

Appendix 2

Shared Micro-mobility Program: Monitoring and Evaluation for 2024

Eight strategic pillars were developed to guide the creation of a shared micro-mobility program (“the Program”) in the City of Mississauga. These pillars form the foundation of the Monitoring and Evaluation Framework for the Program. The Monitoring and Evaluation Framework, in turn, lays out the goals and objectives of the Program, indicators of success, and a list of data staff will need to collect to evaluate the success and other aspects of the Program.



There are over 100 data indicators identified in the framework. Staff use a data sharing platform and request monthly data reports from Bird Canada and Lime Technologies Inc (“the Service Providers”) to monitor service compliance and other metrics.





Figure 1: Strategic Pillars which form the foundation of the Monitoring and Evaluation Framework


This Appendix contains preliminary analysis of the 2024 season organized under the eight strategic pillars. Staff will continue to monitor and evaluate data to recommend further improvements and program oversight in 2025.

Strategic Pillar	Preliminary Analysis
<div style="text-align: center;"> </div> <p style="text-align: center;">Accessibility and Ease of Use</p> <p>Avoid creating accessibility barriers to the extent possible and ensure systems are available for use to all residents (geographically, temporally, financially, physically)</p>	<p><u>Geographically:</u></p> <p>Early in the Program, staff and the Service Providers observed overcrowding at certain approved parking locations indicating a high demand for micro-mobility in the area. Additional parking locations were approved to meet the demand; locations with the highest demand such as Port Credit and City Centre have been flagged for the installation of docking stations and additional bike racks in 2025.</p> <p><u>Financially:</u></p> <p>An important goal of the Program is to meet the needs of those underserved by the City’s existing transportation system. Both Service Providers have options available to make the Program more affordable for all users, including lower-income residents.</p> <p>Lime recently finalized a partnership with Seva Foodbank and launched the Lime Hero Charity Program in Mississauga. Lime Hero allows riders to round up their ride fee to support local nonprofits. Seva Foodbank patrons will automatically qualify for Lime Access, providing a 50% discounted ride for low-income riders and increasing accessibility to affordable transportation options.</p> <p><u>Physically:</u></p> <p>The Program requires devices to be returned to an approved parking location and locked to a pole, signpost, or bike rack at the end of each trip. Locations are reviewed by City staff to ensure that devices properly parked do not impact accessibility or interfere with regular City operations.</p> <p>If an improperly parked device blocks the path of travel, the Service Provider is notified as soon as the concern is received and deploys staff to address the concern within an hour. However, there have been areas where improper parking and device clustering has been a recurring issue. Parking locations where a concern is received are automatically reviewed and revised as needed to prevent recurrence, and staff will continue to evaluate this issue and review other opportunities for improved parking in 2025.</p> <p>In higher demand areas, such as Port Credit and the City Centre, both Service Providers have developed rebalancing plans and</p>

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	proactively patrol in response to recurring issues to prevent overcrowding and address improperly parked devices.
 <p>Addressing Climate Change</p> <p>Reduce vehicular traffic congestion/move people rather than cars and improve mode share for active transportation</p>	<p>Between June 21, 2024 (program launch) and October 31, 2024, 112,215 trips were taken using the shared e-bikes and e-scooters, with users travelling a combined distance of 364,693 km. Over 14,000 users have rented the devices more than five times in the first four months of operations.</p> <p>Research suggests that one out of three micro-mobility trips is likely to replace an automotive trip (Meroux D, Broaddus A, Telenko C, Wen Chan H, 2023). Based on the median trip by an auto driver in the City of Mississauga being 5.9 km (University of Toronto, 2020), an estimated 21,500 automotive trips have been replaced by the shared e-bike and e-scooter Program so far in 2024.</p>
 <p>Building Sense of Community</p> <p>Nurture community by developing a vested interest in micro-mobility, including public art components</p>	<p>Shared e-bikes and e-scooters offer another way in which residents can connect to local parks, libraries, community centres, shopping, transit, and much more. Parking locations have been strategically chosen to ensure access to each of these locations and help the community stay connected.</p> <p>The Service Providers have attended a combined total of 25 events across the City and partnered with community organizations to introduce residents to the Program, hand out free helmets, get people registered in the app, teach proper riding etiquette, provide information on local regulations, and give the community an opportunity to ask questions and share feedback.</p> <p>More needs to be done to build additional trust within the community for the Program, in particular with respect to the parking model and concerns around safety and orderly operations. Staff will focus on facilitating more opportunities for meaningful engagement in Program design and operations in advance of the 2025 season.</p>

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<div> </div> <p>Education</p> <p>Improve residents' understanding of the rules of using micro-mobility systems</p>	<p>The Program's Marketing, Communication, and Education Plan details how the Service Providers will disseminate clear and effective messaging throughout the Program to diverse populations using a variety of communication methods.</p> <p>Both Service Providers communicate regularly with users through their apps. Messaging includes safety tips and local regulation reminders each time the app is opened, prompts to wear a helmet, step-by-step instructions on how to rent a device, ride safely, and park correctly at the end of the trip, and in-app safety quizzes. They have also hosted pop-ups, attended City and community events, intercepted residents and visitors on the street, and held learn-to-ride events with community groups.</p> <p>In addition, the Service Providers have Mississauga specific webpages with information on local regulations, parking requirements, contact information, frequently asked questions and more.</p> <p>The use of personally owned e-bikes and e-scooters are also on the rise in Mississauga. Education for users of both shared and personal micro-mobility devices is essential to ensuring everyone can use City streets and parks safely. Private and shared e-bikes and e-scooters are all subject to provincial regulations and municipal by-laws, including restrictions on the use of devices on sidewalks, requirements for lights and bells, and speed limits.</p> <p>To reach both private and shared micro-mobility users, staff run an annual Share the Trail Campaign to remind users of the importance of proper trail etiquette and to encourage safe riding. The campaign includes sharing information through various communications channels, education workshops and events, pop-ups conducted by the City's Bike Ambassadors throughout the spring and summer months, education material available on the City's website and digital screens, social media posts, and printed material to hand out at events.</p> <p>In 2024, the City handed out 3000 bells, 3000 pairs of lights, 1000 reflective bands, and the Service Providers gave out 860 free helmets to help keep riders safe and ensure their bikes, e-bikes, and e-scooters are in line with provincial legislation.</p>

