

SECRETARIAT

Board of Governors

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BOARD OF GOVERNORS

Thursday, April 16, 2020 at 9:00 a.m. Videoconference via Zoom

AGENDA

NOTE: Members who wish to have items moved from the Consent to the Regular Agenda should contact the University Secretariat before the Board meeting. Members may also request to have items moved when the Agenda is presented for approval at the Board meeting.

Page

A. OPEN SESSION

- 1. **REMARKS FROM THE CHAIR**
- 2. **NOTICE OF MEETING - APRIL 7, 2020**
- APPROVAL OF THE AGENDA OPEN SESSION 3.

CONSENT (9:00 a.m.)

4. MINUTES OF PREVIOUS MEETING – MARCH 5, 2020 (OPEN **SESSION**)

Approval

- 6 10 Minutes - March 5, 2020 (Open Session)
 - 5. **BUSINESS ARISING** (none)
 - **6.** REPORT FOR INFORMATION

Information

- 11 17 Report from Health, Safety and Risk Management
 - 7. REPORT FROM SENATE

Approval

18		Report from the Senate
19 - 22	a.	SPS B1 - Procedures for the Assessment of Teaching
23 - 25	b.	SPS B2 - Teaching Portfolios
26 - 32	c.	SPS C1 - Research Leave Policy - Tenured and CAWAR Faculty

33 - 39		d. SPS C2 - Research Leave Policy - Permanent Faculty
	8.	COMMITTEE REPORTS
		a. COMMITTEE ON UNIVERSITY ADVANCEMENT
		Information
40 - 62		i. Annual Report from University Advancement
		b. REMUNERATIONS COMMITTEE
		Approval
63		Report from the Remunerations Committee
64 - 67		i. Ratification of Tentative Agreement – IUOE Local 772 (Operating Engineers)
		MOTION: That items 4 to 8 be approved or received for information by consent.
	<u>REG</u>	<u>ULAR</u> (9:05 a.m.)
	9.	BUSINESS ARISING (none)
	10.	COMMUNICATIONS (none)
	11.	PRESIDENT'S REPORT TO THE BOARD (9:10 a.m.)
		Information
68 - 71		a. President's Report to the Board
	12.	PANDEMIC ADJUSTED FINANCIAL PLAN (9:30 a.m.)
		Information
72 - 94		a. Pandemic Adjusted Financial Plan
	13.	PRESENTATION TO THE BOARD OF GOVERNORS (10:10 a.m.)
		Name: Dr. Gerry Wright Professor, Department of Biochemistry and Biomedical Sciences Director, Michael G. DeGroote Institute for Infectious Disease Research
	14.	REPORT FOR INFORMATION (10:50 a.m.)

Equity and Inclusion Office Annual Report

Information

a.

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15. REPORT FROM SENATE (11:00 a.m.)

Approval

120		Report from the Senate
121 - 130	a.	SPS A1 - Recruitment and Selection of Faculty Members
131 - 146	b.	Canadian Centre for Electron Microscopy (CCEM)

16. COMMITTEE REPORTS (11:10 a.m.)

a. EXECUTIVE AND GOVERNANCE COMMITTEE

Notice of Motion

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147 - 148		Report from the Executive and Governance Committee
149 - 150	i.	Terms of Reference - Human Resources Committee
151	ii.	Terms of Reference - Executive and Governance Committee
152 - 162	iii.	Revisions to Board By-Laws - Execution of Instruments
163	iv.	Request for Observer Status

b. PLANNING AND RESOURCES COMMITTEE

Approval

164 Report from the Planning and Resources Committee

165 - 200

i. Capital Plan 2020/2021

17. OTHER BUSINESS (11:30 a.m.)

Health, Safety and Risk Management Report to the Board of Governors

Report 2020-2 for the period of February 3, 2020 - March 27, 2020

The Health, Safety and Risk Management (HSRM) unit of Human Resources Services works to promote the health, safety, wellness and engagement of all McMaster employees.

Executive Summary

- COVID-19 is the most critical health and safety issue impacting the world's population in recent times. At McMaster, critical decisions, actions and supports have been made to ensure the health and safety of the university community. Business continuity planning and then crisis response support have been the priority activities during this reporting period.
- Crisis Management Group (CMG) initiated regular meetings 2-3 times a week that started
 at end of February and continues through this COVID-19 crisis. These meetings have dealt
 with a range of issues encompassing activities, discretionary events, classes, research and
 administrative functions. Several matters have been passed on to the standing university
 management and academic functions. CMG continues to meet providing a forum for
 discussion and decisions as required.
- McMaster continues to follow guidelines provided by the Government of Canada, including Hamilton Public Health, in protecting the health and safety of the university community.
- In accordance with the Ontario State of Emergency, essential services continue to be delivered on-site. As of March 16, 2020 the majority of employees are working remotely.
- The Ministry of Labour Training and Skills Development (MOLTSD) was notified regarding two critical injuries during this time period. The MOLTSD was on campus as a result of one of the injuries at the David Braley Health Sciences Centre. No order was issued.
- McMaster provided notification to the City of Hamilton Water division as a result of red sediment entering Cold Water Creek from Parking Lot P. This was subsequent to the initial release reported in the last report. Facilities Services has taken further actions to prevent reoccurrence.

1. Training and Loss Prevention Initiatives

- McMaster continues to work with our community in response to the COVID-19
 pandemic. The Crisis Management Group provides leadership and directs the university
 response to the pandemic. Environmental and Occupational Health Support Services
 (EOHSS) has been actively involved in providing expert advice to our community and
 developing key resources for business continuity planning, and to support those working
 from home and for those continuing to work on campus.
- Employee Health Services (EHS) continues to liaise with Hamilton Public Health on emerging issues related to COVID-19 for guidance on best practices for the McMaster community. Our Occupational Health Nurses work directly with employees and Hamilton

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Public Health for employee testing and surveillance.

- EOHSS continues to provide regular social media messaging on a variety of safety topics to support the McMaster community.
- Planning for the University's annual Health and Safety Week continues. Events will be
 offered in an online format during the first week of May due to the ongoing COVID-19
 crisis.
- The Central Joint Health and Safety Committee (JHSC) convened via teleconference on March 25, 2020. Other Faculty and Department specific JHSCs are planning and preparing to ensure that meeting frequency and inspection requirements set out in the Occupational Health and Safety Act are met.

2. Government Relations and External Inspections/Audits

- A patient at the David Braley Sport Medicine and Rehabilitation Centre slipped and fell resulting in a fractured hip while reaching to open the door to the changeroom.
 MOLTSTD was notified and did not attend.
- A visitor at the David Braley Health Sciences Centre lost their footing and fell backwards
 while walking up the main staircase leading to the second floor. The individual suffered a
 fractured hip. The MOLTSTD was notified and attended the site on March 6, 2020. No
 orders were issued.
- An Inspector from the City of Hamilton, Hamilton Water was on site on February 11, 2020 as a result of a discovery of red sediment at the base of the outflow of Cold Water Creek, which borders McMaster Parking Lot P. Further investigation identified the sediment as mud runoff from a construction dirt pile at the north part of the parking lot as well as the centre baseball diamond. The runoff entered the storm sewer which has an outflow into Cold Water Creek. The Ontario Ministry of Environment and Climate Change Spills Action Centre was notified on this date. To prevent future incidents, Facility Services has installed woven geotextile on catch basins where there is potential of runoff that may cause erosion as well as conducting regular visual inspections. They are also reviewing protocols for storing of landfill.

3. Employee Health Services Summary

3.1 Critical Injuries

There were two critical injuries during this period as noted above.

3.2 Annual Incident/Injury Summary 2019

The Health Safety and Risk Management Team (HSRM) has prepared the 2019 Annual Incident/Injury Report. The below information is a summary of this report and will highlight

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all incidents related to injury/illness that occurred at all McMaster University locations, incidents that required health care, and incidents that resulted in lost time from work.

The report will be distributed to each of the Joint Health and Safety Committees (JHSC) as part of their monthly package from the CJHSC at a future meeting. The JHSC are encouraged to review this report and make recommendations to enhance the existing preventative measures that are in place.

Annual Incident Summary

	2016	2017	2018	2019
Incidents	470	356	409	465
Healthcare	55	54	69	69
Lost Time Claims	16	18	20	33
Lost Time Days	241 days	355 days	127 days	363 days
Average LT Days/LT Incident	15	20	6	11

Typically, 1 to 3 lost time claims account for the majority of lost time days. This trend continued in 2019, with one lost time claim representing 139 lost time days of the total 363 lost time days for the year. Three other claims each had over 30 days lost time. 40 percent of the WSIB claims are related to strains/sprains. Three quarters of the strains/sprains are reported by Hospitality and Facilities Services Team. EOHSS works with the teams to improve and alter processes and provide information on lifting techniques. In addition, Employee Health actively manages all claims to ensure modified duties are offered to promote early return to work. Where possible, Employee Health also submits requests to WSIB for claim cost relief.

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Injuries Resulting in WSIB Claims 2019

Hospitality and Facilities Services areas traditionally involve a greater number of incidents and lost time due to the nature of the work. The JHSC's are actively engaged in efforts to proactively address safety risks and prevent injuries.

Other

Faculties/Depts

2

Faculty of Health

Sciences

Department

Facility Services

Incident Types

of Claims

5

0

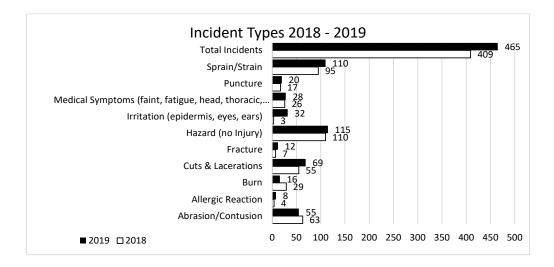
Hospitality

Services

As illustrated in the graph below and noted above, Sprains/Strains continue to be the University's most reported type of injury, followed by Abrasions/ Contusions, cuts & lacerations in 2019. While the chart below depicts 2018 and 2019 these findings have been generally typical over the last 4 years.

It is important to note that the Hazard (No Injury), is defined as an incident caused by an unsafe act, an unsafe condition or a combination of both in the work environment which could potentially have resulted in property loss and/or physical harm. The McMaster community is strongly encouraged to report hazards and identify potential risks.

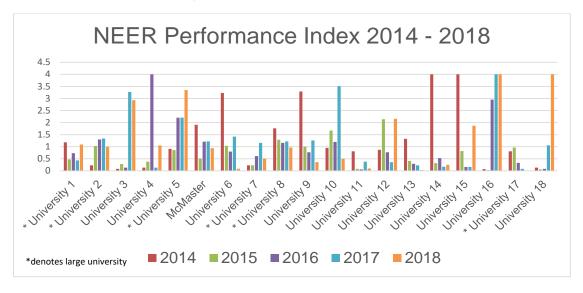
Health, Safety and Risk Management Report 2020-2



WSIB Performance Index

A comparison of annual WSIB performance index for Ontario Universities for the years 2014 to 2018 is noted in the graph below. The universities are not identified to protect the confidentiality of their data. The performance index measurement provides a helpful metric in assessing McMaster's injury and lost time statistics in comparison to other universities. An index of less than 1.0 (rebate) indicates you are performing better than rate group average and more than 1.0 (surcharge) shows that your record is poorer than average in your rate group.

In 2019 McMaster's Performance Index was 2.03 therefore in a surcharge position. This is as a result of 4 high cost claims that occurred in 2019. Note: 2019 data was not available for all the universities at the time of this report.



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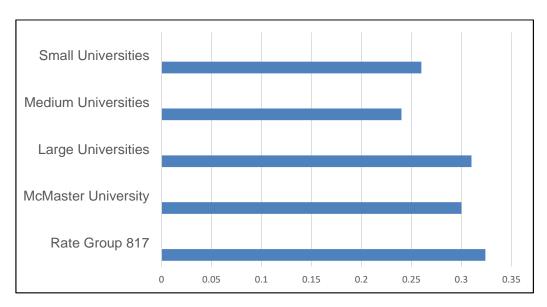
Lost Time Injury Frequency

The lost time injury frequency rate (LTI) is a way to measure an organizations safety performance. It represents the number of lost time injuries that have occurred within a calendar year and is relative to the total number of hours worked. The purpose of calculating this rate and using this metric is to help us measure our safety programming.

Below you will find a chart that outlines the LTI in relation to other Universities and all other industries in the Rate Group 817. From the data in the chart below you will see McMaster University continues to have a lower LTI than the Rate Group and a lower average than other large Universities. These numbers tell us that our current safety programs, early and safe return to work initiatives, and injury prevention initiatives are helping to keep the McMaster community safe and at work.

In 2019 McMaster's LTI continues to remain consistent with a slight increase in frequency from 0.3 to 0.4. Comparable data to other Universities is not yet available.

Five Year Average Lost Time Injury Frequency (LTI) 2014-2018



4. Workplace Wellness Initiatives

McMaster offers a number of initiatives to promote employee well-being, utilizing the 13 psychosocial factors related to the National Standard of Canada for Psychological Health and Safety in the Workplace, to shape the foundation of our programming. Recent activities include:

- Developed multiple resources related to the COVID-19 crisis, including: focusing on your well-being, helping your family navigate COVID-19, supporting remote work arrangements, and tips for staying healthy and productive while working remotely.
- Commenced several programs to help supervisors engage team members that are working remotely, and to foster team development.
- Continue to recognize financial well-being as an important part of health and wellness, with workshops provided on financial and retirement planning.
- Subsidized yoga sessions twice per week for employees were also offered in collaboration with the Healthy Workplace Committee.
- In support of National Random Acts of Kindness Week, a wellness campaign was developed to recognize employees' acts of kindness. Stories were shared as part of a social media campaign.
- A Pickleball league was development, and free sessions were offered once per week in collaboration with Healthy Workplace Committee.
- In collaboration with an organizing committee, the Inspiring From Within employee development conference focused on personal resilience, mental health and PTSD, healthy productive energy, defining your vision, and communication strategies.
- HR supported or delivered workshops for various departments across the University as follows:
 - Developed and delivered multiple workplace interventions regarding respectful work environments
 - o Delivered a newly developed Resilience Training program
 - o Delivered training with respect to our EFAP resources and services
 - Delivered Psychological Health and Safety Training
 - Developed and hosted customized teambuilding retreats and training for multiple teams and departments across the University related to organizational health and personal well-being.



