



Status Report on Phase 1 of the New Infrastructure Plan



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The Parliamentary Budget Officer (PBO) supports Parliament by providing analysis, including analysis of macro-economic and fiscal policy, for the purposes of raising the quality of parliamentary debate and promoting greater budget transparency and accountability.

This report provides status report on Phase 1 of the Government's New Infrastructure Plan, which was announced in Budget 2016 and intended to stimulate economic growth over the short-term.

Lead Analyst:

Negash Haile, Research Assistant

Contributors:

Trevor Shaw, Economic Advisor-analyst

Chris Matier, Senior Director

This report was prepared under the direction of:

Jason Jacques, Senior Director

Nancy Beauchamp and Jocelyne Scrim assisted with the preparation of the report for publication.

For further information please contact pbo-dpb@parl.gc.ca

Jean-Denis Fréchette

Parliamentary Budget Officer

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Executive Summary

Budget 2016 announced the creation of the Government's "New Infrastructure Plan" (NIP).

The NIP is being delivered in two phases:

- Phase 1: *Short-term economic stimulus*. This aspect of the program aims to provide an economic stimulus by funding targeted infrastructure projects. As noted in Budget 2016, "phase 1 focuses primarily on infrastructure investments over (2016-17 and 2017-18)".
- Phase 2: *Long-term strategic investments*. This aspect directs funds to the Government's broader, long-term infrastructure plans.

In December 2017, the PBO submitted information requests to 32 departments, agencies and Crown Corporations responsible for all Phase 1 NIP projects. Most, but not all, of these organizations responded to our information request by an agreed upon deadline. Based on these responses, PBO was able to build an inventory of 10,052 projects, which we believe to represent a substantial majority of total planned NIP Phase 1 funding.

Of the total \$14.4 billion budget for NIP Phase 1, federal organizations have been able to identify \$7.2 billion worth of approved projects that were initiated in either 2016-17 or 2017-18. Thus, \$7.2 billion of Phase 1 funding is yet to be attributed to projects.

As part of its ongoing economic and fiscal analysis, the PBO actively monitors the roll-out of the NIP to determine the timing and impact of the planned stimulus program on the Canadian economy.

Based on the updated profile provided in Budget 2018, we estimate that Budget 2016 infrastructure spending raised the level of real GDP by 0.1% in 2016-17 and 2017-18, increasing the overall level of employment by between 9,600 and 11,100 jobs in 2017-18.

1. What Did the Government Originally Plan?

Budget 2016 announced the creation of the Government's "New Infrastructure Plan" (NIP).¹

The NIP is being delivered in two phases:

- Phase 1: *Short-term economic stimulus*. This aspect of the program aims to provide an economic stimulus by funding targeted infrastructure projects. As noted in Budget 2016, "Phase 1 focuses primarily on infrastructure investments over (2016-17 and 2017-18)".
- Phase 2: *Long-term strategic investments*. This aspect directs funds to the Government's broader, long-term infrastructure plans; with a particular focus on transportation modernization, clean energy and the creation of the Canada Infrastructure Bank.

In Fall 2016, Finance Canada provided the Parliamentary Budget Officer (PBO) with detailed spending plans for Phase 1 of the NIP.² These data indicated that the Government expected that most of the funding was planned to be invested over 2016-17 and 2017-18 in a range of social, green, indigenous and other public infrastructure (Table 1-1).

Following this report, the PBO flagged risks to achieving the Government's planned timelines. Based on detailed analysis of all projects initiated by federal departments and agencies, as well as review of provincial spending plans, we concluded that a substantial amount of planned spending for 2016-17 was at risk of being delayed to future fiscal years.³

Budget 2017 published updated planned spending data regarding Phase 1 of the NIP. It indicated that while there was some minor slippage in original timelines, the overall stimulus program was generally on track compared to the Fall 2016 plans.

