addressed, including requiring that e-scooters be required to park in delineated parking areas only, demonstrated technologies related to noise emissions and sidewalk riding are proven to work and are included on the entire fleet, and that the City increases and improves enforcement by City resources, the CNIB does not recommend that the e-scooter pilot be extended.

The CNIB Foundation also provided commentary for the consideration of the Accessibility Advisory Committee as part of its February 1, 2022, special meeting (also included in Document 10). In a letter to the AAC, CNIB wrote:

*“In sum, while we are happy to see City staff taking on many of our recommendations for improving the safety of pedestrians, they do not go far enough in preventing e-scooters from being a safety hazard and accessibility barrier to vulnerable road users, such as pedestrians with sight loss. As such, **the CNIB remains opposed to the continuation of the e-scooter pilot into a third year.** We hope that, upon consideration, the Accessibility Advisory Committee will agree with us, and pass a resolution to that effect”.*

E-Scooter Survey

To understand how this new form of transportation impacted different demographic groups, the City conducted an end-of-season survey. The results of which have been described throughout this report and detailed in Document 6, “City of Ottawa E-Scooter Survey Results”.

Notification of the survey was distributed through the City’s social media channels, on the City’s webpage, to Chair Tierney and Councilors, the City’s Accessibility Spotlight newsletter and by each of the e-scooter providers. E-mails were also sent to all residents who corresponded with the City about the e-scooter programs and to participants of the Stakeholder Working Group. Through these various channels, traditional media also reported on the roll-out of the survey.

Additional Consultation / Presentations

Staff presented and provided updates to the e-scooter program at the Ontario

Network of Accessibility Professionals on June 22, 2021, the Association of Municipalities of Ontario E-scooter Coordinating Committee on August 16, 2021, the Regional Public Works Commissioners of Ontario on September 17, 2021, and City's Parking Services Stakeholder Consultation meeting on January 27, 2022.

ACCESSIBILITY IMPACTS

The City of Ottawa's Accessibility Policy states that *"The City of Ottawa is committed to providing equal treatment to people with disabilities with respect to the use and benefit of City services, programs, goods and facilities in a manner that respects their dignity and that is equitable in relation to the broader public. This commitment extends to residents, visitors and employees with visible or non-visible, and permanent or temporary disabilities"*.

As outlined in the report, sidewalk riding and improper parking create barriers to safety and accessibility, especially for people who are blind, who have low vision or who use wheelchairs or other mobility devices. People pushing strollers may also encounter accessibility barriers created by e-scooters.

Throughout both e-scooter seasons, the City's community of older adults and people with disabilities communicated to City staff and Councillors that they do not feel safe with e-scooters on the streets. They explained that they had already been involved in incidents with e-scooters including tripping over them, not being able to move them off the sidewalk and being grazed by riders passing by on sidewalks. The community of people who are blind or partially sighted also stated that the e-scooters are too quiet, making this community vulnerable to being hit by e-scooters on sidewalks or while crossing intersections.

Throughout the 2021 season, City staff, including the Accessibility Office worked with other City departments, the AAC and community stakeholders to try and remove the accessibility barriers caused by the three main issues related to sound emissions, sidewalk riding and parking. City staff repeatedly explained to the service providers how important it was to achieve the service levels described in their RFP's. Despite extensive collaborative efforts of the community and City departments, the service providers efforts to pick up the mis-parked e-scooters, the sound emitting test trials and attempts at using technology to stop sidewalk riding, it is felt by many that that these measures have not sufficiently addressed the ongoing barriers.

Staff remain committed to addressing these issues and have recommended changes for the 2022 season to reduce barriers to persons with disabilities.

ASSET MANAGEMENT IMPLICATIONS

There are not asset management implications related to this report.

CLIMATE IMPLICATIONS

The City's Climate Change Master Plan set short, mid, and long-term targets to reduce community greenhouse gas (GHG) emissions by 100 per cent by 2050 and corporate emissions by 100 per cent by 2040. The e-scooter pilot project supports meeting these targets by helping to reduce the reliance on personal vehicles in favour of sustainable modes and reducing emissions within Ottawa's transportation sector. The program can also provide the first and last kilometre to transit, helping to make transit more accessible and convenient and creating a sustainable transportation loop.

