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UPDATE ON THE INVESTING IN CANADA PLAN



OFFICE OF THE PARLIAMENTARY BUDGET OFFICER
BUREAU DU DIRECTEUR PARLEMENTAIRE DU BUDGET

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

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Executive Summary

In response to interest from parliamentarians, the Parliamentary Budget Officer (PBO) updated its monitoring of the Investing in Canada Plan (IICP). Under the IICP, the Government has committed to spend \$187.8 billion over 2016-17 to 2027-28.

The PBO solicited data from all 20 departments and agencies responsible for delivering IICP programming. Working with Infrastructure Canada, we compiled a data set of 33,112 entries for projects with \$34.9 billion in spending since 2016-17.¹

Infrastructure Canada also provided guidance to PBO that there are about 20,556 IICP projects supported through the Canadian Mortgage and Housing Corporation (CMHC) and the Gas Tax Fund (GTF).² Disaggregated information for the GTF was provided June 5th, 2020, subsequent to the completion of our analysis.³ Based on additional, more aggregated data, PBO estimates that \$51.1 billion was spent on the IICP between 2016-17 and 2019-20.

Consistent with previous findings:

- Federal infrastructure spending continues to be delayed (the delay is estimated at \$2.0 billion in total from 2016-17 to 2019-20 from Budget 2019). That said, the delay in infrastructure spending has decreased.
- There is limited evidence that increased federal money resulted in increased provincial spending (while federal infrastructure transfers increased by \$1 billion in 2018-19, overall provincial infrastructure spending decreased by \$733 million).

The PBO estimates that the IICP had raised the level of GDP by 0.74 per cent and the overall level of employment is estimated to have added approximately 65,900 jobs or 91,400 full-time equivalent positions as of 2019-20 (Table S-1).

Table S-1

Economic and job impacts of the IICP, 2016-17 to 2019-20

	2016-17	2017-18	2018-19	2019-20
Infrastructure spending (\$millions)	10,669	12,039	13,464	14,944
Real GDP (%)	0.41	0.51	0.62	0.74
Employment (000s)	20.5	38.8	52.2	65.9
Full-time Equivalent Employment (000s)	31.4	56.1	73.8	91.4

Sources: PBO, Federal Budgets and Infrastructure Canada

Notes: These numbers are based on PBO forecasts and do not represent the actual historical spending lapse.

How did we get here?

Over the past several decades, the total investment in infrastructure by the Canadian public sector, as a percentage of gross domestic product (GDP), has declined. Beginning in the 2000s, increases in infrastructure spending occurred as the Government began rolling out programs to address the infrastructure gap – the difference between perceived need in spending and actual spending.

In 2015-16, the Canadian economy experienced oil price shocks resulting in a significant downward pressure on the economy. Building on substantial existing federal spending (also referred to as “legacy projects”), Budget 2016 announced further increases in two phases:

- Phase 1, which was intended to focus on short-term infrastructure needs during 2016-17 and 2017-18, and;
- Phase 2, beginning in 2018-19, which was aimed at directing funds to long-term infrastructure plans.⁴

The economic pressures largely motivated the introduction of Phase 1 and Phase 2 spending to provide stimulus. Additionally, the IICP was focused on helping Canada transition to a low-carbon economy.⁵ Coinciding with the additional funding, the Government rebranded the overall infrastructure funding envelope as the Investing in Canada Plan (IICP).

Total planned spending of \$187.8 billion was committed under Phases 1, 2 and the legacy projects. Phase 1 committed \$14.4 billion, Phase 2 committed \$81.2 billion and the legacy projects comprised the remaining \$92.2 billion of funding.

The PBO has published 4 reports regarding the IICP. Our previous findings indicated that data gaps existed in the tracking of federal money; planned spending lagged; job creation and economic growth was lower than anticipated; and, increases in federal spending were partly offset by decreases in provincial money.⁶

This report builds upon our previous reports and examines capital investments on a project-level basis with data up to 2019-20. The following sections reassess our earlier findings using an updated data set of federal infrastructure projects from 2016-17 and 2019-20.

