Written Submission to the Blue-Ribbon Panel on Postsecondary Education in Ontario

Prepared by the University of Waterloo

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Introduction: Closing the productivity gap through talent, entrepreneurship, and innovation

The University of Waterloo is one of Ontario and Canada's leading research universities. We combine excellence in fundamental and applied research with a unique emphasis on work-integrated learning through our world-leading co-operative education program, student and faculty entrepreneurship, and building partnerships with private and public-sector partners to drive innovation into the economy.

A significant problem facing policymakers in Ontario is Canada's relatively poor productivity performance. According to OECD data, Canada's current labour productivity is only 74 per cent that of the United States (down from 82 per cent in 2000) and lags well behind the G7 average.[1] Work by UWaterloo economist Joel Blit, among others, illustrates a perplexing problem: as a nation, we perform well on the production of scientific research and of a highly skilled workforce, but this performance does not translate into increased patents, technology adoption by domestic firms, innovation, and job creation. If uncorrected, this disconnect has serious implications for our future competitiveness, economic vitality, and quality of life as a province.

Through our co-operative education, entrepreneurship programs and industry partnerships, the University of Waterloo is already helping to close the productivity gap by educating highly skilled talent and helping Ontario's firms develop innovative products, processes, and services. However, financial constraints like flat provincial funding and frozen tuition fees are restricting our ability to scale up our impact in this area.

Financial sustainability is one of the most significant challenges facing Ontario's universities. Since 2007, the value of per-student operating funding has declined by 21 per cent in inflation-adjusted dollars. The 10 per cent reduction and freeze of tuition fees, now poised to enter its fifth year, has removed $1.86 billion in revenue from the sector. Universities have employed a variety of strategies to manage these financial realities, but we have reached an inflection point beyond which the negative consequences will be difficult to overcome. Some universities are already in serious financial peril. While the large research-intensive universities, like the University of Waterloo, are presently in reasonable financial shape, our two- to three-year financial outlook if current policies continue is grim. Financial pressures will make it difficult for our institutions to grow in-demand, employer-aligned programming for critical and emerging sectors of the economy and to remain internationally competitive.

The University of Waterloo has been actively engaged in the development of the Council of Ontario Universities' (COU) submission to the Blue-Ribbon Panel, and we fully support the recommendations contained within that document. Likewise, we have helped develop a joint position with the other research-intensive universities that address unique financial needs in these large institutions. We are also in full alignment with that document and its guiding principles – preserving the autonomy of institutions while reducing red tape; ensuring greater flexibility to grow high-demand and innovative programming; and an approach to funding that recognizes differentiation – in size, role, and aspirations – among institutions.

[1] Accessed May 10, 2023, https://stats.oecd.org/Index.aspx?DataSetCode=PDB_LV

We intend the following submission to complement those made by the COU and the large research-intensive universities, identifying challenges and opportunities unique to the University of Waterloo.

1. MCU Funding as a Driver of Excellence

Investment in work-integrated learning

The University of Waterloo is an acknowledged leader in co-operative education, with the largest program in Canada. Some 25,000 students – or 73 per cent of our undergraduate population – participate in a co-op placement with over 7,100 employers, earning an average of $12,396 per work term. Our students graduate with two years of paid work experience and enjoy the highest post-graduate employment rate in Canada, with 96 per cent of grads working in a position related to their course of study within six months of graduation. Our success in this area is the definition of labour-market aligned education – students are connected directly to the needs of potential employers while building relationships that often turn into long-term employment.

Co-operative education is baked into the DNA of the University of Waterloo and is supported by an extensive organizational infrastructure. Successful work-integrated learning requires significant resources and government has a key role to play in creating more opportunities for high-impact experiential learning. The Government of Ontario currently funds the Co-operative Education Tax Credit (CETC), which helps incentivize employers to take on student employees. Over the past decade, MCU has also offered modest funding – usually delivered through competitive challenge funds – on short, two- to three-year horizons. A long-term financial commitment and policy framework to support work-integrated learning (WiL) has not been a feature of Ontario's postsecondary sector. As a result, growth in this area has been uneven.

To secure the huge benefits for students and employers delivered by work-integrated learning, we recommend that the Government of Ontario provide dedicated, long-term funding to support this type of activity. Separate funding streams could be created to, on the one hand, incentivize new entrants to the WiL space and, on the other, to allow established institutional leaders to expand opportunities and enhance the quality of outcomes. Two potential areas of expansion include WiL for graduate students and funding to support international student experiential learning, so they can gain invaluable Canadian work experience prior to graduation. For both streams, funding should be delivered on a challenge or performance-aligned mechanism.

