

New and Emerging Vehicles





E-bikes, Mopeds and Motor Scooters



This document is intended for information purposes only. While the Ministry of Transportation does its best to ensure that the information provided is current, the Ontario Highway Traffic Act (HTA), as the official version of the law, should be relied on to ensure accuracy.

Link to the HTA: e-laws.gov.on.ca/html/statutes/english/elaws_statutes_90h08_e.htm

Common name	E-bike and E-scooter	Moped	Motor Scooter
HTA classification	Power-assisted bicycle, Bicycle	Motor-assisted bicycle	Limited-speed motorcycle (LSM)
Where on the roadway do I drive this vehicle?	As close to the right edge of the roadway as is practicable (similar to a bicycle).	Within a lane marked for motor vehicle traffic. If travelling slower than the normal speed of traffic at that time and place, then must travel as close to the right edge of the roadway as is practicable.	
Roads where operation is prohibited	Controlled access highways* (e.g. 400-series highways), and where municipalities prohibit		
Is this a motor vehicle under the HTA?	No	Yes	Yes
Is this a motor vehicle under the Criminal Code of Canada?	Yes	Yes	Yes
Required to be equipped with pedals?	Yes	Yes	No, not applicable - not manufactured with pedals
Key characteristics	<ul style="list-style-type: none"> • Electric-powered • Maximum power output: 500 W • Maximum speed: 32 km/h • Maximum weight: 120 kg 	<ul style="list-style-type: none"> • Gas-powered • Maximum engine size: 50 cc • Does not attain a speed greater than 50 km/h within 2 km from start • Maximum weight: 55 kg 	<ul style="list-style-type: none"> • Electric- or gas-powered • Maximum engine size: 50 cc • Maximum speed: 70 km/h • Can attain speed of 32 km/h within 1.6 km
Additional characteristics	<ul style="list-style-type: none"> • Independent front and rear wheel braking • May have 2 or 3 wheels • Steering handlebars • Minimum wheel diameter: 350 mm • Minimum tire width: 35 mm • No modifications allowed to increase speed or power • Must have bell, white front light and red rear light 	<ul style="list-style-type: none"> • Independent front and rear wheel braking • Pedals must be operable at all times • Does not have hand or foot-operated clutch <p>Note: regular bicycles with attached gas engines (i.e. moped conversions) are not eligible for registration by the Ministry of Transportation, and therefore cannot be used on public roads.</p>	<ul style="list-style-type: none"> • Independent front and rear wheel braking • Minimum seat height: 650 mm • Minimum wheelbase: 1016 mm • Minimum wheel rim diameter: 250 mm • "Step through" scooter design, and handlebar steering

Minimum operator age	16	16	16
Helmet required?	Bicycle or motorcycle helmet	Motorcycle helmet	Motorcycle helmet
Driver's licence required?	No**	Yes: M1, M2 or M, or Restricted M2 or M with L endorsement	Yes: M1, M2 or M, or Restricted M2 or M with L endorsement
Plates and insurance required?	No	Yes, registration, insurance and moped plate required 	Yes, registration, insurance and limited-speed motorcycle plate required 
Passengers allowed?	Yes, if passenger seat available	No	Yes, if passenger seat available. Passenger must be able to reach foot pegs
Passenger minimum age	16	Not Applicable	None
Passenger helmet required?	Yes, bicycle or motorcycle helmet.	Not Applicable	Yes, motorcycle helmet.
Compliance label	Must have permanent label from manufacturer indicating it conforms to federal definition of a power-assisted bicycle. May be located on steering column. 	Must have permanent label from manufacturer indicating it conforms to federal definition of a limited-speed motorcycle if built after Sep. 1, 1988. May be located on steering column or under seat. 	

