

**Response to questionnaire for:  
Assessment of strategic plans and policy  
measures on Investment and Maintenance in  
Transport Infrastructure**

**Country:**

**Canada**

## 1 INTRODUCTION

Canada is defined, among other things, by its geography: a 10-million square-kilometer land mass with the longest land border and most extensive coastline in the world, fronting three different oceans; a diversified landscape with a wealth of resources; and challenging topographical and meteorological conditions.

Canada is also home to nearly 34 million inhabitants, and greets more than 16 million foreign visitors every year. It has an annual economic output of \$1.8 trillion—the 14<sup>th</sup> largest in the world (15<sup>th</sup> by capita)—as well as one of the most diversified economies.

Transportation in Canada operates against this backdrop by moving people and goods over small and large distances, across towns, regions, provinces, territories and the nation itself as well as to and from other countries around the world. Canada's strategic location between Asia and Europe makes it a gateway to the Americas—a role of particular importance in today's global marketplace.

Canada's transportation network is extensive because of the sheer size it must cover. It is designed to withstand or adapt to rigorous winter condition. It serves a country that is home to a handful of large urban areas as well as a number of small and medium communities connected together by transportation infrastructure.

Against this backdrop, Canada's infrastructure faces three important challenges: managing for growth in urban areas within the context of limited public financing, a need to optimize, maintain and renew existing infrastructure and build the infrastructure necessary to carry natural resources from the North to markets around the world.

Canada's political structure is made up of a central government, ten provinces, three territories and a multitude of counties and municipalities. Transportation in Canada is a shared responsibility among the federal, provincial, and municipal levels of government as defined in the Constitution Act of 1867. Each level of government has some responsibilities in transportation infrastructure investment. Municipalities look after the road network and provinces look after the highway network and mass urban transit. Private railways manage rail infrastructure, Canada Port Authorities manage infrastructure investments at major Canadian ports and Local Airport Authorities manage infrastructure investments at Canada's largest airports. The federal government invests in infrastructure across all modes through a variety of funding programs, sometimes in partnership with other levels of government, and plays an active role in transportation infrastructure in the north and remote areas.

The following section describes more in detail each mode of transportation in Canada

### **Air**

Air transport is an important component of Canada's overall transportation mix, with local, regional, national and international airlines flying passengers and cargo to destinations across the country and around the world.

Canada's air sector depends on its 1,889 aerodromes, including 26 airports that are part of the National Airports System (NAS); 570 certified airports, heliports and waterdromes that support scheduled and non-scheduled flights; and 1,297 registered aerodromes and 22 other aerodromes. Of Canada's aerodromes, more than 55% are land aerodromes, 26% are heliports and 19% are water aerodromes. NAS airports are owned by Transport Canada and operated by non-for-profit, non-share capital airport authorities. Canada's 26 NAS airports handle roughly 90% of all scheduled passengers

and cargo volumes in Canada, are particularly important to Canada's trade and tourism industries, and contribute to national prosperity and international competitiveness. Canada also has smaller registered and certified airports and certified heliports, some of which serve communities without highway access—places where aviation is the only year-round transportation option.

At the end of 2011, 1,497 air operators held 2,224 Transport Canada-issued air operator certificates: 768 were domestic, 358 were scheduled international and 1,098 were non-scheduled international licence authorities. Canada is home to large international air carriers, such as Air Canada, WestJet, Jazz, Air Transat and Sunwing as well as a number of smaller regional carriers and freighter operators.

Transport Canada sets and enforces all airport safety and security standards, certifies and regulates all airports, and ensures that Canada's more than 34,000 civil aircraft conform to national and international standards.

The Canadian Transportation Agency—an independent, quasi-judicial, federal administrative tribunal with a mandate set out in the *Canada Transportation Act*—administers the air transport licensing regime. That regime requires domestic air services operators—in addition to having an operating certificate issued by Transport Canada—to be majority-owned and controlled by Canadians and have proper liability insurance. The Canadian Transportation Agency also verifies the financial fitness of applicants starting operations and oversees licensing of international scheduled and non-scheduled services to and from Canada, administering the permit system for international charter operations. This protects advance payments received by airlines for international passenger charter flights originating in Canada.

Scheduled international commercial air transport services between two countries are governed by bilateral air transport agreements. Since the inception of the Blue Sky Policy in 2006, Canada has proactively pursued more liberalized agreements. By the end of 2011 Canada had bilateral air transport relations with 98 partners, including open agreements covering 40 countries.

A large proportion of aircraft in Canada is used for general aviation (GA), often the only service provided in many Canadian airports, particularly in Northern Canada as well as the first rung in the career ascension of aspiring pilots and aircraft mechanics.

NAV CANADA, a privately run, not-for-profit corporation that owns and operates Canada's civil air navigation system, oversees the safe and orderly flow of air traffic in Canadian airspace, in compliance with provisions in the *Aeronautics Act*.

Finally, the Canadian Air Transport Security Authority (CATSA) is responsible for security screening at designated Canadian airports and operates under provisions in the *Aeronautics Act*. CATSA is a Canadian Crown corporation created in 2002 under the *Canadian Air Transport Security Authority Act* and reports to the Government of Canada through the Minister of Transport.

## **Marine**

Canada's marine industry comprises domestic marine service operators who provide both domestic and international shipping services, as well as international shipping lines calling at major Canadian ports. The domestic sector can be viewed under four geographical lenses: the Pacific west coast region; the Great Lakes/St. Lawrence; the Atlantic region, and the northern region.

The Pacific west coast region boasts a large and diverse fleet of vessels engaged in barging and towing of cargoes on inland waterways (e.g., Fraser River, Burrard Inlet), on coastal routes within the Gulf Islands and the Strait of Juan Fuca, and on routes to

the Queen Charlotte Islands and Kitimat. Some of the larger operators in this region include Seaspan Marine Corporation, Pacific Towing Services Ltd. and SMIT Harbour Towage. There are also a number of ferry services in the area, mainly operated by B.C. Ferries.

Great Lakes/St. Lawrence area operators carry dry bulk and liquid bulk cargo, with vessels meeting the maximum size and capacity limits of the Great Lakes and the St. Lawrence Seaway system. The St. Lawrence Seaway Management Corporation, a not-for-profit corporation established by seaway users and other interested parties, follows its legislated mandate to administer, manage and operate the portion of the system under Canadian jurisdiction, while U.S.-based Saint Lawrence Seaway Development Corporation does the same for the U.S. segment. Key marine carriers in this area include: Fednav International Ltd., Algoma Central Corporation, Canada Steamship Lines and Groupe Desgagnés. A recent study by the St. Lawrence Economic Development Council (SODES) and Quebec's department of transportation (MTQ) estimated that in Quebec alone, the marine industry produces \$3 billion in economic activity every year.<sup>1</sup>

The marine industry in Atlantic Canada is engaged in a myriad of activities including container transportation to Newfoundland by Oceanex, oil platform resupply by companies like Secunda Marine, shuttling crude oil between platforms and oil terminals operated by companies such as Canship Uglund Ltd., and providing a large number of intra- and inter-provincial ferry services, such as Marine Atlantic and Northumberland Ferries. The region also has a rich shipbuilding history, which will be augmented even further by Halifax Shipyards carrying out a \$25 billion contract from the Department of National Defence to build 21 combat ships over the next 30 years.

