



# Canadian Infrastructure

**CanaData**

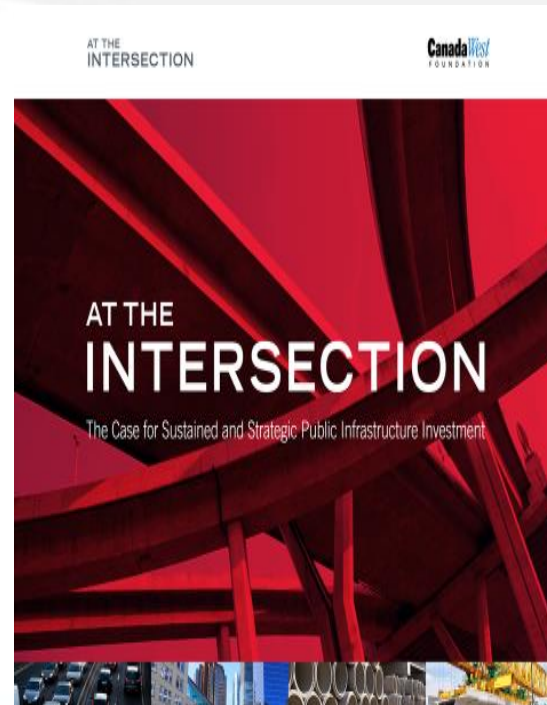
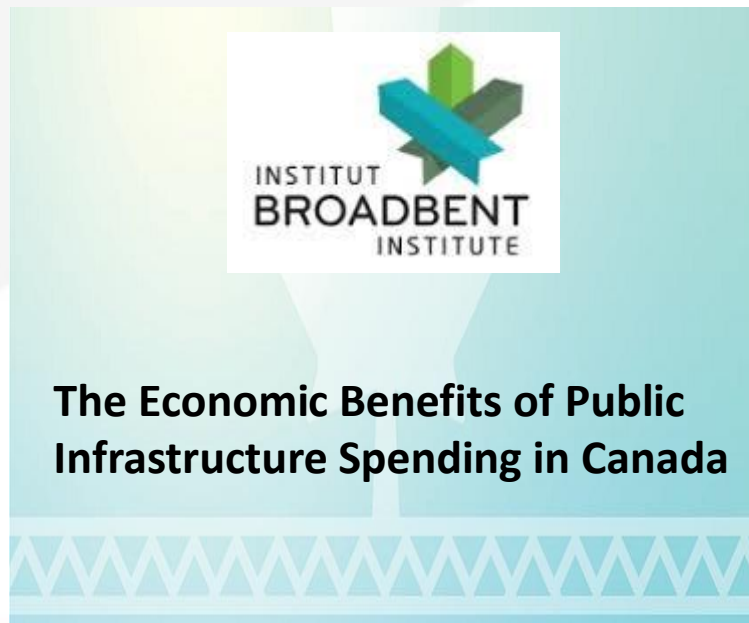
**Construction Industry Forecast Conference**

September 2015 – Toronto, Ontario



# Infrastructure and Canada's Economy

- “ Sustained infrastructure investment is essential to maintaining Canada's future prosperity and quality of life;
- “ Investments in infrastructure increase productivity;
- “ *If trade is the oxygen of the Canadian economy then infrastructure is the lungs!*

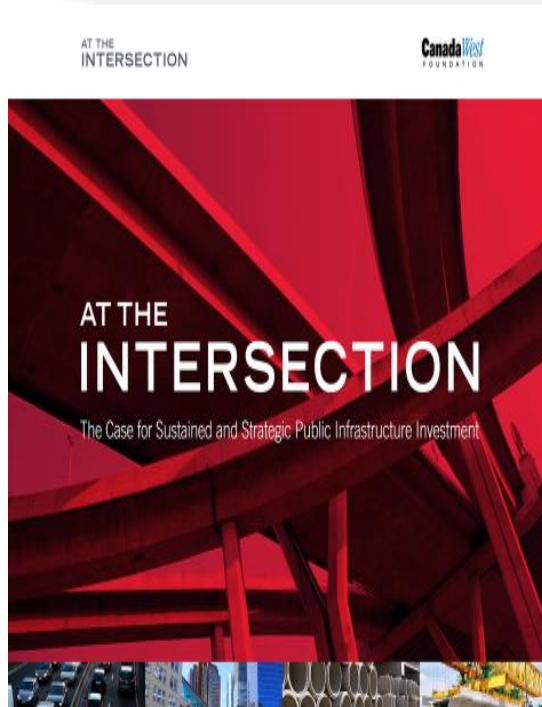


# Infrastructure and Canada's Economy

“ In the short term for every dollar invested in infrastructure GDP increases by \$1.43 and over the long term the discounted present value of GDP generated per dollar of public infrastructure spending or return on investment lies between \$2.46 and \$3.83.



**The Economic Benefits of Public Infrastructure Spending in Canada**



# Infrastructure and Canada

Canada *since* Confederation  
1807 - 1927



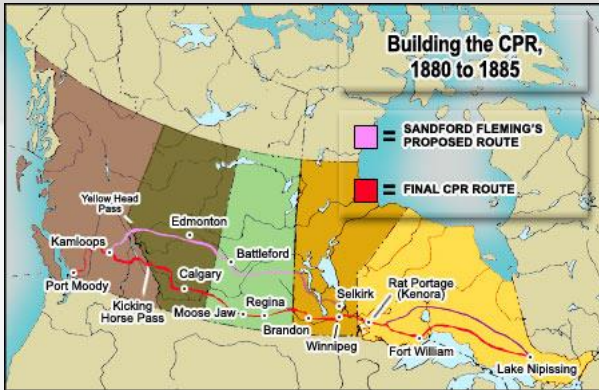
The Fathers of Confederation

- “ Infrastructure instrumental to the founding of Canada
- “ Promise of Eastern rail link helped bring about Confederation with Eastern colonies
  - “ Intercolonial Railway connecting Quebec City to Halifax
- “ Rail link between the East and the West instrumental to BC's entry and populating the West
  - “ Transcontinental Railway

