



Invest in active travel to create healthy, green & just communities

The COVID-19 pandemic has made many people appreciate the need for more space in the public domain for pedestrians and cyclists. With governments considering the investments needed to kick-start our economy, it is a good time to highlight the health, social and environmental benefits that could result from major investments in active travel.

Active travel is any form of travel that involves physical activity such as walking, cycling or blading. Because active travel allows us to accomplish two goals with one



action, it is easier to fit into our schedules. We can get the exercise we need while commuting to work or running errands. Active travel is good for our health, for our communities and for the planet.

PHYSICAL ACTIVITY IMPROVES PHYSICAL AND MENTAL HEALTH

The health benefits of physical activity are well known. It can reduce the risk of over 25 chronic conditions, including coronary heart disease, stroke, breast cancer, colon cancer, Type 2 diabetes and osteoporosis.¹ Estimates suggest that physical inactivity costs Canada about \$6.8 billion per year in health-related costs based on

its contribution to seven chronic diseases alone.²

Physical activity is also good for our mental health. It can improve self-esteem, sleep and cognitive functioning in older adults, and delay the onset of dementia. Physical activity can also relieve depression, anxiety and stress, and support drug and alcohol rehabilitation.³

ACTIVE TRAVEL INCREASES PHYSICAL ACTIVITY

Unfortunately, most Canadians are not active enough to achieve the health benefits that physical activity can offer.⁴ Many identify time as a major barrier to getting physical activity. Active travel allows busy people to incorporate physical activity into their day-to-day lives by replacing car trips with walking or cycling.⁵

1

Active Travel BACKGROUND



A Healthy, Green and Just Recovery



A prospective study that followed thousands of people over five years found that commuting by bicycle was associated with a lower risk of cardiovascular disease, cancer and mortality from all causes, while commuting by walking was associated with a lower risk of cardiovascular disease.⁶ One study found that the risk of premature death from all causes decreased by 28% among people who cycled three hours per week,⁷ while another found that the risk of premature death from all causes was decreased by 22% among people who walked 29 minutes every day.⁸

ACTIVE TRAVEL CAN IMPROVE HEALTH BY REDUCING AIR POLLUTION

The transportation sector in Canada is a significant source of air pollution.⁹ In the Greater Toronto and Hamilton Area (GTHA) alone, traffic-related air pollution is responsible for approximately 700 premature deaths and 2,800 hospital admissions, each year.¹⁰

Several modelling studies suggest that traffic-related air pollution and its related health impacts can be reduced substantially when short vehicle trips are replaced with active travel. For example, it has been estimated that 31.3 million people living in the Midwestern United States could gain \$3.6 billion in air

quality-related health benefits and \$3.75 billion in physical activity-related health benefits, each year, if all vehicle trips that were eight kilometres or less were eliminated, and half of those trips were replaced by cycling.¹¹

PHYSICAL ACTIVITY BENEFITS OUTWEIGH RISK OF AIR POLLUTION EXPOSURE

Concerns have been expressed about the air pollution exposure that cyclists can experience when travelling along roadways. Several studies have found that, while cyclists can be exposed to higher levels of air pollution when travelling beside roads, the health benefits gained far outweigh the health risks posed by their increased exposures in all but a few countries that have exceptionally high levels of air pollution.¹²

ACTIVE TRAVEL NEEDS TO BE SAFE

Studies from several countries have found that there is a decrease in the numbers of cyclists killed or seriously injured when more people cycle.¹³ This pattern is attributed to the increased visibility of cyclists and greater awareness among drivers when the number of cyclists is high. The installation of separated bike lanes and cycle tracks can reduce injuries to cyclists and increase a sense of safety among

Traffic-related air pollution can be reduced substantially when short vehicle trips are replaced with active travel

reluctant cyclists.¹⁴ For pedestrians, reduced vehicle speeds, the separation of pedestrians from vehicles, and increased visibility of pedestrians, are the factors associated with the reduced risk of vehicle-related collisions.¹⁵

ACTIVE TRAVEL CAN REDUCE HEALTH INEQUITIES

A number of groups within Canada – such as lower-income populations, newcomers, racial minorities, Indigenous Peoples, and people with health challenges – experience higher rates of illness, chronic diseases, and premature deaths because of social disadvantages such as low-paying jobs.¹⁶ Neighbourhood walkability is expected to have a greater impact on the health and well-being of these groups because they are less likely to own a vehicle and more likely to rely upon local shops, active travel and public transit.¹⁷

1

Active Travel BACKGROUND



A Healthy, Green and Just Recovery



A number of studies suggest that people who live in more walkable neighbourhoods, walk and cycle more for utilitarian purposes,^{18,19} are less likely to be obese,²⁰ and are less likely to develop Type 2 diabetes.²¹

A Toronto study found that newcomers living in lower-income neighbourhoods with low walkability were three times more likely to develop Type 2 diabetes than newcomers living in high-income neighbourhoods with high walkability.²²

When lower-income neighbourhoods are more walkable in their design, and serviced by efficient public transit, social and health inequities can be reduced because those who cannot afford one or more automobiles have greater access to jobs, health services, grocery stores and recreational facilities.²³ This is also true for those who cannot drive because of age or ability.

