Back from the brink

Restoring public funding to Ontario's universities

Ryan Romard and Randy Robinson

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LAND ACKNOWLEDGEMENT

The Canadian Centre for Policy Alternative's Ontario office is located in Tkaronto (Toronto) on the traditional lands of many Indigenous Peoples including the Mississaugas of the Credit, the Anishinaabe, the Chippewa, the Haudenosaunee and the Wendat. Today, this land is the home to many more diverse First Nations, Inuit and Métis peoples.

The report that follows recommends that the government of Ontario increase its funding to public universities in the province. In doing so, the authors make note of the fact that universities are colonial institutions established on the traditional territories of numerous Indigenous peoples who have lived on this land for tens of thousands of years. While the entire physical apparatus of modern Ontario is built on these territories—from Queen's Park to your local Tim Hortons—universities have played a special role in obscuring and attempting to erase Indigenous land rights. The precursor to the University of Toronto, for example, was established by Royal Charter in 1827; a year later, King's College was granted more than 900 square kilometres of "Crown," i.e., Indigenous, land to generate income for the new university's operations. "Financing universities through land made these institutions no small piece of the process of Indigenous dispossession," in the words of researcher Caitlin Harvey.

From their earliest days, universities were expressly designed to aid in the creation and development of the settler state, through intellectual and technological leadership in areas ranging from law to agricultural science. The resulting monumental changes "diverged from Indigenous ways of being and thinking about land, while simultaneously entrenching settlers' relationship to the land—actions that have had lasting political and ecological legacies," to quote Harvey again.

Every public university in Ontario is now making efforts of various kinds to address these legacies and make progress on reconciliation. Whether these efforts can or will be sufficient is beyond the scope of this report. However, one thing is clear: a lack of funding can never be an acceptable excuse for doing too little. The authors call on the government of Ontario, which has primary jurisdiction over post-secondary education and has benefited so enormously from the use of Indigenous territories since Confederation (and as a British colony before that) to make the work of reconciliation a central priority in all its funding decisions with respect to universities.

i For an eye-opening discussion with Algoma University Professor Paulette Steeves on just how long Indigenous people have been in the western hemisphere, listen to "Indigenous archaeologist argues humans may have arrived here 130,000 years ago," CBC Radio Ideas, January 13, 2022.

ii Caitlin Harvey, "How Commonwealth universities profited from Indigenous dispossession through land grants," *The Conversation*, July 5, 2022.

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Executive summary

OVER THE LAST three decades, no province in Canada has moved more aggressively, or more consistently, to cut public funding to universities. Ontario's funding model, if it can be called that, is simply less funding, year after year.

Ontarians appreciate the value of a university education. In the 2021 census, 36.8 per cent of Ontario's working-age population possessed a bachelor's degree or higher, the highest percentage of any province. Despite this, Queen's Park's provides less funding to its public universities (as a share of total revenues) than any other province.

In 2022, provincial funding made up just 24 per cent of total university revenues. In 2021, Queen's Park's support for universities would have had to increase by \$8,370 per student – double the level that year – to bring Ontario's share of funding up to the average of the other provinces.

Funding continues to fall. From 2018 to 2022, university operating revenues from the provincial government and domestic student fees declined by about \$3,200 (in 2020 dollars) per full-time student.

The dramatic loss of provincial funding has had significant consequences for all aspects of university life and operations, among them:

- Domestic students in Ontario pay undergraduate tuition fees that are 24 per cent higher than the average in the rest of Canada.
- Universities now view international students as exploitable "cash cows": In the 2022–2023 academic year, international undergraduate students paid an average \$40,200 a year (in 2020 dollars) to study

in Ontario, roughly 5.7 times as much as domestic students. In the 2021–22 school year, almost 19 per cent of all full-time students were international students; they were paying *nearly half* (48.4 per cent) of all tuition fees in the province.

- As tuition fees grew in Ontario, so too did the amount of financial aid available to students, mostly in the form of repayable student loans. In recent years the previous system of "high fee, high aid" has become simply "high fee." From 2018–19 to 2019–20, the real value of non-repayable student financial aid funds (in 2020 dollars) disbursed by the Ontario Student Financial Assistance Program was cut by nearly one billion dollars.
- Student debt owed by households in Ontario has grown steadily since the turn of the century. In 2005, the inflation-adjusted average household student debt in Ontario was \$16,400 (in 2019 dollars), \$575 less than the average in the rest of Canada. By 2019, average household student debt in Ontario had grown to \$23,100 - \$5,125 more than the rest-of-Canada average of \$17,975.
- Cost-saving measures have restructured the university labour market. Low-paid contract faculty now make up half the academic workforce and teach half the undergraduate courses in Ontario.
- A majority of all workers in Ontario's post-secondary sector—a group that includes instructors, assistants, administrative staff, custodians and maintenance workers, librarians and more — experience at least one indicator of precarious work, such as involuntary part-time work, temporary employment, or needing to hold multiple jobs to survive.
- The province is walking away from its funding of research. Universities typically draw research funding from multiple sources, with the federal government being the primary source. In 2006-07, Ontario's contribution to research was near the average of the other provinces — about 18 per cent of sponsored research funding. Fifteen years later, the Ontario government's share of university research revenues had dwindled to just 6.7 per cent, while the remaining provinces were on average still providing close to 18 per cent of research revenues.
- Not all universities are equally able to deal with funding losses. Some universities have geographic and historical advantages when

it comes to raising tuition revenue; for others, provincial cuts can push them toward financial crisis.

• Class sizes are growing. In 2005, just under 25 per cent of first-year Ontario university courses had more than 100 students. By 2018, that number was 32 per cent. Bigger classes mean less faculty-student contact, harming the student experience and eroding education quality.

Perhaps most importantly, provincial underfunding has undermined the very values and purposes that are central to the university mission. Ideals like academic freedom and university autonomy are highly valued by universities. But underfunded institutions thrust into a market economy where knowledge is profit face intense pressures to bend those ideals to serve other priorities.

Given the multiple ill effects of the province's funding "model," it is clear that Queen's Park needs to rethink its approach to supporting public universities. It is not enough to let market forces and technological change decide universities' future. A laissez-faire approach will not work.

Ontario's public universities have many competitive advantages, including top-quality curriculum, instruction, and research and the vibrancy of in-person learning and campus life. Queen's Park must take direct steps to build on these strengths.

This will take money.

As a medium-term and modest goal, the province should aim to bring provincial funding of universities up to the average per-student spending of the other Canadian provinces.

Doing so would cost approximately \$4.9 billion in the first year of implementation — an amount roughly equal to Queen's Park's planned increased in spending on physical infrastructure in 2024-25.

With so many competing demands, how this money might be allocated, and in what proportions, is a complex question that calls for broad consultation with all stakeholders in the university sphere. That said, this paper points to some obvious priorities:

- to travel further down the path of reconciliation with Indigenous peoples;
- to do more research and education to address the multiple crises of our time, like the climate crisis and rampant inequality;

- to reduce tuition fees and improve student financial assistance to ensure that every student who wants to attend university is financially able to do so:
- to end the exploitation of, and the over-reliance on, international students;
- to improve wages and working conditions for contract faculty and staff, including by creating more full-time permanent positions;
- to restore funding to research;
- to strengthen smaller universities so they can survive as pillars of their communities; and
- to reduce class sizes to improve the student experience.

At this critical time of rapid change, Ontario must do everything it can to maximize its potential, and that of every Ontarian, to navigate both the present and the future. Adequately funding Ontario's public university system is a critically important investment that benefits Ontarians today and for generations to come.

The return on that investment is many times greater than the cost.

When government walks away

THERE ARE NUMEROUS ways to privatize a public service.

Privatization may involve the sale of a publicly owned business to a private investor. It may involve contracting-out of a public service to a private operator, with the public sector continuing to pay. And in the last 20 years, the increasing use by governments of "public-private partnerships" to finance, design, build, and/or operate major infrastructure projects has given private actors new ways to influence government decision-making and funnel public dollars to private profits.

The techniques of privatization can be complex. But there is one way to privatize that is simpler than all the others.

It happens when government walks away, leaving individuals and organizations to find their way on their own.

This is the story of provincial funding of Ontario's public universities. Over the last three decades, no province in Canada has moved more aggressively, or more consistently, to cut public funding to universities. Ontario's funding model, if it can be called that, is simply less funding, year after year.

This has had dramatic consequences that have restructured every aspect of university life. It has affected the education students receive and the research universities conduct. It has made students pay. It has made faculty and staff pay. Perhaps most importantly, it has undermined the very values and purposes that are central to the university mission.

A clash of values

Reading the mission, vision, and values statements of Ontario's universities is a fascinating exercise, both for what they mention and for what they do not. All profess a commitment to learning, teaching, and research, with some leaning more to teaching and others to research; most make reference to free enquiry and critical thinking; many mention diversity, equity, sustainability, and service to the wider world. The mission statement of McMaster University in Hamilton is typical in this regard:

At McMaster our purpose is the discovery, communication and preservation of knowledge. In our teaching, research, and scholarship, we are committed to creativity, innovation and excellence. We value integrity, quality, inclusiveness and teamwork in everything we do. We inspire critical thinking, personal growth, and a passion for lifelong learning. We serve the social, cultural, and economic needs of our community and our society.1

Ideals like academic freedom and university autonomy are highly valued by universities — in the abstract. But underfunded institutions thrust into in a market economy where knowledge is profit face intense pressures to bend those ideals to serve other priorities.

To be clear, Ontario universities have always been influenced by the views of wealthy business interests, whether through their membership on university boards of governors, major donations, corporate lobbying campaigns, research partnerships, or other means. Yet today, corporate goals for higher education – notably the expansion of research into key areas of interest and the provision of a "job-ready" skilled workforce — play a greater role than ever before in the day-to-day activities of every Ontario university.

The concept of "corporatization" of the university refers to the integration of business values and priorities into the heart of university operations. The corporatized university does not merely do things business desires, as in the 19th century; rather, it becomes more like a business itself and the people in it become more like directors and employees of a business, with similar motivations. It is the application of market thinking to academic life. This has many and varied benefits to business and important consequences for public universities:

Advanced education as a private good is reflected in the growing reliance on student tuition fees and the redefinition of students as educational consumers, a shift in the university's mission away from the provision of liberal arts education, and growing inequality and stratification within and between universities. Corporatization in the university context involves providing businesses with the means to socialize the risks and cost of research while privatizing the benefits, and to accrue advantages through the transfer of technology to the private sector. It subsidizes the retraining of the corporate workforce through an increasingly vocational and technically oriented curriculum, at the same time as increasing marketing opportunities for corporate managers. It bolsters the perception of business legitimacy in higher education and provides the corporate sector with greater control over an institution that has, at times, directly challenged its power.2

The further incursion of business values into university culture would not be noteworthy if universities' fundamental purpose was to conduct commercial research and train students. That is part of their function, but as universities' own mission statements attest, their purpose is, and must be, more than that. Their purpose includes the idea of free enquiry and the pursuit of knowledge for its own sake, not for financial gain. It includes the idea of personal growth. It includes consideration of societal needs and concern for the fate of the planet. Perhaps most of all, it includes the idea that highquality higher education is a public good that must be available to every Ontarian who wants to pursue it, regardless of their personal circumstances.

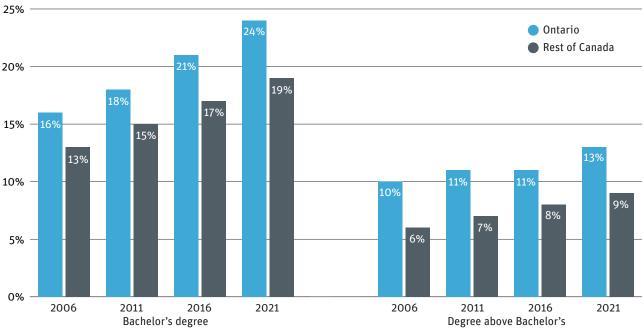
The report that follows begins with an overview of the role of public universities in Ontario and their impacts on the social and economic life of the province. That is followed by a review of the evolution of university funding in Ontario; the impact of the changes on students, faculty and staff, university research capacity, and individual universities and their communities; and a look at provincial funding for universities in the context of Queen's Park's approach to funding public services generally. Lastly, the authors call for renewed provincial investment in public universities to allow them to fulfill their true missions and purposes and expand their vital role in the life of the province.

Public universities are vital to Ontario's success, the well-being of its people, and its hopes for the future

IT IS HARD to imagine Ontario without its public universities. Now numbering 24,3 public universities play a central role in the cultural and economic life of the province today. In a time of rapid change, they are helping to shape what tomorrow will look like, both through the research they provide and the education they deliver.

There is no doubt that millions of Ontarians appreciate the value of a university education. In the 2021 census, 36.8 per cent of Ontario's workingage population possessed a bachelor's degree or higher level of university education, the highest percentage of any province in Canada.4 For the last two decades, the share of the Ontario population with a university degree has exceeded that of other provinces by four or five percentage points. In 2021, 24 per cent of Ontarians had a Bachelor's degree, compared to 19 per cent of Canadians outside Ontario; that same year, 13 per cent of Ontarians had a Master's or Doctoral level degree, compared to 9 per cent in the rest of Canada.

FIGURE 1 Share of population with degree: Ontario vs. Rest-of-Canada average



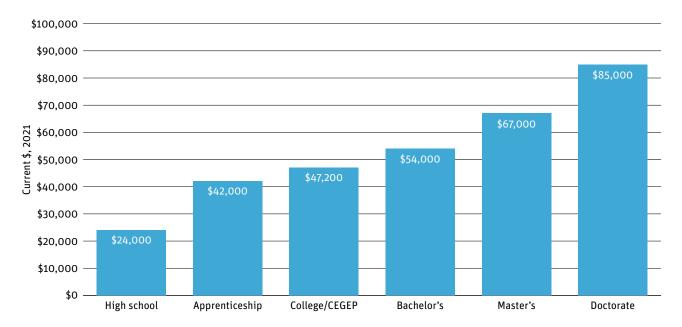
Source Statistics Canada, Table 98-10-0384-01,"Highest level of education by census year: Canada, provinces and territories, census metropolitan areas and census agglomerations," December 9, 2022.

> For those who attend, university opens doors to new facts, new ideas, and new experiences that influence the course of their lives in ways that are frequently unquantifiable.

University education means higher incomes for Ontarians

One thing that is quantifiable is the impact of a university education on graduates' incomes. While news coverage in recent years has highlighted the good wages available to workers who have completed an apprenticeship in the skilled trades, wages for university graduates remain the highest, on average, compared to wages for skilled tradespeople, those with college diplomas, high school graduates, and those who did not graduate from high school. In Ontario, the annual earnings gap between university graduates with a Bachelor's degree and those with a high school diploma averages \$30,000 (as reported in the 2021 Census), higher than the rest-of-Canada average of \$28,080.





Source Statistics Canada, Table 98-10-0439-01, "Employment income statistics by visible minority, highest level of education, immigrant status and income year: Canada, provinces and territories, census metropolitan areas and census agglomerations with parts," November 30, 2022.

Universities support regional economies — and the economy as a whole

In addition to raising the incomes of those with a university education, universities provide significant economic benefits to Ontario as a whole. A 2021 report by the Conference Board of Canada estimated those benefits. In 2018–19, the report calculated, university activities resulted in \$45.6 billion in total direct spending in communities around the province. This included spending in the community by universities, students, faculty and staff, and alumni on food, shelter, transportation, entertainment, and so on, all of which directly benefited local businesses.

While significant, this spending was not the only contribution of universities to economic activity. Universities also have a central role to play in building workforce skills, sometimes referred to as "human capital." The transferrable skills learned at university, both applied and academic, are vitally important in a rapidly evolving economy; many of the jobs of tomorrow do not exist today. Rather than looking for employees with specific job-related skills sets, employees are increasingly looking for "soft skills." Adaptability is becoming the most sought-after trait in prospective employees:

Adaptable, ready-to-learn graduates possess skills such as creativity, critical thinking, an open mindset and the ability to learn, to plan, to collaborate and to communicate. Adaptable graduates are aware of and can navigate through the competing demands required by new hybrid forms of work.⁶

Developing these skills is central to the university experience and the university's mission. The Conference Board estimated that skills acquired at university contributed \$50.6 billion to the Ontario economy in 2018–19. Taken together, these two measures — economic activity and a university-trained workforce — boosted the provincial economy by \$96.2 billion in that year, accounting for 11.1 per cent of Gross Domestic Product (GDP). That economic activity supported 11.7 per cent of the province's jobs as well.

