

BACKGROUNDER:

THE ECONOMIC IMPACTS OF ACTIVE TRANSPORTATION

Various modes of transportation have very different costs associated with them. This backgrounder will discuss some of the economic impacts related to walking and cycling within an urban environment.

Different Levels of Economic Impacts

Impacts on Businesses	Retail businesses benefit greatly from increased pedestrian and bicycle traffic. Wider sidewalks and other efforts to develop pedestrian-friendly shopping districts help shop owners.
Impacts on Personal Finances	The annual costs of bike ownership are dramatically lower than the costs associated with individual car ownership.
Impacts on Public Finances	The costs for governments to develop and maintain infrastructure for walking and cycling are significantly lower than the costs associated with the infrastructure needed to support motorized traffic.
Health and Productivity	There are tremendous economic losses caused by lost time and productivity as a result of road congestion. There are also very significant public health costs related to inactivity. These negative costs can be limited through active transportation.



Very direct economic impacts
Courtesy: <http://franz-joseph.at/>

Impacts on Businesses and Real Estate

Increased retail performance is one of the most direct and quantifiable economic results of greater pedestrian activity in any given area. A worldwide survey revealed a significant upward trend in retail activity within areas where there had been a concentrated effort to improve safety and comfort for pedestrians.¹ A survey of the Annex neighbourhood in Toronto found that 78% of visitors would like to see widened sidewalks or added bike lanes in the area.² Moreover, the Annex survey showed that customers “arriving by foot and bicycle visit the most often and spend the most money per month”.³ Bike lanes, recreational trails, and other infrastructure that promotes active transportation have been shown to increase property values for homes and businesses located nearby.⁴



A pedestrian-friendly street attracts shoppers in Ottawa

Impacts on Personal Finances

Active modes of transportation are often less expensive compared to motor vehicle use. It is estimated that it costs \$0.58/km to operate a car⁵ compared to \$0.06/km to cycle.⁶ People who use active transportation enjoy a significantly

¹ City of Toronto. 1999. *Economic Benefits of Pedestrianisation for Toronto*. Accessed May 30, 2012: <http://www.city.toronto.on.ca/legdocs/1999/agendas/council/cc/cc990413/ed6rpt/cl001.htm>

² Clean Air Partnership. 2009. *Bike Lanes, On-Street Parking and Business: A Study of Bloor Street in Toronto's Annex Neighbourhood*. Accessed September 8, 2012: <http://www.cleanairpartnership.org/pdf/bike-lanes-parking.pdf>

³ Ibid., Executive Summary.

⁴ Toronto Centre for Active Transportation. 2009. *Bike Lanes – Good for Business and for Taxpayers*. Accessed September 8, 2012: http://tcat.ca/sites/all/files/BikeLanes_Business_Brochure_0.pdf

lower cost of living. Providing better infrastructure for walking and cycling thus allows more people to enjoy the savings afforded by active modes of transportation. It has been shown that the higher costs of housing in denser urban areas can be offset by the savings created through the use of more active transportation.¹¹

Impacts on Public Finances

An increase in the number of people who walk or cycle can reduce the volume of motor vehicles on roads. Active modes require considerably less space and cause very little wear damage to road surfaces. Increasing the active transportation mode share can result in significant savings from reduced road maintenance. A decrease in the volume of motor vehicles on the roads would also diminish the demand for roadway expansion and parking, thus creating considerable savings within provincial and municipal budgets.¹²

	Car (Toyota Camry LE)	Good Quality Commuter Bike
Annual Ownership Costs	\$ 7 450⁷ (Insurance, Licensing, Financing, Depreciation)	\$ 500-1000⁸ (Cash Purchase + Accessories)
Total Annual Costs	\$ 10 452⁹ (Ownership Cost + Fuel, Maintenance, Tires)	\$ 100-300¹⁰ (Purchase Cost Over 10 Years + Maintenance)

	Bike lane	Off-road path	Road Widening	Parking Structure
Construction Cost	\$ 20 000/km ¹³	\$ 225 000/km ¹⁴	\$1.3 million/km ¹⁵	\$ 15 000/parking space ¹⁶

Health and Productivity

Congestion on major roadways has very significant economic impacts that can be measured in terms of lost time and productivity. A 2006 survey by Transport Canada concluded that annual congestion costs were between \$2.3 billion and \$3.7 billion for the 9 largest municipalities in Canada.¹⁷ Moreover, inactivity is a very serious public health concern that costs the healthcare system \$5.3 billion annually.¹⁸

Active transportation requires less road space and contributes to a significant reduction in roadway congestion, allowing for expansion of the transportation network in challenging and dense urban areas. It is important to consider the very interdependent nature of different modes of transportation within an urban network. Focusing too narrowly on traffic congestion often leads to calls for roadway expansion, which is not always the most effective or beneficial solution to broader transportation issues.¹⁹

⁵ Canadian Automobile Association. 2012. *Driving Costs*. Accessed September 7, 2012: http://caa.ca/docs/eng/CAA_Driving_Costs_English.pdf *Based on total annual costs for 2012 Toyota Camry LE driven 18,000 km per year

⁶ VTPI, 2011. *Transportation Cost and Benefit Analysis II – Vehicle Costs*. *Based on the median of the figure given by VTPI (5-15 cents per mile)

⁷ CAA, 2012. *Driving Costs*

⁸ Victoria Transport Policy Institute. 2011. *Transportation Cost and Benefit Analysis II – Vehicle Costs*. Accessed September 5, 2012: <http://www.vtpi.org/tca/tca0501.pdf>

⁹ CAA, 2012. *Driving Costs*

¹⁰ VTPI, 2011. *Transportation Cost and Benefit Analysis II – Vehicle Costs*

¹¹ Urban Land Institute. 2009. *Beltway Burden: The Combined Cost of Housing and Transportation in the Greater Washington, DC, Metropolitan Area*. Accessed September 12, 2012: <http://www.cnt.org/repository/BeltwayBurden.pdf>

¹² Litman, Todd. 2012. *Whose Roads? Evaluating Bicyclists' and Pedestrians Rights to Use Public Roadways*. Accessed August 31, 2012: <http://www.vtpi.org/whoserd.pdf>

¹³ City of Toronto, 2001. *City of Toronto Bike Plan*. Accessed July 27, 2012: http://www.toronto.ca/cycling/bikeplan/pdf/bike_plan_full.pdf

¹⁴ Ibid.

¹⁵ Go For Green. 2004. *The Business Case for Active Transportation*. Accessed June 1, 2012: http://thirdwavecycling.com/pdfs/at_business_case.pdf

¹⁶ Victoria Transport Policy Institute. 2011. *Transportation Cost and Benefit Analysis II – Parking Costs*. Accessed September 12, 2012:

<http://www.vtpi.org/tca/tca0504.pdf>

¹⁷ Transport Canada. 2006. *The Cost of Urban Congestion in Canada*. Accessed August 31, 2012: <http://www.adec-inc.ca/pdf/02-rapport/cong-canada-ang.pdf>

¹⁸ Transport Canada. *Active Transportation: A Primer*. Accessed Sept. 28, 2012: <http://www.tc.gc.ca/eng/programs/environment-urban-guidelines-practitioners-atg-2-2674.htm>

¹⁹ Litman, Todd. 2012. *Smart Congestion Relief: Comprehensive Analysis of Traffic Congestion Costs and Congestion Reduction Benefits*. Accessed September 8, 2012: http://www.vtpi.org/cong_relief.pdf