McMaster University
Strategic Mandate Agreement Annual Report 2017-18
Part 1. Overview

Introduction

The 2017-20 Strategic Mandate Agreements (SMAs) between individual universities and the Ministry of Training, Colleges and Universities outline the role universities perform in Ontario's postsecondary education system and how they will build on institutional strengths to fulfil their mandate and help support system-wide objectives and government priorities.

Each priority area in 2017-20 SMAs includes system-wide and institution-specific metrics and targets.

The SMA Annual Report is used by the ministry to track progress on metric performance on an annual basis. The SMA Annual Report is also an opportunity for institutions to provide contextual information and a narrative associated with performance in the shared priority areas. *Part 1. Overview* introduces the institutional context for metrics performance, overall and by priority area. *Part 2. Data Workbook* includes historical data and most recently available values for both system-wide and institution-specific metrics.

For more information on the Strategic Mandate Agreements, please visit the Ontario Government webpage.

Institutional Narrative

Provide a brief description of the overall institutional context for the 2017-18 Strategic Mandate Agreement metric results. **(max. 600 words)**

At McMaster, we strive to foster the creative and intellectual potential of our students, while at the same time preparing our graduates to build successful careers. We develop innovative and entrepreneurial graduates, undertake cutting-edge research, and serve our community by leading and partnering on a variety of local and global initiatives. McMaster also has a strong track record of working with industry, successfully outpacing our peers over the last five years in industry-sponsored research. Such industrial collaborations act as magnets, attracting businesses to our region, allowing for the incubation of new companies, the fostering and mentoring of new entrepreneurs, and creating jobs for Canada's next generation of leaders – our students.

The University has achieved an international reputation as a centre of excellence for research and innovation, teaching and learning, and creativity. This year, McMaster was again ranked one of only two universities in Ontario among the world's top 100 universities, and one of only four in Canada. *Research Infosource 2017* ranked McMaster as Canada's *most* research-intensive university, with a total research income of $354.6M, averaging $405,300 per faculty member – more than double the national average.

Alongside McMaster's achievements in research, the University's institution-wide commitment to promoting and supporting teaching excellence and pedagogical innovation was recognized this year

when McMaster was awarded the 2018 Global Teaching Excellence Award by the Higher Education Academy, in partnership with Times Higher Education, UK.

McMaster continually strives to improve access to underrepresented groups through pathway programs and initiatives. For the second consecutive year, McMaster saw the enrolment of both first generation and students with disabilities rise to more than 6,700 and 1,800 students, respectively. The University is equally committed to its recruitment and access strategies targeted at Indigenous communities, and has more than 400 full-time Indigenous students currently enrolled.

McMaster's dedication to student success and development, both before and after graduation, is evidenced by the institution's stellar performance in the retention and employability metrics. McMaster's first to second year retention rate reached 91.0% in 2017-18. In addition, McMaster's employability metrics have also consistently remained above 91.0% within 2 years of graduation. Our alumni have transformed their educational experiences into meaningful career opportunities, with 94.5% of our graduates securing full-time employment. Furthermore, 91.3% of our graduates have found full-time employment in a field related to their studies. This is indicative of McMaster's strength in preparing students for the job market and to be engaged and successful members of society.

McMaster also places a great deal of focus on the health and well-being of our faculty, staff and students. With growing societal pressures and the associated increased prevalence of mental illness, the University has been proactive in dedicating significant resources to support and assist staff as well as students. In addition to hiring more counsellors, the University has opened wellness centres and provided/promoted wellness resources across campus. This is reflected in the fact that the proportion of operating expenditures spent on student services by the University rose from 4.38% to 5.84% in 2016-17 alone.

The University has also worked hard to be responsive to issues facing our local Hamilton community, as well as broader societal concerns, and has developed strong community and research partnerships, as well as continuing to promote our longstanding commitment to freedom of expression, association and peaceful assembly. Throughout the history of our University, McMaster has advanced the boundaries of knowledge and learning through critical enquiry, discussion and debate, and this freedom to question, research and explore continues to be fundamental to the discovery, communication and preservation of knowledge that is at the heart of our mission.

Priority Areas

Provide trends and key outcomes for the 2017-18 Strategic Mandate Agreement metrics included within each of the five priority areas. **(max. 200 words per priority area)**.

