



Future Transport Technology







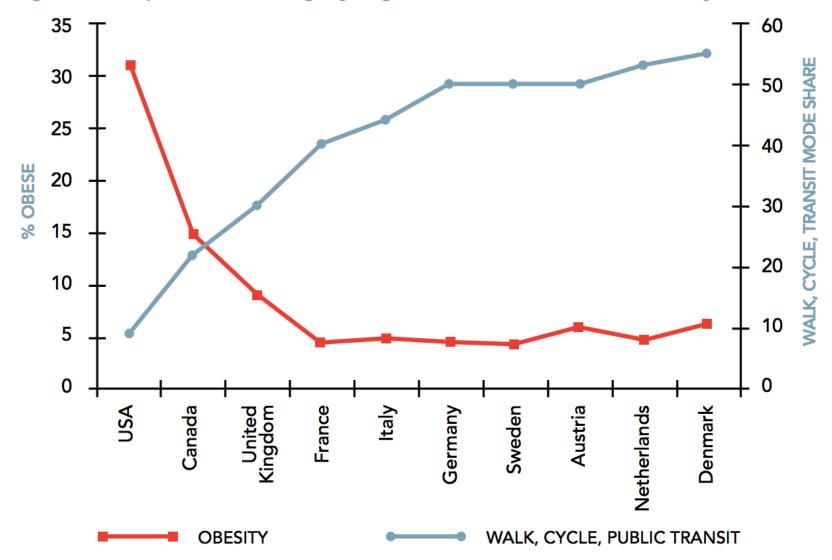


Health and other Impacts

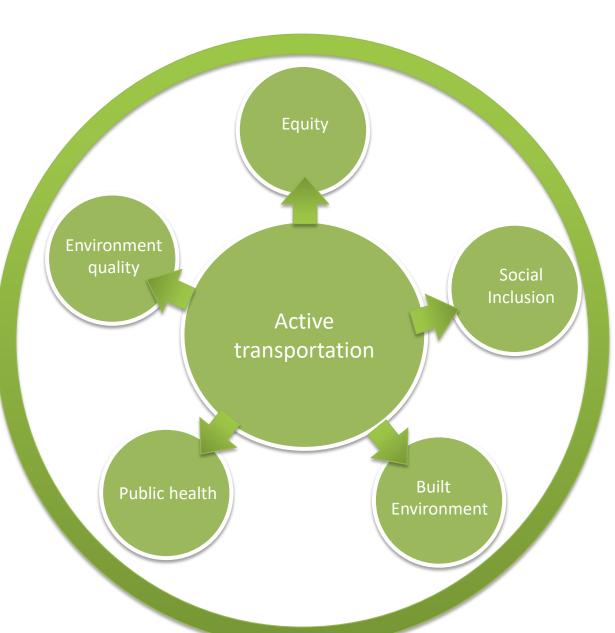
- Only 12% of Canadians' home-based trips are on foot or bicycle.
- Cycling to work was associated with a 45% lower risk of developing cancer and a 46% lower risk of heart disease.
- Risk of obesity goes up 6% for every hour spent in a car each day, while the risk of obesity goes down by almost 5% for every km walked a day.
- 91% of Canadian children and youth and 51% of adults do not get the recommended levels of daily physical activity a direct risk factor for obesity, cardiovascular diseases and other chronic health conditions.
- Physical inactivity costs the Canadian health care system **\$6.8** billion annually from preventable chronic diseases.
- Active transportation infrastructure can reduce the amount of pollution in the air.



Figure: A Comparison of Walking, Cycling and Public Transit Use and Obesity Rates







Sustainable Urban Transport System



Active Transport and Equity

- A 200-pound bicyclist with a 50-pound bike will impose approximately 1/65,000th the roadway damage of a 4,000 pound car (Dutzik et al. 2015)
- A stationary pedestrian takes up one-80th of the space of a parked vehicle, and a bicycle one-20th of the space.
 Even more when taking into account movement.

STATIONARY
parked vehicle

bicycle

pedestrian

vehicle traveling 60 mph

bus passenger

bicyclist

pedestrian

Figure 7. Space Consumed by Transportation Options, Stationary and In-Motion⁵⁹









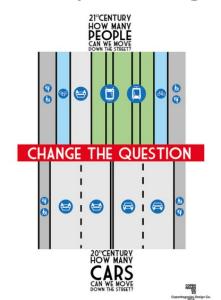


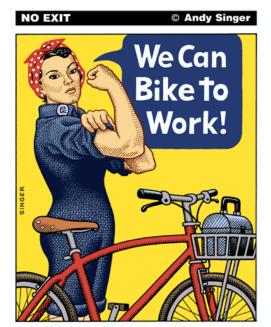


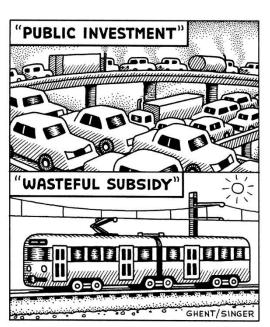
Financing and Subsidies

 The purpose of transportation financing and subsidies is (or should be) to encourage behaviors that maximize benefits to society. Transit use, bicycling and walking serve the public interest by reducing pollution and traffic congestion, and

improving health.







Conclusions

- The *Investing in Canada* plan is based on three key objectives:
 - Create long-term economic growth
 - Support a low carbon, green economy
 - Build inclusive communities
- What kind of transport system can maximize accessibility, efficiency, and connectedness while minimizing environmental damage?

