

### **1. Supporting families and helping vulnerable Canadians by focusing on health, education and training**

At the University of Manitoba we are deeply committed to engaging with our community, and are working with industry, governments, and not-for-profit organizations to find solutions to the challenges of today and tomorrow. More and more, universities are being seen as key players in their local communities through the delivery of targeted solutions, products and services that inject new life, vibrancy and opportunity into neighbourhoods. Universities are supporting families and helping vulnerable Canadians in a number of ways.

Research has proven that graduates of postsecondary institutions have higher incomes than colleges, trades or high school graduates, but a postsecondary education is also the gateway to a healthier, happier life. Education can empower and become a useful tool that enables people to make choices that positively impact their own lives and the lives of others. The social returns from higher education are significant, with graduates of postsecondary institutions demonstrating better health outcomes. They are also more likely to vote and volunteer, have lower rates of crime, and rarely seek out social assistance. Postsecondary education is one of the answers to supporting families and helping the vulnerable.

One of the greatest opportunities for our country is to make education more accessible to those who are not currently participating in the system. In Canada, our Indigenous population is young and rapidly growing, however, fewer than ten percent between the ages of 25 and 64 have a university degree, which is about one-third the rate of non-Indigenous people. This means that Indigenous people, on average, earn less on the job, are under-represented in managerial and professional occupations, and are more likely to be unemployed. We must continue to make it a priority to close this gap.

In an effort to increase accessibility and participation rates, U of M has established four different Access programs designed for Indigenous students who have faced systemic barriers in pursuing postsecondary education.

- The *Aboriginal Business Education Partners* – or ABEP - is made up of a community of Indigenous students, all pursuing a Bachelor of Commerce degree at the Asper School of Business. ABEP graduates are employed in key positions at major corporations, non-profit organizations, and have started their own businesses across Manitoba, Canada, and the world.
- The *Engineering Access Program* (ENGAP) is the most successful program of its kind in Canada - graduating the most Indigenous Engineers in Canada: over 95 and counting. It offers an opportunity for Indigenous students, who may not meet the entrance requirements for engineering, with academic upgrading and support.
- The *Access Program*, in cooperation with the Province of Manitoba, provides academic and personal supports for under-represented groups in Manitoba, with particular focus on First Nation, Métis and Inuit applicants.
- The *Aboriginal Focus Program* offers certificate and diploma programs in First Nation and northern Manitoba communities.

#### **Recommendation:**

- The federal government provide targeted investments to increase accessibility of existing Indigenous student access programs to a greater number of Indigenous students and work with key stakeholders, like universities, to develop new programs in an effort to continue closing the education gap.

## **2. Increasing the competitiveness of Canadian businesses through research, development, innovation and commercialization.**

Universities are responding to the needs of industry by providing the answers to the challenges of today and tomorrow through research, development, innovation and commercialization. In 2011-12, U of M received \$35.6 million in research funding from the three federal granting agencies. This funding is instrumental in driving discovery - predictable, sustainable funding will enable U of M to further build on this momentum.

**Research drives competitiveness:** The new Manitoba Institute for Materials at the University of Manitoba will enable academia and industry to integrate more fully and capitalize on the growing emphasis on composites and aerospace research and development being undertaken in Western Canada. With a federal investment of \$3.5 million, the University of Manitoba will purchase three different high-performance electron scanning microscopes and create a centre of excellence for industry, researchers and graduate students.

**Training, research, development, and commercialization drive competitiveness:** The establishment of the Advanced Satellite Integration Facility (ASIF) housed at Magellan Aerospace in Winnipeg is an example of the University of Manitoba's ability to successfully respond to the needs of industry and improve Canada's global competitiveness. \$2.4 million in funding from Western Economic Diversification will support the U of M to increase skills development and technology commercialization. ASIF will serve as an overall hub for a new collaborative research, commercialization and training program between academia and industry. This new facility will help establish a centre of innovation excellence in Manitoba and Canada and enable partners to access growing market opportunities in the aerospace industry, estimated at \$200 million over the next 10 years.

**Innovation drives competitiveness:** The University of Manitoba is committed to exploring innovative ways to encourage university-industry research collaborations. This is evident through our new program, **Transformational Partnerships**, which has virtually done away with lengthy negotiations over potential royalty payments and control of intellectual property (IP). Instead, the university now assigns the IP management to private-sector partners giving them full control of the technology to incorporate it into their product or service or even sub-license it. Partners only share royalties when they generate revenues from IP. The Transformational Partnerships approach is quite unique and will have a profound impact on the ability of businesses to bring their ideas, products and services to market, thus driving the economy and creating jobs.

### **Recommendations:**

- Commit to sustainable, predictable funding to the federal granting agencies which will enable universities to continue conducting trailblazing research that will provide Canadian businesses with the tools to develop new products, systems and services that will drive the Canadian economy and create jobs.
- Federal government should continue to facilitate university-industry collaboration through sustainable investments in programs like Western Economic Diversification's *Western Diversification Program*.