UNIVERSITY SECRETARIAT

Board of Governors

Senate

Gilmour Hall, Room 210 1280 Main Street West Hamilton, Ontario, Canada Phone: 905.525.9140Ext. 24337 Fax: 905.526.9884 E-mail: univsec@mcmaster.ca http://www.mcmaster.ca/univsec

REPORT TO THE BOARD OF GOVERNORS from the SENATE

a. SPS B1 - Procedures for the Assessment of Teaching

At its meeting on March 11, 2020, Senate approved the proposed revisions to SPS B1 – Procedures for the Assessment of Teaching.

Senate now recommends,

that the Board of Governors approve the amendments to the Policy SPS B1 – Procedures for the Assessment of Teaching, as circulated.

b. SPS B2 - Teaching Portfolios

At the same meeting, Senate approved amendments to SPS B2 – Teaching Portfolios.

Senate now recommends,

that the Board of Governors approve the amendments to the Policy SPS B2 – Teaching Portfolios, as circulated.

c. SPS C1 – Research Leave Policy – Tenured and CAWAR Faculty

At the same meeting, Senate approved amendments to SPS C1 – Research Leave Policy – Tenured and CAWAR Faculty

Senate now recommends,

that the Board of Governors approve the amendments to the Policy SPS C1 – Research Leave Policy– Tenured and CAWAR Faculty, as circulated.

d. SPS C2 – Research Leave Policy – Permanent Faculty

At the same meeting, Senate approved amendments to SPS C2 – Research Leave Policy – Permanent Faculty

Senate now recommends,

that the Board of Governors approve the amendments to the Policy SPS C2 – Research Leave Policy–Permanent Faculty, as circulated.

Board of Governors: FOR APPROVAL April 16, 2020



Policies, Procedures and Guidelines

<u>Complete Policy Title</u> <u>Policy Number (if applicable):</u>

Procedures for the Assessment of Teaching SPS B1

<u>Approved by</u> <u>Date of Most Recent Approval</u>

Senate / December 14, 2011 / Board of Governors December 15, 2011

<u>Date of Original Approval(s)</u> <u>Supersedes/Amends Policy dated</u>

November 10, 1993 April 8, 2009 (SPS 10)

Responsible Executive Policy Specific Enquiries

Provost and Vice-President (Academic) Provost and Vice-President (Academic)

General Policy Enquiries

Policy (University Secretariat)

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by the policy owner, the written copy prevails.

EFFECTIVE TEACHING

- Effective teaching is a condition for promotion through the professorial ranks, the granting of tenure or
 permanence, salary increments based on merit, and University teaching awards (the President's Awards).
 These processes allow opportunities for the improvement of teaching through formal and informal feedback.
 Such feedback is particularly important for faculty at the beginning of their teaching careers, where it can
 and should provide a useful contribution to the development of teaching skills.
- 2. The general expectations regarding teaching effectiveness and illustrations of how this can be evaluated are contained in Section III, clauses 4 to 10 of the *Policy and Regulations with Respect to Academic Appointment, Tenure and Promotion (Tenure and Promotion Policy)*. Procedures for such assessments are described below. In general, they involve two components: assessment by students and assessment by peers. The process of peer assessment is a cooperative one, involving the faculty member and the Department Chair¹, and possibly other departmental colleagues and/or external assessors. other stakeholders.

PROCEDURES FOR STUDENT-EVALUATIONS OF TEACHING FEEDBACK ON LEARNING EXPERIENCE

- 3. It is the responsibility of the Dean of each Faculty to ensure that these procedures are followed.
- 4. Student evaluation by questionnaire feedback shall be performed collected for every undergraduate course (including summer courses), toward the end of the course, every time the course is offered. Students should be informed at the beginning of each course that they will be expected to participate in these evaluations this process.
- 5. Each Faculty shall develop a standard, Faculty-wide student evaluation questionnaire that shall include as the first question a single summative question common to all university courses. The summative question is: "Overall for this course, what is your opinion of the effectiveness of the instructor how would you describe your learning experience?"
- 6. This questionnaire may be customized for the needs of individual instructors and/or departments. At a minimum, the rating of a summary of responses to the summative question, with departmental context, must be included in all tenure/permanence and promotion recommendations as part of the Departmental Teaching Evaluation Report (see SPS B12).
- 7. It should be made clear to the students that the instructor is not involved in the administration or the analysis of student questionnaires.
 - a) Paper questionnaires should be distributed and collected during class time by someone other than the instructor. The instructor shall not be present during this procedure. Completed questionnaires should be returned by someone other than the instructor to the departmental office.
 - b) Questionnaires may be administered on-line. On-line questionnaires must be made available to

¹ "Department Chair" also means "Area Chair", "Director" of a School, and in the Faculty of Health Sciences includes "Assistant Dean" of a Program.



students only during the last two weeks of classes before the commencement of the final examination period and before final course grades are known.

8. Information from the student evaluation questionnaires will be consolidated by the Department or Senate-approved Program² into a report, consisting of a tabulation of the numerical-data. Departments will provide all instructors with contextual data (averages and medians, ideally a histogram) for all the courses given in each term. This report will be used by the department as input for promotion, tenure, permanence, and/or salary reviews as one component of the departmental teaching evaluation, and a copy will be given to the instructor after the final grades have been submitted.

PROCEDURES FOR DEPARTMENTAL EVALUATION OF TEACHING

- 9. Sound evaluation of teaching mandates evaluation by multiple people, on multiple occasions and in multiple contexts. The product of the evaluation process will not be a uniform document, rather teaching is complex and the product of evaluation of teaching may also be complex. Faculty members use a variety of pedagogies and work with students in multiple settings with multiple aids. For this reason, departmental evaluation cannot take the form of a single classroom visit, or an opinion expressed by a single individual after review of a single component of teaching, for research has shown that this method of evaluating teaching is unreliable. Instead, departmental evaluation must adhere to the principles of involving more than one evaluator and more than one site or occasion of evaluation.
- 10. A teaching portfolio structured in accordance with SPS B2 or SPS B3 would allow peers to evaluate the appropriateness of the individual's teaching approach, effectiveness of his or her teaching practice, the robustness of the evidence adduced in support of the instructor's effectiveness, and the importance of the individual's teaching contributions. It will also facilitate yearly annual review and discussion of teaching between the Department Chair and each faculty member, as well as the departmental evaluation that is part of tenure, promotion and/or permanence processes.
- 11. Conversational interviews about the contents of the portfolio between the instructor and the peer evaluators offer a good practice for evaluation, since they prepare the ground for informed and nuanced assessments of the instructor's teaching. A sound practice would be the review of the teaching portfolio by several colleagues. Colleagues may be experienced individuals who are members of the department or of other departments in the University.
- 12. To the extent that the students' ratings feedback features in the consideration by departments, or in the portfolios prepared for tenure and promotion or permanence, it is critical that these numerical ratings this information be set in the context of all the teaching done by the department. At a minimum this context should include the averages and medians of the scores for the summative question(s) for all courses, with distinction as appropriate, e.g., by level. It may be appropriate to weight the results for different courses by the number of responses.
- 13. It is expected that candidates for re-appointment, permanence, tenure or promotion will have an appropriate



² "Program" means a Senate-approved, interdisciplinary course of study at the undergraduate or graduate level which is not the sole administrative and academic responsibility of any one Department.

review of their teaching portfolios at the department level and that the department will construct a departmental report, incorporating the elements of the teaching portfolio that capture the substance of activities.

DEPARTMENTAL TEACHING EVALUATION REPORT

- 14. The department's submission on the evaluation of teaching for reappointment, tenure, permanence and/or promotion, which forms part of the dossier outlined in SPS B8, is not limited in length and should minimally contain commentary with respect to all of the following elements that are relevant:
 - a) annual review, and results of subsequent discussion with the candidate, of the Executive Summary (Part A) of the teaching portfolio (see SPS B2). Results of this discussion will be recorded in writing and agreed to by both parties.
 - b) observations from peers' visits to lectures or other teaching situations and evidence that the observations have been discussed with the colleague.
 - significant contributions to the curriculum. For example, this may take the form of well considered, evidence-based development in one's own course or across the curriculum or evidence of innovative teaching practice.
 - d) significant contributions to the development of course materials.
 - e) significant participation in pedagogical discussions with students, colleagues, TAs, in the department or elsewhere.
 - f) evidence of incorporation of some form of formative evaluation in courses and evidence of response to the concerns of students.
 - g) information on the common summative question on the student evaluation questionnaire should be provided. in tabular form, including for each course, the number of students registered, the response rate, along with the mean, median and standard deviation. These numerical ratings This information should be set in the context of all the teaching done in the department and should, at a minimum, include the means and medians (better a histogram) of the scores for the summative question for all courses with possible distinctions by level as appropriate. Evaluation information should cover all courses taught during the previous five years of service at McMaster University.





Policies, Procedures and Guidelines

<u>Complete Policy Title</u> <u>Policy Number (if applicable):</u>

Teaching Portfolios SPS B2

<u>Approved by</u> <u>Date of Most Recent Approval</u>

Senate / December 14, 2011 / Board of Governors December 15, 2011

<u>Date of Original Approval(s)</u>
<u>Supersedes/Amends Policy dated</u>

April 8, 2009 (SPS 10)

Responsible Executive Policy Specific Enquiries

Provost and Vice-President (Academic)

Provost and Vice-President (Academic)

General Policy Enquiries

Policy (University Secretariat)

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- A teaching portfolio is a record of a faculty member's teaching methods, accomplishments and goals. One
 purpose of a teaching portfolio is to represent the faculty member's involvement in teaching to potential
 reviewers.
- 2. Every faculty member should have a teaching portfolio, which he/she hey updates regularly. The portfolio is owned by the faculty member and may contain any and all information that the faculty member wishes to document.

STRUCTURE OF TEACHING PORTFOLIOS

- 3. The portfolio consists of two main parts:
 - a) Part A Executive Summary which consists of the items (i) (v) listed below and following items:
 - (i) description of responsibilities and mechanism of evaluation drawn from the appointment letter, or updates thereto (maximum one page);
 - (ii) description of teaching approach/philosophy (about one page);
 - (iii) description of teaching practice, including examples of how the approach/philosophy has been realized, or how teaching has been adapted to unusual conditions (one to two pages);
 - (iv) description of contributions to teaching, for example, course design, publications and research on teaching and learning, presentations on teaching and learning, professional development, educational leadership, reports on issues pertaining to teaching and learning (about one page);
 - (v) complete details of responses to the summative question in the students' ratings of eedback on all courses taught over the past five years. The numerical ratings information should be set in the context of all the teaching done in the department, and should, at a minimum, include the means (better a histogram) of the scores for the summative question for all departmental courses with possible distinctions (e.g., by level). It is the responsibility of the Department Chair to provide all instructors with contextual data for all the courses given in each term.
 - b) Part B Supporting Documentation, which is optional and may contain additional material compiled by the faculty member in support of Part A
- 4. This structure of the teaching portfolio accords with best practice and will ensure that departmental evaluation of a candidate's teaching can be conducted most effectively.
- 5. The elements of Part A constitute, in effect, an "executive" summary of a potentially much larger portfolio. The intent of this summary is to provide a means to manage the larger portfolio rather than to require that all such portfolios have a distinct length and uniformity. For example, the supporting documentation in Part B could record the changes and evolution in the items (i) through (iv) and collect relevant items such as course outlines, exams and assignments.
- 6. Students' comments are <u>not</u> to be included in the Executive Summary Part A, or in the Departmental Evaluation Report. Anonymous statements from students are unreliable and typically unverifiable, and a summative evaluation (such as is conducted when candidates are considered for tenure and promotion or permanence) should not be based, in whole or in part, on such comments.



Teaching Portfolios – SPS E		_	
When a candidate is portfolio will be revie incorporating the ele	When a candidate is being considered for re-appointment, permanence, tenure or promotion the teaching portfolio will be reviewed at the department level, and the department will construct a Departmental Report, incorporating the elements of the Executive Summary that capture the substance of activities (see SPS B1).		
Policy Date: TBD	McMaster University		



Policies, Procedures and Guidelines

SPS C1

<u>Complete Policy Title</u> <u>Policy Number (if applicable):</u>

Research Leave Policy – Tenured and CAWAR

Faculty

<u>Approved by</u> <u>Date of Most Recent Approval</u>

Senate / June 7, 2017 / Board of Governors June 8, 2017

<u>Date of Original Approval(s)</u>
<u>Supersedes/Amends Policy dated</u>

October 13, 1993 October 12, 2016
December 9, 1993 October 20, 2016

Responsible Executive Policy Specific Enquiries

Provost and Vice-President (Academic) Provost and Vice-President (Academic)

General Policy Enquiries

Policy (University Secretariat)

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SECTION I: INTENT

1. The University's system of Research Leaves is designed to contribute to the professional resources and effectiveness of faculty members, and to the value of their subsequent service to the University community. Research Leave provides time for carrying out a more extensive program of research than can be achieved when research must be carried out in conjunction with teaching and University service. The system of Research Leaves is one of the most effective ways in which the University encourages and supports research and scholarship. Research Leave is intended for academic research, writing, and other forms of professional development. It provides for a period free of teaching duties and other obligations, except that faculty members on Research Leave are expected to make appropriate arrangements for their graduate students, and to comment on thesis chapters, in accordance with policies approved by Senate or by Graduate Council.

