

Ontario Ministry of Transportation

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Ontario Ministry of Transportation

Cycling Strategy

for Consultation
on the Environmental Registry
November 30, 2012

Ontario Ministry of Transportation's Draft Cycling Strategy

Cycling is an increasingly popular means of transportation, exercise and recreation. Our latest statistics estimate that 630,000 Ontarians ride a bicycle on a daily basis, and that 48 per cent of almost 13 million Ontarians ride at least once a week during the spring, summer and fall.

There has been some recent discussion about the different types of bikes that are found on Ontario's roads (see Appendix A for clarification), but what is not in question are the benefits that bikes can deliver. Cycling has a tremendous effect on our environment, reducing GHG emissions by getting cars off of our roads and easing gridlock. Cyclists also reap significant health benefits, which in turn save money for our health care system. There is no question that cycling is a mode of transportation that the government should continue to support.

The rate of cycling-related injury and fatality has dropped considerably over the last few decades; comparing 2009 to 1988, cyclist fatalities are down 70 per cent and major injuries are down 64 per cent. Ontario has the safest roads in North America, bar none, and the second safest in Canada for cyclists. Despite this, we know we need to do more.

We also recognize the potential economic benefits of cycling tourism through the development of a provincial cycling network. The Province of Quebec, for example, estimates that their network, known as "La Route Verte", generates an annual economic return of about \$30,000 per kilometre, amounting to more than \$100 million each year.

Our vision is for a safe cycling network that connects the province, for collision rates and injuries to continue to drop, and for everyone from the occasional user to the daily commuter to feel safe when they get on a bicycle in Ontario. Our cycling strategy will serve as a map for how we make that vision a reality.

This draft Strategy addresses a number of the recent Coroner's recommendations directed at the Ontario Ministry of Transportation (see Appendix B). It outlines our plans for infrastructure, education and legislation, including a separate consultation on potential legislative amendments to the *Highway Traffic Act* aimed at improving cycling safety, such as those proposed by the Coroner (i.e. mandatory helmets for all riders regardless of age and a minimum one-metre passing rule for vehicles passing cyclists)¹.

The enclosed plan sets out a map for ongoing work and describes in detail the government's plan and priorities. We recognize the important role of our many partners, and look forward to your feedback.

Sincerely,

The Honourable Bob Chiarelli
Minister of Transportation

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¹ Consulting on these items would be a first step in evaluating recommendations 11 and 12 from the Coroner of Ontario's "Cycling Death Review" (the Coroner's Report), to make helmets mandatory for cyclists of all ages and introduce a one meter/three foot passing rule for vehicles when passing cyclists.

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SECTION 1 – CONTEXT

Cycling in Ontario

Research commissioned by the Ontario Ministry of Transportation (the Ministry) in 2011 found that 48 per cent of Ontarians ride a bicycle at least once a week during the spring, summer and fall. Exercise and recreation are the main reasons that Ontarians ride their bicycles, but around 50 per cent of Ontario cyclists also do so as a mode of transportation – to ride to work or school, for shopping, to run errands, or to visit family and friends.

While most cycling takes place on municipal roads, the Province still has an important role to play in increasing both the number and safety of cyclists.

Benefits of Cycling

Cycling offers many potential benefits, including:

- Promoting active and healthy lifestyles – in *Enhancing Cycling Safety in Ontario* (2011), the Ontario Medical Association advocates that people increase their daily physical activity through cycling in response to concerns about obesity and related chronic disease. Cycling is an activity that can be incorporated into the daily tasks of life, and is a cost-efficient means to meet recommended physical activity guidelines.
- Reducing emissions of greenhouse gases and other harmful pollutants – according to the Environmental Commissioner of Ontario (2010), the transportation sector contributes over one-third of Ontario's greenhouse gas emissions and energy consumption. Passenger vehicles account for around 75 per cent of Ontario's greenhouse gas emissions from transportation, which makes encouraging people to choose cycling particularly compelling.
- Reducing congestion – like many urban areas, traffic congestion in the Greater Toronto and Hamilton areas costs billions of dollars to the economy each year. Increasing commuter cycling has the potential to reduce passenger vehicle traffic during peak periods.
- Providing economic development opportunities – the economic potential of cycling tourism is increasingly being recognized. For example, the Province of Quebec estimates that its province-wide cycling network, known as “La Route Verte”, generates an annual economic return of about \$30,000 per kilometre, totalling more than \$100 million each year.