Universities' contribution to GDP in individual Census Metropolitan Areas (CMAs) ranged from 7.6 per cent of GDP in Sault Ste. Marie to 18.6 per cent of GDP in Kingston, the Conference Board said. The report also noted that another central function of universities, academic research, is a major contributor to productivity growth in the province.

The idea that higher education is a key ingredient in any recipe for economic growth is far from controversial. On this theme, comments by Ontario Treasurer Charles MacNaughton in 1967 are typical of those made by MPPs from the late 19th century onward:

We have striven to make education a creative adventure for its participants at the same time as training them to work effectively in the modern world. The cost of this commitment to human development is heavy.... The returns, however, are many times greater. Our efforts in education have raised the knowledge and skills of our people and contributed greatly to Ontario's rapid economic growth. Indeed, the high standard of living and generally good life enjoyed by Ontario people today is due in large measure to our past investment in education (emphasis added).7

While the comment above refers to education generally, universities were central to MacNaughton's budget approach. His faith in their ability to raise living standards through "creative adventure" was such that his 1967 Ontario budget doubled provincial operating grants to universities in one year.8

Universities fuel personal growth and "human development"

While the economic benefits of universities and university education are not in dispute, MacNaughton did not overlook other purposes:

Ontario's one overriding goal is the creation of the opportunity for every individual to develop to his (sic) fullest potential, thereby enriching his own life and benefiting the province at large. Education is our principal instrument for working towards this goal of maximum human development.9

There is no doubt that future employment prospects and hopes for personal prosperity are an important factor in students' decisions to pursue a university education. Yet higher education, in all its forms, offers more than just hard skills and a job. Universities expose students to unfamiliar facts, ideas, people, and experiences. They encourage discussion, debate, and critical thinking — soft skills that become more essential as daily life on the planet becomes ever more complex and ever more dependent on the ability of people to work together.

As one famous quotation has it, "Education is not the filling of a pail, but the lighting of a fire." To reduce education to its usefulness to the economy is to reduce students to mere servants of the marketplace, not independent minds capable of understanding their own lives, seeing others' perspectives, or imagining alternative futures for the world around them.

At its best, education transforms lives and expands the horizons of every learner. This is a goal worth pursuing for its own sake, regardless of its economic benefits.

Universities are cultural anchors in their own communities and beyond

Universities also provide considerable cultural benefits to their communities beyond their campuses.

With significant budgets and deep roots in communities, universities serve as "anchor institutions" that stimulate local economies on an ongoing basis and stabilize them during economic downturns. University cities also tend to enjoy cultural riches which benefit all residents, not just university staff and students:

Universities house art museums, theatre companies, symphony orchestras, film studios, and publishing outlets, just to name a few arts organizations and brick-and-mortar investments that live under the higher education umbrella.... [U]niversities in the twenty-first century are more than just arts patrons of physical structures, they are potential collaborators and partners in the regional arts and cultural ecology through their work on entrepreneurship, innovation, and knowledge transfer in economic, social, and community development. They are the places where most emerging artists receive their artistic training and skills.... Universities support and invest in faculty and staff that oversee arts curricula, they fund scholarships, they pay faculty who are artists in their own right, and they provide the research support and infrastructure for arts economic development.¹⁰

Universities are key to solving critical social and environmental problems

Aside from increasing incomes, boosting economic activity, aiding in human development, and enriching cultural life, universities are also well positioned to play a fifth role that goes beyond the first four: they develop, spread, and help to implement solutions to the multiple interconnected crises that plague our planet and our society.

Universities' problem-solving power has been on full display since the beginning of the COVID-19 pandemic. Just over a year into the pandemic, universities around the world had already published over 217,000 research articles aimed at making a contribution to fighting the virus, with University of Toronto researchers contributing nearly 1,000 of them. 11 All of the earliest COVID-19 vaccines — Astra-Zeneca, Pfizer, Moderna, Johnson & Johnson — were created in cooperation with university researchers and/ or built on earlier university research. And (it is safe to say) the scientists working for the aforementioned corporations were all university-trained. This incredible research power is the main reason many countries were able to begin administering COVID-19 vaccines a mere nine months after the World Health Organization declared the pandemic.¹²

Universities have long been centres of innovation in the sciences — think of Banting and Best isolating insulin for the first time a century ago – but their ability to tackle wicked problems is greatly enhanced by the wide range of disciplines they now embrace. A person attempting to create a kind of factory to solve problems with multiple complex causes might very well propose something similar to a university:

[M]ajor research universities represent extraordinary collections of usable expertise, across every conceivable field, assembled under one roof. Even the largest foundations, NGOs, and think tanks would have to reach outside their own organizations to enlist biochemists, or anthropologists, or mechanical engineers in their work. Universities do not.13

Universities are well placed to counter the current epidemic of misinformation, "fake news," and "alternative facts" that is corroding public discourse around politics and policy in Canada and around the world. While no field of human activity is immune from errors and distortions, it is a central tenet of academic life that statements put forward as true must be based on evidence and the application of critical thinking, and that those statements must be able to withstand critiques from knowledgeable experts in the field.

A major challenge to this ethos is, of course, the injection of bias (consciously or unconsciously) into academic work when scholars modify their work to suit the preferences of funders.¹⁴ Nonetheless, there is no shortage of scholars who take the responsibility to solve pressing social and environmental problems seriously, whether it is through their research or their teaching. Trent University in Peterborough, for example, requires all students to take an introductory course on Indigenous peoples regardless of their major;15 following student protests, the University of Barcelona in Catalonia, Spain may be the first in the world to make climate education mandatory for all students, beginning in 2024, and calls to do the same in Canada are already being heard.¹⁶

While some academic disciplines, or some segments of them, may rightly be accused of upholding a problematic status quo in areas of study where dramatic change is needed to solve major problems, it seems clear that truly independent scholarship that harnesses the full potential for collaboration that universities offer can do much to help us navigate the multiple crises of our time. For Jamie Brownlee, author of Academia, Inc., the greatest challenges facing universities today

centre on the willingness and capacity of these institutions to confront the myriad of global problems that produce needless human suffering, increasing social exclusion and inequality, chronic poverty and unemployment, a rapidly deteriorating natural environment and the potentially disastrous effects of climate change. In the years to come, universities will be relevant to the extent that they interrogate, and aim to solve, these pressing social problems.¹⁷

Ontario's universities merit serious provincial investment

For all the reasons listed above, a thriving university sector is essential to the well-being of the province and its people, both today and tomorrow. As postsecondary education (of all kinds) is a policy area that falls squarely under provincial jurisdiction, the government of Ontario must make investing in universities a priority. In recent years it has failed to do so, preferring instead to reduce investment, and dramatically so. When it comes to universities, "Government disinvestment in real terms has been a factor since 2014," as the University of Ottawa observed in its 2022-23 budget.18

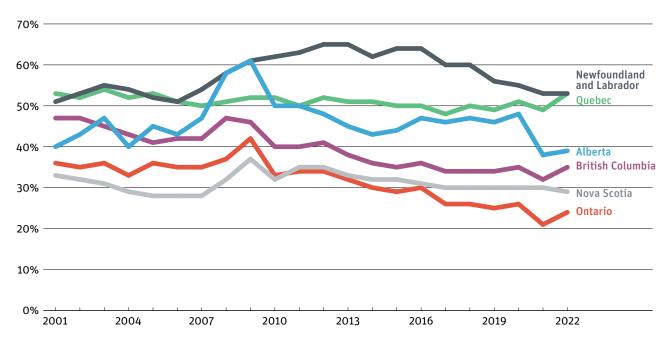
The following section looks at the evolution of university funding in Ontario.

The evolution of university funding in Ontario

IN THE FIRST decades after Confederation, provincial funding for postsecondary education focused primarily on targeted funding to train teachers, farmers, and engineers. It was only in the early years of the twentieth century that government funding for universities came to be viewed as a regular and necessary part of provincial budgets.

Governments made efforts from very early on to keep tuition fees for higher education affordable for students. "It is the desire of the government to not make these fees excessive," Ontario Treasurer George Ross said in 1903. 19 This impulse to affordability recognized that high tuition is a barrier to university attendance for many and also recognized that the benefits of university education accrue not only to individual students but to society as a whole. As a result, affordability was a central concern of governments over most of the 20th century. By the 1987-88 fiscal year, provincial funding made up 78 per cent of university operating revenue, while tuition fees provided just 18 per cent. Investment income, fees, and donations made up the remainder.20

FIGURE 3 Percentage of total university revenues from provincial sources



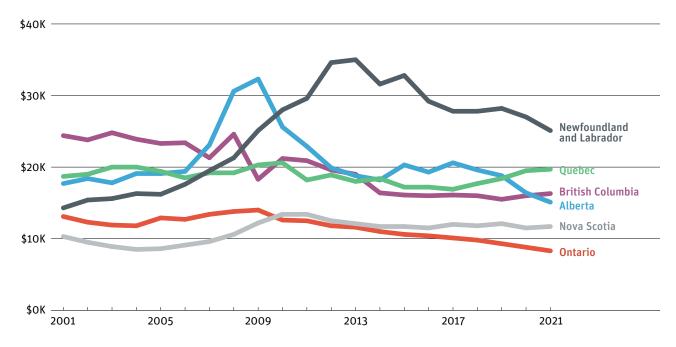
Source Statistics Canada, Table 37-10-0026-01, "Revenue of universities by type of revenues and funds (in current Canadian dollars)," August 9, 2022.provinces and territories, census metropolitan areas and census agglomerations with parts," November 30, 2022.

When it comes to funding universities, Ontario is dead last

The 1990s brought a noticeable shift in the province's approach to university funding. By 2001, Queen's Park provided just 36 per cent of total revenues to universities. Twenty-one years later in 2022, that number had dropped to 24 per cent, putting Ontario dead last among the provinces by this measure and a full 18 percentage points below the average of the other provinces.²¹

While real (inflation-adjusted) provincial funding per student generally improved across Canada at the beginning of the 21st century, the 2008-09 recession and ensuing austerity budgets began a decline that continues to this day. At just under \$8,300 per student, Ontario's provincial per-student contribution to university revenues in 2021 would have had to increase by more than 42 per cent just to reach the level of the next-lowest province, Nova Scotia. It would have had to increase by \$8,370 per student — double the 2021 level — to bring Ontario's share of funding up to the average of the other provinces. Such an increase would have amounted to \$4.1 billion in total additional funding across the Ontario university system in 2021.22

FIGURE 4 Real university revenues (\$2020) from provincial governments per full-time student



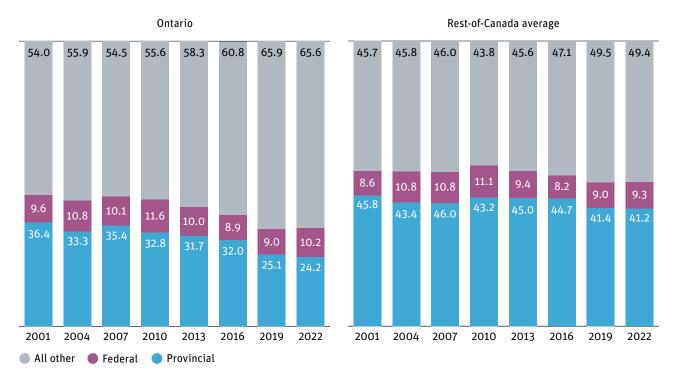
Source Statistics Canada, Table 37-10-0026-01, "Revenue of universities by type of revenues and funds (in current Canadian dollars)," August 9, 2022.provinces and territories, census metropolitan areas and census agglomerations with parts," November 30, 2022.

Federal funding for universities has remained stable

Constitutional jurisdiction over education in Canada lies almost exclusively in the hands of provincial and territorial governments, who are by design the most important sources of public funding to higher education systems. Nonetheless, the federal government retains an important role as the leading funder of research and innovation done at universities and colleges across the country. Overall federal funding to universities has been quite stable over the modern history of Canada's post-secondary system. While a sharp drop in transfers to the provinces did reduce federal funding to post-secondary education in the second half of the 1990s, that reduction was, largely, temporary.²³

In Ontario, federal funding has ranged from 9.6 to 11.6 per cent of total university revenue since 2000, roughly in the middle of the 8.6 to 12.4 per cent range for the other provinces. When adjusted for inflation, the value of federal grants and contracts to Ontario universities has ranged from \$1.41 billion in 2008 to \$1.58 billion in 2022 (in 2020 dollars).

FIGURE 5 Share of total university revenues from federal sources vs. provincial sources



Source Statistics Canada, Table 37-10-0026-01, "Revenue of universities by type of revenues and funds (in current Canadian dollars)," August 9, 2022.

The federal government is certainly a vital source of funding for research and innovation, accounting for over 51 per cent of all sponsored research revenue of Ontario universities in 2022. However, that funding as a share of total university revenues has shown little variation in the 21st century and was, in fact, only slightly higher in 2022 than it was in 2001 (10.2 per cent of total revenues in 2022 versus 9.6 per cent in 2001). The federal government has therefore not been a major factor in changes to university finances in Ontario in the last 20 years. Those changes have been driven almost entirely by the precipitous decline in provincial funding.

How Queen's Park has reduced university revenues since 2018

ONTARIO UNIVERSITIES DRAW on many sources of revenue to fund their operations, but 90 per cent of total university funding comes from three sources: 1) provincial grants; 2) domestic student tuition fees; and 3) international student tuition fees. Over the last five years, changes to provincial policy with respect to the first two have resulted in a marked decline in revenues from these sources.

Stagnant operating grants since 2018 cost universities more than \$500 million in real terms in 2022

Inflation-adjusted provincial per-student grants to Ontario universities have been on a downward trend since the 2008-09 recession and the fiscal austerity measures that followed it. The most recent fiscal era, which began in 2018 with the election of the current government, has continued that trend.

From 2017–18 until 2021–22, university operating revenues from provincial government grants and contracts were reduced by just under \$63 million (in current dollars) per year. The total loss of revenues is dramatically larger when accounting for inflation. The real value of provincial operating revenues (in 2020 dollars) dropped from \$3.9 billion in 2018–19 to \$3.4 billion into 2021–22, a real decline of over \$519 million in annual funding.²⁴

A 10 per cent tuition fee cut in 2019 and subsequent tuition freezes for domestic students cost universities more than \$600 million in 2022

In January 2019, the Ontario government announced that it was cutting tuition fees for all domestic students by 10 per cent, beginning in the 2019–20 school year. This dramatic drop was followed by a succession of annual announcements that have frozen domestic tuition at 2019 levels ever since. The freeze will continue in the 2023–24 academic year.

This tuition reduction should not be viewed as a progressive policy designed to improve affordability. While implementing the tuition cut, the province also eliminated a promising new program providing free tuition to low-income students; at the same time, Queen's Park implemented major cuts to provincial student financial assistance.²⁵ Further, the tuition reduction policy was not accompanied by additional public funding to universities to make up for the loss of student fee revenues. The result was an even tighter squeeze on university operating budgets.

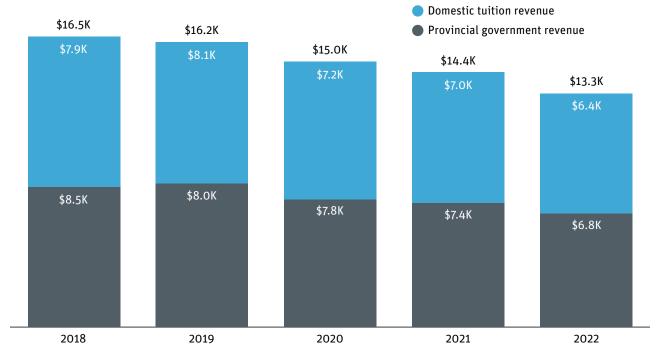
Following the tuition cut and freeze in 2019 until 2022, annual domestic tuition revenues were just under \$250 million lower, in current dollars. Accounting for this reduction and inflation over that time, real domestic tuition revenues fell from a high of \$3.83 billion in 2018–19 to \$3.21 billion in 2021–22, for an annual reduction of \$614 million in 2020 dollars.²⁶

Combined revenue losses exceed \$1.1 billion

As a result of reduced provincial grants and lower income from domestic student fees, universities suffered an inflation-adjusted reduction in annual operating revenue losses of more than \$1.1 billion (in 2020 dollars) in 2022 compared to when cuts began to provincial grants (from 2018) and domestic tuition fees (from 2019). In the span of five years, the combined share of university operating revenue derived from the combination of provincial funding and domestic tuition dropped from 69.2 per cent to just 61.8 per cent.

