



Information on the
Importance of
Single Rider Motorcycle
Access
to Ontario's HOV Lanes

Prepared by
Michael Sanci
(msanci@sympatico.ca)
OCC

Proposal to the Ontario Ministry of Transportation on behalf of the Ontario Confederation of Clubs requesting consideration to make changes to the HTA that would allow single rider motorcycle access to the Provincial HOV lanes.

Our Provincial HOV lanes were established as a green initiative to encourage the reduction of harmful emissions, reduce the consumption of fossil fuels and aid in the flow of traffic. With the implementation of HOT lanes, we have shifted the emphasis on these issues to be more revenue sourced.

This is a logical time to re-visit the option of including motorcycles in the unrestricted access category of the regulations. Presently Ontario is one of the few jurisdictions that have not included motorcycles in their HOV program. The City of Toronto and the Province of B.C. HOV programs have included motorcycles for years. The U.S., federal government has mandated that motorcycles be included in the HOV programs of every State since 1991.

In Ontario, the following vehicles already have unrestricted access to the HOV lanes regardless of the number of passengers.

(<http://www.mto.gov.on.ca/english/ontario-511/hov-lanes.shtml>)

- *buses of all types*
- *licensed taxis and airport limousines*
- *emergency vehicles*
- *vehicles with Ontario green licence plates*

With the new HOT pilot program, any size car, SUV or pick up truck can operate in the HOV lanes with a single passenger, as long as they pay a monthly fee and display a permit in both front and back windows. (Note: Motorcycles don't have windows and therefore nowhere to display permits.)

The rationale behind allowing motorcycles to use HOV lanes is that it is safer to keep two-wheeled vehicles moving than to have them travel in start-and-stop traffic conditions. Two wheeled vehicles have little or no protection from larger four wheel or eighteen wheeled vehicles.

The MTO has even implied that the HOV lanes are safer than lanes in general traffic.

<http://www.mto.gov.on.ca/english/ontario-511/hov-lanes.shtml>

Ontario's HOV lanes have been designed to the highest safety standard, based on over 30 years of experience in other jurisdictions with HOV facilities. Ontario's HOV design includes a buffer separating the HOV lane from the general traffic lane, lane widths to ministry standards and a left shoulder, for optimum safety.

Considerations:

Health & Safety

The addition of motorcycles in the HOV lanes has very specific health and safety considerations for riders.

Motorcyclists are at much greater risk of serious injury or death from rear end collisions than four wheeled motorists and the possibility of a rear end collision while in stop and go traffic is quite high due to:

- Impaired drivers
- Fatigued drivers
- Distracted drivers (which has recently surpassed impaired drivers)

The Washington Post has recently reported on the rising rate of rear end collisions...

<https://www.washingtonpost.com/news/dr-gridlock/wp/2015/06/08/there-are-about-1-7-million-rear-end-collisions-on-u-s-roads-each-year-heres-how-to-stop-them/>

In a report accompanying the recommendation, the NTSB pointed to a study by the National Highway Traffic Safety Administration which found that 87 percent of rear-end collisions happened because the driver simply wasn't paying attention to the road.

Transport Canada Motor Vehicle Safety, with support from the Public Health Agency of Canada printed this report in 2011...

<http://www.tc.gc.ca/eng/motorvehiclesafety/tp-tp15145-1201.htm>

Fatalities among motorcyclists 45 to 54 years of age increased by 109% between 1996-2001 and 2004-2006 as ridership increased in this age group;

Motorcyclists have very little protection when in a collision with an automobile and the odds of being involved in an accident are increasing every year.

Another growing health concern is increasing temperatures.

In 2016, between May and September there were:

72 days with a temperature of 27 degrees or higher and
31 days with a temperature of 30 degrees or higher

When an air-cooled motorcycle is in stop and go traffic, no air is being circulated through the cooling fins and the engine will overheat. In the event that the engine overheats, the fuel/air mixture becomes massively over lean and the engine will lose all power, the engine must be shut down and allowed to cool for an undetermined time. This leaves the rider stopped either in traffic or on the side of the highway in a very unsafe situation. As the ambient temperature rises, so does the risk of failure or damage to the engine.

A motorcyclist in stop and go traffic has to deal not only with the ambient temperature, direct sunlight and humidity, but also the Radiant Heat Load from the motorcycle's engine. When stopped, the Radiant Heat Load rises directly up and into the rider's body.

There are thousands of motorcycle riders in Ontario that do not own an alternate form of transportation. Their only choice is to ride their bike. During extreme heat events, they are still going to wear protective clothing and the only protection that they have from the heat is moving through the air.

There is a study by the US National Library of Medicine and National Institute of Health entitled "Can motorcycle riding in Australia really be that thermally stressful?" that studies the effects of extreme heat and safety gear.

Personal protective clothing and equipment, when used during moderate to heavy workloads, can push individuals to the limits of physiological regulation. Evidence indicates that thermal discomfort is a key disincentive to the wearing of motorcycle protective clothing in hot weather. Therefore, the purpose of this investigation was to quantify thermal and cardiovascular strain during a simulated urban, motorcycle ride, conducted under laboratory conditions.

The conclusion stated:

The principal outcomes from this experiment were that, within air temperatures that approximated deep-body temperature, as may be encountered during an Australian summer, urban motorcyclists would be likely to approach profound hyperthermia and potentially debilitating central cardiovascular strain within 3 h, and earlier in sedentary riders.

We should also consider the following excerpt from the Occupational Health and Safety Council of Ontario's publication "Heat Stress Awareness Guide"

The law

Employers have a duty under Section 25(2)(h) of the Occupational Health and Safety Act to take every precaution reasonable in the circumstances for the protection of a worker. This includes developing policies and procedures to protect workers in hot environments due to hot processes or hot weather.

If heat related problems are significant enough to legislate employers to react and rectify potential hazards then maybe we are at a point where we should resolve a serious issue facing motorcyclists.

Attached are calendars from The Weather Network with the recorded temperatures for every day from May to September. This visualizes the issue at hand.

Every month more motorcyclists are choosing to drive a car in extreme heat events rather than sit uncomfortably in traffic. This is increasing the number of cars on the roads and is counter to the initiative of reducing traffic.

There are several compelling reasons to consider this change to existing regulations and in Statistics Canada's 2015 table - *Motor vehicle registrations, by province and territory*, Ontario is listed as having 217,049 registered motorcycles. This is a substantial number of riders and a small investment by the province would make a considerable difference in their daily lives and overall health and safety.

Another consideration to make is that according to the Motorcycle Industry Council's latest Motorcycle Owner Survey, women riders now account for 14 percent of the total motorcycle riding population. Women also account for over 30% of new motorcycle license registrations, suggesting that they are the fastest growing market segment.

"In fact, the number of female owners more than doubled from 2003 to 2014."

The OCC has undertaken an informal study into female riders and found that a majority of those polled are not comfortable riding with a passenger. That's over 30,000 riders that are never able to access the HOV lanes.

Most people that we are having discussions with are not aware that Motorcycles are not allow HOV access and are quite surprised by this oversight in logic and safety.

Please contact the writer of this document at:

msanci@sympatico.ca

416-948-8137

or

Lawrence Lilly

treasurer@occ4u.org

416-524-5088

