

# Transit Means Business: The Economic Case for Public Transit in Canada

Each year, Canadian public transit systems spend over \$4 billion on operations and infrastructure—a substantial investment that generates even larger economic benefits.

Transit's ability to improve our economy and make our cities more competitive is recognized by both government and business. Several recent studies have broadened our understanding of this issue, and will enable better transit investment decisions by our federal, provincial and municipal governments.

## The nature of transit's economic benefits

Many of transit's benefits are well understood—reducing congestion and air pollution, for example, or helping people get to work or school. Other benefits, like transit's impacts on real estate values or economic spin-offs in various industries, are less obvious and more complex.

The most basic benefits of public transit investment include:

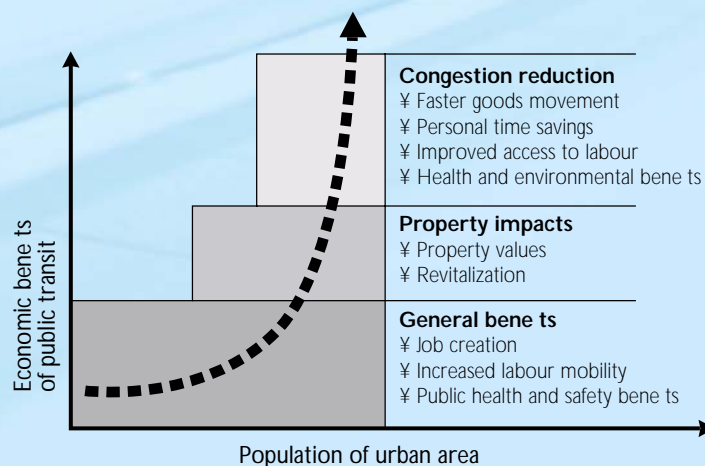
- **Economic activity and spending** through transit industry supply chains, operations, research and new product development
- **Increased labour mobility** for numerous economic sectors, particularly downtown businesses
- **Increased personal mobility** for millions of people who choose not to drive or otherwise cannot reach work, shopping, health care or other services by car
- **Public health and safety benefits** including those derived from cleaner air and fewer traffic collisions

As urban centres grow and make different kinds of transit investments, they reap numerous benefits. One is the **property impact** of enhanced land accessibility that increases residential and commercial values. Another is a reduction in traffic delays and **congestion costs**, a benefit that can have a dramatic impact in severely congested areas.

Figure 1 shows how transit's benefits add up as cities grow. Note that this is a conceptual framework rather than a cost-benefit curve, and that benefits higher up in the curve may require more expensive investments—for example, substantial property impacts are most likely to occur in cities that invest in rapid transit systems like subways, light rail lines or bus transitways. Nevertheless, Canada is becoming more urban and our cities are moving up the curve. Those that continue to invest in transit face the prospect of greater benefits ahead.



Figure 1  
Economic benefits of public transit



Note: This paper is based on a special research report of the same name, published in 2003 by the Canadian Urban Transit Association, the Federation of Canadian Municipalities and Moving the Economy. To purchase a copy of the full report, please visit [www.cutaactu.ca](http://www.cutaactu.ca) or call (416) 365-9800 x113.



Canadian Urban Transit Association  
Association canadienne du transport urbain



# Public Transit

## Efficiency and other benefits to urban economies

Studies consistently find public transit to be more efficient than car travel. Two recent publications provide compelling evidence:

- One international survey identified the average cost of a passenger-kilometre of travel in five large Canadian cities (Montreal, Toronto, Ottawa, Vancouver, and Calgary) as \$0.12 by transit compared to \$0.46 by car—a 74 percent savings.<sup>a</sup>
- Another analysis conducted for the federal government found that the marginal social cost of transit travel was \$0.30 per passenger-kilometre, versus \$0.46 for car travel—meaning that transit is a substantially less-expensive way to serve growing travel demands.<sup>b</sup>

Transit's efficiency has huge implications for our major cities. In a study of dozens of cities around the world, higher transit ridership correlated to greater overall economic success and a higher standard of living.<sup>c</sup> It also found that the transportation systems of large Canadian and European cities, with their strong transit focus, are more efficient than those of large American cities—consuming just over 7 percent of gross regional product, compared to almost 13 percent.

The implications of this finding go beyond mere cost savings. More efficient transportation systems actually let us shift public and private resources to other needs, like education or health care, thereby improving our quality of life and economic competitiveness.

## Job creation and related impacts

Canadian transit systems employ over 40,000 workers, a number that is comparable to our broadcasting, advertising or petroleum extraction industries. Their \$2.1 billion payroll—two-thirds of Canada's overall transit operating investment—supports local economies and creates jobs both directly and indirectly.<sup>e</sup>

The job-creation powers of transit investment have been confirmed by the British Columbia Treasury Board, which found that spending on transit creates jobs more cost-effectively than spending on other modes of transportation. It estimated that a \$1 million transit expenditure creates an average of 21.4 new jobs, compared to 7.5 jobs for the same automotive expense, or just 4.5 jobs in the petroleum industry.<sup>f</sup>



Edmonton LRT

## Measuring transit's costs and benefits

Transport Canada has developed a computer model to evaluate the relative costs and benefits of public transit projects. Three case studies were used during the model's initial demonstration:

- Proposed improvements to conventional bus service in Kelowna
- Actual operation of a light rail line on Spadina Avenue in Toronto
- A proposed new busway in Winnipeg

In assessing these case studies, the model quantified various effects of congestion (e.g. improved travel times and road safety, and reduced operating costs and emissions) as well as mobility benefits to low-income people.