Most recently, in Budget 2018, the Government published a further update of the planned funding flows for Phase 1 of the NIP. This update further pushed planned spending into the medium-term. Overall, more than half of the money intended for short-term stimulus will now be spent beyond 2016-17 and 2017-18.⁴

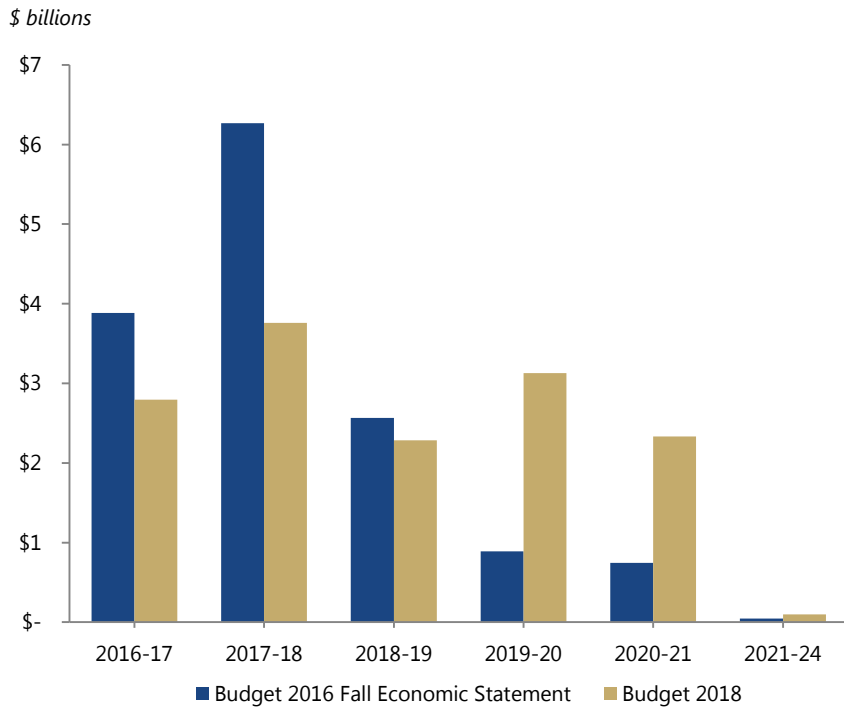
Table 1-1 Planned Phase 1 NIP Spending in First Two Fiscal Years

<i>\$ millions</i>	2016-17	2017-18	Future Years	Total
2016 Fall Economic Statement Allocation	3,885	6,268	4,245	14,398
<i>Public Transit</i>	852	1,696	852	3,400
<i>Green Infrastructure</i>	874	1,562	2,621	5,057
<i>Social Infrastructure</i>	1,643	1,679	119	3,441
<i>Post-Secondary</i>	500	1,250	250	2,000
<i>Rural Broadband</i>	6	81	413	500
Budget 2018 Allocation	2,794	3,759	7,845	14,398
<i>Public Transit</i>	45	210	3,145	3,400
<i>Green Infrastructure</i>	356	773	3,928	5,057
<i>Social Infrastructure</i>	1,638	1,694	109	3,441
<i>Post-Secondary</i>	749	1,001	250	2,000
<i>Rural Broadband</i>	6	81	413	500
Change in Planned Spending	-1,091	-2,509	3,600	0
<i>Public Transit</i>	-807	-1,486	2,293	0
<i>Green Infrastructure</i>	-518	-789	1,307	0
<i>Social Infrastructure</i>	-5	15	-10	0
<i>Post-Secondary</i>	249	-249	0	0
<i>Rural Broadband</i>	0	0	0	0

Source: Finance Canada.

Budget 2018 proposes a more evenly distributed Phase 1 spending profile. The new profile significantly reduces previously planned spending in 2017-18 and 2018-19, with greater outlays in 2019-20 and 2020-21 (Figure 1-1).

