HOUSE OF COMMONS
CHAMBRE DES COMMUNES
CANADA

UPDATING INFRASTRUCTURE IN CANADA: AN EXAMINATION OF NEEDS AND INVESTMENTS

Report of the Standing Committee on Transport, Infrastructure and Communities

Larry Miller
Chair

JUNE 2015

41st PARLIAMENT, SECOND SESSION

Also available on the Parliament of Canada Web Site
at the following address: http://www.parl.gc.ca

UPDATING INFRASTRUCTURE IN CANADA: AN EXAMINATION OF NEEDS AND INVESTMENTS

Report of the Standing Committee on Transport, Infrastructure and Communities

Larry Miller
Chair

JUNE 2015

41st PARLIAMENT, FIRST SESSION

STANDING COMMITTEE ON TRANSPORT, INFRASTRUCTURE AND COMMUNITIES

CHAIR

Larry Miller

VICE-CHAIRS

Hoang Mai
David J. McGuinty

MEMBERS

Peter Braid
Ed Komarnicki
Isabelle Morin
Mike Sullivan
Jeff Watson
Wai Young
David Yurdiga

OTHER MEMBERS OF PARLIAMENT WHO PARTICIPATED

Garry Breitkreuz
Don Davies
Libby Davies
Hon. Stéphane Dion
Jim Eglinski
Matthew Kellway
Chungsen Leung
Jasbir Sandhu
Jinny Jogindera Sims
Francis Scarpaleggia
Craig Scott

CLERK OF THE COMMITTEE

Philippe Grenier-Michaud

LIBRARY OF PARLIAMENT

Parliamentary Information and Research Service

Allison Padova, Analyst

THE STANDING COMMITTEE ON TRANSPORT, INFRASTRUCTURE AND COMMUNITIES

has the honour to present its

NINTH REPORT

Pursuant to its mandate under Standing Order 108(2), the Committee has studied the updating of infrastructure in Canada: an examination of needs and investments, and has agreed to report the following:

TABLE OF CONTENTS

UPDATING INFRASTRUCTURE IN CANADA: AN EXAMINATION OF NEEDS AND INVESTMENTS

INTRODUCTION

Infrastructure Canada is the lead department for federal investments in provincial, territorial and municipal infrastructure. Other federal departments and agencies act as delivery partners for some Infrastructure Canada funds and also make some investments from their own budgets. Finance Canada, Transport Canada, Canada Revenue Agency, Aboriginal Affairs and Northern Development Canada, Atlantic Canada Opportunities Agency, Canadian Northern Economic Development Agency, Economic Development Agency of Canada for the Regions of Quebec, Federal Economic Development Agency for Southern Ontario, Western Economic Diversification Canada and the Royal Canadian Mounted Police are the other major federal institutions involved in infrastructure investment. According to Infrastructure Canada, approximately $1.5 billion of the total $5 billion federal contributions to provincial, territorial and municipal infrastructure in 2013–2014 came from federal departments and agencies other than Infrastructure Canada. [1] Between 2015–2016 and 2022–2023, Infrastructure Canada plans to invest more than $5 billion per year in infrastructure projects.

On 23 April 2015, the House of Commons Standing Committee on Transport, Infrastructure and Communities (the Committee) agreed to undertake a study to examine the magnitude and impacts of federal government investments on federal, provincial and municipal infrastructure in Canada as well as the preliminary progress of the New Building Canada Plan.

The Committee convened six meetings for the purposes of the study during the spring of 2015. During the discussion of the questions put forth in the motion, members also had an opportunity to hear witnesses' perspectives on:

- municipal challenges in relation to their infrastructure;
- public transit funding; and
- public-private partnerships.

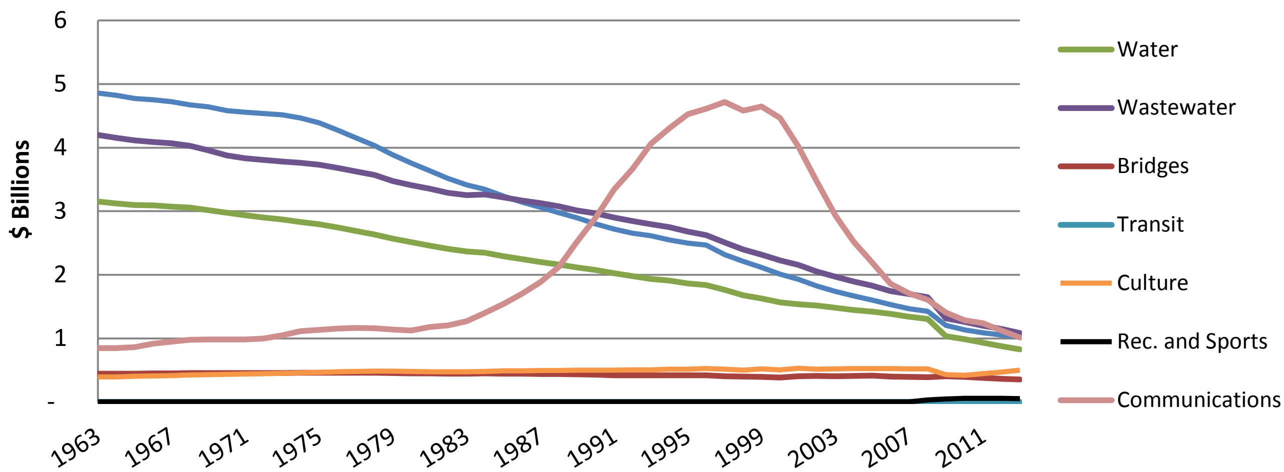
This last report of the Committee in the 41st Parliament presents what the Committee learned about these issues from witness testimony as well as from those stakeholders who submitted briefs.

TRENDS IN FEDERAL INFRASTRUCTURE OWNERSHIP AND INVESTMENTS

The federal government's share of public infrastructure in Canada has declined in the past 50 years. In particular, the federal stock in road, wastewater and water infrastructure declined by 70%-80% in terms of its value since 1963. Federal investments in communications infrastructure more than tripled in value during the 1980s and 1990s, but have since returned to the level, in real terms, prior to the start of the surge in investment.

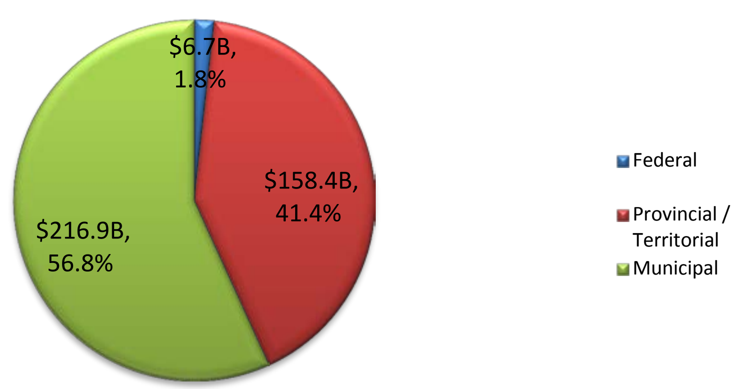
The decline in the federal share of infrastructure ownership in the last 25 years was largely through divestiture and privatization and, as a result, less than 2% of core public infrastructure in Canada was federal property in 2013.[2] Infrastructure Canada prepared graphs for the Committee using Statistics Canada data to illustrate these trends, which are provided in Figures 1 and 2 below.

Figure 1: Federally Owned Core Public Infrastructure Net Stock (billions, constant $)



Notes: Net stock using a hyperbolic function for depreciation from general government. Using constant 2007 dollars. Core public infrastructure includes roads, bridges, transit, water, wastewater, culture, and sports and recreation. Communication Infrastructure includes connectivity, broadband, and telecommunications infrastructure. Data for 2013 based on forecast.

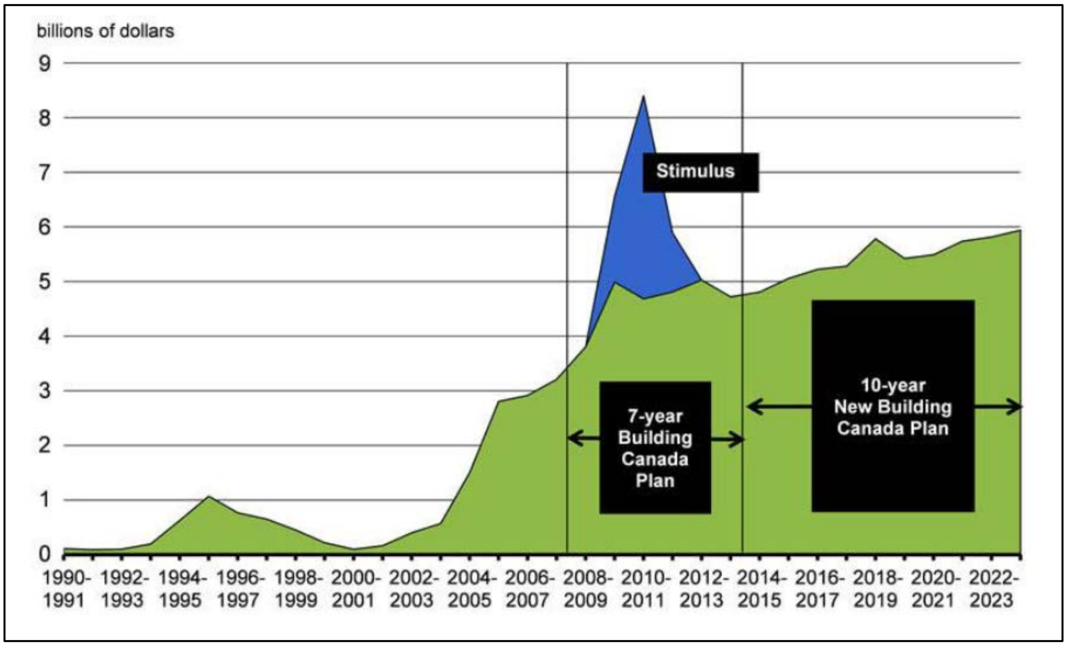
Figure 2: Net Stock of Core Public Infrastructure by Level of Government, 2013 (Billions, current $)



Notes: Net stock calculated using a hyperbolic function for depreciation from general government. Core public infrastructure includes roads, bridges, transit, water, wastewater, culture, and sports and recreation. 2013 data based on forecast.
Source: Statistics Canada, National Economic Accounts Division.

According to Infrastructure Canada, annual federal investments in public infrastructure increased from $400 million in 2002 to over $4.7 billion in 2013. Federal infrastructure contributions peaked during the stimulus program that followed the global financial crisis in 2009–2010, as shown in Figure 3. An overview of the major federal infrastructure programs since 2000 is contained in Appendix C.

