



# INFRASTRUCTURE INVESTMENT IN CANADA 2012-2013

Opportunities for the Consulting  
Engineering Sector



ASSOCIATION OF CONSULTING  
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# Foreword

This report provides a snapshot of federal government departments, agencies and crown corporations with infrastructure funding programs or functions, as of April 2012. The Association of Consulting Engineering Companies - Canada (ACEC) commissioned Temple Scott Associates Inc. to provide ACEC members with a current and convenient reference guide on available federal government infrastructure funding programs that may offer opportunities for consulting engineering companies and their clients.

ACEC is a not-for-profit organization representing companies across Canada that provide professional engineering services to both public and private sector clients. Canada's public infrastructure is a major priority for ACEC and its members. As consulting engineers, ACEC members play a major role in planning, designing and implementing public infrastructure.

ACEC believes infrastructure is an investment in our communities, our quality of life and the environment. Recent investments in infrastructure by the federal government have significantly strengthened Canada's economy and increased prosperity. However, most current federal funding programs, such as the Building Canada Fund are set to expire in 2014. ACEC is working with Infrastructure Canada and other stakeholders to develop a long-term infrastructure plan that will eventually replace some of these current programs. Until then, ACEC will continue to monitor the availability of existing programs.

The report concludes with implications of the federal government's March 2012 budget. Federal infrastructure spending across departments is presented in a comprehensive summary table in Appendix A.

Appendix B includes a profile of Temple Scott Associates Inc. and appendix C includes a profile of ACEC.

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## 1.0 Introduction

The following briefing note contains a lay-of-the-land report which identifies and describes the comprehensive array of departments, agencies and crown corporations that invest in infrastructure as a part of their mandate or as a function of their operations. The report is an extension of a document that was initially prepared for the Association of Consulting Engineering Companies-Canada (ACEC) in 2010 which dealt exclusively with the broadly focused infrastructure programs and base funding agreements under the *Building Canada Plan* and the various infrastructure stimulus programs introduced in Budget 2009. The report also contains a short analysis of the Government of Canada's infrastructure spending plans as referenced in Budget 2012.

## 2.0 A Quick Primer: The Building Canada Plan

It is perhaps valuable to quickly revisit the *Building Canada Plan* (BCP), which is the federal government's vehicle for strategic infrastructure spending and investment. Launched in 2006, the BCP is a \$33 billion, long-term funding plan for provincial, territorial and municipal infrastructure. BCP was centered on a number of objectives: to support economic growth; protect the environment; and, incent the development of healthy communities.

To support these goals the BCP invests in projects through base-funding agreements and specialized programs. Base-funding agreements – which represent about \$20 billion of BCP's lifecycle investment in infrastructure – include the *Gas Tax Fund*, and the *Goods and Services Tax Rebate* which are made payable to municipalities, as well as an “*equal per jurisdiction fund*” which provides \$25 million, per year, to each province and territory. It bears further mentioning that of the base-funding agreements noted, the Gas Tax Fund was made permanent in Budget 2008, and was doubled to \$2 billion per year in Budget 2009. The future of the other base-funding agreements is not guaranteed when the BCP expires in 2014.

Under BCP an additional \$13 billion is being invested through a number of specialized programs to address regional and local infrastructure needs. These include the *Building Canada*

*Fund*, the *Gateways and Border Crossings Fund*, the *Asia-Pacific Gateway Corridors Initiative* and the *Public-Private Partnerships Fund*.

With \$8.8 billion for infrastructure investments, the *Building Canada Fund* (BCF) is the marquee program in the *Building Canada Plan*. All projects funded through the BCF are cost-shared, with the maximum federal contribution to any single project being 50 per cent.

Generally speaking, municipal projects are cost-shared on a one-third basis – the maximum federal share is limited to one-third, with matching contributions from the province and municipality.

BCF is further divided into two key equal-sized elements, the *Major Infrastructure Component* (MIC) and the *Communities Component*. Selected on merit through federal/provincial/territorial negotiations MIC funded projects are focused on large, strategic projects of national or regional significance. The *Communities Component* is targeted at communities with less than 100,000 residents, with projects selected through an application process. Several rounds of intakes for the *Communities Component* have occurred, and based on our review, appears fully subscribed.

While the majority of the application driven BCP programs are close to being fully subscribed, the \$1.25 billion *Public-Private Partnerships Fund* (also known as the *P3 Canada Fund*) is another matter. The *P3 Canada Fund* was created to improve the delivery of public infrastructure by co-funding public infrastructure projects best delivered through a P3 framework. Under the *P3 Canada Fund*, federal contributions are capped at 25 per cent of a project's construction costs.

To help manage the fund and develop a P3 market in Canada, the federal government launched PPP Canada, a Crown Corporation reporting to Parliament through the Finance Minister. To qualify for funding, proposed projects must be procured and supported by a public authority such as a province, territory, municipality, or First Nation. Eligible project categories include water and wastewater, public transit, core national highway system, green energy, disaster mitigation infrastructure, solid waste management infrastructure, brownfield redevelopment, broadband, local roads, shortline railroads, specialized marine terminal and intermodal facilities, regional and local airports, and tourism infrastructure<sup>1</sup>.

To further incent the growth of public-private partnerships in Canada, all project proposals which have sought (or are seeking) \$50 million or more in federal contributions through either the *Building Canada Fund* or the *Gateways and Border Crossings Fund* were (are) required to consider the viability of funding through P3 mechanisms.

Based on information obtained from PPP Canada’s website, investments to date total \$109.5 million, which appears to indicate the *P3 Canada Fund* is vastly undersubscribed.

## 3.0 Key Departments with Infrastructure Programs or Functions

### 3.1 ABORIGINAL AFFAIRS AND NORTHERN DEVELOPMENT CANADA

Aboriginal Affairs and Northern Development Canada (AANDC) has several mandates. Its core obligations are to support the socio-economic well-being of Aboriginal Canadians (First Nations, Inuit and Métis) and to fulfill the federal government’s constitutional responsibilities in the North.