Creating an environment for encouraging cycling is a shared responsibility between the provincial government, municipalities, not-for-profit organizations and cycling associations.

What We Are Doing at the Provincial Level

The Ontario Government has established broad provincial planning objectives that encourage and support cycling and walking in Ontario. These objectives have been communicated through legislation such as the *Planning Act (1990)* and its supporting policy document the *Provincial Policy Statement (2005)*.

The *Provincial Policy Statement* represents the government's policy direction on land use planning. It provides direction for the entire province on matters of provincial interest related to land use

planning and development, and promotes a provincial “policy-led” planning system. The Provincial Policy Statement encourages healthy, active communities through the planning of public streets, spaces and facilities that meet the needs of pedestrians and non-motorized movement (such as cycling). A revised draft Provincial Policy Statement is being developed. More information is available from the Ministry of Municipal Affairs and Housing’s website at: <http://www.mah.gov.on.ca/>.

Across the Ontario Government several ministries have taken actions to support cycling. For example:

- The Ministry of Tourism, Culture and Sport (MTCS) as the government lead for trails planning and coordination, currently oversees the implementation of the *Ontario Trails Strategy (2005)*, which seeks to encourage on- and off-road cycling in order to promote sport/recreation, tourism and active transportation. MTCS has provided support for a range of cycling-related projects through its various funding programs towards achieving national physical activity targets.
- Through the Healthy Communities Fund Provincial Grants, the Ministry of Health and Long Term Care has provided funding to Green Communities Canada to support Walking and Wheeling: Healthy, Happy, Active School Travel, a project to promote walking and cycling to Ontario schools through key activities that build on the foundation of Active and Safe Routes to School.
- Under the Ontario Public Health Standards, public health units are required to deliver initiatives and programs related to healthy weights, physical activity, and prevention of injuries. This work includes active transportation (including cycling), access to recreation, and bike safety. As part of the Healthy Communities Fund Partnership Stream, public health units and host agencies are also developing policies to increase physical activity. In addition, cycling organizations, such as Share the Road Cycling Coalition have received \$90,000 in funding through the Healthy Communities Grants Project Stream to deliver cycling promotion activities.

What We Are Doing at the Ministry of Transportation

The Ministry of Transportation’s vision is “to be a world leader in moving people and goods safely, efficiently and sustainably, and to support a globally competitive economy and a high quality of life.” Achieving this vision requires that we encourage cycling and improve the safety of cyclists in the Province.

The Ministry’s support for cycling is consistent with its commitment to become a more sustainable organization, as described in its sustainability framework – *Sustainability InSight*. Through *Sustainability InSight*, the Ministry has established seven strategic sustainability goals, four of which relate to cycling - improving mobility choices, applying a context sensitive approach to Ministry projects, optimizing infrastructure design, and driving a cultural shift toward sustainability. Copies of *Sustainability InSight* can be downloaded at:

http://www.mto.gov.on.ca/english/sustainability/strategy/MTO_sustainabilityreport-en.pdf

The actions the Ministry has taken to encourage cycling and improve safety can be grouped into the following four categories: infrastructure, safety, planning, and research.

