



Institutional
Accountability Plan
and Report

SFU

2016-17
Reporting Cycle





Simon Fraser University
8888 University Drive
Burnaby BC V5A 1S6
Canada

July 14, 2017

tel 778.782.4644
fax 778.782.4860

Honourable Linda Reid, MLA
Minister of Advanced Education
PO Box 9080, Stn Prov Govt
Victoria, BC V8W 9E2

Board Chair
Julia Kim

Dear Minister Reid,

Chancellor
Anne E. Giardini, O.C., Q.C.

We are pleased to present Simon Fraser University's Institutional Accountability Plan and Report for the 2016-17 reporting cycle. The document was reviewed and approved by the senior administration of SFU and by our Board of Governors on June 29, 2017.

President and Vice-Chancellor
Andrew Petter

We welcome the opportunity to work with the Ministry pursuant to our common mandates to provide the highest quality education, research, and community service to the citizens and communities of British Columbia.

Members
Michael Cordoba
Jimmy Dhesa
Jill Earthy
June Francis
Anke Kessler
Christopher Lewis
Martin Mroz
Fiona K. Robin
Patty P. Sahota
James B. Stewart
Oliver Zihlmann

As Board Chair and President, we accept accountability for this plan and look forward to its implementation.

Sincerely,

A handwritten signature in black ink, appearing to read 'Julia Kim', written in a cursive style.

Julia Kim
Chair, Board of Governors

A handwritten signature in black ink, appearing to read 'Andrew Petter', written in a cursive style.

Andrew Petter
President and Vice-Chancellor

attachment

Table of Contents

Letter from the Board of Governors.....	1
1. Executive Summary	4
2. Institutional Overview	7
2.1. SFU Faculties	8
2.2. Governance	9
2.2.1. Board of Governors	9
2.2.2. Senate	10
3. Strategic Direction and Context	11
3.1. SFU’s Strategic Vision/Mission	12
3.2. SFU’s Core Themes and Strategic Goals	13
3.2.1. Core Theme 1: Engaging Students	13
3.2.2. Core Theme 2: Engaging Research	13
3.2.3. Core Theme 3: Engaging Communities	14
3.2.4. Fundamental Theme: Leveraging Institutional Strength	14
3.3. Underlying Principles	15
3.4. Integrated Planning Framework	16
3.5. Ministry Objectives for Post-Secondary Education	17
4. Quality Assurance	18
4.1. Accreditation	19
4.1.1. Institutional Accreditation	19
4.1.2. Quality Assurance Process Audit	19
4.1.3. Academic Accreditation/Recognition	20
4.2. External Reviews	21
4.2.1. Academic Departmental External Reviews	21
4.2.2. Administrative Departmental External Reviews	23
5. Planning and Operational Review	25
5.1. Engaging Students	26
5.1.1. Teaching and Learning Focus	26
5.1.2. Educational Goals	26
5.1.3. Experiential and Work Integrated Learning	27
5.1.4. Lifelong Learning	27
5.1.5. Student Experience and Success	28
5.1.6. Student Services	29
5.1.7. Aboriginal Education	30
5.1.8. International Students	31
5.1.9. English as an Additional Language Supports and Services	32
5.1.10. Enrolment	32
5.2. Engaging Research	34
5.2.1. Strategic Research Plan	34
5.2.2. Research Excellence	35

5.2.3.	New Research Infrastructure	37
5.2.4.	Major Research Awards	38
5.2.5.	International Collaborations	39
5.2.6.	SFU Innovates	40
5.3.	Engaging Communities	42
5.3.1.	Community Engagement—Goals, Objectives, and Commitments	42
5.3.2.	Community-Engaged Scholarship	43
5.3.3.	Place-Based Initiatives	46
5.3.4.	Celebration and Recognition	50
5.3.5.	Alumni	50
5.4.	Leveraging Institutional Strength	51
5.4.1.	Faculty and Staff	51
5.4.1.1.	SFU as an Employer	52
5.4.1.2.	Faculty Recruitment and Retention	52
5.4.2.	Finance	53
5.4.2.1.	Budgets	53
5.4.2.2.	Investments	54
5.4.2.3.	Capital and Infrastructure	55
5.4.2.4.	Financial Statements	56
5.4.3.	Information Technology	56
5.4.4.	Library Services	57
5.4.5.	Sustainability at SFU	58
5.4.6.	Programming for the Future	58
5.4.6.1.	Student-Focused Programming	58
5.4.6.2.	Planned Growth in the South Fraser Region	59
6.	Major Strategic Risks	60
6.1.	Risk Management	61
6.1.1.	Deferred Maintenance	61
6.1.2.	Pension Funds	62
6.1.3.	Recruitment and Retention of Skilled Faculty and Staff	62
6.1.4.	Maintenance of Critical Information Technology Systems	63
7.	Performance Reflected by Ministry Measures	64
7.1.	Student Spaces	65
7.2.	Credentials Awarded	66
7.3.	Aboriginal Student Spaces (FTE)	67
7.4.	Student Satisfaction with Education	68
7.5.	Student Assessment of the Quality of Instruction	69
7.6.	Student Assessment of Skill Development	70
7.7.	Student Assessment of the Usefulness of Knowledge and Skills in Performing Job	71
7.8.	Unemployment Rate	72
7.9.	Sponsored Research Funding	73
7.10.	Summary of Performance	74
8.	Conclusion	75
9.	Appendix	77

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Executive Summary



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1. EXECUTIVE SUMMARY

The Institutional Accountability Plan and Report analyzes SFU's performance against the Ministry of Advanced Education's performance measures to determine if SFU is meeting its obligations. The report provides a review of the University's achievements related to the goals, objectives, and targets in the Ministry's Institutional Accountability Framework.

SFU's Vision/Mission is to be the leading engaged university defined by its dynamic integration of innovative education, cutting-edge research, and far-reaching community engagement. Three strategic goals guide planning at all levels within the institution:

- 1) To equip students with the knowledge, skills, and experiences that prepare them for life in an ever-changing and challenging world.
- 2) To be a world leader in knowledge mobilization building on a strong foundation of fundamental research.
- 3) To be Canada's most community-engaged research university.

Total student Full-Time Enrolment (FTE) has grown by 58.1% from 2001-02 to 2016-17, with the number of undergraduate domestic students growing by 33.7%, undergraduate international students by 484.9%, and graduate students by 63.7%. However, since 2008-09, domestic student enrolments have leveled off due to the provincial government fixing its funding for such seats, and most growth since then is due to a sharp increase in international student enrolment. The fixed number of funded seats, together with the population growth in the South Fraser Region of BC, has created an increased demand for domestic student spaces, and has forced the entry level GPA to rise. In this constrained environment, SFU is strategically directing its future growth toward programs that meet the urgent needs of BC's growing economy, programs such as engineering science, information technology, creative technology, health sciences, and environmental studies while continuing to support excellence in the established liberal arts, sciences, and professional programs.

SFU is committed to addressing regional inequalities in education. The successful and continued development of its Surrey campus gives one of the fastest growing cities in BC access to a major research university. However, demand in the growing South Fraser Region is still higher than supply, and the University is ready to deliver new programs at Surrey. In November 2016, the federal and provincial governments announced \$90 million in funding to support the construction of a \$126 million, five-storey, 16,000-square-metre Sustainable Energy and Environmental Engineering building to expand SFU's Surrey campus. This building will house a proposed Energy Systems Engineering program to support the clean tech and sustainable energy sector.

In addition to the ongoing development of the Surrey campus, the new Innovation and Residence Centre at the Vancouver campus is complete. To address the diverse needs of learners in all regions, SFU continues to develop distributed options for learning, including online and distance education, as well as blended models.

Neither tuition fees, nor the government grant, have increased sufficiently to cover inflationary and growth pressures and, of necessity, SFU has taken steps to manage these financial pressures. The University is reducing expense budgets, using cash reserves, and making strategic budget allocations to differentiate the rate of growth among programs. This efficient fiscal management means SFU currently has one of the lowest overheads of any of the comprehensive universities. That said, the University has supplemented revenues by enrolling increasing numbers of international students, which strain physical and human resources, as well as student support services. SFU is optimizing the use of information technology to improve efficiency and effectiveness of its services.

The growing deferred maintenance issue on the Burnaby campus is also a major concern. To make better use of the space available and apply new pedagogies, as well as for environmental reasons, SFU is considering and implementing major renovations and/or replacement needs. With the help of the province, the University has started to renew or replace existing facilities and infrastructure, but the backlog is heavy, and much work still needs to be done.

This Institutional Accountability Plan and Report required by the Ministry of Advanced Education illustrates SFU's responsiveness to student, employer, and regional economic needs and its continued support of the priorities identified in *Skills for Growth: British Columbia's Labour Market Strategy to 2020* and *The BC Jobs Plan*. The University continuously meets and exceeds the Ministry measures, and is helping make BC a preferred choice for both domestic and international students while also expanding research, scientific discovery, and commercialization, as it proudly engages the world.



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Institutional Overview



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2. INSTITUTIONAL OVERVIEW

From its beginning in 1965, SFU has redefined the academic status quo with a commitment to innovate rather than replicate, to embrace bold initiatives, and to reach out to the wider community. In five decades, SFU has earned an international reputation for setting standards in innovative teaching, research, athletics, and community involvement.

This tradition of innovation continues today. Not only has SFU become the first university outside of the United States to achieve full membership in the National Collegiate Athletic Association, or NCAA (2011), it is also the first Canadian research university to be accredited by the Northwest Commission on Colleges and Universities (2015).

SFU is one of Canada's premier comprehensive universities and BC's second largest research-intensive university. It boasts three campuses in three adjacent cities within the Lower Mainland of BC: the original campus atop Burnaby Mountain; the Vancouver campus, which includes Harbour Centre, the Segal Graduate School of Business, the Morris J. Wosk Centre for Dialogue, the Goldcorp Centre for the Arts, the Bill Reid Gallery, the performance and study complex and visual arts studio space at 611 Alexander, and the Innovation and Residence Centre on West Hastings; and a campus located in an award-winning tower in Surrey's Central City area.

SFU employs 977 continuing faculty, 1,877 administrative and support staff, and enrolls 35,364 full-time and part-time undergraduate and graduate students in eight Faculties.

2.1. SFU Faculties

SFU offers academic programs in eight Faculties. The founding Faculties in 1965 were Arts (now Arts and Social Sciences), Education, and Science. Since then, other Faculties have been added: Business (1981), now the Beedie School of Business; Applied Sciences (1985); Health Sciences (2004); and the Faculties of Communication, Art and Technology and of Environment (both in 2009).

[Faculty of Applied Sciences](#)

[Faculty of Arts and Social Sciences](#)

[Beedie School of Business](#)

[Faculty of Communication, Art and Technology](#)

[Faculty of Education](#)

[Faculty of Environment](#)

[Faculty of Health Sciences](#)

[Faculty of Science](#)

Table 1: Credentials Awarded

Faculties	Credentials Awarded 2015-16					
	Undergrad Degrees	Post-Bac Diplomas	Certificates	Master's Degrees	PhDs	Graduate Diplomas and Certificates
Faculty of Applied Sciences	404	4	2	62	38	n/a
Faculty of Arts and Social Sciences	1,928	16	365	197	38	1
Beedie School of Business	765	n/a	50	208	6	63
Faculty of Communication, Art and Technology	621	10	n/a	56	12	1
Faculty of Education	510	50	11	288	40	61
Faculty of Environment	189	5	61	43	8	3
Faculty of Health Sciences	266	n/a	n/a	56	3	n/a
Faculty of Science	569	1	127	84	58	n/a

Source: SFU Institutional Research and Planning

2.2. Governance

In 1963, BC's *University Act* created SFU and prescribed its governance system, which includes a Chancellor, a Convocation, a Board, a Senate, and Faculties. The Board of Governors and the Senate are the principal governing bodies, with the *University Act* defining the scope and limits of each one's authority, membership, and responsibilities. Amendments to the *University Act* have not significantly altered either the structure or roles of these bodies. The *University Act* also grants SFU the authority to award its various degrees.

2.2.1. Board of Governors

The Board of Governors is SFU's senior governing body, constituted under the *University Act*. The powers of the Board of Governors are "without limitation to its broad and overarching power to manage, administer, and control property revenue, business, and affairs of the university." Further, the *Act* states that a university's Board of Governors is authorized "to do and perform all matters and things that may be necessary or advisable for carrying out and advancing . . . the purposes of the university." SFU's Board of Governors has 15 members, the majority having no employment, contractual, or financial relationship with the University. Governance structures, including lines of authority, roles, and responsibilities for principal governing bodies and their members, are clearly defined, broadly communicated, and well understood.

All University policies come to the Board for approval or for information. Policies affecting SFU's academic governance are approved by Senate and reviewed by the Board's University Relations Committee to fulfill the requirements of the *Act*, and to ensure Senate remains the body with primary responsibility for the University's academic governance.

2.2.2. Senate

Responsible for the University's academic governance, the University Senate is concerned with all important matters that bear on teaching and research, including the development of new initiatives, the formation of priorities, and the consideration and approval of academic policies.

The Senate has many statutory powers, among them: the ability to identify and conduct its business; to elect a Vice-Chair; to establish committees and delegate authority to them; to set admission and graduation criteria; to award scholarships, bursaries, and academic prizes; to recommend to the Board the approval, or conclusion, of academic programs; to set the terms of affiliation with other post-secondary (or secondary) institutions; and to establish a standing committee of final appeal for students facing academic discipline.

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Strategic Direction and Context

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3. STRATEGIC DIRECTION AND CONTEXT

3.1. SFU's Strategic Vision/Mission

Following an extensive consultation process within and beyond the University, the SFU Vision/Mission was developed and launched in February 2012. The Vision/Mission, which focuses on SFU's strengths and aspirations as an engaged university, represents the culmination of a year-long consultation process that included thousands of students and hundreds of SFU faculty, staff, and alumni as well as community representatives. The Vision/Mission was reaffirmed in June 2016.

SFU's Vision

To be the leading engaged university defined by its dynamic integration of innovative education, cutting-edge research, and far-reaching community engagement.



Students Research Communities

ENGAGING STUDENTS

To equip students with the knowledge, skills, and experiences that prepare them for life in an ever-changing and challenging world.

ENGAGING RESEARCH

To be a world leader in knowledge mobilization building on a strong foundation of fundamental research.

ENGAGING COMMUNITIES

To be Canada's most community-engaged research university.

The full details of the SFU Vision/Mission can be found at: <http://www.sfu.ca/engage.html>

3.2. SFU's Core Themes and Strategic Goals

3.2.1. Core Theme 1: Engaging Students

Goal - To equip students with the knowledge, skills, and experiences that prepare them for life in an ever-changing and challenging world.

Strategies

- SFU will foster supportive learning and campus environments.
- Combining the best traditions of academic and teaching excellence, SFU will provide students with diverse and transformative learning opportunities that enable them to gain the knowledge, critical capacities, research skills, and civic understanding required to become engaged global citizens and to thrive and adapt in demanding and dynamic environments.
- Students will have opportunities to participate in advanced research, thereby sharing in the labour and joy of creating and applying knowledge while acquiring the skills for lifelong learning.
- Students will have access to an unparalleled selection of experiential learning opportunities that allow them to apply knowledge, to grow as individuals, to engage with diverse communities, to develop entrepreneurial skills, and to refine their sense of civic literacy.

3.2.2. Core Theme 2: Engaging Research

Goal - To be a world leader in knowledge mobilization building on a strong foundation of fundamental research.

Strategies

- SFU will leverage its fundamental research strengths, including interdisciplinary research, close community connections, and partnerships and collaborations to become a global leader in research mobilization.
- SFU will support and promote the full continuum of research, from the fundamental generation of knowledge, through the dissemination of that knowledge within the academic community and beyond, to the application of transformative ideas for the benefit of society.
- SFU will promote research excellence, supporting and encouraging all researchers, including undergraduates, graduate students, faculty, staff, and community partners who assist the research mission.
- SFU will seek opportunities to transfer the results of its research to the broader society, including policy-makers, civil society leaders, and the community.

3.2.3. Core Theme 3: Engaging Communities

Goal - To be Canada's most community-engaged research university.