Through its *Community Infrastructure* program activities, AANDC provides funding for the acquisition, construction, operation and maintenance of community facilities such as roads, bridges, water and sewer, and administrative offices. It also funds and delivers a variety of provincial-type services such as education, housing, and community infrastructure.

Under the umbrella of its *Community Infrastructure* activities, various funds have been created for targeted investments designed to address certain infrastructure priorities. These targeted funds include the *First Nations Infrastructure Fund*, the *First Nations Water and Wastewater Action Plan*, and approved funds for investments in First Nations infrastructure and housing that were provided in Canada’s Economic Action Plan – also known as the stimulus plan.

**Table 1: AANDC Community Infrastructure Spending**

	2012–2013	2013–2014
(\$ millions)	1,028.9	993.5

As Table 1 indicates, departmental spending on Community Infrastructure is projected to decrease. The steady decline in funding through to 2013-2014 reflects the sun setting of a number of programs including the aforementioned *First Nations Infrastructure Fund*, the *First Nations Water and Wastewater Action Plan* and approved funding under Canada’s Economic Action Plan to support investments in First Nations infrastructure for school construction, water and wastewater projects, and on-reserve housing.

The *First Nations Infrastructure Fund* (FNIF) funds on-reserve infrastructure. Launched in 2007 FNIF will have invested a total of \$234 million in infrastructure when it sunsets in 2013-14. FNIF provides support for projects related to solid waste management, roads and bridges, energy systems, connectivity, and planning and skills development. Since its creation there have been three application intakes, with no further calls for proposals.

Between 2006 and 2013, the Government of Canada will invest \$2.5 billion in First Nations Communities for water infrastructure projects under *First Nations Water and Wastewater Action Plan* (FNWWAP). FNWWAP also includes funding to enable the development of skills and capacity in First Nations communities to monitor, operate and maintain their drinking water systems through initiatives such as the *Circuit Rider Training program*. To further support the roll-out and effectiveness of the FNWWAP, in the summer of 2009, the Government of Canada initiated the *National Assessment of First Nations Water and Wastewater Systems*. Results of the National Assessment were reported in 2011 and provided policy makers with a detailed assessment of public and private water and wastewater facilities operating in First Nations communities. The Department has also developed new standards to improve water quality, and, in February 2012, introduced companion legislation through the *Safe Drinking Water for First Nations Act* (Bill S-8) to support standards with enforceable regulations. Funding for the FNWWAP expires in 2012-2013.

In addition to its community infrastructure program activities, AANDC has partnered with the Canada Mortgage and Housing Corporation (CMHC) to offer programs and innovative financing approaches that incent investments in infrastructure by Aboriginal Canadians. These measures include:

- *CMHC Loan Insurance On-Reserve* to help First Nations members living on reserves to buy, build or renovate homes.
- *The Loan Insurance Program On-Reserve with Ministerial Loan Guarantee* which allows Band Councils and Aboriginal Canadians access to CMHC insured financing for the construction, purchase or renovation of single family homes or multiple residential rental properties.
- *The Emergency Repair Program* to assist eligible home owners in rural and remote areas to undertake emergency repairs required for the continued safe occupancy of their homes.
- *Proposal Development Funding* to assist with the initial costs of proposal development for projects that offer housing for seniors, the disabled and low income Canadians – including First Nations.
- *The Residential Rehabilitation Assistance Program – On-Reserve*, which provides financial assistance to Band Councils and Band members to repair substandard homes to a minimum level of health and safety and to improve the accessibility of housing for disabled persons.

The “northern development” component of AANDC was formalized through the creation of the Canadian Northern Economic Development Agency (CanNor) in 2009. The Agency delivers economic development programs in the three territories. Within CanNor, the *Northern Project Management Office* is responsible for coordinating the regulatory work of federal departments and agencies on large resource development and infrastructure projects in the territories. The Government of Canada has provided funding in recent years for various infrastructure related projects and programs of note, such as the *Arctic Research Infrastructure Fund* and the *Canadian High Arctic Research Station*.

The \$85 million *Arctic Research Infrastructure Fund* (ARIF) was created to upgrade Arctic science and innovation facilities. A call for proposals was issued in 2009, with the key criteria that favoured projects that transitioned to

more energy efficient and green technologies, resulted in employment, utilized northern suppliers, and met the needs of the Arctic research community. Prior to winding down in 2011-2012 twenty infrastructure projects were selected under ARIF.

Budget 2010 provided \$18 million for the five year pre-construction, design phase of the *Canadian High Arctic Research Station* (CHARS). CHARS, which will be built in Cambridge Bay, Nunavut, will provide a year-round world-class hub for science and technology in Canada’s North. According to CanNor’s website all registered professional engineers and architects may submit their qualifications for the design phase to MERX. Final selection of the design firm will be based on a consultant selection process administered by Public Works and Government Services Canada through their contracting authorities.

Similarly, bidding on construction work will be open to all contractors who qualify through the standard MERX-based bidding process. The size and timing of the construction contracts will be determined during the design process.

### 3.2 ENVIRONMENT CANADA

One of Environment Canada’s regulatory and operational requirements includes the provision of and operation of a 24/7 infrastructure to support the Department’s *Weather and Environmental Services*. To collect data and generate weather warnings and forecasts Environment Canada invests in, maintains and operates a comprehensive network of monitoring infrastructure across Canada. Environment Canada is facing significant challenges to maintain these assets and system capabilities. To this end, the Department is developing a reinvestment strategy to help address the needs of the weather and environmental services and its infrastructure foundation.

#### 3.2.1 PARKS CANADA

As an agency whose lead authority rests with Environment Canada, Parks Canada is responsible for protecting and preserving Canada’s natural and heritage assets for the benefit and enjoyment of Canadians.