Infrastructure

In 2008 Metrolinx, the Ministry’s agency, released The Big Move, a 25-year regional transportation plan for the Greater Toronto and Hamilton Area (GTHA). That plan sets out a

vision for a sustainable, multi-modal transportation system across the GTHA, and includes cycling infrastructure within the definition of a transportation and/or transit system. The Big Move outlines active transportation targets, the need for a commitment of up to \$20 million per year for active transportation infrastructure, which includes cycling, as well as measures to promote the development of communities that are pedestrian, cycling and transit-supportive. This includes the need for an integrated walking and cycling network in the GTHA, creating pilot bike-sharing programs in major urban centres, the inclusion of bicycle carrying devices on transit vehicles, and establishing bicycle storage facilities at major rapid transit stations. Metrolinx is developing an investment strategy to support The Big Move. More about The Big Move can be found at:

<http://www.metrolinx.com/thebigmove/en/default.aspx>.²

The Ministry is in the process of updating its bikeways planning and design guidelines. This document contains a set of guidelines for designing bicycle facilities on Ministry highways.

For the benefit of all road users, the Ministry has paved a minimum one metre shoulder on Highway 6 for 46 kilometres on Manitoulin Island and 66 kilometres on the Bruce Peninsula, as a pilot project. The Ministry is planning on monitoring and collecting information over the next few seasons on the results of this pilot, in order to inform its decisions on how its transportation network can accommodate and support active transportation.

Safety

New Beginner Driver Education curriculum standards were introduced in September 2009 to provide a solid foundation for safe and responsible driving and to help develop positive driving attitudes and behaviours in new drivers. Driving schools are required to include information about courteously sharing the road with cyclists in their curriculum and during in-vehicle practice. New drivers are further tested when obtaining a class G2 or G driver's licence.

The Ministry has completed a stakeholder consultation on its suite of Driver Handbooks with a view to enhancing its "share the road with cyclists" section of the handbooks. Cycling safety groups were consulted as were representatives from enforcement, the insurance industry and the medical community. The Ministry plans to add new information and illustrations on bike lanes, road markings and right-of-way in future copies of the handbooks.

Specific to cycling, the Ministry publishes *Cycling Skills: Ontario's Guide to Safe Cycling* and the *Young Cycling Guide* that are strongly focused on safety. These can be found at <http://www.mto.gov.on.ca/english/pubs/#cycling>.

The Ministry also partners with, and provides funding to, local road safety organizations through its Road Safety Challenge and Road Safety Community Partnership Programs. These educational activities are tailored to the specific needs of communities and can involve public health units, police and members of the community working with Ministry staff to assist with the development and implementation of cycling safety initiatives across the province. A recent example is the Ministry's collaboration with the Share the Road Cycling Coalition and the Canadian Automobile Association, to develop a provincial multimedia public education campaign that rolled out in summer 2012. Other Ministry-supported cycling safety initiatives include a public education campaign by EnviroCentre and the City of Ottawa in spring 2012. The campaign features a video series promoting cycling training and safe riding practices, including how to properly use bike boxes and cycling lanes. Cycling

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² Under The Big Move a transportation plan must (among other things) take into consideration all modes of transportation, including highways, railways, local transit systems, the regional transit system, cycling and walking.

safety was also a priority theme for the 2012 Road Safety Challenge which enabled the Ministry to support 27 community groups to promote cycling safety in their communities.

In Spring 2013, the Ministry will be piloting a new initiative to provide purchasers of new bicycles with cycling safety information at the point of sale.³

Planning

Led by the Ontario Traffic Council, the Ministry continues to work in partnership with municipalities, engineering and planning consultants, and tourism organizations to update *Ontario Traffic Manual Book 18: Bicycle Facilities*. Book 18 will serve as a primary reference document for engineers, planners and designers throughout Ontario. The Book contains information on legal requirements, standards, best practices, procedures, guidelines and recommendations for the justification, design, timing and operation of bicycle facilities and control measures.

The Ministry has also published its *Transit-Supportive Land Use Planning Guidelines* to share strategies, best practices, and case studies on building communities that support cycling and the integration of cycling with transit services with municipalities.

Research

The Ministry has led a comprehensive review of existing and planned cycling touring routes in the province, as well as consulting with key cycling and tourism stakeholders on the key elements of a potential province-wide cycle touring network. This research shows hundreds of on-and off-road routes across the province, most of which are maintained by municipalities. The Ministry will publish maps of existing cycling routes through the Ministry of Natural Resources Land Information Ontario online database.

