Ministry of Transportation Safety Program Development Branch 87 Sir William Hearst Avenue, Room 212 Toronto. Ontario M3M 0B4 Ministère des Transports Direction de l'élaboration des programmes de sécurité 87, avenue Sir William Hearst, bureau 212 Toronto, Ontario M3M 0B4



**MEMORANDUM TO:** Municipalities of Ontario

FROM: Yoassry Elzohairy

A/Director, Safety Program Development Branch

Transportation Safety Division Ministry of Transportation

**DATE:** November 9, 2023

SUBJECT: Ontario Micromobility Pilot Data Collection Questionnaire

Ontario's pilot vehicle projects continue to grow through the rising participation of local governments and their communities. The efforts of participating municipalities to safely integrate micromobility pilot vehicles into their local transportation networks has showcased the innovative drive and dedication of each pilot program's members.

The Ministry of Transportation (MTO) is leading an initiative to better coordinate data collection across Ontario's pilot vehicle programs for golf carts, large quadricycles, electric low-speed vehicles, electric kick-style scooters, and cargo e-bikes. MTO's Safety Program Development Branch is seeking input from participating municipalities on current data collection and public education practices. The information collected will be used to improve data-sharing across municipalities, optimize program requirements, and produce meaningful insights that can inform local policy and program decisions.

If your municipality is participating in one of the pilot vehicle programs listed above, please complete this questionnaire by November 24<sup>th</sup> for each pilot vehicle operating in your jurisdiction. For a list of data categories that may help inform your responses, see the attachment enclosed. If you have any questions regarding the questionnaire or pilot vehicle program, please contact REO@ontario.ca for assistance.

Once the responses are collated, MTO will reach out to participating municipalities to share the findings and discuss best practices. If you have not already, please notify MTO of your enrollment in a pilot vehicle program at <a href="mailto:roadsafety@ontario.ca">roadsafety@ontario.ca</a>. Thank you for your ongoing support of Ontario's new and emerging vehicles and for promoting alternative modes of transportation in your local communities.

Regards,

Yoassry Elzohairy

A/Director, Safety Program Development Branch Transportation Safety Division Ministry of Transportation (MTO)



# **Attachment: Pilot Vehicle Data Source Categories**

## **Category 1: Enforcement and Safety Monitoring**

Data collected on by-law infractions and non-reportable collisions/incidents involving pilot vehicles (i.e., non-motor vehicle collisions) help to identify compliance trends across communities and inform municipalities about target areas for public education.

### Pilot program by-law infractions

By-law infraction data collected through coordination with local law enforcement.

### Provides insight into:

- User behaviour and compliance
- By-law stringency
- By-law enforceability

### Self-reported incidents and injuries

Includes collisions, incidents, and injuries that do not require mandatory police reporting under the *Highway Traffic Act*. Self-reported incident channels can be managed through municipal resources or existing local enforcement processes.

## Provides insight into:

- Frequency and severity of incidents
- Affected vulnerable road user types
- Injury frequency, type, and severity
- · Causal factors affecting incidents

## **Data Category 2: Community Engagement and Feedback**

Community engagement and feedback channels are helpful for local governments to maintain a clear understanding of public opinion on their pilot programs' performance and for measuring how public concerns change over time as policies and program operations evolve.

### Pilot program community surveys

Public engagement initiatives to collect program-specific feedback from community members.

### Provides insight into:

- Public awareness of program rules and requirements
- Barriers to adoption
- Public sentiment about program safety and risk
- Primary areas of concern



### Open public intake channels

Online program intake webforms, 3-1-1 call logs, social media data, e-mails to councillors or municipal offices, etc.

### Provides insight into:

- FAQs and knowledge gaps to support public education
- Common issues and complaints to support by-law evaluation
- Accessibility and logistical challenges among pilot vehicle users

## **Data Category 3: Health and Surveillance Data**

Health system and surveillance data provide key intel about the frequency and severity of pilot vehicle injuries and ridership numbers to measure and compare regional rates.

### Local health system data

Local hospitals and public health units collect key information about injuries through emergency department records and public health monitoring processes. Using proper coding or keywords, this information can be extracted for pilot vehicle-specific events.

### Provides insight into:

- Injury frequency, type, and severity
- Injured rider demographics
- Pilot vehicle impact on emergency department volumes
- Use of personal protective equipment

#### User surveillance data

Automated or manual surveillance of pilot vehicle volumes in a targeted location.

#### Provides insight into:

- Rider volumes (time-of-day and day-of-week trends)
- Rider facility preference (road, sidewalk, shared path, etc.)
- Rider behaviour (dangerous driving, illegal passengers)
- Interactions with other road users (near misses or potential conflict points with pedestrians, motorists)
- Helmet use, other protective equipment

## **Data Category 4: Shared Mobility Data (If Applicable)**

Rental pilot vehicles are commonly equipped with telematic devices that collect and transmit a host of valuable information including trip counts, distance, duration, travel routes, and the number of devices in operation at any given time.



### **Device GPS data**

Vehicles equipped with geo-location provide real-time data on user speed and location.

## Provides insight into:

- Parking locations and infractions
- Travel speed and distance
- Infrastructure preference
- Common travel routes and destinations
- Wrong-way riding

### Mobile app data

Rideshare companies develop mobile apps for registering users, processing payments, and other functions which produce pilot vehicle user data.

## Provides insight into:

- Number of rides by date and time
- Ride frequency by user
- User demographics
- In-app survey responses

## Other telematic device data

New technologies continue to emerge in shared mobility devices and provide novel ways to monitor and collect information on rider behaviour and safety.

Examples for current e-scooter devices include:

- Camera-based sidewalk detection
- Impact detection (falls or collisions)
- Geo-fence infractions
- Improperly parked devices

## **Data Category 5: Vehicle Count (If Applicable)**

Monitoring the number of pilot vehicles in operation improves the comparability of safety metrics across jurisdictions and with other forms of transportation. This category does not apply to pilot vehicles that require registration with the province (e.g., electric low-speed vehicles, three-wheeled vehicles) or where vehicle permits are not feasible.

#### Vehicle permits

Permits issued by a municipal authority to allow an individual to operate a pilot vehicle.

### Provides insight into:

- Public adoption rates
- Safety and compliance rates per number of vehicles in operation



#### Fleet management data

Pilot vehicle rental companies and shared mobility providers track the number of pilot vehicles in their fleet that are rented out or in operation at a given time.

## Provides insight into:

- User trends and seasonality
- Infrastructure capacity pressures
- Public adoption rates

## **Data Category 6: Business Permits (If Applicable)**

Businesses operating within a municipality that are permitted to rent or sell pilot vehicles to the public.

### **Business licences:**

The number of licences or permits issued to businesses within a pilot jurisdiction for selling or renting out pilot vehicles to the public.

### Provides insight into:

- Pilot vehicle business models
- Economic impacts
- Service accessibility