CLIMATE CHANGE IS ALREADY HARMING CANADIANS

On a global scale, climate change is already having a catastrophic impact on human health. In 2018, nearly 300,000 people around the world died prematurely because of hotter temperatures resulting from climate change.²⁴ And yet, increasing temperatures is only one

of the many risk factors presented by climate change.

In different parts of Canada, climate change has increased the frequency and intensity of floods, wildfires, hurricanes, ice storms, and heat waves, over the last several decades.²⁵ These events have exposed millions to extremely high levels of toxic air pollution,²⁶ forced hundreds of thousands of Canadians to evacuate their homes, and left hundreds of thousands without power for extended periods. Climate change is also melting permafrost in the far north, increasing sea levels on three coast lines, and extending the range of vector-borne diseases such as Lyme disease.²⁷

While climate change can harm the health of everyone, it has a greater impact on some. Young children, older people, and people with pre-existing health conditions are more sensitive to heat waves and wildfire smoke. Indigenous Peoples in Northern communities can experience increased food insecurity as melting permafrost and shifting plant and animal populations disrupt their access to traditional foods. In addition, people who live on lower incomes may not have the resources to protect themselves or recover from extreme weather events.²⁸

People who live in more walkable neighbourhoods, walk and cycle more for utilitarian purposes.

The costs of weather-related disasters fuelled by global warming are considerable. The number of catastrophic events has more than tripled since the 1980s. Over the last nine years, these events have resulted in \$14 billion in insurance costs in Canada, an increase of 1,250% since the 1970s.²⁹

ACTIVE TRAVEL CAN REDUCE GREENHOUSE GASES THAT CAUSE CLIMATE CHANGE

In order to avoid catastrophic levels of global warming, the Intergovernmental Panel on Climate Change (IPCC) has concluded that all countries must reduce greenhouse gases (GHG) emissions by 45% by 2030 and to net zero by 2050.³⁰ The transportation sector is the second leading source of GHG emissions in Canada, responsible for more than one quarter of all GHG emissions. This sector must be targeted for deep reductions.³¹

1

Active Travel BACKGROUNDER



A Healthy, Green and Just Recovery



Modelling studies have found that in large urban centres expecting significant population growth, an active travel strategy, when combined with investments in public transit, road pricing, and improvements in the built environment, can substantially reduce vehicle kilometres travelled and GHG emissions.³² For example, a California study estimated that an ambitious cycling-focused strategy could reduce GHG emissions from passenger vehicles by 8% by 2040.³³

THE BUILT ENVIRONMENT NEEDS TO FOSTER ACTIVE TRAVEL

The design of communities – or built environments – shapes the way people travel. Highly walkable neighbourhoods have higher rates of walking and cycling and lower rates of car use.³⁴ The walkability of a neighbourhood can be characterized by its population density, dwelling density, street design, and land use diversity.³⁵

Studies have found that people walk and cycle more, and drive less, when their neighbourhoods have the following characteristics:

- *Fairly high population or job densities* – People will walk and cycle more when their

neighbourhoods have higher densities that can support local businesses and efficient transit service.

- *A rich diversity of land uses* – People will walk and cycle more when their neighbourhoods have stores, restaurants, and community services located in close proximity to their homes.
- *Supportive street designs* – People will walk more when streets are designed in a grid pattern, which makes it easy and efficient to reach local destinations; when there are sidewalks, crosswalks, good street lighting, and street furniture to make walking safe, easy and pleasant. People will cycle more if there are separated bike lanes or safe bike paths.
- *Transit stops within a short distance* – People will walk or cycle more if transit stops are less than 10 minutes from their homes and workplaces, particularly if transit can deliver them to popular destinations.^{36,37}

ECONOMIC RECOVERY

In the 2020 update of Canada's climate action plan, the Government of Canada made a commitment to develop a national active transportation strategy to help deliver more active transportation.³⁸

This is great news. The federal government can play an important role to foster active travel in communities across the country. However, it would be more powerful if the federal government also committed funding to support active travel.

The Building Back Better analysis³⁹ estimated that 18,000 jobs could be created if \$2 billion in federal funding were directed at active travel infrastructure such as separated bike lanes, sidewalks and traffic lights. This investment would create construction jobs and provide economic opportunities for smaller communities, while also reducing air pollution and GHG emissions.³⁹ It could make our communities healthier and more equitable, particularly if lower-income neighbourhoods were prioritized for these investments.

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1

Active Travel BACKGROUND



A Healthy, Green and Just Recovery

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Part of a series on improving public health, decreasing health inequities and addressing climate change.

