

Getting Science Right

2018-2019 Federal Budget Highlights

March 2018

Overview

The Liberal government delivered its third budget on February 27, 2018. It commits to significant investments in research and science, with historic increases to Tri-Council base funding for basic research.

It is a giant step on the road to getting science right, although it falls short of what was recommended by the Advisory Panel on Federal Support for Fundamental Research in its April 2017 final report.

This year's budget contains positive measures to assist government and applied science, with new funding for laboratories and the National Research Council, and a more transparent and competitive process for federal support for priority-driven research initiatives.

The budget also announced small amounts of funding for the post-secondary education (PSE) sector to develop a national framework to address gender-based violence at post-secondary institutions and to support Métis students to attend PSE. As well, additional funding was announced to enable Aboriginal representatives to participate in international discussions on rights to traditional knowledge and traditional cultural expressions, something CAUT has encouraged through its efforts on copyright.

Titled *Equality and Growth*, Budget 2018 makes a number of investments related to enhancing equity. Changes to paternity benefits, paid domestic violence leave, and a commitment to apply proactive pay equity legislation to federal contractors are notable.

To help measure progress on equity, Budget 2018 announces funding for a new Centre for Gender, Diversity and Inclusion at Statistics Canada and a pay transparency initiative to look at wage gaps for women, Indigenous Peoples, persons with disabilities, and racialized Canadians working for federally regulated employers. Notably absent in a gender equity budget, however, is any new funding for child care.

In sum, Budget 2018 makes significant progress on research and science and must be celebrated as it results from our collective and considerable advocacy efforts.

Basic research funding

After more than a decade of lackluster funding for Canada's granting councils, Budget 2018 makes substantive investments in research and science.

Overall, the Budget allocates just over \$1.6 billion in new funding over five years (see Table 1).

This record investment recognizes the importance of basic research to Canada's future, dedicating \$975 million for investigator-led fundamental research funding and another \$275 million for a new Tri-Council Fund to support international, interdisciplinary, fast-breaking, and higher-risk basic research.

Adjusted for inflation, Budget 2018 promises a real funding increase of 31% over 2007-08 funding levels by 2022-23.

Table 1
Granting Council Funding

	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	Total
Granting Council Base Funding	0	115	155	185	235	235	925
Granting Council: New Tri-Council Fund	0	35	45	65	65	65	275
Increasing Diversity in Science	0	5	6	4	4	4	21
Canada Research Chairs	0	25	35	50	50	50	210
Research Support Fund	0	29	39	46	59	59	231
Total	0	209	280	350	413	413	1662

The distribution of granting council base funding represents approximately 24% for SSHRC, and 38% of overall funding for NSERC and CIHR each, as follows:

- \$354.7 million over 5 years and \$90.1 million ongoing for NSERC
- \$354.7 million over 5 years and \$90.1 million ongoing for CIHR
- \$215.5 million over 5 years and \$54.8 million ongoing for SSHRC

The federal government's focus on Gender-Based Analysis+ lens adopted in Budget 2018 also translates into \$15 million over 5 years for the granting councils to implement programs that support improved equity and diversity in academia at post-secondary institutions.

SSHRC will also receive \$3.8 million in 2018–19 to develop a strategic plan that identifies new ways of doing research with Indigenous communities, including strategies to grow the capacity of Indigenous communities to conduct research and partner with the broader research community.

However, the budget falls short of the Fundamental Science Advisory Panel's recommendations which called for higher targets at a faster growth rate. The Panel recognized the dire need to increase funding for investigator-led project funding where success rates have plummeted.

Table 2
Investigator-Led Project Funding

	Advisory Panel	Budget 2018	Panel Funding (% Rec)
2018-19	155	150	97%
2019-20	310	200	65%
2020-21	465	250	54%
2021-22	485	300	62%
Ongoing	485	300	62%

The Panel's report recommended a rapid infusion of funding of \$155 million in each of the first three years,

stabilizing at \$485 million in annual funding after three years.

The federal government nearly matches the amount recommended for 2018-19, but does not meet the Panel's recommendations in subsequent years. As Table 2 shows, Budget 2018 commits to just 62% of the ongoing base funding for the open-operating grants recommended by the Panel.

The Panel also recommended \$350 million over four years for graduate student funding, followed by an ongoing commitment of \$140 million per year. Instead, Budget 2018 commits the government to undertake work to determine how better to support students through scholarships and fellowships. Budget 2018 gives new money for the Canada Research Chairs program in the order of \$165 million over the first four years, well short of the Panel's recommendation \$455 million, with an on-going \$50 million in base funding in 2022-23 onwards.