SECTION II: ELIGIBILITY

- 2. A full-time tenured faculty member may seek approval for either a 6-month or a 12- month Research Leave to commence following the first six years of full-time service at McMaster University. A faculty member who holds a tenure-track or Special appointment and whose case for tenure or CAWAR is under consideration in year 6 of their appointment may apply for research leave. However, under no circumstances can a research leave commence before the date on which a faculty member's appointment with tenure or CAWAR becomes effective.
- 3. Continuing Appointments without Annual Review (CAWAR) are similar in all respects to tenured appointments except for funding arrangements. Because funding arrangements for CAWAR appointments may vary considerably, individuals in this category should contact their Department Chair with any questions related to their eligibility for payment during their approved leave. For faculty initially appointed at the rank of Assistant Professor who are applying for their first leave, 100% of salary will be maintained during the leave, whether the leave is 6 or 12 months' duration. Those initially appointed at other ranks will also be eligible for 100% salary if they can document that their first research leave at McMaster would be the first in their academic career.
- 4. Upon completion of the first and any subsequent leave, there are three options from which the faculty member may choose, varying in length of leave and amount of salary received during the leave. After six additional years of full-time service at McMaster University, a full-time tenured faculty member may seek approval for:
 - a) a 12-month leave at 90% salary. Under this option, leave will usually begin on 1 July.
 - b) a 6-month leave at full salary. Such a leave may begin on either 1 July, or 1 January.
- 5. As an alternative to waiting until the completion of a further six years of service, after three additional years of full-time service at McMaster University a full-time tenured faculty member may apply for:
 - (i) a 6-month leave at 90% of salary.
- 6. A faculty member choosing option (3) will be eligible for a six-month leave at 90% of salary twice in a seven-year period. The first such leave may be taken in either half of the fourth year (i.e. 1 July to 31 December, or 1 January to 30 June); the second leave may be taken in either half of the seventh academic year.



Part of the salary may be taken as a Research Leave Grant. For more information on this option, see
 <u>McMaster University Research Grants Program Application Guidelines and Conditions of Award</u>, or contact
 the Provost's Office.

SECTION III: PRINCIPLES GOVERNING RESEARCH LEAVE

- 8. Research Leave is granted only when three conditions are met. First, the number of years of service as described above must be completed prior to the leave. Second, the applicant must have submitted a satisfactory plan describing the research objectives and the way they will be achieved during the leave. Third, the applicant must normally have a satisfactory record of scholarly achievement since the beginning of the previous research leave (or the beginning of employment at McMaster, in the case of a first leave). When these three conditions are met, leaves shall not be unreasonably denied. Evaluation of scholarly achievement shall take into consideration exceptional cases in which such achievement may have been compromised because the applicant has spent time since the last leave in extensive service to the University or the profession.
- 9. It is the first intention of the University to support in every way possible the leave provisions in this document. To this end, faculty members, Department Chairs, and Faculty Deans are expected to work together to ensure that the instructional needs of the department can be met. On the basis of this consultation, the Chair and Dean may agree upon an alternate timing for a proposed leave of a faculty member. Final approval of the leave will still be based on the application as described below. The University reserves the right to limit the number of leaves granted in any one department in any one year in order to ensure that instructional needs can be met.
- 10. It is not normally the policy to allow banking of research leaves. When, in the opinion of the University, it would benefit the department or University for a faculty member to take leave a year earlier or later than normal, the process for deferring a leave is outlined in Appendix A. In those instances, the faculty member will be eligible for subsequent leave as if this leave had been taken at the normal time.
- 11. Faculty members who for their own reasons wish to postpone taking a leave when they become eligible for one must discuss and document with their chair and Dean the consequences of the deferral. If a faculty member defers a leave, the additional years before the leave is taken are not counted in the eligibility period for any subsequent leave.
- 12. Faculty members on Research Leave shall be entitled to salary increases (ATB and CP/M) and consideration for promotion as are all other faculty members. Leave recipients will not be penalized in promotion deliberations for the absence of teaching or University service activities during the leave period. ATB increases will be based on the faculty member's full salary, not on a reduced salary received during the leave.
- 13. CP/M is based on performance in three categories over a calendar year, two of which cannot be measured during a leave.
 - a) For a 12-month leave over a calendar year, the faculty member will be assigned the average of his/her last three CP/M par increments for the period of the leave.
 - b) For a 12-month leave over an academic year and for a 6-month leave, two equally-weighted CP/M scores will be generated; the first will be based on the model outlined above and the



second will be calculated by the Chair in the normal manner for the non-leave six months. These two scores will then be averaged.

- 14. For purposes of pension contributions, insurance, and medical and disability benefits, a faculty member on Research Leave will be regarded as a full-time member of the academic staff on regular salary. The University and the faculty member will continue to contribute their normal shares of the costs involved.
- 15. A faculty member's pregnancy or parental leave, or any statutory leave or medically supported period of total disability, may overlap the period of an approved Research Leave. The usual practice is that the unused portion of the Research Leave is taken immediately following the end of the other leave. Any departure from this practice requires the approval of the Research Leaves Committee.
- 16. Compassionate, pregnancy, parental, and statutory leaves, and medically supported periods of total disability do not affect the research leave eligibility. Any departure from this practice requires the approval of the Research Leaves Committee. Eligibility for research leave shall continue to accrue during any compassionate, pregnancy, parental, or statutory leave, or any medically supported periods of total disability of up to 24that do not exceed 18 months. Medically supported periods of total disability that are Leaves longer than 1824 months will accrue 1824 months of eligibility. Any departure from this practice requires the approval of the Research Leaves Committee.

SECTION IV: PROCEDURES

- 17. Written application for Research Leave is to be made by the faculty member to the Faculty Dean no later than 31 October of the academic year preceding the leave. The application is to include a description of the planned program of research activity and the way in which it will enhance the applicant's subsequent scholarly contribution to the University, and of the arrangements that have been made for continued supervision of any graduate students while the faculty member is absent from campus. Should the resources of another institution be essential to the planned activity, documentation indicating the support of that institution is needed before final approval can be given.
- 18. The Dean will ask for comment on the proposal from the chair of the faculty member's department. All applications for Research Leave, whether supported by the Department Chair or not, shall be submitted by the Dean to the Research Leaves Committee. Research Leave is granted by the Research Leaves Committee, which consists of the Provost, the Faculty Dean and the Dean of Graduate Studies. If all supporting documents are included with the application, a decision on the request will be given by 31 January. If supporting documents are still needed, a response in principle will be given by that date, to be confirmed after the necessary documents have been received by the Provost through the Faculty Dean. Approved leaves will be reported to the Senate for information.
- 19. The salary to which a faculty member is entitled while on leave may be paid in part as a research grant, in accordance with the requirements of Revenue Canada and the University's policy for awarding such research grants.
- 20. A faculty member on Research Leave may accept fellowships, honorary visiting professorships, or the like, provided that the duties associated with these do not detract from the research plan described in the application for leave.



- 21. The University's Consulting Policy applies during Research Leave. Specifically, a faculty member on Research Leave is permitted to engage in consulting activities comparable in extent to those permitted during non-leave periods. The University insists only that the time expended on consulting activities should not interfere with the time that Research Leave makes available for research. Also the faculty member must report to the Faculty Dean any consulting or teaching carried out during the leave. In addition to the requirements of the Consulting Policy, which calls only for reporting the time spent, in consideration of the salary being paid by the University during the leave, any additional employment income received during the leave must also be reported to the Faculty Dean. The report should provide sufficient detail about the additional employment to show that it is consistent with the application for leave. If total employment income does not exceed 115% of regular salary, the report may be submitted on completion of the leave. Anticipated employment income in excess of 115% of regular salary must be approved by the Dean before taking up the employment.
- 22. Within four months of completion of the leave, the faculty member is required to submit a written report to the Dean of the Faculty on the accomplishments during the research leave. The report allows for proper evaluation of the faculty member's accomplishments while on leave, and becomes part of the material considered for CP/M assessments. The Dean will ask the Department Chair to assess the report, and to take it into account in making a merit pay recommendation; both the assessment and the report will be made available to the members of the Research Leaves Committee.
- 23. A faculty member who wishes to appeal a denial of Research Leave may invoke the procedure outlined in Appendix B.
- 24. The Administration will provide MUFA with the number of research leave denials by Faculty each year by May 1.

SECTION V: SPECIAL LEAVES AND LEAVES OF ABSENCE

- 25. In exceptional cases Special Leave may be approved on the normal financial terms for a Research Leave although the faculty member may have servedfewer than the required number of years of full-time service. Such leave may be granted by the Research Leaves Committee in consultation with the Department Chair. It is understood that only a small number of such leaves, if any, will be approved in any one year. Normally, a Special Leave shall be counted as a Research Leave for purposes of determining the time of eligibility for the next Research Leave.
- 26. Leave of absence without salary may be granted in special circumstances by the University to any member of the faculty. Any such leave taken primarily for the purpose of research shall conform to the principles and procedures of this document. A faculty member on a Leave of Absence without salary is normally required to continue paying for fringe benefits. It would be expected, however, that the University's share would be absorbed by any outside employer. This matter should be discussed with the Faculty Dean and the Provost.
- 27. A decision to stop the clock for promotion consideration must be confirmed in writing via a letter from the President, and signed back by the faculty member.



APPENDIX A: DEFERRAL OF LEAVE

- 1. In those instances where deferring a leave might be of potential benefit to the department or University, in accordance with Section III 3. of this Policy, the following procedure will apply. Such a request to defer Research Leave may be initiated either by the department chair or by a member of faculty.
- 2. In order to consider if a Research Leave is to be deferred and the faculty member still be eligible for subsequent leave as if this leave had been taken at the normal time, the Research Leaves Committee must be provided with the following documentation:
 - a) a letter from the relevant Department Chair(s) requesting the deferral without penalty and outlining the institutional benefit of the deferral, or alternatively supporting or opposing such a request initiated by a faculty member;
 - a letter from the faculty member initiating a deferral request or indicating their position on the proposed deferral by the Chair, which could indicate their interest in or willingness to defer leave for the benefit of the department or University or their reasons why they oppose such a deferral; and
 - c) a written response to the above from the Faculty Dean(s).
- 3. After a review by the Research Leaves Committee, the faculty member will be informed in writing by the Faculty Dean of the Committee's decision. Such notification to the faculty member should also explicitly indicate that, notwithstanding the approved deferral of a Research Leave, the Research Leaves Committee has made no determination regarding the merit of any subsequent request for leave.
- 4. Any decision regarding a future research leave will be made by the Research Leaves Committee at the appropriate time and will include an assessment of the complete Research Leave Application, in accordance with Section III. of this Policy.
- 5. The procedure outlined above should commence no later than October 1 each year. In the case of a faculty member-initiated request for deferral without penalty, should this request be denied the faculty member will be given 10 business days from notification of the decision (or until October 31, whichever is later) to submit a proposal for Research Leave.



APPENDIX B: APPEAL OF DENIAL OF RESEARCH LEAVE

- 1. A faculty member shall be entitled to appeal a Research Leave decision only if she/hethey haves satisfied the service requirement for eligibility set out in Section II of this Policy.
- 2. A faculty member who has been denied a Research Leave and wishes to appeal this decision should first request, within 20 business days of the denial of the leave, a meeting with the Faculty Dean for an informal review of the decision. The Dean will convey the concerns of the faculty member, along with a recommendation as to whether the original decision to deny leave should be overturned, to the Research Leaves Committee. The Research Leaves Committee decision will be conveyed to the faculty member within 15 business days of the meeting between the faculty member and Faculty Dean.
- 3. If, after such consultations, the member remains dissatisfied and wishes to appeal the decision of the Research Leaves Committee, she/hethey may ask the Vice-President (Research) to appoint a Review Committee to review the decision. Such a request shall be submitted within 10 business days from the date of the letter communicating the decision of the Research Leaves Committee to uphold the denial, and must include a written statement on why the decision should be overturned, along with a copy of the original Leave Application and the decision letter.
- 4. The Review Committee shall consist of the Vice-President (Research), who will serve as Chair, and two faculty members, normally from the same Faculty but not the same department as the faculty member requesting the review. The two faculty members, one of whom may be a Chair or former Chair, will be appointed by the Vice-President (Research) in consultation with the faculty member requesting the review.
- 5. The decision of the Review Committee, which should be communicated in writing to the faculty member within 30 business days of the initial request to the Vice-President (Research), shall be final.

McMaster University



Policies, Procedures and Guidelines

<u>Complete Policy Title</u> <u>Policy Number (if applicable):</u>

Research Leave Policy – Permanent Faculty SPS C2

<u>Approved by</u> <u>Date of Most Recent Approval</u>

Senate / June 7, 2017 / Board of Governors June 8, 2017

<u>Date of Original Approval(s)</u> <u>Supersedes/Amends Policy dated</u>

December 14, 2011 October 12, 2016
December 15, 2011 October 20, 2016

Responsible Executive Policy Specific Enquiries

Provost and Vice-President (Academic) Provost and Vice-President (Academic)

General Policy Enquiries

Policy (University Secretariat)

DISCLAIMER: If there is a Discrepancy between this electronic policy and the written copy held

by the policy owner, the written copy prevails.

SECTION I: INTENT

1. The University's system of Research Leaves is designed to contribute to the professional resources and effectiveness of faculty members, and to the value of their subsequent service to the University community. Research Leave provides time for permanent teaching faculty to pursue pedagogical research/scholarship and professional development that will result in more effective teaching at McMaster University. Research Leave would allow permanent teaching faculty who are conducting pedagogical research in parallel with their teaching to have time to prepare the results for peer-reviewed publication, or would provide an opportunity for permanent faculty to visit another institution to learn and participate in a different environment, one whose best features could then be introduced at McMaster. The system of Research Leaves is one of the most effective ways in which the University encourages and supports research and scholarship. It provides for a period free of teaching duties and other obligations, except that faculty members on Research Leave are expected to make appropriate arrangements for their graduate students, and to comment on thesis chapters, in accordance with policies approved by Senate or by Graduate Council.

