



**Canada's New
Infrastructure Plan:
1st Report to
Parliament-
Following the money**



OFFICE OF THE
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The mandate of the Parliamentary Budget Officer (PBO) is to provide independent analysis to Parliament on the state of the nation's finances, the Government's estimates and trends in the Canadian economy; and, upon request from a committee or parliamentarian, to estimate the financial cost of any proposal for matters over which Parliament has jurisdiction.

In June 2016, the Standing Senate Committee on National Finance asked the Parliamentary Budget Officer to conduct an analysis of the infrastructure spending to assist parliamentarians in their review of the program.

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Executive Summary

This report analyzes the Government's New Infrastructure Plan (NIP) announced through the 2016 Federal Budget and its 2016 Fall Economic Statement. This analysis is designed to assist parliamentarians in understanding program outcomes and potential risks to those outcomes.

The Government plans to allocate \$186.7 billion in funding for the NIP over the next 12 years. Of this total, \$82.8 billion is new, incremental funding.

The program is being rolled out in two phases. Phase 1, at \$13.6 billion for the first two years, aims at providing some economic stimulus. The outer-years expenditure is to improve Canada's long-term economic productivity.

The Government has provided no performance measurement framework with which to evaluate the NIP's performance, and only limited visibility on tracking how the money is being spent.

In its supplementary estimates documents, the Government has identified the departments that have received funding through the NIP. However, except for Infrastructure Canada, none of the departments has published a list of funded projects. There is also no mention of the NIP in current departmental performance reports.

PBO has made considerable effort to link the announced budget measures to the underlying infrastructure projects. But there is still a gap between what has been announced and the value of the projects currently identified by departments.

PBO data show that of the \$13.6 billion for fiscal years 2016-18 announced in Budget 2016, departments have identified \$4.6 billion worth of projects. While departments have committed to spending all the allocated funds within the time frame provided, these data show that there remains a significant gap.

The NIP is a key component of the Government's economic plan. Budget 2016 projected that the phase 1 infrastructure spending would raise gross domestic product (GDP) by 0.2% in 2016-17 and by 0.4% in 2017-18. Because of the gap between funds that have been announced and the value of projects identified, the Government is at risk of not realizing this projection.

1. Canada's New Infrastructure Plan

1.1. Program objectives and planned outcomes

As part of its commitment to support 'Growth for the Middle Class', the Government, through its 2016 Federal Budget and its 2016 Fall Economic Statement, has announced plans to allocate \$186.7 billion for infrastructure investments for the 10-year period from 2016-17 to 2027-28. Of this total, \$82.8 billion is incremental funding, with the remainder coming from existing programs.

The objective of this investment is to "create good, well-paying jobs... today... and deliver sustained economic growth for years to come"¹.

1.2. Program description

The NIP spending will occur in two phases. Phase 1 focuses on short-term investments targetted in areas such as public transit, water and wastewater systems, affordable housing, and protecting existing infrastructure from the effects of climate change (resiliency).

Phase 2 will dedicate additional funds to these categories, and introduce investments in transportation infrastructure that supports trade. Phase 2 will also see the introduction of an Infrastructure Bank, which will endeavour to attract alternative sources of infrastructure financing.

Canada Infrastructure Bank

The purpose of the Canada Infrastructure Bank (CIB) is to partner with private sector investors to further leverage additional infrastructure funding over and above what the Government is providing. The CIB is tasked with investing at least \$35 billion into large, revenue generating infrastructure projects. This amount is included in the \$186.7 billion figure shown above.

The CIB is expected to use a variety of financial instruments, including direct contributions, repayable contributions, equity investments and debt instruments. Some \$15 billion of the funds will be sourced from newly announced infrastructure funds. The remaining \$20 billion is to be structured in such a way as to have no current impact on the government's fiscal position. However, as an equity investor in the Bank, the federal government would eventually share some of the risk inherent in the Bank's investments.

A loan guarantee, an example of a debt instrument, is a legitimate source of government support in a public private partnership when the government is best placed to absorb a certain type of financial risk. However, loan guarantees are not generally subject to the same level of parliamentary scrutiny as direct expenditures. In addition, because the guarantees are generally classified as contingent liabilities, they appear only as notes to the government's balance sheet.

For example, the contingent liability arising from the Muskrat Falls Hydro-electric project federal loan guarantee is included in an aggregate contingent liability amount under one line item in the Public Accounts (see Note 18 Contingent Liabilities in the 2016 Public Accounts of Canada).

