

# **Recent Developments in Transit in Canadian Cities, 2010**

**REPORT OF THE URBAN TRANSIT TASK FORCE TO MINISTERS OF TRANSPORTATION**

Data provided by the Canadian Urban Transit Association and the Provincial and Federal Governments

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## INTRODUCTION

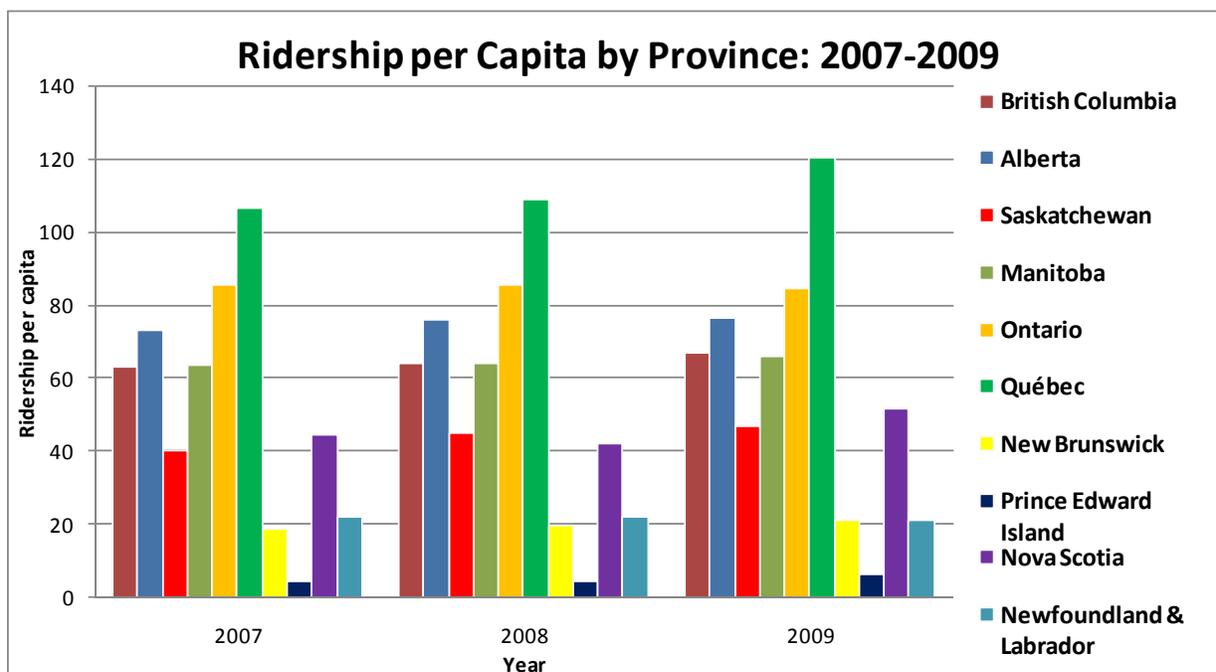
In 2009 the Urban Transit Task Force (UTTF) presented a report to Ministers of Transportation on the state of transit in Canada, based on data from 2006-07. That report updated an earlier study released in 2005. Last year's report presented a picture of increased government investment in transit, increased demand for transit, innovative governance models, and the funding challenges facing transit systems. At their meeting in 2009, Ministers asked to be updated regularly on the status of transit in Canada, and this brief report attempts to meet that instruction.

This report updates several key transit indicators, such as changes in ridership, transit service, fleet age, investments, and governance. The report also highlights recent innovations in transit service delivery. The report does not include data on specialized transit services, in which municipal and provincial governments invested \$363.7 million in 2008. The information presented here is based on the most recent available data from provincial and federal governments and from the Canadian Urban Transit Association's annual survey of 104 transit systems.

## TRANSIT RIDERSHIP IN CANADA

Transit ridership continues to increase across the country, but at a slower rate of growth than in the period 2005 to 2007. The previous report noted a 6.5% increase in ridership from 2005 to 2007. In 2009, Canada's transit ridership totalled 1.83 billion riders. This represents an increase of 3.4%, or 60 million riders, since 2007. Preliminary ridership figures for 2010 from Canada's largest urban transit systems indicate growth rates of 7.9% in January, 10.1% in February, and averaging 2.6% from March to June.