When accounting for the growth of the student population and high inflation rates since the spring of 2021, the financial situation for Ontario universities is considerably worse. From 2018-19 to 2021-22, annual full-time

FIGURE 6 Real operating revenues (\$2020) of Ontario universities per full-time student



Source Council of Ontario Financial Officers, "Financial Data, Table 2: Revenue" and "Table 3: Summary of expense by fund and functional area," Council of Ontario Universities, 2022; Common University Data Ontario, "Enrolment, Table 1: Summary of Enrolments in Ontario Universities, 2012–13 to 2021–22," Council of Ontario Universities, May 2022: and author's calculations.

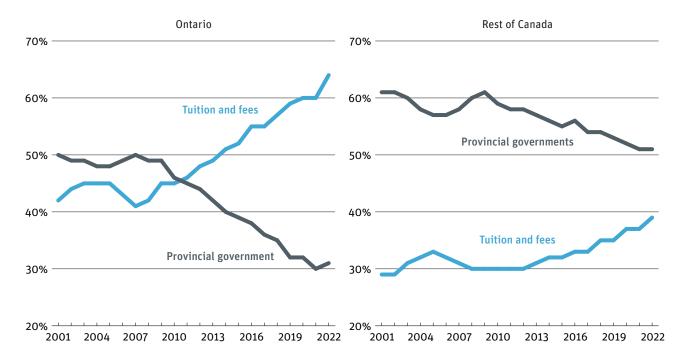
enrolment grew by about 39,400 students, hitting a high of just under half a million students in 2021–2022. That growth is equivalent to adding almost two average-sized universities worth of students to the system in a very short time. As the student body grows, universities must stretch revenues further to cover the increased costs of serving more students. Accounting for inflation and growing enrolment from 2018 to 2022, university operating revenues from the provincial government and domestic student fees declined by about \$3,200 (in 2020 dollars) per full-time student.²⁷

How universities have responded to provincial revenue losses since 1996

UNIVERSITIES ARE ORGANIZATIONS, and like all organizations they must adapt or die when changing circumstances threaten their ability to deliver on their core mission. Going back to the 1990s, universities have adopted, to varying degrees, many strategies to absorb the shock of revenue cuts, first to make up for cuts to government funding and (more recently) to make up for reduced revenues from domestic tuition fees. Some of the key adaptive strategies have included: increased reliance on tuition fees, including professional student fees and international student fees; a related increased reliance on student debt as a funding source; increased reliance on lower-paid contract faculty and staff; and larger class sizes. As a result, the shock to universities has been absorbed by students, faculty and staff, and university communities.

This section explores these topics further.

FIGURE 7 Percentage of university operating revenues from provincial governments vs tuition and fees



Source Statistics Canada, Table 37-10-0026-01, "Revenue of universities by type of revenues and funds (in current Canadian dollars)," August 9, 2022.

The Deregulation Era, part one: Universities dramatically increase tuition fees for all students from 1996 to 2019

In the last two decades, and after the 2008–09 recession in particular, all provinces have increased their reliance on tuition fees as a funding source for universities, and all provinces have reduced provincial funding as a share of total revenues. In Ontario, rising tuition fee revenues have entirely *replaced* the reduction in provincial funding. As the graph below shows, levels of tuition fee revenues and provincial funding in Ontario have virtually mirrored each other since the 2008–09 recession, with the former rising as the latter has fallen.

In a prior era, when public spending on higher education was much greater as a proportion of the total cost, student fees played a relatively minor role in financing Canadian post-secondary systems. In the 1990s, however, provincial governments across the country undertook an agenda aimed

TABLE 1 Average real tuition (\$2020) for domestic undergraduates

	(Ontario		Rest of Canada	
Year	Avg. tuition	Growth since 1992	Avg. tuition	Growth since 1992	
1992	\$3,034	0.0%	\$3,032	0.0%	
1998	\$5,044	66.3%	\$4,537	49.6%	
2004	\$6,433	112.0%	\$5,221	72.2%	
2010	\$7,220	138.0%	\$5,299	74.8%	
2016	\$8,468	179.1%	\$5,727	88.9%	
2022	\$7,411	144.3%	\$5,990	97.6%	

Source Statistics Canada, Table 37-10-0150-01, "Archived-Canadian undergraduate tuition fees by field of study, 1972/1973 to 2006/2007, inactive," June 26, 2020; Statistics Canada, Table 37-10-0045-01, "Canadian and international tuition fees by level of study," September 7, 2020; and author's calculations.

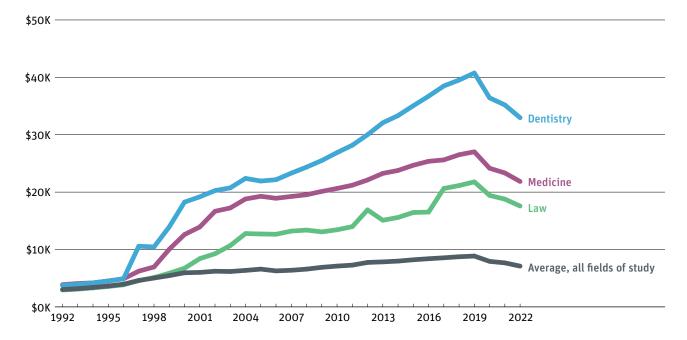
> at privatizing responsibility for funding post-secondary education. This process of privatization has shifted university and college system funding from a "public-pays" to a "user-pays" system. As a consequence, more and more of the burden of paying for post-secondary education has fallen on students and their families.

> Despite the 10 per cent reduction and subsequent freezing of domestic tuition fees since 2019, Ontario tuition fees remain high in 2023 due to government decisions decades ago.

> In Ontario, the government of Premier Mike Harris, elected in 1995, led the charge in reducing public post-secondary funding at the expense of students in the second half of the 1990s. While the province made unprecedented cuts to university and college budgets, it also moved aggressively to deregulate student fees. The province's new market-oriented funding framework gave administrators at universities and colleges — many of whom had long lobbied for deregulation — much greater power to raise tuition fees. Tuition fees for domestic students were allowed to rise rapidly, nearly doubling from 1996 to 1999. Regulations on student fees for professional programs, such as medicine or law, were weakened greatly or eliminated, granting university administrators much leeway in setting fees, so long as a portion of the new tuition revenue was redirected to student aid.28 International student fees were entirely deregulated, giving universities and college administrators the power to set tuition for international students as they saw fit.

> The government of Premier Dalton McGuinty, elected in 2003, imposed a partial re-regulation of post-secondary education in Ontario, capping tuition increases for domestic students at 5 per cent per year. This new framework allowed fees to rise, albeit at a slower pace than in the 1990s (although still





Source Statistics Canada, Table 37-10-0150-01, "Archived - Canadian undergraduate tuition fees by field of study, 1972/1973 to 2006/2007, inactive," June 25, 2020; Statistics Canada, Table 37-10-0003-01, "Canadian undergraduate tuition fees by field of study (current dollars)", September 7, 2022.

more than twice the average rate of inflation at the time). The cap was later lowered to 3 per cent in 2013, ²⁹ which did little to halt the rise of fees; indeed, it should be noted that during this time, growth of student fees in practice often exceeded the legislated cap. ³⁰ From the start of the tuition cap era in 2003 until the 2019 tuition reduction and subsequent freezes imposed by the Ford government, inflation-adjusted tuition for domestic undergraduate students in Ontario grew by 43.3 per cent, compared to just 19.6 per cent for students in the rest of Canada. As a result, tuition fees for Ontario domestic students remained substantially higher in 2022 than the Canadian average.

Provincial government policies that limited tuition growth (at least to some degree) from 2003 to 2019 applied only to domestic students attending non-professional programs. With no limits on tuition fees for professional programs, the cost of attending programs in dentistry, medicine, law, and the like grew rapidly. Prior to 1992, tuition fees to attend a professional program in Ontario were very close to the average price of any field of study. In the

1994-1995 academic year, the average tuition for domestic undergraduates was \$3,645 in 2020 dollars, while tuition for medical school was just \$4,519. By the 2004–05 school year, average undergraduate tuition was \$6,257, almost twice as much as a decade earlier, while medical school tuition was \$19,272, more than 4.2 times greater than previously.

Students today may find it hard to believe that tuition fees for these programs were ever similar to fees in other undergraduate programs. But they were.

The Deregulation Era, part two: International students become "cash cows"

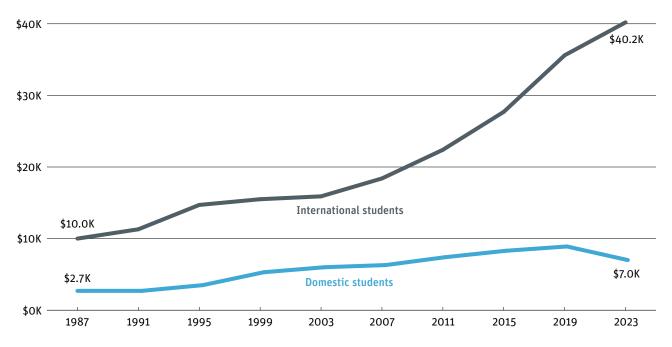
Ontario was the first Canadian province to introduce differential tuition fees for domestic versus international students, in 1976, yet many decades would pass before the internationalization of post-secondary education began in earnest.31 While there were limits on how much universities could raise fees for domestic students, deregulation of international student tuition gave university administrators the power to set those fees at their sole discretion. With steadily falling provincial funding, they had a strong motivation to do so.

All Canadian provinces have some degree of differential tuition for international students; international student fees are much higher than domestic student fees throughout the country. Nonetheless, Ontario's international student fees are the highest by far. Across Canadian provinces other than Ontario, in the 2022-2023 academic year, international undergraduate students paid an average of just under \$20,000 in tuition, compared to just \$5,820 for domestic students in 2020 dollars.32

From 2002-03 until 2022-23, average tuition paid by international undergraduate students in Ontario grew by over \$24,260 in 2020 dollars, an increase of 287 per cent. In the 2022–2023 academic year, international students in undergraduate programs were paying an average \$40,200 a year (in 2020 dollars) to study in Ontario, roughly 5.7 times as much as domestic students. In graduate programs, where tuition fees are generally lower, international students paid an average of \$24,123 (in 2020 dollars), or 2.9 times more than the \$8,339 paid by domestic students.³³

Committed to pushing forward a user-pays post-secondary system, yet facing growing opposition to the privatization of post-secondary finances from student and labour organizations, successive Ontario governments were wary of the political costs of allowing rapid tuition increases for domestic

FIGURE 9 Average real (\$2020) undergraduate tuition in Ontario for international and domestic students



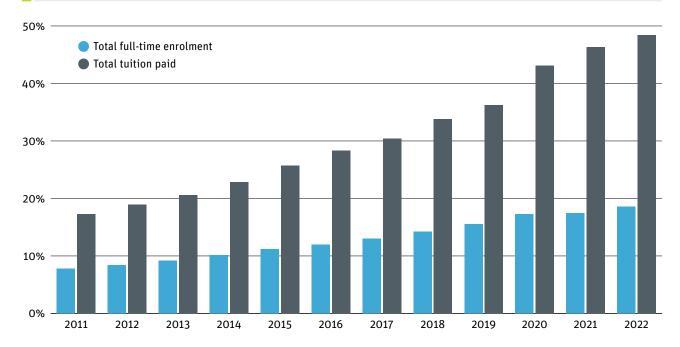
Source Statistics Canada, Table 37-10-0160-01, "Archived—Canadian and international tuition fees by level of study, 1972/1973 to 2006/2007, inactive," June 25, 2020; Statistics Canada, Table 37-10-0045-01, "Canadian and international tuition fees by level of study (current dollars)," September 7, 2022.

students. International students provided an easy alternative at next to no political cost: international students don't vote in Ontario.

Ontario's universities now rely on international students to provide a vastly disproportionate share of tuition revenues. From 2001 until 2012, international students accounted for an average of just 13.8 per cent of growth in full-time enrolment at Ontario universities. International recruitment efforts ramped up substantially from 2013 to 2022, when international students made up an average of 66.8 per cent of growth in full-time enrolment. From 2020–21 to 2021–22, international students accounted for 87.4 per cent of new enrolment.³⁴

Despite the steep rise of international student fees throughout the 1990s and 2000s, they were still a relatively minor source of operating funds for Ontario universities until more recent years. In the 2010–2011 academic year, international students in Ontario paid \$593 million in tuition fees (in 2020 dollars), amounting to 7 per cent of system-wide university operating revenues.³⁵ That year, international students represented just under 8 per cent of full-time students but were already paying just over 17 per cent of

FIGURE 10 International students in Ontario: share of total full-time enrolment vs. tuition paid



Source Council of Ontario Financial Officers, "Financial Data, Table 2"; Common University Data Ontario, "Enrolment, Table 1" and "Table 5: International Students: Fall Fulltime Headcounts by Funding Eligibility, 2012-13 to 2021-22"; and author's calculations.

> all tuition paid in the province. A decade later, in the 2021–22 school year, almost 19 per cent of all full-time students were international students; they were paying nearly half (48.4 per cent) of all tuition fees in the province.³⁶

> The result? Ontario universities have become utterly dependent on international student fees to fund their operations.

> To maximize revenue from international students, universities in Ontario are charging them dramatically higher tuition fees in all areas of study. For universities, students that come from abroad to study in professional programs like medicine, law, or engineering are lucrative revenue sources. At present, one international student enrolled in medicine is paying the same tuition as 11 domestic students in a typical undergraduate program.

> The Government of Canada has made it clear that international students are an essential component of its overall economic growth strategy. "International education makes a large and growing contribution to Canada's prosperity," says Building On Success, Canada's international education strategy for 2019-2024. "International students in Canada spent an estimated \$21.6 billion on tuition, accommodation and other expenses in 2018 and sustained close to 170,000 jobs for Canadians in 2016. Educational expenditures by

\$80K \$70K Domestic International \$60K \$50K \$40K \$30K \$20K \$10K \$OK Medicine Law Engineering Average, Math/ Physical/ Social Humanities Nursing Education all fields Computer Ĺife Sciences of study Sciences Sciences Legal Studies

FIGURE 11 Average real undergraduate tuition (\$2020 thousands) in 2022–2023 for international and domestic students, Ontario

Source Statistics Canada, Table 37-10-0003-01, "Canadian undergraduate tuition fees by field of study (current dollars); and author's calculations.

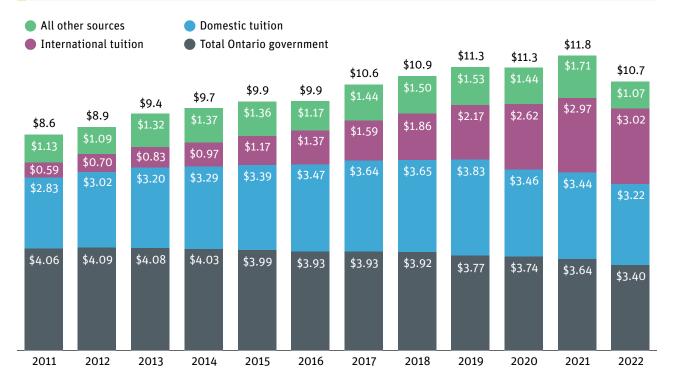
international students have a greater impact on Canada's economy than exports of auto parts, lumber or aircraft."³⁷

From a federal perspective, then, international education is an industry. To many international students, it is an exploitative one which treats them as "cash cows" being milked to subsidize university and college operations and, at the same time, provide a source of cheap labour for Canadian employers.