Figure 3: Federal Spending on Provincial, Territorial and Municipal Infrastructure



Sources: Infrastructure Canada; Department of Finance.

According to Organisation for Economic Co-operation and Development data cited by Infrastructure Canada officials, investment in public infrastructure by all orders of government — municipal, provincial and federal — in Canada currently amounts to 3.9% of gross domestic product (GDP). This represents a significant increase compared to the level of public infrastructure investment during the 1990s — a decade of underinvestment — which was estimated to be in the order of 2% of GDP.[3]

Statistics Canada data presented to the Committee indicate that the average age of core public infrastructure in Canada declined from 17.5 years in 2003 to 14.7 years in 2013. Public investments turned back the clock on road and drinking water infrastructure the most, reducing their age by almost four years on average compared to a two-year reduction on average for other asset classes.

While neither the ratio of public infrastructure spending to GDP nor the average age of infrastructure in Canada are indicators of whether the needs of the economy and residents are being met, some witnesses and Committee members noted that the trends appear to reflect that such investments are now a higher priority for Canadian policy makers than they were at the turn of the millennium.[4]

The Federation of Canadian Municipalities (FCM) recommended that the federal government target long-term public investment in the order of 5% of GDP in order to catch up on maintaining, renewing and building new infrastructure over the long term.[5]

PROGRESS OF THE NEW BUILDING CANADA PLAN AND COMPLEMENTARY FEDERAL FUNDS

The 10-year, New Building Canada Plan, which was announced in 2013, is intended to offer funding options to assist a variety of public and private sector infrastructure project proponents. Certain funding envelopes are earmarked for projects that are local in scope, while other funds favour projects of regional and national significance, as shown in Table 1. The cost-sharing conditions for funding under the New Building Canada Plan leverage contributions ranging from 66% to 75% of total project costs from other funding partners. Those public sector assets that most directly foster economic growth, a cleaner environment and a higher quality of life in Canadian communities were selected to be eligible investment categories. Job creation is expected to result from any infrastructure project. The FCM told the Committee that every $1 billion in infrastructure investment is expected to create in the order of 11,000 jobs.[6]

Table 1: Selected Components of the New Building Canada Plan

Components	Amount	Project Scope
Community Improvement Fund	**$32 B**	
Gas Tax Fund	*$21.8 B*	Local
GST Rebate[a]	*$10.2 B*	Local
New Building Canada Fund	**$14 B**	
National Infrastructure Component	$4 B	National
Provincial-Territorial Component	$10 B *$9 B national and regional projects* *$1 B for communities of less than 100,000*	 National and regional Local
P3 Canada Fund[b]	**$1.5 B**	**Any**

Notes: a. The GST Rebate is administered by the Canada Revenue Agency.

b. The P3 Canada Fund is administered by PPP Canada.

Source: Table prepared by the author using data obtained from House of Commons Standing Committee on Transport, Infrastructure and Communities, *Evidence*, 5 May 2015 (Jeff Moore, Assistant Deputy Minister, Policy and Communications, Infrastructure Canada).

As of May 2015, funding under the New Building Canada Plan has been approved for:[7]

- Two projects under the National Infrastructure Component totalling $207.5 million ($68 million federal contribution);
- 18 national and regional projects under the Provincial-Territorial Infrastructure Component totalling $5.79 billion ($1.06 billion federal contribution); and
- 1 public-private partnership public transit project ($150 million federal contribution);
- 2200 Gas Tax Fund projects ($1.97 billion federal contribution).

The Committee recommends:

1. That the federal government continue to be an important funding partner for infrastructure projects across Canada with the New Building Canada Plan.

A. Broadband infrastructure

The majority of investment categories under the New Building Canada Plan represent what is termed as "core infrastructure," i.e., roads, bridges, transit, water, wastewater, culture, and recreation and sport infrastructure. Broadband infrastructure is one example of "non-core" infrastructure that is eligible for federal funding under the New Building Canada Plan as well as programs administered by other departments, such as Industry Canada's Digital Canada 150 Program.

One of the five pillars of Industry Canada's Digital Canada 150 program is Connecting Canadians.[8] It is a merit-based funding program and offers $305 million to support broadband Internet infrastructure investments in rural and remote regions of Canada, $50 million of which is dedicated to communities in northern Quebec (Nunavik) and Nunavut. Internet service providers can receive non-repayable contributions of up to 75% of costs of those serving remote or Aboriginal communities, or up to 50% of eligible project costs serving other communities. Program recipients may seek an additional 25% of the eligible project costs from other federal sources up to a maximum of 100%. Before Industry Canada's call for applications to Connecting Canadians closed in January 2015, the Department had received more than 300 applications from Internet service providers of all sizes across Canada.[9]

B. First Nations infrastructure

The consideration of First Nations infrastructure is beyond the scope of this study, as Aboriginal Affairs and Northern Development Canada (AANDC) is responsible for providing financial and advisory assistance for the construction, acquisition, operation and maintenance of community infrastructure assets on reserves. However, it is important to note that the New Building Canada Fund includes dedicated funding for First Nations infrastructure under the Gas Tax Fund and the National Infrastructure Component. This funding will be allocated to the First Nations Infrastructure Fund managed by AANDC.

The First Nations Infrastructure Fund (FNIF) assists "First Nations in the provinces to improve and increase public infrastructure on reserves, Crown land, land set-aside for the use and benefit of a First Nation, or off-reserve in the case of cost-shared projects with non-First Nation partners such as neighbouring municipalities."[10] The fund combines three existing federal sources: Infrastructure Canada's Municipal Rural Infrastructure Fund and the Gas Tax Fund; and Aboriginal Affairs and Northern Development Canada's Capital Facilities and Maintenance Program. Under the FNIF, general categories of projects that are eligible for funding are as follows:[11]

- Community planning and skills development;
- Solid waste management and recycling;
- Roads and bridges;
- Energy systems; and
- Connectivity, including high-speed transport networks, internet networks and satellite capacity.

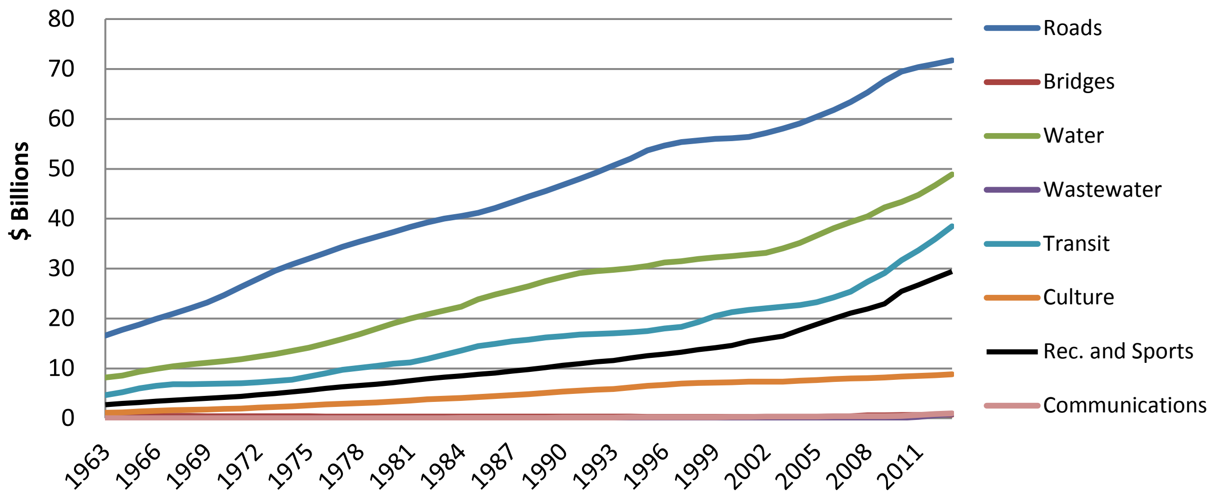
The Kashechewan First Nation submitted a brief to the Committee explaining that, while its infrastructure is aging like that of Canadian municipalities, its problem is unique because of rapid growth in the Aboriginal population.[12] The Committee notes that Budget 2013 proposed allocating funding for the FNIF: $155 million over 10 years from the New Building Canada Fund, in addition to allocations from the Gas Tax Fund amounting to $138.9 million between 2014 and 2019.

The Committee also notes that the Standing Senate Committee on Aboriginal Peoples recently completed its study on challenges relating to First Nations Infrastructure on reserves and expects to table a report with its findings and recommendations before the end of the 41st Parliament.[13]

MUNICIPAL CHALLENGES

As the federal share in public infrastructure fell, and public investments increased to meet growing needs, the municipal share of infrastructure has grown over the decades. According to Industry Canada, municipal governments' shares of road and wastewater infrastructure have grown by 41.5% and 64.2%, respectively, since 1963.[14] Infrastructure Canada prepared the graphic in Figure 4 using Statistics Canada data to illustrate these trends.

Figure 4: Municipally Owned Core Public Infrastructure Net Stock (Billions, constant $)



Notes: Net stock using a hyperbolic function for depreciation from general government. Core public infrastructure includes roads, bridges, transit, water, wastewater, culture, and sports and recreation. Communication Infrastructure includes connectivity, broadband, and telecommunications infrastructure. Data for 2013 based on forecast.
Source: Statistics Canada, National Economic Accounts Division.

Infrastructure Canada estimates that municipal infrastructure currently represents 56.8% of the total value of all public infrastructure in Canada, as shown in Figure 2.

A. Municipal revenues

All municipal representatives who came before the Committee reported that they were pleased that the federal government had made the Gas Tax Fund permanent and indexed it to inflation. The Mayor of Gatineau told the Committee that the “ability to plan into the future is priceless.”[15] Nonetheless, municipal governments report that they still cannot afford to repair, replace, or build new additional infrastructure as required. According to the FCM, municipalities receive only eight cents of every tax dollar collected in Canada, largely through property taxes. The Committee learned that some municipalities, such as the City of Gatineau and Burnaby, have created reserves to fund their infrastructure maintenance and the City of Gatineau has implemented a 1% infrastructure tax.

Some witnesses, including the FCM, recommended aligning municipal taxing powers more with their responsibility for infrastructure. According to an independent urban planning consultant, “I think the tendency to expect local governments to fund a third of such projects, which is a typical expectation, when they don't come close to collecting a third of the actual tax revenue, really fundamentally needs to be rethought.”[16] The Mayor of Kitchener told the Committee that his community supports the view of the FCM and echoed the call for a balanced model of shared responsibilities.