Figure 1 illustrates each province's ridership per capita, which is the average number of transit trips taken by a person in a given year. Last year's report noted that the Census Metropolitan Areas of Toronto, Montréal, and Vancouver account for 67% of total national ridership and a combined ridership of 1.07 billion passengers. Not surprisingly, Canada's biggest cities also have some of the highest trips per capita.



**Figure 1. Ridership per Capita by Province: 2007- 2009**

Table 1 shows each province's ridership (in millions of riders) between 2007 and 2009. Transit ridership increased in most provinces and across Canada as a whole.

<b>Ridership by Province (in Millions)</b>			
	2007	2008	2009*
British Columbia	216.7	224.3	234.4
Alberta	163.2	172.5	174.0
Saskatchewan	18.0	18.7	19.4
Manitoba	42.3	43.8	44.8
Ontario	779.7	796.3	782.9
Québec	517.6	542.2	541.2
New Brunswick	5.5	5.8	6.1
Prince Edward Island	0.1	0.2	0.3
Nova Scotia	19.5	20.3	19.7
Newfoundland & Labrador	3.3	3.3	3.1
Canada	1,765.9	1,827.4	1,825.9

**Table 1. Ridership by Province (Millions): 2007 - 2009**

\* Decreases in ridership in some provinces were due to the economic downturn and labour disruptions.

It is worth noting that this increase in transit ridership has not necessarily increased transit's share of travel in the biggest cities. Between 1996 and 2006, transit's modal share has been approximately 22% in both greater Montréal and Toronto and 16% in Vancouver. In those cities' core areas, transit's share rises to 34% in Toronto, 38% in Montréal, and 25% in Vancouver. But car use still predominates, especially in the urban/suburban agglomeration.

## **TRANSIT SERVICE**

The amount of transit service available in Canada continues to grow. The indicator "revenue vehicle hours per capita" is used to benchmark the total hours transit vehicles are in service per capita. This provides an indication of the amount of transit service available to the population in serviced areas.

From 2005 to 2007, service availability grew by 4% per year, rising from 1.70 to 1.84 hours per capita across Canada. In 2008, service availability also increased by 3.8%, to 1.91 hours per capita. Figure 2 illustrates each province's revenue vehicle hours per capita in 2007 and 2008.

