



Universities Matter

How Canada's universities contribute to
economic recovery and long-term prosperity

AUCC's Pre-budget Submission to the House of Commons Standing Committee on Finance

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Executive Summary

Canadians have just experienced one of our toughest years in memory. Long-held beliefs about economic and social prospects for ourselves and our families have been challenged. At the same time, impending demographic changes will generate new challenges to Canada's economic growth and make innovation and productivity even more important than they are today.

The federal government and many provinces are running deficits as they provide vital economic stimulus to help Canadians weather the economic downturn. One economic stimulus measure that has been especially effective at creating jobs in the short-term and that will lead to productivity gains in the long-term is the more than \$4 billion that the federal government, the provinces and other partners have invested in the Knowledge Infrastructure Program. Ninety-seven percent of the funds for this program are allocated and projects are underway. Through this program, universities across Canada are creating jobs by building new research facilities and modernizing old ones. Many are using cutting-edge technologies that will improve energy efficiency on campus, reduce universities' carbon footprints and improve the environment. AUCC's 94 members, in communities across the country, are doing their part to position Canada for a return to economic growth.

Universities have also been impacted by the global downturn. They are making tough decisions to ensure they are able to deliver high quality education and world-class research to benefit their communities. Canadians expect more from government and from all public institutions – universities are willing and able to do more.

Developing the skills, talent, creativity and innovative capacity of Canadians is the best way to promote long-term productivity, economic growth, social advancement and prosperity. The university community is united in its view that enhancing investments in university-based research, international student recruitment and Aboriginal university education can help Canada return to economic growth more quickly, and improve Canada's competitive position in the global economy.

Now is the time to make the investments that will better enable Canadians to return to economic growth and to prepare for the economy and society of the future. AUCC recommends that the federal government:

- **Significantly increase investments in university research through key granting agencies' programs. These investments would increase the core budgets of the research granting agencies and enhance the Indirect Costs Program, in order to support researchers, the development of new talent, and partnerships within Canada and internationally. Annual investments of \$400 million in each of the next two years, with increases of \$250 million in each of the subsequent three years, will greatly enhance Canada's capacity to develop ideas and talent and to innovate.**
- **Invest in an international student recruitment strategy including targeted marketing activities that will promote the excellence of Canada's universities to potential students abroad. An appropriate level of investment would be \$20 million per year for five years.**
- **Expand university education opportunities for Aboriginal Canadians by increasing financial support to Aboriginal students, investing in university programs and services which support Aboriginal students and establishing a pilot project fund that will see universities partner with Aboriginal communities to help raise K-12 completion rates. For the first year of these efforts, \$65 million in new funding is recommended, with increases of \$55 million in each of the following four years.**

Generating future wealth and knowledge for Canadians and their families

Canada's economy is in a period of profound change. Many traditional jobs in resource industries and the manufacturing sector are disappearing while service and knowledge industries continue to grow. The realities of what it means for individuals to compete in the global knowledge economy are even more apparent. The smartest and most innovative will succeed.

In the coming years, demographic changes will generate dramatic challenges and constraints on Canada's economic growth. Over the last 40 years, Canada relied on a demographic boom to drive economic expansion, but now our population is aging and we must find new ways to drive economic growth. The percentage of the total population aged 25 to 65 that is working is anticipated to begin shrinking in less than 10 years. Over the next 50 years, Canada's population aged 65 and older will double. This is already beginning to place increased demand on our health care system and our social services. And these systems will increasingly be supported by proportionately fewer workers.

The challenge will be to work smarter not longer – to create the innovative products, processes and services to drive productivity. Canadians must earn and produce more for each hour that we work, so that we can maintain a high standard of living. Universities are playing a critical role in helping Canadians achieve this goal in communities, large and small, across the country.

There is a growing worldwide consensus that countries that invest heavily in education, research and innovation will lead globally in economic and social development. Countries around the world recognize that the people and businesses with the most knowledge to harness will earn the highest returns.