Figure 1-1 Phase 1 Infrastructure Investment Extended in Budget 2018



Source: Finance Canada.

If federal spending on infrastructure occurs more slowly than anticipated, this will have important implications for the budgetary balance as well as the strength of the Canadian economy. Such unexpected delays can also provide insight regarding whether federal infrastructure spending is a useful policy instrument for short-term fiscal stimulus.

2. What is the Current Status of NIP Phase 1?

In December 2017, the PBO submitted information requests to 32 departments, agencies and Crown Corporations responsible for all Phase 1 NIP projects.⁵ Most, but not all, of these organizations responded to our information request by an agreed upon deadline (see Annex A). Based on these responses, PBO was able to build an inventory of 10,052 projects, which we believe to represent a substantial majority of total planned NIP Phase 1 funding.

Of the total \$14.4 billion budget for NIP Phase 1, federal organizations have been able to identify \$7.2 billion worth of approved projects that were initiated in either 2016-17 or 2017-18 (Table 2-1). Thus, \$7.2 billion of Phase 1 funding is yet to be attributed to projects.

Table 2-1 Phase 1 Current Status

\$ billions

Total Investment	Project Allocations	Unallocated
\$14.4	\$7.2	\$7.2

Sources: PBO Database and Budget 2018.

Nearly 8,800 projects, comprising 87 per cent of total projects, were approved in 2016-17 (Table 2-2). The balance, roughly 1,300 projects were approved in 2017-18. Roughly 17 per cent (1,667) of approved projects do not have a federal contribution identified.

Table 2-2 Phase 1 Project Approvals in First 2 Years

	Total Approved Projects	Federal Contribution (\$ millions)	Projects with Unidentified Federal Contribution
2016-17	8,780	\$6,587	1,677
2017-18	1,272	\$568	0
Total	10,052	\$7,155	1,667

Source: PBO Database.

While we requested the anticipated start and end dates for each of the projects, several departments and agencies either did not track this information or declined to provide it.

That said, approximately 6,000 of the projects did have identifiable start dates within the first 2 years, representing 60 per cent of the total projects that have been approved. Of those with identifiable start dates, 80 per cent were initiated in 2016-17 (Table 2-3). Approximately 24 per cent of the projects initiated to date are expected to be completed by March 31, 2018.

Table 2-3 Phase 1 Project Implementation Inside of First 2 Years

	2016-17	2017-18	Total
Start Dates	4,731	1,222	5,953
End Dates	1,678	709	2,387

Source: PBO Database.

Approximately 2,800 projects had unidentified start dates, while an additional 1,300 projects had start dates beyond of the first two years (Table 2-4). In terms of project completion, roughly 5,500 projects had unidentified dates while just over 2,100 projects had dates beyond 2017-18. The lack of identifiable project start and end dates provides a challenge in determining the actual the timing and magnitude of their economic impact.

Table 2-4 Phase 1 Project Implementation Outside of First 2 Years

	Unidentified	Outside of First 2 Years	Total
Start Dates	2,786	1,313	4,099
End Dates	5,504	2,161	7,665

Source: PBO Database.

2.1. What is the actual and planned funding allocation across provinces?

A greater proportion of Phase 1 funds are centered in a small group of provinces, representing the majority of the Canadian population. Projects in Ontario, Alberta, Quebec and British Columbia account for a combined 70 per cent of total allocated Phase 1 funding (Table 2-5). In contrast, projects based in Prince Edward Island, New Brunswick, Nunavut, Yukon and the Northwest Territories represent an aggregated 9 per cent of total funding.

Funding was not commensurate with an increased number of projects. In some cases, a smaller number of higher value projects received comparable funding to provinces with a large number of projects. To illustrate, Newfoundland and Labrador and Quebec received a relatively equivalent allocation of Phase 1 funding, although Quebec has roughly five times the number of projects.

