



December 8, 2014

The Honorable Todd Stone
Minister of Transportation and Infrastructure
PO Box 9850 Stn. Prov. Govt.
Victoria, BC V8W 9T5

Dear Minister Stone and BC Transportation Plan Team

I am writing with comments on “**BC on the Move – A 10-Year Transportation Plan Discussion Guide**”. My comments address three vital issues related to transportation: safety; health; and mode share.

A. Transportation Safety

The Guide

The Guide groups moving goods with moving people. It groups moving safely with moving reliably. These are different objectives that are measured in different ways.

There are only two mentions of measures of safety in the Guide: a decrease in vehicle collisions and serious truck crashes by ~25% over a 10-year period (pp. 5 & 16). Injuries and deaths are not mentioned, nor are safety targets.

Comments

Safe transportation should be our first priority. Targets should be set to achieve this priority.

The safest jurisdictions in the world set an ambitious target for safety, “Vision Zero”: NO transportation deaths or serious injuries.

According to data assembled by Transport Canada “Canadian Motor Vehicle Traffic Collision Statistics 2012”,¹ BC casualty rates per billion vehicle-km are above the Canadian average and ~50% higher than Canada’s safest jurisdictions. BC fatality rates per billion vehicle-km are ~100% higher than those of the safest countries, including Norway, Sweden, and the United Kingdom.²

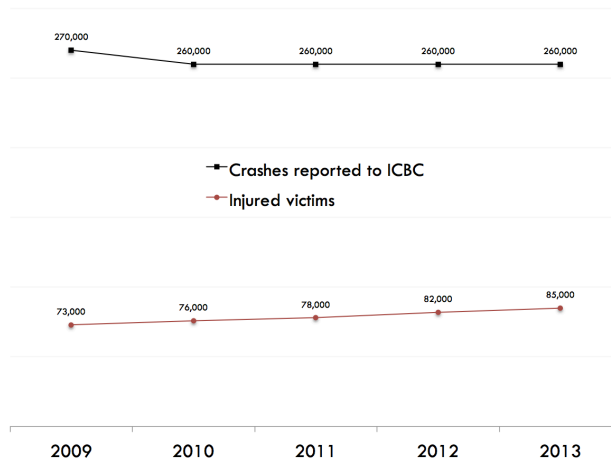
A transportation plan should include an overview of our transportation safety record, to establish benchmarks against which to measure progress towards safety goals. In addition to the national and international comparisons above, data from ICBC’s “Quick Statistics” provide trends within the province (see charts overleaf).³

¹ http://www.tc.gc.ca/media/documents/roadsafety/cmvtcs2012_eng.pdf

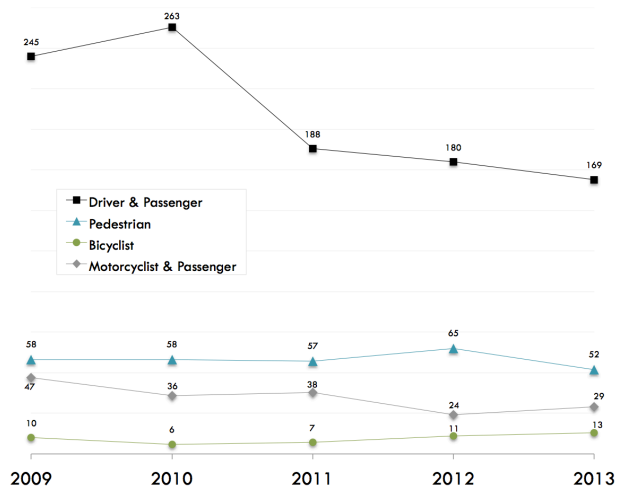
² http://www.keepeek.com/Digital-Asset-Management/oecd/transport/road-safety-annual-report-2013_irtad-2013-en#page13

³ <http://www.icbc.com/about-icbc/newsroom/Documents/quick-statistics.pdf>

Traffic crashes & injured victims per year



Fatalities per year, by mode of travel



They show that in the 5-year period from 2009 to 2013, there was both good and bad news about safety. Crashes have declined, but the numbers of injured victims have increased. Fatalities among drivers and passengers of cars, vans and trucks have declined, but there has been little observable change in deaths to vulnerable road users (pedestrians, motorcyclists, and bicyclists). *Safe transportation systems* for pedestrians and cyclists have additional benefits because they encourage these healthy modes of transportation, discussed in the following section.