Canada is well positioned to make these investments and be a leader in the emerging economic order. Previous decisions and investments helped ensure Canada was among the last countries to go into recession. Future decisions will determine whether we are one of the first out, and whether Canada is able to enhance its competitive position. We have proportionately lower debt and deficit to GDP ratios than any other country in the G8. We have strong education and innovation systems in which to invest. *Advantage Canada* and the federal government's *Science and Technology Strategy* have already put forward a path to follow. The OECD seminar held in February 2009 on "sustainability and the role of innovation policies in the current financial crisis" drew the primary conclusion that "reforms aimed at strengthening innovation in the context of broader reforms to address the crisis can help countries emerge stronger from the crisis and help put them on a more sustainable growth path."

Further investments in university education and research will have an immediate stimulus effect, one that is felt in communities in every region of Canada. But more importantly, the decisions we make today will determine whether Canadians are able to innovate, compete and prosper in the years ahead. A series of recent reports by organizations such as the Council of Canadian Academies, the Competition Policy Review Panel, and the Science, Technology and Innovation Council (STIC) demonstrate the broad consensus on the way forward. As recognized in STIC's recent *State of the Nation, 2008* report:

"...investments in science, technology and innovation will help us ensure that we bounce back quickly from the current global economic downturn. Our investments in science, technology and innovation can help us to build our current strengths, help us to leapfrog competitors who are not in as good financial shape as we are, and provide us with opportunities to shore up the areas where we are not among the world leaders. But failing to act, or making the wrong decisions, will turn the short-term problems we face in the current global financial crisis into a long-term, possibly permanent decline in our living standards. Now is the time to *up our game*."

Investing in knowledge and innovation

Developing the skills, talent, creativity and innovative capacity of Canadians is the best way to promote long-term productivity, economic growth and prosperity. The investments Canada makes today will lead to the new discoveries, processes, services and policies we need to succeed two, five and 25 years from now.

Thanks to investments made by the federal government over the last decade, Canada has today a strong university research base on which to build. Recent significant investments in the Knowledge Infrastructure Program and the Canada Foundation for Innovation will make our research infrastructure even more attractive. Our universities are attracting and retaining top research talent thanks to programs such as the Canada Research Chairs, Vanier Canada Graduate Scholarships and the Canada Excellence Research Chairs. To fully capitalize on these new facilities and talent, the Government of Canada should significantly increase investments in the three federal research granting agencies, enabling researchers to perform more and better research and increasing the support for the institutional costs of research.

These investments are needed to facilitate Canada's ongoing economic transition and to compete in the ever-expanding global knowledge economy. Investments in the upcoming budget in the Canadian Institutes of Health Research, the Natural Sciences and Engineering Research Council and the Social Sciences and Humanities Research Council will create economic and social returns both through research discoveries and through the additional capacity to innovate that graduates will bring to all sectors of the economy. Any new investments should work to promote areas of particular research strength within the three federal research granting agencies, without losing sight of the need to support a broad range of peer-reviewed, long-term, discovery-oriented research. While we know what many of our strengths are today, we do not know where the next major discoveries will come from or what our future strengths will be.

Despite the global economic challenges, other countries are stepping up their innovation investments:

- In addition to increased base budgets, a \$10.4 billion injection has been committed over the next two years to the U.S. National Institutes of Health as part of that country's economic stimulus package. The National Science Foundation has also received a commitment for a \$3 billion injection.
- The German government recently announced a \$28 billion increase in science funding over the next decade. This is in addition to significant new resources announced last year, including support for the institutional costs of research.
- The 2009 Australian budget increased science and innovation funding by 25 percent —primarily through new investments in infrastructure and targeted research areas. The Australian government also announced that, by 2014, it will double the rate of support that universities receive to cover the institutional costs of publicly funded research.
- The government of India this year increased its higher education budget by 40 percent.
- Despite a downturn far more severe than Canada's, the United Kingdom has announced that it will continue its 10-year growth in science investment.

