

Urban Transportation Task Force

Urban Transit in Canada: Taking Stock of Recent Progress



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Urban Transportation Task Force

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Executive Summary

In recent years, all levels of government have given high priority to improving transportation infrastructure and services. In addition to funding the renewal of roads and highways, greater resources have been directed at public transit which is an important mode of transportation in Canada's largest cities, as well as in urban areas of all sizes.

The Urban Transportation Task Force of the Council of Deputy Ministers Responsible for Transportation and Highway Safety released a report in 2005, entitled *Urban Transportation in Canada: Needs and Opportunities*, that provided a snapshot of investment requirements for public transit and urban roads at that time. The Task Force has recently taken stock of progress made since 2005 with respect to urban transit. The report highlights trends and challenges in transit, including urbanization and sprawl, the high degree of automobile ownership, aging infrastructure and equipment, growing congestion in large urban centres, and pressing concerns about climate change and the environment. The report points to rising fuel costs and the economic slow-down as more recent challenges that affect the context in which transit decisions are made.

Since 2005, governments across Canada have made significant transit investments. The report highlights the status of transit funding in several provinces and describes significant funding commitments made by the federal government to the transit sector.

Many positive impacts can be identified as a result of the unprecedented transit investments. Direct impacts include increasing ridership, new and expanded transit systems, and increasing fleet sizes with more accessible vehicles. Indirect impacts include improved accessibility, new urban developments that are often more transit-oriented, and many health, environmental, and economic benefits.

Much has been accomplished but much more remains to be done. The report identifies a wide variety of transit projects being planned over the coming years. Several billion dollars in funding will be required for these projects.

In addition to providing funding, governments can use other means to support transit. Investments in transit can have a greater impact if they are accompanied by good governance, effective planning practices, and transportation demand management. The report notes that transportation demand management measures are being implemented in many jurisdictions across Canada.

Emerging from the Urban Transportation Task Force's review of the status of transit in Canada, recent investments and plans for the future, four recommendations are made. They are:

- 1. All levels of government need to work together to provide adequate funding to support transit, while respecting jurisdictional responsibilities.**

- 2. Recent federal investments in public transit have supported national economic, social, and environmental priorities, and the federal government's continued commitment to provide sustainable, predictable, long-term funding for transit is welcomed.**
- 3. The movement of people and goods in urban areas must be improved through greater investment in transit, transportation demand management, improved planning processes, and the use of advanced technology.**
- 4. All governments should promote transit use by raising public awareness of its economic, social, and environmental benefits.**

Introduction

Safe, efficient, sustainable, and reliable transportation systems are critical to the Canadian economy and to the quality of life of Canadians. In recent years, all levels of government have given high priority to improving transportation infrastructure and services. Funding for transportation has increased significantly. In addition to funding the renewal of roads and highways, greater resources have been directed at public transit which is an important mode of transportation in Canada's largest cities, as well as in urban areas of all sizes.

Greater interest in transit over the last few years has translated into increased funding, new and expanded transit systems, and growth in ridership. There is widespread agreement that investing in public transit produces measurable economic, social, and environmental benefits. New governance models and long range transit expansion plans are being put in place and all indications are that much more will be accomplished in the near future. Especially noteworthy are substantial new transit funding partnerships among Canada's municipalities, provincial/territorial, and federal governments. The state of transit funding has changed dramatically in recent years.

The Urban Transportation Task Force of the Council of Deputy Ministers Responsible for Transportation and Highway Safety released a report in 2005, entitled *Urban Transportation in Canada: Needs and Opportunities*, that provided a snapshot of investment requirements for public transit and urban roads at that time.¹ Since then, the Task Force has continued its work to share information about urban transportation issues and has recently taken stock of progress made since 2005 with respect to urban transit. Insights on the current state of transit in Canada are offered in this report.

The report highlights key investments made in urban transit and describes some of the impacts of those investments. The report also identifies new requirements for transit and further investments that are needed. It concludes that funding partnerships among governments need to be developed further in order to maintain the pace of improvement in transit service and use in Canada's cities.

¹ Urban Transportation Task Force, *Urban Transportation in Canada: Needs and Opportunities* (Ottawa: Council of Deputy Ministers Responsible for Transportation and Highway Safety, 2005).
<http://www.comt.ca/english/reports-e.htm>

Taking Stock: Looking Back at the 2005 Report

In its 2005 report on urban transit and roads, the Urban Transportation Task Force developed five recommendations for consideration by all governments. Endorsed by the Council of Ministers Responsible for Transportation and Highway Safety in September 2004, those recommendations were:

- 1. Recognizing the importance of urban areas, the federal government should provide sustainable, predictable, long-term funding to support urban transportation investment.**
- 2. All orders of government must recognize that amongst competing urban infrastructure needs, the specific needs of transportation, including transit, are significant and merit a proportional share of new investment.**
- 3. Governments must take action to improve transportation and travel time for freight and passengers in urban areas through increased investment, transportation demand management, improved planning processes, and the use of advanced technology.**
- 4. While respecting provincial and territorial jurisdiction and planning priorities, all orders of government must find ways to work together more effectively to improve transportation and mobility in urban areas. Opportunities for collaboration beyond funding partnerships should be explored.**
- 5. All governments should pursue opportunities to promote awareness of the importance of sustainable urban transportation and transportation choices to the economy, the environment, and social lives of Canadians.**

Those recommendations were made in the context of trends and challenges at the beginning of the decade. These trends continue to shape the environment in which transit decisions are made:

Urbanization and sprawl

In 2005, it was noted that the vast majority of Canadians lived and worked in urban centres. But Canada's cities often had low density land use patterns, creating pressure on urban transportation and transit networks. This continues to be true. In the 2006 census, the Montréal, Toronto, and Vancouver Census Metropolitan Areas (CMAs) accounted for 34% of Canada's total population and in 2007 they accounted for 67% of all transit ridership. The population of major urban centres continues to increase, usually in municipalities on the periphery of CMAs. Employment is growing faster in the peripheral areas than in the central municipalities of CMAs.² These conditions exacerbate the pressures on urban transportation networks and make the delivery of effective and efficient transit systems more difficult. There is a growing need for transit to operate within suburban areas, from suburban areas to central areas, and between suburban areas. Smart planning is required to manage these patterns and pressures.

For example, the population within the Greater Toronto and Hamilton Area of southern Ontario – Toronto and the surrounding area that stretches from Hamilton to Durham Region – is projected to grow from about 6 million to 8.6 million by 2031. Employment is expected to increase from

² Statistics Canada, *The Commuting Patterns and Places of Work of Canadians* (Ottawa, 2006).

about 3 million to 4.3 million jobs.³ To plan for this, Ontario has developed a 25-year Growth Plan, which aims to curb urban sprawl, revitalize downtowns, reduce traffic congestion, and promote sustainable communities based on identified growth centres. Public transit is key to the plan. Transit will be the first priority for transportation infrastructure planning and investment. Transit infrastructure will be used to shape growth. The capacity of existing transit systems to support targeted, intensively populated areas will be increased and the modal share of transit will be expanded.

Automobile ownership

The 2005 report highlighted the high degree of automobile ownership of Canadian households. This has not changed substantially in the intervening years. Statistics Canada reported that commuting distances continue to rise. However, cars are used less than in past years in most CMAs and the proportion of workers using public transit or getting to work as a passenger in a car has increased.⁴

Transit ridership

Transit ridership continues to increase steadily across Canada. The Canadian Urban Transit Association (CUTA) reports an overall increase in ridership of 6.5% between 2005 and 2007.⁵ In 2008 the Société de Transport de Montréal saw an increase in ridership of 4%, equivalent to an increase of 15 million passenger trips, compared to 2007. The Toronto Transit Commission reported an increase of 16 million passenger trips between 2006 and 2007, an increase of 3%, for a total of 460 million passenger trips.

Aging infrastructure and equipment

In 2005, aging transportation infrastructure and a lack of funding were widely recognized as key issues for federal, provincial/territorial, and municipal governments. With recent funding commitments made by all levels of government, progress is being made towards addressing the requirements for new and improved transportation facilities and services. However, it will take time to launch all the necessary projects and costs have continued to rise, leaving an infrastructure challenge to contend with for some time.

Congestion

Large urban centres experience major congestion and gridlock, causing delay, increased energy consumption, and air pollution. The economic and environmental consequences of congestion are high. Traffic congestion has a substantial negative impact on Canada's economic competitiveness. For example, in 2006, traffic congestion cost the Greater Toronto and Hamilton Area (GTHA) \$6 billion in travel delays and lost investment. By 2031, three million car trips (compared to the current two million) will be made during the weekday morning commute and the costs to the area are estimated to be \$15 billion in travel delays and lost investment.⁶ Easing gridlock and improving the movement of people and goods through Canada's urban centres can be furthered by investing in transit.

