

MEET BRITISH COLUMBIA'S RESEARCH UNIVERSITIES



FUNDING FOR SUCCESS POST-SECONDARY EDUCATION IN BC

Brief 2 of 6 in a series by the Confederation of University Faculty Associations of British Columbia (CUFA BC)

Meet British Columbia's Research Universities

Part of the "Funding for Success: Post-Secondary Education in BC" Series 2022

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INTRODUCTION

Post-secondary education is strong and has a proud history of contributing to the social, cultural, and economic growth of British Columbia. This success is testament to the visionary decisions of past governments and mature institutions, with the dedication of those who have laboured inside our institutions of higher learning. It is crucial to recognize the incredible work that people bring to the success of BC's post-secondary education.

Faculty, staff, and students are the backbone of the academic mission, serving as stewards of the knowledge economy. Supporting the human infrastructure of post-secondary institutions will be critical to fulfilling the province's needs for high quality, comprehensive education. Investing in research and students will pay dividends long into the future.

There are 71,000 workers in BC's public post-secondary institutions, 41,000 of which are at five research universities in the province: Royal Roads University (RRU), Simon Fraser University (SFU), University of British Columbia (UBC), University of Northern British Columbia (UNBC), and University of Victoria (UVic). Four of these institutions operate under the University Act, while RRU operates under its own Royal Roads University.

BC's research universities and the faculty who work within them are a powerhouse of technological, social, and economic innovation. Faculty are major contributors to the research and understanding of our geopolitical times, and are skilled educators training future generations of students.

The University of Victoria recently released a report outlining its economic contributions, which include adding \$3.3 billion in income to the provincial economy (a value approximately equal to 1.2% of the total gross provincial product) and supporting 40,595 jobs across the province.

Today, post-secondary institutions are asked to play an even greater role in the future of this province. Institutions have taken on roles and responsibilities for the advancement of knowledge in traditional and novel professions, graduate education, equity and inclusion, Truth and Reconciliation, and expanded wrap-around supports for students. There is more to come.

The BC Labour Market Outlook Report anticipates more than one million jobs will be created over the next decade, 80% of which will require post-secondary education.

The education that will best fulfill the province's needs is offered at BC's research universities where high quality and comprehensive education confer the skills and talents for tomorrow.

Together, these five research universities employ tens of thousands of British Columbians, and serve 69% of the province's undergraduate students and 95% of the graduate students of the 142,000 total approximate student body. Faculty are working to close the gap on the province's needs for a skilled, educated workforce.



MEET THE UNIVERSITIES

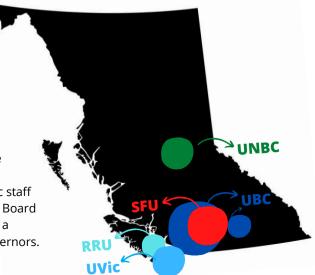
University of British Columbia (UBC) was established in 1908 and is BC's largest and oldest university still in operation. Its two main campuses are located in Vancouver and Kelowna. The UBC-Okanagan campus in Kelowna was opened in 2005. UBC is a comprehensive research and teaching university that consistently ranks among the top universities in Canada and internationally. The university focuses on global citizenship, sustainability, and research, and the benefits of community experiences. UBC enrols approximately 37% of the province's students, including many international students. UBC employs 4000 unionized faculty (including professors, academic librarians, instructors, lecturers, sessionals, and other academic staff) plus non-academic staff and administrators. UBC is governed by a bicameral system in which the Board of Governors is responsible for the business management of the university, while the Senate oversees academic affairs.

Simon Fraser University (SFU) opened in 1965 in Burnaby, opening campuses in Vancouver in 1980 and Surrey in 2002. It is BC's second-largest university in terms of number of undergraduate and graduate students. It consistently ranks among Canada's top comprehensive research and teaching universities, boasting exceptional community engagement in its research practices. SFU has followed a trend toward innovation, with focus on investment in technology, as well as the institutional commitment to international engagement. SFU enrols approximately 14% of the province's students and employs approximately 1200 unionized faculty (including professors, academic librarians, instructors, and other academic staff) plus sessionals, non-academic staff, and administrators. SFU's academic governance structure is bicameral, with the Board of Governors responsible for business matters and the Senate responsible for academic matters.

University of Victoria (UVic) was established in 1963 and is located in BC's capital city, Victoria. UVic is a comprehensive and research-intensive university, focusing primarily on Indigenous research, culture, global studies and social justice, environment, health and life sciences, and physical STEM subjects. UVic serves a valuable role in fulfilling quality education and research needs on Vancouver Island. UVic enrols approximately 11% of the province's students, including a significant international student complement. UVic employs approximately 900 faculty (including professors, academic librarians, instructors, and other academic staff) plus sessionals, non-academic staff, and administrators. UVic's governance is bicameral, consisting of a Board of Governors and Senate, who oversee business and academic affairs respectively.