One way or another, all students pay the price

As total real provincial spending on universities has declined over the last decade, students — both domestic and international — have been left holding the bag. From 2011 to 2022, total annual university operating revenues from the provincial government declined from \$4.06 billion to \$3.40 billion (all figures in 2020 dollars), a drop of 16 per cent. In the same time frame, operating revenue from domestic tuition fees rose by \$390 million — still 14 per cent higher than in 2011 despite the provincially mandated reductions

FIGURE 12 Real operating revenue (\$2020 billions) of Ontario universities by source of funds



Source Council of Ontario Financial Officers, "Financial Data, Table 2" and author's calculations.

from 2019 onwards. Meanwhile, revenue from international student fees rose from \$590 million to \$3.02 billion, an increase of 409 per cent in just 11 years.

This is the new reality of university education in Ontario. Our former publicly supported model recognized the incredible benefits to society and our economy of higher education; that model has largely been replaced by a "user pays" model based on the notion that higher education is an individual affair that benefits individuals and must therefore be funded by them. This philosophical approach, which judges education exclusively by its value in the marketplace, comes at a price, both for individuals and society. Some of the consequences are discussed in the sections below.

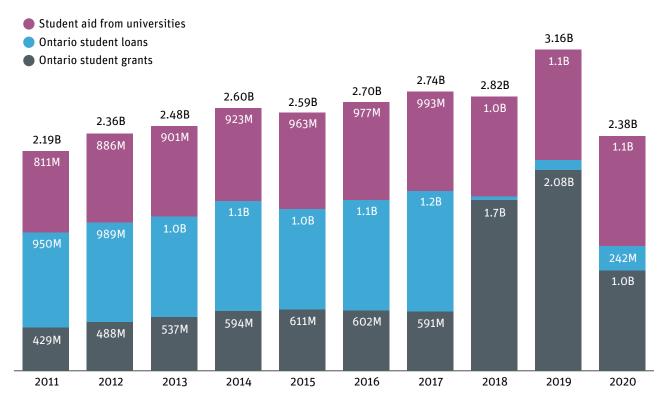
From "high-fee, highaid" to just plain high-fee: provincial student assistance has changed dramatically

AS THE POST-SECONDARY systems of Ontario and most other Canadian provinces grew more dependent on tuition fees to fund operations, they developed into what are referred to as "high-tuition, high-aid" systems.³⁸ As student fees rose over the last two decades, financial assistance to students from non-federal sources, meaning provincial government loans and grants plus financial aid from universities, i.e., scholarships and bursaries, also grew.

In Ontario, most of the financial aid to students from the provincial government was available as repayable student loans through the Ontario Student Assistance Program (OSAP). Non-repayable provincial grants to students ranged from 26 per cent of OSAP disbursements in 2001 to 34 per cent in 2017.

There was a dramatic shift from loans to non-repayable aid by the governing provincial Liberals in 2017–18 and 2018–19. In those school years, 97 per cent and 95 per cent, respectively, of OSAP funds disbursed to students came in the form of non-repayable grants. The election of the Progressive

FIGURE 13 Real value of financial aid (\$2020) to Ontario students



Source Common University Data Ontario, "Student Financial Assistance, Table 1: Ontario Student Assistance Program (OSAP), Federal and Provincial Repayable Assistance Issued, 2010-11 to 2019-20" and "Table 2: Ontario Student Assistance Program (OSAP), Provincial Non-Repayable Assistance Issued, 2000-01 - 2019-20," Council of Ontario Universities.

> Conservatives saw an equally dramatic swing of student aid — in the opposite direction. In terms of provincial participation, what was once a high-fee, high-aid policy regime is being rapidly transformed into simply a high-fee system. From an all-time high in 2018–19 to the following school year, the real value (in 2020 dollars) of non-repayable financial aid was slashed by over \$956 million. In the span of that one year, the real value of total provincial student aid suddenly dropped to lower than it was in 2013. The provincial government's share of total financial assistance (from public or institutional sources) to university students dropped from 38.3 per cent in 2018–19 to 28.8. per cent in 2019–20, leaving the federal government, universities, and students themselves to pick up the slack.39

> In the first year of the COVID-19 pandemic, in August 2020, the federal government doubled the value of its non-repayable Canada Student Grants, boosting grants to Ontario students (college and university) by \$870 mil

lion.⁴⁰ This uptick in the amount of federal student aid, which was only ever meant as a temporary measure, certainly helped to prevent a total collapse of student aid in the province. Unfortunately for students, the affordability picture became a bit dimmer as federal student grants were cut by around 30 per cent, while weekly limits on student loan disbursements were raised, in the 2023 Federal Budget.41

Under Ontario's tuition fee framework, universities are obligated to set aside a portion of revenue from the growth of tuition fees each year, which is used to fund financial assistance to students.⁴² Due to this tuition set-aside policy, student financial aid from universities themselves has steadily risen over the prior two decades, with recent growth helping to fill some of the gap left by the cuts to provincial aid. Since 2001, the real value of universityprovided student aid, mostly awards, bursaries, and scholarships, has grown by over \$711 million, reaching \$1.1 billion in 2019–20.43

Students have paid a high price for the dramatic reduction in student aid, which has left many unable to access adequate funding to cover the costs of attending school.44 Low-income students have been hit particularly hard by the move, as the modest 10 per cent tuition reduction was far from enough to make up for the loss of the targeted tuition-free program.⁴⁵ Many have been either forced to withdraw from their studies due to OSAP shortfalls or live under constant worry that they will have to do so.46

Even among those that have not been forced to drop out, greatly reduced OSAP disbursements have put already thin student budgets under even more strain. To make up for the difference, many students are racking up more debt or having to work more during the school year.⁴⁷ In the face of soaring living costs, especially food prices and rent, dwindling student aid has deepened student poverty and contributed to surging food bank use on many university campuses. 48 This is another example of the provincial government retreating from responsibilities that are clearly within its jurisdiction and then expecting someone else to pay.

Student debt is highest in Ontario

There are many reasons students choose not to attend university, including personal preferences and considerations unrelated to money. However, what little Canadian research exists on the topic shows that some students who decide not to attend university are doing so for financial reasons. A 2007 Statistics Canada study estimated that 12 per cent of the gap in university

TABLE 2 Real value of household student debt (\$2019 billions) from all sources

	Total student debt owed		Share of total debt	
Province/Region	2005	2019	2005	2019
Canada	25.4	38.8	100.0%	100.0%
Ontario	9.4	20	37.1%	51.5%
Prairies	4.2	7.1	16.6%	18.3%
Quebec	4.4	4.3	17.5%	11.2%
British Columbia	4.5	4.2	17.6%	10.8%
Atlantic	2.8	3.2	11.2%	8.2%

Source Statistics Canada, Table 11-10-0016-01, "Assets and debts held by economic family type, by age group, Canada, provinces and selected census metropolitan areas, Survey of Financial Security," December 12, 2020.

> attendance between students from the highest-income quartile and the lowest-income quartile was the result of "financial constraints," but that number is almost certainly too low; many of the other factors explaining the gap were themselves related to family income.⁴⁹ More recent opinion polls in the United States suggest that "the American public has increasingly lost confidence in the economic benefits of a college [university] degree," Meghan Brink reported in *Inside Higher Ed* last year. "As tuition prices and student debt rise across the country, many Americans on both sides of the political spectrum believe that colleges are not addressing the financial need of their students."50

> Students of modest means who are determined to attend university frequently turn to borrowing to finance their education.

> The students who do borrow (approximately half the student population) come disproportionately from lower-income families. By increasing their debts, the high-fee user-pay tuition regime increases economic inequality across society, and not just in the short term: student debt influences individuals' net worth over the course of their entire lives, as well as the wealth of their parents, as families strain to support their children during and after study.

> In 2005, the inflation-adjusted average household student debt in Ontario was \$16,400 (in 2019 dollars), \$575 less than the average in the rest of Canada. By 2019, average household student debt in Ontario had grown to \$23,100 - \$5,125 more than the rest-of-Canada average of \$17,975.

> Households in Ontario accounted for 37.1 per cent of all student debt owed across Canada in 2005, while the province hosted 43.5 per cent of full-time university students in Canada. By 2019, Ontario's share of student

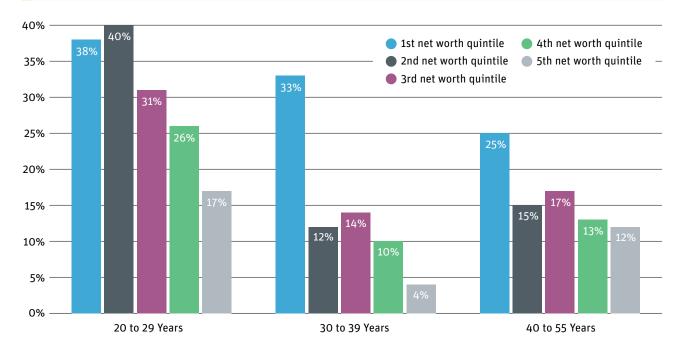
debt had grown to 51.5 per cent, even though the province's share of full-time university enrolment barely moved (to 44 per cent).⁵¹

Student debt is disproportionately held by low-wealth students

There exists an oft-repeated misconception that because individuals from families with higher incomes and more wealth are more likely to enroll in university, most student debt must be held by wealthier individuals and families. However, data from the Survey of Financial Security (SFS), the main source of data on the assets and debts of Canadian households, shows the opposite is true: the burden of student debt falls along — and reinforces — lines of class inequality.

SFS data are collected and reported at the household level. The data show a clear inverse relationship between household wealth and the probability of owing student debt. The wealthier the household, the lower the likeli-

FIGURE 14 Share of Ontario households with student debt in 2019 by net worth quintile and age of main income earner(s)



Source Statistics Canada, Survey of Financial Security, Public Use Microdata File (PUMF) 2019." December 9, 2022.

TABLE 3 Household student debt (current \$) owed in Ontario by net worth quintile

Net worth quintile	Avg. net worth	Total student debt	Share of total debt
1st	-\$802	\$6.2B	36.7%
2nd	\$100,437	\$2.9B	17.1%
3rd	\$354,099	\$3.4B	19.7%
4th	\$788,651	\$2.5B	14.8%
5th	\$2,569,586	\$2.0B	11.6%

Source Statistics Canada, Survey of Financial Security, Public Use Microdata File (PUMF) 2019 and author's calculations. Survey of Financial Security," December 12, 2020.

hood that any member of the household has a student loan; the wealthiest one-fifth of households are the least likely to hold student debt.

People who come from families with abundant wealth are well situated to avoid student debt by paying for school up front or paying down debts rapidly after graduation. The burden of student debt thus falls mainly on those with little to no wealth.

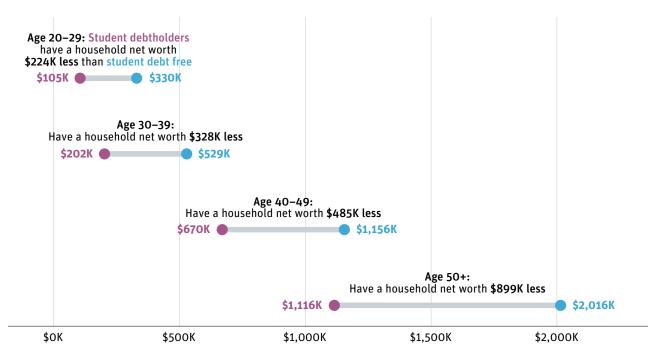
Across Canada, people in the bottom 40 per cent of the household wealth distribution, about 12 million households, owned just 2.8 per cent of all wealth in 2022, while the wealthiest 20 per cent controlled 67 per cent of it.52 Of the \$16.9 billion in student loan debt owed by Ontarians in 2019, at least \$6.2 billion, or 36.7 per cent, was owed by households in the lowest wealth quintile with negative average net worth, meaning they had more debts than assets. In contrast, the wealthiest fifth of households, with average net worth in the multi-millions, owed just 11.6 per cent of student debt.

Student debtors, on average, start out with less wealth and accumulate less wealth throughout their lives, compared to those with a similar education, but no educational debts. It is true that post-secondary graduates in general have higher earnings and wealth potential than those without any post-secondary education. However, among university and college graduates, those who were able to complete their studies debt-free were substantially wealthier than student debtors.

Student debt reduces wealth for life

Comparing households headed by university educated people in Ontario in 2019, those containing student debtors had higher total debts, especially credit card debts, and owned assets worth much less, translating into much lower wealth as measured by net worth (the value of assets minus debts).

FIGURE 15 Household net worth (current \$) of university graduates by age of main income earner(s) in Ontario (2019): student-debtor vs. student-debt-free households



Source Statistics Canada, Survey of Financial Security Public Use Microdata File, 2019.

Young graduates in their twenties, those with unpaid student loans in their thirties and forties, and even pre-retirement-aged people impacted by the student loans of their children were all less wealthy if someone living in the house owed student debt.

The student debt wealth gap not only persists, but expands as age rises, growing the most extreme for student debtor households headed by those age 50 and over. These findings align with a growing body of research connecting student debt to reduced lifetime wealth potential.⁵³ Student debt limits opportunities to build wealth by reducing disposable income,⁵⁴ detracting from savings,⁵⁵ impairing access to credit,⁵⁶ and delaying or outright preventing wealth-key milestones like home purchases.⁵⁷

Student debt not only harms the economic prospects of graduates, but there is evidence that the wealth-corrosive effects can also spill over to parents/guardians and whole families, as the need for growing financial support for their children during and after study, as well as with debt repayment, strains family finances and reduces pre-retirement savings capacity.⁵⁸ Student debt's intergenerational wealth-sapping properties therefore work in both directions, both limiting the opportunity for debt-saddled graduates

to build wealth over life and draining wealth from families who already have less to begin with.

In stark contrast, students from wealthy families (many of whom have not only high incomes but also the extra financial security that comes from inherited wealth) often do not require student loans to attend post-secondary education. Even when they do incur such debts, their wealth makes the load much easier to bear and pay down quickly. Either way, the affluent begin their post-graduation careers well-positioned to see their net worth grow.

Student debt holders face greater financial stress and precarity

The negative impact of student debt on individuals goes beyond fueling inequality by sabotaging future wealth generation for graduates. Student debt is also a major contributing factor to financial precarity and vulnerability for many young graduates and their families in their daily lives. Researchers at Statistics Canada studying the relationship between debt and financial insecurity found that having a debt-to-asset ratio (DAR) above 0.5 (meaning debts worth at least half as much as assets) was strongly related to risk of financial stress and strain.

For households in Ontario and across Canada, the amount of student debt owed is highly correlated to the debt-to-asset ratio of the household. In 2019, households in Ontario with moderate levels of student debt had an average DAR of 1.5×, well above the high-risk cut-off of 0.5× and more than 4.2 times higher than households with no student debt. Even among households with low levels of student debt, the average debt-to-asset ratio was just above the high-risk cut-off of 0.5× and still 1.4 times higher than student debt-free households.59

In addition to data on household debts and assets, the Survey of Financial Security also asks respondents if they are experiencing different aspects of financial stress and vulnerability. In Ontario and across Canada, households that owed any student debt at all were much more likely to indicate that they were experiencing at least one indicator of financial risk and strain.

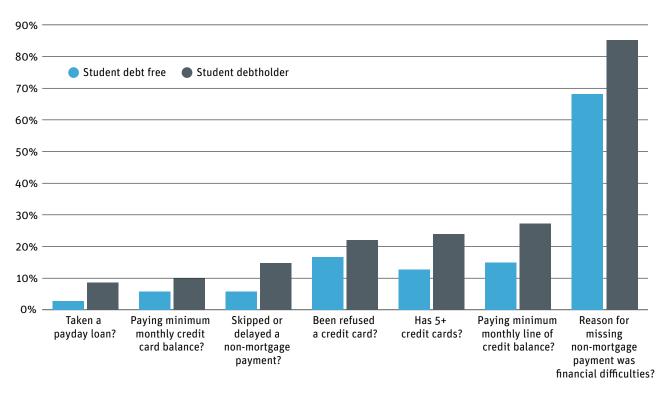
In 2019, student-debt-holding households were more than three times as likely to report having taken a payday loan and more than twice as likely to have skipped a non-mortgage payment due to financial difficulties. These findings are consistent with what limited research on the topic in Canada exists, showing that student debt and financial insecurity are linked.