³ Ontario Ministry of Public Infrastructure Renewal, *Places to Grow: Growth Plan for the Greater Golden Horseshoe* (Toronto, 2006).

⁴ Statistics Canada, *The Commuting Patterns and Places of Work of Canadians* (Ottawa, 2006).

⁵ Canadian Urban Transit Association, data from *Transit Stats* for 2005 and 2007 (Toronto, 2006 and 2008).

⁶ Metrolinx, *Costs of Congestion in the Greater Toronto and Hamilton Area: Impact and Cost Benefit Analysis of the Metrolinx Draft Regional Transportation Plan* (Toronto, 2008).

Climate change and environmental issues

Greenhouse gas (GHG) emissions from transportation are significant, accounting for almost 27% of Canada's GHG emissions in 2006.⁷ The need to address these issues was noted in 2005 and has grown in importance since that time. Many jurisdictions have developed climate change action plans and sustainability objectives. Transit plays a key role in meeting such objectives.

Some additional trends and challenges have become evident since the 2005 study. They also affect the context in which transit decisions are made. These include:

Rising fuel costs

Over several months in 2008, sharp increases in fuel costs captured the nation's attention, raising concerns about fuel dependence and raising the awareness – and attractiveness – of alternatives to the automobile, such as public transit and active modes of transportation. Transit ridership increased as fuel prices rose.

Economic slow-down

The state of the economy in Canada, the United States, and around the world became one of the foremost issues for governments in 2008-09. Investments in transportation infrastructure and transit specifically are viewed as valuable contributions to economic activity in the long term and as effective forms of economic stimulus and job creation in the shorter term, while playing a key role in long-term sustainability objectives.

Smaller urban centres

While most major urban centres in Canada are experiencing population growth, some smaller communities are suffering population losses. Transit can be critical to maintaining viable and liveable smaller communities, often providing a much needed transportation option for all residents, but particularly for the elderly and low income residents.

The trends and challenges related to transit are similar when viewed both from the end of the decade and from its beginning. In big cities, the population continues to grow, congestion is taking a heavier toll on the movement of both people and goods, and cities are now coming to grips with climate change. Transit is seen as an important part of the solution to those challenges. Transit is also seen as a worthwhile investment in both the good times that characterized most of the decade and the economic downturn that marked its close.

⁷ Environment Canada, *National Inventory Report 1990-2006: Greenhouse Gas Sources and Sinks in Canada* (Gatineau, 2008).

Transit Investments: Progress Made since 2005

A survey conducted by the Urban Transportation Task Force in 2004 examined transit systems in 160 cities across Canada and concluded that investments of nearly \$23 billion would be required in transit over the next 10 years. This amount included investments necessary for system maintenance and renewal, as well as system expansion for conventional transit infrastructure, fleet vehicles, and technology. It did not include costs that would be incurred for establishing new transit systems, where none had existed before or for specialized transit. Furthermore, the total did not include transit needs in Saskatchewan, Prince Edward Island, the Northwest Territories or Nunavut, as those jurisdictions did not provide an estimate for the Task Force survey.

Since the \$23 billion need was estimated, significant investments have been made in urban transit across Canada by the federal, provincial/territorial, and municipal governments. The investments of the governments of Canada and Ontario alone met half of the identified investment needs.

Provincial Transit Funding

Funding for urban transit varies greatly from one province to another, now as it did in 2005. In some provinces, urban transit is the responsibility of municipalities. For example, in Prince Edward Island and Newfoundland and Labrador, fare revenues and municipal funding are the sole sources of transit funding. In other provinces, such as New Brunswick, Nova Scotia, and Saskatchewan government support directly targets capital expenditures. In British Columbia, Alberta, Manitoba, Ontario, and Québec, provincial support is provided in varying degrees for operation of services as well as for capital expenditures, with a strong emphasis on capital works. In some cases, such as Ontario's GO Transit, a provincial agency directly operates transit services. Other means to support transit used by some provinces are provincial gas tax allocations, debt servicing, or unconditional grants.

An important source of funding for the provinces since the mid 1990s is federal infrastructure programs. Some federal programs have included public transit as an eligible category for funding. Provinces have to choose whether to invest in transit or other infrastructure priorities within their jurisdiction. Transit has to compete with other worthwhile projects, such as highways or waterworks, for the federal money on offer. However, there have been three transfers specifically oriented toward transit, namely the Public Transit Fund (\$400M in 2006), Public Transit Capital Trust 2006 (\$900M), and Public Transit Capital Trust 2008 (\$500M).

Through various funding mechanisms, provinces across Canada have increased investments in transit since 2005. Some examples follow:

British Columbia

British Columbia's transit services are administered by two distinct agencies. Services in Metro Vancouver's 21 municipalities are delivered by the South Coast British Columbia Transportation Authority, also known as TransLink. Metro Vancouver represents 80% of total provincial ridership, with 181 million trips in 2008. The province provides funding for TransLink operations and capital projects from a transfer of base fuel tax revenues and through collection of additional

motor fuel taxes within Metro Vancouver dedicated for this use. It is also a funding partner in capital projects, according to formulas negotiated to fit the circumstances of each project. The provision of transit services in Metro Vancouver cost over \$700 million per year.

Outside of Metro Vancouver, transit services in British Columbia are delivered by BC Transit, a Crown corporation. BC Transit receives a portion of its capital and operating funds from the province, according to formulas defined in legislation. BC Transit operations are also funded by local tax levies, fares paid by users, advertising and, in Greater Victoria, by additional motor fuel taxes collected by the province. The provincial and municipal governments in BC contribute over \$290 million annually to provide transit services in over 54 transit service areas outside of Metro Vancouver.

In early 2007, BC announced the Provincial Transit Plan. The Plan calls for the province, and its federal and local government partners, to invest \$14 billion by 2020. The goal is to significantly expand transit in communities across BC and to double total ridership. New funding of \$11.1 billion is included in the Plan for investments such as rapid bus lines in high growth urban centres, four new and updated rapid transit lines in Metro Vancouver, and acquiring new clean technology buses.

Current transit projects include the planned \$1.4 billion Evergreen Line, which will build upon the existing SkyTrain LRT system serving Metro Vancouver as a major north-south corridor. Total federal commitments to the project to date are \$417 million. The province has also acquired 20 hydrogen fuel cell buses, which will be in service for the 2010 Winter Olympics. Post-2010 the buses will enter regular service around BC.

Transit use in BC urban areas already ranks with that in other leading jurisdictions. The Provincial Transit Plan intends to grow transit market share to 22% in Metro Vancouver, 12% in Victoria, and 5% in the rest of the province. Through encouraging increased transit use the province can help meet its parallel goal of reducing GHG emissions by 22%. By 2020 transit will contribute 4.7 million tonnes cumulatively, as outlined in the Provincial Climate Action Program.

In addition to major investment programs, the province and its partners are pursuing other cost-effective approaches to accomplishing transit objectives. Travel demand management initiatives such as transit signal priority systems, will help get more out of existing infrastructure. The Transit Plan also stresses the need for complementary local government planning and land use policies to support transit investment, including promotional programs that will educate the public and assist in building a transit culture.

Alberta

There are 11 municipalities in Alberta that operate regular transit service. Calgary and Edmonton, which together have over 50% of the provincial population, both include light rail transit (LRT) as part of their respective transit systems, while the entire transit fleet operated by the Town of Banff consists of four all-hybrid bio-diesel/electric buses. Several other Alberta municipalities are currently exploring the opportunity of providing regular transit service for their residents.

The 2005 report of the Urban Transportation Task Force projected capital transit investment needs in Alberta to be nearly \$3.1 billion over ten years. The primary area identified for investment was system expansion.

Alberta now provides ongoing grant funding of about \$2.5 billion annually to the province's 359 municipalities, of which roughly \$2 billion is invested in capital infrastructure. For the capital infrastructure grants, the province generally allows each municipality to determine its individual infrastructure priorities. For example, the five cent per litre fuel tax grant provided to Edmonton and Calgary must be invested in transportation, but each city determines what type of transportation investment is needed, either roads, bridges, or transit. Since 2005-06, Alberta municipalities have chosen to invest roughly \$480 million of the provincial grant funding into municipal transit capital infrastructure.

In July 2008, Alberta announced an additional \$2 billion in grant funding specifically for public transit, as part of the provincial Climate Change Action Plan. Dubbed Green TRIP (Green Transit Incentives Program), this investment will promote the use of local, regional, and inter-city public transit and will support new public transit services throughout the province. It will also significantly reduce the number of vehicles on Alberta roads and reduce GHG emissions.