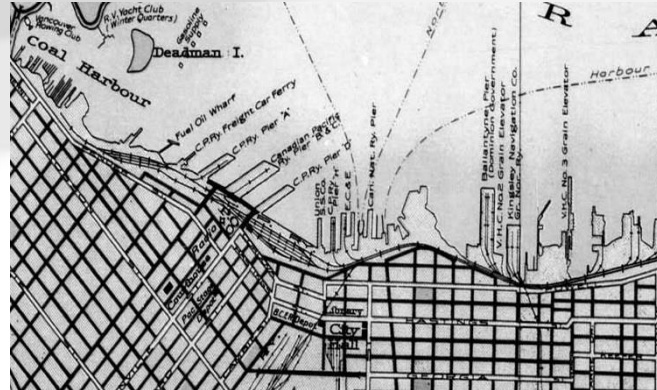


# Historical Federal Investments in Infrastructure

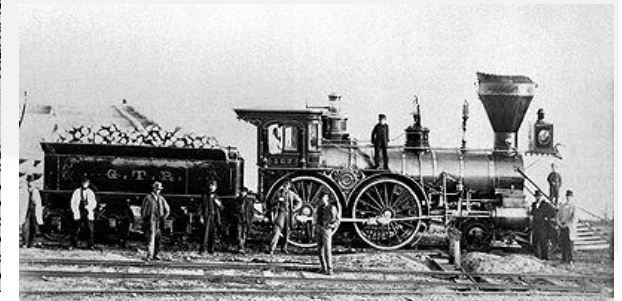
Transcontinental Railway – 1880



Port of Vancouver- 1923



Canadian National Railway – 1919 to 1922



Trans-Canada Highway System - 1950



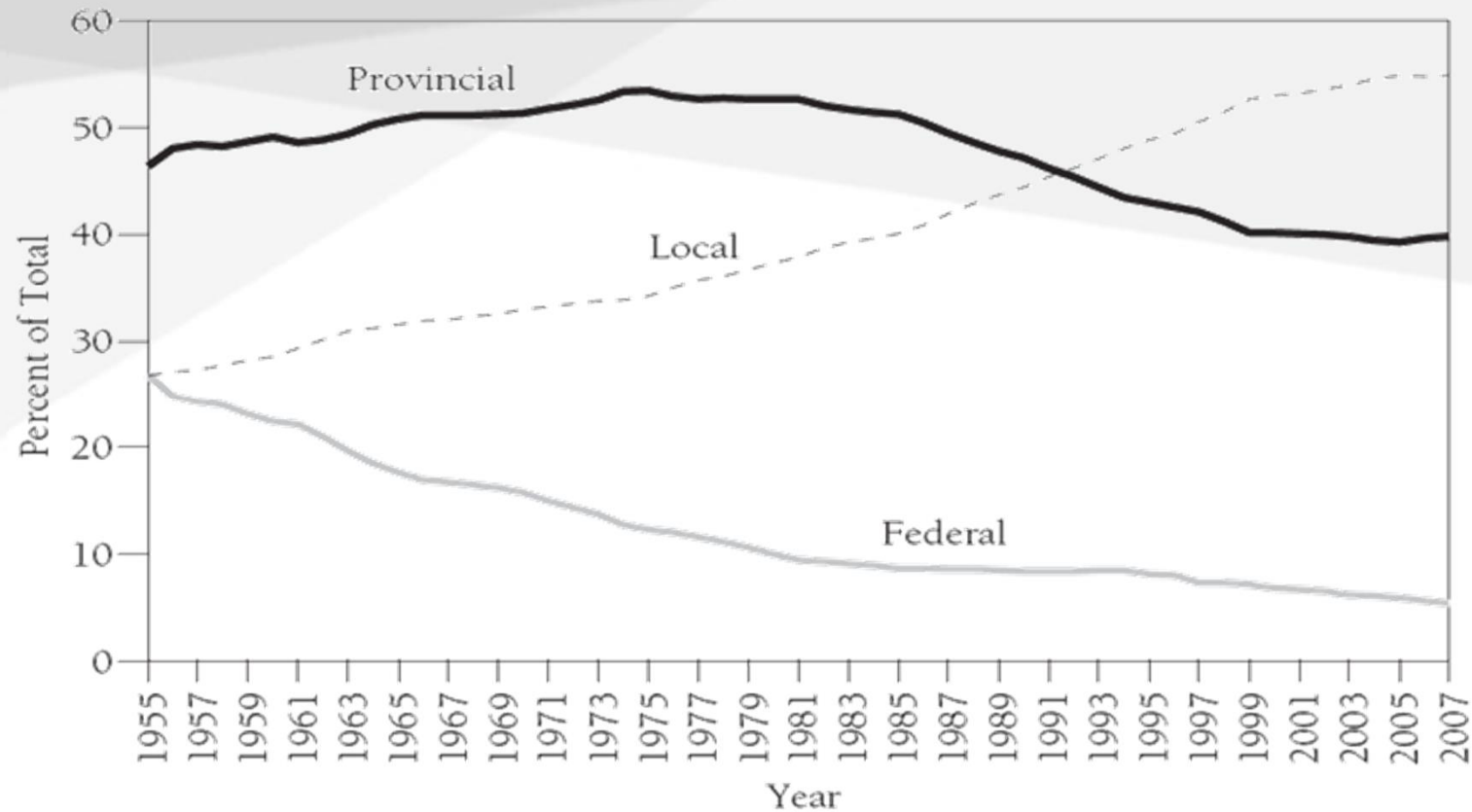
St. Lawrence Seaway - 1954



Airports



# Trend – Custodial Responsibility Shifting to Local Levels – Ownership 1955 -2007



Source: Statistics Canada: CANSIM Table 031-0002, Capital and repair expenditures, by sector and province

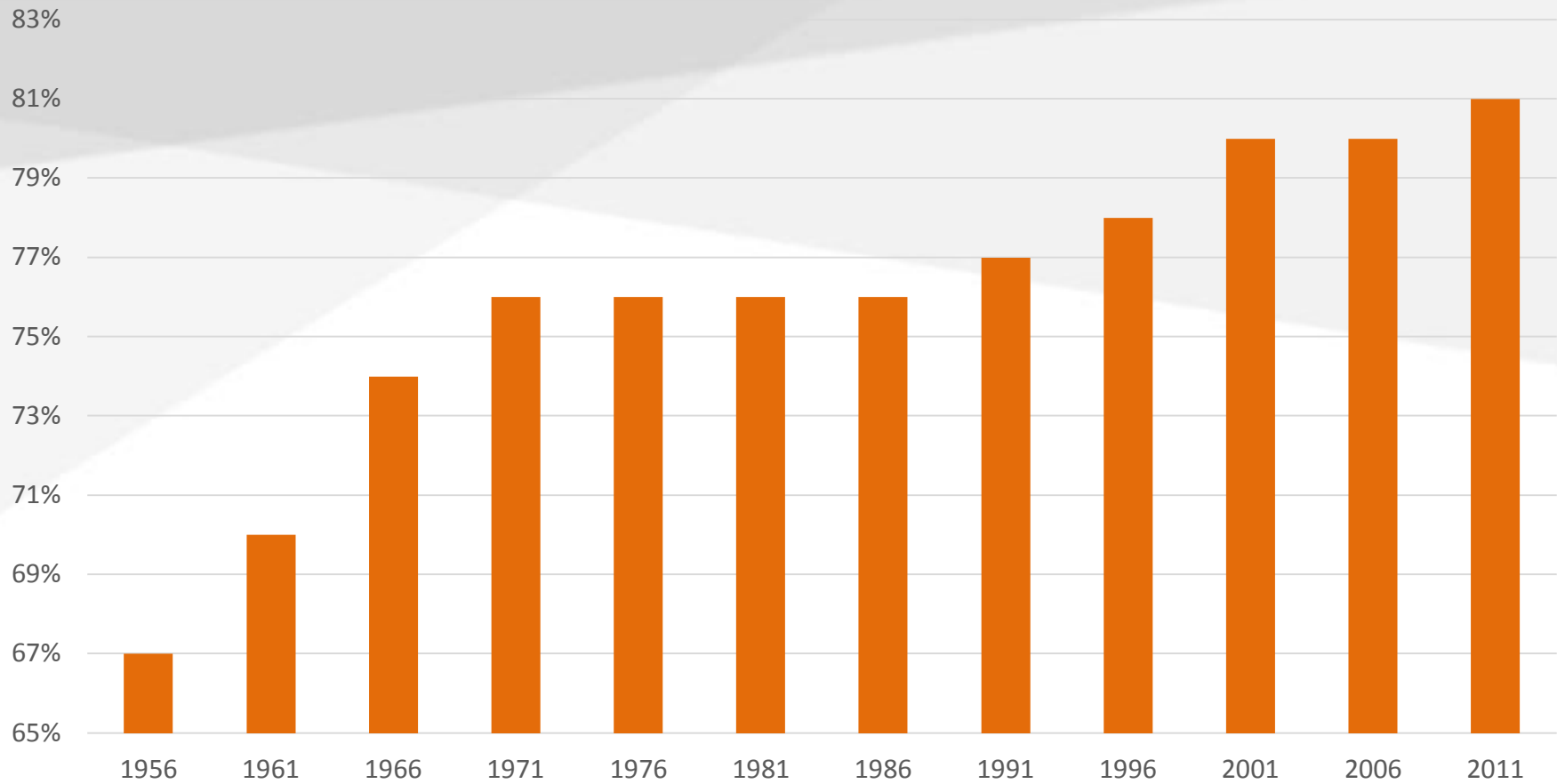


# Custodial Shift - Privatization

- “ Railways (Publicly Traded)
  - “ CN privatized in 1995
- “ Airlines (Publicly Traded)
  - “ Air Canada privatized in 1988
- “ Airports (Not-for-profits)
  - “ Vancouver International Airport – 1992
  - “ Others followed soon after
- “ Ports (Not-for-profits)
  - “ Canada Marine Act – 1998