TABLE 4 Average student debt and debt-to-asset ratios of Ontario households in 2019

Student debt level	Average student debt	Debt-to-asset ratio
No debt	\$0	.36×
Low debt	\$4,373	.52×
Moderate debt	\$12,709	1.52×
High debt	\$44,398	1.62×

Source Statistics Canada, Survey of Financial Security Public Use Microdata File, 2019 and author's calculations.

FIGURE 16 Share of Ontario households responding **Yes** to the following questions in 2019: student-debtor vs. student-debt-free households



Source Statistics Canada, Survey of Financial Security Public Use Microdata File, 2019," December 9, 2022.

According to the insolvency services firm Hoyes and Michalos, more than 22,000 people filing for bankruptcy in Ontario in 2018 cited student debt as a contributing factor, accounting for an all-time high 1 in 6 (17.6 per cent) of provincial insolvency filings.⁶⁰

Regardless of the income-generating advantage that comes with a university education, students who begin their careers with student debt

are two steps behind their debt-free class mates — first because they start out $\,$ with less wealth, or even negative wealth, and second because of the cost of repaying the debt itself. Rather than levelling the economic playing field, current arrangements for financing university education for lower-income students serve instead to reproduce existing class disparities and lock them in for life.61

Cutting costs through precarious work

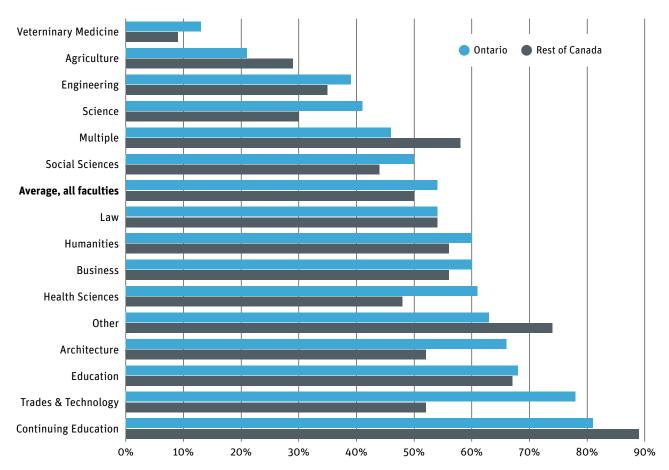
UNIVERSITIES HAVE RESPONDED to the problem of reduced provincial funding by looking for new revenues, especially from higher tuition fees, but they have also taken steps to reduce costs. And since more than threequarters of university operating expenses go to pay staff (both academic and non-academic), 62 administrators have looked for ways to reduce staffing costs. In addition to wage restraint through hard bargaining or as mandated by provincial law, 63 one way universities have suppressed overall wage costs is by reducing the use of permanent full-time staff and relying instead on part-time and temporary workers whose jobs have some combination of limited job security, lower wages, fewer benefits, and/or a narrower scope of work (e.g., sessional lecturers teach but are not paid to do research or other duties).

Low-paid contract faculty make up half the academic workforce

Universities' use of "precarious" workers is significantly higher today than it was 20 years ago.

Data on the contract status of the academic workforce is generally very difficult to come by, usually only obtainable by Freedom of Information

FIGURE 17 Share of university faculty with contract (non-tenured/tenure track) appointments in 2016-17, Ontario



Source Canadian Union of Public Employees, Contract Faculty Appointments in Canada: CUPE Database, May 13, 2018; available online at https://cupe.ca/contract-facultyappointments-canada-cupe-database

> (FOI) requests made to universities. In one such dataset made available to the public by the Canadian Union of Public Employees, it was revealed that 54 per cent of all faculty appointments in Ontario in 2016-17 were on a contract, rather than tenured, basis, well above the average of 50 per cent in the rest of the country. Among universities where contract status was further broken down, about 85 per cent of those contract appointments were part-time, while the remaining 15 per cent were full-time (both in Ontario and across Canada). A study by the Council of Ontario Universities (COU), the group representing university employers, produced similar findings.⁶⁴

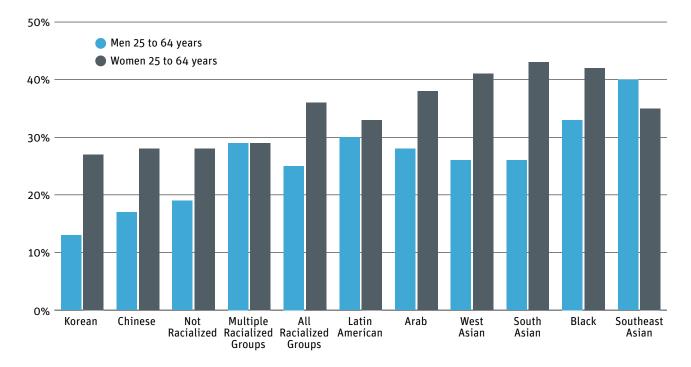
> Post-secondary faculty are not alone in grappling with precarious employment on campus. An analysis of Labour Force Survey data, which included both academic and non-academic staff at Ontario's universities and

colleges, estimated that the post-secondary system's reliance on precarious labour had grown steadily over time. According to that report, 53 per cent of all workers in Ontario's post-secondary sector—including instructors, assistants, administrative staff, custodians and maintenance workers, librarians and more—experienced at least one indicator of precarious work in 2016, such as working part-time involuntarily, having temporary employment, or needing to hold multiple jobs to survive.⁶⁵

Women and racialized faculty are systematically underpaid and underemployed

Canada's labour market features significant discrimination against certain groups of workers who are more likely to experience lower pay, precarious employment, unemployment, and other adverse employment effects compared to other groups, specifically non-racialized men. Available data show that this discrimination is experienced by women and by racialized and Indigenous workers. 66 Ontario's academic labour market is no exception

FIGURE 18 Share of university professors/lecturers not working full-time, full-year in Ontario, 2021



Source Statistics Canada, Table 98-10-0586-01.

TABLE 5 Average employment income for university professors/lecturers in Ontario, 2021

	Average employment income		Gap from non-racialized men	
	Men	Women	Men	Women
Worked full year part time				
Not racialized	\$52,000	\$48,400	\$0	-\$3,600
All racialized groups	\$47,000	\$48,000	-\$5,000	-\$4,000
Worked part year, part time or full time				
Not racialized	\$62,650	\$55,100	\$0	-\$7,550
All racialized groups	\$51,000	\$46,500	-\$11,650	-\$16,150
Worked full year full time				
Not racialized	\$146,800	\$131,400	\$0	-\$15,400
All racialized groups	\$137,200	\$128,200	-\$9,600	-\$18,600

Source Statistics Canada, Table 98-10-0586-01, and author's calculations.

to this trend, where widespread underpayment and underemployment of workers belonging to those groups has long prevailed.⁶⁷

As university administrators cut labour costs by expanding the use of precarious workers and part-time contract faculty, the painful impact was not felt equally by all. Instead, it landed disproportionately on women and racialized workers. According to census data, university professors and lecturers who were both racialized and women were much less likely to be working on a full-time, full-year basis compared to non-racialized men.⁶⁸ While racialized women were about 13 per cent of all university professors and lecturers (ages 25 to 64 years) in Ontario in 2021, they made up over 35.6 per cent of the precarious, part-time faculty who were not working full-time over a full year.

On average, faculty that were either women or racialized were underpaid compared to their non-racialized male colleagues. Relative to non-racialized men, average wages of professors and lecturers were about 11.2 per cent lower for racialized men, 15.6 per cent lower for non-racialized women, and up to 24.3 per cent lower for racialized women.

What can explain these structural differences in wages? While some of the wage gap was due to the trends in underemployment described above, members of equity-seeking groups were underpaid whether they worked fulltime throughout the year or not. According to past research done by CAUT, some of the difference can be attributed to "age, rank, job and discipline," while the remainder is "likely the result of institutional practices and salary

structures that are discriminatory in effect, as well as overt discrimination in hiring and promotion decisions."69

Universities receive very substantial savings on labour costs through the systematic underpayment and underemployment of staff who are women, racialized, and Indigenous.70

Low-paid contract faculty teach half of undergraduate courses

Research and teaching — the production and transmission of knowledge respectively — are widely recognized as the two core activities of a university. For much of the modern history of higher education, the reigning archetype of the university professor was the Teacher/Researcher, engaged in a unified, mutually reinforcing practice of the two.71

As early as the late 1980s, when the neoliberal transformation of higher education was just beginning, leading scholars and teachers in Canada were warning of an increasing over-emphasis on research work, to the detriment and devaluation of teaching.⁷² As universities grew more revenue-driven and expenditure-adverse in response to dwindling public funding, administrators increasingly prioritized and rewarded research work over teaching: research grants and contracts can boost university revenues and enhance prestige in ways that classroom teaching does not, at least within the dominant postsecondary paradigm. The result has been a growing antagonism between teaching and research labour, where teaching is increasingly devalued. Consequently, research output has grown into the most important factor impacting faculty promotion and compensation at Ontario's universities.⁷³

Teaching work, on the other hand, now commonly viewed by university administrators as a problem to solve as cheaply as possible, has become associated with lower compensation and poorer working conditions.⁷⁴ This devaluation of teaching work by employers has allowed for the segmentation of Ontario's academic labour market into two groups of faculty: one layer of precarious and poorly paid contract staff who are (officially) responsible only for teaching, and their tenured counterparts who (officially) perform a mix of teaching and research along with the full range of professorial responsibilities.75

According to data from the Council of Ontario Universities, underpaid contract faculty at Ontario's universities taught 50 per cent of courses and 46 per cent of all students at the undergraduate level in the 2014-15 school year.⁷⁶ While there is no more current data available, given the pressure on university budgets since 2014–15 there is ample reason to suppose that the trend of putting more teaching work into the hands of contract staff has continued and possibly even intensified.

By financially devaluing teaching labour and creating a sub-class of precarious faculty with nearly sole responsibility for teaching, university administrators have no doubt achieved significant savings on employee compensation. If an Assistant Professor taught three courses in 2018–19 at the average collectively bargained rate of \$111,235, a contract instructor could have been paid less than a quarter (\$23,940) of that amount to teach the same number of courses, at an average maximum per-course stipend of \$7,980.77

Considering that over half (51 per cent) of contract faculty surveyed across Canada in 2018 reported teaching four or more courses, many at multiple universities, post-secondary employers have clearly grown accustomed to buying much of their teaching labour at a highly discounted price.⁷⁸

The picture is somewhat complicated by the creation of teaching-stream faculty positions, many of which are tenure-tracked, at some Ontario universities; this innovation shows some potential for redressing the devaluation of teaching labour.⁷⁹ Generally, wages and working conditions are better in these streams than for most precarious, part-time faculty paid to teach on a per-course basis, though that is a low bar to clear.80

While such programs could in theory be used to put teaching and research labour on a much more equal footing, in practice, faculty employed in these programs often report feeling undervalued and underpaid relative to their non-teaching stream colleagues.81

Most precarious contract faculty routinely perform unpaid labour

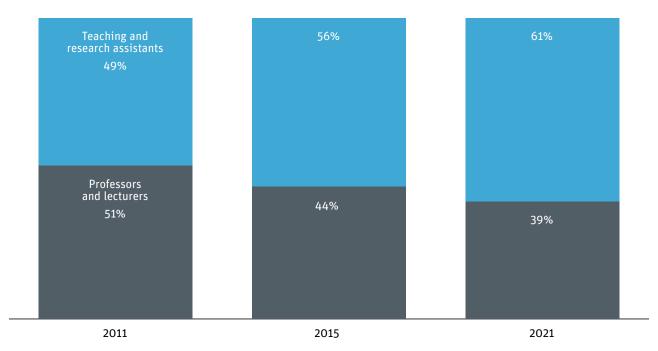
There are additional dimensions to the exploitation of precarious contract faculty. A 2018 report by the Canadian Association of University Teachers (CAUT) found that while part-time faculty are almost always responsible and paid only for teaching according to the terms of their contracts, in practice, the majority are engaged in additional academic labour that mostly goes unpaid. For example, three quarters (75 per cent) of contract staff reported in 2016–17 that they were doing committee work and over one-tenth (15 per cent) reported doing additional administrative work that was not related to their contracted course work.82

Despite being officially responsible only for classroom teaching, a majority of contract academic staff are also engaged in some form of research. Typically, there is no financial support for these research activities in part-time teaching contracts and access to major research grants for part-time staff are extremely limited.83 Many part-time faculty, despite only being paid to teach, are therefore also contributing valuable research work to the system for little or even no compensation. Since a track record of research publication is all but required to finally achieve the stability of a tenure track position, this is hardly surprising.

Assistantships: the ground floor in devaluing academic labour

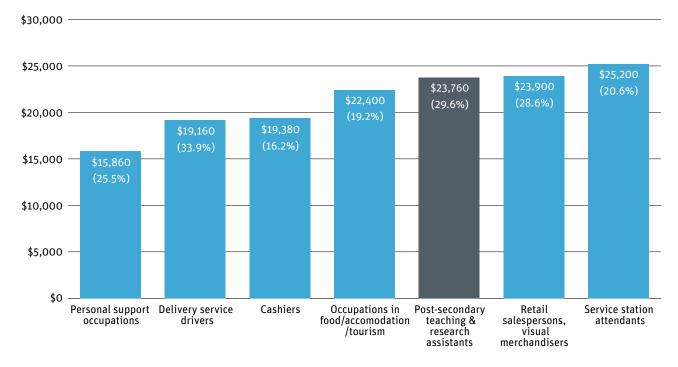
Ontario's academic labour market is not two-tiered, but rather three-tiered, with a layer of workers below contract academic faculty that suffer even lower wages and more precarity - teaching and research assistants who are





Source Statistics Canada, Table 98-10-0586-01 (2021), Table 98-400-X2016356 (2016), Table 99-012-X2011033 (2011).

FIGURE 20 Average annual employment income in Ontario in 2021 (Share of employees working full-time, full-year)



Source Statistics Canada, Table 98-10-0586-01, "Employment income statistics by occupation unit group, visible minority, highest level of education, work activity during the reference year, age and gender: Canada, provinces and territories," May 5, 2023.

mostly also graduate students. In Canada's system of National Occupational Classifications (NOC), the workforce of academic professionals (NOC 4120) at universities is divided into just two classes of occupation: professors and lecturers on one hand, and teaching and research assistants on the other.

In 2011, there were roughly equal numbers of faculty and teaching/research assistants employed in Ontario's university system. A decade later, the ranks of assistants had grown to compose over 61 per cent of the academic workforce. The ratio of assistants to professors in Ontario rose from just under 1:1 in 2011 to over 1.5:1 in 2021, well over the average of 1.34:1 in the rest of Canada.

While there is no broad data available on the work activities of assistants, as they comprise more of the workforce, it is reasonable to conclude that they are conducting an increasing share of teaching and research labour. As explained by Shaker and Shaban, the growth of assistant jobs has steadily

outpaced the growth of the student population and all other academic job classes in Ontario, suggesting that "work previously done by another category of worker is being shifted to a job category that is already inherently less stable and less long term," not to mention lower paying.84

Post-secondary assistant jobs are a somewhat of a special case in the study of precarious employment. Ideally, such positions are intended to give students a source of much-needed income and work experience while they complete their studies. Usually held by graduate students in full-time study, these jobs are part-time and temporary by design to a certain degree. However, there is nothing inherent in the nature of research assistant jobs that justifies the low pay, poor working conditions, and burdensome workloads that have long prevailed in the sector.85

While many, though not all, research and teaching assistantship positions feature high hourly wages, when measured on an annual basis they provide very low incomes that many students struggle to live on. In real terms, the average annual wage of post-secondary assistants in Ontario in 2020 (\$23,760) was the same as it was in 2001 (\$23,500).

Despite requiring very specialized academic skills and knowledge, postsecondary assistantships rank among the lowest-paid and most precarious occupations in Canada. Teaching and research assistantships are the new low in terms of the financial devaluation of academic labour.

