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OVER THE LAST YEAR, ONTARIO’S UNIVERSITIES HAVE BEEN TALKING TO ONTARIANS ABOUT THE FUTURE.

Through our survey, a series of roundtables, and at several conferences, many thousands of Ontarians have shared their thoughts on the challenges and opportunities that lie ahead for the province, and the hopes and concerns they have as they look to the future.

In all, we reached more than half a million Ontarians through social media, our newsletters, and events like the Ontario Universities’ Fair. More than 30,000 visitors came to the Ontario’s Universities website to join the conversation, and more than 6,390 people took our online survey. We held or attended several dozen roundtables, consultations and conferences, hearing in the process from more than 1,000 business, government, and community leaders. On top of that, we spoke to experts and reviewed the latest research and reports to understand where the world is heading and how Ontarians will be affected.

The insights and perspectives we collected were diverse, thoughtful and incisive. We are pleased to share them with you, and to outline how we plan to work with Ontarians to turn them into action.

More than anything, Ontarians spoke about the need for the province to come together to build a prosperous, sustainable and inclusive future.

Ontario’s universities share the same conviction and are strongly committed to working in partnership with all Ontarians to help bring this vision for a better future to life.

We hope you will join us on the journey – and keep the conversation going for years to come.

– The Presidents of Ontario’s Universities
A Year of Listening
As part of a year-long listening initiative, #futuring, we asked Ontarians to tell us their hopes, concerns, ideas and aspirations for the province.

We engaged with:

- **36,000+** Visitors to the Ontario’s Universities website: ontariosuniversities.ca

- **130,000+** Students, parents and educators who attended the Ontario Universities’ Fair

- **13,100+** People who engaged with Ontario’s Universities on social media

- **6,394** People who completed our online survey

- **1,000+** Business, government and community leaders at round-tables, community breakfasts, consultations, conferences, and meetings

Visitors to the 2016 Ontario Universities’ Fair take part in the #futuring initiative.
The world is changing at a rapid pace: Our present is constantly evolving, and our future seems both glowing with opportunity and challenged by unpredictable disruptions.

Ontarians see the world transforming around them. They want the knowledge that will allow them to master new technologies, the skills that will help them thrive in the jobs of today and tomorrow, and the modern services that will advance society and improve their lives, their community, and the planet.

Imagine a world where a wristwatch can detect cancer in the body, where cars drive themselves, and where new clean technologies have preserved our natural world while creating jobs and economic prosperity. Ontario’s universities are helping develop such life-changing discoveries – knowing that we must also help reimagine the skills and technologies that citizens will need to thrive in a world being transformed by automation and machine learning.

When society undergoes such a metamorphosis, institutions of all kinds need to come together and dream big – implementing the innovative ideas that drive success. University research and expertise has played an important role in Ontario and Canada’s progress and prosperity for more than 150 years; and today’s disruptions will call for new, exciting solutions that extend beyond campus walls and run deep into the soil that helps farmers feed us, the factory floors that help us prosper and the hospital wards that save our lives.

Over the past year, Ontario’s universities have carried out an extensive listening initiative, #futuring, reaching out and engaging with tens of thousands of Ontarians who told us their hopes for the future, what keeps them up at night, what issues our leaders need to focus on, and how universities can make valuable contributions to a brighter future.

We wanted straight talk from Ontarians on our role in producing graduates who are ready to make immediate and valuable contributions to the province, on our relationship with communities, on our role in research and innovation, and on the wider economic and social challenges that we believe we can help the province meet.

We received these kinds of thought-provoking insights through a far-reaching online survey, via social media conversations, at a series of roundtables with leading thinkers from every sector, and from thousands of students and parents at the Ontario Universities’ Fair. (See opposite page, ‘A Year of Listening’)

So what did we learn?

The overriding message is that Ontarians are optimistic about the future. They are excited about the positive changes technology can bring, and about the ability of future generations to contribute to a thriving province. They believe Ontario’s biggest strength is its people and its talent. They love the province’s diversity and inclusiveness and believe it’s an advantage it can build upon.

At the same time, they are concerned about how the province will tackle the substantial economic and social challenges that lie ahead, including adapting to the technologies that threaten job security, ensuring the health-care system remains robust and ready for an aging
To address what Ontarians told us, we have set out our commitments and recommendations in eight policy areas:

- Jobs and Future Skills
- Growing the Economy
- Building Strong Communities
- Research and Innovation
- Health Care
- The Environment
- Diversity and Equal Access
- Supporting Students on Campus

In each of these areas, this report lays out:

**What Ontarians Want**
The important messages we received from Ontarians during our listening initiative

**Ontario Universities’ Commitment**
The actions and policies Ontario universities intend to embrace in order to meet these hopes and concerns

**How Government Can Help**
Our recommendations to policy makers and the provincial government to help universities and our many partners achieve these goals for a brighter future

population, and confronting the dangers of climate change. They also expect a just society where Aboriginal communities and all low-income or disadvantaged groups have equal access to the same hope and opportunity.

In the face of such challenges, they look for Ontario’s decision-makers to think big on solutions that will help citizens be ready for tomorrow. Above all, Ontarians want policies and decisions to be based on partnerships; they expect institutions such as universities, colleges, and hospitals to work hand in hand with governments, business, planners and other stakeholders to create solutions that benefit everyone.

They want a society of partners, not a society of silos.

As well as secure jobs, Ontarians want to strengthen their communities by building robust and flexible health care, cutting-edge businesses, and enriching cultural experiences that are pivotal to ensuring we can all lead fulfilling lives from kindergarten through to our senior years.

We think these opinions and suggestions provide an inspirational blueprint for Ontario’s future. We believe that through our research, our knowledge-sharing and the young minds that pass through our classrooms, we can help every single Ontarian thrive and enjoy a better quality of life.

From the insights gathered over the past year, we have produced this report, *Partnering for a Better Future for Ontario*, which examines Ontarians’ feedback, using it to shape universities’ own commitments to help forge a prosperous and hopeful province, as well as our recommendations to governments and policy makers.

We believe that Ontario’s brand as an open and cosmopolitan society, with a high quality of life, a large talent pool and an innovative tech and business environment, gives us a global edge at a time when some of Canada’s major competitors are becoming more insular.

This is Ontario’s moment to shine, and our 21 universities will work with our partners across all sectors to drive economic prosperity and improve quality of life in three key ways:

1. **Helping students thrive.**
   We are committed to nurturing successful citizens and strengthening Ontario’s talent pipeline by preparing every student with the skills they need for the workforce now and in the future, expanding experiential learning in their programs, providing career, social and mental-health support, and ensuring that every young Ontarian who is qualified for a place in university has access.

2. **Supporting our communities.**
   We are committed to helping enhance the quality of life for Ontarians through our research and local partnerships in areas such as health care, the aging population, municipal services, infrastructure, transit and arts and culture.

3. **Driving a growing, dynamic province.**
   We are committed to helping our economy grow by educating the talented graduates that employers need to be competitive here and abroad; supporting entrepreneurism and innovation; attracting the best talent to Ontario from around the world; and contributing to the clean technologies and low-carbon practices to help promote sustainable growth.
**SURVEY RESULTS**

**6,394** total respondents

- **3,068** identified as students
- **2,290** identified as parents

**Top five skills of the future**

Q: How important do you consider each of the following as Ontario prepares for the future?

- **CRITICAL THINKING**: 9.05
- **PROBLEM SOLVING**: 8.96
- **COMMUNICATION**: 8.84
- **TAKING INITIATIVE**: 8.44
- **THRIVING IN QUICK-CHANGING ENVIRONMENT**: 8.41

**Optimistic about technology, concerned about Aboriginal communities**

Q: Looking ahead five years, how much do you agree with the following statements?

