The Way Forward is Paved with Bike Lanes:

How will investing in cycling infrastructure will make Canadian cities more efficient, our businesses more competitive and leads to billions in reduced health and environmental costs for all of Canada

CANADA BIKES

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Executive Summary

Cycling for transportation has enormous unmet potential to contribute to the societal transformation needed to combat climate change and achieve sustained economic growth - no small feat for a century-old invention already found in garages and apartments and basements across the country.

One of the most intelligent business moves a government can make on behalf of businesses and individuals of all ages, is to help meet the demand for cycling.

Canada Bikes challenges the federal government to send a signal to thousands of municipalities across Canada that it intends to directly support cycling and walking infrastructure, invest in research and capacity to further develop this too-often ignored transportation sector and to commit to developing a national active transportation policy. We believe the tremendous benefits of a developed cycling culture in Canada can help reset health and infrastructure system deficits and have spinoff benefits for generations..

Preamble

Our transportation sector generates 25% of our GHG emissions with 12% overall coming from personal vehicles. A mode shift to cycling lowers GHG emissions, and each 10% increase in cycling mode share removes about 1% of national emissions. We know that a majority of Canadians (66-80%) want greater access to cycling, yet our cycling mode share is only 2%. To shift this to 10%, Canada needs a plan supported by citizens and funded by government.

Cycling is very efficient, not just as a means of transportation, but as a means of structuring a city or a family budget. No one requires proof that trading a car for bicycle - even for a few trips a week - puts money directly back into your wallet. Cycling also makes individuals more productive at work and, and when countries move by bicycle at a large scale, makes for an extremely efficient way to move people around. In Canada, it is already the most time efficient form of transport for the most common type of trip distance in an urban area. Try it: race someone on a bicycle to a destination 4 or 5 kilometers away in a city during rush hour. The impracticality of navigating a large and heavy piece of machinery through the landscape will be clear. Now consider the time and energy spent working to by the car instead of the bicycle.

More productive workers will give Canada a competitive advantage. The UK has done significant research to understand this. Their National Institute of Health & Clinical Excellence found that

"employees who cycle to work are fitter, healthier, happier, and less likely to take sick days."[1] When national active transportation research organization Sustrans surveyed people who cycled on the National Cycle Network in the UK, they found that "they take nearly half as many sick days as the average UK worker."[2] Business-oriented programs have been shown to been directly effective: "Employers involved in the Bikes for Business scheme estimated the average savings to the organisation at £25-80 per month per bike." [3] Additionally GlaxoSmithKline found that investing in those willing to give up their cars enabled them to make an annual saving of £2,000 per car parking space reduced. [4] Transport for London has estimated that "removing one car parking space could save a business up to £2,000 per year in high-density urban areas." [5]

People want to ride and it is critically important that we attract and retain talent. Simply put, skilled workers want the good life, and that, increasingly, means less car dependence, a more vibrant urban experience, and a chance to be healthy, active and independently mobile. Bosses who do not recognize this risk losing the best workforce to companies that do. Cities they don't recognize this lose an important competitive edge.

Millenials increasingly see having a car as a burden. As Sustrans also found, "[t]he 'millennials' (those born after 1983) will make up 75% of the workforce by 2025. They think that their employer should be doing more to reduce their impact on the environment, particularly in terms of reducing resource scarcity and combatting climate change.[6]

Wasting time stuck in traffic? The Canadian Chamber of Commerce raised the issue of traffic congestion and productivity in a recently-released report called "Stuck in Traffic for 10,000 years: Canadian Problems that Infrastructure Investment Can Solve ". The report bemoans the fact that congestion in Toronto, Vancouver and Montreal alone "is responsible for adding nearly 88 million hours annually to Canadians' commutes". The report highlights just how much of a waste of time an inefficient transportation system that leaves out cycling can be. The report puts the problem in context thusly: "Inconsistent public infrastructure investment over extended periods of double-digit population growth rates in these cities has put pressure on their basic systems of infrastructure. Transportation systems have especially struggled to keep pace with growth, creating challenges with how people and goods move around these regions. Gridlock and crowded public transit has become an everyday reality for businesses and their employees. This reality . . . lowers employee productivity, increases the time to move goods and services to customers and lowers the quality of life of those experiencing it. It affects everyone from large manufacturers . . . to a self-employed

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[1] Guidance from the National Institute of Health & Clinical Excellence (NICE) shows that on average, physical activity programmes can reduce absenteeism by 20% by helping staff to achieve recommended weekly physical activity levels, Public Health Guidance PH13 (2008)

[2] YouGov, 2013 Commute and Exercise Survey commissioned by Sustrans. YouGov Plc interviewed a total sample size of 2,205 adults, of which 1,261 commuted to work but not usually by bike. Fieldwork was undertaken between 29 April and 1 May 2013. The survey was carried out online. The figures have been weighted and are representative of all UK adults (aged 18+)

[3] Transport for London 2008 Pool Bikes for Business

[4] Sustrans via Transport for London, Workplace cycle parking guidance (2006)

[5] Transport for London, Workplace cycle parking guidance (2006)

[6] The Deloitte Millennial Survey 2014

handyman trying to get to another job. It makes dynamic cities less livable and more frustrating. "

Canada isn't the only one with this problem of course. According to their department of Transport congestion in the UK "cost the economy over £10 billion a year in urban areas alone in 2009 and could rise to £22 billion by 2025"[7].