In the northern region, marine transportation plays a key role in community resupply as well as resource development. Northern Canada makes use of two clearly delineated marine systems: the western Arctic and the eastern Arctic.

In the western Arctic system, marine operations primarily occur in the Mackenzie River Watershed (including the Mackenzie River and Great Slave Lake), the Arctic coast and islands, and Alaska, as well as Richmond, B.C., on occasion. A fleet of tugs and dual-purpose barges brings, among other things, bulk petroleum products and dry cargo for communities, defense installations, and oil and gas exploration sites across the North while transporting natural resources extracted in the North to markets in the South. The largest marine operator in the western Arctic is Northern Transportation Company Limited (NTCL). As well, a ferry service operates in the Yukon along with five ferry services offered in the Northwest Territories.

The government of Nunavut coordinates the eastern Arctic sealift of dry cargo and bulk fuel for government departments, communities and residents. Sealift services are accessible to other shippers under the same contractual terms and conditions. Services include resupply to the eastern Arctic from Churchill and Montreal (and environs), dry cargo sealift, general cargo, use of roll-on/roll-off vessels, tug and barge combination, and delivery tankers for bulk fuel. Many commercial shipping companies operate in the eastern Arctic, including Nunavut Sealink and Supply Inc. (NSSI), Nunavut Eastern Arctic Shipping (NEAS), NTCL, Groupe Desgagnés and the Woodward Group.

Canada's ports and harbours are integral to Canada's transportation system. They serve as vital links and gateways that facilitate domestic and international economic activities. Canada is home to more than 540 ports and more than 940 small craft and fishing harbours. Under the National Marine Policy, three categories of ports exist: Canada Port Authorities (CPAs), regional/local ports, and remote ports. All major

Canadian ports benefitting from international shipping services have links with the country's rail network. Ports with container-handling capabilities include Vancouver, Prince Rupert, Toronto, Montreal, Halifax, St. John's and Saint John. Ports such as Vancouver, Hamilton, Québec City, Sept-Îles and Saint John also handle significant volumes of bulk commodities.

On the safety side, the Canadian Coast Guard, a Special Operating Agency within Fisheries and Oceans Canada (DFO), allows Canada to exert influence over its waters and coasts. The Coast Guard delivers on public expectations of clean, safe, secure, healthy and productive waters and coastlines. It achieves this mission through eight services, including marine navigation, environmental response services, search and rescue services and maritime security. The Coast Guard is also responsible for icebreaking, dredging and marine communications and traffic management.

Another key component of marine safety is pilotage, regrouped under four federal Crown corporations—the Pacific Pilotage Authority (PPA), Great Lakes Pilotage Authority (GLPA), the Laurentian Pilotage Authority (LPA) and the Atlantic Pilotage Authority (APA)—that provide safe, reliable and efficient marine pilotage and related services for commercial vessels in the coastal waters of British Columbia, within the Great Lakes, in Canadian waters in the Laurentian Region and in Atlantic Canada.

The federal government also plays a key role in four sectors related to marine transportation: Marine Atlantic Inc ferry services, private interprovincial ferry services, the management of the bi-national St Lawrence Seaway and the Canada Port Authorities, as detailed below:

Marine Atlantic – Marine Atlantic Inc. (MAI) is a Crown corporation that fulfills Canada's constitutional obligation to Newfoundland and Labrador to provide a year-round freight and passenger ferry service between North Sydney, Nova Scotia, and Port aux Basques, Newfoundland and Labrador, that 'meets the traffic offering'. This is the only constitutional ferry service in Canada. Marine Atlantic Inc. also operates a non-constitutional summer service between North Sydney and Argentia, Newfoundland and Labrador. MAI carries approximately 27 percent of all non-resident visitors to NL, as well as 50 percent of freight and 90 percent of perishables and time sensitive goods. The service is considered a vital link in the regional economy for the movement of goods and people.

Ferry Services – Transport Canada (TC) provides financial support to private operators for three inter-provincial ferry services in Eastern Canada: Saint John, New Brunswick (NB)/Digby, Nova Scotia (NS), Wood Islands, Prince Edward Island (PEI)/Caribou NS, and Îles-de-la-Madeleine, Quebec (QC)/Souris PEI. These services carry approximately 600,000 passengers and approximately 240,000 passenger and commercial vehicles in 2010.

St. Lawrence Seaway – The St. Lawrence Seaway is a bi-national, deep-draft inland waterway between Montreal and Lake Erie. The St. Lawrence Seaway is a vital part of the Great Lakes St. Lawrence Seaway (GLSLS) system, a marine transportation network that includes locks, canals/channels, ports, terminals, carriers, other infrastructure/service providers and intermodal linkages, and extends 3,700 kilometers inland from the Atlantic Ocean. The Seaway is managed and operated by

the St. Lawrence Seaway Management Corporation, that was established by major users of the Seaway and is responsible for its management and operation (as well as for maintaining, repairing, acquiring and replacing the Seaway assets). Although there have been fluctuations in total tonnages carried through the system over the past fifteen years, reflecting changes in the supply of and demand for different commodities, the GLSLS system continues to make a significant contribution to the regional economy of the Great Lakes and through it to the economy of North America as a whole.

Canada Port Authorities - In general, the federal government has the constitutional authority to oversee shipping and navigation as well as international and inter-provincial transportation, while the provincial governments are responsible for intraprovincial transportation. In practical terms, the efficient operation and regulation of Canada's transportation system relies on the close cooperation of all partners (including the private sector) to help ensure safety, efficiency, environmental sustainability, and security. Canada Port Authorities operate at arm's-length from the federal government and are only permitted to receive funding from the federal government under specific circumstances. If a Canada Port Authority meets the legislated criteria, it can access federal funding programs.

There are different classifications of ports in Canada. In general, these are as follows: Canada Port Authorities, federal public ports, provincial ports and private ports. Canada Port Authorities are federally incorporated, autonomous, non-share corporations that operate at arm's-length from the federal government. They are governed by an independent board of directors that includes directors nominated by port user groups and various levels of government to implement "user pay-user say" principles within the port system. They operate according to business principles and have the authority to operate a port, determine its strategic direction and make commercial decisions including those pertaining to port infrastructure.