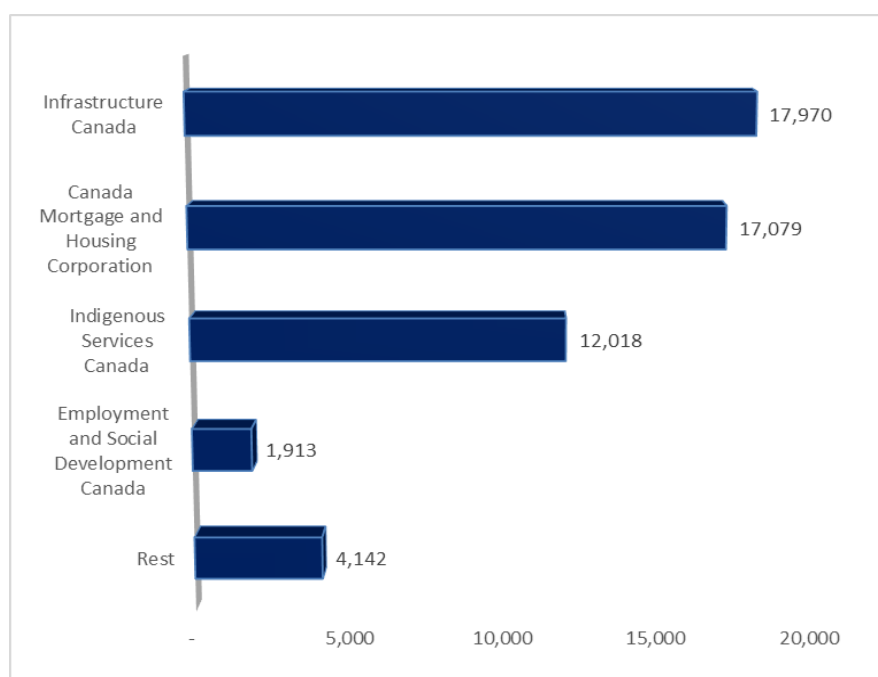
How much money has been spent on how many projects?

To update the PBO's existing dataset of federal infrastructure projects, the PBO worked with Infrastructure Canada officials to amass data from 20 departments and agencies.⁷

PBO requested basic tombstone information (for example, project start/end dates; names, locations, federal contribution, timing of cash flows). However, data quality was not consistent across departments and agencies on a project level basis. As a result, in some situations, PBO was required to make inferences regarding planned and actual annual spending.⁸ An itemization of the data request can be found in Annex A.

Departments and agencies accountable for the IICP provided the PBO with a data set of 33,112 entries for projects initiated since 2016-17. Infrastructure Canada also provided guidance to PBO that there are 20,556 projects supported through the Canadian Mortgage and Housing Corporation and the Gas Tax Fund, for which disaggregated information was not provided in time for this report. Annex B provides further details regarding the project data provided to the PBO. After taking into account assumptions in Annex B with respect to the data received, and in conjunction with the aggregate 20,556 projects provided, the PBO has recorded a total of 53,122 projects that have been started since the inception of the IICP.

As presented in Figure 1-1, three federal organizations are responsible for over 80 per cent of all recorded projects provided to the PBO. That is, Infrastructure Canada, Canada Mortgage and Housing Corporation (CMHC), and Indigenous Services Canada (ISC). The other 17 federal departments and agencies are responsible for the remaining projects.

Figure 1-1 Total projects provided by department, on a project level

Sources: PBO and Infrastructure Canada.

Notes: Figure 1-2 shows the total number of projects provided to the PBO, resulting in 53,122 total projects.

The project-level data set of 33,112 entries relates to \$66.9 billion in earmarked federal spending under the IICP.⁹ Of this earmarked spending, \$34.9 billion was paid out between 2016-17 and 2019-20.¹⁰ As noted earlier, to ensure complete coverage of all spending, PBO incorporated the additional, more aggregated data provided by Infrastructure Canada.