The Agency manages a large number of complex real property assets with a current replacement value of approximately \$11.6 billion<sup>2</sup>. The management of its

real property and heritage assets is top priority for the Agency. As such Parks Canada is putting into place an asset management framework to provide consistent direction to its operational units. Likewise, the Agency is reviewing its real property holdings to ensure that the portfolio can be sustainably managed with an emphasis on high-risk assets such as canals, dams, bridges and highways.

In addition to preserving Canada’s historic sites, Parks Canada also invests in other types of infrastructure such as visitor centres, townsites and throughway infrastructure. Infrastructure spending at the Agency touches a number of its program activities, such as conservation, campgrounds, trails, and visitor centres. Parks Canada also manages, operates and provides municipal services to five townsites communities: Field in Yoho National Park of Canada, British Columbia; Lake Louise in Banff National Park of Canada, Alberta; Wasagaming in Riding Mountain National Park of Canada, Manitoba; Waskesiu in Prince Albert National Park of Canada, Saskatchewan; and Waterton, in Waterton Lakes National Park of Canada, Alberta. Two other townsites, Banff and Jasper, are self-governed. Nevertheless, Parks Canada retains authority for community plans and by-laws in Banff, and for community plans, land-use planning and development in Jasper. Finally, Parks Canada also operates provincial and inter-provincial highways and waterways that connect communities and pass through national parks and national historic sites. A detailed list of Parks Canada’s program activities that invest in infrastructure is provided in Table 2.

**Table 2: Parks Canada Spending by Program Activity**

Planned Spending (\$000s)				
Program Activity	2012–13	2013–14	2013–14	2015–16
Heritage Resources Conservation	195,013	194,977	194,977	195,019
Visitor Experience	235,368	235,296	235,296	235,163
Townsite and Throughway Infrastructure	77,608	62,610	57,610	57,622

**3.3 FISHERIES AND OCEANS**

Fisheries and Oceans Canada (DFO) has the lead federal role to manage Canada’s fisheries and safeguard its waters. As a part of DFO’s functions it operates the *Small Craft Harbours* (SCH) program. Through the SCH program, DFO operates and maintains a national system of harbours to provide commercial fish harvesters and other harbour users with safe and accessible facilities. Its primary duty is to ensure that “core” fishing harbours – meaning those harbours that are either owned by the DFO, critical to fishing and aquaculture industries, or are managed by harbour authorities – are kept open and in a good state of repair. Of the 1,078 small craft harbours in Canada, approximately 750 are classified as “core” harbours.

The majority of SCH’s budget is allocated to the maintenance of fishing harbours although some funds are also dedicated to establish harbour authorities and for divestiture of assets. Over the next two fiscal years DFO is projecting \$92.6 million in spending under the *Small Craft Harbours* program.

SCH is a decentralized program, so while national coordination is based in Ottawa, regional offices have been established in Vancouver, Winnipeg, Quebec City, Moncton, and St. John’s to manage the program’s local operations.

**3.4 FOREIGN AFFAIRS AND INTERNATIONAL TRADE**

**3.4.1 THE CANADIAN INTERNATIONAL DEVELOPMENT AGENCY**

The Canadian International Development Agency (CIDA) manages and coordinates Canada’s aid resources to achieve significant political, economic, social, and environmental progress in the developing world. Under the authority of the Department of Foreign Affairs and International Trade, CIDA’s international development activities focus on three key thematic priorities: increasing food security, securing the future of children and youth, and stimulating economic growth.

To support these themes and promote better outcomes from aid investment, one of tools at CIDA’s disposal is infrastructure. For example, recent investments to improve food security in impoverished countries like Ethiopia include the development of rural infrastructure

to strengthen the food supply chain and also promote better access to markets. To enhance future opportunities for children and youth, CIDA has spearheaded efforts to improve access to education, including the construction of schools.

In addition to the thematic objectives, CIDA also delivers humanitarian assistance to disaster affected populations, including the provision of water, sanitation and shelter. This disaster response mechanism was most recently seen in Haiti, where CIDA played a key role in collaboration with other Canadian aid organizations in responding to the 2010 earthquake. Among its accomplishments, CIDA's work helped to provide access to safe drinking water and shelter for over 1.3 million Haitians. CIDA has also played an active role in reconstruction and development efforts in Afghanistan.

CIDA also supports numerous non-infrastructure related activities, such as teacher training, imparting skills that promote sustainable agricultural practices, maternal health initiatives, and the systemic development of good governance practices. Separating investments for infrastructure from those activities which are focused on building skills is problematic. However, CIDA's operating budget is significant. Each year it invests over \$3 billion (excluding internal services) to support its various program activities.

## **3.5 HERITAGE CANADA**

### **3.5.1 THE NATIONAL BATTLEFIELDS COMMISSION**

The National Battlefields Commission (NBC) administers, manages, maintains, preserves, and promotes the National Battlefields Park (located in the city of Québec). The NBC reports to Parliament through the Minister of Canadian Heritage and Official Languages, and takes its mandate from *An Act respecting the National Battlefields at Québec*, passed in 1908.

Annually, NBC spends close to \$2.5 million for conservation and park development purposes. The NBC primarily invests in infrastructure to undertake repairs to roads and for carrying out general maintenance of the grounds.

At the same time, the NBC will implement a three-year sustainable development action plan, in consultation with employees, users and sub-contractors, to better protect and develop the park. Examples of upgrades to be undertaken include cliff consolidation work, repairing pipes, and replacing lighting systems.

## **3.6 NATIONAL DEFENCE**

To help the Department of National Defence (DND) carry out its roles and responsibilities, it released the *Canada First Defence Strategy* (CFDS) in 2008. CFDS provides a 20-year road map to ensure Canada has a well-trained, well-equipped and modern military. The road-map to modernize Canada's Armed Forces contains stable and predictable funding that permits long-term planning and investment in four Defence capability areas or pillars. The fourth pillar of the road-map deals specifically with Defence infrastructure and the Government of Canada's intentions to replace or retrofit approximately 25 per cent of DND's infrastructure portfolio within 10 years, ramping up to approximately 50 per cent being replaced or refurbished in 20 years.