Canadian universities have to cover costs that are seen, in other countries, as a basic responsibility of those funding research. This ongoing challenge has put a severe strain on other university functions and threatens the long-term sustainability of Canada's university research effort. Canada's current 23.3 percent average rate of overall reimbursement for institutional costs falls short of key competitor jurisdictions, including the U.S., U.K. and the European Union. In these countries, institutional costs are reimbursed at average rates ranging from 40 to 60 cents per dollar invested in research by government. It is important to continue to increase investments in the institutional costs of research to reach internationally competitive levels over the medium-term.

It is also important to provide additional support to keep the growing numbers of talented young graduate students and post-doctoral fellows from a broad range of disciplines here in Canada. A new post-doctoral program providing funding for two-year terms for 800 new graduates annually will help keep and develop creative talents in Canada, provide short-term economic stimulus and better position Canada for long-term economic growth.

Global issues such as poverty alleviation, disease control and climate change require global research teams. It is essential to collaborate internationally in order to produce results with impact. With the emerging research capacity of China, India and Brazil, new opportunities to partner with countries in the Americas, and strong, existing research partnerships with the U.S. and Europe, position Canada well to engage in more international research collaborations. Already, Canadians involved in international research efforts have made their mark on the world stage by contributing to significant new discoveries and breakthroughs. However, by enhancing our international linkages, Canadians will gain access to global talent, markets and revenue sources, thereby leveraging our existing R&D efforts.

Now is the time for Canada to announce a medium-term investment strategy to allow us to maintain and improve our competitive position.

AUCC recommends that the federal government:

- **Significantly increase investments in university research through key granting agencies' programs. These investments would increase the core budgets of the research granting agencies and enhance the Indirect Costs Program, in order to support researchers, the development of new talent, and partnerships within Canada and internationally. An investment of \$400 million in each of the next two years, with increases of \$250 million in each of the subsequent three years, will greatly enhance Canada's capacity to develop ideas and talent and to innovate.**

These investments would help Canada attract and retain top research talent, especially by providing more opportunities for researchers at the post-doctoral level and for researchers who show strong potential. With more money available for research grants, more and better ideas will be generated to create new technologies and solve new problems. Enhanced support for the institutional costs of research will improve the sustainability of universities' research enterprises and move Canada towards the 40 percent reimbursement rate that is the minimum required for Canada to compete internationally. The additional resources for international research collaboration would enhance Canadian universities' ability to engage in research projects with key partner countries, strengthening Canada's position as a research leader.

International student recruitment

By attracting international students to study in Canada, universities play a central role in providing Canadians with connections to highly qualified people and ideas from around the world. The presence of international students enriches the learning experience of all Canadian students and also has a significant immediate economic impact in communities across Canada. New Government of Canada estimates show international students contribute \$6.5 billion annually to our economy.

When international students complete their studies, Canada benefits whether those students choose to stay and work in Canada or put their expertise and knowledge to work in their home country. When students choose to stay after graduation, they help provide the country with the skilled graduates we need to enhance our economic performance as we face the coming demographic crunch. Many of the graduates who return to their home country become business, governmental, academic and cultural leaders, creating networks with other Canadians that strengthen Canada's international economic, diplomatic and cultural ties.

The number of international students at Canadian universities has been growing steadily over the last 10 years to the current level of approximately 76,000. However, in the same time frame, competition for this top talent has been increasing and some key competitor countries have taken the lead. For example, there are 2,600 university students from India in Canada, but Australia and the United Kingdom each have almost 10 times that number. These key competitor countries, through significant government investments in concerted marketing and recruitment activities, have seen a commensurate increase in their market share of international students. The United Kingdom has reinvested in the promotion of its *Education UK* brand with approximately \$50 million from 2006 to 2008 for the Prime Minister's Initiative – in addition to core funding for the British Council, its main promotion organization. The Australian government has increased funding to levels of approximately \$20 million per year for its main education organization, Australian Education International, to enhance marketing. The United States, the longtime leading destination of choice, has been steadily increasing investments in an effort to return to its pre-9/11 international student levels and stands to further increase its share of the market.

