



June 23, 2016

The Honorable Marc Garneau  
Minister of Transport  
House of Commons  
Ottawa, Ontario K1A 0A6

Dear Minister Garneau and Future of Transportation in Canada Team

I am a public health researcher with a focus on active transportation. I welcome the opportunity to share evidence-based comments about the future of transportation in Canada, emphasizing safer and healthier transportation. The first is one of your themes. The latter is not explicitly mentioned, but fits in the rubric of green and innovative transportation.

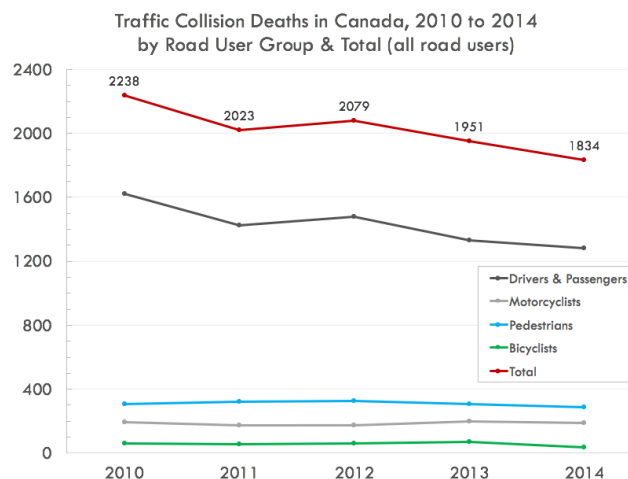
The form of transport that most affects the safety, health, and environment of Canadians is road transport, and my comments are about this mode.

### A. Safer Transportation

*Safe transportation should be our first priority. National targets should be set and safe systems adopted to achieve this priority.*

The safest jurisdictions in the world set an ambitious target for safety: “Vision Zero”, i.e., NO transportation deaths or serious injuries. We remain far from such a goal in Canada.

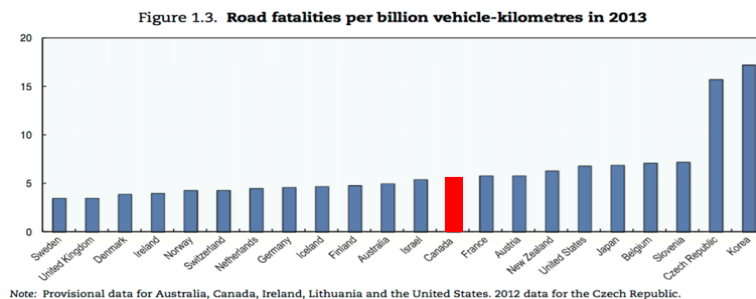
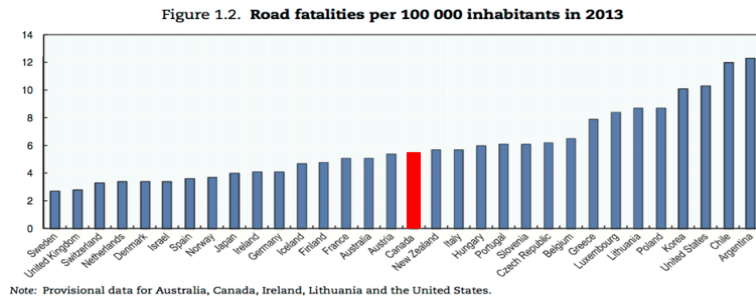
According to data assembled by Transport Canada “Canadian Motor Vehicle Traffic Collision Statistics 2014”,<sup>1</sup> about 2000 Canadians die every year in road transport collisions (see chart to the right). This number of deaths is equivalent in magnitude to 40 Lac-Mégantic rail disasters – every year on an ongoing basis.



Each year, the deaths are accompanied by about 150,000 injuries, including 10,000 hospitalizations.<sup>1</sup> The toll is slowly declining, but in international comparisons, Canada continues to lag.

<sup>1</sup> [http://www.tc.gc.ca/media/documents/roadsafety/cmvts2014\\_eng.pdf](http://www.tc.gc.ca/media/documents/roadsafety/cmvts2014_eng.pdf)

On a per capita basis, 16 of 31 other countries have lower death rates (see charts<sup>2</sup> to the right). On a per distance travelled basis, 12 of 21 other countries have lower rates. Our deaths rates are up to 100% higher than those of the safest countries. Many countries that now have much lower fatality rates than Canada had similar or worse safety records in 1970, including Switzerland, the Netherlands, and Denmark.<sup>2</sup>



In heart-wrenching terms, were Canada to achieve the safety record of the safest country, Sweden, 1000 more Canadians would be alive at the end of each year. Sweden has adopted Vision Zero and has an ongoing program of designing, testing, and implementing *safe system* measures to improve safety.

