PEMBINA institute

IE14.11.1

July 8, 2020

Infrastructure and Environment Committee
City of Toronto
100 Queen St W
Toronto, ON M5H 2N2

Dear Infrastructure and Environment Committee,

The Pembina Institute and co-signatories of this letter support the recommendations being presented in agenda item IE14.11, "Regulatory Clarity for E-Cargo Cycles", at the July 9th Infrastructure and Environment Committee meeting.

More Canadians are shopping online and having items delivered directly to their homes and offices. Between 2016 and 2018, the average number of online purchases made by Canadians increased by 58%. Online shopping has also surged during the COVID-19 pandemic and this is expected to continue in the long-term. As the number of home and office deliveries increases, many businesses are interested in or are testing cargo bikes to conduct last-mile deliveries, particularly in dense, congested urban areas, as a way to reduce transportation emissions and increase last-mile delivery efficiency. The Roncesvalles Village BIA, for example, is working with local cargo bike courier companies in Toronto to test cargo bike deliveries for businesses in their BIA. Larger courier companies have tested cargo bike deliveries, including UPS in Toronto and Purolator in Montreal.

In order for cargo bikes to be an effective mode for goods movement, they typically require some form of propulsion assistance from an electric motor. A cargo bike equipped with an electric motor is commonly referred to as an e-cargo bike. Businesses are increasingly interested in testing and using cargo bikes for goods movement to increase delivery efficiency and reduce transportation emissions. However, existing e-bike regulations are unclear and inconsistent across jurisdictions, which has discouraged businesses from integrating e-cargo bikes into their delivery fleets. Below we dicuss how each recommendation presented in agenda item IE14.11 will help address this issue.

Recommendation 1: City Council request the Ontario Ministry of Transportation review and revise their definition of a power-assisted bicycle to differentiate between different e-bike types including e-cargo cycles (e.g., bicycle-style e-bikes including pedelecs and throttle-only, and scooter-style e-bikes) and that they work with the City of Toronto and other municipalities to ensure that definitions are consistent between jurisdictions by Fall 2020.

- In order for e-cargo bikes to be a scalable solution for businesses, regulatory consistency across jurisdictions is needed.
- Provinces, and therefore municipalities, currently rely on the federal definition of a “power-assisted bicycle” (i.e. an e-bike) and apply different regulations to their use.
- Transport Canada intends to remove the federal definition of a "power-assisted bicycle" in February 2021. As such, provinces and territories will need to decide how to define and regulate them.
- To ensure as much regulatory consistency as possible when this federal change comes into effect, it will be important for the Ontario Ministry of Transportation (MTO) and the City of Toronto, along with other municipalities, to work together when developing e-bike definitions and regulations.

Recommendation 2: City Council request the General Manager, Transportation Services, to develop a proposed regulatory framework for micromobility that differentiates between different e-bike types including e-cargo cycles (e.g., bicycle-style e-bikes including pedelecs and throttle-only, and scooter-style e-bikes), and the infrastructure that they are permitted to use, in consultation with cycling groups, road safety groups, e-bike and cargo bike manufacturers, distributors, and users, and other relevant stakeholders and City Divisions, and to report to the Infrastructure and Environment Committee in Spring 2021.

- One source of confusion in existing bylaws is the lack of clarity between different types of e-bikes and the rules that apply to their use. Regulatory clarity is needed to differentiate between the following e-bike types and ensure the safety of all road users:
  - **Type 1 bicycle-style e-bikes** (i.e. pedelecs): Bicycles or multi-wheeled cycles equipped with an electric motor that requires pedaling in order for the motor to engage. Power assistance from the motor ceases when pedalling stops or when brakes are applied.
  - **Type 2 bicycle-style e-bikes** (i.e. throttle-on-demand): Bicycles or multi-wheeled cycles equipped with an electric motor that can be engaged with a throttle function that does not require pedaling. Power assistance from the motor ceases when the throttle is released or when brakes are applied.
  - **Scooter-style e-bikes** (SSEB)**:** Mopeds or low-speed motorcycle-style vehicles that are propelled with an electric motor controlled by a throttle function. They may or may not be equipped with pedals, but the pedals are more ornamental than they are functional.
- Similar classification systems have been adopted in some states in the U.S., as developed by the Bicycle Products Suppliers Association and with support from the People for Bikes Coalition.
- In Europe, Type 1 bicycle-style e-bikes/e-cargo bikes that have a maximum power of 250 watts and a maximum speed of 25km/h are defined as bicycles and are given the same

permissions as conventional bicycles. Anything with a throttle function (e.g. Type 2 bicycle-style e-bikes and SSEBs) are not considered bicycles and are regulated differently.

Recommendation 3: City Council amend Section 886-1 of City of Toronto Municipal Code Chapter 886, Footpaths, Pedestrian Ways, Bicycle Paths, Bicycle Lanes and Cycle Tracks, by inserting a new Section C as follows:

> *C. As used in Sections 886-14 and 886-15 of this chapter, the following term shall have the meaning indicated:*
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> *BICYCLE - Includes a bicycle, tricycle, unicycle, and a power-assisted bicycle which requires pedalling for propulsion ("pedelec"), or other similar vehicle, but does not include any vehicle or bicycle capable of being propelled or driven solely by any power other than muscular power.*

- Existing bylaws in the City of Toronto allow pedelecs over 40kg to operate on painted bike lanes but not on physically separated bikeways (i.e. cycle tracks), which is potentially prohibitive to the effective use of e-cargo bikes. Most small pedelec cargo bikes range from 40 kg to 70 kg.
- More cycle tracks are being installed in Toronto with the implementation of the city's ActiveTO initiative (e.g. University Avenue, Bloor Street, Dundas Street East, Danforth Avenue); however, pedelecs over 40kg are unable to use this infrastructure under existing bylaws, which limits their use.
- Adopting Recommendation 3 would allow pedelecs weighing more than 40kg to operate on cycle tracks, therefore supporting low-carbon delivery operations by allowing pedelec cargo bikes to better utilize Toronto's cycling network.
- From a safety perspective, Recommendation 3 does not alter existing rules that do not permit e-bikes with throttle-on-demand capabilities on cycle tracks. This is an issue that can be further explored through Recommendations 1 and 2 when differentiating between e-bike types and their regulations.

The recommendations in agenda item IE14.11 will help provide the regulatory clarity and consistency needed to support the use of e-cargo bikes for delivery operations, and we encourage the Infrastructure and Environment Committee to support Councillor Layton's motion.

Yours sincerely,

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