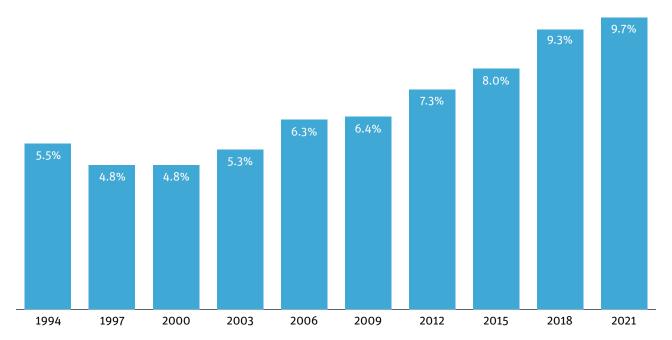
The ranks of precarious full-time faculty are growing

Many precarious faculty tolerate inadequate wages and working conditions in hopes of building the academic career they dream of, yet achieving this dream is becoming more difficult. One indicator of this is that in recent years there has been a steady rise in the share of professors employed on full-time contracts but with a rank below assistant professor, meaning they are not in a tenure-track position. As a result, many are employed with little to no job security, working contract-to-contract from one school year to the next, often bouncing from one university to another in search of their next gig.

In the year 2000, 5.5 per cent of full-time faculty were in this insecure position; by 2021 that percentage had nearly doubled to 9.7 per cent. The last time such a high proportion of full-time faculty in Ontario were not on a tenure track was in 1987.

As with students who have paid more for education and/or taken on more debt, many university staff have paid a price for the collapse of provincial

FIGURE 21 Share of full-time Ontario university teaching staff with rank below Assistant Professor



Note Includes full-time teaching staff with Academic rank/level (1) 'Below assistant professor' and (2) Other (not elsewhere classified).

Source Statistics Canada, Table 37-10-0144-03, "Proportion of full-time teaching staff at Canadian universities, by gender and academic rank," January 23, 2023.

funding to universities, whether in the form of lost wages or through limited career opportunities. They continue to pay it every day.

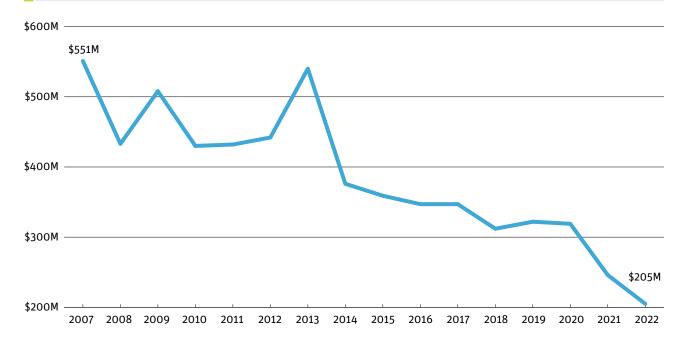
The province has slashed its funding of higher education research

RESEARCH IS FUNDAMENTAL to the university mission and the expansion of knowledge in all fields. When it comes to higher education research (which includes research conducted at universities and colleges), Canada is a recognized leader, with higher education research expenditures ranking in the top five among OECD countries as of 2021.⁸⁶

Other than universities and colleges themselves, which cover about half of post-secondary research expenditures internally, 87 the federal government has long been the most important provider of research funds across Canada, followed by private sources like business enterprises, non-profits and foundations. Generally, provincial governments have been minor players in financing research and development. The government of Ontario has had an especially minor and diminishing role.

When accounting for inflation, provincial funding for research at Ontario universities hit a high of just over half a billion dollars in research revenues (in 2020 dollars) in 2006–07 and has been on a downward path since that time. At the peak, the Ontario government's contribution was comparable with the average provincial share in rest of the country at around 18 per cent of sponsored research revenues. Over the course of 15 years, the Ontario government's share of university research revenues had dwindled to just

FIGURE 22 University real sponsored research revenues (\$2020) from Ontario government



Source Council of Ontario Finance Officers, "Financial Data, Table 2," Council of Ontario Universities.

6.7 per cent, while the remaining provinces were on average still providing close to 18 per cent of research revenues.88

By 2021–22, annual research revenues coming from the Ontario government had been slashed by about \$345 million in 2020 dollars. That's how much annual provincial research funding would have to increase by to reach 2007 levels.

Research funds flowing from the federal government, by far the most important single funder of research across Canada, have been stable or (put another way) stagnant in Ontario for quite some time. Just prior to the pandemic in 2018-19, Ontario universities received \$1.46 billion (in 2020 dollars) in total federal research funds, which was only slightly above the \$1.43 billion received in 2009-2010.

Most federal research funds are distributed by the three federal granting agencies, also known as the Tri-Agencies (the Canadian Institutes of Health Research [CIHR]; the Natural Sciences and Engineering Research Council [NSERC]; and the Social Sciences and Humanities Research Council [SSHRC].

In Ontario, Tri-Agency research funds had a real value (in 2020 dollars) of \$792 million in 2008 and \$915 million in 2022.89 However, nearly all of that

TABLE 6 Real sponsored research revenues (\$2020 millions) of Ontario universities by source of funds

			Value of fund	ing	Share of tot	tal funds
	Source of funds	2007	2022	% change	2007	2022
Federal						
	CIH	342.0	458.3	34.0%	11.4%	15.0%
	NSERC	331.1	313.6	-5.3%	11.0%	10.2%
	SSHRC	109.2	139.4	27.7%	3.6%	4.5%
	Other Federal	557.0	653.1	17.3%	18.6%	21.3%
Non-federal						
	Provincial	550.6	205.3	-62.7%	18.3%	6.7%
	Private donations/grants	895.0	1,100.8	23.0%	29.8%	35.9%
	All other sources	217.8	194.6	-10.6%	7.3%	6.3%
Total research revenues		3,000	3,007			

Source Statistics Canada, Table 37-10-0026-01, "Revenue of universities by type of revenues and funds (in current Canadian dollars)," August 9, 2022.

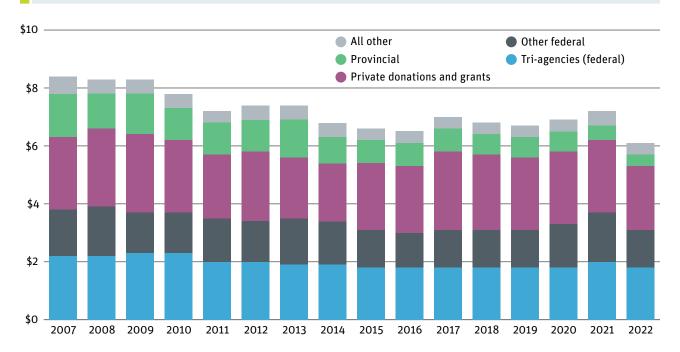
growth can be attributed to temporary boosts to health-research funding at the CIHR related to the COVID-19 pandemic.90 The one-time only pandemic boost notwithstanding, the real value of Tri-Agency research funding has seen little change for many years.91

With funding from both the provincial and federal levels of government trending in the wrong direction, sponsored research revenues have long been frozen in time. Ontario universities reported just over \$3 billion in real sponsored research revenue (in 2020 dollars) in 2007 and nearly the same amount 15 years later in 2021–22, despite significant growth in enrolments and the number of people doing research work in that time.

Private sources of research funding, primarily foundations and nonprofits, substantially increased their financial support for-and influence over-research at universities. Since the decline in provincial research funding began in 2007-08, private research sponsors have added more than \$200 million in sponsored research revenues annually, now committing over one billion in research funding — too little to make up for the loss of funding from other sources, but significant nonetheless.

Each year, the number of people doing research work has grown, while available research funds have remained the same in real terms. This means that the total pool of research funding is being stretched thinner each year. Since 2009–10, the graduate student population has grown by about 50 per cent, and the number of research assistants employed has grown dramatically.92

FIGURE 23 Real sponsored research revenue (\$2020 thousands) of Ontario universities per full-time student



Source Statistics Canada, Table 37-10-0026-01, "Revenues of universities by type of revenues and funds (in current Canadian dollars);" Statistics Canada, Table 37-10-0018-01, "Postsecondary enrolments, by registration status, institution type, status of student in Canada and gender," August 9, 2022; and author's calculations.

> When accounting for both inflation and the growth of the student population, research-supporting revenues in Ontario have been in steady decline for most of the 21st century. The real sponsored research revenues of Ontario's universities have dropped from a high of \$8,400 thousand per full-time student in 2006-07 to just \$6,100 per full-time student in 2021-22. Just under half (48 per cent) of the decrease in per-student research funding can be attributed to the vanishing provincial share.

The "user-pay" era has hit some universities harder than others

AS DISCUSSED ABOVE, Ontario's universities have seen a dramatic shift in the way they are funded. The new funding regime, built on reduced provincial investment and increased reliance on tuition fees, particularly international student fees, has been a profound shock to the system as a whole. However, not all universities have been affected in the same way.

It is clear that great financial inequality exists among universities in Ontario. In a tuition-driven system, universities with geographic and historical advantages in raising tuition revenue may thrive, while their smaller and newer counterparts may struggle. Universities in and around major population centres have much higher potential student populations to recruit from and are much more sought-after destinations for international students. The universities that do well in the current arrangement tend to be among the oldest, as they have had time (more than 150 years, in the case of the University of Toronto and Queen's) to amass both institutional resources and reputation, further enhancing their recruiting efforts. Better-resourced universities are also able to offer more seats in a much wider range of programs and therefore enrol more students. More established and prosperous universities are also home to most of the province's lucrative professional

TABLE 7 Change in real operating revenues (2020 \$millions) from 2018-2022

University	Provincial funds plus domestic tuition	International tuition	Difference
Guelph, University of	-65	12	-53
Carleton University	-60	16	-444
Ottawa, University of	-140	98	-42
Laurentian University	-26	0	-26
Toronto Metropolitan University	-72	47	-25
Wilfrid Laurier University	-36	17	-19
Ontario Tech	-21	7	-14
Brock University	-28	18	-11
Lakehead University	-19	10	-9
Nipissing University	-9	1	-9
Western Ontario, University of	-59	57	-2
OCAD University	-9	15	6
Trent University	-9	16	7
Windsor, University of	-22	31	9
Waterloo, University of	-49	67	18
Queen's University	-23	49	26
Algoma University	-3	35	32
McMaster University	-39	94	55
York University	-51	126	75
Toronto, University of	-205	439	234

Source Council of Ontario Financial Officers, "Financial Data, Table 2" and author's calculations.

programs like medicine, law, or engineering, where each student generates much more revenue than they do in non-professional fields of study.

The combined impact of reduced provincial funding and reduced revenue from domestic student fees has affected every university in Ontario.93 From 2017-18 until 2021-22, universities saw an average real operating revenue loss per university of \$47.2 million (in 2020 dollars) from provincial sources and domestic student fees. Universities responded by recruiting more international students, resulting in an average increase in real international student revenues per university of \$57.7 million (also in 2020 dollars).

As a whole, Ontario's university system took in more new revenue from international students than was lost due to cuts in provincial funds and domestic tuition, but this masks wide variation among individual universities. Overall, nine universities raised more revenue on international student fees than they lost, while 11 raised less than they lost. For those 11 schools, the post-2018 era of user-pay university funding had a negative and often severe financial impact.

The nine universities that came out ahead accounted for over two-thirds of all new international student revenue raised in the province since 2018. If Ontario's universities are left by the provincial government to sink or swim based on how much revenue they can raise from international students, existing inequalities between universities will be greatly amplified.

The University of Toronto, York, McMaster, and Queen's raised more than twice as much in international student fees than they lost through reduced provincial funding and lower domestic tuition fees. At the other end of the spectrum, universities like Nipissing and Laurentian raised very limited revenue from international students and suffered what were, relative to their size, significant revenue losses.

The largest net revenue loss over the four-year period occurred at the University of Guelph, where a \$64.8 million revenue drop and a \$12 million increase in international student tuition resulted in a net loss of \$52.8 million in 2021–22 compared to 2017–18. For universities in this situation, cutting program costs becomes the go-to option; in 2023, the University of Guelph announced it was pausing intake of new students in 16 programs.94

Cost-cutting comes to campus

Per-student spending (in 2020 dollars) is down by \$3,050 over the last two decades

The last two decades have not been easy on university budgets, and administrators have felt increasing pressure to cut costs wherever possible. As a result, after accounting for inflation, average spending by universities (in 2020 dollars) has fallen by approximately \$3,050 per full-time student in 2021-22 compared to where it was in 2000-01 based on data from the Council of Ontario Financial Officers (COFO).

Within the overall reduction, spending dropped most noticeably in three areas: ancillary services; instruction/research; and library services. Meanwhile, spending increased modestly in three areas: general administration, academic support, and student services. Higher spending on the latter was substantially less than lower spending on the former, however, resulting in an overall \$3,050 per-student shortfall.

Ancillary services "typically include bookstores, food services (dining hall, cafeterias, and vending machines), residences, parking, university press, publishing, laundry services, property rentals, university facility rentals, theaters, and conference centres." Reduced spending on these services, which are integral to the day-to-day operation of universities, is likely due

TABLE 8 Real expenditures per full-time student (2020 \$) by Ontario universities

Category	2001	2022	Change	% Change
Total spending	33,730	30,670	-3,050	-9.0%
Instruction/research	19,670	17,780	-1,890	-9.6%
Ancillary services	3,230	1,520	-1,710	-52.9%
Library services	1,230	730	-500	-40.7%
Physical Plant	4,210	4,050	-150	-3.6%
Computing/communications	660	620	-40	-6.1%
Student services (net of student aid)	780	760	-20	-2.6%
External relations	430	450	20	4.7%
General administration	970	1,120	140	14.4%
Academic support	940	1,300	360	38.3%

Source Council of Ontario Financial Officers, "Financial Data, Table 2" and "Table 3: Summary of expense by fund and functional area," Council of Ontario Universities; Common University Data Ontario, "Enrolment, Table 1"; and author's calculations.

to a combination of increased cost recovery through higher fees and lower spending on staffing.

Instruction/research spending is primarily spending on academic staff. The reduction in per-student spending is the result of the combination of a number of factors: a reduction in the number of staff per student; changes in the composition of the teaching and research workforce (i.e., fewer permanent full-time staff, more contract staff); and a reduction in real (inflation-adjusted) wages.

Library spending is down \$500 per student (in 2020 dollars) over the two decades.

When student financial assistance is removed from the equation, perstudent spending on **student services** has stagnated over two decades. Not to be confused with ancillary services, student services include counselling, career guidance, intramural and intercollegiate sports, student transportation services (non-residence), housing help, grants to student organizations, etc.

Spending on academic support also increased. Some aspects of academic support are administrative in nature but unlike ancillary services they directly support instruction and research. Such supports could include, for example, co-op program administration, grants and contracts administration, registrars' offices, audio-visual services and (significantly) student recruitment.

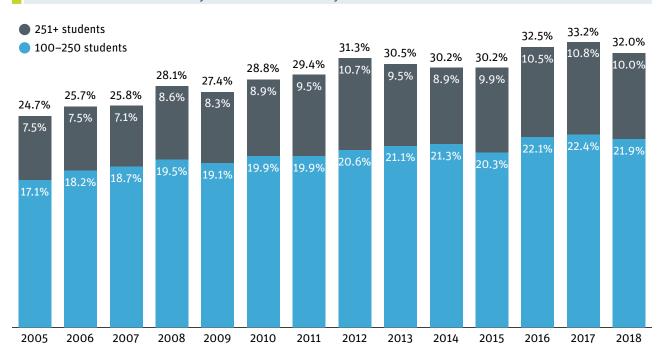
General administration costs increased by \$140 per student (in 2020 dollars) over the two decades.

Spending cuts reduce faculty-student contact, impacting quality

Identifying a clear connection between funding levels (for wages, staffing levels, etc.) and education quality is far from straightforward. Nonetheless, quality is impacted when budget cuts reduce the amount of time faculty and staff can interact with students: "the lack of adequate resources will constrain performance regardless of motivation or intention."95 Faculty time per student disappears as class sizes get larger, reducing opportunities for mentorship and making it that much harder to provide basic supports to students, e.g., providing reference letters.

