Transportation Association of Canada

Transportation Funding and Governance in Canada's Large Metropolitan Areas: An Inventory of Current Practice

August 2014

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ISBN 978-1-55187-546-0

TAC REPORT DOCUMENTATION FORM

Title and Subtitle		
Transportation Funding and Governance in Canada's Large Metropolitan Areas: An Inventory of Current Practice		
Report Date	**Coordinating Agency and Address**	**ITRD No.**
August 2014	Transportation Association of Canada 2323 St. Laurent Boulevard Ottawa, ON K1G 4J8	

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Abstract

Canada's metropolitan regions have developed transportation governance and funding frameworks in response to their unique historical, geographical and jurisdictional contexts. Local conditions such as transportation demand, geography, growth rates, legislation and regulations vary considerably. However, a common theme among metropolitan areas is an ongoing effort to adapt transportation governance and financial arrangements to address current and future transportation needs in a fair and sustainable manner.

The Transportation Association of Canada (TAC) has previously examined regional transportation financing in two separate studies. The 2002 TAC briefing entitled *Innovations in Financing Urban Transportation* examined transportation financing and governance frameworks in Vancouver, Calgary, Edmonton and Montréal. This was followed in 2012 by the briefing *Sustainable Funding for Urban/Regional Transportation in Canada*, which assessed needs and examined a range of funding sources being used.

The focus of this study is to inventory the main elements, successes and challenges of urban transportation funding and governance in Canada's largest metropolitan regions: Greater Vancouver, City of Calgary and region, City of Edmonton and region, City of Winnipeg and region, the Greater Toronto and Hamilton Area (GTHA), the Metro Montréal region and the Halifax Regional Municipality. This inventory will help readers understand how transportation infrastructure and operational decisions are planned and funded, and who the primary decision makers are. In addition, successes and challenges will help other Canadian municipalities learn about the advantages and disadvantages of each system, and which components might be applicable to their situation.

Keywords

Economics and Administration

- Administration
- Financing
- Investment
- Local Authority
- Network (Traffic)
- State of the Art Report
- Sustainability
- Urban Area

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ACKNOWLEDGEMENTS

This project was undertaken with funding provided by several agencies. TAC gratefully acknowledges the following project funding partners for their contribution to the project:

Agence métropolitaine de transport

Alberta Transportation

Halifax Regional Municipality

Metrolinx

Ministère des Transports du Québec

TransLink

Ville de Montréal

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SURVEY PARTICIPANTS

We were fortunate to receive the participation of over 45 senior transportation leaders representing all major travel modes, from the major metropolitan regions of Canada who gave their time to be interviewed at length on transportation funding and governance. We would like to thank them very much for their involvement in this project. The regions were Greater Vancouver, City of Calgary, City of Edmonton, City of Winnipeg, the Greater Toronto and Hamilton Area, the Metro Montréal Region and the Halifax Regional Municipality. Appendix A includes the standard base questions for the interviews, and Appendix B includes a complete list of interviewees.

EXECUTIVE SUMMARY

INTRODUCTION

Canada's metropolitan regions have developed transportation governance and funding frameworks in response to their unique historical, geographical and jurisdictional contexts. Local conditions such as transportation demand, geography, growth rates, legislation and regulations vary considerably. However, a common theme among metropolitan areas is an ongoing effort to adapt transportation governance and financial arrangements to address current and future transportation needs in a fair and sustainable manner. Multiple jurisdictions and substantial transportation investment needs are just two of the challenges they face.

The Transportation Association of Canada (TAC) has previously examined regional transportation financing in two separate studies. The 2002 TAC briefing entitled *Innovations in Financing Urban Transportation* examined transportation financing and governance frameworks in Vancouver, Calgary, Edmonton and Montréal. This was followed in 2012 by the briefing *Sustainable Funding for Urban/Regional Transportation in Canada*, which assessed needs and examined a range of funding sources being used. The latter document noted that sustainable funding is "a stable mix of reliable funding sources yielding sufficient and dependable revenue streams, providing incentives to use the transportation systems more efficiently, and especially use alternative modes (e.g. walking, cycling and transit), and distributing funding obligations equitably among users and other beneficiaries of the system."

PURPOSE

The focus of this study is to inventory the main elements, successes and challenges of urban transportation funding and governance in Canada's largest metropolitan regions: Greater Vancouver, City of Calgary and region, City of Edmonton and region, City of Winnipeg and region, the Greater Toronto and Hamilton Area (GTHA), the Metro Montréal region and the Halifax Regional Municipality. This inventory will help readers understand how transportation infrastructure and operational decisions are planned and funded, and who the primary decision makers are. In addition, successes and challenges will help other Canadian municipalities learn about the advantages and disadvantages of each system, and which components might be applicable to their situation.

METHODOLOGY

The project approach was to first build a base of information through a comprehensive literature search of governance and funding practices related to all transportation modes (i.e. principally road, transit, air and marine, and to a limited extent active modes such as walking and cycling) in the major metropolitan areas in Canada as defined in this study: Halifax, Montréal, GTHA, Winnipeg, Calgary, Edmonton and Vancouver. This enabled an inventory of relevant information on governance structures of various transportation modes, funding mechanisms, distribution and allocation of revenues and resources, and where possible, the motivating and historical factors for the development of specific funding and governance structures.

After the literature search, a questionnaire (Appendix A) was developed for interviews with more than 45 municipal and provincial representatives, transportation policy makers and representatives of key

stakeholder groups (Appendix B). Interviewees have been active in the development of existing regional transportation authorities in Metro Montréal, GTHA and Vancouver, and in the governance and funding of transportation modes in the other major metropolitan areas included in this study: Halifax, Edmonton, Calgary and Winnipeg.

As much as possible, the interviews were completed in person. Experienced transportation professionals on the consulting team were able to conduct the interviews in their own regions, allowing them to ask more in-depth questions and provide greater insight into decision-making processes. The final step was to synthesize the results of the literature search and interviews in this report and its associated briefing document.

TRENDS

Large multimodal transportation organizations have been created in the major metropolitan areas of Vancouver, Montréal and Toronto.

TransLink in Metro Vancouver has the broadest mandate, with responsibility for the operations and supporting infrastructure of many transportation modes across 21 municipalities, an electoral area and the Tsawwassen First Nation. It is responsible for: bus and rail transit, commuter rail and ferries; 2,300 lane-kilometres of major regional roadways (the Major Road Network, or MRN); five bridges (Golden Ears Bridge, Pattullo Bridge, Knight Street Bridge, Westham Island Bridge and the Canada Line pedestrian and bike bridge); cycling and active transportation modes; and transportation demand management (TDM) measures. Of the three large transportation agencies surveyed, TransLink has the most comprehensive toolbox of funding sources in Canada; current sources include fuel taxes, property taxes, parking sales taxes, bridge tolls and hydro levies, and potential sources that have not been implemented including benefiting area taxes and vehicle levies.

Metrolinx in the GTHA has principally focused on the development and operation of the GO Transit commuter bus and rail services, development of the UP Express rail service, implementation of the PRESTO fare card, and delivery of key regional rapid transit infrastructure including the Eglinton Crosstown LRT and the VIVA rapidways. The Agence métropolitaine de transport (AMT) in Metro Montréal is the umbrella organization overseeing all public transportation services and initiatives and does not address roads, bridges or TDM programs. The AMT is responsible for the operation of the region's commuter rail and express bus service; collecting and generating funds (i.e. fuel taxes) from each respective municipality and redistributing these funds; overseeing and developing major transit-related infrastructure; and guiding the overall integration, coordination and planning of regional transportation plans and strategies.

However, these and the other studied transportation organizations are struggling to try to find sufficient capital funds both to manage existing and aging assets, and to build new infrastructure. In most cases they also lack adequate funding for the operating and maintenance costs of proposed capital improvements and desired service enhancements. In addition, in all metropolitan areas studied in this report, new or enhanced models for transportation governance and/or funding are being developed and/or reviewed that could be more effective and efficient, improve the integration of transportation modes, provide sustainable funding, maintain a state of good repair of existing assets, meet future needs, and receive the support of elected officials and the general public.

In Metro Vancouver, the Mayors' Council (associated with TransLink) is working with the British Columbia government to ensure the governance structure will achieve the above-noted objectives. It is also working to obtain support from the province for more sustainable and increased funding sources that it can use to build transit and transportation infrastructure, fund its significant maintenance and operating costs, and rebuild aging infrastructure such as the Pattullo Bridge.[1]

New transportation or transit governance models have been, or are now being, pursued in other areas:

- The Regional Municipality of Halifax has examined the benefits and disadvantages of a multimodal regional transportation agency, and has made no decision yet.
- The City of Winnipeg is in the early stages of working with the province to examine the feasibility of creating a transportation authority that could provide transportation governance and funding for transit and other modes in the City of Winnipeg area.[2]
- In the fall of 2013, the Calgary Regional Partnership will examine potential governance and funding models for enhancing the coordination and growth of the transit network in communities around the City of Calgary, and for improving coordination of this service with the City of Calgary.[3]
- The Capital Region in Edmonton is now working with its municipal partners to examine the feasibility of creating a regional transit commission, and expects to complete this work in 2014.

FINDINGS: GOVERNANCE AND PROCESS

Following are some of the study's key findings on governance and process:

- Difficulties and tensions can arise when federally regulated agencies (e.g. port and airport authorities) with unelected board members decide to fund some of their costs through measures (e.g. airport improvement fees) that do not have general public support. These authorities do consult with stakeholders including local and regional governments that have their own environmental or transportation objectives and do not have the ability to approve or reject such revenue measures.
- Both Metro Vancouver and the City of Toronto have transit boards with unelected members (e.g. four members of the Toronto Transit Commission Board and the entire Board of TransLink) who offer experience and skills beyond those of political representatives and who can moderate parochial voting. However, in Metro Vancouver this governance model has received public and stakeholder criticism in that the TransLink Board, composed solely of unelected representatives, is approving proposed funding mechanisms and plans for regional transportation improvements that significantly impact local municipalities. The current TransLink governance model includes a Mayors' Council that meets every month but can only refuse or accept the TransLink Board's plans and budgets, not modify them.

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[1] www.metro604.com/2011/05/19/translink-renews-commitment-to-rebuilt-pattullo-by-2020

[2] Interview with Winnipeg Transit staff, May 2013

[3] Interview with Calgary Regional Partnership staff, June 2103

- There are ongoing challenges in addressing transportation governance in the Metro Montréal region, which includes 82 municipalities, 14 regional districts and 5 geographical areas plus the AMT, many operating entities, the federal government (e.g. Federal Bridge Corp.) and the Ministère des Transports du Québec. Significant issues need to be resolved to provide sustainable funding for needed transit, road and bridge improvements, including the approvals needed for new revenue sources.
- Many stakeholders (e.g. chambers of commerce, boards of trade, universities, gateway councils) are becoming more involved in the discussion of transportation governance and funding issues. Some have significant concerns about the growing impacts of traffic congestion on residents and businesses, and strongly support transportation improvements that can move people reliably and quickly, such as enhanced bus and rail rapid transit systems. Some are strongly interested in enhancing the directness and reliability of goods movement through better highway and bridge connections to ports, airports and trucking centres.

FINDINGS: FUNDING

Following are some of the study's key findings on funding:

- There is extensive use of property taxes to fund transportation capital and operating expenditures in all areas studied. Most transit systems outside the Vancouver and Montréal regions (i.e. those in Winnipeg, GTHA, Edmonton, Calgary and Halifax) depend almost totally on fares and property tax revenues, with some smaller contributions from advertising revenues and charter activities. Metro Vancouver uses a parking tax, a hydro tax and a fuel tax, while Metro Montréal uses a gas tax and car registration charges to supplement traditional funding sources.
- Transit operating revenue-cost ratios have declined in recent years in several areas, partly due to the fact that fare structures include the social cost of transit fare subsidies for youths, students, seniors and low-income individuals. In addition, there are the high costs of providing transit service to lower-density suburban developments far from downtown. These issues impact the availability of funding for transit service improvements.[4]
- Tolls and fuel taxes can prove to be unsustainable sources of funding for transportation. Fuel taxes are susceptible to declines due to more fuel-efficient vehicles, declining car ownership, and consumers purchasing fuel outside the boundaries of the taxing jurisdiction. In addition, tolls implemented on one bridge (e.g. Golden Ears and Port Mann bridges in Metro Vancouver) can divert travelers to use free bridges instead.[5]
- All studied areas are dependent upon both provincial and federal government programs and grants to offset many capital costs, especially for major rapid transit lines (e.g. Canada Line and Evergreen Line in Metro Vancouver, proposed SE/West LRT line in Edmonton, future bus rapid transit extensions in Winnipeg) and bridge upgrades/replacements (e.g. Champlain Bridge in Metro Montréal). Federal funding, including through a public-private partnership, was

[4] Interviews with transit system staff members

[5] TransLink business plans and budget on its website

instrumental in building the Canada Line from Vancouver to Richmond and the Vancouver International Airport for the 2010 Winter Olympics.[6]

- Some studied areas (e.g. City of Toronto) are drawing down capital reserves for transportation investments, and borrowing to keep property taxes low.[7]

INNOVATIONS AND INITIATIVES: GOVERNANCE AND PROCESS

Following are some of the key identified innovations and initiatives related to governance and process:

- Many transportation agencies are preparing medium- and long-term strategic and transportation network plans (e.g. AMT's *Vision 2020*, TransLink's *2040 Vision*, and Alberta Transportation's 50-year planning horizon), as well as detailed short-term and rolling one- to three-year plans to ensure investments and management of their transportation systems are more efficient, effective and customer-focused. Interviewees in the above-noted areas indicated that plans have enhanced the focus on transportation governance and funding, and gained the support of the public and important stakeholders.[8]
- The City of Edmonton has an internal governance structure that provides Computer Systems, Human Resources, Fleet Management, Materials Management, Legal and Communications functions as central services shared by all city departments including Edmonton Transit. This has been done to add value and special expertise to these services, and to provide greater efficiency and effectiveness in serving clients. Staff indicated that the shared service concept has had generally good success, although mixed in some departments, and is being evaluated to determine how it can be enhanced.
- The BC Ministry of Transportation and Infrastructure (MOTI) provides strong support for the growth of transit services through a crown corporation. BC Transit provides 46% of operating costs (the highest provincial share in Canada) and significant capital investments to over 80 transit systems including those in Mission, Whistler and Abbotsford on the periphery of Metro Vancouver. MOTI staff indicated that they implicitly design roads and structures in regions such as Metro Vancouver with transit in mind, for example providing special accesses and transit priority measures such as dedicated transit lanes on highways.[9]
- Metro Vancouver coordinates regional land use and utility infrastructure planning, and TransLink coordinates transit system funding and operations; the two agencies work closely to integrate land use planning and transit investments. The same can be said about agencies in Metro Montréal, namely the Ministère des Transports du Québec, AMT, Communauté métropolitaine de Montréal (CMM), City of Montréal and other municipalities, and numerous transit operators. Interviews found that efforts to integrate transit investment and land use planning in Metro Montréal and Metro Vancouver have contributed to success in increasing

[6] Interviews with former senior TransLink executives, May 2013

[7] Interview with Stephen Buckley, General Manager of Transportation Services, City of Toronto, May 2013

[8] Interviews with TransLink and AMT officials, April-June 2013

[9] Interview with BC MOTI senior official, May 2013

transit ridership and mode shares, especially in primary travel corridors, town centres and key station areas.[10]

- In several studied areas, gateway councils have been formed (e.g. Metro Vancouver, Metro Toronto, Metro Halifax). These councils include broad representation from business, industry and government stakeholders including the Chamber of Commerce, Board of Trade, transit systems, airport and port authorities, and regional trucking associations. Transit system interviewees in these areas indicated that gateway councils have been relatively successful in improving the coordination of roads, transit, airports and ports for the improved movement of both people and goods, with benefits for economic development, employment and traffic congestion.

INNOVATIONS AND INITIATIVES: FUNDING

Following are some of the key identified innovations and initiatives related to funding:

- Port authorities such as Port Metro Vancouver have tapped a new source of revenue: an impact fee on municipalities that benefit from road investments made by the port. For example, Port Metro Vancouver has charged benefiting municipalities a fee to recover a portion of costs for improved road access to their lands (e.g. in the case of improvements made to Low Level Road in the City of North Vancouver).
- There is an increased emphasis on funding for asset management and state of good repair of capital assets, to optimize maintenance and operating expenditures and to extend the life of these capital assets (e.g. the City of Toronto spends 88% of its capital budget on these areas).[11]
- The City of Edmonton has created ongoing funding for neighborhood renewal through a tax levy that includes a specific amount targeted to maintain roads (including gutters, sidewalks and lights) properly and extend their life in residential and industrial neighborhoods, and to bring them back to their original design standard if rehabilitation is needed. This strategy has enabled the City to move away from relying on program grants by other orders of government that fluctuated and had no firm long-term assurance.
- The investment of $300 million in building a Canada Line station by the Vancouver airport authority has enhanced mobility for airport staff, airline employees and customers, and has provided a continuing stream of revenue from mixed-use, transit-oriented development (TOD) around the station site.[12] The transit mode share at the YVR has increased from 2% before Canada line to 17% today, and reduced parking demands from above capacity to within capacity.[13] Similarly, the Halifax Airport contributed to the cost of Halifax Metro BRT service and this has supported recent efforts to promote TOD development around the airport.

[10] Interviews with AMT and other transit funding, planning and operators in Metro Montréal, April-May 2013

[11] Interview with Steven Buckley, General Manager of Transportation Services, City of Toronto, May 2013

[12] Interview with senior YVR official, May 2013

[13] Information from YVR Airport Authority, September 2013

- Airport authorities in Canada have implemented a variety of financing sources to keep airline costs down and enhance the viability of their operations; these include landing fees, passenger fees, parking fees, on-site commercial and office developments, and the creation of consulting firms. These authorities are governed by private-sector boards with no municipal staff or elected officials, but with representatives nominated by municipalities, federal and provincial governments, and private-sector stakeholders such as boards of trade and chambers of commerce.
- Municipalities currently in the process of examining governance and/or funding options include the City of Winnipeg, Metro Montréal, City of Edmonton and the Capital Region Board in the Edmonton Region, Metrolinx and the Ontario government in Metro Toronto, TransLink and the Province of BC in Metro Vancouver, and the Calgary Regional Partnership.
- Some metropolitan transit agencies (e.g. Edmonton Transit System for Southwest LRT, Winnipeg Transit for Southeast BRT) are pursuing or reviewing public-private partnership strategies (i.e. design, build and finance) for major capital investments such as bus and rail rapid transit infrastructure. These strategies can help attract federal contributions, and transfer some key risks to the private sector.

Table 1 summarizes some of the transportation funding innovations and initiatives identified through this study.

Table 1. Funding Innovations and Initiatives in Major Metropolitan Areas

Funding Innovations and Initiatives	Metro Vancouver	Cities of Calgary and Edmonton and Regions	City of Winnipeg and Region	Greater Toronto and Hamilton Area	Metro Montréal	Halifax Regional Municipality
Use of public-private partnerships (P3) for transit and road infrastructure	To design, build and operate the Canada Line rapid transit line, TransLink pays concessionaire over time from savings from truncated bus routes and new revenue from ridership on Canada Line	For roadways in Calgary and Edmonton; Edmonton is pursuing a P3 model to build Southeast LRT		P3 used for roadways in Ontario; AFP being used for the Eglinton Crosstown LRT	P3 used for roadways in Quebec – Highways 25 and 30	
Consulting firm from expertise acquired at YVR adds to funding sources	InterVISTAS consulting company created by Vancouver Airport Authority					
Actively develop TOD guidelines and TOD developments at transit stations to raise ridership and revenues	TransLink has created guidelines and has had some success around Expo, Millennium and Canada Line SkyTrain stations	Some success in Calgary and limited success in Edmonton		Metrolinx has Mobility Hub guidelines and is pursuing; Ontario has transit-supportive land use guidelines	AMT has guidelines and is pursuing	
Commercial business area parking sales tax revenue	TransLink within its transportation service area, with revenue predominantly from downtown Vancouver					

Funding Innovations and Initiatives	Metro Vancouver	Cities of Calgary and Edmonton and Regions	City of Winnipeg and Region	Greater Toronto and Hamilton Area	Metro Montréal	Halifax Regional Municipality
Charge airline landing fees and airport improvement fees for customers	Vancouver International Airport	Edmonton and Calgary Airports	Winnipeg International Airport	Toronto Pearson International Airport	Montréal Trudeau International Airport	Halifax Stanfield International Airport
Transit development levies		Calgary charges levies in new development areas to recover some transit capital costs using transportation impact studies of both near and downstream costs; the City of Edmonton also does this but to a lesser extent				HRM has a special taxation area for transit tax; development charges to be extended to cover transit services and infrastructure in near future
Carbon tax	BC provincial government: $30 per tonne of CO_2 equivalent emissions, increasing by $5 per tonne from $25 per tonne imposed since July 2011; proceeds go to general revenue					
Improvement fees	Metro Vancouver Port Authority charges fees to adjacent municipalities that benefit from improvements on port					

Funding Innovations and Initiatives	Metro Vancouver	Cities of Calgary and Edmonton and Regions	City of Winnipeg and Region	Greater Toronto and Hamilton Area	Metro Montréal	Halifax Regional Municipality
	lands such as new or enhanced roads					
Purchase additional land around transit corridors and stations to raise revenues	TransLink has ability in its legislation but has not pursued due to restricted funding					
Hydro tax	TransLink receives transit revenues from $1.90 tax per month on hydro customers					
Toll roads and bridges	Port Mann and Golden Ears Bridges have tolls which are levied for 35 years and then bridges revert to TransLink ownership			Highway 407 is an electronic toll highway; tolls are also levied on many bridge crossings into the United States near the GTHA	Highways 25 and 30 are electronic toll highways	Tolls are the sole source of funding for the MacKay and Macdonald Bridges
Vehicle registration fee					Greater Montréal has tax of $45/vehicle	
Vary fares by time of day or trip length; provide loyalty discounts to customers who travel above assigned thresholds	TransLink has peak and off-peak and distance-based fares, and passes reward loyalty; added features with introduction of Compass electronic fare card by early 2014	Transit passes reward loyalty	Transit passes reward loyalty	PRESTO fare card used by all transit systems; fully implemented by 2016	OPUS card enables customers to have different kinds of fares	Charges higher fares for long-distance routes in communities outside Halifax-Dartmouth core

Funding Innovations and Initiatives	Metro Vancouver	Cities of Calgary and Edmonton and Regions	City of Winnipeg and Region	Greater Toronto and Hamilton Area	Metro Montréal	Halifax Regional Municipality
Examining alternative funding sources for transportation	TransLink has examined and evaluated a wide range of additional funding sources, with some preference for road pricing	The Calgary Regional Partnership is considering forming a regional transit agency; the Capital Region Board is examining the feasibility of a regional transit commission in 2013/2014	The City of Winnipeg is examining the feasibility of transportation authority, and studying new funding sources for transit and transportation as part of this work	Metrolinx has examined and evaluated new funding sources, recommending a 1% harmonized sales tax increase to generate $1.3 billion; a regional fuel tax of 5 cents/l to generate $330 million; a business parking levy on non-residential parking spaces to generate $350 million; and development charges to generate $100 million	Examining potential future sources such as a fuel tax, vehicle registration fee, parking tax; duties based on car size; and a congestion charge	Metro Transit's five-year plan recommended new fare media to increase ridership, parking levies, bridge tolls (now on two bridges: $1 cash fare each way or 80 cents with pass), value-capture taxes and fuel taxes

1.0 INTRODUCTION

1.1 BACKGROUND

Canada's metropolitan regions have developed transportation governance and funding frameworks in response to their unique historical, geographical and jurisdictional contexts. Local conditions such as transportation demand, geography, growth rates, legislation and regulations vary considerably. However, a common theme among metropolitan areas is an ongoing effort to adapt transportation governance and financial arrangements to address current and future transportation needs in a fair and sustainable manner. Multiple jurisdictions and substantial transportation investment needs are just two of the challenges they face.

The Transportation Association of Canada (TAC) has previously examined regional transportation financing in two separate studies. The 2002 TAC briefing entitled *Innovations in Financing Urban Transportation* examined transportation financing and governance frameworks in Vancouver, Calgary, Edmonton and Montréal. This was followed in 2012 by the briefing *Sustainable Funding for Urban/Regional Transportation in Canada*, which assessed needs and examined a range of funding sources being used. As noted in the latter document, sustainable funding is "a stable mix of reliable funding sources yielding sufficient and dependable revenue streams, providing incentives to use the transportation systems more efficiently, and especially use alternative modes (e.g. walking, cycling and transit), and distributing funding obligations equitably among users and other beneficiaries of the system."

1.2 PURPOSE AND METHODOLOGY

The focus of this study is to prepare an inventory of the main elements and best practices of urban transportation governance and funding in Canada's largest metropolitan regions and their provincial context: Metro Vancouver, City of Calgary, City of Edmonton, City of Winnipeg, the Greater Toronto & Hamilton Area (GTHA), the Metro Montréal and the Halifax Regional Municipality. This inventory will help to further understand how these regions are planned and funded as well as who the primary decision makers are. As well, the success and challenges of the financing mechanisms and governance frameworks will be reviewed so that Canadian municipalities considering the creation of new regional transportation authorities or new ways to fund transportation can learn about the advantages and disadvantages of each system.

The overall approach to this project was to first build a base of information through a comprehensive literature search of governance and funding practices related to all transportation modes (i.e. principally road, transit, air and marine, and to a limited extent active modes such as walking and cycling) in the major metropolitan areas in Canada as defined in this study: Halifax, Montréal, GTHA, Winnipeg, Calgary, Edmonton and Vancouver. This enabled an inventory of relevant information on governance structures of various transportation modes, funding mechanisms, distribution and allocation of revenues and resources, and where possible, the motivating and historical factors for the development of specific funding and governance structures.

After the literature search, a questionnaire (Appendix A) was developed for interviews with more than 45 municipal and provincial representatives, transportation policy makers and representatives of key

stakeholder groups (Appendix B). Interviewees have been active in the development of the three existing regional transportation authorities in Metro Montréal, GTHA and Vancouver, and in the governance and funding of transportation modes in the other major metropolitan areas included in this study: Halifax, Edmonton, Calgary and Winnipeg.[14]

As much as possible, the interviews were completed in person. Experienced transportation professionals on the consulting team were able to conduct the interviews in their own regions, allowing them to ask more in-depth questions and provide greater insight into decision-making processes. The final step was to synthesize the results of the literature search and interviews in this report and its associated briefing document.

1.3 REPORT STRUCTURE

Chapter 2 outlines the role of the federal government and its current infrastructure funding programs for roads, bridges and public transit in major metropolitan areas.

Chapter 3 outlines the governance and funding of road, transit, airport, port and active transportation in the studied areas. It provides interview details, and references reviewed literature and documents from the studied organizations.

Chapter 4 identifies key innovations that were observed.

Chapter 5 identifies major study conclusions.

[14] Where multiple transit systems co-exist in a studied area, not all were interviewed due to limitations on study resources. Also, airport authorities were included due to their success in de-politicizing governance models, implementing diverse funding models, and managing growth in freight and air passenger traffic; they provided useful lessons for other modes. However, airport authorities were not interviewed in all areas studied (specifically, for Vancouver, Calgary, Winnipeg and Halifax but not for Montréal, Toronto and Edmonton) because they have similar governance and funding models.

2.0 THE FEDERAL ROLE IN FUNDING TRANSPORTATION IN METROPOLITAN AREAS

2.1 INFRASTRUCTURE FUNDS

The Government of Canada has supported urban transportation investment in the major metropolitan areas in this study, and in other Canadian communities. This has been accomplished through a number of multi-year infrastructure commitments such as the $400-million Public Transit Fund and $500-million Public Transit Capital Trust in 2006; the $500-million Public Transit Capital Trust in 2008; the $4.3-billion Canada Strategic Infrastructure Fund; the Gas Tax Fund; the Infrastructure Stimulus Fund; the Public-Private Partnership P3 Canada Fund; and the $33-billion Building Canada Plan.

The objective of the **Gas Tax Fund** is to provide long-term funding for Canadian municipalities and is intended to build and revitalize public infrastructure. An example includes funding for TransLink's 34 new state-of-the-art trolley buses in 2009. These generated positive environmental results with reduced greenhouse gas emissions because they have replaced diesel buses on many routes. From 2005 and 2014, it was intended that $13 billion be invested in municipalities for projects similar to the above.[15] The funding is provided twice a year to provincial/territorial governments or municipal associations that can pool, bank and borrow against this funding. Legislation was passed in 2011 to make the Gas Tax Fund a permanent $2 billion per year.

Since 2007, the federal government has provided $33 billion in funding for infrastructure projects under the **Building Canada Plan**, supporting over 12,000 infrastructure projects including subways, commuter rail, highways and bridges. Projects include the completion of the Autoroute 30 ring road in Greater Montréal, the expansion of Toronto's Union Station and the creation of the Canada Line in Vancouver.[16]

The Building Canada Fund, managed by Infrastructure Canada, has been renewed for ten years. It contains $53 billion in investments over 10 years beginning in 2014-15, with $47 billion in funding for local and economic infrastructure projects including:[17]

- The **Community Improvement Fund** that will provide $32.2 billion as part of an indexed Gas Tax Fund and incremental GST Rebate for municipalities to build roads, public transit, recreational facilities and other community infrastructure across Canada. Gas Tax Fund payments will be indexed at 2% per year beginning in 2014-15 with increases applied in $100-million increments.
- A new $14-billion **Building Canada Fund** to support major projects of national, regional and local significance including roads and public transit. The Fund has two components: a $4-billion

[15] www.infrastructure.gc.ca/media/news-nouvelles/2009/20090108northvancouver-eng.htm

[16] Metrolinx 2012. "Canada's Regional Transportation Authorities". Online at www.metrolinx.com/en/regionalplanning/funding/IS_Appendix_G_EN.pdf [cited 30 March 2013]

[17] Government of Canada 2013. "Chapter 3.3: The New Building Canada Plan". Online at www.budget.gc.ca/2013/doc/plan/chap3-3-eng.html [cited 25 April 2013]

National Infrastructure Component (projects that support job creation, economic growth and productivity) and a $10-billion Provincial-Territorial Infrastructure Component (a broader range of categories).

- $1.25 billion for the renewal of the **P3 Canada Fund** to support public-private partnerships.

As well, $6 billion will be provided to provinces, territories and municipalities under the current infrastructure programs in 2014-15 and beyond.

The federal government also has the **Canada Strategic Infrastructure Fund** that provides $4.3 billion for large-scale infrastructure and transportation projects to support economic growth. Project categories include highways and railways; local transportation; tourism and urban development; water and sewage; and broadband (telecommunications connectivity). Contributions from the federal government can be up to a maximum of 50% of eligible costs. Projects are generally selected according to regional and national infrastructure priorities, in consultation with provinces and territories. Transportation projects that have been partially funded from this program in the large metropolitan areas include the Calgary and Edmonton Ring Roads, the Kenaston Underpass in Winnipeg, and the Canada Line in Vancouver.[18]

The **P3 Canada Fund** supports innovative, public infrastructure procurement P3 projects (public-private partnerships to design, build, contract the operation/maintenance, and in some cases finance transportation infrastructure) and must be supported by a province, territory, municipality or First Nation (i.e., a public authority). The program focuses, in particular, on jurisdictions inexperienced with P3 procurement. The program was first introduced in September 2001. PPP Canada has contributed funding to such transportation projects as the Canada SkyTrain line in Metro Vancouver and made a $250 million contribution to the Southeast Light Rail Transit Line in Edmonton, Alberta.[19]

The Canadian Urban Transit Association (CUTA) has noted the following highlights of the most recent federal budget from a public transit perspective:

- The budget includes a new 10-year Building Canada Plan with over $53 billion in new and existing funding for federal investments in infrastructure, including public transit.
- The permanent Gas Tax Fund is now indexed at 2% annually.
- The 100% rebate of GST for municipalities is now permanent.
- Infrastructure programs will be reviewed and, if necessary, improved or expanded in five years.
- In comparison to the previous plan, transit is now eligible for all funds under new the Building Canada Plan.
- The federal role in transit infrastructure funding has been strengthened.[20]

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[18] www.infrastructure.gc.ca/prog/other-autres-eng.html#csif-fcis

[19] http://actionplan.gc.ca/en/initiative/p3-canada-fund

[20] Interview with Michael Roschlau, CUTA, May 2013. CUTA's full assessment of Budget 2013-2014 can be found at www.cutaactu.ca/en/publicaffairs/resources/CUTA_Budget_Analysis_Final.pdf

2.2 FEDERAL AIRPORT POLICIES

Airports in Canada are under the unique jurisdiction of the federal government. The development of airport authorities began in 1987, following the United Kingdom's airport privatization program, with the announcement by the federal government that management of airports would be transferred from Transport Canada to local airport authorities if the local communities expressed interest. In early 1990 under Doug Lewis, the federal Minster of Transport, the federal government created 26 airport authorities in Canada.

The National Airports Policy (NAP) was created by the Government of Canada in 1994 to define the federal role in Canada's major airports as owner, landlord and regulator. The objectives were to improve efficiency and the long-term viability of the airports. The role of the Canadian Airport Authorities is to be the operator and manager.[21] The National Airports System (NAS) consists of 26 airports (including seven in the metropolitan areas studied in this project) on lands leased to various regional and municipal airport authorities by Transport Canada, which "acts as steward of airport property by overseeing airports for which operations have been transferred to Canadian Airport Authorities." Transport Canada sets the regulatory standards and ensures compliance. The *Canada Airports Act*, passed in June 2006, contained a new Canadian Airport Policy declaration that addressed the ongoing economic behaviour of airports, as they had been the only transportation system under federal jurisdiction without a legislated economic policy framework.[22]

The airport authorities are responsible for infrastructure improvements and expansion as well as operation and maintenance of the airport facility. Funding usually comes from commercial operations at the airports, which includes aeronautical revenue (e.g. airplane landing and terminal fees, air traveler fees) and non-aeronautical revenue (e.g. duty-free shops, car rentals), vehicle parking contributions, terminal and land rents, and revenues from consulting activities. Any surpluses are commonly invested in airport infrastructure.

[21] Calgary Airport 2013. "The Calgary Airport Authority – Chapter 4: Airport Governance, Statutes and Policies". Online at www.calgaryairport.com/portals/0/342_Chapter_4-Airport_Authority,_Governance,_Statutes_and_Policies_(258_KB).pdf [cited 13 March 2013]

[22] Parliament of Canada. *Bill C-20: Canada Airports Act*. Online at www.parl.gc.ca/About/Parliament/LegislativeSummaries/bills_ls.asp?ls=c20&Parl=39&Ses=1 [cited 2 June 2013]

3.0 FUNDING AND GOVERNANCE IN MAJOR METROPOLITAN AREAS

This chapter highlights key findings of the literature search and interviews with senior representatives of provincial, regional and local transportation organizations in the metropolitan areas studied (Metro Vancouver, Edmonton, Calgary, Winnipeg, Greater Toronto and Hamilton Area, Metro Montréal, Regional Municipality of Halifax). It outlines the governance structure, roles and responsibilities, as well as funding sources and the principal challenges and successes experienced by the relevant transportation organizations.

3.1 INDIVIDUAL PERSPECTIVES

Interviews were conducted with a few individuals who are prominent in transportation governance and funding discussions, but whose perspective is not restricted to any single metropolitan area under study. Following are some key points raised in two of these interviews.

