



THE FEDERAL ROLE IN BUILDING A BIKE-FRIENDLY CANADA



THE OPPORTUNITY

Supporting substantial increases in bicycling of all types across Canada will constitute a simultaneous investment in fighting climate change, promoting health and equity, and boosting low-carbon tourism and small business. Furthermore, investing in bicycling is economically efficient and demonstrated to result in strong overall returns.

A 2018 United Nations resolution, declaring **World Bicycle Day**, encourages member states to take advantage of bicycling's benefits through the implementation of measures and policies to improve road safety and to promote sustainable mobility. The resolution also highlights the proven effectiveness and versatility of the bicycle as technology. Bicycles (including increasingly common electric-assisted e-bikes and cargo bikes) are used to move people and goods for a wide variety of personal and business-related purposes in a green, healthy, and economically efficient manner.

The potential to substantially increase the rates of all types of bicycle riding in Canada is strong as nearly half of all Canadians already ride a bike at least once a year. It 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.



The Government of Canada has a major role to play given its responsibilities in many policy and legislative areas that significantly affect the quality, safety, and affordability of cycling. **Maximizing the potential benefits requires coordinated planning and action from all levels of government.**

FEDERAL AREAS FOR ACTION IN CYCLING



LOW CARBON TRANSPORTATION AND GOODS MOVEMENT:

Capitalizing on public transit investment, exploiting e-bike and cargo bike technology for zero-emission goods movement.



PUBLIC HEALTH:

Increasing physical activity, improving equity in transportation, reducing air pollution and noise



ROAD AND VEHICLE SAFETY AND DESIGN:

Reducing injuries and fatalities while contributing to the development of more efficient, versatile, resilient, and age-friendly communities.



NEW INFRASTRUCTURE AND BROWNFIELD URBAN RENEWAL:

Supporting municipalities who are building new bicycle networks and adding bicycle facilities during road & bridge rehabilitation.



TOURISM AND SMALL BUSINESS:

Supporting national and provincial bicycle touring networks, attracting visitors, encouraging bike-related spending, and bringing new vitality to business districts.



STATISTICS CANADA:

Collecting and analyzing data to guide the development of policies that maximize cycling's potential.



FEDERAL PROPERTY:

Making bike riding safe and appealing on federal land (e.g., national parks, National Capital Commission property, rail crossings, bridges and corridors).



PUBLIC SERVICE OF CANADA:

Supporting an increase in the number of federal employees who commute by bike.



INDIGENOUS SERVICES:

Collaborating on initiatives that use bike riding to promote health, safety, well-being, transportation choice and economic opportunities in Indigenous communities.

FACTS

CYCLING IN CANADA AND THE POTENTIAL FOR GROWTH

- Riding bikes for transportation in Canada is rapidly gaining in popularity. Canadian cities of a variety of sizes such as Whitehorse, Regina, Halifax, Thunder Bay, Victoria, Vancouver, Edmonton, Calgary, Toronto, Ottawa and Montreal all have multiple census tracts in which bike riding is the main mode of commuter transportation for more than 10 per cent of people. In numerous neighborhoods over 30 per cent of commuting is now by bike.³
- These figures are comparable to city-wide cycling rates in leading international jurisdictions of wide ranging sizes and varying characteristics (e.g., low population densities, challenging winter weather). Examples include Oulu, Finland (21 per cent) Innsbruck, Austria (14 per cent), Umeå, Sweden (21 per cent) and Helsinki, Finland (11 per cent) ⁴
- Oulu, Finland's success in bicycle transportation points to its potential in Canada. While Oulu's population density is lower than that of the Edmonton metropolitan area⁵ and while its subarctic climate results in more than 160 days of snow cover per year, it has achieved cycling transportation rates (i.e. as percentages of all urban trips) of 32 per cent (summer) and 12 per cent (winter).⁶
- Survey research conducted in Ottawa suggests that 67 per cent of all commuters either already sometimes travelled to work by bike or would consider doing so if more safe and appealing conditions were provided.⁸
- Canadian municipalities are convinced of the value of cycling and active transportation. The City of Toronto's transportation objectives include having 75 per cent of trips of less than 5 km be either by bike or walking by 2050.⁹



**41 per cent
of Canadians
(12 million people)**
aged 12 and over
reported having ridden
bicycles in 2013/2014.¹



37 per cent of commuters in
Canadian census metropolitan areas
and agglomerations **have distances
between home and work of less than
5 km** – easily short enough for bike
commuting to be an appealing choice.⁷



