

To: Economic and Development Services Committee

From: Anthony Ambra, P.Eng, Commissioner,
Economic and Development Services Department

Report Number: ED-25-14

Date of Report: January 8, 2025

Date of Meeting: January 13, 2025

Subject: E-mobility Pilot Program

Ward: All Wards

File: 14-03-2024

1.0 Purpose

On June 20, 2022, City Council considered [DS-22-163](#): Public Consultation on an E-Scooter Pilot Program, and approved the use of electric kick-scooters within the City of Oshawa as part of the Province's 5-year e-scooter pilot program up until December 31, 2024. The Province has since extended the duration of the pilot for an additional 5 years, until 2029. DS-22-163 also included proposed amendments to appropriate by-laws to allow the use of electric scooters and authorized staff to issue a Request for Proposal ("R.F.P.") to trial a shared micromobility program up to December 31, 2004.

The purpose of this report is to:

- Present the evaluation of the shared E-mobility Pilot program;
- To receive Council's approval to continue with allowing electric kick-scooters within the City's Skateboards and Bicycles By-law [78-91](#), as amended, Traffic and Parking By-Law [79-99](#), as amended, and Parks and Facilities By-law [83-2000](#), as amended, in accordance with Ontario Regulation [389/19](#): Pilot Project – Electric Kick-Scooters; and,
- Provide options and receive direction regarding the City's Shared E-mobility Program.

Attachment 1 illustrates the E-mobility Device Deployment Area.

Attachment 2 illustrates the Daily Trip routes of E-scooter Users.

Attachment 3 illustrates the Trip Utilization Heat Map.

Attachment 4 illustrates the Trips Distance Distribution of E-mobility Devices.

Attachment 5 illustrates the Vehicle Utilization Chart for the 2023 and 2024 seasons.

Attachment 6 illustrates the Recommended Deployment Areas for the 2025 season.

Attachment 7 illustrates the Recommended Physical Parking Stations (Parking Mats).

2.0 Recommendation

That the Economic and Development Services Committee recommend to City Council:

1. That electric kick-scooters continue to be permitted for use in the City of Oshawa as part of the Province's pilot program which was extended for an additional five (5) years or from 2025 to 2029 in accordance with Ontario Regulation [389/19](#): Pilot Project – Electric Kick-Scooters, as well as the City's Skateboards and Bicycles By-law [78-91](#), as amended, Traffic and Parking By-Law [79-99](#), as amended, and Parks and Facilities By-law [83-2000](#), as amended;
2. That City Council select an appropriate option regarding the Shared E-mobility Pilot Program as set out in Section 4.3 of Report ED-25-14 dated January 8, 2025; and,
3. That a copy of this Report be forwarded to Durham Region, Durham Regional Police Service, Durham College and Ontario Tech University.

3.0 Input From Other Sources

The following have been consulted in the preparation of this Report:

- Commissioner, Community and Operations Services Department
- Commissioner, Corporate and Finance Services Department
- Commissioner, Safety and Facilities Services Department
- City Solicitor
- Oshawa Accessibility Advisory Committee ("O.A.A.C.")

4.0 Analysis

4.1 Background

In January 2020, the Province of Ontario initiated a five (5) year pilot program for electric kick scooters ("E-scooters") allowing municipalities to participate if they choose to permit them within their jurisdiction. On January 24, 2022, City Council considered [DS-22-22](#), "Proposed Community Shared Micromobility Pilot Program by Bird Canada Inc." concerning an E-bike and E-scooter pilot and directed staff to consult with the public, the O.A.A.C. and the Oshawa Environmental Advisory Committee to receive input on whether the use of E-scooters should be permitted in the City of Oshawa under the Provincial E-scooter pilot program and to report back upon completion of the consultation process.

As directed by Council, staff undertook a five (5) week public consultation process beginning on Monday, March 7, 2022 and concluding on Monday, April 11, 2022 to engage

community members on whether the use of E-scooters should be permitted in the City of Oshawa.

On June 20, 2022, City Council considered [DS-22-163](#), Public Consultation on an E-Scooter Pilot Program and approved staff to enact the necessary by-laws to permit and regulate the use of E-scooters in the City. Council also provided direction to Issue an R.F.P. for a shared micromobility program within the City of Oshawa, at no cost to the City until December 31, 2024.

The City undertook a competitive procurement process that included an R.F.P. for the Shared E-mobility Pilot Program. As a result, the City entered into agreements with two companies (Neuron Mobility and Bird Canada) to provide a combined fleet size of 700 E-mobility devices. The agreements regulated fleet size, fees, speed, geofencing, and parking. The first season of Oshawa's shared E-mobility pilot ran from April 25, 2023 to December 1, 2023 and the second season ran from April 1, 2024 to December 1, 2024.

Throughout the program, staff monitored ridership levels, origin-destination patterns, parking, E-mobility utilization, incidents, and concerns. The data was provided to staff by each of the vendors. Staff also tracked resident feedback through Service Oshawa, 311, and traditional and social media. In collaboration with the E-mobility vendors, many service issues were addressed through operational changes, increased public education/awareness campaigns and communication activities, and meetings with external and internal stakeholder groups.

It is recognized that improper parking and improper riding are top concerns when assessing the effectiveness of the shared E-mobility pilot program in Oshawa. Although the number of concerns compared to the total number of rides was very low (less than 0.5 per cent of total rides), it is understood that not all incidents of improper parking or improper riding may have been reported. Therefore, improving the program to minimize accessibility impacts is a necessity for moving forward if the City's Shared E-mobility Pilot Program is approved to be continued.

The Province has recently extended the duration of the pilot for an additional 5 years, until 2029. This extension will allow for the Province to continue to collect and analyze data, providing a more robust understanding of the program's outcomes and helping to inform future policy direction. In compliance with the Province's decision to extend the program to 2029, Durham Region recently extended its Electric Kick Scooter By-law 23-2022, as amended that supports the use of E-scooters to 2029.

4.2 Discussion

This section provides an assessment of the first two seasons (2023/2024) of the Shared E-mobility Pilot Program. This assessment is based upon staff observations, monitoring of trip and parking data, Service Oshawa reports, e-mails from residents, consultation with key external stakeholders and participating City Departments, and reports from the two shared E-mobility operators.

4.2.1 Shared E-mobility Pilot Program Characteristics

The program ran from April 25, 2023 to November 30, 2023 and from April 1, 2024 to December 1, 2024. Although the vendors were approved to provide 350 E-mobility devices (E-scooters and E-bikes) each to a total fleet of 700 devices; the vendors took a measured approach and started the season with 500 vehicles. The total fleet sized remained at 500 in 2023 and increased to 600 in 2024. In 2023, both vendors began the season operating in smaller deployment areas around Ontario Tech University/Durham College, Lakeview Park, and Downtown Oshawa and gradually increased their deployment areas. The E-mobility deployment areas are generally shown in Attachment 1.

In accordance with the City of Oshawa's By-law (78-91, as amended) to regulate and control skateboards, bicycles and similar devices within Oshawa, the agreement with the Shared E-mobility device vendors allowed Electric kick-scooters, as defined under the Highway Traffic Act, R.S.O. 1990, c. H.8, to be parked in the City's right of way in the furniture zones next to light poles, street furniture and bike parking while maintaining a continual throughway clearance for pedestrian traffic. Some localized areas such as parking garages, recreational centres, and skateboard parks were geofenced as "no ride zones" which prohibited rides from entering into these areas. E-mobility devices were also not permitted to be ridden on sidewalks or on interlocking pathways at Lakeview Park.