- **6.75** Technological advances will drive positive change
- **6.48** Arts and cultural scene will be vibrant
- **6.25** Communities will be strong and dynamic
- **6.00** The economy will be strong and growing
- **5.73** Social supports will be ready for those who need them
- **5.63** The environment will be protected and valued
- **5.43** Aboriginal peoples will be respected and empowered

**Ontarians are mostly optimistic**

Q: Overall, how do you feel about your future?

- **7.11** out of 10

47% responded with 7 or 8 (optimistic)

22% responded 9 or above (very optimistic)
PARTNERING ON JOBS AND FUTURE SKILLS

Promoting secure and meaningful employment in a time of rapid technological change
PARTNERING ON JOBS AND FUTURE SKILLS 07

Future Makers

Learning for the Workplace

Throughout this report, we highlight Future Makers: students, researchers and university projects that are partnering for a better future. More examples can be found at ontariouniversities.ca.

Ryerson University’s new master’s program in Data Science and Analytics addresses the skills employers need in this field. The interdisciplinary program, with partners such as IBM, St. Michael’s Hospital, the Hospital for Sick Children, Microsoft, the Globe and Mail and the Toronto Stock Exchange, will give students hands-on experience with analytics tools in areas such as health care, software engineering, social media, services and finance.

Business students at Nipissing University can take an experience certificate program called iLEAD (Learn through Experience, Action and Discovery). Students on the program earn credits towards their degree through directed study, honours theses, workplace internships, service work, or international placements.

University of Waterloo operates the world’s largest postsecondary co-op program with nearly 20,000 co-op students enrolled in more than 120 programs. Its William M. Tatham Centre for Co-operative Education and Career Action offers students, alumni, employees and post-docs career guidance; in 2016, some 6,700 employers from 60 countries conducted 76,900 job interviews through teleconference, Skype or group interviews.

Across the province, new technologies are emerging to transform the way industries operate and Ontarians work.

In factories, robots already work side-by-side with humans, retailers are using algorithms to create customer-service “bots” that give buyers customized recommendations, doctors are working with artificial intelligence software to personalize cancer treatments based on a patient’s DNA, and veterinarians are using AI apps to personalize treatments for dogs by breed.

In short, automation and machine learning have only just started disrupting how most of us – from main street to Bay Street – will work. Service and other white-collar jobs may be affected as much as manufacturing.

Meanwhile, we live in an economy still feeling the aftershocks of the 2008 downturn. Since then, wages have been stagnated and part-time jobs are increasingly replacing full-time work. The ‘gig economy’ is taking hold. Temporary employment more than doubled from 4.7 per cent in 1989 to 10.7 per cent in 2016, according to the provincial government.

Our survey revealed that Ontarians are largely optimistic about the future, but concerned about job insecurity. They worry whether there will be enough jobs in the future, whether these jobs will be well-paid and stable, and whether they will support a decent standard of living. “I’m worried that I won’t be able to find a job that not only supports me but can support my family as well,” one student wrote in our survey.

While such fears are common, the positive news is that Ontarians believe the province’s citizens have the talent to address these problems and emerge stronger than ever. Their concern about automation’s effect on jobs is tempered by their wider belief that new technologies will, on balance, bring about a better life for all.

We share this vision of a better future, and agree that Ontarians have to be flexible and learn new skill sets to adapt to conditions being constantly reshaped by technology. Universities have a responsibility to help define and share these skills – and we too must be nimble and adaptive.

People that can learn quickly, that can pivot, that can problem solve, to me those are the core skills that our universities and other educational institutions need to be instilling in people. We can’t say, “this is the knowledge that you will need for the next 40 years.” But here’s the skill set that you will need to continue to be successful in our rapidly changing environment.”

— Gordon Frost, partner at human resources consulting firm Mercer, at the Ontario’s Universities Roundtable on Innovation and the New Economy.

10.7%
in 2016

More than doubled

4.7%
in 1989

10.7%
Ontario needs a dynamic talent pipeline to remain competitive and satisfy the needs of tomorrow’s workplaces. This will call for three areas of continued growth:

Adaptable skills: Employers told us they need workers with core skills such as critical thinking, problem solving, communications and creativity; adaptable skills that will help graduates master new technologies and remain highly employable. Our survey respondents agreed that these are the skills graduates will need to succeed. Universities will play a key role in helping meet this challenge by ensuring our programs train students in these adaptable skills and allow them to think across disciplines. The future will demand humanities students with business and data-analysis knowledge, and science majors with the communication and teamwork skills to match their expertise in machine learning.

Experiential learning: Work-related, real-life learning (widely known as experiential learning) is at the core of what we do and will continue to do. Through partnerships with employers, universities are helping students across all disciplines gain real-world experience by applying their skills and knowledge at a range of organizations – from major corporations to non-profits. These co-ops, internships, research projects and other on-the-job initiatives ensure students gain invaluable experience in their field. Opportunities for work-related learning will need to keep expanding to match the demands of the workplace.

Entrepreneurship: A province-wide culture of entrepreneurism is also crucial to help replace traditional jobs that are no longer being created. Through our campus incubators and accelerators and in the classroom, we will continue to grow our partnerships with employers and the public sector to encourage entrepreneurism and support students and graduates in starting their own business.

Ontario university students thrive in the workplace: they have a 94-per-cent employment rate after two years, with 89 per cent of graduates employed in jobs closely or somewhat related to their degree. But universities can, and will, build on this success. We are committed to collaborating with our partners to make sure tomorrow’s graduates are equipped with the skills and expertise the province will need.

One respondent to our survey believes strongly that we can:

“Education is the harbinger of positive change, so universities also hold the responsibility of empowering young minds. And I believe that when the dust settles, we will find that Canadian universities rose to the occasion.”
Commitments and Recommendations

**What Ontarians Want**

Education that gives students flexible and adaptable skills – such as critical thinking, problem solving, communication, teamwork and creativity – to help them thrive throughout their career.

Co-ops, internships, lab work, research projects and other experiential learning opportunities that prepare students for the workforce.

Partnerships among employers, universities and colleges to boost experiential learning and ensure Ontario continues to have a strong talent pipeline.

**Ontario Universities’ Commitments**

Ensure students graduate with the knowledge, skills and experience needed to thrive in the workplace and be successful global citizens in today’s and tomorrow’s world.

Establish explicit learning outcomes in every program and department so students graduate with the necessary knowledge and adaptable skills, as well as with the ability to explain them to prospective employers.

Ensure that all students benefit from experiential learning that exposes them to the demands of workplaces and improves their employability, interpersonal skills, and transition to the workforce.

Further develop robust partnerships with employers and colleges in order to increase the number of experiential learning opportunities.

**How Government Can Help**

Provide financial support for new technology and innovative teaching methods to help ensure all students can continue to enjoy an enriching educational experience while developing the core skills they need for the future.

Invest in experiential learning through:

- Sustained funding for a full range of experiential learning at universities.
- Incentives to employers, particularly small businesses and not-for-profit organizations, to partner with universities to create more experiential learning opportunities for all students, including Aboriginal students, those with disabilities and other underrepresented students.
- Development, in collaboration with universities, colleges and employers, of an online province-wide information resource to encourage and support employers to provide experiential learning opportunities for students.
PARTNERING ON GROWING THE ECONOMY

Ensuring long-term prosperity through talent, innovation, entrepreneurship and economic development
Economic Impact: The Numbers

- **$48.7 billion**
  - Human capital: total extra income earned by university alumni

- **$42.4 billion**
  - Spending in the province by universities, students, alumni and visitors

- **$24.7 billion**
  - Increase in economic activity due to university research and development

- **$1.5 million**
  - Average additional lifetime earnings of an Ontario university graduate compared to high school graduate


Ontario universities are proud of the partnerships that enable us to contribute to the province’s economic life:

Farmers’ yields boosted by agricultural innovations, vibrant companies formed from medical discoveries, mining and energy firms made more productive by new technology, clusters of business activity driven by high-tech research, thousands of energetic start-ups, and many thousands of international students and researchers who come to make Ontario their home.

We believe in not only educating young people to be well-rounded and responsible members of society, but also in helping train them to be active participants in a prosperous, thriving and globally-competitive province.