Strategies

- SFU will maintain and expand its community connections as an integral part of its academic mission, creating opportunities for practical and experiential learning, informing and inspiring research, and contributing to its relevance and success.
- SFU will develop partnerships and maximize the capacities of its three campuses to enhance the social, economic, environmental, and cultural well-being of communities both locally and globally. The University will build respectful and mutually beneficial community relationships.
- SFU will meet the lifelong learning needs of students, alumni, and the community, and will respond with innovative programs and learning opportunities for academic, personal, and professional development.
- SFU will be BC's public square for enlightenment and dialogue on key public issues, and will be known as the institution to which the community looks for education, discussion, and solutions.

3.2.4. Fundamental Theme: Leveraging Institutional Strength

To achieve SFU's goals, the University must ensure that it builds institutional strength to support its activities. This institutional strength includes recruitment and retention of excellent faculty and staff, recruitment of high-quality students, and development of supporting structures such as Student Services, IT capabilities, and the Library.

3.3. Underlying Principles

In addition to the core themes and fundamental theme, SFU commits to the following underlying principles:

Academic and Intellectual Freedom: SFU will be an open and inclusive university whose foundation is intellectual and academic freedom.

Diversity: SFU will foster a culture of inclusion and mutual respect, celebrating the diversity and multi-ethnic character reflected amongst its students, staff, faculty, and our society.

Internationalization: SFU will value international knowledge, understanding and engagement, and will seek to engender an active global citizenship among its students, faculty, and staff, and to ensure that SFU is an engaged partner and contributor on the international stage.

Respect for Aboriginal Peoples and Cultures: SFU will honour the history, culture, and presence of Aboriginal Peoples. The University will welcome and nurture Aboriginal students and seek opportunities for greater representation of Aboriginal Peoples amongst its faculty and staff.

Supportive and Healthy Work Environment: SFU will recognize, respect, and value the essential contribution made by staff and faculty, and will seek to build and sustain a work environment that is equitable, supportive, rewarding, and enjoyable.

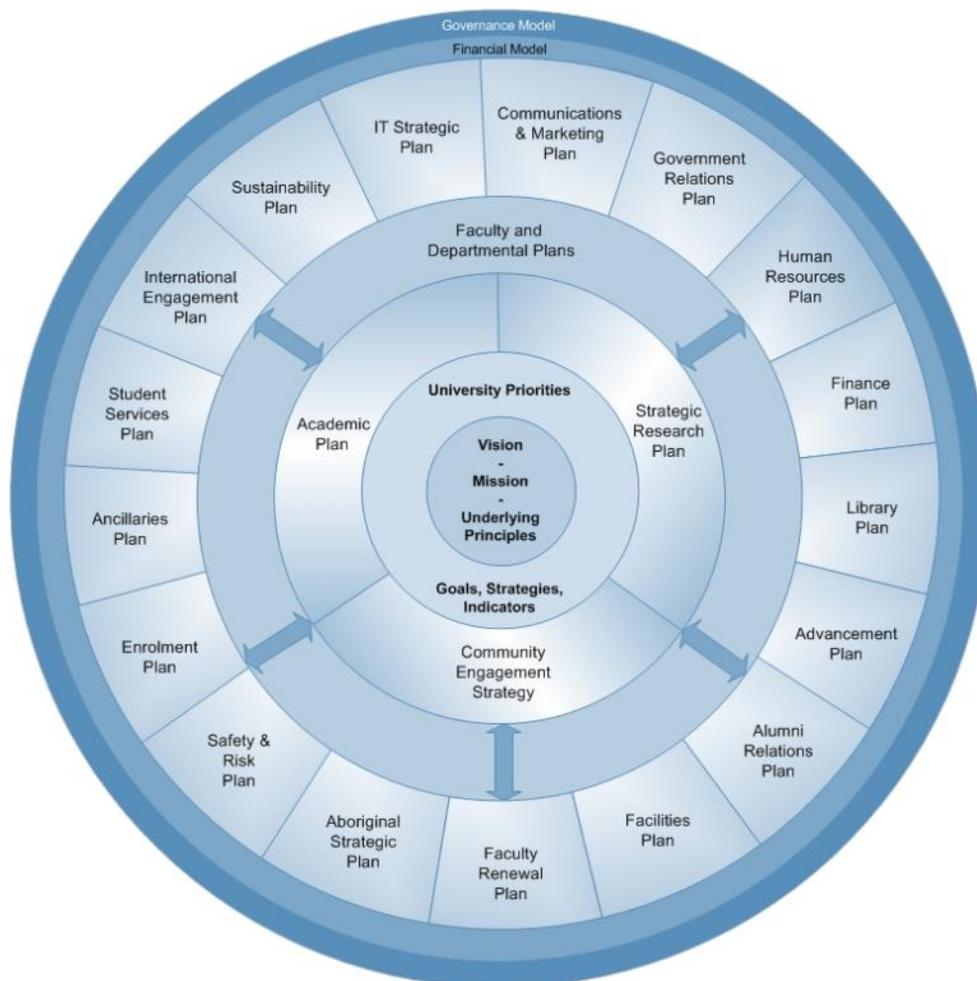
Sustainability: SFU will pursue ecological, social, and economic sustainability through its programs and operations. Through teaching and learning, research, and community engagement, SFU will seek and share solutions. In its own operations, it will develop and model best practices, from minimizing its ecological footprint, to maximizing its social health and economic strength.

3.4. Integrated Planning Framework

The Integrated Planning Framework is the result of a consultative administration process derived from the Vision/Mission. The Framework informs future initiatives, allocation of resources, and measurement of success. It guides all institutional planning activities and includes mechanisms for monitoring progress and achievements. As a dynamic document that reflects the University response to its changing environment, it is updated annually.

The “Planning Wheel” below (Figure 1) illustrates how all operational plans integrate to form the University’s Planning Framework. The Academic Plan, Strategic Research Plan, and Community Engagement Strategy, which represent core theme planning, form the main linkages between the Vision/Mission and the Faculty Plans, Departmental Plans, and functional plans. All plans are constrained by the two outer circles—Financial Model and Governance Model.

Figure 1: University Planning Framework (“Planning Wheel”)



3.5. Ministry Objectives for Post-Secondary Education

SFU's Alignment with Ministry Goals and the Accountability Framework

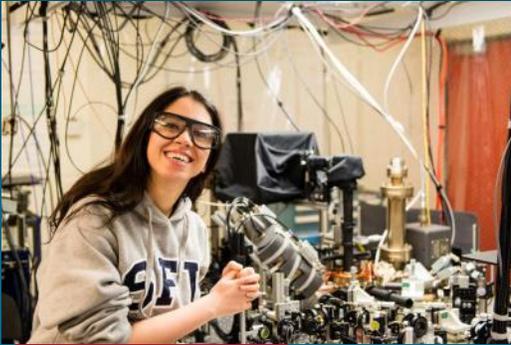
Table 2: SFU's Strategic Alignment with and Support for the Ministry's Strategic Goals

SFU STRATEGIC GOALS and OUTCOMES	Ministry of Advanced Education Goals*		
	GOAL 1 Ensure students are supported to achieve their education, employment, and training goals.	GOAL 2 Ensure a high-quality post-secondary education system that provides BC with a global competitive advantage.	GOAL 3 An education and training system that maximizes social and economic benefits and supports British Columbia's diverse communities.
Engaging Students			
Students gain the knowledge to complete degree requirements.	✓	✓	✓
Students acquire skills necessary in an ever-changing and challenging world.	✓	✓	✓
Students apply knowledge in the workplace or further studies.	✓	✓	✓
Engaging Research			
Research is at a high-quality level.	✓	✓	✓
Research is mobilized through partnerships/collaborations with external partners.	✓	✓	✓
Research is integrated into learning and teaching.	✓	✓	✓
Research investment is leveraged to drive innovation and transfer of technology for the benefit of society and the economy.	✓	✓	✓
Engaging Communities			
SFU is engaged locally.	✓	✓	✓
SFU is engaged globally.	✓	✓	✓
SFU is engaged with its alumni.	✓	✓	✓

The matrix above shows that all of SFU's goals both complement and support three goals of the Ministry of Advanced Education.

* Source: <http://www.bcbudget.gov.bc.ca/2017/sp/pdf/ministry/aved.pdf>

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Quality Assurance

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4. QUALITY ASSURANCE

4.1. Accreditation

4.1.1. Institutional Accreditation

Because Canada has no equivalent quality assurance organization for post-secondary institutions, SFU sought, and was granted, formal accreditation from the Washington-based [Northwest Commission on Colleges and Universities \(NWCCU\)](#),* effective September 1, 2015. The NWCCU is one of seven independent regional agencies officially sanctioned by the United States Department of Education to evaluate post-secondary educational quality and institutional effectiveness.

Benefits of institutional accreditation include:

- Accreditation provides an accepted and broadly recognized set of best-practice standards. By demonstrating accountability through improved institutional assessment and evaluation, SFU's reputation for academic quality is enhanced.
- Accreditation helps establish clearer benchmarks for assessing educational goals, helps smooth the progress of curriculum reform, and helps benefit students' learning experiences.
- International accreditation enhances the value of an SFU degree for alumni abroad.
- Accreditation simplifies relationships with US institutions, including collegiate sports associations.
- The value of accreditation is not limited to quality assurance alone; it also fosters public confidence in an institution's ability to fulfill its stated mission and goals.

4.1.2. Quality Assurance Process Audit

In 2015, the Minister of Advanced Education tasked the Degree Quality Assessment Board with developing and implementing periodic quality assurance process audits of internal program review policies and processes at public post-secondary institutions. A Quality Assurance Audit Committee (QAAC) was formed to undertake the task. The Committee's Terms of Reference state that the audits should ensure that rigorous, ongoing program and institutional quality assessment processes have been implemented. Institutions are to be audited every eight years.

The QAAC developed Quality Assurance Process Audit Framework and Assessment Criteria, which were approved by the Ministry. A two-year Quality Assurance Process Audit pilot was launched in January 2017. SFU was the first to undergo an audit.

* SFU reports submitted to the NWCCU can be found at: <https://www.sfu.ca/vpacademic/accreditation/>

The University prepared a 72-page [Quality Assurance Process Audit Report](#) that adhered to a Ministry of Advanced Education template. The report was followed by a site visit by three Canadian peer academics/reviewers, culminating in an assessment report of SFU's best practices in quality assurance, with specific attention on the University's external program review processes. The report commended SFU for its high-quality work and commitment to quality assurance. It also made some minor recommendations, to which SFU responded with a plan of action. A follow-up to the audit review will occur in approximately one year.

4.1.3. Academic Accreditation/Recognition

SFU has a number of programs that are accredited and/or recognized by relevant professional governing bodies and associations. Professional associations, industry, and the Faculties and departments themselves demand reviews so as to maintain the highest possible standards for their respective programs.

Table 3: SFU's Current Specialized or Programmatic Accreditation and/or Recognition

Faculty	Degree or Program	Accrediting Agency
Applied Sciences	Engineering Science	Canadian Engineering Accreditation Board
Applied Sciences	Mechatronic Systems Engineering	Canadian Engineering Accreditation Board
Arts and Social Sciences	MA and PhD-Clinical Psychology	Canadian Psychological Association
Business	Business Administration	European Quality Improvement System (EQUIS)
Business	Business Administration	Association to Advance Collegiate Schools of Business (AACSB)
Business	Business Administration	(Signatory to) Principles of Responsible Management Education (PRME)
Business	Business Administration-Management Information Systems	Business Technology Management Accreditation Council (BTMAC)
Education	Teacher Certification	Ministry of Education—Teacher Regulation Branch
Environment	Physical Geography-Geosciences Concentration	Recognized by the Professional Engineers and Geoscientists of British Columbia
Environment	Master of Resource Management (Planning)	Recognized by the Canadian Institute of Planners and the Planning Institute of BC
Health Sciences	Public Health	Council on Education for Public Health (CEPH)
Science	Chemistry	Canadian Society for Chemistry
Science	Earth Sciences	Recognized by the Association of Professional Engineers and Geoscientists of British Columbia
Science	Biomedical Physiology and Kinesiology (Kinesiology major only)	Canadian Council of University Physical Education and Kinesiology Administrators
Science	Statistics	Statistical Society of Canada
Science	Actuarial Sciences	Canadian Institute of Actuaries
Science	Biological Sciences	College of Applied Biology

4.2. External Reviews

4.2.1. Academic Departmental External Reviews

All academic units are reviewed periodically, normally once every seven years. These reviews allow the units to:

- Assess their strengths and weaknesses.
- Obtain the view of external experts in the field.
- Support academic planning.

The review process is intended to ensure that:

- (a) The quality of the unit's programs is high, and there are measures in place to allow the evaluation and revision of teaching programs.
- (b) The quality of faculty research is high, and faculty collaboration and interaction provide a stimulating academic environment.
- (c) Department members participate in the unit's administration and take an active role in the dissemination of knowledge.
- (d) The departmental environment is conducive to the attainment of the department's objectives.

Below is a schedule of the SFU departments that have recently been, or currently are, involved in academic external reviews. The recommendations made by reviewers have been considered and implemented where possible.

Table 4: SFU's Academic Departmental External Reviews

SFU Academic Departmental External Reviews				
Year	Department	Recommendations received following site visits	External Reviewers' Home Institutions	Action Plan developed and approved by Senate
2013-14				
	Business	Jul 2014	HEC Montreal / uSaskatchewan / uMiami	Oct 2015
	French	Apr 2014	McMaster / uLaval / uToronto	Jan 2015
	Humanities	May 2014	Purdue / uToronto / Stanford / uNorth Carolina, Asheville	Sep 2016
	Interactive Arts and Technology	Apr 2014	Carnegie Mellon / Wilfred Laurier / uNorth Carolina, Charlotte	Apr 2015
	Mathematics	Apr 2014	uDelaware / McGill / uWashington	Nov 2014
	Political Science	Apr 2014	uAlberta / Wilfred Laurier / uVictoria	Sep 2016
2014-15				
	Education	Apr 2015	York / uBritish Columbia / uArizona	Dec 2015
	Environmental Science	Mar 2015	uToronto / Duke / uWashington	Jan 2016
	Gerontology	May 2015	uAlberta / McMaster / uMissouri, Columbia	Dec 2015
	Psychology	Jun 2015	Western / Queen's / uOntario Institute of Technology	Dec 2015
2015-16				
	Chemistry	May 2016	uVictoria / uSaskatchewan / Georgia Inst of Tech	Sep 2016
	Criminology	Apr 2016	uToronto / uOttawa / uMontreal	Oct 2016
	International Studies	Apr 2016	uOttawa / McGill / uWaterloo	Sep 2016
	Linguistics	May 2016	Indiana University / uWashington / Carleton	Oct 2016
	Public Policy	May 2016	uRegina / Carleton / uChicago	Sep 2016
2016-17				
	Engineering Science	Jul 2017	uAlberta / Carleton / uWaterloo	TBA
	First Nations Studies	May 2017	uMontana / First Nations University of Canada	
	Gender, Sexuality, and Women's Studies	Jun 2017	uAlberta / uManitoba / Queen's	
	History	Mar 2017	uToronto / Dalhousie / uMichigan	
	Mechatronic Systems Engineering	Apr 2017	uToronto / uWaterloo / uMichigan	
	Philosophy	May 2017	uWaterloo / uVictoria / uWashington	
	Resource and Environmental Management	Apr 2017	uWaterloo / uBritish Columbia / Michigan State	

4.2.2. Administrative Departmental External Reviews

Administrative departmental reviews complement the periodic academic reviews. These assessments focus on the University's core administrative functions and are designed to:

- Identify the highest-value opportunities to improve the quality of administrative processes and outputs.
- Enhance the capabilities of the departmental administrative staff to better support the University's academic and research objectives.
- Identify ways to better serve the University's diverse stakeholders.

As a complement to the external review process of academic programs, the University has recently (early 2017) renewed its approach to administrative reviews. These reviews engage administrative departments and functions in an introspective assessment of administrative operations. In the pursuit of continuous improvement, the reviews identify and prioritize opportunities to enhance business processes, promote the efficient use of resources, and deliver exceptional customer service.

The reviews include a self-study retreat, a digital repository of key unit information to be leveraged by external reviewers, a customer/stakeholder survey, an on-site expert visit, a review team final report, and a detailed execution plan.

