

# Forward on access, no word on fundamental science

## 2017/ 2018 Federal Budget Highlights

March 2017

## Overview

The Liberal government delivered its second budget on March 22, 2017. It lays out the government's vision for jobs and growth-focusing on skills development, innovation and infrastructure investment. As part of this agenda, a number of positive measures were introduced that will help increase access to post-secondary education, specifically for First Nations, Inuit and Métis students and part-time learners.

Absent from this year's budget is any new funding for basic research. This is particularly notable following the government's first budget last year which boosted funding for the granting councils and announced a review of fundamental science, the results of which have been delayed.

Academic researchers may see modest increases in applied research opportunities through partnerships with industry as part of several federal boutique innovation initiatives. As well, approximately 25 more Canada Excellence Research Chairs will be created over the next eight years from existing funds. The government has promised to close the wide gender gap within this program.

Budget 2017 is the first to include a gender-based analysis. The budget makes investments in child care, home care, programs to increase women's participation in STEM (Science, Technology, Engineering, and Mathematics) fields and initiatives to decrease gender-based violence. These are good first steps to address barriers to equity.

In sum, Budget 2017 makes a number of welcome initiatives but stalls on support for basic research. We need sustained investments in fundamental science that lead to real advances in knowledge that contribute to our understanding of the world and a better quality of life.

## Science & research-related investments

Given the government's focus on inclusive innovation, the absence of any new increases to the granting councils base funding is startling. Last year's budget began the process of reversing the decade-long slide in research funding, by providing an additional \$95 million per year to the budgets of the research granting councils. CAUT estimates that \$500 million over three years is needed to get to 2007 levels when adjusted for inflation.

Granting Councils	% Change 2007-2017
Social Sciences & Humanities Research	-12.0%
Natural Sciences & Engineering Research	-2.9%
Canadian Institutes of Health Research	-7.3%
Indirect costs	-1.7%
Total	-5.6%

### What is in Budget 2017:

- \$117.6 million over eight years for approximately 25 Canada 150 Research Chairs which will be funded with resources within the existing Canada Excellence Research Chairs program. This is an opportunity to close the equity gaps within the program.
- Commitment to release the report on fundamental science in the coming months. The government is potentially setting expectations around new funding, by highlighting that it was asked to make recommendations concerning the challenges facing women and other underrepresented groups, and ways to make current programs more accessible and inclusive.
- A new Prime Minister's Gold Medal to recognize scientific excellence and bring greater international acclaim to Canadian scientists and researchers.
- \$125 million to launch a Pan-Canadian Artificial Intelligence Strategy to increase post-graduate trainees and researchers studying artificial intelligence and deep learning, managed through the Canadian Institute for Advanced Research (CIFAR).
- Renewed and enhanced funding for CIFAR of \$35 million over five years, starting in 2017–18.
- Renewed funding of \$6 million for the Stem Cell Network in 2018–19.

- \$80.9 million on a cash basis over five years, for the Canada Space Agency, starting in 2017–18, for new projects.
- \$10 million over two years for the Institute for Quantum Computing.
- \$10 million over two years for the Community and College Social Innovation Fund, starting in 2017–18.
- \$22.3 million over five years to establish a new Accessible Technology Development Program.

## Government science

Following deep cuts to science under the previous government, CAUT called for an independent and non-partisan Chief Science Officer, to be appointed by and accountable to Parliament. The government partially delivered this year with the creation of a Chief Science Advisor. Budget 2017 sets out an annual budget of \$2 million for the Advisor and related secretariat. The Chief Science Advisor will provide advice to the Prime Minister and the Minister of Science on how to ensure that government science is open to the public, that federal scientists are able to speak freely about their work, and that science is effectively communicated across government.

With the fundamental science panel recommendations pending, the government also announced it would develop a new federal science infrastructure strategy and a review of the National Research Council.

New government science initiatives are also proposed:

- \$70 million over six years, starting in 2017–18, to further support agricultural discovery science and innovation, with a focus on addressing emerging priorities, such as climate change and soil and water conservation at Agriculture and Agri-Food Canada.
- \$73.5 million over five years, starting in 2017–18, to Environment and Climate Change Canada and Natural Resources Canada to establish a new Canadian Centre for Climate Services to improve access to climate science and regional climate resilience centres. The centres will work with provincial, territorial, Indigenous and other partners to make it easier for governments, communities, decision-makers, businesses and organizations to access data and information on climate science, and help support climate adaptation decision-making across the country.

- \$47.0 million over five years, starting in 2017–18, to Health Canada, the Public Health Agency of Canada and the Canadian Institutes of Health Research to develop and implement a national action plan to respond to the broad range of health risks caused by climate change.