Sidewalks and paths were also geofenced which stopped shared E-scooters from entering these areas. Vendors also set up roads that have speed limits greater than 50 km/hr as "no ride zones" to prevent devices operating on these roads. The technology prompts the devices to come to a gradual stop upon entering a no ride zone. There is a brief period that devices would operate on sidewalk or on other no ride zones before stopping completely as an abrupt stop would be unsafe for the user.

The operating speed of the shared E-mobility devices was limited to 20 km/hr. To ensure the comfort and safety of other users, shared E-mobility devices were geofenced to maximum of 15 km/hr on recreational trails and some park walkways that are considered high use areas. All shared E-mobility devices were outfitted with mandatory bells, kick stands, front and rear lights, and brakes in accordance with the provincial pilot regulation.

4.2.2 Shared E-mobility Trip Characteristics

In 2023, more than 21,000 unique riders took approximately 112,000 rides, totaling 223,000 kilometres of travel throughout the deployment area. In 2024, more than 14,000 unique riders took approximately 87,000 rides, totaling 154,000 kilometres of travel throughout the deployment area. In total for both 2023 and 2024, Oshawa residents and visitors took approximately 200,000 E-mobility rides and travelled approximately 377,000 km during the pilot program. Nearly 4,500 riders in Oshawa took 10 trips or more in 2023 and about 2,000 riders took 10 trips or more in 2024.

On average, approximately 508 trips were completed daily in 2023 and 360 trips were completed daily in 2024. Table 1 provides the average breakdown per month for both seasons.

Table 1: Average Daily Trips per Month

Month	Average E-Scooter Trips per Day	Average E-Scooter Trips per Day (Weekdays Only)	Average E-Scooter Trips per Day (Weekend Only)
April 2023	592	426	924
May 2023	1,106	1,023	1,344
June 2023	597	547	735
July 2023	552	498	665
August 2023	457	429	536
September 2023	470	451	511
October 2023	240	230	263
November 2023	107	101	122
April 2024	235	208	306
May 2024	357	343	396
June 2024	379	381	374
July 2024	447	414	538
August 2024	418	398	466
September 2024	485	485	483
October 2024	357	367	327
November 2024	185	188	175

It is important to note that the high number of trips in May 2023 might have been due to the novelty of the E-mobility devices at the time of launch. Additionally, vendors began reducing their fleet size at the end of each season in late October. Monthly trip averages indicate that there is a demand for a shared E-scooter program in Oshawa.

Attachment 2 illustrates the daily trip routes and Attachment 3 illustrates the most popular origins and destinations for the 2023 and 2024 season. It is identified that the high concentration of trips were near Durham College, Ontario Tech University and the student residences on Simcoe Street. Other high concentration areas include the Windfields Farm area, Downtown Oshawa and Lakeview Park.

4.2.2.1 Trip Distance, Duration and Speed

While trips ranged from less than 1 km to about 5 km, the average E-mobility trip length was 2.0 km and the average trip duration was 12.2 minutes in 2023. Similarly, the average E-mobility trip length was 1.9 km, the average trip duration was 11.4 minutes in 2024. The average distance travelled, and the duration of the trip remained constant during both seasons. Attachment 4 illustrates trip distance distributions for the 2023 and 2024 seasons.

4.2.2.2 Trip Purpose

Both E-mobility vendors conducted an in-app end-of-season survey which provided insight into the benefits and issues associated with E-mobility devices. The surveys were conducted in November 2023 and November 2024, respectively. The 2023 survey results for Oshawa indicated that the most common reason for riding an E-mobility device was for leisure and recreation (53%) and commuting to work or study (41%). The 2024 survey results indicated that the most common reason for riding an E-mobility device was commuting to work or study (58%) and leisure and recreation (40%). Other reasons that respondents reported using E-mobility devices included, as examples, connecting to or from public transit, running errands, completing a trip from other modes, to reduce vehicle emissions, to explore Oshawa and to get to the gym. The percentage of riders using E-scooters to connect to or from public transit increased from 20% in 2023 to approximately 30% in 2024 which indicates that E-mobility devices serve as a first and last kilometre travel solution.

4.2.2.3 Fleet Size

The number of daily trips versus the average number of available E-mobility devices is shown in Attachment 5. There was a decrease in daily usage rate per mobility device in 2024 compared to 2023, from 2.17 to 0.81. However, the available fleet size increased from 500 to 600 and the novelty of the E-mobility devices decreased in 2024 and reached a norm. The overall daily average trips from August 2023 to November 2024 remained consistent indicating that there is a demand for E-mobility devices in Oshawa. The fleet size could be reduced to maintain the utilization rate to 1.0 or above.

4.2.2.4 Alignment with Mobility Objectives and Healthy Choices

E-mobility devices advance the City's broader goals of providing more sustainable mobility choices for residents as well as supporting Greenhouse Gases ("G.H.G.") reduction goals by offering alternatives to automobile travel.

The vendor's end of the year survey results indicates that many shorter trips by E-mobility devices replaced a trip that would have been taken by automobile. Nearly 45% of trips replaced car journeys, thus resulting in reduced congestion and carbon emissions. Approximately 14% respondents in 2023 and 17% of respondents in 2024 said they would not have made the trip if E-mobility devices were not available which indicates E-mobility devices provide mobility choices for Oshawa residents.

The 2023 survey results indicated that about 10% of E-mobility riders in Oshawa have a disability or mobility impairment, which makes it difficult for them to walk long distances or for extended periods of time. E-mobility devices afford them the opportunity to travel further and more frequently. The vendors' survey results also indicated that about 20% of those with a disability or mobility issue would not have made the trips if E-mobility devices were not available.

4.2.2.5 Facilitating Transit and Multimodal Trips

One of the goals for introducing E-mobility devices was to facilitate first- and last-kilometre transit trips. According to vendor’s survey results, approximately 20% (one in five riders) used E-mobility devices to connect to or from public transit in 2023. The survey results indicate that approximately 30% of riders used E-mobility devices to connect to or from public transit in 2024. First/last kilometre trips to/from transit stations averaged between 1.5 and 2 kilometres. Many survey respondents reported taking a shared E-mobility device to connect to/from another form of transportation at least once indicating transfers and multimodal trips.

4.2.2.6 Support for Local Businesses

The vendors’ year end survey results show that approximately 40% of E-mobility trips were made to/from local businesses in 2023 and over 60% of trips were made to/from local businesses in 2024. Of those who visited local businesses, 59% of trips resulted in an average purchase of \$37, or contributing approximately \$3 million to Oshawa’s economy in 2023. In 2024, the average purchase increased to about \$43, contributing approximately \$5 million to Oshawa’s economy.

It should be noted that General Motors of Canada entered into an agreement in 2024 with one vendor to provide shared E-mobility services within its property.

The shared E-mobility devices also supported tourism as respondents noted that the E-mobility devices were a convenient option for them to get around and explore Oshawa.

4.2.3 Feedback and Concerns

The City received feedback throughout the riding season through a variety of means including Service Oshawa and 3-1-1. Tables 2 below provide a summary of the concerns and/or inquiries received by the City directly.