Overall, DND maintains a significant amount of infrastructure holdings across Canada, including approximately: 21,000 buildings; 5,500 km of roads; 3,000 km of water, storm and sewer pipes, and 2.25 million hectares of land.

To support infrastructure renewal DND has allocated up to \$566 million and \$552 million over the next two fiscal years to rebuild DND's infrastructure assets. Recent investments include a 14,000 square metre, \$32 million Light Armoured Vehicle (LAV) III Facility in Montréal, which will provide full maintenance for 102 LAV IIIs, including battle decontamination and damage repairs.

## **3.7 PUBLIC SAFETY CANADA**

Public Safety Canada (PSC) exercises leadership by coordinating efforts to protect Canadians and Canada's critical infrastructure from national security threats through the development and implementation of policies, programs and legislative proposals.

In recognition that Canada's critical infrastructure faces a range of dynamic risks and threats, including terrorist attacks, natural disasters, and pandemics, PSC is leading consultations with other departments and infrastructure community stakeholders to implement the *National Strategy and Action Plan for Critical Infrastructure*. In developing the plan PSC is striving to advance a public-private sector approach to manage risks; respond effectively to attacks; and recover swiftly if disruptions occur.



### 3.7.1 CORRECTIONAL SERVICE CANADA

Correctional Service of Canada (CSC) is the federal government agency responsible for administering prison sentences which exceed two years. Across the country, CSC operates 57 prisons, 16 community correctional centres and 84 parole or sub-offices. On an average day it is responsible for 13,500 federally incarcerated offenders and 8,700 offenders in the community<sup>3</sup>. Lead authority for CSC falls under Public Safety Canada.

Recently passed and pending legislation will impact CSC because it will result in more convicted offenders incarcerated in the federal penitentiary system. Using just two examples the federal government estimates that the *Tackling Violent Crime Act* (C-2) will result in an increase of nearly 400 male offenders by 2014 and the *Truth in Sentencing Act* (C-25) will result in an additional 3,000 male and 200 female prisoners by March 31, 2013. Add to this new legislation currently before Parliament, most notably Bill C-10, the *Safer Streets and Communities Act*, which will exert greater pressures on Canada's federal penitentiary system including significant stress on CSC's infrastructure.

To address these safety concerns, CSC launched an *Infrastructure Renewal Team* (IRT) to develop strategies that will accommodate immediate and longer-term inmate growth, by adopting temporary and permanent accommodation measures. Over the next three years, IRT will lead the capacity-building and population-management exercise that includes the construction of new units at institutions in all five regions across the country<sup>4</sup>.

To implement its strategy, IRT has developed a three stage plan. Of particular note to the infrastructure community is the second phase – expected to begin in 2013 – which is concentrated on building new units within institutional perimeters while maintaining the delivery of correctional services such as inmate employment, programming, treatment and case management.

So while some ad-hoc investments are being made to renovate existing facilities, Budget 2012 provided no money for new prison construction. The Budget document also stated that “Correctional Service of Canada will find efficiencies in its operations and will continue to use existing facilities,” and “the Government has not built a single new prison since 2006 and has no intention of building any new prisons.”

Nevertheless, while no new prisons are planned, and the amount of money PSC has to invest in prison retrofits remains unclear; based on our review of government expenditures, contracts for upgrades to prison facilities are appearing on MERX.

### 3.8 PUBLIC WORKS AND GOVERNMENT SERVICES CANADA

Through its Real Property Branch, Public Works and Government Services Canada (PWGSC) is the Government of Canada's real estate expert, managing a large and diverse portfolio of real estate assets.

The branch employs a number of property professionals who specialize in office accommodation, architecture, engineering, real estate and asset and facility management. Furthermore, it is involved in all aspects of real property, including initial investment strategies and financing, construction, leasing, maintenance, repair, and disposal of real property assets.

In recent years, PWGSC has received approval for more than \$2.6 billion worth of federal office building construction and redevelopment projects across Canada.

### 3.9 TRANSPORT, INFRASTRUCTURE AND COMMUNITIES

Transport Canada and Infrastructure Canada have been the leading drivers of infrastructure investment in Canada. Infrastructure Canada has served as the nerve centre for the *Building Canada Plan* and Transport Canada has assumed lead responsibility for the *Gateways and Border Crossings Fund* and the *Asia-Pacific Gateway and Corridor Transportation Infrastructure Fund*.

In addition to these large-scale, multi-billion dollar infrastructure funds, Transport Canada also administers more narrowly focused infrastructure programming. The *Airports Capital Assistance Program* (ACAP) provides funding to eligible airports for capital projects to maintain and improve safety. In fiscal 2011-12 ACAP received a significant boost in its funding, increasing 58 per cent over the previous year, for a total of \$60,000,000 in contributions.

Airports that are not federally owned or operated, that meet certification requirements, offer year-round regularly scheduled commercial traffic, and handle at least 1,000 passengers per year, can apply for funding<sup>5</sup>.

ACAP funding is provided for projects that help airports meet required levels of safety. Eligible projects are ranked according to three priorities. First priority is given to airside safety projects including, rehabilitation of runways, taxiways and flight aprons, lighting systems and visual aids, and aircraft firefighting equipment required by regulations. Second priority projects include heavy airside mobile equipment such as runway snowblowers and snowplows and airside equipment shelters. Third priority projects include air terminal and groundside safety such as sprinkler systems and asbestos removal.