## Accessing post-secondary education

Last year's budget saw substantial investments to increase access to post-secondary education and reduce student debt, through changes to the maximum Canada Student Grant for low-income students and improved eligibility. However, there was no increase to the Post-Secondary Education Support Program for Aboriginal students. CAUT joined others to call for a \$50 million per year investment in the program. Budget 2017 makes the long overdue investment to support Indigenous students, and expands access in other ways.

### Indigenous Education

- \$90 million over two years, beginning in 2017–18, for the Post-Secondary Student Support Program which funds First Nations and Inuit students. This funding will support the post-secondary education financial needs of over 4,600 students over the two-year period.
- \$5 million per year for five years, starting in 2017–18, to Indspire, conditional on Indspire raising \$3 million per year in matching funds from the private sector to provide \$40 million over five years in bursaries and scholarships for more than 12,000 First Nations, Inuit and Métis students.
- A comprehensive and collaborative review with Indigenous partners of all current federal programs that support Indigenous students who wish to pursue post-secondary education will be undertaken. The purpose of the review will be to ensure that these programs meet the needs of individual students while supporting attendance at, and completion of, a post-secondary degree or credential.
- The Canada Student Financial Assistance Act will be amended, so that students who are registered under the Indian Act but do not have Canadian citizenship can access the Canada Student Loans Program.
- \$14.7 million over three years, starting in 2017–18, to extend and enhance the Northern Adult Basic

Education Program which is delivered by local colleges.

### Student grants

- \$59.8 million over four years, starting in 2018–19, and \$17 million per year thereafter to expand eligibility for Canada Student Grants for students attending school part-time. These changes, including changes to the threshold, which will be in place for the 2018–19 academic year, are expected to make an additional 10,000 part-time students eligible for Canada Student Grants and Loans each year.
- \$107.4 million over four years, starting in 2018–19, and \$29.3 million per year thereafter, to expand eligibility for adult students with dependents, by increasing income thresholds.
- \$287.2 million over three years, starting in 2018–19, for a pilot project to test new approaches to make it easier for adult learners to qualify for Canada Student Loans and Grants who wish to return to school after spending several years in the workforce.
- \$132.4 million over four years, beginning in 2018–19, and \$37.9 million per year thereafter, to allow unemployed Canadians to pursue self-funded training while receiving EI benefits.

### Tuition tax credit

- Expand the range of courses eligible for this credit to include occupational skills courses that are undertaken at a post-secondary institution in Canada (e.g., training in a second language or in basic literacy and numeracy to improve job skills) at a college or university.

### Canada Learning Bond

- \$12.5 million over six years, starting in 2017–18, from Employment and Social Development Canada's existing resources to launch a pilot project to help more low-income families benefit from the Canada Learning Bond.
- Budget 2017 also proposes to amend the Canada Education Savings Act to allow the cohabiting spouse or common-law partner of the primary caregiver to apply for the Canada Learning Bond and the Additional Canada Education Savings Grant.

## Skills development

Skills training is a major theme of this year's budget which proposes a number of initiatives to encourage lifelong learning. Of most interest is the expansion of workplace learning initiatives for students and the creation of a new organization to look at skills development.

- \$221 million over five years to Mitacs, a not-for-profit organization that builds partnerships between industry and educational institutions, to provide up to 10,000 work-integrated learning placements for Canadian post-secondary students and graduates each year—up from the current level of around 3,750 placements.
- \$225 million over four years, starting in 2018–19, and \$75 million per year thereafter, to establish a new organization to support skills development and measurement in Canada. Working in partnership with willing provinces and territories, the private sector, educational institutions and not-for-profit organizations, this organization will: identify the skills sought and required by Canadian employers; explore new and innovative approaches to skills development; share information and analysis to help inform future skills investments and programming. Further details on this new organization will be shared in the coming months.

## Innovation

Innovation is a second major theme of Budget 2017, and follows from the government's innovation consultations. The big investment in this area is on "superclusters", which could include post-secondary institutions. These investments will focus in on areas like advanced manufacturing, agri-food, clean technology, digital technology, health/bio-sciences and clean resources, as well as infrastructure and transportation. This is one area which has come under criticism in terms of the budget's gender-based analysis, as these six economic sectors are predominantly male employment sectors. The budget does provide some funding to promote STEM and digital skills training for under-represented groups.