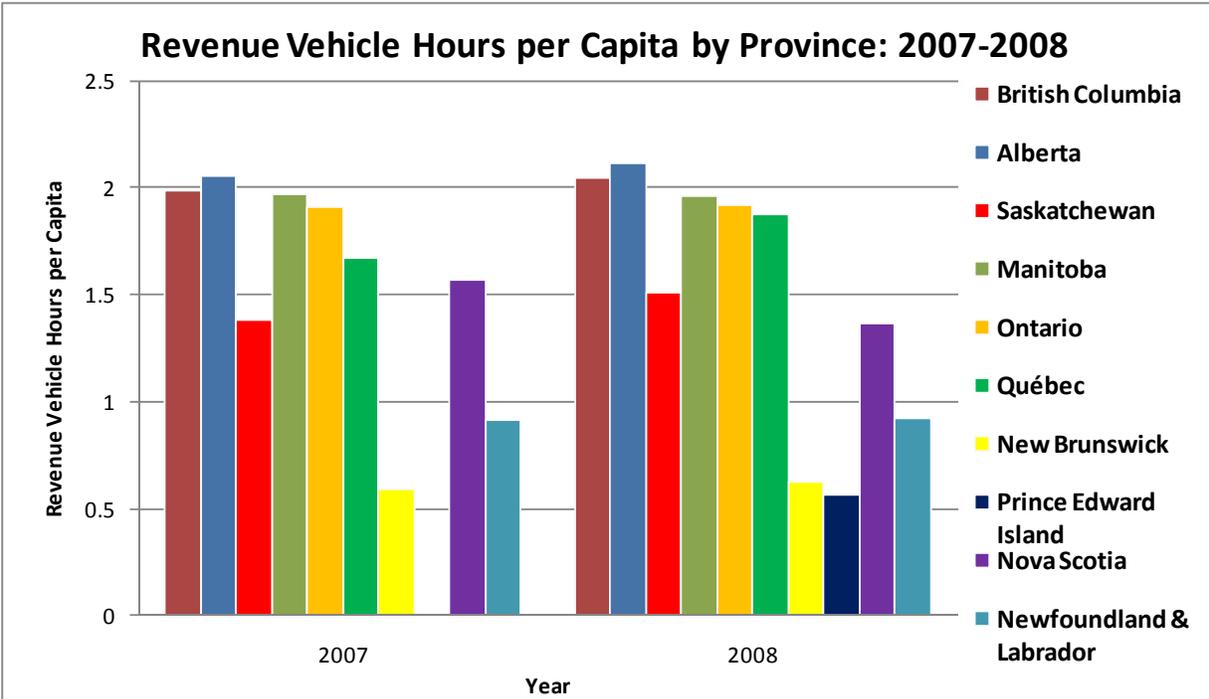


Figure 2. Revenue Vehicle Hours per Capita by Province: 2007-2008

## TRANSIT FLEET

Continued investment in transit rolling stock has reduced the average age of vehicles and maintenance costs, while increasing accessibility and service reliability. New technologies have decreased the environmental impacts of transit vehicles. Transit systems rely on several different types of vehicles to deliver their services, such as buses, subways, light rail vehicles (LRV), streetcars, commuter rail, and ferries.

### TRANSIT BUSES

Buses account for the largest mode of transit. In 2008, 15,222 transit buses operated in Canada, with an average age of 7.8 years. In 2007, the average age of a bus was 8.7 years. The following table presents the size and average age of each province's transit bus fleet in 2008.

**Transit Bus Fleet Size and Average Age**

	Bus Fleet Size	Average Age
British Columbia	2,588	8.0
Alberta	2,143	8.8
Saskatchewan	264	12.7
Manitoba	561	10.4
Ontario	5,942	6.5
Québec	3,212	8.3
New Brunswick	121	9.7
Prince Edward Island	17	10.3
Nova Scotia	315	6.5
Newfoundland & Labrador	59	13.0

Table 2. Transit Bus Fleet Size and Average Age (2008)

## **SUBWAY**

Subways operate in Canada's two largest cities, Montréal and Toronto. In 2008 the Société de transport de Montréal (STM) had 756 subway cars with an average age of 39.4 years. Those subway cars will be replaced in coming years. The Toronto Transit Commission (TTC) operated 678 subway cars with an average age of 17.3 years.

## **LIGHT RAIL TRANSIT (LRT)**

A number of transit systems in Canada operate Light Rail Transit (LRT) systems. In Alberta, the cities of Calgary and Edmonton operate a combined fleet of 221 LRT cars with an average age of 14.7 years. In Metro Vancouver, TransLink operates 210 LRT cars with an average age of 17.0 years. In Toronto, 31 Advanced Light Rail Transit cars operate on the Scarborough Rapid Transit line with an average age of 22.3 years. Ottawa also operates a fleet of three LRT cars on its O-Train service.

## **STREETCAR**

The Toronto Transit Commission is the only system in Canada to operate streetcars. It has a total fleet of 248 streetcars, averaging 26.4 years. These streetcars will be replaced with 204 low-floor vehicles at a cost of \$1.25 billion. The first new streetcars will appear in 2012 and all cars will be delivered by 2018.

## **COMMUTER RAIL**

Canada's three major metropolitan regions, Metro Vancouver, Greater Montréal, and Greater Toronto and Hamilton area, operate networks of commuter rail trains. GO Transit, the operational arm of Metrolinx, operates Canada's largest fleet of commuter rail cars in the Greater Toronto and Hamilton area. Its fleet has a total of 495 cars with an average age of 16.5 years. In Greater Montréal, the Agence métropolitaine de transport (AMT) operates a fleet of 205 commuter rail cars, with an average age of 23.6 years. In Metro Vancouver, TransLink's West Coast Express operates 37 commuter rail cars at an average age of 13.1 years.