## **Rail**

With close to 46,000 kilometres of tracks, the rail transport industry is an important element of Canada's transportation system. In Canada, the rail transport industry generates approximately \$10 billion per year—95% of which comes from rail freight operations and approximately 5% from commuter, intercity and tourist passenger rail services in major urban centres, corridors and regions.

The North American rail industry is highly integrated. Companies operating on integrated rail networks build track to a standard gauge, and tracks are maintained to similar standards. Loaded rail cars are usually pulled by locomotives owned and operated by the track owner, but North American integration allows railways to interchange or hand off cars and locomotives that meet industry standards to other railways to complete a journey.

Canadian National Railway (CN) and Canadian Pacific Railway (CPR) are the two dominant freight rail operators in Canada and are both Class I railways, meaning their revenues exceeded \$250 million in the past two years. Of total Canadian rail transport industry revenues, CN accounts for over 50% and CPR for approximately 35%.

Together, CN and CPR represent more than 95% of Canada's annual rail tonne-kilometres, more than 75% of the industry's tracks, and three-quarters of overall tonnage carried by the rail sector. For Canada, these two firms serve as important supply chain links for Canada's key trade corridors and gateways. CN crosses Canada from the Atlantic Ocean to the Pacific Ocean and follows the Mississippi River to the Gulf of Mexico, linking customers in Canada, the U.S. and Mexico. This has been made possible through various CN acquisitions—Illinois Central in 1999; Wisconsin Central in 2001; and Great Lakes Transportation in 2004—as well as a 2004 partnership agreement with BC Rail. CN generates annual freight revenues in Canada on the order of \$5.5 billion, and employs 22,000 people here and abroad. Meanwhile, CPR operates 22,500 route-kilometres in six provinces and 13 States, generates almost \$4 billion in annual revenues in Canada; it has roughly 15,000 employees system-wide.

*Shortline* railways are a fundamental component of the country's rail network, feeding and delivering traffic to and from mainline railways, originating more than 20% of all CN and CPR's freight carload traffic, and moving billions of tonne-kilometres back and forth from Class I railways.

*Passenger* railways include intercity rail operators, urban rail transit railways and heritage railways. In 2009, intercity passenger rail traffic totalled 4.5 million passengers and approximately 1.4 billion passenger-kilometres. VIA Rail Canada—a Crown corporation established in 1977 that now operates close to 500 trains weekly serving more than 450 communities across 12,500 kilometres of rail network—is Canada's dominant intercity rail passenger service operator, with annual passenger revenues of \$260 to \$280 million. It is also a Class I railway. This is complemented by about \$260 million in annual operating subsidies as well as substantial capital funding. Remote communities benefit from subsidized intercity passenger rail services provided by carriers such as Tshiuetin Rail Transportation Inc. between Sept-Iles and Schefferville, while cross-border passenger rail service connections are made possible in Vancouver through Amtrak's Cascades service, in Niagara Falls through Amtrak's Empire service, and in Montreal through Amtrak's Adirondack service.

A number of tourism rail services are offered throughout the country and include Rocky Mountaineer, Alberta Prairie Railway Excursions, Great Canadian Railtour Company Ltd., South Simcoe Railway, and Steam Train HCW. Commuter rail service is provided by TransLink in Metro Vancouver, GO Transit in the Greater Toronto and Hamilton Area, and Agence métropolitaine de transport (*Metropolitan Transportation Agency*) in the Greater Montreal area.

## **Road**

Canada has more than a million kilometres of (two-lane equivalent) roads, roughly 38,000 of which make up the National Highway System (NHS). Road transportation is the most important mode for passenger and freight transportation, local (intra-city) and intercity transportation, intra-provincial transportation activities, and trade between Canada and the United States (in terms of value transported).

Canada's road network is shared by a wealth of different users, including 20 million light vehicles, 750,000 medium and heavy trucks, 15,000 public transit buses, motorcoaches and motorcycles in addition to pedestrians, cyclists and rollerbladers.

## 1.1 Infrastructure

Rail : 45 888Km conventional lines. No high speed rail

Roads (Paved): 415,600 two-lane equivalent KM, including 38,010 in the National Highway System

Roads (Unpaved): 626,700 two-lane equivalent KM

Ports: 324 including 18 Canada Port Authorities (major domestic and international ports)

Small craft and fishing harbours: 923

Aerodromes: 1,889 (including 314 certified land aerodromes [airports])

## 1.2 Performance

### Congestion

Canada's transportation system is generally reliable and efficient. Road congestion is an issue in large urban areas around rush hour however, outside of those areas and times, it is less of an issue when normal conditions are in effect. Rail congestion does occur, particularly in the busy corridors between Montreal and Toronto and through the Rocky Mountains. To alleviate congestion in the latter, Canada's two major railways operate in co-production mode, meaning that one railway's track will be used for travel in one direction and the other railway's tracks will be used in the other direction. Finally in Air, Canada has only two Level-3 slot coordinated airports, Toronto and Vancouver. Elsewhere, there is usually enough spare capacity to accommodate with growing demand, except in Calgary, where a new 4,267m runway currently being built should alleviate any capacity issues.

### Reliability

Transport Canada is developing new tools for transportation system performance measurement that better reflect the efficiency and reliability imperatives that Canadian and other companies face in today's era of global supply chains.

Transport Canada has also devised an integrated approach that seeks to monitor performance and utilization of critical gateway assets at both gateway (port utilization indicators) and supply chain (fluidity) levels. These initiatives rest on sound partnerships between Transport Canada and participating supply chain partners and leverage an unprecedented level of world-class expertise.

With approximately 90% of global trade by volume transported by sea and waterways, ports are critical links in global supply chains. Despite the importance of seaports to the global economy, little is known about what makes a port truly



competitive and a best-in-class performer. While no single metric can truly capture the full complexity of port operations, gateway stakeholders recognize the need to build a factual, impartial case for ensuring the competitiveness of Canada's gateways. To do so, a project has been initiated to develop a set of port utilization indicators at a national level to assist ports in monitoring their operational performance over time.

Port utilization indicators were recently developed and implemented based on the principle of methodological transparency and under partnerships that leveraged operational and academic port expertise.

The project began in the fall of 2008 and involved the largest Canada Port Authorities (CPAs). The first phase of the project sought to implement metrics at container facilities, while bulk facilities were addressed in a subsequent phase due to methodological complexities related to bulk operations. Bulk indicators are aggregated by commodity and cover iron ore, coal, minerals (potash and sulphur), grain, general cargo, forest products and liquid bulks. All metrics focus on operational aspects of port facilities.

To evaluate how gateways and strategic trade corridors interact together operationally a fluidity indicator was developed. This indicator examines end-to-end supply chain performance by focusing on the time component. The fluidity indicator measures the total transit time of inbound containers from overseas markets to strategic North American inland destinations via various Canadian gateways. Initial phases of this indicator project targeted inbound container movements for Pacific Gateway markets (British Columbia ports). However, future phases will cover inbound movements at other gateways, but also international outbound container and bulk movements across all major gateways.