Through the jobs we help create, the innovations we inspire, the creation of new infrastructure and the activity of our students, it’s estimated that Ontario’s universities contribute more than $115 billion annually to the province’s economy (see above). Our research and development alone helps boost Ontario’s economic activity by almost $25 billion. This impact is felt across the province and reaches into all corners of society.

Our survey respondents told us they believe universities have a major role to play in driving economic development, producing research with tangible economic impact, supporting Ontarians’ entrepreneurial spirit, and attracting the brightest minds to come to the province and stay. They believe challenges such as job insecurity require partners from all sectors to collaborate on bold solutions for job creation and growth.

Universities are committed to being good economic citizens. In the technologies that are transforming the global economy, we are partnering to make sure Ontario is not only ready, but taking the lead. In artificial intelligence and machine learning, the Vector Institute, supported by the University of Toronto, is partnering with government and major employers to attract top researchers to design solutions for tomorrow’s new economy. Similarly, the Institute for Quantum Computing at the University of Waterloo and the biomedical research collaboration Medicine by Design in Toronto are being fuelled by university expertise, helping drive discoveries that boost economic activity.

“If our universities are succeeding, our young people are succeeding, our economy is succeeding and we’re doing well.”

— Lekan Olawoye, Executive Lead at MaRS Discovery District, at an Ontario’s Universities’ Roundtable on Youth Employment

Thriving clusters – regional concentrations of companies, non-profits and academic institutions that spur growth and innovation in a common field – are a major opportunity for economic expansion in Ontario. Just as computer-science talent drives employment in Kitchener-Waterloo and IT innovation boosts the Ottawa region, similar clusters are flowering throughout the province, energizing
communities with new ideas and new jobs. They demonstrate how economic growth can be powered by collaboration and knowledge-sharing between postsecondary intuitions, business and the public sector.

Through our joint projects with industry and communities, we help strengthen industries from tourism and agriculture in the southwest, to digital tech and biotechnology in the Golden Horseshoe and mining and forestry in the North. The Institute for Competitiveness and Prosperity recently highlighted the role universities play in driving the mining industry, for instance, writing that the human capital and expertise we provide are “one of the industry’s greatest assets.” Its report, Collaborating for Growth: Opportunities in Ontario, also cites our role in helping develop the talent for three other industries with high-growth potential: finance and insurance, life sciences, and motor vehicle and parts manufacturing.

We also want to help grow a society that’s buzzing with entrepreneurial energy. This matters because the rise of the “gig economy” and part-time work has made self-employment and starting up a business an attractive option. A 2017 Global Entrepreneurship Monitor report found that 16.7 per cent of working-age Canadians are involved in early-stage entrepreneurial activity – up from 12.2 per cent in 2013.

The incubators and accelerators on our campuses give students the opportunity to develop their business ideas, the confidence to take risks, and the access to networks of investors that could help put their dreams in motion. Thousands of young students and recent graduates in Ontario have started up businesses, and even those who don’t find immediate success are learning how to fail, pivot, try again and become lifelong entrepreneurs, sparking new ideas and creating jobs.

We believe that the people of Ontario are its greatest resource. Its talent attracts businesses from around the world. That’s why universities are committed to ensuring a rich talent pipeline − developing high-quality graduates who advance research, pass on their knowledge and hone the leadership skills to become part of a world-class workforce.

Ontario’s students and faculty also bring their energy and creativity to the world through study-abroad opportunities and international research partnerships that help give Ontario a global reputation for excellence – and then bring the benefits of new ideas back home. And through research collaborations and by welcoming almost 60,000 international students from more than 200 countries, we help attract new knowledge to enrich our own economy.

However, the path to greater prosperity can only be laid with the help of our partners in business and the public sector, enabled by decisive government leadership.

“Local learning institutions such as universities, colleges, and innovation hubs are vital aspects of building a strong knowledge economy,” Gregory M. Spencer of The Martin Prosperity Institute wrote recently. “However, on their own, they do not automatically create economic prosperity. For this to occur they must have strong ties to local industry and coordinate their offerings with the needs of businesses.”

We pledge to maintain and strengthen these ties. We share the same vision of economic growth and an entrepreneurial society: Let’s work together to achieve it.
## Commitments and Recommendations

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<td>Research, partnerships and entrepreneurial initiatives that drive innovation in key industries.</td>
<td>Strengthen relationships with industry to ensure we are conducting research, fostering talent, and supporting knowledge transfer so that new ideas and inventions move from the laboratory to the community and help businesses innovate and grow.</td>
<td>Support the development of a “cluster” strategy that will stimulate Ontario’s competitive economic leadership.</td>
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<td>Support for regional economic development across the province.</td>
<td>Recruit talented graduate students and researchers who bring new knowledge, ideas and innovations to various industries.</td>
<td>Help bring new companies and entrepreneurial ideas to life through stable funding for university incubators and incentives for graduates to start a business.</td>
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<td>Support to help start-ups and small businesses grow.</td>
<td>Work with our students and our business and community partners to encourage and support entrepreneurs.</td>
<td>Support a shift from a risk-averse to an entrepreneurial society by providing incentives that attract venture capital, enable business growth, entice innovative companies to Ontario and help start-ups grow and stay in the province.</td>
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<td>Incentives and policies to keep innovators and inventors in the province and ensure their ideas benefit the lives of Ontarians.</td>
<td>Ensure Ontario benefits from the best international ideas by attracting international talent, supporting students and faculty to study and collaborate abroad, and offering education that prepares students for a globalized world.</td>
<td>Help attract the best talent through measures that include expanding the number and value of graduate scholarships.</td>
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<td>Provide responsive funding for internationally-matched research projects and support students to take a semester abroad or gain international work experience.</td>
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PARTNERING ON BUILDING STRONG COMMUNITIES

Supporting thriving communities through high-quality municipal and social services, improved infrastructure and transit, well-served rural areas and dynamic arts and culture.
Today’s universities strive to be more than centres of learning.

They are integrated into the social fabric of their community, serving local citizens and partnering with local institutions and businesses to improve quality of life for all. Ontario’s 21 universities believe in being good neighbours in the communities in which they have roots, by contributing expertise, ideas, volunteers, new infrastructure and cultural initiatives to help our communities thrive.

Our partnerships can be as grassroots as a project to use dance to improve the fitness and mental health of Peterborough’s seniors, in which Canada’s National Ballet School is working with Trent University’s Centre for Aging and Society.

Or they can help to provide services that improve life for millions of Ontarians: Researchers from the University of Windsor, Ryerson University and University of Guelph are partnering with the Southwestern Integrated Fibre Technology Network in its project to build a high-speed Internet infrastructure for everyone in southwestern Ontario.

Ontarians expect this kind of engagement. “Universities can ensure that they are engaged with communities, beyond what can be seen as solely academic,” one parent wrote in our survey. “They can work with others to create real, meaningful solutions to real-life, everyday problems.”

The transformations caused by technology and globalization will not just affect jobs and the economy, but will also demand creative solutions to the social shifts in our communities. Immigration is bringing cultural diversity but also population growth; the flight to cities means our urban and suburban areas are expanding and putting pressure on greenbelts; highways, transit and related infrastructure are stretched; city housing prices are outpacing incomes, and the aging population is putting strain on families and public services. Meanwhile, many post-industrial and rural areas, especially in the North, have seen their populations decline.

In this shifting society, smart ideas and strong partnerships are crucial to raising our communities’ quality of life, helping families adapt to change and ensuring that our young generation is set up for success. Universities are natural partners in seeking better outcomes for all: livable cities, faster commutes, affordable housing, thriving arts and sports scenes, customer-friendly public services and beautified streetscapes.

Universities can ensure that they are engaged with communities, beyond what can be seen as solely academic. They can work with others to create real, meaningful solutions to real-life, everyday problems.”