Men (47 per cent)
**are more likely than
women (34 per cent)**
to report having used a
bike in the past year.²

**On a per capita basis, Canada has one of the highest rates
of automobile transportation (over 80 per cent) and among
the highest levels of carbon dioxide emissions per capita
from road and rail transport, (roughly 4000 tons).¹⁰**

FACTS

GREEN, INNOVATIVE TRANSPORTATION AND CLIMATE CHANGE BENEFITS

- Countries comparable to Canada such as Finland, Sweden, and Norway (all of which have levels of car ownership higher than Canada's)¹¹ all have national cycling strategies and have achieved much lower rates of automobile transportation (60-65%) and, correspondingly, much lower levels of emissions per capita (roughly 2300 tons).¹²
- In Canada, decades of improvements in fuel efficiency have not been enough reduce passenger transportation emissions, with their total having grown by 17 per cent relative to 1990.¹³
- According to a recent comprehensive study, a global effort (including by Canada) to shift transportation to non-car modes with particular emphasis on bike riding (including e-biking) has the potential to reduce urban passenger transport carbon dioxide emissions by 50 per cent relative to what is currently predicted for 2050.¹⁴
- A recent study of European cities suggests that half of all trips (both business and personal) involving traditional motorized goods transport have the potential to be converted to bicycle trips via the use of a variety of cargo bicycles and electric assist technology.¹⁵

HEALTH BENEFITS

- Canada's Chief Public Health Officer's Report on the State of Public Health in Canada in 2017 notes the strong value of cycling and calls on leadership from all levels of government and partners to take concrete actions to improve the health of Canadians through healthy community design.¹⁶
- A University of Glasgow study of more than 260 000 participants found biking to work to be associated with a 41 per cent lower risk of premature death relative to non-active commuting. People who biked to work had a 45 per cent lower risk of developing cancer and a 46 per cent lower risk of heart disease.¹⁷



Less than 10 per cent of Canadian children and youth and less than 20 per cent of Canadian adults meet national guidelines for physical activity.¹⁸




Air pollution, which can be significantly reduced by increases in cycling, **kills 21 000 Canadians prematurely each year with an associated annual economic cost of \$8 billion.**²⁰



Riding a bike for 15 minutes twice a day 5 days of the week would allow a Canadian adult to meet national physical activity guidelines.¹⁹

ECONOMIC BENEFITS, SMALL BUSINESS AND TOURISM

- According to calculations by the Chief Medical Officers of Health of the Greater Toronto Area (GTA), the net economic benefits of a combined 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.²¹
- The City of Helsinki (which has a climate and population density comparable to the City of Ottawa, for example) calculated a predicted benefit to cost ratio of approximately 8:1 for investment in cycling infrastructure.²³
- US calculations indicate 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.²⁴
- In the UK, research indicates that if bike riding rates increased from current levels (2 per cent of all trips – roughly equal to Canada) to 10 per cent by 2025 and 25 per cent by 2050, the cumulative benefits would be worth almost \$US 350 billion.²⁵
- Increases in bike riding and bicycle related tourism (which includes a wide variety of activities such as renting bicycles to explore Canadian cities or to go on short, family-oriented day trips) are good for business. At the moment bicycling (including retail and services) and bicycle tourism in Quebec alone generate \$65 million and \$150 million in tax revenues for the federal and provincial governments respectively while creating the equivalent of 10 000 jobs.²⁶
- Relative to those who drive, people who ride bikes to work are likely to be healthier²⁷, less frequently absent²⁸ and less frequently late.²⁹



**PREVENT 338
PREMATURE DEATHS
PER YEAR IN THE GTA,
WITH AN ASSOCIATED
ANNUAL ECONOMIC
BENEFIT OF
\$2.2 BILLION²²**

FACTS

SOCIAL EQUITY BENEFITS

- Canadian women are considerably less likely to ride bicycles than Canadian men³⁰, while in leading international jurisdictions female cyclists outnumber male cyclists.³¹ According to North American experts, a major explanatory factor for low levels of bike riding among women is a lack of safe conditions.^{32 33}
- Bicycle programs have shown particular promise for youth and economic development on First Nations reserves in Canada.^{34 35}
- The findings of a national-level Canadian study suggest that investing in active transportation infrastructure is most important for the mobility of lower-income populations because of their stronger reliance on these modes.³⁶
- Given their frequently low populations and low population densities, it may be very difficult for rural and small communities to reach the economies of scale necessary for public transit, making cycling a logical alternative to automobile use for distances that are often too far to cover on foot.³⁷

CYCLING'S POTENTIAL IN CANADA

The powerful and wide-ranging benefits of cycling relate to numerous critical areas that are clear priorities for the Government of Canada. These include climate change and the need for low carbon transportation, health, gender and social equity, reconciliation with Indigenous peoples, tourism and small business. Furthermore, cycling has been demonstrated to result in strong overall economic returns.