1. Student Experience

This priority area captures institutional strengths in improving student experience, outcomes and success, and recognizes institutions for measuring the broader learning environment, such as continuity of learning pathways, retention, student satisfaction, co-curricular activities and records, career preparedness and student services and supports.

Overall, McMaster has exceeded the 2019-20 target for all the system-wide and institution-specific metrics related to this priority area. McMaster's continued efforts to support and enhance the student

experience are reflected in the University's rising achievement indicators. McMaster's student experience metrics rank among the top in system-wide comparisons, and have all shown steady growth since 2014, with the first to second year retention rate reaching 91.0% in 2017-18. The University has allocated additional resources to further improve these historically high retention rates and has introduced statistical modelling, counselling and intervention methods intended to help predict those students who may be at risk and ensure that they have the opportunity to receive appropriate guidance and supports. McMaster has also allocated additional resources to the Student Wellness Centre to provide a wide range of counselling options, medical services and wellness programs, supporting students to be successful both academically and personally. The enrichment of the student experience is further demonstrated by the increasing number of High Impact Practices (HIPs) our students are engaging in, and the innovative learning pathways available through our unique partnership with Mohawk College, for example, which is one of the strongest in the province.

2. Innovation in Teaching and Learning Excellence

This priority area focuses on innovative efforts including pedagogical approaches, program delivery and student services that contribute to a highly skilled workforce and ensure positive student outcomes. It captures institutional strengths in delivering high-quality learning experiences such as experiential, entrepreneurial, personalized and digital learning, and student competencies that improve employability.

Innovation is another area where McMaster leads, having met or exceeded the 2019-20 target for all the system-wide and institution-specific metrics related to this priority area. McMaster was awarded the 2018 Global Teaching Excellence Award by the Higher Education Academy, in partnership with Times Higher Education, in recognition of our innovative pedagogy. The success of our graduates also evidences the quality of our teaching excellence: Donna Strickland, a McMaster alumna, was recently awarded the Nobel Prize for Physics. McMaster leads all universities in the sector on curriculum mapping, with a score of 100%. Across the University, students are offered opportunities to engage in work-integrated learning, both within Canada and overseas. We have a strong record of working with local small and medium sized businesses and large manufacturers, offering our students an exceptional work integrated experience, but also bringing the innovations of our students and researchers to industry. McMaster's FORGE provides students interested in entrepreneurship with training resources and a network of alumni and mentors. New blended learning programs continue to be developed, combining online and in-class modules plus work-integrated assignments. McMaster's normalized score for instructor effectiveness has reached an all-time high, further solidifying our commitment to innovative teaching practices.

3. Access and Equity

This priority area recognizes institutions for their efforts in improving postsecondary education equity and access, and for creating opportunities that can include multiple entrance pathways and flexible policies and programming, with the focus on students who, without interventions and support, might not otherwise participate in postsecondary education.

Overall McMaster is within or above the 2019-20 target or target range for all the system-wide and institution-specific metrics related to this priority area. The University strives to create new pathways to support those groups who would not be able to attend postsecondary education otherwise. McMaster's strong commitment to access and equity is reflected in our ongoing improvement in access measures and

metrics. In line with this commitment, the University has developed various pathway programs: the McMaster Discovery program offered to Hamilton residents who have experienced barriers to postsecondary education; the Indigenous Pathway through the McMaster Bachelor of Social Work program; and a number of collaborative programs with Mohawk College that allow Mohawk students to receive a McMaster degree. The University's Graduand Survey asks students from historically marginalized groups to rate their satisfaction with services provided at McMaster. The latest survey results show that 96.6% (up from 88.3% in 2016) of students from marginalized groups provided positive feedback regarding the services which the university offered/provided to them. As an institution McMaster works hard to promote equity, diversity and inclusivity and has a dedicated Equity and Inclusion Office which proactively supports and promotes equity across all areas of the McMaster community.

4. Research Excellence and Impact

This priority area captures institutional strengths in producing high-quality research on the continuum of fundamental and applied research through activity that further raises Ontario's profile as a globally recognized research and innovation hub. It also acknowledges that research capacity is strongly linked with graduate education.