Some witnesses pointed out that the federal government’s new wastewater requirements impose additional costs on the municipal owners of those systems.[17] According to the FCM, one-quarter of all municipalities need to upgrade their water systems to comply with the new regulations. It is estimated that these municipalities need $3.4 billion to meet the 2020 target and an additional $14.6 billion for full compliance. The FCM recommended that the federal government introduce dedicated funding to assist with meeting the new federal wastewater obligations.[18]

B. Access to federal funds

The Community Improvement Fund under the New Building Canada Plan, which consists of the permanent, indexed Gas Tax Fund and the incremental Goods and Services Tax rebate, provides $32 billion in base funding to municipalities. A number of investment categories were added to the Gas Tax Fund including sport, tourism, and cultural infrastructure, bringing the total number of eligible categories to 17. With a few exceptions, the Gas Tax Fund usually flows to the municipalities through the provinces and territories.[19]

The provinces and territories each establish a list of their highest-priority projects for submission to the $10 billion Provincial-Territorial Infrastructure Component of the New Building Canada Plan. The Committee learned that the manner in which the provinces and territories include municipal projects on these lists varies considerably among jurisdictions. For example, the provincial and territorial decisions about which projects to submit for funding may be based on a capital plan, a minimum allocation for each municipality, or a process by which municipalities can submit applications for project funding.

Municipal proponents may apply directly to Infrastructure Canada only for projects under the $4 billion National Infrastructure Component of the New Building Canada Plan. This component of the plan is focussed on projects having a broad and significant impact on economic competitiveness and productivity, rather than projects of local importance. Eligible investment categories include highways and major roads, public transit, connectivity and broadband, drinking water, wastewater, solid waste management and green energy.

Infrastructure Canada reimburses municipalities for costs of projects approved under the National Infrastructure and Provincial-Territorial Components of the New Building Canada Plan after the agreement is in place, work has been done and expenses have been submitted. According to an official from Infrastructure Canada, “A municipality will go ahead and proceed with the project, construction will occur and take place, and they will submit the appropriate documentation to our organization, Infrastructure Canada. We do some reviews, ensure that we have the appropriate information, and we issue a payment. It's quite a simple process.”[20]

Some municipal representatives told the Committee that accessing the available federal funds was a challenge for some communities. According to the FCM, “It's hard for municipalities to understand how their projects are approved or not approved, who is making the decision, and what criteria are being used.”[21] The STO and the City of Gatineau, together, recommended that the federal government ensure that the transportation priorities for the National Capital Region are among the projects submitted by the Government of Quebec to receive federal funding.[22] The FCM recommended that the federal government:[23]

- help the provinces and territories establish the criteria for projects they will accept; and

- allocate to municipalities a proportion of federal funds that matches the municipal share of infrastructure.

The Committee received some recommendations from other witnesses on the eligibility and selection criteria for infrastructure projects under the New Building Canada Plan.

- The Canadian Public Works Association recommended that the federal government take on a role in promoting the use of a sustainability rating system for infrastructure investments and provide dedicated funding to support that.[24]

- An independent urban planning consultant recommended that "shovel-ready" road projects *not* be prioritized because they do not solve the problem of traffic congestion. He recommended prioritizing transit, walking and biking projects instead because they make vehicular movements of people and goods more efficient and create a better return on investment.[25] The Committee notes that "shovel-ready" projects are not prioritized under the New Building Canada Plan.

Two witnesses called for federal funding for the operations and maintenance (O&M) of infrastructure. Professor Siemiatycki, from the University of Toronto, explained to the Committee that a significant and predictable proportion — up to 80% for some projects — of the overall costs over the life cycle of an infrastructure project is O&M. He commented that "it is problematic if money is going to be spent to build these projects without necessarily having the revenue streams, the opportunities to be able to keep them up and running and in states of good repair."[26] The Mayor of Burnaby also recommended that federal funds be given for operating purposes.

The Committee recommends:

2. That the federal government continue to provide flexible and reliable funding to municipalities across the country through the Gas Tax Fund.

3. That, once projects are identified and prioritized by provinces and territories, the federal government continue to evaluate and approve projects as they are submitted.

4. That the federal government continue to work with provinces, territories and municipalities to deliver the New Building Canada Fund.

C. Municipal asset management practices

Discussion concerning the magnitude of infrastructure needs across the country (i.e., the so-called infrastructure "gap" or "deficit") highlighted the fact that there is little agreement on the concept except that the data required to produce an estimate are not readily available. An official from Infrastructure Canada told the Committee that "the key problem goes back to how municipalities and other asset owners collect information and if they're able to collect information. There's a bit of a capacity issue there in terms of various organizations and municipalities being able to tell us what kind of infrastructure they have, what they own, how much it is worth, what kind of deferred maintenance they are involved in, what the condition of the asset is, [and] what the remaining service life of the asset is […]."[27] The FCM and other municipal representatives referred to the 2012 Canadian Infrastructure Report Card, which had identified that nearly one-third of public roads, drinking water, wastewater and storm water facilities were between fair and very poor condition and needed significant investment immediately.[28] Some Committee members expressed the view that, with assets constantly aging and ongoing population growth, it may not ever be possible to eliminate the infrastructure "deficit."

Some witnesses told the Committee that, although some cities (e.g., Edmonton and Ottawa) manage their infrastructure assets very well, the majority of municipal governments lack the capacity and resources to effectively track the status of their infrastructure and make informed investment decisions. Infrastructure Canada officials noted that "capacity building" is an eligible investment category under the Gas Tax Fund and that municipal associations at the provincial and territorial level can also assist municipalities with asset management. The FCM recommended to the Committee that there be "national leadership to create the national scope and perspective that says 'here's the kind of asset management in general that we want to see in this country.'"[29]

The Committee recommends:

5. That the federal government continue to encourage capacity building in asset management for municipalities.

PUBLIC TRANSIT FUNDING

The Committee learned that public transit investments are an eligible investment category for all components of the New Building Canada Plan.

The Canadian Urban Transit Association (CUTA) told the Committee about the surge in government investment in transit in the past decade. "In 2013 the amount of transit infrastructure capital funding from all orders of government reached $4 billion. Over the last decade, the federal government has invested or committed more than $8 billion in funding for transit infrastructure across the country, nearly $1 billion per year."[30]

The economic, social and environmental benefits of transit investment were thoroughly discussed during the course of this study. Some witnesses highlighted that transit investments reduce traffic congestion in major cities, whose impact on economic productivity was considered to be of national importance as it costs Canada billions in lost economic activity already.[31] Transit projects are also expected to attract higher-paying jobs to communities, support the development of business clusters, and reduce urban sprawl, car dependence, greenhouse gases and the cost of living for some households. Witnesses proposed that transit projects generate a return on investment, in terms of incremental economic activity, of at least 20%.

CUTA told the Committee that public transit ridership has been growing strongly and continues to grow faster than urban populations in Canada. Brent Toderian, an independent urban planning consultant, observed that huge cohorts of young adults and baby-boomers in Canada will drive demand for public transit even higher. He told the Committee that "the two largest demographic groups in human history are predisposed towards different priorities in infrastructure — transit, walking and biking."[32]

According to CUTA, municipalities have devoted $2.5 billion of their federal Gas Tax Fund allocations to transit projects over the last 10 years. Five of Canada's largest cities — Toronto, Vancouver, Ottawa, Calgary, and Edmonton — have allocated almost all of their federal Gas Tax Fund allocations to public transit. Federal infrastructure funds have also enabled large transit projects such as Ottawa's Confederation Line as well as smaller ones, such as purchases of buses in Cornwall, Ontario, Whitehorse, Yukon and in Prince Edward Island.

The former Minister of Transport indicated in his response to the Committee's 2012 *Report on Transit in Canada*, that the federal government supports "the consideration and use of public-private partnerships (P3s) by provinces, territories and municipalities in shared-cost capital infrastructure projects and acknowledges that the private sector can offer additional expertise in the provision of public transit from which many jurisdictions have already benefitted."[33]

Budget 2015 proposes new merit-based public transit funding in the amount of $750 million over two years starting in 2017-2018, and $1 billion annually thereafter. The new public transit funding would be administered by PPP Canada, the federal P3 agency, in support of projects that demonstrate more value for money for taxpayers as public-private partnerships. The terms and conditions of the proposed new public transit funds have not been announced. Major transit P3s in Edmonton, Winnipeg, Kitchener-Waterloo, York, Toronto and Ottawa are already underway. What the Committee heard from stakeholders about P3s is discussed in more detail in the following section.

CUTA told the Committee that its members strongly support the new federal transit funding proposal and hope that the terms for accessing the funds will be flexible. By proposing $1 billion in dedicated transit funding per year starting in 2020 "the government is setting the wheels in motion to unlock funding for major infrastructure projects across the country."[34] Although CUTA appreciates the predictability of the new funding, it told the Committee that there would still be a shortfall of $18 billion for the $56 billion in transit projects planned over the next five years. CUTA estimates that 28% of transit needs over the next five years will be for rehabilitation or replacement.

FCM also signalled its members' approval of the new public transit funding announced in Budget 2015. As the terms and conditions of the funds are established, however, the FCM told the Committee that it would like to ensure "that local governments retain the flexibility to determine the appropriate degree of private sector involvement."[35] Since the proposed new public transit fund is set up to respond to big projects, which take time, the delay in disbursing those funds is not seen as a problem by the FCM as long as the approval process starts soon.

Some representatives of individual municipalities expressed some concerns about the P3 requirements of the proposed new public transit funding. For example, the Mayor of Burnaby would like to have a choice not to engage in a P3 for a large transit project, and representatives from the City of Montréal suggested that the new public transit funds for P3 projects would only benefit the transit systems in the largest municipalities in Canada. The City of Montréal recommended that public transit funding be flexible, inclusive and long term. The representatives of the City of Vancouver also recommended having flexible rules around the new transit fund.

The FCM and CUTA both requested that the federal contribution for P3 transit projects be raised to one-third of eligible projects costs, like other federal funds. The FCM told the Committee that it is critical that the federal government invests as a true one-third partner in these projects as P3s do not reduce the need for government funding for the capital costs of public goods like major transit projects.

In a brief to the Committee, the Canadian Association of Ferry Operators (CAFO) indicated that their members are not satisfied with transit funding. Only ferries that are part of an urban transit system are eligible for federal funding under the New Building Canada Plan, which makes ferry operations outside of cities ineligible. The CAFO argues that ferries that carry goods as well as passengers outside of urban areas make important contributions to the economy and should be eligible for New Building Canada Plan funds.

The Committee recommends:

6. That the federal government continue to work with provinces, territories and municipalities to deliver record levels of funding for public transit through the New Building Canada Plan, the Gas Tax Fund and the new Public Transit Fund.

PUBLIC-PRIVATE PARTNERSHIPS

The following sections summarize what the Committee learned from witnesses about using P3s to procure public infrastructure.