University of Northern British Columbia (UNBC) was established in 1990, expanding BC's access to high quality education to northern and remote parts of the province. UNBC is a research-intensive university, with research and courses primarily focusing on the environment and people in northern BC. Its academic focus is primarily undergraduate, but it also hosts a growing number of graduate programs. The strategic development vision for UNBC focuses on connection to the local community and industry/labour market, as well as environmental initiatives and Indigenization of the academy. UNBC enrols more than 2% of the student population in BC and employs approximately 240 unionized faculty (including professors, academic librarians, instructors, and other academic staff) plus sessionals, non-academic staff, and administrators. UNBC's governance system is bicameral, consisting of a Board of Governors and Senate, which oversee business and academic affairs respectively.

Royal Roads University (RRU) was established in 1995 and is located in Hatley Park near the capital city of Victoria. It is a primarily graduate blended university with a focus on applied and professional programs and research offered through a blended delivery model of residencies and online instruction. RRU leads the province in delivering virtual learning around the world, adopting an individualized and local community focus with strong ties to business and labour markets. RRU exists under its own legislation, the *Royal Roads University Act*, but which relies heavily on referencing the *University Act* in areas of duplication. RRU enrols approximately 1% of the provincial student body, many of whom live outside the province. RRU employs seventy-five unionized core professors and academic librarians, plus over 600 non-unionized sessional faculty as well as non-academic staff and administrators. RRU's governance system is unicameral, consisting only of a Board of Governors with members appointed by the provincial government. Instead of a traditional senate, there is an academic council that can advise the Board of Governors.





FUNDING | ACCOUNTABILITY | RESEARCH

FUNDING

Research universities in British Columbia are funded by a historical block-grant funding structure, which includes three primary sources:

- · an operating grant (base funding)
- BC Knowledge Development Fund (research funding for STEM disciplines)
- · capital funding

The research universities account for slightly less than four-fifths (78.1%) of all provincial operating grant funding for universities, about four-fifths (80.1%) of all provincial university funding, and about four-fifths (85.1%) of total sponsored research funding.

The early years for research universities were marked by unstable operating funding, and included funding cuts. These cuts resulted in fewer resources on campus and layoffs or the downgrading of permanent employment into term-limited, precarious contracts, like those of contract faculty and outsourced food and cleaning services. These cuts threatened the quality of education at the institutional level.

Furthermore, some favouritism was observed, with cuts unevenly distributed. For instance, education, nursing, and social work faced the largest cuts at UBC compared to other institutions. The years since 2017 have been marked by greater investment in post-secondary education by the provincial government.

What is most notable in the histories of the BC research universities is how interconnected political changes, economic shifts, and funding policies are to the success of post-secondary education in the province. There is a trickle-down effect of funding cuts and budget priorities. Decisions about how and where allocations are made need to be done with a critical eye for how they will interact with already-existing elements in the sector.

BC's research universities perform exceptionally well in terms of maximizing learning and research outcomes, and maintaining programming in spite of the year-over-year unpredictability in public funding allocations.

ACCOUNTABILITY

All public post-secondary institutions are subject to an annual accountability framework conducted through the Ministry of Advanced Education and Skills Training. The **Institutional Accountability Plan and Report (IAPR)** is based on five government-set system objectives: **capacity**, **access**, **efficiency**, **quality**, and **relevance**.

Post-secondary institutions measure and report on their performance on these objectives using indicators set by the Ministry and the institutions themselves, including total student spaces / enrolments, credentials awarded, Aboriginal student spaces, sponsored research funding, undergraduate student satisfaction indicators, and unemployment rates of bachelor degree graduates.

Some performance indicators are common to a number of universities, and some are unique. **UBC**, **UNBC** and **UVic** include enrolments in nursing and allied health programs, while **UBC** also notes enrolments in medical school. **RRU** has indicators for financial health performance, greenhouse gas emissions performance, and Continuing Education headcounts / enrolments. Overall, BC's research universities perform exceptionally well on both their own and government performance indicators.



Implementing policies with novel or punitive performance indicators (such as in the case of performance-based funding initiatives seen elsewhere in Canada) has the potential to exacerbate already existing disparities. This is especially the case for vague measures like 'educational outcomes' or 'student knowledge' and other outcomes that are hard to measure.