Michael Roschlau, Ph.D., Chief Administrative Officer, Canadian Urban Transit Association (CUTA)

- *Transportation governance.* At a fall 2012 meeting of the International Association of Public Transportation (UITP) in Montréal, with representatives of European cities and the three large regional transportation agencies in Canada, a consensus emerged that a balanced board of elected and professional members is preferred for transit agencies, and that robust selection criteria for membership are required. There is an increasing focus at CUTA and among many municipalities and regions on active transportation and mobility management. There is a general need to insert transit and active transportation functions into governance structures that are autonomous in order to match their broader role as mobility managers. Too often these functions lack the necessary resources and governance focus to respond effectively to community needs.

- *Transportation project prioritization.* In very large regions such as Metro Vancouver, Greater Montréal and GTHA, the balance of benefits and costs must reflect the interests of all orders of government – local, regional, provincial and federal. It is important to build evidence-based processes to protect decision-making from undue political pressure.

Dr. Eric Miller, Department of Civil Engineering, University of Toronto

- *Transportation prioritization.* A transportation investment prioritization process must include a robust cost-benefit analysis, and focus on "the network and not the lines" in order to optimize connectivity. The regional network approach is a challenge in a region with vested local priorities. Metrolinx is attempting to overcome this challenge. A good example that may be helpful to review is the integrated state transportation model in Oregon. The economic impact of transportation decisions could be more carefully calculated and assessed in Canadian provinces under such an approach.

- *Transportation funding.* The investment strategy conversation in the GTHA is important. Funding models can be dedicated to transportation on a provincial scale or for a specific project:
  - Sales tax or income tax may be the best models for projects or investments that are fundamental to the region (e.g. sales tax is easy to collect and can be dedicated to a specific project, while income tax can be provincially applied and allocated to infrastructure).
  - Road pricing will increase revenues for infrastructure and tolls show strong evidence of changing travel behaviour. However, there is a high cost of administration that must rely on robust technology.
  - Fuel taxes and parking fees are problematic because one group of citizens pays for others' use of the transportation network.
  - A property value-capture tax shows promise if the revenue is dedicated to infrastructure.
  - New funding models must eliminate or reduce the difference between road and transit funding. Roads are planned and operated as a system. While there is some discontinuity between cities or regions, travel by roads between jurisdictions is generally seamless. This is not the case for transit. Just as the Province should encourage and support a seamless road system, they need to do the same for transit.

Operating Data for Transit Systems Considered in this Project

Table 2 provides an overview of some key operating statistics for transit systems in the studied areas, as reported to CUTA in 2011. The information in this table indicates a wide range in the size and complexity of these transit systems, ranging from very large multimodal transit systems in Metro Montréal, the GTHA and Metro Vancouver, to medium-sized systems in Calgary and Edmonton, to smaller systems in Winnipeg and Halifax. Many of these transit systems have revenue-cost (R/C) ratios lower than 50%, meaning that fares represent less than half of their operating costs. Interviews with senior officials in these transit systems indicated that they are operating in environments in which the R/C ratios will continue to drop, as they are faced with additional costs for the provision of more transit service to address growth and attract increased ridership, but are restricted by councils from raising fares.

Table 2. Transit Systems in Studied Metropolitan Areas[23]

Metro Area	Transit System	Annual Direct Operating Expenses ($ millions)	Revenue/Cost Ratio (%)	Annual Ridership (millions of trips)	Annual Service (millions of vehicle-kilometres)
Vancouver	TransLink	1,088.6	41	231.9	124.2
Edmonton	Edmonton Transit	256.1	42	80.3	50.5
Calgary	Calgary Transit	299.8	50	96.2	52.6
Winnipeg	Winnipeg Transit	138.8	51	47.5	24.5
GTHA	Toronto Transit Commission	1,463.4	68	500.2	204.3
	GO Transit	727.9	48	61.2	61.1
	York Region Transit	146.6	36	19.8	27.3
	Hamilton Street Railway	72.3	50	21.9	12.9
Montréal	AMT	129.2	43	18.2	9.9
	STM	967.2	55	404.8	145.8
	RTL (Longueil)	122.8	42	33.8	17.5
	STL (Laval)	82.2	36	20.1	11.9
Halifax	Metro	110.3	27	20.1	11.9

Congestion as a Driver of Change in Transportation Governance and Funding

In many of the metropolitan areas studied, the growing impacts of congestion on mobility and economic competitiveness are building support for changes in transportation and governance. For example, congestion in Vancouver, Montréal and Toronto is believed to be seriously impacting quality of life, economic development and competitiveness as measured against global competitors, and the lost time has significant costs in reducing productivity. A report by the Organization for Economic Co-operation

[23] CUTA, 2011. *Canadian Transit Fact Book – Operating Data*

and Development says Toronto's traffic problems cost the city billions of dollars every year. "The OECD estimates a loss of $3.3 billion in lost productivity annually because of traffic congestion on streets and highways, coupled with the growth problems associated with Toronto's public transit system."[24] In 2011 the Toronto Board of Trade benchmarked five Canadian cities (Toronto, Montréal, Vancouver, Calgary and Halifax) against 18 major urban centres around the world, and found that all the Canadian cities scored poorly on transportation.[25]

3.2 METRO VANCOUVER

This section of the report presents the findings of this project's review of transportation funding and governance in Metro Vancouver. It addresses the following transportation agencies:

- British Columbia's Ministry of Transportation and Infrastructure (MOTI) as well as BC Ferries and BC Transit, the Crown corporations providing transit and ferry connections to Metro Vancouver
- TransLink, the only multimodal transportation agency in Canada
- Metro Vancouver, the land use and infrastructure planning and funding agency that provides a foundation for integrating regional land use plans and policies with transit and transportation planning and transportation investments
- The City of Surrey, a major municipality in Metro Vancouver, one of the fastest growing municipalities in Canada, and one having some advanced governance and funding activities
- The Metro Vancouver airport and port authorities

3.2.1 OVERVIEW

Metro Vancouver is Canada's third-largest metropolitan area, and the first to establish a multimodal transportation planning and funding agency. The South Coast British Columbia Transportation Authority, known as TransLink, was created in 1999 to coordinate transit, road, transportation demand management (TDM) and active mode investments and policies; land use planning is undertaken at a strategic level by Metro Vancouver and at the local level by 21 municipalities and one First Nation.

Figures 1 and 2 illustrate the governance and funding relationships between transportation agencies in Metro Vancouver.

[24] OECD, *OECD Territorial Review: Toronto, Canada*, 2012

[25] Toronto Board of Trade, *Scorecard on Prosperity,* 2011

Figure 1. Metro Vancouver: Transportation Governance

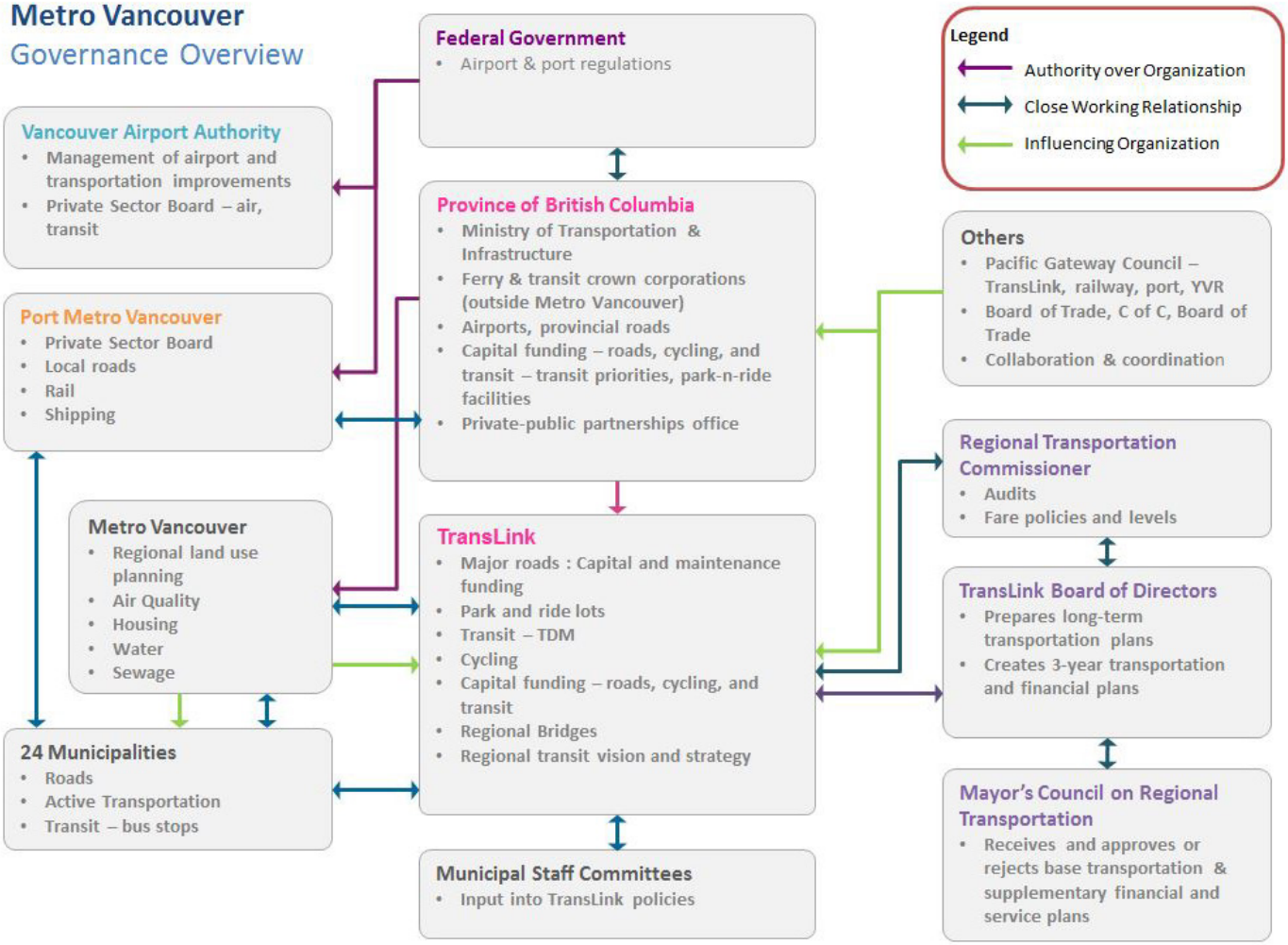
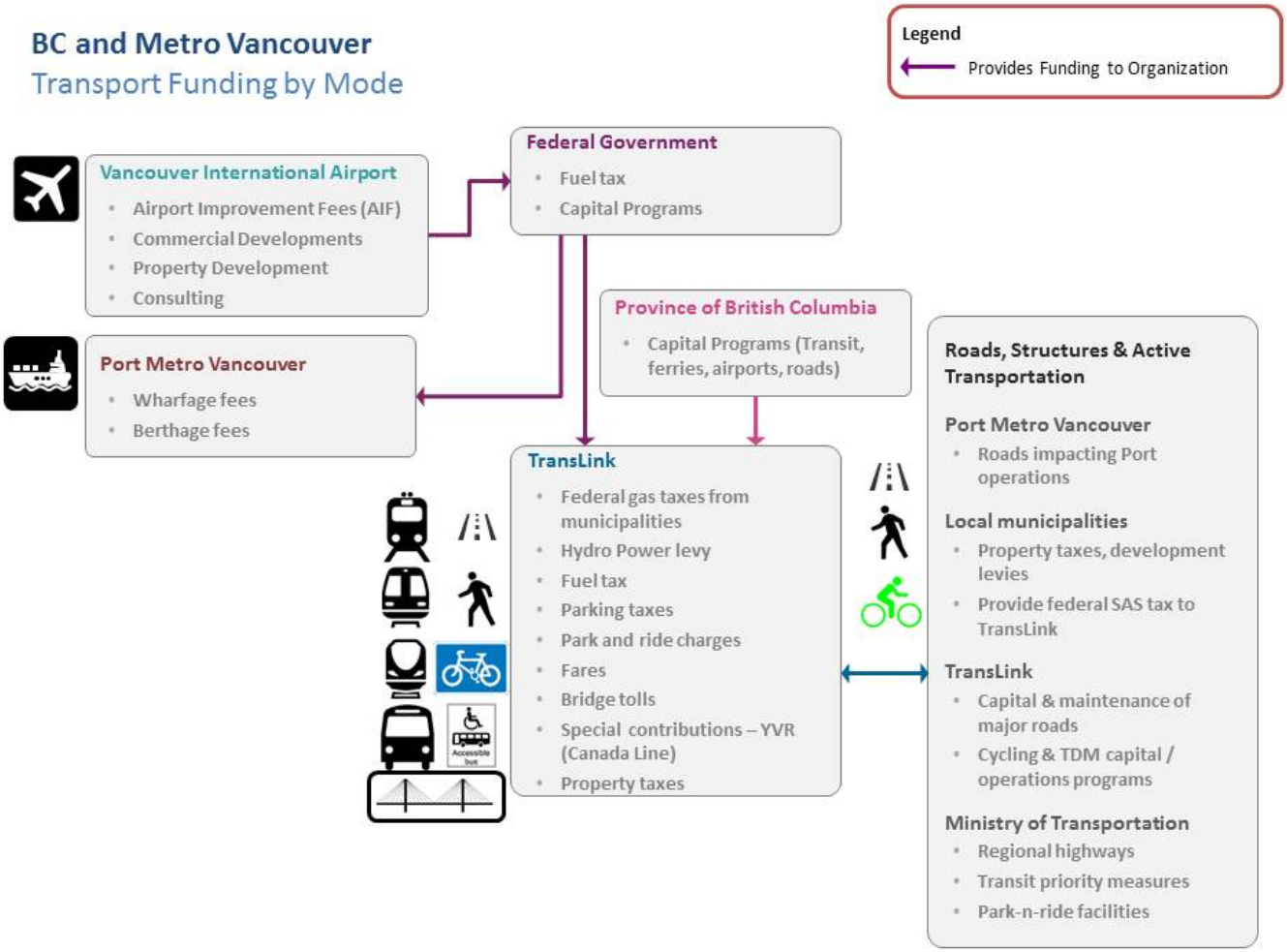


Figure 2. Metro Vancouver: Transportation Funding



3.2.2 BRITISH COLUMBIA MINISTRY OF TRANSPORTATION AND INFRASTRUCTURE, BC FERRIES, BC TRANSIT

Governance

The British Columbia Ministry of Transportation and Infrastructure (MOTI) plays a pivotal role in planning, maintaining and funding all modes of transportation in the province. It is organized around different transportation modes: roads and bridges, ferries, transit, ports, and airports. MOTI also administers the Crown corporation BC Ferries, which provides extensive service between Metro Vancouver, Vancouver Island and the Gulf Islands, and BC Transit. Its legislation enables it to direct capital spending and borrowing to these Crown corporations and to some extent spread debt loads and minimize impacts on provincial spending.

Public transit in BC was administered by BC Hydro, the provincially owned electric utility, until 1980 when bus and trolley coach services were transferred to the newly created Urban Transit Authority and Metro Operating Company. Subsequently, the province established BC Transit to oversee and operate all municipal transit systems including Metro Vancouver's. In 1998, a separate transportation authority known as TransLink[26] was established specifically for the Greater Vancouver Regional District as a result of comprehensive negotiations between the Provincial Government and the Greater Vancouver Regional District (GVRD). The purpose was to separate a Vancouver component from the provincial crown corporation BC Transit. The driving force for this change was that Metro Vancouver was much more ambitious to enhance transit service in the Vancouver area than was the province of BC, and it needed the financial resources and governance structure to enable it to do so.[27]

MOTI has taken a very active role in funding and managing the construction of the rapid transit network in Metro Vancouver. It conceived of and constructed the SkyTrain system, working closely with BC Transit at the time. Future planned extensions to the SkyTrain network in Metro Vancouver are to be built in the Northeast Sector, with the Evergreen Line to be completed in 2017, and possibly west to the University of British Columbia and south of the Fraser River to the City of Surrey and Langley City and Township. The Ministry, through BC Transit, has also taken a very active role in funding the capital and operating costs of over 80 conventional transit and paratransit systems in large and small municipalities throughout BC, including communities on the periphery of Metro Vancouver such as Mission, Abbotsford and Whistler. BC Transit contributes an average of 46% of the eligible operating costs of these systems.

The BC Transportation Financing Authority (BCTFA)[28] was established as a Crown corporation by the *Build BC Act* in 1993, which has been superseded by the *Transportation Act*[29]. The BCTFA is governed

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[26] Officially the agency was called the Greater Vancouver Transportation Authority, now the South Coast British Columbia Transportation Authority

[27] Personal experience of one of the authors of this report who was involved in the transition to create TransLink from BC Transit-Vancouver

[28] www.th.gov.bc/publications/ministry-reporting/bctfa.htm

[29] Province of BC, 2013. BCTFA Financial Statements. Online at www.th.gov.bc.ca/publications/ministry_reporting/BCTFA_Financial_Statements/2010_11_BCTFA_FS_audited.pdf [cited 8 March 2013]

by a Board of Directors who may exercise the rights, powers and advantages conferred on them under the Act, although the Board is constrained in the use and disposal of transportation infrastructure assets. The BCTFA's mandate is to acquire, construct, hold and improve transportation infrastructure. The Ministry is provided with a three to four year allocation of funding by the British Columbia Provincial Treasury based on business plans and a network analysis that indicates where the greatest needs are. Crown corporations such as BC Ferries and BC Transit are run at arm's length, which enables them to shelter debt in a different way.

BC Transit also provides the following services on a charge-back basis for most of the 80 transit systems outside Metro Vancouver: fleet procurement and management, operational and long range planning, marketing, contract administration, and human resource assistance (e.g. labour relations). Future directions with regard to provincial policies and funding for transit are guided by the Provincial Transit Plan, approved in 2008.[30] That plan's objective is to increase transit mode share (from 12% to 17% by 2020 in Metro Vancouver) and to reduce provincial transportation greenhouse gas emissions by 4.7 million tonnes cumulatively by 2020. The $14-billion plan calls for the following investments:

- $10.3 billion for four new rapid transit lines in Metro Vancouver—the Evergreen Line (to open in 2017), the UBC Line, the upgraded and extended Expo Line (some upgrades are underway), and the Canada Line (opened in 2010, and for which $2 billion was previously committed)
- $1.2 billion for a new, cutting-edge, energy-efficient, high-capacity RapidBus BC service along nine major routes in the high growth urban centres of Kelowna, Victoria and Metro Vancouver (all being undertaken)
- $1.6 billion for 1,500 new, clean energy buses and related maintenance infrastructure to provide communities around the province with improved bus service (in progress)
- Increased security measures to enhance transit safety and use (in progress)[31]

Playing a pivotal role in the planning and funding of provincial highways and transit, senior officials from the MOTI indicated that they felt that it has also been very supportive of planning its highway system with transit in mind by building-occupancy (HOV) ramps and lanes on highways to provide priority to transit service and enhancing bus travel time and reliability.[32]

BC Ferries was established as a provincial Crown corporation in 1960 to provide passenger and vehicle ferry service between Vancouver Island and the Lower Mainland as a cheaper and more reliable alternative to the service operated by the Canadian Pacific Railway and Black Ball Line. It now operates 25 routes among the islands of the south coast and between Vancouver Island and the mainland.

[30] www.th.gov.bc.ca/Transit_Plan

[31] www.th.gov.bc.ca/Transit_Plan

[32] Interview with MOTI senior official, May 2013

Funding

Provincial tax revenue is MOTI's principal source of funding. The Province helps municipalities provide a range of mobility options with both technical and financial support, and has also developed good relationships with the federal government readying projects in order to obtain federal funding.

Funding for capital projects is influenced by the value of total assets under the province's jurisdiction. Some major factors influencing funding over the past few years include the growth in the population of BC, the increase in vehicle trips within BC and to Washington state (the latter for shipping of freight and cross-border shopping), and the 2010 Winter Olympics.[33]

The largest proportion of expenditures is concentrated on capital assets. In the future, greater investments are expected in rapid transit projects, park-and-ride lots, and transit priority measures on highways.

MOTI is not anticipating any changes in funding sources. However, staff indicated that they saw regional tolling of bridges as one viable option to provide an efficient means of collecting funding for major transportation improvements. Tolling can also be structured to influence the level and timing of travel, increasing the rate in peak hours and lowering it in non-peak hours. In addition, the funding can be dedicated for specific investments.[34]

Funds for transportation are prioritized using network modeling, safety audits and an analysis of service levels. MOTI's funding model has allowed it to obtain a high level of federal financial contributions and to spread debt between the provincial government and Crown corporations.

Successes and Challenges

Successes: Governance

- MOTI's governance structure has allowed it to successfully integrate different modes of transportation.
- Having municipalities make significant investments in capital and operating costs of their transportation systems ensures responsible spending.
- Significant financial support by the province for both the capital costs and operating costs of transit systems has enabled over 80 viable transit systems in the province, even operating in very small centres with less than 1,000 residents. The provision of significant provincial operating funds to all transit systems in the province at a fairly high level (i.e. 46% of eligible operating costs, on average) is not practiced in any other province.

[33] Interview with MOTI officials

[34] Interview with MOTI officials

Challenges: Governance

- Modal shift to sustainable transportation in BC has not been as rapid as desired by MOTI. While about $10 billion has been spent on major transit service investment projects over the past 12 years in Metro Vancouver, transit's mode share has only increased from 11% to 12.5%.[35]
- It is difficult to reach agreement on future transportation priorities and funding options when there are 24 Lower Mainland municipalities to work with.

3.2.3 METRO VANCOUVER

Governance

Metro Vancouver provides the region's land use plan, develops policies and plans for the design and operation of sewer water and waste management infrastructure, and manages regional parks and housing programs. The policy framework for land use planning is provided through its Regional Growth Strategy entitled *Metro Vancouver 2040: Shaping our Future*. The Official Land Use Plan of all 21 area municipalities must include a Regional Context Statement, to be approved by the Metro Board, indicating policy compliance with the Regional Growth Strategy.

Metro Vancouver also monitors regional air quality to ensure it is moving in the right direction in terms of reducing greenhouse gas emissions and other pollutants from regional transport and other investments. Metro Vancouver works closely with TransLink and area municipalities to coordinate the strategic location and density of land use within the region, to support areas of higher transit service investment such as the Primary Transit Network, SkyTrain corridors and stations, and the designated regional and municipal town centres. TransLink provides formal comment to Metro Vancouver on changes to official land use plans and the Regional Growth Strategy. Conversely, Metro Vancouver is responsible for reviewing TransLink plans for consistency with and support for the Regional Growth Strategy. The Metro Vancouver region has 40 directors who are drawn from municipalities based on their population levels; each municipality has a weighted vote. The chair and vice-chair are selected by Board members, and reappointment of new Board members coincides with municipal elections every three years.

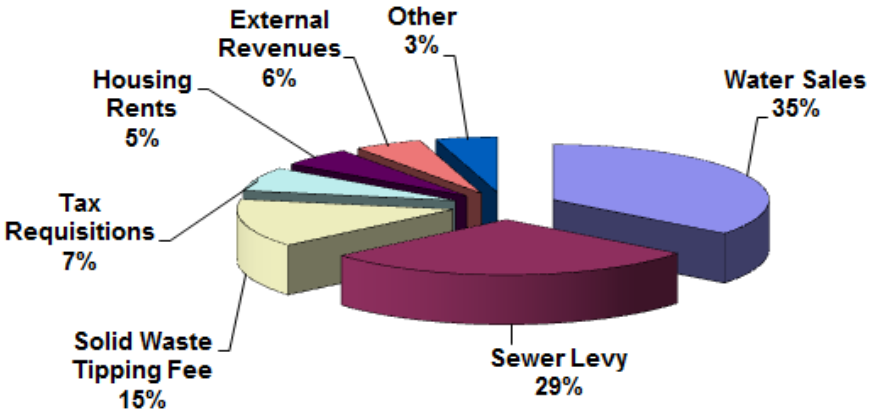
Funding

The Metro Vancouver regional organization's budget for 2013 was $635.6 million, funded from a number of sources shown below in Figure 3.[36]

[35] Interview with MOTI officials

[36] Metro Vancouver 2013. "2013 Budget in Brief". Online at www.metrovancouver.org/programsandbudget/BudgetDocs/2013BudgetinBrief.pdf [cited 7 May 2013]

Figure 3. Metro Vancouver: Budget



3.2.4 TRANSLINK

The *South Coast British Columbia Transportation Authority Act* (SCBCTA Act) established the governance structure for TransLink. The main impetus for the Act in 1998 came from the Greater Vancouver Regional District (GVRD, now Metro Vancouver), which wanted to ensure that the Transport 2021 transportation plans developed in 1993 were carried out, as they were vital to the success of its own Livable Region Strategic Plan.

Under the Act, TransLink is responsible for providing transportation services and facilities, along with managing transportation demand, in Metro Vancouver in accordance with an approved long-term strategy having a minimum 30-year horizon. The Act requires TransLink to annually update a detailed Three-Year Plan and Seven-Year Outlook (Base Plan) identifying the services, facilities and programs it proposes to deliver over the 10-year period. The Act also allows TransLink at any time to propose a Three-Year Supplementary Plan and Seven-Year Outlook (Supplement) that adds, enhances or changes the Base Plan to be funded by existing or new funding sources. The 10-Year Base Plan, once approved by TransLink's Board of Directors, is subject to review and consideration by the Mayors' Council on Regional Transportation along with the Regional Transportation Commissioners' report. The Mayors' Council may approve or reject any supplemental plan. The Board of Directors and the Mayors' Council are explained in the next section.

Governance

The TransLink Board makes funding and investment decisions and sets priorities for the Authority. It consists of nine directors appointed to three-year terms by the Mayors' Council on Regional Transportation (comprised of 21 local mayors). The Board is comprised of private-sector members with backgrounds in transportation, engineering, planning, finance and other relevant specialties.

Figures 4 and 5 illustrate the governance components of TransLink.

Figure 4. TransLink: Key Governance Components

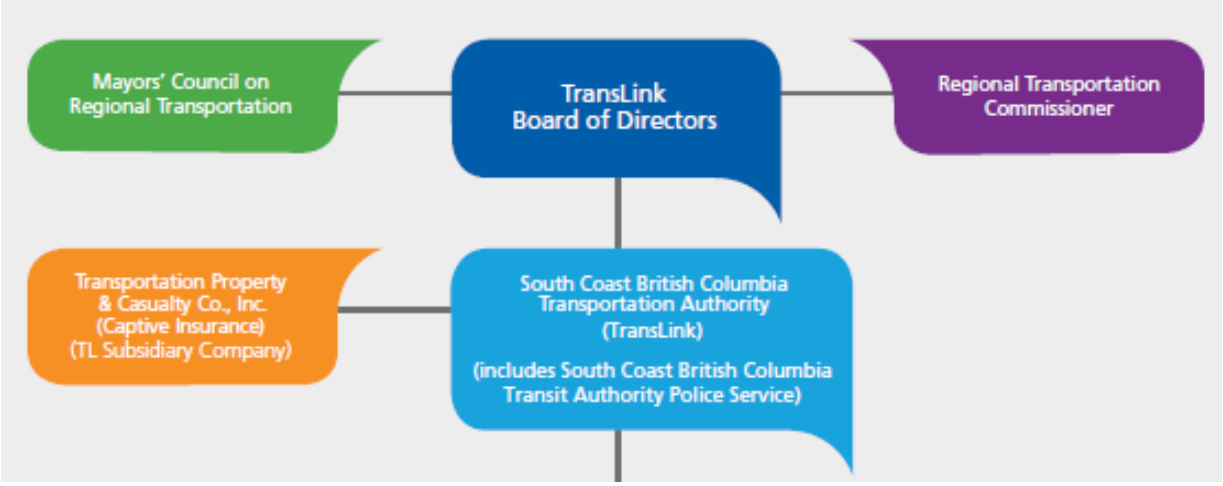
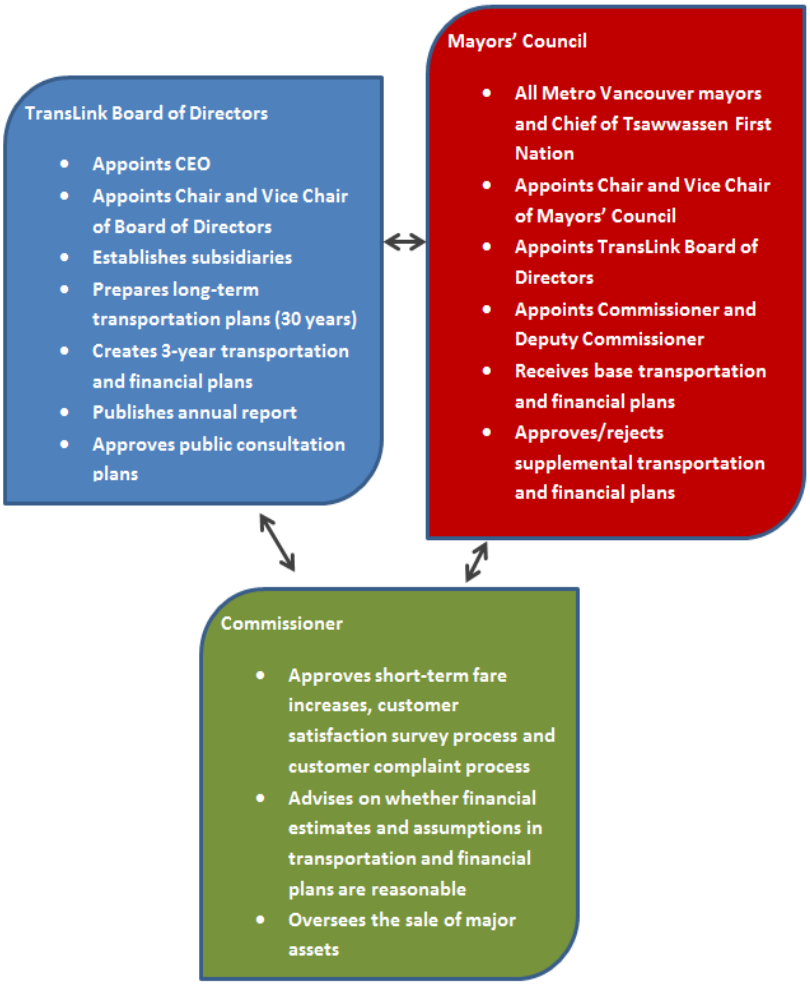


Figure 5. TransLink: Key Governance Responsibilities



From 1998 to 2007 the TransLink Board was appointed by the Board of GVRD (now Metro Vancouver), and was made up of mayors and members of the GVRD Board. Up to three provincial MLAs or ministers were also permitted to sit on the Board, but they chose not to. A number of disagreements developed between the TransLink Board and the provincial government in subsequent years, particularly over the construction of the Canada Line linking Vancouver to Richmond and the Vancouver Airport, using a P3 funding model.[37]

In 2007, an independent panel commissioned by the MOTI recommended a new governance structure that was adopted by the Province. As a result, an independent Board of private-sector representatives was created in 2008. Since then, there has been some tension with this structure due to the fact that the Board of Directors is unelected but has the greatest say in TransLink decisions while the Mayors' Council, composed of elected officials, meets up to 10 times annually and has a more limited role in reviewing plans, and in approving or rejecting plans that involve new funding sources or increases to existing funding sources. The municipalities give TransLink plans funded through property taxes, and they are consulted in the creation and funding of the plans. In 2012 the legislation was amended to allow the Chair and Vice-Chair of the Mayors' Council to also sit on the Board of Directors, but they have chosen not to.

In March 2013, the Mayors' Council on Regional Transportation commissioned a study to examine strengths and weaknesses of the existing regional transportation governance, and best practices elsewhere.[38] This study found that TransLink was the only surveyed transportation system in Canada not governed by elected officials. It concluded that the current governance structure is effective at oversight of the business functions including financial sustainability, but less effective at handling major policy initiatives and structural changes including financial challenges due to a perceived lack of legitimacy and accountability.

A challenge of the current Board is that it is unelected and less able to build a political consensus on key issues around policy, priorities and funding. The governance report recommends that transportation governance be assigned to the Metro Vancouver board and policy functions to the Mayors' Council, and that a new governance entity made up of members of the Metro Vancouver board and Mayors' Council be developed. The authority for such governance changes rest with the Province through regulatory amendments.

The above-noted governance report concluded that improved coordination with the Province would be desirable, as it has the responsibility for planning, policy and management of the provincial highway network throughout the region.[39] For example, current provincial policy with respect to bridge tolls does not permit a transportation system management approach, as tolls are only permitted for new or significantly enhanced facilities where the option of a free bridge exists nearby.

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[37] Interviews with former TransLink senior staff, May 2013

[38] Acuere Consulting 2013. *TransLink Governance Review*. Online at www.translink.ca/~/media/documents/about_translink/governance_and_board/translink_governance_review.ashx [cited 13 May 2013]

[39] Ibid

Funding

The SCBCTA Act requires that TransLink meet its financial requirements using established funding sources including taxes, user revenues, accumulated surpluses, and borrowings within its approved limit. TransLink relies on four types of tax revenue: property, fuel, parking (off-street in downtown Vancouver), and hydro power. It has two types of user revenue, namely transit fares and bridge tolls.

TransLink's legislation includes two sources that are not being used: a **vehicle levy** and an **area benefiting tax**. For the former to be put into effect, the Province must table enabling legislation that outlines how the charge would be collected.[40] The vehicle levy has been blocked from use three times since TransLink was formed, first by an NDP government in 2001 and twice by a Liberal government,[41] most recently in 2009; the proposed 2009 levy of $120 per vehicle would have raised $150 million per year for TransLink. The area benefiting tax is a contribution from property owners who benefit directly from transit improvements; it would be more difficult to implement than a vehicle levy as it requires close coordination with affected municipalities.

TransLink approved and introduced an area **parking tax** in 2006. It raised about $17.0 million from a tax on all parking areas in the region including shopping malls. It was originally intended to apply to all available parking areas in the region, as agreed to by development industry representatives; however, the actual legislation exempted parking areas owned by municipalities, schools and churches. The tax had been in place for only a year when the provincial government repealed it with a reform of the TransLink legislation in 2007, due largely to the opposition of developers and owners of shopping centres in Metro Vancouver.[42] The revenues obtained from this tax were replaced by additional property taxes. **Property tax** is assessed on net taxable value of land and improvements within the 24 municipalities in the service area. Under TransLink's legislation, this increases by 3% each year to keep pace with inflation and increases in population. Property tax is currently calculated by multiplying each $1,000 of assessed home values by 0.35 and businesses by roughly 1.61.

The **fuel tax** increased from 12 cents per litre to 15 cents per litre in January 2010, and was raised to 17 cents per litre in April 2012 as part of a revenue source package to finance the Evergreen Line and some additional transit service. TransLink is struggling with fuel tax revenues that have declined an average of 2% per year for the past five years[43] due to reduced driving, more fuel-efficient vehicles, and drivers buying gasoline outside of the region.

The **parking tax** is a 21% tax on all paid off-street parking in Metro Vancouver. Prior to June 2010, the tax was collected by parking vendors or businesses that sell parking and sent to the Ministry of Finance.

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[40] TransLink 2013. "TransLink 101: Where does TransLink get it's funding – and how do we spend it?" Online at http://buzzer.translink.ca/2013/03/translink-101-where-does-translink-get-its-funding-and-how-do-we-spend-it/ [cited 3 April 2013]

[41] SurreyLeader.com. "TransLink vehicle levy back on mayors' agenda". Online at www.surreyleader.com/news/187546471.html [cited 15 February 2013]

[42] Experience of Bill Lambert, then Manager of Program Planning, Translink

[43] SurreyLeader.com. "Gas tax a drag on TransLink's budget". Online at www.surreyleader.com/news/201353561.html [cited 5 April 2013]

Since then it has been collected by TransLink under the *SCBCTA Act*.[44] The parking tax tripled from 7% to 21% in January 2010.