A. Public-private partnerships versus conventional procurement

The Committee learned that the P3 procurement model is one in which the public sector bundles the responsibilities of an infrastructure project (i.e., to design, finance, build, operate and maintain the infrastructure) into a single contract with the private sector.[36] PPP Canada explained to the Committee that, "P3 is not a single thing; it's a family of procurement options with the private sector."[37] When the private sector is responsible for operating and/or maintaining the infrastructure, the P3 contract may be for the entire economic life of the project. The private sector partner gets paid for the project either by charging users of the infrastructure or through payments directly from the public sector.

The P3 model was developed in order to overcome some recurring problems encountered with the conventional public procurement model, whereby the public sector would typically have separate contracts with different private parties to design and then build infrastructure. In a conventional public procurement model, the public sector usually finances the project, and operates and maintains it over its life cycle. Some witnesses told the Committee that this model often results in costly delays, greater than anticipated maintenance costs and, potentially, operational challenges.[38]

An effective P3 contract makes the private sector partner responsible for all additional costs when project timelines and specifications are not respected, when there are issues related to infrastructure performance or when there are unanticipated maintenance costs over the project life. The Canadian Council for Public Private Partnerships (CCPPP) told the Committee that “What makes P3s quite unique is that they are ensuring that an asset that's being built will be maintained to a standard agreed to by both government and the private sector at a particular level and returned to government 30 years from now in exactly the condition that was agreed to. If that isn't the case along the way, for instance if the facility is not maintained, the private sector is penalized for that.”[39] The downside of the private sector financing a project is that they borrow at a higher rate than public sector and the additional interest must be repaid by users or taxpayers.

As a result of the considerable complexity and costs of negotiating and closing a P3 deal, the model has been found to be a viable alternative to conventional procurement for only 10%–20% of all infrastructure projects in Canada.[40]

The kinds of projects that tend to be most suitable as P3s are large and complex and for which performance expectations are easily measured and expected to remain the same over the project life cycle.

B. Canada’s experience with public-private partnerships

The Canadian experience with P3s spans a few decades, many sectors and all levels of government. The CCPPP told the Committee that there are now 224 P3s operational, under construction, or in procurement across the country. Canadian P3s include hospitals, schools, prisons, highways, federal buildings and bridges, water treatment facilities, solid waste facilities, recreation and public transit projects representing a total investment of more than $72 billion.

Almost all witnesses who appeared before the Committee felt that Canadian P3s have been successful in terms of being completed on time and on budget. Professor Matti Siemiatycki, who has studied P3s extensively, noted that the P3s completed since 2000 have not resulted in any major failures, contract negotiations or bankruptcies once operational. He also observed that the public sector has largely avoided controversy with P3s in Canada by retaining operations in the public sector and paying the private partner for its services directly rather than imposing user fees.

The CCPPP told the Committee that independent analysis has demonstrated that P3s saved governments in Canada $9.9 billion in avoided costs because projects have been completed on time and on budget. According to PPP Canada, the federal P3 agency, Canadian P3s have delivered on average 5% to 15% better value for money than what was expected to be achieved through conventional procurement.

PPP Canada told the Committee that, with its diverse and growing project pipeline, international competition for contracts, and mature, low-cost, capital market for infrastructure projects, Canada is now recognized as one of the global leaders in P3 procurement.[41] The P3 market is further supported by P3 institutions established at the provincial and federal levels, which develop and share information about best practices and guide project proponents.

C. Municipal perspectives

Municipal representatives who came before the Committee demonstrated different levels of acceptance of the P3 approach. The Mayor of Burnaby was at one end of the spectrum, dismissing P3s out of hand as privatization.[42] The Mayor of Gatineau declared that his city is not too familiar with P3s and was concerned that only the largest cities in Canada would have projects big enough to be approved.[43] Based on their experiences with P3s, the representatives from the cities of Vancouver and Surrey were strongly in favour of P3 procurement when it is determined to generate better value for money. The Mayor of Surrey also underscored that ownership of the asset remains with the public sector.[44]

Some municipal representatives were concerned that the mandatory P3 screen under the New Building Canada Plan for projects over $100 million took away the choice to use conventional procurement methods, if that was the city's preference. Some witnesses also expressed concern that the new Public Transit Fund would leave out all but Canada's largest cities.[45] Infrastructure Canada and PPP Canada officials reassured the Committee that there is $14 billion in funding for non-P3 infrastructure projects in the National Infrastructure and the Provincial-Territorial Infrastructure Components of the Building Canada Fund.

The Committee recommends:

7. That the federal government continue to encourage the use of public-private partnerships (P3s) where an analysis proves there is value for money.

D. Reducing public-private partnership costs

Transferring financial risk to the private sector partner, and the considerable complexity and costs of negotiating and closing a P3 deal, make P3s expensive relative to conventional procurements. Professor Siemiatycki told the Committee that research in Europe has shown that P3s cost 25% more in upfront capital costs than conventional procurement projects. The City Manager of Surrey, whose city is entering the construction phase of Canada's first biofuel P3, said that "that comes at a price where you have to pay the private consortium to take those risks, but at least you know what you're paying and what you're getting."[46] Professor Siemiatycki described the "P3 premium" as an insurance policy against unexpected outcomes in terms of the cost or performance of the infrastructure because with a P3, the costs are known in advance for the entire life cycle of the asset.

Professor Siemiatycki suggested that paying more for private financing over the longer term operational phase of the project might not be worth it. He told the Committee that, once operational, no recent Canadian P3s have failed or required contract negotiations; he therefore questioned whether the risks beyond the construction phase were worth the cost of private financing over the life of the project. He cited a report by the Auditor General of Ontario that concluded that P3s had cost the province $8 billion more than if the projects had been effectively procured in the conventional method. While Professor Siemiatycki admitted that the public sector does not have a reputation for staying on budget and on time, he believes that there are potential cost savings that could be achieved by retaining the O&M portion with the public sector in P3s. In order to make P3s less expensive for the public sector, Professor Siemiatycki recommended that:[47]

- the bureaucracy be trained to manage O&M risks better; and
- PPP Canada should analyze the data from P3 projects in order to better quantify the value of O&M risk.

Conversely, PPP Canada suggested to the Committee that private financing is essential — even definitional — for a P3 as it incentivizes the private partner to build high-quality infrastructure and maintain it properly over its life cycle.

Witnesses representing municipalities and public transit agencies recommended that the federal contribution to P3s be raised to 33% of eligible project costs, as is the case for other federal infrastructure funding programs.[48]

E. Delivering all infrastructure better

Professor Siemiatycki noted that 85% to 90% of public projects are procured in the conventional way, not as P3s. He suggested to the Committee that "the federal government could play a much more information coordinating role beyond just P3s."[49] In order to improve public sector management of conventionally procured projects, Professor Siemiatycki recommended expanding the mandate of PPP Canada to advise all levels of government on all types of procurement options.[50]

LIST OF RECOMMENDATIONS

RECOMMENDATION 1

That the federal government continue to be an important funding partner for infrastructure projects across Canada with the New Building Canada Plan.

RECOMMENDATION 2

That the federal government continue to provide flexible and reliable funding to municipalities across the country through the Gas Tax Fund.

RECOMMENDATION 3

That, once projects are identified and prioritized by provinces and territories, the federal government continue to evaluate and approve projects as they are submitted.

RECOMMENDATION 4

That the federal government continue to work with provinces, territories and municipalities to deliver the New Building Canada Fund.

RECOMMENDATION 5

That the federal government continue to encourage capacity building in asset management for municipalities.

RECOMMENDATION 6

That the federal government continue to work with provinces, territories and municipalities to deliver record levels of funding for public transit through the New Building Canada Plan, the Gas Tax Fund and the new Public Transit Fund.

RECOMMENDATION 7

That the federal government continue to encourage the use of public-private partnerships (P3s) where an analysis proves there is value for money.

1 Infrastructure Canada, *2013–2014 Departmental Performance Report*, p. 5 (see Figure 1).

2 The federal government privatized Air Canada in 1989, Canadian National Railway in 1995 and the civil air navigation system in 1997 (NAV Canada). Many smaller airports and ports were transferred to other levels of government or private sector interests during the 1990s and 2000s while some facilities were decommissioned.

3 House of Commons, Standing Committee on Transport, Infrastructure and Communities [TRAN], *Evidence,* 41st Parliament, 2nd Session, 5 May 2015, 1530 (Jeff Moore, Assistant Deputy Minister, Policy and Communications, Infrastructure Canada); *Evidence*, 12 May 2015, 1540 (Brock Carlton, Chief Executive Officer, Federation of Canadian Municipalities [FCM]).

4 TRAN, *Evidence,* 5 May 2015, 1645 (Moore); *Evidence,* 12 May 2015, 1540 (FCM); *Evidence*, 5 May 2015, 1645 (Ed Komarnicki, Member of Parliament, Souris-Moose Mountain).

5 TRAN, *Evidence*, 12 May 2015, 1600 (FCM).

6 Ibid., 1615.

7 Infrastructure Canada, *Written Response*, 29 May 2015, p. 7.

8 Digital Canada 150, *About the Program*, *Connecting Canadians.*

9 TRAN, *Evidence,* 28 May 2015, 1605 (Corinne Charette, Senior Assistant Deputy Minister, Spectrum, Information Technologies and Telecommunications, Department of Industry).

10 Aboriginal Affairs and Northern Development Canada, *First Nation Infrastructure Fund (FNIF) Program Guide*, p. 1.

11 Ibid.

12 Hatch Ltd. and Kashechewan First Nation, Brief, received 8 June 2015.

13 Standing Senate Committee Aboriginal Peoples, "Study on challenges relating to First Nations infrastructure on reserves," *Studies & Bills.*

14 Infrastructure Canada, Written Response, 29 May 2015, p.3.

15 TRAN, *Evidence*, 7 May 2015, 1710 (Maxime Pedneaud-Jobin, Mayor, City of Gatineau).

16 TRAN, *Evidence*, 28 May 2015, 1545 (Brent Toderian, TODERIAN UrbanWORKS).

17 *Wastewater Systems Effluent Regulations*, SOR/2012-139; TRAN, *Evidence*, 12 May 2015, 1540 (FCM); *Evidence*, 26 May 2015, 1535 (Derek Corrigan, Mayor, City of Burnaby).

18 TRAN, *Evidence*, 12 May 2015, 1540 (FCM).

19 The Gas Tax Fund is provided directly to Toronto and through the Association of Municipalities for Ontario to other recipients. In B.C., the Gas Tax Fund flows through the Union of B.C. Municipalities.