Phase 1 funding allocations highlighted significant variances on a per capita basis. Ontario, Quebec and New Brunswick were at the bottom end of funding relative to their populations, averaging \$143 per person. Nationally, the mean was \$703 per person. Sparsely populated provinces and territories Newfoundland and Labrador, Nunavut and the Yukon received, on average, roughly 2.5 times the national average.

This unbalanced allocation of funding may be attributable to information gaps in federal reporting (that is, the actual allocation of funding is more balanced, but simply not reported to the PBO), or delays in program implementation.

Table 2-5 Phase 1 Regional Project Distribution

Province	Share of Total Infrastructure Investment	Number of Infrastructure Projects	Infrastructure Investment on a Per Capita Basis
ON	32%	2884	\$161
BC	14%	1630	\$202
QC	12%	1289	\$97
NL	13%	242	\$1,752
AB	13%	976	\$214
MB	5%	678	\$258
NS	3%	588	\$244
SK	3%	887	\$198
NB	2%	478	\$171
NT	1%	87	\$1,618
NU	1%	45	\$2,146
YT	1%	131	\$1,797
PEI	1%	115	\$272

Sources: PBO Database and Statistics Canada.

3. Phase 1 Economic Impacts

As part of its ongoing economic and fiscal analysis, the PBO actively monitors the roll-out of the NIP to determine the timing and impact of the planned stimulus program on the Canadian economy. Budget 2016 committed \$11.3 billion (cash basis) in infrastructure spending over 2016-17 and 2017-18, resulting in an expected increase in the level of real GDP of 0.2% and 0.4% in 2016-17 and 2017-18 respectively.

The updated profile of Budget 2016 infrastructure investments provided in Budget 2018 (see Table A2.17) details \$6.6 billion in spending over 2016-17 and 2017-2018. The PBO currently estimates that a slightly lower amount will actually be spent (\$6.2 billion). Over the entire planning horizon (2016-17 to 2023-24), Budget 2016 infrastructure investments total \$14.4 billion.

To provide parliamentarians with an independent and updated estimate of the economic impacts of Budget 2016 infrastructure investments, we have simulated our economic and fiscal model with the new profile under alternative assumptions about the response of monetary policy (Table 3-1). Depending on the economic context, monetary policy may respond to new fiscal measures to prevent the economy from overheating and inflation rising above its target.

At the time of Budget 2016, estimates indicated that the Canadian economy was operating well below its productive capacity while the policy interest rate was close to its effective lower bound. Thus, it was unlikely that the Bank of Canada would respond to Budget 2016 measures over 2016-17 and 2017-18 by increasing its policy rate. Consequently, in our initial assessment of the economic impacts of Budget 2016 measures, we assumed no monetary policy response.⁶ This was also consistent with Finance Canada's assumption in its Budget 2016 economic impact assessment.

However, in the current context, with the economy operating close to its productive capacity and the policy rate well above its lower bound, monetary policy may respond to new fiscal measures, reducing their impact on the economy. Given these conditions and the uncertainty surrounding the nature of the monetary policy response, we have simulated the updated profile of Budget 2016 infrastructure spending under both assumptions.

Table 3-1 Phase 1 economic impacts**Without Monetary Policy Response**

	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Infrastructure spending (\$ millions)	2794	3423	2548	3201	2334	85	10
Infrastructure multiplier	0.8	1.0	1.2	1.3	1.4	1.5	1.5
Real GDP impact (%)	0.1	0.1	0.1	0.2	0.1	0.1	0.1
Employment impact (000s)	4.3	11.1	13.4	15.7	16.4	13.1	9.7
Full-time equivalent impact (000s)	7.1	16.4	18.8	22.0	22.2	16.5	11.9

With Monetary Policy Response

	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Infrastructure spending (\$ millions)	2794	3423	2548	3201	2334	85	10
Infrastructure multiplier	0.8	0.8	0.8	0.8	0.7	0.7	0.6
Real GDP impact (%)	0.1	0.1	0.1	0.1	0.1	0.0	0.0
Employment impact (000s)	4.1	9.6	10.1	10.5	9.4	4.7	0.9
Full-time equivalent impact (000s)	6.7	14.1	13.9	14.3	12.1	4.7	0.0

Source: PBO Database.