The **power levy** is a hydro levy of $1.90 per month charged to each BC Hydro residential customer in the TransLink service area. This generated nearly $19 million in revenue in 2011. The current rate has been in place since 1991, prior to the formation of TransLink. [45]

In addition, the federal and provincial governments contribute to TransLink's capital, primarily through the Building Canada Fund and the Strategic Priorities Fund (i.e. federal gas tax transfer). These funds can only be used for capital expenditures.

Revenue sources in the 2013 base plan and budget for annual operating expenditures including debt repayment are as follows: transit fares (36%); bridge tolls (3%); property taxes (22%); fuel taxes (25%); parking sales tax (4%); residential hydro levy (3%); and senior government contributions (2%). The projected shortfall in 2013 of 5% is proposed to be made up by a draw-down from the accumulated fund reserve and a time-limited property tax.

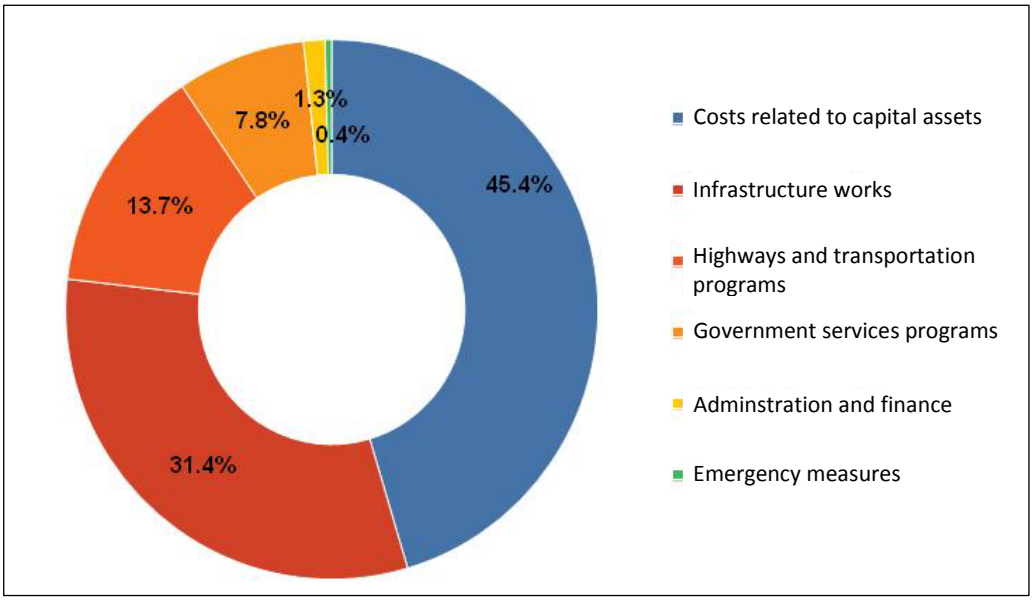
This funding model is the largest and most diverse in Canada at the moment, as TransLink has a wide range of sources to draw upon. On the other hand, the lack of political accountability with a non-elected Board makes it challenging to introduce higher taxes and user fees or to propose new taxes or fees. TransLink and the Mayors' Council have examined the need for additional funding sources in consultation with the Provincial government. TransLink has examined more comprehensive road and bridge tolling for the region, but does not yet have a legislative mandate to introduce such tolls. As this is a Provincial responsibility, the provincial government would be seen as being accountable for any such road pricing.

Figure 6 illustrates TransLink's operating spending.

[44] TransLink 2012. "About the Parking Tax". Online at www.translink.ca/en/About-Us/Taxes/Parking-Tax/About-the-Parking-Tax.aspx [cited 4 February 2013]

[45] TransLink 2012. "2012 Business Plan, Operating and Capital Budget Summary". Online at www.translink.ca/~/media/documents/about_translink/governance_and_board/board_minutes_and_reports/2012/february/2012%20business%20plan%20operating%20and%20capital%20budget%20summary.ashx [cited 8 March 2013]

Figure 6. TransLink: Operating Expenses (2011, total $1.36 billion)[46]



Successes and Challenges

Successes: Governance

- Board members are competent and qualified people.
- Board positions are filled on the basis of merit and the chair is elected from peers.
- The Board is good at overseeing direction and management and ensuring compliance with financial and legal requirements, corporate reporting, and so on.
- The Board is non-political and business-focused.
- Efforts to organize and support the creation of the Metro Vancouver Gateway Council, which has representatives of TransLink, municipal, regional and provincial governments, major freight and passenger organizations (e.g. freight associations, board of trade, chamber of commerce, airport and port authorities, CN and CP) are seen as very successful. The council is a very useful forum for discussing and moving on major regional transportation issues, and for integrating all transportation modes including transit, walking and cycling with rapid transit and rail passenger services.

Challenges: Governance

- Lack of political accountability and transparency (few members of the public at board meetings, and board members are invisible to most of the public).

[46] TransLink, "2013 Business Plan"

- There is no political face for the organization to advocate, defend and speak for TransLink decisions.
- Public confusion over who is in charge and who is responsible for the decisions made (e.g. Minister and Chair of Mayors' Council also speak for TransLink).
- Mayors' Council is asked to approve or request additional taxes but has little input into TransLink plans, projects, priorities and operations.
- As the Board has no public profile, it is difficult to have a relationship with the Provincial Government at a political level. This falls to the Mayors' Council but as the Mayors do not appear to support the current governance model, the relationship with the Province is problematic (e.g. they recently rejected a proposal to add two members of the Mayors' Council to the TransLink Board).[47]

Successes: Funding

- Due to its wide variety of funding sources, TransLink relies less on municipal and provincial funding for its operating expenditures than most other transit agencies and metropolitan areas examined in Canada, with the exception of the Toronto Transit Commission which in 2011 recovered 68% of its operating expenditures from the farebox.[48]

Challenges: Funding

- All are appropriate taxes except for the hydro levy, which is regressive and is not related to transportation.
- In 2011, the five taxes that TransLink levies made up 52.1% of its total revenue, with tolls from the Golden Ears Bridge adding another 2.6%. While the bridge has seen continued yearly growth in traffic volumes, its revenues have been short of projections (i.e. toll revenues in 2013 are estimated to be $38 million lower than forecast) and there is still a risk that it will not be able to meet the financing and operating costs of the bridge.[49] While fuel taxes make up almost a quarter of total revenue, higher fuel prices in Metro Vancouver have contributed to revenue slippage due to the ability to purchase fuel outside the TransLink zone at about a 25% discount. Also improved vehicle fuel economy has necessitated increases in the fuel tax and a search for other sources of revenue that are more stable.
- All taxes have imperfections. The challenge of the fuel tax is that residents are buying less fuel due to improved fuel efficiency, the switch to alternative modes such as transit and the purchase of cheaper fuel outside Metro Vancouver.

[47] Interviews with former TransLink senior managers

[48] 2011 CUTA data and interviews with transit systems in metropolitan areas

[49] TransLink, "2013 Base Plan and Outlook"

- Toll revenues on Golden Ears Bridge and Port Mann Bridge are significantly lower than projected due to lower than forecast traffic. This arises from a resistance to paying tolls and the availability of free alternative bridges.

3.2.5 REPRESENTATIVE LOCAL MUNICIPALITY: CITY OF SURREY

Governance

The City of Surrey's transportation functions are located in the Engineering Department, which reports to the Transportation and Infrastructure Committee of Council. The General Manager of the Engineering Department reports to the City Manager, directs the department, and ensures the efficient and effective delivery of high quality services. The Engineering Department is organized into five divisions: Utilities and Operations; Transportation; Land Development: Design and Construction; and Realty Services.

The Transportation Division's mission is to provide a balanced transport system that offers alternative travel choices and meets the following objectives:

- Provide an effective and efficient roadway network.
- Provide mode choice.
- Work towards improving casualty reduction, maintaining and improving street and sidewalk lighting, and road safety education.
- Use transportation system to support economic competitiveness.
- Encourage large increases in the use of transit, and support land uses that generate fewer and shorter trips.
- Promote transportation integration with land use plans.[50]

The City of Surrey has a 10-year *Strategic Mobility Plan*, integrating transportation and land use. This plan is supported by other key policy documents including a *Walking Plan,* a *Cycling Plan* and a *Safe Mobility Plan*. The *Strategic Mobility Plan* is comprehensively monitored and its progress is reported annually in some detail.[51]

The creation of TransLink in 1999 impacted Surrey's role by changing the planning and funding of roadways, transit and alternative modes. TransLink adopted a key role in funding the operating and capital costs of transit services; funding the maintenance costs of a defined regional Major Road Network (MRN); managing specific capital improvements to the MRN; planning and funding of alternative mode programs such as cycling facilities; implementing TDM measures; and integrating transportation modes.

Soon after TransLink was created, it was jointly decided among the municipalities that the federal fuel taxes to be received by the 21 municipalities in Metro Vancouver would be transferred to TransLink to

[50] www.surrey.ca/city-government/608.aspx

[51] www.surrey.ca/city-services/4789.aspx

fund regional transit initiatives. There are now pressures to have these funds returned to the municipalities to pay for their pressing road and other transportation needs.[52]

Funding

Property taxes represent the majority of funding for the City of Surrey. In addition, development levies are used to finance transportation capital and operating expenditures. Parking fees have been implemented in the five town centres in Surrey and in major neighbourhood commercial areas, to encourage the use of alternative modes of transportation. Public safety along with asset management and growth determine the priorities for the City in terms of transportation investments.

Senior representatives at the City of Surrey have proposed the creation of a regional road pricing system on major roads and bridges throughout Metro Vancouver. They feel this funding source would have the following advantages: it would generate millions of dollars that could replace some of the existing poor funding sources for current transportation investments (e.g. hydro tax); the funds could be split among the municipalities, province, and TransLink; the fund amounts could be readily identified by the public in separate accounts; the specific uses for transportation investments would be made known to the public; the measures could be used as a strong TDM or travel influencing factor; and the tax would be more equitable than existing taxes such as parking taxes.

Consultation and Stakeholder Innovation

To increase public understanding of transportation plans, the difficult financial tradeoffs that must be made, and the decision-making processes for transportation infrastructure, the City of Surrey implemented an innovative community outreach program that has been operating for three years. The 12-week course is offered by city transportation staff with invited experts in transportation and land use planning, governance, financing and other related areas. Invited participants include community activists and transportation stakeholders, consultants, politicians and interested citizens. In the view of City staff interviewed and attendees, this program has greatly assisted in the approval process, and built general understanding of transportation plans in the community and the difficult tradeoffs that must be made.

Successes and Challenges

Successes

- A transportation course offered each year for 12 weeks to community representatives for education and community-building, is delivered in partnership with the City Program at Simon Fraser University.
- Agreements with developers for hybrid cars, transit passes and cash-in-lieu of parking.
- Transportation operating and capital levies for arterial roads and new developments.

[52] Interview with senior staff, City of Surrey Engineering Department, May 2013

- A multimodal strategic transportation plan that is integrated with land use, which includes annual monitoring and performance reporting.

Challenges

- The City of Surrey lacks the funding it would like for its transportation system. All federal gas tax funds have gone from the municipalities to TransLink since 1999, and it would like this changed.
- Surrey would also like to get a share of carbon tax revenue from the Province for transportation.

3.2.6 VANCOUVER AIRPORT AUTHORITY

Governance

Vancouver International Airport is the largest in Canada after the Toronto International Airport. There are 26,000 workers on Sea Island where the airport is located, and 17 million passengers use the airport annually.

The Vancouver Airport Authority is governed by a Board of Directors of up to 15 members, nine of whom are appointed by the Government of Canada and other government and professional bodies. The Board has a large array of nominating entities, including the cities of Richmond and Vancouver, the Government of Canada, the Vancouver Board of Trade, Metro Vancouver, the Association of Professional Engineers and Geoscientists of BC, the Institute of Chartered Accountants of BC, and the Law Society of BC.[53] Up to five directors are appointed by the Board from the community, and one seat is for the President and CEO of the Authority.

The Vancouver Airport Authority operates as a not-for-profit corporation under the *Canada Not-For-Profit Corporation Act*. The Authority is unique in that it operates its own consulting firm, called InterVISTAS, half of which is owned by Citibank. The company manages airports around the world and also sells its consulting expertise to other airports.

Funding

The Vancouver Airport Authority has three main sources of revenue: aeronautical revenue, non-aeronautical revenue, and the Airport Improvement fee (AIF).

Aeronautical revenue consists of landing and terminal fees, while non-aeronautical revenue includes concessions (e.g. duty free and car rentals), vehicle parking, contributions, as well as terminal and land rents. The AIF is added to ticket prices at the time of purchase, with passengers charged $20 each if they are flying outside of BC or the Yukon or $5 if they fly within. The fee is used to cover the operating costs of running the airport as well as capital projects such as secure corridors and moving walkways to reduce connection times for passengers, a new high-speed baggage system, and runway safety enhancements.

Revenue increased from $248.5 million in 2002 to $369.3 million in 2011, while operating expenses have risen from $142.7 to $275.9 million over the same period. This means that the excess of revenue over

[53] Vancouver International Airport 2013. "Board of Directors". Online at www.yvr.ca/en/about/leadership/directors.aspx [cited 22 May 2013]

expenses has seen an increase from $39.5 to $59.1 million.[54] About 50% of the revenue for the Authority comes from improvement fees (either Airport Improvement Fees or Terminal Fees), 25% comes from commercial rents and 25% through borrowing. The Authority is completely self-financing, and all profits from the Airport are reinvested in capital infrastructure.

The key factors determining the Airport Authority's spending priorities are safety and security, revenue generation, and required capacity. The Authority has a 20-year master plan that aims to make best use of its land base, a Capital Plan and Financial Plan that allocate funding over 10 years, and a three-year business plan that provides context for the annual Business Plan. Detailed business cases are prepared for individual projects to determine whether or not they should be funded.

Successes and Challenges

The Vancouver Airport Authority is one of the most entrepreneurial airport authorities in the country with a number of unique initiatives to its credit. It has invested over $300 million in three Canada Line rapid transit stations on airport property in order to improve travel times and options for airline passengers and airport employees. Transit mode share has increased at the airport from 2% before the Canada Line to 17% today, and parking capacity has gone from "we are at capacity" to "we have lots of capacity."[55] The Authority is also planning to develop transit-oriented development (TOD) areas around the stations for the convenience of airport customers and to generate additional revenues.

The Airport has to handle large volumes of traffic from 26,000 workers on the airport island, arriving and departing passengers, taxis and airline employees. Many employees have been able to replace their parking passes with transit passes. This has allowed the Airport to use surface parking close to the terminal building for other uses.

Through its consulting arm, InterVISTAS, the Authority manages 13 other airports around the world. It operates on a for-profit basis and the Authority takes dividends from the company which helps the Authority to charge lower fees to its customers. The Authority was asked in the mid-1990s by the Chilean and Bermuda governments to help them set up airport authorities and structure their capital programs in order to expand their airports. Given the business opportunity for the Authority, it set up a separate company for consulting work. Eventually half of the company was sold to Citibank.

Successes: Governance

- A private-sector board works well as it can make decisions in the airport's best interests, and develop diverse income sources.
- Since there are no shareholders, the Airport can take a long-term view and make investments in infrastructure, such as the $300 million put into the Canada Line. This decision may have been difficult for a shareholder-owned company. This investment has paid high dividends to the airport, in terms of providing enhanced mobility to its staff, airline employees and customers, as well as a continuing stream of revenue from TOD development at the station sites from mixed-

[54] www.yvr.ca/en/default.aspx

[55] Information from Tony Gugliotta, VP of Marketing and Business Development, YVR Airport, September 2013

use developments. The transit mode share at the YVR has increased from 2% before the Canada line to 17% today; excessive parking demands have also been relieved.

Challenges: Governance

- Convincing the public that airport improvement fees are spent wisely.
- Minimizing impact on adjacent communities from noise (e.g. YVR built a special airplane warm-up area, and changed flight paths to reduce noise).

Successes: Funding

- Provides diverse sources of income.
- Continuing efforts to grow the airport revenue sources by making smart business decisions to increase revenue in the future from transit-oriented and mixed-use developments near SkyTrain stations, incorporating hotels and outlet stores.

Challenges: Funding

- A reduction in the rent that Canadian airports pay would allow airport authorities to reduce the airport improvement fee and airline charges.

3.2.7 PORT METRO VANCOUVER

Governance

The Vancouver Fraser Port Authority operates as Port Metro Vancouver. The Port is responsible for the operation and development of the former Fraser River Port Authority, North Fraser Port Authority and Vancouver Port Authority. Port Metro Vancouver is an important player in the governance and funding of port facilities and the movement of freight by both water and road in Metro Vancouver.

It is a non-shareholder, financially self-sufficient corporation established by the Government of Canada in January 2008 under the *Canada Marine Act*. The *Canada Marine Act* establishes the governance model for the Boards of Directors of all Canada Port Authorities; it is an "Act for making the system of Canadian ports competitive, efficient and commercially oriented".

The Port Authority is accountable to the federal Minister of Transport. Port Metro Vancouver has a Board of Directors with 11 members on three-year offset terms. The Board members are selected by the federal government; however, the Chair is elected by the members. The federal government provides the legislative framework through the *Canada Marine Act* as well as oversight and support from federal departments that relate to rail service, ports, goods movement and trade. The champions for the Port's governance and funding structures were the Federal Ministries of Trade, Transport and Finance, the BC Marine Group, along with Gordon Houston, the CEO of Port Metro Vancouver.

Funding

Port Metro Vancouver has independent jurisdiction over the lands within its sites. It leases this land for 50 years with a standard tenant lease along with productivity clauses. New investment charges are also

used to raise funds from positively impacted tenants on airport lands infrastructure improvements (such as the Low Level Road in the City of North Vancouver).

Port funding priorities are split into two distinct categories: improvements to existing facilities and lease sites, and improvements to infrastructure for growth or change. The investment strategy is evaluated every year based on the state of existing leases, and federal grants available versus approaching opportunities.[56]

Successes and Challenges

Successes: Governance

- Full corporate authority over actions.
- Good political support from multiple federal departments.
- Good relationships with transportation carriers (rail, water, and roads).
- Ability to help support funding requests for external agencies or municipalities on projects with secondary benefit to Port (e.g. Massey Tunnel upgrade could allow deeper water access up the Fraser River).
- No political interference in decision-making.

Challenges: Governance

- The non-elected board is not accountable to the public or local municipal authorities.
- There is no transparency in the decision-making process for the public.
- Relationship-building with municipalities can be challenging when transportation upgrades are required for access to Port lands, especially if Port Metro is viewed as a distant federal agency.
- Keeping supply lines open without the ability to influence or impact local transportation planning and management.
- There is a supply committee with rail providers, water-based providers and road-based companies, but keeping clear supply lines is the main challenge.

Successes: Governance

- Use of a good process and planning tools.
- Experienced and knowledgeable staff.
- A well-educated Board.

Challenges: Governance

- Addressing growth needs.

[56] Interview with senior officials of Port Metro Vancouver, May 2013

- Regional rules that make it difficult to improve infrastructure (e.g. the Pattullo Bridge needs to be replaced, but the cities on both sides of the river need to be in agreement).

3.3 CITIES OF CALGARY AND EDMONTON AND REGIONS

This section of the report presents a review of transportation funding and governance in the City of Calgary and City of Edmonton and their regions. It addresses the following transportation agencies:

- The Province of Alberta's Ministry of Transportation and Ministry of Local Government
- The City of Calgary and Calgary Transit, and the City of Edmonton and Edmonton Transit
- The Capital Region around the City of Edmonton and the Calgary Region Partnership around Calgary
- The Calgary and Edmonton Airport Authorities

3.3.1 OVERVIEW

This study considered the transportation and transit areas of Alberta's two largest cities (City of Calgary with 1.1 million people, Calgary region with 1.4 million, City of Edmonton with 0.8 million and Edmonton region with 1.1 million),[57] and two very different regional transportation-related authorities – the Calgary Regional Partnership (CRP) and the Capital Region Board (CRB).

The CRP and the CRB were created to coordinate investments in regional transportation infrastructure, transportation and land use development around the cities of Calgary and Edmonton, respectively. The CRB was legislated by the provincial Ministry of Municipal Affairs to bring together the City of Edmonton, Strathcona County, City of St. Albert and surrounding municipalities to coordinate and plan major investments in transit infrastructure such as LRT lines and inter-municipal transit services, and to provide a strategic-level regional land use plan, a housing plan and a regional geographical information system. Prior to the CRB's creation there had been difficulty in achieving these objectives.

On the other hand, the Calgary Regional Partnership is a co-operative federation of the City of Calgary and 14 regional municipalities. It has worked together since 1999, and in a formal sense since 2006. The CRP has developed a *Calgary Region Metropolitan Land Use Plan* (CMP) with regional infrastructure services and transit investment policies and plans integrated with the regional land use plan. The CMP was approved by the Province of Alberta in 2010.

Figures 7, 8, 9 and 10 illustrate the governance and funding relationships between transportation agencies in the Calgary and Edmonton regions.

[57] Sourced from cities and regions, 2012

Figure 7. Calgary and Region: Transportation Governance

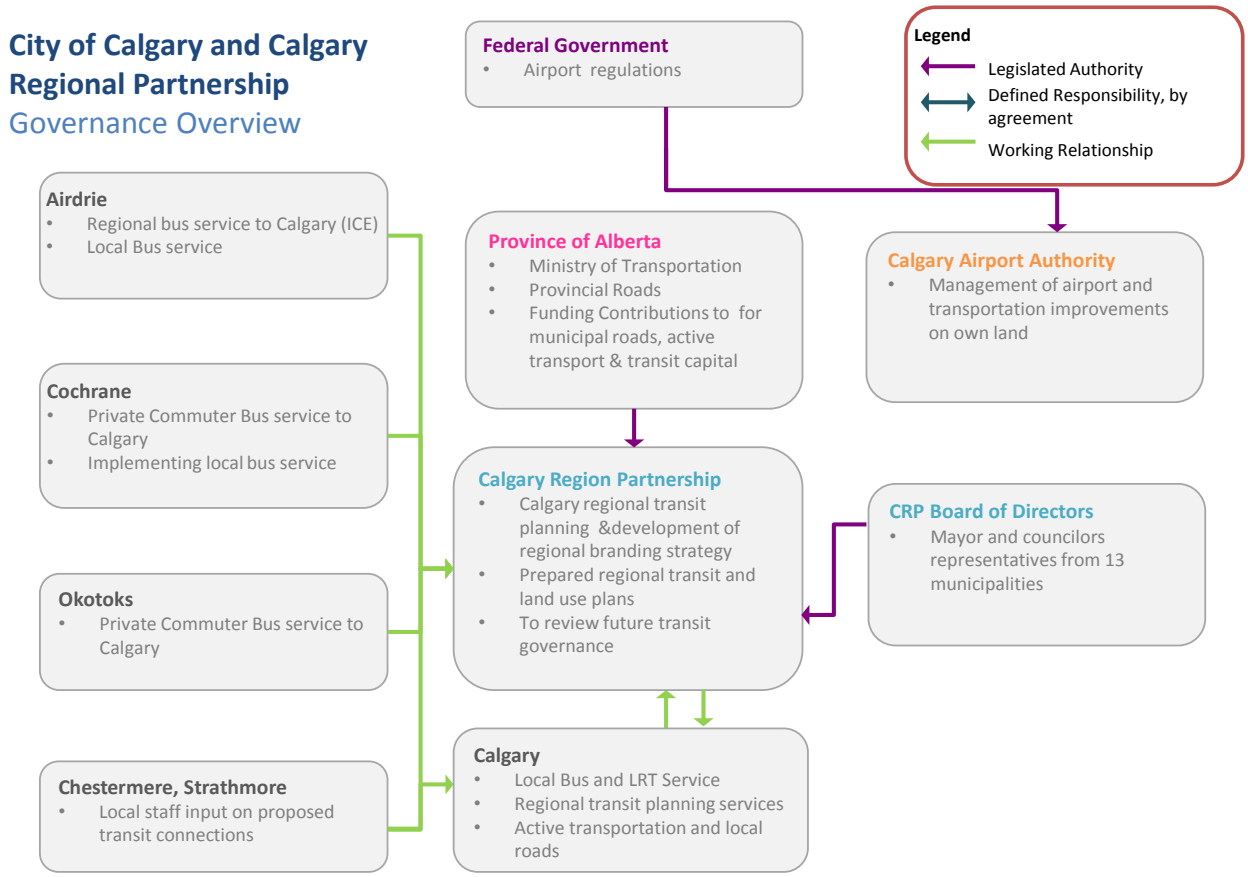


Figure 8. Edmonton and Region: Transportation Governance

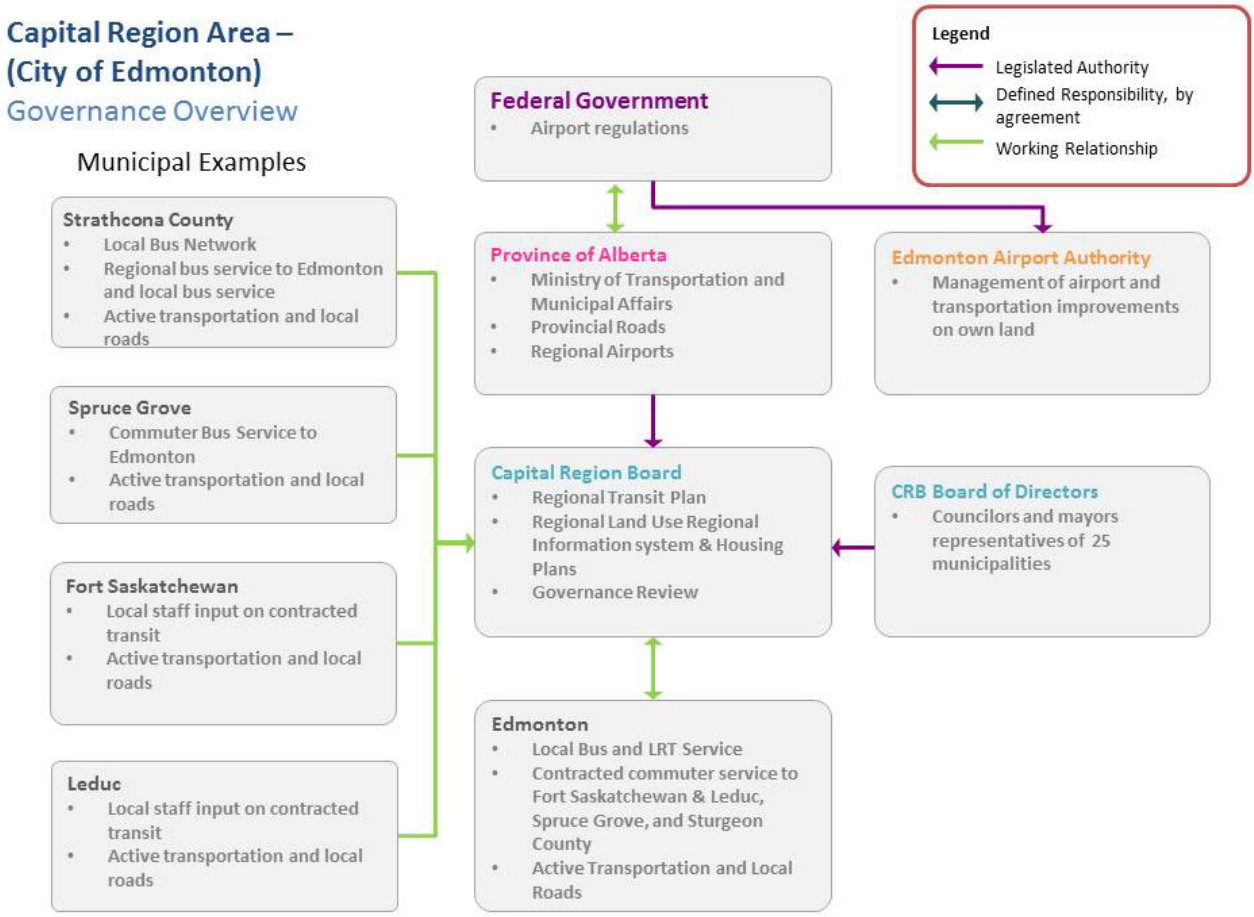


Figure 9. Calgary and Region: Transportation Funding

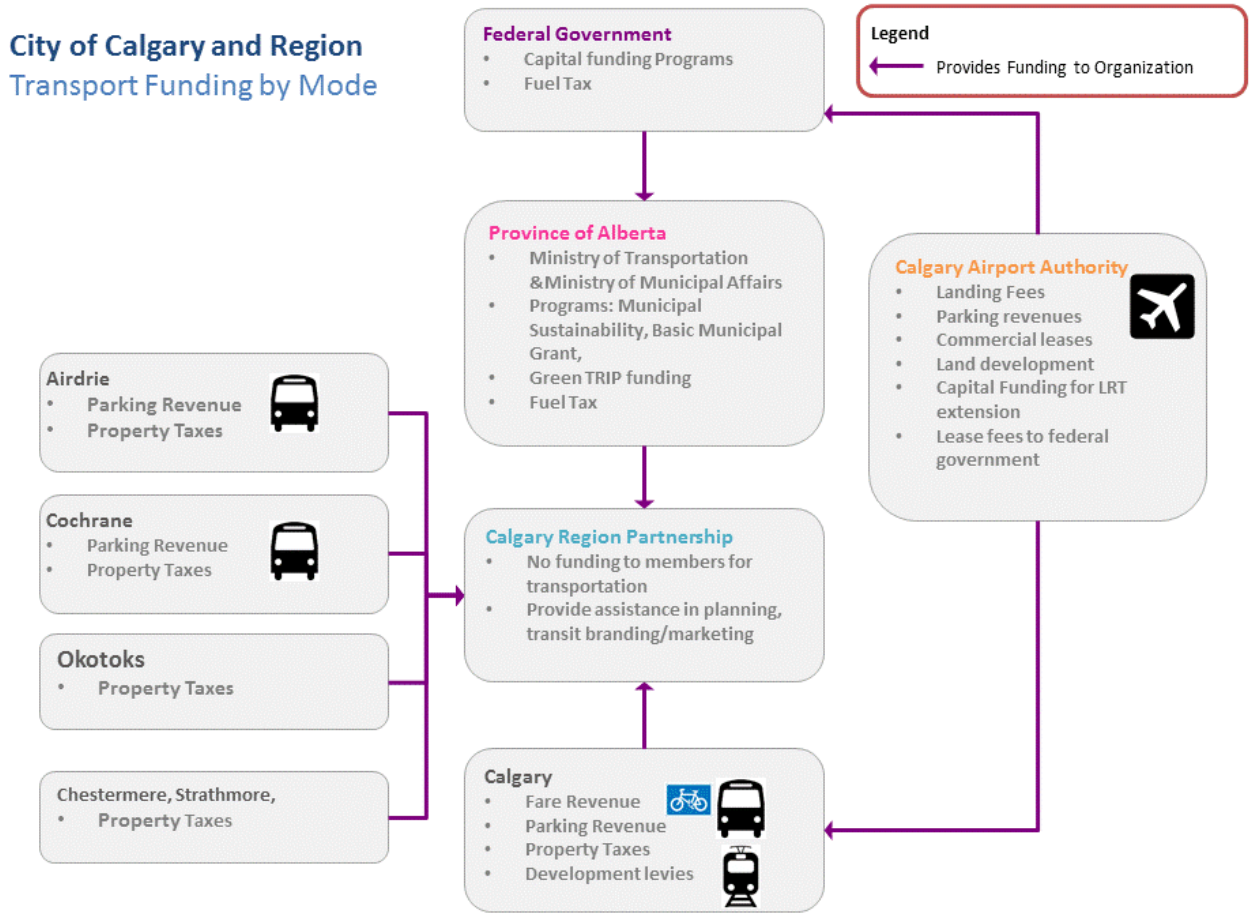
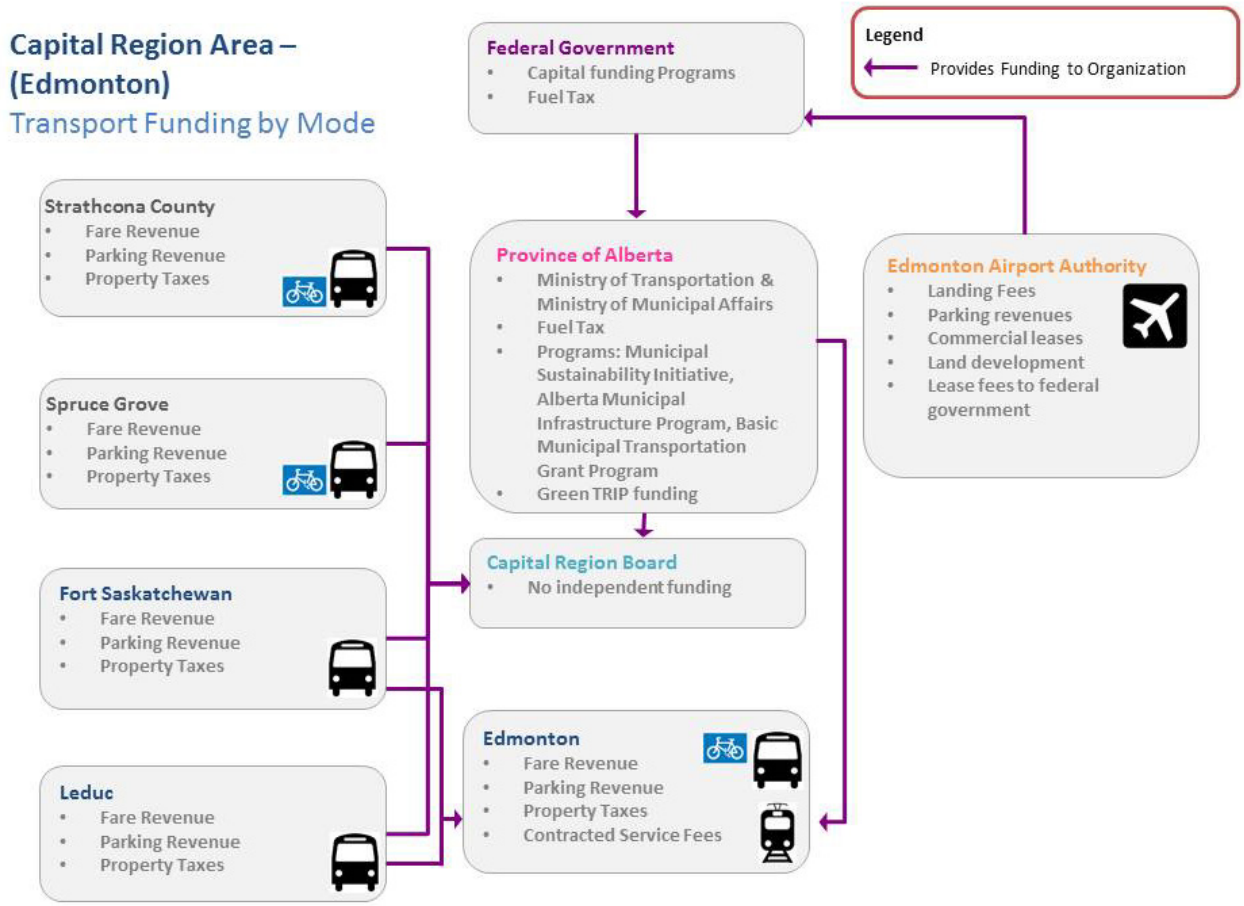


Figure 10. Edmonton and Region: Transportation Funding



3.3.2 ALBERTA MINISTRY OF TRANSPORTATION

Governance

The Alberta Ministry of Transportation comprises the Department of Transportation and the Transportation Safety Board. The Department of Transportation:

- Leads the planning, construction, and maintenance of the provincial highway network;
- Manages provincial transportation safety services;
- Designs, constructs and maintains Alberta's water management infrastructure;
- Manages provincial and federal grant programs to help municipalities develop and maintain their transportation systems, and increase public transit service to enhance mobility; and
- Represents Alberta's interests in the development of safe road-rail-air transportation systems.

