



ASSOCIATION OF CONSULTING
ENGINEERING COMPANIES | CANADA

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Pre-Budget Consultations in Advance of the 2017 Budget Making our Infrastructure Investments Count

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Summary of recommendations

1. Prioritize investments that enable economic prosperity
2. Commit to timely and realistic schedules and deadlines
3. Use procurement best practices for quality, innovation and long-term life-cycle savings
4. Adopt Asset Management to identify needs and measure effectiveness
5. Harmonize federal and provincial approvals to reduce red tape and provide clarity
6. Re-invest revenue to ensure continuing sustainable investment
7. Reinstate the National Guide to Sustainable Municipal Infrastructure

Introduction

- Public infrastructure is a core business of government and vital to Canada's prosperity and enhances the economic, social and environmental quality of life of Canadians.
- Infrastructure is an investment that enables our economy, strengthens and connects our communities and protects our environment.
- Study after study demonstrates a link between infrastructure investment and economic performance.
- The commitment to infrastructure investments needs to be strategic, predictable and ongoing in order to provide the best value and return on investments to Canadians.
- Investments must be made based upon a clear, efficient and transparent application process that reflects the demonstrated needs of communities and the economy.

Background

- Recent investments in infrastructure by all levels of government will help improve the quality and capacity of some of Canada's public infrastructure.
- However currently committed funds, while very important, are not sufficient to meet all of the historical and emerging demands.
- Since 2006 infrastructure investment in Canada has averaged 3.4% of GDP, up from 2.5% from 2001-2006.
- However, even with recent government programs and initiatives, investments are significantly lower than 6% of GDP in the 1950s and 1960s.
- Some of Canada's major economic competitors such as China and India have been investing as much as 9% of GDP towards infrastructure.
- ACEC is prepared to continue to work closely with the federal government and other stakeholders to ensure that the program is a success.

How to make infrastructure investment count

1. Prioritize investments that enable economic prosperity

Infrastructure can be an effective investment in our social, economic and environmental quality of life. However priority should be given to core infrastructure that grows the economy, creates jobs and expands the tax base. Growing the economy will be essential to making further investments in community and social infrastructure viable and sustainable in the long term. Communities that have established sound asset management plans and that follow them would have more ability to invest in community and social infrastructure.

Sufficient, up-to-date and well maintained infrastructure creates wealth. In its 2010 report [*Lessons from the Recession and Financial Crisis*](#), the Conference Board of Canada concluded that every dollar spent on infrastructure has the potential to increase GDP by as much as \$1.20. By contrast, infrastructure underinvestment is costing the Canadian economy 1.1% of real GDP annually and reducing the long-term profitability of Canadian businesses by an average of 20% according to [*Public Infrastructure Underinvestment: The Risk to Canada's Economic Growth*](#) by the Residential and Civil Construction Alliance of Ontario (2010).

2. Commit to timely and realistic schedules and deadlines

Commit to the project as soon as possible. Usually, federal infrastructure funds have been tied to immovable and sometimes arbitrary target dates, which can increase complexity and costs if timelines are needlessly strained. Advise owners and other stakeholders, including consulting engineers and contractors, of funding opportunities and procurement schedules well in advance. Long-term predictable infrastructure investment allows all levels of government and the private sector to invest and develop the human and technical resources necessary to plan, finance, design, construct and operate infrastructure projects. It is also important that decisions on projects be made in a timely manner so that municipalities, consulting engineers and contractors do not tie up resources while waiting for decisions to be made on projects.

3. Use procurement best practices for quality, innovation and long-term life-cycle savings

Supporting Canada's infrastructure represents a significant investment of tax dollars. Upfront procurement decisions have a significant impact on not only the cost and quality of the design and construction phase, but on operations and maintenance of infrastructure assets.

In order to ensure the best possible outcome and the best possible value to taxpayers, Qualifications-Based Selection (QBS) should be used for the procurement of engineering and other professional services. QBS is recommended by the [*Best Practice: Selecting a Professional Consultant*](#), developed in 2006 by the National Guide to Sustainable Municipal Infrastructure (Federation of Canadian Municipalities, National Research Council, et al.). This guide was developed by the public sector for the public sector.