SECTION II: ELIGIBILITY

- 2. A full-time teaching-stream faculty member may seek approval for a four-month, one- term (Fall, Winter or Spring/Summer) Leave to commence following the first six years of full-time service at McMaster University. A faculty member who holds a teaching- stream appointment and whose case for permanence is under consideration in year 6 of their appointment may apply for research leave. However, under no circumstances can a research leave commence before the date on which a faculty member's appointment with permanence become effective.
- 3. During their first Leave, 100% of salary will be maintained.
- Upon completion of the first and any subsequent Leave and after six additional years of full-time service at McMaster University, a full-time faculty member with permanence is entitled to apply for another one-term Leave at 90% salary.
- 5. Part of the salary may be taken as a Research Leave Grant. For more information on this option, see McMaster University Research Grants Program Application Guidelines and Conditions of Award, or contact the Provost's Office.

SECTION III: PRINCIPLES GOVERNING RESEARCH LEAVE

- 6. Research Leave is granted only when the following conditions are met:
 - a) for all Leaves:
 - (i) the number of years of service as described above must be completed prior to the leave;
 - (ii) the applicant must have submitted a satisfactory plan describing the research objectives and the way they will be achieved during the leave.
 - b) for Leaves Subsequent to the first:
 - (i) The applicant must normally have a satisfactory record of scholarly achievement since the beginning of the previous research leave.



- 7. When these conditions are met, leaves shall not be unreasonably denied. Evaluation of scholarly achievement shall take into consideration exceptional cases in which such achievement may have been compromised because the applicant has spent time since the last leave in extensive service to the University or the profession.
- 8. It is the first intention of the University to support in every way possible the leave provisions in this document. To this end, faculty members, Department Chairs, and Faculty Deans are expected to work together to ensure that the instructional needs of the department can be met. The teaching load for teaching stream faculty will be reduced in accordance with the length of the Leave. On the basis of this consultation, the Chair and Dean may agree upon an alternate timing for a proposed leave of a faculty member. Final approval of the leavewill still be based on the application as described below. The University reserves the right to limit the number of leaves granted in any one department in any one year in order to ensure that instructional needs can be met.
- 9. It is not normally the policy to allow banking of research leaves. When, in the opinion of the University, it would benefit the department or the University for a faculty member to take leave a year earlier or later than normal, the process for deferring a leave is outlined in Appendix A. In those instances, the faculty member will be eligible for subsequent leave as if this leave had been taken at the normal time.
- 10. Faculty members who for their own reasons wish to postpone taking a leave when they become eligible for one must discuss and document with their chair and Dean the consequences of the deferral. If a faculty member defers a leave, the additional years before the leave is taken are not counted in the eligibility period for any subsequent leave.
- 11. Faculty members on Research Leave shall be entitled to salary increases (ATB and CP/M) and consideration for promotion as are all other faculty members. Leave recipients will not be penalized in promotion deliberations for the absence of teaching or University service activities during the leave period. ATB increases will be based on the faculty member's full salary, not on a reduced salary received during the leave.
- 12. For permanent faculty, CP/M is based (wholly and partially) on performance in two categories (teaching and service) over a calendar year which cannot be measured during a leave. Two CP/M scores will be generated. One score will be the average of the faculty member's last three CP/M par increments. The other score will be calculated by the Chair in the normal manner for the non-leave eight months. The final merit increment will be the weighted average of these two scores 1/3 for the average of CP/M over the past 3 years and 2/3 for the 8 non-leave months.
- 13. For purposes of pension contributions, insurance, and medical and disability benefits, a faculty member on Research Leave will be regarded as a full-time member of the academic staff on regular salary. The University and the faculty member will continue to contribute their normal shares of the costs involved.
- 14. A faculty member's pregnancy or parental leave, or any statutory leave or medically supported period of total disability, may overlap the period of an approved Research Leave. The usual practice is that the unused portion of the Research Leave is taken immediately following the end of the other leave. Any departure from this practice requires the approval of the Research Leaves Committee.



15. Eligibility for research leave shall continue to accrue during any pregnancy, parental, or statutory leave, or any medically supported periods of total disability of up to 24 months. Medically supported periods of total disability that are longer than 24 months will accrue 24 months of eligibility. Any departure from this practice requires the approval of the Research Leaves Committee.

SECTION IV: PROCEDURES

- 16. Written application for Research Leave is to be made by the faculty member to the Faculty Dean no later than 31 October of the academic year preceding the leave. The application is to include a description of the planned program of research activity and the way in which it will enhance the applicant's subsequent scholarly contribution to the University, and of the arrangements that have been made for continued supervision of any graduate students while the faculty member is absent from campus. Should the resources of another institution be essential to the planned activity, documentation indicating the support of that institution is needed before final approval can be given.
- 17. The Dean will ask for comment on the proposal from the chair of the faculty member's department. All applications for Research Leave, whether supported by the Department Chair or not, shall be submitted by the Dean to the Research Leaves Committee. Research Leave is granted by the Research Leaves Committee, which consists of the Provost, the Faculty Dean and the Dean of Graduate Studies. If all supporting documents are included with the application, a decision on the request will be given by 31 January. If supporting documents are still needed, a response in principle will be given by that date, to be confirmed after the necessary documents have been received by the Provost through the Faculty Dean. Approved leaves will be reported to the Senate for information.
- 18. The salary to which a faculty member is entitled while on leave may be paid in part as a research grant, in accordance with the requirements of Revenue Canada and the University's policy for awarding such research grants.
- 19. A faculty member on Research Leave may accept fellowships, honorary visiting professorships, or the like, provided that the duties associated with these do not detract from the research plan described in the application for leave.
- 20. The University's Consulting Policy applies during Research Leave. Specifically, a faculty member on Research Leave is permitted to engage in consulting activities comparable in extent to those permitted during non-leave periods. The University insists only that the time expended on consulting activities should not interfere with the time that Research Leave makes available for research. Also the faculty member must report to the Faculty Dean any consulting or teaching carried out during the leave. In addition to the requirements of the Consulting Policy, which calls only for reporting the time spent, in consideration of the salary being paid by the University during the leave, any additional employment income received during the leave must also be reported to the Faculty Dean. The report should provide sufficient detail about the additional employment to show that it is consistent with the application for leave. If total employment income does not exceed 115% of regular salary, the report may be submitted on completion of the leave. Anticipated employment income in excess of 115% of regular salary must be approved by the Dean before taking up the employment.
- 21. Within four months of completion of the leave, the faculty member is required to submit a written report to the Dean of the Faculty on the accomplishments during the research leave. The report allows for proper evaluation of the faculty member's accomplishments while on leave, and becomes part of the material



considered for CP/M assessments. The Dean will ask the Department Chair to assess the report, and to take it into account in making a merit pay recommendation; both the assessment and the report will be made available to the members of the Research Leaves Committee.

- 22. A faculty member who wishes to appeal a denial of Research Leave may invoke the procedure outlined in Appendix B.
- The Administration will provide MUFA with the number of research leave denials by Faculty each year by May 1.

SECTION V: SPECIAL LEAVES AND LEAVES OF ABSENCE

- 24. In exceptional cases Special Leave may be approved on the normal financial terms for a Research Leave although the faculty member may have servedfewer than the required number of years of full-time service. Such leave may be granted by the Research Leaves Committee in consultation with the Department Chair. It is understood that only a small number of such leaves, if any, will be approved in any one year. Normally, a Special Leave shall be counted as a Research Leave for purposes of determining the time of eligibility for the next Research Leave.
- 25. Leave of absence without salary may be granted in special circumstances by the University to any member of the faculty. Any such leave taken primarily for the purpose of research shall conform to the principles and procedures of this document. A faculty member on a Leave of Absence without salary is normally required to continue paying for fringe benefits. It would be expected, however, that the University's share would be absorbed by any outside employer. This matter should be discussed with the Faculty Dean and the Provost.
- 26. A decision to stop the clock for promotion consideration must be confirmed in writing via a letter from the President, and signed back by the faculty member.

McMaster University

APPENDIX A: DEFERRAL OF LEAVE

- 1. In those instances where deferring a leave might be of potential benefit to the department or University, in accordance with Section III 3. of this Policy, the following procedure will apply. Such a request to defer Research Leave may be initiated either by the department chair or by a member of faculty.
- 2. In order to consider if a Research Leave is to be deferred and the faculty member still be eligible for subsequent leave as if this leave had been taken at the normal time, the Research Leaves Committee must be provided with the following documentation:
 - a) a letter from the relevant Department Chair(s) requesting the deferral without penalty and outlining the institutional benefit of the deferral, or alternatively supporting or opposing such a request initiated by a faculty member;
 - a letter from the faculty member initiating a deferral request or indicating their position on the proposed deferral by the Chair, which could indicate their interest in or willingness to defer leave for the benefit of the department or University or their reasons why they oppose such a deferral; and
 - c) a written response to the above from the Faculty Dean(s).
- 3. After a review by the Research Leaves Committee, the faculty member will be informed in writing by the Faculty Dean of the Committee's decision. Such notification to the faculty member should also explicitly indicate that, notwithstanding the approved deferral of a Research Leave, the Research Leaves Committee has made no determination regarding the merit of any subsequent request for leave.
- 4. Any decision regarding a future research leave will be made by the Research Leaves Committee at the appropriate time and will include an assessment of the complete Research Leave Application, in accordance with Section III. of this Policy.
- 5. The procedure outlined above should commence no later than October 1 each year. In the case of a faculty member-initiated request for deferral without penalty, should this request be denied the faculty member will be given 10 business days from notification of the decision (or until October 31, whichever is later) to submit a proposal for Research Leave.



APPENDIX B: APPEAL OF DENIAL OF RESEARCH LEAVE

- 1. A faculty member shall be entitled to appeal a Research Leave decision only if she/hethey haves satisfied the service requirement for eligibility set out in Section II of this Policy.
- 2. A faculty member who has been denied a Research Leave and wishes to appeal this decision should first request, within 20 business days of the denial of the leave, a meeting with the Faculty Dean for an informal review of the decision. The Dean will convey the concerns of the faculty member, along with a recommendation as to whether the original decision to deny leave should be overturned, to the Research Leaves Committee. The Research Leaves Committee decision will be conveyed to the faculty member within 15 business days of the meeting between the faculty member and Faculty Dean.
- 3. If, after such consultations, the member remains dissatisfied and wishes to appeal the decision of the Research Leaves Committee, she/hethey may ask the Vice-President (Research) to appoint a Review Committee to review the decision. Such a request shall be submitted within 10 business days from the date of the letter communicating the decision of the Research Leaves Committee to uphold the denial, and must include a written statement on why the decision should be overturned, along with a copy of the original Leave Application and the decision letter.
- 4. The Review Committee shall consist of the Vice-President (Research), who will serve as Chair, and two faculty members, normally from the same Faculty but not the same department as the faculty member requesting the review. The two faculty members, one of whom may be a Chair or former Chair, will be appointed by the Vice-President (Research) in consultation with the faculty member requesting the review.
- 5. The decision of the Review Committee, which should be communicated in writing to the faculty member within 30 business days of the initial request to the Vice-President (Research), shall be final.

McMaster University



For your information

Date: April 16, 2020

To: Members of the McMaster University Board of Governors

From: Mary Williams '87, Vice-President, University Advancement

Re: 2019 University Advancement Results

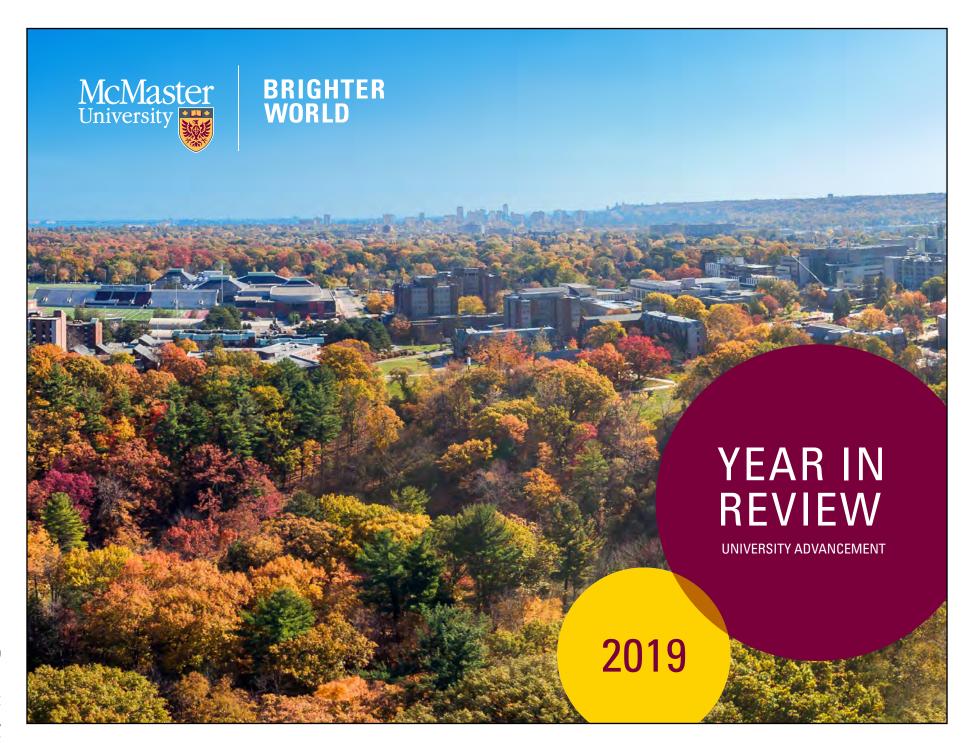
We are proud to share McMaster's 2019 University Advancement Year in Review, highlighting accomplishments that demonstrate strong growth, which are the result of the entire University community working together to help build McMaster's relationships, reputation and resources in support of our strategic priorities. The document also provides context and connections to University Advancement's Strategic Business Plan 2015-2020.