# The Custodial Shift - Urbanization



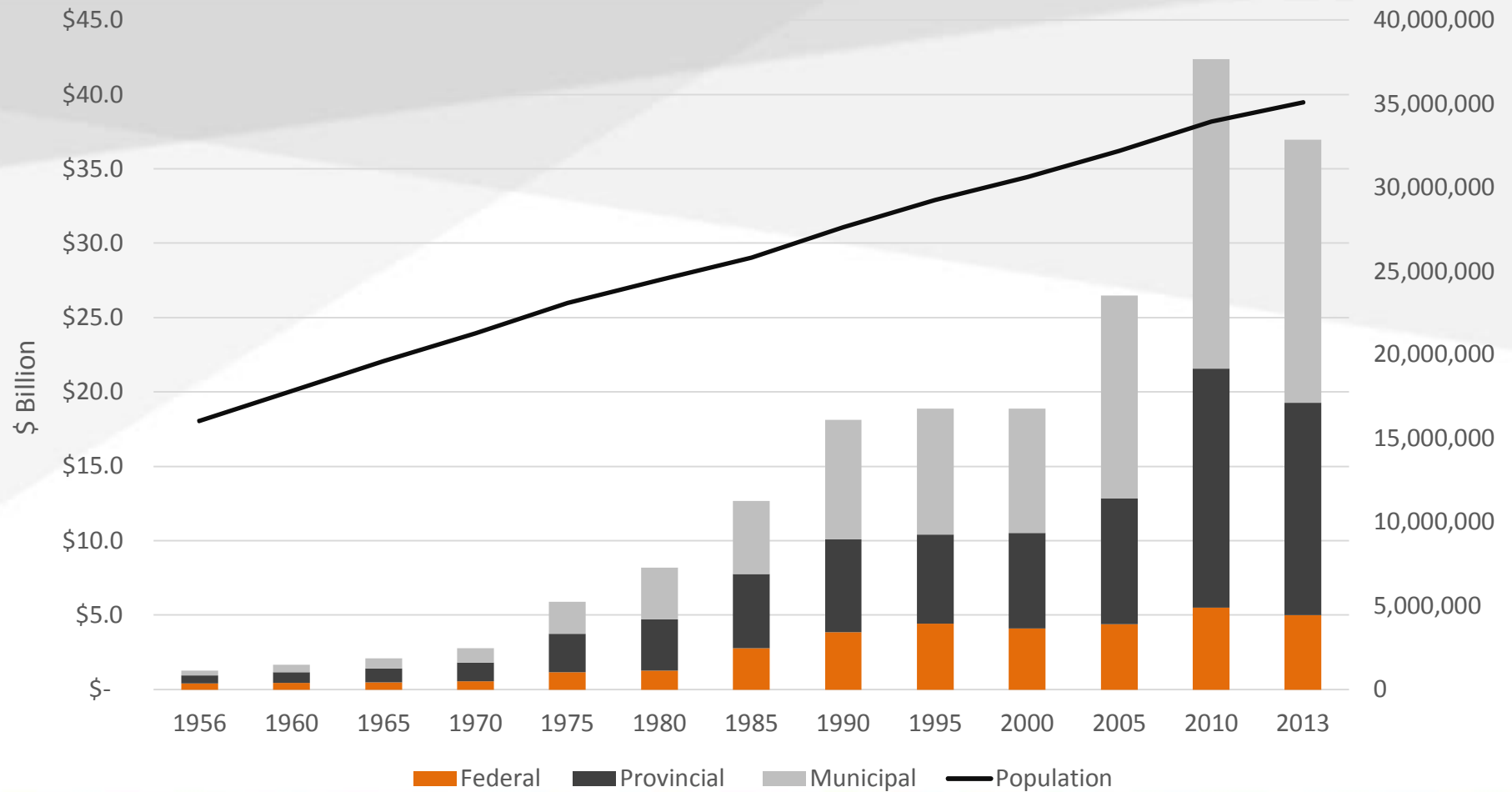
■ Percentage of Urban Population



Source: Statistics Canada: Census Data - Population, urban and rural, by province (Canada): <http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/demo62a-eng.htm>



# The Shift - Public Capital Spending and Population Growth



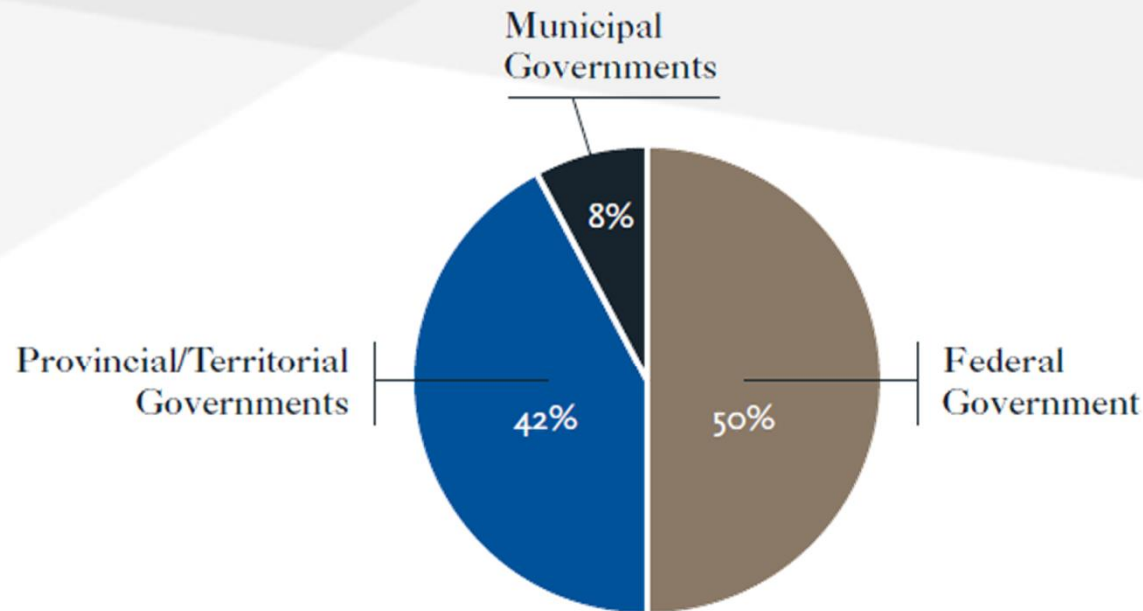
Source: Statistics Canada: CANSIM Table 029-0005; Capital and repair expenditures, by sector and province, annual (dollars x 1,000,000)

Source: Statistics Canada: CANSIM Table 051-0005; Estimates of population, Canada, provinces and territories

