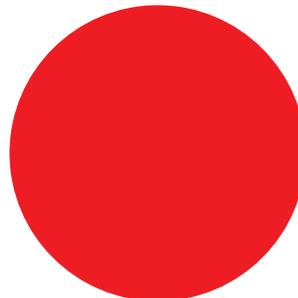
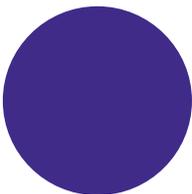


Partnering to Drive Ontario's Recovery through Talent and Innovation

Summary Report
October 2021



Introduction

As the impacts of COVID-19 continue to ripple through the province, Ontarians have grappled with immense change and disruption. In many cases, the pandemic has further exposed challenges that already existed, emphasizing the need for innovative solutions.

We now must work together to find answers to big questions, such as how to rebuild our health-care system and economy, how to support the many workers who have been displaced and the many employers struggling to hire, and how to foster innovation and growth.

Finding solutions to these challenges will not be easy. It requires partnership and collaboration. No government, business or institution can solve these complex issues on their own.

Ontario's universities can and will help. Universities will continue to play a critical role that helps lead our province to a more competitive economy with a highly skilled workforce, sustainable community infrastructure and a health-care system that is prepared for the challenges of today and tomorrow.

Because, as Ontario looks to rebuild and recover from COVID-19, Ontario's universities are at the forefront of:

- **Rebuilding a World-Class Health-Care System:** Through the training of health-care professionals and leading public health experts, early discovery and gene-mapping of the virus, as well as helping businesses retool to produce PPE, Ontario's universities have been at the forefront of the response to COVID-19. A strong workforce and innovation in health-care, life sciences and medical technologies will continue to ensure Ontario has the knowledge and innovation it needs to overcome COVID-19 and be best prepared to face future shocks within the health-care system.
- **Developing Job-Ready Graduates:** From increasing STEM enrolment by more than 50 per cent since 2009 to expanding job-ready micro-credential programming, universities have quickly adapted to changing workforce needs, equipping students with the transferrable and high-demand skills employers want. In a rapidly changing job market, Ontario's employers will continue to need adaptable workers who are future-proofed with the foundational skills and innovative learning experiences for the jobs of today and tomorrow.

- **Driving Regional Economic Development:** As large employers and purchasers, Ontario's universities have a vital role to play in the economic recovery of Ontario's communities. As these regions look to rebuild and thrive, they will continue to need spaces and institutions that fuel the local workforce and stimulate local economies through employment opportunities, innovation and drawing talent from around the world.
- **Supporting a Globally Competitive Economy:** Ontario's highly skilled workforce and supportive government policies have been a magnet for business and economic growth. By building on the province's high-quality talent and innovation, Ontario will be better positioned to respond to the changing needs of the job market, while producing the innovative solutions that will continue to help the province throughout the pandemic and beyond.
- **Creating Solutions to Ontario's Challenges:** As universities continue to support students, communities and the province through the pandemic and beyond, investing in a high-quality university sector over the long-term will ensure they can continue to make their fullest contribution to a world that is rapidly changing and evolving.

Ontario's universities are working to address some of the province's most critical challenges. They will continue to partner to empower and support students, families and communities; connect people and ideas; drive the innovation that supports job creation and brings made-in-Ontario solutions to market.

Because of these critical contributions, a sustainable world-class postsecondary education system will be more important than ever.

Vibrant universities will continue to develop adaptable talent, drive innovation, support local businesses, drive regional economic development and help rebuild our health-care system – key ingredients that are crucial to rapidly shifting labour market needs, economic growth and community resilience.

It is why in order to fully unleash this potential, Ontario's universities are asking that the government – through increases to university revenue sources – make critical investments in the university sector today to rebuild a better Ontario for tomorrow.