Overall McMaster has exceeded the 2019-20 target for all but one system-wide and institution-specific metric, and is just 0.15% below target on the share of Ontario CIHR funding metric. McMaster's commitment to fostering and supporting high quality fundamental research is embedded in McMaster's Strategic Plan for Research, *Research for a Brighter World.* The Plan outlines key areas where our researchers are delivering solutions to meet pressing global challenges, and articulates our commitment to support diverse and talented graduate students, and use our research platforms and strengths to raise the profile of Ontario and Canada as globally recognized research and innovation hubs. McMaster has again been recognized as Canada's most research intensive university by *Research Info$ource 2017*, with a total research income of $354.6M, averaging $405,300 per faculty member, more than double the national average. In Health Sciences, McMaster ranks 23rd in the world and 2nd in Canada in the Times Higher Education's Subject Rankings in 2017-18. The institution secured $136.9M in research funding from industrial sources in 2017-18, doubling the amount that was secured in 2013-14 ($67.8M). Moreover, McMaster continues to increase graduate enrolment and provide enhanced opportunities for graduate students to work with our world-class researchers in their laboratories.

5. Innovation, Economic Development and Community Engagement

This priority area recognizes the unique role institutions play in contributing to their communities and to economic development, as well as to building dynamic partnerships with business, industry, community members and other colleges and universities. It focuses on regional clusters, customized training, entrepreneurial activities, jobs, community revitalization efforts, international collaborations, students, partnerships with Indigenous Institutes and a program mix that meets needs locally, regionally and beyond.

Overall McMaster has exceeded the 2019-20 target for all the system-wide and institution-specific metrics related to this priority area. McMaster engages with our local communities in a variety of innovative ways. McMaster Innovation Park (MIP) provides office, lab, and specialized facilities to more than 65 companies; the FORGE, the University's accelerator, provides early stage entrepreneurs and rapid growth technology companies with incubation space; and the McMaster Industry Liaison Office (MILO),

supports commercialization of the cutting-edge work undertaken by our researchers, enabling them to bridge the gap from research to commercial application and/or develop positive and productive collaborations with other researchers or industry. In June 2018, the University and the Six Nations of the Grand River hosted more than 350 researchers and stakeholders at the Global Water Futures Program, intended to deliver risk management solutions to manage water futures in Canada and other cold regions around the globe. In 2017-18, McMaster broke into the top 100 in QS's Graduate Employability rankings and ranks 93rd in the world, demonstrating that McMaster's graduates become successful and contributing members to both the local and global economy. Furthermore, in 2017-18, 94.5% of McMaster's graduates secured full-time work within 2 years of graduation.

Attestation

McMaster University confirms that all information being submitted to the ministry as part of the 2017-18 SMA annual report is accurate and has received approval from the University President.

Please complete the contact information below.

Institutional Contact Name:	Jacy Lee
Telephone:	905-595-9140 x 23530
Email:	avpira@mcmaster.ca
Completion Date:	January 11, 2019
Website address for posting ministry approved report:	https://ira.mcmaster.ca/strategic-mandate-agreement/

McMaster University SMA2 Annual Report 2017-18 Part 2
System-Wide Metrics

ID	Priority Area	Metric Name	2014-15	2015-16	2016-17	2017-18
8	Student Experience	Year 1 to Year 2 retention rate	89.9%	90.3%	90.9%	91.0%
34	Student Experience	Proportion of senior-year students with two High-Impact Practices (HIPs)	59.2%	60.9%		62.3%
98	Student Experience	Average number of High Impact Practices (HIPs) per fourth-year student	2.0	2.1		2.1
71	Student Experience	Proportion of operating expenses on student services, net of student assistance	4.3%	4.4%	5.8%	6.5%
52	Innovation in Teaching and Learning Excellence	Graduation rate	76.9%	78.9%	77.5%	79.0%
41	Innovation in Teaching and Learning Excellence	Proportion of programs with explicit curriculum maps and articulation of learning outcomes			100.0%	100.0%
35	Innovation in Teaching and Learning Excellence	Composite score on NSSE question related to students' perceived gains in higher order learning outcomes	28.1	28.2		28.4
103	Access and Equity	Number of first generation students enrolled at institution	3,279	5,222	6,951	6,715
104	Access and Equity	Number of students with disabilities enrolled at institution	926	1,008	1,884	1,806
105	Access and Equity	Number of Indigenous students enrolled at institution	489	487	449	444
106	Access and Equity	Number of French-language students enrolled at institution	140	192	229	228
36	Access and Equity	Share of OSAP recipients at an institution relative to its total number of eligible students	59.7%	54.9%	55.3%	59.5%
84	Access and Equity	Number of transfer applications	646	584	656	
107	Access and Equity	Number of transfer registrations	62	73	80	
48	Research Excellence and Impact	Number of papers per faculty member			4.1	
50	Research Excellence and Impact	Number of citations per paper			16.4	
97	Research Excellence and Impact	CIHR funding - share to total Ontario universities			12.7%	12.6%
96	Research Excellence and Impact	SSHRC funding - share to total Ontario universities			5.7%	5.8%
95	Research Excellence and Impact	NSERC funding - share to total Ontario universities			9.2%	9.4%
94	Research Excellence and Impact	Total Tri-Council funding - share to total Ontario universities			10.5%	10.5%
87	Innovation, Economic Development and Community Engagement	Of those graduates who are working full-time, what proportion are working in related jobs	93.0%	92.0%	91.2%	91.3%
1	Innovation, Economic Development and Community Engagement	Graduate employment rate 6 months	90.4%	88.8%	89.9%	89.3%
1	Innovation, Economic Development and Community Engagement	Graduate employment rate 2yr	94.8%	94.5%	93.9%	94.5%