Industry & business partnerships

Helping business and industry develop innovative new products, processes, and services is one way Ontario's universities help build Ontario's global competitiveness. The University of Waterloo is a leader in this space with a range of successful partnerships from small, local companies all the way up to huge multinational corporations. One of our strategic priorities as an institution is to expand these collaborations, deepening our economic impact. However, few government funding streams or programs support this programming, making it difficult to create new partnerships that often require significant resources to initiate, both in terms of personnel and equipment, but also de-risking the venture for private sector partners.

An example is the Advanced Manufacturing Consortium (AMC). This program was first established in 2017, bringing together many industry partners and researchers from the University of Waterloo, McMaster University and Western University. The Consortium uses a single-entry point to ensure that industry partners are immediately directed to the appropriate researchers and labs, eliminating red tape, and providing access to world-class research to accelerate adoption of advanced technologies. In five years, the AMC has completed or initiated over 450 projects with over 250 industry partners. The consortium has developed over 150 products, services and processes that have been commercialized. Created with an initial investment by the Government of Ontario, the AMC has provided a 500 per cent return in terms of leveraging additional investment by business and other government partners.

Expanding this program will allow the consortium to build on its success in advanced manufacturing, AI, robotics and 5G while adding new regional partners in the North and East of the province. Unfortunately, the AMC has struggled to find an appropriate funding stream within the Government of Ontario to support its ongoing activities.

As part of a revisioning of the Ontario Research Fund (ORF), we recommend that the government consider adding a dedicated funding stream to support partnerships that deliver targeted research and development to meet industry needs, deploying made-in-Ontario IP on the shop floors of Ontario plants in key sectors, including automotive, manufacturing, mining, aerospace, and health tech. This provision would help ensure that Ontario's investment in university research yields direct economic benefits for the province.

A quality & innovation fund

Performance management within the current Strategic Mandate (SMA) structure imposes financial penalties on institutions that fail to meet specified targets. It does not provide meaningful positive incentives – for example, additional funding – for institutions that surpass their targets. Like the COU proposal, we recommend that the MCU create a new "quality and innovation fund" to provide new, targeted investment to institutions that achieve beyond expectations. The fund should be composed of net-new dollars, augmented with funds reallocated through the existing redistributive mechanic in the SMAs, and the investment should be significant enough to incentivize positive institutional behaviour. The funding could be delivered on a challenge basis, where institutions would apply for funding to support new and innovative activities, or it could be automatically allocated to institutions who perform beyond expectations. In either case, this funding would help drive greater innovation in teaching, student experience, and economic development within the sector.

Addressing deferred maintenance & capital needs

Financial constraint means that universities have few resources to address accumulated maintenance and facility renewal requirements. In the absence of dedicated public funding to support new and renewed capital on campus, it is difficult to maintain a high-quality student experience while accommodating growth in high-demand programs. These programs, often in STEM fields, require more resource-intensive facilities to support optimal learning and research outcomes. Capital constraints also make it difficult to complete green retrofits of existing buildings, an important part of our strategy to become carbon neutral.

Ontario universities currently have an accumulated deferred maintenance cost of $4.55 billion.[2] The cost of addressing deferred maintenance in Ontario is currently carried by universities through their capital and operating budgets. In 2019, 76 per cent of deferred maintenance funding was internal while the province contributed 19 per cent. Compare this to the western provinces, where provincial funding accounts for 65 per cent of the total spend. There is a clear need for greater Government of Ontario investment in this area.

In 2020, MCU announced a three-year increase to the Facilities Renewal Program (FRP) intended to help colleges and universities address their deferred maintenance needs. This program provided $178 million in 2022-23. While appreciated by the sector, this amount is not sufficient to address the scale of the urgent and ongoing need. We therefore recommend that the Government of Ontario increase funding for the FRP to match the level found in peer jurisdictions, such as Quebec and Alberta. In addition, we recommend the Government of Ontario work with the Government of Canada to create a stable, long-term fund to support new capital projects in areas aligned with provincial and national economic priorities.

