



Higher
Education
STRATEGY ASSOCIATES

The 2022 Federal Budget

A Higher Education Strategy
Associates Commentary

April 8, 2022





Higher Education Strategy Associates (HESA) is a Toronto-based firm providing strategic insight and guidance to governments, postsecondary institutions, and agencies through excellence and expertise in policy analysis, monitoring and evaluation, and strategic consulting services. Through these activities, HESA strives to improve the quality, efficacy, and fairness of higher education systems in Canada and worldwide.

Any errors or omissions are the authors' alone.

Contact:

Higher Education Strategy Associates
Suite 207, 20 Maud Street, Toronto ON, M5V 2M5, Canada
+1 (416) 848-0215
info@higheredstrategy.com
www.higheredstrategy.com

© Higher Education Strategy Associates, 2022

Table of Contents

1. Introduction	1
2. A New Innovation and Investment Agency	2
3. Innovation SuperClusters	3
4. Science.....	4
4.1 Innovation and Commercialization	4
4.1.1 Intellectual Property	4
4.1.2 SR&ED Review	4
4.2 Targeted Research Funds	5
4.2.1 Funding for Long Covid Research	5
4.2.2 Funding for Dementia Research.....	5
4.2.3 Net-0 Emissions in Agriculture	5
4.3 Research Security	5
4.4 Supporting Leading and Emerging Researchers	6
5. Skills and Labour Market Agreements.....	7
6. Miscellaneous.....	8
6.1 Funding for Individual Institutions	8
6.2 A Ban on Foreign Investment in Canadian Housing	8
6.3 Strategic Policy Review.....	9
7. Conclusion.....	10

1. Introduction

On April 7, 2022, Finance Minister and Deputy Prime Minister Chrystia Freeland rose in the House to deliver her second – and the Trudeau government’s sixth – federal budget. The backdrop to the budget was a spike in the cost of living – especially housing prices, the war in Ukraine, and of course the lingering COVID crisis. Two big, interlinked questions that needed answering in this budget were firstly whether the Liberal government would return to a modicum of fiscal restraint after the emergency spending of 2020 and the massively expansionary budget of 2021, and secondly whether the budget would reflect anything from the NDP/Liberal agreement signed less than three weeks ago.

Adding a bit of intrigue for the post-secondary sector was the fact that the Liberals made a number of significant promises in areas related to higher education and science while winning a second straight minority government just six months ago. Many had to do with the expansion of the Canada Student Financial Assistance Program, others had to do with research and innovation – such as a putative “Canada Advanced Research Projects Agency” modelled on the American DARPA program, expansion to the Canada Research Chairs Programme, and a variety of boutique science initiatives distinctly not in keeping with the spirit of the Naylor report. But the mood swing over the past six months suggested that higher education issues might be at least temporarily be set aside.

And with all that as prelude, we turn to what Freeland actually said.

2. A New Innovation and Investment Agency

In what might be the best news of the budget, the Government of Canada has seemingly ditched the idea of a Canada Advanced Research Projects Agency (CARPA) and replaced it with the idea of an “Innovation and Investment Agency” (as yet unnamed), modelled on the Finnish TEKES agency (now known as Business Finland) and the Israel Innovation Authority (IIA).

TEKES and IIA both focus on helping private sector efforts, at the level of individual firms, to bring new products to market, through various funding opportunities and by facilitating partnerships with university researchers and on occasion with international partners (TEKES additionally has played a role in university commercialization, but this is not really its focus). Analysts have credited both institutions for a great deal of their respective countries’ success in developing large numbers of start-up and scale-up companies, particularly in the IT industry, even though neither organization has a specifically “tech” mandate and in fact both are officially blind when it comes to specific technologies or sets of technologies.

Pursuing the TEKES and IIA model represents in many ways a huge evolution in official Ottawa thinking on innovation. The most important thing is not so much that Ottawa now officially recognizes that private sector R&D is specifically where the country has a problem, but that Ottawa recognizes it must work directly with the private sector to solve this problem, rather than pouring public sector dollars into universities as an *alternative* to private sector R&D. This is potentially a real game-changer for Canada. It will require Universities Canada, in particular, to change its lobbying strategy. It may also give the three granting councils latitude to reduce the amount of private co-funding built into their own programs, since they will no longer be the sole route through which public and private monies for research can be brought together.

This idea made it into the budget without being fully-baked. While the budget earmarks \$1 billion over five years for the agency, the agency does not have an official name, and its structure and mandate are to be the subject of further consultations with “Canadian and Global experts”. There will be a further report out before the fall fiscal update.