# The Shift – To Level Least Positioned to Generate Revenue?

## Can Municipalities Fund Infrastructure Renewal on Their Own?

Municipal Government Share of All Tax Revenues

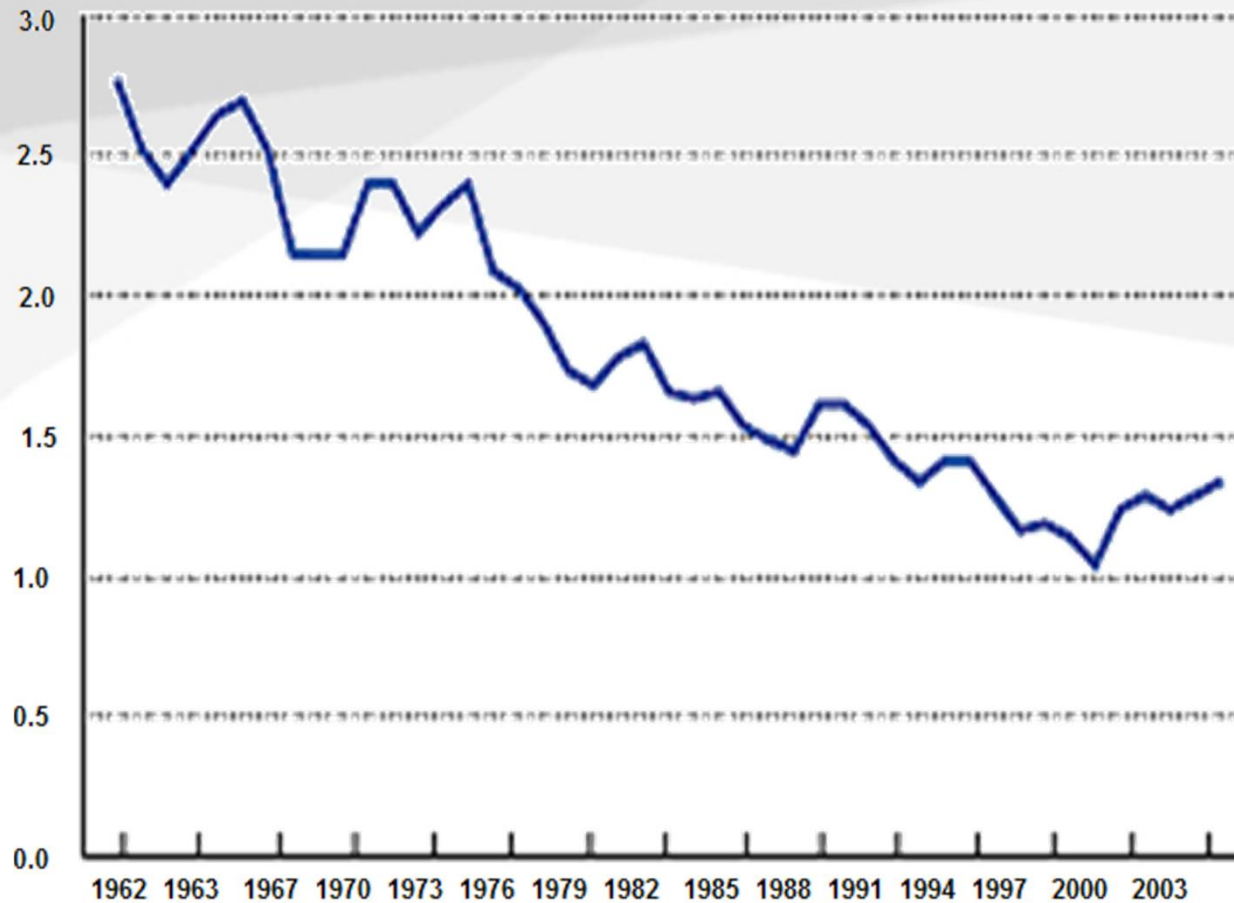


Municipal governments receive less than 10 per cent of existing revenues.



# Current Facts and Trends

## Federal Contribution to Infrastructure in Decline



Source: Finance Canada

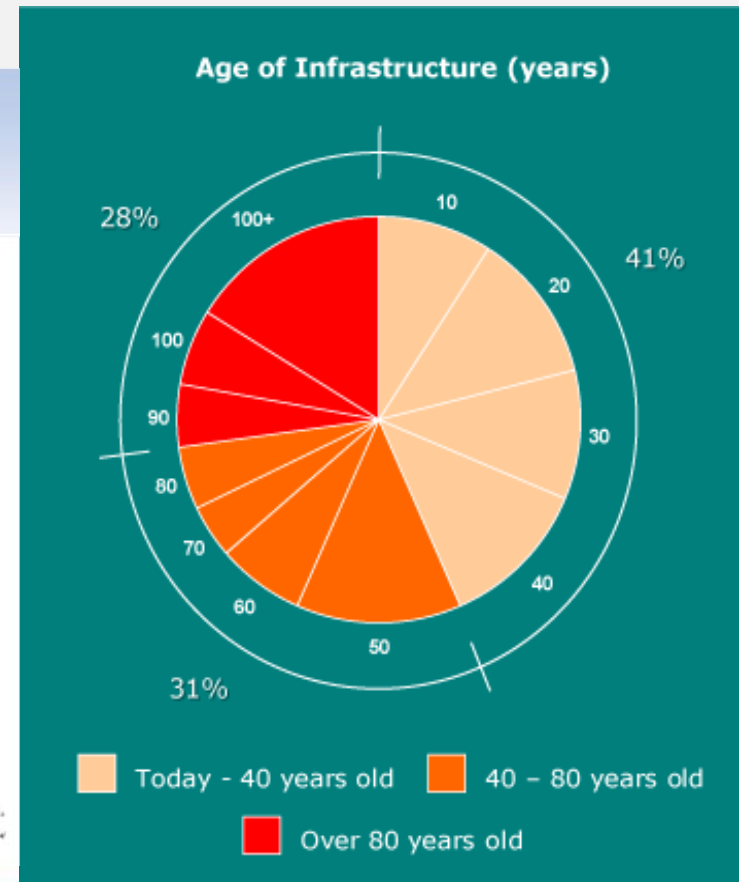
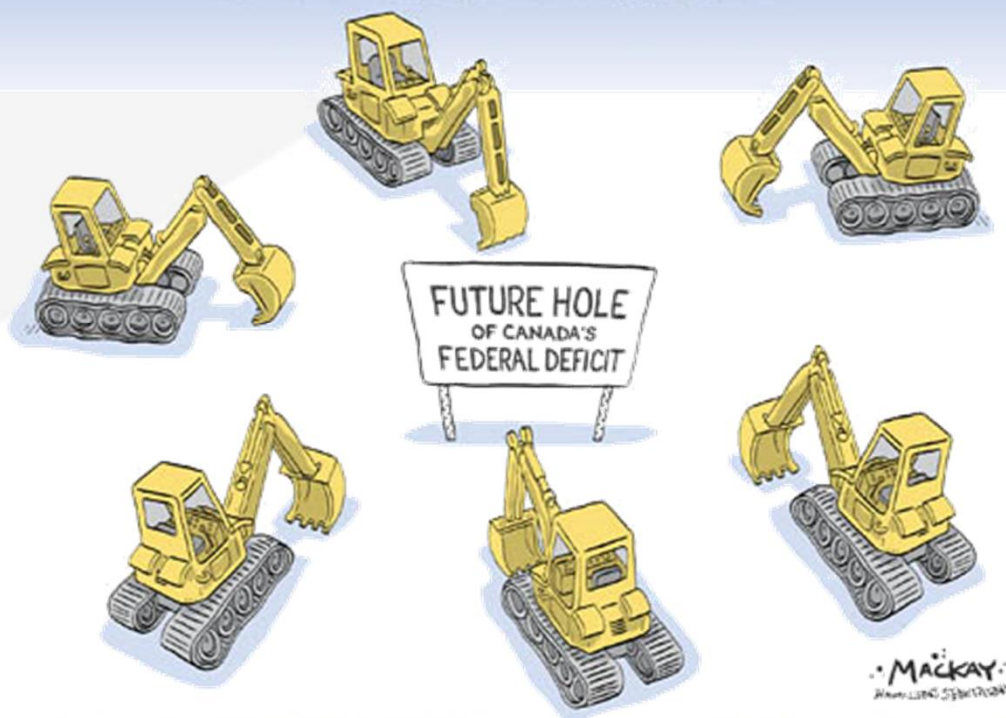


# Current Facts and Trends

Capital Spending Often Cut in Times of Fiscal Restraint

Is this changing? **This past tendency directly contributed to Canada's infrastructure deficit.**