20 TRAN, *Evidence,* 5 May 2015, 1705 (Bogdan Makuc, Director General, Program Integration, Infrastructure Canada).

21 TRAN, *Evidence*, 12 May 2015, 1620 (FCM).

22 City of Gatineau and Societé de transport de l'Outaouais, Written Response, 2 June 2015.

23 TRAN, *Evidence*, 12 May 2015, 1615 and 1635 (FCM).

24 Ibid., 1535 (CPWA).

25 TRAN, *Evidence*, 28 May 2015, 1550 (Toderian).

26 Ibid., 1620 (Matti Siemiatycki, Associate Professor, University of Toronto).

27 TRAN, *Evidence,* 5 May 2015, 1600 (Moore).

28 The Canadian Infrastructure Report Card, "2012 Infrastructure Report Card."

29 TRAN, *Evidence*, 12 May 2015, 1705 (FCM).

30 TRAN, *Evidence*, 7 May 2015 1535 (Patrick Leclerc, Vice President, Strategic Development, Canadian Urban Transit Association [CUTA]).

31 TRAN, *Evidence*, 28 May 2015, 1545 (Toderian); City of Toronto, Brief — Appendix, 3 June 2015, p.1.

32 TRAN, *Evidence*, 28 May 2015, 1550 (Toderian).

33 TRAN, *Study on Transit in Canada — Government Response*, 1st Session, 41st Parliament, June 2012.

34 TRAN, *Evidence*, 7 May 2015 1535 (CUTA).

35 TRAN, *Evidence*, 12 May 2015, 1540 (FCM).

36 P3 is a term that covers private sector contracts that may bundle any number of project responsibilities; however, private sector financing is necessary for a P3.

37 TRAN, *Evidence,* 7 May 2015, 1555 (John McBride, Chief Executive Officer, PPP Canada Inc.).

38 TRAN, *Evidence*, 7 May 2015, 1605 (McBride); *Evidence,* 12 May 2015, 1715 (Mark Romoff, President and Chief Executive Officer, Canadian Council for Public-Private Partnerships); *Evidence,* 28 May 2015, 1530 (Siemiatycki).

39 TRAN, *Evidence,* 12 May 2015, 1715 (Romoff).

40 TRAN, *Evidence,* 7 May 2015, 1600 (McBride); *Evidence,* 12 May 2015, 1550 (Romoff), *Evidence,* 28 May 2015, 1530 (Siemiatycki).

41 TRAN, *Evidence,* 7 May 2015, 1530 (McBride).

42 TRAN, *Evidence (unedited)*, 26 May 2015, 1535 (Corrigan).

43 TRAN, *Evidence*, 7 May 2015, 1645 (Pedneaud-Jobin).

44 TRAN, *Evidence*, 26 May 2015, 1615 (Linda Hepner, Mayor, City of Surrey).

45 TRAN, *Evidence*, 26 May 2015, 1535 (Corrigan); *Evidence*, 7 May 2015, 1645 (Pedneaud-Jobin).

46 TRAN, *Evidence*, 26 May 2015, 1630 (Vincent Lalonde, City Manager, City of Surrey).

47 TRAN, *Evidence,* 28 May 2015, and 1540 and 1635 (Siemiatycki).

48 TRAN, *Evidence*, 7 May 2015, 1540 (CUTA); *Evidence*, 12 May 2015, 1540 (FCM).

49 TRAN, *Evidence,* 28 May 2015, 1635 (Siemiatycki).

50 Ibid.

APPENDIX A
LIST OF WITNESSES

Organizations and Individuals	Date	Meeting
Infrastructure Canada	2015/05/05	55
Bogdan Makuc, Director General, Program Integration		
Jeff Moore, Assistant Deputy Minister, Policy and Communications		
Stephanie Tanton, Director, Strategic Policy and Priority Initiatives		
Canadian Urban Transit Association	2015/05/07	56
Patrick Leclerc, Vice-President, Strategic Development		
Alex Maheu, Manager, Government Relations and Policy		
City of Gatineau		
Gilles Carpentier, City Councillor		
Maxime Pedneaud-Jobin, Mayor		
Patrick Robert-Meunier, Political Councillor		
Denis Tassé, City Councillor		
PPP Canada Inc.		
John McBride, Chief Executive Officer		
Canadian Council for Public-Private Partnerships	2015/05/12	57
Mark Romoff, President and Chief Executive Officer		
Canadian Public Works Association		
Kealy Dedman, President		
Federation of Canadian Municipalities		
Brock Carlton, Chief Executive Officer		
Daniel Rubinstein, Manager, Policy and Research		
City of Burnaby	2015/05/26	58
Derek Corrigan, Mayor		
City of Surrey		
Jaime Boan, Manager, Transportation		
Linda Hepner, Mayor		
Vincent Lalonde, City Manager		
Paul Lee, Rapid Transit and Strategic Projects Manager		

Clean Energy Canada	2015/05/26	58
Dan Woynillowicz, Director, Policy and Partnerships		
As an individual	2015/05/28	59
Matti Siemiatycki, Associate Professor, University of Toronto		
Department of Industry		
Corinne Charette, Senior Assistant Deputy Minister, Spectrum, Information Technologies and Telecommunications		
Éric Dagenais, Assistant Deputy Minister, Spectrum, Information Technologies and Telecommunications		
TODERIAN UrbanWORKS		
Brent Toderian		
City of Kitchener	2015/06/02	60
Berry Vrbanovic, Mayor		
City of Montreal		
Benoit Champagne, Acting Director of Transports, Infrastructures, Road Network and Transports Service		
Chantal Morissette, Director, Water Service		
Lionel Perez, City Councillor, Member of the Executive Committee		
City of Vancouver		
Penny Ballem, City Manager		
Fred Cummings, Vice-President, Infrastructure Management and Engineering, TransLink		
Jerry Dobrovolny, Acting General Manager of Engineering		

APPENDIX B
LIST OF BRIEFS

Organizations and individuals

Canadian Ferry Operators Association

Canadian Public Works Association

City of Toronto

Hatch

International Union of Painters and Allied Trades

Kashechewan First Nation

APPENDIX C
RECENT HISTORY OF FEDERAL CONTRIBUTIONS TO INFRASTRUCTURE

Annual federal support for provincial, territorial and municipal infrastructure increased from $571 million in 2003–2004 to nearly $5 billion in 2015–2016, peaking at nearly $8 billion in 2010–2011.[1] Infrastructure Canada provides the majority of federal support for public infrastructure and does so largely through time-limited transfer programs, with the exception of the statutory Gas Tax Fund. In 2007, a number of programs were grouped together and presented as the $33-billion Building Canada Plan.[2] The New Building Canada Plan was announced in 2014, whose component programs amount to $53 billion.[3] The purpose, timing, amounts and cost-sharing requirements of the federal government's main transfer programs for public infrastructure since 2000, including those comprising the two Building Canada Plans, are described in the sections below.[4]

1. Infrastructure Canada Program (2000–2010)

The $2.05-billion Infrastructure Canada Program (ICP) was launched in 2000 with the objective of funding projects that protect the environment, and support long-term community and economic growth. Under this contribution program, projects were selected and approved on an individual basis. In terms of funding, the Government of Canada matched provincial/territorial contributions by providing up to one-third of the cost of each infrastructure project.[5]

2. Canada Strategic Infrastructure Fund (2001–2017)

In 2001, the federal government announced that it would establish a new contribution program to support large-scale strategic projects of major federal and regional significance. Commitments to the Canada Strategic Infrastructure Fund (CSIF) were reaffirmed in the budgets for 2003 and 2006 bringing the fund to a total of $4.3 billion. The federal government provided funding for up to 50% of the costs of eligible projects to recipients. The main categories of investment under the CSIF were highway and rail

---

1 Infrastructure Canada, 2013–2014 Departmental Performance Report, p. 5 (see Figure 1); Budget 2015, Chapter 3.4 – Investing in Infrastructure.

2 Infrastructure Canada, "Building Canada Plan," *Programs*.

3 Infrastructure Canada, New Building Canada Plan.

4 Not included here are targeted funds such as the Broadband Canada Fund (now called Connecting Canadians program), which is administered by Industry Canada, or the various First Nations funds administered by Aboriginal Affairs and Northern Development Canada.

5 Treasury Board Secretariat of Canada, "Infrastructure Canada Program," *Horizontal Initiatives Database*.

infrastructure ($1 billion) and local transportation infrastructure (i.e., public transit) ($900 million).[6]

3. Municipal Rural Infrastructure Fund (2004–2014)

Announced in Budget 2003 and increased in 2006, the $1.2-billion Municipal Rural Infrastructure Fund (MRIF) was a cost-shared contribution program that focused on the infrastructure needs of smaller communities.[7] For most projects the MRIF provided up to one-third of eligible project costs. More than 80% of the funding was dispersed to municipalities with populations of less than 250,000 by the federal regional development agencies.[8] This fund, which supported nearly 2,000 projects, was largely concluded on 31 March 2014.

4. Border Infrastructure Fund (2004–2014)

The $600-million Border Infrastructure Fund was announced in 2001 and has been fully allocated. This fund was intended to improve the physical and transportation system infrastructure and analytical capacity at the largest Canada–U.S. surface border crossings. Transport Canada delivered up to 50% of the eligible projects costs to recipients. Eleven border improvement projects were announced under the Border Infrastructure Fund, representing a total investment of $1.2 billion.

5. Gas Tax Fund (2005–Present)

The Gas Tax Fund (GTF) was first announced in Budget 2005 as part of the New Deal for Cities and Communities. The GTF "provides predictable, long-term, stable funding for Canadian municipalities to help them build and revitalize their local public infrastructure."[9] At that time, it was billed as a five-year program with an annual allocation of $1 billion.[10] However, the GTF was extended to 2013–2014 in Budget 2007.[11] In Budget 2008, the federal government announced that the program would be made permanent with funding of $2 billion per year beyond 2013–2014.[12] This announcement was followed by a Budget Implementation Bill in December 2011 which legislated the GTF as a permanent source of funding at $2 billion per year,[13] and then by legislation that

---

6 Infrastructure Canada, 2013–2014 Departmental Performance Report, p. 36.

7 Treasury Board of Canada Secretariat, "Municipal Rural Infrastructure Fund," *Horizontal Initiatives Database*.

8 Infrastructure Canada, 2013–2014 Departmental Performance Report, p. 37.

9 Infrastructure Canada, "The Federal Gas Tax Fund: Permanent and predictable funding for municipalities," *New Building Canada Plan*.

10 Department of Finance Canada, The Budget Plan 2005, p. 199.

11 Department of Finance Canada, The Budget Plan 2007: Aspire to a Stronger, Safer, Better Canada, p. 19.

12 Department of Finance Canada, The Budget Plan 2008: Responsible Leadership, p. 106.

13 *Keeping Canada's Economy and Jobs Growing Act*, S.C. 2011, c. 24, s. 161.

indexed the GTF at 2% per year (to be applied in $100-million increments) in June 2013.[14] As a result, Gas Tax Fund payments are now a statutory item in the main estimates.