Based on the available data and PBO modelling, PBO estimated that total spending between 2016-17 and 2019-20 was \$51.1 billion (Table 1-1).¹¹ This is \$2.0 billion less than forecasted by the Government in Budget 2019.

Table 1-1**PBO forecasts lower spending than Budget 2019 (\$millions)**

	<u>Budget 2019</u>	<u>PBO Estimate</u>	<u>Difference</u>
2016-17	\$10,643	\$10,669	\$26
2017-18	\$12,075	\$12,039	(\$36)
2018-19	\$14,340	\$13,464	(\$876)
2019-20	\$16,067	\$14,944	(\$1,123)
Total	\$53,125	\$51,116	(\$2,009)

Sources: PBO, Finance Canada and Infrastructure Canada.

Notes: The PBO forecast represents the PBO's estimate of infrastructure spending based on historical lapse rates and available data.

How much money was leveraged from Provinces?

The value of Canada's stock of public infrastructure stood at \$613 billion in 2019. In 2019, investment in public infrastructure totaled \$61.9 billion with public investment making up 68% of the total infrastructure investment.¹²

While the IICP represents a substantial increase in the level of federal financial support for public infrastructure, it represents about one fifth of overall Canadian public capital investment.

Commensurate with their ownership of public assets, provinces and municipalities were responsible for most of this spending. In 2016, the federal government reported owning 2% of Canada's stock of public infrastructure, the provinces 35% and municipalities 63% when excluding defence, health and education services.¹³

A key policy objective of the IICP is to increase the overall level of public infrastructure investment. As such, most federal infrastructure transfers require cost sharing with provincial and local governments. Some programs also target spending on "new" projects, which otherwise would not be undertaken.¹⁴ This "incrementality" is an important policy objective, as it ensures that the overall level of public capital investment increases as a result of federal spending, rather than being offset by declines on spending by other levels of government.

Prior PBO reports noted that, in the case of provinces, there was limited evidence of incrementality.¹⁵ Specifically, while there may have been individual projects that required federal funding to get underway, overall spending was generally unchanged from its historical trend.

Based on updated provincial data released over the past year, this trend has continued in these jurisdictions. The four largest provinces (Alberta, British Columbia, Ontario and Quebec), accounting for 90 per cent of overall provincial capital spending, maintained spending levels despite increases in federal infrastructure transfers (Table 2-1).¹⁶

Table 2-1 Provincial capital spending has increased since 2015-16, (\$millions)

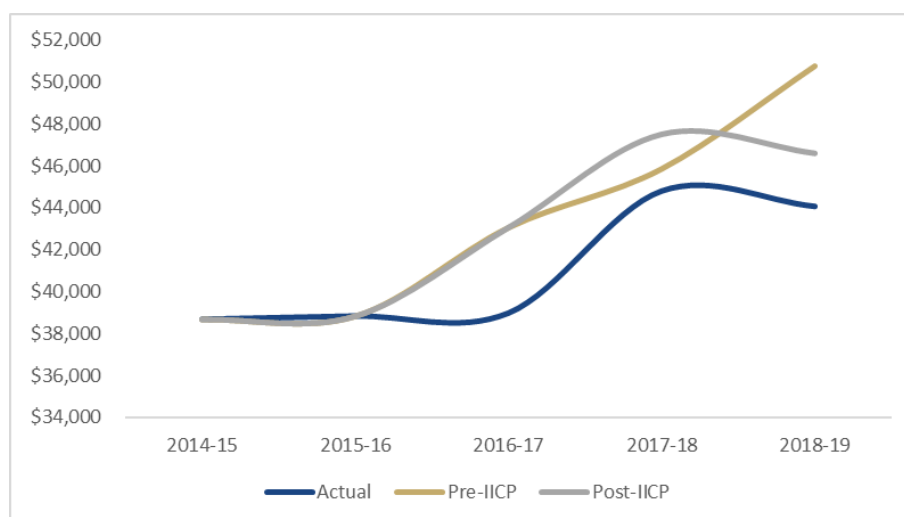
	2015-2016	2016-2017	2017-2018	2018-2019	Total
Total Capital Spending	\$38,835	\$38,978	\$44,807	\$44,074	\$166,694
Federal Transfers	\$2,057	\$2,635	\$3,417	\$4,440	\$12,550
Net Capital Spending	\$36,778	\$36,343	\$41,390	\$39,634	\$154,145

Sources: PBO, Public Accounts and Provincial Budgets.