In a recent statement, the union representing teaching and research assistants at the University of Ottawa drew a direct line between staffing levels and education quality. Local 2626 of the Canadian Union of Public Employees⁹⁶ called on the university to reduce the professor-to-student ratio "to allow professors to better support students through their learning process, for instance, by providing more effective feedback on their assign-

FIGURE 24 Percent of first-year Ontario university courses with 100–250 students and 251+ students



Source Common University Data Ontario, "Table H2A: Undergraduate Class Size by Year Level (Sections)," Council of Ontario Universities.

ments, meeting with students who need extra support, etc." The local also called for lower Teaching-Assistant-to-student ratios "to allow TAs to provide a higher quality, more individualized learning experience for students."

Class sizes for first-year undergraduates have been rising steadily in recent years. In 2005, just under 25 per cent of first-year Ontario university courses had more than 100 students. By 2018, that number was 32 per cent, with one out of 10 first-year classes having more than 250 students. The University of Toronto concedes that many of its first-year classes are attended by between 300 to 500 students.97

When it comes to the undergraduate experience, class size is, of course, one of the key differentiators among universities, and there is wide variation. In 2019, the average first-year class size at McMaster was 128 students, according to a Canada-wide survey conducted by Maclean's magazine; in that survey, the six universities with the highest average first-year class sizes were all in Ontario.98

Funding cuts that reduce personal contact between faculty and students are highly unlikely to improve education quality. They are much more likely to reduce it.

Queen's Park has created a crisis

THE DRAMATIC REDUCTION in funding to higher education in Ontario since the 1990s as a direct result of budget and policy decisions by the provincial government has had a number of significant consequences, all aimed at offloading the cost of university to non-government actors:

- Despite the 2019 tuition fee cut and subsequent tuition freezes for domestic students, Ontario domestic-student tuition fees remain well above the Canadian average.
- Tuition fees for professional programs, which in the 1990s were roughly equivalent to average fees in all programs, have skyrocketed to the point where they are now several times higher. This has significant implications for low-income/low-wealth students' ability to access these programs.99
- As more of the cost burden of paying for higher education falls on students and their families, the rapidly rising cost of education has left Ontario students with average debt levels among the highest in Canada.
- Drastic reductions in student aid in recent years, combined with the elimination of targeted free tuition for low-income students, have

worsened affordability, created financial stress, and outright blocked access to university education for many students. 100

- International students are now paying tuition fees that are five times those paid by domestic students. Universities see international students as cash cows; government sees them as a lucrative export industry.
- Like international students, faculty find themselves increasingly exploited by a system focused on cutting costs. Half of Ontario university faculty are contract workers with low wages and limited job security.
- Program cuts and growing class sizes mean less faculty-student contact in class and in seminars and tutorials, harming the student experience and eroding education quality.
- The province has substantially reduced its financial commitment to cutting-edge research, a core component of the universities' mission.
- Many universities are struggling financially after suffering large revenue losses, which in the current funding framework can only be overcome by raising international student revenue.

A policy regime with so many negative side effects, harming so many people in so many ways, cannot be considered a success. A new approach to funding Ontario's universities is desperately needed.

Performance-based funding won't meet its stated objectives

Aside from cutting university revenues through the reduction and freezing of domestic student fees, the current government's most significant policy move with respect to funding universities is likely its decision (announced in 2019) but only set to be implemented, finally, in the 2023–24 fiscal year) to allocate a portion of provincial monies to universities through "performance-based" funding. The overall goal of this approach is to encourage universities 1) to specialize their programming to concentrate on their particular strengths and 2) to allocate revenues to provincial priorities. A number of these priorities are aimed at improving labour market outcomes, for example by producing graduates with higher incomes; others are aimed at raising revenues from

sources other than the province, e.g., by securing research funds from private sources and the federal government.

Proponents of performance-based funding sometimes suggest that, without it, universities have little incentive to strive for success. This marketbased notion — that no one does anything unless it comes with a financial reward — turns out to be difficult to apply in the university context, where programs and motivations are complex. And as critics have pointed out, basing funding on specific outcomes can result in universities "gaming" the system.101

For example, a 2023 report from Statistics Canada looked at the incomes of racialized university graduates. "Racialized individuals are generally more likely than their non-racialized and non-Indigenous counterparts to pursue a university-level education," the report says. "Despite this, their labour market outcomes are often less favourable."102 Knowing this, a university could decide to reduce its recruitment of racialized students, since their statistically lower incomes after graduation could negatively affect the university's funding. While this may sound implausible or far-fetched, it has already happened elsewhere. Since the U.S. state of Indiana introduced performance-based funding, "universities have become more selective and less diverse while also not improving degree production."103

Regardless of the theory behind it, the most stinging criticism of performance-based funding has been that it simply doesn't accomplish its own objectives. In a 2016 article, Nicholas Hillman reviewed the U.S. experience, where (at that time) 32 states were using performance-based funding. Hillman found that "research comparing states that have and have not adopted the practice has yet to establish a connection between the policy and improved educational outcomes."104

When the status quo works just as well as an expensive, time-consuming alternative in which the only people guaranteed to succeed are the consulting firms working on it, then doing nothing is better than doing the wrong thing. That appears to have been the thinking of the Manitoba government, which in May 2023 scrapped its own plans for performance-based funding.¹⁰⁵ Ontario should do the same.

Performance-based funding implicitly favours universities with more resources over those with fewer. In its 2022–23 budget, for example, the University of Toronto outlined plans to generate \$50 million a year in revenue by developing 3.5 million square feet [approximately 80 acres] of real estate. 106 Those kinds of resources (see Land Acknowledgement, above) are simply not available to other universities. The general lack of resources — not how

they are allocated — is the problem: "If a [university] does not have adequate financial resources to support student success, then it becomes even more difficult to meet performance goals," as Hillman wrote in 2016.107

Guaranteeing provincial funding that enables all universities to achieve high academic standards and positives outcomes for students should be a basic priority of government policy.

Perhaps recognizing the shortcomings of the current funding model, in March 2023 the Ministry of Colleges and Universities announced the creation of a "blue-ribbon panel" to advise the minister on ways "to improve the financial sustainability of the postsecondary sector, to support colleges and universities in developing a skilled workforce, and to promote economic growth and innovation."108 The panel made its report to government in November 2023.

While recognizing the enormity of the financial challenges universities and colleges face, the panel's recommendations to address those problems are modest and do not propose a new relationship between publicly supported post-secondary institutions and their principal funder. In recognition of the effects of inflation, the panel recommends a one-time 10 per cent increase in provincial per-student funding in 2024-25 followed by annual increases of two per cent or the rate of increase in the Consumer Price Index, whichever is greater, through 2026-27. With respect to tuition fees, the panel recommends increasing the financial burden on students by allowing tuition fees for domestic students to rise by five per cent in 2026-27, then by an additional two per cent or the rate of increase in the CPI, whichever is greater, through 2026-27. It also recommends allowing an additional one-time increase of three per cent in professional program tuition for 2024-25.

With respect to OSAP, provincial research funding, and over-reliance on international student dollars to fund universities and colleges, the blueribbon panel makes no recommendations that would impact the status quo in a substantive way. The panel recognizes that "salary and benefit costs in Ontario's universities per full-time equivalent student are lower than in almost every other province," but instead of proposing funding to improve wages in the sector it encourages universities "to investigate how they might become more cost efficient."109

Overall, the panel's recommendations are too modest to address the scale of the problem. A much bolder prescription is called for. One such prescription is discussed below.

Online education and the disruption of in-person learning

REGARDLESS OF WHETHER the province implements the recommendations of the blue-ribbon panel, a massive upheaval is already under way in the delivery of post-secondary education in Ontario. A main driver of that upheaval is online learning, the use of which exploded as a result of the pandemic. And with wages failing to keep up to inflation and housing and food costs at an all-time high, students face financial pressures that may make online learning more worthy of consideration than it was even a few years ago.

Distance learning for university students is not new in Ontario; in fact, Queen's University in Kingston was the first in North America to offer classes by mail, in 1889. 110 A century later, the creation of Contact North in 1986 was an early attempt by the province to provide one-stop shopping for those interested in enrolling in post-secondary education from a remote part of the province. Contact North (studyonline.ca) has been serving remote locations across Ontario ever since, operating on provincial funding of \$12.9 million in 2021-22.

The first signs of a truly provincial strategy for online learning emerged in 2015 with the launch of eCampus Ontario's online portal. The portal itself directs students interested in taking online programs or courses to the universities, colleges, and Indigenous institutes that provide them. As of March 2023, participating universities offered 5,599 courses in 239 programs.

In addition to providing this service, eCampus Ontario is largely responsible for creating the Ministry of Colleges and Universities' Virtual Learning Strategy for the province. The strategy's stated three pillars include: improving the quality and accessibility of online education; facilitating lifelong learning, with a particular focus on short-duration training "to meet the needs of the rapidly evolving labour market"; and building Ontario's capacity to export virtual learning to a global market.111

eCampus Ontario's strategic plan anticipates a "post-pandemic mass shift to hybrid teaching and learning" and aims to support faculty and staff to adapt.¹¹² The provincial government's support for this plan is evident in its budgeting: Ministry of Colleges and Universities (MCU) funding for eCampus Ontario saw a seven-fold increase from \$7.2 million in 2016–17 to \$53.5 million in 2021-22.113

This unprecedented acceleration in spending shows no sign of being a one-time surge related to the pandemic. While the pandemic saw universities rush to adapt to a new reality without in-person learning — essentially trying to replicate the classroom experience — the emergency online learning that occurred then may bear little relation to what online learning looks like in future. As universities increasingly see online learning as fundamental to their mission and work to upgrade students' online experience, the very idea of the university may be entering a period of profound change. According to one view,

Fall 2020 marks a clear inflection point as students, educators, and government leaders alike scrutinize the price and value proposition of higher education through the new lens of traditional classroom versus multiple modes of digital delivery.... This moment is likely to be remembered as a critical turning point between the "time before," when analog on-campus degree-focused learning was the default, to the "time after," when digital, online, career-focused learning became the fulcrum of competition between institutions.114

With respect to competition, universities will increasingly see themselves competing for students not only with other universities but with for-profit corporations as well. "With the popularity of e-learning, competition from non-traditional organizations investing in large-scale digital delivery threatens a portion of traditional institutions' markets," eCampus Ontario's

strategic plan says. "With students realizing they can learn from anywhere, institutions will need to show why their campus experience is different."115

The basis of the unfolding competition between online and in-person learning is clear enough. For those with suitable equipment, adequate space, and Internet access, online learning is accessible from anywhere and eliminates the need to commute or move. Students with full-time jobs and/ or family responsibilities may be able to learn at their own pace and at times of their choosing. Those seeking specific skills or "micro-credentials" (based on short-term training in a particular employment-related competency) will increasingly find what they are looking for online. The possibility of lower fees, including those charged by for-profit corporations outside the university system, may also make online learning more attractive. 116

All that being said, pandemic-era predictions of a rapid and revolutionary technology-driven transformation of universities, focused primarily on making students "job ready" have (largely) not come to pass. Students, it appears, today want to be on campus every bit as much as they did in the past. In his (satirically titled) lecture, "The university is dead: COVID-19 killed it," British academic Hugh Martin offers some insight:

The campus and the university is so much more than the sum of its parts. Why do students want to come back? Why do those of us that work enjoy being on campus? Why did we enjoy being students, all of us who had that opportunity, that amazing opportunity, to go to university ourselves? Because we met people, we engaged with people, we debated with people, we argued with people. We met people from different backgrounds, different races, different colours, different genders, different sexualities, different behaviours, different languages. We learned on campus about ourselves. 117

In late 2020, a group of students at York University in Toronto attempted to summarize the advantages of in-person learning, citing: a sense of community and friendship; the presence of social cues to aid understanding; greater motivation for studying; better ability to stay focused; more privacy than studying at home; a sense of routine and discipline; and the enjoyment of "just being on campus."118

In the years ahead, all indications are that online learning will attract massive investment, both through public funding (as with eCampus Ontario) and through private funding by educational corporations or other investors. In the case of the latter, such privatization of advanced education should be of great concern to all who care about education quality. Private companies that enter the market by providing university courses must find profit somewhere; they can be expected to extract profit through increased use of technology for more and more aspects of learning (e.g., "ChatBots") and are highly likely to reduce reliance on personal interaction between faculty and students.

In terms of education quality, this is simply the wrong approach. As with in-person learning, the quality of online education depends on the support of dedicated faculty who have adequate time to deliver courses and interact directly with students.

While Ontario's universities have many competitive advantages — including top-quality curriculum and instruction and the vibrancy of in-person learning and campus life – their success at maintaining their own appeal to learners will depend on how much they invest in it. Likewise, the ability of all students to share in the authentic university experience will depend in large part on the level of financial support, of universities and students alike, from Queen's Park.

Back from the brink: restoring public funding to Ontario's universities

NO PROVINCE IN Canada has been more zealous than Ontario when it comes to using sustained underfunding to restructure its university system. As discussed above, universities have responded to underfunding in numerous ways, but their ability to do so – at least without distorting their long-held values and purposes or making major cuts to programs—is not unlimited. With dramatically lower provincial funding for university education than any other province, Ontario's universities really are on the brink. The crisis is upon us.

Governments invest in what they value

Governments invest in what they value, and successive governments have failed to invest in universities.

This is a sharp departure from the economic strategy that built Ontario. In an open free-market economy, sub-national governments have only limited options when it comes to boosting economic development. Two of the main ones are: 1) investing in physical infrastructure; and 2) investing in education and training to develop the current and future workforce.

Following the approach of Ontario governments since the Great Recession, the current government is investing heavily in physical infrastructure. According to the latest provincial budget, provincial spending on physical infrastructure in 2023–24 will increase by \$2.9 billion — a 14 per cent increase over last year. In 2024–25, it will increase by \$4.0 billion – a 17 per cent increase over this year. While this year's budget did include spending on training, particularly for skilled trades, the extra spending in 2023–24 amounts to an increase of \$230 million — not remotely on the same scale as physical infrastructure spending.¹¹⁹

By boosting investments in physical infrastructure but not in education and training—"human capital"—Ontario's economic strategy is flying on one wing.

The restructuring of the university system has come at great cost to students, their families, university staff, the communities they live in, and society as a whole. There is an alternative to this chaos: to invest public dollars into the system and revitalize the university values of free inquiry, critical thinking, and concern for the greater good. At a time like this, when so many crises confront us, we must build the economy but we would be naïve to rely on market solutions to take us where we need to go.

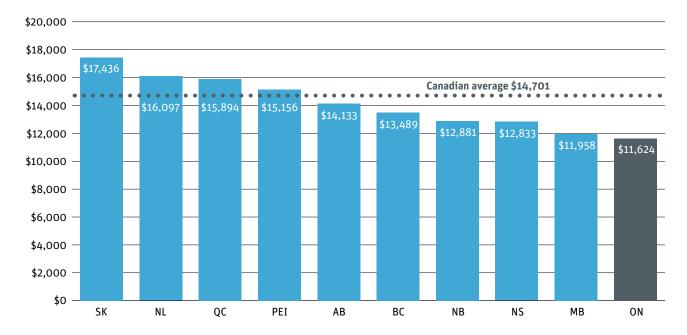
The greatest obstacle to increased provincial funding for universities is not money, but ideology, and the belief that if governments withdraw funding from public services, market forces will produce optimal outcomes, not only for individuals but for society as a whole. This belief, which has occupied a central place in public policy discussions around the world since the beginning of the neoliberal era more than 40 years ago, has failed to deliver the better world its supporters promised. It has produced unimaginable wealth – for some – while at the same time driving up income and wealth inequality and bringing us to the brink of climate catastrophe.

In Ontario, high rates of poverty, housing that is unaffordable for a quarter of the population, and overflowing emergency rooms in our hospitals are just a few of the symptoms of a system that exalts private profit as the highest measurement of policy success while ignoring basic human needs.