Table 2: Concerns Received by the City

Vendor	Sidewalk Riding	Parking	Rider Behaviour	Others
2023				
Neuron	2	4	2	
Bird				
General		9	12	6
Total	2	13	14	6
2024				
Neuron		4	1	1
Bird				

Vendor	Sidewalk Riding	Parking	Rider Behaviour	Others
General		9		5
Total		13	1	6

Table 2 shows that in 2023, the City received about 35 concerns and in 2024 the City received a total of 20 concerns. Many concerns received by the City were related to the pilot program and shared E-scooters in general. Concerns related to specific vendors were forwarded to the vendors to address. Most of the concerns in 2023 were at the beginning of the program and were related to rider behaviour and dissatisfaction with the pilot program in general. The most common concerns in both 2023 and 2024 were related to improper parking.

Many concerns were sent to the vendors directly. The vendors could be contacted via their customer service phone number, a local e-mail address that went directed to their local operations team or through their apps as mandated in the Service Agreements. Each E-mobility device had a sticker with the company’s contact information and QR code, allowing residents to report issues directly to them without requiring their app. Table 3 provides a summary of the concerns received by each vendor.

Table 3: Concerns Received by Vendors

Vendor	Sidewalk Riding	Parking	Rider Behaviour	Others	Total Concerns received by each vendor
2023					
Neuron		135	1		136
Bird	3	23	4	1	31
2024					
Neuron		58	1		59
Bird		15	1	1	17

It should be noted that the above-data only reflects incidents that were reported. The City also received valuable feedback through engagement with the City’s Active Transportation Advisory Committee (2023), and the City’s Accessibility Advisory Committee. Below is a summary of the key issues encountered and actions taken to address them.

4.2.3.1 Improperly Parked E-mobility Devices

The primary issue that arose during both the 2023 and 2024 seasons was the improper parking of E-scooters. In accordance with the Skateboard and Cycling By-Law, the City permitted E-scooters and E-bikes to be parked within the furniture zone next to trees, light poles, street furniture and bike parking while maintaining a continual throughway clearance for pedestrian traffic. The challenges included streets in the E-mobility 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 vendors to respond to parking concerns. 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.

City staff and the vendors worked to increase public awareness of where to correctly park E-mobility devices. City-led awareness initiatives included communications using a variety of communications tactics, including the City's website, website newsfeed and social media. Additionally, the vendors were to provide temporary parking mats in high utilization areas.

Vendor-led initiatives included education events (scoot safe, helmet giveaway), in-app messaging and an industry coordinated messaging campaign including a mid-season survey of E-mobility users. They also had representatives interacting with riders, proactively correcting improperly parked E-scooters and responding to concerns related to parking. The vendors audited the required end-of-ride photos leading to fines or suspensions for repeated infractions. In 2024, vendors reminded riders to park in temporarily designated parking locations that the vendors installed later in the season at 12 locations. The temporary parking locations were identified by both vendors and City staff on walkabouts as well as a review of resident concerns. These areas were discussed at bi-weekly meetings with the vendors to develop localized parking solutions. As the season progressed there was improved parking compliance as evidenced through less concerns and on-site observations of key corridors conducted by City staff. However, City staff recognize the need for improvements as any improperly parked E-mobility device is an accessibility concern.

It is noted that vendors worked with Durham Region Transit and geofenced off bus bays where e-scooter parking was impeding access to transit.

4.2.3.2 Sidewalk Riding

The City does not permit E-mobility devices to be ridden on sidewalks. However, sidewalk riding has been reported and observed. Although the number of concerns decreased over the course of the season, which could be attributed to several awareness campaigns and initiatives, this issue continued to be reported. Residents and stakeholders have voiced concerns about safety and discomfort when encountering E-mobility devices operating on sidewalks.

City staff and the vendors worked to correct sidewalk riding through geofencing of key corridors where feasible and increasing public awareness of the rules through both City-led and vender-led initiatives. City-led messaging included the City's website, website newsfeed and social media reminders, including sharing vendor reminders as well as posting the Ministry of Transportation of Ontario's riding behavior and rule videos on the City's website. Vender-led initiatives included in-app messaging, education events (scoot safe, helmet giveaway, etc.), mid-season survey of E-mobility riders, and a coordinated industry-wide messaging campaign. The vendors also demonstrated a decreased tolerance for sidewalk riding which resulted in rider suspensions from their apps when this

behaviour was witnessed by their staff. Problem areas were identified by a review of feedback from residents and discussed at bi-weekly meetings with the vendors. It should also be noted that numerous concerns related to sidewalk riding were related to privately owned e-scooter devices which were not formally part of the pilot project.

4.2.4 Reported Incidents, Collisions and Offences

Durham Regional Police Service (“D.R.P.S.”) collision reported 6 collisions involving an E-mobility device in 2023. Two were identified to involve a motor vehicle, one of which included a fatality. An investigation by D.R.P.S. into the fatality is still ongoing. City staff have worked with the vendors to identify possible issues from the program and worked towards addressing these issues to try and prevent future incidents. This included ensuring both vendors geo-fence all sidewalks and roads with a speed limit greater than 50 km/hr as “no riding zones” with accuracy. The City also requested that vendors increase education campaigns. There were 21 collisions reported to vendors in 2023 and 19 collisions reported in 2024. The reported collisions are being followed up by the vendors directly. These incidents were generally minor in nature (i.e. minor fall) and did not require the involvement of D.R.P.S.

4.2.5 City Revenues and Fees

City expenses directly related to the delivery of the pilot were intended to be recovered from fees paid by the e-scooter vendors. The 2023 and 2024 fee structure is shown below in Table 4.

Table 4: 2023/2024 Pilot Season Fee Structure

Description of Fee	Amount in 2023	Amount in 2024
Trip Fee	\$0.20 per trip	\$0.10 per trip
Vehicle Fee	\$0.50 per vehicle per day	\$50 per vehicle per season
Compliance Fee (City staff to move improperly parked vehicles or impound)	\$100 per incident	\$100 per incident
Non-refundable license fee to operate a shared micromobility program within the City of Oshawa	\$5,000 per season	\$5,000 per season

The City generated \$70,627.20 in 2023, and as of the end of Q3 2024, generated \$51,024.20 (Q4 figures were unavailable at the time of writing this report). The fees collected in 2023/2024 allowed for the recovery of costs for services such as a subscription to a data monitoring platform, City-led communication and education activities (Bike Month, Shape Oshawa), and support from Community and Operations Services, Corporate Communications, Engineering Services, Finance Services, Municipal Law Enforcement

and Licensing Services and Service Oshawa staff. The fee structure should be continually reviewed at the end of each season to ensure that the program remains revenue/expense neutral at a minimum, as intended.

4.2.6 Region and Adjacent Municipalities

Durham Region did not participate in the Shared E-mobility Pilot Program. However, the Region's Electric Kick Scooter By-law 23-2022 – which was recently extended in compliance with the Province's decision to extend the program to 2029 – supports the use of e-scooters on Regional roads. The Region's Electric Kick Scooter By-law 23-2022 regulates the safe operation of E-mobility devices on Regional roads and infrastructure. The by-law allowed continuous use of Oshawa's shared E-mobility devices on Regional infrastructure and prevented users from being unexpectedly locked out of E-mobility access when crossing over Regional Roads or infrastructure.