Grey-out cells: data not available

Institution-Specific Metrics

#	Priority Area	Metric Name	Objective of Metric	Frequency	2013-14	2014-15	2015-16	2016-17	2017-18
1	Student Experience	Percentage of graduate students satisfied with their academic experience (rating of excellent or very good)	To measure overall satisfaction level of graduate students with their academic experience at McMaster.	Every three years		71% (2010)	70.6% (2013)	70.9% (2016)	
2	Innovation in Teaching and Learning Excellence	Aggregated normalized instructor effectiveness score	To measure overall effectiveness of an instructor	Annual		77.0	76.6	77.2	82.4
3	Access and Equity	Student satisfaction with services delivered to under-represented groups (Composite of Indigenous, international, and students with disabilities)	To measure overall satisfaction level of under-represented students with University services.	Annual		No data	No data	88.3% (2016)	96.6% (2017)
4	Research Excellence and Impact (Univ)	Research funding from industrial sources	To measure overall amount of research funding McMaster receives from business enterprises.	Annual (Slip Year)	$103.5M	$67.8 M	$73.3 M	$117.0 M	$136.9 M
5	Research Excellence and Impact (Univ)	Research Intensity Ratio: Total sponsor research income/Full-time Faculty	To measure McMaster's annual research intensity.	Annual			339.5	358.3	405.3
6	Innovation, Economic Development and Community Impact	New Licenses	To measure McMaster's annual number of new licenses.	Annual (Slip Year)	135	71	138	190	204

Grey-out cells: data not available

Appendix 1. Data inputs required for calculation of selected system-wide metrics

Metric ID	Metric Name	Data inputs - for calculating metrics	2016-17	2017-18
36	Share of OSAP recipients at an institution relative to its total number of eligible students	Total OSAP Award Recipients	14,119	15,480
		Total Eligible Student Headcount	25,548	25,998
71	Proportion of operating expenses on student services Table 6 COFO Financial Report	Total operating expenses (000s) (Cell L36)	$606,679	$630,910
		Student service expenses (000s) (Cell G36)	$68,242	$79,146
		Scholarships, bursaries (000s) (Cell G28)	$32,997	$38,201

Research Funding Data

Metric ID	Metric Name	Data inputs - for calculating metrics	2014-15	2015-16	2016-17	Total (14/15 - 16/17)	3yr avg. (14/15 - 16/17)
97	CIHR funding - Share to total of Ontario Universities	University funding value	$38,947,024	$37,804,762	$42,852,383	$119,604,169	$39,868,056
		Total Ontario funding value	$304,962,320	$304,827,533	$337,697,915	$947,487,768	$315,829,256
96	SSHRC funding - Share to total of Ontario Universities	University funding value	$3,688,934	$3,919,408	$4,298,326	$11,906,668	$3,968,889
		Total Ontario funding value	$64,980,841	$66,781,141	$73,737,728	$205,499,710	$68,499,903
95	NSERC funding - Share to total of Ontario Universities	University funding value	$26,359,491	$24,846,929	$27,784,139	$78,990,559	$26,330,186
		Total Ontario funding value	$276,845,451	$273,490,047	$293,234,732	$843,570,230	$281,190,077
94	Tri-Council funding - Share to total of Ontario Universities	University funding value	$68,995,449	$66,571,099	$74,934,848	$210,501,396	$70,167,132
		Total Ontario funding value	$646,788,611	$645,098,721	$704,670,375	$1,996,557,708	$665,519,236