Notes: Net capital spending is the difference between capital spending and federal transfers.

As shown in Figure 2-1, the level of provincial capital spending was \$6.7 billion lower than the PBO's benchmark when considering the budget estimates and \$2.5 billion lower than the capital accounts revision. This was largely due to underspending by the Ontario, Saskatchewan and Alberta governments.

Figure 2-1 Provincial spending on capital lower than PBO's benchmark (\$millions)



Sources: PBO, Public Accounts and provincial budgets

Notes: The PBO's benchmark for provincial capital spending, post-IICP is presented for illustrative purposes only. The assessment of the effect of the IICP on provincial capital spending is performed by comparing actual spending to the PBO's benchmark pre-IICP.

Spending lapses are not unusual with provincial capital programs. However, it appears that they have become more pronounced. It is unclear whether

this is caused by a reduction in provincial spending due to increased federal transfers or due to other factors. The combination of provinces spending less than planned and higher federal transfers have resulted in a reduction in the share of provinces' contributions to capital spending since the start of the IICP.

In May 2020, the Government segmented existing IICP funding for a new COVID-19 funding stream. Specifically, it announced that it will set aside up to 10 per cent of the \$33.5 billion provincial and territorial component of the IICP for projects identified under this stream. For these provincial projects, the federal government will increase their share of project funding, and up to 100 per cent for territories.¹⁷ Additionally, on June 1st, 2020, the Government announced that the \$2.2 billion in funding delivered through Gas Tax Fund would be accelerated to municipalities.¹⁸

Given the significant fiscal pressures faced by provinces and municipalities, it is unclear whether federal funding will be able to leverage new provincial and municipal money over the medium-term for new projects.¹⁹

What are the economic impacts of the IICP?

As noted previously, one of the objectives of the IICP is fostering economic growth. Based on the PBO's updated monitoring, by 2019-20, the PBO estimates that the IICP raised the level of GDP by 0.74 per cent and the overall level of employment added 65,900 jobs or 91,400 full-time equivalent positions as of 2019-20.

Table 3-1 Economic and job impacts of the IICP, 2016-17 to 2019-20

	2016-17	2017-18	2018-19	2019-20
Infrastructure spending (\$millions)	\$10,669	\$12,039	\$13,464	\$14,944
Real GDP (%)	0.41	0.51	0.62	0.74
Employment (000s)	20.5	38.8	52.2	65.9
Full-time Equivalent Employment (000s)	31.4	56.1	73.8	91.4

Sources: PBO, Federal Budgets and Infrastructure Canada

Notes: The change in capital spending is based on the PBO's forecast presented in Table 1-1. These figures are based on the PBO's forecasts and do not represent the actual historical spending lapse.

Previous PBO reports have observed that the potential economic and job creation impacts of the IICP have been lower than anticipated. PBO has observed that this has been primarily attributable to delays in the roll-out of the program.²⁰

If federal spending on infrastructure occurs more slowly than anticipated, this would result in lower-than-expected deficits. Examining delays can also provide insight as to whether infrastructure spending is a useful policy instrument for short-term fiscal stimulus.

As presented earlier, PBO calculations indicate that the Government spent \$2.0 billion less than forecasted on infrastructure between 2016-17 and 2019-20. This lower spending resulted in lower growth in GDP and job creation. PBO estimates that compared to the planned spending set out in Budget 2019, real GDP was 0.03 per cent lower in 2018-19 and 0.04 per cent lower in 2019-20. Similarly, full-time equivalent employment was 2,200 lower in 2018-19 and 4,400 lower in 2019-20.