Oshawa's adjacent lakeshore municipalities, the Town of Whitby and the Township of Clarington, did not participate in the pilot program. Through effective geofencing, shared devices were prevented from travelling to or crossing over their infrastructure. It should be noted that the Town of Whitby is now exploring its options to participate in the Pilot Program.

The Town of Ajax has been participating in the Province's Pilot Program since 2023 and recently extended the contract to continue until 2029. The City of Pickering will be starting its Pilot Program in 2025.

4.3 Recommendations

4.3.1 Option 1: Continue Oshawa's Shared E-mobility Program

Option 1 recommends continuing the Shared E-mobility Program in 2025 to 2029 with key modifications as identified below.

4.3.1.1 Reduced Deployment Areas

Staff recommend that the deployment area be limited to the areas shown in Attachment 6. Trip origin and destination data from the 2023/2024 pilot program indicated that there were more trips beginning and ending in and around the areas of Ontario Tech University and Durham College, Windfields Farm, Downtown Oshawa, and Lakeview Park, compared to other parts of Oshawa.

The trip route patterns indicated that the majority of the trips outside of these areas were mainly going to/from these areas. To better manage the pilot program and to address the identified issues associated with E-mobility devices, it is recommended that the deployment and parking of E-mobility devices be restricted to the areas shown in the attachment. However, the riding of E-mobility devices between these areas should be allowed as per the City's by-laws. This provides an alternative travel option for areas with high demand for E-mobility devices while protecting those areas that do not currently have a high demand. The deployment area could be expanded if staff identifies a need for it or if there is a request from a resident group and/or the local business community; provided

that vendors are meeting the City's standards. A reduced deployment area would mean reduced staff time and resources for public outreach, communication, and issues management.

One of the vendors, Bird Canada, has made an agreement with General Motors of Canada (G.M.) to allow E-scooters on their private property. Staff recommends to include the area surrounding G.M. in the deployment area in support of this initiative.

4.3.1.2 Reduced Fleet Size

Staff recommend that the fleet size be limited to 500 E-mobility devices (down from 700) to improve the overall operations of the program. Vehicle utilization and observations by staff during the 2023/2024 seasons indicated that there were many E-mobility devices that were parked for long durations without being ridden, indicating low demand in that area. Too many parked e-scooters contribute to overall sidewalk clutter, which was a common concern during the 2023/2024 pilot program.

In discussions with the vendors, it is felt that aiming for two to three trips per device per day is an appropriate target for the size and population of the City of Oshawa. The utilization rates observed in 2023/2024 support the recommendation to reduce the fleet size. This approach will increase the availability of E-mobility devices and reduce the potential for street clutter with too many parked E-scooters not in use.

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

The refined agreement should include the City's discretion to decrease the total fleet size, if necessary, at any time throughout the program. Staff also recommend that the agreement include provisions to allow the City to either cap E-mobility device deployment in specific areas of the City (such as potentially in Downtown Oshawa) 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-mobility programs.

4.3.1.3 Enhanced Parking Restrictions

Physical Parking Locations: In 2024, the City sought to identify physical parking locations for E-mobility devices. Areas with heavy E-mobility device use or a high frequency of parking issues were targeted. Twelve potential parking locations were identified and temporary parking mats were implemented prior to the end of this season. As it was implemented close to the end of the season, the impact could not be fully measured. Staff recommend that all permanent parking locations be equipped with a parking mat as shown in Attachment 7, to assist with great parking compliance.

Virtual parking locations: It should be noted that E-mobility devices will be allowed to park temporarily for specified hours outside of the deployment area to allow a user to shop, go to class, etc. Staff recommend that the City mandate that any shared E-mobility vendor permitted to operate in Oshawa set up virtual preferred parking locations which provide

riders precise parking location and parking duration information. This should be demonstrated and proven to work as part of the agreement revision process. Vendors will work with the staff to identify the duration and location for these parking spaces.

In-app No Parking Zones: Staff recommend that vendors set up “no parking zones” in their app. This would include small residential streets that do not have furniture zones. If these “no parking zones” are large, vendors should work collaboratively with staff in identifying preferred parking areas (either in-app identified or physically demarcated) in order to balance the accessibility concerns and the convenience of the program for riders.

Improved Vendor Response Times: Staff recommend a higher standard for E-mobility parking compliance. The one-hour allowance for E-mobility vendors to respond to improperly parked E-mobility devices allocated in the 2023/2024 seasons would be replaced with a 30-minute response time allowance. The agreement would require vendors to improve the time and staffing they commit to responding to issues. City staff would be empowered to impound E-mobility devices or fine the vendors for any observed improperly parked E-mobility devices without warning, in the event that the vendor does not address issues within the time allowance. This would motivate E-mobility vendors to increase their own proactive management of E-mobility parking to minimize fees associated with the retrieval of impounded vehicles. In addition, language in the agreement with the vendors 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 vendors be required to demonstrate that the E-mobility device is parked properly before the ride is considered complete. As part of the refinement process, the vendor’s parking compliance mechanisms will be closely reviewed to assess the adequacy of the mechanisms and deterrent measures to address parking incidents.

Introduce Enhanced Collection and Impoundment: In addition to the recommended improvements measures that the E-mobility vendors must carry out, and in the event that the vendor does not address issues staff may be engaged as a last option to remove and impound E-mobility devices. This would include issuing fines or impounding E-mobility devices, regardless of the 30-minute response time allowance. This would help ensure that vendors manage their operations to minimize the potential for impoundment and fines. Staff time related to impoundment / enforcement could be offset by the proposed increase to the Compliance Fee as described below.

4.3.1.4 Enhanced Sidewalk Riding Restrictions

Staff recommend that the City mandates that the newest generation of E-mobility device from any vendor be deployed in Oshawa at 100% capacity of their fleet to ensure the newest sidewalk detection technologies and adaptive technologies are being used. The vendor must demonstrate that these technologies are proven and effective. They must also demonstrate that they would be deployed immediately upon starting the season. Failure to meet these criteria may lead to the termination of the agreement. This may require a gradual expansion of E-mobility deployment areas as required geofencing layers to manage these technologies are implemented.

4.3.1.5 Enhanced User Training

Staff recommend the continuation of mandatory in-app user training modules before riders can begin using a shared E-mobility device for any future pilot season. It is recommended that additional in-app educational measures (e.g., periodical mandatory quizzes or training modes which reduce speeds for first time users) be included.

4.3.1.6 Enhanced Vendor Staffing Requirements

Staff recommend a higher standard for E-mobility riding behaviour compliance. In addition to the technologies and education strategies, the refined agreement should include how much time and staffing they commit to addressing this issue. In addition, language in the service agreements with the vendors 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 permission to operate in the City's right of way.

4.3.1.7 Enhanced Durham Regional Police Service Enforcement

Similar to bicycles, all Highway Traffic Act rules of the road apply when riding e-scooters. Penalties will also apply to violations of the pilot regulation. Staff recommend that the City work with the D.R.P.S. to undertake enforcement "blitzes" targeting sidewalk riding and improper riding behaviours at the beginning of each season and throughout at high ridership times of day/weekends to help educate and enforce the "no sidewalk riding" policy and proper riding behaviours. This will be done in conjunction with intelligence gained from ride data, concerns, and staff observations.