Saskatchewan

There are seven communities in Saskatchewan that have public transit systems, serving approximately 53% of the population. The province provides unconditional grants, which can be used for transit, to each community each year. The province also provides funding to transit operators so that reduced-cost transit passes can be provided to low-income residents. In addition, the province provides direct funding (\$2.65 million in the 2008/09 fiscal year) through the Transit Assistance for People with Disabilities Program to 75 communities. Demographics are changing; transit for mobility-challenged people is seen as an emerging issue in Saskatchewan and will necessitate improvements to the transit fleet, such as adding low floor buses.

Cities in Saskatchewan continue to encourage transit usage. Large centres have implemented transportation demand management initiatives to encourage alternatives to car usage. Transit ridership in one city has seen a dramatic increase, due to the mandatory provision of an annual transit pass with university registration.

Saskatchewan is currently implementing the Urban Highway Connector Program, which encourages transportation planning, including transit, through funding of transportation plans in larger urban centres.

Manitoba

There are four communities in Manitoba that currently have public transit systems: Winnipeg, Brandon, Thompson, and Flin Flon. In addition, 66 rural communities offer transit services to enable seniors and persons with disabilities to remain within their communities.

In the 2005 Task Force report, Manitoba's transit investment needs were estimated (for Winnipeg only) at \$226 million, primarily for fleet maintenance and renewal.

In 2007, the province restored the 50/50 transit funding partnership, resulting in increased transit operating funding for the four cities in Manitoba that offer transit services. Legislation was introduced April 11, 2008, to enshrine the 50/50 funding partnership in law.

The province also provides annual grants of \$3.84 million to Winnipeg, primarily towards the purchase of new transit buses (including diesel-electric hybrid buses) and \$128,000 to the city of Brandon. Some of the annual transit capital grant has been committed by the province to support transit improvements, i.e., bus stop enhancements, signage, electronic transit information display, telebus automated telephone service, etc.

Also in Winnipeg, the development of the Southwest Rapid Transit Corridor is being planned. The first stage of the Corridor will receive a \$138 million investment under a funding agreement between the city and the province. Winnipeg will contribute \$30.75 million, including \$17.5 million of federal funding from the Public Transit Capital Trust 2008. Manitoba will match the federal transit trust contribution of \$17.5 million from the Trust and will also fund 50% of the net operating costs of the rapid transit system, including the financing cost for Stage 1 of the rapid transit corridor, through the reinstated 50/50 transit funding partnership. Tax increment financing (TIF), an investment and development tool that reinvests property and school taxes, will be utilized to capture any incremental growth from residential and commercial infill development along the rapid transit corridor.

It is estimated that 66 communities in rural Manitoba that have a Mobility Disadvantaged Transportation Program (handi-transit) will receive operating grants totaling \$983,800 and capital grants of \$30,000 in 2008. The funding is based on a formula that provides a one-time start-up grant of \$6,000 and then annual operating grants of 37.5% of the gross eligible operating costs.

Ontario

Transit is a key element of Ontario's aim to deliver a well-integrated, multi-modal transportation system. Ontario continues to make substantial investments in the improvement and expansion of transit systems in the Greater Toronto and Hamilton Area and throughout the province. There are 90 transit systems serving 115 communities and the scale of these transit systems varies enormously across the province.

Between 2003 and 2008, the province invested \$7.4 billion in public transit. That amount includes over \$2.5 billion for its inter-regional commuter system GO Transit, which links Toronto with other communities in southern Ontario, and is operated directly by a provincial agency. Ontario's investment included over \$2.9 billion to help the City of Toronto improve and expand Canada's largest public transit system, the Toronto Transit Commission (TTC).

The province has also made significant progress on the issue of governance. In 2006, Metrolinx was established to enhance transportation coordination and integration throughout the Greater Toronto and Hamilton Area. Metrolinx's Board of Directors in 2008 approved a Regional Transportation Plan for the development and implementation of a sustainable transportation

system over the next 25 years. The plan will make substantial capital expansion investments in the province's transit infrastructure. The province has committed long-term funding and is working with Metrolinx on an implementation strategy that involves provincial and federal funding, but does not require municipal investment.

The 2005 report of this task force projected Ontario's capital transit investment needs to be over \$10 billion for the four-year period from 2006 until 2010. This total included investments for system maintenance and renewal, as well as system expansion for conventional transit infrastructure, fleet vehicles, and technology. Investments have been made in all of those areas and ambitious plans have been developed for further transit expansion. The province focuses on capital funding, but some operating funding has been provided.

In 2007, the province announced MoveOntario 2020 – a 12-year building plan of rapid transit initiatives in the Greater Toronto and Hamilton Area. The province has committed \$11.5 billion toward its implementation, and calls for \$6 billion in federal funding. Metrolinx is implementing the MoveOntario 2020 initiative through its Regional Transportation Plan.

GO Transit, the rail and bus inter-regional commuter system, carries more than 55 million passengers each year. Ontario has invested heavily in GO Transit since 2003. Seven train stations and three new bus terminals have opened, in addition to the replacement and expansion of GO Transit's rail cars and buses. The 70-year-old signal system is also being modernized to improve and expand service frequency and reliability at Toronto's Union Station, with almost half of the old signals replaced. A \$388 million overhaul of Union Station is planned.

The province has partnered with other levels of governments to fund the Toronto-York Spadina Subway Extension, which for the first time will extend subway service beyond Toronto's city boundaries. The province has provided \$870 million in funding support for this project and the federal government will provide \$697 million, which upon completion is expected to add 36 million transit trips and eliminate 30 million car trips per year.

Introduced in 2004, the provincial gas tax program provides two cents per litre of provincial gas tax revenues to the province's 90 transit systems. The funding is allocated on the basis of a ratio of 70 per cent ridership and 30 per cent population to balance the needs of transit providers in large and small municipalities. Since 2004 the province has provided over \$1.3 billion in gas tax funding to Ontario municipalities. In the first four years of the program \$57.5 million of the gas tax funding was provided to smaller municipalities. This funding has resulted in the addition of 10 small municipal transit systems across the province. It has also enabled municipalities to introduce service improvements such as additional buses, expanded routes, and improved security infrastructure.

Ontario's multi-year funding program - the Ontario Bus Replacement Program - provides up to \$50 million annually to municipalities across the province to support the replacement of both conventional and specialized municipal transit buses. This funding program enables municipalities to replace transit buses over time; it reduces the average fleet age and also increases accessibility, lowers emissions, and improves efficiency.

At the beginning of the decade the Ontario Government had withdrawn from many areas of transit, and municipalities filled the void. Since 2003, that policy has been reversed. The government of Ontario has become the largest investor in transit in Canada, an increasingly larger direct operator of transit services, an authoritative planner of transit services, and the exponent and funder of large-scale transit expansion.

Québec

In Québec, there are 32 public transit agencies that serve 125 municipalities, representing nearly 75% of the province's population. In these municipalities in 2006, 96 trips per capita were made by public transit, a number that has grown steadily since 2004.

The 2005 report of the Urban Transportation Task Force forecast nearly \$4.6 billion in urban transportation investment needs in Québec for the next ten years. At that time, the priorities were maintenance and renewal of transportation infrastructure and replacement of the vehicle fleet.

From the 2003-2004 fiscal year to the 2007-2008 fiscal year, the contribution of the Government of Québec to public transit totalled more than \$2.6 billion. During that time, key investments were:

- The Montréal metro extension to Laval with three new stations, which represented an investment of \$745 million. Begun in 2002 and inaugurated in 2007, this project was the biggest urban construction project Québec had seen in the past few years.
- From 2003 to 2008, 1,100 buses were replaced or added, accounting for 25% of the Québec fleet. This represented an investment of more than \$500 million.
- Investments in commuter trains exceeded \$96 million for the same period.

To meet Québec's growing public infrastructure needs, in January 2009 the government announced it would increase funding from \$37.7 billion to \$41.8 billion in the Québec Infrastructure Plan for the 2008-2013 period. This plan arises from the Act governing good infrastructure management, which makes the maintenance and renewal of public infrastructure compulsory for the future.

- Over the 2006-2011 period, the Government of Québec will have allocated \$4.4 billion to public transit funding.

In accordance with its Sustainable Development Policy, Québec announced its Climate Change Action Plan in June 2006, which includes 26 initiatives to reduce greenhouse gas (GHG) emissions. In support of the Action Plan, the Québec Public Transit Policy was also issued in June 2006. The Policy addresses two of the 26 initiatives set out in the Plan, including those aimed at supporting the use and development of public transit and alternative transport modes. The Policy aims to increase public transit ridership by 8% and augment the service offered to the public by 16% by December 2011.

To achieve those targets, the government of Québec has four main strategies – fair allocation of the efforts of all public transit stakeholders, improvement of services to the public, modernization and development of infrastructure and equipment, and support for transportation modes other than the automobile.

