

Towards a Safer and Clearer E- Bike Framework for Ontario Municipalities

AMO'S SUBMISSION TO THE ENVIRONMENTAL REGISTRY OF ONTARIO ON
MODERNIZING ONTARIO'S FRAMEWORK FOR POWER-ASSISTED BICYCLES (E-
BIKES)

ERO 026-0422

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Executive Summary

The Association of Municipalities of Ontario (AMO) appreciates the opportunity to provide comments on the Provincial government's proposal to modernize Ontario's framework for power-assisted bicycles (ERO #: 026-0422).

In recent years, the use of power-assisted bicycles (e-bikes) has increased substantially within municipalities across the province. This proliferation of e-bike usage, paired with an unclear regulatory and enforcement environment raised several concerns for municipalities. AMO welcomes the province's proposal to update and modernize the definition of e-bikes in Ontario through a new regulation governing their use and safety. An updated regulatory framework will improve safety for residents and provide greater clarity and consistency for municipalities, ultimately supporting the safe use of e-bikes in communities across the province.

Proposed Classification Approach

The existing definition of e-bikes, which continues to reference a repealed federal e-bike definition, does not provide a clear framework for classification of e-bike models and has created significant challenges around enforcement for many municipalities. The proposed approach will help clearly define acceptable e-bike classes and differentiate them from non-compliant moped/scooter- and motorcycle-style electric motor vehicles. These vehicles are generally heavier, capable of higher speeds, and fully throttle-powered. This would enable more standardized requirements on safety, protective gear, operator licensing, and roadway use and enable municipalities to make empowered determinations as to where the different e-bike classes could be best fit on their respective infrastructure.

In recent years, several municipalities have also seen that many illegal motor vehicles are bypassing safety measures such as licensing, insurance, and registration by passing as e-bikes. There is also an often-dangerous co-mingling of e-bikes, especially of these non-compliant e-bike models, on municipal roadways and multi-use paths, which can create bottlenecks and conflicts between e-bike riders and other users of the infrastructure. Overall, there was an urgent need for clear and consistent definitions and classification of e-bikes to better address safety concerns and ensure better regulatory compliance – which this proposal addresses.

While we welcome the new provincially-defined classes, municipalities continue to be best placed to make determinations where new e-bikes classes best fit within their communities. *Any new regulatory framework should reflect the important municipal role in setting locally-specific transportation bylaws which remain aligned with provincial regulations.*

Public Safety Considerations

Public safety remains of the utmost concern for municipalities across the province. Over the last several years, as their popularity and use in micromobility devices such as e-bikes and e-scooters has grown, there has been a sharp increase in the number of lithium-ion battery-related fires across the province. In Toronto for example, from 2020 to 2024 Toronto Fire Services reported a 591% increase in fire incidents involving lithium-ion batteries. Due to their severity, these fires pose a serious risk to public health and safety. Municipalities are at the front lines of trying to manage this growing issue.

A large portion of the fires and explosions associated with lithium-ion batteries have involved unregulated and uncertified lithium-ion batteries that have been damaged, overcharged or tampered with – especially on e-bikes and e-scooters. As part of the updated regulated framework, we are pleased to see that no modifications are permitted within accepted e-bike classes.

To further support public safety, we would encourage the Ministry to consider specific guidelines around safe lithium-ion battery use for accepted e-bike classifications.

Many municipalities have also expressed growing safety concerns for users and pedestrians given the rise in accidents and injuries related to e-bike and e-scooter use, especially among children. Since 2020, the SickKids Trauma Registry has seen a significant increase in the number of serious injuries relating to battery-powered devices.¹ Establishing a clear regulatory framework that distinguishes e-bikes from the faster and more dangerous moped/scooter- and motorcycle-style electric-motor vehicles, which have been documented more frequently in increased injuries and accidents, will hopefully help address safety concerns.

Liability and Enforcement

On the liability side, municipalities have also seen a rise in lawsuits in which they are named as defendants for accidents that occur on roads, sidewalks, trails and any other municipal property where e-bike users are injured. Joint and Several Liability, along with absence of any insurance policy for some users, makes the financial implications of allowing all classes of e-bikes a concern for municipalities. AMO is pleased that in the proposal, the province has prioritized a classification system that supports road safety to reduce accidents and municipal liability by clearly distinguishing e-bikes from moped/scooter style electric motor vehicles that must comply with an existing motor vehicle class.

Although supportive of enhanced classification, some municipalities still have questions about enforcement. As part of the updated regulatory framework, clarification around enforcement will also be critical. For municipalities, it will be important to understand if and how municipal police services and the OPP will be empowered to enforce new e-

¹ SickKids, <https://www.sickkids.ca/en/news/archive/2024/sickkids-seeing-growing-number-of-injuries-from-e-scooters-and-e-bicycles/>

bike classifications within municipalities.

We've heard from municipalities and other stakeholders that education and public awareness is also an important component of ensuring the success of a new e-bike framework. As such, AMO is pleased to see that as part of the proposal the province is proposing a 12-month education and awareness period to support the public, manufacturers, retailers, and stakeholders in understanding and complying with the updated rules.

Conclusion

AMO supports the province's proposed definition of e-bikes and broader efforts to strengthen Ontario's regulatory framework for these vehicles. We also strongly support the proposed education and awareness period and would welcome further clarity on the province's plans to lead or support public education efforts during implementation. As the framework moves forward, AMO recommends that the province establish clear, province-wide requirements for safety, enforcement, and user awareness, while preserving the authority of municipalities to set local by-laws that reflect community needs, infrastructure, and road safety considerations.

Municipalities understand the importance of keeping our roads safe and accessible for all residents. AMO and municipal governments look forward to continuing to work with the province on any future implementation of the new e-bike regulatory framework.