4.3.1.8 Revised Fee Structure

To date, the management of the pilot has been run using existing staff resources. Currently, the program is led by engineering staff with ongoing support from multiple departments (Community and Operations Services, Corporate Communications, Finance Services, Municipal Law Enforcement and Licensing Services and Service Oshawa). As the pilot program and expectations have evolved, staff recommend that the overall fee structure be revised to support additional efforts with respect to program improvement and staff resources. Staff recommends revising the fee structure as shown in Table 5.

Table 5: Proposed Fee Structure

Description of Fee	Amount in 2023	Amount in 2024	Recommended Amount in 2025
Trip Fee	\$0.20 per trip	\$0.10 per trip	\$0.15 per trip
Vehicle Fee	\$0.50 per vehicle per day	\$50 per vehicle per season	\$60 per vehicle per season

Description of Fee	Amount in 2023	Amount in 2024	Recommended Amount in 2025
Compliance Fee	\$100 per incident	\$100 per incident	\$250 per vehicle per incident
Non-refundable license fee to operate a shared micromobility program within the City of Oshawa	\$5,000 per season	\$5,000 per season	\$10,000 per season
Non-refundable application fee to request for increase to existing fleet during mid-season	\$0	\$0	\$2000 per request
Station Encroachment Fee	0	0	\$250 per station

The proposed License and Application fees will cover administrative costs related to the intake, analysis, processing, and finalizing of the service agreements.

The Trip and Vehicle Fees are intended to cover all remaining operational costs associated with the program including, analysis and reporting, contract administration, communication, issue management and vendor management.

The proposed Compliance Fee will cover operational costs associated with enforcement activities undertaken by the City, including removing E-mobility devices if a vendor fails to address issues within the time allowance.

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. This fee could cover the expenses related to signage and replacement of sod, if any removed, and any repair work on the furniture zone due to the parking structure.

The collection of these fees shall not release the permitted shared E-mobility vendor from additional requirements (ex: educational, operational).

4.3.1.9 Encourage Durham College/Ontario Tech University Participation

Staff recommend that the City facilitates a discussion with Durham College, Ontario Tech University and the vendors to consider allowing E-mobility devices on their campuses. E-mobility user Data and observations indicate that a significant number of trips are to/from Durham College and Ontario Tech University and the students and faculty would benefit from this service being continuous within their campuses.

4.3.1.10 New Competitive Procurement Process for One Vendor

Staff recommend using a competitive procurement process to identify one qualified E-mobility vendor for 2025-2029, down from two vendors in the 2023/2024 season. Having one vendor is consistent with industry standards in other jurisdictions comparable to the size and population of the City of Oshawa. Limiting the number of E-mobility vendors operating in Oshawa is proposed to:

- Simplify reporting of issues;
- Decrease staff resource time on managing the program;
- Increase vendor accountability;
- Reduce the potential for sidewalk clutter due to multiple competing vendors; and,
- Offer residents more consistent service.

The R.F.P. will continue to be based on the City's Micromobility System Framework established in 2022 and proponent submissions will be evaluated on higher standards including management plans, experience, staffing levels, safety records, communications, sidewalk detection, improved parking, emissions, software app ease of use, innovation and elements identified in Section 4.3.1 of this Report.

The City will contract with the highest ranked successful proponent to operate a shared E-mobility fleet for 2025-2029.

4.3.2 Option 2: Discontinue Oshawa's Shared E-mobility Program

Option 2 would discontinue the Shared E-mobility Pilot Program. However, residents would still be permitted to use their own privately owned E-mobility devices in accordance with City by-laws.

5.0 Financial Implications

The fees collected from the vendors are intended to cover operational costs including subscription to a data monitoring platform, and staff time to implement, monitor and communicate the program.

The Fees collected in 2023 and 2024 (Q1-Q3 only for 2024) were \$79,627.20 and \$51,024.20, respectively. Software expenses in 2023 and 2024 were \$12,385.66 and \$9,928.34, respectively. Additional staff time (Community and Operations Services, Corporate Communications, Engineering Services, Finance Services, Municipal Law Enforcement and Licensing Services, and Service Oshawa) was not recorded. It is estimated that the program was generally cost neutral in 2023 and 2024.

If Council chooses to extend the shared E-mobility Program, and based on the data from 2023/2024 and the proposed modifications indicated in Section 4.3 of this Report, including but not limited to the proposed increased cost recovery charges for staff time and license fee, it is anticipated that program should remain generally cost neutral.

6.0 Relationship to the Oshawa Strategic Plan

This Report responds to the Oshawa Strategic Plan Priority Area:

“Care: Safe and Sustainable Environment” with the goal to reduce the City's carbon footprint and greenhouse gas emissions.

A handwritten signature in black ink, appearing to read "Greg Hardy".

Greg Hardy, P.Eng., PMP, Director,
Engineering Services

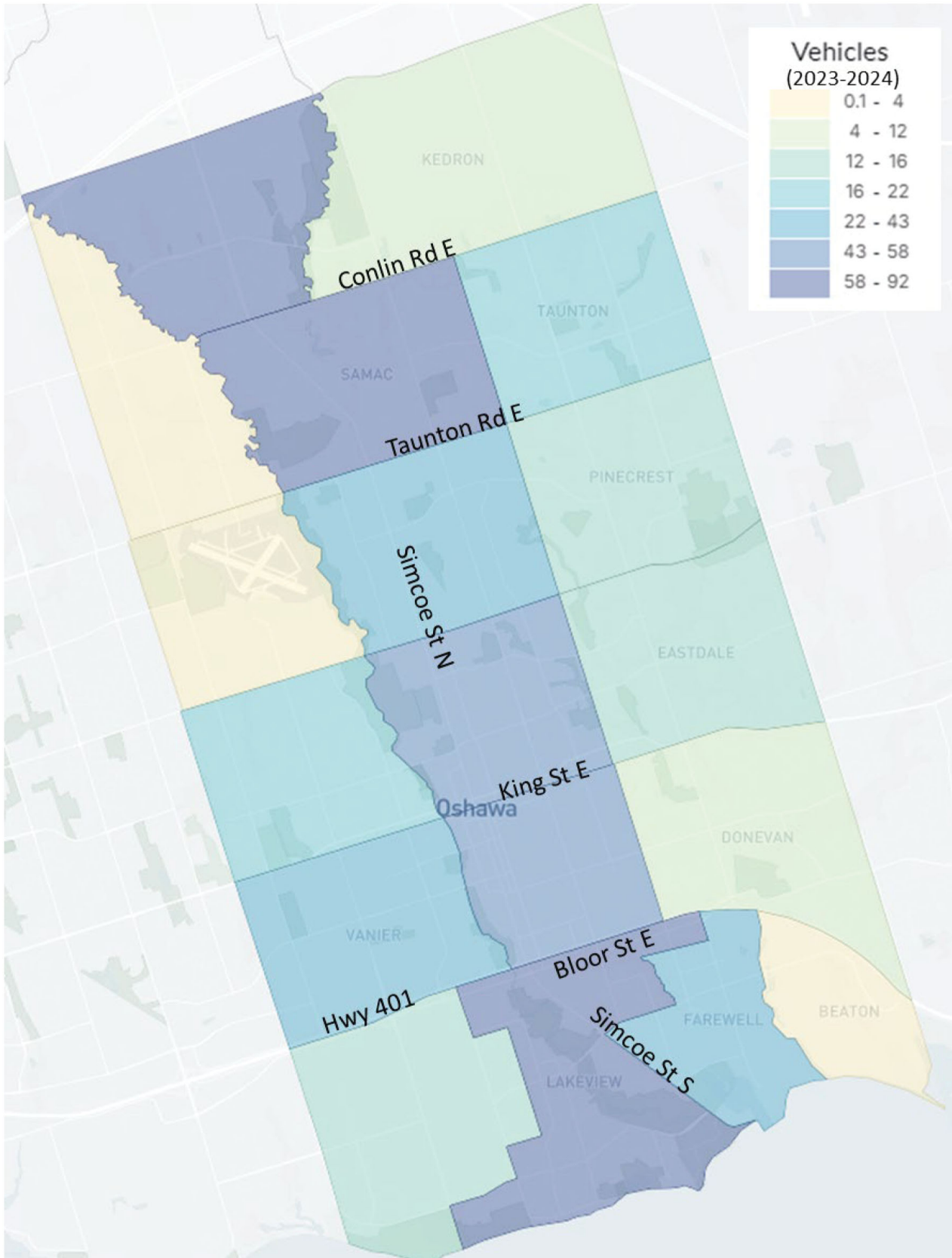
A handwritten signature in blue ink, appearing to read "Anthony Ambra".

