

A person wearing a green helmet and a yellow shirt is riding a bicycle on a paved path. The background is filled with lush green trees, creating a sense of a healthy, livable environment. The word "HEALTH" is overlaid in large white letters.

# HEALTH

## MOVING IN A LIVABLE REGION

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## FRAMING TRANSIT IN THE CONTEXT OF PUBLIC HEALTH

Transportation is a fundamental aspect of daily operation from nearly every individual living in a built environment. It is not just a means of opening opportunity to employment and education, but also an enabler in seeking recreation. Within the context of public health, transit can play a significant role in shaping the health outlook of a region's entire population and the quality of life for each individual in that population.

According to an issue paper entitled "Promoting Better Health Through Public Transit Use" by the Canadian Urban Transit Association, public transit has a significant influence on three of Health Canada's determinants including physical environment, personal practices, and income and social status.



The United States Centers for Disease Control and Prevention frames public transportation as a public health issue in a number of areas including as a significantly safer transportation mode than passenger vehicles. While 69% of urban households and 14% of rural households in the US have access to public transit, passenger vehicle travel continues to be the fastest growing transportation mode.

**LESS AIR  
POLLUTION**

**LESS  
STRESS**

**FEWER  
CRASHES**

**LOWER  
COSTS**

**INCREASED  
ACTIVITY**

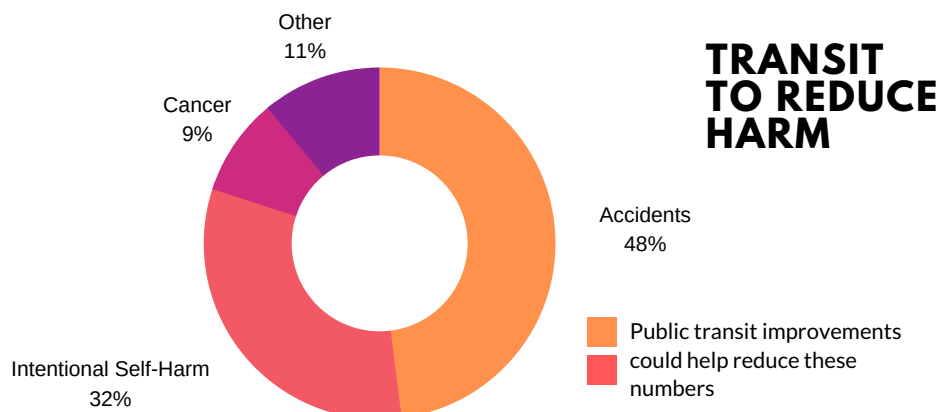
**GREATER  
EQUITY**

## LISTENING TO REGIONAL EXPERTS

In May 2016, the *Vancouver Sun* published an article by Dr. Perry Kendall (BC Provincial Health Officer), Dr. Patricia Daly (Chief Medical Health Officer, Vancouver Coastal Health), and Dr. Victoria Lee (Chief Medical Health Officer, Fraser Health Authority).

# QUANTIFYING THE PUBLIC HEALTH BENEFITS OF PUBLIC TRANSIT

In September 2018, WSP published an article entitled "What if we can design transit to improve our health?" that provide an analysis of the ways we can shape our transit infrastructure to support mental and physical well-being.



The same article reports that the Société de transport de Montréal found that a transit user achieves one-third of their recommended daily step count through active transportation. Across the country, public health spending due to obesity rates are high, and physical activity through transit can be a way to mitigate that.

Mental health spending costs the Canadian economy \$50 billion per year and will exceed \$2.5 trillion over the next three decades. It is expected that 8.9 million people in Canada will live with mental health problems by 2041. There are that can be made to increase our efficiency in addressing these issues.

8 MIN/DAY OF PHYSICAL  
ACTIVITY USING CAR

**41**

MIN/DAY USING TRANSIT

101.6 g CO<sub>2</sub>/PASSENGER KM  
USING CAR

**28.4**

g CO<sub>2</sub>/PKM BY TRANSIT

2600 KJ/PKM OF ENERGY  
USING CAR

**150**

KJ/PKM USING TRANSIT

## DESIGNING SPACES & VEHICLES TO IMPROVE HEALTH

**01**

Integrate green spaces into station design

**02**

Allow for natural light into underground spaces

**03**

Provide active spaces for exercise

**04**

Encourage social interaction in space design

**05**

Improve safety and security in transit design

**06**

Designing interior vehicle lighting to resemble nature

**07**

Improve vehicle design to seem more airy and open

**08**

Reduce noise and vibration of vehicles

**09**

Mitigate overcrowding and congestion