The Ministry also undertook a Bicycle Survey for the Greater Golden Horseshoe to determine who is cycling, why and how useful the existing facilities are. The results will enhance the Ministry's forecasting for cycling, enabling the Ministry to produce more accurate forecasts in support of cycling, safe roads, and infrastructure planning and investment. The Ministry will share this information with municipal partners.

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³ Providing the purchasers of bicycles with cycling safety information would address recommendation 5 from the Coroner's Report. See Appendix B for further details.

SECTION 2 – A CYCLING STRATEGY FOR ONTARIO’S MINISTRY OF TRANSPORTATION

The Ministry is taking a three-pronged approach to its cycling strategy in order to increase the number of people cycling in Ontario and improve the safety of all road users. Some of this work is ongoing or underway, but enshrining this approach into the Strategy ensures that it will be a part of the Ministry’s ongoing business.⁴

2.1 Enhancing Cycling Infrastructure in the Province

In Ontario, roads and highways are either owned by the provincial or the municipal/regional levels of government. Cyclists are allowed on all roads throughout the province, except those where cycling is expressly prohibited and where “no bicycling” signs have been erected (e.g. 400-series highways). In general, most utilitarian or daily cycling occurs on municipal roads, while long-range recreational cycling mostly takes place on provincial roads. Creating an environment for encouraging cycling is a shared responsibility between both provincial and municipal governments.

Cycling can be accommodated in many ways, including bike lanes, shoulder bikeways, off-road trails or paths, and through simple signage where traffic volume and speed is low enough.

Leading the Identification of a Province-Wide Cycling Network

The Ministry will identify a province-wide cycling route network to connect cycling destinations to create recreational cycling and tourism opportunities.

Using data collected on existing municipal or regional local cycling routes, the Ministry will identify how connections can be made between local cycling routes to form a province-wide cycling route network in order to maximize existing municipal investments. The Ministry will focus its cycling infrastructure investments on closing the gaps between existing cycling routes to create a provincial cycling network.⁵

When the Ministry plans infrastructure projects for future funding – either constructing new provincial highways or rehabilitating existing provincial highways – it will evaluate on a case-by-case basis whether the addition of a cycling component⁶ is warranted based on outlined criteria and whether it can be accommodated without substantially altering the scope of the project. Priority will be given to projects that:

- Could form part of a province-wide cycling network.
- Have no viable alternative route.

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⁴ Developing the Cycling Strategy addresses recommendation 2 from the Coroner’s Report. See Appendix B for further details.

⁵ Leading the identification of a province-wide cycling network partially addresses recommendation 1 of the Coroner’s Report. “Complete-streets” is a planning approach applied to urban settings to guide the redevelopment of existing communities and the creation of new communities, therefore the recommendation was jointly directed at the Ministry of Transportation (MTO) and Ministry of Municipal Affairs and Housing (MMAH).

⁶ Examples of the ways that cycling can be accommodated include bike lanes in urban areas, shoulder bikeways in rural areas, off-road trails or paths, and, where traffic volume and speed is low enough, simple signage. Providing paved shoulders where appropriate could also improve the safety of all road users. While paving shoulders on provincial highways responds to recommendation 3 of the Coroner’s Report, the *Highway Traffic Act* currently restricts driving on paved shoulders. It is the Ministry’s intention to initiate consultation on legislative and/or regulatory changes regarding cycling on paved shoulders as part of its consultation on other legislative and/or regulatory changes.

- Would connect with other existing or planned cycling routes.
- Are consistent with local tourism goals.
- Connect population centres and/or places of interest.
- Allow access to services and accommodation.
- Have a demonstrated demand for cycling.
- Are, or can, reasonably be made safe.
- Have strong local support.
- Are cost effective.

When a municipality or stakeholder group requests the addition of a cycling component to a provincial highway construction project, the Ministry will consider partnership agreements with municipalities or other stakeholder groups for the additional costs, subject to available funding.