Annexes

Annex A: Data Request

On February 12, 2020 the PBO requested the profile of the total capital spending on a project level basis for all projects and programs under the IICP.²¹ The PBO received information from all 20 departments and agencies that received funding under the IICP by May 4, 2020.²²

Based on the responses from departments and agencies responsible for program delivery, the PBO was able to build an inventory of 33,112 total entries.

The PBO requested the following information from departments:

- Year;
- Delivery department;
- Program name;
- Project title;
- When the program/project was introduced;
- The province/territory the program/project was being delivered to;
- The location in which the program/project was being delivered to;
- The total eligible cost of the project/program;
- The announced allocated funding to the project/program;
- The initial amount of money available for the project/program;
- The approved federal share for the project/program;
- The provincial, municipal and other federal share;
- The forecasted and actual start and end date;
- A brief description of the project/program;
- The total money paid;
- The total money still available to be spent on the project/program;
- The reimbursement claims submitted;
- Whether the project/program fell under the bilateral agreement;
- The associated McKinsey category.

An amended request clarified that the data was to be provided on a fiscal profile. This was not provided in time for this report. Of the data provided, some departments provided data on a project level basis with full information whereas other departments and agencies were only able to provide information on a program level. Inconsistent data in this report refers to missing project level funding, exclusion of program level funding, and incomplete project data which refers to, but is not limited to, missing location, start dates, end dates and projected funding.

Annex B: Breakdown of projects

Based on the responses from departments and agencies responsible for program delivery, the PBO was able to build an inventory of 33,112 total entries.

There were cases of inconsistent reporting across departments and incomplete data across program level spending. After discussion with Infrastructure Canada, the PBO has assumed that each entry with funding paid out represents a unique project. This was assumed true regardless of missing information or potential repeating projects over different time periods. Entries without money paid out and incomplete information were assumed to be future projects. In our estimation of total projects, the PBO excluded all projects that had not been initiated by the end of 2019-20.

After removing out future project spending and projects that were explicitly identified as "Unallocated", the list of projects is reduced to 32,566.

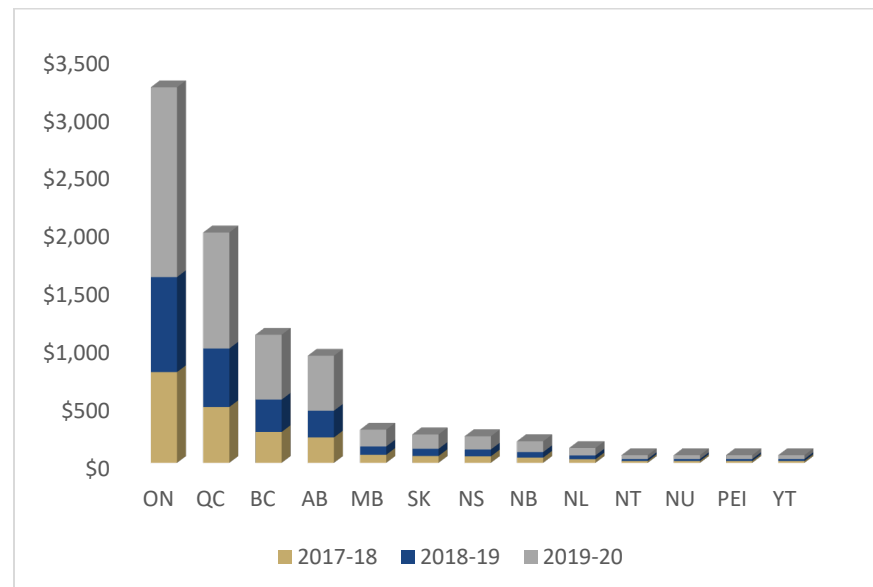
However, this is not a fully exhaustive list. Upon communication with Infrastructure Canada, an additional 20,556 projects attributable to the Gas Tax Fund (GTF) and Canadian Mortgage and Housing Corporation (CMHC) were identified (the Fund delivers approximately 4,000 projects per year, or around 12,000 projects since the inception of the IICP). CMHC had an additional 8,556 projects for the same period. A detailed list of projects attributable to the GTF was provided on June 5th, 2020 subsequent to the completion of our analysis. From the list provided, 12,297 of these projects were identified as receiving funding beginning between 2016-17 and 2018-19.²³ A detailed analysis, on a project level basis, for the GTF was not included in this report.