Bibliometrics Data (as of Nov.2017 for the time period 2011-2015)

Metric ID	Metric Name	Data inputs - Counts for calculating metrics	2011	2012	2013	2014	2015	Total (2011-2015)	5yr avg. (2011-2015)
50	Number of citations per paper	Number of citations	84,837	77,401	63,917	44,890	32,592	303,637	
48	Number of papers per faculty member	Number of papers	3,320	3,580	3,762	3,850	4,008	18,520	3,704
		Number of faculty members					900		

ID	Metric Name	Description	Source	Reporting Period	Notes
			Appendix 2. University Metrics - Dictionary		
8	Year 1 to Year 2 retention rate	Percentage of first-time, full-time undergraduate university students who commenced their study in a given Fall term and have continued to study at the same institution in the next Fall term	Consortium for Student Retention Data Exchange (CSRDE)	Academic year, returning cohort. E.g., the 2016-17 data value reflects students who enrolled in Fall 2015 and returned to the institution in Fall 2016	Based on cohort analysis by CSRDE and reported by universities through SMA Annual Reports. Compatible with CSRDE graduation rate
34	Proportion of fourth-year students with two or more High-Impact Practices (HIPs) (1)	Percentage of students who participated in two or more of the six High Impact Practices (HIPs) as identified in NSSE - service learning, learning community, research with a faculty member, internship or field experience, study abroad and culminating senior experience	National Report on "Customizable Items Selector", National Survey of Student Engagement (NSSE)	Academic year when National Survey of Student Engagement (NSSE) is administered; e.g., data for 2014 NSSE is included under 2014-15. Most Ontario universities participate in the survey every three years and provide data only for these years (2014 and 2017)	Participation includes the percentage of students who responded "Done or in progress" for five HIPs (Q11) and at least "Some" of courses included a community-based project for service learning (Q12)
98	Average number of High Impact Practices (HIPs) per fourth-year student (1)	Average number of High-Impact Practices (HIPs) of the six HIPs identified in NSSE per respondent	National Report on "Customizable Items Selector", National Survey of Student Engagement (NSSE)	Academic year when National Survey of Student Engagement (NSSE) is administered; e.g., data for 2014 NSSE is included under 2014-15. Most Ontario universities participate in the survey every three years and provide data only for these years (2014 and 2017)	Participation includes the percentage of students who responded "Done or in progress" for five HIPs (Q11) and at least "Some" of courses included a community-based project for service learning (Q12)
71	Proportion of operating expenses on student services	Percentage of total student services expenses, excluding scholarships and bursaries, in total operating expenses in a given fiscal year (consolidated values including affiliates where applicable)	Council of Ontario Finance Officers (COFO)	Fiscal Year	Proportion of operating expenses on student services is calculated as total student services expenses (Cell G36) minus scholarships, bursaries etc. (Cell 28) divided by total operating expenses (Cell L36) as per Table 6, COFO Financial Report of Ontario Universities
52	Graduation rate	Percentage of first-time, full-time undergraduate university students who commenced their study in a given Fall term and graduated from the same institution within 6 years	Consortium for Student Retention Data Exchange (CSRDE)	Academic year, graduating cohort: e.g. 2015-16 data value reflects students who enrolled in Fall 2009 and graduated within six years, before or in calendar year 2015	Based on cohort analysis by CSRDE and reported by universities through SMA Annual Reports. Compatible with CSRDE retention rate
41	Proportion of programs with explicit curriculum maps and articulation of learning outcomes	Proportion of programs with explicit curriculum maps with articulation of learning outcomes	Institutional data	Academic year	As part of the Quality Assurance process introduced in 2010, all academic programs undergoing cyclical review are required to articulate learning outcomes in relation to undergraduate and graduate degree-level expectations. Curriculum mapping involves the articulation of learning outcomes at the course level.
35	Composite score on NSSE question related to fourth-year students perceived gains in higher order learning outcomes	Students' perceived gains in knowledge, skills and personal development	National Survey of Student Engagement (NSSE)	Academic year when National Survey of Student Engagement (NSSE) is administered; e.g., data for 2014 NSSE is included under 2014-15. Most Ontario universities participate in the survey every three years and provide data only for these years (2014 and 2017)	Skills gains are measured as a simple sum of NSSE means for ten areas (Q17a-Q17j) including effective writing and speaking, critical thinking, numerical analysis, work-related knowledge and skills, team-work, problem-solving, being an informed and active citizen, understanding people of other backgrounds
103	Number of first generation students enrolled at institution	Total number of full-time first generation students enrolled at institution	Enrolment data	Academic year	First generation student is a student whose parent(s)/guardian(s) has/have not attended a postsecondary institution. If a sibling of the student has attended a postsecondary institution, but the parent(s)/guardian(s) have not, the student is still considered a first generation student
104	Number of students with disabilities enrolled at institution	Total number of students with disabilities registered with the Office for Students with Disabilities	Table 1 of the institution's annual report to the ministry for the Accessibility Fund for Students with Disabilities (AFSD); enrolment data	Academic year	Number of students with disabilities for 2016-17 year is based on the AFSD reports. Please review and update where necessary to align with previous values