Based on the updated profile provided in Budget 2018, we estimate that Budget 2016 infrastructure spending raised the level of real GDP by 0.1% in 2016-17 and 2017-18, increasing the overall level of employment by between 9,600 and 11,100 jobs in 2017-18.

We estimate that Budget 2016 infrastructure investments will provide a modest boost to real GDP and employment over the remainder of the planning horizon. That said, under the assumption that monetary policy responds by raising interest rates, the impact on real GDP is fully offset by 2021-22.

Annex A: Departmental Data Request Performance

Organization	Received by Due Date	Received by Extension Date	*Received After Extension Date
Agriculture and Agri-Food Canada	✓		
Atlantic Canada Opportunities Agency		✓	
Canada Border Services Agency			✓
Canada Mortgage and Housing Corporation	✓		
Canada Science and Technology Museum Corporation	✓		
Canadian Heritage		✓	
Canadian Northern Economic Development Agency		✓	
Canadian Space Agency		✓	
Economic Development for Quebec Regions		✓	
Employment, Workforce Development and Labour			✓
Environment and Climate Change		✓	
Federal Economic Development Agency for Southern Ontario		✓	
Fisheries, Oceans and the Canadian Coast Guard		✓	
Health		✓	
Indigenous Affairs and Northern Development			✓
Infrastructure and Communities		✓	
Innovation, Science and Economic Development		✓	
Marine Atlantic Inc.	✓		
National Arts Centre	✓		
National Capital Commission	✓		
National Defence		✓	
National Gallery of Canada			✓
National Research Council	✓		
Natural Resources Canada		✓	

Organization	Received by Due Date	Received by Extension Date	*Received After Extension Date
Parks Canada Agency			✓
Public Services and Procurement Canada		✓	
Royal Canadian Mounted Police			✓
Shared Services Canada		✓	
Transport		✓	
Treasury Board Secretariat		✓	
VIA Rail	✓		
Western Economic Diversification		✓	
Total	8	18	6

Source: PBO

Note: *These include departments and agencies that were provided with an extension by the PBO, but were unable to provide the requested data in sufficient time for us to analyze it for this report.

Notes

1. Budget 2016: Growing the Middle Class. Government of Canada.
<https://www.budget.gc.ca/2016/home-accueil-en.html>
2. PBO Information Request 271: http://www.pbo-dpb.gc.ca/web/default/files/files/files/informationRequests/IR0271_2016-11-10_FC_FES_EN.pdf
3. Canada's New Infrastructure Plan: 1st Report to Parliament Following the money: http://www.pbo-dpb.gc.ca/web/default/files/Documents/Reports/2017/NIP/New%20Infrastructure%20Plan_EN.pdf
4. Budgets 2018: Equality and Growth. Government of Canada.
<https://www.budget.gc.ca/2018/home-accueil-en.html>
5. A comprehensive listing of all information requests is presented at:
<http://www.pbo-dpb.gc.ca/en/information+requests>
6. PBO's original estimate of the impact of Budget 2016 measures was based on the assumption of no monetary policy response. This was consistent with Finance Canada's assumption in its Budget 2016 assessment of economic impacts.
7. See PBO's April 2016 report *Budget 2016: Key Issues for Parliamentarians*, available at: http://www.pbo-dpb.gc.ca/web/default/files/Documents/Reports/2016/Budget%202016/BUD16_Issues_EN.pdf. Finance Canada's estimates were provided in Annex 2 of Budget 2016, available at: https://www.budget.gc.ca/2016/docs/plan/anx2-en.html#_Toc446106884