GTF Agreements must be signed with provinces and territories to establish accountability for the flow of funds. Unlike other contribution programs, the GTF provides recipients with annual funding up-front and allows municipalities to pool, bank, borrow against, and cash manage the funds. The GTF does not have any cost-sharing or other requirements. Between 2005 and 2014, $13 billion has been transferred to municipalities through the GTF.[15]

6. Public Transit Fund (2005–2010)

Also announced as part of the New Deal for Cities and Communities, the Public Transit Fund (PTF) was a $400-million transfer payment program designed to provide funding to improve transit services in Canada. The purpose of the PTF was to contribute to the federal government's environmental objectives related to reduced greenhouse gas emissions and decreased traffic congestion.[16] The PTF was delivered with the terms and conditions similar to the GTF agreements.

7. Public Transit Capital Trusts (2006–2009)

The Public Transit Capital Trusts (PTCT), with a combined funding envelope of $1.4 billion, were made available to provinces and territories following Budget 2006 ($900 million) and Budget 2008 ($500-million top-up).[17] The PTCT provided funding to provinces and territories to assist them with capital investments in public transit infrastructure that would reduce traffic congestion as well as carbon dioxide and their emissions.[18] The beneficiaries of the PTCT owned their portion of the funds and the federal government provided guidelines on how they were to be spent. The entire $1.4 billion that was committed by the federal government under PTCT was spent on the delivery of public transit infrastructure.[19]

8. Asia-Pacific Gateway and Corridor Transportation Infrastructure Fund (2006–2017)

The $591-million Asia-Pacific Gateway and Corridor Initiative was implemented in 2006 to enhance the capacity and efficiency of major ports, airports, border crossings, road and rail connections in British Columbia that connect the North American supply

---

14 Economic Action Plan 2013 Act, No. 1, S.C. 2013, c. 33, s. 233.

15 Budget 2015, Chapter 3.4 – Investing in Infrastructure.

16 Infrastructure Canada, "Public Transit Fund," *Other Programs*.

17 Department of Finance Canada, The Budget Plan 2006: Focusing on Priorities, p. 115; and Department of Finance Canada, The Budget Plan 2008: Responsible Leadership, p. 132.

18 Urban Transportation Task Force, Urban Transit in Canada: Taking Stock of Recent Progress, October 2009, p. 17.

19 Ibid.

chain to the Asia-Pacific region. The maximum federal contribution is 50% of total eligible project expenditures.

9. Goods and Services Tax Rebate (2007–2014)

The Goods and Services Tax (GST) Rebate was part of the 2007 Building Canada Plan. The GST rebate to municipalities was increased from 57% to 100% of the GST they paid over seven years and was expected to amount to more than $5.8 billion in incremental funds.[20] Unlike other federal infrastructure funds, municipalities directed the GST Rebate towards their highest priorities, including the maintenance and operation of existing infrastructure, and were not required to submit expenditure reports to the federal government.

10. Provincial-Territorial Infrastructure Base Fund (2007–2014)

The $2.3-billion Provincial-Territorial Infrastructure Base Fund (PT Base) was announced in Budget 2007 and all funds had been committed as of 31 March 2014.[21] The PT Base provided each province and territory with a $175-million allocation over seven years (from 2007 to 2014) to address their infrastructure needs. The program was designed "to provide predictable funding to provinces and territories to address core infrastructure priorities."[22] Provinces and territories were required to prepare and submit a capital plan in order to receive funds, which were distributed in advance. The provinces were expected to contribute equally to the entire capital plan (not individual projects), whereas the territories had to contribute at least one-third to their overall capital plan. As with the GTF, recipients were permitted to pool, bank or cash-manage the PT Base funds.

11. Building Canada Fund (2007–2014)

Launched in 2007, the $8.8-billion Building Canada Fund (BCF) was a contribution program that was designed "to address national, regional and local infrastructure priorities … in three areas of national importance: a stronger economy, a cleaner environment, and strong and prosperous communities."[23] Funding under the BCF was allocated based on population size taken from census data. The program operated under two frameworks in the provinces: the Major Infrastructure Component (BCF-MIC) and the Communities Component (BCF-CC).

The BCF-MIC targeted larger, strategic projects of national or regional significance. Projects funded under the BCF-MIC were selected through federal-provincial negotiations

20 Infrastructure Canada, "Building Canada – Modern Infrastructure for a Strong Canada," *Building Canada plan*.

21 See "equal per jurisdiction funding," in Department of Finance of Canada, The Budget Plan 2007: Aspire to a Stronger, Safer, Better Canada, pp. 136, 146, 166 and 167.

22 Infrastructure Canada, "Provincial-Territorial Base Fund," *Programs*.

23 Infrastructure Canada, Building Canada Fund and "Strong and Prosperous Communities," *Building Canada Fund – Funding Categories*.

and measured against minimum federal eligibility requirements.[24] The federal government contributed up to a maximum of 50% of eligible project costs, but limited its contribution to one-third for municipal projects and 25% for private sector projects. At $3 billion, public transit infrastructure was the investment category that received the most BCF-MIC funding, followed by national highway system infrastructure at over $2 billion.[25]

The BCF-CC contributed one-third to the cost of projects intended to construct, renew and improve infrastructure in communities with fewer than 100,000 residents.

12. P3 Canada Fund (2007–Present)

Announced in Budget 2007,[26] the $1.25-billion P3 Canada Fund was created "to improve the delivery of public infrastructure and provide better value, timeliness and accountability by increasing the effective use of P3s [public-private partnerships]."[27] P3s for infrastructure projects usually involve a government entering into a contract with a private consortium to transfer a number of the components of procurement and management (e.g., design, financing, construction, operation, maintenance) as well as some of the risks.[28] In Budget 2013, the federal government committed to providing an additional $1.25 billion for the renewal of this contribution program.[29] The New Building Canada Plan added $1.25 billion for the P3 Canada Fund in 2014.[30]

Other than requiring that projects get delivered through a public-private partnership, the P3 Canada Fund differs from other federal infrastructure contribution programs in that the federal government will contribute up to a maximum of 25% of a project's total eligible costs.[31]

13. Gateways and Border Crossing Fund (2008–2018)

This merit-based program was established in Budget 2007 with $2.1 billion to improve infrastructure at key border crossings between Canada and the United States.

---

24 The federal eligibility requirements for each investment category are contained in the Terms and Conditions of the program which are classified as Secret.

25 Infrastructure Canada, 2013–2014 Departmental Performance Report, p. 33.

26 Department of Finance of Canada, The Budget Plan 2007: Aspire to a Stronger, Safer, Better Canada, p. 166.

27 PPP Canada, "The P3 Canada Fund: How to Apply," *Apply for Funding*.

28 For more information about P3s, see Allison Padova, Public-Private Partnerships: Why, Where, When, and How, Publication no. 2010-18-E, Parliamentary Information and Research Service, Library of Parliament, Ottawa, 12 May 2010.

29 Department of Finance Canada, Economic Action Plan 2013: Jobs, Growth and Long-Term Prosperity, 21 March 2013, p. 8.

30 Budget 2015, Chapter 3.4 – Investing in Infrastructure.

31 PPP Canada, Application Guide and Application Form, 2014.

Transport Canada administers the fund, of which at least $400 million will be used to build access to the new bridge between Windsor and Detroit from Highway 401.[32]

14. Infrastructure Stimulus Fund (2009–2011)

The $4-billion Infrastructure Stimulus Fund (ISF) was announced in Budget 2009 following the onset of the global financial crisis and focused on construction-ready infrastructure projects.[33] Initially intended as a two-year contribution program, the deadline was extended to 31 October 2011 to provide sufficient time for some of the 4,000 beneficiary projects to be completed.[34] The ISF funding was allocated to provinces and territories on a per-capita basis and covered up to 50% of eligible project costs.

15. G8 Legacy Fund (2009)

Infrastructure Canada administered this $50-million fund to help build infrastructure related to the G8 meeting that took place in Huntsville, Ontario and provide legacy tourism and community assets for the region.[35]

16. New Building Canada Fund (2014–2024)

In Budget 2013, the Government of Canada announced the creation of the $14-billion New Building Canada Fund.[36] The New Building Canada Fund is divided into two main contribution programs: the $4-billion National Infrastructure Component (NIC) and the $10-billion Provincial-Territorial Infrastructure Component (PTIC). The NIC is reserved for projects of "national significance," is a merit-based program that does not have any predetermined provincial allocations, and has objectives related to long-term economic growth and productivity.[37] Under the PTIC, each province and territory is scheduled to receive a base amount of funding ($250 million) plus a per-capita allocation to fund national, regional and local priorities that contribute to economic growth, a clean environment and stronger communities.[38] A $1-billion envelope from the PTIC is reserved for projects in communities with fewer than 100,000 residents. Under both the NIC and the PTIC, the federal government may provide up to the 50% of eligible costs for provincial projects and up to 75% for projects in the territories.

According to Budget 2015, after only one year in operation contributions from the New Building Canada Fund have already been committed to support projects with total

---

32 Transport Canada, "Gateways and Border Crossings Fund (GBCF)," *Infrastructure and Research*.

33 Department of Finance Canada, Budget 2009: Canada's Economic Action Plan, p. 145.

34 Infrastructure Canada, "Infrastructure Stimulus Fund," *Other Programs*.

35 Infrastructure Canada, "G8 Legacy Fund," *Other Programs*.

36 Department of Finance Canada, Economic Action Plan 2013: Jobs, Growth and Long-Term Prosperity, 21 March 2013, p. 159.

37 Infrastructure Canada, New Building Canada Fund: National Infrastructure Component.

38 Infrastructure Canada, New Building Canada Fund: Provincial-Territorial Infrastructure Component – National and Regional Projects.

costs of more than $5.7 billion. These projects include highway improvements and a new bridge in Prince Edward Island (up to $5.7 million), highway improvements in Nova Scotia (up to $20 million), expansion and enhancements at the Port of Montreal (up to $43.7 million), extension of the subway in Toronto (up to $660 million), a new water treatment plant in Manitoba (up to $12.1 million), and highway improvements in Saskatchewan (up to $22.8 million).