ID	Metric Name	Description	Source	Reporting Period	Notes
105	Number of Indigenous students enrolled at institution	Total number of full-time Indigenous students enrolled at institution	Enrolment data	Academic year	Indigenous is a collective name for the original people of North America and their descendants. The Canadian Constitution, Constitution Act 1982, recognizes three groups of Indigenous peoples - Indians (First Nation), Métis and Inuit. These are three separate peoples with unique heritages, language, cultural practices and spiritual beliefs
106	Number of French-language students enrolled at institution	Total number of full-time French-language students enrolled at institution	Enrolment data	Academic year	A student is considered a French-language student if he or she meets at least one of the following criteria of: The student's mother tongue is French; The principal language of correspondence with the student is French; The student was previously enrolled in a French-language education institution; The student was enrolled in a postsecondary program delivered partially in French
36	Share of OSAP recipients at an institution relative to its total number of eligible students	Full-time Ontario Student Financial Aid (OSAP) recipients at an institution as a share of its total number of full-time grant eligible enrolment	OSAP recipients: MTCU; Full-time grant eligible enrolment: Institutional data	Academic year, 2016-17 and 2017-18. OSAP academic year starts at August 1, with academic year end data available at the end of August the following year. Full-time enrolment: funding-eligible November 1st headcount of undergraduate and graduate students with 60% Load (0.3FTE) or greater	The number of OSAP awards includes any undergraduate and graduate student who has applied for full-time OSAP assistance and was issued funding. Note: In 2017-18 the definition was adjusted to reflect the number of recipients that were issued awards (rather than the number of applicants eligible for awards) and to exclude the double counting of applicants.
84	Number of transfer applications	Full-time transfer students in the fall of the first-year of a university program, who have applied to university and have identified on applications to Ontario University Applications Centre (OUAC)	Ontario University Applications Centre (OUAC) reports and reported by universities through SMA Annual Reports	Academic year of application and registration	Metric does not reflect all transfers as it excludes transfer students who apply directly to university and includes only students who applied through OUAC in the fall of the 1st year of university from publicly-assisted colleges and universities
107	Number of transfer registrations	Full-time transfer students registered in the fall of the first-year of a university program, who have applied to university and have identified on applications to Ontario University Applications Centre (OUAC)	Ontario University Applications Centre (OUAC) reports and reported by universities through SMA Annual Reports	Academic year of application and registration	Metric does not reflect all transfers as it excludes transfer students who apply directly to university and includes only students who applied through OUAC in the fall of the 1st year of university from publicly-assisted colleges and universities
48	Number of papers per full-time faculty	Number of papers divided by the number of full-time faculty at the university (including affiliates)	SCOPUS (Elsevier) data on papers; Faculty data: Common University Data Ontario (CUDO) or institutional data on faculty eligible for research funding	Papers: Calendar year, 5-year average, one year slip (2011-2015); Faculty: Full-time faculty (Fall 2015). Data was collected as of November 2017	Data includes articles, reviews, self-citations, and captures affiliated hospitals and institutions. Metric calculated by MTCU
50	Number of citations per paper	Number of citations divided by the number of papers published over a period of five years at the university (including affiliates)	SCOPUS (Elsevier) data on papers and citations	Calendar year, 5-year total, one-year slip, citations in 2011-16 on papers published in 2011-15, and papers published in 2011-15. Data collected as of November 2017	Data includes articles, reviews, self-citations, and captures affiliated hospitals and institutions. Metric calculated by MTCU
97	CIHR funding - share to total Ontario universities	Canadian Institutes of Health Research (CIHR) funding received by university (including affiliates) and percentage in total CIHR funding received by all Ontario universities in a given fiscal year	Research Support Programs, The Tri-agency Institutional Programs Secretariat (TIPS)	Fiscal Year, 3-year rolling average, one-year slip. The 2017-18 metric value is based on the average for the period 2014-15 to 2016-17	Funding includes CIHR research grants received by universities (including affiliates) and funds spent by the Network of Centres of Excellence (NCE) administrative centers hosted by universities, and excludes funding for research chairs, fellowships, scholarships, awards and prizes. Full list of exclusions is available at http://www.rsf-fsr.gc.ca/apply-demande/calculations-eng.aspx
96	SSHRC funding - share to total Ontario universities	Social Sciences and Humanities Research Council (SSHRC) funding received by university (including affiliates) and percentage in total SSHRC funding received by all Ontario universities in a given fiscal year	Research Support Program, The Tri-agency Institutional Programs Secretariat (TIPS)	Fiscal Year, 3-year rolling average, one-year slip. The 2017-18 metric value is based on the average for the period 2014-15 to 2016-17	Funding includes research grants received by universities and their affiliates from SSHRC and funds spent by the Network of Centres of Excellence (NCE) administrative centers hosted by universities, and excludes funding for research chairs, fellowships, scholarships, awards and prizes. Full list of exclusions is available at http://www.rsf-fsr.gc.ca/apply-demande/calculations-eng.aspx