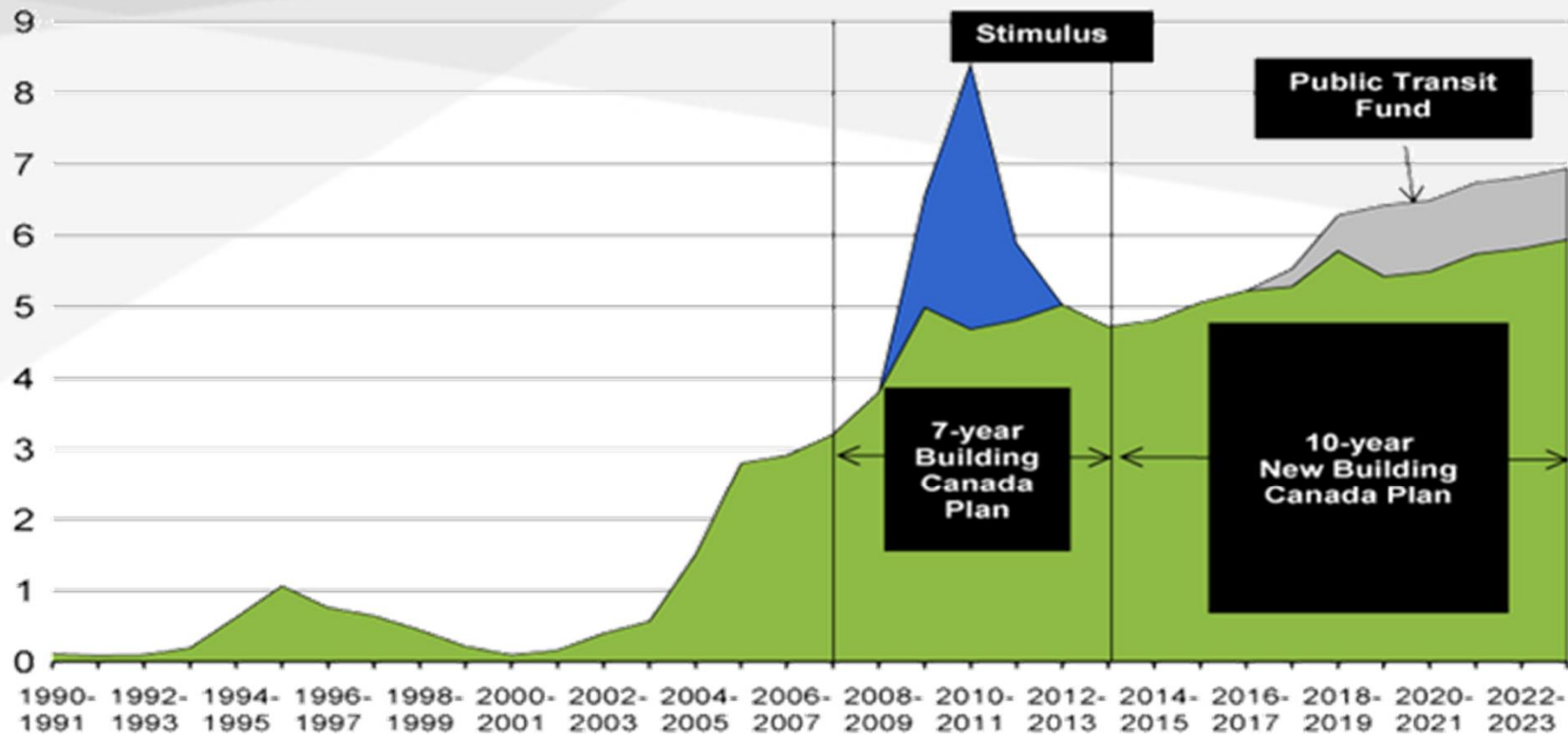
## A SHOVEL-READY PROJECT



# Federal Infrastructure Investment

## Funding for Provincial-territorial and Municipal Infrastructure

billions of dollars



# Federal Infrastructure Program

## New Building Canada Plan



The navigation menu consists of several colored buttons: a blue button for 'New Building Canada Plan', a pink button for 'New Building Canada Fund \$14B — 10 Years', an orange button for 'Federal Gas Tax Fund \$2B Per Year — Permanent', a purple button for 'P3 Canada Fund \$1.25B', and a pink button for 'FAQ'. There are also three image thumbnails: a road, a train, and a bridge. Below the menu is a green map of Canada with the text 'New Building Canada Plan in your Province-Territory'.

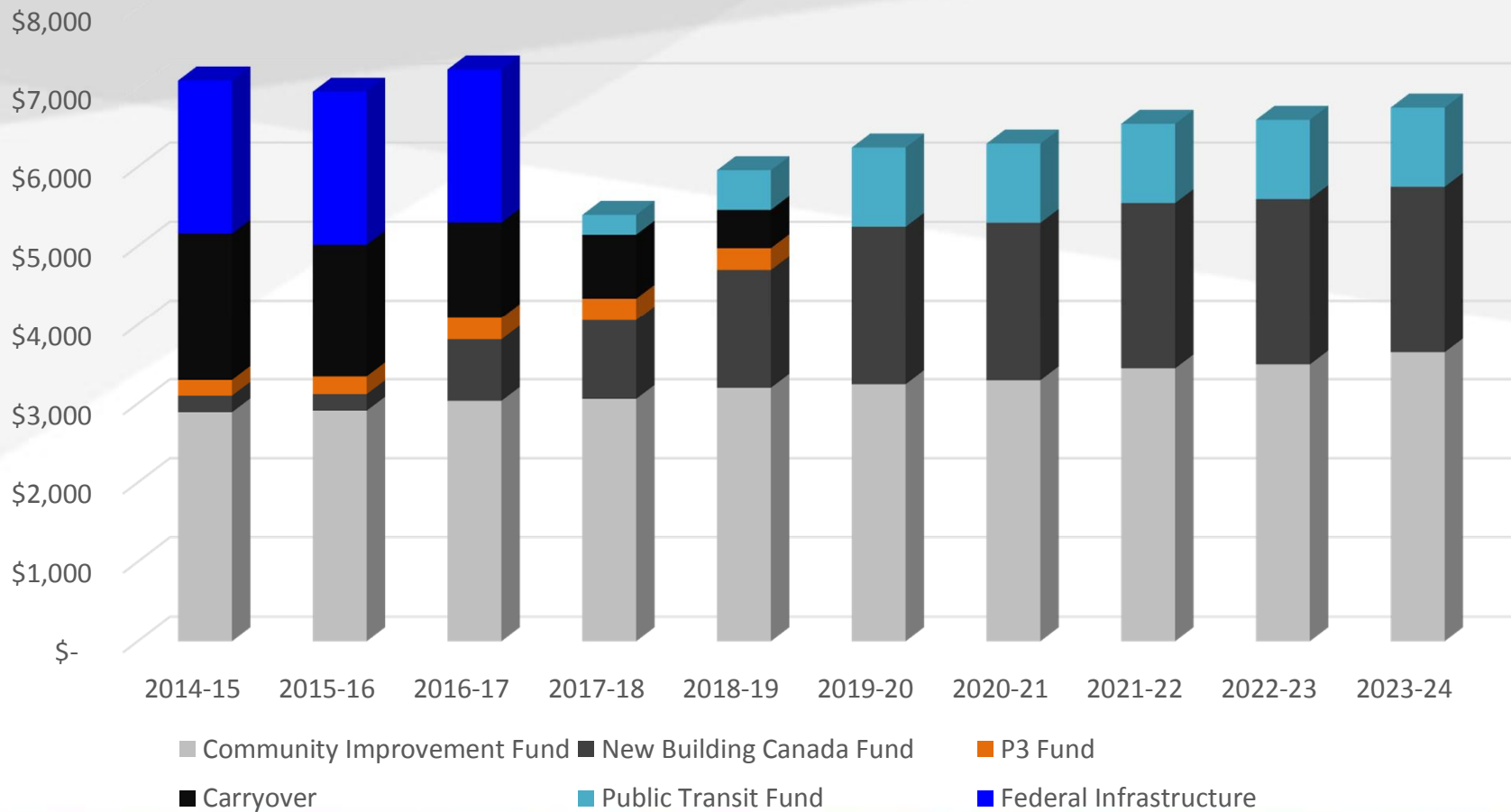
- “ **Community Improvement Fund**
  - “ \$32 billion over 10 years
- “ **New Building Canada Fund**
  - “ \$4-billion National Infrastructure Component
  - “ \$9-billion Provincial-Territorial Infrastructure Component
  - “ \$1-billion for Communities with less than 100,000 residents
- “ **Public-Private Partnership Canada Fund**
  - “ \$1.25 billion over 5 years
- “ Carryover from previous program (BCP)
  - “ \$6 billion

Source: Infrastructure Canada: <http://www.infrastructure.gc.ca/plan/plan-eng.html>



