



E-CARGO BIKE

PILOT PROGRAM

Ontario Cargo E-Bike Pilot Program

Advisory Committee for Persons with Disabilities

June 14th, 2022

What is a Cargo E-Bike?



- Cargo e-bikes are a type of electric-powered bike with a platform or box to carry larger items like packages and boxes for deliveries
- Can be used for personal use or for commercial deliveries
- The Highway Traffic Act's current definition of an e-bike excludes most cargo e-bikes:
 - E-Bike: max weight of 120 kg and motor output of up-to 500 W
 - Cargo E-Bike: greater than 55 kg and motor output of up-to 1,000 W



Image source: DHL

Ontario Cargo E-Bike Pilot Program



March 1, 2021: O. Reg. 141/21: Pilot Project – Cargo Powered-Assisted Bicycles approved

- Provincial pilot allows municipalities to opt-into permitting cargo e-bikes by passing a by-law.
- The pilot runs from March 1, 2021 to March 1, 2026.
- Ottawa & Toronto have opt-ed in. London is examining it.

Requirements Set-Out By the Province

- Helmet requirements
- Minimum age for operators
- Size and speed restrictions

Pilot Components the Municipality Can Dictate

- Where cargo e-bikes can be used (roads, bike paths, trails, etc.)
- Where cargo e-bikes can park/stop to load and unload
- How to monitor and report on the use of cargo e-bikes
- If insurance is required (the type and coverage)
- Other considerations relevant to the municipality

Provincial Pilot Requirements



Cargo E-Bike Requirements

- Have a **traditional bicycle design**
- Electric-powered motor with **max. output of 1000 W + pedals** to propel the bicycle
- Max. power-assisted speed of **32 km/h**
- Have a **platform, basket or container** for carrying cargo, parcels or goods
- Greater than **55 kilograms to an unlimited maximum weight**
- Have **two or three wheels**
- **Maximum** width of <1.3 m, length of 4 m, height 2.2 m, wheel width of 35 to 350 mm.

Operator Requirements

- At least **16 years of age**
- **Allow passengers only if the passenger is using a seat designed for passenger use**
- Driver and passengers **must wear a helmet**
- **Ensure that any load is loaded**, bound, secured, contained or covered.

Falls Under the Definition of a Cargo E-Bike



Tricycle cargo e-bike design with enclosed cargo box at the back



Reverse tricycle design with enclosed cargo box in the front



Passenger Trishaw

May Fall Under the Definition of a Cargo E-Bike



Depends on weight and power output



Image source: K. Gebhardt



Does Not Fall Under the Definition of a Cargo E-Bike



Other Factors to Consider



- Parking locations off-road
- Where they can operate (e.g. multi-use pathways, parks, higher speed roads)
- Speed, weight or power outputs
- Enforcement
- Permitting or insurance requirements



Benefits of Cargo E-Bikes



- Reduce vehicle congestion
- Mitigate demand for curbside space (parked delivery vehicles)
- More flexible delivery options for businesses
- Reduces air pollution, especially in high activity areas
- Supports the Climate Emergency Declaration
- Support the vision and objectives of the TMP and CMP