Usually, external advisors conduct the administrative reviews. The review process includes a comprehensive document review, interview sessions with relevant departmental senior managers and University customers, interim reporting to senior management for feedback, and the submission of a final report. Results and recommendations are presented to the associated unit for comment, and summary information is presented to the University executive team upon completion of the review.

SFU currently has three administrative reviews in progress, and has also developed a preliminary five-year rotation plan to ensure every service unit within the University is subject to a review within the five-year time period.

The administrative departmental external review process is an important aspect of managing academic affairs. Its evaluative, peer-oriented perspective promotes high-quality teaching and research and is conducive to the attainment of both unit and University goals.

Table 5: SFU's Administrative Departmental External Reviews

SFU Administrative Departmental External Reviews		
Findings Published	Department	External Reviewers
Jun 2010	Facilities Services	PwC Advisory Services
Oct 2011	Human Resources	PwC Advisory Services
Dec 2011	Graduate Studies	Edge Training and Consulting
Mar 2012	Finance	GNA Consulting
May 2012	Art Gallery	GNA Consulting
Feb 2013	Faculty of Arts and Social Sciences (admin only)	GNA Consulting
Jun 2013	Parking Services	Collings Johnston Inc.
Jul 2015	Academic Relations	Private Consultant
Oct 2015	Office of Research Services	External University Administrators
Apr 2016	Space Management	Huron Consulting
Apr 2017	Archives and Records Management	Western University / Private Consultant
May 2017	Information Technology Services	University of Victoria / Thompson Rivers University
Jun 2017	Safety and Risk Services	University of Alberta / Xpera
Jun 2017	Teaching and Learning Centre	Queen's University / University of Waterloo
Fall 2017 *	Advancement and Alumni Relations	Grenzebach Glier and Associates

* Anticipated date of publication – review in progress

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Planning and Operational Review



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5. PLANNING AND OPERATIONAL REVIEW

5.1. Engaging Students

Educating students is the central purpose of any university, and the students' experience while attending a university can enhance or inhibit their ability to learn. At SFU, students are not “end-users” to be trained and produced, but partners in learning, discovery, and community engagement. In addition to encouraging critical thinking and research skills, SFU provides opportunities for students to gain practical experience, social aptitudes, and civic understanding, not only to be job ready, but also life ready.

Many of the activities focusing on student engagement are identified in the five-year [Academic Plan 2013-2018](#) and the [2013-2018 Faculty Plans](#). Development of new Academic and Faculty Plans beyond 2018 is already in progress.

SFU is committed to enhancing the student experience both in and outside of the classroom at all three campuses. The “Big Ideas” initiative will enhance the student experience through targeted funding of \$9 million over three years to a few large “banner” projects and several smaller projects. The goal is to identify viable and sustainable initiatives that, together, will have a major impact on student experience.

In addition, a new Associate Vice-President, Teaching and Learning position has been added to support the Vice-President, Academic in improving the student experience. A search to fill this senior administration role is currently underway.

5.1.1. Teaching and Learning Focus

As a comprehensive research university that respects and values diversity, SFU charges its academic units with planning their programs according to their disciplinary standards, evolving knowledge bases, and pedagogical strengths while supporting new program development in areas of demand and curricular relevance. Teaching and learning are seen as complex activities that may vary by discipline, and occur in a variety of environments, including traditional class-based courses and programs, co-operative education experiences, field studies, project-based assignments, credit and non-credit contexts, and through a wide variety of pedagogies and experiences. SFU continues to strive for relevant and diverse learning experiences for its students in the various Faculties.

5.1.2. Educational Goals

In May 2013, the University Senate approved that all academic units at SFU must develop, and subsequently assess, educational goals at the academic program level (majors, minors, master's degrees, and doctorates), as part of the regular external review process, starting with the 2014 review

cycle. These goals are articulated in the external review self-study reports, post-review action plans, and mid-cycle progress reports, and are to be publicly accessible on unit websites.

Educational goals are considered broadly as the anticipated benefits to students from participation in an academic program. They may include knowledge, understanding, skills, competences, experience, attitudes, ethics, and professional development. The goal statements are intended as a framework for curriculum discussion, course mapping, and program structure, and will more clearly reflect what is already occurring within units. SFU encourages units to define and assess their goals in a manner that best suits each unit's discipline and context.

A new working group was formed in the spring of 2017 to assess the current adoption of educational goals at the program level, and to expand upon this process.

5.1.3. Experiential and Work Integrated Learning

SFU is a leader in developing and delivering world-class experiential learning opportunities that equip students with the knowledge, skills, and experiences to thrive in an ever-changing and challenging world. SFU students can develop a “Degree of Experience” that extends their learning beyond the classroom, through immersion in community projects, research laboratories, rainforests and river banks, corporate boardrooms, government offices, start-up companies, friendship centres, and thousands more environments where they might apply their knowledge and skills once they graduate.

Students can customize their learning and studies to include any number of experiential learning opportunities, including participating in full-time, paid co-operative education work terms; taking an exchange semester with one of SFU's international partner universities; spending a semester in dialogue, exploring critical global and local issues through an interdisciplinary lens; or joining one of the University's many leadership and peer education programs right on campus. These local, national, and international opportunities allow students to develop the skills and expertise they want to complement their degree requirements.

5.1.4. Lifelong Learning

Lifelong Learning is at the core of the SFU's Vision/Mission to be student centred, research driven, and community engaged. Through SFU NOW (Nights or Weekends) and CODE (Centre for Online and Distance Education), students may complete their degrees at places and times convenient for them.

Lifelong Learning's practical curriculum meets the career-transitioning and professional development needs of working adults. Through 32 Senate-approved, non-credit certificates and diplomas, learners gain skills in areas as diverse as applied business analysis, legal interpretation and translation (Mandarin/English), non-profit management, social innovation, and public relations—to name just a few. Online certificates such as the Next-Generation Transportation Certificate and the Restorative Justice Certificate provide students across the world access to thought leaders in areas essential to the well-being of the planet and its inhabitants.

Community engagement is, in many ways, what Lifelong Learning is all about. The 55+ program has over 5,000 fee-based registrations annually, not to mention the 2,000+ attendances at free events. In addition, Lifelong Learning offers educational programming designed to advance communities and, through free events like the Philosophers' Cafés and City program public lectures, promote open dialogue on a variety of topical issues to over 14,000 attendees annually.

5.1.5. Student Experience and Success

The “student experience” refers to the entirety of a student’s interactions at, and with, the University, including whether a student feels valued by, and connected to, the University. Students’ experiences have clear implications for a number of critical personal and institutional outcomes: student recruitment and retention, student satisfaction, student engagement, institutional reputation, career preparation and transition, and alumni support, among others. Positive student experiences are built on a foundation of engagement, fostered by a supportive learning and living environment, all of which contribute to healthy and thriving campus communities. A student’s overall experience is a reflection of what happens to them both inside the classroom (e.g., quality of teaching, class size, rigour and relevance of the curriculum, course availability, accessibility of professors, inclusive classroom practices, etc.) and outside the classroom (e.g., opportunities for experiential learning such as co-operative education programs, field schools, and leadership programs; academic support such as advising, student success programs, access to health counselling professionals, and disability services; and quality of ancillary services such as housing, food, parking, etc.).

At the operational level, “student success” has typically been defined more narrowly as “academic success,” and is traditionally measured by attrition and persistence rates, completion rates, time to completion rates, etc. SFU recognizes that student success is grounded in experience, and for this reason, and for the purposes of this report, these two concepts have been strategically entwined under a single heading: *“Student Experience and Success.”*

SFU has historically measured student success in terms of academic success, as indicated by various categories of academic standing, from “Good Academic Standing” (GAS) for those achieving a Cumulative Grade Point Average (CGPA) of 2.0 or greater, to various levels of probationary standing for students struggling to be in GAS, to Required to Withdraw (RTW) for those students who fail to meet standards over time. The Back on Track (BOT) program is aimed at supporting students who wish to improve their academic standing. This program is available to students who would otherwise be required to withdraw due to their inability to maintain good academic standing. More than 1,000 students participate annually in the BOT program, working one-on-one and in groups to become more effective learners. This program is designed and delivered by multiple campus service units, including academic advising, counselling, and the Student Learning Commons, providing students with a seamless and integrated support system. Over 70% of those who complete the BOT program achieve sufficient CGPAs to allow them to get back to good academic standing.

Additionally, SFU provides services to help students make career-informed academic choices throughout their academic tenure, and not just at the end of their studies and as they transition out of SFU. The Student Services-led Experiential Community of Practice has developed resources that outline all of the experiential learning options available to students. These may be seen in [A Degree of Experience](#).

University-mediated student learning opportunities outside of the classroom are now captured on SFU's new Co-Curricular Record, an institutionally recognized and valued example of student engagement.

5.1.6. Student Services

SFU's [Student Services](#) is a large and diverse portfolio that includes four divisions: Student Enrolment Services, Student Affairs, Student Success and Strategic Support, and Athletics and Recreation, in addition to support services in operations, planning and projects, and finance and administration. Working with partners across SFU's three campuses, and in local, national, and international communities, these units are dedicated to ensuring students are recruited, admitted, and supported in their personal, professional, and academic development, as well as maintaining the integrity of pertinent records and Senate-related policies and operations.

Student Services is committed to enhancing the student experience by working with members of the campus community and beyond to provide services, programs, opportunities, and environments that optimize student learning and success. Student Services continually reviews and improves its transactional business to ensure the most effective, cost-efficient, and timely outcomes. It delivers all the programs and services denoted by the service units listed above, as well as designs and delivers innovative programming specific to the particular needs of SFU students (e.g., supporting English as an additional language learners). In recognition that it is all one experience for the learner, Student Services seeks to blur the lines between the traditional "academic" side of the house and the "programs and services" side.

Recent and notable examples of this work include:

- The *Sexual Violence and Misconduct Policy* is a result of work led by the Provost's Office and done in collaboration with Student Services; Human Resources; the Office of Human Rights and Responsibilities; the Women's Centre; the Department of Gender, Sexuality, and Women's Studies; General Counsel; the Faculty Association; the Canadian Union of Public Employees (CUPE); the Teaching Support Staff Union (TSSU); and the Simon Fraser Student Society (SFSS).
- The *Residence and Housing Master Plan* is a long-range plan to increase capacity across SFU's three campuses by 1,000 beds, including the development of a number of living-learning communities. One example of a living-learning community: the [Indigenous Student Cultural House](#). The planning was led by Student Services in collaboration with Facilities Services, Ancillary Services, and other campus units.
- The *Stadium Project* is a 1,800-seat, covered grandstand adjacent to Terry Fox Field. Funded primarily by the students through a \$10 million contribution from Simon Fraser Student Society (SFSS) student fees, with the remaining coming from the University, this project is a result of collaboration across Athletics and Recreation; the Vice-President, Academic; Students and International Office; Facilities Services; and the SFSS.

- The *Job Search Success online course* is designed for English as an additional language and permanent resident learners. This initiative was led by the Intercultural Community of Practice, with strong support from Work Integrated Learning and the Centre for English Language Learning, Teaching and Research.

Student Services also offers students opportunities to develop leadership and employability skills through programs such as Peer Educators, Peer Mentors, and the Innovative Leadership programs. To ensure that Student Services continues to be relevant to students, it provides many student and para-professional work-integrated learning opportunities. Finally, Student Services staff members work closely with both student governments, the Simon Fraser Student Society (SFSS) and the Graduate Student Society (GSS), on many joint activities related to the student experience.

Many of Student Services' activities have significant community engagement components. Programs such as Work Integrated Learning (over 3,300 SFU students/year working in local, national, and international workplaces); Career and Volunteer Services (networking with over 5,000 employers and professional groups); and International Services for Students (interfaces with over 100 global partners/year for study abroad activities, including field schools and exchanges) are examples of activities that demonstrate SFU's commitment to community engagement. Many Student Services staff participate on provincial, national, and international professional association boards. A smaller number is concurrently engaged in research related to the advancement of both theory and practice in student affairs and service. This ensures that SFU Student Services staff and programs remain current and continue to "set the pace" in many areas provincially, nationally, and internationally.

5.1.7. Aboriginal Education

SFU is committed to Aboriginal education. With growing Aboriginal student enrolment and graduation numbers, a committed Office for Aboriginal Peoples, a well-established and supportive Indigenous Student Centre, and an Office of Indigenous Education housed within the Faculty of Education, SFU embraces, encourages, and supports Aboriginal Peoples. The full extent of SFU's commitment to Aboriginal Peoples and Aboriginal education can be found within the [Aboriginal Strategic Plan \(ASP\)](#), which was first approved by Senate in 2007 and updated in 2013.

Since the Plan's approval, much progress has been made to advance ASP goals and strategies. This progress is detailed in annual reports on Aboriginal Strategic Initiatives submitted by the Director of the Office for Aboriginal Peoples. Recruitment and retention data are also collected annually to gauge Aboriginal student numbers, along with retention and graduation rates. Financial resources for implementing the ASP come from the Vice-President, Academic's budget, the various Faculties and other University offices, and through special allocations from the University Priority Fund. An Aboriginal Reconciliation Council is also currently convened at SFU to come up with a University response to the Truth and Reconciliation Commission's Calls to Action. A final report is due for release in fall 2017.

The ASP also aligns SFU's activities and initiatives with the Ministry of Advanced Education's plan for improving post-secondary opportunities and outcomes for First Nations, Métis, and Inuit Peoples as referenced in the Ministry's *Aboriginal Post-Secondary Education and Training Policy Framework and Action Plan: 2020 Vision for the Future*.

Furthermore, the Vice-President, Academic has begun a process involving Indigenous Peoples, including invitations to local bands and urban Aboriginal Peoples, to participate in a redesign of the Aboriginal University Transition program to make it more attractive to, and better meet the needs of, Indigenous students.

5.1.8. International Students

As global politics and economics increase the need for interculturally competent graduates, the internationalization of higher education in Canada has become imperative. Universal access to knowledge, the interconnectedness of world trade, and the increasing rate of cultural exchange dictate that higher education must contribute to, and be influenced by, global change. SFU recognizes the importance of internationalization, which is an essential component of the University's Vision/Mission as an engaged university.

SFU fosters a culture of inclusion and mutual respect that embraces the diversity and multi-ethnic character of today's society. The University has a rich history of international engagement and activity, including attracting international students and scholars, study abroad and international experiential education, exchanges and research collaborations, language learning, area studies, and international development. The Dual Degree Computing Science program with Zhejiang University is just one example of SFU's international engagement. International students bring diversity to the SFU community and reflect the University's Vision/Mission to be an engaged and internationalized university.

SFU has established the administrative structures, fee arrangements, and admission policies necessary for achieving its international enrolment goal. With new initiatives to increase retention of international students, they now represent 19.4% of total undergraduate enrolment. This growth in the international student body has resulted in additional revenue, but has also added pressure on faculty, and the facilities and services provided to these students. To better manage intake targets for international students, SFU is applying differential admission standards for international students. The University remains committed to attracting international students in disciplines aligned with regional labour market needs, and to providing a positive experience for these students.

Table 6: Total International Student Undergraduate Enrolment (FTE)

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
	Actual Data					
International UG - FTE	3,756	3,979	3,895	3,980	4,132	4,425
Share of total UG - FTE	16.5%	17.3%	17.0%	17.5%	18.2%	19.4%

Source: SFU Institutional Research and Planning

Fraser International College

Operational since September 2006, Fraser International College (FIC) is a private college on the Burnaby campus that provides transition programs for international students. In 2010, after the academic operations of the college underwent an external review, the contract was renewed for a ten-year term. For more than a decade, FIC has been successfully recruiting international students, who transfer to SFU for undergraduate degree programs after completing preparatory and university-transferable courses. FIC now has approximately 2,775 students. From September 2007 to February 2017, approximately 5,636 students have transferred from FIC to SFU.

