

## **Council of Ontario Universities**

### **Responses**

#### **1. Economic Recovery and Growth**

*Given the current climate of federal and global fiscal restraint, what specific federal measures do you feel are needed for a sustained economic recovery and enhanced economic growth in Canada?*

Strong economic growth requires a strong, talented and diversified workforce. Canadians are Canada's greatest natural resource; a country can only be as productive and competitive as its people. Developing the talent of the next generation of innovators, entrepreneurs and educators is one of the most critical actions that Canada can take to sustain its economic recovery and enhance its economic growth. Through our teaching and research, Ontario universities have much to contribute to this goal and are committed partners in the pursuit of strong fiscal and economic forecasts for our country. To ensure that our greatest natural resource has the tools required to make a significant impact on Canada's economic outcomes, Ontario universities urge the federal government to invest in three key areas:

- A Data Infrastructure Program (DIP). This program would support job creation by providing students and researchers with access to essential tools, such as high performance computing, to strengthen Canada's existing competitive edge in data analytics;
- Continued investment in high-profile research programs such as the Canada Research Chairs, as well as in nimble and flexible resources for Canadian researchers to pursue and maintain global research partnerships. These investments would allow Ontario's postsecondary institutions to address the demographic challenges associated with an aging population by providing critical support for the attraction and retention of top global talent and by increasing our ability to work in global partnerships; and
- Continued investment in core research programs through the federal granting agencies, NSERC, SSHRC, and CIHR, as well as CFI, with a particular emphasis on student training as provided by graduate and post-graduate scholarships. Ongoing and new commitments in this area would help ensure that Canadians have the knowledge, skills, and attributes they require to respond to Canada's productivity challenges.

#### **2. Job Creation**

*As Canadian companies face pressures resulting from such factors as uncertainty about the U.S. economic recovery, a sovereign debt crisis in Europe, and competition from a number of developed and developing countries, what specific federal actions do you believe should be taken to promote job creation in Canada, including that which occurs as a result of enhanced internal and international trade?*

To promote job creation, the federal government should focus on actions that build on our existing strengths as Canadians. Data analytics is an area in which we have developed a strong competitive edge. Canadians are among the best in the world at interpreting and manipulating data; we are global leaders in data visualization, modeling, and story development. This has allowed us to make critical contributions in key areas such as epidemiology, drug design, cryptography, economics, weather, and disaster planning. It is because of our talent in the area of data analytics that companies such as IBM, Cognos, Siemens, HP, and Open Text continue to invest in Canada. Universities are unique and important contributors to building and sustaining this competitive advantage in Canada. First, and most importantly, we develop and train the human talent required to use and continually push the boundaries of Canadian expertise in data analytics. Second, our students and researchers are constantly refining and stretching our know-how in this area through their work, which often relies heavily on

cutting edge data interpretation and manipulation. Lastly, our talent in data analytics is leveraged to support the needs of large, industry-based partners and, more recently, we have begun to build partnerships that will allow us to identify and support the needs of SMEs. To maintain our competitive edge and investment in this area, students and researchers need access to advanced computing infrastructure, such as high performance computing. This infrastructure also needs to be maintained and renewed. Because of the great success of the Knowledge Infrastructure Program (KIP), Ontario universities encourage the federal government to consider the creation of a Data Infrastructure Program (DIP). This program would provide students and researchers with essential access to ultra-high speed networks, high performance computing, data storage, and key digital databases of research findings. It also would touch every community across Canada with a university or college campus.

### **3. Demographic Change**

*What specific federal measures do you think should be implemented to help the country address the consequences of, and challenges associated with, the aging of the Canadian population and of skills shortages?*