In terms of shipment delivery time and costs, world-class gateways can offer shippers numerous options, ranging from expedited and premium services to lower-value propositions. For the fluidity indicators project, Transport Canada identified eight different supply chain models. These represent various combinations of modes and logistical arrangements, including transloading of containers.

Analysis of transit times by logistical segment reveals the essential role the marine component plays in overall trans-Pacific movement of containers. Indeed, ocean transit makes up 65% of the total journey, while port dwell and rail transit accounts for the remaining 35% of the journey. In other models, drayage—the transport of goods by truck on a short distance—generally constitutes a marginal share of total transit time, despite its critical role in the overall movement of goods.

Overall, Transport Canada's supply chain performance monitoring initiatives support the establishment of KPIs to assist government agencies in enhancing visibility and accountability in oversight of key assets. Transportation and logistics

facilitate global trade, and their efficient performance is essential to trade-reliant countries such as Canada. Moreover, the nodal role of seaports in global supply chains and international gateways warrants special attention. Transportation decisions are increasingly made within a broader scheme of supply chain management; it is through this lens that performance should be approached. Improved supply chain performance can impact the daily lives of nearly all Canadian consumers. Insightful performance measurement can lead to more precise identification of logistics elements needing adjustment, which can then improve supply chain performance and Canada's trade competitiveness.

This benefits all gateway users and, ultimately, end consumers. This type of detailed information is highly valuable and can be leveraged for several purposes, including overseas promotion of Canada's gateways, stakeholder facilitation, policy support, and measuring return on infrastructure investment, among others. In gathering performance measurement details— and to maintain integrity of the data collected—Transport Canada continues to expand the scope of trade lanes and corridors while supporting effective data exchange partnerships.

### **Marine transportation**

St. Lawrence Seaway – Traffic levels in the St. Lawrence Seaway have typically been at around 40 million tonnes annually (approximately 50 percent of its capacity); the cargoes shipped through the Seaway system feed a network of industries within the central portion of the Great Lakes basin and the St. Lawrence River region. With respect to reliability, the SLSMC has the objective of continuing to provide system availability at a level exceeding 99 percent; actual system availability has consistently been above 99.5 percent.

Canada Port Authorities- Canada Port Authorities handle approximately \$162 billion worth of goods annually, a quarter of all Canadian trade.

Canadian ports and marine terminals handle about 400 million tonnes of cargo per year (2010-2011). The overall port sector in Canada is estimated to contribute roughly \$44 billion to Canadian Gross Domestic Product, of this Canada Port Authorities are estimated to contribute approximately \$24.5 billion and provide 269,000 jobs.

## **2 MAJOR PROJECTS AND FUNDING**

With global supply chains evolving, trade movement on the rise and new markets emerging, the Government of Canada is working to ensure Canada's ongoing trade competitiveness through the implementation of long-term policies, strategic planning, and focused investment in the transportation system.

The growth of containerization has had a significant impact on world trade and created the opportunity for Canada to become a key gateway for Asia–North America trade. In the decade leading up to 2005, Canada's trade with China alone grew by almost 500%. All levels of government, along with private stakeholders, responded to improve both the capacity and efficiency of the transportation infrastructure on Canada's west coast. In 2006, these efforts culminated with the launch of the Asia–Pacific Gateway and Corridor Initiative (APGCI). The systems-based, multi-modal APGCI strategy extends beyond infrastructure to include policy, regulatory and operational measures to improve the efficiency and reliability of the supply chain.

Canada's connectivity with the U.S.—the country's largest trading partner—is also crucial. Central Canada's transportation infrastructure handles approximately 70% of trade (by value) with the U.S.

On the east coast, while European trade dominates, imports from South America and South Asia have grown significantly since 2000, providing new trade opportunities for Canada.

In response to the increase in trade and the resulting impact on the transportation system, the Government of Canada released the National Policy Framework for Strategic Gateways and Trade Corridors in July 2007. This Framework was developed to improve the capacity and efficiency of the country's transportation system to support international trade, thereby advancing the competitiveness of the Canadian economy. The Framework provides focus and direction through a government-wide approach that fosters further development and optimization of the transportation system that is fundamental to Canada's success in international trade.

The National Policy Framework emphasizes Canada's geographic advantages, includes long-term planning and public-private collaboration, and applies an integrated approach to assessing and implementing infrastructure, policy and operational measures.

Under the National Policy Framework, Canada's Gateways are divided into three strategic regions: the Asia–Pacific Gateway and Corridor, the Ontario–Quebec Continental Gateway, and the Atlantic Gateway and Trade Corridor. As each gateway is unique, specific strategies aim to reflect each region's local realities, opportunities and challenges, while recognizing that these gateways are complementary to one another.

### ***Current gateways and trade corridors***

The objective of the **Asia–Pacific Gateway and Corridor (APGCI) Initiative** is to strengthen Canada's competitive position by establishing the best transportation network between Asia and North America. To date, 47 strategic transportation infrastructure projects valued at more than \$3.5 billion have been announced by the federal government in partnership with all four western provinces and other public and private sector partners. This gateway links the ports of Vancouver and Prince Rupert with the inland supply chain and the rest of the continent.

The **Ontario–Quebec Continental Gateway** is a vital component of Canada's multimodal transportation system and provides a critical link between all key gateway facilities and also to Canada–U.S. border crossings. The Ontario–Quebec Continental Gateway is focused on developing a sustainable, secure and efficient multimodal transportation system that supports business opportunities.

Canada's **Atlantic Gateway and Trade Corridor** is a transportation network that connects North America to markets in Europe, the Caribbean, Latin America, and Asia

via the Suez Canal. With its deep-water ports, specialized niche and customized services, modern intermodal transportation network, and partnership between government and the private sector, the Atlantic Gateway and Trade Corridor reaches into the economic heartland of North America. The Atlantic Gateway and Trade Corridor Strategy was released in March 2011. It was developed through the collaboration of the Governments of Canada, Nova Scotia, New Brunswick, Prince Edward Island, and Newfoundland and Labrador, as well as the private sector.

### ***Development activities***

#### **Analytical framework**

Since 2007, Transport Canada, in collaboration with provinces and other public and private stakeholders, has developed and implemented an analytical framework to support the various gateways. Substantial analysis has been conducted to identify capacity and demand of the multimodal transportation system, and considerable knowledge has been gained. This analytical framework has led to the identification of issues and bottlenecks affecting the efficient flow of international freight, as well as the competitiveness of the transportation system—both now and in the future.

#### **Collaboration**

A key factor in gaining knowledge and gathering relevant information is consultation and collaboration with the private sector—owners, operators and users of the transportation system in Canada. Stakeholder roundtables, workshops and direct consultations create a strong base for collaboration to identify the real issues that impact the efficient movement of freight and Canada's trade competitiveness.

