



Cycling: Supporting Economic Growth in Canada

Prepared by Vélo Canada Bikes for the House of Commons Standing Committee on Finance pre-budget consultations

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Investing in cycling and active transportation: Supporting economic growth in Canada

Recommendations for the Government of Canada

In collaboration with provincial and territorial governments, the Federation of Canadian Municipalities, the Assembly of First Nations and additional stakeholders, implement the following recommendations:

Recommendation #1: Develop a funding stream designed to rapidly increase the development and improvement of active transportation infrastructure and related traffic calming in all Canadian municipalities and in rural areas.

Recommendation #2: Establish a national-level forum to consult, share, and develop a plan for moving more people and goods by bicycle in a wide variety of Canadian settings including urban, rural and remote communities.

Recommendation #3: Direct Statistics Canada to collect data that will ensure the adequate and appropriate monitoring and reporting of the prevalence, potential and safety of cycling in Canadian municipalities. Use this data to set achievable evidence-based five- and ten-year transportation mode share targets for cycling.

Investment in bicycling represents a vastly underexploited opportunity for economic growth in Canada. If more Canadians were able to safely use a bicycle for daily transportation, there would be significant economic benefits including: a boost to economic productivity from a healthier and more productive workforce; improved mobility and personal savings for Canadians; disadvantaged groups could more easily gain skills and access employment opportunities and there would be an increase in business and tourism revenues.

Increased cycling would also help to counter the negative economic costs that motorized vehicles impose on society in the form of congestion; road casualties; physical inactivity and poor health; pollution; and the political and environmental costs of maintaining fossil fuel supplies.

ECONOMIC BENEFITS FROM CYCLING

Studies repeatedly demonstrate the economic benefits of increasing cycling rates. Calculations by the Chief Medical Officers of Health of the Greater Toronto Area indicated that the net economic benefits of a shift in transportation habits in favour of bike riding (5 percentage points), walking (5 percentage points) and public transit use (9.8 percentage points) would be worth \$15 billion by 2030 as a result of reduced commute times alone.¹ Similarly, US research suggests that increasing the total rate of bike riding and walking by 3.4 percentage points would result in an economic benefit (from avoided driving, fuel savings, CO² reductions, and physical activity) of \$US 6.3 billion per year.² Furthermore, a UK study predicts that if bike riding rates increased from current levels (2% of all trips – roughly equal to Canada) to 10% by 2025 and 25% by 2050, the cumulative benefits would be worth almost \$US 350 billion.³

CYCLING IMPROVES WORKPLACE PRODUCTIVITY AND LEARNING

People who ride bikes for transportation are more productive workers and will give Canada a competitive advantage. The UK's National Institute of Health & Clinical Excellence found that “employees who cycle to work are fitter, healthier, happier, and less likely to take sick days.”⁴ Meanwhile, Sustrans (a UK transportation research organization) found people who cycled on the National Cycle Network took nearly half as many sick days as the average UK worker.”⁵

¹ Mowat, D et al (2014). *Improving health by design in the greater Toronto-Hamilton area. A report of medical officers of health in the GTHA.* <https://www.peelregion.ca/health/resources/healthbydesign/pdf/moh-report.pdf>.

² Rails to Trails Conservancy. *Active Transportation for America. The Case for Increased Federal Investment in Bicycling and Walking.* <https://www.railstotrails.org/resourcehandler.ashx?id=2948>.

³ Lovelace, R. et al. *The Economic Cycle. Quantifying the benefits of getting England cycling.* 2015. https://itsleeds.files.wordpress.com/2015/02/economic_cycle_-_exec_summary.pdf

⁴ Guidance from the National Institute of Health & Clinical Excellence (NICE) shows that on average, physical activity programs can reduce absenteeism by 20% by helping staff to achieve recommended weekly physical activity levels, Public Health Guidance PH13 (2008)

⁵ YouGov, 2013 Commute and Exercise Survey commissioned by Sustrans.

Similarly evidence indicates that physical activity has a positive influence on cognitive skills, attitudes, and academic behaviour among children at school.^{6,7} Unfortunately, only one third of Canadian children use active transportation to get to school.⁸

CYCLING DECREASES CONGESTION AND IMPROVES MOBILITY

According to the C.D. Howe Institute, the total cost of congestion in the Greater Toronto Area may be as high as \$11 billion per year.⁹ The Canadian Chamber of Commerce noted that congestion in Toronto, Vancouver and Montreal adds 88 million hours to Canadian's commutes, lowering employee productivity and quality of life and increasing time to move goods.