Anthony Ambra, P.Eng, Commissioner,
Economic and Development Services Department

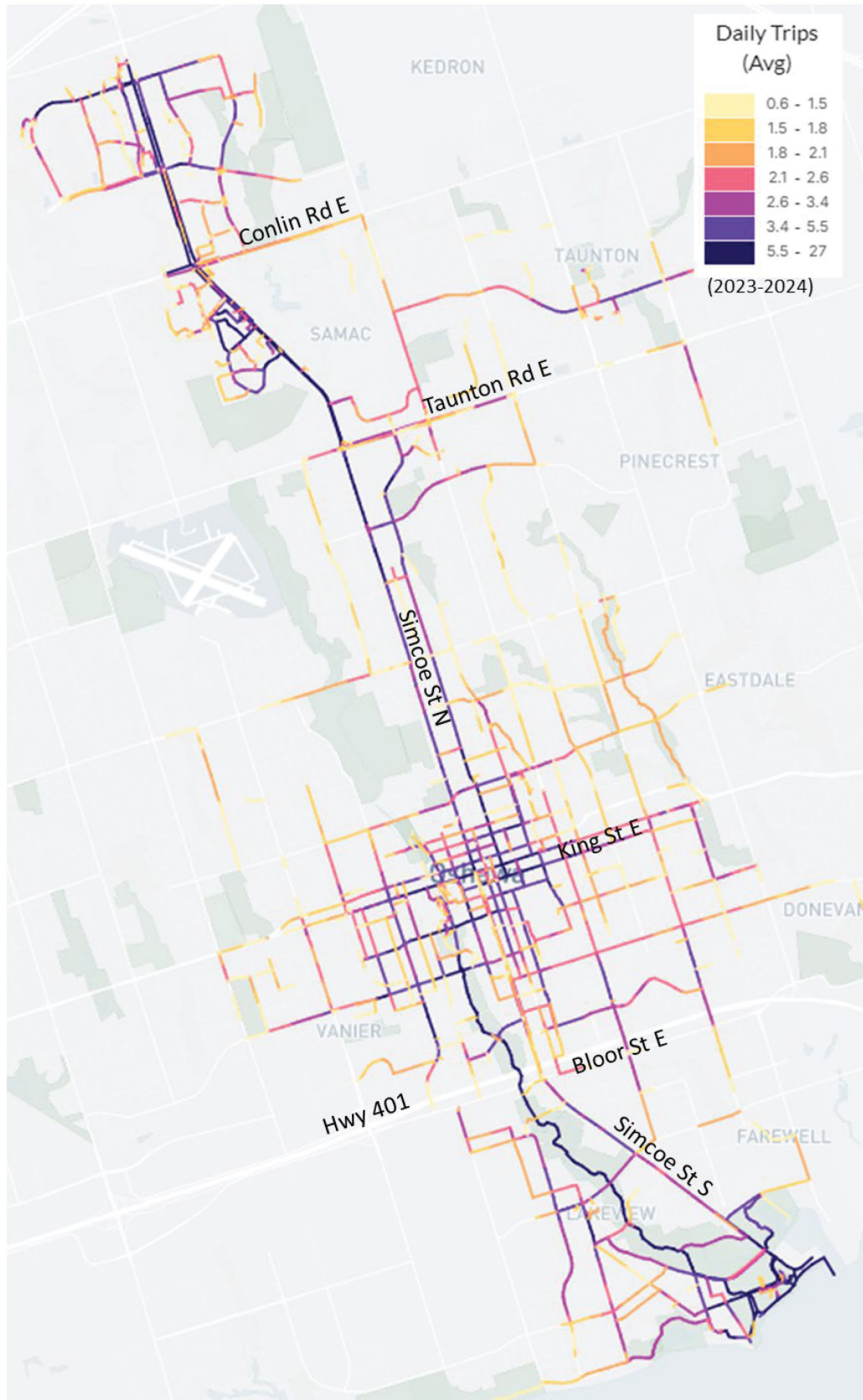
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Subject: E-Mobility Pilot Program
Ward: All Wards
File: 14-03-2024-E-scooter Pilot