5.1.9. English as an Additional Language Supports and Services

The Faculty of Education has developed a cross-university, collaborative, and co-operative strategy to complement and add to the strengths of English as an additional language (EAL) activities underway at SFU. The strategy addresses gaps in the curricular and co-curricular academic and language-support services provided to the EAL student population. The Faculty of Education has established the [Centre for English Language Learning, Teaching and Research](#) to work with students and instructors. The Centre partners with departments to integrate EAL curricular support within course design, offer instructional design workshops that address EAL issues, create online resources for students and instructors, encourage communication across academic and support areas to increase efficiency and share best practices, find creative ways to fill support gaps, and use research opportunities to identify what works well in support of SFU's EAL population and for the SFU community as a whole.

5.1.10. Enrolment

Changes to BC's population demographics have been discussed in detail in previous documents, but the major changes, and their impact, bear repeating. Although the Lower Mainland population will grow over the next few years for the cohort 18-29 years of age, the number of people between the ages of 18 and 24 will decrease, except for those in the South Fraser Region. In response to these growing communities south of the Fraser, SFU is developing new programs in Surrey related to clean energy, and building a new facility that will house a proposed Energy Systems Engineering program.

The shrinking demographic of 18-24 year olds in BC is SFU's traditional market, which means that enrolment from school leavers and college students will decline, while the need for post-secondary education for those over 24 years of age will increase. From a programming view, this translates into a growing demand for continuing studies and professional programs, and an opportunity for SFU to provide such programs. SFU has developed effective blended-learning models to accommodate adult learners, and will continue to develop innovative research-intensive and professional graduate programs. This way, the University can continue to meet the rising demand for a new generation of highly qualified individuals to fill important educational, research, and administrative positions in the public and private sectors.

Tables 7, 8, and 9 show SFU's Ministry-funded graduate and undergraduate enrolment growth to 2016-17.

Table 7: Undergraduate and Graduate Enrolment and Ministry-Funded Targets (FTE)

	2013-14		2014-15		2015-16		2016-17		2017-18
	Funded	Actual	Funded	Actual	Funded	Actual	Funded	Actual	Targets
FTE	20,203	22,713	20,203	22,329	19,990	22,181	19,903	22,096	19,761
% Achieved		112.4%		110.5%		111.0%		111.0%	

Source: SFU Institutional Research and Planning

Table 8: Domestic Undergraduate Enrolment and Ministry-Funded Targets (FTE)

	2013-14		2014-15		2015-16		2016-17		2017-18
	Funded	Actual	Funded	Actual	Funded	Actual	Funded	Actual	Targets
FTE	17,682	19,071	17,682	18,748	17,316	18,582	17,229	18,367	16,954
% Achieved		107.9%		106.0%		107.3%		106.6%	

Source: SFU Institutional Research and Planning

Table 9: Graduate Enrolment and Ministry-Funded Targets (FTE)

	2013-14		2014-15		2015-16		2016-17		2017-18
	Funded	Actual	Funded	Actual	Funded	Actual	Funded	Actual	Targets
FTE	2,521	3,642	2,521	3,581	2,674	3,599	2,674	3,729	2,807
% Achieved		144.5%		142.0%		134.6%		139.5%	

Source: SFU Institutional Research and Planning

SFU has consistently exceeded its funded targets over the last four years.

5.2. Engaging Research

SFU is distinguished by its strengths across a range of core and interdisciplinary fields. The University is committed to becoming a world leader in knowledge mobilization building on a strong foundation of fundamental and applied research.

5.2.1. Strategic Research Plan

In the last 10 years, SFU has transformed into one of Canada's top research-intensive universities. The [2016-2020 Strategic Research Plan](#) (SRP) outlines the University's research priorities, and establishes the strategic directions to fulfill the University's research mission as a leader in knowledge mobilization. Aligned with the vision of being a leading engaged university, the SRP focuses on the following goals:

- To support and promote the full continuum of research, from the fundamental generation of knowledge, through the dissemination of that knowledge within the academic community and beyond, to the application of transformative ideas for the benefit of society.
- To promote research excellence, supporting and encouraging all researchers, including undergraduate and graduate students, postdoctoral fellows, faculty, staff, and community partners who assist the research mission.
- To leverage fundamental research strengths, including interdisciplinary research, close community connections, and partnerships and collaborations to become a global leader in research mobilization.
- To seek opportunities to transfer the results of the University's research to the broader society, including policy-makers, civil society leaders, and the community.

The SRP identifies six priority research challenges designed to push the limits of discovery and knowledge mobilization, and deliver impactful breakthroughs. Success in tackling these challenges rests on SFU's ability to draw from fundamental and applied research.

Challenge 1: Addressing environmental concerns and creating a sustainable future.

Challenge 2: Understanding our origins.

Challenge 3: Supporting health across the human lifespan.

Challenge 4: Strengthening civil society by advancing justice, equity, and social responsibility.

Challenge 5: Enhancing our world through technology.

Challenge 6: Transforming the landscape of teaching and learning.

In the process of addressing these challenges, SFU has developed particular strengths that have led to the establishment of four strong research clusters. These clusters allow researchers to tackle large crosscutting challenges while creating and capitalizing on distinct advantages for global leadership. The clusters are defined by a core of researchers from diverse disciplines who use innovative approaches and methods to drive impactful outcomes.

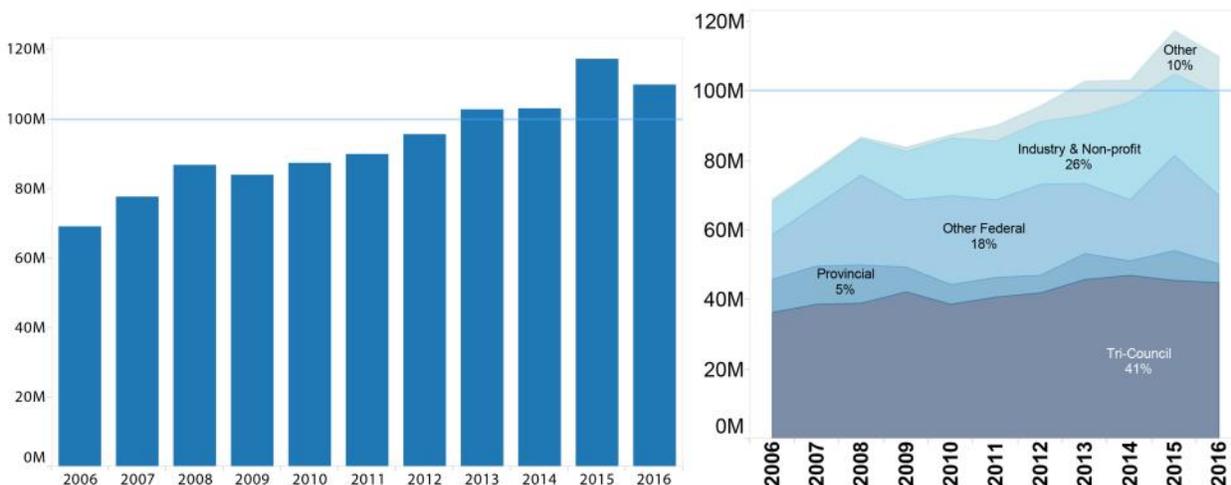
The four research clusters are: (1) Big Data, (2) Community-Based Research, (3) Health Technology and Health Solutions, and (4) New Materials and Technology for Sustainability. Together, these clusters demonstrate SFU's commitment to interdisciplinary research, data-driven innovations, seamless partnerships with diverse sectors, and the agility to capitalize on new opportunities to achieve maximum impact. Expanding this approach will not only continue to build critical mass in existing areas, but also provide an important platform to develop and diversify SFU's strategic research strengths.

5.2.2. Research Excellence

SFU's excellence in research is becoming increasingly recognized at the provincial, national, and international levels, as evidenced by the growth in research funding and research output, by the impact of SFU researchers across sectors, and by the increasing number of local and international partnerships engaging academic institutions, industry, and governments.

Over the last 15 years, SFU has increased its research capacity four-fold, having surpassed an annual \$100 million in research income since 2013. With nearly 41% of its research income from federal Tri-Council agencies, SFU ranks among Canada's top universities for Tri-Council research funding per full-time faculty.

Figure 2: SFU's Total Research Income 2006-2016



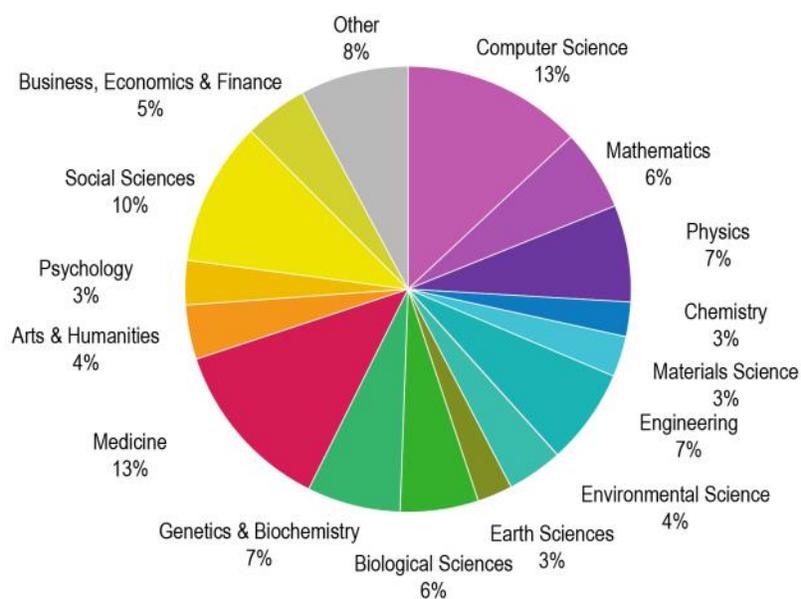
Source: Canadian Association of University Business Officers (CAUBO)

In FY 2016, SFU's total sponsored research income reached \$109.9 million, which is a 6.6% increase from 2014, and a 6.4% decrease from 2015. The decrease in the total research funding from 2015 is due to the timing of a major infrastructure acquisition that was awarded in 2016, but the funds were

not received until the start of the following fiscal year. SFU expects to recover the successive upward trend in its research income in FY 2017.

SFU's research spans a range of fundamental and applied areas, from origins of the universe and future-oriented technologies to materials science and macroeconomics. Figure 3 illustrates the distribution of SFU publications in various subject areas in the last five years, as made available by the Scopus database. In 2016, SFU researchers published more than 2,300 journal articles, over 41% of which appeared in the world's top 10% journals. The University's annual number of scholarly publications has increased by more than 55% over the last decade.

Figure 3: SFU Publications by Subject Area 2011-2016



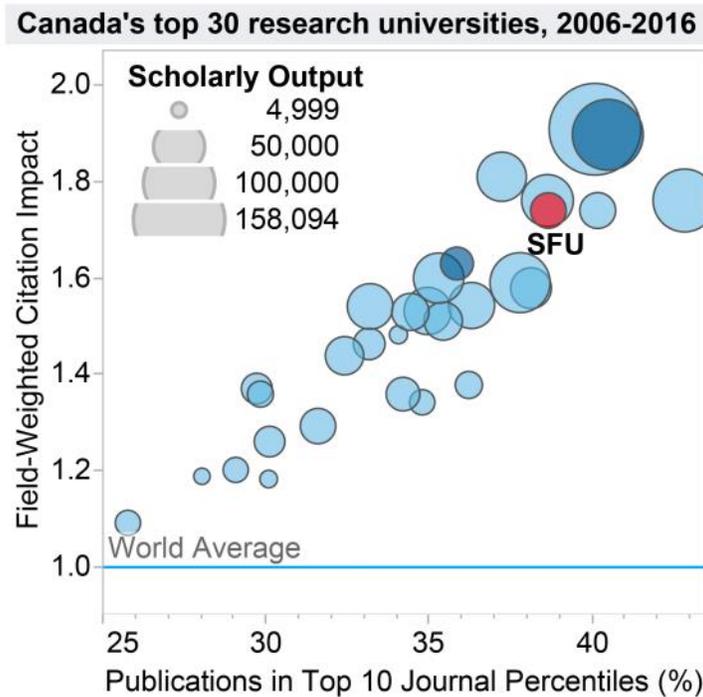
Source: SciVal

SFU is consistently ranked among Canada's top 12 research universities by every major global and national university ranking system. This remarkable performance has positioned the University to achieve national and/or international leadership in a number of research areas.

- [Maclean's University Rankings](#): SFU is consistently ranked as Canada's top comprehensive university, including the latest rankings publication in 2016.
- [Times Higher Education](#): SFU ranked 10th in Canada overall, and 8th for citations.
- [QS World University Rankings](#): SFU ranked 11th in Canada for a second straight year, and 2nd once again for research impact.
- [CWTS Leiden Ranking](#): SFU ranked 2nd among Canadian universities for percentage of international collaborative publications.
- [2017 U.S. News Global Rankings](#): SFU is in the 11th spot in Canada, based on its research output, impact, and reputation (supplied by Web of Science data). The rankings also place SFU among the top 10 universities in Canada in eight subject areas, including 5th in Physics and Environment/Ecology, and 6th in Computer Science.

Figure 4 illustrates the research impact and research output of Canada's top 30 research-intensive universities, based on metrics provided by Elsevier's Scopus database. Along with Canada's largest universities, and universities in BC (dark blue circles), SFU stands out as a national leader in research impact.

Figure 4: Research Performance of Canada's Top 30 Research-Intensive Universities 2006-2016



Source: SciVal

5.2.3. New Research Infrastructure

Because good facilities are critical to groundbreaking research and innovation, SFU is constantly identifying ways to support contemporary and innovative research spaces. By capitalizing on opportunities with government and industry, and through internal mechanisms, the University is continuously enhancing and expanding its infrastructure to meet the evolving demands of a research-intensive university. The example below highlights one of SFU's recent major research infrastructure acquisitions.

Compute Canada Data Centre

In partnership with Compute Canada, Canada's research computing consortium, SFU has launched a new, advanced research computing system at its Burnaby campus. The full investment, valued at \$75 million, is made possible with funding from the Canada Foundation for Innovation (CFI), the BC Knowledge Development Fund, and industry partners. One of four new Canadian supercomputing and data centre sites, the facility serves as Canada's most powerful academic supercomputer and will give Canadian researchers access to the latest resources and expertise in advanced research computing.