The document provides a snapshot of some of the amazing highlights from the past year in support of McMaster's vision "to achieve international distinction for creativity, innovation and excellence." We proudly report on our collective accomplishments as part of our accountabilities to various University governing bodies. The information and stories in this booklet are excellent examples of the exceptional efforts of our students, faculty, researchers, staff, alumni and friends in support of our University and helping to build a *Brighter World*.

We have had the opportunity to share these results with the University Advancement Committee and the Planning & Resources Committee as part of our annual accountability reporting. Now, we are pleased to share these results with you.

Given the priority focus of the University and this Board on addressing the impact of the COVID-19 pandemic on our University and our community, we have added this to the consent agenda. If timing allows, we will look to a future meeting where we can answer any questions that Board members may have. Alternatively, please feel free to reach out to me with any questions. Thank you.

Enclosed



University Advancement



Together, we enable McMaster to advance human and societal health and well-being.



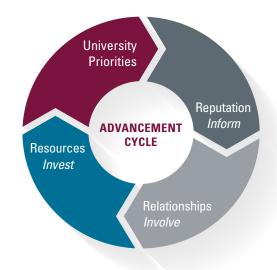
Inspired by McMaster's tradition of collaboration and innovation, we strengthen relationships, reputation and resources in pursuit of our goal to be the best.



Our values and principles help us to achieve our vision and mission. They are: Integrity, Quality, Respect, Service, Strategy and Teamwork.

Our advancement philosophy

University Advancement at McMaster actively integrates diverse programs to build relationships, reputation and resources to support the University's goals. Our operation is structured to maximize opportunities for collaborative action. Our advancement philosophy is to continuously inform our diverse stakeholders, involve them in the life of our institution and work with them to invest in McMaster's priorities.

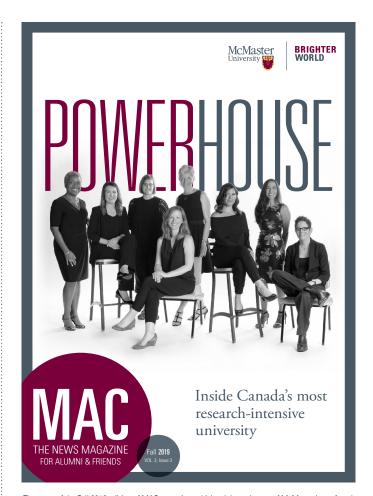


BRIGHTER WORLD | 2

University Advancement at McMaster our competitive advantage:

Lifting McMaster above a crowded field of **competitors** is more critical than ever when it comes to advancing relationships, building reputation and securing resources. McMaster's University Advancement team **does things differently** and this helps make our university stronger.

- 1. Our degree of collaboration: All of our units communications, marketing, government relations, development, alumni advancement, stewardship, volunteer engagement and advancement services & operations work in a highly collaborative way to maximize outcomes for the University. We are one of only a few advancement operations in Canada to be structured in this way.
- 2. We attract and retain the best staff: In a profession where competition for great people is pervasive, we take the time to hire the best. In an industry where the average length of stay for a team member is 18-24 months, our team has an average length of service of more than 8 years.
- 3. We punch above our weight: Our cost efficacy is second to none. Even with a small team relative to our U15 counterparts, we deliver excellent results in all areas of our advancement operation.
- 4. We bring in record-setting funding and gifts: Our comparatively small shop has helped secure a number of major government grants and some of the biggest philanthropic gifts in Canadian university history.
- 5. We adapt and change: We consistently measure and assess what we are doing to ensure that we continue to work at the leadingedge of our industry. We embrace change, and our nimble structure allows us to quickly adapt which leads to even stronger results.
- 6. Our depth of relationships: We excel at building long-term, meaningful relationships with our diverse constituent groups, including funders, alumni, volunteers, government, the community, the media, our faculty, staff and students. The strength of our relationships is a key contributor to our success.



The cover of the Fall 2019 edition of MAC magazine, which celebrated some of McMaster's top female researchers. For those viewing this document electronically, please click here to learn more about these researchers.

The Strategic Landscape

In creating the University Advancement Strategic Business Plan 2015-2020, we identified a number of sector trends which we need to anticipate. The landscape ahead is both challenging and exciting, and our role is to help ensure that McMaster is strategically positioned to take advantage of new opportunities.



The post-secondary system is evolving

Ongoing and significant policy uncertainty and financial restraints within the provincial government present the post-secondary sector with numerous challenges. The recent provincial decision to roll back tuition rates and freeze tuition at lower rates in 2020/21 signals that fiscal restraint is likely to continue. This means McMaster must be creative in our positioning, adaptive in our planning and interactions, and strong in leveraging our influential relationships.

Near-term economic and funding environments will be challenging

Canadian and international economic conditions will no doubt continue to fluctuate, and that volatility will have impacts on the University. Of particular note is the pressure on research funding.

The business of generating revenue is changing

Dynamic shifts in the philanthropic sector have introduced uncertainty in the potential for support from donors. Strategies are needed in order to respond to several broad trends, including aging donors; fewer numbers of potential donors (as the number of active donors declines); and increasing donor expectations. As well, competition for government and philanthropic support is robust and ongoing, with more than 86,000 registered charities in Canada. This includes other U15 schools, hospitals and non-profits with initiatives attractive to government and private funders, which drives the level of sophistication and expectation. These emerging business needs demand that McMaster create greater capacity by analyzing past performance and behaviours in order to gain insight and drive business planning.

Technology has transformed the media landscape

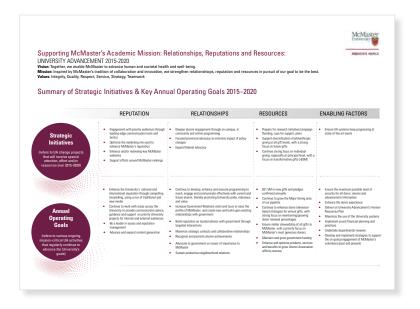
The use of mass media no longer dominates standard marketing strategies. Many of the traditional channels used in marketing and communications will soon no longer exist. Today, success requires a new mix ranging from social, digital, web and apps to online giving and connecting directly with audiences electronically. These changing media landscapes and roles for new, smart technologies create both challenges and opportunities for how we communicate, interact and engage.

Changing alumni demographics present new opportunities

Consistent increases in university enrolment have resulted in significant growth in post-secondary alumni populations across Canada and abroad. Not only are alumni numbers growing at a steady rate, but the overall demographic makeup is also changing. Recent graduates (within the last 10 years) comprise the largest alumni demographic. They are tech-savvy and transient — both of which require new and innovative approaches to alumni programming and engagement.

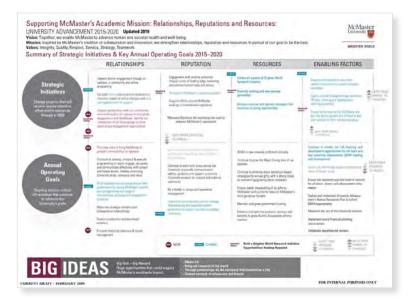
University Advancement's Strategic Business Plan 2015-2020

University Advancement's 2015-2020 Strategic Business Plan identifies our key priorities and annual objectives through 2020, and sets a framework to guide how we advance the University's vision, mission and strategic priorities.



In order to ensure the plan remains current and adapts to the ever-changing environment in which we operate, an exercise to update the plan's key components was undertaken in 2018. The result was revisions to our strategic initiatives and annual operating goals, and the introduction of "Big Ideas" — opportunities that could support McMaster's worldwide impact.

The tables below show summaries of the strategic initiatives and annual operating goals from our Strategic Business Plan (original at right; updated version at left). The forthcoming pages share highlights from the past year in relation to University Advancement's Key Success Factors from this plan, which include **Relationships, Reputation, Resources** and **Enabling Factors**.



Strengthening relationships Key success factor #1

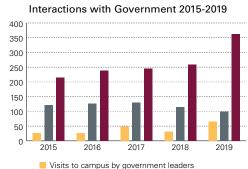
Fostering effective external and internal relationships through strong partnerships and effective government, community and alumni relations, as well as through strong and successful programs, events and services that connect with key contacts and audiences locally, nationally and internationally.

Strengthening relationships with our government partners

We remain focused on operationalizing government relations plans to achieve success and mitigate challenges/risks to the University. Key priorities include:

- · Continuing to build McMaster's reputation as a trusted advisor with all levels of government by raising McMaster's profile and strengthening the range of relationships, advocacy and engagement activities
- Focused federal and provincial advocacy to minimize impact of policy changes and seek out opportunities for support
- Focused municipal advocacy and issues management with municipal partners
- · Ensuring strategic consistency and alignment of McMaster messaging

The following data and stories highlight some of our government relations work over the past year.



3rd across Ontario universities

For meaningful meetings with members of the federal government.

Source: Federal Lobbvist Registry

President's interactions with government



Securing funding for critical research

Lawrence MacAulay, Minister of Veterans Affairs, was on campus in July to announce funding for the Centre of Excellence on Chronic Pain, which will receive \$20.1 million in federal funding for its first five years, with \$5 million per year after that.

From left: Paul O'Byrne '82, Dean and Vice-President, Health Sciences; Fred Eisenberger, Mayor of Hamilton; Filomena Tassi, Hamilton MP and Minister of Seniors; Lawrence MacAulay, Minister of Veterans Affairs: retired Corporal John Brown: and Ramesh Zacharias, medical director, Centre of Excellence on Chronic Pain.

Strengthening relationships Key success factor #1

Bringing government leaders to McMaster

Doug Ford, Premier of Ontario, visited McMaster Innovation Park in August to tour McMaster's Biomedical Engineering and Advanced Manufacturing (BEAM) Project Centre, the McMaster Automotive Resource Centre (MARC), and Fusion Pharmaceuticals, a McMaster startup company specializing in cancer therapies.



From left: David Farrar, President and Vice-Chancellor, McMaster University; John Brennan, Professor and Director of BEAM; John Valliant '93, '97, Professor and CEO, Fusion Pharmaceuticals Inc.; Doug Ford, Premier of Ontario; Ross Romano, Ontario Minister of Training, Colleges and Universities; and Donna Skelly, MPP for Flamborough-Glanbrook.

Various federal government leaders visited campus in November to meet with senior University leadership to discuss shared priorities and opportunities for collaboration, tour research laboratories and participate in a student careers panel.



Back row left: Rob Coelho, Director, Canada Revenue Agency; Patrick Borbey, President of the Public Service Commission; Andrea Farquhar, AVP, Communications and Public Affairs; Karen Mossman, Vice-President, Research (Acting), front row: Taki Sarantakis, President, Canada School of Public Service; Tina Namiesnioski, President, Public Health Agency of Canada; James Meddings, President, Federal Economic Development Agency for Southern Ontario; David Farrar, President; and Mary Williams '87, Vice-President, University Advancement.



McMaster and the City of Hamilton continued to grow their partnership in 2019, renewing their principles of cooperation and working together to connect students and the city through CityLab.

Pictured above: Fred Eisenberger, Mayor of Hamilton; and David Farrar. President.

McMaster informing public policy

Kirsty Duncan, the federal Minister of Science and Sport, announced the launch of a new federal equity, diversity and inclusion charter, later visiting campus to participate in a signing ceremony with McMaster's then-President Patrick Deane.

McMaster was one of the first post-secondary institutions in the country to endorse a pilot program from the Government of Canada designed to transform research culture by strengthening equity, diversity and inclusion.



From left: Maureen MacDonald, Dean, Faculty of Science; Karen Mossman, Associate Vice-President, Research; Patrick Deane, then-President of McMaster; Kirsty Duncan, Minister of Science and Sport; Arig al-Shaibah, McMaster Associate Vice-President, Equity and Inclusion; Danika Goosney, NSERC vice-president, research grants and scholarship directorate.

Strengthening relationships Key success factor #1

Fostering effective external and internal relationships through strong partnerships and effective government, community and alumni relations, as well as through strong and successful programs, events and services that connect with key contacts and audiences locally, nationally and internationally.

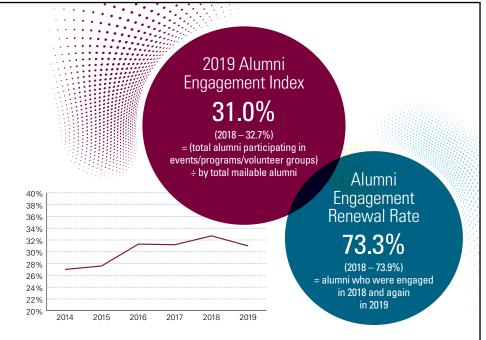
Deepening our alumni engagement

University Advancement, the McMaster Alumni Association (MAA), and our campus partners work collaboratively to engage our more than **207,000 alumni** around the world through a wide range of programs and activities. We strive to:

 Deepen engagement with McMaster's alumni, students, campus community, funders, advocates and friends through on-campus, in-community and online programming

Continue to develop, enhance and execute programming to reach, engage, recognize and communicate effectively with current and future alumni, thereby promoting University pride, relevance and value

Some of our initiatives and key metrics in pursuit of these goals are highlighted on this and the next page.



Engaging alumni to encourage and provide advice to new students

McMaster's Welcome Note Project provides personalized notes of encouragement and advice to incoming first-year students. The project was expanded and revamped in 2019, moving to digital submissions and personalized email notes by students' Faculty and where they would be living. Messages went out to every incoming undergraduate student (approximately 6,000) the night before move-in weekend. Alumni were enticed to participate in the program with prizes for the most notes submitted by Faculty of graduation, graduation year and residence/off-campus location.