For the safety of all road users, the Ministry will prioritize the use of off-road trails or lower speed, low volume roads where possible, and will take steps to ensure that crossings of provincial highways are minimized when identifying the network.

When a provincial road project is within municipal boundaries, the Ministry's regional offices will consult with municipalities during the design of provincial highway rehabilitation and/or new construction projects to discuss cycling and other road issues.

Supporting Municipalities in the Development of Local Cycling Networks

The Ministry provides support for municipalities in developing and enhancing their cycling routes. The Ministry does not want its infrastructure to be a barrier to existing municipal routes.

Assisting with Infrastructure Design

Municipalities planning on developing municipal cycling networks work in partnership with the Ministry when that proposed route would cross or otherwise touch upon Ministry infrastructure. The Ministry works with municipalities to identify the most appropriate design to accommodate all road users safely in these situations.

In these circumstances, funding for the redesign and construction of cycling-related portion of the agreed-upon treatment will continue to be assessed on a project-by-project basis taking into account the impact of the redesign on overall project costs. Given the magnitude of the expenses entailed, where bridges or other structures need to be expanded to better accommodate cycling, incremental costs associated with the expansion will be the responsibility of the requesting municipality.

Providing Guidance Documents

The Ministry provides technical and guidance documents, including guidelines for designing cycling infrastructure, that can be used by municipalities.

Access to Funding for Municipalities

The Ministry recognizes that most cycling occurs on municipal infrastructure and encourages municipalities to ensure that their proposed cycling infrastructure investments are integrated into their asset management plans. Asset management is a cornerstone of the government's Municipal Infrastructure Strategy and helps prioritize needs to ensure the right investments are made at the right time. In this

context, the province has made cycling infrastructure eligible under the Municipal Infrastructure Investment Initiative, and will explore options to include cycling within other provincial funding programs.

2.2 Enhancing Cycling Safety through Education and Legislation

The Ministry seeks to improve the safety of road users, including cyclists.

Travelling safely on roads and highways in Ontario is the shared responsibility of all road users, including cyclists. The Ministry recognizes it has an important role to play in improving road safety.

In Ontario, cyclists are officially recognized in the *Highway Traffic Act* as legitimate road users. This includes all cyclists – from young children to seniors, occasional users, to experienced commuters. Cyclists have similar rights and responsibilities to other vehicle operators.

Public Education for Cyclists and Drivers

The Ministry publishes guides for the public on cycling skills that are focused on safety.

The Ministry partners with, and provides funding to, local road safety organizations to provide educational activities that assist with the development and implementation of cycling safety initiatives across the province.⁷

The Ministry updates its series of Driver Handbooks regularly to enhance the safety of all road users, including cyclists.⁸

Legislation that Provides for the Safety of Cyclists

The Ministry regularly reviews and updates the *Highway Traffic Act* and other relevant Ministry legislation and policies to improve cycling safety.⁹

In determining the need for updates to the *Highway Traffic Act*, regulations or policy, the Ministry will undertake its own research, review the approaches of other jurisdictions, listen to the comments and concerns of stakeholders, including the Coroner, and consider the recommendations of other government bodies. The overall objective of any amendments will be to improve the safety of Ontario's cyclists and other road users.

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⁷ Public education for drivers and cyclists, in collaboration with road safety organizations, addresses elements of recommendation 4 from the Coroner's Report. See Appendix B for further details.

⁸ Updating the Driver Handbooks to enhance the safety of all road users, including cyclists, addresses recommendation 7. See Appendix B for further details.

⁹ Reviewing and updating the *Highway Traffic Act* to improve cycling safety addresses recommendation 8 from the Coroner's Report. See Appendix B for further details.

2.3 Ensuring Relevancy through Monitoring, Researching and Coordinating

The Ministry will review the effectiveness of this Strategy on a timely basis to determine how it can be improved and updated.

Monitoring and Research

The Ministry will monitor the implementation of this Cycling Strategy, as well as the cycling policies of other leading jurisdictions to ensure that the Ministry follows best practices.