The Department has the following main divisions: Engineering Services, Regional Services, Traffic Safety Services, and Policy and Corporate Services.

The Alberta Transportation Safety Board is the final administrative authority for making operator license determinations. It is also responsible for hearings under the *Railway (Alberta) Act*. While the Board reports to the Minister of Transportation, formal decisions are made independently in accordance with governing legislation: the *Traffic Safety Act* and the *Railway (Alberta) Act*.

Unlike the BC, Quebec and Ontario transportation ministries, the Alberta Ministry of Transportation staff plays a very limited role in promoting transit and alternative modes (e.g. providing transit lanes and other priority measures on provincial highways). To date, there have been few demands for such provisions on provincial roads in Alberta's urban areas.[58]

Funding

In the next three years, the Alberta Ministry of Transportation will spend almost $9.0 billion on capital programs and $3.3 billion on highway and bridge maintenance. The majority of funds will be spent on road projects (e.g. ring roads) in Edmonton and Calgary, grants for municipal transit and transportation in urban areas, and doubling the capacity of the highway between Edmonton and the Wood Buffalo Region.[59]

Provincial capital funding is provided for municipal capital infrastructure projects through the Municipal Sustainability Initiative (MSI) Fund, the Alberta Municipal Infrastructure Program and the Basic Municipal Transportation Grant Program. Since 2007, these three programs have provided municipalities with $8.7 billion in funding. Edmonton and Calgary received $4.5 billion in total for capital infrastructure. Since Alberta supports municipalities determining their own priorities, Edmonton and Calgary were free to dedicate any or all of this $4.5 billion to transit projects, at their discretion.

Furthermore, in 2008 the Albert Ministry of Transportation introduced Green TRIP, a $2.0 billion program that provides funding for transit capital investments that reduce greenhouse gas emissions. This one-time program provides $800 million to Calgary and region and $800 million to Edmonton and region for transit capital projects, and $400 million for transit throughout the rest of Alberta.

A unique aspect of this program is that funding is available to owner/operators of public transit services, which may include municipalities, regional entities, non-profit organizations, Métis settlements, the private sector and First Nations. The private sector may apply in partnership with municipalities.[60]

Challenges and Successes

Successes

- Funds major investments in road and transit improvements in both Edmonton and Calgary regions, and provides significant funding through GreenTRIP program for smaller municipalities to invest in transit.
- Provides complete flexibility for municipalities to decide how they want to spend provincial funding for capital infrastructure, including transportation: "They know best."[61]

[58] Information provided by Sara Wong, Director, Multi-Modal Transportation Policy, Alberta Transportation

[59] www.transportation.alberta.ca

[60] www.transportation.alberta.ca

Challenges

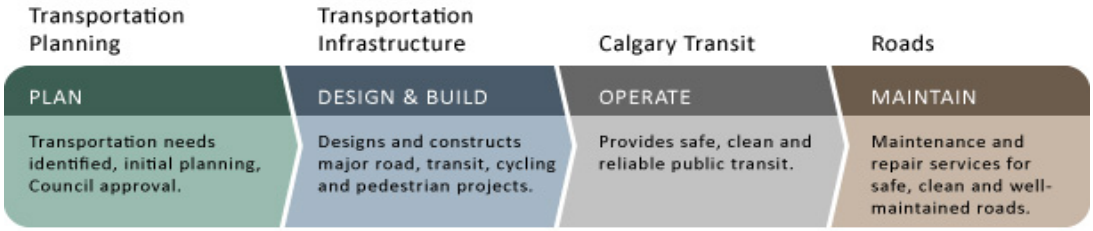
- In the face of declining oil revenues for the province (a major source of funding), how to continue to enhance transportation systems for people and goods.

3.3.3 CITY OF CALGARY AND CALGARY TRANSIT

Governance

The City of Calgary provides road, transit, pedestrian and cycling transportation services through its Transportation Department. Calgary's population of 1.1 million has grown by 20,000 in the last two years, and is projected to grow by another 50,000 between 2012 and 2014.

Calgary's Transportation Department is made up of four business units:[62]



Calgary Transit provides more than 2.5 million hours of service each year using community shuttles, buses, bus rapid transit (BRT) and light rail transit (LRT). Calgary Transit owns and operates more than 1,100 buses and shuttles on over 170 bus routes and more than 190 light rail vehicles and 38 LRT stations. Access Calgary provides specialized transportation services for people with disabilities.

The City of Calgary has an integrated approach to its transportation services. In September 2009, City Council approved a new *Municipal Development Plan* (MDP) and *Calgary Transportation Plan* (CTP), which were generated through the Plan It Calgary process. These plans outline the vision for long-term growth in Calgary over the next 60 years, and for shaping the form of the City over the next 30 years. The CTP includes targets for monitoring and reporting purposes (see Table 3). The 2009 CTP target for transit mode share heading into downtown in the morning was 50% by 2020. This target has been reached nine years ahead of schedule, due principally to two factors: significant city investment 20 years ago in high-capacity transit and active modes, while not expanding roads into the inner city; and establishing the Calgary Parking Authority which has established among the highest downtown parking rates in Canada.

Transit ridership and mode share in Calgary is expected to continue to increase with the recent addition of the West LRT in the winter of 2012, the pending extensions to the Northeast and Northwest LRT lines, and the addition of four-car platforms to the City LRT system (see Table 3).[63]

In March 2013, the City of Calgary Council approved RouteAhead, a process to develop a new plan long-term plan for Calgary Transit's network and service delivery. It outlines financing for the capital and

[61] Interview with senior Alberta Transportation official, May 2013

[62] City of Calgary Transportation Department, www.calgary.ca/Transportation

[63] City of Calgary Transportation Department, www.calgary.ca/Transportation

operating costs of the city's 30-year capital plan, and includes prioritization of transit projects for the city's 10-year *Investing in Mobility Plan*. That $4.5-billion plan encompasses all City transportation investment priorities across all modes the city is responsible for, is reviewed and approved by City Council, and is in line with their three-year business planning cycle.

Table 3. City of Calgary: Downtown Mode Split Targets (%)[64] [65]

	Walk	Cycle	Transit	Auto driver	Auto passenger	Walk, cycle and transit
2011 actual	9	2	50	33	6	61
Old targets (GoPlan, for 2024)	12 (combined)		50	38 (combined)		62
New targets (CTP, for 2020)	11	4	55	22	8	70

Funding

The City of Calgary receives money for capital infrastructure through the following means: the provincial funding provide through the Municipal Sustainability Initiative (45%); an acreage assessment (10%); civic taxes (8%); federal fuel taxes (15%); provincial fuel taxes (18%); and other (4%). Operating funding is supplied by civic taxes (75%) and revenues (25%).

Calgary Transit's revenue/cost ratio has slowly decreased in the past 10 years, from 57% in 2003 to 51% in 2012. Service reductions have been one method of reducing costs.

Table 3 summarizes the funding for Calgary's Transportation Department.

[64] City of Calgary Transportation Department, www.calgary.ca/Transportation

[65] City of Calgary Transportation Planning, www.calgary.ca/Transportation/TP

Table 4. City of Calgary: Transportation Department Operating Budget[66]

Business Unit	Operating budget (tax supported, $ millions 2012)		
	2012	2013	2014
Calgary Transit (CT)	$172	$177	$180
Roads	$132	$132	$134
Transportation Infrastructure* (TI)	$0	$0	$0
Transportation Planning (TP)	$10	$10	$9

(*) = Funded by non-tax sources including fees and other revenues

Methods of Funding Projects and Modes

A model with four key criteria was established by the City to allow citizens and City Council to choose an allocation of transportation funding among alternative choices:

- Mobility Hubs and transit Corridors (40-50%)
- Goods Movement and Traffic Growth (25-30%)
- Lifecycle and Asset Management (20-25%)
- Transportation Network Optimization and Maintenance (5-10%)

The City Administration recommendation was to consider two options: either prorate funding to all four areas, or optimize and maintain the transportation network. Information sessions were held in the fall of 2012 to ask residents how they would prioritize infrastructure spending for the next 10 years. Respondents generally favoured optimizing and maintaining existing infrastructure while investing heavily in mobility hubs and transit corridors. Ultimately, Council approved a scenario under optimize and maintain.

[66] City of Calgary Transportation Department, www.calgary.ca/Transportation

Successes and Challenges

Successes: Governance

- Growth rates have been consistent in the City, and as a result revenue from acreage assessments has been steady.
- There has been recognition of the need to invest in road infrastructure to deal with goods movement and traffic growth.

Challenges: Funding

- Building sustainable sources of funding.
- Capital funding for transportation projects is expected to decline significantly in 2013, as a number of funding programs of the provincial and federal governments will end.
- There is expected to be a $2-billion funding gap for required transportation needs in the City over the next 10 years.

3.3.4 CALGARY REGIONAL PARTNERSHIP

The Calgary Regional Partnership (CRP) is a collaborative and voluntary network of 14 municipalities in the Calgary Region. CRP works to ensure that growth occurs in a sustainable manner—which is defined in terms of protecting the rich agricultural, water and natural resources of the region for future generations by concentrating growth in well-defined communities. CRP was created in 1999 and collectively represents more than 1.3 million people. In the last five years, it has developed a regional land use plan called the *Calgary Metropolitan Plan* (CMP), a *Regional Transit Plan* and a *Regional Infrastructure Plan*. It is governed by a board of representatives from its municipal members, and is funded by contributions from its members and the provincial government.

Through its efforts and member cooperation, it has helped obtain provincial Green Trip transit capital grants to advance transit service development in its communities; developed a regional transit branding strategy; developed integrated land use and transit plans which have been approved by the province; developed a transit-oriented development (TOD) toolbox for municipalities to advance the integration of land use with transit service; and supported the development of a new regional transit system in the Bow Valley (home of the towns of Banff and Canmore, ID #9 and Banff National Park).

3.3.5 CITY OF EDMONTON AND EDMONTON TRANSIT

Governance

The Transportation Services Department of the City of Edmonton (population 1.1 million in 2012) is mandated to provide a safe, reliable and integrated transportation network that meets current and future demands. The department plans and maintains Edmonton's roads, sidewalks, multi-use trails, bicycle infrastructure and transit system. In 2012, an estimated 83 million trips were taken on transit and 21 million vehicle-kilometres were travelled daily on city roads.

The Transportation Services Department has the following key functional areas:

- **Transportation Planning** – Develops long-term plans and policies guiding all transportation modes. This includes the City's Transportation Master Plan, *The Way We Move*, which guides transportation's direction and integration with land use planning. The plan places a high priority on influencing travel behaviour by building an interconnected, multimodal transportation system where citizens can walk, bike and ride transit efficiently and conveniently to their desired location.
- **Facility and Capital Planning** – Develops and coordinates concept engineering plans for LRT, roadway, and transit improvements.
- **Development Planning and Engineering** – Reviews and approves the transportation components of land use plans and engineering designs for new growth areas.
- **Sustainable Transportation** – Supports transportation modes such as cycling, walking and ridesharing.
- **Policy Implementation and Evaluation** – Manages the creation, implementation and monitoring of the Transportation Master Plan.
- **Public Engagement** – Manages the public involvement, social marketing, public education and web initiatives for all transportation projects and programs.
- **Transportation Operations** – Manages the daily operation of Edmonton's road network to ensure that pedestrians, motorists and cyclists can move safely and efficiently. This includes the functions of Roadway Maintenance; Engineering Services; Traffic Engineering; Signals, Street Lighting and Infrastructure; Traffic Control; and the Office of Traffic Safety that works to reduce the frequency and severity of traffic collisions on Edmonton's roads.[67]

Other areas of the city administration that impact transportation include:

- **LRT Design and Construction** – Provides project management services for planned and approved LRT projects.
- **Road Design and Construction** – Provides detailed design and project management services for road projects including major road and bridge renewal, interchange construction, neighborhood renewal and rehabilitation, slide repair and erosion control.[68]
- **Edmonton Transit System (ETS)** – Operates buses, LRT and Disabled Adult Transportation Services (DATS). ETS ridership has grown by 30% in the last five years, and is projected to reach 85 million in 2013. It operates 969 buses on 191 different bus routes serving 26 transit centres, and 74 light rail vehicles that serve 15 stations. DATS delivers about 927,000 trips annually using 172 vehicles.[69] Edmonton's Transit Branch is unique from transit systems in other metropolitan areas in this study, in that some of its essential services are performed and managed by Shared Service Branches that also serve other City departments. These functions include computing

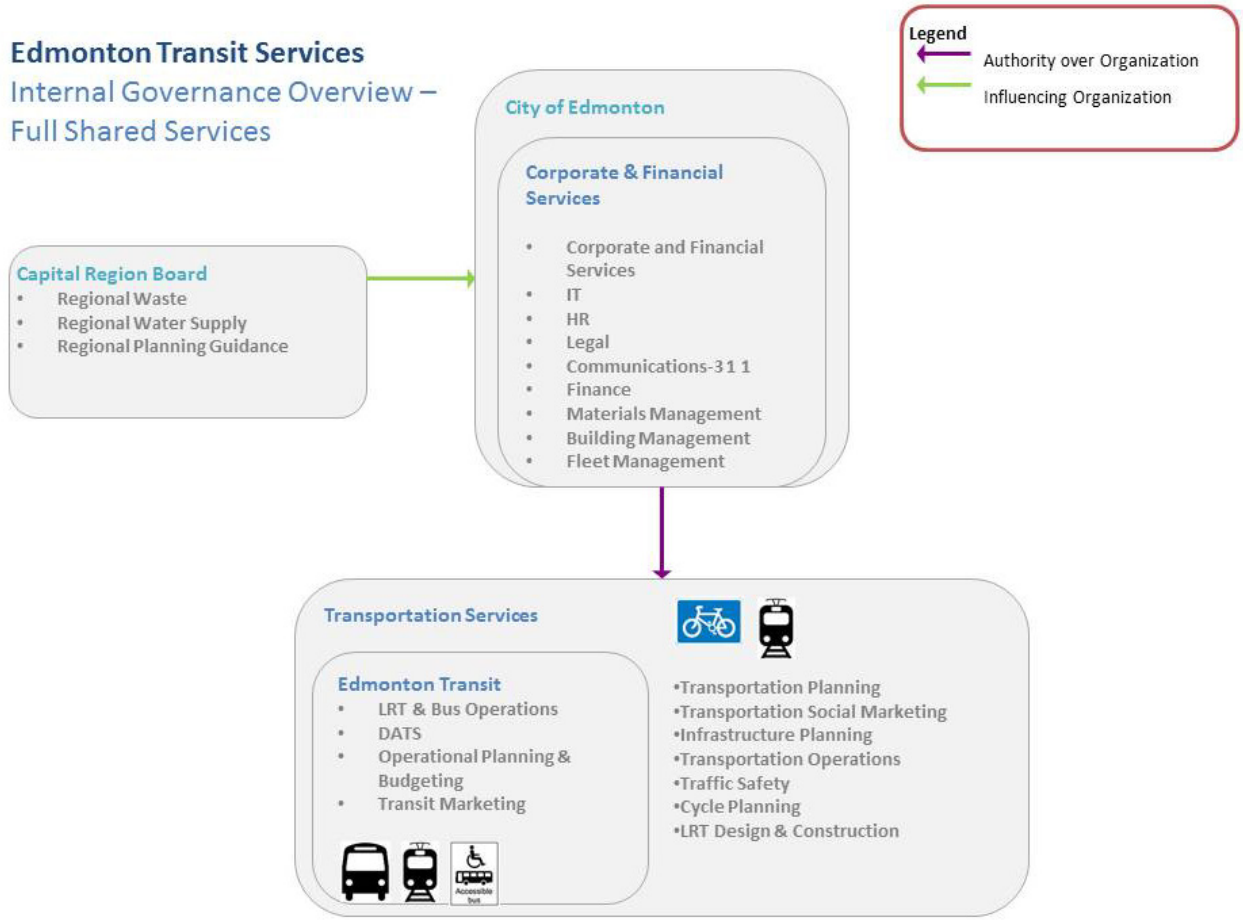
[67] www.edmonton.ca/transportation.aspx

[68] Ibid

[69] www.edmonton.ca/transportation/ets/about-ets.aspx

services, legal, finance, materials management, building management, human resources, fleet management, and customer communications/311. This is a concept used by the City of Edmonton to add value and find efficiencies. See Figure 11 below.

Figure 11. Edmonton Transit Services: Internal Governance



Funding

Revenue Sources and Expenditures

Annual operating costs of the transportation system represent about 25% of the City's tax-supported operations. Capital budgets for Transportation Services account for about 50% of both the total renewal budget of transportation assets and the total growth budget.

Tables 4 and 5 show the 2013 Edmonton Transportation Department budgeted revenues and expenditures. Revenues come 65% from the tax levy and 35% from user fees, fines and permits.

Table 5. City of Edmonton Transportation Services: Revenues and Transfers ($ thousands)[70]

Branch	2011	2012 (budget)	2013 (budget)
Edmonton Transit	114,427	121,183	129,399
LRT Design and Construction	191		30
Roads Design and Construction			
Traffic Safety	15,937	32	30,100
Transportation Operations	18,034	16,461	13,711
Transportation Planning	948	704	815
Total	*149,537*	*138,380*	*174,055*

Table 6. City of Edmonton Transportation Services: Expenditures and Transfers ($ thousands)[71]

Branch	2011	2012 (budget)	2013 (budget)
Edmonton Transit	281,483	301,260	309,476
LRT Design and Construction	874	695	707
Roads Design and Construction	1,629	1,424	1,435
Traffic Safety	14,425	16,700	14,400
Transportation Operations	166,133	147,127	149,916
Transportation Planning	14,916	15,280	14,874
Total	*479,460*	*482,486*	*490,808*

Expenditures by branch are Edmonton Transit 63%, LRT Design and Construction 0.1%, Roads Design and Construction 0.3%, Traffic Safety 3%, Transportation Operations 31% and Transportation Planning 3%. Approved capital expenditure budget for 2013 is $971.7 million, made up of grants (65%), pay-as-you-go (14%), tax-supported debt (14%), developer/partner financing (4%), reserves (2%) and local improvement (1%).

Edmonton City Council establishes general priorities, targets, goals and budgets based on input from City staff in committee meetings, inquiries, reports and presentations. However, in significant projects (exceeding $30 million in value, or where there is a keen political interest) Council may be more specific

[70] www.edmonton.ca/city_government/city_organization/transportation-services.aspx

[71] www.edmonton.ca/city_government/city_organization/transportation-services.aspx

in approval and expectations. City Departments determine the impacts of their programs, projects and services on operating budgets (annual plan) and capital budgets (three-year plan with annual adjustments). There are several layers of filters involving City staff refining and prioritizing the plans, with the final filter being the Corporate Leadership Team including the City Manager and the General Managers of all Departments.

Usually under the direction of Council, a financial cut-off point is set based on political support for the amount of tax levy as well as expected funding from other orders of government. This target can vary greatly during the 10 months before the tax levy is set and the operating and capital budgets are approved. Even during the final debate, there are opportunities to make adjustments due to new financial information (e.g. better or worse projections for income), emerging situations (e.g. pothole repair, snow removal) and political interests (e.g. events in month leading up to decision).

Successes and Challenges

Successes

- Financial reporting has been improving and clearer explanations of projects, including transportation, have been the main outcomes.
- Under the current internal governance structure, transportation areas including Edmonton Transit use Corporate Service Branches for shared functions such as Computer Systems, Human Resources, Fleet Management, Materials Management, Legal and Communications. In general, this has added value, offered specialized expertise, and improved efficiency and effectiveness.
- A unique success has been the decision by City Council to create ongoing funding for Neighbourhood Renewal, where the tax levy includes a specific amount that can only be used for roads (i.e. roads, gutter, sidewalk and lights) in residential and industrial neighbourhoods to rehabilitate them back to original design standards (if needed) and to extend their life-cycle through maintenance. This strategy has also allowed the City to move away from relying on program grants by other orders of government that fluctuated without long-term assurance.
- The fixed funding commitment has enabled the City to enter into long-term contracts with companies that ensured better pricing and availability of resources, including for transportation projects.

Challenges

It can be challenging to build universal acceptance of the following priorities before change can happen: legislative, mandated safety, state-of-good-repair, efficiency improvements and enhancement or expansion.

3.3.6 CAPITAL REGION BOARD

Governance

The Capital Region Board (CRB) is a non-profit corporation made up of one elected official from each of the 24 municipalities in the Capital Region (City of Edmonton Region). The Board was created by the provincial Municipal Affairs Department to develop and implement the Capital Region Growth Plan,

Growing Forward, which places priority on land use, intermunicipal transit services, non-market and market-affordable housing, and geographical information services. The Board differs from the Calgary Regional Partnership in that the Province used legislation to mandate the participation of each municipality. It was granted authority under Ministerial Order L: 2710/10, enabling it to "approve Municipal Statutory plans and ensure the compliance with the Growth Plan, in accordance with the Regional Evaluation Framework".[72]

The CRB is currently examining the feasibility, benefits, risks and financial viability of the creation of a regional transit commission, which could include all or some of the major municipalities. This study is expected to be completed in 2014.

Funding

The CRB is 100% funded by the Province of Alberta with an annual budget of $3 million. It funds studies rather than projects, and either the administration brings forward recommendations to the Board or the Board itself recommends initiatives based on the CRB's four priorities.

Successes and Challenges

Successes

- Funding is reliable but has not increased since the Board was founded in 2008.
- A feasibility study for a new regional transit governance structure is underway.

Challenges

- There are 24 municipalities with different views on what should be the priorities for the region.
- The province recently gave the CRB $500,000 and a deadline of June 2015 to update its growth plan. This project could involve re-examining everything from density to its voting model, which could impact the success of the region in its efforts on enhancing regional transit services, and their integration with land use.

3.3.7 CALGARY AIRPORT AUTHORITY

Governance

The Calgary Airport Authority is a not-for-profit, non-share Capital Corporation under the *Regional Airports Authorities Act* of Alberta. Calgary International Airport and Calgary/Springbank Airport are operated under an 80-year Government of Canada lease that extends to 2072. Calgary International Airport was transferred to its Authority in June 1992, and Calgary/Springbank Airport to the west of the city became part of the Authority in October 1997. About 14,000 people work at the airports. The Calgary Airport Authority is an important component of the governance of the transportation in the Calgary Region, in view of its role serving the movement of both people and goods.

[72] Capital Region Board, 2013. "About the CRB". Online at http://capitalregionboard.ab.ca/about [cited 17 April 2013]

Four organizations appoint members to the Calgary Airport Authority Board for four-year terms:

- Long Range Planning Committee of the Calgary Chamber of Commerce (8 members)
- Corporation of the City of Calgary (3)
- Government of Canada (2)
- Rocky View County (1)

The Board is responsible for "fostering the long-term success of the Authority, for its stewardship, for compliance with applicable laws and for promoting ethical conduct, integrity, and transparency".[73] The Calgary Airport Authority Board is different from the other airport authorities in Canada in that the local Chamber of Commerce appoints a majority of board members.

Funding

Figures 12 and 13 show revenue sources and expenditure areas for the Calgary Airport.

The Authority divides its revenue sources into three main categories: Airport Improvement Fee (AIF) revenue ($108 million), commercial revenue ($98 million) and aeronautical revenue ($84 million), representing 37%, 34% and 29% of total revenue, respectively. All surpluses are reinvested in the two airports.

The Airport Improvement Fee (AIF) is collected by air carriers according to an agreement among Canadian airports, the Air Transport Association of Canada, and air carriers that serve airports that have signed the AIF Agreement. The airlines receive a 5% collection fee as part of the agreement. The AIF was raised from $25 to $27 on March 1, 2013[74] and is charged to every originating passenger departing the Airport. The increase in the AIF will help to pay for a new runway and terminal at the airport, with a projected cost of $2 billion.

Aeronautical revenue includes aircraft landing fees, aircraft loading bridge fees, common use counter fees, aircraft terminal fees, and aircraft parking fees. Commercial revenues include parking, car rentals, concessions (i.e. retail, food and beverage), land rentals, space rentals and ground transportation.

The Calgary Airport Authority divides its operating expenditures into four broad categories: goods and services ($53 million), salaries and benefits ($18 million), property taxes ($7 million) and federal rent ($27 million). Operating expenses have increased from $102.3 million in 2007 to $110.2 million in 2011, an average growth rate of 1.9% per year.[75] Additional expenses are interest, collection costs for the Airport Improvement Fee, and amortization costs. Federal rent has gradually increased from $5 million in 1992 to over $25 million today.

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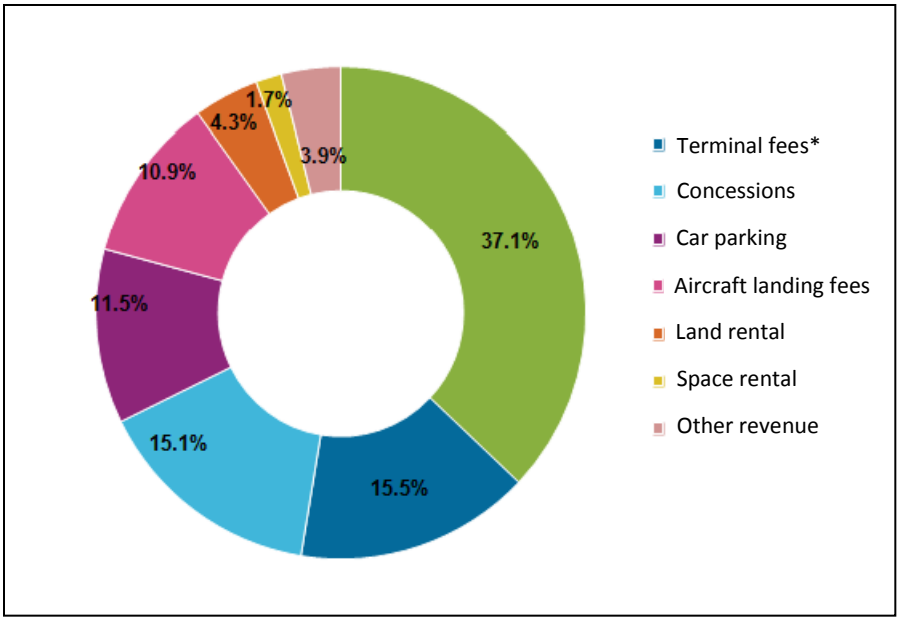
[73] Calgary International Airport 2013. "Corporate Governance". Online at www.yyc.com/en-us/calgaryairportauthority/corporategovernance.aspx [cited 25 April 2013]

[74] Financial Post 2012. "Calgary Airport Improvement Fee Hike to Hurt Canadian Airlines". Online at http://business.financialpost.com/2012/12/07/calgary-airport-fee-hike-to-hurt-canadian-airlines/ [cited 20 March 2013]

[75] Calgary Airport April 2012. *Calgary Airport Authority 5 Year Performance Review (2007-2011).* Online at

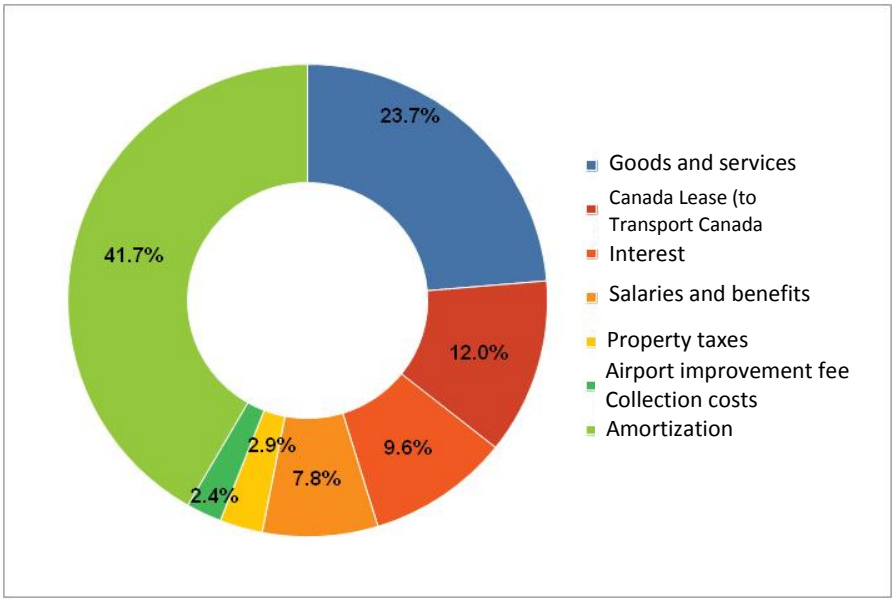
www.calgaryairport.com/Portals/0/MEDIA/Five%20Year%20Performance%20Review%20Report%202007-2011.pdf [cited 13 May 2013]

Figure 12. Calgary Airport Authority: Revenue Sources (2011, total $290.1 million) [76]



**Terminal fees include aircraft landing fees, aircraft loading bridge fees, common use counter fees, aircraft terminal fees, and aircraft parking fees*

Figure 13. Calgary Airport Authority: Expenditure Allocation (2011, total $226.2 milion)



[76] Calgary International Airport 2008. *Strategic Operating Plan 2009-2013.* Online at www.yyc.com/en-us/calgaryairportauthority/corporategovernance.aspx [cited 25 May 2013]

Successes and Challenges

Successes

As noted in the Calgary Airport Authority's Five-Year Performance Review, the Authority places a high value on being a low-cost airport. It has achieved success by having the lowest direct operating expenses per passenger among peer airports, and having a reasonable distribution between revenue from aeronautical and non-aeronautical sources. This has enabled revenue increases even when passenger traffic has decreased, such as in the 2008-2009 period.

Challenges

Cross-border competitiveness is an issue since the United States uses a less intense user-pay model than Canada. The Calgary Airport Authority has paid about $384 million in federal rent since 1992, which flows into general federal revenues. The Authority would like to see rents capped, gradually scaled back and eliminated over a 20-year period to be more competitive with its U.S. counterparts.

In addition, the Authority would like to take on full property ownership using the current governance model and discontinue the federal government's perpetual leasehold interest in airports. The Authority feels that the current structure "imposes significant additional and unnecessary costs" on the Authority and the federal government.

3.3.8 EDMONTON AIRPORT AUTHORITY

The Edmonton Airport Authority was not examined in this study because it is very similar to those in Vancouver and Calgary.

3.4 THE CITY OF WINNIPEG AND REGION

This section of the report presents the review of transportation funding and governance in the Winnipeg region. It addresses the following transportation agencies:

- Manitoba Department of Local Government (MLG), the Manitoba Department of Infrastructure and Transportation (MIT) and the Canada-Manitoba Infrastructure Secretariat (CMIS)
- Partnership of the Capital Regional of Manitoba (PMCR)
- City of Winnipeg, Winnipeg Transit and Winnipeg Parking Authority

3.4.1 WINNIPEG AIRPORT AUTHORITY OVERVIEW

The population of the City of Winnipeg and its surrounding metropolitan area in 2012 was 678,000, with 65,000 in the rest of the Census Metropolitan Area (CMA), for a total of 743,000. By 2031, the population is expected to grow to 837,000 for the City of Winnipeg and 934,000 for the CMA.[77]

[77] www12.statcan.gc.ca/census-recensement/2011/as-sa/fogs-spg/Facts-cma-eng.cfm?LANG=Eng&GC=602

Figures 14 and 15 illustrates the governance and funding relationships among transportation agencies in Metro Winnipeg and the surrounding region.