– Survey respondent

One good example of such a partnership is the City of Oshawa’s Teaching City initiative (see above). It demonstrates a forward-looking municipality aiming to prepare its local economy and community structures for the future by partnering with postsecondary institutions, employers, non-profits and governments.
We welcome similar opportunities in every corner of the province. The presence of university activity can help spark urban renewal. Talking about the renaissance of Brantford’s once-desolate downtown core around Wilfrid Laurier University’s new campus, which opened in 1999, Mayor Chris Friel said: “Postsecondary completely changed our culture, it completely changed our focus. It has been the catalyst for the revitalization we are seeing throughout the entire city.”

Meanwhile, many rural, Northern and Aboriginal communities rarely enjoy the same level of investment as the rest of the province. In Aboriginal communities especially, limited access to basic services such as clean water and high schools harms the development and empowerment of their residents.

We are committed to helping bridge these gaps to ensure the whole province has access to the benefits of new technology and the opportunities of a growing economy. With better infrastructure, in particular broadband Internet access, we can help underserved communities reap the same benefits from the advances in Ontario’s economy. Arts and culture also have a role to play in communities’ quality of life. Many of our survey respondents told us that the arts are vital in helping citizens imagine possible futures and cope with their daily reality. Meanwhile, at OCAD University’s Roundtable on Arts and Culture, Claire Hopkinson, Director and CEO of the Toronto Arts Council, told us: “In a disruptive society, giving people a sense of place, a sense of purpose, a sense of wonder is going to be very important.”

Through our students and our campus facilities, we work to strengthen Ontario’s arts and culture sector, which according to Statistics Canada contributes more than $25 billion annually to the provincial economy. Universities help educate the artists and performers, and partner with communities to support the events, cultural centres and galleries that inspire our imagination.

We believe that being a good neighbour also means helping out at a grassroots level. Our students and faculty regularly volunteer in the community, creating new bonds and partnerships with local residents; and universities partner with local organizations to offer community-service learning, encouraging students to develop core skills by working in their community.

Faculty members’ expertise and advice is regularly called upon to help communities make policy decisions. For example, Ottawa’s police service turned to York University for its researchers’ input on the issue of racial profiling, and the force is developing an action plan based on their recommendations.

Universities contribute their people and facilities to local communities in myriad ways: whether it’s Ryerson athletes teaching hockey to local youth at the university’s Mattamy Athletics Centre, or Nipissing University students holding book clubs to encourage reading among low-income children.

Our roots are in Ontario’s communities, and these roots will grow. We are committed to building more partnerships with business, municipalities, cultural leaders, non-profits and governments to promote thriving communities.
## Commitments and Recommendations

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<td>Effective local community planning that addresses key issues such as sustainability, health, housing and transit.</td>
<td>Support and publicize research that leads to services and processes to strengthen our local communities.</td>
<td>Work with universities, local governments and communities to encourage a vibrant flow of ideas and research that helps spur new thinking and develop solutions to local issues.</td>
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<td>Support for arts and culture that helps create vibrant communities.</td>
<td>Help build strong, vibrant communities by strengthening bonds with a wide range of partners, including businesses, non-profits, local service providers and arts organizations.</td>
<td>Ensure urban and rural communities, particularly in Northern and remote regions, have the services and infrastructure, such as quality Internet access and strong transit, that ensure high quality of life and prosperity.</td>
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<td>Meaningful partnerships between postsecondary, private, and public sectors to improve communities.</td>
<td>Encourage vibrant community-services and programs by partnering with communities to leverage our campus resources.</td>
<td>Develop a Northern Ontario strategy that includes incentives to students and graduates to study, stay and work in Northern communities; sustained funding for the Northern Ontario Heritage Fund Corporation, including funding for research facilities and equipment; establishing a Northern Ontario Research Chair to focus research on issues particular to the region.</td>
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PARTNERING ON RESEARCH AND INNOVATION

Supporting and commercializing life-changing ideas and discoveries
Across Ontario, universities help nurture the skilled and successful citizens of tomorrow. Equally important for our future is the daily activity taking place at labs and research facilities, where ideas and discoveries are born that will lead to a more productive, vibrant and healthy province.

The results of research and innovation help feed us, save our lives, transport us to work, power our homes, organize our social structures and allow us to communicate with each other. Many of the technologies we have come to rely on – from the smart phone to the MRI and the three-point seat belt – have their origins in research carried out in postsecondary institutions, often in partnership with business and governments.

In Ontario’s rapidly-changing economy, innovation is key. During our listening initiative, we consistently heard innovation cited as a crucial element of transformation and growth. Ontarians told us that forward-thinking research, inventions, technology and science are fundamental to keeping the province competitive and thriving. We also heard that universities need to be a proactive partner.

“When a university can use the tremendous intellectual resources at its disposal to help provide real world, timely solutions to local problems, those solutions can be scaled up and the lessons learned applied to provincial problems,” one parent wrote in our survey.

According to Statistics Canada, the higher education sector is the second largest performer of research and development in Ontario, carrying out an estimated $5.2 billion in work, which translated into 34 per cent of the province’s research activities in 2014.

University-generated research partnerships drive an innovative society by assisting in the production of technological breakthroughs that make businesses more competitive, produce new ideas and data that shape better policies, and generate solutions to local and global issues.

Ontario universities are involved in collaborative research projects that aim to improve lives across all areas of business and society: for example, reducing the harm of oil-and-gas industry flaring, examining new medical uses for wearable technology, looking at ways of making commercial cross-border traffic between Canada and the U.S. more efficient, developing synthetic probiotic treatments to combat the C.difficile virus, and working with police forces to improve officers’ use-of-force decision-making during confrontations.

Further partnerships with private- and public-sector stakeholders are vital in order to produce research that has quantifiable, positive effects on the province.

As Rick Huijbregts, then-VP of Digital Transformation and Innovation at Cisco, said at our Roundtable on Innovation and the New Economy: “Innovation doesn’t only happen in your or our R&D departments. Innovation happens everywhere. We can

Future Makers

Engines of Innovation

In partnership with Ford Canada, the University of Windsor’s Clean Combustion Engine Laboratory (CCEL) is doing groundbreaking research into combustion-engine technology. Results of the long-standing partnership include major improvements to engine efficiency, advanced combustion control, and biofuel adaptation in diesel engines. Collaboration with CCEL has increased Ontario-based jobs at Ford Canada, which employs many University of Windsor graduates. Together, the university and the carmaker are training the next generation of skilled workers, addressing important challenges facing the automotive industry, and contributing directly to our economy.
make the transformation only work when we collaborate between the private sector, academia and government."

The federal report delivered by Canada’s Fundamental Science Review panel (the Naylor Report), which called for more funding and improved support structures for research and innovation, underlined the crucial role played by postsecondary research in “investing in the future.”

“"Innovation doesn’t only happen in your or our R&D departments. Innovation happens everywhere. We can make the transformation only work when we collaborate between the private sector, academia and government."

— Rick Huijbregts, then-VP of Digital Transformation and Innovation at Cisco, at an Ontario's Universities' Roundtable on Innovation and the New Economy

“When quantum physics and relativity were born in the early 20th century, no one could have predicted the array of innovations that would result many years downstream – innovations as varied as the transistor and semiconductors, solar cells, rechargeable batteries, the laser, the integrated circuit, the personal computer, the Internet, medical imaging, flat-panel high-definition televisions, satellites in orbit, and the BlackBerry, to name but a few," the report said.

In this spirit of discovery, collaborations across the province between university researchers and business and community partners are driving innovation in artificial intelligence, quantum computing, nanotechnology, clean energy, medical and health research, social sciences, and many other fields.

However, the positive effects of research can’t find their way into the community unless the ideas and inventions born in labs can be turned into real-life products and solutions. Leaders from the technology sector have emphasized to us that Ontario needs to do more to ensure its research is commercialized and goes to market. A 2015 innovation report card from the Conference Board of Canada gave Ontario good marks overall, but said it “might be facing challenges commercializing and reaping the larger benefits of innovation.”