FUNDING | ACCOUNTABILITY | RESEARCH

THE CASE FOR RESEARCH

There is special value to research. Research generates knowledge that transcends national, social, and geopolitical boundaries. It continues to be one of the most important sources of creative solutions to the pressing challenges we face as a society. Research activities at universities contribute to new discoveries and innovation, and create new understandings of our experiences in the world.

RESEARCH SUPPORT

Research is primarily supported through funding sources like the provincial Knowledge Development Fund (KDF) and the federal Tri-Council agencies (Canadian Institutes of Health Research (CIHR), Natural Sciences and Engineering Research Council (NSERC), and Social Sciences and Humanities Research Council (SSHRC)). Other research funding comes from public-private partnerships as well as non-profit foundations. Research performance is a generally accepted indicator of quality and productivity, and is assessed through peer review at the disciplinary level.

INSTITUTIONAL SUPPORT

Post-secondary institutions provide both *direct* supports for research (*i.e.*, internal research and travel funds; start-up grants for new faculty; supplies, materials, and equipment) and *indirect* supports (i.e., building space and utilities; university libraries; hazardous waste disposal; campus security; liability insurance; legal and administrative services, *etc.*).

FACULTY AND RESEARCH

Faculty at BC's research universities typically allocate 40% of their work to conducting research. They also supervise graduate and undergraduate student research, employ students to work on research projects, collaborate with private industry, act as public intellectuals, and engage in public civic engagement.

The ideas that flow out of BC's research universities are the lifeblood of our citizenry and democratic landscape, our intellectual life, and our economy.

GOVERNMENT PRIORIZATION

Shifts in government priorities have resulted in targeted funding growth in science, technology, engineering, and mathematics (STEM) disciplines, with fewer resources allocated to social sciences, humanities, and fine arts. Canadian university enrolment trends are shifting toward engineering and health programs, which are more costly to deliver. Providing adequate resources to support teaching and research at BC's mature research institutions is critical in all disciplines and at all academic levels (including faculty and graduate / undergraduate student research).

GRADUATE STUDENTS AND RESEARCH

Graduate students and their research are a necessary part of the infrastructure that supports undergraduate education in BC's universities. Student research at the graduate and undergraduate levels develop the skills needed to meet labour demands of the BC Labour Market Outlook report.

THE VALUE OF RESEARCH

BC's research universities build the province's research strength to compete and innovate in the scientific, social scientific, and technical domains, delivering a competitive edge in contemporary economic and social contexts. Research infrastructure requires people and resources, and their contributions result in novel solutions to pressing issues facing society. The research function of the university is crucial to provincial and local economies, which in turn benefit the lives of all British Columbians. The University of Victoria alone boasts \$3.3 billion in added income to the BC economy, and \$1.9 billion of that was in the Greater Victoria.* That's the equivalent of 25,224 jobs in the region, or one out of every nine jobs, that are supported by the research activities of the institution and its students. It's impressive. It's also only one of five research universities in the province.

* Source: https://www.uvic.ca/_assets/docs/ uvic_regional_factsheet_1920_final_accessible.pdf



FACTS & FIGURES

Student Enrolment is Strong in BC Research Universities



BC's five research universities serve 69% of the province's undergraduate students and 95% of the graduate students of the 142,000 total approximate student body. Student demand continues to grow with higher enrolments year over year, even throughout the disruptions of the pandemic.

Figure 1. Share of Student Enrolment in Research Universities vs Other Institutions, 2020

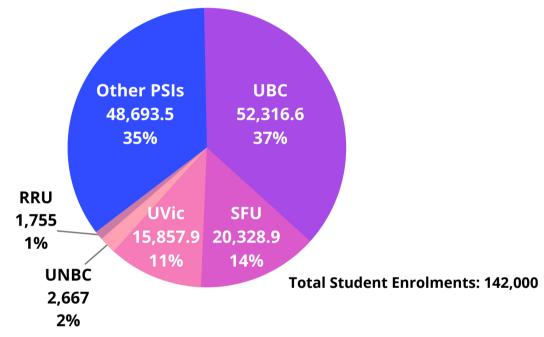
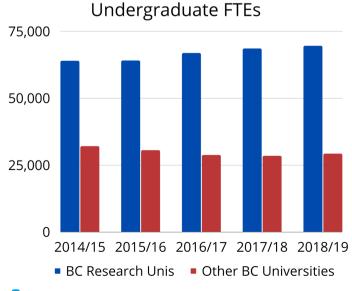
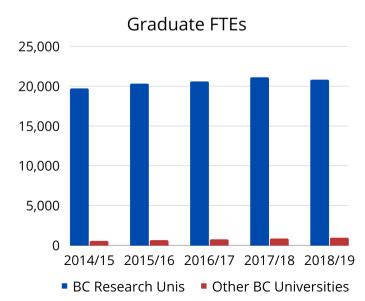