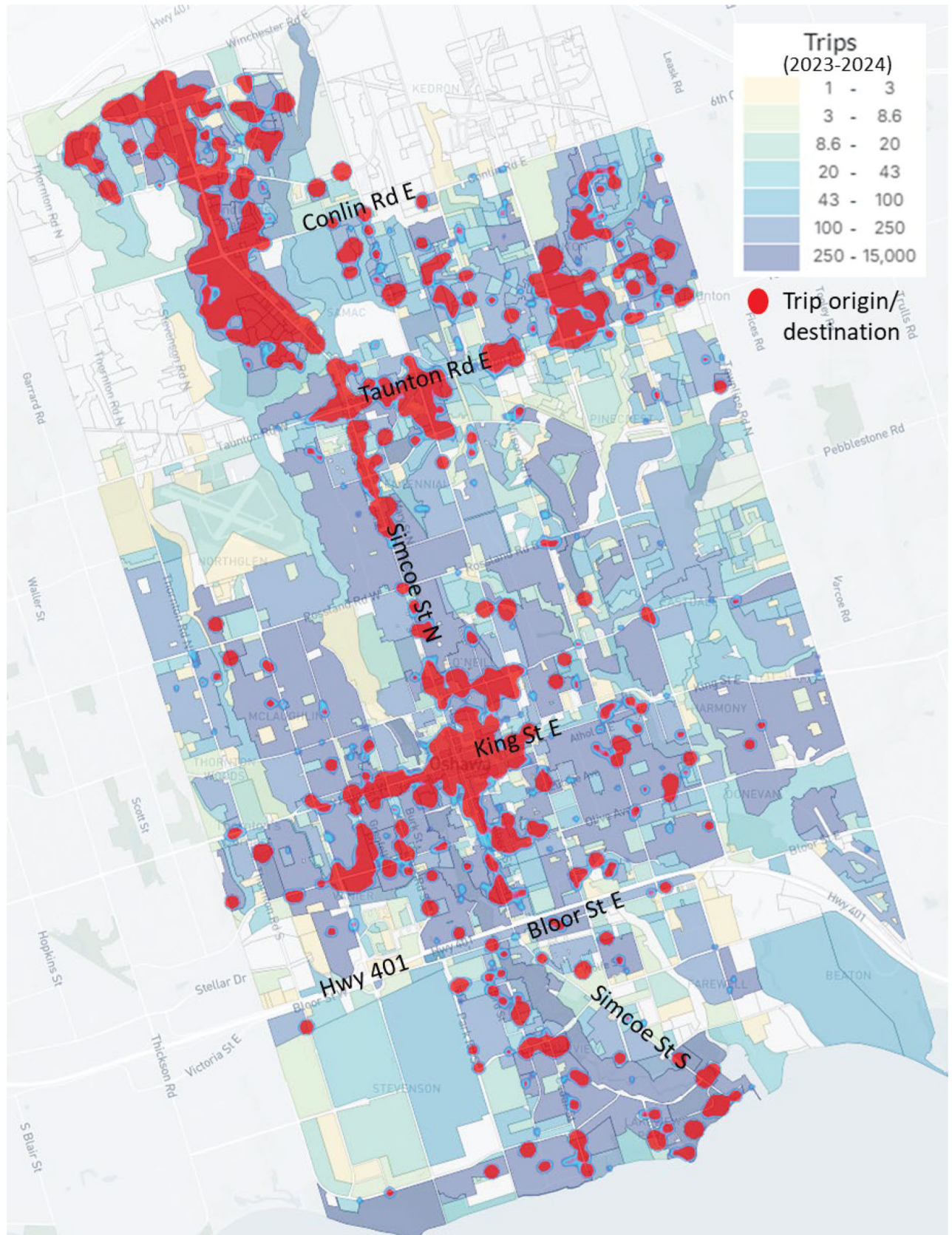
City of Oshawa
Economic and Development Services



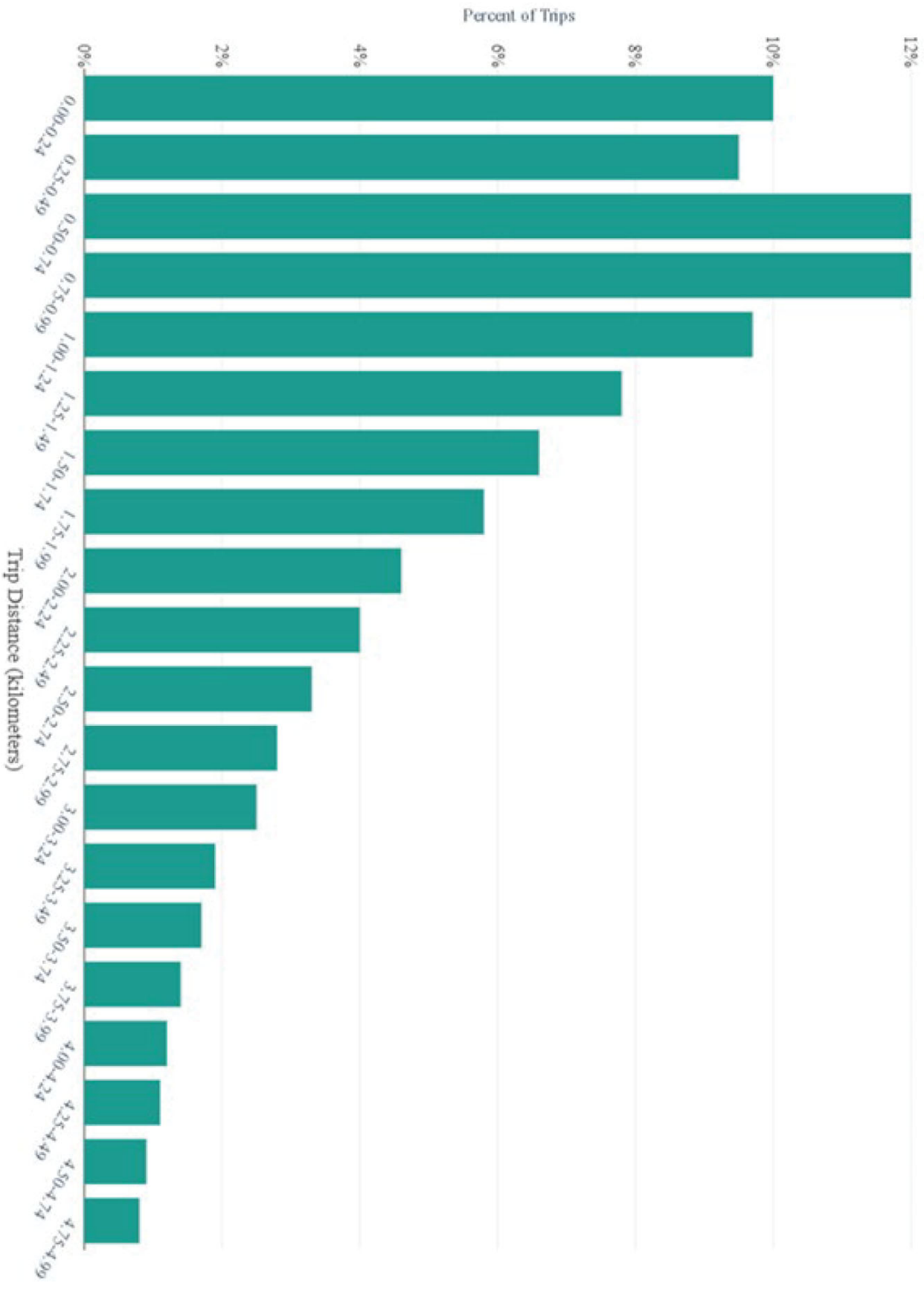
Title: Daily Trip routes of E-scooter Users
Subject: E-Mobility Pilot Program
Ward: All Wards
File: 14-03-2024-E-scooter Pilot



Title: Trip Utilization Heat Map
Subject: E-Mobility Pilot Program
Ward: All Wards
File: 14-03-2024-E-scooter Pilot