Cycling is logically considered integral to efforts to increase overall levels of low carbon transportation. Most obviously, increasing the choice of bike riding over automobile driving for personal and business-related trips (including those involving goods transport) will substantially reduce greenhouse gas emissions and air pollution. In addition, the need to capitalize on current and planned Canadian investments in public transit by making bike riding an appealing method of travelling to and from transit stops is well-recognized.

In contributing to both increasing Canada's alarmingly low rates of physical activity and to decreasing harmful air pollution and noise, strengthening the popularity of bike riding for both transportation and recreation is an obvious and promising means of alleviating what have become intractable health and well-being challenges in Canada. These include chronic conditions and diseases such as obesity, cardiovascular disease, diabetes, respiratory ailments, as well as some cancers and mental illnesses.

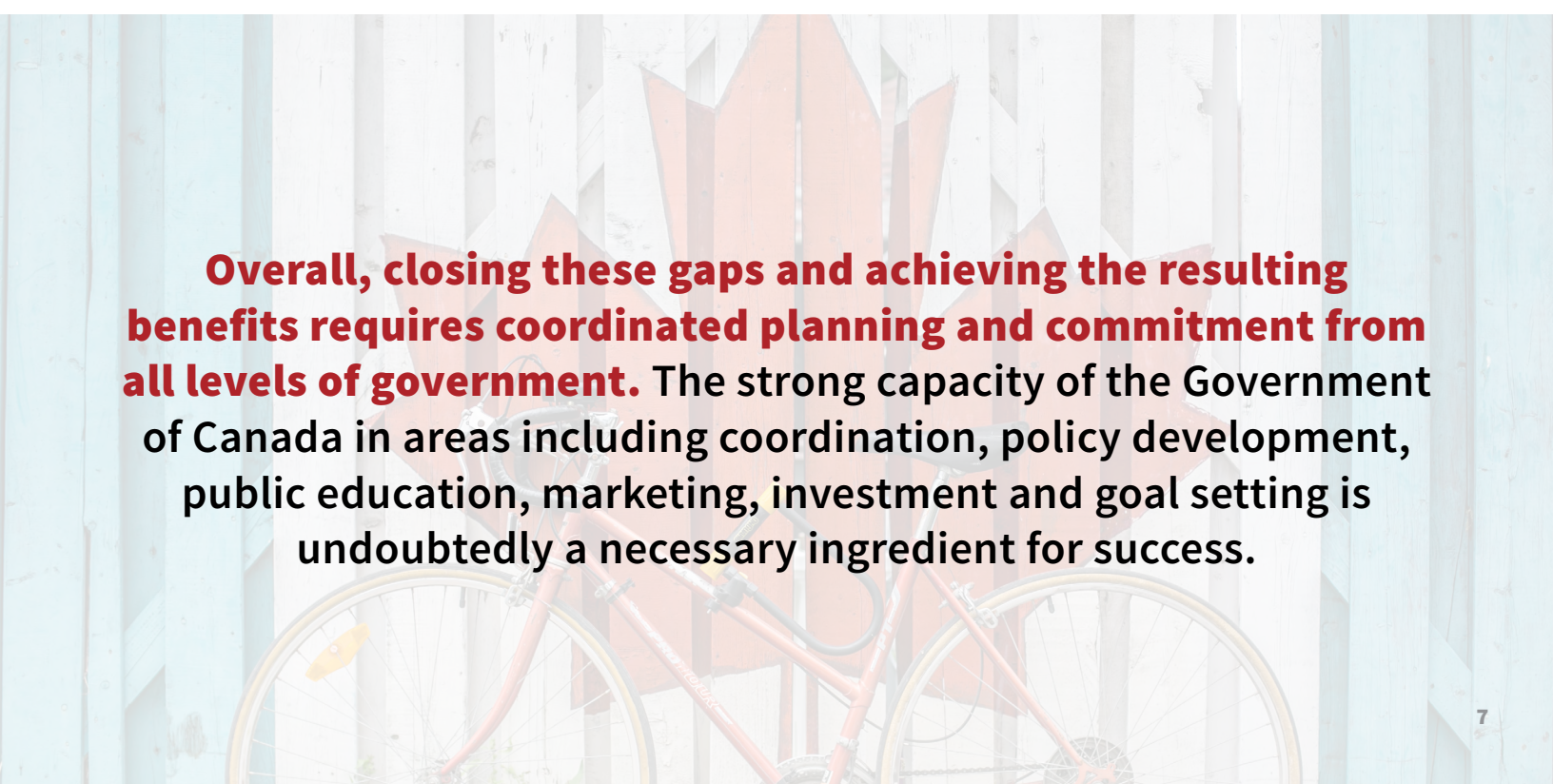
Bicycle riding is a particularly important form of transportation with respect to the provision of equity in mobility for Canadians. For those who cannot or choose not to drive for reasons including affordability, age, and limitations in physical capability, riding a bike can provide access to important destinations such as those connected with employment, education, retail and food shopping, health, and recreation. Meanwhile, smaller cities and communities in rural and remote areas can particularly benefit from improved conditions for bike riding. In particular, these communities often lack public transit service but feature distances that are frequently too far to cover on foot, making cycling a feasible alternative.