"Push your boundaries, explore your new world, meet people, try new experiences, and have fun! Don't be afraid, you're all in this boat together. But most importantly... welcome home!"

- quote from one of the 2019 Welcome Notes

Strengthening Relationships

Key success factor #1

Lifelong engagement: celebrating 50 years of physical education / kinesiology

2019 marked the 50th anniversary of the first cohort of 29 students graduating from McMaster's four-year Combined Arts and Physical Education program – now known as the Kinesiology program. More than 250 alumni, administrators, faculty and staff – both past and present – returned to campus in October for a special celebration to mark the occasion and to pay tribute to all those who helped shape the program throughout its history.





Sharing alumni experiences and stories

The Life After Mac series features online stories of alumni experiences at McMaster and their transition after graduation.

In 2019, Samantha Dias '17, was one of the contributors to the series, sharing her story of utilizing her experience in the Communications program at McMaster to secure employment after graduation in social media positions at Loblaw Companies Limited and FCT.

From 16 to 207,000+ alumni: 125th anniversary of the McMaster Alumni Association

The McMaster Alumni Association was founded on May 3, 1894 when 16 members of the first Arts class graduated. The Association crested 200,000 members in 2019. It took 106 years to pass 100,000 total alumni in 2000 and only 19 years to crest 200,000. McMaster now has over 207,000 graduates. The Association's Board of Directors, and past



Members of McMaster's first graduating Arts class, including the inaugural 16 members of the McMaster Alumni Association.

presidents gathered to celebrate the 125th anniversary with a dinner co-hosted by McMaster's President and the President of the Association.

Recognizing the efforts of McMaster's volunteers



As part of National Volunteer Week in April, an email was sent on behalf of one of McMaster's most generous volunteers, Suzanne Labarge '67, to over 800 past and present volunteers at the University. The message recognized and thanked individuals who had served on McMaster's Board of Governors, campaign cabinets, reunion committees, advisory boards and in other volunteer roles. Dr. Labarge has been a tireless volunteer at McMaster, including serving as Chancellor from 2013-2019 and previously on the Board of Governors for 12 years. She is also an alumna, a generous donor and key friend of the University.

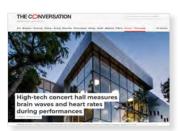
Enhancing McMaster's reputation for excellence — through outstanding media and alumni relations, communications, marketing, government relations and stewardship.

Key priorities

- Engagement with priority audiences through a mix of leading-edge marketing and communication tools and tactics
- Strengthening McMaster's digital ecosystem
- Supporting efforts around McMaster's rankings in international reputation
- Enhancing and/or redeveloping key McMaster websites and coordinating digital platforms and strategies
- Implementing an integrated content strategy that advances and expands content generation to support reputation initiatives
- Providing marketing support to help grow and diversify McMaster's undergraduate international student population

Integrated Media Strategy

We want to reach influencers and academics around the world and we're using a variety of methods to target and reach our desired audiences effectively. Coordinating our focused earned media strategy with a targeted digital and paid advertising strategy helps strengthen McMaster's international reputation for advancing human and societal health and well-being.



Opinion pieces, such as those carried in The Conversation, are an increasingly key vehicle for our experts to share views and analysis with a large, international audience.

Two of the Top 10

2 in Top 10 Best Performing stories on The Conversation, 2019*

1,400,000 article reads (+23% vs. 2018)*

3rd in Canada

average reads per article published (+40% vs. 2018)*

*Source: The Conversation Canada

Historical Growth of Earned Media Coverage, 2010-2019



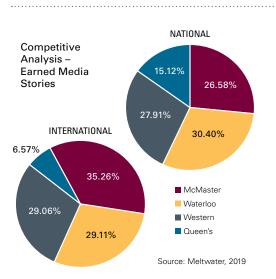
2019 Earned Media Coverage

The focus of McMaster's earned media is increasingly shifting to digital platforms for the biggest audience and impact.

- 6.248 stories on websites
- 3,517 national stories and op-eds placed
- 2,692 international stories placed

Page 50 of 488

Building McMaster's national and international reputation by connecting with an increasingly global audience through the University's platforms and outreach efforts.













14.9 million total impressions (+63% vs. 2018)

> 326.000 engagements



7.4 million

total impressions (-10% vs. 2018)

445,000 total engagements



8.7 million

total impressions

203,000

engagements

1.61 million (Daily News and Brighter World)

total Canadian website users

BRIGHTER WORLD | 11

Enhancing McMaster's reputation for excellence – through outstanding media and alumni relations, communications, marketing, government relations and stewardship.

Strategic advertising

Digital advertising allows us to be precise in connecting with our targeted audiences in new and interesting ways. The goal for 2019 focused on building McMaster's research and teaching reputation by driving a global audience to our Brighter World research website, and other key McMaster websites.

58 million+

social media advertisement impressions earned (2018: 65 million+)

95 million+

digital banner advertisement impressions earned (2018: 79 million+)

13 million+

print media advertisement impressions earned across key print publications (2018: 3.5 million+)

emails deployed promoting McMaster research stories globally

GLOBAL

Marketing's role in supporting international recruitment

In 2019, McMaster identified a growing need to diversify and nurture its international recruitment funnel. The marketing team supported this initiative through an integrated lead generation advertising program focused on generating awareness, interest and intent to apply. This pilot program was supported with a new website to develop interest among prospective international students.

■ 🖾 💠 :: vimeo

A screenshot of one of the videos featured on the website for prospective international students. For those viewing this document electronically, please click here to view the video.

566+ million

546,047

200 +countries represented by website users

international prospects out of total website

increase in international student applications from outside of Ontario over prior year (source: Ontario Universities Application

BRIGHTER WORLD | 12

Enhancing McMaster's reputation and global ranking

2nd in the world, 1st in North America

University Impact Rankings)

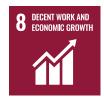
University Advancement co-chairs McMaster's Rankings Committee which developed the University's first Rankings Roadmap report.

The deep analysis and ideas proposed in this document continue to support McMaster's approach to enhancing its national and international reputation and global rankings results.

SUSTAINABLE GALS DEVELOPMENT







#2 in the world

In 2019, McMaster placed 2nd in the world in a new international ranking that recognizes the impact universities are making on a global scale, based on the United Nations' Sustainable Development Goals (SDGs).

McMaster's stellar performance in the rankings reflects the University's authentic commitment to the SDGs and its priorities. We ranked #1 in the world for SDG 8, Decent Work and Economic Growth, and #2 globally for SDG 3, Good Health and Well-Being.



Supporting the pursuit of knowledge by expanding and stewarding private and public support — through a comprehensive range of development programs for funders that achieve an annual goal of \$55 million in new revenue.

The following pages highlight some of the most impactful examples of the exceptional generosity of McMaster's community of funders from 2019.

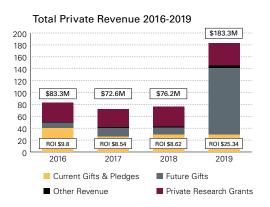
Securing resources to support McMaster's mission and vision

A number of strategic initiatives and annual goals have been established to secure ongoing funding for University priorities. These include:

- Initiate all aspects of the Brighter World Research Initiative (BWRI)
- · Diversifying existing and new revenue generation
- Embracing creative and rigorous strategies that maximize all giving opportunities
- \$55 million in new revenue confirmed annually
- Continuing to grow the major giving area of our pipeline, and continue to build capacity in McMaster's Faculties and units
- Continuing to enhance donor behaviour-based strategies for annual gifts, with a strong focus on maintaining/growing donor renewal

Key metrics and initiatives in support of these objectives are shown on this and the following page.





Goal	\$55 Million
Current Gifts and Pledges	\$28,811,693
Future Gifts	\$112,224,021
Other Revenue	\$4,075,050
Private Research Grants	\$38,221,619
2019 Total	\$183,332,383

Return on investment: \$25.73 (\$8.62 in 2018) Cost per dollar raised: \$0.04 (\$0.12 in 2018)

Definitions

- Current Gifts & Pledges all outright cash gifts made (not including pledge payments) and unconditional pledges made during the calendar year.
- Future Gifts bequests (discounted for funders < 70; otherwise at the 5-year average estate gift) and deferred gifts including life insurance policies and charitable trusts
- Other Revenue non-philanthropic gifts and revenue, confirmed but not processed through University
- Private Research Grants contributions received for either unrestricted or restricted use in the furtherance of research that typically come from a corporation, foundation, or other organization, rather than an individual.

An extraordinary legacy gift to support health research in perpetuity

In 2019, Hamilton philanthropists Charles and Margaret Juravinski established an endowment of more than **\$100 million** to support researchers across Hamilton Health Sciences, McMaster University and St. Joseph's Healthcare Hamilton. Their estate gift is one of Canada's largest ever legacy gifts. A planned endowment of \$100 million or more will provide up to \$5 million a year to the institutions, in perpetuity.



Gift announcement
557,740
impressions and
17,403
engagements on
social media

The hashtag
#JuravinskiLegacy
trended nationally at
#3 on Twitter the day
of the announcement





A screenshot from the video announcement of the gift. For those viewing this document electronically, please click here to view the video.

"It brings us great pleasure to think that when we are gone, our legacy to this community may be measured in the good health of those who come after us....As a couple, our most important lesson has been this: the greatest pleasure in life and the most powerful force for good in the world is sharing."

- Charles and Margaret Juravinski, from their letter to the community that was released upon the announcement of their gift in May 2019

BRIGHTER WORLD | 15

Alumnus' \$1M gift enhances experiential learning, awareness and research in earth sciences

Earth Sciences alumnus Keith MacDonald '80, who graduated with distinction, made an endowed gift of \$1 million to create three funds supporting experiential learning and research in the earth sciences program.



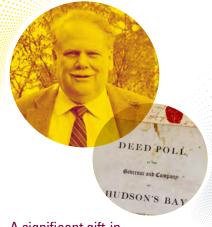
From left: Maureen Padden, associate professor, School of Geography and Earth Sciences; Bruce Newbold '88, Director, School of Geography and Earth Sciences; Maureen MacDonald, Dean, Faculty of Science; Keith MacDonald '80 and spouse Traci Woish; Heather Colwell, Manager, Development, Faculty of Science; Gianni Parise '97, '99, Associate Dean (Research & External Relations), Faculty of Science; and Serena Formenti, Educational Outreach Facilitator, School of Geography and Earth Sciences

Supporting a new generation of anthropology students

Before her passing in 2008, Shelley Saunders established a scholarship program for graduate students in the Department of Anthropology. Victor Koloshuk and his family have now stepped forward with an additional generous gift of \$1 million to further augment the Shelley Saunders/Koloshuk Family Scholarships in Anthropology, which support biological anthropology PhD students for four years of study.



Back row (L. to R.): Robert Stark '17, 2010-2014 scholarship recipient;
Hendrik Poinar, professor of anthropology; Rob Koloshuk.
Front row (L. to R.): Tracy Prowse '01, Associate Dean, Faculty of Social Sciences; Megan Brickley, professor of anthropology; Tina Moffat '93, '98, associate professor and chair,
Department of Anthropology; Sarah Elshahat, current scholarship recipient; Victor Koloshuk;
Thierry Sienche, manager, development, University Advancement; Jeremiah Hurley, Dean,
Faculty of Social Sciences; Madeleine Mant '16, 2011-2015 scholarship recipient.



A significant gift-inkind: "Treasure trove of documents" paints vivid picture of Canada's historic fur trade

Dr. William Bensen '71, '73, a nationally recognized rheumatologist, and a McMaster faculty member and alumnus, had a lifelong passion for Canadian history. Dr. Bensen, who passed away in 2017, was honoured by his family this past year through the donation of the Dr. William G. Bensen Fur Trade Collection of Robert D.W. Band — to be housed in McMaster Library's William Ready Division of Archives and Research Collections.

At top: Dr. William Bensen '71, '73. and images of the Dr. William G. Bensen Fur Trade Collection of Robert D.W. Band

revenue revenue \$38,150,613

Number of donors:

Future gift value (5-year average):

Private revenue contributions of \$1M or greater:

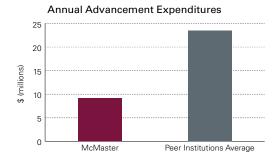
Growing revenue through microcampaigns: The Nines' Legacy

From November 26th through December 31st, 2019, McMaster encouraged its alumni, faculty, staff and friends to support critically important initiatives across campus through a specific micro-campaign called The Nines' Legacy. The campaign looked back at the University's history through the lens of "The Nines" – the years that come along once a decade and have helped make McMaster what it is today and will be tomorrow.

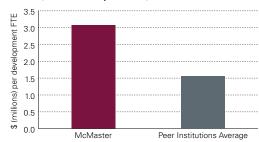


Advancement Leadership Forum

Since 2017, McMaster has been participating in the Advancement Leadership Forum (ALF). The ALF comprises eight of the largest U15 members, with each institution submitting advancement data to share within the group for benchmarking purposes. This data has proven to be invaluable for decision-making and allocation of resources. Highlights from the most recent comparative ALF data are shown below.



Total Private Support Per Development Staff (Full-Time Equivalent)



BRIGHTER WORLD | 17

Things that enable our work Enabling Advancement

The work undertaken by University Advancement in support of McMaster's strategic priorities depends on a number of enabling factors and strategies including those related to our culture, people, technology, systems, processes, research, training and use of operational budgets.





At left: Mel '52, '97 and Marilyn Hawkrigg '00, '15 attend the 125th anniversary celebrations for the McMaster Alumni Association. Above: Josh Marando '19 assumed the role of President of the McMaster Students Union (MSU) in May 2019, and was an active partner in our advancement work.