5.2.4. Major Research Awards

In addition to discipline-specific honours, in the period covered by this report, SFU researchers received the following major awards and fellowships:

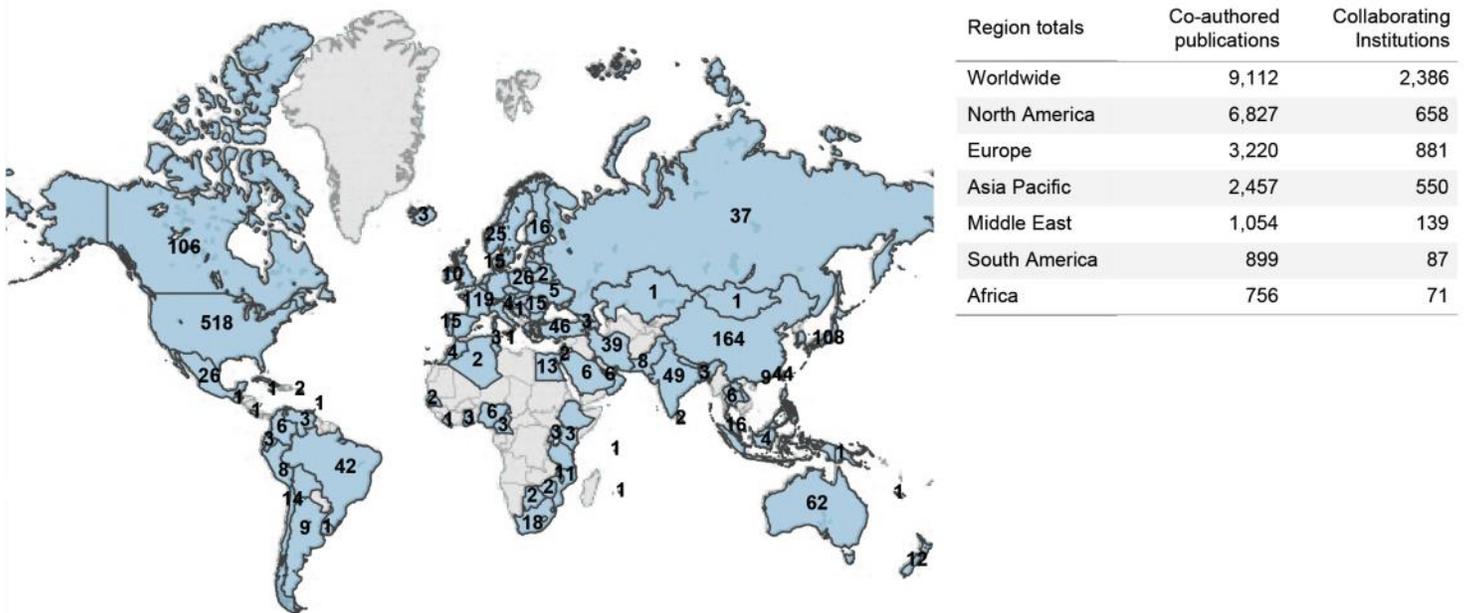
- Professor of Education and former Canada Research Chair Kieran Egan received both the \$50,000 Cmolik Prize for the Enhancement of Public Education in BC and the Paz Buttedahl Career Achievement Award from the Confederation of University Faculty Associations of British Columbia (CUFA BC).
- Epidemiologist Dr. Meghan Winters of the Faculty of Health Sciences received the Early in Career Award from CUFA BC for “influential contributions to public policy and community outreach on the impacts of built environments on people’s physical activity and health.”
- Criminology professor and Director of the Institute for Canadian Urban Research Studies Martin Andresen received the 2016 Western Society of Criminology Fellows Award for impactful contributions to the field. His research analyzes individual crime types at the micro-spatial scale using police data knowledge directly relevant to crime prevention.
- Dr. Jing Li, Canada Research Chair in Global Investment Strategy at the Beedie School of Business, has been named to the 2016 cohort of the Royal Society College of New Scholars, Artists, and Scientists. The mission of the College is to recognize scholarly, research, and artistic excellence; to advise governments and organizations; and to promote a culture of knowledge and innovation in Canada and around the world.
- Professor John Willinsky of the Publishing@SFU program received the 2016 Social Sciences and Humanities Research Council Connection award in the Connection category. This award recognizes outstanding contributions in facilitating the flow and exchange of research within the academic community and beyond. Dr. Willinsky heads up the Public Knowledge Project (PKP), an open access publishing program that has significantly contributed to knowledge mobilization in Canada and internationally, and is a major pillar in the movement to provide open access to research and scholarship.
- Computing science professor and Natural Sciences and Engineering Research Council of Canada E.W.R. Steacie Memorial Fellow JC Liu has been named a Fellow of the Institute of Electrical and Electronics Engineers (IEEE) for his contributions to multimedia communication and Internet content distribution. The IEEE is the world’s largest professional organization for technology innovation, and its Fellowship program recognizes select members with an extraordinary record of accomplishment in their field.
- Professor emeritus John Dill has received the 2016 Visualization Career Award from the IEEE for his pioneering leadership and research contributions in visual analytics. From his early interventions in the emerging field, he went on with his SFU and University of British Columbia (UBC) colleagues to launch the SFU-based Vancouver Institute for Visual Analytics (VIVA) and to advance other research efforts funded by the Boeing Company.

- RBC Professor of Technology and Innovation and former Dean of the Beedie School of Business Blaize Horner Reich has received an Academic Fellow Award from the International Council of Management Consulting Institutes for her contributions to the study and teaching of management consulting. Professor Reich is one of five Canadians to receive the fellowship since 2013.

5.2.5. International Collaborations

SFU fosters local to international collaborations to advance fundamental and applied research and innovation across diverse sectors. In the past six years, SFU has collaborated with over 2,100 institutions worldwide in more than 110 countries (Figure 5).

Figure 5: Number of Collaborating Institutions by Country 2011-2016



Source: SciVal

5.2.6. SFU Innovates

SFU Innovates is a university-wide strategy that seeks to strengthen the University's commitment to innovation and entrepreneurship. In the past year, since the launch of the initiative in October 2015, SFU has significantly grown its Entrepreneurship, Incubation and Acceleration, and Social Innovation ecosystems. Here are some highlights:

Open Access Labs

4D LABS

- 4D LABS is SFU's \$65 million, state-of-the-art materials science and engineering facility where researchers, engineers, and companies can develop prototypes and leverage characterization and testing equipment to understand and resolve product issues. 4D LABS has the most comprehensive and advanced materials equipment and expertise under one roof in Western Canada. It has been home to a number of successful spin-off companies like Nanotech Security, Switch Materials, and Ionomr. 4D LABS' industry clients include Cooledge Lighting, Aiscent Technologies, Philips Ledalite, and Mercedes Benz.

Entrepreneurship

Charles Chang Certificate in Innovation and Entrepreneurship

- While most entrepreneurship certificates are offered by a single Faculty, at SFU the certificate program is delivered and supported by seven Faculties, including the Beedie School of Business, Science, and Health Sciences and is supported by Coast Capital Savings Venture Connection® and RADIUS incubators. In this unique model, undergraduate students, as early as their second semester, can "choose their own adventure" by enrolling in classes and programs that focus on the specific types of problems they want to solve, from health, environmental, business, and technology to design. Cross-disciplinary training and real-world problem solving are what make the student experience unique at SFU.

Invention to Innovation — Graduate Certificate in Science and Technology Commercialization

- SFU offers a Graduate Certificate in Science and Technology Commercialization at the graduate and post-doctoral levels. The goal is to provide research scientists and engineers with the knowledge, frameworks, and skills necessary to commercialize their inventions and contribute to new product development in industry. This program has seen a number of significant successes including the Ionomr, which raised \$1.6 million in funding thus far and is projected to grow to 12-15 employees by the end of 2017.

Incubation and Acceleration

Coast Capital Savings Venture Connection®

- Students, staff, faculty, and recent alumni can apply to the Venture Connection incubator, which supports early stage entrepreneurs. In 2017, Coast Capital Savings provided committeemen to fund over \$750,000 in investments over five years to Venture Connection. This investment was one of the first under Coast Capital Savings' new Community Leadership strategy, which promises to build a richer future for youth in our communities around the themes of financial well-being, education, family and social connections, and health.

VentureLabs®

- VentureLabs works with science, technology, and innovation-based companies that have strong value propositions and potential to scale-up. Through its partnership with C2CAN, it has organized two trade missions to China with 25 Canadian start-ups to support business development, strategic partnerships, and international expansion.

Ready to Rocket List

- Twenty-four start-ups from the SFU Incubation and Acceleration ecosystem have been recognized and named on the Ready to Rocket and Emerging Rockets list, which recognizes high-growth potential and innovative BC technology companies.

Social Innovation

RADIUS (RADical Ideas, Useful to Society)

- RADIUS Ventures helps social ventures that are addressing meaningful societal and/or environmental challenges become market ready, growth ready, and investor ready. The 2016 cohort of seven companies from the Slingshot program are growing an average of 60%. RADIUS is also working to create a multi-year partnership with the Sto:lo Community Futures and the Sto:Lo Nation to conduct venture incubation and acceleration programs.

[SFU Innovates](#) provides one of the world's most comprehensive continuums of programming and resources for entrepreneurs and change makers, from interdisciplinary learning, early stage ideation and venture mentorship, to helping companies scale up. The University offers programming at every stage of the innovation journey.

5.3. Engaging Communities

SFU is committed to contributing all of its capacities, from people to properties, to develop healthier and more vibrant communities. Whether by preparing adaptable, high-functioning citizens, or by collaborating in and mobilizing knowledge, SFU encourages, supports, and celebrates community engagement.

5.3.1. Community Engagement – Goals, Objectives, and Commitments

“To be Canada’s most community-engaged research university” is an ambitious goal, but SFU continues to build on its tradition of mutually beneficial partnerships with local and global communities, and to address major community issues through research and public engagement.

Effective September 1, 2015, SFU was granted accreditation by the Northwest Commission on Colleges and Universities (NWCCU). In its evaluation report, the NWCCU review team drew particular attention to SFU’s remarkably rich and varied community engagement programs, which align with the mission and vision, and help the University integrate into the community, and nurture long-term partnerships.

Community Engagement Defined

SFU has adopted the definition used by the Carnegie Foundation, an organization that provides a community engagement classification service for US institutions, to describe community:

“Community engagement is collaboration between the University and communities for the mutually beneficial exchange of knowledge and resources in a context of partnership and reciprocity.”

SFU’s Community Engagement Strategy

SFU’s formal [Community Engagement Strategy](#) stems from the University’s Vision/Mission to be an engaged university. Goals, strategies, and community commitments are as follows:

Goal: To be Canada’s most community-engaged research university.

Strategy: Integration

SFU will expand and deepen community partnerships and connections. Community connections are an integral part of the academic mission, creating opportunities for practical and experiential learning, informing and inspiring research, and contributing to the University’s overall relevance and success.

Strategy: Reach and Relationships

Sustained by a foundation of respectful and mutually beneficial community relationships, *SFU will maximize institutional capacities and campuses to enhance the societal, economic, environmental, and cultural well-being of communities, both locally and globally.*

Strategy: Lifelong Learning

SFU will meet the lifelong learning needs of students, alumni, and the community, and will respond with innovative programs and learning opportunities for academic, personal, and professional development.

Strategy: BC's Public Square

SFU will be BC's public square for enlightenment and dialogue on key public issues, and will be known as the institution to which the community looks for education, discussion, and solutions.

SFU is continuously working to advance its Community Engagement Strategy. Through broad consultations, and an ongoing planning process, the University is soliciting advice on current Strategy commitments, the current definition of "Community Engagement," the successes and challenges associated with the goal to be Canada's most community-engaged research university, and on methods to improve and support key community engagement initiatives.

5.3.2. Community-Engaged Scholarship

SFU is committed to the co-creation of knowledge, lifelong learning, and knowledge translation and is represented in many community-university partnership networks. Select examples include the Centre for Community-Based Research, Community-Based Research Canada, the Canadian Alliance for Community Service Learning, BC's Community-Engaged Learning Network, and the Talloires Network, an international association of institutions dedicated to strengthening the civic roles and social responsibilities of higher education.

In May 2017, SFU was the host of C2U Expo, Canada's immersive, dialogue-centred conference that explores the role of community-campus partnerships in addressing social, health, environmental, and community issues. Over 500 people attended from community, academia, government, and industry across North America and beyond.

Community Engagement Initiative

SFU's Community Engagement Initiative was created to enhance community-engaged scholarship across all Faculties. From 2013–2016, the University funded 81 projects, with all Faculties represented in each year. Projects that resulted in new or substantially strengthened community partnerships and which provided robust experiential learning and/or community-based research opportunities were favoured. Aggregate funding across the four years was approximately \$500,000.

Community-Based Research

In 2016, SFU's Vice-President, Research sponsored a Community-Engaged Research Advisory Committee to create an inventory of current and notable historic community-based research (CBR) projects across the University, to review best practices in CBR (rigour, excellence, impact metrics, etc.), to create a celebration of CBR at SFU, and to develop recommendations to advance CBR at SFU, linking best practices with the University's current strengths and its vision as the engaged university. The Committee's findings yielded a working definition of CBR at SFU, a summary of the benefits and challenges associated with conducting CBR, recommendations for supporting CBR at SFU, and a summary of approximately 100 CBR initiatives in progress, including a subset of 30 exemplary project vignettes. Future steps include the review and implementation of the CBR action plan (which includes training people on how to conduct CBR), raising the profile of CBR through communications, recognizing how to value and evaluate CBR, allocating resources to support CBR, and streamlining administrative processes to improve sustainability of CBR.

Faculty, Department, and Centre Highlights

Since its inception in 1965, SFU's history has become increasingly rich with genuine, grass-roots community connections, both through place-based hubs located within the communities the University serves, and through the growing relationships among professors, researchers, and residents of the region. Organized into nine areas of academic strength, all of SFU's Faculties serve communities through outreach and engagement programs; community-focused research centres, clusters, and institutes; leadership and community sustainability initiatives; arts, education, and cultural centres; Indigenous engagement initiatives; alumni and partner initiatives; innovation and entrepreneurship summits; and countless activities, events, exhibitions, speaker series, cafés, lectures, certificates, and lifelong learning programs. A list of select community partnership highlights is included below:

- Aboriginal Speaker Series (Office for Aboriginal Peoples)
- Bill Reid Centre for Northwest Coast Art Studies (Arts and Social Sciences)
- Building Local Living Economies: New Models for Urban and Rural Economic Renewal (Environment)
- Café Scientifique (Science)
- Canada 150 Speaker Series (Arts and Social Sciences)
- Centre d'études francophones Québec-Pacifique (Arts and Social Sciences)
- Centre for Comparative Study of Muslim Societies and Cultures (Arts and Social Sciences)
- Centre for Education, Law, and Society (Education)
- Centre for Forensic Research (Environment)
- Centre for Policy Studies on Culture and Communities (Communication, Art and Technology)
- Centre for Research on Early Child and Health Education (Education)
- Centre for Research on Restorative Justice (Arts and Social Sciences)
- Centre for Research on Sexual Violence (Arts and Social Sciences)
- Centre for Scottish Studies (Arts and Social Sciences)
- Chronic Pain Research Institute (Communication, Art and Technology)

- City Program Lecture Series (Lifelong Learning)
- Co-operative Resource Management Institute (Environment)
- Digital Humanities Café (SFU Library)
- Embedding Project (embedding sustainability) (Beedie School of Business)
- First Nations Language Centre (Arts and Social Sciences)
- Friends of Simon Tutoring program (Education)
- Gerontology Research Centre (Arts and Social Sciences)
- Globally Responsible Leadership Initiative (Beedie School of Business)
- Hakai Network for Coastal People, Ecosystems, and Management (Environment)
- Hile'kw Welcome Event (Communication, Art and Technology)
- Hopeful Economics Leadership and Innovation Summit (Environment)
- Indigenous Research Institute (Office for Aboriginal Peoples)
- Institute for the Humanities (Arts and Social Sciences)
- Institute for the Reduction of Youth Violence (Arts and Social Sciences)
- INTERACT: INTERventions, Research, and Action in Cities Team (Health Sciences)
- Interaction Design Research Centre (Communication, Art and Technology)
- International Centre of Art for Social Change (Education)
- K-12 Outreach programs (Applied Sciences and Science)
- Mental Health and Addictions (Health Sciences)
- Multimodal Opportunities, Diversity, and Artistic Learning (Education)
- Museum of Archaeology and Ethnology (Environment)
- Philosophers' Café (Lifelong Learning)
- Science in Action (Science)
- Science Rendezvous and International Astronomy Day (Science)
- SFU Campus Sustainability Team (Environment)
- SFU President's Dream Colloquium (President's Office)
- SFU President's Faculty Lecture Series (President's Office)
- Social Attention Research Group (Education)
- Social Inequities and Health (Health Sciences)
- Special Collections Readings (SFU Library)

5.3.3. Place-Based Initiatives

Burnaby

As one of Burnaby's major employers, SFU has long been one of the community's most active institutional citizens. The University's new residential development, UniverCity, is further strengthening the ongoing relationship with Burnaby, which is reflected by various collaborative community and research ventures. The SFU-Burnaby Liaison Committee facilitates ongoing communication.

A strong relationship between SFU and the Burnaby Board of Trade (BBoT) is based on a shared purpose: to represent the interests of the Burnaby business community to local government, and to foster economic development in Burnaby. Areas of collaboration include the Local Government Reception, the Burnaby State of the City Address, the Burnaby Business Excellence Awards, the Distinguished Speaker Series, and the BBoT Annual General Meeting.

SFU's 50th Anniversary year-long celebration, which concluded in May 2016, helped connect the University with alumni and the community, as well as engage students, staff, and faculty. Over 200 charter students who began with the University in 1965-66 participated in the launch festivities at the Burnaby campus. The celebration year ended with SFU and the City of Burnaby co-presenting the inaugural Burnaby Festival of Learning, a week-long celebration of learning. Its success has led to a second year of the Festival in 2017, again co-presented by SFU and the City of Burnaby, and an interest in establishing the Festival of Learning as a community-led, grass-roots initiative in future years.

Community partnership highlights include:

Burnaby Festival of Learning is co-presented by Simon Fraser University and the City of Burnaby, with participation from School District #41. The Festival is a week-long celebration of learning with free events that inform, engage, and spark creative conversations among diverse audiences. During the week, there are live performances, lectures, discussions, debates, and book launches.