## B. Healthier Transportation

*Healthy transportation should be our second priority.*

Walking, cycling and transit use have been shown to increase physical activity of the population in a way that is easier to maintain over the long term than specialized exercise programs. Physical activity has been consistently shown to reduce the risk of ischemic heart disease, cerebrovascular disease, dementia, colon cancer, breast cancer, type 2 diabetes and depression.<sup>3,4</sup> All are among the leading causes of death in Canada.<sup>5</sup>

Research consistently shows that walking, cycling and transit use have important health benefits – in terms of lives, disability adjusted life years, and health care expenditures.<sup>4</sup> Examples of these benefits include the following (adjusted to Canadian data):

- Increasing walking and cycling by 7 to 25 minutes per person per day on average is estimated to increase disability adjusted life years (DALYs) by 160,000 to 370,000 per year. This represents up to an extra year of life expectancy for Canadians.
- Increasing walking by 1 km and cycling by 3 km per person per day on average is estimated to reduce healthcare expenditures by more than \$1 billion per year.<sup>4</sup> This is many times higher than the current level of investment in cycling and walking infrastructure in Canada.
- Transit use not only increases walking, but it is the safest mode of road transport, with injury and fatality rates for bus travel 5 to 20 times lower than personal motor vehicle travel.<sup>6</sup>

<sup>2</sup> International Transport Forum. *Road Safety Annual Report 2015*. 2015 [http://www.itf-oecd.org/sites/default/files/docs/15irtadannualreport\\_0.pdf](http://www.itf-oecd.org/sites/default/files/docs/15irtadannualreport_0.pdf) Accessed June 23, 2016

<sup>3</sup> <http://www.sciencedirect.com/science/article/pii/S0140673612607661>

<sup>4</sup> <http://www.plosone.org/article/abstract?uri=info%3A%2F10.1371%2Fjournal.pone.0051462&representation=PDF>

<sup>5</sup> <http://www5.statcan.gc.ca/cansim/a26?lang=eng&id=1020561&p2=46>

<sup>6</sup> <http://ajc.oxfordjournals.org/content/166/2/212.long>

Walking and cycling not only impact health through physical activity, but through their low environmental impact: these modes produce little to no air pollutants or greenhouse gases, and almost no noise. Together with transit use, they form a trio of green transport modes that warrant infrastructure expenditures to make them as welcoming an option to Canadians as possible, whether for commuting to work, travelling to school, shopping, or socializing. Most Canadians make many trips in a week that they could enjoy making on foot, bike, or transit, if routes were comfortable, convenient, and safe.

*Targets should be set for walking, cycling and transit mode shares.*

The Statistics Canada 2011 National Household Survey provides benchmark data on the proportions of commute trips by these healthy modes of travel: 12.0% by transit, 5.7% on foot, and 1.3% by bike.<sup>7</sup> However, about 80% of commute trips in Canada are by personal motor vehicle.

International comparisons show that there are huge opportunities for increasing our walking, cycling, and transit use. The United Kingdom, France, Germany, Denmark, and the Netherlands have 2 times more walking and 2 to 25 times more bicycling than Canada.<sup>8</sup> Metropolitan areas around the world (throughout western Europe, Asia, and even in the US) have transit usage higher than many Canadian cities.<sup>9</sup>

Reducing trips by car is a goal that would serve multiple purposes, for example:

- reductions in traffic congestion for those who have no alternative but to drive and for the movement of goods,
- reductions in the capital and maintenance costs of transportation infrastructure, and
- reductions in air pollutant and noise emissions.

Reducing trips by car also aligns with generational trends of lower driving rates of an aging population and of millennials. Recent data from the United States indicates that though most *trips* there are by car, most *people* are multimodal. In an average week, 72% of people took transit, walked and/or biked for at least some trips, whereas 28% of people travelled *only* by car.<sup>10</sup> This suggests that people are more open to shifts in transport modes than is commonly believed. Setting targets, developing strategies and making meaningful investments so alternate modes are more comfortable and available will reap rewards.

I hope these ideas will influence the future of Canadian transportation. Thank you very much for the opportunity to comment.

Yours sincerely



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<sup>7</sup> [https://www12.statcan.gc.ca/nhs-enm/2011/as-sa/99-012-x/99-012-x2011003\\_1-eng.cfm](https://www12.statcan.gc.ca/nhs-enm/2011/as-sa/99-012-x/99-012-x2011003_1-eng.cfm)

<sup>8</sup> <http://onlinepubs.trb.org/onlinepubs/trnews/trnews280WesternEurope.pdf>

<sup>9</sup> [http://en.wikipedia.org/wiki/Modal\\_share#Modal\\_share\\_targets](http://en.wikipedia.org/wiki/Modal_share#Modal_share_targets)

<sup>10</sup> <http://link.springer.com/article/10.1007%2Fs11116-014-9556-z#page-1>