Figure 2. Undergraduate and Graduate Student FTEs, Research Universities and Other BC Universities







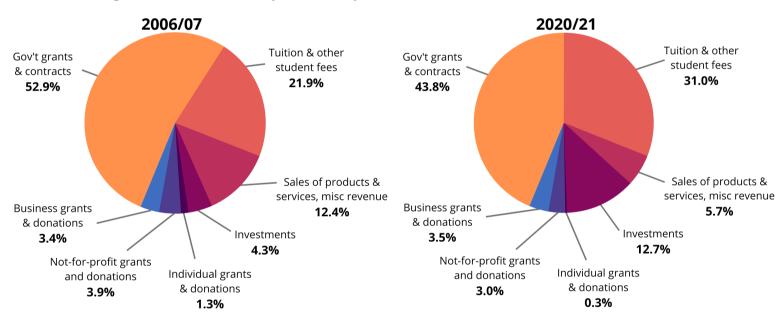
FACTS & FIGURES

Private funding sources now surpass public funding as share of university funding



Funding at BC's universities have shifted from predominantly public sources to predominantly private sources as a share of university funding. The long-term shift reached an important milestone in 2013/14, when these funding sources surpassed federal, provincial and other government grants and contracts as a share of university funding.

Figure 3. Share of University Revenues by Source in BC, 2006/07 and 2020/21



While total revenues for universities in Canada grew over the last 15 years, not all of these revenues are able to pay for increases in operating costs. Sponsored research, capital, endowment, and special purpose and trust funds are **restricted funds**, while **unrestricted funds** include both general operating and ancillary funds. National sources note that about 84% of spendable funds at Canadian universities come from grants and tuition. Further, government grant income fell in real terms since 2010/11 while revenues from tuition grew by 61.8% across Canada.

University expenditure has shifted away from instruction and research toward non-academic costs



Expenditure in BC universities and degree-granting colleges has shifted, with decreased spending on instruction, libraries and non-specialized research (64.4% of total operating funds in 2006/07 to 58.9% in 2020/21). Spending has increased, meanwhile, for student services, administration, and computing and technology, and spending on external relations has more than doubled in relative terms since 2006/07 (1.4% to 2.9% of operating expenditures).



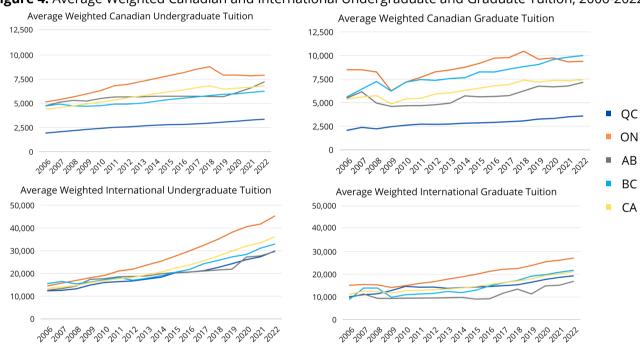
FACTS & FIGURES

Tuition growth has become the primary method of increasing university revenues



Tuition growth is particularly notable as a method that Canadian universities are using to increase their revenues. BC has a 2% cap on annual domestic tuition fee increases, which generally has paced inflation, but no such cap exists for international students. Annual BC tuition rates average \$6,919 for Canadian students, while international students pay an average of \$30,480.

Figure 4. Average Weighted Canadian and International Undergraduate and Graduate Tuition, 2006-2022

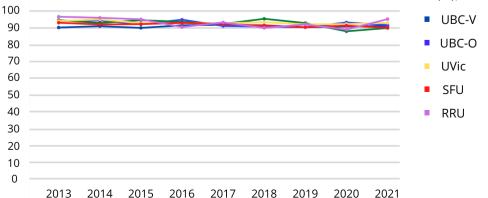


Students are satisfied with the quality of education at BC's research universities



Student satisfaction ratings held at an average of 92% for BC's research universities. Despite the challenges facing faculty and staff at BC's research universities, this rating is a strong testament to the quality of the programs and people on campus who support students throughout their schooling.