Transport Canada calculates the percentage of the cost it will pay for approved ACAP projects according to the number of commercial passengers and airport services. For example, airports that serve between 1,000 and 49,999 passengers per year are eligible under ACAP to receive 100 per cent of project costs, whereas an airport which services 500,000 to 524,999 passengers a year can only recover a maximum of five per cent of costs. The one notable exception is for airports north of the 60th parallel, where Transport Canada contributes at least 85 per cent of approved project costs.

Infrastructure Canada is further responsible for the \$1.2 billion *Municipal Rural Infrastructure Fund* (MRIF). Created in 2004 and winding down in 2014, MRIF targets funding for communities of less than 250,000 including First Nations. MRIF supports several areas of public infrastructure, including water, wastewater, culture, recreation, and 'green' projects.

The fund is cost-shared, with the Government of Canada contributing, on average, one-third of total eligible costs. Provinces and municipalities contribute the remainder of project costs. In recognition of the unique circumstances of First Nations and the Territories, where many communities have no tax base, the Government of Canada may contribute a higher percentage of total project eligible costs. While funding for MRIF will not expire until March 31, 2014, deadlines for project approvals were completed in 2008.

## 4.0 The Regional Economic Development Authorities

The Government of Canada funds and operates several regional economic development authorities. In delivering their respective regional development mandates, infrastructure is a significant priority because of the role modern infrastructure – such as water management, sanitation, transportation and communication – plays in supporting communities, attracting business investment and enhancing competitiveness. Furthermore, because of their connections and proximity to local communities, the regional development authorities played an important role delivering infrastructure funding for several of the stimulus measures under the Economic Action Plan, most notably the *Recreation Infrastructure Canada Program* and the *Community Adjustment Fund*. Moreover, they are also playing an ongoing and collaborative role with Infrastructure Canada and the provinces as part of the *Communities Component* of the *Building Canada Fund* and the *Municipal Rural Infrastructure Fund*.

### 4.1 THE ATLANTIC CANADA OPPORTUNITIES AGENCY

Established in 1987, the Atlantic Canada Opportunities Agency (ACOA) is the federal department responsible for the Government of Canada's economic development efforts in the provinces of New Brunswick, Prince Edward Island, Nova Scotia, and Newfoundland and Labrador.

Through its mandate ACOA helps the Atlantic region to realize its full economic potential in terms of productivity, competitiveness and growth. The Department's program activity architecture covers several themes, including *Enterprise Development*, *Policy Advocacy*, and *Community Development*. Through its *Community Development* program activities ACOA plays a role as a driver for community-based business development, community investment and infrastructure. Planned spending for Community Development in ACOA is pegged at \$90 million in 2012-13 and \$88.1 million in 2013-14.

ACOA is also responsible for the *Enterprise Cape Breton Corporation* (ECBC). ECBC works with communities and community-led organizations, to develop and implement strategies that support economic development, including investing in community infrastructure. Through its development function the corporation makes lands available for lease or sale to businesses and organizations in an effort to foster growth.

## 4.2 CANADIAN NORTHERN ECONOMIC DEVELOPMENT AGENCY

Please refer to previous section, *Aboriginal Affairs and Northern Development Canada*.

## 4.3 ECONOMIC DEVELOPMENT AGENCY OF CANADA FOR THE REGIONS OF QUEBEC

Under its Act, which came into being in October 2005, the Economic Development Agency of Canada for the Regions of Quebec promotes the long-term economic development of the regions of Quebec by focusing on those communities where slow or stagnant economic growth is prevalent or opportunities for employment are poor. In carrying out its mandates, the Agency stimulates and encourages development by offering information, guidance and business consultation services and community development funding.

Through its community development programming the Agency supports several activities such as community mobility, local enterprises and investments in public infrastructure and tourism facilities. Overall the Agency will spend \$136 million in 2012-13 and \$114 million in 2013-14 as a part of its *Community Development* programming. Furthermore, and as a separate item, the Agency will spend \$18.4 million over the next two fiscal years as a part of a contribution program to construct a gas pipeline between Vallée-Jonction and Thetford Mines.

## 4.4 FEDERAL ECONOMIC DEVELOPMENT AGENCY FOR SOUTHERN ONTARIO

Budget 2009 provided \$1 billion over five years for a new economic development agency for Southern Ontario. The new agency would act to support the Government of Canada's *Southern Ontario Development Program* (SODP) which was itself designed to incent economic growth and promote job creation in the region. To support SODP's objectives, the federal government launched the Federal Economic Development Agency for Southern Ontario (FedDev Ontario).

Authority for FedDev Ontario falls under Industry Canada. FedDev Ontario advances the economic development of Ontario communities in the same manner that regional development agencies support activities in other parts of the country.

As a part of operational duties FedDev Ontario also plays a key role in working with the National Research Council – *Industrial Research Assistance Program* (NRC-IRAP) which provides financial and technological assistance to small and medium-sized enterprises engaged in research, development, adaptation, adoption, or commercialization of innovative products, services or processes.

## 4.5 FEDERAL ECONOMIC DEVELOPMENT INITIATIVE IN NORTHERN ONTARIO

The operations of the Federal Economic Development Initiative in Northern Ontario (FedNor) are internalized within Industry Canada. Through FedNor's flagship *Northern Ontario Development Program*, it invests in projects that support community economic development, business growth and innovation. More specifically, FedNor's community economic development functions provide support to not-for-profit organizations in Northern Ontario, Aboriginal and Francophone organizations, industry and business associations, networks or alliances, as well as, municipalities, municipal organizations and First Nations in Northern Ontario for a variety of projects.

Examples of eligible project categories include:

- Strategic and business planning, including engineering studies and inventories of community assets; and,
- Strengthening communities' economic foundations, including industrial and commercial assets and industrial/business parks, downtown revitalization, and waterfront development.