Promoting the commercialization of research requires coordinated work. It requires the combined efforts of universities, businesses, government, accelerators and investors to support projects from the development phase through to product creation and distribution to the customer or end-user. In the case of ideas-based research in areas such as traffic management or health policy, “commercialization” means ensuring it is seen and adopted by decision-makers and service providers.

A thriving and livable Ontario in 25 years’ time will in part depend on the innovations that universities and their partners are working on now. We are committed to developing the research partnerships to produce the concrete, actionable innovations that will help ensure a dynamic future.

Lieutenant-Colonel Jeremy Hansen credits the Royal Military College of Canada (RMC) – where he earned a degree in Space Science and a Master of Science in Physics – for preparing him for an out-of-this-world career with the Canadian Astronaut Corps. One of two Canadians who will travel to the International Space Station by 2024, Hansen says his education and experiential learning at the RMC provided him with the necessary industry knowledge, leadership skills, and work-related opportunities. Three other Canadian astronauts have graduated from RMC: Joshua Kutryk, Chris Hadfield and Marc Garneau.
## Commitments and Recommendations

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<th>What Ontarians Want</th>
<th>Ontario Universities’ Commitments</th>
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<tr>
<td>A breadth of innovation that helps find solutions to our multi-faceted challenges that span from the economy, to the environment, to social policy.</td>
<td>Produce high-quality research and innovation across all disciplines in STEM, the humanities, arts, and the social sciences to deliver real, impactful improvements in the province.</td>
<td>Work with the federal government to improve research funding.</td>
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<td>Collaboration between government, universities, employers and industry to commercialize research.</td>
<td>Help commercialize and publicize researchers’ work so that it leads to new products, services and processes that improve health care, productivity, public policy and more in communities across the province.</td>
<td>Increase investments in the Ontario Research Fund and ensure it supports a wide range of research and innovation.</td>
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<td>Support the movement of universities’ ideas and inventions into the marketplace by creating a Research Commercialization Fund.</td>
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PARTNERING ON HEALTH CARE

Health and well-being for all through groundbreaking medical research, innovative technology and high-quality care
Western University’s Brain and Mind Institute is transforming our understanding of brain health. The institute promotes research in cognitive neuroscience, trains highly qualified personnel, and fosters national and international collaborations. It also houses the most powerful human MRI machine in Canada, a 7 Tesla fMRI – one of only a dozen in the world. Within the last year, researchers at the institute have developed a new brain scan analysis for treating head injuries, and launched the largest-known study on the effects on the brain of sleep deprivation.

Health Ecosphere is a collaboration led by York University and Southlake Regional Health Centre − an innovation pipeline for commercial health solutions. Along with University Health Network, the 32 partners are working with businesses and other research institutes to develop personalized health-care technologies and state-of-the-art enterprise solutions, health management and care. Technologies include health apps, medical devices and big data platforms.

New discoveries and technologies are advancing the life-saving and life-enhancing powers of health care at a thrilling pace.

In partnership with hospitals and organizations across the province, universities conduct research into every imaginable aspect of care: personalized cancer treatments, non-invasive surgeries, treatments for neurological and cardiovascular disease, therapeutic robotics, mental-health treatment, immunotherapy, all the way to state-of-the-art computer algorithms to better analyze the role of malfunctioning proteins in disease.

In so many fields, a stream of innovations means more diseases are being demystified and more treatments introduced every day.

The future of medicine and health provision is full of hope and excitement, but its potential can only be realized through creative thinking, collaboration across private and public sectors, and meaningful government support.

As our public institutions and businesses work hard to innovate and to stay ahead of medical advances, Ontario also faces the challenge of a growing and aging population, adding strain on a health-care system that is already stretched in terms of resources.

Amid these challenges, universities have a crucial role to play in partnering on health care in two core areas: research that fuels discoveries in life-saving knowledge and technology, and training the doctors, nurses and other medical professionals and managers to provide our communities with the highest-quality care.

Ontario’s health-care system is facing some remarkable challenges, particularly over the next 20 years, and universities are going to be key partners, not just to hospitals but all providers, in coming up with ideas that ultimately address those core challenges.”

— Anthony Dale, President and CEO, Ontario Hospital Association, at an Ontario’s Universities’ Roundtable on the Aging Population

During our listening initiative, Ontarians expressed excitement about future medical breakthroughs and said it was important to support the research and development of these discoveries.

“In five years we could be so much further in our scientific advancement,” wrote one graduate who responded to our survey. “We could be on the way to curing cancer, understanding Alzheimer’s disease or something even bigger.”

We believe the way forward to better outcomes for patients lies in expanding collaboration across as many sectors and stakeholders as possible. The Health Ecosphere project (see above) is one of many burgeoning health-care partnerships across the province, bringing together some 32 partners, including York University, to break down silos and share knowledge and expertise to solve pressing health-care challenges.

At our Roundtable on the Aging Population, Sophia Ikura, a Senior Director at the Toronto Central Local Health Integration Network, stressed the need for new thinking in the health-care sector: “Solutions have to be much more
interconnected, much more complex, stretching across multiple disciplines. And I think in this space, universities have become very good at training the best in their profession because they are places that tackle complexity and encourage cross-pollination and integrative thinking."

Innovation will also be paramount in the context of a dramatic demographic shift in the province. Some 16.7 per cent of Ontarians are 65 and over, outnumbering Ontarians who are under 15 for the first time, according to Statistics Canada; in cities such as Peterborough, St. Catharines and Belleville, the number of seniors has risen to more than 20 per cent of the population. By 2041, the Ontario Ministry of Finance estimates that one in four Ontarians will be a senior.

The greying of the population will affect the province in several ways: its working-age population will shrink; its health-care system will face increasing demand, and families will need more services to help them care for senior relatives.

Many of our survey respondents are concerned about Ontarians’ future access to the care they need as they grow older. “I am nearing 65 and I worry about my medications, health care and being able to afford to stay in my house and look after basic needs,” one Ontarian wrote. Most of all, they stressed that ensuring a healthy future for Ontario requires a broad focus on an assortment of programs and initiatives – from continued improvements to our hospitals, to greater access to home care and long-term care homes, and preventive care.

Mental health was also among our respondents’ concerns. They said the current system isn’t addressing citizens’ needs and that provincial policies need to include more of a focus on mental as well as physical health. Universities agree, and are working to broaden mental-health services on our campuses, while partnering on research into new and innovative treatments and therapies for the greater population.

Across all fields, Ontario’s universities’ role in a healthy future must focus on partnering to train the medical researchers, doctors, surgeons, nurses and other practitioners with the right skill sets – giving them not only cutting-edge expertise in their fields, but also the interdisciplinary skills necessary to create age-friendly communities and holistic health care.

That’s why our universities are working with their communities, for instance, to increase access to primary care. In Hamilton, McMaster University’s Department of Family Medicine has partnered with the city’s Public Health Service on the David Braley Health Sciences Centre, which offers care to 15,000 Hamiltonians who don’t have access to a family doctor.

Building these connections is particularly vital if Ontario is to take a preventive approach to health care that will keep Ontarians healthier for longer and make service delivery more efficient. Ontarians told us that healthy living must be central to our province’s social policies and planning, and that includes transforming our cities and towns into age-friendly communities. This requires urban planning that places retail outlets and services within reach of seniors who are no longer able to drive. The majority of seniors, we heard repeatedly, don’t want age to change how they live. Age-friendly communities will also need to provide career opportunities, volunteer work and an enriching cultural life.

Ontario’s universities are proud of the health-care research we help produce and the health-care talent we help train – and realize that the challenges and the promises of the future can only be met through building on our partnerships. We are committed to a healthy Ontario for all.

Future Makers

McMaster University’s Institute for Research on Aging is an initiative dedicated to transforming the experience of aging. Cross-faculty teams engage with older Ontarians, their families, health-care providers and others through research, evaluation and implementation of interventions and technologies. The institute’s Labarge Centre for Mobility in Aging is a hub for research and education in mobility, creating positive outcomes for seniors’ social and economic independence, as well as physical and mental health.