# Federal Infrastructure Program

## New Building Canada Plan



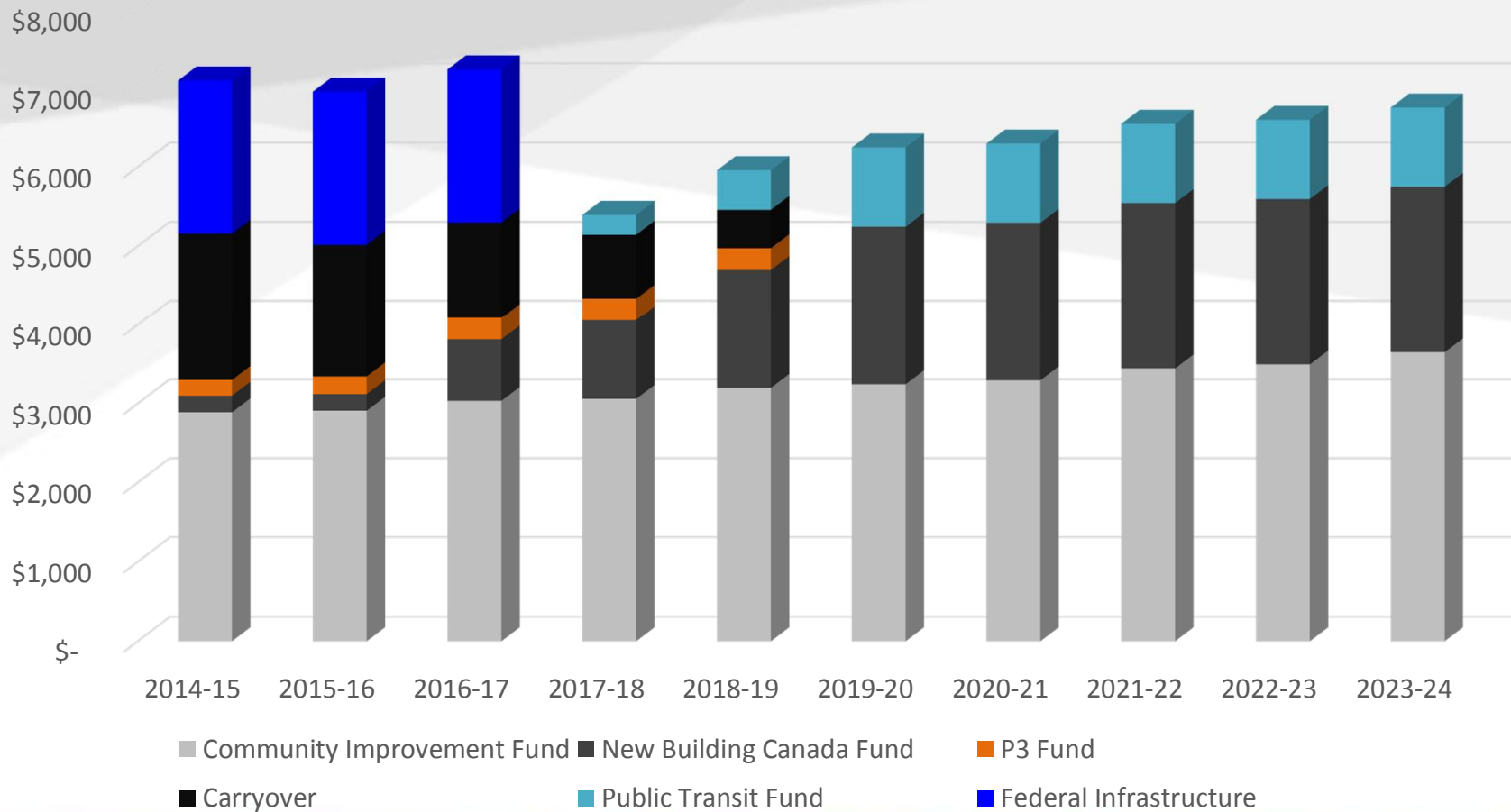
Source: Department of Finance, Budget 2013 and Budget 2015

Source: Press Release: Federal Infrastructure - London, Ontario – 24 November 2014 (estimated)



# Federal Infrastructure Program

## New Building Canada Plan



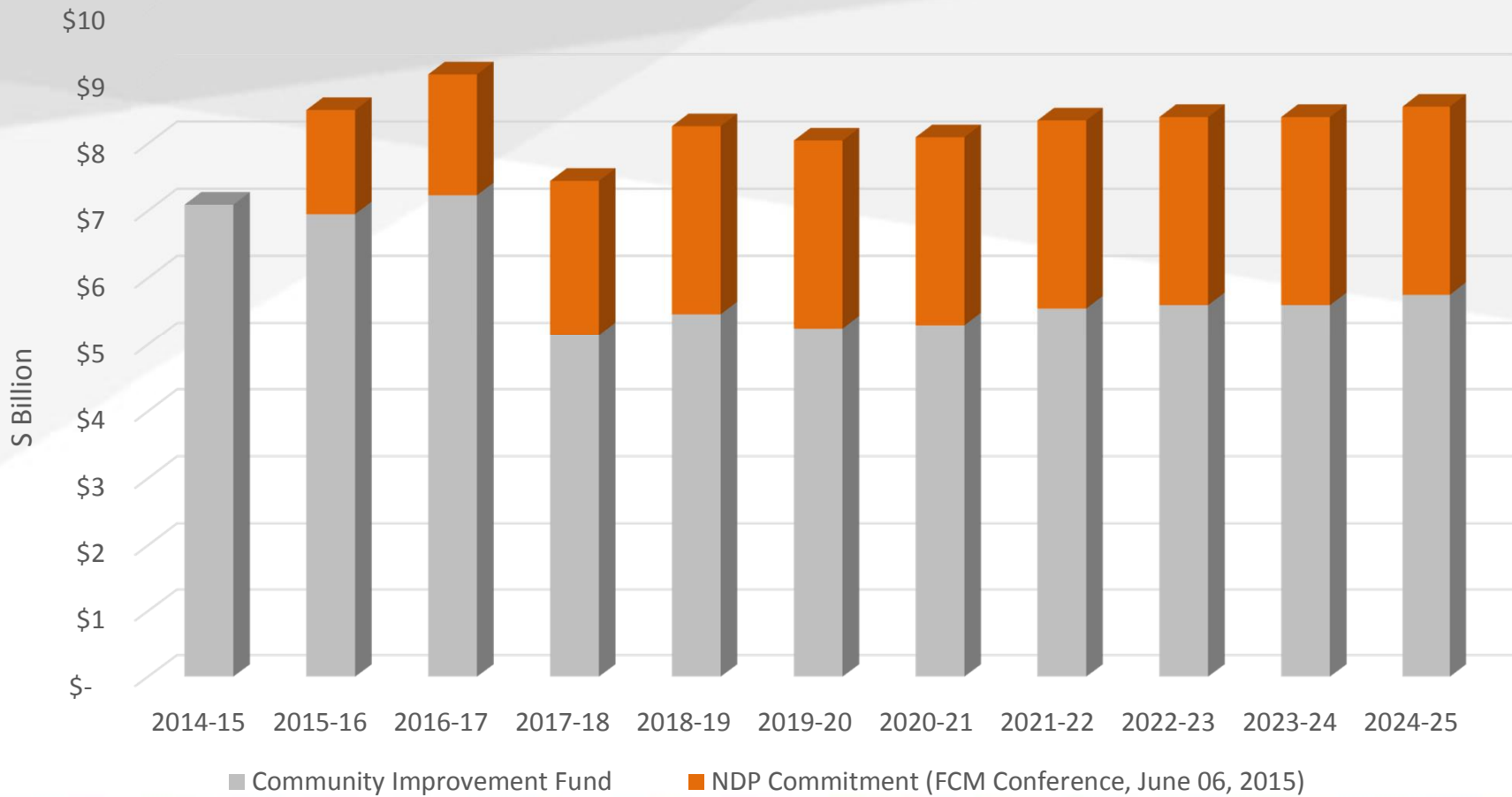
Source: Department of Finance, Budget 2013 and Budget 2015  
Source: Press Release: Federal Infrastructure - London, Ontario – 24 November 2014 (estimated)