Seven programs are dedicated to funding public transit and achieving the objectives of the Québec Public Transit Policy. Three programs dedicated to public transit represent nearly 80% of all financial participation by the Government of Québec in public transit for the 2007-2008 fiscal year. These programs are:

- The improvement of the Government Assistance Program for Public Transit (PAGTCP). It targets public transit agencies and has two components.
 - The first component concerns assistance for capital expenditures. This assistance is equivalent to 100% of the acquisition and construction costs of heavy transportation modes (subway, commuter train, etc.), 75% for construction of garages, termini, reserved lanes, incentive parking, etc., and 50% for the purchase of buses. The value of the projects funded by this component was \$325 million in 2007-2008 and is estimated at \$720 million for 2008-2009.
 - The second component, intended for the smallest transit agencies, represents assistance equivalent to 40% of user revenues, at approximately \$25 million per year.
- The assistance program for public transit capital expenditures of the Société de financement des infrastructures locales du Québec (SOFIL). This program, created under the Canada-Québec Gas Tax Agreement sets guidelines for the payment of amounts intended for public transit. The beneficiaries are all public transit agencies, except the Agence métropolitaine de transport (AMT) of Montréal. This represents assistance of 84.5% for eligible capital projects (essentially the same as for the PAGTCP).
 - This assistance program includes \$315 million for the 2006-2010 period. This amount includes \$222 million from the federal government and \$93 million from the Government of Québec, to be matched by funding provided by the municipalities. In addition to this \$315 million, there is another \$189 million coming from Law C-66 (Layton Amendment) dedicated to public transit, for a total of \$504 million. In Québec, about 20% of the Gas Tax Funds (\$222 million of \$1.5 billion) is allocated to public transit through SOFIL.
- The Government Assistance Program for Improvement of Public Transit Services (PAGASTC). This program, funded by the Green Fund, represents assistance equivalent to 50% of the direct costs associated with increasing service. All public transit agencies are eligible for the PAGASTC. The annual contribution of the Government of Québec is \$100 million.

Four other programs concern public transit services in the regions, adaptation of services for people in wheelchairs, improvement of vehicle energy efficiency, and active alternatives to the automobile. The Government of Québec allocates \$30 million annually to these programs.

In addition to these sources of funds are motorists' contributions, including \$30 for each personal vehicle registered in the six major metropolitan regions in Québec and a tax of 1.5¢ per litre of gasoline sold in the Montréal metropolitan region. These amounts are reserved for public transit.

Since October 2007, an annual total royalty of \$200 million is charged to oil and gas companies to support the Green Fund. The royalty is apportioned according to the carbon dioxide emissions

attributable to each energy sector. Of this amount, \$130 million serves to fund the various measures in Québec's Public Transit Policy. With the royalty coming into effect in October 2007, it was limited to \$100 million for the 2007-2008 fiscal year, of which \$65 million served to fund the measures of the Transit Policy.

The creation of the Green Fund marked a major turning point in the public transit funding philosophy of the Government of Québec. Indeed, since 1992, the Government had withdrawn from directly funding operating expenditures of transit corporations. With the launch of the Green Fund, the Government adds \$1 for each dollar paid by the local community to increase its transit service.

New Brunswick

With 50% of its population located in rural areas, New Brunswick has transit systems operating in its three largest urban centers: Fredericton, Saint John, and Greater Moncton.

The 2005 Task Force report projected that New Brunswick's capital transit investment needs over the ten year period from 2004 until 2013 would reach nearly \$39 million. The primary areas identified for investment were bus replacement and upgrading and maintenance of transit infrastructure, such as garages and bus stop locations. Some additional funding was identified for advanced technology traveller information systems.

In New Brunswick, transit operations are funded by municipalities which receive unconditional grants from the province. The province has provided funding for transit through the Environmental Trust Fund and the Climate Action Fund.

In addition to supporting the three established transit operators in the province, \$2 million was set aside for the construction of a new commuter ferry serving the Saint John area and \$500,000 was set aside for capital investments in new transit operations in each of four smaller cities: Edmundston, Miramichi, Bathurst, and Campbellton. Of these, only Miramichi is in the process of developing and implementing public transit services. This municipality is using a unique model for transit operations tailored to the reality of transit services within smaller urban centers.

To date, the majority of new federal funding allocated to Fredericton Transit has been directed toward transit fleet renewal. As of October 2008, the average fleet age has dropped from 13 to 8 years. Beyond the environmental benefits of a more modern fleet, a lower fleet age has resulted in increased reliability of service. This, coupled with new urban development, increased fuel prices, and financial incentives such as the federal tax benefit have led to increased demands for an expanded range of services. Further pressure on service capacity resulted from a University of New Brunswick transit pass introduced in 2006-07. With ridership close to capacity, the City of Fredericton has plans to expand its transit facility beginning in 2008-09, in order to accommodate additional buses.

Increased focus is being placed on the need for expanding transit services within the urban centers, but rural and suburban communities face a significant lack of transit services. With this in mind, a new rural to urban commuter program has been established which is open to all municipalities and provides a total of \$2 million in capital funding for the establishment of new

commuter services. A condition of the rural to urban commuter program is that municipalities must guarantee the costs of operating the service. Operating costs are a major barrier for the establishment of any new transit service. To date, two proposals have been approved from the communities of Hampton and Quispamsis for articulated buses to expand the capacity of the Bus Rapid Transit service to/from the City of Saint John.

Nova Scotia

There are conventional transit services operating in Nova Scotia's three largest urban centers: Halifax Regional Municipality, Cape Breton Regional Municipality, and Kings County. In 1994 the province transferred responsibility for public transit to municipalities in exchange for social service programs. Therefore, in Nova Scotia, transit authorities are funded by municipalities, primarily through property taxes.

While Nova Scotia has not directly funded urban transit, the province has administered dedicated public transit capital funding through the Agreement on the Transfer of Federal Public Transit Funds. The total program allocation to eligible transit services is \$51.6M from 2006-10.

Furthermore, the province announced the Nova Scotia Transit Rural Incentive Program (NSTRIP) which is intended to generate new and improved public transit services in rural or small centers that currently have limited or no public transit services available. Similar to the administration of the Federal Gas Tax Transfer Program, the NSTRIP funds will flow through the 55 municipal units to assist with capacity building, operations, or capital. The total program budget for 2008-09 is \$500,000.

Nova Scotia also provides limited operating and capital funding for the enhancement of 11 community-based transportation services through the Community Transportation Assistance Program (CTAP). The program promotes the expansion of sustainable and inclusive community-based transportation services in low population density regions of the province. This is done through funding (\$1.60 per capita) to existing community-based transportation providers, and through providing seed funding of \$5,000 to organizations investigating the development of new community-based transportation services. Since its inception, CTAP funding has benefited 11 transportation providers in Nova Scotia representing service coverage of 70% of the province, excluding the Halifax and Cape Breton regional municipalities.

Total CTAP funding spent in 2008/09 was \$630,000 broken down into the following categories:

- Operating (\$485,000),
- Capital - Accessible Transportation Assistance Program (\$120,000),
- Plate Reimbursement Program (\$2,900),
- Research Program (\$22,100).

It is expected that the operating portion will increase in 2009/10 as there were two new services started in 2008/09 that only received partial funding for the year. The capital funding has been earmarked for the Accessible Transportation Assistance Program (ATAP) to further promote and expand accessible transportation. The \$120,000 budget is dedicated to the purchase or modification of wheelchair accessible vehicles.

Nova Scotia adopted a Climate Change Action Plan in January 2009. One component of the plan is to produce a sustainable transportation strategy, consult with the public and interested groups, and consider all aspects of transportation, including public transit, active transportation, funding, and land-use planning.

In 2009, Service Nova Scotia and Municipal Relations proposes to undertake the Nova Scotia Sustainable Public Transit Strategy Study as a component of the Sustainable Transportation Strategy. The study will establish policy direction, investment priorities, and roles and responsibilities of the province and municipalities to promote the sustainable movement of people in the future. It will include a set of guiding principles, background information and consultation results, and provincial and municipal land use planning policies and regulations relevant to both sustainable public transit and a general reduction in automobile greenhouse gas emissions.

Other Provinces and Territories

In addition to the provinces described above, Prince Edward Island and Newfoundland and Labrador, as well as the Yukon and Northwest Territories, also have transit systems operating within their jurisdictions. Although not cited as examples herein, the transit systems and the communities they serve have benefited from investments made in recent years. They also have plans and investment needs that will be part of the future transit development in Canada.

Municipal Transit Funding

Municipal governments are key partners in transit funding across the country. Fare-paying transit users and municipal ratepayers are the backbone of transit investment in Canada. In Toronto, for example, more than 70% of the annual operating costs of the Toronto Transit Commission are covered by transit riders. In addition to contributing to operating costs, the City of Toronto provides more than 50% of annual capital funding to transit.