## **3. Ensuring prosperous and secure communities, including through support for infrastructure**

The construction of infrastructure in and around universities leads to the development of prosperous, vibrant and secure communities. The Building Canada Fund's eligible categories, which include innovation, will serve to stimulate the Canadian economy through the construction of critical

infrastructure such as roads and public transit as well as create spaces where innovative ideas can flourish.

The federal government's 2009 *Knowledge Infrastructure Program* (KIP) earmarked \$2 billion in economic stimulus funding for universities. Of that amount, \$32 million was provided to the University of Manitoba, allowing the university to leverage an additional \$52 million from other sources, totaling \$84 million.

### ***Universities and Transformational Research***

Through KIP, U of M was able to fund seven projects, one of which was Dr. Geoff Hicks' lab in the Regenerative Medicine Program. Dr. Hicks and his team received \$2.5 million from KIP for the construction of 9,000 square feet of additional space, which included 4 new labs.

Recently, the team discovered a mechanism by which a mutated gene called TLS/FUS causes amyotrophic lateral sclerosis (ALS). The discovery of this gene opens up avenues to possible new treatments which will have a positive impact on families who have loved ones suffering from this debilitating disease. Dr. Hicks, and his team of graduate students and fellows, found that the mutated gene TLS/FUS creates a "runaway train" effect that produces too much protein within cells. This example demonstrates that world-class lab spaces and equipment are a pre-requisite for ground-breaking discoveries.

### ***Universities promote active living and sport***

The U of M is home to a number of recreational venues that are used by and benefit the community. Our new Active Living Centre, once completed in winter 2015, will create a new healthy living space in our city and will be available for community use. As well, our sports fields, arena, pool and gymnasias are used by community groups and sports teams throughout the year.

Hundreds of thousands of people come to the U of M campus for sporting and cultural events at the Investors Group Field each year and we will be hosting the 2015 FIFA World Cup Women's soccer and the 2017 Canada Summer Games. The co-location of the stadium and a modern recreation facility on our campus further solidifies the University of Manitoba's reputation as a community builder and as a place where the community can access quality recreational services as well as prominent cultural and sporting events.

### ***Universities as thought leaders in the community***

The University of Manitoba's Fort Garry Campus will be home to the future site of the **National Research Centre for Truth and Reconciliation (NRC)**. The Centre will be home to the largest collection of oral history in the country, comprised of thousands of statements from the hearings and statement gathering activities of the Truth and Reconciliation Commission of Canada (TRC). As the permanent home of all documents and statements collected by the TRC, the Centre will be a national, public institution, which will attract researchers, groups, individuals and communities from across the country.

The Centre will educate Canadians on the relationship between Indigenous and non-Indigenous people, creating opportunities for its work to be integrated within school curricula across Canada. It will also explore and advance concepts of reconciliation as it grows over time and contribute to fostering a community of understanding and respect.

**Recommendation:**

- The federal government commit to predictable, multi-year funding for infrastructure programs like the Building Canada Fund, with a component for postsecondary institutions, and the Canada Foundation for Innovation in an effort to strengthen and grow communities, attract and retain top talent, and drive research and innovation.

**4. Maximizing the number and types of jobs for Canadians**

Canada's postsecondary institutions equip students with the skills they need to obtain good jobs and create new jobs. This, in turn, drives the Canadian economy as is evident by recent OECD figures which demonstrate that sixty percent of Canada's GDP growth is attributable to the income growth of those with postsecondary education.

The value of a university degree remains strong. Between May 2008 and May 2014, 878,000 net new jobs were created for university graduates – a 21 percent increase over this six-year period. The average salary for university graduates working full-time in 2010 was \$80,500 a year with college and trades grads earning \$54,000 and high school grads at \$46,000.

Universities do address the skills gap in Canada. At least two-thirds of new jobs created in Canada over the next decade are expected to be in occupations requiring a postsecondary degree. In the last five years, employers have already created new jobs, many requiring a university degree, to respond to evolving business demands in financial regulation, cyber security, storing and managing data, social media, and global relations. Universities produce this type of employee, even in an economy weakened by recession.

At the U of M, we are educating the next generation of leaders, including the majority of the Province's professional workforce. About 80 percent of our alumni live in Manitoba – (over 64,000 in Winnipeg). The U of M generates at least \$1.8 billion in economic activity and attracts nearly \$160 million annually in sponsored research income. We create jobs, including direct and indirect employment of more than 17,000 people in Winnipeg. We employ over 8,700 people, and are one of Manitoba's top 25 employers.

**Recommendations:**

- The federal government invest in an integrated package of programs – building on those that already exist and developing new options – to offer more hands-on, experiential opportunities for Canadian students. This could include:
  - a new voucher program, with a focus on SMEs, and not-for-profits, to hire co-op students;
  - new funding to support institutions' development of co-op placements; and
  - additional funding for research internships through MITACS' programs.
- The federal government work in partnership with the provinces, the private sector and universities to create new opportunities for short-term international and domestic student mobility as Canada prepares to celebrate its 150<sup>th</sup> anniversary in 2017.