17. Green Infrastructure Fund (2009–2014)

The $1-billion Green Infrastructure Fund was announced in 2009 for projects in aid of cleaner air and water as well as reduced greenhouse gas emissions. Infrastructure Canada administered this merit-based fund, which was fully allocated amongst 19 proposed projects by 2011.[39] Through the GIF, the federal government provided up to 50% federal funding to recipients, including other levels of government, public sector bodies, not-for-profit organizations and private sector companies. The major investment categories under the GIF were wastewater infrastructure ($300 million) and solid waste management infrastructure ($80 million).[40]

18. Inuvik to Tuktoyaktuk Highway Fund

In 2011, the federal government announced $150 million towards an all-season road between Inuvik and Tuktoyaktuk in the Northwest Territories. The amount was increased by $50 million in 2013.[41]

19. Investments in Federal Infrastructure (2014–2021)

In November 2014, the federal government announced $5.8 billion for improvements to federal, rather than provincial/territorial or municipal, infrastructure between 2013–2014 and 2020–2021.[42] Investment commitments to date include:

- Improvements in national historic sites, parks and marine conservation areas ($2.8 billion)
- Repair and construction of on-reserve schools ($500 million)
- Repair and upgrade of Canadian Armed Forces facilities ($452 million)
- Replacing border infrastructure ($440 million)
- Maintenance, upgrading and construction of federal buildings and other assets ($400 million)

---

39 Infrastructure Canada, "Green Infrastructure Fund," *Programs*.

40 Infrastructure Canada, 2013–2014 Departmental Performance Report, p. 33.

41 Infrastructure Canada, "Minister Aglukkaq Confirms New Funding for Inuvik To Tuktoyaktuk Highway," *News release*, 13 March 2013.

42 Prime Minister of Canada, "Federal Infrastructure," *News*, 24 November 2014.

- Repairs and upgrading federal laboratories and research facilities ($380 million)

- Repairing and maintaining small craft harbours ($288 million)

- Enhancements to federally-owned and operated airports and VIA Rail's infrastructure ($204 million)

- Renewal of and repairs to heritage and museum sites ($191 million)

- Repair and procurement of vessels and small craft for the Canadian Coast Guard and Fisheries and Oceans Canada ($183 million)

20. Infrastructure Funds Included in Budget 2015

Budget 2015 proposes $750 million between 2017 and 2019 to PPP Canada in order to promote public transit infrastructure projects. Budget 2015 would also invest $1 billion per year in a new Public Transit Fund, which would start in 2020 and continue for decades. The long-term stream of annual contributions to public transit operators through the Public Transit Fund would guarantee a portion of the revenue to project proponents, reducing the risk and increasing the financing available for such projects. The federal government projects that $10 billion dispersed in this manner though the Public Transit Fund could enable capital investments in public transit totalling $65 billion over the same period.

Budget 2015 also proposes a Canada 150 Community Infrastructure Program which would "support the renovation, expansion and improvement of existing community infrastructure in all regions of the country."

In Budget 2015, the federal government proposes to increase the borrowing limits of the Government of the Northwest Territories to $1.3 billion (up from $800 million) and the Government of Nunavut to $650 million (from $400 million) to allow them to invest in their infrastructure. These proposed increases in the territorial borrowing limits would require approval from the Governor in Council.

REQUEST FOR GOVERNMENT RESPONSE

Pursuant to Standing Order 109, the Committee requests that the government table a comprehensive response to this Report.

A copy of the relevant *Minutes of Proceedings* (Meeting N^{os} 55, 56, 57, 58, 59, 60, 61 and 62) is tabled.

Respectfully submitted,

Larry Miller

Chair

DISSENTING OPINION OF THE OFFICIAL OPPOSITION
THE NEW DEMOCRATIC PARTY OF CANADA

Standing Committee on Transport, Infrastructure and Communities

Updating Infrastructure in Canada: An examination of needs and investments

Introduction

Due to the omission of highly relevant aspects of the state of infrastructure in Canada from the final report, the NDP members of the Committee feel compelled to issue a dissenting opinion to better reflect the entirety of evidence that was presented at committee and to put forward recommendations that flow from and are consistent with the evidence that was received by the committee.

It should be noted that infrastructure related to First Nations Communities was considered by the committee to be outside the scope of this study. Consequently, limited and certainly insufficient evidence was submitted to the committee to address the state of First nations Infrastructure. This is particularly unfortunate in light of the single brief received from a First Nations Community which said that:

"Kashechewan First Nation suffers the same dilemma as municipalities across Canada with aging infrastructure. The unique difference is that infrastructure is subjected to a rapidly growing population, in some cases the quality of workmanship during the initial construction of some of the facilities was sub-standard and a financial challenge to bring it to today's current technical standards."

A study of infrastructure needs and investments in Canada merits an objective consideration of the full suite of evidence available to the committee and an understanding that the state of infrastructure at the local level impacts the social, economic, and environmental life of Canada. It follows that the Federal Government needs to be a more reliable partner to our provinces, territories and municipalities when it comes to building into Canada's towns, cities, and First Nations communities the infrastructure needed to ensure that they will be prosperous, fair and sustainable.

Past and current infrastructure programs have failed to get funding out the door, with complicated application processes that shut out smaller communities while adding years of uncertainty and delays to important projects. Failing to maintain investment in vital infrastructure such as transit, roads and bridges means we are passing the cost on to future generations and preventing our communities from transitioning towards a cleaner and more innovative economy, with a prosperity more equally shared.

The following recommendations aim to:

A. establish a partnership between the three orders of government with regard to providing Federal infrastructure funding to municipalities and managing assets effectively;

B. to address municipal challenges in relation to financing mechanisms;

C. to improve the state of infrastructure on First Nations communities; and

D. to learn from other models of infrastructure funding in Federal jurisdictions around the world.

A. A new governance arrangement to ensure effective asset management

Witness testimony throughout the study has suggested that a new governance arrangement should be developed to improve the relationship between the three orders of government with the aim of managing assets across Canada in a coordinated fashion and ensuring that sustainability criteria be applied to all infrastructure projects.

Mr. Brent Toderian, an expert in city planning with 21 years of experience in advanced urbanism and urban design appeared at committee and advocated for an improved relationship between the Federal, provincial, and municipal governments with regard to infrastructure:

“I would suggest that a new relationship between the federal government, provinces and cities—and, of course, given the constitutional nature of cities, the provinces have to be part of that conversation—a new relationship between the feds, the province and the cities could work together to come up with a series of criteria that I think would include the cities' definitions of “success.” I do believe that cities understand the success of cities better than any other level of government clearly. So I think the cities should take a lead through maybe the Big City Mayors' Caucus, or other things, in defining “success” in cities.” - Mr. Brent Toderian

Mr. Brock Carlton, Chief Executive Officer at the Federation of Canadian Municipalities (FCM), expressed concern in his testimony with regard to the Federal government failing to recognize the opportunity to mitigate Climate Change through the infrastructure in our cities and implement a National strategy:

“There is no question that there is a need for this country to look at its infrastructure from the perspective of resilience and from the perspective of the impacts of climate change and greenhouse gas emission reduction. We believe there are great opportunities. Municipalities own directly or indirectly the sources

of about 44% of the GHG emissions in this country. […] Our concern is that there's an opportunity being missed by not creating a way of having a national perspective on this that can mobilize the knowledge and experience at the municipal level for the kinds of things municipalities are responsible for so that, rather than having municipalities left alone to do their work that needs to be done, they are supported in a framework that is all orders of government rowing in the same direction." - Mr. Brock Carlton, Chief Executive Officer (FCM)

During testimony and in a written brief, Ms. Kealy Dedman, President of the Canadian Public Works Association, shared her enthusiasm for a sustainability rating system in the United States and her hope of seeing something similar applied in Canada:

"Our association believes in adopting and adapting best practices where possible, which is why in our written submission we provide an example of a sustainability rating system that has been developed in the United States called Envision. Used as a planning tool for projects, rating systems such as Envision can help identify sustainable approaches during the planning, design, construction, and operation of infrastructure." - Kealy Dedman - President, Canadian Public Works Association

Therefore, it is recommended that the Federal government develop, in consultation with provinces, territories and municipalities, a new cities framework to, in part, bring coherence, efficiency, and fairness to the federal relationship with cities with regard to infrastructure funding by:

i. jointly establishing a metrics system with provinces, territories and municipalities to determine the value of assets, the state of assets in Canada and a process to ensure efficient expenditures and a maintained state of good repair;

ii. collaborating with First Nations, provinces, territories and municipalities to develop a set of sustainability criteria (ie. the core eco-efficiency indicators developed by the National Round Table on the Environment and Economy re energy, waste and water intensity indicators) for the purpose of evaluating infrastructure funding from the Federal government for all projects;

iii. collaborating with First Nations, provinces, territories and municipalities to develop and help municipalities implement sustainable infrastructure rating systems to ensure long-term management of local infrastructure.

B. Recommended principles for financing

1. <u>Allowing more flexibility and barring mandatory financing vehicles</u>

Witnesses at committee attributed a lack of flexibility in the process of applying for infrastructure funding to the imposition of mandatory financing vehicles.

Several witnesses expressed their dissatisfaction with the mandatory requirement to apply for infrastructure funds through the use of Public-Private Partnerships, particularly with regard to the New Public Transit Fund announced in Budget 2015.

In its brief to the committee, the Société de transport de l'Outaouais (STO), the public transit operator in the City of Gatineau, noted that the PPP mechanism for allocating new public transit funds *"is not compatible with Québec's public transit infrastructure funding programs."*

Matti Siemiatycki, an expert in transportation policy and planning as well as infrastructure finance and delivery, outlined his concerns at committee regarding the P3 requirement, describing public-private partnerships as *"the only game in town"*:

"Public-private partnerships are one option, but we have to be very careful that we're not setting up structures that make this the only option that's available for especially municipalities to access senior level government funding. This poses the potential that we're not using public-private partnerships because they deliver value, but really just because we can access money. That can lead to real problems in terms of the incentives and projects being used that are not necessarily the best value. So I think it's very important, then, that when we have funding models for delivering money to municipalities especially, but also provinces, that these are not tied to a specific model. Public private partnerships are one option for delivering infrastructure, but they need to be used in the ideal setting. We shouldn't be choosing in advance so that governments can access money. That can really lead to potentials of not carrying out accurate studies on the incentives and why we're using public-private partnerships." – Mr. Matti Siemiatycki

The Mayor of Burnaby, Derrick Corrigan, expressed his frustration with regard to the P3 application process, having been through the experience himself:

"Having gone through the Canada-aligned 3P, and having been one of the involved members of TransLink throughout that process, I found it to be one of the most frustrating and disappointing times in my career. All of the information was kept secret from the public. We were not allowed to even go to our staff to be able to get support in our opinions. Much of the advice we were receiving was from outside consultants, who had often a vested interest in the project proceeding. It was very, very problematic" – Derek Corrigan, Mayor of Burnaby

Therefore, it is recommended that:

i. The Federal government abolish any mandatory requirement for municipalities to exclusively apply for infrastructure funding through alternative financing, including Public-Private Partnerships.

2. The need for a National Transit Strategy and increased long-term, predictable funding

The flawed P3 process was a prevalent theme in this study, especially with regard to transit funding. Testimony suggested the need for a more coordinated approach to prioritizing transit investments and to provide more long-term, dedicated, and reliable funding to municipalities for this purpose in particular.

The transit infrastructure backlog is growing, with tens of billions of dollars in new investment needed to reduce congestion, improve productivity, and keep our cities moving. Across Canada, congestion is hurting the environment and costing local economies. In the GTHA alone the cost is $11 billion annually.