- \$950 million over five years, starting in 2017–18, to be provided on a competitive basis in support of a small number of business-led innovation “superclusters” – dense areas of business activity that contain large and small companies, post-secondary institutions and specialized talent and infrastructure. The competition will launch in 2017 and focus on “superclusters” that enhance Canada’s global competitiveness by focusing on highly innovative industries. \$800 million will be drawn from the Budget 2016 provision for innovation networks and clusters and \$150 million will be drawn from the public transit and green infrastructure allocations provisioned in the 2016 Fall Economic Statement.
- \$10.8 million over five years, starting in 2017–18 to the PromoScience program to promote STEM to young Canadians, particularly those under-represented.
- \$50 million over two years to go to digital skills and training organizations through a competitive process.

## Equity measures

The budget takes some steps to address inequality and reduce barriers to economic opportunity. The changes to EI for caregiving and parental leave are of interest, as may be the changes to the federal labour code.

- \$7 billion over 10 years, starting in 2018–19, to support and create more high-quality, affordable child care spaces across the country.
- \$6 billion over 10 years for home care.
- \$5 billion over 10 years for mental health initiatives.
- \$11.2 billion over 11 years for affordable housing. Particularly in larger centres, this will help attract and retain students and workers.
- \$100.9 million over five years, starting in 2017–18, and \$20.7 million per year thereafter, to establish a National Strategy to Address Gender-Based Violence. The Strategy will create a centre of excellence within Status of Women Canada, to better align existing resources to address gender-based violence, and include measures that will be implemented by the Royal Canadian Mounted Police and the Department of National Defence.
- \$3.6 million over three years, starting in 2017–18, to support the work of the Prime Minister’s Special Advisor on LGBTQ2 to deliver on his mandate to provide advice on the development and coordination of the Government’s LGBTQ2 agenda.
- Development of new planned federal accessibility legislation, which will promote equality of opportunity and increase the inclusion and participation of Canadians who have disabilities or functional limitations by increasing accessibility and removing barriers in areas of federal jurisdiction.
- \$691.3 million over five years, starting in 2017–18, and \$168.1 million per year thereafter, to create a new EI caregiving benefit of up to 15 weeks. The new benefit will cover a broader range of situations where individuals are providing care to an adult family member who requires significant support in order to recover from a critical illness or injury. Parents of critically ill children will continue to have access to up to 35 weeks of benefits, with additional flexibility to share these benefits with more family members.
- EI parental benefits will be more flexible. Proposed changes will allow parents to choose to receive EI parental benefits over an extended period of up to 18 months at a lower benefit rate of 33 per cent of average weekly earnings. EI parental benefits will continue to be available at the existing benefit rate of 55 per cent over a period of up to 12 months. Making EI parental benefits more flexible is expected to cost \$152 million over five years, starting in 2017–18, and \$27.5 million per year thereafter.
- Women will be able to claim EI maternity benefits up to 12 weeks before their due date—expanded from the current standard of 8 weeks—if they so choose. The additional flexibility is expected to cost \$43.1 million over five years, starting in 2017–18, and \$9.2 million per year thereafter.
- Federally regulated workers will have the right to request flexible work arrangements from their employer, such as flexible start and finish times and the ability to work from home. Proposed changes will also provide federally regulated workers with new unpaid leaves for family responsibilities, to participate in traditional Indigenous practices, and to seek care if they are victims of family violence. Changes will also make bereavement leave more flexible.

## Indigenous culture

Following on the Truth and Reconciliation Commission recommendations, the government is investing in Indigenous languages and cultures. Aboriginal academic institutions and non-Aboriginal universities and colleges in partnership with Indigenous organizations can apply to the Aboriginal Languages Initiative to support preservation and revitalization of Indigenous languages.

- \$89.9 million over the next three years to support Indigenous languages and cultures. This includes: \$69 million to significantly enhance the Aboriginal Languages Initiative. This new funding will support a range of activities such as developing learning materials, funding language classes and culture camps, and archiving Indigenous languages; \$14.9 million for Library and Archives Canada to support the digitization of existing Indigenous language and cultural materials. Funding would also support the development of an Aboriginal Oral Testimonies Project to document Indigenous heritage; \$6 million for the National Research Council Canada to develop, in collaboration with Indigenous stakeholders, information technology to preserve oral histories by converting speech to text, and creating other interactive educational materials.

## Conclusion

Budget 2017 takes some positive steps but stalls on investing further in fundamental research.

Underfunding basic research limits innovation and job growth and hampers Canada's ability to attract and retain researchers.

CAUT is looking forward to the release of the report on fundamental science. We will continue to engage the government to strengthen Canada's knowledge infrastructure, and further improve the quality and accessibility of post-secondary education.