## 4.6 WESTERN ECONOMIC DIVERSIFICATION CANADA

Western Economic Diversification Canada (WD) is the federal government's regional development agency for the provinces of Manitoba, Saskatchewan, Alberta, and British Columbia. Created by Parliament in 1987, WD acts to strengthen, diversify and expand the economy of Western Canada. Under its *Community Economic Development* activities WD helps rural and urban communities adjust to economic forces and invest in public infrastructure to attract business and support local economies. *Community Economic Development* spending for 2012-13 and 2013-14 is estimated at \$27.1 million and \$23.1 million respectively.

## 5.0 Crown Corporations

### 5.1 THE FEDERAL BRIDGE CORPORATION LIMITED

Located in Ottawa the Federal Bridge Corporation (FBCL) was incorporated in 1998 to replace the former St. Lawrence Seaway Authority (SLSA) as the corporate body responsible for operating and managing non-navigational SLSA structures. FBCL is directly responsible for two international bridges in Ontario and six facilities in the Greater Montreal area. These assets are operated through three subsidiary corporations:

- The Jacques Cartier and Champlain Bridges Incorporated (JCCBI) which operates the Jacques Cartier Bridge, the Champlain Bridge, the Champlain Bridge Ice Control Structure, the federal portion of the Honoré-Mercier Bridge, the federal portion of the Bonaventure Expressway, and the Melocheville Tunnel;
- The Seaway International Bridge Corporation, Ltd (SIBC) which runs the Seaway International Bridge in Cornwall; and,
- The St. Mary's River Bridge Company (SMRBC) which runs the Sault Ste. Marie International Bridge.

In addition to the aforementioned subsidiaries, FBCL is also responsible for the oversight and management of the Canadian portion of the Thousands Islands Bridge.

In recent years each of FBCL's subsidiaries have launched competitions to retrofit and repair the assets they operate. For example, SIBC is in the midst of a four-phase construction project. Phase One of the project is complete and the second phase worth \$31,185,000 was awarded to Aecon Construction and Material Limited. Phases Three and Four are subject to future tender with expectations that the construction will be completed by 2016.

The Jacques Cartier and Champlain Bridges Incorporated recently issued requests for proposals to rehabilitate several sections of piers through MERX. For its part the St. Mary's River Bridge Company is in the process of replacing outdated and undersized Canada Border Services Agency (CBSA) facilities at the Sault Ste. Marie International Bridge. The project will take five years to complete and cost \$49 million, with most of the funds coming from the *Gateways and Border Crossings Fund*. EPOH Inc, a Sault Ste. Marie based architectural and engineering firm, was awarded the contract for the detailed design of the project.

### 5.2 THE NATIONAL CAPITAL COMMISSION

Created by Parliament in 1959, the National Capital Commission (NCC) manages and protects physical assets of national significance in Canada's Capital Region. NCC assets include over 470 square kilometers of land, 27 roads and parkways, 570 kilometers of pathways, 1,639 buildings and 110 bridges.

With regards to its real asset base, NCC is responsible for safeguarding and preserving the Capital's most treasured cultural, natural and heritage assets. It further manages its assets through the application of relevant policies and regulations and by means of a life-cycle maintenance and rehabilitation program. Where appropriate, NCC's assets are used to generate a stream of revenues through leases and land use permits, to complement federal appropriations and to support the work of the Corporation. NCC's estimated expenditures for 2011-2012 were \$106.9 million of which \$64 million was for real asset management.

### 5.3 THE ST. LAWRENCE MANAGEMENT CORPORATION

The St. Lawrence Seaway Management Corporation (SLMC) was constituted as a not-for-profit corporation in 1998. Through an additional agreement with the Minister of Transport, the SLMC assumed responsibility for the management, operation and maintenance of the Seaway for an initial period of ten years which was subsequently renewed for a further ten years.

While certain assets were transferred to SLMC at the time of its incorporation, ownership of the real property, locks, bridges, buildings and other fixtures remains with the Government of Canada. Nevertheless SLMC is responsible for the asset renewal expenditures, such as the cost of maintenance and major repairs of locks, canals, bridges, buildings and other infrastructure assets excluding capital acquisitions. In 2011 these asset renewal and maintenance costs totalled \$49.3 million. SLMC has approved a five-year envelope for maintenance and capital expenditures totalling \$270 million.

## 6.0 Other Federally Funded Organizations that Support Infrastructure

### 6.1 THE CANADA FOUNDATION FOR INNOVATION

Created in 1997 through an Act of Parliament, the Canada Foundation for Innovation (CFI) is an independent, arms-length, non-government organization. The CFI strives to build Canada's research capacity through investments in state-of-the-art infrastructure. As a result of CFI investments to support and develop research infrastructure – including buildings, laboratories and equipment – Canadian universities, colleges, research hospitals and non-profit research institutions are able to attract and retain world-class research talent and train the next generation of researchers.

To evaluate proposals CFI has established a rigorous, competitive and independent merit-review process that rewards excellence. Funding is awarded to institutions – not individual researchers– and proposals must support an institution's strategic research plan.

Eligible Canadian institutions can apply to the CFI through a suite of funds, which are in turn evaluated using three criteria:

- Quality of the research and its need for infrastructure;
- Contribution to strengthening the capacity for innovation; and,
- Potential benefits of the research to Canada.

CFI funds up to 40 per cent of a project's infrastructure costs. Funding is then leveraged to attract the remaining investment from partners in the public, private and non-for-profit sectors.

Since its inception, CFI has supported over 7,300 leading-edge research infrastructure projects at 130 research institutions in 65 municipalities spanning the country. Similarly, the federal government has contributed \$5 billion to CFI to date. Budget 2012 saw the Government of Canada commit an additional \$500 million over five years for new funding beginning in 2014-15 to support new competitions.

### 6.2 THE NATIONAL RESEARCH COUNCIL

The National Research Council (NRC) is an agency of the Government of Canada, reporting to Parliament through the Minister of Industry. Since its creation in 1916, the NRC has been the Government of Canada's premier organization for research and development. Facilities include astronomical observatories, the laboratory for national measurement standards, the TRIUMF sub-atomic research facility, and Chalk River Laboratories.