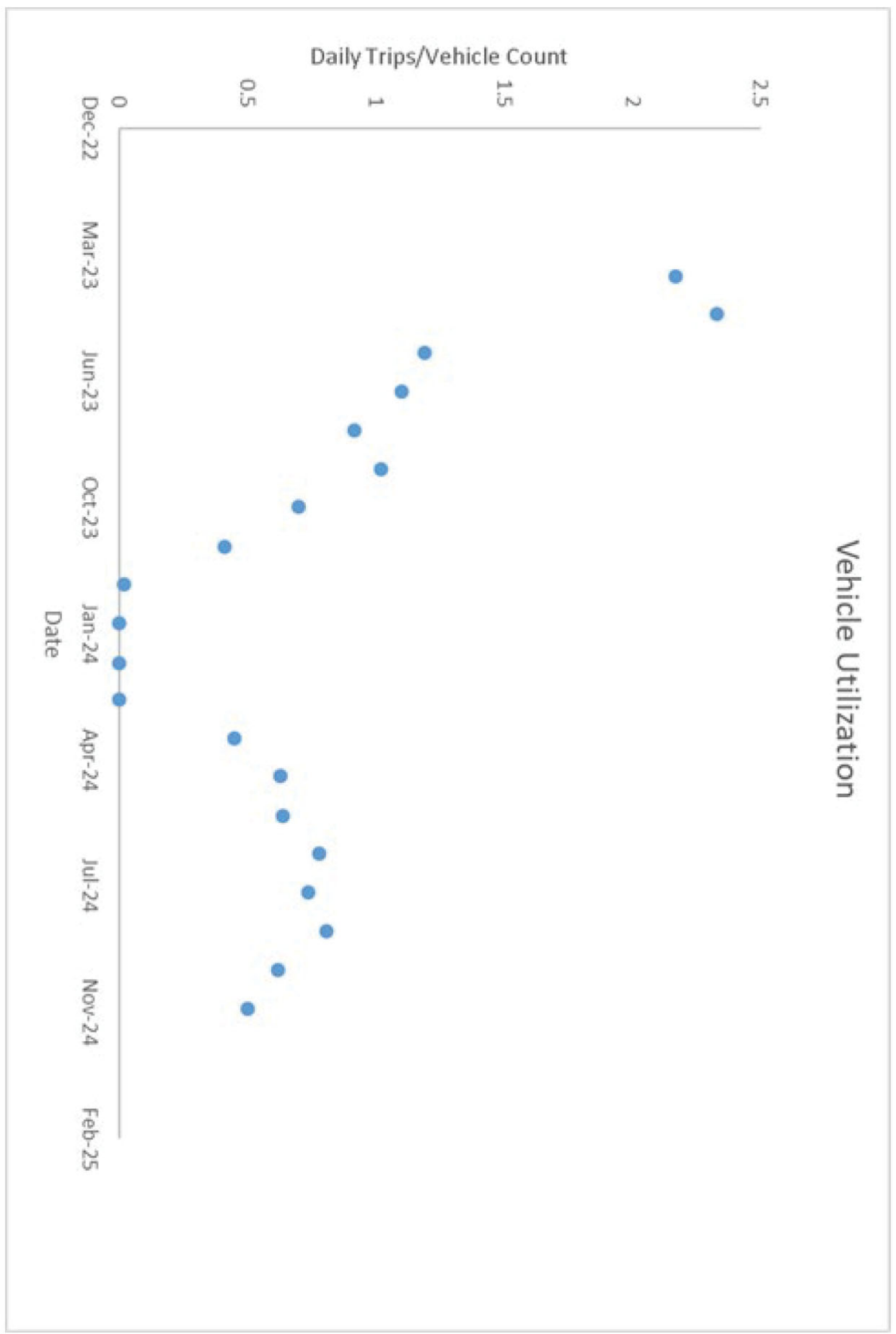


Title: Trips Distance Distribution of E-mobility Devices
Subject: E-Mobility Pilot Program
Ward: All Wards
File: 14-03-2024-E-scooter Pilot

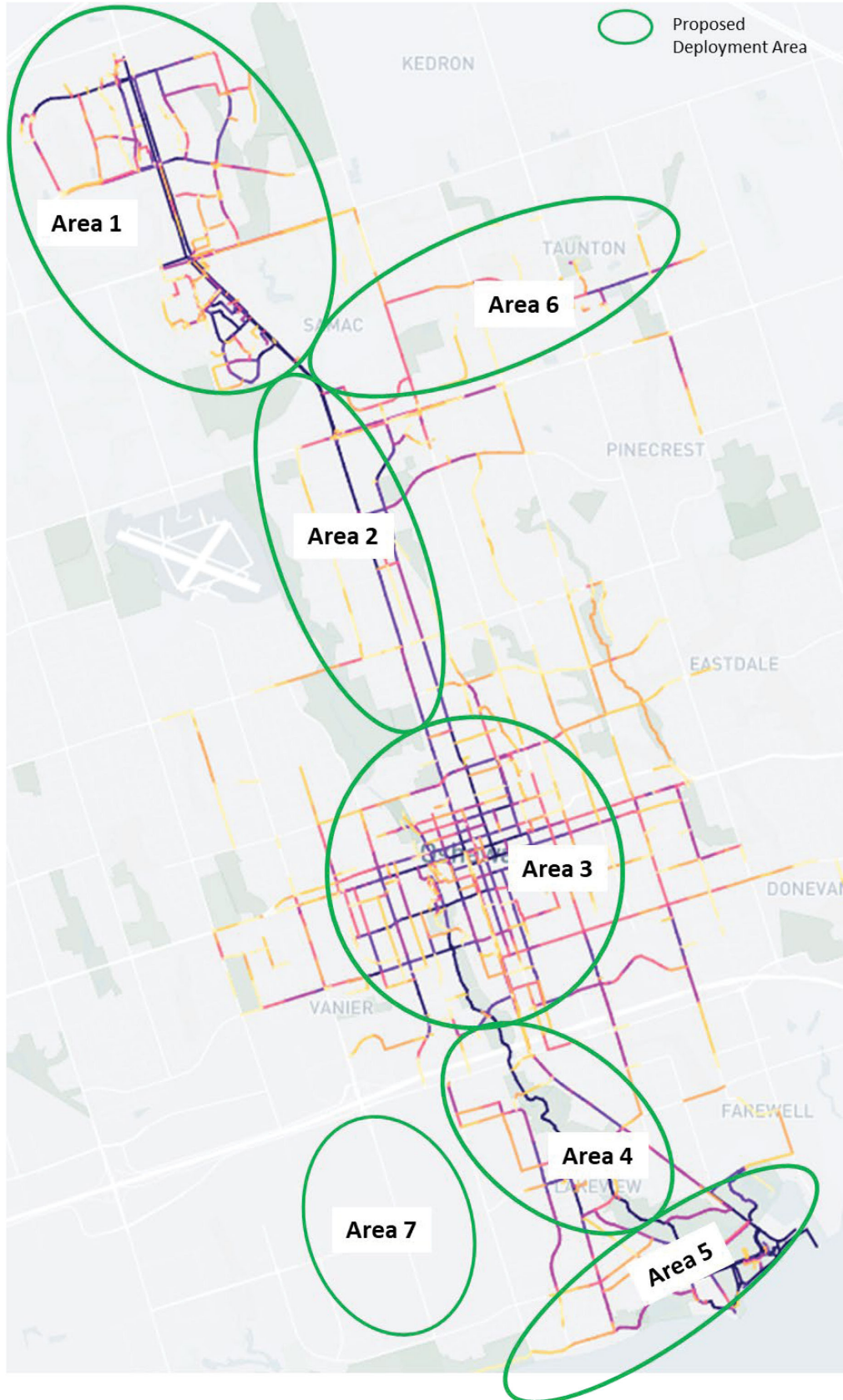


Title: Vehicle Utilization Chart for the 2023 and 2024 Seasons
Subject: E-Mobility Pilot Program
Ward: All Wards
File: 14-03-2024-E-scooter Pilot

Vehicle Utilization



Title: Recommended Deployment Areas for the 2025 season
Subject: E-Mobility Pilot Program
Ward: All Wards
File: 14-03-2024-E-scooter Pilot



**Item: ED-25-14
Attachment 7**

Title: Recommended Physical Parking Stations (Parking Mats)
Subject: E-Mobility Pilot Program
Ward: All Wards
File: 14-03-2024-E-scooter Pilot