SFU Recreation Camps are offered to community members of all ages. The camps encourage learning and skill development through physical activity, educational programming, and creative activities in an inclusive and positive environment. In 2015-16, nearly 7,000 people participated in aquatics, computing, language, leadership, media arts, science, outdoor, recreation, and sports camps, providing SFU students with leadership opportunities in a range of activities.

Trottier Observatory and Science Courtyard is an integral part of the Trottier Studio for Innovative Science Education. Both facilities are uniquely dedicated to bringing science education and astronomy to children, youth, and the public. Nestled within the heart of the Burnaby campus, the Trottier Observatory is the flagship facility in the Faculty of Science's myriad outreach programs, including the Starry Nights program, which has brought thousands of star-gazers to campus to scan the night skies and learn about astronomy.

Surrey

Established in 2002, SFU's Surrey campus is a 105,000-square-metre architectural masterpiece, located at Central City. The building, designed by acclaimed architect Bing Thom, has won numerous national and international awards.

In one of Canada's largest and fastest growing cities, SFU Surrey is uniquely situated in the centre of BC's next great metropolitan core, where Surrey's City Centre is undergoing a complete revitalization. City Centre, which currently includes a flagship library, a community plaza, a large-scale urban park, recreational facilities, and outstanding SkyTrain and transit access, will be further bolstered by the addition of a light rail system, a premium hotel and residence, and multiple new commercial and residential developments.

In the heart of the Surrey community, SFU's community partnerships run deep. They include:

- Support and leadership of the long-established SFU Surrey Community Advisory Committee.
- Work on various committees and tables in the region, including Surrey's Local Immigration Partnership, Poverty Reduction Coalition Committee, and Cultural Diversity Advisory Committee.
- Engagement in business and innovation initiatives with partners such as the Surrey Board of Trade (SBoT), the Downtown Surrey Business Improvement Association, and the City of Surrey's Economic Development Office. Innovation initiatives include Cleantech Expo, Social Innovation Summit, and SBoT's Top 25 Under 25.
- Establishment of numerous community events such as the City of Surrey's Party for the Planet, Fusion Festival, Vaisakhi Parade, SFU's Diwali Gala, and the SFU President's Gala.

Community-University partnership highlights include the following:

Innovation Boulevard, founded by SFU, Fraser Health, and the City of Surrey, focuses on the commercialization of health technologies through collaborations with industry, academia, and innovators in Central City, Surrey. In April 2017, the BC Innovation Council announced Innovation Boulevard as Western Canada's first HealthTech accelerator. The goal of the accelerator is to foster the development of medical devices, software, and processes at various stages through entrepreneurs/executives in residence (EIRs), collaboration, and support.

SFU Surrey – Central City Student Community Engagement Competition is a community-sponsored competition that offers prizes to teams of students that come up with the most innovative ideas for engaging the Surrey Centre neighbourhood. Over the first three years, the competition has allocated \$19,000 to support the implementation of seven student projects. Surrey Collaborative Outreach and Research Experience (SCORE) provides students at the high school, undergraduate, or graduate levels with opportunities to get involved in hands-on research in medical technologies and scientific training. SCORE was the winner in the inaugural year of the competition and has since been recognized internationally, winning the 2016 Gold Global Best Award in the category of Science, Technology, Engineering, and Mathematics for North America.

SFU Surrey – TD Community Engagement Centre fosters connections between SFU and the growing South Fraser Region through programming at the Surrey City Centre Library, at SFU's Surrey campus, and in various South Fraser communities with the aim of improving the educational, social, economic, environmental, cultural, and physical health of residents. In 2016, community partners and SFU students, faculty, and staff offered over 30 programs to 2,000 community members, and the SFU Surrey – TD Community Engagement Centre was recognized with a Global Best Award for building learning communities.

Vancouver

In the past 27 years, SFU's Vancouver campus has grown from a small storefront, continuing studies operation to a broad-based, urban university campus. Undergraduate and graduate students join thousands of working professionals enrolled in diploma programs, hundreds of seniors attending lectures, and 40,000 citizens and conference attendees engaged in events annually at one of the downtown campus sites.

The campus includes the original Harbour Centre facility, the Morris J. Wosk Centre for Dialogue, the Segal Graduate School of Business, the Goldcorp Centre for the Arts (GCA), the Bill Reid Gallery, the performance and study complex and visual arts studio space at 611 Alexander, SFU Venture Labs, and the Innovation and Residence Centre at 300 West Hastings. GCA contains six public performance venues, offering cultural, community, and artistic programming within the innovative, mixed-use re-development of the historic Woodward's district. Festivals include Indian Summer, PuSh International Performing Arts Festival, and the Vancouver International Film Festival.

SFU's Vancouver campus represents the hub of the downtown educational precinct, with each site engaged with the downtown community in multiple ways: engaging in ground-breaking research in mental health and addiction issues; providing community access and programming in the Downtown Eastside; supporting social innovation and technology start-ups; offering free public lectures, seminars, and dialogues on key urban issues; engaging with business and government representatives to enhance the downtown experience; and providing students with state-of-the-art learning environments.

Community-University partnership highlights include:

CityStudio is an innovation hub where City of Vancouver staff, students, and community co-create experimental projects to make Vancouver more sustainable, livable, and joyful. In the past three years, CityStudio has engaged 127 students in the Studio program, 1,878 students in the Partner Course Network, 75 faculty across six campuses (SFU, UBC, Emily Carr University of Art and Design, British Columbia Institute of Technology, Langara College, and Vancouver Community College), 40 City staff, and over 100 guests in dialogue and consultation.

RADIUS (RADical Ideas, Useful to Society) is a social innovation lab and venture incubator consisting of three components:

- With people as its starting point, RADIUS Edu is re-imagining how to support the learning journeys of emerging change makers.
- Systems-focused, RADIUS Lab works with community partners to understand problems and design, test, and launch interventions.
- Built to amplify promising solutions, RADIUS Ventures partners with impact ventures to get them market-, growth-, and investor-ready.

SFU Morris J. Wosk Centre for Dialogue fosters understanding and positive action by creating an environment conducive to shared understanding and dialogue. Dialogue Fellows lead initiatives that address issues of fundamental significance to communities through four programming streams: Civic Engage, Climate Solutions, Intercultural Dialogue, and Peace and Security. Ground-breaking programs include Carbon Talks, Renewable Cities, and others.

SFU Public Square is SFU's go-to convener of serious and productive conversations about issues of public concern. Key initiatives include an annual week-long community summit that focuses on a local or international issue of public concern.

SFU Semester in Dialogue is a one-semester, full-time program designed to inspire students with a sense of civic responsibility and encourage their passion for improving society. Each semester the program offers an original, interdisciplinary experience that bridges the classroom with the community and creates space for students to reflect on what they are doing and why it matters.

SFU Vancity Office of Community Engagement (VOCE) supports creative engagement, knowledge mobilization, and public programming in the areas of arts and culture, social and environmental justice, and urban issues, through public talks, dialogues, workshops, screenings, performances, and community partnerships. In 2016, VOCE hosted 8,000 people through their public events. Approximately 100 of these events were hosted at SFU, with an additional 100 in the community.

SFU Woodward's Cultural Programs (WCU) promotes creativity and leading practices in contemporary arts as well as public community discourse. WCU engages the immediate inner-city community through unique cultural, employment, and public initiatives.

5.3.4. Celebration and Recognition

50th Anniversary Celebration

In 2015-16, SFU planned and implemented a 50th Anniversary year-long celebration, which included the goal of connecting with alumni and the community, as well with students, staff, and faculty. As of the end of 2016, 347 50th Anniversary events had been hosted, 147 media stories documented, 18,345 event registrations had been recorded, over 3,500 units of 50th Anniversary merchandise had been purchased, and thousands of social engagement instances through Facebook and Twitter had occurred.

Jack P. Blaney Award for Dialogue

The Jack P. Blaney Award for Dialogue is presented every second year to an individual who has demonstrated international excellence in the use of dialogue to increase mutual understanding and advance complex public issues.

Nora and Ted Sterling Prize in Support of Controversy

The Nora and Ted Sterling Prize in Support of Controversy honours and encourages work that provokes and/or contributes to the understanding of controversy.

Warren Gill Award for Community Impact

In 2017, SFU established the Warren Gill Award for Community Impact, which recognizes and celebrates the achievements and community impact of an SFU staff or faculty member who has built significant partnerships between the University and the communities it serves.

5.3.5. Alumni

[SFU alumni](#) are reaching positions of influence and making vital contributions to the world, and they are the largest, fastest growing, and potentially most influential stakeholder group. With more than 145,000 alumni in over 130 countries, this group serves as the University's greatest global ambassadors, building SFU's reputation through their accomplishments and expanding the University's reach through their connections. Alumni also support the University and its students in multiple capacities, including recommending SFU to prospective students, employing SFU co-operative education students, hiring SFU graduates, and contributing toward scholarships and bursaries that support the next generation of alumni. Alumni are both the best indication of what SFU has been in the past, and the best indicator of what SFU can be in the future.

5.4. Leveraging Institutional Strength

To achieve its Vision/Mission, SFU relies on the strength and flexibility of its infrastructure. From faculty and staff, to IT support, to building maintenance, and many other support units and services, SFU subscribes to the maintenance of a healthy and strong institutional infrastructure to fulfill its Vision/Mission.

5.4.1. Faculty and Staff

All SFU employees belong to one of seven employee groups, five of which participate in collective bargaining. Bargaining groups include:

- The Faculty Association (SFUFA)
- The Teaching and Support Staff Union (TSSU)
- The Administrative and Professional Staff Association (APSA)
- The Canadian Union of Public Employees (CUPE Local 3338)
- Poly Party – which collectively bargains on behalf of tradespeople belonging to several unions with small numbers at SFU

A small group of “excluded” staff (the sixth group) does not bargain individually or as a group; their salaries tend to be based on settlements negotiated with APSA. The senior administrative staff, including the President, Vice-Presidents, Associate Vice-Presidents, and Deans, comprise the seventh group.

In 2016, the Faculty Association was certified as a union and negotiated its first contract with the University.

5.4.1.1. SFU as an Employer

In February 2017, for the tenth consecutive year, SFU was chosen as one of Canada's top 100 employers and one of the most family-friendly workplaces by [Mediacorp Canada](#), the country's leading employment periodicals publisher. Mediacorp evaluates employers using eight criteria:

- Physical workspace
- Work atmosphere and social atmosphere
- Health, financial, and family benefits
- Vacation and time off
- Employee communications
- Performance management
- Training and skills development
- Community involvement

SFU scored consistently high in all eight categories. The employee benefits that scored particularly high included the following:

- SFU provides generous maternity and parental leave top-up payments for employees who are new mothers, fathers, or adoptive parents. It also manages onsite daycare facilities, which new parents may take advantage of on their return.
- Employees at the Burnaby campus may take advantage of a range of onsite amenities, including private wellness/rest areas for employees who need a quick rest during the busy day, employee lounges, and subsidized access to fitness facilities, including state-of-the-art exercise equipment; volleyball, basketball, and badminton courts; swimming pool and track; and sauna and shower facilities.
- SFU's employees and students enjoy a unique campus located on the top of Burnaby Mountain. It offers breathtaking views overlooking Burrard Inlet and the surrounding city. The campus is also central to the ongoing new urbanist development project (UniverCity) designed to encourage sustainable lifestyles in a community that, at full build-out, is anticipated to house up to 10,000 residents.

5.4.1.2. Faculty Recruitment and Retention

SFU places a priority on attracting and retaining highly qualified and productive faculty. Over the past five years, approximately 1% of faculty per year (on average) have chosen to leave the University for reasons other than retirement. Retirement rates have remained lower than expected due to the elimination of mandatory retirement and uncertain economic conditions.

Faculty renewal at SFU is continuing in 2017-18 with all Faculties undertaking searches. The annual [Faculty Renewal Plan](#), produced by the Vice-President, Academic, outlines the current status of the faculty complement, and proposed activities regarding faculty recruitment and retention.

SFU is recruiting more female academics, with the proportion of females in the faculty complement as of January 2017 standing at 36.4%.

5.4.2. Finance

5.4.2.1. Budgets

Government Funding

SFU's provincial operating grant for 2016-17 was \$219.4 million, up \$3.1 million from the previous year's \$216.3 million. The 2016-17 fiscal year saw an end to the \$50 million of post-secondary sector operating grant reductions that began in 2013-14. The 2014-15 operating grant was \$218.7 million.

SFU has been working proactively and collaboratively with the province on the deferred maintenance issue, which extends, to a large degree, to all post-secondary institutions in BC. Prior to 2015-16, SFU had received annual maintenance and rehabilitation funding in the range of \$2-3 million per year from the province's Routine Capital program. In 2015-16, funding rose significantly to \$12.9 million, and has further increased to \$18.7 million in 2016-17. In addition, for 2016-17, \$15 million of operating funding was transferred to deferred capital contributions to fund ongoing and future deferred maintenance projects. For 2015-16, the transfer totalled \$25 million. Classroom upgrades, washroom overhauls, study space enhancements, and general building updates have all been accelerated with the additional funding. This partnered approach to bridging a funding need and addressing crucial infrastructure renewal has had a significant and positive impact on the Burnaby campus and resulted in a much improved student experience.

Government of Canada operating grants for 2016-17 are \$8.6 million, up approximately 7% from the previous two years' funding of just over \$8 million.

Tuition and Student Fees

Tuition and student fees are also a major source of operating income and have increased to \$247.6 million for 2016-17, exceeding provincial operating grant funding. The increase is due primarily to a 2% across-the-board tuition fee increase.

In some Faculties, the University has implemented differentiated tuition fees to reflect the higher cost of delivering specialty and professional programs. Since 2005, provincial government policy has limited tuition fee increases to 2% annually. This remained in effect for 2016-17, but is not applicable to international students.

Other Revenues

Other revenues are projected to increase as tuition and fees from international students are expected to have a positive impact on the royalty payments received from Fraser International College (FIC). In addition, the revenues generated from Ancillary Services will likely cover all related expenses and debt service payments, as well as provide reinvestment to ensure long-term sustainability.

Expenses

Salaries and benefits comprise most of the University's operating expenses. With nearly 2,700 continuing full-time employees, as well as part-time and temporary faculty and staff, salary and benefit costs comprise 67% of total budgeted operating expenses for 2016-17. Salary and benefit cost increases associated with progression through the ranks, and step increases are not funded by the government. However, general wage increases have been government-funded.

University Priorities

Other budgeted expense increases relate to increased investment in strategic initiatives funded through the University Priority Fund (UPF). 2015-16 was the final year for accepting new applications to the existing UPF process. However, approved awards that span multiple years have received their allocated funding to ensure the relevant projects reach their stated longer-term objectives.

To better align the UPF with institutional priorities, SFU has undertaken a new process to identify university-wide strategic investments that advance SFU's engaged university vision and goals, differentiate SFU, and establish SFU as a leader. This renewed process has reduced the number of projects funded, and focused spending on major initiatives to maximize the positive impact on the University and its global reputation.

5.4.2.2. Investments

SFU's endowment fund ended 2016-17 at \$428.1 million, driven by a strong year of donations and investment earnings. The endowment fund consists of over 800 individual endowments that provided \$15.3 million of support in 2016-17 for academic programs, professorships, student financial aid, athletics, library materials, and research.

In 2014-15, SFU adopted a new Responsible Investment Policy and became a signatory to the United Nations Principles for Responsible Investment (UNPRI). The new policy provides for governance of SFU's investment strategy consistent with the UNPRI and the University's investment objectives, with greater emphasis on environmental, social, and governance (ESG) factors in investment decisions. The University continues to review its portfolio and the portfolio management team to ensure compliance with the UNPRI and to identify ways to further enhance its sustainable investment position.

Major steps forward in 2016-17 included investing \$8 million in a Socially Responsible Investment (SRI) fund (thereby increasing SFU's total SRI investments to \$20 million), requiring all new fund managers to be signatories of the UNPRI, using ESG factors as a weighted criterion in investment manager selection, and making a commitment to reduce the carbon footprint of SFU's investment portfolio by 30% by 2030.