Figure 5. Student Satisfaction with Education at BC's Research Universities (%), 2013-2021





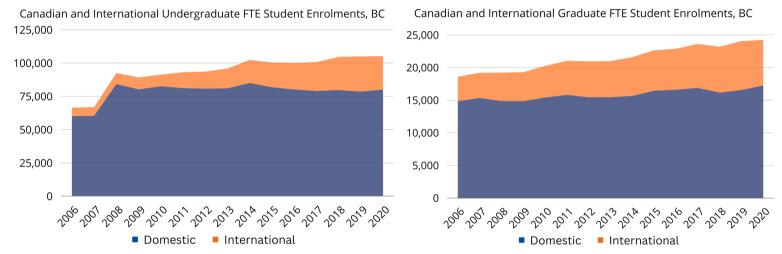
FACTS & FIGURES

International student enrolments have doubled while other enrolments show modest increase



For four out of five research universities, out-of-province Canadian enrolment has increased from 9.7% in 2006/07 to 12.5% of all enrolments. International student enrolments more than doubled in this time, from 9.3% to 21.7%.

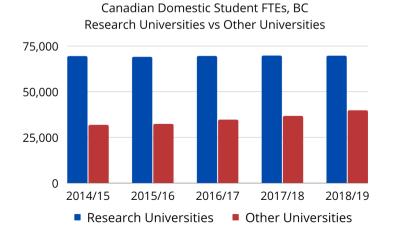
Figure 6. Canadian Domestic and International Undergraduate and Graduate FTE Enrolment in BC Research Universities

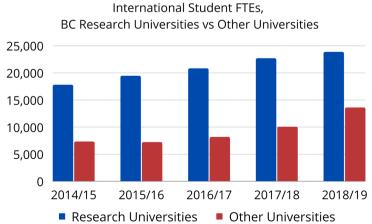




The majority of enrolments in Canada are domestic citizens and permanent residents, although in recent years international students have driven growth in FTE enrolments. This trend is even more pronounced in British Columbia. Across Canada, international students are at about one-fifth (22%) of Canadian student FTE enrolments, while in British Columbia they make up about one-third (33%).

Figure 7. Canadian Domestic and International Student FTEs, Research Universities and Other BC Universities, 2014-19







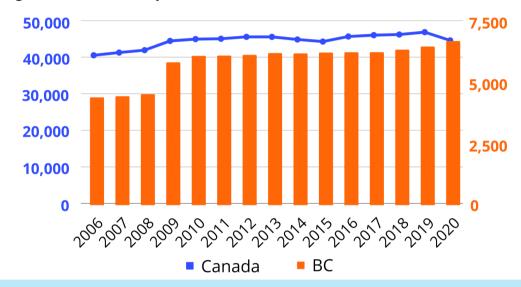
FACTS & FIGURES

Faculty hiring is not proportionate to student enrolments



Faculty hiring in BC's research universities has not kept pace with student enrolments. Faculty members are doing more with fewer resources while class sizes continue to rise. Institutions are increasingly relying on contract faculty to teach students.

Figure 8. Full-time faculty at universities, Canada and BC, 2006 to 2020

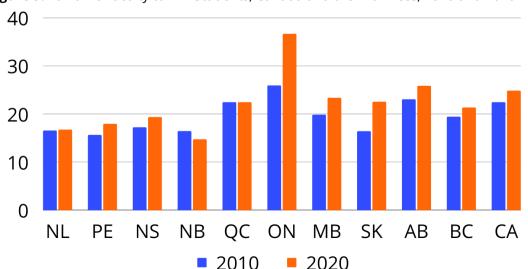


Full-time faculty to FTE student ratios are increasing, and so are class sizes



Full-time faculty to FTE student ratios in British Columbia grew by nearly 14% since 2010, from 19.4 FTE students per full-time faculty member in 2010/11 and rising to 22.3 in 2020. This was a growth rate (9.7%) slightly below the national average (which grew by 10.3%). Class sizes have increased as a result.

Figure 9. Full-time Faculty to FTE Students, Canada and the Provinces, 2010 and 2020





About CUFA BC



The Confederation of University Faculty Associations of British Columbia (CUFA BC) represents more than 5,500 faculty members (professors, lecturers, instructors, and academic librarians) through their unionized faculty associations at five research-intensive and doctoral universities in British Columbia: University of British Columbia, University of Northern British Columbia, University of Victoria, Royal Roads University, and Simon Fraser University.

For over fifty years, CUFA BC has promoted the value of post-secondary education and research in British Columbia. We advocate for the interests of members on a variety of issues affecting post-secondary education, including academic freedom, collegial governance, labour rights, and funding.

In this series:



















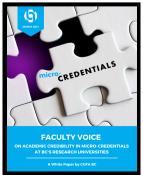








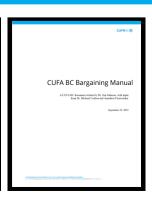
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