The federal government did not take up the Panel's funding recommendations to substantially increase its support for the indirect costs of research through the Research Support Fund and other new funds for post-secondary operating funding. It instead adopted the Panel's recommendation to provide permanent funding to the Canada Foundation for Innovation (CFI). This includes \$763 million over 5 years, with \$160 million for nationally important research facilities, after which CFI will receive ongoing, stable funding of \$462 million yearly as of 2023-24. For comparison, CFI expects to disburse \$330 million in funding in 2018-19.

Budget 2018 also adds \$572.5 million over 5 years with \$52 million per year ongoing to develop and implement a Digital Research Infrastructure Strategy to deliver more open and equitable access to advanced computing and big data resources to researchers across Canada.

Following the Panel's recommendations to solidify the overall governance of the granting councils, Budget 2018 foresees further changes to CIHR. The federal government will introduce legislation to separate the functions of the President of the Canadian Institutes of Health Research from those of the Chair of Governing Council at this granting council in order to implement best practices in organizational governance.

Priority-driven research

Budget 2018 makes changes to the applied research landscape, following on its horizontal review of innovation funding, announced in last year's budget.

The review identified a number of needed changes to reduce the number and complexity of programs. Specific recommendations for the granting councils include:

- The Natural Sciences and Engineering Research Council will consolidate the Engage Grants, Industrial Research Chairs, Connect Grants, Strategic Partnership Grants for Networks and Projects, and Experience Awards Grants into a single Collaborative Research and Development Grant program.
- The Canadian Institutes of Health Research will consolidate the eHealth Innovations Partnership Program and Proof of Principle Program into a single Industry Partnered Collaborative Research program.

To improve the adaptability and effectiveness of federal research funding, the Government will communicate in the coming year new competitive processes for research institutes and organizations.

The budget also allocates \$140 million over five years, starting in 2018-19, to increase support for collaborative innovation projects involving businesses, colleges, and polytechnics through the College and Community Innovation Program.

Government science

This budget also sees significant reinvestment in government science following a decade of cuts and neglect with an emphasis on “re-imagining” the National Research Council (NRC) and re-investing in government laboratories.

The federal government's review of the NRC led to significant renewed investments in this year's budget of \$540 million over five years, starting in 2018-19, and \$108 million annually:

- \$150 million over five years with \$30 million per year ongoing, to work with innovators from post-secondary institutions and businesses on multi-party research and development programs.

- \$30 million over five years with \$6 million per year ongoing, to establish an ideation fund to target breakthrough research ideas through a competitive peer-reviewed process.
- \$62 million over five years with \$12.4 million per year ongoing, to lower access fees to the NRC's specialized facilities and equipment, scientists and technical services charged to small and medium-sized enterprises, universities and colleges.
- \$298 million over five years and \$59.6 million per year ongoing, making permanent the NRC's temporary funding.

The budget commits \$139 million for renewal of government laboratories and announces a plan for construction of multi-purpose, collaborative, federal science and technology facilities, committing \$2.8 billion on a cash basis (\$58 million on an accrual basis) over five years, starting in 2018-19, with \$4.5 million per year ongoing.

The government also is investing just over \$600 million in research on agriculture, oceans, and climate.

In its budget submission, CAUT called for the renewal of climate research networks. Budget 2018 offers no new funding for the extramural climate research networks.

The budget acknowledges the importance of Canadian Arctic research with investments in intramural climate research with \$20.6 million over four years, starting in 2019-20 with \$5.1 million per year ongoing, to POLAR Knowledge Canada. This funding will support the Canadian High Arctic Research Station (CHARS) campus and proposes to amend the Canadian High Arctic Research Station Act to support the transfer of the CHARS campus to POLAR Knowledge Canada.

Indigenous education

CAUT called for an increase to the Post-Secondary Student Support Program (PSSSP) which funds First Nations students in Budget 2018. As Budget 2017 increased PSSSP for two years and announced a review of supports for Aboriginal PSE education, the absence of new funding for PSSSP is disappointing but expected. This year's budget does commit \$10 million in 2018-19 to support Métis Nation post-secondary education.

Equity & diversity

CAUT called on the government to take measures to address employment equity by reversing changes to the Federal Contractors Program. Budget 2018 does not reverse the threshold for the Federal Contractors Program, but makes other positive steps. Notably absent is further investment in a national child care program.

Data on equity, diversity & inclusion

CAUT has been advocating for improved equity and intersectional data from Statistics Canada, participating in consultations on PSE and census data.

The government announced this year the creation of a new Centre for Gender, Diversity, and Inclusion Statistics, committing \$6.7 million over five years, starting in 2018-19, and \$0.6 million per year ongoing, within Statistics Canada. A focus will be to increase the disaggregation of various data sets by race to better understand the inter-sectional dimensions of major issues, with a particular focus on the experience of Black Canadians.

It is also creating the Indigenous Statistical Capacity Development Initiative providing \$3.8 million over five years, starting in 2018–19, and \$0.4 million per year ongoing, to help Indigenous leadership, communities and governments build their own data and research capacities.