Cycling, often used in combination with public transit and walking, offers a promising means of improving mobility. People and businesses that use active transportation often enjoy a faster, cheaper and healthier way to move in cities. **A particular opportunity for improving mobility exists for Canadian women**, who are considerably less likely to ride bicycles than Canadian men.¹⁰ According to North American experts, a major explanatory factor is a lack of safe conditions.^{11 12}

COST SAVINGS FOR INDIVIDUALS AND FAMILIES

The cost of owning and operating a single vehicle is between roughly \$10 000 per year in Canada¹³, indicating considerable potential for personal savings if the need for a car can be replaced by cycling and walking trips that include transit.

BIKE RIDING AND BICYCLE TOURISM ARE GOOD FOR BUSINESS

At the moment, roughly 2.5 million Canadians per year indicate that they cycle while on out-of-town trips and there remains substantial room for growth.¹⁴ In Quebec alone, bicycling (including retail and services) and bicycle tourism generate annual spending of \$1.2 billion and tax revenues of \$65 million and \$150 million for the federal and Quebec governments

⁶ U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. The Association Between School-Based Physical Activity, Including Physical Education, and Academic Performance.

⁷ Wang K. Self-esteem and cognitive development in the era of the childhood obesity epidemic. *Obesity Reviews* 2008; 9 (6): 615-28

⁸ Canadian Fitness and Lifestyle Research Institute. 2010 Physical Activity Monitor. Bulletin 12: Transportation among children and youth. Ottawa: Canadian Fitness and Lifestyle Research Institute; 2012.

⁹ Dachis, B. C.D. Howe Institute. Cars, Congestion and Costs: A New Approach to Evaluating Government Infrastructure Investment: https://www.cdhowe.org/sites/default/files/attachments/research_papers/mixed/Commentary_385_0.pdf

¹⁰ Morin-Ramage, P., L. Statistics Canada Health Reports: Cycling in Canada. 2017.

¹¹ Slavin, T. 'If there aren't as many women cycling as men...you need better infrastructure'. The Guardian. July 9, 2015. <https://www.theguardian.com/cities/2015/jul/09/women-cycling-infrastructure-cyclists-killed-female>.

¹² Tao, D. In Urban Cycling, a Gender Gap Persists. New York Times. City Room. Blogging from the five boroughs. <https://cityroom.blogs.nytimes.com/2009/06/30/in-urban-cycling-a-gender-gap-persists/>.

¹³ Canadian Automobile Association: <https://www.caa.ca/caa-provides-real-picture-of-annual-driving-costs/>

¹⁴ Lang Research Inc. Canadian Travel Market. Cycling While on Trips of One or More Nights. 2007. http://www.mtc.gov.on.ca/en/research/travel_activities/tams_cycling_cdn.shtml

respectively.¹⁵ Overall, the bicycle business and tourism industry in Quebec creates the equivalent of 10 000 jobs.¹⁶

CYCLING COUNTERS NEGATIVE ECONOMIC COSTS TO SOCIETY

Reduced Environmental Costs

On a per capita basis, Canada has one of the highest rates of automobile transportation (over 80%) and among the highest levels of carbon dioxide emissions per capita from road and rail transport, (roughly 4000 tons).¹⁷ Our transportation sector generates 24% of our GHG emissions with 12% overall coming from personal vehicles.¹⁸ There are significant economic costs from climate change including costs from severe weather (e.g., disaster relief and rising insurance costs) and public infrastructure damage (e.g, roads, sewers, bridges, dams). A mode shift to cycling will lower GHG emissions. In helping to reduce GHG emissions, bicycle riding and active transportation make an important contribution to slowing climate change.

INCREASING CYCLING WILL REDUCE HEALTH CARE COSTS

Healthcare savings will mainly accrue from increased rates of physical activity and reduced air pollution. Less than 10% of Canadian children and youth and less than 20% of Canadian adults meet official physical activity targets.¹⁹ Breathing polluted air is responsible for the deaths of 21,000 Canadians per year and has an annual economic cost of \$8 billion.²⁰ According to the Chief Medical Officers of the GTA, increasing rates of bike riding, walking and public transit use would prevent 338 premature deaths per year in the GTA, with an associated annual economic benefit of \$2.2 billion.²¹

POTENTIAL TO GROW CYCLING IN CANADA

The potential to substantially increase the rates of all types of bicycle riding in Canada is strong. Numerous international jurisdictions (e.g. Finland, Denmark and Northern Sweden) feature noteworthy similarities with respect to characteristics such as size, population density, climate, and car ownership yet have achieved cycling rates between 4 and 10 times those typically found in Canada by investing in bike networks.²²

¹⁵ Vélo Quebec. *Cycling in Quebec in 2015*. <http://www.velo.qc.ca/documents/?mag=l%C3%A9tat-du-v%C3%A9lo-au-qu%C3%A9bec-cycling-in-qu%C3%A9bec-in-2015/0548836001464362483>.