* Controlled-access highways include the 400-series highways, provincial highways 69, 6, 24, 35, 58, and specific parts of certain provincial highways. For more details, please see Schedule 1 in Ontario Regulation 630: Vehicles on Controlled-Access Highways.
Link: http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_900630_e.htm

Additional Notes About E-bikes
<p>Pedals: If the pedals have been removed from an e-bike, it is no longer considered to be an e-bike. Removing the pedals makes it an illegal motor vehicle because it does not conform with the HTA definition of a power-assisted bicycle. Operators run the risk of being ticketed for operating a motor vehicle without registration and insurance. E-bike purchasers who have concerns with the pedal location may wish to consider other models and/or styles of e-bikes.</p> <p>Driving an e-bike while intoxicated: You do not need a driver's licence to operate an e-bike. However, an e-bike is considered a motor vehicle under the Criminal Code of Canada. Anyone operating an e-bike while intoxicated can be charged for impaired driving under the Criminal Code of Canada. If convicted, the offender would be subject to the Criminal Code penalties, including a fine or jail time, and a driving prohibition.</p> <p>** Suspended licences and e-bikes: If your driver's licence is suspended, you may not be legally allowed to drive an e-bike. If you have been convicted under the Criminal Code of Canada that has resulted in a driving prohibition, you cannot legally operate an e-bike until the prohibition has been lifted. If your driver's licence has been suspended under these or other circumstances, it is recommended that you discuss your situation with a licensed legal practitioner before deciding to operate an e-bike.</p>

For more information about these and other new and emerging vehicles, please see the MTO website: <http://www.mto.gov.on.ca/english/dandv/vehicle/emerging/index.shtml>

2



New and Emerging Vehicles

Personal mobility devices and Segways



This document is intended for information purposes only. While the Ministry of Transportation does its best to ensure that the information provided is current, the Ontario Highway Traffic Act (HTA), as the official version of the law, should be relied on to ensure accuracy.

Link to the HTA: e-laws.gov.on.ca/html/statutes/english/elaws_statutes_90h08_e.htm

Common name	Wheelchair, Mobility Scooter, Motorized Personal Mobility Device 	Segway 
HTA definition/ classification	Wheelchair	Segway. Temporarily allowed under provincial pilot that expires Oct. 19, 2013
Who can use this device?	Persons with mobility disabilities	Persons 14 and over with mobility disabilities, police officers, Canada Post mail carriers
Minimum operator age	None	14
Helmet required?	No	Yes, bicycle (under 18 only)
Driver's license, registration, and insurance required?	No	No
Where on the roadway do I operate this device?	Sidewalks, if municipalities allow. Otherwise, must travel along the left shoulder of the roadway facing oncoming traffic, like pedestrians.	Sidewalks, if municipalities allow, otherwise as close to the right edge of the roadway as possible.
Roads where operation is prohibited	Controlled access highways* (e.g. 400-series highways), and where municipalities prohibit	
Passengers allowed?	No	No
Key characteristics	<ul style="list-style-type: none"> Designed and intended to be used by persons with mobility disabilities. 	<ul style="list-style-type: none"> Device known as the Segway Personal Transporter or Segway Human Transporter manufactured by Segway Inc. Must have bell, white front light and red rear light. Basket and bags are allowed to be attached to the Segway. No other modifications allowed after manufacture.
Is this a motor vehicle under the HTA?	No	No. However, it is defined as a motor vehicle for municipal by-laws concerning the use of motor vehicles on sidewalks.

*Controlled-access highways include the 400-series highways, provincial highways 69, 6, 24, 35, 58, and specific parts of certain provincial highways. For more details, please see Schedule 1 in Ontario Regulation 630: Vehicles on Controlled-Access Highways.

Link: http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_900630_e.htm

For more information about these and other new and emerging vehicles, please see the MTO website: <http://www.mto.gov.on.ca/english/dandv/vehicle/emerging/index.shtml>



New and Emerging Vehicles

Motor tricycles and Low-speed vehicles



This document is intended for information purposes only. While the Ministry of Transportation does its best to ensure that the information provided is current, the Ontario Highway Traffic Act (HTA), as the official version of the law, should be relied on to ensure accuracy.