Witness testimony suggests the need to simplify application processes and remove funding barriers through direct, stable and transparent transfers to municipalities and provinces for their priorities, especially with regard to transit:

"I could go on for hours about the flawed process that was undertaken to build a transit line operated by the private sector. Suffice it to say that the project has created very little new ridership, at massive costs to local municipalities. We ended up funding well over half the project, and continue to pay higher interest rates on the money borrowed by the private sector." – Mr. Derek Corrigan

Mr. Brent Toderian advocated for the establishment of a National Transit Strategy at committee - pointing to the economic benefits of doing so:

"The need for a national transit and transportation strategy is really about recognizing that every single city in Canada has recognized that mass transit is a critical component of the region's success, economy, and in every way we measure success. Every single one is struggling with the funding […] A national transportation strategy should include, in my opinion, smart, significant, stable and predictable funding for urban infrastructure projects for municipalities and city regions around Canada. Given the relative percentage of tax dollar funding that actually goes to the municipal level in Canada, the estimate is municipalities collect about 8¢ of every tax dollar, I think the tendency to expect local governments to fund a third of such projects, which is a typical expectation, when they don't come close to collecting a third of the actual tax revenue, really fundamentally needs to be rethought."– Mr. Brent Toderian

Therefore, it is recommended that:

i. The Federal government establish, in collaboration with the provinces, territories and municipalities, a National Transit Strategy that involves Federal commitments to provide $1.3 billion annually in dedicated and transparent public investment in transit by the 2019-2020 fiscal year;

ii. The Federal Government increase the existing gas tax transfer by $420 million in the 2016-2017 fiscal year and increase up to an additional $1.5 billion by 2019-2020 for a total of $3.7 billion with the continuation of the current indexing formula.

3. De-politicizing funding – The need for a more transparent funding process

Witnesses at committee expressed the need to ensure that Federal funding for infrastructure remain consistent, predictable and stable and provide financing flexibility through transparent processes to provinces, territories and municipalities.

Mayor of Burnaby Derek Corrigan shared his experience at committee with regard to the political influence in the distribution of federal infrastructure funds:

"In British Columbia, many people believe that the political influence on the distribution of federal funds is a major factor in the decisions on infrastructure projects, rather than prioritization of the projects by level of importance and impact. In my 28 years of experience on municipal council, I tend to agree that the process is not sufficiently objective or impartial. In fact, the political lobbying required to get support for much needed infrastructure has become unseemly in a democratic, policy-driven society. We need to know that the process is based on solid criteria and a transparent process. That has not always been the case." – Mr. Derek Corrigan

"We need a fair and impartial process for infrastructure funds that is based on objective criteria. We need to be sure that there is no political interference in the dissemination of funds that come from our hard-working communities and are redistributed by Ottawa. We need Ottawa to co-operate in an open procurement process, where the best interests of our communities is the highest priority and there is no predetermined political direction that insists on privatization. Canada should be an example to the rest of the world in showing that the even-handed management of limited financial resources can achieve great results for our citizens. We can all accept losing in a fair process, but it is un-Canadian to stack the deck and cheat communities out of their fair share of limited financial resources for political reasons." – Mr. Derek Corrigan

"This was [Canada 150 Fund], was in my view, cobbled together at the last minute. It smacks of politics to me, as opposed to being a plan that actually looks for communities to be able to develop something that will be meaningful. That, in fact, was the tenor of my statement to you that consistently there's this political overtone to anything that is done as a result of moneys being dispensed to communities as opposed to an open process in which all of us are aware and can participate in a way that is fair." – Mr. Derek Corrigan

Delays in the distribution of funds were confirmed by Mr. Brock Carlton of the FCM, who represent over 2000 members, and he also suggested that the funding criteria currently in place do not adequately prioritize municipal infrastructure:

"Are the funds being distributed quickly? No. I think the challenge for our members is that the federal government and the provincial/territorial governments are not necessarily prioritizing municipal infrastructure. Whatever the criteria is for the decisions that are being made currently, there's nothing that directs the decision makers to focus on municipal infrastructure; therefore, decisions are being made that sometimes take the opportunities away for the municipal proponent of a project to a provincial-level project or some other piece of work that is not municipal in nature." - Mr. Brock Carlton

Therefore, it is recommended that:

i. The government establish a fair, simplified, and impartial process for the allocation of federal infrastructure funds that is based on objective criteria in order to reduce political interference in the dissemination of funds and to prioritize municipal infrastructure in a timely manner.

C. First Nations Infrastructure – "closing the gap"

Although the NDP members are pleased that a written brief submitted jointly by Hatch Engineering Company and Kashechewan First Nation was briefly referenced, the final report has failed to adequately address First Nations Infrastructure and does not do justice to the full range of insight provided or recommendations proposed in the brief. Due to the omission of these key recommendations from the report, the full picture of First Nations infrastructure in Canada is not sufficiently illustrated to reflect key factors that exacerbate its deterioration and prevent it from reaching the standards required to be sufficient for use.

The consideration of First Nations infrastructure was deemed to be beyond the scope of this study. The NDP disagrees with this assessment and considers First Nations infrastructure, which is in a dire state of repair, to be an essential part of this study on infrastructure needs in Canada.

First, the brief describes the unique challenges faced by First Nations communities like Kashechwan, where over 49% of the population was under 19 years of age in 2011. This *"reflects the Statistics Canada surveys that aboriginal populations are the fastest growing youthful populations in Canada. This is a very typical demographic for First Nations Communities across the country".*

The brief goes on to say that *"This growth of communities across Canada represents a sizeable investment in infrastructure. As these communities grow,* *they will require more room for housing, roads, water and sewage, let alone education and health services support. However a clear strategy for both the management of these investments and the subsequent maintenance of the investments are needed to be efficient as the growth of these communities require the use of robust and often more complex infrastructure to provide up to date, modern facilities in line with infrastructure investments in other parts of Canada."*

In regards to the process of acquiring infrastructure funds, the brief explains that "w*hile, through Aboriginal Affairs and Northern Development Canada (AANDC), First Nations have a Capital Planning Study outlining community growth over the next 20 years, in practice, infrastructure is funded on an urgent need basis and/or when excess funds happen to be available. In many cases, this leads to a lack of planning, up front engineering and coordination of work. This in turn leads to inefficiencies and cost increases over what would have been possible had the activities been undertaken following a modern managed approach in which the requirements are well defined and engineered in advance of the actual tendering and implementation of the work"*.

In addition to the rapid population growth experienced in these communities and the lack of coordination that stems from receiving funds on a piecemeal basis, First Nations also have had the challenge of "*maintaining the systems with insufficient Operations and Management resources which have not increased over a 2% cap in the last ten years."*

The authors of the brief cite the example of the Kashechewan Ring Dyke (outlined in the brief) as being *"representative of the engineering related issues that must be rectified if reliable and sustainable infrastructure improvements are to be implemented at First Nations communities".*

The NDP believe it would be an oversight not to include these important perspectives on First Nations Infrastructure in the Final report. It is essential that the Federal government heed the advice outlined by engineering experts and First Nations communities in this written brief.

Therefore, it is recommended that:

i. The Federal government jointly establish a metrics system with First Nations communities to determine the current state of infrastructure in these communities and to identify the level of investment needed to provide up to date, modern facilities in line with infrastructure investments in other parts of Canada;

ii. The Federal Government establish a clear strategy for both the management of infrastructure investments and the subsequent maintenance of the investments needed to be efficient in rapidly growing First Nations communities;

iii. The Federal government establish a community liaison program to allow for early, effective and ongoing engagement with First Nation communities to ensure that their needs are fully understood and to provide opportunities for capacity building and training;

D. Comparative study of other federal jurisdictions

Witnesses at committee spoke of the benefit of taking lessons from various models for funding infrastructure in other jurisdictions, particularly when it comes to public transit and asset management:

"Throughout Europe and particularly in Asia, I would say, and even in new places like the Middle East, they are investing massively, by a multiplier of a hundred, in mass transit specifically, and these are parts of the world that until very recently were doubling down on car infrastructure. They've had an epiphany in a relatively short period of time about the smarter investment that public transit represents and they're putting their considerable funding power towards the new bet on public transit." - Mr. Brent Toderian

"A holistic approach to managing municipal infrastructure assets is being practised in other jurisdictions such as Australia and New Zealand, and is also making inroads in Canada, particularly in our western provinces. Canadian municipalities have a growing interest in applying proper asset management principles and practices to the infrastructure they are responsible for planning, building, operating, and maintaining." – Ms. Kealy Dedman

Therefore, it is recommended that:

i. The Federal government undertake a comparative study of infrastructure and transit investments/policies/metrics in other federal jurisdictions to identify successful models/precedents that can be applied in Canada, with an understanding that results need to be seen through lens of Canada's unique features (eg. constitution, geography, climate etc.).

Supplementary Opinion

Liberal Party of Canada (David McGuinty, Ottawa-South):

As witnesses testified, it is clear that there is a gap in Canada's current infrastructure assets in terms of what exists and what is required. It is also clear that significant investments are needed on the part of all levels of government to close it. Despite this well-accepted need for investment, there is no consensus on what Canada's actual infrastructure gap amounts to in real figures. If the Government of Canada is to begin to seriously address this problem, it is essential that it work closely with its provincial, territorial, and municipal partners to establish precisely what Canada's infrastructure gap is.

It is recommended that the Government of Canada convene all orders of government to create and implement a process by which an evaluation of Canada's infrastructure assets could be completed so that Canadians would better understand where the most crucial infrastructure needs are and plan appropriately for the future.

Although the current government is quick to laud its infrastructure investments, it fails to explain that there are significant flaws in the ways in which funding is distributed. Currently, the federal government does not attach any specific criteria to its infrastructure funding. As an example, the government should look for specific guarantees with regards to job creation, economic impact, and sustainability. Considering the ever-evolving challenges which the global economy and climate change pose to Canada, it is important that the government support projects which are well thought-out, resilient and provide maximum long-term benefit to the communities in which they are built.

It is recommended that the Government of Canada attach specific criteria in the areas of job creation, economic impact, and sustainability when allotting infrastructure funding.

Canada, like all countries, is forced to deal with climate change. Jurisdictions such as the United States have made it clear that infrastructure projects must take in to account this ever-evolving challenge. Without a clear standard to which projects can strive to achieve or even compare themselves to, Canada's infrastructure investments may not be anywhere near as effective as they could be in terms of their energy efficiency, water efficiency, sustainability of resources used in construction, etc.

It is recommended that the Government of Canada work with all orders of government to establish a sustainability rating system for infrastructure projects. Examples such as the Envision™ rating system in the United States haven proven to be effective and provide an excellent example for Canada to follow.