5.4.2.3. Capital and Infrastructure

The University's capital strategy is based on four strategic initiatives that will help SFU meet its goals by fostering supportive campus environments for students, research, and the community:

1. Surrey Campus Expansion
2. Burnaby Campus Renewal
3. Community Engagement
4. Sustainability and Climate Action

As the University passes its 50th Anniversary year, aging campus facilities are experiencing ever-increasing issues related to health and safety deficiencies, lack of functionality, and unreliable and inefficient building systems. In total, over half of the capital projects described in SFU's current Five-Year Capital Plan are targeted to renew or replace existing facilities and infrastructure.

However, the University continues to leverage creative ways to mitigate the impact of its aging infrastructure. The Deferred Maintenance Advance initiative, approved in 2014-15, continues to support deferred maintenance requirements. This initiative provides a \$30 million internal line of credit to address building upgrades. The University has also committed \$10 million to address deferred maintenance issues in the facilities adjacent to the proposed stadium project. When available, SFU leverages contingency, budget surpluses, and carry-forward funds, as well as its Routine Capital allocation to make inroads into the University's substantial renewal requirements.

Major capital initiatives are currently either underway or in the planning stage. These include:

- A new Sustainable Energy and Environmental Engineering building (funded by the province of BC, the government of Canada, and SFU).
- A new student union building (funded by the student society).
- A new stadium and athletics infrastructure upgrade (funded jointly by the student society and SFU).
- A new bio-mass fuelled central energy plan (in partnership with SFU, UniverCity, and a private operator).
- A downtown student residence and innovation centre (recently completed).

[SFU's 2017-2022 Five-Year Capital Plan](#) includes a detailed synopsis of priority, renewal/replacement, student housing, and self-funded projects.

5.4.2.4. Financial Statements

The most recent Audited Financial Statements are available at: <http://www.sfu.ca/finance/publications.html>.

5.4.3. Information Technology

One Information System

The future of Information Technology at SFU requires unification of the vast and diverse array of people, processes, data, and technologies into a seamless system. Information Technology (IT) Services is referring to this vision for all Information Systems (I.S.) as “One I.S.,” meaning all systems, and staff who support them, should work together seamlessly.

Creating “One I.S.” requires integration of the University’s core administrative systems, development of a single integrated teaching and learning ecosystem, and implementation of a unified research computing environment.

Integrating SFU’s administrative systems requires the development of interfaces linking the University’s independent PeopleSoft system silos, and the tools to ensure that everything works together as a single system. It means creating a shared database to ensure the University makes decisions based on a single source of the data truth.

IT Services will integrate the University’s various teaching and learning tools onto tightly integrated, consistent platforms. By using a consistent information system architecture, IT Services will provide the best support possible to the University’s teaching and learning mission.

Improving service to SFU researchers starts with unifying the research-computing environment into an understandable collection of services that are consistent, easy to find, and well supported. The University’s strategic emphasis on being the preeminent leader in Canadian research computing demands exceptional effort and support from IT Services.

Achieving this vision requires collaboration across all information systems providers throughout the University. This vision of unified information systems also demands significant internal improvements within the IT Services organization.

5.4.4. Library Services

The SFU Library offers programs and services that go far beyond its traditional print collection of over three million volumes and 3,500 print journal subscriptions, to include 71,000 e-journals, and more than 10 million digital volumes in total. The Special Collections division develops and manages extensive holdings of rare books, manuscripts, archival collections, visual material, and oral histories, with a current collecting emphasis on content reflecting the literary, political, and cultural history of BC. The Student Learning Commons offers student learning and writing support to all students, including those needing help with academic English and those whose academic careers are at risk. The Research Commons provides a range of services to graduate students, such as intensive thesis writing workshops, advanced training and support for research software, and graduate-level writing support.

The Library's facilities on all three SFU campuses provide access to collections, in-person research assistance, and study space. Research assistance and information services are also offered through many virtual channels for the convenience of researchers via telephone, email, chat and text messaging, and twitter. The BC Electronic Library Network is hosted by the SFU Library, a synergistic relationship that has fostered online support, resource sharing, and electronic journal licensing for all BC post-secondary libraries. The Electronic Health Library of BC, which supports online information service to health services educational, training, and practitioner organizations, is also hosted by the SFU Library.

The SFU Library is a leader in digitization and software development projects in Canada, providing access to over two million pages through local digitization projects, including www.komagatamarujourney.ca and many others. The SFU Library also makes all SFU theses and dissertations freely available online via Summit, the SFU Research Repository, which also houses academic papers, video, audio, and other scholarly output from the University community. In addition, the Library is the primary development site for open-source software from the Public Knowledge Project (PKP). The PKP software suite includes the Open Journal System (OJS), now the most widely used open-source software in the world for production of scholarly journals, used by more than 10,000 active publications globally. The Library's research data repository platform, Radar, provides a long-term digital preservation solution for research data in a variety of formats. The Library is also collaborating closely with SFU researchers on innovative Digital Humanities projects, creating scholarly digital editions, data visualization and modelling, and other new forms of digital scholarship. The Digital Humanities Innovation Lab is a partnership among the Library, SFU's Big Data Initiative, and Digital Humanities scholars from around the University.

Finally, the SFU Library is active in community engagement projects. The Community Scholar program extends access to published scholarly research to 500 individuals working in not-for-profit and charitable organizations in BC, and provides research training and support through librarian-led workshops, online courses, and in-person meetings. This access helps those working in BC's community-based organizations gain access to paywalled academic research as an input into programming, grant applications, and practice.

5.4.5. Sustainability at SFU

Sustainability is one of SFU's priorities and a thread that connects all of the University's work in research, academics, and operations. In 2016, SFU developed an innovative engagement methodology and invited the entire community of faculty, students, staff, and senior leadership across all three campuses to envision the University's long-term sustainable future. The resulting [20-Year Sustainability Vision and Goals](#) lays the foundation for the University's next Five-Year Sustainability Strategic Plan (2018-2022), which will outline specific targets, towards which all vice-presidential portfolios will work.

SFU's 20-Year Sustainability Vision:

- SFU has embraced sustainability as a core value.
- SFU is globally recognized as a leading post-secondary institution for sustainability.
- SFU graduates and community members are sustainability literate.
- SFU is a safe, inclusive, diverse, equitable, and healthy campus community.
- SFU is a true part of the communities in which it is located.
- SFU's academic programs, research, and operations recognize the bounds of our planet.

5.4.6. Programming for the Future

5.4.6.1. Student-Focused Programming

SFU's strategic planning processes will continue to address the current post-secondary demographic challenges in BC through new and responsive programming, expanded infrastructure, new revenue sources, and continued recruitment and retention of the best faculty, staff, and students.

In the face of heightened pressure for universities to prepare students in all programs, SFU is working to ensure that its curriculum provides the knowledge and skills that students need to engage successfully as citizens in a global, knowledge-driven economy. Students should leave SFU with the ability to think creatively, imaginatively, and constructively. They should be able to engage in dialogue and discussion, reflect on the ideas of others, and communicate their thoughts effectively using good judgment and sound argument. SFU graduates should be technologically sophisticated and able to use and adapt to emerging technologies while also evaluating the impact of those technologies on their lives and the world. SFU's curriculum and internationalization strategies should provide graduates with an understanding of other cultures and an appreciation for the value, inevitability, and complexity of interacting in a globalized environment. Students should also have acquired the ability to identify and evaluate information resources. Their SFU experience will nurture the qualities and virtues imperative for a democratic society: compassion, empathy, ethical and moral values, and tolerance.

SFU NOW (Nights or Weekends) reflects SFU's response to the increased need for more part-time credit studies for older working adults. Within BC, there are only a few competing, part-time degree studies programs for a learner seeking face-to-face experiences, and there is little emphasis on non-cohort-based, part-time degree studies for working adults. Since it began, SFU NOW (Nights or Weekends) has

demonstrated steady growth, providing undergraduate education specifically for the working adult student who cannot attend classes during the day. All SFU NOW classes are scheduled on weekday evenings and weekends. This program allows students to earn a full Bachelor of Arts degree or take arts courses toward another degree program.

SFU continues to expand its close working and collaborative relationships with other BC post-secondary institutions and with local school districts. A number of memoranda of understanding have been signed and subsequent partnering initiatives have been operationalized, creating opportunities that support the smooth flow of students in specific disciplines between the collaborating institutions, either through dedicated pathways or through joint programming. These and other related agreements allow for such initiatives as inter-institution program laddering and concurrent registrations, allowing for a more effective use of teaching infrastructure, and benefitting both students and the entire BC post-secondary system. Agreements with local school districts offer dual-credit opportunities for secondary students, providing advanced educational experiences at SFU that grant both high school and university credit that students can use to further their education opportunities.

5.4.6.2. Planned Growth in the South Fraser Region

Surrey is one of the fastest growing cities in Canada. Through its commitment to the expansion and growth of its Surrey campus, SFU is striving to fill the demand for access to higher education in the South Fraser Region of BC.

SFU Surrey is the only research university in the South Fraser Region. It has launched over 30 academic programs, and exceeded the Ministry's first-phase target of 2,500 FTEs by more than 550 FTEs. Over 8,000 undergraduate and graduate domestic students enrolled in at least one course at the Surrey campus in 2016-17. This does not include over 2,000 registrants in over 90 Lifelong Learning programs and courses over the same period.

New Surrey Expansion

SFU is moving forward with the expansion of its Surrey campus. In November 2016, the provincial and federal governments announced a commitment of \$90 million for a new \$126 million, five-storey, 16,000-square-metre building that will house a proposed Energy Systems and Environmental Engineering program.

This is the first of a three-phase academic expansion plan for SFU Surrey. Further programs in health systems innovation and creative technologies will follow as provincial funding becomes available.

The building represents the first major step in expanding the Surrey campus beyond its current home in the Central City complex. Embedded in Surrey's emerging City Centre, it will strengthen SFU's mission to be Canada's engaged university.

SFU



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Major Strategic Risks

SFU



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6. MAJOR STRATEGIC RISKS

6.1. Risk Management

SFU operates in an increasingly complex environment and must assume certain risks to meet its objectives and realize its Vision/Mission. To successfully manage strategic risks, the University has implemented a framework for risk identification, measurement, and monitoring, and the most significant risks are reported every November to the Audit, Risk and Compliance Committee of the Board of Governors. SFU faces four key strategic risks and is taking steps to mitigate these, as discussed below.

6.1.1. Deferred Maintenance

As SFU passes its 50th Anniversary, aging infrastructure on the Burnaby campus continues to hamper the University's ability to execute its core mission of student, research, and community engagement. According to the Facilities Condition Index (FCI), 53% of Burnaby campus academic buildings are in "poor" condition. This is in addition to the deferred maintenance needs of residences, other ancillary buildings, roads, utilities, and campus infrastructure. The University's Five-Year Capital Plan guides decision making related to the construction and renewal of campus facilities. Over half of the capital projects described in the most recent Capital Plan are to renew or replace existing facilities and infrastructure.

On a positive note, in partnership with the province, the University has started to address its deferred maintenance needs. Prior to 2015-16, SFU had received annual maintenance and rehabilitation funding in the range of \$2-3 million per year from the province's Routine Capital program. In 2015-16, funding rose significantly to \$12.9 million, and has further increased to \$18.7 million in 2016-17. In addition, \$15 million of operating funding was transferred to deferred capital contributions in 2016-17 to fund ongoing and future deferred maintenance projects, building on the \$25 million transferred in the previous year.

The University has also embarked on some important capital construction projects. A new student union building, enhanced stadium and athletics facilities, a new Surrey Sustainable Energy and Environmental Engineering building, a bio-mass district energy plant, and phase 1 of a Residence Master Plan are all either underway or proceeding through detailed planning.

Even with this progress, the maintenance backlog remains, and the University is challenged in funding these projects from internal sources. This places significant financial pressure on core programs, and diverts scarce resources from important academic endeavours.

6.1.2. Pension Funds

Another significant challenge relates to rising costs associated with the University's defined benefit pension plans, especially the administrative union plan.

Tri-annual actuarial valuations of the pension plan, pursuant to the *Pension Benefits Standards Act*, determine the contribution requirement, which was \$21.8 million for the year ended March 31, 2017. The last valuation, at December 31, 2013, showed a concerning deficit of \$30.4 million. This was up from \$16.4 million at December 31, 2010. As a result, SFU's contribution rate increased to 17.14% of eligible payroll, up from 15.3% in the previous valuation. The most recent actuarial valuation took place at December 31, 2016. Results of this valuation are expected in the fall of 2017.

Annual actuarial valuations, pursuant to Public Sector Accounting Standards, determine the pension expense, which was \$7.6 million for the year ended March 31, 2017. This valuation showed a \$55.2 million pension plan surplus, up \$20.2 million from the \$35 million surplus the previous year.

While the pension plan has recently shown improvements, the defined benefit plan has inherent risk exposures to fluctuations in financial market performance and increasing life spans in retirement. This is reflected in the plan's solvency valuation, which required a \$78 million Letter of Credit to cover the deficiency at the end of the 2016 calendar year. This deficit is expected to increase in the next valuation, driven by record-low discount rates, and mortality projections that increase the payout period.

As SFU's current administration pension plan includes provisions that are imposing unsustainable costs on the plan, finding a solution is imperative. Stakeholders are actively seeking an appropriate, balanced way to address the plan's funding and structural gaps.

6.1.3. Recruitment and Retention of Skilled Faculty and Staff

SFU is highly dependent on the skill of its people to deliver on its academic goals and to run its administration efficiently and effectively. There are a number of factors that are eroding the ability of the University to attract and keep high-performing faculty and staff.

Compensation packages that the University offers its employees play a key role in SFU's ability to recruit and retain top talent. In recent years, the University has found it increasingly difficult to consistently offer salaries and benefits that compete with the market. The issue is exacerbated by the government restrictions on compensation and funding that were introduced in September 2012 by the Public Sector Employers' Council. The high costs associated with living in the Greater Vancouver Region (particularly housing) and the increasing global competition for skilled employees also aggravate the problem. Additionally, SFU's ability to attract and keep skilled faculty and staff is impaired by the quality of the University's work environment, which is negatively impacted by aging infrastructure.

SFU has taken proactive steps to address the recruitment challenge. The Faculty Renewal Plan strives to maintain the appropriate balance of high-performing teaching and research faculty members. There is also a market differential fund, a retention fund, and a comprehensive benefits package in place to

provide financial incentives for faculty to continue on as part of the University. For administrative staff, along with a comprehensive benefits package, local rental housing and a mortgage subsidy program have been offered as ways to offset the high costs of living in the Vancouver area. However, even with these programs, SFU continues to be challenged in recruiting and retaining the talent pool that is so vital in carrying out its mission.

6.1.4. Maintenance of Critical Information Technology Systems

All University stakeholders' processes ubiquitously depend on information systems to function effectively on a daily basis. Processes and services must be put in place to protect the ongoing operational capacity, security, and compliance of these systems.

There are weaknesses in the University's critical IT systems resulting from, among other reasons, aging equipment, long-term lack of investment in IT, and overloaded system capacity. In addition, there are concerns with inadequate information systems security, which increases the risk of cyber-attacks on SFU's information and communication systems infrastructure, leading to potential privacy breaches and legal liability.

In response, the University is actively addressing the IT systems risk by implementing a new stewardship process to manage information systems decisions, creating a change advisory board to drive IT service updates, and targeting funding to the most critical and vulnerable IT processes and infrastructure. Systems security is being improved by prioritizing security staffing, forming a new council to manage IT security improvements, undertaking an external security audit (scheduled to be completed in March 2018), and performing ransomware test exercises through the University's Emergency Operation Centre.

Even with these internal initiatives, the lack of major investment means SFU's IT systems are expected to remain vulnerable to major system interruptions/failures and increasingly sophisticated attempts at breaching its security protocols.