2. Financial Sustainability

The combined impact of real-dollar declines in operating grant funding and tuition fee freezes have put significant pressure on the university sector. The COU and large research-intensive universities have articulated complementary proposals for addressing the financial sustainability issue, which the University of Waterloo supports. On the operating grant side, we favour an initial increase to the operating grant to help close the funding gap with comparable (and competitor) jurisdictions like BC and Alberta. Thereafter, the operating grant should increase according to a yearly escalator. For example, the MCU could tie this rate of increase to the escalator build into the Canada Social Transfer (CST). On the tuition fee side, we support a multi-year framework that provides greater flexibility while ensuring enhanced financial aid for students, as discussed below.

For the University of Waterloo, it is particularly important that the Government of Ontario address the existing limitations of the corridor-based enrolment model created by the previous provincial government. This model was intended to provide a negotiated approach for managing enrolment growth between institutions and within the system. It has instead become an effective brake on growth in high-demand programs. At the University of Waterloo, for example, keeping up with student demand in many of our labour-market aligned programs in STEM has meant taking in a considerable number of students above our corridor, creating a pool of unfunded enrolments. At present, this represents an annual loss of $21.9 million in revenue for the University. During the negotiations for the third round of the Strategic Mandate Agreements (SMAs), the MCU committed that discussions around increased enrolment in high-demand programs would be moved into a separate process. Unfortunately, this process has yet to occur.

[2] Based on 2019 data published by the Canadian Association of University Business Officers (CAUBO).

The University of Waterloo therefore urges the Government of Ontario to work with the sector to allow responsible and sustainable enrolment growth across the sector according to labour-market needs, student demand, and strategic institutional priorities.

3. Multi-Year Tuition Fee Framework

The University of Waterloo is fully supportive of the tuition fee recommendations contained within the COU submission and the recommendations jointly put forward by the large research-intensive universities. Namely, through a multi-year framework, universities should be given the broad flexibility to set their fees in accordance with their institutional needs subject to the approval of their internal governance mechanisms, which in all cases includes student representation. For their part, universities will commit to providing a proportion of this increased tuition-fee revenue to provide financial aid to students, beyond existing tuition set-aside and Student Access Guarantee (SAG) requirements, which currently distribute $1.3 billion in direct aid to students. This new Institutional Student Aid Program (ISAP) will integrate with the publicly funded OSAP program to ensure no student is prevented from attending a program due to financial factors.

This proposal has a variety of benefits. It increases institutional revenue while ensuring access and affordability for students. By returning control of tuition fees to institutions, it also allows for better long-term planning while supporting the principles of autonomy and flexibility within the sector.

It also shifts the Government of Ontario from the role of “regulator of fees” to the “guarantors of access.” Ontario’s approach to tuition fees over the last two decades has exacerbated the difficult public perceptions that plague the tuition fee policy issue. Since 2005, Ontario has deployed a series of three-year frameworks, usually characterized by either capped increases (most recently, under the Wynne government, a five per cent overall cap with eight per cent for higher-cost programs) or fee freezes subject to yearly renewals. In practice, this means that the government needs to keep having the tuition fee discussion over and over with institutions, students, and voters. Multi-year tuition fee flexibility ends this cycle and escapes short-term and time-limited policy frameworks.

4. Supporting International Students

International students deliver immense benefits to Ontario’s universities and to their host communities. They bring diverse perspectives that enrich the learning experience and community life through volunteerism and entrepreneurial activities. In 2018, international students’ spending translated to over 118,000 jobs for Ontarians.[3] Ontario and Canada have set ambitious immigration targets, and international students are an excellent pathway for bringing highly skilled individuals into the country.

With these benefits in mind, it is important that we provide adequate supports to international students on our campuses. As international enrollments have increased, research-intensive universities have invested heavily in support for these students. By offering wrap-around supports, helping them settle in their new communities, and providing a welcoming learning environment, universities ensure that international students receive the best possible educational experience. An emerging challenge for international students

[3] https://ontariosuniversities.ca/resources/data/by-the-numbers

is finding affordable and suitable housing. Increased international enrolment can place pressure on local housing supply and universities are increasingly interested in working collaboratively with government and the private sector to ensure that all students and community members have a suitable place to live.

Universities typically are not capitalized to undertake major development projects on their own. Frequently, local, and provincial regulations also act as barriers to universities who may wish to take a leading role in developing housing solutions in their communities. The University of Waterloo therefore recommends that the Government of Ontario explore ways to reduce red tape and de-risk student and community housing projects led or supported by universities in Ontario. For example, the government could consider providing low- or zero-interest loans to institutions to support the construction of new housing for international and domestic students, faculty, and staff.