The private sector offers insight into the daily challenges of moving goods through and along Canada's transportation system. Formal partnerships have been established for all three gateways and corridors. Coupled with the national perspective of Canada's Gateways, these partnerships assist the Government of Canada to address transportation system needs that are critical to the efficiency of international trade flows and trade competitiveness.

The APGCI Gateway Performance Table was established in 2008. Its participants represent a cross-section of major transportation, shipping and labour interests operating in the Lower Mainland of British Columbia and across the Prairies. The Performance Table was set up in response to ongoing stakeholder feedback regarding the overall performance of this supply chain, and to assess whether APGCI infrastructure investments were resulting in performance improvements over time.

Both a private sector and a public sector advisory committee were established for the Ontario–Quebec Continental Gateway, to provide advice on public policy issues and governmental measures, to collaborate on the development of the gateway and trade corridor, and to offer a forum for participants to share their expertise, information and insights.

In the east, the Atlantic Gateway Advisory Council provides regional perspectives to support the ongoing development of Atlantic Gateway initiatives. The Council consists of 13 private sector representatives from a broad range of industries in Atlantic Canada. The Council works with governments to identify and address the issues affecting Atlantic Canada's international trade competitiveness, and to ensure the greatest possible long-term benefits to the entire Atlantic Region.

## **Marketing**

In addition to its efforts in stakeholder collaboration, the Government of Canada has been engaged in extensive marketing initiatives to promote the advantages of the Canadian transportation system—particularly the country's first-class gateways and corridors that enable access to and from the North American market.

Trade missions have been led by various federal ministers, in partnership with provincial governments and the private sector, to Asia, South America, the United States and Europe. Emphasis is placed not only on Canada's transportation system, but also on the country's significant business opportunities.

More specifically, under the APGCI, the Department of Foreign Affairs and International Trade was allocated dedicated funding to develop and implement an international marketing strategy for the Asia-Pacific Gateway and Corridor. The strategy included business-to-business engagement, a strong presence at international transportation and logistics events, targeted media outreach, and an advertising campaign. When appropriate, Canada's other gateways were also represented.

Marketing is also a major component of the Atlantic Gateway Strategy and is supported by a dedicated fund. Atlantic Gateway marketing focuses on building national and international awareness of the gateway's assets and includes key sectors such as bulk/break-bulk, containers and air cargo. Ongoing collaboration with ports and airports in the region has led to the development and implementation of strategic international marketing initiatives in key international markets including the United States, Europe, Asia and South America. Participation at key industry events provided Atlantic Gateway ports and airports with venues to identify and develop global business opportunities.

## **Infrastructure investments**

Coinciding with the National Policy Framework for Strategic Gateways and Trade Corridors, the \$2.1 billion Gateways and Border Crossings Fund and the \$1.0 billion Asia-Pacific Gateway and Corridor Initiative form a special element within Building Canada, the federal government's overall plan for infrastructure.

Almost \$6 billion has been committed to Canada's gateways and trade corridors from a variety of sources, leveraging significant public and private investments. These commitments support the objectives of improving both the capacity and efficiency of the country's transportation system, and advancing the competitiveness of the Canadian economy. Investments support key projects underway or recently completed, such as the South Fraser Perimeter Road and the Roberts Bank Rail Corridor in British Columbia, a new access road linking the planned new Windsor-Detroit crossing to Highway 401 in Ontario, modernization of Port of Sept-Îles in Quebec, terminal expansions at the Port of Halifax in Nova Scotia and the Port of Belledune in New Brunswick.

Since 2006–2007, close to \$17.4 billion has been invested in the National Highway System (NHS) by all levels of government, with amounts increasing from \$2.3 billion in 2006–2007 to \$4 billion in 2010–2011, peaking at \$4.5 billion in 2009–2010. These investments from 2006–2010 have been used to extend the NHS with pavement rated in good condition by 12% (2,600 km), and to decrease the length of pavement in poor condition by 22% (800 km). During this same period, the length of unpaved NHS decreased by more than 24% (800 km).

The NHS also has more than 8,700 bridges, 60% of which are more than 30 years old. Due to increased government investments, however, the number of bridges less than

10 years old increased by 16% between 2006 and 2010, from 896 to 1,223. In contrast, aging infrastructure remains an issue as the number of bridges 50 years or older went from 870 to 1,318 between 2006 and 2010, an increase of more than 50%. Since 2007, almost 700 bridges on the NHS have either been rebuilt or have undergone major rehabilitation.

Between 2005 and 2008 (latest available data), total travel on the NHS increased by more than 6% (from 119 to 127 billion vehicle-kilometers), while truck travel increased by approximately 9% (from 18 to 19.6 billion vehicle-kilometers). Almost 93% of car travel and 95% of truck travel in Canada occurred on the Core National Highway System.

The federal government invests in highway and road infrastructure through federal funds administered by Transport Canada and Infrastructure Canada. All land border crossings and most international bridges are owned or operated by the federal government directly or indirectly via Crown corporations or operating authorities. The Canadian government (through the Federal Bridge Corporation Limited, FBCL) also owns and maintains several strategic assets in Quebec. FBCL also oversees and manages the Canadian portions of several international bridges, including the Thousands Islands Bridge, the Seaway International Bridge and the Sault Ste. Marie International Bridge.

The rest of Canada's road network, basically its vast majority, is under provincial, territorial and municipal jurisdictions, and the federal government's policy role is limited to promoting road safety and developing strategic highway and infrastructure policies that support the best possible transportation system. Over the years, the Government of Canada has provided cost-shared funding for constructing and expanding portions of the NHS and some local roads through various funding programs.

Intelligent Transportation Systems (ITS) is key to Canada's transportation efficiency and competitiveness. Illustrative examples of ITS projects in which Transport Canada was a partner include:

- Traveler information—in Metro Vancouver, a new Regional Traffic Data System will produce real-time traffic flow information along the region's main roads and strategic highway corridors (including truck routes) and display it online, allowing drivers to avoid busy stretches and operators to manage congestion.
- Commercial vehicle operations—in British Columbia, the Weigh2Go system improves commercial vehicle safety with intelligent inspection stations, which remotely measure vehicle weight and credentials at highway speed.
- Border efficiency—Transport Canada is working with partner agencies in Canada and the U.S. to improve border efficiency by installing sensors to measure and broadcast wait times at the busiest border crossings.