SFU



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Performance Reflected by Ministry Measures

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7. PERFORMANCE REFLECTED BY MINISTRY MEASURES

The following pages assess SFU’s performance using the measures under the Ministry of Advanced Education’s Accountability Framework for post-secondary education. The Ministry assesses performance based on the following scale:

Target assessment scale	Description
Exceeded	More than 10% above target
Achieved	Up to 10% above target
Substantially achieved	Up to 10% below target
Not achieved	More than 10% below target

7.1. Ministry Performance Measure: Student Spaces

Ministry Accountability Objective: Capacity

Operational Definition

Number of full-time equivalent (FTE) student enrolments delivered overall and in designated program areas

SFU’s Achievement:	Exceeded	
2016-17 Target: 19,903	111.0%	% of target
2016-17 Actual: 22,096		

SFU’s total student headcount for 2016-17 was 35,364, including 29,944 undergraduates and 5,420 graduates.

With 47% of domestic undergraduate students attending the University on a part-time basis, this equates to 18,367 total domestic FTE undergraduate students. The undergraduate and graduate FTEs for 2016-17 reached 22,096, which exceeded the government-funded enrolment target of 19,903 by 11%.

A majority of students enter SFU’s undergraduate programs either directly from BC Grade 12 or through college transfer. In 2016-17, 46% of the University’s new undergraduates came from BC Grade 12 with average entry grades of 87%. BC college transfer students made up 33% of new students.

7.2. Ministry Performance Measure: Credentials Awarded

Ministry Accountability Objective: Capacity

Operational Definition

The average number of credentials awarded by public post-secondary institutions in the most recent three years

SFU's Achievement:		Achieved	
2016-17 Target:	6,820	104.0%	% of target
2016-17 Actual:	7,095		

Total credentials awarded by SFU to students annually have grown by 26% from 2011 to 2016, with bachelor's degrees increasing by 30%, master's degrees remaining the same, and doctoral degrees increasing by 46%.

The Ministry has been increasing this target steadily for the last five years. SFU has kept pace every year with substantial increases to its actual number of credentials awarded. This year, SFU surpassed the Ministry's target by 4%. It has done this through increasing enrolment in earlier years alongside a continued commitment to the retention of its students. Furthermore, SFU has provided student services and support that add quality to the campus experience, and encourage and promote credential attainment.

SFU will continue to support degree completion by its students by giving priority to teaching excellence, recruiting high-quality students, increasing student financial assistance budgets, increasing access to affordable student residences, and providing increased funding to other student support services.

7.3. Ministry Performance Measure: Aboriginal Student Spaces (FTE)

Ministry Accountability Objective: Access

Operational Definition

Number of full-time equivalent (FTE) enrolments of Aboriginal students delivered in all program areas

SFU's Achievement:		Achieved
2016-17 Target:	≥ 2015-16 actual 443	100.2% of prior year
2016-17 Actual:	444	

From 2012-13 to 2016-17, SFU showed an increase of 20% in Aboriginal student enrolment as the University continues its efforts to recruit and retain Aboriginal students.

For 2016-17, the Ministry is requiring that all institutions set their own targets and report on them in the Institutional Accountability Plan and Report.

SFU is committed to equalling or increasing its Aboriginal FTEs. Following the target principle established in other performance measures, SFU's target for the "Ministry Performance Measure: Aboriginal Student Spaces" is to equal or increase the FTEs actual from the previous year.

7.4. Ministry Performance Measure: Student Satisfaction with Education

Ministry Accountability Objective: Quality

Operational Definition

Percentage of students who were very satisfied or satisfied with the education they received

SFU's Achievement:		Achieved
2016-17 Target:	≥ 90%	102.3% % of target
2016-17 Actual:	92.1% (±0.9%)	

The University remains concerned with course availability. In fall 2016, 59% of undergraduate students surveyed were getting the specific courses they wanted, and 85% of students were getting the number of courses they wanted each semester. SFU will continue to focus on improving this measure, and to set and attain higher goals.

The University also continues to improve student facilities. A number of support centres are in place, including the Centre for Students with Disabilities, the Indigenous Student Centre, and the Student Development and Programming Centre. Furthermore, SFU will be adding a new senior administration position, Associate Vice-President, Teaching and Learning, in the Office of the Vice-President, Academic with a portfolio that will, among other things, concentrate on the student education experience.

7.5. Ministry Performance Measure: Student Assessment of the Quality of Instruction

Ministry Accountability Objective: Quality

Operational Definition

Percentage of students who rated the quality of instruction in their program positively

SFU's Achievement:		Achieved
2016-17 Target:	≥ 90%	104.8% % of target
2016-17 Actual:	94.3% (±0.7%)	

SFU graduates indicate very high levels of satisfaction with the quality of instruction they receive over the course of their educational programs. The University is meeting its goal to develop an enhanced learner-centred environment for students, and it will continue to explore new ways of fostering interaction between scholars and students.

SFU piloted an online teaching and course evaluation system in the summer of 2015. The system provides feedback from students on teaching and courses, and helps identify areas for improvement and automated workflows—all designed for an elevated learning experience. The pilot was successful and a full launch of the system took place on March 24, 2017.

7.6. Ministry Performance Measure: Student Assessment of Skill Development

Ministry Accountability Objective: Quality

Operational Definition

Percentage of students who indicated their education helped them to develop various skills

SFU's Achievement:		Achieved
2016-17 Targets ≥85%	Overall Performance	99.1% <small>% of target</small>
	2016-17 Actual: 84.2% (±1.2%)	
	Written Communication:	2016-17 Actual 83.1% (±1.2%)
	Oral Communication:	2016-17 Actual 81.3% (±1.2%)
	Group Collaboration:	2016-17 Actual 78.4% (±1.3%)
	Critical Analysis:	2016-17 Actual 92.0% (±0.9%)
	Problem Resolution:	2016-17 Actual 76.4% (±1.4%)
	Learn on Your Own:	2016-17 Actual 89.0% (±1.0%)
Reading and Comprehension:	2016-17 Actual 88.8% (±1.0%)	

In 2006, SFU implemented an initiative to ensure students graduate as improved writers, with better quantitative reasoning skills, and with a greater breadth of knowledge (WQB). Since the fall of 2006, all students must complete a minimum of 36 credit hours of courses designated as Writing, Quantitative, or Breadth, with a grade of C- or better to receive the WQB credits. Foundational courses are part of the WQB program: Foundations of Academic Literacy (FAL), and Foundations of Analytical and Quantitative Reasoning (FAN). The WQB credits are a mandatory requirement for an undergraduate degree.

In a further commitment to quality and consistency in education, SFU recently adopted the practice of developing assessable educational goals for all of its programs. Each department is now required to articulate program educational goals as part of the external review process.

SFU is committed to flexible education, as shown by the release of the [Task Force on Flexible Education Report](#). The report highlights a number of actions that support a more engaging and effective student learning experience. These new initiatives are meant, in part, to help students acquire the necessary skills for future studies and careers.

7.7. Ministry Performance Measure: Student Assessment of the Usefulness of Knowledge and Skills in Performing Job

Ministry Accountability Objective: Relevance

Operational Definition

Percentage of employed graduates who indicated the knowledge and skills they acquired through their education was useful in performing their job

SFU's Achievement:		Substantially Achieved	
2016-17 Target:	≥ 90%	90.2%	% of target
2016-17 Actual:	81.2% (±1.5%)		

SFU strives to provide students with the knowledge and skills they need to participate effectively in society, including being successfully employed. The University believes that it is critical to provide students with work experience related to their fields of study. SFU's Work Integrated Learning is one of North America's largest and most comprehensive co-operative education programs, with over 30 years of successful student and employer work placements around the world.

International co-operative education provides students with a unique opportunity to expand their career horizons while gaining international and intercultural work experience. In the past 15 years, SFU students have worked in well over 1,000 placements throughout the globe.

Co-operative education, international study, practicums, internships, and field study offer students invaluable exposure to a wide range of occupational environments.

SFU will continue to strive to improve this measure.

7.8. Ministry Performance Measure: Unemployment Rate

Ministry Accountability Objective: Relevance

Operational Definition

Percentage of employed graduates who were unemployed at the time of the survey, compared with the percentage of unemployed individuals with high school credentials or less

SFU's Achievement:		Exceeded 135.0% % of target
2016-17 Target:	≤ 10.8%	
2016-17 Actual:	8.0 (±0.9%)	

SFU's graduates' unemployment rate is more than a third (8.0%) of the provincial target of 10.8%.

The Ministry's definition of "Relevance" is that the public post-secondary system is relevant and responsive to the needs of the province by providing the appropriate scope and breadth of post-secondary education. At present, programming demand is concentrated in four areas: technology, business and public administration, health and the health professions, and teacher education. SFU is well positioned to respond to the demand in each of these four areas. More recently, with the continuing global concern over environmental sustainability and the increase in green technologies, SFU will provide opportunities to students in areas that address environmental issues.

7.9. Ministry Performance Measure: Sponsored Research Funding

Ministry Accountability Objective: Capacity

Operational Definition

Total sponsored research funding awarded from federal government, provincial government, and other sources

SFU's Achievement:	Substantially Achieved	
All sources	93.6 % % of target	
2016-17 Target: \geq 2015-16 actual \$117.4 m		
2016-17 Actual: \$109.9 m		
Federal sources		
2016-17 Target:	\geq 2015-16 actual \$72.8 m	
2016-17 Actual:	\$64.5 m	
Provincial sources		
2016-17 Target:	\geq 2015-16 actual \$8.6 m	
2016-17 Actual:	\$5.2 m	
Other sources		
2016-17 Target:	\geq 2015-16 actual \$36.0 m	
2016-17 Actual:	\$40.2 m	

In FY 2016, SFU's total sponsored research income reached \$109.9 million, which is a 6.6% increase from 2014, and a 6.4% decrease from 2015. The decrease in the total research funding from 2015 is due to the timing of a major infrastructure acquisition which was awarded in 2016, but the funds were not received until the start of the following fiscal year. SFU expects to recover the successive upward trend in its research income in FY 2017.

Furthering and advancing meaningful research is an integral part of SFU's Vision/Mission. Research-intensive faculty members are continually providing opportunities for undergraduate and graduate students to explore scholarly research through focused course seminars, independent study semesters, and honours and thesis supervision.

7.10. Ministry Performance Measures: Summary of Performance

Table 10: Summary of Performance

2016-17 Performance Reflected by Ministry Measures				
Ministry Performance Measure	Exceeded	Achieved	Substantially Achieved	Not Achieved
Student Spaces	✓			
Credentials Awarded		✓		
Aboriginal Student Spaces		✓		
Student Satisfaction with Education		✓		
Student Assessment of the Quality of Instruction		✓		
Student Assessment of Skill Development		✓		
Student Assessment of the Usefulness of Knowledge and Skills in Performing Job			✓	
Unemployment Rate	✓			
Sponsored Research Funding			✓	



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Conclusion



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8. Conclusion

SFU is proud of its Vision/Mission to be the leading engaged university. The essential elements of the Vision/Mission are reflected in the three core themes: engaging students, engaging research, and engaging communities. All University planning is now governed by these core themes as SFU strives to be the leading engaged university defined by its dynamic integration of innovative education, cutting-edge research, and far-reaching community engagement.

While maintaining enrolments from Vancouver to Maple Ridge, SFU is also committed to meeting the demand for relevant, high-quality post-secondary education from the growing population of the South Fraser Region. Working collaboratively with school districts, other post-secondary institutions, and communities at large, and with a recent \$90 million commitment from the federal and provincial governments to build a Sustainable Energy and Environmental Engineering building at the Surrey campus, SFU is well positioned to expand programming that meets the social and economic needs of the region and the province.

This Institutional Accountability Plan and Report analyzes SFU's performance and provides a review of achievements relating to the identified goals, objectives, and targets described in the Ministry of Advanced Education's Institutional Accountability Framework. The University has exceeded the Ministry's Performance Measures in two instances, achieved them in five, and substantially achieved them in two. This analysis indicates that SFU is contributing to the achievement of the Ministry's goals for the delivery of high-quality, post-secondary education in BC.

In support of the *BC Skills for Jobs Blueprint*, SFU is adding FTEs to disciplines in demand: computing, engineering, mechatronics, and business.

SFU is fulfilling its Vision/Mission and mandate.

9. Appendix *

Simon Fraser University 2016/17 Accountability Framework Performance Measure Results

Performance measure ¹	Reporting year					
	2015/16		2016/17	2016/17		2016/17
	Actual		Target	Actual		Assessment
Student spaces²						
Total student spaces	22,181		19,903	22,096		Exceeded
Credentials awarded³						
Number	6,867		6,820	7,095		Achieved
Sponsored research funding⁴						
Sponsored research funding from all sources (million \$)	\$117.4		≥ previous year	\$109.9		Substantially achieved
Federal sources (million \$)	\$72.8			\$64.5		
Provincial sources (million \$)	\$8.6			\$5.2		
Other sources (million \$)	\$36			\$40.2		
Aboriginal student spaces⁴						
Total Aboriginal student spaces	443		TBI	444		TBI
Ministry (AVED)	443			444		
Industry Training Authority (ITA)	N/A			N/A		
Student satisfaction with education⁵						
	%	+/-		%	+/-	
Bachelor degree graduates	91.6%	0.9%	≥ 90%	92.1%	0.9%	Achieved
Student assessment of the quality of instruction⁵						
	%	+/-		%	+/-	
Bachelor degree graduates	93.0%	0.8%	≥ 90%	94.3%	0.7%	Achieved
Student assessment of skill development⁵						
	%	+/-		%	+/-	
Bachelor degree graduates	83.8%	1.1%	≥ 85%	84.2%	1.2%	Achieved
Student assessment of usefulness of knowledge and skills in performing job⁵						
	%	+/-		%	+/-	
Bachelor degree graduates	82.2%	1.4%	≥ 90%	81.2%	1.5%	Substantially achieved

continues on next page...

* All tables, data, and notes in appendix are provided by the Ministry of Advanced Education.

Unemployment Rate ^{5,6}						
	%	+/-		%	+/-	
Bachelor degree graduates	5.7%	0.8%	≤10.8%	8.0%	0.9%	Exceeded

Notes:

TBI - Institutions are required to include their target and assessment.

N/A - Not applicable

¹ Please consult the 2016/17 Standards Manual for a current description of each measure. See http://www.aved.gov.bc.ca/framework/docs/standards_manual.pdf

² Results from the 2015/16 reporting year are based on data from the 2015/16 fiscal year; results from the 2016/17 reporting year are based on data from the 2016/17 fiscal year. Excludes Industry Training Authority student spaces.

³ Annual performance is measured using a rolling three-year average of the most recent fiscal years, e.g., the results for the 2016/17 reporting year are a three-year average of the 2013/14, 2014/15, and 2015/16 fiscal years.

⁴ Results from the 2015/16 reporting year are based on data from the 2014/15 fiscal year; results from the 2016/17 reporting period are based on data from the 2015/16 fiscal year.

Results from the 2015/16 reporting year are based on 2015 survey data; results from the 2016/17 reporting year are based on 2016 survey data.

⁵ For all survey results, if the result plus or minus the margin of error includes the target, the measure is assessed as achieved. In all cases, the survey result and the margin of error are used to determine the target assessment. Survey results are not assessed if the number of respondents is less than 20 or the margin of error is greater than 10%.

⁶ Target is the unemployment rate for those aged 18 to 29 with high school credentials or less for the province.

Target assessment scale	Description
Exceeded	110% or more of the target
Achieved	100% - 109% of the target
Substantially achieved	90% - 99% of the target
Not achieved	Less than 90% of the target
Not assessed	Survey results with less than 20 respondents or a margin of error of 10% or greater, descriptive measures, and measures without targets

APPENDIX
Simon Fraser University
2016/17 Accountability Framework Performance Measure Results

Performance measure ¹	Reporting year					
	2015/16		2016/17	2016/17		2016/17
	Actual		Target	Actual		Assessment
Bachelor degree graduates' assessment of skill development						
	%	+/-		%	+/-	
Skills development (avg. %)	83.8%	1.1%	≥ 85%	84.2%	1.2%	Achieved
Written communication	82.5%	1.2%		83.1%	1.2%	
Oral communication	81.2%	1.2%		81.3%	1.2%	
Group collaboration	78.7%	1.3%		78.4%	1.3%	
Critical analysis	91.1%	0.9%		92.0%	0.9%	
Problem resolution	78.1%	1.3%		76.4%	1.4%	
Learn on your own	89.3%	1.0%		89.0%	1.0%	
Reading and comprehension	86.0%	1.1%		88.8%	1.0%	