Located in every province of Canada, the NRC is comprised of more than 20 institutes and national programs, encompassing a wide variety of disciplines and offering an array of services to stimulate community-based innovation.

Through its operations, the NRC manages a large national network of research infrastructure and facilities and is responsible for ensuring that Canada's national science and technology facilities are up-to-date and accessible to Canadians. In each of the next two years, NRC plans to spend roughly \$92 million to operate and maintain its national science and technology infrastructure.

## 7.0 Conclusion: The Economic Action Plan 2012

On March 29, Finance Minister Jim Flaherty tabled the federal government's latest budget, entitled the *Jobs, Growth and Long-Term Prosperity: The Economic Action Plan 2012*. True to its title, Budget 2012 focused on creating the right economic conditions to incent growth while also laying out the Government of Canada's strategy to rebalance the nation's finances by 2015-2016. While Canadians were primed to expect a tough budget with deep public sector cuts, what they got was a more moderate approach. The public sector will trim 19,000 jobs, many due to attrition and phased in over three years, and the Government anticipates saving close to two per cent of expenditures by eliminating wasteful practices through reducing printing costs, back office support and reining in public service travel.

All departments are facing spending cuts ranging from 2.7 per cent (Aboriginal Affairs and Northern Development) to 16.8 per cent (Finance), with 6.9 per cent the average across federal departments. For its part Transport, Infrastructure and Communities will be asked to trim 10.7 per cent of base funding, that is funding for its employee salaries, operations and maintenance, grants and contributions and its *Employee Benefits Plan*. Overall the Department will trim \$152 million over the next three years. These changes do not affect the status of transfer payments through the Building Canada Plan.

Despite these reductions to the Department's operating base there was good news for infrastructure proponents. Significantly, the federal government restated its commitment to working with stakeholders to develop a new long-term strategic plan to replace the *Building Canada Plan* when it expires in 2014. With a new plan two years away, and many of BCP's programs fully subscribed, the Government of Canada is injecting money into a few key projects until a new funding framework is online. To support repairs and improvements to existing small public infrastructure assets \$150 million will be spent over two years through the *Community Infrastructure Improvement Fund* which will be delivered through the regional development agencies on a cost-shared basis.

The Government of Canada also announced sizeable new investments of \$330 million over two years to build and renovate water infrastructure in First Nations communities and \$500 million to the Canada Foundation for Innovation for research infrastructure. Other recipients of new infrastructure dollars include VIA Rail, the Esquimalt Graving Dock, and a new bridge built to replace the Champlain Bridge in Montreal.

These new sizeable investments should be good news to the infrastructure community while it consults with the Government of Canada to develop the next generation of infrastructure programming. What is clear is that the government continues to see value in infrastructure investment as a precursor to facilitating economic growth. What is less certain will be the ability of some provinces and municipalities to fully participate in matching-fund infrastructure agreements when BCP expires in two years. It will be an interesting story to follow in the years to come and one with tremendous significance to Canadians and the engineering community.

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<sup>1</sup>For a complete and detailed listing of eligible projects within each category please see <http://www.p3canada.ca/p3-canada-fund-eligible-categories.php>

<sup>2</sup>Parks Canada evaluation from March 2010

<sup>3</sup>Correctional Service Canada, 2011-12 Report on Plans and Priorities

<sup>4</sup>In the month of September 2011 alone construction firms submitted bids for at least seven major building or renovation projects, worth at least \$32 million and adding 576 beds to federal prisons in Ontario, Manitoba, Quebec, and Alberta over the next two years.

<sup>5</sup>Airports designated as "Remote Airports" under the National Airports Policy are exempt from the regularly scheduled passenger service requirement. The thirteen airports designated as remote facilities can be viewed at: <http://www.tc.gc.ca/eng/programs/airports-policy-remotelist-313.htm>

# Appendix A: Federal Infrastructure Spending Summary

Program Activity and Supporting Programs, Strategies, Funds, Projects and/or other Infrastructure Related Activities	Infrastructure Funding <sup>6</sup>	Lifespan	Page Reference	Website Information
Aboriginal Affairs and Northern Development				
Community Infrastructure	Community Infrastructure \$1.028 billion	N/A	Pages 5 - 6	www.aadnc-aandc.gc.ca
<ul style="list-style-type: none"> <li>• First Nations Infrastructure Fund (FNIF)</li> </ul>	FNIF \$234 million (lifespan)	2007 - 14		
<ul style="list-style-type: none"> <li>• First Nations Water and Wastewater Action Plan (FNWWAP)</li> </ul>	FNWWAP \$2.5 billion (lifespan) <sup>7</sup>	2006 - 13		
Northern Development Canada	CHARS \$18 million for pre-construction phase	2010 -		www.north.gc.ca
<ul style="list-style-type: none"> <li>• Northern Project Management Office</li> <li>• Canadian High Arctic Research Station (CHARS)</li> </ul>				
Atlantic Canada Opportunities Agency				
Community Development	\$90 million	1987 -	Page 10	www.acoa-apeco.gc.ca
Enterprise Cape Breton Corporation (ECBC)	\$7 million <sup>9</sup>			
Canada Foundation for Innovation				
N/A	\$500 million in new funding approved and beginning in 2014 - 15	1997	Page 13	www.innovation.ca
Economic Development Agency of Canada for the Regions of Quebec				
Community Development	\$136 million	2005-	Page 11	www.dec-ced.gc.ca
Environment Canada				
Weather and Environmental Services	\$219 million	N/A	Pages 6-7	www.ec.gc.ca
Parks Canada				www.pc.gc.ca
<ul style="list-style-type: none"> <li>• Heritage Resources Conservation</li> </ul>	\$195 million			
<ul style="list-style-type: none"> <li>• Visitor Experience</li> </ul>	\$235 million			
<ul style="list-style-type: none"> <li>• Townsite and Throughway Infrastructure</li> </ul>	\$77 million			