Build for what you want. What we want and what we need are *smarter* transportation systems that put the movement of people first. It means cities that are designed for walking and lingering. It means comprehensive, protected bicycle networks designed to move vast numbers of healthy and content people over shorter and medium distances, between denser more land-use efficient neighbourhoods, at less cost to our bodies, to our workplace and country's healthcare system, and to our soul.

The environmental impact of ignoring cycling is costly. The total cost of the carbon emissions for car trips made in the UK each year, for example, is £3.98 billion.[8] As Sustrans further explains, if the journeys made on the National Cycle Network during 2012 had been by car, the potential CO2 emitted during the year would have been 883,904 tonnes, at a cost of £51.2 million. [9]As one StatsCan report on cycling notes, "commuting by bicycle helps to alleviate road congestion and noise pollution and reduces emissions."[10]

Cycling profoundly affects provincial and federal bottom lines in many ways, but perhaps none so powerful as the chronic disease prevention power inherent in fighting sedentary behaviour. As noted in a report released by Statistics Canada in April 2017, "[t]he health benefits of physical activity, including cycling, are widely recognized.[11] In an era when nearly a third of children and youth and just under two-thirds of adults are overweight or obese[12], cycling for leisure or transport is

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[7] Department for Transport (DfT) 2006 The Eddington Transport Study The case for action: Sir Rod Eddington's advice to Government

[8] Calculated using standard methodology adapted from DfT's appraisal guidance (WebTAG3.14.1), using data from the National Travel Survey supplied by ONS

[9] Calculated using standard methodology adapted from DfT's appraisal guidance (WebTAG3.14.1), using data from the National Travel Survey supplied by ONS

[10] Health Reports Cycling in Canada. Pamela L. Ramage-Morin
http://www.statcan.gc.ca/pub/82-003-x/2017004/article/14788-eng.htm

[11] Garrard J, Rissel C, Bauman A. Health benefits of cycling. In: Pucher J, Buehler R, eds. City Cycling. Cambridge, Massachusetts: MIT Press: 2012: 31.
Andersen LB, Schnohr P, Schroll M, Hein HO. All-cause mortality associated with physical activity during leisure time, work, sports, and cycling to work. Archives of Internal Medicine 2000; 160(11): 1621-8.
Johan de Hartog J, Boogaard H, Nijland H, Hoek G. Do the health benefits of cycling outweigh the risks?Environmental Health Perspectives 2010; 118(8): 1109-16.

[12] Statistics Canada. CANSIM Table 117-0004. Distribution of the household population by children's body mass index (BMI) - World Health Organization (WHO) classification system, by sex and age group. CANSIM (database).http://www5.statcan.gc.ca/cansim/a26?lang=eng&retrLang=eng&id=1170004&pattern=BMI&tabMode=dataTable&srchLan=-1&p1=1&p2=49. Accessed: March 15, 2016.
Statistics Canada. CANSIM Table 117-0005. Distribution of the household population by adult body mass index (BMI) - Health Canada (HC) classification, by sex and age group. CANSIM (database). Available at:

a valuable form of moderate exercise. That translates directly into dollars. The cost of doing nothing is high. "The estimated direct, indirect, and total healthcare costs of physical inactivity in Canada annually (in 2009 numbers) were $2.4 billion, $4.3 billion, and $6.8 billion, respectively. These values represented 3.8%, 3.6%, and 3.7% of the overall health care costs" in Canada or a total of $13.5 Billion.[13]

Canadians already love bikes and want to ride far more.. Statistics Canada found that Canadians are overwhelmingly familiar with cycling with "an estimated 12 million Canadians (41%) aged 12 or older report[ing[that they had cycled in the previous year (Table 1). In 2011, 201,800 of Canadian adults report cycling as their primary method of commuting to work[14]).