## **FERRY**

Two transit systems in Canada operate scheduled passenger ferry service, Metro Transit Halifax and TransLink (Metro Vancouver). TransLink has two ferries with an average age of 32 years, while Metro Transit Halifax's three ferries have an average age of 27 years. The Société des traversiers du Québec, a Crown corporation, also operates two 39-year-old ferries for vehicles and passengers between Québec City and Lévis.

## **TRANSIT INVESTMENT**

The previous report noted exceptional levels of investment in transit by the provincial, municipal, and federal governments in the period 2005 to 2007.

From 2007 to 2008, Canadian provinces and municipalities increased their contribution to both operating and capital funding. One way to measure operating contributions by governments is to look at "net operating revenues," which exclude passenger fares from total operating revenues. In 2008 Canadian municipalities contributed 62.7% of net operating revenues, or a 4.2% increase from 2007. Provincial governments contributed 29% of net operating revenues, a 20% increase over the previous year.

In 2008 municipal capital contributions amounted to 18% of total capital costs, while provinces increased their capital contributions by 39.0%, representing 59% of total capital cost. Meanwhile, federal capital contributions as a percentage of total capital investment decreased from 25% to 20%.

### **PROVINCIAL OPERATING CONTRIBUTIONS TO TRANSIT SYSTEMS**

Transit funding varies greatly from one province to another. For example, the Atlantic provinces rely on fare revenues and municipal funding as the sole sources for operating funding. All other provinces have established programs to contribute to operating costs. The federal government does not provide funding to support transit operations.

Jurisdictions also differ on the parameters of their reporting periods. Most municipalities use the calendar year, while the federal and provincial governments use an April-March fiscal year. Despite these reporting differences, trends are clear.

In developing transit funding programs, provinces have preferred to provide capital contributions towards system expansion or renewal. But municipalities have applied pressure on provincial governments to also fund operating costs. As noted in the previous report, operating costs have increased 12.5% since 2005, with the cost of energy alone increasing 19.9% from 2005 to 2007. Provinces have responded to these concerns by increasing their operating contributions by around 20% between 2007 and 2008. The following table shows the breakdown of provincial operating contributions for 2007 and 2008.

**Provincial Operating Contributions (in Millions): 2007-2008**

	2007	2008
British Columbia	\$295.0	\$307.0
Alberta	\$3.6	\$3.6
Saskatchewan	\$0.6	\$0.5
Manitoba	\$25.3	\$26.1
Ontario	\$193.5	\$316.4
Québec	\$201.0	\$205.4
New Brunswick	\$0.0	\$0.0
Prince Edward Island	\$0.0	\$0.0
Nova Scotia	\$0.0	\$0.0
Newfoundland & Labrador	\$0.0	\$0.0
<b>Total Provincial Operating Contributions</b>	<b>\$719.0</b>	<b>\$859.0</b>

**Table 3. Provincial Operating Contributions by Province (Millions): 2007-2008**

## PROVINCIAL AND FEDERAL CAPITAL CONTRIBUTIONS TO TRANSIT SYSTEMS

Last year's report noted that provincial and federal capital contributions have grown substantially since 2005. This trend continued in 2008, with a 39.0% increase in provincial capital contributions. Federal capital contributions increased by 4.2% over 2007 levels (calculated by CUTA on the calendar year). Significant funding increases were seen in Nova Scotia, Ontario, Alberta, and British Columbia. The decline in Quebec was due to completion of work to extend the Montreal subway to Laval. Table 4 shows the provincial and federal capital contributions made in 2007 and 2008.

**Provincial and Federal Capital Contributions (in Millions): 2007-2008\***

	2007	2008
British Columbia	\$81.0	\$153.0
Alberta	\$127.8	\$270.2
Saskatchewan	\$0.0	\$0.0
Manitoba	\$4.0	\$4.0
Ontario	\$761.7	\$1,091.9
Québec	\$341.1	\$305.4
New Brunswick	\$0.0	\$0.0
Prince Edward Island	\$0.0	\$0.0
Nova Scotia	\$0.0	\$4.8
Newfoundland & Labrador	\$0.0	\$0.0
<b>Total Provincial Capital Contributions</b>	<b>\$1,315.6</b>	<b>\$1,829.3</b>
<b>Total Federal Capital Contributions</b>	<b>\$599.0</b>	<b>\$624.0</b>

**Table 4. Provincial and Federal Capital Contributions (Millions): 2007-2008**

\* Different accounting practices are used in jurisdictions to calculate provincial contributions, such as direct investment and debt service payments.