Municipal funding for operating and capital expenditures is largely supported by property tax revenues. But this funding source is not sufficient to support public transit, and property taxes must also provide funding for other forms of municipal infrastructure. According to CUTA, in 2007 municipalities across Canada contributed 59% of total transit operating costs and 18.6% of capital costs. Provinces contributed 11.4% of operating costs and 48.8% of capital costs. Federal contributions for municipal transit operating costs were 0.09% and 29.5% of capital costs.⁸

In 2007, The Big City Mayors' Caucus of the Federation of Canadian Municipalities argued for a national approach to supporting transit because of its national economic, social, and environmental impacts. In addition to better planning, incentives for transit use, research, and accountability measures, the mayors recommended that the federal government provide \$2 billion annually for transit capital projects.

⁸ Canadian Urban Transit Association, *Canadian Transit Fact Book 2007* (Toronto, 2008). However, it is important to note that the federal government has no funding programs that support transit operations, which raises some questions about these statistics.

The big city mayors also cited the need for funding transit in smaller communities. They said: “Provinces and territories should develop separate and appropriately designed and targeted funding programs to fund and support smaller transit systems. This approach will ensure that these smaller systems do not end up competing with larger systems for the same funding envelope.”⁹

Federal Transit Funding

As noted above, public transit is a provincial, territorial, and municipal area of responsibility. All federal engagement in public transit, including funding, is based on strict respect for jurisdiction.

Annual federal investments in public transit infrastructure have increased significantly in recent years and are projected to reach an estimated \$1 billion in fiscal year 2008/2009. Furthermore, there is significant potential for more funding to be invested in transit in the future, under the \$33-billion Building Canada Plan, if provinces and territories choose to give priority to transit over other infrastructure investments.

Between 2001 and 2005, the federal government launched significant infrastructure funding programs that included public transit as an eligible category. The Infrastructure Canada Program, Canada Strategic Infrastructure Fund, and Municipal Rural Infrastructure Fund collectively represented a commitment of \$8.25 billion. Of that amount, approximately \$1.84 billion will be invested in public transit between 2002 and 2014.

The Gas Tax Fund (GTF), announced in 2005, committed \$5 billion to environmentally sustainable municipal infrastructure from 2005 to 2010. Budget 2007 committed another \$8 billion from 2010 to 2014. The GTF is a major source of predictable long-term federal funding. Municipalities select eligible projects within program parameters, and public transit is an eligible category. In fiscal years 2005/6 and 2006/7, approximately 25 per cent of committed spending, or \$217 million, was allocated to public transit. In fiscal year 2007/8, 29 per cent of the Gas Tax Fund, or a total of \$270 million, was allocated to public transit.

Some major urban areas have allocated 100 per cent of their GTF allotments to public transit. For example, for the period 2005-2010, Toronto, Metro Vancouver, and Edmonton allotted \$407 million, \$307 million, and \$108 million respectively to transit.

The \$400-million Public Transit Fund (PTF) supported investments in public transit infrastructure from the fiscal years 2005-2006.

The first Public Transit Capital Trust, which was announced in Budget 2006, provided \$900 million from 2006 to 2009 to support capital investments in public transit and infrastructure, as a means to reduce traffic congestion, as well as carbon dioxide and other emissions. In addition, Budget 2006 provided \$1.5 billion for the ecoTrust, which was designed to support provincial and territorial climate change agendas, including transit. Budget 2006 also created the Public Transit Tax Rebate for transit pass users, the scope of which was extended in Budget 2007.

⁹ Federation of Canadian Municipalities, *Big City Mayors' Caucus National Transit Strategy* (Ottawa, 2007).

Considerably more funding became available under the seven-year, \$33-billion Building Canada plan, announced in 2007. A significant portion is eligible to support public transit, if provinces/territories and municipalities choose to make transit a priority. Building Canada plan components include:

- The \$8.8-billion Building Canada Fund (BCF), under which public transit is particularly prioritized, along with clean water and sewage treatment infrastructure, the core National Highway System, and green energy. The Fund also has dedicated funding for projects in communities with populations of less than 100,000.
- The Gas Tax Fund, which will provide \$2 billion per year by 2010, and a total of \$11.8 billion by 2014.
- A full Goods and Services Tax (GST) rebate for municipalities, providing \$5.8 billion in additional flexible funding by 2014 will allow them to devote more money to priorities, such as transit.
- The \$2.275-billion Provincial/Territorial Base Funding Initiative, which provides each jurisdiction with \$25 million per year to support core infrastructure priorities.
- The \$1.25-billion Public-Private Partnerships Fund (P3s) will be awarded to projects on a merit basis.

The Building Canada plan is predicated on flexibility and respect for jurisdiction, meaning that the extent of funding dedicated to transit, or any other sector, is largely contingent on priorities established by the provincial/territorial and municipal sectors.

Budget 2008 announced the creation of the \$500-million Public Transit Capital Trust 2008, which provides supplementary funding to support capital investment projects in public transit infrastructure. Allocated on a provincial-territorial per capita basis, the Trust will finance projects such as such as rapid transit, rail, transit buses, and high occupancy vehicle and bicycle lanes.

Furthermore, Budget 2008 confirmed the GTF as an annual \$2 billion permanent measure, taking effect as of 2014, providing municipalities with predictable, long term, sustainable funding that will help provinces plan and finance their infrastructure needs.

In response to the current economic climate, Budget 2009 provided approximately \$12 billion in new infrastructure stimulus over the next two fiscal years, and transit is an eligible recipient for much of this funding. In addition, approvals will be streamlined and funding accelerated under the Building Canada plan. The objective of these investments is to help Canada emerge from economic crisis with a more modern and greener infrastructure that is the foundation of sustainable, long-term economic growth.

The new \$4-billion Infrastructure Stimulus Fund will provide support for provincial/territorial and municipal infrastructure rehabilitation projects, including transit. Funding will be available for two years for projects that will begin construction in 2009/10. The federal government will fund up to 50 per cent of eligible project costs.

The 2009 federal budget also included several legislative and regulatory amendments that would ensure a more efficient approval of projects under the Building Canada plan and other funding initiatives. For projects requiring federal environmental assessment decisions, regulations could allow one environmental assessment process to meet both federal and provincial/territorial requirements, by agreement with the provinces and territories. With these changes, it is expected that the time needed to provide federal approvals for major projects could be shortened by up to 12 months.

To accelerate the construction of community projects, Budget 2009 provided up to \$500 million in new funding over two years under the Communities Component of the BCF. Also, payments under the Provincial/Territorial Base Funding initiative will be accelerated; for the next two years, up to \$1 billion of this federal funding will be brought forward and will be available for infrastructure projects, including urban transportation projects. Budget 2009 identified two public transit projects for potential acceleration of infrastructure spending, namely Union Station revitalization in Toronto and the Evergreen Line in Vancouver, and also announced that the P3 Fund will include an initial call for applications in 2009/10. Transit projects are considered an eligible category.

The following are some of the public transit projects that the federal government has committed to funding, or has already provided funding, as well as the amounts of the federal commitment. This list does not seek to be exhaustive, and does not include projects that are currently funded by the Gas Tax Fund.

- Toronto-York Spadina Subway Extension: \$697 million (Building Canada Fund and Public Transit Capital Trust 2006)
- Vancouver Canada Line: \$450 million (Canada Strategic Infrastructure Fund and other sources)
- Evergreen Line in Metro Vancouver: \$416.7 million (Building Canada Fund and Public Transit Capital Trust 2008)
- Greater Toronto Area's GO Transit network improvements: \$385 million (Canada Strategic Infrastructure Fund)
- Toronto Transit Commission Modernization and State of Good Repair: \$350 million (Canada Strategic Infrastructure Fund)
- Sheppard East Light Rapid Transit: \$333 million (Building Canada Fund)
- GO Transit Improvement Package: \$250 million (Building Canada Fund)
- Ontario's York Region Rapid Transit System, VIVA Phase I and II: \$135 million (Canada Strategic Infrastructure Fund)
- Edmonton Transit Expansion: \$100 million (Building Canada Fund)
- Brampton, Ontario AcceleRide: \$95 million (Canada Strategic Infrastructure Fund)
- Calgary Light Rapid Transit: \$90 million (Building Canada Fund)
- Mississauga, Ontario Bus Rapid Transit: \$83 million (Canada Strategic Infrastructure Fund)
- British Columbia Transit Plan Upgrades and Improvements: \$118.3 million (Building Canada Fund)
- Winnipeg Rapid Transit: \$17.5 million (Public Transit Capital Trust 2008)
- Whitehorse, Low-emission buses: \$0.5 million (Public Transit Capital Trust 2008)

Apart from infrastructure funding, the federal government supports public transit through numerous targeted initiatives, such as:

- The \$40-million Urban Transportation Showcase Program has supported demonstration projects that integrate new transit services with land use, active transportation, and transportation demand management measures in support of greenhouse gas (GHG) emission reduction.
- The \$10-million ecoMOBILITY Program aims to cut transportation-related GHG emissions by implementing transportation demand management measures that encourage commuters to choose public transit and other sustainable transportation options.
- In June 2006, the federal Cabinet approved \$115 million over five years to address security needs in the highest-risk areas of passenger rail and urban transit. Out of this amount, \$80 million was allocated to the Transit-Secure contribution program for initial security measures, including the development of risk assessments and security plans, enhanced employee training and public awareness, physical security, and communications.
- Transport Canada has engaged in the deployment of innovative technologies and in various research and development and demonstration projects related to transit, by way of the Transportation Development Center and the Intelligent Transportation Systems program. Bus-to-rail connection protection and dynamic scheduling of flex-route transit are two examples.