Program Activity and Supporting Programs, Strategies, Funds, Projects and/or other Infrastructure Related Activities	Infrastructure Funding	Lifespan	Page Reference	Website Information
Federal Bridge Corporation				
Jacques Cartier and Champlain Bridges Incorporated	N/A	1978	Page 12	www.federalbridge.ca
Seaway International Bridge Corporation		1962		
St. Mary's River Bridge Company		N/A		
Fisheries and Oceans Canada				
Small Craft Harbour Program	\$92.6 million	N/A	Pages 7	www.dfo-mpo.gc.ca
Foreign Affairs and International Trade				
Canadian International Development Agency	\$3.4 billion (2011-12) <sup>12</sup>	1968-	Pages 7-8	www.acdi-cida.gc.ca
Heritage Canada				
National Battlefields Commission	\$2.5 million	1908-	Page 8	www.ccbn-nbc.gc.ca
Industry Canada				
Federal Economic Development Agency for Southern Ontario • Community Economic Development	\$34 million	2009	Pages 11	www.feddevontario.gc.ca
Federal Economic Development Initiative in Northern Ontario • Northern Ontario Development Program	\$38 million (2009-10)	1987		www.fednor.gc.ca
National Capital Commission				
N/A	\$64 million (2011-12 for asset management)	1959	Page 12	www.ncc-ccn.ca
National Defence				
Canada First Defence Strategy • Defence Infrastructure	\$1.118 billion planned for infrastructure over the next two years	2008-2020	Pages 8	www.forces.gc.ca
National Research Council				
N/A	\$92 million <sup>14</sup>	1916	Pages 13	www.nrc-cnrc.gc.ca



Program Activity and Supporting Programs, Strategies, Funds, Projects and/or other Infrastructure Related Activities	Infrastructure Funding	Lifespan	Page Reference	Website Information
Public Safety Canada				
Correctional Service Canada	N/A	N/A	Pages 8-9	<a href="http://www.publicsafety.gc.ca">www.publicsafety.gc.ca</a> <a href="http://www.csc-scc.gc.ca">www.csc-scc.gc.ca</a>
Public Works and Government Services				
Accommodations and Real Property Asset Management	\$1.7 billion <sup>15</sup>	N/A	Page 9	<a href="http://www.tpsgc-pwgsc.gc.ca">www.tpsgc-pwgsc.gc.ca</a>
St. Lawrence Seaway Management Corporation				
N/A	\$270 million (total) approved over next five years	1998-2018 (with possibility of extension)	Page 12	<a href="http://www.greatlakes-seaway.com">www.greatlakes-seaway.com</a>
Transport, Infrastructure and Communities				
Airports Capital Assistance Program (ACAP)	\$60 million (2011-12) albeit traditionally funding is approximately \$38 million per year	1995-	Pages 9-10	<a href="http://www.tc.gc.ca">www.tc.gc.ca</a>
Municipal Rural Infrastructure Fund (MRIF)	\$1.2 billion (lifespan)	2004-2014		<a href="http://www.infrastructure.gc.ca">www.infrastructure.gc.ca</a>
Western Economic Diversification				
Community Economic Development	\$27.1 million	1987	Page 11	<a href="http://www.wd.gc.ca">www.wd.gc.ca</a>

<sup>6</sup> 2012-13 unless otherwise noted

<sup>7</sup> Budget 2012 announced another \$300 million for First Nations water and wastewater treatment projects

<sup>8</sup> 2012-13 unless otherwise noted

<sup>9</sup> For commercial development, property management and community economic development.

<sup>10</sup> 2012-13 unless otherwise noted

<sup>11</sup> 2012-13 unless otherwise noted

<sup>12</sup> Total CIDA funding including those for infrastructure and non-infrastructure related activities.

<sup>13</sup> 2012-13 unless otherwise noted

<sup>14</sup> Includes operations and maintenance costs for national science and technology infrastructure.

<sup>15</sup> Figure reflects \$4 billion for operations and \$280 million for capital expenditures less \$2.58 billion in revenue.

<sup>16</sup> 2012-13 unless otherwise noted

## Appendix B: Corporate Profile - Temple Scott Associates

Founded in 1990, Temple Scott Associates (TSA) is a wholly Canadian-owned and fully integrated public affairs firm with offices in Ottawa and Toronto. TSA provides government relations counsel on federal, provincial and municipal issues to clients headquartered in Canada, the United States and internationally. TSA staff come from a variety of backgrounds including media, government, law, financial services, corporate communications and marketing. Their in-house expertise includes multiple sectors, including financial services, energy and environment, entertainment and culture, transportation, health care, telecommunications and technology. They possess specific knowledge of Canada's engineering sector and a knowledge of government operations and policy pertaining to public infrastructure. Senior consultants have previously worked with Engineers Canada, the Canadian Public Works Association as well as ACEC.

## Appendix C: Association of Consulting Engineering Companies – Canada

The Association of Consulting Engineering Companies - Canada (ACEC) is a not-for-profit organization representing companies across Canada that provide professional engineering services to both public and private sector clients. These services include the planning, design and execution of all types of engineering projects as well as providing independent advice and expertise in a wide range of engineering and engineering-related fields. Through offering these services, ACEC member companies have a direct influence on virtually every aspect of our economic, social and environmental quality of life in Canada.

Founded in 1925, ACEC today consists of nearly 500 independent consulting engineering companies, and 12 provincial and territorial member organizations. Consulting engineering in Canada is a \$17.8 billion a year industry that employs 100,000 Canadians. Canada is globally recognized for its engineering services and is the fourth largest exporter of engineering services in the world with 30% of its work performed at the international level. ACEC advocates for a business and regulatory climate that allows its members to provide the highest level of services and best possible value to its clients. Moreover, as part of a regulated profession, the engineers employed by ACEC companies are obligated by law to act with fidelity to the public interest.