Project to develop an Infrastructure Report Card for Canada

Project Summary and Update
January 24, 2011 – Presentation at the AM-BC Workshop

The Changing Culture of Asset Management
Vancouver, BC
Project Objective

- Develop a rigorous, repeatable assessment process for the condition of Canada’s infrastructure to raise the awareness of the public, decision-makers and other stakeholders about current infrastructure issues and future trends.

- The results of this process would be published as a factual Infrastructure Report Card, not an advocacy document, using a school-type letter grading system.

- Project Started in July 2010 and report card expected to be published in 2011.
International Perspective

• Several countries, including the USA, the UK and Australia have produced, and continue to create on a regular basis state-of-the-infrastructure report cards.
  – Although there are variations in how the letter grading is assigned, they all use a school type report to communicate the results.

• Most state of the infrastructure reports are aimed at awareness (the target audience may vary but in general includes the public and elected decision makers). The second main common objective of these studies is to influence senior government decisions.

• Most studies are performed in a 12 month timeframe, and are repeated on a regular basis (annually or every two years) to establish trends.
International Perspective (continued)

• Basic infrastructure systems are at the core of the studies: transportation, water resources (potable water, wastewater and drainage), energy.

• All of the international initiatives have been one-dimensional in terms of stakeholder involvement: most are produced by the engineering community with NZ as the exception, which was an economists exercise.

• The main barrier to the production of these reports is consistently data availability.
# United States

ASCE

http://www.infrastructurereportcard.org/

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**America's Infrastructure G.P.A.**

D

**Estimated 5 Year Investment Need**

$2.2 Trillion

**Notes**

Each category was evaluated on the basis of capacity, condition, funding, future need, operation and maintenance, public safety and resilience.

A = Exceptional
B = Good
C = Mediocre
D = Poor
F = Failing
# Australia

**Engineers Australia**


## Infrastructure Report Cards 2010

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* Not Rated
United Kingdom
Institution of Civil Engineers

http://www.ice.org.uk/stateofthenation
International Perspective (continued)

• In terms of lessons learned, three key issues stand out:
  – There needs to be **rigorous evaluation** (i.e., process) criteria from the beginning.
  – **Multidimensional stakeholder involvement** (i.e., from regions, sectors, professions, etc.) is essential.
  – **No one should expect 100% accuracy**
Canadian Examples & Information

October 2009

Statistics Canada
www.statcan.gc.ca

Home > Publications > 11-621-M >

Printed Copy

Age of Public Infrastructure:
A Provincial Perspective

by Mychèle Gagnon, Valérie Gaudreault and

City of Hamilton
Infrastructure Report Card

Asset Group Rating 2005 Comments Trend 2020

Water B

Wastewater B

Roads D

Water C

Wastewater B

Roads D

City of Edmonton
Infrastructure Report Card

Opportunities to Address Edmonton's Infrastructure

Thinking Outside the Gap

Aging of the underground infrastructure

A significant backlog exists in the need for infrastructure and the assets continue to deteriorate. This backlog needs to be addressed to avoid further deterioration of asset condition.

A long-term plan is currently being prepared for water management. An asset management plan needs to be completed and its costs assessed in terms of the water and sewer revenues. Once the funding is obtained, the program will be implemented.

Many water facilities are being built and new programs being implemented over the next few years. Other facilities are older and will require attention. The challenge will be to incorporate all the sustainable management practices in all areas, including funding or field replacement.

Many facilities and open spaces are at the end of their useful lives, and the funding for maintenance and improvements is not at a sustainable level. This will have a negative impact on service levels that are sustained in the short term.

Canada’s National Highway System Condition Report 2008

Council of Ministers Responsible for Transportation and Highway Safety

Statistics Canada

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Statistics Canada
Expected Benefits

• **Clear communication** of issues with respect to infrastructure assets can help informed decisions – policy, strategic, or operational, at all levels of government. Examples include the use state-of-the-infrastructure reports to:
  
  – **Gain support** for better cost recovery models;
  
  – **Help define** the parameters of infrastructure programs (at the regional or national levels);
  
  – **Establish past trends and forecasts**; and
  
  – **Evaluate the efficiency of investments** in reducing the “infrastructure deficit”.

  [Canadian Infrastructure Report Card]

  [www.CanadaInfrastructure.ca]
Expected Benefits (continued)

• A state-of-the-infrastructure report can be used to **mobilise stakeholders** (including the professions involved in providing the services, elected decision-makers, and special interest groups) to **focus on the key issues** that can potentially have severe impacts on the health, safety, and economic well being of Canadians and their communities.
Project Principles

- Present the state-of-the-infrastructure in a **school-type format**, i.e., using the letter grades A-D and F.