Cycling also demonstrates particular capacity to be a positive force for youth and economic development in First Nations communities. For example, teenaged youth in Carcross/Tagish First Nation have used traditional hunting routes to create an internationally-acclaimed network of mountain bike trails that is considered part of a successful effort to attract tourists.³⁸ In B.C., furthermore, the Aboriginal Youth Mountain Biking Program works to encourage Aboriginal youth and communities to participate and excel at mountain biking. Its programs in 17 communities include (among others) youth development, events, bike maintenance, and trail building.³⁹

The Canadian bicycle retail, service, and tourism industries would all stand to benefit substantially from overall cycling increases. While the economic benefits of the bicycle sector are clear (with cycling and bicycle-related tourism generating annual spending of \$1.2 billion in Quebec alone⁴⁰ and roughly 2.5 million Canadians per year indicating that they cycle while on out-of-town trips⁴¹) there remains substantial room for growth.

Evidence suggests that substantially increasing the feasibility of bike riding in Canada is a realistic objective. Bicycling for practical purposes is already growing rapidly within Canadian cities, particularly where strong efforts have been made to improve bicycling conditions. As noted above, cities across Canada of a wide variety of sizes already have neighbourhoods in which bike riding is the main mode of transportation for large (i.e. 10 – 30 per cent) portions of residents.⁴²

At the same time, cycling remains a vastly underexploited opportunity in Canada. Numerous international jurisdictions featuring noteworthy similarities with respect to characteristics such as size, population density, climate, and car ownership have achieved cycling rates between 4 and 10 times those typically found in Canada.



Overall, closing these gaps and achieving the resulting benefits requires coordinated planning and commitment from all levels of government. The strong capacity of the Government of Canada in areas including coordination, policy development, public education, marketing, investment and goal setting is undoubtedly a necessary ingredient for success.

RECOMMENDATIONS FOR THE GOVERNMENT OF CANADA

Work with provincial and territorial governments, the Federation of Canadian Municipalities, the Assembly of First Nations and additional stakeholders to develop a coordinated, evidence-based action plan tailored to maximizing current and future investments in cycling by all levels of government.

With respect to areas of federal jurisdiction, give consideration to the following actions:



Establish a national-level forum to consult, share, and develop best practices in the promotion of moving people and goods by bicycle in a wide variety of Canadian settings including urban, rural and remote communities.



Support sector capacity to maximise the investments made by all levels of government by funding non-profit organisations working to make their communities, be they national, provincial or local, bike-friendly.



Create a dedicated federal infrastructure fund (structured like the Public Transit Infrastructure Fund) for the development and improvement of active mobility infrastructure and related traffic calming in all Canadian municipalities and in rural areas where the displacement of cyclists, and other non-motorised users, on many of Canada's rail trails, by motorised recreational users, poses an increasing challenge.



Set achievable evidence-based five- and ten-year transportation mode share targets for cycling in Canada, taking into consideration the realities of different communities including rural and Indigenous ones, to contribute significantly to the achievement of our Paris Accord commitments.



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. Include not only large municipalities but also small communities in rural and remote areas, including communities on First Nations lands.

NOTES

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