## MUNICIPAL OPERATING AND CAPITAL CONTRIBUTIONS TO TRANSIT SYSTEMS

Canadian municipalities provide substantial funding to transit operating costs. Compared to 2007, the total value of municipal contributions increased by 4.2% from \$1.77 billion to \$1.84 billion in 2008.

**Municipal Operating Contributions (in Millions): 2007-2008**

	2007	2008
British Columbia	\$290.0	\$272.0
Alberta	\$221.8	\$263.2
Saskatchewan	\$27.8	\$29.8
Manitoba	\$31.6	\$36.0
Ontario	\$681.2	\$673.5
Québec	\$477.9	\$521.9
New Brunswick	\$9.3	\$10.2
Prince Edward Island	\$0.0	\$0.8
Nova Scotia	\$25.4	\$29.7
Newfoundland & Labrador	\$5.5	\$7.2
<b>Total Municipal Operating Contributions</b>	<b>\$1,770.5</b>	<b>\$1,844.3</b>

**Table 5. Municipal Operating Contributions by Province (Millions): 2007-2008**

\* Includes TransLink operational expenditures funded from property, fuel and other taxes.

Municipal capital contributions in 2008 also increased by 27.7% over 2007, rising from \$828.3 million to \$1.06 billion.

**Municipal Capital Contributions (in Millions): 2007-2008**

	2007	2008
British Columbia*	\$475.0	\$513.0
Alberta	\$10.0	\$200.1
Saskatchewan	\$0.9	\$1.9
Manitoba	\$2.5	\$12.7
Ontario	\$306.8	\$251.8
Québec	\$23.9	\$70.0
New Brunswick	\$0.9	\$1.7
Prince Edward Island	\$0.0	\$0.0
Nova Scotia	\$6.5	\$6.2
Newfoundland & Labrador	\$2.7	\$1.7
<b>Total Municipal Capital Contributions</b>	<b>\$829.2</b>	<b>\$1,059.1</b>

**Table 6. Municipal Capital Contributions by Province (Millions): 2007-2008**

\* Includes TransLink capital expenditures funded from property, fuel, and other taxes.

## 2009 TRANSIT INVESTMENTS

In 2009, all levels of government continued to invest heavily in transit. In most jurisdictions, all three levels of government increased their capital and operating contributions compared to 2008. Some examples are described below.

### British Columbia

In fiscal 2009-10, the provincial, municipal, and federal governments made significant investments in capital projects through TransLink, including: completion of the Canada Line; planning of the Evergreen Line; purchase of additional SkyTrain vehicles; system upgrades; and other transit-supportive investments. Further, the provincial and municipal governments invested in new vehicles and supporting infrastructure outside Metro Vancouver. In total, provincial capital contributions were \$140 million. Municipal capital contributions (including TransLink expenditures) were \$475 million and federal capital contributions were \$168 million. The provincial government also invested in transit operations by providing \$315 million in direct and indirect provincial operating grants, while the municipal sector (including TransLink) invested \$265 million in operating funding.

### Alberta

As part of the province's plan to reduce greenhouse gas emissions, the \$2 billion Green Transit Incentives Program (GreenTRIP) provides one-time capital funding to support new and expanded public transit throughout Alberta. The program will provide a wider range of sustainable public transit alternatives for local, regional, and inter-municipal travel. The program will reduce the number of vehicles on Alberta roads and greenhouse gas emissions. To meet the needs of Alberta's two largest urban areas, \$800 million in funding will be available to the Edmonton region, \$800 million to Calgary and surrounding area, and \$400 million to other municipalities throughout Alberta.

### Saskatchewan

Seven cities in Saskatchewan have transit systems. The provincial government supported specialized transit in fiscal year 2008-09 by providing \$275,000 towards capital projects and \$2.3 million towards operating funding.