The Ministry will continue to gather and analyze data related to collisions involving cyclists and motor vehicles which in turn will help inform planning and policy decisions. Cycling related collision data will continue to be published each year in the *Ontario Road Safety Annual Report*.

The Ministry monitors and supports research aimed at improving knowledge related to cycling in Ontario. This may include activities that lead to improved cycling safety, provide a better understanding of the current cycling mode share and cycling usage across the province, or identify barriers to cycling in Ontario. This research will help determine additional actions that can be taken to reduce or eliminate barriers to cycling. It will also serve to identify opportunities and strategies to connect existing cycling routes together across the province.

The Ministry will encourage municipalities to collect cycling-related data within their jurisdiction and to share this data with interested parties, including the Ministry, in order to better understand the needs, patterns and barriers to cycling in the province.

Co-ordination

The Ministry will continue to coordinate cycling initiatives and share cycling information through regular meetings of the Ministry's Active Transportation Working Group, which includes representatives from all relevant Ministry divisions, including those with responsibility for road user education and highway design standards.

In addition, the Ministry will continue to share cycling information and coordinate cycling-related activities across all relevant provincial ministries and provincial agencies through regular meetings of the Inter-Ministerial Active Transportation Working Group.

The Ministry will continue to liaise with cycling stakeholders and organizations across the province on both local issues and broader Ministry activities as they relate to cycling as a mode of transportation.

Glossary

Below are definitions of terms as used in the draft Cycling Strategy.

Highway or Road – The term “highway” is interchangeable with the term “road.” A highway consists of the roadway itself and any adjacent land that lies between the lateral property lines.

Provincial Highway – A highway under the jurisdiction and control of the Ministry of Transportation. There are approximately 16,500 km of provincial highway in Ontario. Cycling is prohibited on about 2,000 kilometres of this network, mostly on controlled access (e.g. 400 series) highways. In addition to these, Ontario municipalities control a separate, much larger network of roads.

Municipal Highway – A highway under the jurisdiction and control of a municipality.

Roadway – The part of a highway that is improved, designed or ordinarily used for vehicular traffic, but does not include the shoulder.

Shoulder – The portion of a highway that provides lateral support to the roadway and that may accommodate stopped motor vehicles and emergency use.

Infrastructure – Examples of the ways that cycling can be accommodated include bike lanes in urban areas, shoulder bikeways in rural areas, off-road trails or paths, and, where traffic volume and speed is low enough, simple signage. Providing paved shoulders where appropriate could also improve the safety of all road users. While paving shoulders on provincial highways responds to recommendation 3 of the Coroner’s Report, the *Highway Traffic Act* currently restricts driving on paved shoulders. It is the Ministry’s intention to initiate consultation on legislative and/or regulatory changes regarding cycling on paved shoulders as part of its consultation on other legislative and/or regulatory changes.

Appendix A – Types of Bikes in Ontario

Bicycles

Can be operated on roads in Ontario, except those that are expressly prohibited and “no bicycling” signs have been erected (such as 400 series highways).

Under the *Highway Traffic Act* (HTA), the definition of bicycle includes tricycles, unicycles and power-assisted bicycles, but not motor-assisted bicycles. You do not need a driver's licence to operate a bicycle in Ontario.

Traditionally, a bicycle is a vehicle that:

- Has steering handlebars and is equipped with pedals;
- Is designed to be propelled by muscular power;
- Has no age restriction for operators;
- Can be operated on most roadways (e.g., not allowed to travel on 400 series highways); and
- Cannot be operated across a roadway within a pedestrian cross-over.

An operator must wear a bicycle helmet if under 18 and operating the bicycle on the road. If the operator is under 16 it is the duty of the operator's parent or guardian to ensure that he/she wears a helmet. If the person is 16 or 17 it is his/her personal responsibility to wear a helmet. No passengers are allowed if the bicycle is only meant for one person. When going slower than the rest of traffic, cyclists should stay as close to the right edge of the road as is practicable. Cyclists are allowed to safely use the full lane if staying close to the right edge of the road is unsafe.