Figure 14. Greater Winnipeg: Transportation Governance

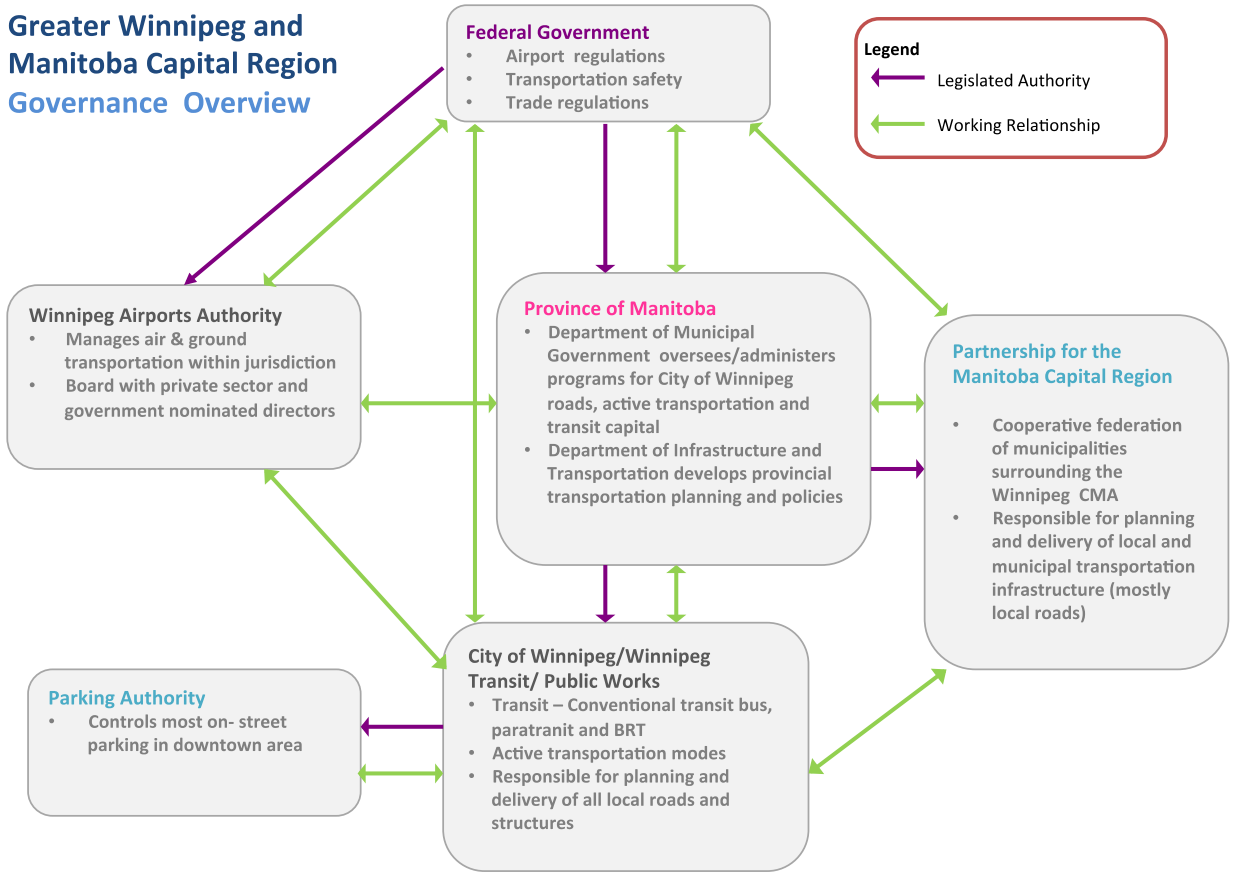
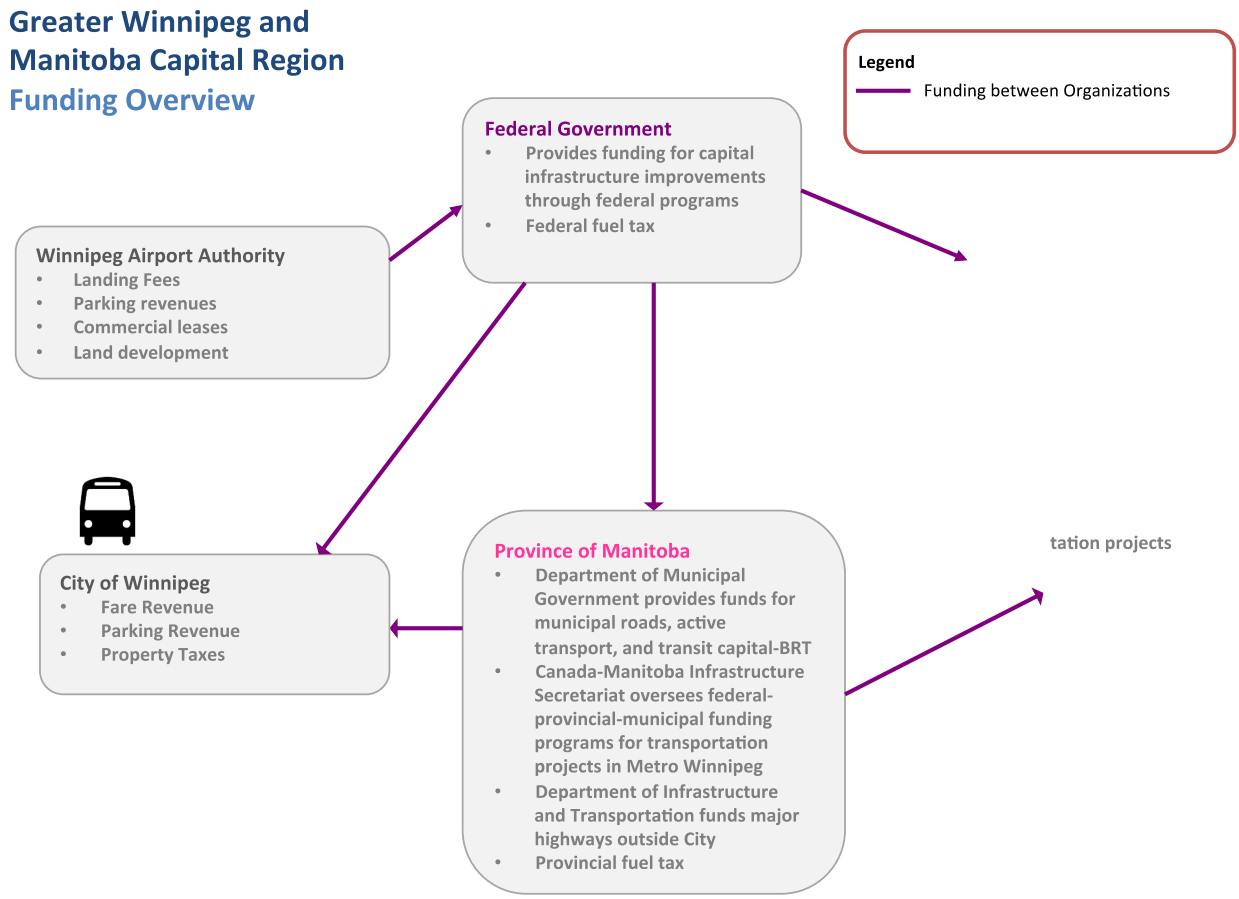


Figure 15. Greater Winnipeg: Transportation Funding



3.4.2 PROVINCE OF MANITOBA

Governance

Manitoba Department of Local Government

The Manitoba Department of Local Government (MLG) plays the provincial role in coordinating land use and development in municipalities and communities across Manitoba, and oversees the *City of Winnipeg Act* that sets the governance framework for the City of Winnipeg. It provides provincial funding to the City of Winnipeg and surrounding municipalities to help with the construction, operation and maintenance of local transportation infrastructure and services. To achieve these objectives the Province of Manitoba has established two key programs:

- The **Building Manitoba Fund** is equivalent to one-seventh of the provincial sales tax; as of April 2013 this represented $194 million. Funding from this program is used for the following purposes:
    - City of Winnipeg infrastructure maintenance (operating) and renewal (capital) needs, including roads and bridges;

  - Local street renewals;
  - Operating assistance to the city's conventional and Handi-Transit services, through a grant set by provincial legislation in 2008 that provides a 50/50 split with the City of net transit operating costs (i.e. costs less fare revenues);
  - Capital funding for the city to enable it to buy new buses, enhance shelters, provide electronic scheduling information to customers, and other enhancements;
  - Capital funding for the new BRT service, including $17.5 million toward the $138 million capital cost of the 3.5 km initial phase of the Southwest BRT service, and 50% of its net operating costs; and
  - A 50/50 share of planning and preliminary design costs for the next eastern leg of the BRT network.[78]
- A **Local Improvement Program** fund for City of Winnipeg local street renewals, totaling $21 million over the next three years with $7 million in 2013 and $14 million in 2013-14. Major projects funded by this program over 2007-2012 include the Fort Garry Bridge at $10.0 million, McGillivray Boulevard at $7.5 million, Inkster Boulevard at $16.1 million, Osborne Street at $7.2 million, Jubilee Overpass at $4.1 million, and Chief Peguis Trail at $9.0 million.

The MLG also plays the provincial role in coordinating land use and transportation comments for major developments in communities on the edges of the City of Winnipeg in the CMA. The Department of Infrastructure and Transportation provides the transportation input on these developments.

Manitoba Department of Infrastructure and Transportation

The Manitoba Department of Infrastructure and Transportation (MIT) develops provincial transportation policies and legislation, and manages infrastructure assets worth over $11 billion.[79] MIT manages 19,000 km of provincial highways and over 1,000 provincial highway bridges. A portion of the highway system includes primary highways within the City of Winnipeg and the surrounding region, including the Perimeter Highway.

MIT also works with the Partnership for the Capital Region of Manitoba (discussed below) to develop a strategic Transportation Master Plan for the Winnipeg CMA. This plan is being coordinated with the City of Winnipeg's Transportation Master Plan 2013-2031, which was approved by Winnipeg City Council in 2012.

Canada-Manitoba Infrastructure Secretariat

The Canada-Manitoba Infrastructure Secretariat, created in 1994, administers jointly funded federal-provincial infrastructure programs in Manitoba, including those related to transportation in Metro Winnipeg.

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[78] http://web5.gov.mb.ca/mfas/grants_payments_city.aspx

[79] Manitoba Infrastructure and Transportation. *2011-2012 Infrastructure and Transportation Annual Report*. Online at www.gov.mb.ca/mit/reports [cited 22 February 2013]

Manitoba Capital Region

The Manitoba Capital Region includes and surrounds the City of Winnipeg. The Capital Region includes 16 municipalities identified in the Province of Manitoba's *Capital Region Partnership Act*: the Cities of Winnipeg and Selkirk, the Town of Stonewall, and the Rural Municipalities of Cartier, East St. Paul, Headingley, Macdonald, Ritchot, Rockwood, Rosser, St. Andrews, St. Clements, St. Francois-Xavier, Springfield, Taché and West St. Paul. Together, these municipalities represent about 1.4% of the province's land base but about two-thirds of its population (over 767,000 in 2011).

The Partnership for the Capital Region of Manitoba (PMCR) has been established and meeting since 1999. The efforts of PMCR are funded by the MLG. This co-operative federation works to develop a competitive, economically strong Capital Region, and to create awareness of and address Capital Region issues and concerns that cross community boundaries. The PMCR Board has an executive committee of political members from the City of Winnipeg, St. Clements, Macdonald, St. Andrews and Rosser. It also includes members from Rockwood, Taché, St. Paul, City of Selkirk, Springfield, East St. Paul, St. Francois-Xavier, Ritchot, Headingley, Town of Stonewall and Cartier.

In collaboration with MLG and MIT, the PMCR is preparing a long- term *Transportation Master Plan* for the portion of the Capital Region outside the Winnipeg CMA. This Plan is being integrated with the City of Winnipeg's *Transportation Master Plan*. Its objectives are to:

- Shift the balance of mobility toward more public transit and transportation alternatives;
- Slow the growth of traffic congestion and increase mobility;
- Assess and promote the feasibility of public transit services connecting Capital Region population nodes;
- Research potential regional transportation targets such as expanding public transit availability and ridership, reducing individual travel times and distances, and augmenting bicycle routes, carpooling and park-and-ride services; and
- Develop models for more comprehensive cost-benefit analysis for sustainable transportation in new development.[80]

In a strategic sense, the Plan is addressing the development of rapid transit, cycling and walking routes in the CMA.

Successes and Challenges

Successes

- The creation of the PMCR has been very helpful in discussing and working towards resolution of Metro Winnipeg transportation concerns in areas around the City of Winnipeg.

[80] www.manitobacapitalregion.ca/main.asp?fxoid=FXMenu,2&cat_ID=2&sub_ID=18&sub2_ID=46

Challenges

- Senior Ministry officials felt that current funding is insufficient to keep transportation systems in the province in a state of good repair, and to fund improvements related to growth needs.

3.4.3 CITY OF WINNIPEG, WINNIPEG TRANSIT AND WINNIPEG PARKING AUTHORITY

Governance

City of Winnipeg Public Works Department

The City's Public Works Department is responsible for building and maintaining roads and structures, and helping the Winnipeg Transit Department build transit priority signals, diamond bus lanes and other measures on arterial roads to enhance transit travel times and reliability. The Public Works Department reports to a Council standing committee, the Executive Policy Committee and then City Council, with Council making the final decisions.

The Public Works Department had an operating budget of $727.8 million in 2012, and a capital budget of $511.7 million in 2013.[81]

Walking and cycling strategies and infrastructure are also the responsibility of the Public Works Department, which created an Active Transportation Group in 2006. For example, if Public Works wants to redesign a road that has been designated as an active transportation route, it is responsible for incorporating active transportation facilities. Funding for active transportation capital projects comes from the City of Winnipeg and the provincial and federal governments. Active transportation spending has grown from a capital budget of $0.2 million in 2006 to operating and capital budgets of $1.25 million (each) for 2011-2015.[82] In the last three years, the City's multi-use pathways and bikeways have expanded from 90 kilometres of facilities to over 300 kilometres.

In June 2013 Winnipeg's first-ever buffered bike lanes, marked by special polyposts, were built on the east and west sides of Pembina Highway between Chevrier Boulevard and Plaza Drive, which is one of the city's busiest commuter cycling thoroughfares. With the addition of Pembina Highway to the city's Active Transportation (AT) Network, Winnipeg now has 392 kilometres of multi-use pathways and bike lanes. This network enables residents to travel from downtown using AT facilities leading to Crescent Drive and various areas in south Winnipeg, including the University of Manitoba. It also provides a connection to the Bishop Grandin Greenway and other AT facilities in the area.

This cycling facility features a unique design for bus stops, featuring an elevated bike lane between the bus stop and the sidewalk. The design accommodates buses by not requiring them either to pull out of their travel lane, or to block cyclists. This project cost $4 million, with the City of Winnipeg contributing $3.5 million through the capital budget and the Province of Manitoba contributing $0.5 million through the Road Improvement Fund of the Department of Local Government.[83]

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[81] http://winnipeg.ca/cao/media/DocumentsReports.stm

[82] Interviews with Winnipeg Transit Staff, May 2013

[83] http://news.gov.mb.ca/news/index.html?item=17953

Winnipeg Parking Authority

The Winnipeg Parking Authority (PA) was created in 2004-05 as one of Winnipeg's four Special Operating Authorities. The driving force behind its creation was to coordinate and focus future parking directions and policies (mainly on-street parking) and enforcement under one organization. Previous parking roles were split between the Public Works, Police, and Planning, Property and Development Departments.

The PA operates like a business—not completely separate from the City Council, but at arm's length—in that it develops is own operating budget and plan, and reports to the Executive Policy Committee of City Council and City Council. Its revenues are mainly obtained through surface parking lots, but also through special permitting (e.g. residential parking permits). The 2013 budget was between $18 and $19 million. PA has some surplus revenue and has never run a deficit. It has a line of credit which it can use to repair and improve parking structures. The PA controls all on-street parking in the downtown area (3,700 spaces) and some off-street parking lots (mostly for City employees). The PA does not control enough parking to have an impact on influencing travel behaviour, as Calgary Parking Authority is able to do.

Winnipeg Transit

The transit system in Winnipeg manages all transit and administrative functions through one department. In 2011, Winnipeg Transit had a ridership of over 47.5 million passengers, and ridership has been growing at about 5% per year in recent years. There are 565 buses in the fleet, with service on over 95 routes including BRT, express and DART (Dial-a-Ride Transit).

An important new part of the Winnipeg Transit network is the development of a Bus Rapid Transit (BRT) system. The first part of this network is a 3.6-km long Southwest busway with three stations, and the City wants to implement a second phase of the busway by 2018. It is expected to cost at least $650 million, possibly under a P3 model that would see the City pay $138 million as its part of the cost in addition to provincial and federal funding. It also wants to carry out planning work to determine detailed alignment and station locations for other BRT service corridors in the next five to ten years.

Winnipeg Transit has two garages for storing and maintaining its buses. A new garage being built near one of the new BRT stations will hold an additional 200 buses. Conventional bus services are operated through two unions with a total of 1,550 staff, and paratransit services are run by private contractors.

Winnipeg Transit prepares an annual service plan and six-year capital plan. It does not prepare longer-term capital and strategic plans to guide the future planning of services, infrastructure investments and fleet purchases. It will be introducing a new smartcard in 2014 to facilitate streamlined passenger boarding.

The City of Winnipeg is currently investigating the development of a transportation authority that will enable it to advance, in a cost-effective and time-efficient way, its agenda to increase investments in the construction and operation of a rapid transit network based on exclusive busways. Furthermore, a transportation authority could address other significant road and transportation investments on the city's Regional Street Network as outlined in the City's comprehensive 2013-2031 Transportation Master Plan, which calls for capital expenditures in the order of $1.1 billion plus. A proposed full BRT network

more than 40 kilometres long would significantly enhance the City's ability to address the growing mobility needs of Metro Winnipeg's population.

This above-noted study is analyzing alternative governance structures and funding mechanisms available to such a transportation authority, including the ability to add value capture taxes, development fees, profits from land sales and development, and other potential funding streams related to investments in the rapid transit network at station areas and along the corridors. The benefits of tying funding streams to land use is that transit-oriented development can support transit ridership and Winnipeg's *Transportation Master Plan* policies on increasing transit mode share.

A new transportation authority could be established at an arm's length from the City of Winnipeg Council and have all the transit capital assets of the City of Winnipeg such as vehicles, garages and land transferred to the new body to enable it to borrow against these assets.

Funding

Winnipeg Transit

Winnipeg Transit has $165 million in annual operating costs in the 2013 budget, of which $38.6 million (23%) is covered by provincial grants, $79.6 million (47%) by transit fares (resulting in a projected revenue-to-cost ratio of 48.2%), $45.8 million (27%) by the City of Winnipeg through tax support, and $4.7 million (3%) by transfers and other sources (including $2 million per year in advertising revenue and $1 million from revenue-neutral charter services).

Total capital expenditures for transit in the City of Winnipeg vary considerably depending on the amount of non-direct funding streams and the degree of interest by Winnipeg City Council. Average annual totals include $50 to $60 million in capital in 2013, with an expectation of $306 million over the next five years.

To identify funding requirements, priority lists are developed for both capital and operating budgets using a business case model. Project prioritization involves cost-benefit analyses and business case scenarios. The process for final review and approvals is through Winnipeg City Council. A significant component of funding is provided by the province, and some is received from federal government including for special projects.

Capital expenditures vary considerably depending upon the amount of indirect funding.

Successes and Challenges

Successes

- Large cash infusions to construct the Southwest Transitway as part of bus rapid transit staging, and the savings achieved by removing buses from adjacent street traffic.
- A public-private partnership (P3) is being considered for funding of Phase Two of the Southwest Transit Corridor within the City of Winnipeg.
- The creation of a specific City staff position to coordinate and develop active transportation initiatives attached to funding allocations in the *Transportation Master Plan*.

Challenges

- For Winnipeg Transit, the high dependence of major infrastructure improvements on provincial and federal commitments, which doesn't allow staff to foresee when projects will be announced. This makes ramping up staff and resources difficult.
- Budgets are currently limited to one-year approvals from council, creating challenges and limiting opportunities to modernize routes with new buses, advance calling methods, and electronic display boards.

3.4.4 WINNIPEG AIRPORTS AUTHORITY

Governance

Winnipeg Airports Authority (WAA) is a community-based, non-share capital corporation that operates, manages, maintains and invests in the community airport, Winnipeg James Armstrong Richardson International Airport. Control of the airport was transferred from the federal government to WAA on January 1, 1997.

The Board of Directors is comprised of 15 members, 11 of whom are nominated by local government and private sector agencies. The Board makes decisions on funding, revenue streams and opportunities for the community airport.

Funding

Revenue Sources

Sources of capital funds include airport improvement fees, user pay systems, land rentals, concessions and other sources; there is no federal or provincial support. Operations within WAA are self-sufficient.

Airport Improvement Fees are charged to passengers originating in Winnipeg, but also applies to arriving passengers who stay in excess of four hours before they continue their journey. The fee increased from $20 to $25 on April 1, 2013. Aircraft landing fees are based on the maximum take-off weight, and passenger processing charges are based on the number of passenger seats on each aircraft. Non-aeronautical sources of revenue include parking charges and ground transportation, concessions and rentals.

Methods of Funding Projects and Modes

The distribution of funding is based on input from engineering and customer service groups, life-cycle costing exercises, regulatory requirements and site safety. They are moving towards privatization and use a business-based model. They are also developing non-profit shares and no-tax revenue models.

Successes and Challenges

Successes

- No political influence with a private board.

- The airport meets community-based goals and objectives, and there is continued growth and diversification with new firms.

Challenges

- The operation includes very capital-intensive costs with considerable fixed costs and variable funding.
- Foreseeing future funding requirements is difficult based on a user-pay approach.

3.5 GREATER TORONTO AND HAMILTON AREA, ONTARIO

This section of the report presents a review of transportation funding and governance in the Greater Toronto and Hamilton Area (GTHA), which has a population of more than 6 million people. It addresses the following agencies:

- Ontario Ministry of Transportation;
- Metrolinx, the regional transportation planning, project management, funding and coordinating agency; and
- City of Hamilton and Hamilton Transit, City of Toronto and Toronto Transit Commission, and the Regional Municipality of York.

3.5.1 OVERVIEW

Figures 16 and 17 illustrate the governance and funding relationships and independencies among transportation agencies in the GTHA.

Figure 86. GTHA: Transportation Governance

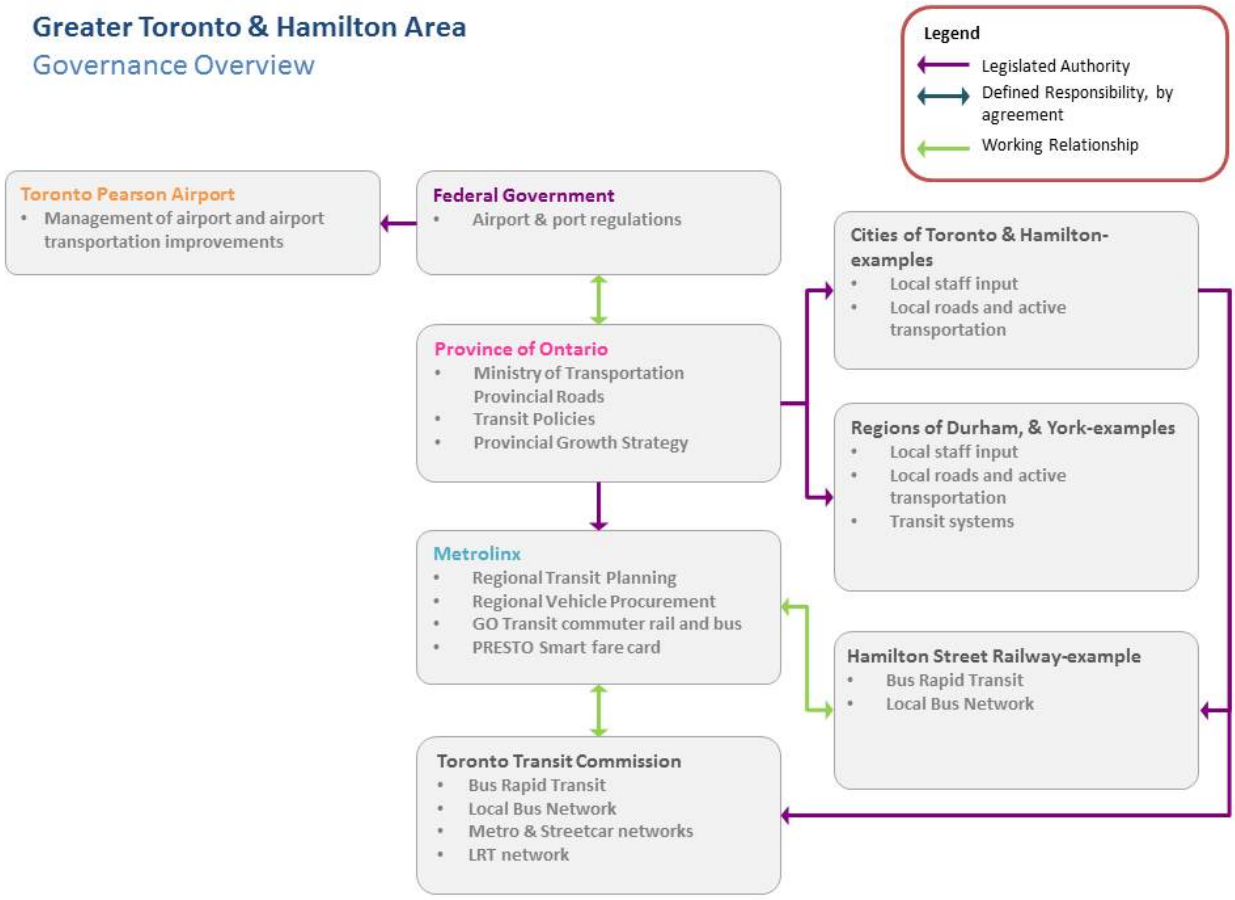
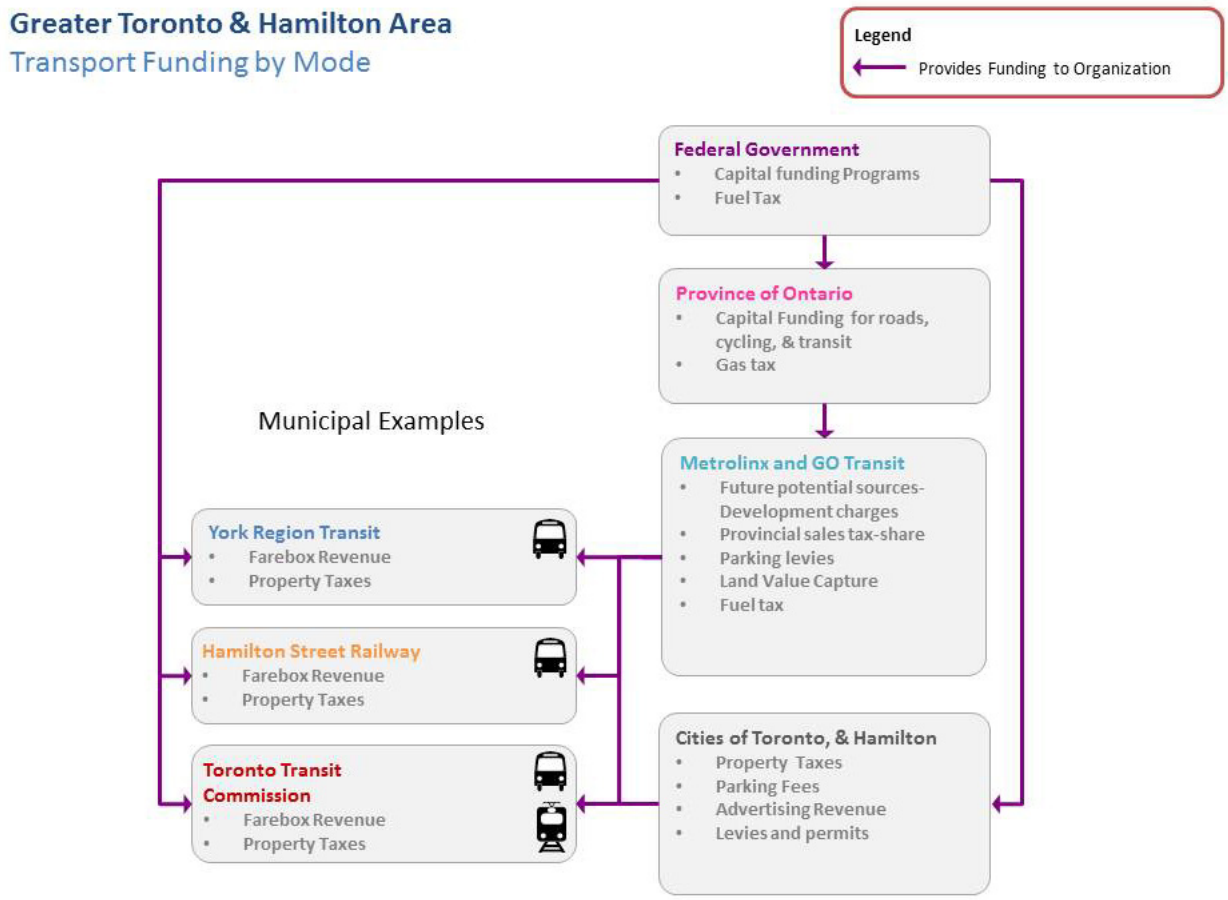


Figure 97. GTHA: Transportation Funding



3.5.2 ONTARIO MINISTRY OF TRANSPORTATION

Governance

Two Chairs report to the Minister of Transportation (the Ontario Highway Board Chair and the Metrolinx Chair) in addition to the Deputy Minister. Reporting to the Deputy Minister are the Assistant Deputy Ministers (ADMs) of Provincial Highways Management, Policy and Planning, Road User Safety and Corporate Services, along with the Chief Information Officer. Transit Policy and Transportation Planning fall under the ADM of Policy and Planning.

The MTO administers 24 pieces of legislation including the *Capital Investment Plan Act*, the *Metrolinx Act*, the *Ontario Highway Transport Board Act*, the *Public Transportation and Highway Improvement Act*, and the *Toll Bridges Act*.

The Ministry has a vision, which is "To be a world leader in moving people and goods safely, efficiently and sustainably, and to support a globally competitive economy and a high quality of life."[84] Its four key priorities are to:

- Increase transit ridership (e.g. through the Regional Transportation Plan and PRESTO fare card);
- Promote a multimodal transportation network to support the efficient movement of people and goods (e.g. through Union Station revitalization);
- Promote road safety (e.g. through graduated driver license improvements); and
- Integrate sustainability into the Ministry's decision-making, programs, policies and operations (e.g. through hybrid and electric fleet vehicles).[85]

Metrolinx is an agency of the Province that provides leadership in the GTHA including through the development of an integrated, multimodal transportation plan. The Ontario Highway board is a quasi-judicial agency that controls market entry for the public vehicle (or intercity bus) industry.

Funding

The Ontario government's revenue sources and MTO's expenditure areas are shown in Tables 7 and 8 below.

[84] Interview with MTO staff, June 2013

[85] Ministry of Transportation Ontario 2012. *2011-12 Results-Based Plan Briefing Book*. Online at www.mto.gov.on.ca/english/pubs/results-based-plan/2011/overview.shtml [cited 12 April 2013]

Table 7. Province of Ontario Revenue Sources (Actual, 2011-12)[86]

Funding Source	Revenues ($ millions)	%
Personal income tax	24,548	22.4%
Federal transfers	21,305	19.4%
Sales tax	20,159	18.4%
Corporations tax	9,944	9.1%
Education property tax	5,765	5.3%
Employer health tax	5,092	4.6%
Income from government's business enterprises	4,413	4.0%
Ontario Health Premium	2,916	2.7%
Gasoline tax	2,380	2.2%
Other taxes	4,794	4.4%
Other non-tax revenue	8,457	7.7%
Total	*109,773*	*100%*

Table 8. MTO Expenditures (2011-12)[87]

Operating and Capital Expense	Expenses ($ millions)	%
Ministry administration	40	1.3
Policy and planning	2,501	79.8
Road user safety	97	3.1
Provincial highways management	427	13.6
Labour and transportation cluster	70	2.2
Total	*3,135*	*100%*

Successes and Challenges

Successes

- Created the Ontario Gas Tax Program that allows municipalities to introduce transit service improvements such as additional buses and expanded routes.

[86] Ministry of Finance Ontario 2013. *2013 Ontario Budget*. Online at www.mto.gov.on.ca/english/pubs/results-based-plan/2011/overview.shtml [cited 20 May 2013]

[87] www.fin.gov.on.ca/en/budget/estimates/2011-12/volume1/MTO.html

- Placed an important role on using a large percentage of their resources (80%) for policy and planning work versus the operation and construction of transportation systems in the province, as many transportation systems are mature.[88]

- Developed the PRESTO electronic fare system with municipal transit agencies to provide a flexible and seamless fare payment mechanism for all customers in the Greater Toronto and Hamilton area. PRESTO makes it easier for customers to transfer between area transit systems, and enables frequent rider rewards by reducing average fares.

- Developed Environmental Management System (EMS) to guide planning, design, construction and operation of provincial transportation facilities.

Challenges

- Climate change, demographic change, traffic congestion, increasing urbanization and creating a green economy, among others.

3.5.3 METROLINX

Governance

Metrolinx is an agency of the Government of Ontario created in 2006 as a non-share capital corporation by the *Metrolinx Act*. Its mission is to champion, develop and implement an integrated transportation system for the GTHA that enhances prosperity, sustainability and quality of life. It also acts as a central procurement agency for Ontario's public transit systems.

Metrolinx has a 15-member Board of professional, unelected officials appointed by the Premier through the Public Appointments Secretariat based on required skillsets. The current governance model was implemented in 2009 as a modification to the original 2006 governance structure of appointed professional and elected officials. This change was prompted by the transition of the agency's focus from primarily planning to the actual implementation of projects such as new rapid transit lines, the PRESTO smart card, and GO Transit.

Recently, Metrolinx established agreements with the Toronto Transit Commission and York Region Transit regarding Metrolinx ownership of new rapid transit projects and local transit agency operation. Alternative Financing and Procurement (AFP) or P3 is recommended for the delivery of new rapid transit projects, with Infrastructure Ontario as an active partner in procurement for project delivery.

Metrolinx has three operating divisions: GO Transit, PRESTO and UP Express.

Funding

The operating subsidy (primarily for GO Transit) is 100% funded by the province, and GO Transit recovers about 80% of its operating costs from fare revenues. Capital funding is about 80% from the province and 20% from federal and municipal governments. Capital expenditures of $2 to $3 billion are forecast over the next five years.

[88] Interview with senior MIT officials, June 2013

Investment Strategy

An investment strategy for Metrolinx's regional transportation plan was mandated by legislation to be delivered in June 2013. The strategy was to provide Metrolinx with stable funding to sustain transportation infrastructure investment into the future and help avoid boom and bust construction cycles caused by unpredictable funding. Metrolinx outlined the following vision for its investment strategy:

- Fair and equitable full-cost transportation pricing;
- Access to a range of dedicated, long-term funding sources and tools;
- Dedicated funding pledged back to support integrated multimodal solutions;
- Shared responsibility by all three orders of government;
- A meaningful role for the private sector;
- Importance of public and stakeholder consultation and engagement; and
- Commitment to performance measurement.

In April 2013, Metrolinx released a shortlist of investment tools for consultation. It examined 25 investment options and retained 11 for additional consultation:

- Development charges;
- Employer payroll tax;
- Fuel tax;
- High-occupancy toll (HOT) lanes on provincial highways;
- Highway tolls;
- Land value capture on lands within close proximity of rapid transit stations;
- Parking space levy, including pay-for-parking at transit stations;
- Property tax;
- Provincial sales tax with mobility credit to partially redress equity impacts on lower-income people;
- Transit tare increase; and
- Vehicle-kilometres travelled (VKT) fee.[89]

[89] www.metrolinx.com

In June 2013, a final Investment strategy was released with four recommended tools:

- 1 percentage point HST increase ($1.3 billion annually)
- 5 cent fuel and gasoline tax ($330 million annually)
- Business parking levy ($350 million annually)
- 15% development charges ($100 million annually)

The strategy also included three supporting policy tools: HOT lanes, paid parking at transit stations, and land value capture. The Metrolinx Investment Strategy recommendations are currently under review by the provincial government.

Investment Decisions

In addition to funding, investment decisions are guided by a modified multiple account analysis framework and a project prioritization framework. This framework is guided by the regional transportation strategy (*The Big Move*) and includes two key phases of technical analysis and score card development:

- Primary evaluation against the three "lenses" of *The Big Move*, namely a high quality of life, a protected environment and a prosperous and competitive economy; and
- An implementation screening for deliverability and constructability.

Projects are allocated to priority groupings based on this modified multiple account analysis for Board review, assessment of "strategic fit," and a recommendation for decision by the Province.

Successes and Challenges

Successes

- Regional Transportation Plan that is required to conform to the provincial Growth Plan for the Greater Golden Horseshoe.
- Capital infrastructure planning and coordination in the GTHA.
- PRESTO fare card is a key tool that could provide for eventual integration of fares. Also there are some bilateral fare integration agreements among local operators and GO Transit.
- Significant recent investments in commuter rail and rapid transit improvements.
- GO Transit service and ridership expansion.
- Current implementation of some long sought-after and challenging transit projects such as the rail connection between Union Station in downtown Toronto and Pearson International Airport.

Challenges

- Reflecting the broad geographic scope and range of community and business interests in plans and policies.
- Prioritization of projects in the context of significant needs and limited funding.
- Lack of dedicated funding tools to provide reliable and timely implementation of the regional transportation plan.

3.5.4 CITY OF TORONTO AND TORONTO TRANSIT COMMISSION

Governance

The TTC is governed by the bylaws and policies of the City of Toronto, most recently the *City of Toronto Act* (2006). It was established in 1921 as the Toronto Transportation Commission, taking over private transit services, and changed its name to the Toronto Transit Commission in 1954 with the opening of the first subway and expansion of its service to the newly formed municipality of Metropolitan Toronto. The TTC largely operates within the City's boundaries but there are extensions to neighboring municipalities/regions as provided in agreements.

The TTC has an 11-member Commission, with seven elected officials from Council and four private citizens. All are appointed by Council. Under a new governance structure implemented six months ago, the Chair is appointed by Council from the seven elected officials, and the Vice Chair is elected by the Commission from the four private citizens. The prior governance structure involved a nine-member Commission, with all elected officials appointed from Council. The appointment process is administered by a striking committee that makes recommendations to Council. The private citizens are selected based on skillsets required by the Commission.

The TTC is empowered by the City to plan for the future development of local passenger transportation to serve the city's inhabitants. Accordingly, the City is not entitled to exercise power related to local transportation, except as it relates to the Toronto Islands. The TTC is dependent upon the City for both operating and capital subsidies.