The loan guarantee for Muskrat Falls is worth up to \$9.3 billion, but the total amount provisioned for all of the federal government's loan guarantees of \$490 billion is \$312 million. It is impossible to ascertain the potential fiscal impact of the loan guarantee for the Muskrat Falls project from the information provided in Public Accounts.

1.3. Tracking infrastructure spending

PBO is analyzing the NIP to assist Parliament in understanding program outcomes and potential risks to those outcomes by tracking the allocation of funds, from the budget initiative to the underlying projects/investments. In future reports, depending on data availability, PBO will provide additional analysis of the likelihood of the Government's ability to meet the planned objectives of the NIP.

PBO has collected baseline data from all of the departments that have received funding from the NIP. Most of the data was collected in September and October of 2016. Data from Infrastructure Canada is current to January 4 2017. PBO will collect data on the progress of projects on an ongoing basis.

1.4. Budget transparency: Following the money

From budget to project

Phase 1 of the New Infrastructure Plan (NIP) contains funding of \$13.6 billion² over two years, allocated among a variety of programs, and being delivered by 31 departments and agencies. Some of the programs are being funded over two years, some over three years, and others over five.

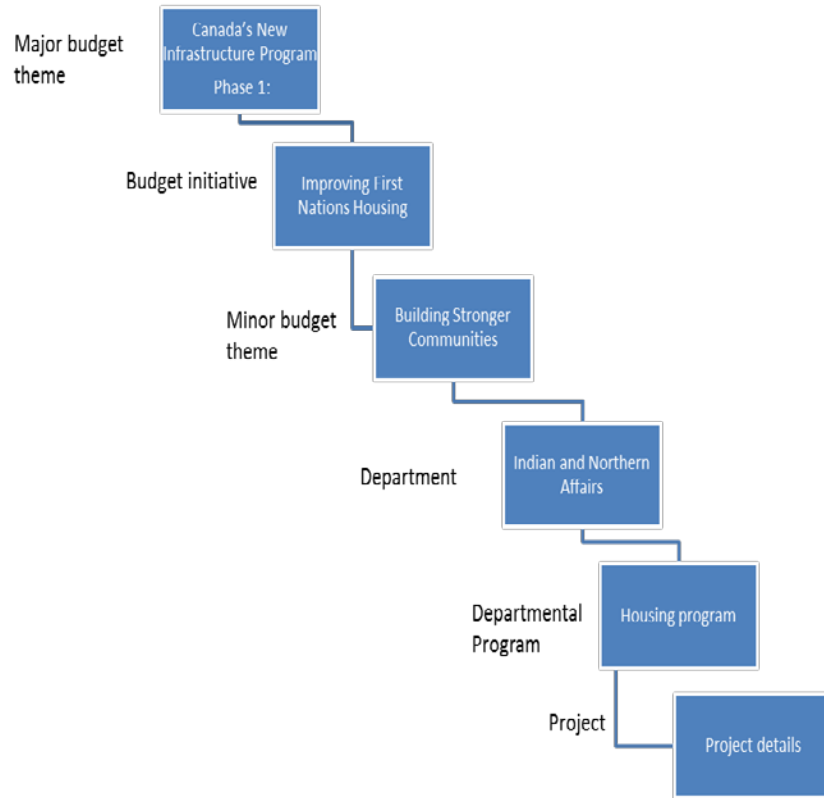
The programs range from 'green infrastructure' infrastructure investments such as public transit and water/wastewater projects, to 'social infrastructure', such as cultural and recreational centres, affordable housing, and early learning and child care, and also includes government capital asset rehabilitation investments.

Allocation in the fiscal framework

A federal government's budget announces spending targets in thematic areas. But the implementation details and specific departmental funding allocations are approved by Treasury Board.

Budget 2016 was presented to Parliament on March 22, and initial allocations for Phase 1 of the NIP were subsequently approved by Treasury Board. A total of 719 projects worth \$1.5 billion were scheduled to start immediately after this date.