Our aim is to "Be the Best"

Toward that objective, some of the current strategic initiatives include:

- Leading a cultural change focused on readiness for growth and change, human resource planning, training and development and learning outcomes
- Ensuring funds received by McMaster are put into action quickly and efficiently and well utilized for their intended purpose
- Advancing the use of data and analytics programs to support decisionmaking and strategic outcomes

Other goals that guide our activities include:

- Continuing to evolve learning and development opportunities for the University Advancement team and other key University stakeholders
- Ensuring our technology keeps progressing at state-of-the-art levels
- Ensuring the maximum possible level of security for all funder, alumni and advancement information
- Updating and implementing University Advancement's human resources plan to reflect current priorities
- Maximizing the use of enterprise-wide university systems
- Implementing sound financial planning and practices to ensure resources are used efficiently and strategically
- Undertaking departmental reviews to benchmark and ensure best practices are integrated into our work



Bernice Downey '09, '14 was named as the Acting Director of the McMaster Indigenous Research Institute (MIRI) in May 2019. She also supported Indigenous training sessions for our University Advancement team as part of our in-house Advancement Academy programming.

Announcing and supporting presidential transition

Patrick Deane's tenure as McMaster's seventh president and vice-chancellor ended in June 2019. University Advancement supported the celebration of his contributions to the broader McMaster community.

Then-president and vice-chancellor Patrick Deane speaks at his farewell gathering in June next to his portrait, which was completed by artist

Then-president "It's a remarkable institution, a remarkable extended family, in June next to his embedded in an extremely interesting, vibrant and growing city.

It has a great sense of its mission and future."

- Patrick Deane, June 2019

David Farrar served as acting president and vice-chancellor effective July 2019. In December, he was officially announced as McMaster's eighth president and vice-chancellor following an international search. University Advancement's teams coordinated the rollout of this announcement to a variety of key audiences including the internal campus community, alumni, media, funders and friends, and government officials, along with an active transition plan to support his relationship with many key external friends.







106,803 impressions across social media platforms

6,353 unique pageviews of Daily News story

2,136

unique pageviews linked via social media

2,248 video views

and McMaster

graduate Christina Sealey '96.

Samples of how we support University priorities

Santee Smith '94, '05 installed as McMaster's 19th Chancellor

Santee Smith, an internationally recognized artist, dancer and choreographer, was installed as McMaster's new Chancellor at convocation ceremonies in November. Smith, who is from the Kahnyen'kehàka (Mohawk) Nation, Turtle Clan from Six Nations of the Grand River, is a two-time McMaster graduate, holding degrees in physical education and psychology along with a Master of Arts in dance from York University.

University Advancement's teams coordinated the announcement of this news, which included a video (below) from the installation ceremony. Smith donned the ceremonial Chancellor's robe for the first time — a garment that incorporated both the traditions of the Office of the Chancellor and Smith's own Mohawk and Scottish heritage.



A screenshot from the video of the Chancellor's installation ceremony. For those viewing this document electronically, please click here to view the video.



John Stackhouse (fourth from right), Senior Vice-President, Office of the CEO at RBC, visited campus in October to talk with students and the broader community about RBC research reports, Humans Wanted and Bridging the Gap, that focus on the skills revolution.



From left: Former governor general of Canada David Johnston speaks with former McMaster Chancellor Lynton "Red" Wilson '62, '95 at an event celebrating the Wilson Leadership Scholar Award program. The program, which provides funding of \$25,000 for undergraduate and graduate students at McMaster, is funded by Wilson, who is also an alumnus and key friend of the University.

Transforming the student experience in Engineering

This year, McMaster's Faculty of Engineering announced changes to its undergraduate curriculum, including reimagined classrooms and an emphasis on experiential learning, in what's being called The Pivot. Alumnus and tech titan Stephen Elop '86, shown at right, is a supporter of the program, and participated in The Pivot's launch in May.



A screenshot from the video of The Pivot's launch. For those viewing this document electronically, please click here to view the video.

Engaging business leaders with alumni and prospective students

A delegation from McMaster travelled to Bermuda in September for a series of events featuring entrepreneur and alumnus Michael Lee-Chin '74. The events, organized by the DeGroote School of Business and University Advancement, included a talk with an audience of alumni, friends and prospective students in Bermuda, in which Lee-Chin reflected on his life of business success, philanthropy and community service. The events helped to further McMaster's strategies related to alumni advancement, volunteer engagement and international student recruitment. Lee-Chin returned to McMaster in October for a "fireside chat" with Dean Len Waverman and students from the DeGroote School of Business at the Ron Joyce Centre in Burlington.





Stephanie McLarty '03, President of the McMaster Alumni Association, at an event for the McMaster Alumni Awards.



Incoming students of the McMaster Class of 2023 pose for a photo on Alumni Field.

An award-winning team

McMaster's University Advancement team continues to be recognized by its peers as among the best in North America. In 2019, our dedicated team of advancement professionals received the following accolades from the Canadian Council for the Advancement of Education (CCAE) and the Council for the Advancement and Support of Education (CASE):

1 CCAE Prix d'Excellence Gold Award

Best Multimedia

3 CCAE Prix d'Excellence Silver Awards

- Best Online Publication
- Best Annual Giving Initiative
- Best Use of Video/Film

2 CCAE Prix d'Excellence Bronze Awards

- Best Advancement Services Initiative
- Best Media Relations Initiative

2 CASE District II Gold Awards

- News and Research Videos
- Special Events: Event Series

3 CASE District II Silver Awards

- Video Features: General Information Videos
- Institutional Media Relations Programs
- Community Relations Programs, Projects and Special Events

Office of the Vice-President, University Advancement

McMaster University, Gilmour Hall 205 1280 Main Street West , Hamilton, ON L8S 4L8 (905) 525-9140, ext. 24677 or vpua@mcmaster.ca







UNIVERSITY SECRETARIAT

Board of Governors

Senate

Gilmour Hall, Room 210 1280 Main Street West Hamilton, Ontario, Canada Phone: 905.525.9140, Ext.24337 Fax: 905.526.9884 E-mail: univsec@mcmaster.ca http://www.mcmaster.ca/univsec

REPORT TO THE BOARD OF GOVERNORS from the REMUNERATIONS COMMITTEE

i. Ratification of Tentative Agreement – IUOE Local 772 (Operating Engineers)

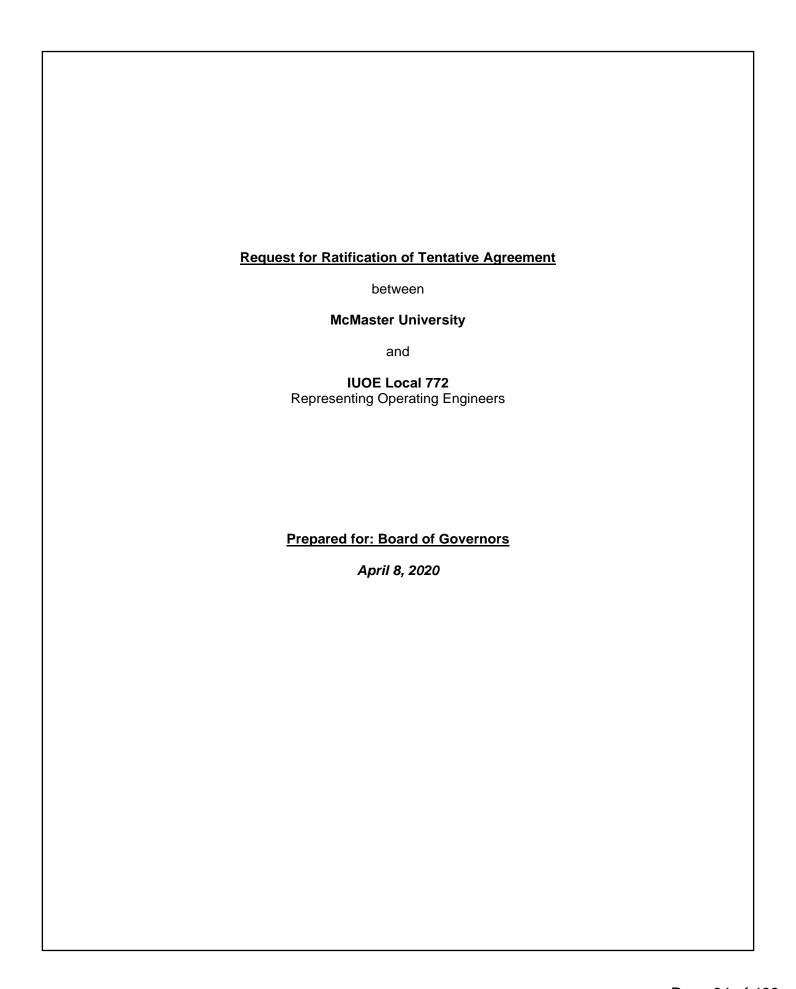
On March 26, 2020 the Remunerations Committee reviewed and approved, the tentative agreement between McMaster University and IUOE Local 772 (Operating Engineers). Details of the agreement are provided in Attachment I of the circulated report.

The Remunerations Committee now recommends,

that the Board of Governors approve the tentative agreement between McMaster University and IUOE Local 772 (Operating Engineers) for a 4-year term effective April 16, 2020, and expiring April 30, 2024, with terms outlined in the circulated report.

Board of Governors: FOR APPROVAL

April 16, 2020



Background

On March 3, 2020, the University's Bargaining Team reached a tentative agreement with IUOE Local 772, representing Operating Engineers. The bargaining unit includes 11 employees, with a total compensation cost of \$1,342,670.83.

The Remunerations Committee approved the mandate for this round of collective bargaining in December 2019. The provincial legislation *Protecting a Sustainable Public Sector for Future Generations Act, 2019, (*the "Act", previously referred to as Bill 124), passed in November 2019, restricts annual wage increases to 1%, and further restricts incremental increases to existing compensation entitlements to 1% (inclusive of wage increases).

The University and the Union agreed to recommend the ratification of the tentative agreement to their respective principals. The IUOE confirmed that is bargaining unit ratified the tentative agreement on March 4, 2020.

A summary of the tentative agreement is provided below.

SUMMARY OF TERMS OF TENTATIVE AGREEMENT

Term:

4 years, effective Date of Ratification, and expiring April 30, 2024

Wages:

- Wage Increases: will take place in accordance with the following tables:
 - o Year 1 May 1, 2020: 1%
 - o Year 2 May 1, 2021: 1%
 - o Year 3 May 1, 2022: 1%
 - o Year 4 May 1, 2023: 2.5%
 - Employees who are members of the Hourly Pension Plan (a maximum of 4 individuals) will receive an additional 1% increase on May 1, 2023, as an offset to pension contribution increases. The mandate permitted this offset to be provided in addition to the total compensation limitations.
 - The parties signed a memorandum of understanding agreeing to an additional contingent wage increase of 1% on the first day of Year 3, only if such wage increase is lawful as at May 1, 2022. If not lawful on May 1, 2022, the contingent wage increase will not apply.

Premiums Increases:

- o Increased Night Shift Premium from \$1.50 to \$1.60 per hour;
- Increased Meal Allowance during overtime shift from \$12.00 to \$14.00;

 Introduced Snow Closure Payment in lieu of Snow Closure Policy applications.

Pension Provisions:

 Pension contribution increases to 8% under YMPE and 11% over YMPE (from 7% and 10% currently), effective Year 4.

Benefits Improvements:

- Aligned health and dental benefit provisions with Unifor Unit 4 (Special Constables);
- The benefit improvements include the following non-exhaustive list:
 - Increased vision care to \$400 from \$350;
 - Expanded mental health specialist coverage maximum to \$3,000 per person per benefit year, for combined services of psychologist, social worker, and psychotherapist;
 - o Increased speech therapist coverage from \$200 to \$500;
 - o Introduced a managed drug formulary requiring generic substitution, to maintain control of the cost of the plan.

Leave Provisions:

- Introduced a Pregnancy Leave Supplemental Unemployment Benefit ("SUB") of up to 17 weeks and a Parental Leave SUB benefit of up to 13 weeks, each at 90% of regular wages.
- Agreed to provide partial reimbursement for medical notes when requested, consistent with other collective agreements.
- Adjusted bereavement leave (effective in Year 4 of agreement), consistent with other collective agreements.

Operational and Other Highlights:

- Extended the length of a standard probationary period and introduced a new probationary period for new college graduates without industry experience.
- Aligned language regarding harassment, sexual violence, and health and safety with other collective agreements.
- Adjusted language regarding the procedure for jury duty leave, for clarity and consistency with other collective agreements.
- Adjusted the frequency of paying the premium for holding an IMT Certificate from every 3 months to once annually, to alleviate administrative complexity.

Board of Governors Decision Summary

April 8, 2020

Recommendation

The Board of Governors ratify the tentative agreement reached with IUOE Local 772 (Operating Engineers) for the period effective May 1, 2020, to April 30, 2024.

Prior Committee Review

Remunerations Committee: approved

Description

Renewal of the collective bargaining agreement with IUOE Local 772 (approximately 11 Operating Engineers) negotiated within mandate.

Financial Implications

Baseline Total Compensation: approximately \$1,342,670.83 per annum

Wage Rate Effective Date:	% Wage Increase
Year 1 (May 1, 2020 – April 30, 2021)	1.0%
Year 2 (May 1, 2021 - April 30, 2022)	1.0%
Year 3 (May 1, 2022 – April 30, 2023)	1.0%
Year 4 (May 1, 2023 – April 30, 2024)	2.5%

- an additional 1% increase on May 1, 2023, as an offset to pension contribution increases, will apply only for employees in the pension plan;
- o an additional *contingent* wage increase of 1% on the first day of Year 3, only if such wage increase is lawful as at May 1, 2022.