Annex C: Federal Transfers to Municipalities

The Gas Tax Fund (GTF) was established in 2005 with the objective to provide predictable and reliable funding directly to municipalities.²⁴ As of 2016-17, the GTF provides \$2 billion per year to municipalities, indexed at 2% per year, to support infrastructure projects.

Budget 2019 provided a one-time top up of \$2.2 billion through the federal GTF to address short-term priorities in municipalities and First Nation Communities.

Figure C-1 Cumulative flow of the Gas Tax Fund to each province (\$millions)



Sources: PBO, Infrastructure Canada

Municipalities can pool, bank and borrow against the GTF. It provides additional liquidity for municipalities to support infrastructure projects.

For instance, the city of Toronto received \$167.4 million in funding from the Gas Tax Fund in 2018 and a total of \$1.8 billion since 2005. This fund has been used to leverage over \$4 billion in investments since 2005. Overall, the yearly permanent transfer makes up, on average, 4.9% of the city's annual capital budget.²⁵

When examining total municipal spending for Toronto, Montreal, Calgary, Ottawa and Edmonton, total spending on capital assets has significantly increased since the introduction of the IICP.

Table C-1 Municipal spending on infrastructure (\$millions)

	2014	2015	2016	2017	2018
Toronto	\$2,486	\$2,885	\$2,588	\$3,043	\$3,530
Montréal	\$1,123	\$1,798	\$1,851	\$2,523	\$2,912
Calgary	\$1,024	\$1,051	\$1,416	\$1,344	\$1,271
Ottawa	\$742	\$745	\$911	\$974	\$670
Edmonton	\$954	\$988	\$1,114	\$1,138	\$1,290
Total	\$6,328	\$7,467	\$7,879	\$9,023	\$9,673

These municipalities have invested more capital than initially planned, indicating that federal funding has leveraged additional municipal funding for infrastructure.

Notes

1. https://www.pbo-dpb.gc.ca/web/default/files/Documents/Info%20Requests/2020/IR0451_INFC_IICP_new_projects_program_funding_response_ltr_e.pdf
2. The request, which asked for data to be provided on a fiscal profile, dated February 27th, 2020, was not received at the time of this report. Inconsistent data refers to missing project level funding, exclusion of program level funding, exclusion of legacy funding, incomplete data provided for projects which includes but is not limited to missing start dates, end dates and projected funding.
3. The PBO received a list of projects under the Gas Tax Fund on June 5th, 2020, subsequent to the completion of our analysis. Aggregate information on the Gas Tax Fund was provided to the PBO in the original information request which was included in our analysis.
4. The first phase focuses on repairing and upgrading vital public transit system, investing in water and wastewater systems and build and repair affordable housing. The second phase focuses on investment in small and large projects that will help build the economy.
5. <https://www.budget.gc.ca/2016/home-accueil-en.html>
6. A full list of reports can be found on the PBO's website. The most recent reports include the following:
[Infrastructure Update: Investments in Territories](#), April 2019. [Infrastructure Update: Investments in Provinces and Municipalities](#), March 2019. [Status Report on Phase 1 of the New Infrastructure Plan](#), March 2018. [Status Report on Phase 1 of the Investing in Canada Plan](#), August 2018.
7. https://www.pbo-dpb.gc.ca/web/default/files/Documents/Info%20Requests/2020/IR0451_IC_II_CP_new_projects_program_funding_ltr_e.pdf
8. Inconsistent data refers to missing project level funding, exclusion of program level funding, exclusion of legacy funding, incomplete data provided for projects which includes but is not limited to missing start dates, end dates, and projected funding.
9. The \$66.9 billion in earmarked federal spending includes future project level spending and unallocated spending. As noted earlier, to ensure complete coverage of all spending, PBO incorporated the additional, more aggregated data provided by Infrastructure Canada. Some of these programs were not included in the 33,112 entries.
10. Of the total \$34.9 billion in recorded spending provided to the PBO, \$15.7 billion can be attributed to Phase 1 and Phase 2.
11. Given the data provided by Infrastructure Canada, the PBO estimates a total spend of \$15.7 billion in project level spending thus far when excluding Infrastructure Canada's Legacy projects. Disaggregated spending by year was not provided. Therefore, we estimated the spending profile in 2018-19 and 2019-20 using the PBO infrastructure forecast.