Example: following the money - from budget to project

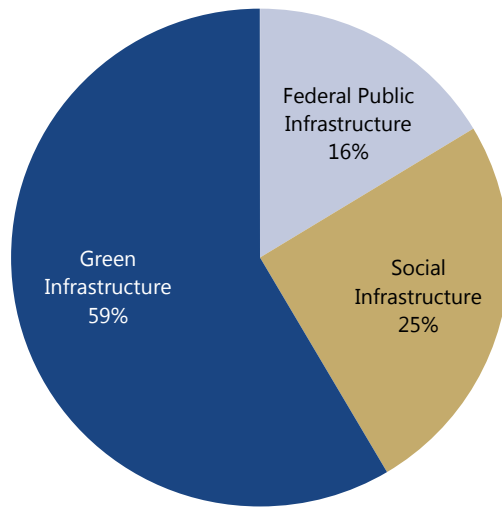


Sources: PBO, Department of Finance, TBS

Allocation to departments and agencies

Departments were asked to provide submissions to Treasury Board to detail how these funds would be spent. These submissions would have included a list of projects, programs or initiatives that were to fit into one of three categories: 'Green Infrastructure', 'Social Infrastructure', and 'Federal Infrastructure Renewal'. Treasury Board approved a total allocation of 10.8 billion over two years to the following 'Funded Programs' as shown in Figure 1-1 below:

Figure 1-1 Allocation by funded programs



Source: Treasury Board of Canada, Secretariat

Allocation by departments and agencies

As Figure 1-2 shows, almost three-quarters of the NIP funding has been allocated to three organizations.

Figure 1-2 Allocation by Department or Agency

| Department / Agency | Share |
|--|-------|
| Office of Infrastructure Canada | 38% |
| Canada Mortgage and Housing Corporation | 16% |
| Indigenous and Northern Affairs | 15% |
| All others | 29% |

Source: Treasury Board of Canada Secretariat

The majority of the New Infrastructure Program is being delivered by Infrastructure Canada, Canada Mortgage and Housing Corporation (CMHC), and Indigenous and Northern Affairs Canada (INAC). Infrastructure Canada is disbursing its funds through two new funds: the Clean Water and Wastewater Fund and the Public Transit Infrastructure Fund. The Government describes these as investments in 'Green Infrastructure'.

CMHC has longstanding programs addressing Affordable Housing, On-Reserve Housing, Northern and Inuit Housing, and Aboriginal Capacity Development, through which it is disbursing its allocation.

INAC also has longstanding programs to address Housing on Reserve as well as to fund cultural infrastructure in First Nations communities. The Government describes these programs as investments in 'Social Infrastructure'.³ (the complete list of departmental programs funded through the NIP is available online at <http://www.pbo-dpb.gc.ca/web/default/files/Documents/Reports/2017/NIP/NIP%20Tables%20Public%20bilingual.xlsx>)

Current projects

Generally speaking, funds received under the Federal Infrastructure Renewal plan have been allocated to repairing and replacing departmental physical assets. At the moment, there are 961 projects worth about \$1.5 billion identified by the 21 departments and agencies that have received funding.

Examples include: improvements to laboratories at Agriculture and Agrifood; repairs and upgrades to border crossing posts at the Canada Border Services Agency; a variety of asset repairs and upgrades at Fisheries and Oceans; and a number of projects dealing with the ongoing remediation of contaminated sites.

Projects funded under the Green Infrastructure allocation include repairs and upgrades to water and sewer systems across the country. Most of these projects are being delivered by projects and municipalities using funds from Infrastructure Canada's Green Water and Wastewater Fund. Indigenous and Northern Affairs is delivering and funding a number of water management infrastructure development projects on First Nations reserves. Natural Resources is delivering on projects involving electric vehicles and electricity infrastructure. Health Canada is funding projects to strengthen the management of on-reserve water and wastewater. These four departments have to date identified 1,023 projects towards which the federal government will contribute \$2.7 billion.

At the time of this report, there were 1,889 projects being funded via the Social Infrastructure program, to which \$427 million has so far been allocated. These projects include building new housing and health facilities and renovations to existing facilities on First Nations reserves, as well as upgrades and renovations to a variety of local community buildings, community cultural centres and outdoor recreation areas across the country. Twelve departments and agencies have received funding under this category.

1.5. Analysis

Project progress

For the purposes of this analysis, PBO assumes that each project that is part of a signed contribution agreement generates economic activity on the basis of its start date, regardless of the date of an eventual associated transfer payment from the federal government.

As of October 31 2016, (and for Infrastructure Canada as of January 4, 2017), departments and agencies have identified 3,866 projects, whose federal contribution is worth roughly \$4.6 billion. Of those, 1,682 projects with an estimated value of \$333 million are scheduled for completion in this fiscal year, that is, by 31 March 2017. A total of 1,461 projects with an estimated value of \$3 billion are scheduled for completion in the next fiscal year, that is, by 31 March 2018.

Another four projects with an estimated value of \$4 million are not scheduled to start until after 31 March 2018. Finally, 554 projects with an estimated value of \$461 million have no scheduled start or completion dates.

