



## Supplemental Report: Equity Analysis for Seasonal Prohibition on Lithium-Ion Battery Powered E-Bikes and E-Scooters

**Date:** December 3, 2024  
**To:** TTC Board  
**From:** Chief People and Culture Officer

### Summary

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The TTC Board on October 29, 2024, referred the report titled Seasonal Prohibition on Lithium-Ion Battery Powered E-Bikes and E-Scooters to the TTC's Racial Equity Office and directed staff to complete an equity impact review for consideration by the TTC Board at the Board's next meeting. The review assessed potential impacts that a ban of lithium-ion-powered micromobility devices, including e-bikes and e-scooters, may have on equity deserving groups and gig workers. Staff have also developed recommendations for impact mitigation.

See here: Decision - [Seasonal Prohibition on Lithium-Ion Battery Powered E-Bikes and E-Scooters](#)

### Recommendations

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It is recommended that the TTC Board:

1. Receive this equity analysis for information.

### Financial Summary

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The recommendations of this report have no financial impact.

The Chief Financial Officer has reviewed this report and agrees with the financial impact information.

### Equity/Accessibility Matters

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The TTC strongly believes that all customers should enjoy the freedom, independence, and flexibility to travel anywhere on its transit system and across the city. The TTC's commitment to providing accessible transit is at the forefront of its 2024-2028 Corporate Plan, including the key principles of Equity, Diversity, Inclusion, and Accessibility.

## **Introduction**

The TTC has proposed a ban on lithium-ion-powered micromobility devices, including e-bikes and e-scooters. This proposal is being considered through the application of an equity analysis and is also grounded in the TTC's commitments to improving the customer experience and minimizing environmental impacts. The purpose of this equity analysis review is to provide insight on potential inequities that may arise as a result of implementing a ban on micromobility devices, especially for equity-deserving groups.

## **Limitations**

There is a limited number of studies that focus on addressing e-bike and e-scooter bans, especially in Canada. To mitigate this, the Racial Equity Office (REO) referred to related literature, which provided key insights into the broader implications of restrictions on e-bikes and e-scooters. Additionally, research and data collection were conducted over the course of 2 weeks, based on the urgent timeline of the request.

## **Methodology**

A mixed-methods research approach was employed to gather both quantitative and qualitative data. Focus groups were organized with approximately 160 participants and virtual key informant interviews were conducted with 4 e-bike and e-scooter retail store business owners in Toronto.

Recruitment efforts covered multiple platforms to maximize outreach and represent a broad demographic spectrum with respect to administering surveys. Engagement channels included community agencies, and information sessions hosted by other organizations.

A literature review and media scan were conducted to better understand the impact of e-bike bans on gig workers, particularly those in the food delivery sector, as this has been a subject of concern in recent policy discussions. The City of Atlanta and Metrolinx served as case studies.

Additionally, Toronto gig workers (i.e. e-bike dashers) have shared their concerns, underscoring the urgency of reviewing the TTC's decision from an equity perspective. For example, over 31 emails from Toronto e-bike dashers were sent to Commission Services, emphasizing the negative impacts from a winter ban.

## **Findings and Conclusions**

Research indicates that e-bikes and e-scooters are considered to be cost-effective and eco-friendly forms of transportation, that also have a positive impact on overall health and well-being. For low-income individuals in particular, e-bikes are a readily available and affordable form of commuting. For low-income users, alternatives such as public transit, manual bicycles or scooters are viewed as less economically viable, and in some cases, less convenient, potentially increasing travel costs and negatively affecting their budgets. As such, low-income individuals and marginalized groups with limited transportation options would be disproportionately affected by a ban.

Metrolinx has recognized the importance of ensuring customer safety while also considering the needs of e-bike users. Rather than imposing a ban on e-bikes, Metrolinx requires e-bike batteries to comply with standard Underwriters Laboratories of Canada

(UL) and Conformité Européenne (CE) certification requirements, and other measures.<sup>1</sup> On the other hand, the City of Atlanta has reduced the nightly curfew imposed on e-bikes and e-scooters, from four to two hours, to support night-shift workers and marginalized communities who depend on these devices for transportation during late hours.

By reviewing the policies and practices of relevant cities and transit agencies, the TTC could help to mitigate potential negative equity implications of imposing a ban on e-bikes and e-scooters. However, there have been incidences of e-bike lithium-ion battery fires on a TTC subway train and in Toronto. Ultimately, the decision to implement a ban or to apply restrictions to the use of e-bikes and e-scooters should be made with sufficient consideration of equity and accessibility implications.

The TTC's commitment to customer safety and accessibility is also reflected in this report. TTC acknowledges e-bikes can create safety concerns for TTC customers who rely on TTC and may be at risk due to e-bikes and e-scooters with lithium-ion batteries in the system. For instance, their presence in crowded areas can make it more difficult more customers to navigate safely, especially those with mobility challenges. As well, in emergencies, these devices may block pathways, creating additional safety concerns for customers. Overall, the decision to ban e-bike and e-scooters could have several negative equity-related impacts on users, including:

- **Decreasing accessibility:** Limiting access to a relatively affordable option, especially for low-income individuals.
- **Restricting access to essential services:** Including employment, public transit, healthcare, grocery stores, and education.
- **Exacerbating economic challenges:** Adversely affecting income, earning potential, and employment opportunities.

Those who are engaged in gig and delivery work could be negatively impacted in the following ways:

- **Losing income:** Largely due to the higher transportation costs.
- **Reducing efficiency:** Associated with alternative modes of transportation.
- **Decreasing autonomy and bargaining power:** Disrupting social networks and potentially diminishing users' (i.e. workers) agency and income.

Similarly, business owners could face many issues, including:

- **Missing opportunities:** Hindering business owners' ability to respond to the increasing demand for e-bikes and e-scooters.
- **Decreasing sales:** Making less sales throughout the duration of the ban, and negatively affecting overall profit margins.
- **Reducing sustainability:** Affecting potential contributions to meeting sustainability goals through eco-friendly devices.

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<sup>1</sup> ["Metrolinx to ban some e-bikes on GO Trains starting next month: Only bikes with batteries complying with UL or CE requirements allowed, agency says."](#) (2024, March 14). *CBC News*.

Conversely, imposing specific restrictions rather than a complete ban on e-bikes and e-scooters could offer many benefits, including but not limited to:

- **Promoting accessibility:** Enhancing users' agency, improving access to services, jobs, education, etc.
- **Enhancing safety measures:** Imposing certification requirements for batteries that prioritize safety and well-being.
- **Supporting economic vitality:** Contributing to economic development by supporting access to employment opportunities for e-bike/e-scooter users and supporting business owners.
- **Promoting community engagement:** Fostering social connections and building a sense of community.

A TTC policy that aligns with the E-bike Policy developed by Metrolinx could improve safety on the system, while also ensuring clarity for gig workers who rely on public transit to earn income. By taking a similar approach as Metrolinx, the TTC could address legitimate safety concerns while preserving the socio-economic benefits that e-bikes offer to users and business owners.

## Contact

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Marlon Merraro, Director, Diversity  
416-676-3713  
marlon.merraro@ttc.ca

## Signature

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Shakira Naraine  
Chief People and Culture Officer