### Manitoba

In 2009, Manitoba received \$6.69 million from the federal government for transit capital funding through the gas tax fund. This instalment was the final portion of the \$12.71 million gas tax allocation negotiated with the federal government. The gas tax funding was distributed to Manitoba's four transit agencies over the period 2007 to 2009. The province also provided \$8.84 million towards capital projects, such as bus replacement, transit priority measures, bus rapid transit, and specialized transit. Through 50/50 funding commitments between municipalities and Manitoba, \$28.1 million was provided to transit systems for operating funding.

### Ontario

Ontario continued to provide dedicated transit funding of \$316 million to municipalities through the province's 2009-10 Gas Tax Program and \$197.3 million through both the 2009 Ontario Bus Replacement Program and year-end reinvestments in 2009-10. Additionally, Ontario provided Metrolinx/GO Transit with over \$1 billion in capital and operating funding for the provincial fiscal year 2009-10. The province has provided \$870 million for the Toronto-York Spadina Subway Extension project, and construction is underway. The province also committed \$744 million to support other transit initiatives across the Greater Toronto and Hamilton Area. As well, the province is providing up to \$416.3 million to the City of Toronto for the Toronto Transit Commission's replacement of 204 streetcars.

In spring 2009, the Ontario government announced over \$9.5 billion in funding for five of the highest-priority regional rapid transit projects identified in the Metrolinx Regional Transportation Plan, including four light rail transit projects in Toronto and a bus rapid transit project in York Region. The province and federal government announced funding commitments in July 2009 to support the revitalization of Union Station. Ontario has committed up to \$172 million through Metrolinx and the federal government is contributing up to \$164 million. Ontario is also delivering a dedicated air-rail link between Pearson International Airport and Union Station in time for the 2015 Pan American Games.

Ontario and the federal government have committed \$600 million each for light rail transit in Ottawa. In summer 2010, the province also announced \$300 million towards rapid transit in Waterloo Region, connecting the cities of Kitchener, Waterloo, and Cambridge. The federal government committed up to \$265 million.

### Québec

In Québec, the three levels of government provided substantial support to transit systems. In fiscal 2009-10, the province provided \$602.8 million towards capital costs. Québec also committed \$279.8 million for transit operating costs. Through the gas tax fund, the federal government provided Québec transit systems with \$220.3 million. In fiscal 2008-09, municipal governments committed \$112.1 million for capital costs and provided \$521.9 million for operating costs.

### New Brunswick

The province provides \$37 million in annual unconditional grants to Fredericton, Moncton, and Saint John for all types of municipal services, including transit. In 2007 and 2008, \$21 million in federal capital funding was transferred by the province for capital investments in transit. In addition, \$3.7 million was allocated to enhanced rural-to-urban transit, commuter ferries, and a new transit service in Miramichi.

### Nova Scotia

In Nova Scotia, transit costs are covered by passenger fares, municipal investments, and federal capital contributions. Through the gas tax fund, the federal government provided Metro Transit (Halifax), Transit Cape Breton, and Kings Transit with \$6.76 million for capital costs. These transit systems also received \$6.56 million in capital contributions and \$40.9 million in operating contributions from their municipal partners.

### Canada

Federal investments in public transit have greatly increased since the beginning of the decade, with over \$5 billion in federal funding invested in transit infrastructure since 2000-01. In fiscal 2008-09, total federal investments in transit amounted to \$1 billion. Federal funding is provided through various mechanisms, all of which emphasize respect for the primary provincial and municipal jurisdiction over public transit. In 2008-09, over 30 per cent of the transfer of federal gas tax funds to municipalities (\$285 million) was allocated to public transit. Cities such as Toronto and Vancouver have allocated all of their gas tax fund allotments to public transit projects.

Various funding transfers that have targeted transit include the \$400 million Public Transit Fund in 2006, the \$900 million Public Transit Capital Trust 2006, and the \$500 million Public Transit Capital Trust 2008. Transit has also been eligible for funding under the \$33 billion Building Canada Plan, and the \$4 billion Infrastructure Stimulus Fund. Under the Infrastructure Stimulus Fund, the federal government has committed more than \$255.8 million towards public and regional transit infrastructure.