The table below shows the funds allocated to departments and agencies against the value of the projects they have identified.

Figure 1-3 Total allocation vs identified projects

| Department | Allocation (\$,000) | Project Value Identified (\$,000) |
|---|--------------------------------|--|
| Agriculture and Agrifood | \$ 39,708 | \$ 48,909 |
| Atlantic Canada Opportunities Agency | \$ 16,600 | \$ 7,940 |
| Canada Border Services Agency | \$ 63,731 | \$ 63,835 |
| Canada Mortgage and Housing Corporation | \$ 1,756,200 | \$ 84,749 |
| Canadian Food Inspection Agency | \$ 3,838 | \$ 3,910 |
| Canadian Heritage | \$ 167,490 | \$ 53,980 |
| Canadian Northern Economic Development Agency | \$ 6,400 | \$ 500 |
| Canadian Space Agency | \$ 8,700 | \$ 8,700 |
| Economic Development Agency for Quebec Regions | \$ 31,200 | \$ 15,000 |
| Employment and Social Development | \$ 131,642 | \$ 74,500 |
| Environment and Climate Change | \$ 10,611 | \$ 2,111 |
| Federal Economic Development Agency for Southern On | \$ 44,400 | |
| Fisheries and Oceans | \$ 429,793 | \$ 433,085 |
| Health | \$ 273,054 | \$ 134,298 |
| Indigenous and Northern Affairs | \$ 1,889,073 | \$ 239,159 |
| Innovation, Science and Economic Development | \$ 94,166 | \$ 16,322 |
| Marine Atlantic | \$ 21,735 | \$ 21,335 |
| National Arts Centre | \$ 114,900 | \$ 114,900 |
| National Capital Commission | \$ 785 | \$ 785 |
| National Defence | \$ 227,212 | \$ 299,175 |
| National Gallery of Canada | \$ 9,600 | \$ 9,600 |
| National Museum of Science and Technology Corp | \$ 156,439 | \$ 45,624 |
| National Research Council | \$ 18,491 | \$ 22,775 |
| Natural Resources | \$ 154,799 | \$ 105,600 |
| Office of Infrastructure of Canada | \$ 4,155,298 | \$ 2,503,971 |
| Parks Canada | \$ 219,861 | \$ 80,460 |
| Public Services and Procurement | \$ 128,690 | \$ 54,467 |
| Royal Canadian Mounted Police | \$ 63,893 | \$ 63,893 |
| Transport Canada | \$ 145,395 | \$ 18,030 |
| Via Rail | \$ 34,400 | \$ 6,930 |
| Western Economic Diversification | \$ 46,200 | |
| Shared Services Canada | \$ 383,802 | |
| Treasury Board of Canada, Secretariat | \$ 2,144 | |
| Grand Total | \$ 10,850,252 | \$ 4,534,543 |

Source: PBO Data.

In many cases, departments have been able to identify projects for all of their available funding. In some cases, there are significant discrepancies between what departments have been allocated and what projects they have identified for funding. In many cases, this discrepancy arises due to the nature of the programs being administered, where they may be a lag

between the time that funds are available and that project proposals are approved. In other cases, such as with Agriculture and Agri-food and National Defence, the department has re-allocated funding from within its current reference levels to supplement funding received from Treasury Board.

Allocation vs proposal-based funding

Allocation-based funding programs, such as the Public Transit Infrastructure Fund and the Gas Tax Fund, provide provinces and municipalities with some certainty over the amount of funding they can expect. Proposal-based funding programs require the submission of individual project proposals, and thus there is some uncertainty around the level of funding a project proponent can expect.

Many of the departmental programs require project proponents to submit funding proposals. The proposals are then assessed and approved projects are added on an ongoing basis. For example, the regional development agencies are all delivering funds through the Canada 150 Community Infrastructure Program (CIP 150). Infrastructure Canada's Clean Water and Wastewater Fund is another example of a proposal-based program. This program has been provided with \$1.4 billion over two years. To date, it has allocated \$540 million, or 39 per cent, of that total to projects.

CMHC's Investment in Assisted Housing program is an allocation-based program, in that the agency allocates a portion of the total program dollars to provinces and municipalities to undertake projects. CMHC is not provided with a list of the projects until after they have been completed, and the recipient has submitted a claim against its share of the program funds. That is why there are no project values showing for this particular program at this time.