16.7% of Ontarians are 65 and over and 1 in 4 Ontarians will be a senior by 2041
## Commitments and Recommendations

### What Ontarians Want

- A comprehensive approach to health that covers prevention and treatment, for both physical and mental health.

- Focus on and funding for scientific research that will lead to new cures and treatments, and provide Ontarians with world-class technology.

- A health-care system that meets the needs of an aging population.

- Community planning and development that takes into account the needs of an aging population.

### Ontario Universities’ Commitments

- Support and aid in the commercialization of research on medical technology, treatments, processes and services to save lives and improve health-care delivery.

- Support social innovation that leads to better health services and health outcomes for Ontarians.

- Educate the world-class doctors, nurses, rehab therapists and other practitioners who are at the heart of our health-care system.

- Work with health providers and government in our communities to help increase the level of care for Ontarians, including supporting preventive care and the development of age-friendly communities.

### How Government Can Help

- Continue to invest in a healthy province by financially supporting research in medicine and health care.

- Work with universities, hospitals, start-ups and others so that the best health research and inventions reach Ontarians when they need them.

- Continue working with universities to ensure Ontario has the right number and mix of health care professionals working where they are most needed, so that all Ontarians have access to high-quality health care close to home.
PARTNERING ON THE ENVIRONMENT

A sustainable future that preserves our natural riches and drives prosperity through clean technology and a green workforce
The Centre of Excellence for Sustainable Mining and Exploration at Lakehead University is playing an important role in guiding sustainable mineral exploration and extraction in Northern Ontario. The centre brings together 16 Lakehead departments, including geology, law, biology, Aboriginal initiatives, engineering and anthropology, to examine the impact of resource development in Northwestern Ontario. Its research, education and outreach activities focus on ensuring exploration and extraction is sustainable and done in consultation with First Nations and Métis communities.

Climate change is perhaps the biggest threat facing our planet, setting challenges that affect every corner of the globe and demand action from everyone on it.

In Ontario, global warming and other pressures on the environment threaten our local communities, economic well-being and quality of life. While governments enact policies to address the threat, it’s vital that universities, other public institutions and the private sector come together to produce bold and innovative solutions to support the effort.

Whether it’s lowering industrial emissions, saving energy, protecting our natural landscapes and lakes or making transportation more sustainable, universities are partnering to help create new technologies and imagine new strategies.

Climate change is high on the list of things that worry Ontarians, and they believe more needs to be done. Respondents to our survey were dubious about the world’s commitment to sustainability; asked whether they agree with the statement “the environment will be protected and valued” in five years’ time, they gave it a rating of only 5.6 out of 10.

“Ultimately, I am worried for my child because of the way we treat the environment,” one parent wrote in our survey.

Preserving our natural environment was a constant theme in our listening initiative. Ontarians value the province’s parks, lakes and rivers. Maintaining this natural beauty, they told us, is fundamental to maintaining what makes Ontario special.

Ontarians also recognize, however, that addressing our environmental challenges can also bring us great economic opportunities. “Ontario needs to focus on building its environmental economy and reducing its environmental footprint. This requires innovation, and will create jobs,” another survey respondent said.

Forward-looking green policies and a strong economic future are indeed complementary goals; and our universities are developing strong partnerships with government, businesses and organizations to help realize both.

Seventeen of Ontario’s 21 universities have added new research initiatives or institutes on sustainability since 2013. Their work includes research on new biofuels and other clean energy sources, electric vehicles and transit, eco-friendly construction and low-carbon households, all the way to sustainable agriculture.

Through the Centre for Hybrid Automotive Research and Green Energy, for example, the University of Windsor is partnering with companies such as Ford Canada and D&V Electronics to develop next-generation battery and engine technology to advance the development of electric vehicles.

Universities also partner with industry to develop clean technology and devise solutions to make industrial and business operations cleaner, more efficient and non-harmful to surrounding communities. For example, the mining industry, an important employer in the province, is collaborating with Lakehead University on a wide range of sustainable practices and solutions (see above).

Although we are working to slow the pace of climate change, its effects are already apparent. Universities are therefore engaged in collaborative work with provincial partners.
to mitigate the threat of changing weather patterns, including addressing flood risk to communities and helping municipalities plan for extreme weather events.

Our research and community outreach is also helping the province preserve our natural environment. Many of our universities collaborate with U.S. counterparts and local authorities on initiatives to maintain the Great Lakes’ water quality and ecosystems, and we are active in partnerships to study and preserve our forests, parklands, rivers and wildlife.

We have to ensure that we are good environmental stewards of this country and create a green economy to protect it, and through our inventions allow this green economy to flourish across the world, providing security for all Canadians.”
— Survey respondent

Effective environmental projects require interdisciplinary thinking; our faculty and students break down silos and come together from science, math, engineering, health sciences and humanities departments to work with our partners on creative solutions.

We also know that being good environmental citizens begins at home. We see our own campuses as microcosms of the positive sustainable practices Ontarians demand across the greater province. Whether it’s by adopting LEED-certified design in new buildings or aggressive retrofit campaigns to make older buildings energy efficient and even carbon-neutral, our universities take sustainability to heart.

Our partnerships with government, utilities and students are resulting in state-of-the-art solutions, driving CO$_2$-emissions reductions equivalent to taking thousands of vehicles off the road. Students’ passion for environmental change helps drive our initiatives, leading to great ideas that they even help fund — such as a sustainable, green-roofed pavilion and bicycle shelter at the University of Guelph powered by solar panels.

Universities are proud to be partners in environmental initiatives across the province. By working with all Ontarians, we are committed to helping keep Ontario’s lakes clean and its parks pristine, all while creating the sustainable economic development that will drive a dynamic province for years to come.

“We have to ensure that we are good environmental stewards of this country and create a green economy to protect it, and through our inventions allow this green economy to flourish across the world, providing security for all Canadians,” one of our survey respondents wrote.

It is a sentiment that we take to heart, and a mission that we intend, with our partners’ help, to keep building on.
### Commitments and Recommendations

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<td>A focus on sustainable job creation and economic development: reducing emissions, preserving our province’s natural beauty and moving toward a low-carbon economy.</td>
<td>Dedicate resources to building sustainable, low-carbon campuses and producing graduates with the broad skills to contribute to a sustainable and prosperous economy.</td>
<td>Support advancements in clean technology and climate science that will move the results of university research into businesses and communities.</td>
</tr>
<tr>
<td>Support for and development of renewable energies and technology.</td>
<td>Encourage research into green technology and innovations that will benefit the province.</td>
<td>Encourage conservation and energy efficiency through funding to repair or retrofit aging infrastructure, with dedicated investments to postsecondary institutions.</td>
</tr>
<tr>
<td>A proactive approach to energy efficiency and wildlife conservation.</td>
<td>Continue research on ecological issues that help preserve our natural environment for future generations.</td>
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**Commitments and Recommendations**
PARTNERING ON DIVERSITY AND EQUAL ACCESS TO POSTSECONDARY EDUCATION

Ensuring that economic success and a high quality of life are attainable by all Ontarians
Algoma University, in partnership with Shingwauk Kinoomaage Gamig, is working to transform the negative legacy of the former Shingwauk Indian Residential School into a positive one by offering courses and programs of interest to Anishinaabe students. Students move seamlessly between the two institutions, participating fully in student life and cultural activities. This close collaboration reflects the roots of Algoma’s campus, which started life in the residential school building following its closure after 96 years. The Children of Shingwauk Alumni Association continues to meet and to work with Algoma University.

Ontario’s universities are diverse and multicultural, a quality that we celebrate and encourage. It’s vital that our campuses continue to reflect the dynamic social diversity that plays a major part in the province’s success.

