

## Allowing the on-road use of electric and non electric large cycles

### Background:

MTO is interested in the feasibility of implementing a pilot program that would permit the on-road use of electric and non-electric large cycles.

MTO recognizes the importance of new or existing vehicle technology, especially if it expands mobility options for Ontarians; however, safety remains a top priority. The safe integration of new or existing vehicle types with pedestrians and other vehicles is a key consideration before any vehicle type will be allowed on-road.

Since 2005, Ontario's *Highway Traffic Act* has given the ministry the authority to implement and evaluate pilot projects by regulation, to test the safe integration of new and existing vehicles on Ontario's public roads. Under this pilot authority, the ministry is seeking to explore options and develop a feasible solution to allow the use of large cycles on-road.

The pilot authority is intended to assess these vehicles over a specified period of time in order to examine their ability to safely integrate with other vehicle types, and determine whether existing rules of the road are adequate and the appropriateness of some unique operating and licensing requirements before expanding their use and/or allowing these vehicles on-road permanently.

### Large Cycles

Large cycles are large vehicles that are used to carry as many as 16 riders (14 passengers, one operator and a potential bartender). They are used to provide tours of landmarks within jurisdictions, mainly breweries and wineries. There are two types of large cycles:

- Large **non-electric cycles** which are propelled by the passengers (up to seven on each side) pedaling. The operator steers the vehicle and controls the braking system.
- Large **electric cycles** use power assistance up to 10km/h - both when passengers are pedaling and/or through the operator's control of a push pedal, similar to a car.

Currently, non-electric large cycles may operate on municipal roads if by-laws are in place to permit their use. Some municipalities in Ontario currently permit non-electric large cycles in their jurisdiction within preapproved routes. There is currently no alcohol served on these large cycles in Ontario. As non-electric large cycles do not have a specific classification within the *Highway Traffic Act* (HTA), municipalities have applied their own differing classifications, such as slow-moving vehicle or horse and buggy, which each have their own unique requirements. Additionally, large electric-assisted cycles are not permitted to be on roads as they do not comply with any current motor vehicles class. As such the ministry is proposing a pilot program to create clear operator and vehicle requirements for both non-electric and electric-assist large cycles due to

their similarity and additionally permit the use of electric-assist large cycles for municipalities who wish to pass by-laws to permit their use.

MTO would like your input on the following categories to help inform the development of a pilot project framework for electric and non-electric large cycles and invites you to submit your comments for consideration.

### **Proposed Large Cycle Pilot Framework:**

#### **Pilot Duration:**

- How long should the pilot take place for (i.e., 10 years)

#### **Driver Qualification**

- What type of driver's licence must an operator that is steering a large cycle have (i.e., a valid A, B, C, D, E, F or G licence)?
- What type of driver's licence should those that are pedalling a large cycle have?

#### **Operating Requirements Include:**

- What roads should large cycle be permitted to be operated on (i.e., roads with a maximum road speed limit of 50km/h)?
- How fast should large cycles be able to go (i.e., cannot exceed a speed of 10 km/h)?
- Required to display a slow-moving vehicle sign.
- Cannot carry passengers under eight years of age.
- Can be operated during nighttime hours if adequate lighting requirements are met for nighttime operation.
- Must be operated in the right-most lane.
- Should large cycles be able to be operated year round or during certain months (i.e., when there is no snow, ice, slush)?
- All *Highway Traffic Act* rules of the road and penalties will apply to the operation of urban mobility vehicles on-road.
- Any other requirements?

#### **Vehicle Safety Equipment Features:**

- What should the max weight, length, width and height be?
- What should the max power output be for an electric large cycle?
- How many seats should a large cycle have (i.e., max 16)?
- A steering handle bar
- Brakes
- headlights, turn signals, brake lights
- A rear-view mirror
- A horn
- Good quality tires

- Reflectors
- Seatbelts
- Any other requirements?

**Insurance Requirements Include:**

TBD

**Registration Requirements Include:**

TBD

**Data Collection:**

Municipalities to remit data to the province annually.