The TTC is responsible for conventional bus and subway services and Wheel-Trans, a transit service for people with disabilities, which is also subsidized by the City. The Commission's subsidiaries include Toronto Transit Infrastructure Limited, Toronto Coach Terminal Inc., and its subsidiary TTC Insurance Company Limited.

Funding

Transit capital funding is supported by development charges and property tax. Senior government funding for infrastructure is also available on a project-by-project basis from the provincial and federal governments (typically shared in even thirds). On a more predictable basis, the Province of Ontario shares two cents per litre of gas tax revenue with municipalities for public transit, with an allocation based 70% on ridership and 30% on population.

In 2013, transit operating costs were covered 74% from operating revenues (which are, in turn, 95% from fares and 5% from other sources such as advertising and leasing) and 26% from City property taxes and provincial fuel tax transfers.

The Metrolinx Investment Strategy, as described previously, is important to the City. The TTC did not submit a brief indicating its preferred investment strategy options.

In the recent past, the City of Toronto has adopted budget policies to benefit the TTC. Two years ago, the City adopted a policy allocating 75% of any annual budget surplus to transit for base capital requirements. The City's Build Toronto corporation is selling surplus lands and air rights for development, with proceeds directed to TTC capital needs.

TTC uses a priority ranking system to allocate capital expenditures, using the following priorities:

1. State of good repair;
2. Safety;
3. Regulatory or legislative requirements;
4. Efficiency or productivity; and
5. Capacity expansion, which typically aligns with Metrolinx's *The Big Move*.

The City of Toronto spends the majority of its capital budget (88%) on asset management and state of good repair of capital assets, in order to optimize maintenance and operating expenditures, and to extend the life of these capital assets.[90]

Successes and Challenges

Successes

- The Commission and City have been instrumental in advocating for the development of senior government funding for transit.
- The TTC has been strategic in seeking new internal funding sources to prioritize its investment decisions.
- Service and ridership have grown, with ridership growth assisted by the introduction of the PRESTO card.
- The TTC is an integrated city-wide system, with up to 70% of all passengers transferring (especially to the subway).

Challenges

- Growth in population and the need to respond to this growth.
- Passenger demand outstrips service and funding; there is an urgent need to expand service.
- City funding sources are inadequate and/or appropriate for the significant investments necessary.
- Growth in capital expenditures.

[90] Interview with senior official, City of Toronto Transportation Services Department, May 2013

3.5.5 REPRESENTATIVE LOCAL MUNICIPALITY: CITY OF HAMILTON

This study included a review of the transportation governance and funding of the City of Hamilton as it is considered to be a representative local municipality in the GTHA.

Governance

The City of Hamilton is a municipality governed by the provincial *Municipal Act* of 2001. Council's Public Works Committee provides direction and recommendations to Council on transportation matters.

The Hamilton Street Railway (HSR) is the City's transit system, and is managed within the Public Works Department. The City's organization was recently changed to integrate the formerly separate functions of roads and transit in a single department. This new structure also marked an increased focus on active transportation (walking, cycling and transit), related mobility programs and a special project group working on rapid transit. A current services review being led by the City Manager and the General Manager of Finance may lead to further changes.

Funding

Transit capital funding is supported by development charges and property tax. Senior government funding for infrastructure is also available on a project-by-project basis from the provincial and federal governments (typically shared in even thirds). On a more predictable basis, the Province of Ontario shares two cents per litre of gas tax revenue with municipalities for public transit, with an allocation based 70% on ridership and 30% on population. Transit operating funding is drawn from passenger farebox revenue and property tax.

Capital spending decisions are guided by the City's Transportation Master Plan, and follow a disciplined capital budget process during which staff assess project priorities within block funding/budget envelopes established by senior management and Council.

Successes and Challenges

Successes

- A new organizational model for transportation with a focus on mobility, Metrolinx and its support for LRT.
- Senior Hamilton officials felt that provincial and federal funding sources were critical to enabling many transportation projects that would otherwise be beyond the financial capacity of local governments.
- Revitalized support and approval for planning, designing and building rapid transit projects in the GTHA after many years, through the combined efforts of the Province of Ontario, Metrolinx and municipalities.
- A strong regional agency like Metrolinx to enable project delivery.

Challenges

- Equity or fairness between investments in active transportation versus roads.

- A big change in approach to transportation.
- The challenge of building consensus across the City with a Ward Council structure.
- Resources to deliver long-term solutions in a political culture having a strong "next election" priority.

3.5.6 REPRESENTATIVE REGIONAL MUNICIPALITY: YORK REGION

This study included a review of the transportation governance and funding of York Region as it is considered to be a representative regional municipality in the GTHA.

Governance

Created in 1971, York Region is located north of Toronto and has a population of 1.1 million. It includes nine local municipalities, of which the largest two (Markham and Vaughan) have more than 300,000 each in population. York Region is one of the fastest growing municipalities in Canada, having grown 19% in the last 6 years. It is expected to reach a population of 1.5 million by 2031.

The Region is governed by a 21-member Regional Council (9 local Mayors, 11 elected Regional Councillors, and a Chair). The Chair had previously been appointed but under provincial legislation in 2012 will now be elected.

Regional transportation functions are administered by the Transportation and Community Planning Department, which has the following functional areas: Complete Streets; Transportation Planning; Regional Roads; Traffic and Technology; and Transit. The Department reports to Transit Services Committee, Planning and Economic Development Council Committee, and York Region Council.

York Region Transportation is responsible for arterial roads, public transit (since 2001), regional cycling and transportation demand management (since 2008). Local transportation is administered by the Region's member municipalities.

The department is guided in its budget and policy decisions by the *Transportation Master Plan*, *Streetscape Policy*, *Sustainability Strategy*, the *Regional Official Plan*, the *Pedestrian and Cycling Implementation Plan, Vision 2026* and a *Regional Excellence Framework*.

The region has made significant progress in advancing the implementation of its VIVA BRT network, which provides frequent service using high-quality buses and dedicated rights-of-way. VIVA forms the core of the York Region Transit network and is integrated with other regional and local bus connections along with the GO bus and rail services. York Region has participated in the development and implementation of the regional PRESTO fare card.

To implement the rapid transit network, York Region formed the York Region Rapid Transit Corporation (which has Mayors of key municipalities on its Board) with private-sector representatives to plan, design and build the VIVA network. This partnership has enabled the VIVA system to be built more quickly, to use the best practices and expertise of the private sector, to share the financial risk and to obtain greater funding from both the Ontario government and the federal government. The corporation's main responsibilities are to establish service levels and fare polices, to own the infrastructure, and to ensure

good value for money by having an independent auditor set contract prices for the design/build implementation process.[91]

Senior orders of government (i.e. Metrolinx, provincial and federal governments) are critical to the implementation of capital projects, with their more comprehensive set of funding tools. The Region includes these key stakeholders in its decision-making process.[92]

Funding

Capital and operating funding is prescribed by provincial legislation.

Transit capital funding is supported by development charges and property tax. Senior government funding for infrastructure is also available on a project-by-project basis from the provincial and federal governments (typically shared in even thirds). On a more predictable basis, the Province of Ontario shares two cents per litre of gas tax revenue with municipalities for public transit, with an allocation based 70% on ridership and 30% on population. Transit operating funding is drawn from passenger farebox revenue and property tax.

The process of prioritizing projects and budget is guided by the Region's *Transportation Master Plan* and *Vision 2051*.

Successes and Challenges

Successes

- Progressive leadership, effective and respectful partnership between staff and Council.
- Regional working relationships developed over time on a project-by-project or function-by-function basis. For example, regional co-operation with Brampton and Toronto on projects of joint interest include collaboration, win-win approaches, structured agreements. Direct, bilateral, project-focused regional coordination has also been successful.
- The VIVA bus rapid transit project.
- Authorization of funding to implement transportation plans, and hiring staff and external resources to accomplish projects and programs.

Challenges

- The fast pace of growth challenges all systems and resources in the Region.
- Members of the public, transit passengers and businesses are more informed and more engaged in consultation processes, which lead to more understanding and consensus but requires extra time and resources.

[91] Interviews with York Region staff, May 2013

[92] Ibid

3.5.7 GREATER TORONTO AIRPORTS AUTHORITY

Governance

The GTAA is a unique non-share capital, not-for-profit corporation. It was incorporated under Part II of the *Canada Corporations Act (93)* in 1993 and manages Toronto Pearson International Airport under terms set out in a 1996 lease with the federal government. This Canadian airport governance and funding structure is unique in the world. It compares to the municipal model in the US, the private corporation ownership and/or concession model of Australia, and some combination of these later two models in Europe.

The GTAA has a 15-member autonomous and professional Board comprised of non-elected officials nominated by designated stakeholders (two federal, one provincial, 12 regional). Appointments are made by the Board.

The GTAA manages Toronto Pearson International Airport, Canada's busiest airport. Its mandate is to ensure that the airport's facilities and services match the needs of the growing population of south-central Ontario. It manages airside facilities, passenger terminals, ground transportation (i.e. access, circulation and parking), air cargo facilities, business aviation facilities, and airline and airport support facilities.

Funding

The GTAA is financed through operating revenues (i.e. fees) and debt capital financing ("A" credit rating). The federal government charges a ground lease but all assets are owned by the GTAA.

No significant changes in funding are planned. In recent years the GTAA has built increased transparency into its pricing by focusing on a user-pay model. This has incentivized airport users to make more efficient use of airport assets, thereby delaying expensive infrastructure investments.

Project prioritization and decisions are guided by the GTAA's business plan goals, objectives and targets and its long-term capital funding capacity.

Challenges and Successes

Successes

- Autonomy of decision-making and financing in a business plan framework.
- Taking a comprehensive view of the region works better than looking at discrete issues of one municipality or one sector.

Challenges

- The Board, a not-for-profit corporation, uses business plan goals, objectives and targets that are not all financial (bottom line) in nature to guide its decisions.

[93] City of Toronto. "Greater Toronto Airports Authority (GTAA) Board". Online at www.toronto.ca/abcc/eb-gtaa.htm [cited 9 June 2013]

- The GTAA also adopts consultation forums on issues with neighbours (e.g. noise) and rates and charges (e.g. with air carriers, public).
- To ensure ease of access to Pearson International Airport for the 8 million residents in its catchment area.
- To minimize congestion in order to influence the air vs. road decision of freight companies.

3.6 METRO MONTRÉAL

This section of the report presents a review of transportation funding and governance in Metro Montréal, the Province of Quebec's largest urban agglomeration. It addresses the following transportation agencies:

- Ministère des Transports du Québec (MTQ)
- Communauté métropolitaine de Montréal (CMM)
- Agence métropolitaine de transport (AMT)
- Société de transport de Montréal (STM)
- City of Montréal

3.6.1 OVERVIEW

Figures 18 and 19 illustrate the governance and funding relationships among transportation agencies in Metro Montréal.

In the Province of Québec, federal, provincial and municipal jurisdictions participate in transportation governance and financing. Each order of government has an influence on local and regional authorities as they plan and implement their projects.

Agencies in federal jurisdiction include the Montréal Port Authorities, the Federal Bridge Corporation, Aéroports de Montréal, and CN and CP Railways which are involved in many transportation projects.

Provincially, the Quebec Ministry of Transport (MTQ) is the main actor with responsibility for planning, development and financing transportation for people and goods in Québec. As of 2012, the Minister of Transport is also head of the Ministry of Municipal Affairs, Regions and Land Occupancy in an effort to support the integration of transportation and land use in the province.

Municipalities are responsible for the construction, maintenance and operation of municipal roads and funding of transit agencies within their territory. Accordingly, transit operators have to carry out municipal visions for sustainable mobility, and support the goals and objectives of municipal plans. A new regional structure was put in place in 2002, namely the Communauté métropolitaine de Montréal (CMM) which covers 14 regional municipalities (MRC) and 82 municipalities in the greater Montréal region. The CMM has responsibility for land use planning, and has to optimize and develop transportation networks to support personal and freight mobility, and to protect and enhance the quality of environment.

In Metro Montréal, the Agence métropolitaine de transport (AMT) is mandated to plan, build, contract and support public transportation services and facilities in the Montréal region. It is also the operator of the regional commuter train network. AMT reports directly to the MTQ.

Figure 18. Metro Montréal: Transportation Governance

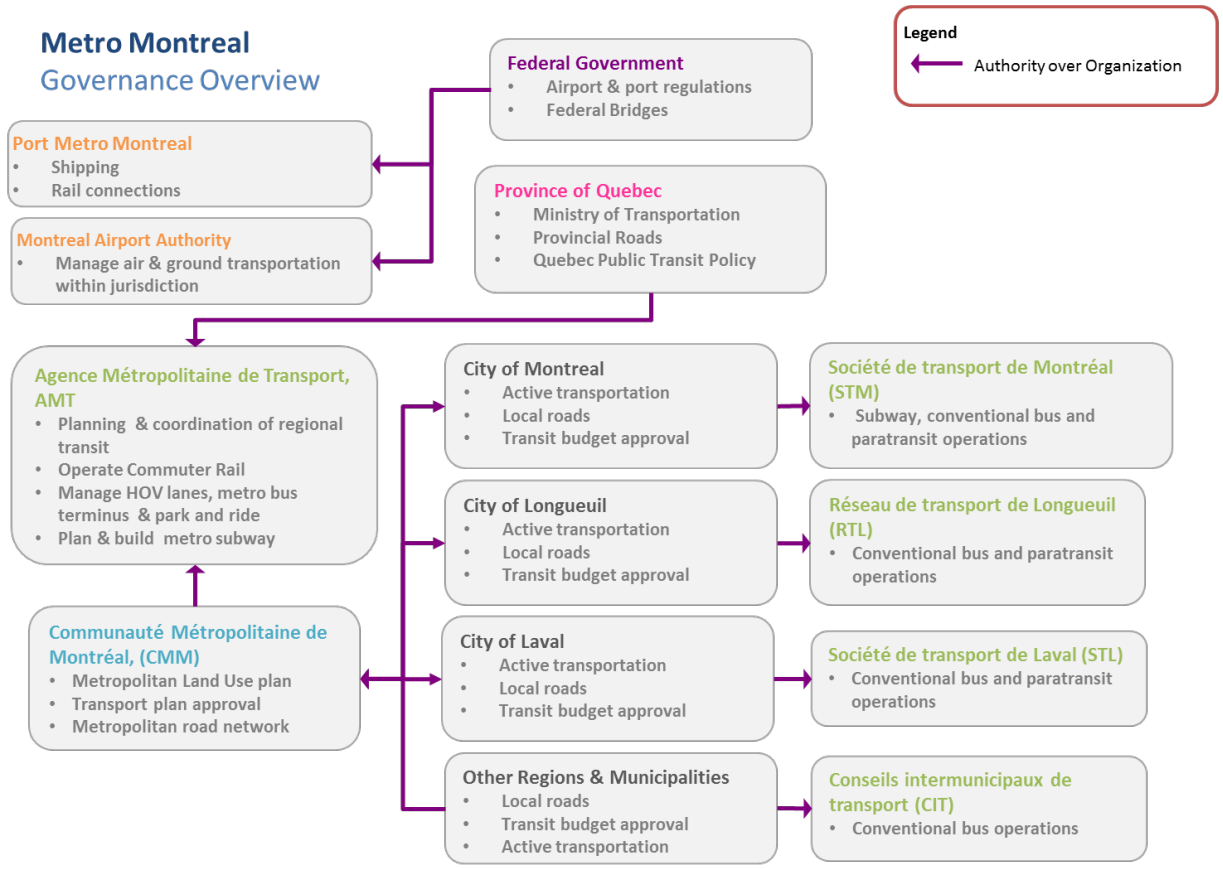
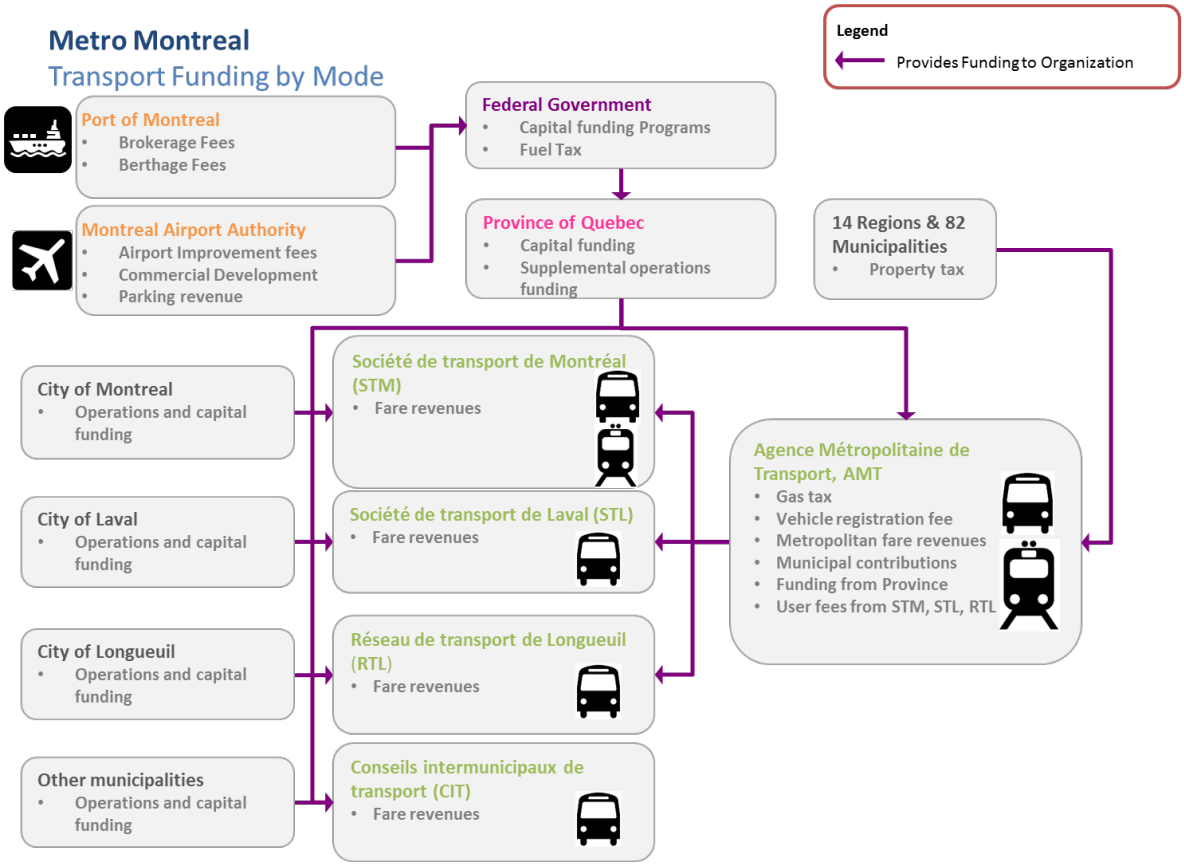


Figure 19. Metro Montréal: Transportation Funding



Each of the above organizations develops visions, plans, strategies, action plans, and operational plans in accordance with the MTQ's orientation and vision, and specifically with Québec's *Vision of Sustainable Mobility*.

There are three provincial funding sources, namely the MTQ programs FORT, SOFIL and Green Fund (detailed below). Project prioritization is based on conformance with those programs. Complementary funding is provided by municipalities based on local tax structures, and by agencies from their revenue sources. Local funding authorities are looking for other forms of funding such as fuel taxes, motorist registration fees, or parking fees to assure sustainable transport financing.

Inter-jurisdictional coordination seems to be one of the most important challenges in reaching transportation objectives—specifically, coordination in financing, land use, and the goal of meeting citizens' mobility needs and priorities. The Montréal region's complex governance creates a strong need for coherence and coordination in the implementation of a unified vision.[94]

[94] Interviews with senior officials of Metro Montreal transportation agencies, May-June 2013

3.6.2 MINISTÈRE DES TRANSPORTS DU QUÉBEC

Governance

The MTQ conducts planning and provides funding for all transportation modes: air, rail and bus transit, roads and active transportation. MTQ's mission is to ensure, throughout the province, the sustainable mobility of people and goods by safe and efficient transportation systems that contribute to the development of Québec. Its guidelines include:

- Ensuring the sustainability of transport systems for future generations;
- Supporting efficient, diversified and integrated transportation systems;
- Providing users with safe transportation systems; and
- Optimizing the performance of transportation systems to improve services to the population.

MTQ departmental managers identify needs, which are then evaluated through a process of prioritizing projects and tools to help in decision making, based on parameters defined in advance. The result is submitted to the authorities of the Ministry and then to the Minister for direction and decision, all reviewed periodically as part of multi-year budget frameworks.[95]

Due to its strategic plan relying more on the principles of sustainable development, MTQ aims to develop tools to better integrate these principles into a focus on sustainable mobility. Experts in the engineering and management of roads and structures, however, have been the source of tools for prioritizing road works based on sound asset management. In addition, to ensure transparency and performance, MTQ is currently working to establish a new government entity responsible for the management of assets, to ensure competent, responsible and innovative asset management.

In this context, MTQ retains responsibility for vision, direction, strategy and a new structure dealing with implementation, including infrastructure construction and maintenance.

Funding

The three main sources of funding by MTQ are:

- FORT (Fund for Ground Transportation Networks), financed primarily by provincial fuel taxes, fees and licenses, and supplemented by other provincial funds;
- SOFIL (Local Infrastructure Finance Corporation of Québec), powered by the federal excise tax on fuel, additional duties, and a contribution from the Government of Quebec; and
- Green Fund, financed by oil and gas royalties in the context of legislation related to the Climate Change Action Plan.

[95] Interviews with senior MTQ officials

Dedicated funds like FORT meet long-term needs, and make a vital link between transportation taxes and expenditures.

SOFIL was proposed by the Province to accommodate federal funds transferred to municipalities, according to provincial priorities. It was developed out of necessity, and is not a modification of governance generated by experts.

Successes and Challenges

Successes

- Programs created to expand transit services such as FORT, the Green Fund, and other energy efficiency and intermodal programs that support sustainable mobility.
- The creation of a new structure for transport operations.
- Consulting with non-profits and academia, both nationally and internationally. Managers have the opportunity to participate in community activities and commission research to provide advanced expertise and develop tools to fully carry out their responsibilities.

Challenges

- Demand management as part of a new policy of transporting people.
- The sustainability and stability of funding.
- Refocusing of policies and requests of other jurisdictional partners while maintaining provincial investment priorities.
- The multiplicity of agencies in different jurisdictions in the region requires greater consultation to identify joint projects that meet mobility needs. Establishing an organization to manage the road network by applying sound asset management will allow more transparency while encouraging development of more effective expertise and optimal resource allocation.
- Economic tools for managing transportation demand (e.g. congestion pricing, parking policies) could be useful to the extent that they complement, and do not overlap with, current pricing. They can support both demand management and financing, but funds collected through demand management measures may decrease as those measure become more successful; this makes them poor funding sources.
- The current transportation governance framework is more than 15 years old. Accordingly, it must be upgraded to: (a) sort out overlapping responsibilities within CMM and transportation agencies, and to promote working together rather than competition; (b) to index funding to

reduce the gap between needed and available resources; and (c) to use funding sources that also manage transportation demand.[96]

3.6.3 AGENCE MÉTROPOLITAINE DE TRANSPORT

Governance

The AMT is the regional transportation authority operating under the MTQ that is tasked with overseeing all public transportation services and initiatives throughout Metro Montréal. AMT's mission is to improve the efficiency of personal travel by promoting the use of public transportation.[97] The Province of Quebec established AMT as a Crown Corporation on January 1, 1996 through the *Loi sur l'Agence métropolitaine de transport* (AMT Act). [98] Under the legislation, the AMT is authorized to design, implement and operate an integrated system of ticket sales and revenue collection for public transit, operate the region's commuter rail and express bus service, oversee and develop major metropolitan transit infrastructure, and guide the overall integration and planning of regional transportation plans and strategies. The AMT also plays in important role in the financing of public transportation in the region by collecting funds from each municipality and redistributing these funds to transit operators proportional to observed ridership.

The AMT plans and builds extensions to the Métro (subway) system, participates in the funding of operations of the 14 transportation authorities, and coordinates paratransit services. It is responsible for five commuter rail lines operating over 217 kilometres of track and 51 stations, one express bus route, 61 park-and-ride lots with over 33,000 spaces, 16 metropolitan terminuses, and 86.2 km of reserved bus lanes.

The AMT is also tasked with coordinating the operations of 14 municipal transit systems and operators including the Réseau de transport de Longueuil (RTL), Societé de transport de Laval (STL), Societé de transport de Montréal (STM), and 11 additional inter-municipal transport groups (Conseil intermunicipal de transport, or CIT).[99]

The AMT Board of Directors reports to the MTQ. It is composed of seven members: four unelected members named by the province (including the chair and chief executive officer) and three elected officials nominated by the CMM from within its membership. The Board meets once monthly and oversees AMT activities, discusses and approves transportation projects valued at more than $200,000

[96] Key points raised in interviews in Quebec

[97] AMT 2007. "Montréal Train System – Investments in New Infrastructure". Online at www.amt.qc.ca/uploadedfiles/AMT/Site_Corpo/Promotion/presentation/13-11-07_International_Rail_Forum_Valence.pdf [cited 15 March 2013]

[98] Publications Québec 2013. *Loi sur l'Agence métropolitaine de transport.* Online at www2.publicationsduQuébec.gouv.qc.ca/dynamicSearch/telecharge.php?type=3&file=/A_7_02/A7_02.htm [cited 1 July 2013]

[99] www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=3&file=/A_7_02/A7_02.htm

when appropriate, examines and approves strategic procurement initiatives, and guides and approves all three-year financial plans and regional plans required by the AMT.[100]

The AMT oversees the transportation planning and development in its service area, which includes 82 municipalities in the CMM); the town of St. Jerome (and the Kahnawake Mohawk Reserve); 12 regional county municipalities; and two agglomeration councils (Montréal and Longueuil). Its senior government partners include the Québec Ministry of Finance and Economy; the Ministry of Municipal Affairs, Regions, and Land Occupancy; the Ministry of Sustainable Development, the Environment and Parks; the Québec Treasury Board; and Transport Canada. AMT works closely with the Québec provincial government to integrate provincial planning directives.

The AMT's territorial limits are scheduled to change in response to demographic changes in commuter catchment areas in the region. However, a change in the number of municipalities within the AMT would require amendment of AMT's guiding legislation. In addition, since Québec's policy on public transportation expired in 2010, a new sustainable mobility policy is expected in 2014. This new policy could alter the roles and responsibilities of the AMT. The AMT's legislation also needs to be tied to the *Crown Corporations Governance Act.*

The internal governance of the AMT is also changing in terms of:

- Modernization and improvement of prioritization processes and project management;
- Optimization and upgrading of major business processes; and
- Implementation of a cost allocation model for large service activities.

AMT plays a significant role in shaping regional transportation throughout the Greater Montréal area, with the overall goal of creating a world-class transportation system that can meet the mobility and accessibility needs of all citizens. To meet the region's growing transportation challenges, the AMT has committed itself to improving the bus network, the métro and all guided transport systems, and the commuter rail system.[101] To achieve these objectives, the AMT developed and released *Vision 2020*, its overarching transportation plan. In developing *Vision 2020*, the AMT consulted extensively with citizens, transport providers/operators, the province and other stakeholders. *Vision 2020* has three central objectives: to facilitate easier trips; to improve the quality of life for residents, workers and visitors; and to develop a rapid, multimodal metropolitan transit network.[102] To support and implement the plan, AMT must secure funding for transit undertakings, identify and prioritize transit infrastructure projects, and work with service providers to ensure timely delivery.[103]

Funding

Figures 20 and 21 show the AMT's revenue and expenditure areas.

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[100] 2011 budget report

[101] Vision 2020

[102] Ibid

[103] Ibid

Figure 20. AMT: Revenue Sources (2011, total $342 million)

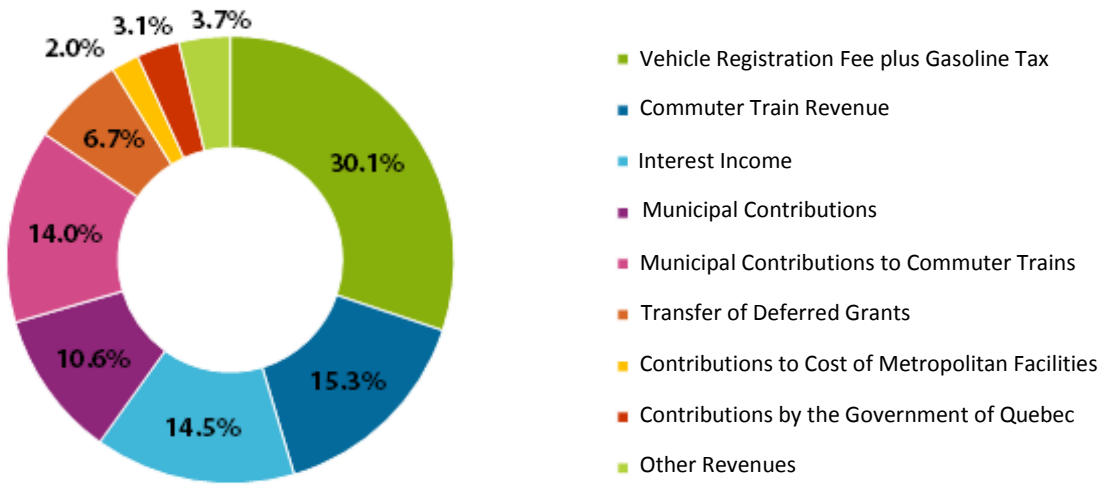
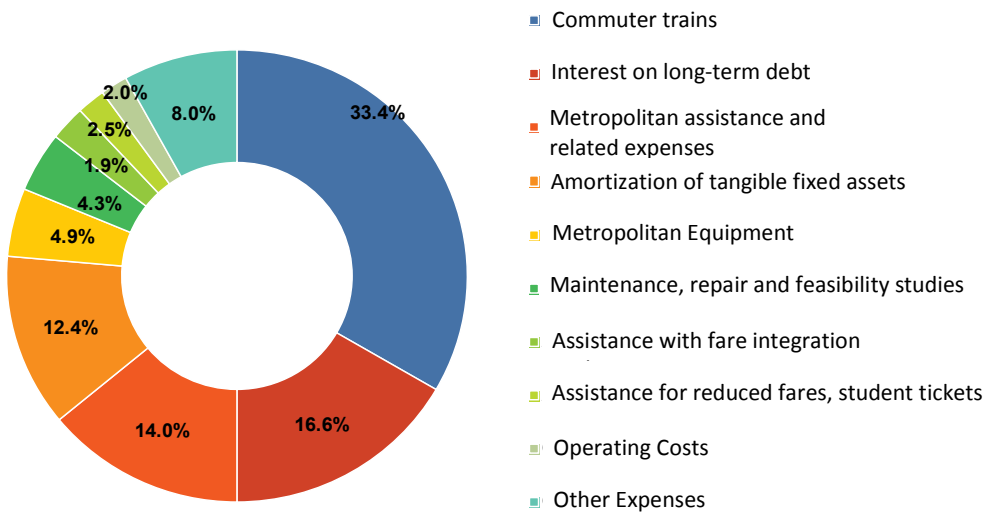


Figure 21. AMT: Expenditures (2011, total $361.7 million)



The AMT has six major sources of operating funds:[104]

- Government transfers, which come from a gasoline tax ($0.03 per litre, generating $100 million in revenue per year) and a vehicle registration fee ($30 per vehicle, generating $55 million per year) collected within AMT's territory;

[104] European Metropolitan Transport Authorities 2013. "Montréal Transport Authority". Online at www.emta.com/spip.php?article621 [cited 24 April 2013]

- Fare revenues from metropolitan tickets and passes, commuter trains, park and ride, and metropolitan express bus;
- Contributions from municipalities served by commuter trains and metropolitan express buses;
- Funding from the Québec government;
- Payments from transit agencies that use the terminuses, reserved lanes and metropolitan ticket offices; and
- Other revenues, including interest income.

For capital investments, municipalities contribute through la Richesse foncière uniformisée (RFU or Standardized Property Assessment on residential and commercial properties), amounting to one cent per $100 of assessed value, which contributes about $40 million per year to the AMT. As well, government grants generally cover about 75% of the capital costs of new transit infrastructure; the remainder comes from municipal property taxes. Federal government grants are also used occasionally. Capital investments are connected with the subway, commuter trains, metropolitan equipment and the areas of technological innovation, accessibility for people with restricted mobility, and safety and security.

The largest expenditures in the AMT budget are commuter trains (33.4%), followed by interest on long-term debt (16.6%), metropolitan assistance (14.0%), and amortization of tangible fixed assets (12.4%).

The AMT is reviewing the use of funding sources that also influence transportation demand (e.g. road pricing). The region is in the process of working on an 18-month strategic review in which all aspects of the current fare system are being assessed. The AMT aims to produce a 10-year vision for a regional fare system.

The AMT has a 10-year strategic development plan that must be approved by the CMM and the provincial government. There is also a Three-Year Capital Program (PTI) that must be approved by the provincial government after consultation with the CMM, and is subject to an annual comprehensive consultation program with its partners (i.e. municipalities, transportation agencies, ministries and others). As well, the annual budget must be approved by the CMM. Fares are set by the AMT and must be submitted to the CMM which has the power to reject changes.

Many aspects of the process used to prioritize metropolitan transit projects are still rather informal, with political negotiation and arbitration playing a role. Considerations include geographic equity, levels of congestion, and the efficiency of bus operations. A more formal process being developed involves four levels of need that are considered, with appropriations reserved for each:

- Legal obligations;
- Safety and security;
- Asset maintenance and performance; and
- Development.

The various initiatives are funded from a Three-Year Capital Program (PTI) and subject to an annual comprehensive consultation program with its partners (municipalities, transportation agencies,

ministries and agencies). The result of this approach is finalized by the AMT and the government, which in the end grants loans through its own five-year capital program.

Challenges and Successes

Successes

- Implementing the metropolitan fare system (i.e. integrated pricing).
- Establishing self-governance through a Board of Directors with a majority of independent members, and clear legislation regarding AMT roles and responsibilities.
- Achieving financial autonomy and establishing an obligation by cities to contribute to the development of public transportation.
- Establishing a metropolitan vision in the absence of elected metropolitan officials.
- Developing a public transit system with the involvement of municipalities.
- Relaunching a network of commuter trains.

Challenges

- The current transportation governance framework is more than 15 years old. Accordingly, it must be upgraded to: (a) sort out overlapping responsibilities within CMM and transportation agencies, and to promote working together rather than competition; (b) to index funding to reduce the gap between needed and available resources; and (c) to use funding sources that also manage transportation demand.

3.6.4 COMMUNAUTÉ MÉTROPOLITAINE DE MONTRÉAL

Governance

The CMM was created in January 2001 and serves 82 municipalities that are home to 3.7 million people. It is funded principally by member municipal contributions according to their respective tax bases, with the exception of amounts related to specifically priced or otherwise regulated services. To pay its CMM contribution, each municipality can impose either a general or special tax based on the value of taxable properties within its borders.

The CMM has jurisdiction in the following fields directly related to transportation: land use planning; the metropolitan arterial road network. In regard to transportation planning at the regional level, the CMM has legal jurisdiction but shares this responsibility with the AMT and MTQ; the latter organizations have greater resources and play a stronger role.

To fulfill its purpose as mainly a planning, coordinating and financing body, the CMM has several key objectives:

- Provide the Montréal metropolitan area with a common shared vision, including an economic development plan and a metropolitan land use and development plan;

- Establish a metropolitan financing system which deploys diverse revenue sources to finance metropolitan activities and municipal activities in specific sectors; and
- Coordinate government and regional organization policies and programs with the CMM's activities.[105]

In terms of transportation planning for the Metro Montréal metropolitan area, the CMM undertakes land use and transport planning for people and freight at an integrated regional planning level, and sector-based planning for public transit and the metropolitan road network.