Infrastructure projects are financed by a wide number of stakeholders, including the federal, provincial, territorial and municipal governments as well as the private sector. The following is a list of federal government infrastructure funding programs:

*Funding Programs:*

- Building Canada Fund
- Gateways and Border Crossings Fund
- Asia-Pacific Gateway and Corridor Initiative

- Border Infrastructure Fund
- Canada Strategic Infrastructure Fund
- Outaouais Road Agreement
- Strategic Highway Infrastructure Fund
- Regional and Remote Rail Passenger Services Class Contribution Program
- Security and Prosperity Partnership
- Grade Crossing Improvement Program
- Grade Crossing Closure Program

### **Beyond infrastructure**

Throughout the development and implementation of the various gateway and trade corridor initiatives, transportation system improvements have not been limited to infrastructure investments. In many cases, improvements have been identified and implemented to reduce policy, regulatory and financial barriers, to improve the business environment for trade growth, and to enhance freight operations at key facilities by way of company-level agreements, application of new technology and establishment of innovative operational practices.

These significant non-infrastructure improvements to date include modified customs tariff rules allowing greater domestic use of imported cargo containers, the elimination of the 25% duty on certain foreign-built vessels, amendments to the *Canada Marine Act*, the elimination of many manufacturing tariffs (Tariff-free Zones for manufacturers), free trade agreements under development (e.g. with the European Union and with India), and the amalgamation of ports in the Lower Mainland of British Columbia to form Port Metro Vancouver.

### **Inland ports and logistics hubs**

Inland ports and multimodal hubs offer opportunities to attract investment and the concentration of value-added manufacturing, logistics and other services.

Successful inland ports and other multimodal hubs exist near strategic transportation infrastructure that is well integrated into global value chains, that has space for development, that offers proximity to suppliers and markets, and that resides in a regional economy with a skilled labour force and concentrations of services that support trade and transportation.

One prime example of such an inland port is Winnipeg's CentrePort Canada, a provincial and locally initiated project to develop a 20,000-acre zone for an inland port and trade area around J.A. Richardson International Airport. The project seeks to leverage Winnipeg's geographic location on north-south and east-west trade routes, and build a multimodal hub for international transportation, manufacturing, distribution and warehousing activities.

### **Foreign Trade Zones**

Canada offers a unique package of tax programs and policies that allow any business to operate as if it has its own foreign trade zone (FTZ), anywhere in Canada. Developed by the Department of Finance, these include duty deferral and remission policies, the customs bonded warehouse program, and programs for exporters. The programs combine with the fully refundable GST/HST system to allow unrestricted access to FTZ-like benefits without the requirement of operating within the limited zone of a traditional FTZ.

Budget 2009 identified CentrePort Canada as a key priority for federal infrastructure funding, with contributions to six projects and operational funding for CentrePort

Canada's start-up. A single-window task force and outreach program were also launched in Winnipeg to raise awareness of Canada's tax and duty deferral advantages, including enhanced promotion of Canada's foreign trade zone-type programs.

### **Lessons learned**

Throughout the development and implementation of various tasks associated with Canada's gateways, collaboration among public and private stakeholders has been the key to success. While strong partnerships may take considerable time to develop, the ability to identify issues and implement solutions is a demonstration of what can be accomplished when stakeholders collaborate effectively.

Developing, maintaining, sharing and applying an extensive knowledge base of Canada's multimodal transportation system as well as the current and future trade flows it must support amount to a sizeable task. The economic environment is constantly changing, with decisions made daily that impact trade and the transportation system. Staying abreast of these issues and responding accordingly have been key to the gateways' success.

While the National Policy Framework for Strategic Gateways and Trade Corridors represents a national perspective, individual gateway initiatives have addressed needs at both regional and local levels. One essential—but often overlooked—benefit of the gateway approach is that gateways share global supply chains. As such, improvements to a specific supply chain in one gateway can benefit another gateway where the supply chain also exists.

### **Next steps**

The APGCI has had many successes in the last five years. With federal funding fully committed, significant progress has been made on infrastructure projects. Moving beyond traditional bricks and mortar toward competitiveness measures, the APGCI has also helped ensure a thriving business environment. Moving forward, to derive the greatest benefits from its investments APGCI will focus on deepening relationships domestically and internationally and seizing opportunities to expand trade with international partners.

As for the Ontario–Quebec Continental Gateway, analysis of the multimodal transportation system within Ontario and Quebec continues in order to identify impediments and opportunities for more efficient trade. The Government of Canada is working with the private sector and other key public sector stakeholders to address current and future transportation needs.

The Atlantic Gateway and Trade Corridor Strategy includes a balance of immediate measures and longer-term directions to position the region's transportation system to take advantage of global trade opportunities. Core elements of the Strategy guide implementation activities, which are well underway. Beyond advancing the infrastructure projects, other activities include further supply chain analysis, focused analytical work, regional workshops on various issues, international trade missions and marketing efforts. Moving forward, the Atlantic Gateway Federal-Provincial Officials Committee will also continue to collaborate with the private sector to identify and address policy and regulatory issues that affect the competitiveness of the Gateway.

More information on Canada's Gateways is available at [canadagateways.gc.ca](http://canadagateways.gc.ca)



## **Public Transit**

Safe, sustainable and efficient public transit systems are essential to Canada's economy, environment and quality of life. Although urban transit infrastructure is a shared municipal and provincial/territorial responsibility, the Government of Canada recognizes that making urban transportation more sustainable and efficient is a significant challenge that requires the cooperation of all levels of government. Therefore, the Government of Canada works closely with our provincial, territorial and municipal partners to help them meet their transit infrastructure needs, while respecting jurisdictional responsibilities. As such, the federal government makes considerable investments in urban transit across Canada, through a number of existing cost-sharing infrastructure programs.

Intelligent Transportation Systems (ITS) are a combination of innovative technologies, communications systems and management strategies that are applied to the transportation network to optimize operations. In doing so, they maximize benefits from existing infrastructure—increased efficiency, safety, security and environmental sustainability—and minimize the need for new capital investments. A wide range of ITS has been deployed in Canada, and much more is planned.

## **Marine Transportation**

MAI – In July 2010, the federal government announced that it is investing \$521 million in MAI over five years (to 2014/15) to renew the Corporation's fleet and shore facilities and improve the quality and reliability of its services. Funding includes allocations for significant improvements to MAI's shore-facilities at its terminal sites in North Sydney, Nova Scotia, and Port aux Basques and Argentia, Newfoundland and Labrador. A portion of this investment has also been dedicated to the chartering of two new vessels – the *MV Blue Puttees* and the *MV Highlander* – to replace the ageing *MV Caribou* and *MV Joseph and Clara Smallwood*. The new vessels were introduced into the fleet in December 2010 and February 2011, respectively, and will significantly improve the corporation's ability to provide on-time, reliable service and meet increasing traffic demand between North Sydney and Newfoundland and Labrador.

St. Lawrence Seaway – The St. Lawrence Seaway, the inland waterway between Montreal and Lake Erie, consists of 15 locks and connecting channels in two sections: the Montreal/Lake Ontario section, which includes five Canadian and two American locks, and the Welland Canal, which includes eight Canadian locks. These assets are administered by the Canadian St. Lawrence Seaway Management Corporation (a commercialized entity) and by the American Saint Lawrence Seaway Development Corporation (a government entity).