# Federal Infrastructure Program

## New Democratic Party

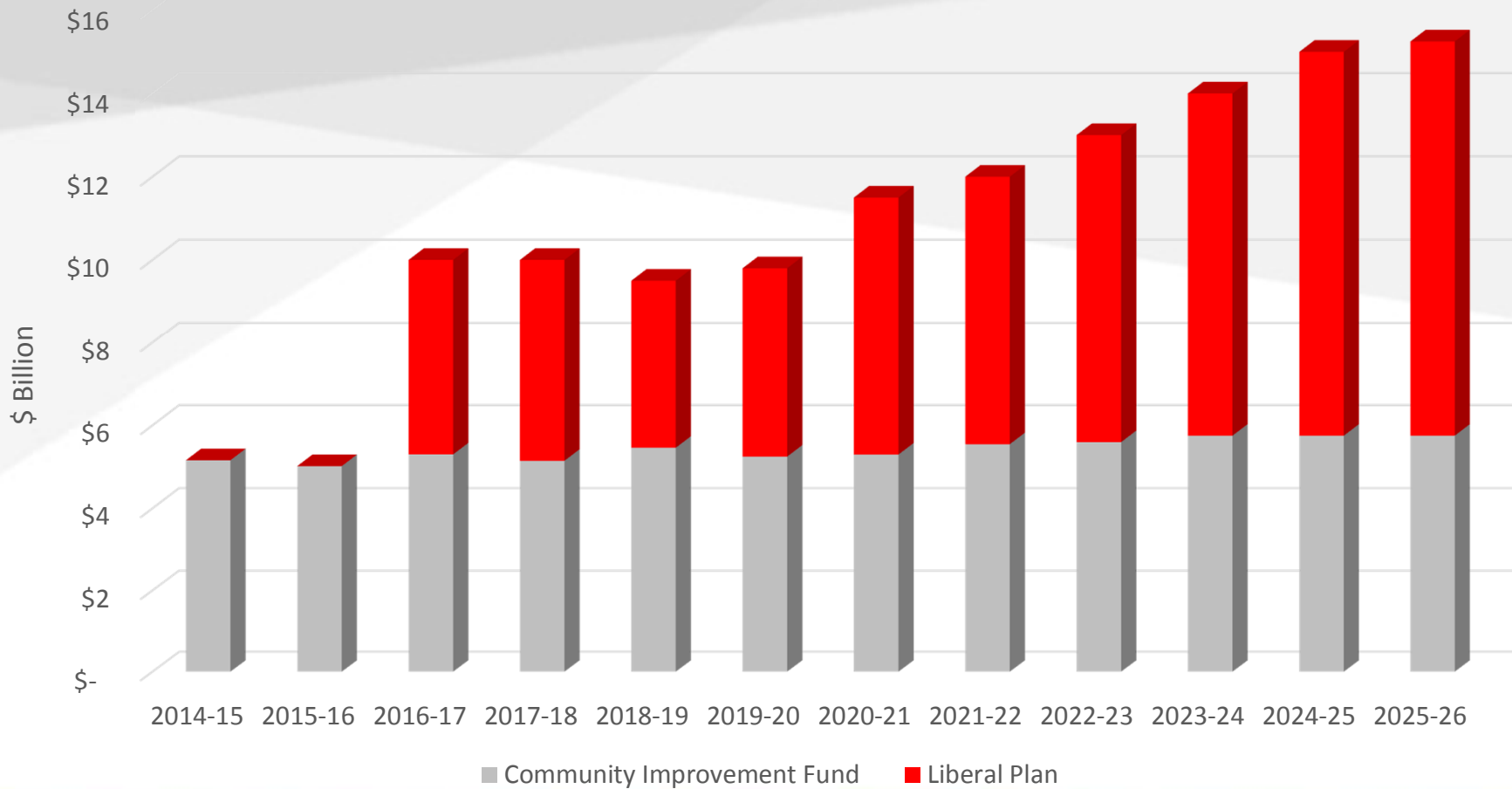


Source: Press Release – Tom Mulcair’s plan to build stronger cities and communities, June 06, 2015



# Federal Infrastructure Program

## Liberal Party of Canada



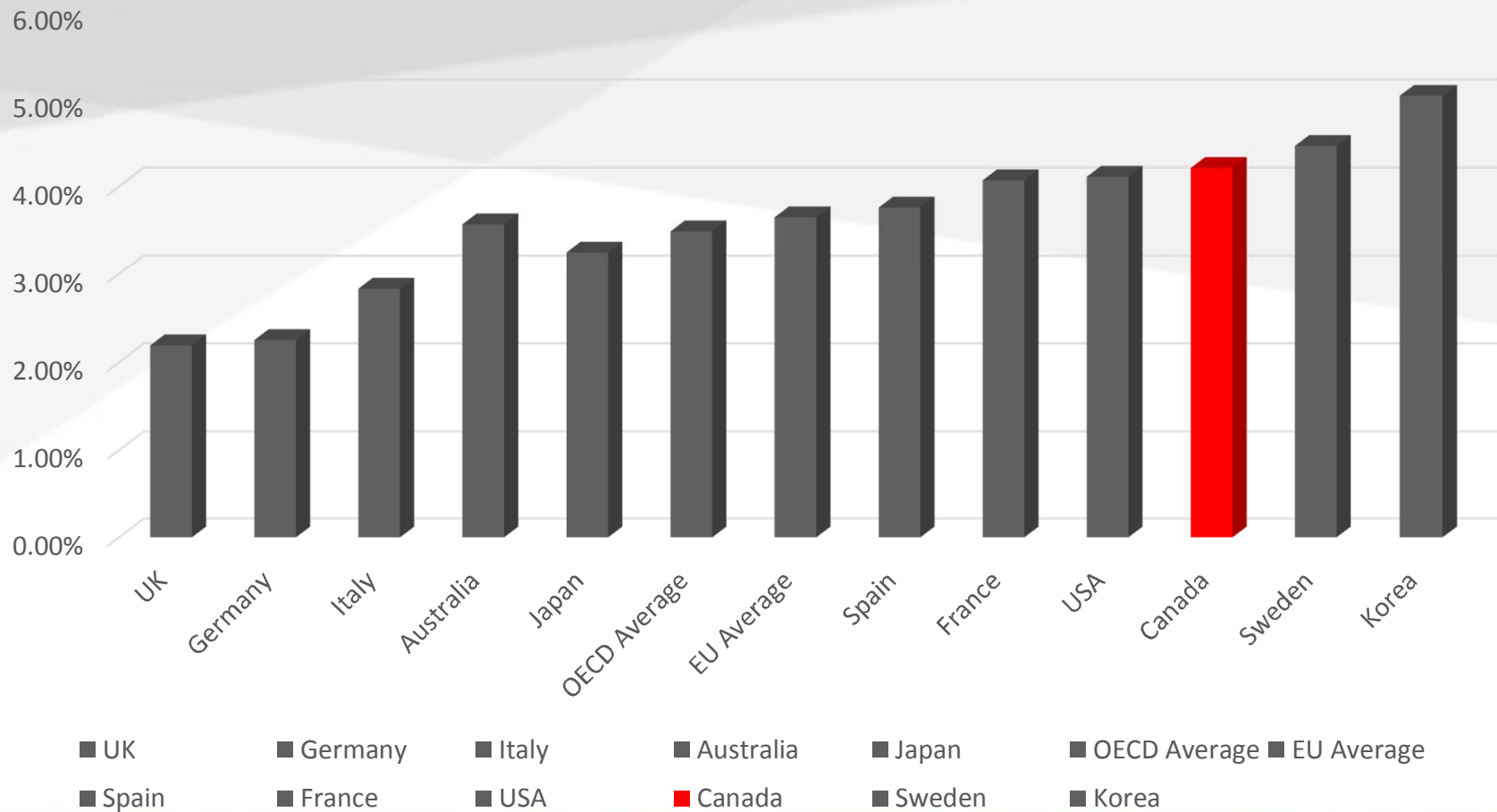
Source: Department of Finance, Budget 2013 and Budget 2015

Source: Press Release: Federal Infrastructure - London, Ontario – 24 November 2014 (estimated)



# Infrastructure Investment

## Where Canada Ranks in the OECD



Source: OECD (2013), OECD Economic Outlook 94 Database



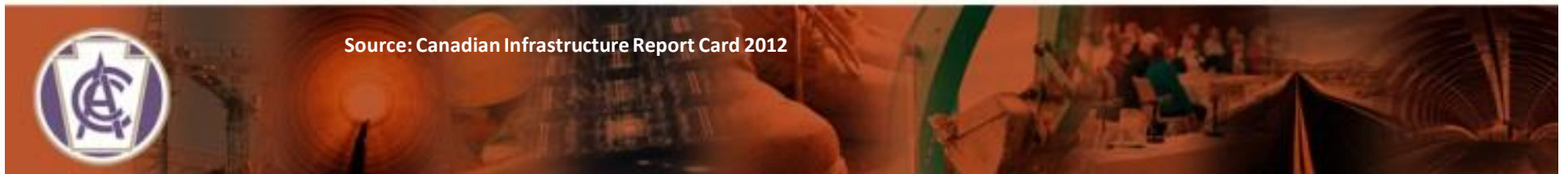
# Canadian Infrastructure Report Card (2012)