Link to the HTA: e-laws.gov.on.ca/html/statutes/english/elaws_statutes_90h08_e.htm

Common name	Motor Tricycle	Low-Speed Vehicle
		
HTA classification	Motor Tricycle, Motorcycle	Low-speed vehicle. Temporarily allowed under provincial pilot that expires Dec. 31, 2014.
Where on the roadway do I drive this vehicle?	Within a lane marked for motor vehicle traffic. If travelling slower than the normal speed of traffic at the time and place, then must travel as close to the right edge of the roadway as is practicable.	
Roads where operation is prohibited	No restrictions	See chart below: Operating Requirements for LSVs in Different Environments
Key characteristics	<ul style="list-style-type: none"> Has three wheels in contact with the ground (includes two-wheeled motorcycle with side car): can have one wheel in front and two in back; or two wheels in front and one in back Straddle-type seating Maximum weight: 1000 kg Minimum wheel rim diameter: 250 mm Minimum wheel base: 1016 mm 	<ul style="list-style-type: none"> Some models resemble passenger cars Designed for use on streets with low speed limits and in controlled environments Powered by an electric motor Can attain speed of 32 km/h within 1.6 km Maximum speed: 40 km/h Meets the Canada Motor Vehicle Safety Standards 500 for LSVs (required to have headlamps, turn signals, mirrors, parking brake, Vehicle Identification Number, windshield, seat belt assembly) Does not produce emissions Travels on four wheels Does not use fuel as an on-board source of energy Maximum weight: 1,361 kg
Is this a motor vehicle under the HTA?	Yes	Yes
Minimum Operator Age	16	16
Helmet required?	Motorcycle	No
Driver's license required?	Yes: M1, M2 or M, or Restricted M2 or M with "M" endorsement	Yes: A, B, C, D, E, F or G
Registration and insurance required?	Yes	Yes
Passengers allowed?	Yes, if passenger seat available	Yes
Passenger minimum age	None, but passenger must be able to reach foot pegs	8
Passenger helmet required?	Motorcycle	No



Operating Requirements for LSVs in Different Environments

LSVs are permitted to operate in three different environments. The licensing and equipment requirements are slightly different for each.

Operating Environment	Roads in Parks and Conservation Areas with speed limit of 40 km/h or less	Controlled Environments: Pelee Island, or within 50 m of property owned or occupied by university or college	Public Roads with speed limits of 50 km/h or less
Who can use LSVs?	Park Employees	Licensed driver	Licensed driver
Driver's licence required?	Yes: Class A, B, C, D, E, F, G or G2	Yes: Class A, B, C, D, E, F, or G	Yes: Class A, B, C, D, E, F, or G
Insurance required?	Yes: have liability insurance	Yes	Yes
Additional notes for use on-road	No additional notes.	A traffic light must be present before an LSV may directly cross a higher speed road of up to 80 km/h.	A traffic light must be present before an LSV may directly cross a higher speed road of up to 80 km/h.
Meet federal safety standards?	Yes: Canada Motor Vehicle Safety Standards (CMVSS) for LSVs (required to have headlamps, turn signals, mirrors, parking brake, Vehicle Identification Number, windshield, seat belt assembly).		
Meet provincial safety standards?	No	Yes: HTA motor vehicle requirements include service brakes, high and low-beam headlamps, windshield wiper, odometer, safety glass where glass is used, horn and federally compliant tires.	
Additional equipment required?	No	Compartment doors	Compartment doors, defog/defrost and heating systems, 3-point seat belts, slow-moving vehicle sign, and proximity warning device that emits intermittent noise when near pedestrians/bicyclists
Federal compliance label required?	Yes. The LSV must have a Motor Vehicle Safety Act (Canada) compliance label from a manufacturer or importer who is registered with Transport Canada, and be manufactured as an LSV. The label is typically located on the inner door edge of the driver side.		
Provincial compliance label required?	No.	Yes. Label must have "ONT-LSV-BASIC " notation.	Yes. Label must have "ONT-LSV-5CMVSS" notation.
General Requirements	<ul style="list-style-type: none"> • Slow-moving vehicle sign required. • Operator to provide a signed "Declaration Form" prior to vehicle registration acknowledging LSV pilot and the vehicle's safety limitations. • LSV to have an interior warning label affixed by the manufacturer visible to occupants at all times that states the safety and operating limitations of LSVs. • No towing. • No modifications to increase maximum speed. • Cannot be used for driver's licence road test. 		

For more information about these and other new and emerging vehicles, please see the MTO website: <http://www.mto.gov.on.ca/english/dandv/vehicle/emerging/index.shtml>