The priority Canadian universities place on the recruitment of top international talent has converged over the last several years with the government's agenda of attracting these students as a potential pool of high quality immigrants and skilled labour. The government's commitment to this has been reiterated on numerous occasions and has been supported by recent measures such as the Edu-Canada branding initiative, improvements to key immigration policies and the creation of the new Vanier Canada Graduate Scholarships. Canadian universities are poised to maximize the impact of these initiatives, meet the challenge of the increasingly competitive environment and ensure Canada's position on the global stage as a destination of choice for quality higher education. Our effort can be enhanced with the support of the federal government through a new comprehensive recruitment and marketing strategy to increase the visibility and attractiveness of Canada's universities.

AUCC recommends that the federal government:

- **Invest in an international student recruitment strategy including targeted marketing activities that promote the excellence of Canada's universities to potential students abroad. An appropriate level of investment would be \$20 million per year for five years.**

The main activities to be carried out as part of the recruitment strategy include: enhanced web presence and media and advertising campaigns to roll out the new Edu-Canada brand; promotion of the Vanier Canada Graduate Scholarships; new immigration measures such as the post-graduate work permit program; dedicated personnel on the ground abroad to carry out marketing activities; the organization of fairs and outreach events for target countries; and tailored campaigns with a focus on the university sector.

Expanding university education opportunities for Aboriginal Canadians

Aboriginal Canadians are working hard to achieve full participation in Canadian society. Many individual Aboriginal Canadians and their communities are taking important steps to move forward but face a unique set of challenges tied to a variety of social, economic, geographic, cultural and historical factors. The Prime Minister's apology last year for the residential school abuses signaled the government's intent to work with Aboriginal peoples to correct past mistakes and move forward together.

Aboriginal peoples can play a very important role in addressing the labour market pressures that come with Canada's demographic challenges. Canada's Aboriginal youth population is growing at three times the national average. Aboriginal Canadians' level of university degree attainment is one-third the national average. While Aboriginal university participation is increasing, the attainment gap with the non-Aboriginal population is widening.

Aboriginal Canadians with a university degree have similar earnings and employment outcomes to their non-Aboriginal peers. While many of the educational challenges are at the kindergarten to grade 12 level, universities are playing an important role in improving the educational attainment level of Aboriginal Canadians. To further increase enrolment and graduation levels, universities need specialized academic and support programs for Aboriginal Canadians.

Many Canadian universities have developed programs in collaboration with Aboriginal communities that have helped not only to attract Aboriginal students, but also to provide them with the necessary assistance to ensure academic success and the completion of their studies. These programs require additional resources that, for the most part, are not covered by provincial operating grants for classroom instruction. Many of these programs lack long-term, sustainable funding. Current federal funding for these programs is insufficient.

Further, growth in funding from Indian and Northern Affairs Canada specifically to help status Indian and Inuit students address the costs of their education has not kept pace with changes in demand, demographics and costs. Considering the strong economic and social returns Aboriginal university graduates provide, a sound policy would be to ensure that qualified students have sufficient funds to access university. This will help address the urgent and complex issues facing Aboriginal Canadians in achieving their goals of full participation in Canadian society.

AUCC recommends that the federal government:

- **Expand university education opportunities for Aboriginal Canadians by increasing financial support to Aboriginal students, investing in university programs and services which support Aboriginal students and establishing a pilot project fund that will see universities partner with Aboriginal communities to help raise K-12 completion rates. For the first year of these efforts, \$65 million in new funding is recommended, with increases of \$55 million in each of the following four years.**

These investments would see an additional 2,800 Aboriginal students receiving federal support to pursue a postsecondary education next year. Within five years, more than 10,000 additional Aboriginal students would be in the postsecondary system. The success rates of Aboriginal students would be higher thanks to the sustained provision of necessary support programs. Universities and Aboriginal communities would be working together to improve results at the K-12 level so that more Aboriginal students would be eligible and prepared to go to university.