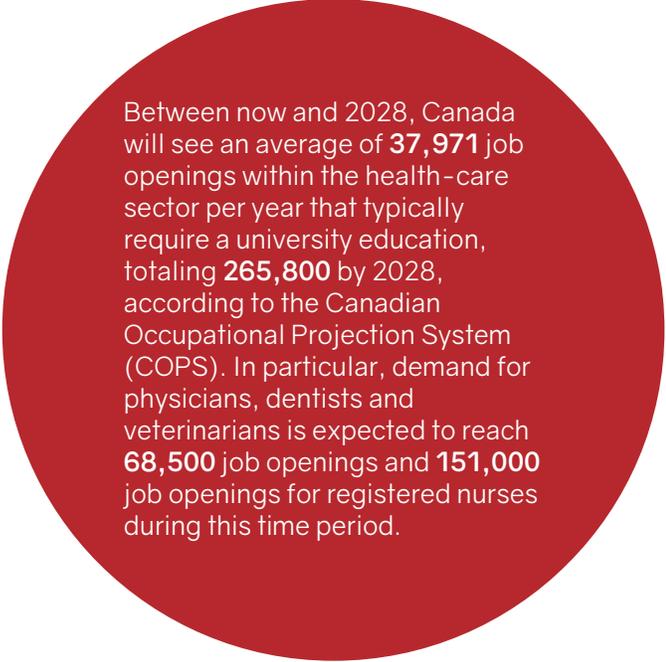
Ontario's success is founded on the capacity of people from many different sectors to work collaboratively to answer big questions and solve challenging problems.

By working together, we can navigate through this pandemic and build a brighter future – not just for the students we teach and the communities we serve, but to unlock the full potential of Ontario's future and all who live here.

At the Forefront of a World-Class Health-Care System

Ontario needs a robust workforce and innovation in order to rebuild the health-care system and best serve Ontarians.

Many doctors, nurses and other health-care professionals are burning out and plan to leave the profession due to the challenges they've experienced during the pandemic.



Between now and 2028, Canada will see an average of **37,971** job openings within the health-care sector per year that typically require a university education, totaling **265,800** by 2028, according to the Canadian Occupational Projection System (COPS). In particular, demand for physicians, dentists and veterinarians is expected to reach **68,500** job openings and **151,000** job openings for registered nurses during this time period.

Further compounding this growing challenge is the fact that emergency rooms and hospitals are already stretched to the limit, but the health-care system will soon need to tackle an increasing backlog of elective surgeries, diagnostic tests and routine procedures that were put on hold during the pandemic.

A 2021 report released by Ontario's Financial Accountability Office estimates that it will take more than three years to eliminate the backlogs and cost approximately \$1.3 billion.

Through unique programs and collaborations, Ontario's universities are developing strong, highly skilled talent within the health-care sector. This in-demand talent is ready to meet the need today and into the future, ensuring Ontario's patients receive the care they need.

We are already seeing a growing interest in health-care programs offered at Ontario's universities and record high applications to these programs.

Applications to Bachelor of Science in Nursing programs are up **15.3%**, and nurse practitioner program applications have jumped by **58%** from last year. In addition, applications to Ontario Medical Schools went up **10%** in 2021 from 2020, according to recent Ontario Universities' Application Centre (OUAC) statistics.

Ontario's universities stand ready to train this generation of health-care workers – the doctors, nurses and other health professionals who Ontario will need to help address backlogs in the short-term, as well as support patient care and innovate through future outbreaks and challenges.

At the Forefront of Developing Job-Ready Graduates

The pandemic brought unexpected shocks to the labour market. More and more Ontarians and Ontario employers are now looking at ways they can best protect against future shocks and job displacement.

Ontario's workforce needs to be equipped with adaptable skills in order to succeed in the jobs of today and tomorrow and weather economic downturns.

In fact, these are the adaptable skills employers are looking for. **A 2018 RBC assessment of skills rankings** across 300 occupations and 2.4 million expected job openings found an increasing employer need for critical thinking, co-ordination, social perceptiveness, active listening and complex problem-solving skills.

In addition, according to research provided by the Business Higher Education Roundtable (BHER), companies say they need workers with technical, human and business skills. BHER also highlights that, with the impact of COVID-19, there is a greater emphasis on hybrid skills, including a mix of foundational digital skills alongside non-digital human and interpersonal skills.

With a high demand for transferrable skills from the province's employers and a commitment to help students develop resiliency in a changing world, Ontario's universities are ensuring every student graduates job-ready with the adaptable skills that will help them become recession proof.

Recent economic recessions have highlighted the importance of this skillset, demonstrating that jobs that require a university education appear to be more resilient to job market shifts.

During the onset of the pandemic, the average monthly layoff rate was **7.2%** for Canadians with a Bachelor's degree or higher, compared to **15.1%** for those whose educational attainment was below a Bachelor's degree, according to [Statistics Canada](#).

An adaptable skillset equips Ontario's students with the right tools to meet job market needs and seize new opportunities that emerge as our information economy rapidly changes.