Ensuring that students from Aboriginal, immigrant, minority and disadvantaged communities can access a university education – and feel welcome on campus – is important. As we prepare students to become the workforce of the future, broad access to university and college results in broad access to the economic opportunities that stem from them.

Whenever a bright and curious young mind is unable to access postsecondary education, it hurts all Ontarians, because that person potentially loses the opportunity to grow, flourish, enter the workplace at a higher salary and give more back to the economy over a lifetime of knowledge-sharing and contributing to our tax base. Conversely, increasing access will have positive economic effects throughout the province.

As one of our survey respondents, a retired Ontarian, put it: “Today’s graduates are brighter, more talented and more diverse than ever before. They will carry us forward with new discoveries in medicine, engineering and the humanities to bring us a brighter, more diverse future as a country.”

Over the last decade, Ontario’s universities have seen a growth in applications and enrolment, even as the number of young adults in the province has begun to decrease. Ontarians recognize the value of a university education, and we are committed to helping all citizens who qualify to access one.

Our population growth is being driven by immigration, and Statistics Canada estimates that immigrants will account for up to 30 per cent of the population by 2036. The Aboriginal population, meanwhile, is growing at an even faster rate – by 42 per cent between 2006 and 2016. That is four times faster than the non-Aboriginal population, and 27 per cent of that population is 14 and under.

Unfortunately, Aboriginal peoples in Ontario and across the country are still less likely to have a postsecondary education than non-Aboriginals.

As Max FineDay, co-executive director of Canadian Roots Exchange, wrote recently: "The health of our society, not to mention our national economy, will depend on the path Canada decides to walk, now and in the years to come," on the question of Aboriginal peoples.

Universities are committed to walking on the right path and providing a welcoming environment. Each of Ontario’s 21 universities is creating or redesigning programs to be inclusive of Aboriginal learners. Meanwhile, on many campuses, students are learning more about Aboriginal traditions and can earn Bachelor of Education degrees that put Aboriginal knowledge and perspectives at the forefront of teacher training.

We are also reaching out to Aboriginal communities to encourage more indigenous youth to attend university. The Aboriginal Access to Engineering program at Queen’s University, for example, promotes math
The health of our society, not to mention our national economy, will depend on the path Canada decides to walk, now and in the years to come.”

— Max FineDay, co-executive director of Canadian Roots Exchange

and science to elementary and high school students and supports teachers in order to increase the number of Aboriginal engineers in Canada.

Success stories include Donna Kimmaliardjuk, who credits the Aboriginal students’ centre on her campus for helping her cope with undergraduate pressure, and who obtained a residency in Ottawa as the first female Inuit cardiac surgeon.

Low-income families are also a priority. We want to ensure equal university access to all students from disadvantaged families who qualify — including high-school students who are the first person in their family to have the opportunity. Ontario’s universities provide students with more than $900 million in scholarships and bursaries. In 2010, 47 per cent of our students graduated debt-free, and we welcome improvements to OSAP that mean more than 210,000 students annually will in effect pay no tuition fees.

Since 2001, Ontario has led the country when it comes to increasing the on-campus ratio of students from low-income families to those from higher-income families, according to Statistics Canada. We want to partner with government to further improve those numbers, notably by promoting more instruction in high school that will help young people to apply and equip them and their parents with knowledge about the jobs market that helps them select the right programs. More high school guidance to prepare students for campus challenges — such as managing the workload and being financially literate for life away from home — would also encourage first-generation students to apply and have a successful university experience.

Universities will continue to educate students to be global citizens who are comfortable living and working with people of all backgrounds and cultures.

Ontarians are rightly proud of the province’s diversity. It draws more immigrants, attracts business and contributes to the cultural richness of communities. We are committed to ensuring that diversity on, and equal access to, our campuses will contribute to wider economic and social success.
### Commitments and Recommendations

**What Ontarians Want**
- An inclusive society in which all Ontarians can contribute to and benefit from the province’s economic success.
- Stronger relationships with Aboriginal communities and a focus on ensuring they have the tools to thrive, including by increasing their participation rate in postsecondary education.
- Increased access to university for under-represented groups, and more culturally sensitive supports for them on campus.

**Ontario Universities’ Commitments**
- Ensure that any Ontarian who is willing and qualified can gain a university education.
- Ensure prospective students have the support and resources they need to make an informed decision about their postsecondary education.
- Develop and implement plans to support and increase access for Aboriginal peoples, under-represented youth and first-generation university students.

**How Government Can Help**
- Help high schools prepare students for the transition to university by providing training on managing university workloads, financial literacy and living independently.
- Continue improving access to data about in-demand jobs and marketable skills, so students and parents can better assess career opportunities.
- Increase investments to attract and support Aboriginal students, including incentives to increase the numbers of Aboriginal faculty.
- Work with universities to attract and support first-generation university students.
PARTNERING ON SUPPORTING STUDENTS ON CAMPUS

Providing the foundation for a secure, healthy and fulfilled life on campus
Ontario's colleges, universities and student groups have come together to propose an integrated approach to student mental health called In It Together that begins in kindergarten and continues through high school, postsecondary life and adulthood. This 'whole-of-community' approach by government, health-care providers, community agencies, student associations and PSE institutions includes: mandatory curriculum changes to teach resiliency in young people before they reach PSE campuses, culturally diverse counselling, expanded use of technology, and peer counselling – all at no cost to students, regardless of whether they live on or off campus, in their home communities or away. The In It Together partnership aims to help Ontario become a leader in mental wellness, for the health and well-being of its students, and for the future of the province.

An undergraduate’s first day on campus is a milestone: For many, it means leaving the family home – but for all, it means stepping into adulthood, independence and a new world of opportunities.

It’s an exciting time, but managing that transition can often bring new pressures and anxieties. Universities believe in supporting students through to graduation in order to make the most of their campus experience and fulfil their potential.

Proper support in high school through courses that emphasize resiliency and coping skills would ease the transition to university for students, and once there students can expect enhanced supports to help them cope with new and often complex pressures of postsecondary life.

That support starts in the classroom, but extends far beyond.

From the theatre stage to the hackathon, and from the sports field to the entrepreneurship lab, students have countless opportunities to take part in extracurricular activities that help them make friends, hone new skills and learn important life lessons. In many ways, life outside the classroom is as integral to the university experience as life inside it.

Then, as students prepare to graduate, they have access to a variety of career services to prepare them for the leap from campus to the workforce: help finding job opportunities, advice on preparing their resumes and how to succeed in job interviews.

But another aspect of postsecondary life, one that is growing in public awareness as society learns more about the impact of transitioning to campus, is that of student mental health. Three-quarters of mental-health disorders first appear before the age of 25. For many students, these issues intensify if they are away from family support. Between 2011 and 2016, students identifying their primary disability as a mental-health disability more than doubled.

For all our universities, student mental-health support is a top priority – as it was for many Ontarians in our survey. Many students already rely on the varied services we offer, whether it’s on-campus counsellors or programs that educate students about mental-health issues and connect them to services in the community.

Universities will continue to offer and improve on these services. But we believe having the right mental-health support requires a community approach, not a campus-centric one. That’s why we have partnered with colleges, students and mental-health associations to develop the Centre for Innovation on Campus Mental Health – a hub designed to help Ontario’s colleges and universities enhance their capacity to support student mental-health and well-being.

Recognizing that mental health is a broader societal issue, universities are ready to work further with our partners in the health sector and across government to ensure all Ontarians receive the support and help they need. This should include free mental-health care for students, awareness training and early-intervention strategies in the K-12...
years, continuing after university graduation and throughout adult life.

Regarding support structures for Aboriginal students, we work with their communities to ensure these students encounter a supportive environment on campus. The Truth and Reconciliation Commission’s 2015 report outlined recommendations on how educators can help repair the harm caused by residential schools and advance the process of reconciliation. We are committed to working with Aboriginal communities to incorporate Aboriginal history, culture, traditions, and culturally appropriate supports and meet the challenges laid out in the TRC.