## **TRANSIT GOVERNANCE**

Good transit governance ensures that investments are delivered efficiently and in a timely manner. The 2009 UTTF report discussed the regional governance models implemented by TransLink in British Columbia, the Capital Region Board in Alberta, and Metrolinx in Ontario. These authorities encourage region-wide coordination of land-use and transportation planning and decision-making.

In Québec, the Agence Métropolitaine de Transport (AMT) was created in 1995 and reports to the Ministry of Transportation of Québec. Its mission is to increase public transit services and improve the efficiency of people's mobility within the Greater Montréal Region, the city of Saint-Jérôme, and of the Kahnawake Indian Reserve. The AMT board of directors is composed of seven members, four of whom are nominated by the government and three by the Communauté métropolitaine de Montréal. The President is nominated from the board of directors by the provincial government.

Since publication of the previous report, Alberta has approved the regional land use and inter-municipal transit network plans developed by the Capital Region Board, comprising Edmonton and 24 surrounding municipalities. The transit governance structure identifies a Regional Transit Committee to oversee high-level activities, such as long-range planning, funding advocacy, and regional branding. Responsibility for the day-to-day provision of transit service remains with the local jurisdictions. Communities in and around Banff National Park have applied to the province to form a regional services commission to introduce new transit services and enhance existing ones. The Calgary Regional Partnership represents several municipalities in the Calgary region, voluntarily working on land use and transit plans which will be reviewed by the province. This Partnership is considering a regional transit board or commission to oversee transit service.

## **INNOVATIVE TRANSIT SERVICE DELIVERY**

Several transit systems across Canada are using innovative techniques to deliver transit service. Innovations in service delivery can make transit a more attractive alternative to using a car. Joint procurement and public-private partnerships can provide taxpayers better value for their money, while innovative intelligent transportation systems can result in better operations and timely information for riders.

### **JOINT PROCUREMENT**

The joint procurement process can be characterized as a group of transit systems that purchase goods and/or services as a single entity to stimulate competitive interest and pricing. A number of joint procurements showed innovation.

#### **Vehicles**

The joint procurement of transit vehicles is the most common and oldest practice of joint procurement in the industry. Within the province of Québec, all buses purchased by transport authorities are purchased in this way.

In Ontario, Metrolinx offers a joint procurement of transit buses to transit systems. Since 2007, 400 buses have been purchased through this initiative. In 2008, the joint procurement achieved a cost saving of approximately \$18,700 per bus (5% cost saving), and up to \$56,300 per bus (16.5% cost saving) when U.S. prices were adjusted for exchange rate fluctuations.

#### **Fuel**

In the absence of a market for biodiesel, the Société de transport de Montréal (STM) and other transit systems in Québec interested in the purchase of biodiesel created a bulk purchase of the fuel. This process created a market for biodiesel in the province at a competitive rate.

#### **Intelligent Transportation Systems**

Recently, four smaller transit systems in Québec joined together to issue a RFP for the supply of computer-aided dispatch and automated vehicle location systems. This process has created interest among manufacturers that otherwise would not have bid for individual system contracts.

#### **Smart Cards**

Smart card systems have been developed and implemented across numerous transit systems in Canada's largest metropolitan regions. In Ontario, the PRESTO card has been launched in some transit systems in the Greater Toronto and Hamilton Area. This integrated smart card allows transit riders to travel seamlessly across transit systems. The PRESTO card will be fully implemented on GO Transit and nine transit systems across the Greater Toronto and Hamilton Area. The city of Ottawa's transit system, OC Transpo, could see the PRESTO card rollout as early as 2012.

In 2009, Metro Vancouver started the procurement process for a Smart Card system that is expected to be operational by late 2012.

In Québec, the OPUS card was successfully launched in the Greater Montréal Area and in Québec City. Similar to Ontario's PRESTO card, OPUS is a contactless integrated fare system that permits transit customers to use a single card on six OPUS transit systems.

## **PUBLIC-PRIVATE PARTNERSHIPS**

A number of transit systems in Canada have entered into public-private partnerships to provide services to the public. Various models are used.

### **Design-Build-Finance-Maintain**

In Ontario, the design-build-finance-maintain model is being utilized for the maintenance and storage facility for the Sheppard East LRT project. The successful private sector proponent will be responsible for the construction, financing, and maintenance of the facility for the duration of the concession. Ownership of the facility and operation of the transit-related activities will remain public (Metrolinx).