Results from Public Engagement

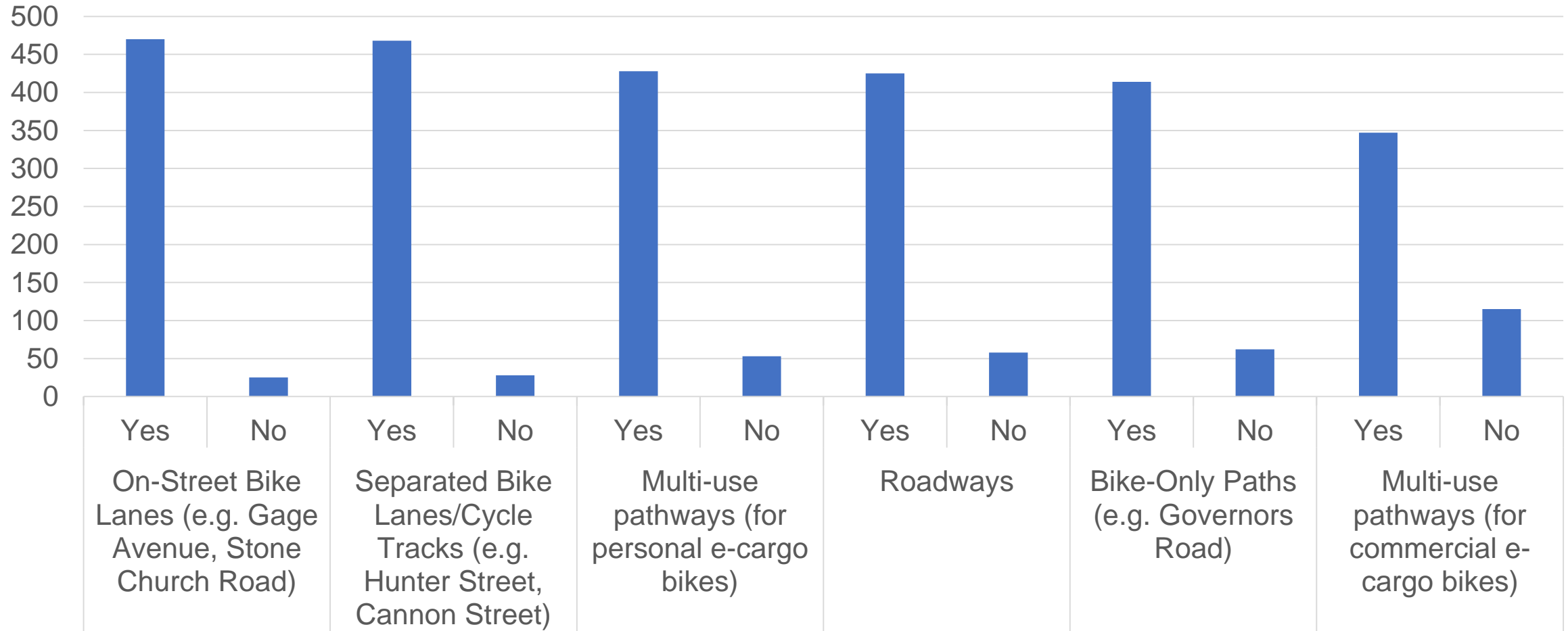


- **503** respondents
- **15%** of respondent already own or are planning to purchase an e-cargo bike in the next year
- **93% supportive** of a cargo e-bike pilot for personal use
- **94% supportive** of a cargo e-bike pilot for commercial use

Results from Public Engagement



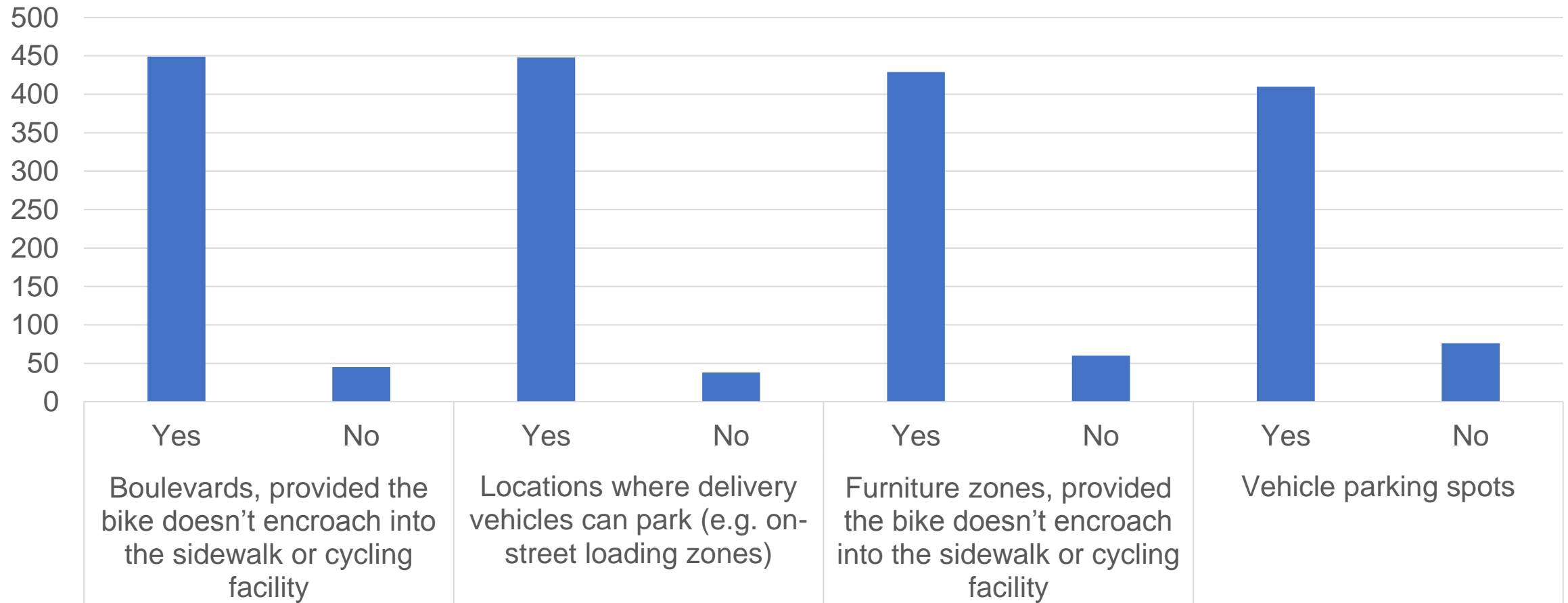
Do you support allowing ecargo bikes on the following facilities?



Results from Public Engagement



Do you support allowing e-cargo bikes to park on these facilities?



Proposed Pilot for Hamilton



- Similar to Toronto and Ottawa, Hamilton will create different by-laws for smaller, personal cargo e-bikes; and larger, commercial cargo e-bikes.
- Bikes that are heavier than 120kg and wider than 1.2m will be considered large or commercial ebikes and have different bylaws.

Less than 120kg and less than 1.2m wide

- Can travel and park in the same facilities as ebikes (roads, bike paths, not in parks unless otherwise signed).
- No insurance required.

Greater than 120kg or greater than 1.2m wide

- More work needs to be done to determine where large ecargo bikes can travel, and stop/unload.
- More work needs to be done to determine if insurance will be required.

Have Your Say!



- Share your comments via e-mail to sustainable.mobility@hamilton.ca
- Will review comments for consideration as we finalize a pilot program framework



Hamilton

THANK YOU