



To: Toronto Accessibility Advisory Committee
From: Walk Toronto (Steering Committee)
Date: Nov 14, 2021
Re--DI18.4 Automated Micro-Utility Devices

Walk Toronto is a grassroots pedestrian advocacy group that works with various levels of government, community groups and citizens to improve walking conditions and safety in Toronto.

Walk Toronto recommends against adopting the pilot framework to test automated micro-utility devices (MUDs) on sidewalks, in order to prevent creating new barriers for Ontarians with disabilities and will only mean financial gains for the companies involved and are not likely to produce any direct benefits for local workers in Ontario — thus exacerbating inequities in the province.

We are extremely concerned about the implications for pedestrians, and particularly for those with disabilities, of deploying automated or remote-controlled MUD technology, including automated personal delivery devices, on our sidewalks. Accessibility should be the baseline in any pilot, and not an afterthought for prospective commercial partners. Small robots – whether automated or remotely driven – utilized to deliver food and other goods such as packages are not a solution to heightened consumer demand, as they have grave consequences for people with disabilities: experiences in other jurisdictions that have adopted such services show how they have increased occupation of sidewalk and curb space, which is especially relevant for “last mile” urban freight delivery.

Given the undue burden that automated delivery robots pose for people with disabilities, it is concerning and disappointing that there is not even a mention of accessibility considerations in the Proposed Amendments to the Pilot Project - Automated Vehicles. We cannot emphasize more strongly that such a pilot would also mean deepening longstanding inequities in our province, as workers see jobs disappear, potentially to overseas labour.

Accessibility considerations and safety concerns

While automated ground delivery robots are cheaper to operate than human delivery services and have gained traction for contactless deliveries in the COVID-19 pandemic, they have also created the experiences in other jurisdictions that have adopted pilots to test such vehicles with almost no regulation have shown that these devices have created important safety hazards for the disability community.



New accessibility barriers

Although these devices are advertised as innovative, they come at a high cost: creating an inaccessible environment for pedestrians, and especially for people with disabilities. In addition, Automated MUDs on the sidewalk and other public spaces create a new set of barriers for people with disabilities in already constrained sidewalks. There are already emerging cases in cities such as Pittsburg and Seattle, where the negative implications of MUDs are evident. They are responsible for impeding disabled people's already limited access to public space, blocking ramps to enter buildings, and occupying curb cuts, all of which may strand people with disabilities on the street.

Allowing these robots on our sidewalks would create a substantial and worrisome new disability barrier that would impede people with disabilities from the safe use of public sidewalks and other paths of travel.

Conflicts between robots and pedestrians

The experiences of disabled people in other jurisdictions provide valuable examples of how manufacturers continue to develop and deploy MUDs regardless of their failure to provide solutions or considerations for preventing conflicts with pedestrians. Even if the proposed pilot may require these devices to yield to pedestrians, conflicts will be unavoidable: sidewalks are not even wide enough to accommodate pedestrians, and adding robots that cannot change direction into the mix is a recipe for disaster; how would a person using a wheelchair, walker, cane or guide dog be able to find their way around these machines? These devices may be programmed to stop, but the available space may not allow them to get out of the way, pushing people with disabilities out of the sidewalks and into the roadway. Without specific well-thought solutions, these situations will be unavoidable; and the ones who will lose are the most vulnerable, who cannot avoid these devices.

Lack of inclusion

MUD services not only create barriers for people with disabilities, but they also exclude this type of street user. The proposed model is not inclusive of all Ontarians: this kind of delivery service assumes that users are sighted and have physical strength, balance, and coordination; there is no customization or options for delivery that may require human intervention, which means that many users would not even be able to benefit from this kind of delivery service. For example, there's no flexibility for users who may not be able to see where their package was dropped, or who cannot pick up the package and bring it inside their unit.



Risk for Gig-workers

While the automated personal delivery devices are envisioned as a solution to a last mile delivery, they also would likely be replacing the jobs of many gig workers, who already struggle to make ends meet, especially during the pandemic. The advancement of technology shouldn't come at the cost of jobs, especially when it compromises pedestrian safety as well.

Final considerations

Walk Toronto recommends not adopting a pilot framework for testing automated personal delivery devices on sidewalks, which should be prioritized for pedestrians and people who need to use them, not for the convenience and profit of a select few. Given the safety risks that these devices pose to pedestrians who are blind, those who have mobility disabilities and have balance issues, or those who are older and more frail, it is just too dangerous and inequitable.

Furthermore, the introduction of any new automated device, including through pilots, should be accompanied by legislation to protect the safety and wellbeing of all Ontarians, especially the most vulnerable. Accessibility is a provincial responsibility and addressing accessibility implications should not be left to the discretion of micro-mobility manufacturers, which may then have no recourse to overwrite provincial-level policy. Pedestrian safety and the prevention of accessibility barriers should be planned for and regulated by the provincial government, and not left to MUDs manufacturers or delivery services touting technological solutions. Legislation would be necessary to ensure rules and regulations around safe operation and best practices for integration into city infrastructure planning. The government should anticipate and prevent negative impacts and not treat a pilot as an experiment of wait and see. It is the responsibility of government at all levels to ensure that manufacturers and users of MUDs address accessibility concerns and ensure that steps are taken to eliminate barriers and prevent hazards to disabled pedestrians, such as those experienced in other jurisdictions where delivery robots have already been deployed. Any legislation would also require effective enforcement.

In sum, Walk Toronto strongly opposes enacting regulations under the *Highway Traffic Act* to deal with this type of device; this issue requires the legislature enacting strong legislation to ensure the rights of all Ontarians to get around are protected. These robots present a danger to accessibility and should not be allowed.