In the survey, when asked "Why did you take a shared e-scooter instead of another mode of transportation?", 40 per cent of respondents indicated that they chose to use an e-scooter to reduce GHG emissions. This demonstrates commitment among residents towards supporting the City's climate change goals through personal transportation choices.

The results of the first and second season of the pilot suggests that the pilot may have led to a reduction in GHG emissions as riders chose to use e-scooters for trips previously made by car. Overall, 61 per cent of 490 respondents reported driving less and 49 per cent reported travelling less as a car passenger.

Through the 2020 and 2021 agreements, shared e-scooter providers rented central warehouse space and deployment area spaces (i.e., parking garage spaces) for housing and charging e-scooters when not in operation. This allowed providers to efficiently collect, recharge and redeploy efficiently. By having a central location for this part of the operation meant that less vehicles were needed to pick up and distribute vehicles and therefore contributed to less vehicles on the road and helping to reduce GHG emissions from e-scooter transportation. One of the providers also had swappable batteries on some of their fleet. This enabled them to swap the battery on site without transporting it for recharging. It is recommended that the requirement for a central warehouse space and / or swappable batteries be maintained for the 2022 season.

ENVIRONMENTAL IMPLICATIONS

See “Climate Implications” above.

RISK MANAGEMENT IMPLICATIONS

As already described in this report, recommendations to significantly reduce incidents of mis-parked e-scooter and sidewalk riding are planned for the 2022 season through technology, awareness and education programs, and shorter response times.

Resources for by-law enforcements, and program management will be funded from the program’s fee structure. Sound emissions will be required, but with the provision that they can be adjusted as more refinement is undertaken throughout the season. Works are underway to improve issues reporting and management.

Limiting the number of providers to a maximum of two will ensure that only providers that are most progressive and responsive to the issues identified will be selected, regardless of how companies are interested in setting up business in Ottawa. The competitive procurement process will be fair and transparent, setting out clearly the City’s expectations for provider performance.

RURAL IMPLICATIONS

It is not expected that shared e-scooters will be available in rural areas during the 2022 pilot.

TECHNOLOGY IMPLICATIONS

The technology implications are identified within the body of the report.

TERM OF COUNCIL PRIORITIES

Continuing to offer shared e-scooters in Ottawa would align with the following 2018-2022 Term of Council Strategic Priorities:

1. Economic Growth and Diversification: Encourage economic growth and diversification by supporting business investment and expansion, talent attraction and retention, and branding Ottawa as a place to be.
2. Integrated Transportation: Enable effective mobility through a sustainable, accessible and connected city transportation system.

3. Service Excellence Through Innovation: Deliver quality services that are innovative and continuously improve to meet the needs of individuals and communities.
4. Environmental Stewardship: Grow and protect a healthy, beautiful and vibrant city that can adapt to change.

SUPPORTING DOCUMENTATION

Document 1 2021 Shared E-scooter Season Data Analysis

Document 2 Time of Day Service Availability Literature Review

Document 3 Bird Canada Final Report and Pilot Results

Document 4 Lime Final Report

Document 5 Neuron Final Report and Pilot Results

Document 6 City of Ottawa E-Scooter Survey Results

Document 7 Ottawa Public Health - Summary of e-scooter relevant emergency department visits at Ottawa hospitals

Document 8 Proposed Fee Schedule

Document 9 Draft Amending By-law

Document 10 Ottawa E-Scooter Pilot CNIB Report

DISPOSITION

Following Council's approval of the report recommendations, staff from Planning, Real Estate and Economic Development (PRED) will be responsible for leading the pilot, including supporting the procurement process, led by the City of Ottawa's Supply Services, and contract administration. Following the competitive procurement process PRED staff will also be responsible for monitoring and evaluating operations, corresponding with residents, and collecting data for reporting.

Staff will work with Legal Services and By-law and Regulatory Services to finalize and complete the steps to enact the amendments to the by-law and to seek approval of the set fines.

By-law and Regulatory Services will respond to Service Requests and carry-out and monitor provider enforcement activities related to parking.