QBS focusses on the qualifications of the project team and their understanding of the project objectives. QBS results in a project scope, schedule and budget that are realistic and commercially fair and responsible. This results in high quality projects with increased service life and significant life-cycle savings over the entire design life.

QBS also encourages and rewards innovation on projects. However, current public procurement practices discourage and even penalize innovation by assuming the lowest price is the best price, by unilaterally transferring all risk to the proponent and by not respecting intellectual property of service providers.

4. Adopt Asset Management to identify needs and measure effectiveness

In order to ensure that local priorities are met and investments yield the best return, the federal government should encourage and help create capacity for asset management plans for municipalities. Asset management plans allow municipalities to understand the state of their existing infrastructure assets, understand operational and maintenance needs, reliably project their infrastructure needs, and make strategic investments. Municipalities with sound asset management plans will be able to measure the effectiveness of their investments.

The National Guide for Sustainable Municipal Infrastructure has created best practices for [Asset Management](#) and other resources and tools to help municipalities plan, manage and operate their infrastructure assets. This program was extremely successful in helping municipalities, in collaboration with their public and private sector partners, to develop and share best practices.

5. Harmonize federal and provincial approvals to reduce red tape and provide clarity

It is important that proponents of major projects in both the public and private sector have confidence in the regulatory approval regimes in order to make informed business decisions. Proponents of projects support rigorous environmental assessment based on science, provided the process is clear and efficient with minimal interjurisdictional duplication and overlap.

Unreasonable and unforeseen delays make it extremely difficult for both public and private sector proponents, as well as their consultants and contractors to plan and commit resources to projects. Delays can also create uncertainty in both material and labour markets resulting in significant cost escalation for projects – these can sometimes be ruinous to the proponent. Unnecessary delays to projects can also result in lost economic opportunity.

There is an adage that a timely “no” is better than an indefinite “maybe”. And while there may be cases where it will be in the greater public interest to not approve a project, the objective of environmental approvals should not be obstructionist. The objective should be to ensure the implementation of environmentally and socially responsible projects.

6. Re-invest revenues and value derived from infrastructure to continued investment

All levels of government and transportation stakeholders need to engage in rational and objective discussions about financing options and how, we as a society, pay for and maintain critical infrastructure that is vital to our economy and quality of life. Taxes are no longer enough to pay for the infrastructure we need to maintain our high standard of living. Additional funding mechanisms will be required, such as capturing a portion of the increased value created by new or upgraded infrastructure assets that can be used to pay for and maintain these assets. This increased value can be in the form of property values or increased economic activity.

[Road pricing](#) can be a fair and cost-reflective means to finance and maintain transportation and transit infrastructure. Road pricing is also an effective and attractive demand-management tool that is particularly effective in reducing congestion by encouraging people to consider other forms of transportation, drive less, and/or travel at non-peak travel times.

7. Reinstate the National Guide to Sustainable Municipal Infrastructure

This document has twice referred to the [National Guide to Sustainable Municipal Infrastructure](#) also known as InfraGuide. This guide was developed by the public sector for the public sector. InfraGuide operated from 2001 to 2007 as a partnership between the Federation of Canadian Municipalities, the National Research Council and Infrastructure Canada. InfraGuide's national network of public and private sector experts from across the stakeholder community produced a collection of case studies, best practice reports and e-learning tools for sustainable municipal infrastructure - offering the best in Canadian experience and knowledge. This program should be reinstated, or a comparable program created, to provide resources, tools and capacity building opportunities to municipalities, public agencies and their stakeholders.

About The Association of Consulting Engineering Companies

The Association of Consulting Engineering Companies (ACEC) is the national voice of consulting engineering in Canada. Consulting engineers are experts in infrastructure and will be directly involved in delivering the federal government's \$126 billion commitment to infrastructure.

ACEC is a federation of 12 provincial and territorial associations representing over 400 companies that provide engineering and other professional services to both public and private sector clients across Canada. These services include the planning, design and execution of all types of infrastructure 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.

Consulting engineering in Canada is a \$28.4 billion a year industry. ACEC member firms directly employ over 70,000 Canadians. Canada is globally recognized for its engineering services and is the second largest exporter of engineering services in the world.

ACEC is an influential member of the International Federation of Consulting Engineers (FIDIC).

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