3. Innovation SuperClusters

Canada's Innovation Superclusters Initiative was born as part of the Innovation and Skills Plan announced in the 2017 federal budget. The Superclusters seek to bring together entrepreneurs, academia, government, and not-for-profits to innovate new processes and products, with the ultimate goal of driving significant economic growth – ideally emulating world-leading economic clusters elsewhere such as Silicon Valley.

The Government of Canada provided CAD 950 million for the Superclusters from 2018 to 2022 and charged them with leveraging money from the private sector to co-fund innovative investments. By December 2021, the Superclusters had approved more than 415 projects with 1,840 partners, worth over \$1.9 billion (including both public and private funds). In terms of measurable innovations, the Superclusters have generated more than 850 patents.

Critics of the Superclusters initiative point to a central piece missing from Canada's efforts: geographic proximity. By definition, the comparative advantage of clusters is the local network that arises around an economic sector or group of closely related sectors. However, Canada's superclusters span large regional distances: Protein Industries Canada spans the Prairies, such a large area that this can hardly be called a true 'cluster'. The logic of regional ~~perk-barrelling~~ development financing dictated this approach to cluster-building.

Another point of contention is the calculation of economic impact. The Ministry of Innovation, Science and Economic Development (ISED) initially claimed that investments in Superclusters would yield a 25-fold economic impact. Yet, many independent economists estimate closer to 3-6-fold impacts. This independently generated number is still significant, but suggests that the Government's Superclusters projections have been significantly overstated.

The Liberals' Budget 2022 continued support for the Superclusters Initiative. The government is proposing to invest \$750 million from 2022/23 to 2028/29 in the now renamed "Canada's Global Innovation Clusters". This is about half of what ISED had requested for the program, but remains a significant ongoing investment in the innovation space. The name change also suggests a different and less gee-whizzy approach to policy-making moving forward.

4. Science

Several funding initiatives interspersed through the budget are relevant to Canadian postsecondary institutions' research endeavours. These initiatives broadly seek to foster innovation and commercialization, supported targeted research, enhance research security, and support leading and emerging researchers.

4.1 Innovation and Commercialization

4.1.1 Intellectual Property

As part of the Budget's quest to "build a world-class intellectual property regime," the government has allocated \$47.8 million over five years beginning in 2023-24, and \$20.1 million per year thereafter for Innovation, Science and Economic Development Canada (ISED) to build a new platform designed to help graduate students and other academic researchers bring their work to market. This can be seen as either a partial fulfillment or downsizing of the Liberals' 2021 platform pledge to launch a \$75 million annual fund to assist postsecondary institutions to commercialize their research, which would have also included assistance in identifying and securing patent rights.

The government's investment in intellectual property includes additional efforts to measure the impact of government research funding. Beginning in 2022-23, the Budget earmarks \$10.6 million over five years, and \$2 million annually thereafter, for ISED to establish a survey programme to assess federal research investments and how knowledge generated at postsecondary institutions produces commercial returns. This closely resembles Statistics Canada's Survey of Intellectual Property Commercialization, which was a casualty of the 2011-12 Harper program review. Although this investment does not promise postsecondary institutions additional research dollars, the findings of the assessment may impact their future funding.

4.1.2 SR&ED Review

The Liberals announced before the last federal election that they would review the Scientific Research and Experimental Development (SR&ED) program to make the program "more generous for those companies who take the biggest risks, promoting productivity, new inventions, and the creation of good jobs". The Budget confirms that the government will follow through on its commitment, further specifying that "the review will examine whether changes to eligibility criteria would be warranted to ensure adequacy of support and improve overall program efficiency". The budget also indicates that the government will explore whether to adopt a patent box regime, which reduces corporate income taxes that result from qualifying intellectual property assets.

This is an area of seeming bipartisan agreement, as the Conservatives made a very similar pledge to an SR&ED review in the 2021 election campaign. The program provides

more than \$3 billion in tax incentives to over 20,000 claimants annually, making it the single largest federal program supporting business R&D in Canada.

4.2 Targeted Research Funds

4.2.1 Funding for Long Covid Research

Budget 2022 announced \$20 million over five years, starting in 2022-23, for the Canadian Institutes of Health Research (CIHR) to support research on the long-term effects of Covid-19, as well as the wider impacts of Covid-19 on health and health care systems. To date, CIHR had funded research on this topic primarily through its operations grants (357 of them) and a few fellowships and other programs. The existing grants presumably fell under previously announced Covid-related operating grant competitions, such as [Emerging COVID-19 Research Gaps & Priorities, July 2021](#). The Government of Canada is following a similar path as other jurisdictions, for instance the Biden Administration has just unveiled a national research action plan to assist in the diagnosis and treatment of long Covid, and Congress has allocated US \$1.15 billion through the National Institutes of Health for long Covid research.