¹⁶ Vélo Quebec. *Cycling in Quebec in 2015*. <http://www.velo.qc.ca/documents/?mag=l%C3%A9tat-du-v%C3%A9lo-au-qu%C3%A9bec-cycling-in-qu%C3%A9bec-in-2015/0548836001464362483>.

¹⁷ Buehler, R., Pucher, J. *Sustainable Transport in Freiburg. Lessons from Germany's Environmental Capital*. International Journal of Sustainable Transportation. 5:43-70. 2011.

¹⁸ Environment and Climate Change Canada. Canadian Environmental Sustainability Indicators. Greenhouse Gas Emissions. 2017. http://www.ec.gc.ca/indicateurs-indicators/18F3BB9C-43A1-491E-9835-76C8DB9DDFA3/GHGEmissions_EN.pdf

¹⁹ Statistics Canada. Table 117-0019 - Distribution of the household population meeting/not meeting the Canadian physical activity guidelines, by sex and age group (occasional (percentage)).

²⁰ Canadian Medical Association. (2008). No breathing room: National illness costs of air pollution. *Summary Report*. Ottawa, ON

²¹ Ibid.

²² European Platform on Mobility Management. TEMS - the EPOMM modal split tool: About TEMS. http://www.epomm.eu/tems/about_tem_s.phtml.

Indicative of the realistic possibility of increasing Canadian cycling rates is the fact that more than 40% of all Canadians already ride a bike at least once a year²³ and that several Canadian cities have neighbourhoods in which cycling is the main mode of transportation for more than 30% of residents.²⁴ This is comparable to city-wide rates in leading international jurisdictions. Finally, bike riding is highly affordable and flexible, making it suitable not just for major urban centres, but also for smaller cities and communities in rural and remote areas where many citizens could gain strongly from improved mobility options.

RECOMMENDATIONS

- 1. Develop a funding stream designed to rapidly increase the development and improvement of active transportation infrastructure and related traffic calming in all Canadian municipalities and in rural areas.**

In order for cycling and walking to become more popular in Canada, active transportation infrastructure and the associated comfort and safety of cyclists and pedestrians must be improved. Recent polls show that the vast majority of Canadians want more dedicated bicycle infrastructure.²⁵ A dedicated federal funding stream is necessary in order to ensure sufficient investment in active transportation infrastructure across Canada.

- 2. Establish a national-level forum to consult, share, and develop a plan for moving more people and goods by bicycle in a wide variety of Canadian settings including urban, rural and remote communities.**

Canada needs a plan for how to advance active transportation across Canada. This plan would help guide investments in infrastructure, address long standing traditions of automobile focused engineering, planning, and behaviour, and consider the needs of all Canadian communities, be they rural or urban. While Canadian expertise in active transportation is growing quickly, a national-level best-practices forum that leads to a detailed plan for active transportation in Canada would allow for rapid and much needed progress.

- 3. Direct Statistics Canada to collect data that will ensure the adequate and appropriate monitoring and reporting of the prevalence, potential and safety of cycling in Canadian municipalities. Use this data to set achievable evidence-based five- and ten-year transportation mode share targets for cycling in Canada.**

²³ Morin-Ramage, P., L. Statistics Canada Health Reports: Cycling in Canada. Catalogue no. 82-003-X. ISSN 1209-1367. 2017.

²⁴ Census Mapper. Bike to Work (Canada Census 2016) <https://censusmapper.ca/maps/972#11/49.2750/-123.1059>

²⁵ Pelley, L. CBC News. July 31, 2018. 80% of Toronto residents support building protected bike lanes, poll finds: <https://www.cbc.ca/news/canada/toronto/bike-lane-poll-toronto-1.4766745>

In order to ensure that investment is most effective, detailed understanding of current, developing, and potential cycling behaviours is required, as is information concerning safety and additional challenges to increasing cycling rates. In order to ensure long-term commitment and to gauge progress, evidence-based five- and ten-year targets for increased overall rates of cycling should be set and.