Ontario spends less per capita on public programs than any other province

Despite years of relentless attacks on their funding which have put Ontario universities at the back of the pack compared to all other provinces, it is

FIGURE 25 Per-capita provincial program expenditures (\$ current) in 2021



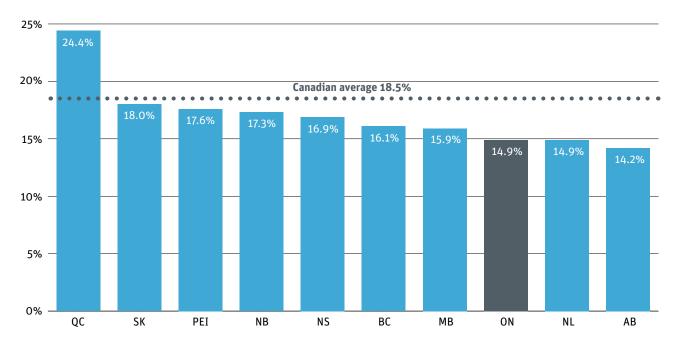
Source Statistics Canada, "Table 10-10-0017-01 Canadian government finance statistics for the provincial and territorial governments." November 22, 2022; Statistics Canada, "Table 17-10-0005-01 Population estimates on July 1st, by age and sex," December 21, 2022; and calculations by Sheila Block in "What if Ontario aimed to be average?" The Monitor, January 16, 2023.

> difficult to say that provincial governments in Ontario (past and present) have singled universities out for special treatment. The fact is, Ontario's per capita spending on public programs *overall* is typically lowest in Canada. Over the five-year period from 2017–2021, per capita program spending in Ontario averaged \$2,437 less than the average of the other Canadian provinces; increasing spending to the Canadian average would have boosted overall Ontario program spending by \$36.1 billion in 2021. 120

> Not surprisingly, Ontario also lags behind other provinces when it comes to collecting revenues to pay for program spending. In 2021, as measured by "own-source" revenues — revenues collected by the province, not received as transfers from the federal government — Ontario collected a smaller share of provincial GDP than any province except Alberta. Bringing Ontario's ownsource revenue collection up to the average of the other provinces would have brought in an additional \$34.5 billion that year.121

> Ontario would have to boost both program spending and own-source revenue collection by roughly 20 per cent just to be average among Canadian provinces.

FIGURE 26 Own source revenues as share of provincial GDP in 2021



Source Statistics Canada Table 10-10-0017-01; Statistics Canada, Table 36-10-0222-01, "Gross domestic product, expenditure-based, provincial and territorial, annual," November 8, 2022; and calculations by Sheila Block in "What if Ontario aimed to be average?" The Monitor, January 16, 2023.

Rather than raising money for program spending, however, the current government is methodically dismantling its own ability to collect revenues. Government tax cuts, tax credits, and fee cuts brought in since 2018 are reducing annual provincial revenues by at least \$8.2 billion a year. 122 Among recent changes, the elimination of license plate fees for non-commercial vehicles in the province was notable mostly in that it received considerable media attention. This single change reduced provincial government revenues by an estimated \$1.1 billion a year.

Underfunding of public services and programs pushes them into the marketplace, where a customer's ability to pay what the market will bear determines how resources are allocated. When the resources in question are health care, adequate housing, or university education, this has serious negative implications for social equality and, ultimately, democracy.

In this regard, the challenge of achieving adequate provincial funding for Ontario's universities is inseparable from the challenge of achieving adequate provincial funding for public services generally.

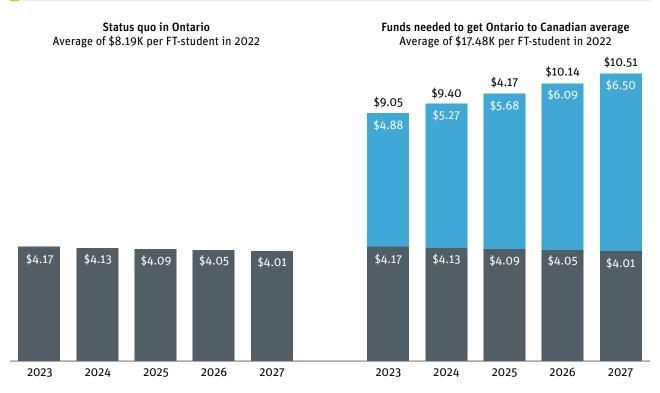
That being said, there is something very special about universities. As an investment in people, in economic development, and even our survival as a species, they offer an immense return.

The province must adequately fund its public universities

The government of Ontario must increase its funding to public universities. That is the central recommendation of this report.

Given the economic and social value of universities, and the extent to which Ontario's economy is driven primarily by the skills and wisdom of its people, there is no obvious reason for Ontario to be anything but first among Canadian provinces when it comes to university funding. As a medium-term and modest goal, the province should aim to bring provincial funding of

FIGURE 27 Projected total revenue from provincial government (current \$ billions) to Ontario universities



Note See Appendix for information on forecast calculations.

universities up to the average per-student spending of the other Canadian provinces.

Doing so would cost approximately \$4.9 billion in the first year of implementation — an amount roughly equal to Queen's Park's planned increased in spending on physical infrastructure in 2024-25.123

With so many competing demands, how this money might be allocated, and in what proportions, is a complex question that calls for broad consultation with all stakeholders in the university sphere. That said, the information in this paper points to some obvious priorities: to travel further down the path of reconciliation with Indigenous peoples; to do more research and education to address the multiple crises of our time, like the climate crisis and rampant inequality; to reduce tuition fees to ensure that every student who wants to attend university is financially able to do so; to end the exploitation of, and the over-reliance on, international students; to improve wages and working conditions for contract faculty and staff, including by creating more full-time permanent positions; to strengthen smaller universities so they can survive as pillars of their communities; and to reduce class sizes to improve the student experience.

The province must reinvest in student financial assistance

When it comes to post-secondary funding, student assistance from the province is a special case: it funds students, not universities. Given the student debt crisis, it is vital that the province restore levels of funding for student financial assistance through the Ontario Student Assistance Program (OSAP) to the amounts made available in 2018-19. It is equally important that this renewed financial assistance be made available to students mostly or entirely

TABLE 9 Proposed new provincial spending on OSAP, current \$billions

Year	New funds	Diff. from status quo (2019–20)
2024	2.40	1.12
2025	2.47	1.18
2026	2.53	1.25
2027	2.59	1.31

Note See Appendix for information on projected figures.

as non-repayable student grants instead of repayable student loans. Doing so would increase support for students by \$1.12 billion in 2024, rising to \$1.31 billion in additional funding by 2027. As the Ontario government does not release OSAP data in a timely manner, the suggested additional funds are relative to the last reported amount in 2019–20 (\$1.28 billion).

The province must develop sustainable exit strategies for the user-pays system

Tuition fees paid by domestic (\$3.5 billion) and international (\$3.3 billion) students in 2021–22 amounted to over 58 per cent of university operating revenues. In moving away from a higher education system based on public funding, many students and their families have paid a high price: rising education costs, mounting education debts, harm to physical and mental health, reduced wealth potential, greater financial risk and instability, and the normalization of widespread student poverty.

Beyond the negative impacts on students, the overall financial health of the system has not benefitted from this arrangement in the long-term. Given excessive over-reliance on international student fees to fund university operations, the prospects for the current system going forward in the next decade are not bright. There is still a considerable risk for a revenue crisis of much greater magnitude in the event of a major interruption to the flow of international students into Ontario universities.

To remedy this situation, the province should immediately commit to working with key system stakeholders to develop a long-term strategy for moving away from a tuition-driven system to one based on full public funding. Ontario's user-pays system of higher education took decades to develop and surely will not be easily or quickly replaced with a better alternative. To do so will take time, planning, imagination, and political will.

By reducing domestic student fees without any corresponding increase in public funding to replace the lost revenue, the province has created a revenue crisis for the university system.

To avoid this situation going forward, the province must commit to offsetting any future student fee reductions with sufficient public funds to compensate for reduced revenues.

Failing to move forward on these priorities is a betrayal of all Ontarians and the future of our province.

At this critical time of rapid change, Ontario must do everything it can to maximize its potential—and that of every Ontarian—to navigate both the present and the future. Adequately funding Ontario's public university system is a critically important investment that benefits Ontarians today and for generations to come.

The return on that investment is many times greater than the cost.

Appendix

Forecasting alternative funding and spending levels

The purpose of this Appendix is to provide details on the underlying forecasts used to propose alternative levels of various aspects of provincial post-secondary spending. In general, this paper is not a technical exercise in forecasting or projection, as the purpose of the forecast is merely to provide a reasonable starting point for considering alternate levels of funding required to stabilize the province's university sector. All forecasted figures are in current dollars.

All data processing, analysis, modeling, and forecasting were done using the R (4.1.2) programming language, along with the Tidyverse (2.0) family of software packages, the tsibble (1.3.3) package for handling time series data, and the fable (0.3.3) package for time series modeling and prediction.

In all cases, baseline forecasts have been made using the assumption that status quo trends in the funding of Ontario's post-secondary sector will continue as they have over the next few years.

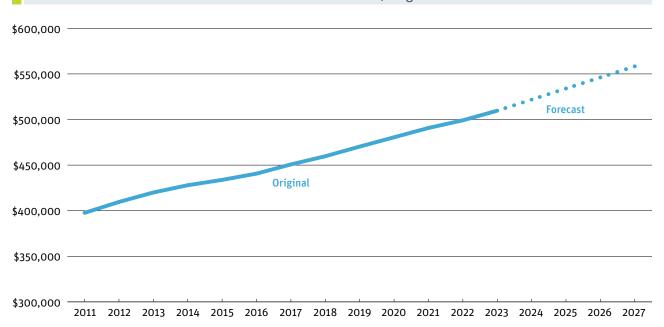
Forecasted values (full-time enrolment, per-student revenues) were modeled based on the existing trend in the data using an auto-ARIMA model and forecasted through the 2022-23 to 2026-27 period. Aggregate provincial government funding totals were calculated using forecasted enrolment and per-student revenue figures.

Alternative funding for OSAP was modeled using a TSLM (time-series linear model) as a function of the trend in the data up until 2018–19 and

TABLE A1 Baseline scenarios for producing alternative spending levels (current \$)

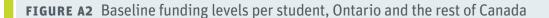
Category	2023-24	2024-25	2025-26	2026-27
Provincial revenue per FT student (Rest-of-Canada)	18,021	18,290	18,559	18,828
Provincial revenue per FT student (Ontario)	7,917	7,661	7,417	7,183
Full-time enrolment at Ontario universities	521,836	534,004	546,173	558,342
Total provincial government university revenue	4,131,369,210	4,091,067,030	4,050,764,851	4,010,462,671

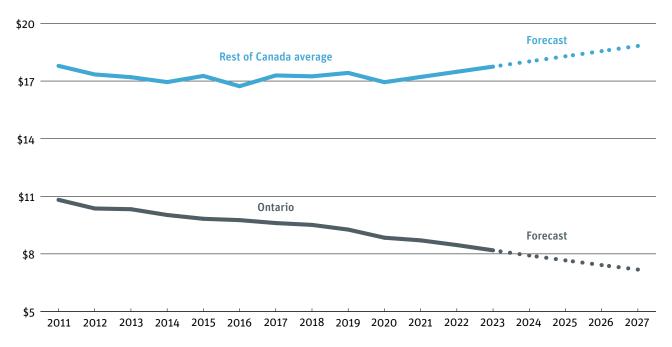
FIGURE A1 Full-time enrolment at Ontario universities, original vs. forecasted values



Source Common University Data Ontario, "Enrolment, Table 1: Summary of Enrolments in Ontario Universities, 2012-13 to 2021-22," Council of Ontario Universities, May 2022. Council of Ontario Finance Officers, "Financial Data, Table 2", Council of Ontario Universities.

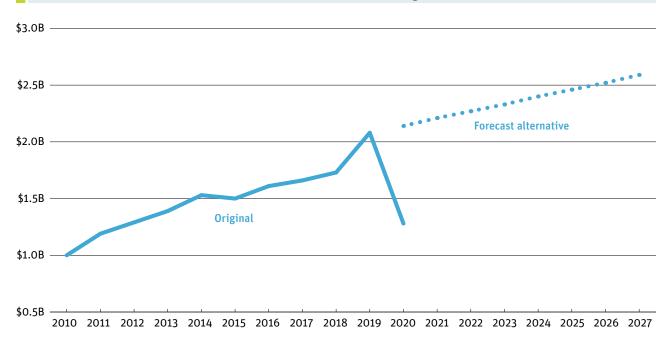
full-time enrolment, then forecasted through the 2019–20 to 2026–27 period. Given extreme variance in the student aid data, no baseline forecasts were produced for comparison.





Source Statistics Canada, Table 37-10-0026-01, "Revenues of universities by type of revenues and funds (in current Canadian dollars)". Statistics Canada, Table 37-10-0018-01, "Postsecondary enrolments, by registration status, institution type, status of student in Canada and gender," August 9, 2022.

FIGURE A3 Total OSAP disbursements in current dollars, original vs. forecasted alternative values



Source Common University Data Ontario, "Student Financial Assistance, Table 1: Ontario Student Assistance Program (OSAP), Federal and Provincial Repayable Assistance Issued, 2010-11 to 2019-20", Council of Ontario Universities. "Table 2: Ontario Student Assistance Program (OSAP), Provincial Non-Repayable Assistance Issued, 2000-01-2019-20," Council of Ontario Universities.

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- 2 Jamie Brownlee, Academia, Inc.: How corporatization is transforming Canadian universities (Halifax and Winnipeg, Fernwood Publishing, 2015), 4.
- 3 A complete listing of Ontario's public universities is available at the Ontario Universities' Application Centre at https://www.ouac.on.ca/university-links/. Note that the Royal Military College of Canada has degree-granting authority under Ontario law but is funded by the Government of Canada and is not included in analyses in this report.
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- 8 Ibid., 67.
- **9** Ibid., 11.
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- 19 George Ross, Financial Statement of the Treasurer of the Province of Ontario (Toronto: Printer to the King's Most Excellent Majesty, April 29, 1903), 9.
- 20 Robert Nixon, 1990 Ontario Budget (Toronto: Queen's Printer for Ontario, April 24, 1990), 57.
- 21 In its 2023 Ontario Budget submission, the Council of Ontario Universities stated that provincial government funding represented 30.9 per cent of total operating revenues. The 24 per cent figure used here is a percentage of total university revenues, including operating revenues plus revenues intended for special purposes and trusts, sponsored research, ancillary enterprises, and capital spending, but not including endowments. The province contributes to all these revenues to varying degrees (except endowments), but more than 90 per cent of provincial funding goes to universities' general operations. Ontario's funding of universities remains last among the provinces regardless of the measure used. For context, the table below compares total university revenues and total university operating revenues for Ontario in current dollars in 2021–22.

	Total Revenues	Operating Revenues	Total Revenues by Source as % of Total	Operating Revenues by Source as % of Total
Federal	\$1,776,736	\$38,438	10.2%	0.3%
Provincial	\$4,224,608	\$3,761,671	24.2%	31.0%
Municipal	\$14,767	\$7,397	0.1%	0.1%
Other provinces	\$8,694	\$4	0.0%	0.0%
Foreign	\$58,664	\$1,322	0.3%	0.0%
Tuition and other fees	\$7,786,996	\$7,786,992	44.6%	64.2%
Total donations	\$812,315	\$48,264	4.7%	0.4%
Total grants	\$1,224,901	\$98,735	7.0%	0.8%
Investment	\$20,071	-\$58,565	0.1%	-0.5%
Other	\$1,528,904	\$447,611	8.8%	3.7%
Total revenues	\$17,456,656	\$12,131,869	100.0%	100.0%

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 - (1) Not all student debts are taken to pay for university and might be incurred at any level of study. A minor share of total student debts is likely owed by college students, though their average debts tend to be much lower than those of university students. Ontario's college sector exists in the same policy environment and would have been largely subjected to the same trends impacting affordability and student debt as the university side of the sector. (2) Not all Canadian student debts owed by Ontarians were necessarily incurred in Ontario because of inter-provincial mobility, meaning that people can take their debts with them from province to province. However, Ontario has not been a significant source or receiver of inter-provincial migration in recent decades and the numbers of internal migrants are small compared to the total population, so the impact of such mobility on aggregate debts owed is likely very minimal. See Statistics Canada, Centre for Demography, Demographic Estimates Program, Table 17-10-0015-01. (3) The implication of (2) is that Ontario government post-secondary policy is not the sole factor in determining the amount of student debt owed by people living in households in Ontario, but it is certainly the most dominant factor at play.
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