We recognize that Ontario “can’t achieve a sense of belonging until we recognize and remove the systemic and institutional barriers that have been placed due to historical legacies,” as Sam Erry, the Ontario Associate Deputy Minister for Inclusion, Diversity, and Anti-Racism, told our Roundtable on Diversity and Inclusion. This is true not only of Aboriginal, but of all minority and disadvantaged groups that have been excluded from social opportunities.

Finally, we are committed to a safe and secure campus for all. Providing a safe and inclusive environment for all students is a top priority for every one of our universities. With the help of government and our local partners, we will continue to build on the support systems that improve our students’ quality of life and help them make the most of their university experience. For students to reach their full potential, a rich and happy campus life is as important as the education they receive in the classroom.

When Anna Soper, a University of Ottawa student, headed to Ghana as part of her graduate studies, she discovered that students in the Bobikuma region were required to learn computer skills, yet had no access to computers. So Anna forged local and international partnerships to help build a financially sustainable computer lab. She set it up so that outside of school hours, community members could use the facilities for a nominal fee. With the fees, the lab is able to provide more than 400 primary and junior high students with free access to computers. Many other Ontario university students are having a profound global impact through international service projects like this.

“[Ontario] can’t achieve a sense of belonging until we recognize and remove the systemic and institutional barriers that have been placed due to historical legacies.”

– Sam Erry, Ontario Associate Deputy Minister for Inclusion, Diversity, and Anti-Racism, at an Ontario’s Universities’ Roundtable on Diversity and Inclusion
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<td>Campus programs and supports that ensure students are healthy and engaged.</td>
<td>Offer a wide range of extra-curricular initiatives, career services and other supports for students to get the most out of their university experience.</td>
<td>Increase the investment in culturally-sensitive student services and the implementation of cultural awareness and safety training for students, faculty and staff.</td>
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<td>A comprehensive approach to health that includes robust mental-health supports.</td>
<td>Ensure a safe on-campus experience for all students through strong safety measures and policies.</td>
<td>Work with universities, colleges, students and providers to develop a whole-of-community mental-health and wellness strategy that:</td>
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<td>Work with Aboriginal communities to respond to the Truth and Reconciliation Commission’s recommendations related to education.</td>
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<td>Ensure students have access to robust mental health supports.</td>
<td>— Clearly defines roles and responsibilities for government ministries, postsecondary institutions, student associations, health care and community organizations.</td>
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<td>Partner with colleges, governments and communities to ensure a broad mental-health strategy is in place that serves students and Ontarians as a whole.</td>
<td>— Ensures that all post-secondary students, regardless of geographic location, can access gender and culturally-sensitive mental health services and supports that are timely, effective, flexible, and provided in a safe and comfortable environment.</td>
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<td>— Emphasizes prevention and harm reduction as important elements of mental health priorities.</td>
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</table>
CONCLUSION

We are living in a time of rapid change, with disruptive technologies transforming every aspect of our lives, and economic pressures and demographic shifts presenting both opportunities and challenges to the future of Ontario.

But we believe that Ontario’s brand as an open and cosmopolitan society, with a high quality of life, a large talent pool and an innovative tech and business environment, gives us a global edge at a time when some of Canada’s major competitors are becoming more insular.

Over the past year, universities asked Ontarians to tell us their vision of the future – what they were concerned about and what excited them. Their responses showed us clearly what kind of province they want, and the role universities can play as partners in shaping a better future for all.

They see Ontario’s economic and social progress as being tied to the skills, innovation and research that will help the province adapt to continuous change. They also believe that advances in areas such as health care, sustainability, public services and diversity are vital to maintain vibrant, thriving communities.

Ontarians see universities as a key participant in helping bring these outcomes to fruition, and they believe it’s by partnering with businesses, public-sector bodies such as hospitals, and governments that we can be most effective.

In this report, we have documented the partnerships through which Ontario’s universities are adding tremendous value to the lives of Ontarians. And, having listened to Ontarians’ insights, we have laid out how we hope to build on these partnerships in three ways: Helping students thrive on campus and in the new economy; enhancing the quality of life in our communities; and driving a vibrant, economically dynamic province.

This report is just one step on the path toward those goals. We welcome current and potential partners to continue to work with us for a better province, and we urge government to take into consideration our recommendations on how it can help us meet the challenges – and seize what we believe is Ontario’s moment to shine.

For more information on how Ontario universities are partnering for a better future, go to ontariosuniversities.ca.
Summary of Recommendations to the Ontario Government

On Jobs and Skills

- Provide financial support for new technology and innovative teaching methods to help ensure all students can continue to enjoy an enriching educational experience while developing the core skills they need for the future.

- Invest in experiential learning through:
  - Sustained funding for a full range of experiential learning at universities.
  - Incentives to employers, particularly small businesses and not-for-profit organizations, to partner with universities to create more experiential learning opportunities for all students, including Aboriginal students, those with disabilities and other underrepresented students.
  - Development, in collaboration with universities, colleges and employers, of an online province-wide information resource to encourage and support employers to provide experiential learning opportunities for students.

On the Economy

- Support a shift from a risk-averse to an entrepreneurial society by providing incentives that attract venture capital, enable business growth, entice innovative companies to Ontario and help start-ups grow and stay in the province.

- Help attract the best talent through measures that include expanding the number and value of graduate scholarships.

- Provide responsive funding for internationally-matched research projects and support students to take a semester abroad or gain international work experience.

- Support the development of a "cluster" strategy that will stimulate Ontario’s competitive economic leadership.

- Help bring new companies and entrepreneurial ideas to life through stable funding for university incubators and incentives for graduates to start a business.

On Building Strong Communities

- Work with universities, local governments and communities to encourage a vibrant flow of ideas and research that helps spur new thinking and develop solutions to local issues.

- Ensure communities, both urban and rural, and particularly in Northern and remote regions, have the services and infrastructure, such as quality Internet access and strong transit, that ensure high quality of life and prosperity.

- Develop a Northern Ontario strategy that includes incentives to students and graduates to study, stay and work in Northern communities; sustained funding for the Northern Ontario Heritage Fund Corporation, including funding for research facilities and equipment; establishing a Northern Ontario Research Chair to focus research on issues particular to the region.
## On Research and Innovation

- Work with the federal government to improve research funding.
- Increase investments in the Ontario Research Fund and ensure it supports a wide range of research and innovation.
- Support the movement of universities’ ideas and inventions into the marketplace by creating a Research Commercialization Fund.

## On Health Care

- Continue to invest in a healthy province by financially supporting research in medicine and health care.
- Work with universities, hospitals, start-ups and others so that the best health research and inventions reach Ontarians when they need them.
- Continue working with universities to ensure Ontario has the right number and mix of health care professionals working where they are most needed, so that all Ontarians have access to high-quality health care close to home.

## On the Environment

- Support advancements in clean technology and climate science that will move the results of university research into businesses and communities.
- Encourage conservation and energy efficiency through funding to repair or retrofit aging infrastructure, with dedicated investments to postsecondary institutions.

## On Diversity and Access to Postsecondary Education

- Help high schools prepare students for the transition to university by providing training on managing university workloads, financial literacy and living independently.
- Continue improving access to data about in-demand jobs and marketable skills, so students and parents can better assess career opportunities.
- Increase investments to attract and support Aboriginal students, including incentives to increase the numbers of Aboriginal faculty.
- Work with universities to attract and support first-generation university students.

## On Supporting Students

- Increase the investment in culturally-sensitive student services and the implementation of cultural awareness and safety training for students, faculty and staff.
- Work with universities, colleges, students and providers to develop a whole-of-community mental health and wellness strategy that:
  - Clearly defines roles and responsibilities for government ministries, postsecondary institutions, student associations, health care and community organizations.
  - Ensures that all postsecondary students, regardless of geographic location, can access gender and culturally-sensitive mental health services and supports that are timely, effective, flexible, and provided in a safe and comfortable environment.
  - Emphasizes prevention and harm reduction as important elements of mental health priorities.