Canada Port Authorities – Canada Port Authorities operate at arm's-length from the federal government and are only permitted to obtain funding from the federal government under specific circumstances. A key feature of Canada Port Authorities is that by law they must be financially self-sufficient. Canada Port Authorities finance their operations from their revenues and borrow from commercial banks for capital projects. They do not receive appropriations or funding from the government to meet operating costs or deficits. They do not receive federal government loans or any federal government guarantees of commercial loans. They cannot pledge federal real

property as security for any borrowing, and they do not benefit from any interest free loan or bond issue status, nor have taxing powers.

A Canada Port Authority can access federal funding if the proposed project meets the legislated criteria and concerns infrastructure, environmental sustainability and the implementation of security measures. All federal government funding for applicable port related transportation projects in Canada are oriented at developing gateways and trade corridors. In doing so, the Government of Canada is pursuing long-term policy, planning and strategic investment in transportation systems to strengthen Canada's position in international commerce. The approach includes the National Policy Framework for Strategic Gateways and Trade Corridors

The following programs are available to applicable port related transportation projects in Canada: Asia-Pacific Gateway and Corridor Initiative, Building Canada Fund, Gateways and Border Crossings Fund, Canadian Strategic Infrastructure Fund, Border Infrastructure Fund. For all funds, the amount of federal funding that went to Canada Port Authorities since 2009 is \$242.4 million.

### **3 STRATEGIC PLANS**

Canada faces many challenges relating to its road transportation infrastructure. Some are unique to the country—such as its extensive land mass and often harsh climate, its high degree of urbanization, and its high level of trade dependency—and some are shared by others, including an aging road and highway infrastructure, limited finances, issues of transportation safety, the rise of emerging economies such as Brazil, Russia, India and China (BRIC) which has reshaped global business models and value chains, increased demand for renewable and non-renewable resources of which Canada holds an abundance of and environmental considerations enabling sustainable and responsible supply chains. These challenges increase pressure for more federal, provincial and municipal spending at a time when economic and financial circumstances are forcing all governments to consider new and innovative ways to fund transportation infrastructure. Given the challenges ahead, the need for investment will undoubtedly continue. In coming years, however, government spending at all levels is likely to be limited given current fiscal situations and competition for funding from social sectors such as health and education.

Through its legislative and regulatory responsibilities, the federal department of transportation, Transport Canada, currently supports the efficiency, safety, security and sustainability of the national transportation system, and helps ensure that Canada's system is well integrated with global transportation networks. Supported by a modern and responsive policy and regulatory framework, that system can substantially contribute to long-term economic prosperity. That said, all partners have a role to play, including the federal, provincial and territorial governments, and municipalities that may own, operate or regulate aspects of the transportation system.

For Canada's transportation system to remain successful and efficient, each level of government and the private sector need to excel in their respective roles, respect the boundaries that frame these roles and coordinate their actions to advance their activities and work towards a common goal. Successfully positioning Canada's transportation system to better respond to challenges and opportunities will require all

stakeholders make strategic choices and take deliberate action that is predicated upon sound analysis, respect for each other's fields of responsibility, and effective collaboration.

Some of the key issues facing Canada's Transportation system in the coming years include:

- Having a transportation system that meets the needs of northern resource development;
- How the widening of the Panama Canal will alter shipping patterns;
- Demographics which will create two distinct issues, namely a greater demand for accessible transportation and a labour shortage in the transportation sector as retirements outnumber new hires;
- An ageing infrastructure in need of replacement in a time of tight public finances, leading to an exploration of alternate service delivery mechanisms;
- Decoupling energy consumption from volume growth;
- Maintaining a very low number of accidents despite a rise in activity;
- Ensuring that securing the transportation system does not impact on its performance.

In Budget 2011 and Economic Action Plan 2012, the Government of Canada has committed to working with partners and stakeholders to develop a long-term plan for public infrastructure that extends beyond the expiry of the Building Canada plan in 2014. To meet this commitment, Infrastructure Canada is engaging provinces, territories, the Federation of Canadian Municipalities and other stakeholders to shape **the development of a new long-term infrastructure plan**. This involves taking stock of our achievements, identifying priorities for the future and building the knowledge needed to address Canada's future infrastructure needs and articulated around the themes of infrastructure and the economy, infrastructure and the environment, infrastructure and stronger communities, financing infrastructure, and planning and sustainability.

Specifically for marine transportation, the following strategic plans should be taken into account:

MAI – MAI provides a constitutionally-mandated ferry service between North Sydney, Nova Scotia, and Port aux Basques, Newfoundland and Labrador on behalf of the federal government. The Corporation also operates a seasonal service between North Sydney and Argentia, Newfoundland and Labrador. In July 2010, the federal government announced an additional investment of approximately \$521 million over five years to renew the Corporation's fleet and shore facilities and to improve the quality and reliability of its services; Transport Canada will continue to work with MAI towards this goal.

Canada Port Authorities - Some of Transport Canada's policy objectives for the Canadian transportation system are to improve transportation safety and security as well as help make Canada's critical transportation infrastructure safer and more efficient. In doing so, Transport Canada contributes directly to the success of three key government-wide initiatives: supporting economic growth; protecting the security

and safety of Canadians; and serving Canadians in a way that continues to ensure their ability to travel.

Major issues related to achieving these objectives are diversification of trade and keeping Canada’s transportation system aligned with the global marketplace: transporting resources to emerging and developed economies and building a sustainable transportation system for Northern Canada. Canada’s transportation sector faces challenges concerning how to optimize the use of current transportation infrastructure so as to alleviate congestion and adapt to increasing traffic volumes. In addition, another matter facing Canada’s transportation network is the issue of aging infrastructure and aligning infrastructure investment with future supply chain demands.

**3.1 Long Term**

The complete list of major infrastructure project across Canada to be carried out over 5 years or more would be too long to list here; instead, the following three projects with federal government involvement are presented as examples:

Detroit River International Crossing

This project will see the construction of a new bridge crossing the Detroit River and linking Detroit to Windsor. This will be the third fixed road crossing between both cities, the most important road border crossing in North America in terms of trade value. The crossing, combined with the new Windsor–Essex Parkway will connect Detroit and Windsor by linking Ontario’s Highway 401, the nation’s busiest, with Michigan’s Interstates 75 and 94 in Michigan. The bridge is expected to cost about \$3.5B to \$4B CAD and will be financed through tolls and a public-private partnership.