4.2.2 Funding for Dementia Research

The government also announced \$20 million over five years, starting in 2022-23, for CIHR grants aimed at increasing our understanding of dementia and brain health, improving treatment and outcomes for persons living with dementia, and evaluating and addressing mental health consequences for caregivers. In Budgets 2011 and 2016, the Government also committed up to \$120 million to the Canada Brain Research Fund, a public-private fund administered by the Brain Canada Foundation.

4.2.3 Net-0 Emissions in Agriculture

A substantial section of the Budget focused on tackling climate change, but only one investment was directly relevant to post-secondary institutions. Budget 2022 pledges \$100 million to the federal granting councils over six years to support research aimed at developing technologies and crop varieties that will allow for net-zero-emissions agriculture.

4.3 Research Security

Budget 2022 pledges to protect “Canada’s research from foreign threats” through two measures. The first is a new Research Support Fund that will allow postsecondary institutions to build capacity to “identify, assess, and mitigate potential risks to research security.” The Research Support Fund will receive \$125 million over five years beginning in 2022-23, and \$25 million per year subsequently. This type of funding appears to be

unprecedented among the Five Eyes countries and is a significant get for postsecondary institutions. In a second measure, the government will provide postsecondary institutions with forward-looking assistance in developing research security policies and practices, through a new Research Security Centre. This Centre will receive \$34.6 million over five years beginning in 2022-23 and \$8.4 million annually thereafter.

4.4 Supporting Leading and Emerging Researchers

Budget 2022 provides modest additional support to the Canada Research Chairs Program, which was first created in 2000 in an effort to increase the number of outstanding researchers in Canadian postsecondary institutions. The Budget earmarks \$38.3 million over four years starting in 2023-24, and \$12.7 million annually thereafter, to establish between 12 and 25 new Canada Excellence Research Chairs in STEM fields. One concern is that increasing the number of Chairs exclusively in STEM fields where women are severely underrepresented may exacerbate the program's already significant gender imbalance.

At the same time, the Budget provides \$40.9 million over five years beginning in 2022-23, and \$9.7 million annually thereafter, for additional scholarships and fellowships to support Black student researchers. This expands on the 2021 Liberal platform commitment to provide \$30 million over five years to support mentorship and development of young Black Canadian researchers at postsecondary institutions. Black researchers are presently underrepresented among research award recipients, whereas many consider that a more diverse and equitable research community will produce better research.

5. Skills and Labour Market Agreements

The Budget contains major elements related to skills training, mainly pertaining to the Labour Market Agreements (LMAs) which allow provinces to use Employment Insurance dollars for training. Most importantly by far, the Government of Canada has signalled its intent to renew or “modernize” these partnerships. Its aim is “to be more responsive to the needs of workers, businesses and the economy” and to “modernize” the LMAs to reflect “the changing needs and challenges of both the current and future Canadian labour market”. There is a special focus on “support[ing] mid-career workers in transitioning to new sectors and [on] help[ing] local economies adapt and prosper”. The announcement suggests there will be significant and possibly contentious negotiations between the Provinces and the Federal Government starting in the very near future, as each will seek put in place their own vision for modernized workforce development.

The budget’s proposal to amend the Employment Insurance Act to ensure that “more workers are eligible for help before they become unemployed, and that employers can receive direct support to re-train their workers” appears more immediately tangible. This proposition sounds an awful lot, at least in spirit, like the Harper government’s Canada Job Grant (CJG): an EI-based fund which was directed by employers themselves and could be used to train individuals still in work in order to increase firms’ productivity. The CJG was introduced in 2012, but kyboshed a few years later by the Liberals.

6. Miscellaneous

6.1 Funding for Individual Institutions

Budget 2022 earmarks only modest funding to individual institutions. There is support for a Research Chair at York University and a collaborative initiative for Muslims in Canada at the University of Toronto.

The budget earmarks \$1.5 million for the Jean Augustine Chair in Education, Community and Diaspora to be housed at York University. A tribute to the social justice activist, educator and first Black Canadian woman elected to the House of Commons, the Chair is focused on addressing systemic barriers and racial inequalities to improve educational outcomes for Black students, and was featured in HESA's 2020 report on [York University's Economic and Social Impact](#). This is one of only two Chairs in Canada dedicated to research and knowledge mobilization on Black and African-descended communities.

The budget also provides \$4 million, through the Department of Canadian Heritage, to support the Muslims in Canada Archive, a collaborative initiative of the Institute of Islamic Studies at the University of Toronto. This aligns with the commitment in the Liberal platform to confront systemic racism and discrimination.