An example of *safe systems* is speed limits guided by the complexity of the route (e.g., the number of intersections and junctions, traffic volumes, median dividers, presence of vulnerable road users). In the recent Rural Highway Safety and Speed Review, the Ministry concluded that speed limits should be increased on certain intercity roads. It is reasonable to consider that there are road designs and settings that may accommodate higher speeds safely. However, there are other settings that demand very different treatment to achieve safe and comfortable travel. For example, the safest countries have much lower default urban speed limits than BC: 30 km/h.

B. Relationship between Transport Modes and Health

The Guide

The Guide indicates that walking and cycling are healthy transportation options and that transit ridership supports the development of healthy communities. (pp. 6-7)

There is no information about how these modes of travel are related to health or how much influence they might have on health.

Comments

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.⁴ 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.^{4,5} All are among the

⁴ <http://www.sciencedirect.com/science/article/pii/S0140673612607661>

leading causes of death in BC.⁶

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.⁴ Examples of these benefits include the following (adjusted to BC 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 16,600 to 37,900 per year. This represents up to an extra year of life expectancy for the BC population.⁵
- Increasing walking by 1 km and cycling by 3 km per person per day on average is estimated to reduce healthcare expenditures by \$123 million per year.⁴ This is many times higher than the current level of investment in cycling and walking infrastructure by the province. In fact, these healthcare savings would represent a substantial portion of the Ministry of Transportation and Infrastructure budget.

C. Encouraging Healthy Transportation Modes

The Guide

The Guide indicates that a goal of the Ministry of Transportation and Infrastructure is to encourage walking, cycling and transit and to support alternative choices to automobiles. (pp. 6-7)

There is no information about current numbers or proportions of trips by these modes, or the numbers or proportions of people who use these modes. There are no targets for walking and cycling. There is a target of doubling transit ridership in the 2008 “Provincial Transit Plan”.⁷

Comments

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 in BC by the modes “encouraged” in the Guide: 12.6% by transit; 6.7% on foot; and 2.1% by bike.⁸ Compared to the rest of Canada, we have similar transit usage, and slightly more walking and bicycling.⁹ However, nearly 80% of commute trips in BC and in Canada are by personal motor vehicle.

International comparisons show that there are huge opportunities for increasing walking, cycling and transit use in BC. The United Kingdom, France, Germany, Denmark and the Netherlands have 3 to 5 times more walking and biking than BC.¹⁰ Metropolitan areas around the world (throughout western Europe, Asia and even in the US) have transit usage 2 to 3 times higher than in Metro Vancouver.¹¹

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

- reductions in traffic congestion for goods movement and for those who have no alternative but to drive;
- reductions in the capital and maintenance costs of transportation infrastructure; and
- reductions in greenhouse gas emissions.

⁵ <http://www.plosone.org/article/fetchObject.action?uri=info%3Adoi%2F10.1371%2Fjournal.pone.0051462&representation=PDF>

⁶ <https://www.vs.gov.bc.ca/stats/annual/2000/tab22.html> Depression is not listed here; there are ~400 suicide deaths per year.

⁷ http://www.th.gov.bc.ca/transit_plan/Provincial_Transit_Plan_LR.pdf

⁸ <http://www12.statcan.gc.ca/nhs-enm/2011/as-sa/fogs-spg/Pages/FOG.cfm?lang=E&level=4&GeoCode=5909052>

⁹ http://www12.statcan.gc.ca/nhs-enm/2011/as-sa/99-012-x/99-012-x2011003_1-eng.cfm

¹⁰ <http://policy.rutgers.edu/faculty/pucher/TRNWesternEurope.pdf>

¹¹ http://en.wikipedia.org/wiki/Modal_share#Modal_share_targets

All of these ideas are mentioned in the Guide – but no targets are set to achieve them by reducing car trips and increasing walking, cycling and transit use.

Reducing trips by car also aligns with generational trends: the aging population and the lower driving rates 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 *vs.* 28% who travelled *only* by car.¹² This suggests more openness to shifts in transport modes than is commonly believed. Making alternate modes more comfortable and available will reap rewards.

I hope these ideas will influence the provincial transportation plan. Thank you very much for the opportunity to comment.

Yours sincerely



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¹² <http://link.springer.com/article/10.1007%2Fs11116-014-9556-z#page-1>