It also committed to adjust the 2021 Census of Population questions and response options to better reflect how people identify themselves by gender and orientation.

Status of Women Canada will receive \$5 million per year to undertake research and data collection in support of the government's Gender Results Framework. One of the first projects this would support is an analysis of the unique challenges visible minority and newcomer women face in finding employment in Science, Technology Engineering, and Mathematics occupations.

Gender-based violence

Following last year's announcement of a National Strategy to Address Gender-Based Violence and with the rise of #metoo movement, Budget 2018 further invests in actions to address gender-based violence and harassment.

- \$5.5 million over five years, starting in 2018-19, to Status of Women Canada to work with stakeholders, including provinces and territories, towards developing a harmonized national framework to ensure consistent, comprehensive, and sustainable approaches in addressing gender-based violence at post-secondary institutions across the country.

Starting in 2019, for those universities and college campuses that are not implementing best practices addressing sexual assaults on campus, the Government of Canada will consider withdrawing federal funding.

- \$86 million over 5 years and \$20 million ongoing to expand Canada's Strategy to Address Gender-Based Violence.
- \$50.4 million over four years in legal aid funding for workplace survivors of sexual harassment and assault.
- \$10 million over 5 years and \$2 million ongoing for the RCMP to address "unfounded" sexual assaults.
- \$14.51 million over five years for National Human Trafficking Hotline.
- \$34.9 million over five years, starting in 2018–19 with \$7.4 million per year ongoing, to create a single, integrated framework that will protect federally regulated employees from harassment and violence in the workplace.
- \$20 million over 5 years with \$3.6 million in ongoing funding to establish a Centre of Diversity, Inclusion and Wellness within the public service that will, as part of its mandate, better support public servants in dealing with sexual harassment in the workplace within the public service.

Following a campaign by the Canadian Labour Congress, the federal government also agreed to amend the *Canada Labour Code* to provide 5 days paid domestic violence leave for federally regulated sectors.

Pay equity

The budget commits to table Proactive Pay Equity legislation for federally regulated sectors in budget implementation legislation. The federal pay equity legislation will include job types including part-time, temporary and seasonal. The legislation would apply to the Federal Contractors Program on contracts equal to

or greater than \$1 million and ensure a robust application of federal employment equity law.

The budget also announces a pay transparency initiative to hold federally-regulated employers accountable for wage gaps that impact the designated groups under the *Employment Equity Act*. This will serve as a model for other public employers.

Gender & racial equity education

The budget also announces a series of investments related to improving equity, diversity and inclusion.

- \$1.3 million to host a national roundtable on benefits of Gender-Based Analysis+.
- \$7.2 million over five years to “lead a national conversation” on gender equality.
- \$1.8 million over two years to engage boys and men in conversation specifically.
- \$23 million over two years to a Multiculturalism Program for new National Anti-Racism Approach to address growing racist, xenophobic sentiment.
- \$1.5 million for a major symposium on women in the workplace in spring 2019.
- \$100 million over 5 years to the Status of Women Canada Women’s Program to support funding for organizations focused on vulnerable women.

Copyright & intellectual property

As the *Copyright Act* is under review, CAUT has been working to raise the challenges of copyright in relation to Indigenous Knowledge and Aboriginal rights. The issue is on the government’s agenda as this year’s budget commits \$1 million over five years to enable representatives of Canada’s Indigenous Peoples to participate in discussions at the World Intellectual Property Organization related to traditional knowledge and traditional cultural expressions, an important form of intellectual property.

The budget also commits \$2 million over 3 years to conduct an intellectual property awareness and use survey. This survey will help identify how Canadians understand and use intellectual property, including groups that have traditionally been less likely to use intellectual property, such as women and Indigenous entrepreneurs.

Other initiatives of interest

Last year’s budget brought a suite of changes to the Employment Insurance program which could impact provisions in collective agreements.

This year, further improvements were made to the Employment Insurance Act creating a Parental Sharing Benefit and the Working while on Claim program.

Following a concerted push on pharmacare by the Canadian Labour Congress, the government created an “Advisory Council on the Implementation of National Pharmacare”

As the first two Liberal budgets invested considerably in skills and jobs, Budget 2018 adds:

- \$0.75 million in 2018-19 for a horizontal review of skills programming over the next year.
- \$448.5 million over five years for Youth Employment Strategy (to support the doubling of Canada Summer Job).
- \$46 million over 5 years for a new Pre-Apprenticeship Program and \$19.9 million over 5 years for the Apprenticeship Incentive Grant for Women.

Conclusion

Budget 2018 is a historic budget, investing significant amounts in basic research and science.

The government has heard the call of Canada’s scientific and research community that investing in basic research will support fundamental advances in knowledge that will benefit all Canadians.

CAUT will continue to work with the government to strengthen the federal partnership on science and research.