Electric Bicycles ("e-bikes")

Can be operated on roads in Ontario except those that are expressly prohibited and “no bicycling” signs have been erected (e.g. 400 series highways).

Are considered a “bicycle” for the purposes of the HTA, but are defined as “power-assisted bicycles” under the HTA.

The HTA defines a power-assisted bicycle as:

- Having affixed to it pedals that are operable;
- Capable of being propelled solely by muscular power; and
- Meeting the federal definition of a power-assisted bicycle (*for the full definition, please see subsection 2(1) of the Motor Vehicle Safety Regulations under the Motor Vehicle Safety Act*), which includes:
 - Has steering handlebars and is equipped with pedals;
 - Is designed to travel on not more than three wheels;
 - Has an electric motor that has a power output rating of 500W or less. (Note: the motor is electric, and is incapable of propelling the cycle at speed of 32 km/h or greater on level ground, without pedaling); and
 - Bears a permanently affixed label by the manufacturer stating in both official languages that the vehicle conforms to the federal definition of a power-assisted bicycle.

Since October 3, 2009, e-bikes (both those resembling conventional bicycles and those resembling motor scooters) have been allowed on roads and highways where conventional bicycles are

currently permitted. They must follow the same rules of the road as set out in the HTA that currently apply to cyclists, with some exceptions.

In order to operate an e-bike:

- Operators must be 16 years of age or older; and
- All operators must wear an approved bicycle or motorcycle helmet at all times.

In addition:

- No person who is the owner or is in possession or control of an e-bike shall permit a person who is under the age of 16 years to ride on, drive or operate the e-bike on a highway.
- An e-bike must not be ridden on, driven or operated unless it is in good working order.
- Similar to bicycles and mopeds, power-assisted bicycles are prohibited from use on certain provincial controlled-access highways.
- Any municipal by-law prohibiting bicycles from highways under their jurisdiction also apply to e-bikes. Municipalities may also pass by-laws specific to e-bikes that prohibit them from municipal roads, sidewalks, bike paths, bike trails and bike lanes under their jurisdiction.

To operate an e-bike on Ontario roads, an e-bike must meet the following equipment requirements:

- Have a maximum unladen weight of 120 kg (includes the weight of vehicle and battery).
- Must be equipped with at least two independent braking systems that applies force to each wheel and is capable of bringing the e-bike, while being operated at a speed of 30 km/h, to a full stop within 9 metres from the point at which the brakes were applied.
- Must have wheels with a minimum diameter and width of 350 mm and 35 mm, respectively.
- Must have all electrical terminals completely insulated or covered and, along with the battery and motor, must be securely fastened to the bicycle to prevent them from moving while the bicycle is in motion.
- No modifications to the motor of an e-bike to permit it to exceed the federal requirements for motor output or speed for an e-bike (500W and a speed greater than 32 km/h) are allowed.

Motor-Assisted Bicycles (Mopeds)

Like limited-speed motorcycles, mopeds can be operated on roads in Ontario.

A restricted Class M licence for limited-speed motorcycle (LSM) and moped drivers was introduced on November 28, 2005. This restricted Class M licence has a condition that allows licence holders to drive limited-speed motorcycles and mopeds only. New moped drivers will be required to take road tests.

A motor-assisted bicycle is a bicycle that:

- Is fitted with pedals that are operable at all times to propel the bicycle;
- Weighs not more than 55 kg;
- Has no hand or foot operated clutch or gearbox driven by the motor and transferring power to the driven wheel;
- Has a piston displacement of not more than 50 cubic centimetres; and
- Does not attain a speed greater than 50 km/h on level ground within a distance of two km from a standing start.

To operate these vehicles on the roadway:

- The driver must hold the new restricted class M licence for limited-speed motorcycles/mopeds (Class M2 with L restriction or M with L restriction or a valid motorcycle licence (Class M1, M2 or M);
- Approved motorcycle helmet is required;
- The vehicle must be insured and registered and have a valid licence plate;
- No passengers are allowed;
- They must meet federal safety standards for a limited speed motorcycle; and
- Motor-assisted bicycles are not allowed to travel on 400 series highways.