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 <p>Leverage and Partner with Business</p> <p>Monetize or capitalize on the presence of micro-mobility, including sponsorship and the use of micro-mobility vehicles for goods movement</p>	<p>The Program has allowed residents and visitors to connect to jobs and businesses across the city. In 2024, 22% of all trips started or ended within an Employment Area or BIA. Trends in time-of-day usage for the shared devices also indicate the devices are used for commuting with a clear uptick in weekday morning (6:00 to 9:00 AM) and weekday evening (6:00 to 9:00 PM) rides when compared to weekend ridership patterns.</p> <p>The Program has also helped visitors navigate the city, with 24% of trips being taken by those who live outside of Mississauga.</p>
 <p>Mobility as A Service</p> <p>Provide a wide variety of ways to move around the city, including combining modes of travel</p>	<p>Users in Mississauga traveled an average distance of 3.2km per trip, showing that shared e-bikes and e-scooters are great tools to connect residents to local destinations and to nearby transit, providing greater connectivity across the city.</p> <p>For this reason, parking locations have been strategically chosen to connect users to key destinations including their local MiWay stop, transit terminal, GO station, shopping, and more.</p> <p>City staff have responded to a total of 163 resident inquiries through 311, the media office, and Councillors’ offices. The Service Providers have received just over 5,800 inquiries through their various channels including apps, webforms, phones, emails, and in-person.</p> <p>Most inquiries to the City have been from non-users who had questions regarding the parking model and were concerned about devices being parked around the city. In contrast, inquiries directed to the Service Providers’ channels have been from users who express that the restrictive parking model and a lack of parking locations in parts of the city has led to user frustration at the end of the trip.</p> <p>The Program has been adjusted based on feedback received from Councillors and the public, including: a no ride zone added to Lakeshore Road in Port Credit to avoid conflicts with patios and high pedestrian volumes; proactive rebalancing plans in Port Credit to address overcrowding; and parking location adjustments and</p>

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	<p>deactivations across the city in response to accessibility concerns or reoccurring parking concerns.</p> <p>From a user perspective, more parking locations are needed across the city to ensure users can end their trips as close to their destination as possible. The current parking model restricts where trips can end and, while more parking locations have been added throughout the 2024 season, many parts of the city have been found by users to have insufficient parking locations, forcing them to go out of their way to properly end their trips.</p>
<div style="text-align: center;">  <p>Safety</p> </div> <p>Build complete streets, including separated active transportation corridors</p>	<p>Provincial regulations and municipal by-laws for the use of e-bikes and e-scooters are in place to help keep everyone safe. Each of the shared micro-mobility devices are equipped with a bell, front and rear lights, reflectors, and a helmet. The devices are also speed limited to 20 km/h across the City and 15 km/h on shared park trails and are not able to be ridden in certain areas like local parks, transit terminals, highways, railway corridors, etc. in accordance with provincial restrictions and municipal by-laws.</p> <p>Incidents of sidewalk riding have been reported by residents and members of Council. For the shared program, a combination of technology, education, incentives, and fines are used to encourage riders to follow City by-laws.</p> <p>In areas where sidewalk conflicts are higher, such as the Port Credit BIA area, the City has instituted a full geofenced no-riding zone capturing both roadways and sidewalks on Lakeshore Road in order to stop sidewalk riding. However, this is not feasible across the entire city. Staff will continue to work with the Service Providers to mitigate sidewalk riding.</p>
<div style="text-align: center;">  <p>Supporting Infrastructure and Policies</p> </div> <p>Create a robust and sustainable financial model, and address liability and risk</p>	<p>To address safety and accessibility concerns, staff have set out clear requirements for the Service Providers to meet. These requirements include: limiting parking locations to approved zones, requiring devices to be locked at the end of a trip, adhering to maximum response times to concerns, meeting minimum customer service levels, and more.</p> <p>The parking model in 2024 required devices to be parked at locations approved by staff. Approved parking locations included city-owned bicycle racks, light standards, and street sign posts. Users need to</p>

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	<p>lock their device to the approved piece of infrastructure. While in theory this should provide the City with a high degree of control over where devices can be parked and flexibility to assess Program demand, in practice this has resulted in a disorganized look to the Program, user frustration with a lack of parking options, non-user confusion about what constitutes a legitimate parking area, and user confusion about how to end trips properly.</p> <p>Some littering of devices / device abandonment has been reported and addressed during the 2024 season to date. Overall, the proportion of trips that end in device abandonment has been very low. The Service Providers have tools to identify and locate abandoned devices, and the City has established service levels for retrieval of abandoned devices when reported.</p> <p>Compliance with parking regulations, riding zones, and other restrictions is handled by the Service Providers. A combination of technology, education, incentives, and fines are used to ensure the use of shared e-bikes and e-scooters remains in line with provincial regulations and municipal by-laws. The Service Providers follow a progressive discipline policy for users who do not comply with regulations. This policy provides first time offenders with a warning and safety tips related to the infraction, a second offence results in a \$10 fine, and continued offences result in account suspension and/or deactivation.</p> <p>So far in 2024, 4% of trips resulted in a warning with a 93% success rate in avoiding further discipline.</p>