In conclusion, the federal government has increasingly engaged in supporting public transit through a series of different means, including an exponential increase in capital funding, while continuing to respect jurisdiction.

Making an Impact: Investments Pay Off

It is clear that major increases in investments in urban transit have been made by all levels of government in recent years, with plans to continue to increase funding for a variety of projects and programs over the coming years. But the demand for transit continues to grow. That the need is even greater than originally projected in the 2005 report is a reflection of many factors, including:

- growing demand for transit services in both large urban centres and in smaller communities,
- with growing demand, some transit systems are reaching capacity and need to expand operations,
- continuing need to maintain and renew transit infrastructure and fleets.

There are numerous impacts and accomplishments that can be identified as a result of unprecedented transit investments in the last few years. Some are highlighted below.

Direct impacts of the investments being made in urban transit may be seen in system and fleet characteristics, as well as in operating data. A source of such data is the Canadian Urban Transit Association (CUTA) annual summary of Canadian transit statistics. CUTA's members, which are most of the urban transit systems across Canada, provide the data on a voluntary basis. It provides some interesting insights into the state of transit in Canada. It looks at ridership, expenses, and energy consumption. The data presented in Table 1 have been extracted from CUTA's annual summaries for 2005 (the year of release of the first Task Force report) and 2007 (the most recent year for which CUTA data is available).

- Transit ridership continues to increase steadily across Canada. Ridership (regular service passengers) has increased since 2005 by about 6.5%. This continues a steady trend that CUTA has reported for the last ten years. In Ontario, for example, since 2003 transit ridership has increased by 102 million passenger trips and the number of car trips has been reduced by 85 million. Ontario's total transit ridership in 2007 was almost 780 million trips, a 3.5% increase over 2006.¹⁰
- The total distance traveled annually by transit vehicles increased by 5% between 2005 and 2007. The amount of transit service available, as indicated by the revenue vehicle hours per capita, also increased by 8.2% between 2005 and 2007. In the Québec City region, for example, the Réseau de transport de la Capitale has continued to develop its services, which have increased by 11.8% in 2008 over 2006.
- All reported transit operating expenses have increased substantially, with the total operating expenses being 12.6% higher than they were in 2005.
 - Among operating expenses, the biggest increase has been in fuel costs, showing a 19.9% increase in 2007 when compared to 2005.
 - In this context, it is interesting to note the marked increase in the amount of bio-diesel used, while use of regular diesel and natural gas have decreased by 7.7% and 16.4%, respectively.

¹⁰ Canadian Urban Transit Association, *Ontario Urban Transit Fact Book, 2007 Operating Data* (Toronto, 2008).

Table 1: CUTA: Transit System Characteristics in 2005 and 2007

Overview	2005	2007	Change
Number of Transit Systems Reporting	107	105	-1.9 %
Number of Fixed Routes	2,983	2,915	-2.3 %
Revenue Vehicle Kilometres (km)	862,605,967	905,457,118	5.0 %
Regular Service Passengers	1,654,402,211	1,761,208,215	6.5 %
Amount of Service (rev veh hrs/capita)	1.70	1.84	8.2 %

Active Revenue Vehicles	2005	2007	Change
Accessible	8,414	10,925	29.8 %
Non-Accessible	7,166	5,647	-21.2 %
Total	15,580	16,572	6.4 %

Energy Consumption	2005	2007	Change
Diesel (litres)	396,477,216	366,099,641	-7.7 %
Bio-diesel (litres)	14,612,210	98,760,474	575.9 %
Natural gas (cubic metres)	13,120,507	10,969,976	-16.4 %
Electricity (kilowatt-hours)	811,686,164	839,639,580	3.4 %

Direct Operating Expenses	2005	2007	Change
Transportation Operations	\$ 1,968,613,719	2,301,895,363	16.9 %
Fuel	\$ 368,321,097	441,625,750	19.9 %
Vehicle Maintenance	\$ 877,502,629	1,003,748,459	14.4 %
Plant Maintenance	\$ 381,112,781	411,520,532	8.0 %
General and Administration	\$ 501,164,070	588,539,115	17.4 %
Total Operating Expenses	\$ 4,786,379,404	5,388,221,131	12.6 %
Operating Expenses per Passenger	\$ 2.56	\$ 2.76	7.8 %

Capital Expenditures (\$)	2005	2007	Change
Vehicles	760,707,008	1,138,932,171	49.7 %
Land and Buildings	250,046,779	555,276,088	122.1 %
Rights-of-Way and Track	338,940,284	554,360,956	63.6 %
Computer & Other Automation Equipment	107,507,298	137,852,848	28.2 %
Other	146,429,537	85,202,270	-41.8 %
Total Capital Expenditures	1,603,630,906	2,471,624,333	54.1 %

Capital Funding Contributions (\$)	2005	2007	Change
Federal Contribution	223,377,882	599,041,295	168.2 %
Provincial Contribution	494,914,973	991,380,913	100.3 %
Municipal Contribution	370,395,214	378,546,796	2.2 %
Other Contributions (e.g. Reserve funds, etc)	152,789,352	59,335,554	-61.2 %
Total Capital Funding	1,241,477,421	2,028,304,558	63.4 %

Source: CUTA, 2005 and 2007 *Transit Stats*, Transit Statistics for the Canadian Urban Transit Industry, (excluding specialized transit services)

- Total operating expenses per passenger rose by 7.8% between 2005 and 2007. Used as an indicator of cost effectiveness by CUTA, this ratio has been increasing by about 10 cents per year for the last several years,¹¹ suggesting financial performance has been challenged despite increases in ridership and funding.
- Federal and provincial contributions to capital funding programs have increased substantially in recent years. Capital funding has increased by 63.4%.
- More than 90% of the capital expenditures in 2007 were made on vehicles, land and buildings, and rights-of-way and track.
 - Compared with 2005, an increase of nearly 50% was made in capital expenditures on transit vehicles.
- Total fleet size increased by only 6.4%. However, more significant has been the increase in accessible vehicles and the decrease in non-accessible vehicles in the fleet. The data suggest that recent expenditures have gone a long way to increasing the accessibility of the fleet as vehicles are replaced.

Although the CUTA summary of transit statistics does not include average fleet age, data provided by provincial members of the Urban Transportation Task Force reflects the impact of increased investment on the age of vehicles in the transit fleet. As examples,

- Investment in new Light Rail Transit vehicles in Calgary brought the average age of the fleet down to 14.7 years (from 15.9 in 2005).
- Investment in new buses brought the average age of the fleets down to 10.8 (from 14.6) years in Toronto and to 8.0 (from 13.0) years in Fredericton.
- The average age of buses in Québec has dropped from 9.4 years in 2004 to 7.3 years in 2008 and is expected to be reduced to 6.6 years by 2011.

Reducing the age of the fleet will improve the quality and reliability of service, reduce maintenance costs, and reduce environmental impacts associated with operating newer vehicles, as compared to older models.

In addition to the direct impacts of investment observed in transit system ridership data, there are also numerous indirect impacts and benefits that can be expected from the investments. These include:

- *Improved accessibility.*
Investments in transit can mean services are improved or expanded, which will improve access. Greater access may translate into increased ridership, increased mobility for transit-captive sectors of the population, and decreased use of, and reliance on, less efficient options such as the single-occupancy automobile.

¹¹ Canadian Urban Transit Association, data from *Transit Stats* for 2002, 2004 and 2007 (Toronto, 2003, 2005, 2008).

- *New urban developments.*
Access to new or improved transit services may encourage and attract new transit-oriented development. With transit as a community focal point, those developments may also have more efficient land use patterns, with greater population density and services offered in a transit-friendly form. More efficient land use patterns would allow transit systems to become more cost efficient and cost effective to operate.
- *Environmental benefits.*
With improved transit services, transit mode share may increase relative to the automobile mode, which could result in reduced congestion and reduced GHG and air pollutant emissions. For example, Ontario's transit plan will result in 800 million new transit trips per year, taking 300 million car trips off roads in the Greater Toronto Area and reducing carbon dioxide emissions in the region by 10 megatonnes by 2020.¹² Québec's 2006 Climate Change Plan targets and funds two transit-related objectives that would foster the development and use of public transit and alternative transport modes. These two actions have a potential to reduce or eliminate 130 kilotonnes in CO₂ equivalents.¹³

In December 2007, Québec was rated first among all jurisdictions in eastern North America for reduction of GHG emissions. While it is too soon to quantify the precise contribution transit has made to the reduction, knowing that transport is the sector that generates the greatest GHG emissions in Quebec, it is clear that public transit has an important role to play.