Champlain Bridge Replacement

The Government of Canada is building a new bridge corridor to replace the existing Champlain Bridge in Montreal. It will span the St. Lawrence River to connect the Island of Montreal to the South Shore. The Champlain Bridge is the busiest bridge in Canada in terms of vehicular traffic. The new bridge is expected to be opened in 2022 and the old one will be demolished two years later. The new bridge is expected to cost \$3B to \$5B CAD

Evergreen SkyTrain Line

The Evergreen Line is a new rapid transit line that will connect Coquitlam, British Columbia to Vancouver via the towns of Port Moody and Burnaby. The Evergreen Line will be a fast, frequent and convenient SkyTrain service, connecting

Coquitlam City Centre through Port Moody to Lougheed Town Centre in approximately 13 minutes. It will connect without transfer to the current SkyTrain network at Lougheed Town Centre Station and will integrate with regional bus and West Coast Express commuter rail network networks. The construction cost for the Evergreen Line is \$1.4 billion and will be funded by the federal government (\$417M), the province of British Columbia (\$583M) and TransLink (\$400M), the provincial body responsible for the transportation network in the Lower Mainland (Metropolitan Vancouver Area).

### 3.2 Mid Term

The complete list of major infrastructure project across Canada to be carried out over the medium-term would be too long to list here; instead, the following five federal projects are presented as examples:

#### The Union Station Revitalization Project:

The Union Station in Toronto is the busiest, most important multimodal passenger transportation hub in Canada, serving more than 250,000 passengers daily. The century-old station is a National Historic Site and a significant part of Toronto's history and culture. The Revitalization Project comprises of improvements that are being made to maintain the station in a state of good repair, enhance pedestrian circulation and concourse capacity, maintain the heritage aspects of the station, construct a loading dock, extend downtown Toronto's underground pedestrian network (the PATH system) and structurally enhance the station to allow for a new lower level. The total cost is estimated at \$640M CAD; funded under the Building Canada Fund, the project is expected to be completed in 2016.

#### Highway 30 Bridge

In Quebec, the Highway 30 project is a ring highway that will enable to circumvent the island of Montreal. The completion of Highway 30 will relieve traffic congestion in the Montreal area by providing an alternative route via a southern bypass road. It will also consolidate Highways 10, 15, 20, 30, 40, and 540 into a more effective road network, for easier access to markets in Eastern Quebec, Atlantic Canada, Ontario, and the United States. The project includes a 2,6 km bridge over the St Lawrence River at the Beauharnois Canal. This \$2.5-billion project will be financed by the Government of Quebec (\$1.84 billion) and the federal government (\$704.5 million),

#### The Halifax Port Authority (HPA) Terminal Improvements Project

This project comprises the South End Terminal Expansion Project and the Richmond Terminal Improvement Project. The South End Terminal Expansion project involves

the extension the main pier at the South End Terminal, as well as access improvements to the Pier, including the Halterm Road Realignment and the Halterm Truck Marshalling & Gate Complex project components. The project also includes the Richmond Terminal Improvements which involves upgrading and expanding the value added cargo-handling services that can be conducted at Richmond Terminals. Along with this development several smaller rehabilitation projects are planned within the Richmond Terminal to address issues with old infrastructure in need of repairs. The total project cost is estimated at \$108M; funded under the Gateways and Border Crossings Fund, the project is expected to be completed in 2013/14.

#### Highway improvement under the Major Infrastructure Component in British Columbia

This consists of 10 projects. These projects will improve and upgrade the major highways of British Columbia along the National Highway System, increasing the flow of goods and user safety, and enhancing strategic benefits. The project is funded under the Building Canada Fund – Major Infrastructure Component and its total estimated cost is \$496M CAD, with completion expected in 2016/17.

#### Port Divestiture

For ports owned by Transport Canada, the Government of Canada has announced \$27.3 million over two years to support the divestiture of regional ports and the continued operation and maintenance of federally owned ports.

## **4 ASSESSMENT METHODOLOGY**

Infrastructure investment decisions are taken for a multiple number of reasons using various assessment methodologies. Most projects though fall under one of four broad categories: repair and renew, capacity increase, extension of existing infrastructure or strategic infrastructure and are assessed under the appropriate lens.

Canada's Economic Action Plan, announced in 2009, simplified federal approval processes so that more projects could get underway quickly. Through the Economic Action Plan, funding is accelerated upon agreement of provinces and territories, in order to provide economic stimulus.

The assessment phase is the starting point in the project life cycle and involves a review of the proposed project and of applicable regulatory and/or legislative requirements before the project is submitted for approval/rejection. The technical review of the business case marks the start of the process, as it ensures that the proposed selection of projects will meet the objective(s) of the program. The process starts when a potential funding recipient (proponent) submits a business case or proposal.

The Project Manager (PM) assesses the eligibility of the proposal or business case to determine whether it meets basic program requirements. At this time, a determination is also made of whether there is a need for an environmental assessment and/or Aboriginal consultation. After the business case has been assessed, the PM prepares a due diligence/project assessment report containing a formal recommendation to the Minister for approval or rejection of the proposed project. The Minister will make the final determination, subject to the quality and relevance of proposals and the availability of funds, and will advise applicants in writing once a funding decision has been made on their proposal.

### Highways:

In Canada, almost all of the more than one million kilometres of road network (two-lane equivalent) is owned and operated by provinces, territories, and municipalities.

Based on an informal survey of provincial governments conducted in 2011, some of the major factors, criteria and principles that influence highway planning, investment, maintenance and rehabilitation activities in Canada are: age and condition of pavement and bridges, volume of passenger and freight traffic, safety considerations, availability of funding, stakeholder input, potential social and economic benefits, application of asset management principles, whether the infrastructure is "strategic" and/or part of a trade corridor.

Provinces rely on various analytical tools, assessment methodologies, and database systems to analyze, plan and prioritize investments, e.g. pavement management systems; bridge management systems; asset management system; highway classification systems; and road-user cost-benefit models.

### The Gateways and Border Crossings Fund

Canada's Economic Action Plan, announced in 2009, simplified federal approval processes so that more projects could get underway quickly. Through the Economic Action Plan, funding is accelerated upon agreement of provinces and territories, in order to provide economic stimulus.

In 2007, the federal government launched the 7-year, \$33 billion Building Canada plan (BCP), which represents the Government of Canada's first long-term plan for infrastructure and the largest ever federal commitment made toward public infrastructure.

Funding objectives and project selection methodology vary between the different BCP programs. For example, the \$2.1 billion Gateways and Border Crossings Fund (GBCF) is a merit-based program, guided by the Government of Canada's National Policy Framework for Gateways and Trade Corridors, that is used to improve trade flows between Canada and the rest of the world through strategic investments in nationally-significant transportation infrastructure and other related initiatives.

GBCF projects are identified through transportation system analysis, partner and stakeholder consultation, calls for proposals, and applications from individual

proponents. Projects proposed for GBCF funding are assessed against the Fund’s objectives, conditions, and merit criteria (including: international trade traffic volumes and values, and addressing a demonstrated need to improve trade flows at a strategic gateway, along trade corridors, or at border crossings).