## What Is It?

- “ First Canadian attempt to quantify the infrastructure challenge.
- “ Data drawn from responses received from 123 municipalities across Canada.
- “ Project Objectives:
  - “ Repeatable
  - “ Defendable
  - “ Raise Awareness
  - “ Factual



Source: Canadian Infrastructure Report Card 2012



# Canadian Infrastructure Report Card 2012





## About the Ratings

- “ **Very Good** – Fit for the Future (80% or higher)
- “ **Good** – Adequate for Now (70% to 80%)
- “ **Fair** – Requires Attention (60% to 69%)
- “ **Poor** – At Risk (50% to 59%)
- “ **Very Poor** – Unfit for Sustained Service (50% or less)



# Canadian Infrastructure Report Card (2012)

## Results

|   |   |   |   |
|---|---|---|---|
|  <p><b>15.4%</b></p>                                   |  <p><b>30.1%</b></p> |  <p><b>23.4%</b></p> |  <p><b>52.6%</b></p> |
| <p><b>DRINKING WATER</b><br/>GOOD, ADEQUATE FOR NOW</p>   | <p><b>WASTEWATER</b><br/>GOOD, ADEQUATE FOR NOW</p>   | <p><b>STORMWATER</b><br/>VERY GOOD, FIT FOR THE FUTURE</p>  | <p><b>MUNICIPAL ROADS</b><br/>FAIR, REQUIRES ATTENTION</p>  |
| <p>15.4 percent of drinking water pipes rank fair or below</p>  | <p>30.1 percent wastewater pipes rank fair or below</p>   | <p>23.4 percent of stormwater pipes rank fair or below</p>  | <p>52.6 percent of municipal roads rank fair or below</p>   |
| <p>Replacement cost - \$25.9 billion or \$2,082 per household in Canada</p>   | <p>Replacement cost - \$39 billion or \$3,136 per household in Canada</p>                             | <p>Replacement cost - \$15.8 billion or \$1,270 per household in Canada</p>                             | <p>Replacement cost - \$91.1 billion or \$7,325 per household in Canada</p>                             |
| <p>NOTE: "REPLACEMENT COST" MEANS HOW MUCH IT WOULD COST TO BRING ALL OF THE INFRASTRUCTURE AT FAIR OR BELOW UP TO "GOOD" CONDITION</p> |   |   |   |

Source: Canadian Infrastructure Report Card 2012



# Canadian Infrastructure Report Card 2012

## The Results

- “ The replacement cost for assets rated fair or below was **\$171.8 billion**.
- “ Municipal roads – Replacement cost estimated at \$91.1 billion or \$7,325 per Canadian household.
- “ Wastewater infrastructure – Replacement cost estimated at \$39 billion or \$3,136 per Canadian household.
- “ Drinking-water infrastructure – Replacement cost estimated at \$25.9 billion or \$2,082 per Canadian household.
- “ Storm water infrastructure – Replacement cost estimated at \$15.8 billion or \$1,270 per Canadian household.



# Canadian Infrastructure Report Card

## What We Learned from CIRC 2012

- “ Many municipalities do not have accurate information regarding the condition of their infrastructure assets.
- “ The situation is particularly acute within small and rural municipalities.
- “ Finite financial resources and limited staff time preclude a much more thorough, real-time evaluation of the state and performance of their physical infrastructure.





# The Municipal Infrastructure Forum

## Principles for Federal Long-term Infrastructure Plans

1. **Secure, stable investments** - Certainty and predictability key.
2. **Supporting economic growth.**
3. **Flexibility: Keeping communities – large and small – strong.**
4. **A balanced approach with smart partnerships.**
5. **Building municipal capacity** - Federal investments must help build municipal capacity to plan, build and maintain their infrastructure over the long term.



# The Five Myths of Canadian Infrastructure

Todd Latham, Founder of Renew Canada

1. We are doing better than other countries;
2. It is all about roads and bridges;
3. The Canadian public understands:  
*“Taxpayers support infrastructure renewal **as long as** it creates new jobs, doesn’t increase their taxes and does not require user-pay structures or special municipal levies to pay for it. The party is over: citizens need to wake up and realize that quality of life is not free.”*
4. Local governments are looking long term; and
5. There is little we can do about climate change.



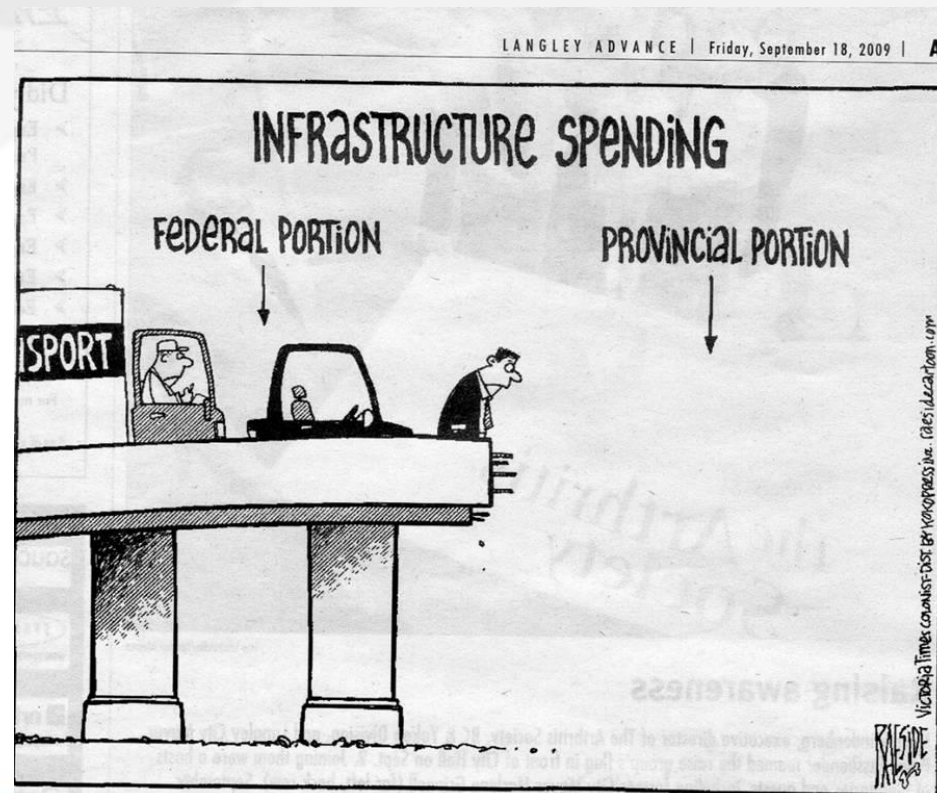
# The New Public Policy Milieu

**Infrastructure investment is not the sole domain of any one level of government in Canada and must be a priority focus for all.**



# The New Public Policy Milieu

The inability of governments in Canada to plan long term necessitates the formation of partnerships with the private sector.



# Future Needs

## Trade-enabling Infrastructure



# Future Needs

## Trade-enabling Infrastructure



# The New Public Policy Milieu

- 3. Balancing government budgets by neglecting infrastructure is “borrowing” dangerously from our future! A series of financing options must be explored so that prudent fiscal planning and prudent infrastructure management are not perceived nor in fact mutually exclusive.**
- 4. Governments must abandon the short term annual deficit/surplus fixation and instead adopt prudent policies that seek to meet longer term Debt/GDP targets.**



# The New Public Policy Milieu

5. **Canadians must learn that “state-of-the-art” public infrastructure that supports a healthy, environmentally friendly and prosperous quality of life is NOT free and that they as taxpayers may ultimately have to pay more.**







**THANK YOU**

Questions?