- *Economic benefits.*
There is a strong economic case for public transit. Improving and expanding public transit systems can result in economic benefits. The availability of transit services can reduce the number of automobile trips and reduce congestion within urban centres, saving auto and transit commuters time and money, and making the movement of goods and people more effective and efficient. Less congested areas and areas that are well-served by transit are more appealing to businesses. Reducing travel delays, driving costs, and collision rates by reducing congestion are also clearly beneficial from an economic perspective. According to the American Public Transportation Association, every dollar invested in public transportation generates an average of six dollars in economic returns.¹⁴

According to the Canadian Chamber of Commerce, access to roads and public transit are key factors that influence businesses location and expansion decisions.¹⁵ Urban congestion can also influence a business's decision to invest or expand in a particular region. Numerous studies have shown that the goods movement industries in Toronto, Montreal, Ottawa, and Greater Vancouver are being impacted negatively by road congestion. Expanded transit use could ease congestion on roads and boost the economy.

¹² Ontario Ministry of Transportation, *Press Release: McGuinty Government Action Plan for Rapid Transit Will Move the Economy Forward*, (Toronto, June 15, 2007).

¹³ Government of Québec, *Québec and Climate Change, a Challenge for the Future. Action Plan 2006-2012* (Québec, 2008)

¹⁴ American Public Transportation Association, *Public Transportation Takes Us There*
<http://www.publictransportation.org/takesusthere/>

¹⁵ Canadian Chamber of Commerce, *Strengthening Canada's Urban Public Transit Systems* (Ottawa, 2002).

Likewise, a knowledge-based economy makes it increasingly important to get the right workers to the right places efficiently. Transit increases the efficiency of the labour market by getting workers where they need to go.¹⁶

Transit-oriented development can also increase the property values of both commercial and residential properties. In Toronto, properties within 460 metres of a rapid transit station have a 15 per cent higher value.¹⁷

- *Health benefits.*
Decreasing reliance on the automobile and decreased congestion and emissions can have health benefits for all Canadians. Since 2003 Ontario's GHG emissions from cars have been reduced by an estimated 350,000 tonnes.¹⁸

¹⁶ Board of Trade of Metropolitan Montreal, *Public Transit: A Powerful Economic-development Engine for the Metropolitan Montreal Region* (Montreal, 2004).

¹⁷ Ibid.

¹⁸ Ontario Ministry of Transportation, *Press Release: Gas Tax Fuels Better Public Transit* (Toronto, March 6, 2009).

Looking Ahead: Expansion of Urban Transit

The transit investments made to date have produced direct and indirect impacts that have begun to pay off and will continue to do so into the future. But recent successes of increased investments have spawned even greater demand for transit services. Capacity is being reached in some systems, and they must improve and expand operations in order to accommodate growing populations and growing economies. Smaller communities that may not yet have transit systems see its benefits and are exploring the addition of new services. Municipal plans predicated on environmental sustainability are building on transit services to help meet such objectives.

There continues to be a strong need for all levels of government to support urban transit. However, transit projects continue to compete with other infrastructure investment needs for funding across all levels of government. The provincial members of the Task Force strongly support greater federal investment in transit, including a long-term federal funding program dedicated to transit. For its part, the federal government is currently providing more funding for transit than ever before, having increased funding from about zero at the beginning of the decade to approximately \$1 billion in fiscal year 2008/9; at the same time federal funding is based on strict respect for jurisdiction.

Urban Transportation Task Force members identified a wide variety of transit projects being planned in their jurisdictions over the coming years. As described in the following paragraphs, many billions of dollars in total funding will be required for these projects.

Ontario is committed to developing liveable communities that provide a balance of transportation options for travelling around the Greater Toronto and Hamilton Area (GTHA) conveniently, comfortably, and safely. With a current population of about six million people, the region is projected to grow to 8.6 million by the year 2031.¹⁹

To plan for this growth, an ambitious 25-year Regional Transportation Plan (RTP) has been developed to guide future transportation investment in the GTHA. It will ensure transportation planning is integrated for local transit systems, GO Transit, major roads, and new transit infrastructure. Connections between different modes of transportation and across jurisdictions will be seamless, and public transit will compete effectively with the automobile as a transportation option. Implementation of the plan will reduce congestion, improve air quality, and support sustainable urban development.

More than 1200 kms of new rapid transit lines are planned, which includes subway expansion, express and regional rail service, and regional rapid transit (e.g., light rail and bus rapid transit). Upon implementation of the plan, 80% of residents in the region will live within 2 kms of rapid transit.

Priority will be placed on improving transit connections to Pearson Airport and Toronto's Union Station – two of the province's most significant transportation hubs. Connectivity to Pearson Airport by rapid transit will be available from all directions. Union Station will be expanded and

¹⁹ Ontario Ministry of Public Infrastructure Renewal, *Places to Grow: Growth Plan for the Greater Golden Horseshoe* (Toronto, 2006).

revitalized at a cost of \$640 million to ensure greater capacity and seamless connections among transportation modes.

Travel across the GTHA will be more convenient for transit users through the implementation of advanced technology. An integrated fare collection system will allow commuters to travel on public transit from Oshawa to Hamilton. Future expansion within Ottawa will also include integrated measures.

Projects proposed in the Toronto-Hamilton Regional Transportation Plan are estimated to cost about \$2 billion annually over the next 25 years. Ontario has already committed an initial investment of \$11.5 billion to implement the plan. A further \$6 billion contribution from the federal government has also been requested.

In April 2009 Ontario announced \$9 billion in provincial funding for the implementation of major transit infrastructure projects across the Greater Toronto and Hamilton Area. Rapid transit projects involve the construction, rehabilitation, and expansion of light rail and bus rapid transit corridors identified as priorities in the Regional Transportation Plan, including the construction of a 30-kilometre, east-west rapid transit line through central Toronto to Pearson Airport, a 23-kilometre light rail line running east-west at the northern limits of the city of Toronto, and major expansion of rapid bus services in York Region north of Toronto.

In **British Columbia**, funding of about \$14 billion is needed between now and 2020 for expansion plans including:

- four new and updated rapid transit lines serving communities across Metro Vancouver,
- new RapidBus BC lines,
- 1500 new clean technology buses,
- new rail cars for rapid transit,
- electronic gates and closed circuit cameras at rapid transit stations,
- smart-card system for rapid transit and bus users.

The province has committed \$4.75 billion to implement the plan, and is seeking an additional \$3.1 billion from the federal government.

The Provincial Transit Plan, in partnership with the federal and local governments have committed investments of \$2.9 billion showing a determination to move the whole plan into operational reality:

- Canada Line – ALRT from Vancouver to the airport and to Richmond,
- Hwy 1 Rapid Bus – Rapid bus service along Hwy 1 from Langley City to Burnaby and the Millennium ALRT Line,
- Hydrogen Bus Fleet – 20 new buses and operational facilities,
- other fleet expansion and transit infrastructure projects.

In **Alberta**, current needs for capital transit investment are projected to be nearly \$9 billion, with system expansion still the highest priority.

In **Saskatchewan**, the funding needs are currently expected to be over \$78 million until 2014, with expansion of infrastructure and maintenance and renewal of the fleet requiring nearly three-quarters of that total amount.

In **Manitoba**, the City of Winnipeg approved a transit improvements plan in February 2006 which included the following initiatives: new vehicles, including new buses using clean diesel and alternative fuels; Intelligent Transportation Systems such as SmartBus (new GPS-based Fleet Management System) and automated fare collection system; upgraded stops and stations with heated bus shelters and electronic bus departure displays at busy/major stops; on-street transit priority, including diamond lanes, queue jumps, and Transit Signal Priority; and new park and ride facilities. These initiatives are being implemented over the 2007 – 2012 time period.

In **New Brunswick**, funding of \$57 million is expected to be required.

In **Nova Scotia**, funding of \$225 million is expected to be required.

In **Québec**, transit agencies aim to increase service by 20% by 2012.

In 2008, the Government of Québec announced several measures demonstrating the importance of public transit. These include:

- \$236 million for the acquisition of 20 new commuter train locomotives,
- \$386 million for the purchase of 160 commuter train cars,
- \$1.2 billion for renewal of the cars of the first generation of the Montréal metro,
- \$750 million for the purchase of nearly 1,300 buses by 2014.

In total, for the 2009-2011 period, the forecast investments in public transit by the Ministère des Transports du Québec total nearly \$3.3 billion.