We separated the types of funding delivered under the IICP by Phase 1, Phase 2 and Legacy. It was assumed that federal transfers to provinces and municipalities would be fully exercised each year. Therefore, variations in spending are attributed to Phase 1, Phase 2 and legacy projects after removing federal transfers. An implied lapse rate was assumed based on historical reprofiling. Adjustments were made based on the data received.

12. Statistics Canada. Table 36-10-0608-01 Infrastructure Economic Accounts, investment and net stock by asset, industry, and asset function (x 1,000,000)
13. Statistics Canada. Table 36-10-0608-01 Infrastructure Economic Accounts, investment and net stock by asset, industry, and asset function (x 1,000,000). The ratios are taken as the share of the Federal geometric end-year net stock excluding health services and defence, provincial share excluding health and education and the municipal share excluding educational services.
14. <https://www.infrastructure.gc.ca/prog/programs-infc-summary-eng.html>.
15. For details on how the benchmark was established see: https://www.pbo-dpb.gc.ca/en/blog/news/Infrastructure_investments_provinces_municipalities%20Revised%3A%20Table%203-1
16. Increases in total capital spending in 2017-18 and 2018-19 is largely attributable to Ontario.
17. <https://cmckenna.liberal.ca/news-nouvelles/together-apart-covid-19-update-11/>
18. <https://pm.gc.ca/en/news/news-releases/2020/06/01/prime-minister-announces-support-help-communities-create-jobs-and>
19. Municipalities are not allowed to run deficits to cover operating expenses. While they can run deficits to cover capital costs, overall, we anticipate that there will be less flexibility in spending.
20. https://www.pbo-dpb.gc.ca/web/default/files/Documents/Reports/2018/Infrastructure%20update/Phase%201%20June%20update_FINAL_ENG.pdf
21. https://www.pbo-dpb.gc.ca/web/default/files/Documents/Info%20Requests/2020/IR0451_IC_II_CP_new_projects_program_funding_ltr_e.pdf
22. The departments and agencies that received funding include: Canada Infrastructure Bank, Canada Mortgage and Housing Corporation, Canadian Heritage, Crown-Indigenous Relations and Northern Affairs, Employment and Social Development Canada, Environment and Climate Change Canada, Health Canada, Indigenous Services Canada, Infrastructure Canada, Innovation, Science and Economic Development Canada, Natural Resources Canada, Parks Canada Agency, Public Health Agency of Canada, Transport Canada, Atlantic Canada Opportunities Agency, Canadian Northern Economic Development Agency, Canada Economic Development for Quebec Regions, Western Economic Diversification Canada, Federal Economic Development Agency for Southern Ontario, and the Federal Economic Development Initiative for Northern Ontario.
23. This list excludes Quebec as no usable project information has been received under the renewed GTF for this province.

24. https://www.oag-bvg.gc.ca/internet/English/parl_cesd_201605_01_e_41380.html#hd3d
25. 2018 Annual Expenditure Report. <https://www.toronto.ca/city-government/accountability-operations-customer-service/city-administration/city-managers-office/intergovernmental-affairs/federal-gas-tax-fund/>