At the Forefront of Regional Economic Development

Due to their critical position across many of Ontario's regions, universities have a vital role to play in the economic recovery of Ontario's communities.

As major employers and large purchasers, universities are often one of the top five employers in the region, collectively employing more than **138,600** Ontarians and purchasing approximately **\$5 billion** in local goods and services each year.

A 2021 Conference Board of Canada report (not yet published) highlighted the many ways that Ontario's universities activities impact the province's economy, including contributing:

- **487,639 jobs and \$45.6 billion** in GDP, stemming from spending activities related to Ontario universities' by institutions, students, visitors and alumni
- **At least \$50.6 billion** in GDP resulting from the higher human capital development of alumni

In addition, university infrastructure is often at the very heart of Ontario's regions. The type of spaces found on campuses, such as community centres, gyms, pools, theatres and stadiums, bring people together, enrich the everyday experience for many Ontarians and help them live healthier lives.

Many small businesses and community members also access innovative facilities and spaces where they can test ideas and scale operations, providing communities and local industry with necessary resources to recover from the pandemic.

In fact, the very act of building, maintaining and modernizing strong physical and knowledge infrastructure, such as universities, schools and libraries, within Ontario's communities helps create jobs in construction, maintenance and more, employing members of the local workforce and fueling associated supply chains.

As the province continues to navigate the impacts of COVID-19 in the years ahead, the regional economic impact of Ontario's universities will be needed more than ever to ensure a path to prosperity for all of the province's regions. Investment in universities is an investment in the thriving communities of Ontario.

At the Forefront of a Globally Competitive Economy

The province must ensure Ontario remains a desirable place to live and work because competition for the right talent is fierce in an increasingly globalized world. Labour and production can be outsourced anywhere.

While the future may present jobs that we have not yet imagined, we are already seeing increasing levels of demand amongst certain STEM and non-STEM occupations that require a university degree, such as engineers, computer programmers and health-care professionals. Demand for these high-quality jobs requiring a university degree will only increase.

For example, prior to COVID-19, the Canadian Occupation Projection System (COPS) projected that the country will need almost a quarter million STEM graduates and more than 265,000 health care graduates from now until 2028. In addition, the combination of an aging population and the backlog of surgeries and procedures caused by the pandemic has only put renewed stress on those already working within the health-care system, including physicians, nurses, medical scientists and other health-care professionals. This has further highlighted the critical need for a strong health-care workforce that will help contribute to a strong economy.

The failure to meet these demands will undermine both Ontario's and Canada's economic growth. It is critical that the federal and provincial governments work together to help ensure our economy has the highly skilled university graduates needed to drive innovation, rebuild our health-care system, attract investment and compete globally.

A highly skilled workforce with the transferrable and cross-disciplinary skills to meet the changing needs of the job market will position Ontario as a jurisdiction that can attract investment and compete with the best that Europe, India or China has to offer.

Ontario's universities are leading the development of this talent, particularly in fast-growing fields, such as artificial intelligence, clean technology, life sciences, engineering and cybersecurity.

In fact, much like Silicon Valley, Toronto, Ottawa and Waterloo have become high-tech ecosystems, attracting companies like Amazon, Uber, General Electric and Stripe who are looking to invest in this highly skilled talent.



"[Canada] is the number-one work destination for many of the types of people that countries prize, including those with Masters or PhD degrees, those with digital training or expertise, and those younger than 30." – [Decoding Global Talent](#), Boston Consulting Group

For example, Toronto now has the third-largest tech talent pool in North America with the fastest growth of tech workers, according to the [2021 Scoring Tech Talent Report](#), while the [2021 Global Startup Ecosystem](#) report found that the Toronto-Waterloo start-up ecosystem has risen four spots in the world ranking to number 14.

In general, Ontario now has the second largest IT cluster, as well as financial hub in North America, according to [InvestOntario](#).

In addition to a highly skilled workforce, research and innovation is critical for Ontario's competitive advantage and its ability to drive economic growth.

Throughout the pandemic, Ontario's universities have played an active role in conducting ground-breaking research and making the types of discoveries that are helping the treatment, outcome modelling, testing and vaccine development of COVID-19.

It was university research and industry partnerships that were at the forefront of addressing Ontario's personal protective equipment (PPE) shortage and mobilizing Ontario's manufacturing might. These collaborations resulted in retooled industries that have helped provide much-needed PPE and resources to essential workers and helped make Ontario more self-sufficient.