6.2 A Ban on Foreign Investment in Canadian Housing

The government's high-profile two-year ban of most foreign investment in residential property will affect a subset of international students from relatively wealthy backgrounds. Still, a limited carve-out aligns with the government's goal to encourage skilled workers to remain in Canada upon graduation: "International students on the path to permanent residency would be exempt from the ban in certain circumstances, as would individuals on work permits who are residing in Canada." As yet, the referenced circumstances are unspecified, while presumably the relevant work permits would include the Post-Graduate Work Permit program.

According to [StatsCan](#), about 30% of international students who arrived in the 2000s became landed immigrants within 10 years of their arrival. Still more would have started on that path but not have achieved landed status. Hence, the number of students potentially exempt from the ban is significant. That said, it is likely that few invest in residential property during their studies.

The Government also recently introduced legislation to establish an Underused Housing Tax, which the Budget promises will affect "non-resident, non-Canadians who own homes that are being underused or left vacant." This might also have a marginal negative impact on Canada's attractiveness as a "study-and-invest" destination.

6.3 Strategic Policy Review

As indicated in the Liberal platform, the Treasury Board will conduct a strategic policy review of government programs. This review intends to stand apart from previous reviews that were “driven by cost-savings or deficit reduction.” Still, savings will remain the key objective, even if one stream of the review promises to assess how programs and policies are working to meet environmental, equity and quality of life goals. The review targets savings of \$6 billion over five years, and \$3 billion annually by 2026-27.

The last review in 2012 under Stephen Harper found savings that ramped up to roughly \$5.2 billion ongoing. The post-secondary sector was impacted by way of belt-tightening at the tri-councils and HRSDC. There is no guarantee that this program review will affect any programs related to post-secondary education, but there is no guarantee that the system will escape unscathed either.

Strategic Policy Review 2012: Savings in \$CAD Million				
	2012-13	2013-14	2014-15	Ongoing
SSHRC	7.0	14.0	14.0	14.0
NSERC	15.0	30.0	30.0	30.0
NRC	1.3	16.3	16.3	16.3
HRSDC	6.3	39.4	183.2	183.2

7. Conclusion

This is a difficult budget to evaluate. By no stretch of the imagination can it be called an “education budget” and some of it seems to have been thrown together in haste. Yet at the same time, some of its changes seem to us to be quite profound.

First, there are a number of areas where the Budget is most notable for what it did *not* do. It did not renew the Business Higher Education Roundtable’s existing funding package, which runs out in early 2023 (presumably there will be some off-budget-cycle investment). Neither did it implement any of the changes to the Canada Student Financial Assistance Program promised in the 2021 election manifesto. Also, some points of note were more statements of intent than actual policy announcements, most notably with respect to labour market agreements with the provinces. None of these things represent a failure or betrayal by the Liberals – none were do-or-die in April, and most will probably be addressed within a year.

Second, most of the direct money related to science is relatively small beans, with the possible exception of the Net-zero Emissions in Agriculture piece. The research security initiative, where the Government is now paying universities to set up the minimal amounts of security necessary to stop Chinese secrets being funnelled abroad, is not very big, but it is a definite sign of the lobbying power of universities: in none of the other Five Eyes countries, so far as we can establish, have governments ever paid universities to do what might be seen as basic due diligence in this area.

No, the real change is the big money to support private sector R&D. For years there has been a debate in world innovation policy circles about whether it is better to support innovation through tax credits (i.e., firms figure out how to spend money and tax credits follow automatically) or through direct subsidies (government or arms-length bodies “pick winners”). Over the past decade or so the balance of opinion has shifted fairly decisively toward the latter, even though the role of governments in picking specific firms remains the cause of much apprehension. Canada, with its massive investments in Scientific Research & Experimental Development (SRED) Tax credits, has been seen as a laggard, even after the mild reforms which accompanied the Jenkins Panel a decade ago. Superclusters – clumsily-designed as they have been in many ways – were nevertheless a step in the right direction in that they fronted money to individual companies.

But look at the package in this Budget. Less money for SRED. More money for clusters. And – glory be – \$1 billion over five years for a new innovation agency, modelled on some of the best global practices, and which focuses directly on the problem of insufficient investment in private R&D. Though it is not being sold as a single coherent shift, that is what it might turn out to be in the end. And not only that, Superclusters have lost their goofy name (they are now simply and soberly “innovation clusters”) and the Canadian Advance Research Projects Agency – dreaded CARPA, that asinine policy answer to a question nobody asked – was simply deep-sixed.

Not everyone will view this balance sheet as good for higher education. But it is without question the best day that innovation policy has had in a long time in the country. And that’s probably how this budget will be remembered.



**Higher
Education**
STRATEGY ASSOCIATES

20 Maud Street, Suite 207
Toronto ON, M5V 2M5, Canada
+1 (416) 848-0215
info@higherstrategy.com

higherstrategy.com