Also in 2008, the City of Montréal revealed a proposal for a transportation plan for the next 10 years. In addition to the introduction of a downtown streetcar line, the priorities that Montréal identified are an extension of the metro eastward, and then westward, a rail shuttle between downtown and the airport, improvement of the West Island commuter train service, the Train de l'Est, the rapid implementation of a vast network of dedicated bus and car pool lanes, deployment of a bikeway network, implementation of the Pedestrian Charter and measures to increase the safety of trips and, finally, make all metro stations accessible to persons with reduced mobility. These projects, for which the Quebec Government will be decisive, could represent \$5.1 billion in investments over 10 years.

Beyond Funding: Supporting Transit Through Effective Governance and Other Means

In addition to providing funding, other means to support transit are available to governments. Indeed, it seems clear that investments in transit cannot have an optimal impact if they are not accompanied by good governance, effective planning practices, and transportation demand management. As recommended in 2005, all orders of government must find ways to work together more effectively to improve transportation and mobility in urban areas by exploring opportunities for collaboration beyond funding partnerships.

Governance

Some provinces are introducing new governance models within their metropolitan areas. These models encourage region-wide coordination of land use and transportation planning and decision-making. It is argued that such practices by regional authorities can resolve inefficiencies and inequities in the provision of government services and will ultimately be favourable to transit.²⁰

In 1999, the Greater Vancouver Regional District and the Province of British Columbia created TransLink to provide a regional response to transportation issues in the lower mainland of BC. Now formally known as the South Coast British Columbia Transportation Authority, TransLink plans, finances, implements, and operates an integrated transportation system, with responsibility for major regional roads as well as public transit. Under a model introduced in 2007, TransLink has the opportunity to expand services beyond Metro Vancouver, based on municipal agreements. Metro Vancouver (formerly the Greater Vancouver Regional District) continues to be responsible for the long-term growth management plan and the air quality plan of the region. TransLink seeks input from Metro Vancouver on its long range transportation plan.²¹

In Alberta, the province has created a Capital Region Board involving Edmonton and the 24 surrounding municipalities. This board has been mandated to prepare a regional transit plan that will enhance mobility for the more than one million people living in the Greater Edmonton area. The province is also funding the Calgary Regional Partnership (CRP) transit initiative study and participates on the CRP transit technical committee. This committee has been exploring the opportunity for development of heavy-rail commuter transit within the region. These initiatives recognize the regional approach that is needed for planning, in order for municipalities to effectively deliver transit services.

Transit governance in Ontario has been constantly improved. In 1967 the Province of Ontario created GO Transit – a commuter rail and bus service for the Greater Toronto and Hamilton Area (GTHA) – and assumed full responsibility for GO's capital costs and operating deficit. In 1999 the ownership and operation of GO Transit was transferred from the province to the Greater Toronto Services Board (GTSB). It was determined at the time that transit should be the responsibility of the municipal sector. While the province continued to offset some previous

²⁰ Transportation Research Board, *Making Transit Work: Insight from Western Europe, Canada and the United States, Special Report 257* (Washington, DC: National Academy Press, 2001).

²¹ Trevor Wales, *The Road Less Travelled: TransLink's Improbable Journey from 1999 to 2008* (Burnaby: TransLink, 2008).

capital commitments, municipal governments through the GTSB became responsible for capital and operating costs for GO.

In 2002 the province reassumed responsibility for GO Transit, including its capital rehabilitation and replacement budget and operating deficit. Municipalities however were expected to contribute up to 1/3 of GO Transit's growth capital costs.

In 2006 the Ontario government established Metrolinx, whose board was composed mostly of municipal politicians, to enhance transportation coordination and integration throughout the GTHA. In 2008 Metrolinx delivered on a core element of its mandate by creating a Regional Transportation Plan for the next 25 years. Their Regional Transportation Plan conforms with the province's Growth Plan for the region.

In May 2009, the province passed the *Greater Toronto and Hamilton Area Transit Implementation Act, 2009*. This Act consolidated Metrolinx and GO Transit into a single organization named "Metrolinx," governed by a new provincially-appointed board of non-elected individuals with corporate and professional experience. The mandate of Metrolinx is to implement the transit projects in the Regional Transportation Plan, operate GO Transit, own and operate other regional transit services designated by the Minister, lead transit vehicle procurement for Ontario municipalities, and eventually oversee the "Presto" integrated fare card system.

Transportation Demand Management

To complement land use and transportation planning practices, implementation of transportation demand management (TDM) strategies can result in more efficient use of transportation resources.²² TDM is a general term for a wide range of policies, programs, services and products that influence how, why, when and where people travel to make travel behaviors more sustainable.²³ Urban Transportation Task Force members have shared information about TDM measures being used in their jurisdictions. The information compiled includes practices relating to: education, promotion and outreach; travel incentives and disincentives; sustainable travel options; and supportive land use practices, among others. It is evident from the extensive compilation that all jurisdictions in Canada have begun implementing transportation demand management in one form or another.

Key Challenges

There are a number of common challenges that face transit across Canada in the coming years.

The existing funding and delivery models of transit operations will need to change if local governments are to continue to contribute to transit services at existing levels. There may be some opportunity to increase the transit users' contribution to covering operational costs, but, on average, transit users in Canada already contribute a higher percentage of operating costs than in the USA and many countries in Europe. Local governments are required to find revenues to

²² Victoria Transport Policy Institute, *Online TDM Encyclopedia* (<http://www.vtppi.org/tdm/> , 2009).

²³ Transport Canada, *Transportation Demand Management Resource Centre* (<http://www.tc.gc.ca/programs/environment/UTSP/TDMResources.htm>, 2007).

support existing transit operations. Transit expansion will increase those requirements on local government and further challenge existing funding models.

The impacts on transit of a global recession are yet to be seen. Reduced property values, reduced fuel consumption, reduced GDP, increased unemployment, increased cost of living, and potential inflation will influence the demand, the cost, and the supply of transit services.

There is a pressing need to convert auto trips to transit trips. Transit trip time advantage over the auto during congested traffic periods is essential to encourage a switch to transit. Local ordinances, traffic management practices, TDM, and intelligent transportation systems that favour transit need to be implemented more aggressively.

Transit expansion plans are welcomed by the public, but there is much debate on how these investments will be financed. A single jurisdiction cannot achieve transit expansion without a coordinated funding partnership and stakeholder consensus. It is essential to align transit visions, planning goals, project justification, construction time-frames, and budgets. In the absence of funding assurances, it is difficult for transit authorities to adequately prepare their organization, generate community support, align transportation and transit networks, and ensure that transit demand is coordinated with transit supply. Long term funding envelopes are critical to transit expansion.

Conclusions, Principles, and Recommendations

Transit services and use have increased dramatically since the last report of the Task Force in 2005. All levels of government have substantially increased transit investment, and the federal government has become a significant investor in transit infrastructure. Ambitious and expensive transit expansion plans have been developed for Montreal, Toronto, and Vancouver and for hundreds of smaller communities across Canada. Much has been accomplished. However, much more remains to be done.

Canadian society has become one of the world's most urbanized, and this trend shows no sign of abating. Congestion is already impacting competitiveness and quality of life in our major cities, and it is clear that a more sustainable future will not allow for the same patterns of transport use that are in evidence today, particularly with regard to automobile use. Transit is critical to the functioning of Canada's big cities and is becoming an increasingly essential source of mobility in our smaller cities and communities.

No order of government is equipped to resolve these challenges alone. Collaboration is essential. To that end, a set of principles is offered and recommendations are made.

Principles

- Canada's future sustainable development – in terms of competitiveness, environmental stewardship, human health and social inclusion – will require fundamentally different patterns of transport use in small and large communities, in which particular priority is placed on collective forms of passenger transport, on active transport, on non-transport mobility options, and on urban goods movement, over and above the single-vehicle automobile;
- All orders of government should promote transit use, with a view to changing attitudes among transportation professionals and the public at large;
- All orders of government should continue to invest in sustainable transportation options for Canadians, including public transit, as well as active transportation, non-transport options to mobility, and technological applications that improve traffic flows;
- It should be recognized that the solution does not lie in the supply of transport alone. Governments must also actively promote changes to transportation demand by facilitating more sustainable urban growth and providing incentives to the use of more sustainable forms of transport.

Recommendations

- 1. All levels of government need to work together to provide adequate funding to support transit, while respecting jurisdictional responsibilities.**
- 2. Recent federal investments in public transit have supported national economic, social, and environmental priorities, and the federal government's continued commitment to provide sustainable, predictable, long-term funding for transit is welcomed.**

- 3. The movement of people and goods in urban areas must be improved through greater investment in transit, transportation demand management, improved planning processes, and the use of advanced technology.**
- 4. All governments should promote transit use by raising public awareness of its economic, social, and environmental benefits.**

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