ID	Metric Name	Description	Source	Reporting Period	Notes
94	Tri-Council funding - share to total Ontario universities	Tri-Council funding received by university (including affiliates) and percentage in total Tri-Council funding received by all Ontario universities in a given fiscal year	Research Support Program, The Tri-agency Institutional Programs Secretariat (TIPS)	Fiscal Year, 3-year rolling average, one-year slip. The 2017-18 metric value is based on the average for the period 2014-15 to 2016-17	Funding includes research grants received by universities and their affiliates from the three federal research granting agencies and funds spent by the Network of Centres of Excellence (NCE) administrative centers hosted by universities, and excludes funding for research chairs, fellowships, scholarships, awards and prizes. Full list of exclusions is available at http://www.rsf-fsr.gc.ca/apply-demande/calculations-eng.aspx
95	NSERC funding - share to total Ontario universities	Natural Science and Engineering Research Council (NSERC) funding received by university (including affiliates) and percentage in total NSERC funding received by all Ontario universities in a given fiscal year	Research Support Fund, The Tri-agency Institutional Programs Secretariat (TIPS)	Fiscal Year, 3-year rolling average, one-year slip. The 2017-18 metric value is based on the average for the period 2014-15 to 2016-17	Funding includes NSERC research grants received by universities and their affiliates and funds spent by the Network of Centres of Excellence (NCE) administrative centers hosted by universities, and excludes funding for research chairs, fellowships, scholarships, awards and prizes. Full list of exclusions is available at http://www.rsf-fsr.gc.ca/apply-demande/calculations-eng.aspx
87	Of those graduates who are working full-time, what proportion are working in related jobs	Percentage of university graduates in the labour force employed full-time in a job related to skills developed at university, two years after graduation	Ontario University Graduate Survey (OUGS)	Academic year when the Ontario University Graduate Survey (OUGS) is administered, e.g. 2017-18 data value reflects graduates from bachelor or first professional degree programs who graduated in calendar year 2015 and responded to the 2017-18 OUGS	Metric is based on the number of respondents employed in full-time jobs closely related or somewhat related to skills developed at university, and the total number of OUGS respondents employed in full-time jobs. The labour force includes persons who were employed or unemployed but looking for work
1	Graduate employment rates	Percentage of university graduates in the labour force employed six months and two years after graduation	Ontario University Graduate Survey (OUGS)	Academic year, when Ontario University Graduate Survey (OUGS) is administered, e.g. 2017-18 data value reflects graduates from bachelor or first professional degree programs who graduated in calendar year 2015 and responded to the 2017-18 OUGS	Graduate employment rates are based on the number of respondents in the labour force who were employed part-time, full-time or were offered a job, and the total number of OUGS respondents in the labour force. The labour force includes persons who were employed or unemployed but looking for work