CMM managers working for the Directorate General report to an executive committee responsible for the process under a council representing 82 municipalities. One structure of six commissions advises the board on all matters within its mandate, namely: planning, economic development, metropolitan facilities and finance, environment, social housing, transportation and agricultural activities.

CMM has the authority to plan transit, and coordinate and provide financing for those aspects of the metropolitan area taking into account provincial government transportation polices. In addition, it has the following responsibilities:

- Approve the plan and fares submitted by the AMT;
- Approve transit agency plans in its area, in consultation with the AMT;
- Approve capital funding and loans for the subway as well as any loan over five years entered into by the corporation for the network when the repayment term is more than five years;
- Identify the metropolitan road network and revise every five years; and
- Develop management standards and harmonize the rules on signaling and monitoring traffic in its area and revise them every five years.

To ensure the prioritization of projects, the CMM recommends a sequence of investments and a timetable for the implementation of transit projects, in accordance with the guidelines, objectives and criteria under PMAD (the Metropolitan Land Use and Development Plan), based on the following priorities:

- Maintaining active member municipalities;
- Projects in progress (e.g. the new commuter train line to Mascouche and the BRT on Pie-IX boulevard) as part of the vision of PMAD; and
- Projects at the planning stage, as a function of ridership criteria, cost and regional equity.

More specific descriptions of its responsibilities are described below.

[105] http://cmm.qc.ca/public-transit-and-the-metropolitan-road-network

Public Transit

In accordance with Section 158 of its constituting legislation, the CMM has jurisdiction to plan and coordinate public transportation at a strategic level, and to finance the aspects of public transportation that are of metropolitan importance. At the same time, the CMM also has authority over certain planning tools and the financial policies of specific transport authorities active in the metropolitan region. In this regard, the CMM approves amendments to and the revision of the strategic plan for metropolitan transportation produced by the AMT, and its operating budget and fares. Further the CMM approves the strategic development plans of the public transit agencies in its territory.[106]

The CMM has the power to approve the AMT'S operating budget and may reject changes to metropolitan fares submitted by the Agency.

The AMT must also submit a three-year capital expenditure program to the CMM for review before sending it to MTQ for approval. In addition, the CMM approves any loan by-laws related to the subway network of the STM.[107]

Furthermore, the CMM names three elected officials to sit on the AMT's board of directors.

Metropolitan Arterial Road Network

Under Québec law, the CMM must define the metropolitan arterial road network and review its composition every five years. It must establish minimum standards for managing the metropolitan arterial road network. The major metropolitan arterial road network is important to transportation governance and funding in Metro Montréal as it determines the location and priority of future road investment decisions.

Land Use and Development Plan

Related to the provision of transportation service in Greater Montréal, the CMM adopts and maintains a land use and development plan. On December 8, 2011 the CMM Council adopted its first *Metropolitan Land Use and Development Plan* (PMAD), which came into effect on March 12, 2012.

As Greater Montréal's population is projected to grow by more than 530,000 residents (or 320,000 households) and 150,000 new jobs by 2031, the CMM conducts analyses and consultation to provide strategic policy directions on issues such as: the location of homes and jobs; the means of travel by residents; needed infrastructure to accommodate growth; and how to protect and enhance the natural environment.[108]

For example, one objective of its land use plan is to strengthen the integration of land use and transit planning. The PMAD recommends locating 40%, and eventually 60%, of the population growth projected for 2031 around métro, commuter rail, LRT and BRT stations, notably through transit-oriented

[106] http://cmm.qc.ca/public-transit-and-the-metropolitan-road-network

[107] Ibid

[108] http://cmm.qc.ca/land-planning

development (TOD) neighborhoods. The PMAD also calls for the development intensification on lands that are vacant or slated for redevelopment outside TOD zones.[109]

Another objective is to provide an efficient transportation network and facilities that would increase the transit mode share from 25% to 30% during the morning rush hour by 2021, and to 35% by 2031. This proposed modernization and expansion requires an investment of some $23 billion.

There has been a process underway since 2006 of establishing a committee on governance and funding to develop an agreement on the sharing of subway net costs, and the development of a new funding framework aimed at a new governance approach.

The aim is to bring forth a metropolitan consensus to include:

- Better representation of elected officials;
- A new definition for the approval of allocation rules; and
- A new process to deal with subway extensions.

Funding

The CMM has a budget of $112 million in 2013 that is funded 60% by member municipalities, 20% by transfer programs, 10% by project financing, and 10% from other sources.[110]

A number of objectives for funding transit improvements in Metro Montréal that could act as incentives to increase transit modal share were established in AMT's strategic plan *Vision 2020*, which was approved by the CMM. These objectives include the following:

- Obtain an increase of 0.5 cents/year in the gas tax for the Metropolitan area;
- Introduce vehicle registration fees that are indexed, adjusted according to travel patterns, and inclusive of commercial vehicles;
- Increase gasoline prices by the equivalent of 2 cents per litre and use the fund's contribution for ground transportation network improvements; and
- Initiate studies on metropolitan road pricing, parking, additional contributions from the private sector, land value capture, and the harmonization of the metropolitan fares.

[109] Ibid

[110] Interviews with CMM officials

Successes and Challenges

Successes

- Completion of the first metropolitan development plan and the development last year of the PMAD which is now the reference plan of Greater Montréal for all jurisdictions.

Challenges

- Establishing a metropolitan structure over the course of the decade.
- Implementing the PMAD.
- Ensuring the integration of plans of regional agencies within an integrated common vision in order to achieve an overall common reference plan.
- Clarifying the relationship of the organizations in different jurisdictions.
- Having a long-term approach to funding.
- Rethinking the representativeness of five geographical areas of the CMM.

3.6.5 SOCIÉTÉ DE TRANSPORT DE MONTRÉAL

Governance

The STM is responsible for operating an integrated metro system, bus system and paratransit network, while ensuring that all residents, employees and visitors to the Island of Montréal are provided an efficient, reliable and safe transport system.[111] The metro system has 68 stations and carries more than 900,000 trips each day.

The STM's Board of Directors is appointed by the Urban Agglomeration Council of the City of Montréal, from the members of municipal councils. Three other residents of the Agglomeration are members, and the chairman is appointed by the agglomeration from among these nine people. The Board executes the functions and powers of the STM and establishes its major future directions through a strategic plan. The STM adopts an annual budget, staffing plan and three-year capital expenditures program, and it establishes a fare structure and products. The STM can approve, abolish or replace public transit services and may approve permanent changes to bus routes.

As part of the Québec Public Transit Policy, a key objective of the STM's strategic plan is to expand overall service to carry 540 million trips in 2020, an increase of more than 40% over current ridership. Another goal is to contribute to achieving targets set by the Québec government and the City of Montréal for reducing greenhouse gas (GHG) emissions. By 2020, the province is aiming for a decrease of 20% compared with 1990 levels, and the city is aiming for a 30% reduction.

[111] STM budget, 2012

As part of the funding programs of the MTQ, and consistent with the plans of the region and the Urban Agglomeration of Montréal, priorities and authorizations for investments are approved by the Urban Agglomeration of Montréal.

The governance of public transport is a constant concern, particularly since the inception of the Communauté métropolitaine de Montréal (CMM) in 2001. Governance must adapt to the changing reality of the market and harmonize with urban development and land use strategies. STM hopes that CMM will be reviewed to facilitate decision-making and project implementation. Moreover, a technical committee of the board has been specifically created for the STM to make appropriate recommendations in this regard. In addition, the CMM made recommendations on governance during public consultations on funding in 2012.

Funding

The STM's funding sources and expenditures are as follows:

Sources

- Customers: $514 million (40.7%);
- Non-fare: $39 million (3.1%);
- Governments: $229 million (18.2)%;
- Urban Agglomeration of Montréal: $390 million (30.9%);
- Region (AMT-CMM): $90 million (7.1%);
- TOTAL: $1,262 million.

Expenditures

- Operations: 81.1%;
- Investments: 18.9%;
- STM: $0.77 million;
- Governments: $161 million;
- TOTAL: $1,262 million

The STM has developed a specific process of portfolio management of projects that is linked to the priorities of the STM's Business Plan and the Strategic Plan.

Successes and Challenges

Successes

- Enhanced marketing and a 25% increase in transit service levels from 2007 to 2011 caused ridership to grow by 11.4%.
- Establishment of technical committees of the board, especially those that focus on ethics and governance, finance and internal auditing.
- Development of a strategic plan for 2020 that addresses societal goals of urban mobility.
- Deployment of a strategy to mobilize staff.
- Development of a new motivating brand image.
- Growth in ridership and mode share, especially aided by the use of the OPUS smartcard.
- Establishment of external partners as agents of change and especially the group of 13 of WMATA on transport governance in America.[112]

Challenges

- Saturation of traditional sources of financing, and the need for research and development of new approaches to financing.
- Development of innovative and strategic solutions to meet mobility needs.
- Development of a mobility network that is as efficient as possible in terms of maintenance and development.[113]

3.6.6 CITY OF MONTRÉAL

Governance

The City of Montréal is responsible for the planning, design, construction, funding and maintenance of roads, bridges and active transportation modes in the City. It is also responsible for land use planning. The new *Development Plan of Montréal* (PDM, adoption intended for late 2013) identifies a 20-year vision for development and the measures to implement policies and goals. The PDM is also consistent with the *Metropolitan Land Use and Development Plan* (PMAD) and adopted by the CMM.

As part of the new urban structure resulting from municipal mergers, 19 districts, 15 related cities and the central City of Montréal have entrusted the Department of Infrastructure, Transport and

[112] www.stm.info/en-bref/memoire_ville2012_03.pdf

[113] Interviews with STM officials

Environment (SITE) with roles related to these functions of transportation, road and environmental work.

The City's Department of Transportation specifically takes charge of all activities relating to transportation: provides research, development, and planning; coordinates stakeholders of all other jurisdictions in this field of expertise; provides guidance; prepares files to SITE and to the Directorate-General for submission and approval by the Executive Committee of the city.

Montréal's first *Transportation Plan*, adopted in 2008, was the result of broad consultation with all stakeholders. It serves as background for the strategic and financial prioritization of different projects in all aspects of urban mobility. The plan aims to ensure a more sustainable balance between the need to travel and the quality of the environment.

For public transit, the Société de transport de Montréal (STM) stipulates operating parameters and determines a budget that is approved by its Board of Directors and by the Montréal Agglomeration Council. The program must be within the framework of the *Montréal Transportation Plan* and the *2020 Strategic Plan*.

In the area of roads, the City's Department of Infrastructure proposes investments to be included in the Three-Year Investment Program (TIP) that is approved by the political authorities (e.g. Executive Committee, City Council, Montréal Agglomeration Council). The TIP aims to optimize investment, maximize benefits and ensure the coordination of stakeholder efforts across all jurisdictions.[114]

Funding

The City's revenues come mainly from property taxes, and from other sources including parking and registration fees and grant programs.

Funding priorities are determined through a process of internal consultation with the municipal departments based on the following, among other considerations:

- Functional roles of internal stakeholders;
- The needs of partners such as STM and the BIXI bike share program;
- Policy guidelines;
- The availability of funding; and
- Guidelines on borrowing capacity.

In 2010 the elected members of the CMM proposed a new framework for governance and funding that was acknowledged, in principle, by the 2010 provincial budget. The *AMT Act* has not yet been amended to reflect the changes required for the implementation of this new framework, which would give greater weight to local officials in decision making.

[114] Interviews with City of Montréal staff, August 2013

Since 2008, the City has rolled out its *Transportation Plan* in an unchanging governance environment and in a framework of known funding, which has evolved into the City increasing funding for public transit and introducing new local taxes to supplement the property tax contribution. City officials interviewed felt that the existence of the Transportation Plan has had a profound influence on the choice of priorities for the future.

Success and Challenges

Successes

- Development of the *Montréal Transportation Plan* and its implementation since 2008 has been instrumental to transportation improvements in the region, which have led to the adoption of the *Metropolitan Land Use and Development Plan* (PMAD). This in turn has enabled the development of a vision that is increasingly shared, and an integrated approach to development and mobility.
- The introduction of new sources of funding (parking and vehicle registration levies) dedicated to transportation.
- The emergence of a political vision for the future of transportation.
- Funding for major metropolitan infrastructure.
- A revised financial framework for metropolitan transportation based on the involvement of member municipalities.
- The development of a more formal and articulated governmental vision on sustainable mobility. This has ensured more consistent project prioritization and funding allocation, and helped enable the realization of projects.

Challenges

- Developing a new form of governance between the AMT and the CMM.
- Providing sustainable transportation funding.
- Developing a proactive link between land use and urban transport.
- Fostering the integration of mobility pricing through the use of a transit pass as a "citizenship card".
- Improving current governance to ensure integration and cohesiveness of plans and visions of stakeholders from all jurisdictions.
- Establishing a formal process for prioritizing projects that is better coordinated and capable of incorporating new sources of funding (e.g. road tolls).

- Increasing existing funding sources that can impact mode shares (e.g. fuel tax, parking tax) by influencing the decision to drive to work and school.
- Establishing a regional road toll dedicated to public transit. Such a toll could have a significant impact on mode shares.
- Introducing variable transit pricing that adjusts pricing for each trip or group of trips, and encourages an increase in transit mode share.

3.6.7 AÉROPORTS DE MONTRÉAL

The airport authority in Metro Montréal is a very important component of the transportation fabric of this region. However, it has not been profiled because officials declined to be interviewed.

3.6.8 PORT OF MONTRÉAL

The Montréal Port Authority, which operates the Port of Montréal, offers facilities to shipping lines and land carriers, terminal operators and shippers. The port is required to self-finance all activities and investments.

The Montréal Port Corporation was created in 1983 as an autonomous body reporting to the federal Minister of Transport, with a Board of Directors made up of business leaders from the Montréal region.[115] In 1999, under the *Canada Marine Act*, it was renamed the Montréal Port Authority. Its Board of Directors includes seven individuals from the Montreal business community; federal, provincial and municipal governments each name a director; the federal Minister of Transport, on the recommendation of port users, names four other directors. The Board elects its own Chair.

The Port of Montréal is located 1,600 km inland from the Atlantic Ocean, making it the international port closest to the industrial heartland of North America. It is the leading port on North America's East Coast for container traffic to and from Northern Europe, handling 12 million tons of containerized cargo traffic in 2012.[116] In 2011, container traffic at the Port of Montréal reached 1.36 million 20-foot equivalents (TFEs), which represents nearly 28% of the 4.8 million TFEs of international container traffic in Canada. These figures place the port second in the country, after Vancouver.

The port has its own railway network, which includes more than 100 kilometres of track and provides transcontinental railways with direct access to almost every berth. The Montreal Port Authority also operates the Iberville Passenger Terminal, which accommodated 70,000 cruise ship passengers and crew members in 2012.[117]

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[115] Port of Montreal 2013. "The Port then and now". Online at www.port-montreal.com/en/the-port-then-and-now-about.html# [cited 3 June 2013]

[116] Canadian Sailings. "Port of Montreal continues to reinvent itself". Online at www.canadiansailings.ca/?p=6221 [cited 15 April 2013]

[117] Port of Montreal 2013. "Reinventing the Port – Annual report". Online at www.port-montreal.com/files/PDF/publications/2013-05-06_rapport-annuel-2012-en.pdf [cited 3 June 2013]

On the Island of Montréal, the port's territory stretches along 26 kilometres of waterfront from the Victoria Bridge at the upstream end to Pointe-aux-Trembles at the downstream end. The port also has a terminal at Contrecoeur, located on the south shore of the St. Lawrence River about 40 kilometres downstream from Montréal, where it owns four kilometres of waterfront land that will be used to increase the port's container-handling capacity once its land on the Island of Montréal reaches full capacity.

All orders of government recognize the economic importance of the Port of Montréal and support its various projects. In May 2013 the Province of Quebec established a collaborative framework with the City of Montréal for an extension of l'Assomption Boulevard to link with port facilities. The province also announced the construction of an exit ramp from Highway 25 that will allow trucks to directly reach the port, and an entrance ramp reconfiguration on the same highway that will provide trucks leaving the port with direct access to the highway network. The two projects will improve truck access to the Port of Montréal. In March 2012 the federal government announced that it would contribute up to $15.1 million to two projects that will increase the port's container-handling capacity. At the same time, the federal government announced a $0.5-million subsidy towards the second phase of an electronic navigation project in the St. Lawrence River channel between Québec City and the City of Montréal.[118]

The Port of Montréal was the driving force behind the creation of the Logistics and Transportation Metropolitan Cluster of Montréal, or Cargo Montréal (CargoM), an initiative that will help establish the City of Montréal as a centre for goods transportation. The project is supported by the CMM and its activities are financially supported by Quebec's Finance and Economy Ministry, Executive Council Ministry, the Montréal Metropolitan Community and all Cargo Montréal members, while Transport Canada is a participant.

In 2012 the Montréal Port Authority had $85.6 million in total revenue from operations, and net earnings of $9.1 million.[119]

3.7 HALIFAX REGIONAL MUNICIPALITY

This section of the report presents a review of transportation funding and governance in Halifax Regional Municipality (HRM). It addresses the following transportation agencies:

- Nova Scotia Department of Transportation and Infrastructure Renewal (NSTIR);
- HRM and its public transit agency, Metro Transit;
- Halifax International Airport Authority; and
- Halifax Port Authority.

[118] www.newswire.ca/en/story/1163351/improved-port-access-port-of-montreal-delighted-with-announcements-from-quebec-transport-minister

[119] Port of Montreal 2013. "2012 Annual Report". [cited June 7, 2013]

3.7.1 OVERVIEW

HRM is the largest city in Nova Scotia and the primary urban centre in a region covering at least three provinces (i.e. Nova Scotia, New Brunswick, Prince Edward Island). It is home to roughly 40% of Nova Scotians, and its share of provincial population has been rising rapidly. HRM's neighbouring municipalities are also increasing their share of the province's population.

HRM was formed through the 1996 amalgamation of the Cities of Halifax and Dartmouth, the Town of Bedford, and the Municipality of the County of Halifax. Halifax County was the largest of Nova Scotia's 17 traditional counties, and the area of the amalgamated municipality is slightly larger than the Province of Prince Edward Island. As a result, HRM has extensive rural areas extending west and east from its urban core. The urban and suburban areas radiating from Halifax Harbour are home to more than 350,000 residents, which is considerably more than any other community in Atlantic Canada. The rural area, particularly east of the urban core, is sparsely populated. Consequently, local government must reconcile the needs and demands of areas with very different settlement patterns.

The influence of adjacent municipalities on traffic patterns in HRM is minimal. The eastern half of HRM is actually treated as an external zone in the region's traffic model, and influence from Chester to the west is also modest. Only East and West Hants, located north of HRM, have any significant influence. In total, only 4.5% of commuter traffic to the urban core and western portions of HRM is modeled as external, and a portion of that comes from eastern communities within HRM's boundaries.

Figures 22 and 23 illustrate the transportation governance and funding relationships among transportation agencies in HRM**.**

Figure 22. Halifax Regional Municipality: Transportation Governance

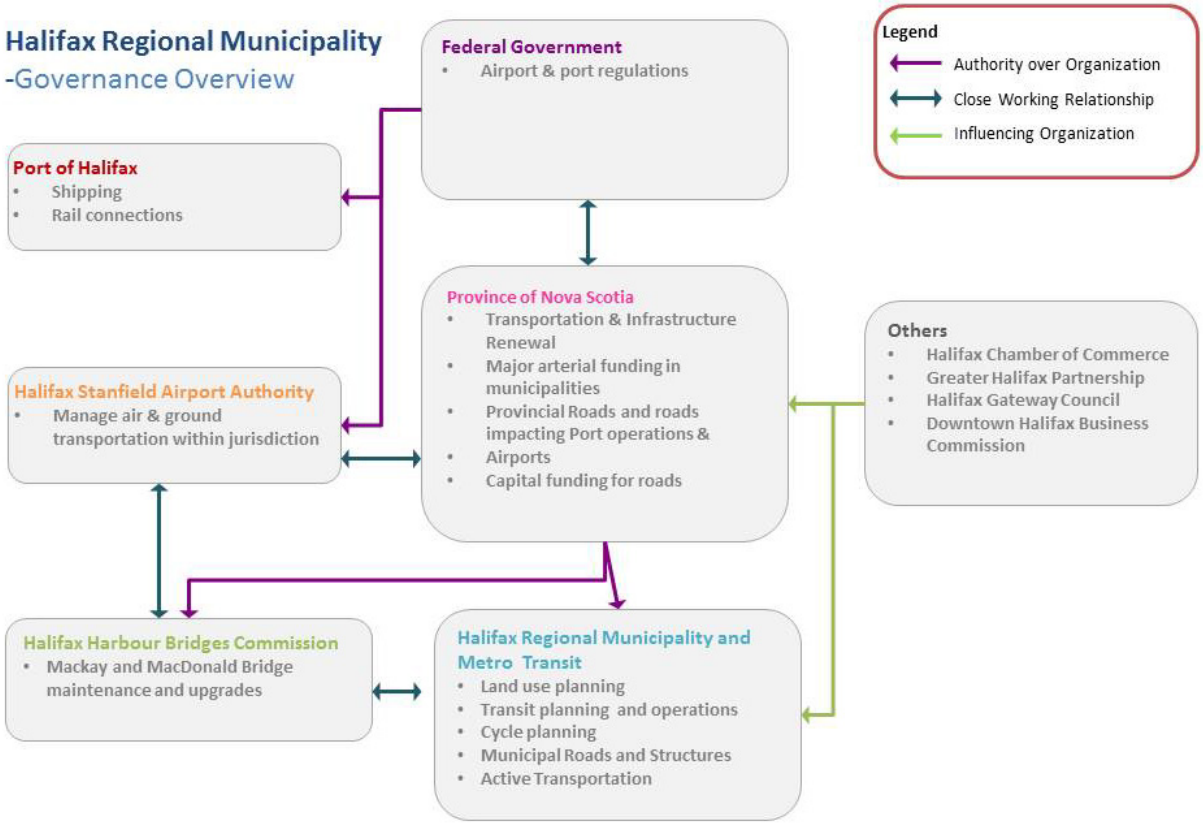
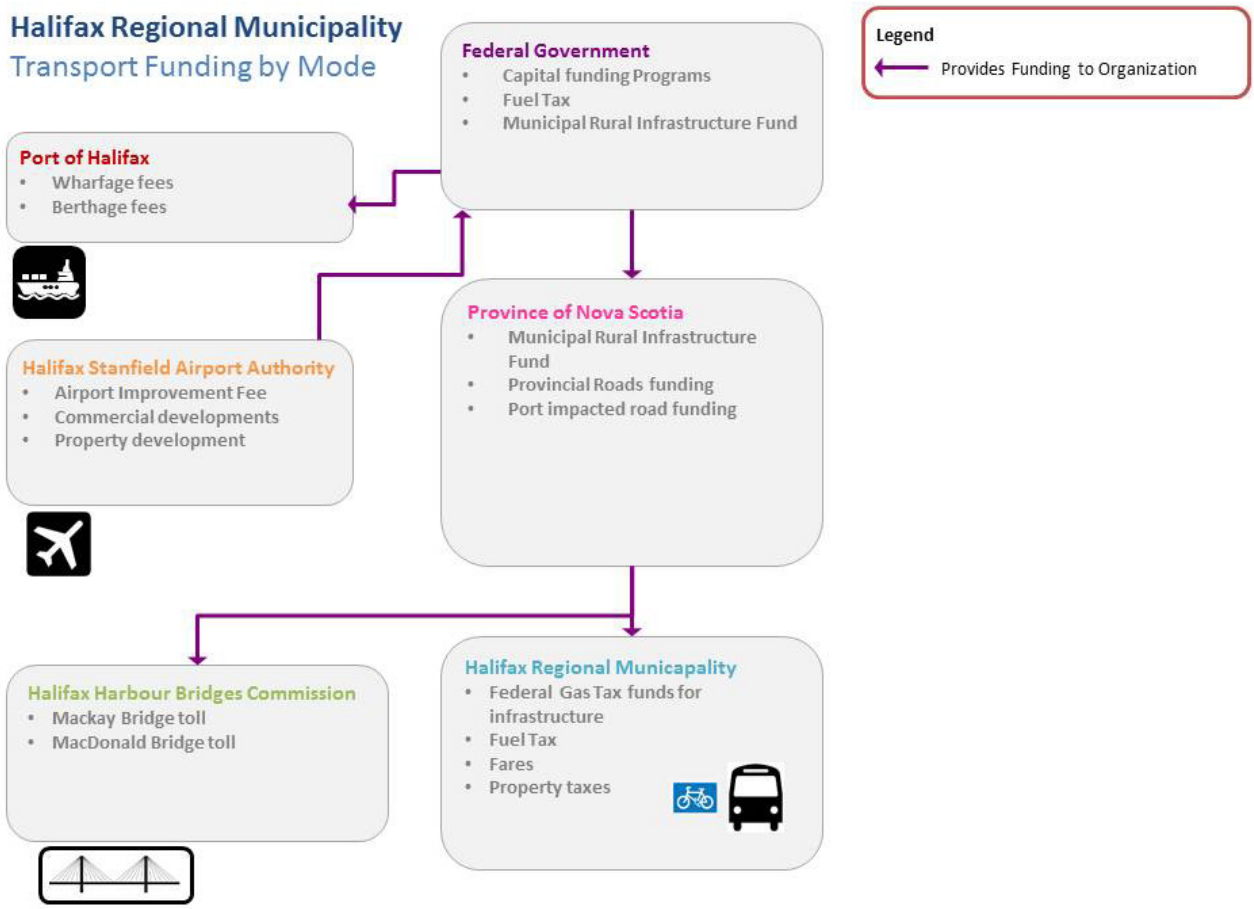


Figure 23. Halifax Regional Municipality: Transportation Funding



Governance

Amalgamation was part of a program of "disentanglement" pursued by provincial governments since the 1970s. This process eliminated nearly all grants from the Province to municipal governments, and significantly increased the reliance of municipal units on their own tax base, particularly property taxes.

Through amalgamation, the Province sought to create stronger municipal units in critical urban areas within the province. The municipal reorganization initiative was tied to a service reallocation that was intended to upload social services from municipal governments and download local roads in rural areas from the Province. However, while the Province did assume responsibility for social services, municipalities have not yet taken over rural local roads. In HRM, all roads outside the urban core remain the responsibility of the Province, as they are in rural municipalities across Nova Scotia. Amalgamation was also intended to eliminate commissions and authorities that were separate from municipal governments, but the Halifax-Dartmouth Bridge Commission (now Halifax Harbour Bridges, HHB) survived as a Provincial Commission. Several municipal-level commissions have also persisted with one (Halifax Water), growing notably.

Nevertheless, HRM has a relatively small number of organizations that provide transportation services. Urban roads, transit and most aspects of active transportation are the responsibility of HRM; the Province takes care of highways and rural roads, and (through HHB) two major bridges: the Angus L. Macdonald Bridge completed in the mid-1950s, and the A. Murray MacKay Bridge built in 1969. The federal government has a modest role in active transportation through its involvement with the Trans Canada Trail, and through Transport Canada it oversees the operation of the Port of Halifax and Halifax Stanfield International Airport by authorities created in the late 1990s.

The Halifax Gateway Council is an important regional coordinating structure. It was formed in 2000 at the initiative of the CAO of the Halifax International Airport Authority (HIAA), Reg Miley. The Gateway Council is closely associated with the Greater Halifax Partnership (GHP) and the local regional economic development agency that operates as a public-private partnership to promote the region and improve its economic performance. The Gateway Council shares office space with GHP and receives administrative support from the larger organization, but is otherwise independent. The Gateway Council is composed of municipal officials, provincial officials and representatives of major passenger and freight stakeholder and organizations (i.e. the Port and Airport authorities), and is modeled after a similar organization in Vancouver. Its focus is the facilitation and coordination of the activities of the Port of Halifax and HIAA.

The notion of a transportation authority for the region has received recent public and media attention as a result of advocacy by the Chamber of Commerce and local business people. The recent Halifax Regional Transportation Authority Study addressed the issue. The Chamber of Commerce has softened its advocacy in the wake of that study, which took a moderate view of the potential of an authority, but the Chamber has not lost interest in improving transportation coordination.

Funding

Consistent with its historical disentanglement initiative, the Province of Nova Scotia provides no significant support to urban transportation. Some assistance has recently come from the federal government through its allocation of gas tax monies, which HRM has largely directed to transit improvements. Roadway cordon charges have also been suggested as a source of revenue and means of managing demand, as Halifax's geography is particularly well-suited to capturing vehicle movements in and out of the urban core. Considerable effort would likely be required before residents would accept such a measure.

Governance

The NSTIR is responsible for the construction, operation, and maintenance of all public highways and bridges as well as rural roads and ferries under provincial control.[120] NSTIR is led by the Minister of Transportation and Infrastructure Renewal, while staff report through the Deputy Minister. Two sections report to the Deputy Minister, namely Highway Programs and Public Works. Highway Programs is divided into Highway Engineering and Construction, and Maintenance and Operations. The Chief Engineer for Highway Programs reports directly to the Deputy Minister.

[120] Government of Nova Scotia. "Government Administrative Histories Online". Online at www.gov.ns.ca/nsarm/gaho/authority.asp?ID=105 [cited 6 May 2013]

The department also develops, administers and implements provincial policies on road, air, rail and marine transportation systems. [120] The key legislation for NSTIR is contained in the *Public Highways Act,* the *Ferries Act* and the *Railways Act*.

Funding

Funding for highways comes from the provincial portion of gas tax, vehicle registrations, federal funding for cost-shared projects, and general provincial revenues. Revenues for 2013-14 are as follows:

- Gas tax revenue $251.0 million (57%);
- Registry of motor vehicles (RMV) revenue $90.0 million (21%);
- Federal cost sharing $22.0 million (5%); and
- General revenues $76.0 million (17%).

Funds are distributed using a network needs assessment taking into account traffic volumes, the condition of assets, future economic benefits and safety considerations. For example, NSTIR has a pavement management system that determines pavement priorities as well as a bridge inspection system that is used to determine priorities for maintenance and upgrades of bridges.

The annual capital budget for Highway Programs is divided into two parts: a major infrastructure component and envelope funding. Major infrastructure projects such as major highway upgrades, twinning of bridges, and federal cost-shared projects are presented as business cases and approved by the provincial Treasury Board after they have been compared against other provincial non-highway related priorities put forward by other departments. Envelope projects are approved within each department by the Minister of Transportation and Infrastructure Renewal. The department now has a five-year highway improvement plan that is updated annually.[121]

Successes and Challenges

Successes: Governance

- Provides accountability for expenditures.
- The user-pay principle has been implemented since the gas tax, RMV revenue and tolls pay for a significant proportion of transportation expenditures.

Successes: Funding

- Government policy and legislation providing dedicated gas tax and RMV revenues helps to ensure a stable base of revenue for transportation improvements.

[121] Government of Nova Scotia. "5-Year Highway Improvement Plan, 2013-14 Edition". Online at http://novascotia.ca/tran/highways/5yearplan/Plan_2013-14.pdf [cited 12 May 2013]

Challenges: Funding

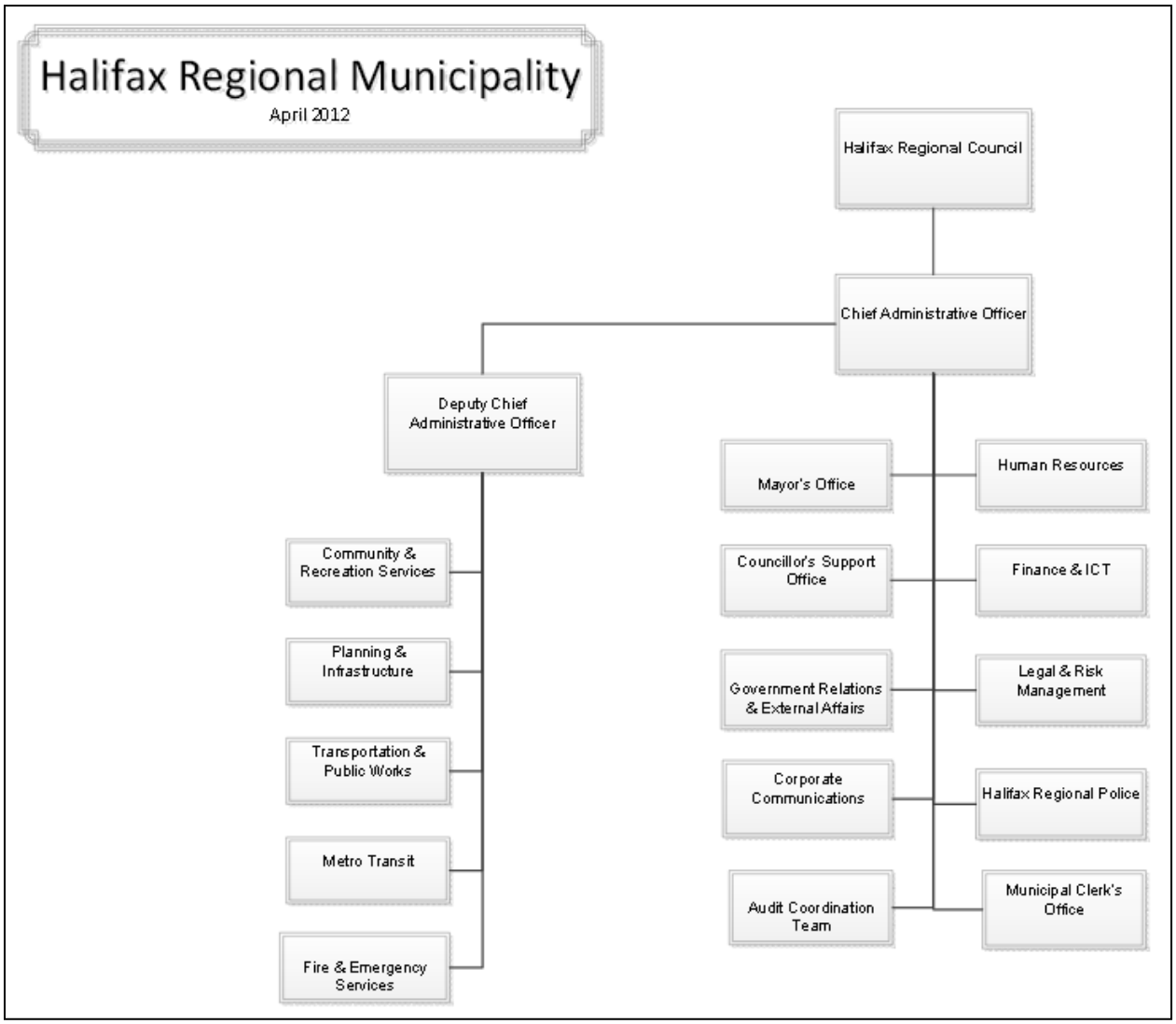
- Revenue is subject to downward pressure as the government works on eliminating deficits.

3.7.2 REGIONAL ROADS AND TRANSIT: HALIFAX REGIONAL MUNICIPALITY AND METRO TRANSIT

Governance

HRM is governed by Halifax Regional Council, which includes a Mayor and 16 district councillors who are elected every four years. As shown in Figure 24, HRM's various departments report to either the Deputy Chief Administrative Officer or the Chief Administrative Officer. Both the Transportation and Public Works department as well as Metro Transit report to the Deputy CAO. Metro Transit is the public transportation agency for HRM. It was recently made a municipal line department, and its budget is determined by Council.