The model calculated the benefit-cost ratios of the three case studies as 1.4, 1.7 and 2.1, respectively—meaning that the economic benefits of the transit projects exceeded their costs by 40 to 110 percent. Overall, the projects were estimated to yield economic benefits of almost \$500 million at a cost of less than \$220 million.<sup>d</sup>

## Access to employment

The 2001 Canadian Census found that about 10 percent of Canadians—over 1.4 million people—take transit to work. In our largest cities, this figure rises to about 22 percent.<sup>g</sup> Increasingly, employers are making the connection between transit accessibility and the basic viability of their operations. Manufacturing facilities, call centres and recreational businesses, in particular, depend on transit to deliver their workers safely, economically and on schedule.

In the downtowns of major commercial centres like Toronto, Montreal and Vancouver, transit carries as many as 50 percent of commuters and is the only practical transportation choice for many of them due to congestion, parking space restrictions and parking costs. In fact, linkages between downtown job growth and transit ridership levels suggest that public transit is a key enabler of growth in our traffic-jammed downtown cores.

Transit also provides access to tourism jobs for younger and lower-income workers, as demonstrated by evidence from cities like Vancouver, Victoria, Calgary, Toronto, Niagara Falls and Halifax. In the Niagara Region, the need to bring in tourism workers was so strong that the industry commissioned a special transit service to reach nearby communities. The transit systems of Welland, St. Catharines and Niagara Falls are now examining an intermunicipal service to support this need.

## Congestion reduction

There is an economic cost when people are stuck in traffic. Modelling efforts in the Greater Toronto Area suggest that, without additional investment in transit, the time needed for an average commute could grow 50 percent by 2021.<sup>h</sup> This would add an estimated \$28 million per day to congestion costs—or an extra \$7 billion per year.

# Wherever life takes you



Goods are also vulnerable to traffic delays, and congestion's growing effects are making Canadian business associations increasingly concerned about their members' international competitiveness. Various estimates of the congestion costs borne by the goods movement industries in Toronto, Montreal, Ottawa and Greater Vancouver total more than \$3 billion each year.

## Personal productivity

Many transit commuters make productive use of their travel time. Some read for pleasure, while others catch up on work—returning phone calls, reading or even checking e-mail. This fact is recognized by Transport Canada's models, which discount the cost of transit users' travel time by 25 percent.<sup>n</sup>

Applying this notion to the number of commuter rail and subway riders in Vancouver, Toronto and Montreal, but using a lower estimate of the proportion of people who work while commuting (5 percent instead of 25 percent), produces an estimated annual productivity benefit of \$33 million.



Development around Toronto subway stations

## Increasing property values

Dozens of studies in the United States have compared the value of properties near rapid transit stations to the value of similar properties in other areas. Almost all of these studies have concluded that proximity to quality transit service leads to an increase in property values.

Studies in Vancouver, Scarborough and Calgary have also found that properties increase in value when they are close to commuter rail, subway or light rail lines. In fact, a detailed study conducted by University of Toronto researchers suggested that homes near a subway station were worth \$4,000 more than other homes in the area, due to their higher level of accessibility.<sup>o</sup>

## Supporting retail businesses

For retailers, public transit means increased customer accessibility. Shopping destinations that are developed in an integrated manner with adjacent transit facilities gain direct access to a large and loyal customer base, without having to build expensive parking lots.

Downtown stores in large cities often see a majority of their customers arrive by transit, and an Ottawa survey found that more than a third of transit riders said bus routes influenced where they shopped.<sup>p</sup>



Ottawa Transitway station at St. Laurent Shopping Centre

"Increasing congestion is hindering the economic competitiveness and quality of life of Canada's urban centres. It impacts Canada's ability to attract and win new investment, as businesses report that access to roads and public transit are key factors in their business location and expansion decisions.... Strengthening and expanding public transit networks will reduce congestion, ensure a cleaner environment, manage urban growth and provide economic returns."

– Canadian Chamber of Commerce <sup>i</sup>

"Ontario's reliance on trade makes it imperative that we have a road and public transit system across Ontario that will sustain us into the future."

– Windsor Chamber of Commerce <sup>j</sup>

"Roadway congestion in Greater Montreal was found to cost users more than \$500 million annually."

– KPMG Consulting LP <sup>k</sup>

"Traffic congestion arising from increases in private automobile commuting and commercial vehicle traffic for goods movement diminishes the relative attractiveness of the region for business and domestic purposes."

– York Region <sup>l</sup>

"With regard to transportation priorities, business was clear that the needs in those areas were important. Public transit and pedestrian friendly access to their businesses for employees and customers were among the top ranked concerns."

– Greater Victoria Chamber of Commerce <sup>m</sup>

## Public health and safety benefits

Clean air is a major public health issue in Canada, and motorized travel is one of the biggest contributors to poor air quality in our cities. Public transit, however, can improve air quality by providing an alternative to driving that is energy efficient and lower in emissions. Transit also keeps a lid on the economic costs of air pollution—billions of dollars each year for health care, lost productivity, pain and suffering, and loss of life.

Transit also makes a real contribution to road safety in Canada, boasting a rate of fatal collisions per passenger-kilometre that is about one-twentieth that of car travel. In 1998, the estimated economic costs of collisions in Canada were \$10.5 billion, including medical expenses, lost productivity, vehicle and property damage, pain and suffering, and loss of life.<sup>9</sup> Without public transit, Canadians would likely suffer an additional 150 fatal collisions and 11,000 personal injury collisions each year, at a cost to the economy of at least \$1.1 billion.



Photos courtesy Toronto Transit Commission

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The Canadian Urban Transit Association (CUTA) is the voice of Canada's public transit industry. For additional information, including research reports, industry updates, news bulletins and more, please contact us or visit our website.

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