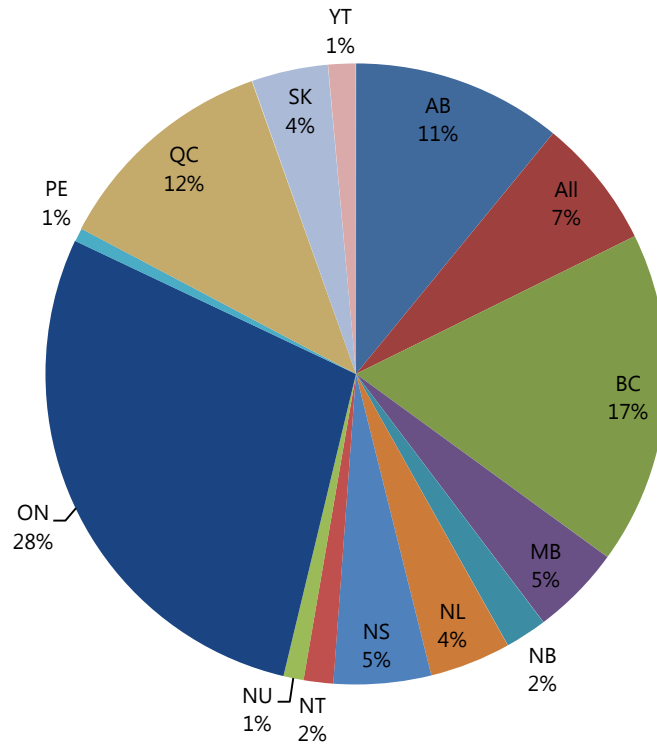
The Public Transit Infrastructure Fund is another example of an allocation-based program. Funds have been allocated to provinces on the basis of public transit ridership. Once the province and its municipalities have agreed on a list of projects, the federal government will conclude a funding agreement with the province.

The Public Transit Infrastructure Fund has allocated \$1.9 billion of the \$2.5 billion, or 76 per cent of its two-year allocation under this fund.

Project distribution

Much of the funds available for Phase 1 of the NIP target investments in areas with larger populations. Virtually all the projects funded by the Public Transit Infrastructure Fund are located in urban centres, as are most of the projects funded by the Clean Water and Wastewater Fund.

Figure 1-4 Provincial share of projects (by project value)



Source: PBO Data

Although the project data are not classified into urban and rural areas, it is clear from the chart above that the majority of the larger value projects occur in the most heavily populated provinces.

Program performance and risks

For the Government to achieve its economic impact estimates for the NIP within the stated time frame, it needs to disburse roughly \$11 billion by March 31 2018 in infrastructure investments.⁴

The table below shows progress to date:

| | Infrastructure Investment 2016-18 (\$million) |
|---|--|
| Target (Budget 2016 p.257) | 11,283 |
| Less: Value of project data still to be collected* | 2,831 |
| Net project value target | 8,452 |
| Value of projects identified to date** | 4,534 |
| Difference | 3,918 |

The NIP is a key component of the Government's economic plan. Budget 2016 projected that the phase 1 infrastructure spending would raise gross domestic product (GDP) by 0.2% in 2016-17 and by 0.4% in 2017-18. Because of the gap between funds that have been announced and the current value of projects identified, the Government is at risk of not realizing this impact.

Sources: Department of Finance, PBO project data

* PBO hasn't yet collected project data for programs other than the ones mentioned in this report. PBO will provide an update on the additional projects in its next report.

** As noted above, CMHC's Affordable Housing initiative (\$505 million) funds projects in other jurisdictions. It is an allocation-based program that pays out only when claims are received, therefore there are no specific projects associated with these funds in the database.

An often cited report from McKinsey and Company⁵ finds that project selection and delivery are critical success factors for achieving productivity gains from infrastructure investments. Since one of the NIP objectives is productivity gains in the long term, Parliament may wish to ask the Government to report on its progress in delivering against these planned outcomes.

Notes

1. Budget 2016, p. 86.
2. As illustrated on page 257 of Budget 2016, this amount is divided into a 'Housing Investment' of \$2.3 billion and an 'Infrastructure Investment' of \$11,283 billion. This remainder of this report focuses on the 'Infrastructure Investment' amount.
3. Complete list of departmental programs funded through the NIP
<http://www.pbo-dpb.gc.ca/web/default/files/Documents/Reports/2017/NIP/NIP%20Tables%20Public%20bilingual.xlsx>
4. Budget 2016, p. 257, Table 2.4
5. <http://www.mckinsey.com/industries/capital-projects-and-infrastructure/our-insights/infrastructure-productivity>, accessed November 30 2016.