Appendix B – Recommendations from the Chief Coroner of Ontario’s “Cycling Death Review” Directed at the Ministry of Transportation¹⁰

Recommendations on Infrastructure

1. To the Ministry of Transportation and the Ministry of Municipal Affairs and Housing

A “complete streets” approach should be adopted to guide the redevelopment of existing communities and the creation of new communities throughout Ontario. Such an approach would require that any (re-)development give consideration to enhancing safety for all road users, and should include:

- Creation of cycling networks (incorporating strategies such as connected cycling lanes, separated bike lanes, bike paths and other models appropriate to the community.)
- Designation of community safety zones in residential areas, with reduced posted maximum speeds and increased fines for speeding.

2. To the Ministry of Transportation and the Ministry of Municipal Affairs and Housing

An Ontario Cycling Plan should be developed, building upon the 1992 Provincial Bicycle Policy. This Plan would establish a vision for cycling in Ontario, and would guide the development of policy, legislation and regulations and commitment of necessary infrastructure funding pertaining to cycling in Ontario. This plan should be publicly available.

3. To the Ministry of Transportation

The Ministry of Transportation should identify the development of paved shoulders on provincial highways as a high priority initiative.

Recommendations on Education

4. To the Ministry of Transportation

A comprehensive public education program should be developed to promote safer sharing of the road by all users. This initiative should be facilitated by the Ministry of Transportation, in collaboration with key stakeholder groups, including but not limited to, the Canadian Automobile Association, Share the Road Cycling Coalition, local cycling organizations and the Ontario Association of Chiefs of Police. Such a program should include:

- A targeted public awareness campaign, in the spring/summer months, with key messages around cycling safety. This could include changes arising from other recommendations from this Review (such as changes to the *Highway Traffic Act*).
- Education targeted at professional truck drivers regarding awareness and avoidance of cycling dangers.
- Education / regulation directed towards Beginning Driver Education (BDE) courses and driving instructors to include sharing the road and bicycle safety. This should be introduced in both classroom curricula and on-road training.
- Public safety campaigns around the dangers of distracted and impaired cycling (headphone use; carrying unsafe loads; cycling while under the influence of drugs or alcohol).

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¹⁰ Note: the numbers of the recommendations correspond to the Coroner’s Report. Not all of the Coroner’s recommendations are listed here since a number of them were not directed at the Ministry of Transportation (MTO).

5. To the Ministry of Transportation and the Ministry of Consumer Services

It should be a requirement that important bicycle safety information (such as rules of the road and helmet information) be provided to purchasers of any new or used bicycle. Such information could be included in a “hang tag” information card attached to the handlebar of every bicycle at the time of purchase which would include critical information and a reference to the Ministry of Transportation website and Service Ontario for additional bicycle safety information and publications.

7. To the Ministry of Transportation

The Official Driver’s Handbooks (Driver’s Handbook; Truck Handbook; Bus Handbook; Motorcycle Handbook) should be updated to provide expanded information around sharing the road with cyclists, and include cycling-related scenarios in driver examinations.

Recommendations on Legislation

8. To the Ministry of Transportation

A comprehensive review and revision of the *Highway Traffic Act* (HTA) should be conducted to ensure that it is consistent and understandable with respect to cycling and cyclists and therefore easier to promote and enforce.

11. To the Ministry of Transportation

The *Highway Traffic Act* should be amended to make helmets mandatory for cyclists of all ages in Ontario. This should occur in conjunction with an evaluation of the impact of mandatory helmet legislation on cycling activity in Ontario. Such an evaluation strategy should be developed and carried out in collaboration with the Ministry of Health and Long-Term Care and Public Health Ontario.

12. To the Ministry of Transportation

The *Highway Traffic Act* should be amended to include a one (1) meter / three (3) foot passing rule for vehicles when passing cyclists. This change in legislation should be reflected in the Ontario Driver’s Handbook, Beginning Driver Education curricula and the driver’s licence examination process.