### **Design-Build-Finance-Operate**

In British Columbia, a public-private partnership was used to construct the Canada Line, which links downtown Vancouver with Richmond and the Vancouver International Airport. The private sector partner contributed to construction costs and is responsible for the line's operating and maintenance costs. A performance-based contract also requires the private sector partner to comply with service standards, such as frequency, hours of operation, reliability, and comfort. Ownership of the Canada Line remains public, with TransLink controlling fares and safety.

### **Operate – Maintain**

The operate-maintain partnership is the most common type of partnership between the public and private sectors for the delivery of transit services. This type of partnership is used in the Region of York, a major suburban region of the Greater Toronto and Hamilton Area. Seven different private contractors operate, maintain, and store the fleet of transit vehicles owned by York Region Transit.

### **Own – Operate – Maintain**

The own-operate-maintain partnership exists at a number of transit systems, primarily in smaller communities. Since fall 2005, Charlottetown has been providing transit service to its citizens through a local contractor. The contractor is responsible for the vehicles, their maintenance, and the vehicles' operators. The Conseils intermunicipal de transport (CIT) link communities located on the North and South Shores of the Greater Montréal Region with each other and the cities of Montréal, Laval, and Longueuil. Services are provided under contract between the CITs and a private operator. Numerous private operators are responsible for the staff, vehicles, and vehicle maintenance.

## **INTELLIGENT TRANSPORTATION SYSTEMS (ITS)**

Intelligent transportation systems are becoming more and more common within transit systems. These systems provide valuable information for day-to-day operations, but are also key for new traveller information systems.

### **Computer-Aided Dispatch (CAD) and Automated Vehicle Location (AVL) Systems**

Computer Aided Dispatch and Automated Vehicle Location systems provide transit systems with real-time location of their vehicles, priority screening of operator calls, and network on-time performance, among other features. They are also the backbone for many traveller information systems that provide real-time information to customers. The Société de transport de l'Outaouais (Gatineau), the Société de transport de Laval, Winnipeg Transit, and TransLink (Metro Vancouver) are examples of transit systems operating CAD/AVL systems.

### **Traveller Information Systems**

#### *Next Stop Audio Visual Announcements*

A number of transit systems have started to offer next stop audio and visual information on board their transit vehicles. Examples of transit systems offering this information are: TransLink (Metro Vancouver), TTC (Toronto), York Region VIVA Service, and Winnipeg Transit.

*Real-time information at transit stops*

Real-time information at transit stops has been deployed in a number of transit systems in Canada. These information panels provide real-time arrival information for transit routes and can also communicate service disruption information to transit customers. The Société de transport de l'Outaouais (Gatineau), the Société de transport de Laval, the TTC (Toronto), and Metro Transit Halifax are examples of transit systems offering customers real-time information at transit stops. Vancouver's TransLink is also examining real-time pilot projects.

*Smartphone Applications*

Some transit systems have made real-time information available as applications for smartphones and through short message service (SMS) text messaging systems. Both the Société de transport de Laval (STL) and Winnipeg Transit have developed these technologies. The STL's Synchro application is available to iPhone users to view next stop arrival information, closest transit stop to their present location, and route detours. Winnipeg Transit information is available via SMS text messaging. Next arrival information and locations of the closest transit stops are among the available features.

**CONCLUSION**

The thrust of developments since 2003-07 continued in 2008-09, with growth in ridership and service, upgrades of fleets, and greater investments in capital and operating costs by all levels of government. Current expansion projects for public transit systems will contribute to healthy ridership gains in the upcoming years, as suggested by preliminary ridership numbers for 2010 from Canada's 10 biggest transit systems. Transit agencies are using technology and pooling their buying power to improve service and reduce costs.

But some signs of slower growth were also evident in the latest data. When full data becomes available for 2009 and 2010, we can expect to see slower growth in transit as fiscal restraint replaces fiscal stimulus as government policy across the country. The end of federal infrastructure and stimulus programs and of the transit trust funding of 2006 and 2008 may have a significant effect. The Urban Transit Task Force will continue to monitor and report on the status of transit as developments occur.