Canada's aging population is creating significant pressures across many sectors of Canadian society. Future skill and labour shortages are predicted for Canada's workforce. Our ability to combat the effects of a shrinking workforce will be predicated on our capacity as Canadians to be more nimble, innovative and productive than our competitors. It also will require us to strengthen our ability to attract and retain immigrants and to create new and strategic partnerships with others elsewhere in the world. Ontario universities are key partners in all of these areas and would like to continue to work with the federal government on building the programs and policy responses required to strengthen and maintain our contributions. Supporting Canada's postsecondary institutions in their goal of remaining top-tier places of teaching and research, where all qualified Canadians have the opportunity to receive an education, will ensure that Canadians have the advanced skills that they require to be nimble, innovative, and productive in the workplace. It also builds our ability to attract and retain highly skilled students and researchers from within and outside Canada. For this reason, Ontario universities encourage the federal government to continue its critical investments in programs such as the Canada Research Chairs, the Canada Excellence Research Chairs, the Vanier Canada Graduate Scholarships, and the Banting Postdoctoral Fellowships, that allow Canada to recruit and repatriate top-tier Canadian and international research talent. To help deal with the skill and labour shortages that are anticipated in Canada's future, Ontario universities also recognize that active attraction and retention of immigrants will only be one part of the equation; we must also increase our ability to work in global partnerships. Ontario researchers have a strong track record of engaging in research partnerships around the world. However, to be effective partners, Canadian researchers must be able to react nimbly and with matching resources to collaborative international research opportunities. Currently, these resources can be difficult to identify and Ontario universities encourage the federal government to provide nimble and flexible resources for Canadian researchers to pursue and maintain global research partnerships.

### **4. Productivity**

*With labour market challenges arising in part as a result of the aging of Canada's population and an ongoing focus on the actions needed for competitiveness, what specific federal initiatives are needed in order to increase productivity in Canada?*

Productivity is directly linked to our ability to be forward thinking, innovative, and nimble. This means that in addition to creativity, flexibility, and adaptability, Canadians must bring well-developed skills and knowledge into the workplace. In 2006, Human Resources and Social Development Canada produced a report, Looking Ahead: A 10-Year Outlook for the Canadian Labour Market 2006-2015, that stated that two out of every three new jobs in Canada would require a postsecondary education. Ontario

universities are critical players in ensuring that Canadian businesses and organization have the highly qualified people they need to fill these roles. Our ability to develop and shape a new generation of talent depends not only on what goes on in our classrooms, but also on what happens in our labs, libraries and other research activities. Research is a critical training ground for students, allowing them to gain hands-on experience and practical know-how that they will serve them, and the companies and organizations that hire them, well. Canada's three granting agencies, the Natural Sciences and Engineering Research Council of Canada (NSERC), the Social Sciences and Humanities Research Council (SSHRC), and the Canadian Institutes of Health Research (CIHR), as well as the Canada Foundation for Innovation (CFI) are essential to the research activities that are undertaken on our campuses. Their investments in scholarships for graduate and postgraduate students are particularly critical to creating training opportunities and experiences for our students to develop and refine the skills that they will need to support greater productivity in the Canadian economy. The CFI is key to ensuring that the technological platforms, equipment, and core facilities that our students work with, are current and relevant to the infrastructure they will use in the workplace. Ontario universities would encourage the federal government to invest in its core research programs through the federal granting agencies and the CFI, with a particular emphasis on student training through graduate and post-graduate scholarships.

## **5. Other Challenges**

*With some Canadian individuals, businesses and communities facing particular challenges at this time, in your view, who is facing the most challenges, what are the challenges that are being faced and what specific federal actions are needed to address these challenges?*

The 2006 Statistics Canada census showed that less than 10% of the Aboriginal population had attained a university degree, compared to 23% of non-Aboriginal Canadians. It also provided the startling statistic that 60% of on-reserve and 43% of off-reserve Aboriginal learners had dropped out of high-school. In the next two decades, more than 400,000 Aboriginal youths will come of age to enter our labour force. As Canadians we must do all that we can to ensure that these youth are not left behind and we must do so without delay. Recently, National Chief Shawn Atleo underscored the importance of our collective investment in Aboriginal education when he stated that "education, in particular post secondary and skilled trades, is absolutely fundamental to unlocking the potential of First Nations peoples and communities. Given the labour force shortages and the fact that the vast majority of key resource development initiatives for the Canadian economy will happen in or near First Nation territories, investing in First Nation students is a key economic imperative for the entire country". Ontario universities are committed to continuing their work with the Aboriginal community to ensure that the supports required for Aboriginal learner success are met within their institutions. They are also committed to ensuring that the education they provide will help Aboriginal students to develop the critical knowledge and skills that they and their communities require to be competitive in the new economy. In addition, Ontario universities are working to increase the number of Aboriginal learners enrolled in our programs. However, we realize that this is not a goal that we can achieve on our own; it requires the collective investment and support of many other players. It is for this reason, that Ontario universities would encourage the federal government to consider new areas of investment that will increase Aboriginal high school completion and expand access and success to university and college education for Aboriginal learners.