University research and development over the years is responsible for a **\$30.6 billion** increase in Ontario's GDP in 2018 compared to 1971, according to a 2021 Conference Board of Canada report (not yet published).

Further investment in university research and innovation will support more industry-research partnerships, helping create the type of breakthroughs that makes our economy more self-sufficient and results in new jobs, products and services.

We are already seeing how the ripple effect of regional innovation ecosystems is not only supporting job creation, but also attracting interest and investment from the global marketplace.

For example, due to the attractiveness of Ontario's highly skilled talent, as well as recognizing its manufacturing capacity and ground-breaking innovation, Hoffmann-La Roche Limited (Roche Canada) invested **\$500 million** over five years in **500** highly skilled and specialized full-time positions to the province.

A strong workforce that can fill the job gaps of today and tomorrow, coupled with dynamic innovation ecosystems that continue to drive discovery, commercialization and investment are key ingredients for Ontario's economic recovery.

Sustainable Universities: At the Forefront of Solutions to Ontario's Challenges

Today's students are entering an ever-evolving economic, technological and social landscape.

To help them navigate these changes, Ontario's universities are adapting programming in areas, such as work-integrated learning, and providing additional resources and support systems for student mental health and well-being that will help our students prepare for today and tomorrow.

A recent Canadian Alliance of Student Associations (CASA) survey found that overall **84%** of students reported that the pandemic has added new or exacerbated existing mental health challenges. In addition, since last year, at **71%**, there has been a 10-point increase in those who say they are overwhelmed.

From addressing disproportionately inequitable outcomes within various programs, particularly STEM and medicine, to implementing inter-cultural training, mentorship programs, all-gender residences and women's campus safety initiatives, Ontario's universities

will continue to respond to the need for more programming that reaches all students.

Universities remain committed to supporting these students, their communities and the province through the pandemic and beyond as we face the challenges of a rapidly changing society head-on and work to find solutions. But in order to continue to support Ontario, universities must be financially sustainable.

COVID-19 re-shaped the university sector in real-time and placed unprecedented demands on stakeholders. The sector has incurred costs due to COVID-19, which include developing alternative modes of course and exam delivery, as well as mental health services; reconfiguring classrooms and residences to accommodate distancing protocols, creating quarantine spaces and ensuring access to appropriate PPE; and providing emergency relief funds for students.

These financial challenges have been further compounded by reduced revenue to the sector with universities receiving the lowest per-student government funding in Canada and seeing a decline in inflation-adjusted operating grants per student by 21 per cent since 2006-07.

An ongoing tuition freeze and a 10-per-cent cut to domestic tuition in 2019 has cost the sector more than \$1.8 billion in actual and projected revenue.

Ontario's universities will continue to play a role in addressing the societal challenges facing Ontario and support the resilience of the students and communities they serve.

However, a pattern of reduced investment by government threatens to erode our ability to do so, as our universities continue to see growing needs for modernized programs and learning environments; increased campus services in areas such as student mental health; and more cost-intensive resources to foster a culture of innovation.

Nevertheless, universities have demonstrated their ability to do more with less, adopting new and innovative ways to reduce red tape and streamline processes and operations that have resulted in significant cost-savings.

But, in order to run as efficiently as possible, our sector requires support.

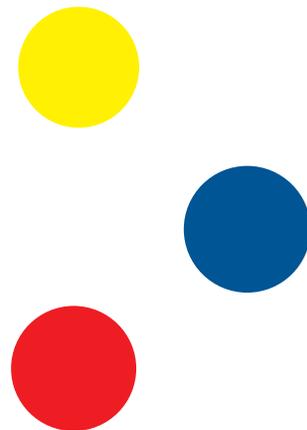
Investing in the university sector over the long-term will ensure universities can continue to make their fullest contribution to a world that is rapidly changing and evolving.

Support for the sector is critical to ensuring universities remain at the forefront of Ontario's social and economic recovery.

It is why Ontario's universities are asking that the government – through increases to university revenue sources – make critical investments in the university sector today to rebuild a better Ontario for tomorrow.

The future of the sector will shape the future of our province in significant ways – a future that can be more equitable and inclusive, more prosperous and more resilient, through and beyond the COVID-19 pandemic.

It is time for a new partnership between government and universities that allows Ontario's universities to build the better and brighter future for our province that we all want to see.



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