The *near market* for cycling is far larger and offers almost unlimited growth potential for the next few decades. Consider one Canadian city already vaunted for bikeability: assuming the installation protected cycling infrastructure network to make it safe and convenient, a detailed study covering Metro Vancouver alone projected that 500,000 people would be willing to make a shift.[15]

Young people want to and need to ride bicycles. It is good for their brain, for the sense of well-being and for their long term education. It is important to recognize that young people are very familiar with cycling (82% among 12- to 14-year-olds reported cycling in the same year) yet are unrepresented among the ranks of decision makers at all levels of government. Making it safe to cycle to school requires special effort and it is incumbent upon us to give this particular issue consideration in the development of something as important to their future as the federal budget. Young people overwhelmingly want to be able to cycle to school, yet it is estimated that only 2% of Canadian school children (and their guardians) feel comfortable doing so.

Cycling meets government priorities. Phase II of the federal government's infrastructure spending plans will inject an additional $81.2 billion into the economy over 11 years and will focus on public transit, green infrastructure, social infrastructure, trade and transportation projects, and transportation and infrastructure in rural and northern communities. Cycling has an integral role to play in ALL of these categories.

We need a large investment and dedicated funding. We fear that cycling and walking projects, by virtue of being simple, less invasive, and easy to plan and complete, will lack the attention they require simply by the nature of the funding programs designed to support them. Funding needed for municipalities should not be buried within eligibility for other funding programs or expected to

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http://www5.statcan.gc.ca/cansim/a26?lang=eng&retrLang=eng&id=1170005&pattern=BMI&tabMode=dataTable&srchLan=-1&p1=1&p2=49. Accessed: March 15, 2016.

[13] Health care costs of physical inactivity in Canadian adults. Janssen I1.

[14] Statistics Canada Commuting to work. National Household Survey
http://www12.statcan.gc.ca/nhs-enm/2011/as-sa/99-012-x/99-012-x2011003_1-eng.cfm

[15] Route Preferences Among Adults in the Near Market for Bicycling: Findings of the Cycling in Cities Study Teshcke K, Winters, M
http://cyclingincities-spph.sites.olt.ubc.ca/files/2015/01/Winters-Teschke-2010-Route-preferences-among-adults-in-the-near-market-for-bicycling-findings-of-the-cycling-in-cities-study.pdf

compete with big projects like subways or wastewater treatment plants. It has been estimated that Canada's cycling infrastructure deficit alone amounts to more than $64Billion dollars (based on current build costs of protected cycling infrastructure and the amount of existing investment in the leading cycling jurisdiction).[16]

Cycling makes the most of transit. Cycling in particular offers the potential to expanding the reach of a given transit stop or station (which is usually designed for first mile and last mile walking) by 9X. Current federal government funding plans only make cycling eligible, and often target transit agencies whose mandate and project scopes do not extend to the creation of the neighbourhood-wide cycling networks that would be of most benefit. We need specific, targeted funding to help province and municipalities make the choice to invest in walking and cycling as solutions in their own right.

Recommendations

1. The budget of the Government of Canada should **explicitly mention walking and cycling in the budget** in the context of their importance to Canada's economy, the health of individual Canadians, the efficiency of our transport systems and our commitments to addressing climate change, and our obligations under the National Transportation Policy declaration of the Canada Transport Act, specifically the need to ensure that "the transportation system is accessible without undue obstacle to the mobility of persons, including persons with disabilities" [17].

2. The Government of Canada should **establish a dedicated fund to match walking and cycling infrastructure investments made by provinces and municipalities across Canada** in the amount of $2.1B over 3 years above and beyond that which is already eligible or likely to be included as part of the Public Transit Infrastructure Fund or Green Infrastructure Fund (See our infrastructure proposal and appendix for details)[18]

3. **Including the specific words cycling and walking in the context of the Pan Canadian Framework on Climate Change** as a key strategy.

4. Continue to allow **cycling and walking projects to be eligible under Public Transit Infrastructure Fund.**

5. **Allocate funding for the development of a national active transportation strategy** (which will simultaneously address cycling, walking and children's mobility policy at a national level).

6. **Invest in research, evaluation and programming capacity** so that funding is available for non-governmental organizations and governments to do the ongoing work required to support, implement and measure the effect of investment in infrastructure.

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[16] Herbert Tiemens , Policy advisor for the Region of Utrecht and representative of the Dutch Cycling Embassy, speaking at the 2017 National Bike Summit in Ottawa.

[17] Canada Transportation Act: National Transportation Policy http://laws-lois.justice.gc.ca/eng/acts/c-10.4/page-1.html

[18] Canada Bikes with CAA, Heart and Stroke Foundation, Canadian Cancer Society, Canadian Lung Association, British Columbia Cycling Coalition, Velo Quebec, and Share the Road "National Cycling & Walking Infrastructure Fund Proposal" http://www.canadabikes.org/wp-content/uploads/2016/09/CyclingWalkingFundingProposalnov416.pdf


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