- **Initially** consider infrastructure asset in the following groups: potable water systems, storm and wastewater collection and treatment, and roads.
  - Other infrastructure asset groups will be added in future reports.

- Establish a **robust and repeatable methodology** so that future report cards can be used for trends.

- Use a process that is **inclusive**, drawing on **multi-discipline and multi-sector experts to validate and confirm** the grades.

- Use a combination of **existing** data sources – initial focus on municipalities.
Project Structure

- Project Steering Committee (PSC)
- Project Manager
- Report Card Advisory Board (RCAB)
- Regional Contacts Network (RCN)
- Expert Working Groups (EWGs)

- Contracted services as required

Action or Input relationship
Information sharing
Role of Stakeholder Associations

• **Report Card Advisory Board (RCAB)**
  – A Board member and an alternate (may be a staff person) provide linkages between the Association and its networks with the project
  – As a member of the RCAB, participate in the development of overall assessment statements for the report card

• **Expert Working Groups**
  – Association provides names of experts in the field that can be invited
Progress to date

• **Questionnaire and Online survey**
  – Completed questionnaire based on work by the Infrastructure Canada *Core Public Infrastructure Advisory Committee* and Statistics Canada
  – Questionnaire is available online and electronic (pdf) copies can be distributed.

• **Website**
  – Website is operational and provides access to the online survey
  – URL: [www.CanadaInfrastructure.ca](http://www.CanadaInfrastructure.ca)
Introduction

Thank you for taking the time to complete the first Canadian Infrastructure Report Card. This project is sponsored by four major infrastructure stakeholder associations whose members directly impact on, and are intimately involved with, building, operating and maintaining Canada’s municipal infrastructure. These associations are the Federation of Canadian Municipalities (FCM), the Canadian Construction Association (CCA), the Canadian Society for Civil Engineering (CSCE) and the Canadian Public Works Association (CPWA).

The main goal of this national survey is to provide comprehensive, scientifically based, repeatable and standardized information on the inventory, condition and asset management practices of Canada’s core public infrastructure that municipalities own, manage and operate. Each sponsoring association has released reports over the years, illustrating their respective concerns about the state and performance of municipal infrastructure. Through your involvement in this survey, all orders of government, as well as business, the media, civil society and the general public, will have access to a national account of the state of municipal infrastructure.

Asset categories

For this edition of the Report Card, only municipal roads, potable water systems, wastewater systems and stormwater systems are being considered. In the future, other infrastructure assets will be added - for example, buildings and facilities, and public transit.

The Report Card will present a snapshot in time of the infrastructure being considered. At no time will the Report Card make recommendations on how to address the issues associated with the condition of the

Canadian Infrastructure Report Card

Survey Purpose

The Canadian Infrastructure Report Card is a project initially sponsored by four major stakeholder associations whose members have direct impacts on and involvement in maintaining and improving the country’s municipal infrastructure: the Federation of Canadian Municipalities (FCM), the Canadian Construction Association (CCA), the Canadian Society for Civil Engineering (CSCE) and the Canadian Public Works Association (CPWA).

For the purpose of the current Report Card, only municipal roads, potable water systems, wastewater systems, and stormwater systems are being considered. The objective is to collect information on Canada’s core public infrastructure and on the current asset management practices of asset owners. In the future, other infrastructure assets will be added, for example buildings and facilities, and public transit.

The main goal of this national survey is to provide comprehensive, scientifically-based, and standardized information on the inventory and condition of Canada’s core public infrastructure that municipalities own, manage and operate. The Report Card will be a factual report that will present a snapshot in time of the infrastructure being considered. At no time will the Report Card make recommendations on how to address the issues associated with the condition or the management of the infrastructure, nor on how to finance future needs. The Report Card is intended to assist policy-makers, asset owners and managers in their infrastructure asset management, planning and decision-making.

For your organization, the survey results will represent an excellent opportunity to benchmark the state of your core public infrastructure against other similar organizations across Canada.
Progress to date

• Promotion and Responses
  – FCM e-mail blast to Heads of Council – December 2010 + follow-up in January 2011 to CAOs
  – *INVITE PSC member organisations to promote and encourage participation*
  – As of January 24 a.m.
    • 236 municipal registrations
    • 50+ electronic questionnaires sent
  – Deadline is March 1\textsuperscript{st} 2011
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Total responses: 236
Next Steps

• **Presentations – promotion + engagement**
  – *Asset Management BC workshop* – January 24, 2011 (Vancouver)
  – Continue promotion: contact and follow-up with registered municipalities

• **RC Advisory Board**
  – Convene meeting

• **Expert Groups**
  – Appointments
Contact:

Dr Guy Félio, P.Eng.
Project Manager
Canada’s Infrastructure Report Card
E-mail: Guy.Felio@InfraSR.ca
Tel: +1 613.266.0023