Figure 24. Halifax Regional Municipality: Organizational Chart[122]



A recent HRM reorganization consolidated long-range transportation planning with land use planning, and collected operational functions within Transportation and Public Works.

HRM uses formal workshop sessions attended by inter-disciplinary groups to discuss transportation issues and priorities such as affordable transportation and transit. Senior employees are designated as champions of specific transportation initiatives (e.g. affordable transportation, safe communities) within this workshop process. In response to long-standing public pressure the new CAO has made transit service a high priority for HRM, raising the profile of Metro Transit and encouraging the development of land use and other policies supportive of transit service.

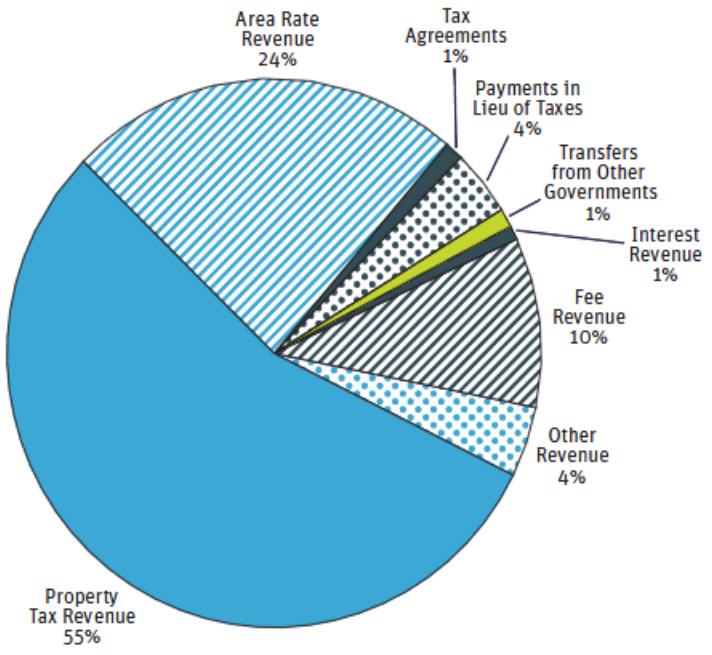
[122] Halifax Regional Municipality. "HRM's Organizational Chart". Online at www.halifax.ca/mediaroom/orgchart.html [cited 8 May 2013]

Funding

Figure 25 shows the budget revenue sources of HRM. Municipal taxes make up nearly 80% of revenues, and HRM receives minimal support from the Province. Metro Transit receives revenue through transit fares, the Gas Tax Funding program, and regional and local transit taxes that are based on property assessments. The Gas Tax Funding program was first signed in 2005, spanning the years 2005-06 to 2009-10, during which $64 million was transferred to HRM. Local transit taxes apply to residents who live within one kilometre of bus service; in rural areas, a tax of 8.8 cents per $100 of assessment is charged for transit service to residents living within one kilometre of local transit route.[123]

No changes in revenue sources for HRM are anticipated. In future, HRM would like to have access to Gas Taxes to fund transportation infrastructure improvements. The Municipality is also seeking greater control over obtaining more parking and related revenue. Metro Transit is not considering a change in funding sources, as its current funding sources are working well and the transit tax is only five years old. Metro Transit does plan to raise fares by $0.25 since it has the lowest fares related to similar- sized transit systems in Canada.

Figure 25. Halifax Regional Municipality: Budget Revenues (2012-2013, total $790 million)[124]



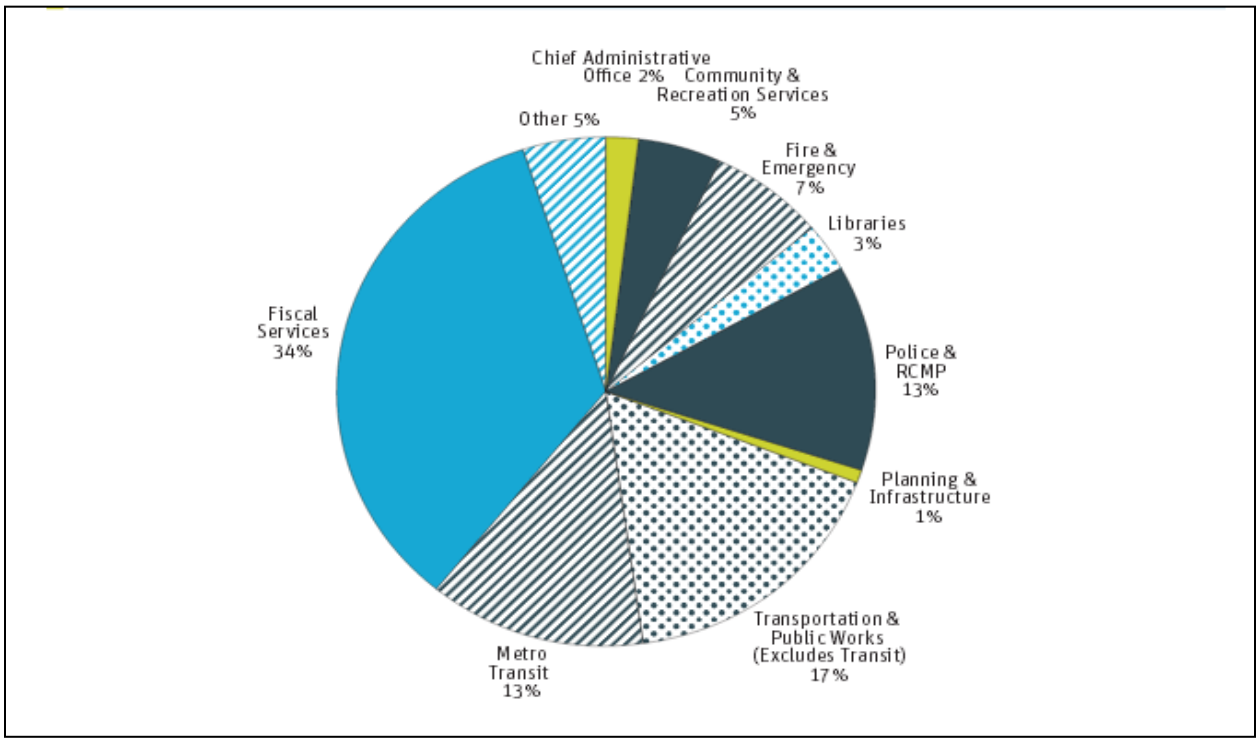
Reference Halifax Regional Municipality, Approved Budget 2012–13 (Halifax: HRM), p. c19. www.halifax.ca/budget/documents/12-13V4ApprovedBook.pdf

[123] www.halifax.ca/revenue/tax

[124] www.halifax.ca/budget

Figure 26 shows HRM expenditures, including 30% for Metro Transit and transportation. Metro Transit will get $19 million of $27 million in gas tax funding available to HRM in each of the next three years. These monies are only applied to capital investments. A Metro Transit official indicated that if there is any surplus revenue from operating it is used for capital expenditures.

Figure 26. Halifax Regional Municipality: Expenditures (2012-13, total $790 million)[125]



Metro Transit uses service standards to prioritize work. Service is analyzed in each area to determine whether standards are being met and attainment of standards is prioritized. Regional municipal priorities are also considered such as coordinating with the current regional plan review in order to provide the larger picture on what is happening region-wide. As well, Metro Transit has a 10-year plan for operations although its ultimate implementation depends on Council direction and approval.

Successes and Challenges

Successes: Governance (HRM)

- Transportation needs are managed cost-effectively.
- More work has been contracted out leading to a streamlining of operations.

[125] www.halifax.ca/budget and www.policyalternatives.ca/sites/default/files/uploads/publications/Nova%20Scotia%20Office/2012/08/Alternative%20Municipal%20Budget_final.pdf

Successes: Governance (Metro Transit)

- Requires no coordination of services across municipal jurisdictions because HRM includes the rural commutershed.
- Ensures a high priority on transit is placed by Council and the public.
- Permits a focus on transit issues.
- Provides increased transparency (not buried in Transportation and Public Works, which isolates transit in budget and financial statements).
- Allows an easier assessment of other Transportation and Public Works functions.

Successes: Funding (HRM)

- Long-range capital planning is easier to implement at the regional level through a region-wide government.
- Capital and operating expenditure decisions are based on locally determined needs and are rarely distorted by cost-sharing considerations.

Successes: Funding (Metro Transit)

- Metro Transit can control its own destiny with its own surpluses and deficits.
- Surpluses can be invested into transit.
- The public can more readily evaluate transit performance.

Challenges: Governance (HRM)

- The extent of the amalgamated area has created difficulties due to the distinct differences between urban and rural areas.
- Service delivery in rural areas is difficult.
- Demand for service levels cannot often be met.
- Rural residents criticize improvements that primarily benefit the urban area.

Challenges: Governance (Metro Transit)

- Dealing with the Regional Council can be difficult as the district system can encourage parochial debate.
- A Board would be easier to deal with than councillors who can be influential and powerful.
- Councillors can force expenditures that are not technically or financially logical.

Challenges: Funding (HRM)

- Revenue available for road network improvements is constrained.
- At the municipal level, the public opposes nearly all roadway upgrades.

Challenges: Funding (Metro Transit)

- Pushback still happens when tax bills go out showing the portion going to transit services that some residents feel are not provided to them.

3.7.3 HALIFAX INTERNATIONAL AIRPORT AUTHORITY

Governance

The HIAA operates Halifax Stanfield International Airport as a locally controlled, non-share capital corporation under Part II of the *Canada Corporations Act*.[126] HIAA was created in 1995, and in 2000 it signed a 60-year ground lease with Transport Canada and took over responsibility for managing, operating and developing Stanfield International Airport.[127] HIAA's executive management team is led by the President and CEO. Six Vice Presidents report directly to the CEO.[128] The structure for HIAA was modeled on predecessor airport authorities such as Calgary's.

The HIAA Board is made up of 13 directors, 10 of whom are appointed by nominating entities and three by the board itself.[129] Four directors are appointed by HRM, three by the Halifax Chamber of Commerce, two by the federal government, and one by the Province of Nova Scotia. The nominated members can also appoint additional members who represent the interests of the community. Five board meetings are held each year to work on the five-year strategy and annual business plan.

HIAA has a good relationship with organizations such as the Halifax Gateway Council, the Greater Halifax Partnership, and the Halifax and East Hants Chambers of Commerce. Positive interaction with these organizations brings the airport's perspective to strategic public policy and economic development initiatives. HIAA also works closely with the Province, which has contributed to the recent expansion of the airport's runway. In addition, Provincial Tourism and Economic Development staff work with the HIAA on route development and other issues.

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[126] www.ic.gc.ca/eic/site/cd-dgn.nsf/eng/cs02167.html

[127] Halifax International Airport Authority. "Annual Report 2012". Online at www.hiaa.ca/images/pdf_files/2012/HIAA_AnnualReport_2011.pdf [cited 10 June 2013]

[128] HIAA 2013. "Executive Management Team". Online at www.hiaa.ca/default.asp?mn=70.1.260.275 [cited 5 June 2013]

[129] HIAA 2013. "Board of Directors". Online at www.hiaa.ca/default.asp?mn=70.1.260.274 [cited 4 June 2013]

Funding

Revenues

HIAA revenue comes from investment returns, the Airport Improvement Fee (AIF), aeronautical revenue in the form of landing fees, non-aeronautical revenue (e.g. concessions, parking, rental car businesses), and the issuance of bonds. In the year ended 2012, total revenues increased to $79.3 million from $77.9 million in 2011 due to increases in passenger traffic, concession revenues and parking income. Record passenger traffic (3.6 million passengers) increased AIF revenues to $26.9 million from $26.8 million in 2011. The previous year's increase in AIF revenue resulted from an increase in the fee from $15 to $20 on January 1, 2011. Revenues exceeded expenses by $1.6 million in 2012. Under HIAA's mandate, the surplus is reinvested in the operations and development of the airport.

Expenditures

HIAA expenditures increased from $74.4 million in 2011 to $77.7 million in 2012, due to higher salary and amortization costs along with increases in the cost of materials, supplies and services.

Salaries, wages and benefits make up the largest share of expenditures, followed by materials, services and supplies; amortization; and interest on long-term debt. Ground lease rent and administrative and property taxes make up the remaining revenues.

About 80% of capital improvements are paid for by the AIF, in addition to investment returns and bonds. Infrastructure such as the parkade or retail spaces cannot be funded by the AIF, and must use investment returns and bonds. Operating expenses are covered using a blend of fees and investment returns.

Successes and Challenges

Successes: Governance

- Local interests have more control over the airport facility.
- Increased pride in the airport among workers and community.
- Major upgrades of the airport have taken place under HIAA.
- Encourages a more entrepreneurial approach that has led to increased traffic and additional revenue sources.
- With more entrepreneurial airport management, communities are working harder to attract airlines and traffic.

- Extension of public transit to the airport by Metro Transit in 2012, with HIAA contributing $500,000 to the purchase of new Metro Transit vehicles.[130]

Successes: Funding

- More stable funding.
- Greater impetus to generate revenue for the facility.
- HIAA has developed from a mid-sized airport to a premier international airport.
- HIAA is working on the commercial development of airport property from the terminal building to Highway 102 to create a multi-faceted regional centre for trade and commerce with significant revenue opportunities.

Challenges: Governance

- The process of transitioning to an airport authority was cumbersome.
- Developing and maintaining an effective Board of Directors, particularly for auditing purposes.

3.7.4 HALIFAX PORT AUTHORITY

Governance

The Halifax Port Authority is a not-for-profit Crown Corporation created under Letters Patent issued by the Minister of Transport in March 1999. The Authority replaced the Halifax Port Corporation. The Port Authority has jurisdiction over port activities related to shipping, navigation and transportation of passengers and goods, as well as handling and storage of goods and other activities deemed necessary to support port operations.

The *Canada Marine Act* establishes the governance model for the Boards of Directors of all Canada Port Authorities.[131] The Halifax Port Authority has a Board of Directors with seven members: one provincial representative (the Provincial director), one municipal (the Municipal Director), one federal (the Federal director), and four Port User nominees nominated by a Port Advisory Committee. The appointing body for the Provincial director is the Minister of Transportation and Public Works, while for the Municipal director it is the Halifax Regional Council, through the process used for voluntary citizen appointments. The appointing body for the Federal director and the Port Users nominees is the Lieutenant Governor, on nomination of the Minister of Transportation, Infrastructure, and Communities.[132] However, in the latter case, this is preceded by a consultative stage with nominations from the four classes of Port Users:

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[130] Halifax Regional Municipality 2011. "Upcoming airport service a step closer". Online at www.halifax.ca/mediaroom/pressrelease/pr2011/110812AirportTransitService.html [cited 3 March 2013]

[131] http://laws.lois.justice.gc.ca/eng/acts/c-6.7/page-2.html#h-5

[132] Halifax Port Authority. "Governance Model". Online at www.portofhalifax.ca/english/about-us/corporate/governance.html [cited 12 May 2013]

inland transportation; tenants, shipping lines and agents; labour, non-terminal operators and other port user providers; and terminal operators and shippers. The Nominating Committee provides recommendations for members of the Board of Directors in the "user" category and is made up of four members appointed by the port users to represent each of the four classes. These recommendations are provided to the Minister of Transport.

Funding

Revenues

The *Canada Marine Act* prohibits the Port from receiving appropriations. Funding for the Port is derived from operations through rent, tariffs, berthage fees (docking), and wharfage fees (loading/unloading). Some monies are received for infrastructure projects from other levels of government, but in general the Port must borrow money like any private business.

Expenditures

The Port has a five-year capital plan that responds to current needs. The highest priority needs are safety and security, followed by the priorities of the strategic and business plans. Detailed business cases are prepared for individual projects in order to determine whether they should be funded.

Successes and Challenges

Successes: Governance

- The ability to operate like a private business.
- Facilitates exploitation of opportunities such as land development (e.g. Pier 21) that would not have been possible under the previous structure.
- Structure has forced the Authority to find different ways to generate revenue.
- Coordination is achieved through the Halifax Gateway Council, which works well.

Successes: Funding

- Has made the Port more entrepreneurial.

Challenges: Funding

- Borrowing limits were placed on Canadian Port Authorities (CPAs) when they were formed and it is difficult to change them.
- Banks should be allowed to decide whether to lend money to CPAs, as with any private enterprise.

Challenges: Governance

- Numerous stakeholders have varied opinions as to how the Port should be operated.
- Competing interests can be a major distraction.

4.0 KEY INNOVATIONS

This chapter identifies notable innovations in transportation governance, funding and decision making from the seven metropolitan areas reviewed in this study.

4.1 GOVERNANCE

Consideration of governance options. Several studied areas are examining or have recently examined ways to enhance their transportation governance structure and roles including: the City of Winnipeg, the Greater Montréal area, the City of Edmonton, the Capital Region Board in Edmonton, Halifax Regional Municipality, Metrolinx and the Ontario government in Metro Toronto, TransLink and the Province of BC in Metro Vancouver, and the Calgary Regional Partnership.

Airport authorities. Airport authorities in Canada provide some valuable lessons for other transportation models in major metropolitan areas in terms of developing innovative funding sources and transportation governance models. They have had success with their de-politicized governance model, attracting diverse funding sources such as consulting revenues, and managing to fund transportation improvements to address significant growth in freight and air passenger traffic growth in recent decades.

Composition of transportation authority boards. Some agencies, notably airport and port authorities, have established governing boards with mixed membership. Directors are appointed by municipal, provincial and/or federal governments, as well as by business and other stakeholder groups, and they typically have backgrounds in transportation, planning, engineering, management, business and other key areas. These boards are usually blessed with broad experience and diverse skillsets, and are able to manage authorities in a businesslike manner, both effectively and efficiently. However, they can face challenges in terms of accountability and transparency when politically sensitive decisions are made.

4.2 FUNDING

New funding sources in place. Some major metropolitan areas have implemented new sources of funding such as transit capital development levies (City of Calgary); the creation of transportation agency consulting entities that generate revenue in other localities (Vancouver Airport); and contributing to rapid transit investments to create future TOD development opportunities (Vancouver Airport, which contributed $300 million to the Canada Line to downtown Vancouver).

New funding sources being considered. Other areas are actively examining more sustainable sources of funding: Metrolinx has narrowed its preferred future funding choices to development levies, parking charges, a share of the sales tax and a fuel tax; the City of Winnipeg, in examining the feasibility of a new Transportation Authority, is in the very early stages of assessing both transportation governance and funding sources; Metro Montréal transportation agencies are discussing a variety of funding sources include road pricing and fuel taxes to fund AMT's long-term transit plan for the region; and TransLink will likely have a referendum in 2014 asking the public to support potential new funding sources.

Senior representatives at the City of Surrey have proposed a regional road pricing system for major roads and bridges throughout Metro Vancouver. They feel this funding source would have the following advantages: it would generate millions of dollars to replace existing poor transportation funding sources (e.g. hydro tax); funds could be split among municipalities, province and TransLink; fund amounts could be identified by the public in separate accounts; specific uses would be made known to the public; it could help shape travel behaviour; and it would be more equitable than existing parking taxes.

While there have been extensive studies of alternative means of transportation financing, evaluating them exhaustively against many criteria, no agencies were found to have conducted pilot studies or tests of measures such as road pricing to demonstrate their effectiveness, feasibility, costs or public acceptance.

P3 for transit projects. Some transit agencies are reviewing or have used public-private partnerships (P3) for designing, building and financing major capital investments such as rapid transit, in part to obtain additional federal funding. P3 approaches can help get projects off the ground in terms of funding, lower the risk of not completing projects on time and on budget, and transfer this risk to the private sector. The City of Edmonton has obtained P3 funds for its Southeast LRT corridor, and the City of Winnipeg is pursuing P3 funding for its Southwest BRT extension.

Support for transit, cycling and walking. There is increased emphasis on funding infrastructure and programs for transit, cycling, walking and transportation demand management (TDM). This is due to the environmental and health benefits, road infrastructure savings, and the lower social costs of more sustainable modes. There is a strong recognition that the success of transit depends on the quality of walking and cycling access, with a resulting desire to better integrate walking and cycling facilities with public transit to make transit more effective and efficient.

Provincial involvement in sustainable modes. BC, Ontario and Québec are among the few provincial jurisdictions that do not focus almost exclusively on roads and bridges, and instead actively fund public transit and active transportation. As an interesting footnote, the Québec provincial government has also promoted the use of hybrid and electric cars. Three provinces (BC, Manitoba and Québec) provide operating funding as well transit capital funding to transit systems; however, the Ontario government is now working with Metrolinx to develop more sustainable sources of funding for both capital and operating purposes.

Port impact fees. A new source of revenue for Port Metro Vancouver involves charging an impact fee to municipalities operating on their lands that benefit from capital transportation improvements such as new roads. That organization charges municipalities in or adjacent to their lands for a portion of the cost of transportation projects that improve access to their lands (e.g. improvements made to Low Level Road arising in a charge to the City of North Vancouver).

Transit fare technology. There has been some success in promoting transit ridership and fare revenues by introducing smartcards for transit fares in Metro Montréal (OPUS) and in Metro Toronto (PRESTO). Similar systems are expected to be introduced in Calgary, Edmonton, Metro Vancouver (Compass) and Winnipeg in the next year.

4.3 DECISION MAKING

Long-range plans. Many agencies are preparing medium- and long-term strategic and transportation network plans (even 50 years ahead, in the case of Alberta Transportation), as well as more detailed one- to three-year plans. Examples of long-term, 10- to 30-year plans include Calgary's *Plan It* and *RouteAhead*, Edmonton's *The Way We Move*, Winnipeg's 2013-2031 *Transportation Master Plan*, TransLink's *Regional Transportation Strategy*, AMT's *Vision 2020*, Metrolinx's *The Big Move*, and HRM's Transportation and Land Use Plans in their *Regional Growth Strategy*. These plans enrich transportation investments and the management of transportation systems, making them more efficient, effective and customer-focused. They consider climate change, land use, demographic and economic changes, and they create a future transportation vision and related objectives and principles.

Investment criteria. Many agencies use common criteria to make transportation investment and funding decisions, such as regulatory requirements, safety, economic growth, infrastructure age and condition, transit ridership gains, network impacts and total costs. More interestingly, in order to make more informed decisions on transportation capital investments, several organizations use these and other criteria in comprehensive multivariate analysis and modeling linked to specific program and policy performance measures (e.g. TransLink, City of Calgary, Metrolinx). There does seem to be a preference to fund asset management and state-of-good-repair of capital assets to optimize operating expenditures and extend asset life.

Education and performance measurement. The City of Surrey uses an innovative concept to support informed decision making. The City provides a transportation course instructed by staff and guest speakers for stakeholders including community groups, media, consultants and the general public. The course serves as positive outreach and increases understanding of transportation planning and the difficult tradeoffs that have to be made in investment decisions. As well, the City of Surrey Engineering Department generates a detailed and easy-to-read annual report outlining the City's performance in achieving major objectives in its Transportation Master Plan.

Gateway Councils. Some metropolitan areas (e.g. Metro Vancouver, Metro Halifax) have Gateway Councils with broad business, industry and government representation. These councils have succeeded in improving the coordination of roads, transit, airports and ports for the improved movement of both people and goods, with benefits for economic development, employment and traffic congestion.

Consultation. Many metropolitan areas studied are increasing efforts to consult on operating and capital investment plans, as well as governance and funding options, through public meetings, workshops, charrettes, focus groups, social media (e.g. Facebook, Twitter) and online platforms for community consultation. Transportation agencies want their investments to be more effectively and efficiently designed and built, and supported by stakeholder groups and the general public.

Integration of transportation and land use planning. Government agencies are increasingly working together to coordinate land use and transportation planning – for example, Metro Vancouver (land use and utility infrastructure planning) collaborates with TransLink (transportation investments), and in Metro Montréal the CMM works closely with transit systems and area municipalities. Transit-oriented development (TOD), which coordinates major transit projects with progressive land uses, is seen as a way to maximize the return on transit investments, build two-way transit ridership, boost transit cost

recovery, and provide the opportunity for new taxes or development levies due to increased property values. This review found significant agency interest (e.g. in Vancouver, Calgary, Montréal, Toronto and Winnipeg) to dedicate resources to capturing increased property values within 800 metres of rapid transit stations.

5.0 CONCLUSIONS

All the metropolitan areas examined in this report are struggling to identify adequate, sustainable, long-term funding sources—not only to maintain aging road, public transit, active transportation, airport and port infrastructure, but also to fund expansions and upgrades that can address congestion, provide timely and reliable movement of goods and people, and meet the demands of growing population and employment. This is despite significant provincial funding for major metropolitan areas in British Columbia, Ontario, Québec, Manitoba and Alberta.

Interviewees suggested that the keys to meeting this funding challenge include:

- Continuing to enhance the efficiency and effectiveness of governance structures and roles of transportation agencies, to find more funds internally and to gain public and stakeholder support for additional funding;
- Undertaking tests and pilot studies of new favoured funding mechanisms to obtain data enabling support and implementation;
- Ensuring accountabiliy for and transparency of the revenues generated from funding sources, and how they are allocated to transportation services and capital investments; and
- Establishing long-term sustainable sources of funding for transit infrastructure, for example through a national transit investment program.[133]

Municipalities and transportation agencies in major metropolitan areas are advancing studies and research programs, conducting comprehensive community consultation initiatives, and working together to advance work on these fronts. For example, organizations in the Vancouver, Edmonton, Calgary, Winnipeg and GTHA metropolitan areas are evaluating new or modified transportation governance and/or funding options that are more effective and efficient, improve the integration of transportation modes, provide sustainable funding, meet future mobility needs, and are supported by elected officials and the general public. Transit funding is a common focus of dialogue, study and innovation. Consultation with key stakeholders and the general public is integral to these efforts because congestion is having a significant impact on economic development and quality of life in metropolitan areas where the vast majority of Canadians reside.

The federal government's recent approval of funding programs (e.g. Building Canada Fund) for new transportation capital investments, including roads and transit, demonstrates its recognition of the importance of strong urban transportation systems to the economic development of metropolitan areas. It has also provided funding for metropolitan areas within its mandate regarding seaways,

[133] CUTA, 2012. *Issue Paper No. 38 – Bridging the Gap: The Federal Role in Transit Investment.* Online at www.cutaactu.ca

railways and airports. However, these programs do not represent a national transit strategy or funding program as advocated by the Canadian Urban Transit Association and the Federation of Canadian Municipalities. Such a program would be similar to those of Canada's peer nations where central governments provide sustainable funding levels and diverse funding sources to meet long-term public transit needs.[134] Additionally, in the areas studied there are no federal programs and few provincial programs that support the growing costs of operating and maintaining roads and public transit systems.

With all of these considerations in mind, it is worth emphasizing a final point made in almost all the literature reviewed and interviews conducted for this study—that is, the optimal transportation governance and funding model in any given region will be determined by the local context. It is crucial to consider the unique circumstances of a region in terms of its history, geography, legislation, mobility needs, land use patterns, population and employment trends, agency mandates, and the views of local elected officials, members of the p ublic and other stakeholders.

[134] CUTA, 2011. *National Strategies on Public Transit Policy Framework*. Online at www.cutaactu.ca

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APPENDIX A: INTERVIEW GUIDE

Interview Guide for Transportation Organizations

Transportation Association of Canada (TAC) Transportation Funding and Governance in Canada's Large Metropolitan Areas: An Inventory of Current Practice

Stantec Consulting and its team are conducting a series of interviews with senior decision makers in transportation functions in major metropolitan areas across Canada for the Transportation Association of Canada. The intent is to create an inventory of the main elements of urban transportation financing and governance in Canada's major metropolitan areas: the three regional transportation authorities of Metro Montréal, the Greater Toronto and Hamilton Area (GTHA), and Metro Vancouver, along with Edmonton, Calgary, Winnipeg and Halifax. This will help to better understand the relationship between who plans, who funds, and who decides.

**As well, please let us know which, if any, information provided in your answers should remain confidential.

Stantec et son équipe a été retenu par l'Association des Transports du Canada (ATC) pour mener une enquête auprès des hauts dirigeants du transport dans les grandes régions urbaines du Canada.

L'objectif est de réaliser un inventaire des formes de gouvernance et de financement dans les principales régions du Canada : Montréal métropolitain, la région Toronto/Hamilton, Vancouver métropolitain, et aussi à Edmonton, Calgary, Winnipeg et Halifax.

Cela devrait permettre une meilleure compréhension des relations entre : la planification, le financement/ et le processus décisionnel.

General Information

Date (e.g. 2013/03/12):

Name:

Organization/Company/Agency:

Position:

Length of time with company/organization:

Type of organization *(e.g. provincial, municipal, regional, corporation, commission, stakeholder representative):*

Email:

Phone numbers - work and cell (*if possible*):

Indicate all relevant current modes of transportation for interview:

___ Air

___ Transit (conventional and specialized)

___ Roads and bridges

___ Cycling and walking

___ Other (specify): _____

Questions

- How is your board or leadership structured and who/what body ultimately makes the decisions on funding investment decisions and priorities within the organization-both from staff and political perspective?

  Quelle est la structure organisationnelle de gouvernance de votre organisation, et le processus décisionnel interne de priorisation des investissements, tant par les gestionnaires que par le Conseil?

- What process do you use for prioritizing the distribution of funding between different transportation modes and projects? ***(Note: ask specifics such as software used or specific tools)***

  Quelles sont les approches (logiciels, guides, etc.,) utilisées pour ordonnancer les différents projets de transport (personnes, marchandises, infrastructures, circulation, modes, etc.…)

- What are your principle sources of capital and operating funding and what approximate percentage does each of these sources represent of your respective capital and operating funds?

  Quelles sont vos principales sources de financement (investissements et exploitation) et la proportion respective en pourcentage?

- Are you considering any revisions/additions to your governance structure/ responsibilities/funding and if so, what and why? How are you going about making/reviewing these changes?

  Êtes-vous dans un processus de révision des règles de gouvernance (QQOQCP)

  Gouvernance Structure: ***Gouvernance***

  Responsabilités: ***Responsabilités***

  Funding: ***Financement***

- Are there any other transportation organizations/ agencies/ stakeholder groups/experts in your region with innovative ideas on governance and funding, that we should talk to (e.g. Board of Trade, specific stakeholder groups, or university professors who have done research and presented papers)?

  Est-ce qu'il y a d'autres organismes de la région que nous devrions rencontrer afin de considérer de nouvelles approches de gouvernance?

  Name:

  Company & Position:

  Phone:

  Email:

- Who have been the champions to create your governance and funding structures?

  Qui sont les experts à l'origine de la forme la forme actuelle de gouvernance et de financement

- What have been the principal *successes* of your governance structure? Your funding model?

  Jusqu'à ce jour, quels sont les succès de gouvernance et de financement de votre organisation?

- What have been the principal *challenges* of your governance structure? Your funding model?

  Quels sont les récents défis de financement et de gouvernance que vous avez rencontrés à ce jour?

- What advice would you provide to other municipalities considering moving to your type of agency/organization for this mode of transportation and why? What about your funding model?

  Est-ce que votre modèle actuel de financement et de gouvernance pourrait-être recommandé? Et pourquoi?

- Would consolidation or improved coordination of regional transportation providers be desirable and why?

  Est-ce qu'une simple amélioration de la gouvernance actuelle en transport est souhaitable? Et pourquoi?

- Are there any sources of funding which you are now using, or contemplating for the future, for influencing travel demand? If so please describe.

  Quelles sources de financement (actuelles ou potentielles) auraient une influence directe sur la part modale? Et quelles sont-elles?

APPENDIX B: LIST OF INTERVIEWEES

Region	Organization	Interviewee
Greater Vancouver	TransLink	Glen Leicester, former VP of Planning
	City of Surrey	Vincent Lalonde, GM, Engineering Jaime Boan, Manager of Transportation
	Port Metro Vancouver	Sherri Plewes, VP, Infrastructure Delivery
	Vancouver International Airport	Tony Gugliotta, Senior Vice-President, Marketing and Business Development
	Ministry of Transportation and Infrastructure	John Schnablegger, Regional Manager, Programming, Partnerships and Planning
Calgary	City of Calgary, Office of Roads	Ryan Jestin, Director
	City of Calgary, Calgary Transit	Doug Morgan, Director
	City of Calgary, Transportation Infrastructure	Gord Stewart, Director
	Alberta Transportation	Alan Humphries, Acting Deputy Minister, ADM of Policy and Corporate Services
	Calgary Airport Authority	Bob Schmitt, Senior Vice-President, Planning and Engineering
	Calgary Regional Partnership	Colleen Shepherd, Executive Director
Edmonton	City of Edmonton - Transportation Services	Robert Boutilier, General Manager (retiring)
	City of Edmonton - Transportation Planning Branch	Brian Latte, Manager
	Capital Region Board	Doug Lagore, CEO
Winnipeg	Winnipeg Airports Authority	Catherine Kloepfer, Senior Vice-President Corporate Services and Chief Financial Officer
	Winnipeg Transit	Dave Wardrop, Director
	Manitoba Infrastructure and Transportation	Ron Weatherburn, Executive Director of

Region	Organization	Interviewee
		Construction and Maintenance
	The City of Winnipeg, Public Works Department	Kevin Nixon, Active Transportation Coordinator
	The City of Winnipeg, Engineering Department	Lester Deane, Manager of Engineering
	Government of Manitoba – Dept. of Local Government	Matt Dryburgh, Director
GTHA	Ministry of Transportation Ontario	John Lieou, Assistant Deputy Minister, Policy & Planning Division,
	Metrolinx	John Howe, VP Investment Strategy and Project Evaluation
	TTC	Vince Rodo, Chief Financial & Administrative Officer
	City of Hamilton, Special Projects	Carla Ippolito, Finance Manager
	Hamilton Street Railway (HSR)	Don Hull, Director
	York Region, Transportation Planning	Rick Leary, General Manager
	City of Toronto	Stephen Buckley, General Manager-Transportation Services
	Greater Toronto Airports Authority	Brian P. Gabel, Vice President and Chief Financial Officer
	Canadian Urban Transit Association	Michael Roschlau, President & CEO
	Toronto Region Board of Trade, Policy and Government Relations	Richard Joy, Vice President
	University of Toronto, Cities Centre	Eric Miller, Director, Cities Centre & Professor, Department of Civil Engineering
Montréal	Agence metropolitaine de Transport (AMT)	Daniel Bergeron, Vice-Président, Information stratégique et Affaires métropolitaines
	CMM, direction générale, ou/et direction du plan	Yves Phaneuf
	STM, Planification Stratégique	Céline Desmarteau, Directrice Principale

Region	Organization	Interviewee
	Ville de Montréal, Direction des Transports	François Major
	Ville de Québec, Division du transport, Service de l'aménagement du territoire	M. Marc des Rivières, Directeur (with assistance from M. Liguori Hinse)
	Ministère des Transports du Québec, direction générale Montréal, ou/et le sous ministre des transports du Québec	Évangeline Lévesque, directrice
Halifax	Halifax Regional Municipality, Transportation and Public Works	Ken Reashor, Director
	Nova Scotia Transportation & Infrastructure Renewal	Bruce Fitzner, Chief Engineer
	Halifax Chamber of Commerce	Nancy Conrad, Senior Vice-President, Policy
	Halifax Harbour Bridges	Steve Snider, CEO
	Greater Halifax Partnership	Fred Morley, Executive Vice-President
	Metro Transit	Edward Robar, Director
	Halifax Port Authority	Karen Oldfield, President & CEO
	Halifax International Airport Authority	Tom Ruth, President & CEO
	Halifax Gateway Council	Nancy Phillips, Executive Director