Alignment with University Strategy

Institutional Alignment	Simplified and aligned health and dental benefit plans with other "Skilled Employee" groups, effectively eliminating the need for a separate plan.
Fiscal Responsibility	Financial outcomes within mandate and in compliance with the <i>Protecting a Sustainable Public Sector for Future Generations Act</i> , 2019.
Inclusive Excellence	Affirmed both parties' commitment to Employment Equity and embedded employment equity language. Incorporated gender-neutral language. Agreed to Pay Equity language and a Pay Equity maintenance agreement. Introduced Pregnancy leave and Parental leave Supplemental Unemployment Benefits.
Labour Relations Stability	Enabled competitive recruitment and retention of operating engineers by renewing the Apprenticeship Program. Engaged in respectful and productive discussions; the relationship with IUOE is strong.

Major Risks and Mitigating Factors Identified

Risk of non-compliance with new	Agreed to increases in compliance with Bill 124. Contingent
legislation (Protecting a Sustainable	increase in Year 3 would only apply if legally compliant at that
Public Sector for Future	time.
Generations Act, 2019)	

Prepared By: Wanda McKenna, AVP & Chief Human Resources Officer

Reviewed by: Roger Couldrey, Vice President (Administration)

PRESIDENT'S REPORT TO McMASTER UNIVERSITY'S BOARD OF GOVERNORS APRIL 16, 2020

Update on Responses to COVID-19 and Ongoing Contingency/Scenario Planning

At our last Board meeting on March 5, 2020, when I outlined for the Board the key priorities and challenges for the year ahead, and reported on the contingency and business continuity planning underway with regard to a potential pandemic, I don't think any of us anticipated that little more than a week later we would be ending in-person classes, moving to a virtual classroom and assessment process for the rest of the term, and sending the vast majority of our students home. As Board members know, as a result of government requirements around physical distancing and essential services, most of the University's faculty and staff are now working remotely, the majority of research labs have been shut down, the library is operating on an entirely online basis, and in-person convocation ceremonies for Spring 2020 have been cancelled, with arrangements being made for a virtual celebration, which will be followed by an expanded Fall convocation for students who wish to return and celebrate their success with the McMaster community at that time.

The University is committed to ensuring that wherever possible students are able to complete their courses and programs as scheduled, that assessments can be undertaken, albeit in a different format, and that degrees are conferred to the regular timescale. Nonetheless it is clear that the abrupt end of the 2019/20 academic year and the enforced closure and remote working environment creates a myriad of issues for students, faculty and staff alike, as well as for the overall institution. Just by way of a very brief summary and overview, and not intended to be in any way exhaustive, some of the key issues include:

Impact on Students

Many students are experiencing severe financial hardship as a result of the loss of planned employment, summer jobs, co-op learning opportunities, and similar. For those seeking to return for the 2020/21 year this will clearly present additional financial barriers, and those who are members of the graduating class suddenly find themselves in a very challenging job market, and potentially also a highly competitive market for graduate applications alongside fewer funding sources (scholarships, research grants) as well. Depending on the nature of their work and discipline, many current graduate students find themselves unable to continue their studies at the current time without physical access to archives, labs and studios, and many are also unable to undertake necessary fieldwork. For affected students this will result in delays of at least a term in completing their studies.

While the University has put in place financial relief measures, including \$560,000 to assist with students requiring immediate assistance, as well as freezing late fees and interest on student accounts in March, April, and May, much more support will be needed. Many students are not eligible for the Canada Emergency Response Benefit (CERB) since unless the job or position had already started it is not considered to be a lost job for those purposes. Our Government Relations team is working hard, together with our peer institutions through the Council of Ontario Universities, Universities Canada and the U15, to advocate for increased supports and emergency relief funds. As Board Members will appreciate, the loss of potentially many months

of income from summer jobs, placements, undergraduate summer research awards or other opportunities, for students who are reliant on such income to pay their tuition and other costs in the next academic year, will create extreme hardship for those affected, and will also mean that many students will be challenged to continue their studies in the Fall.

Impact on Research

The closure of research labs, studios, archives and libraries obviously has a huge impact on McMaster's research enterprise as projects are delayed or shelved. We are working closely with our U15 research-intensive peer institutions, and with the granting councils, to quantify the losses and impact, and to try to address the continuity of payment issue for research personnel (students, postdocs, research associates). While granting councils are looking at addressing this payment issue for research personnel supported from Tri-agency funds, it is notable that many highly-qualified and experienced research personnel are paid from multiple sources outside Triagency funds (private sector, charities, etc.). As we continue to advocate for potential solutions to this lost funding, our current estimates show a loss in revenue and productivity of over \$10M per month.

Impact on Staff

The University has been working hard to protect our employees throughout this period of disruption. All employees who can work from home are doing so, with only those employees whose work has been deemed essential still working on campus. This includes staff working in the McMaster Nuclear Reactor, in labs undertaking COVID-19 related research, as well as security, catering, and facility services staff. Where we are able to we are re-deploying individuals or adjusting work to keep as many employees working as possible. McMaster committed to maintaining pay for all employees through to the end of the pay period on April 4. For many employees there will be no changes after this date, but for others who have a lack of work or funding, adjustments will need to be made. Managers are being urged to be creative to keep people working wherever possible, including redeploying people into new roles, using vacation time, promoting job sharing, delivering on special projects or temporarily reducing hours. Regrettably, for some areas and situations, layoffs will also have to be considered and we will work closely with our unions and employee groups with regard to these difficult decisions. As Board Members may be aware, the new Canada Emergency Wage subsidy that covers 75 per cent of salaries is not available to universities.

Institutional Impact

Clearly the impact of the current pandemic has far-reaching effects across our campus and community. Roger Couldrey, Vice-President (Administration) and Dee Henne, Assistant Vice-President (Administration) and Chief Financial Officer, will give a detailed presentation on financial impacts at our meeting but, in addition to the impacts on McMaster's research enterprise, our estimates for general operating losses since the onset of the pandemic in mid-March amount to approximately \$13M until the end of April. This does not include the substantial losses we will realize on our investments. We are also modelling a range of scenarious for the 2020/21 academic year, including consideration of significant anticipated losses related to reductions in international students and potentially even domestic enrolment. Although we are currently planning for a physical return to campus by the start of the next academic year in late August, we are also considering the possibility that this may not be

possible and that the virtual learning environment will need to continue, potentially until the end of 2020.

Beyond the financial impact, the University is extremely concerned by the impact on the health and well-being of our students, faculty and staff, including the impact on mental health across our community. We are continuing to make supports available through our Student Wellness Centre, and through Human Resources Services. The longer the current situation continues, the more acute such issues are likely to become.

Planning for the Future

As mentioned, we are planning for a range of potential scenarios and will continue to engage in modelling and scenario planning as the current situation unfolds. We will also continue to work closely with all three levels of government, and with peer institutions, to make the case for the supports the university community needs, in order to emerge successfully and strongly from the current crisis. In addition to discussions with the Ministry of Colleges and Universities around short-term funds and additional operating support, we have also been engaged in discussions with regard to SMA3, the agreements for which were due to have been finalized by March 31. The Ministry has agreed to defer the introduction of SMA3 for the time being, which means that the current SMA2 agreement will remain in place. Clearly before SMA3 can be finalized we will need to look closely at the metrics and performance measures and advocate for adjustments based on the impact of current events.

Opportunities and Successes

Despite all the difficult challenges we are currently dealing with as a community, there are positive elements that we can all take pride in. I am immensely proud, for example, of the way that members of our University have come together to support one another and the institution and find solutions to the many questions and concerns that we have been recently confronted with. These positive elements range from research successes to community-building activities, to practical supports, and I thought it appropriate to end my report by offering a few examples of the ways in which McMaster has joined the fight against COVID-19.

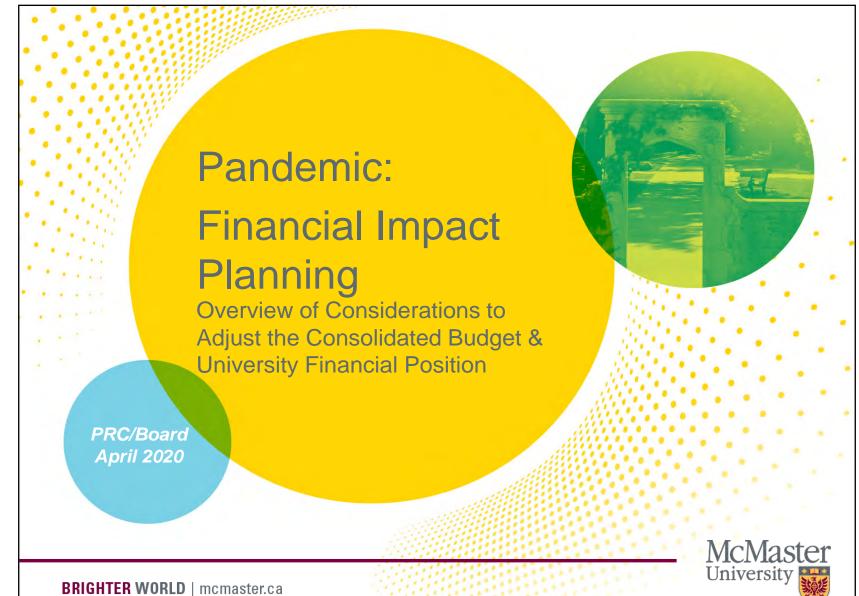
Research

- Currently, our researchers are working around the clock to conduct urgent research into COVID-19. This includes identifying and testing new forms of therapies, working on new novel test strips, and creating prototypes/ manufacturing/and testing of ventilators and PPE for frontline healthcare workers. We are also working with manufacturers directly to accelerate production of essential medical equipment, and testing ventilators and PPE so they can move from the factory to frontline healthcare workers. McMaster researchers have also been working directly with Woodbridge Foam Corporation to get a new made-in-Canada mask designed, tested and certified.
- In addition to the 22 COVID-related projects underway in campus labs, other COVID-related research continues across the disciplines. This includes work focused on the toll of the virus on mental health, studies considering the benefits of exercise, and research on the economic impacts and the resiliency of businesses.
- McMaster researchers have developed a tool to share with the international health sciences community which can help determine how the virus that causes COVID-19 is spreading and whether it is evolving. The tool, which is essentially a set of molecular

- 'fishing hooks' to isolate the virus, SARS-CoV-2, from biological samples, can be used to track how the virus evolves over time and how it transmits between people.
- A McMaster researcher, postdoctoral fellow Arinjay Banerjee, played a critical role on a small team that successfully isolated and grew copies of the virus responsible for COVID-19, enabling urgent Canadian research into how it behaves.
- McMaster engineers are exploring whether a technology developed to 3D print cells that mimic human tissue can be put to use printing cells that are affected by COVID-19. This would potentially provide scientists with an important tool in researching treatments.
- McMaster is a key partner in a Canadian consortium that has launched one of the world's largest clinical trials of a potential treatment for COVID-19 to determine whether blood plasma taken from those who survive the infection can be used to treat those who are hospitalized by it.
- A team of McMaster engineers is using data analytics and machine learning to help inform Canada's crisis response, using recent COVID-19 data for their algorithms. The team has collected data on how other countries have used non-pharmaceutical interventions, such as physical distancing, then used that information to create algorithms that could help inform Canada's response to the crisis.
- A team from McMaster played a key role in developing and issuing guidelines for healthcare workers who are treating intensive care unit patients with COVID-19. Thirty-six experts from around the world, including six from McMaster, worked together to develop the guidelines which were formulated in only days.
- The Office of the Vice-President (Research) is working with colleagues across the U15 to create and populate the CanCOVID platform an expert community of Canadian COVID-19 researchers, clinical collaborators, and healthcare stakeholders from across the country. Canada's Chief Science Officer mandated the creation of CanCOVID to optimize Canada's research response to the COVID-19 public health crisis. The Office is also working with the Council of Ontario Universities to populate Ontario Together: Help Fight Coronavirus Portal connecting businesses, researchers and organizations who can supply emergency products and innovative solutions to support the provincial response.

Community Engagement

- Faculties across McMaster are donating vital medical equipment and supplies to help support local hospitals in the battle against COVID-19. Responding to a call from Hamilton Health Sciences (HHS), researchers in Engineering, Health Sciences, Science and Humanities have collected thousands of masks, goggles, gloves, face shields, cleanroom suits, sanitizer and swabs for use by local health care providers.
- McMaster researchers have rallied together to answer calls for the provision of critical equipment, including masks and ventilators. Researchers at the McMaster Manufacturing Research Institute have been studying how to quickly produce ventilators, while others are finding ways of pivoting equipment to produce masks and other needed items.
- The McMaster Optimal Aging Portal, a unique online health resource created by McMaster to support the healthy aging of Canada's older adult population, is shifting its focus to highlight ways for older adults to stay active and engaged while practising physical distancing during the current COVID-19 pandemic.
- The University is working closely with the City of Hamilton and with Hamilton Health Sciences and St. Joseph's Healthcare to determine how the University's residence buildings can potentially be used to support them at this critical time.



Government Funding

- SMA 3 2020-2025 funding linked to metrics
 - The Ministry has deferred the 2020 implementation of SMA3 to May 1, 2021. SMA 2 will be used in 2020 (thus, funding ~stable)
- Possible economic stimulus funding or Tri-Agency funding for capital / deferred maintenance / research wind-down (pause costs)
- Likelihood of Ontario Credit Rating downgrade due to stimulus spending and increased budget deficits post-Pandemic, may pull down McMaster rating to AA- affecting future Debt costs

Conclusion:

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- Consolidated Budget assumes no reduction in 2021 operating grants
- Some risk of grant reductions beyond 2021 when government rebalances post-Pandemic



Enrolment Planning

- Plans involve increased offer of admissions. Offers based on student success potential and conditions will be waived.
- Spring/Summer will be offered via virtual classrooms, Fall may involve similar virtual classrooms.
- International participation reduced to ~80% of original forecast across all levels for Fall/Winter terms.
- 3 month waiver of late fees, interest, no blocks to registering if students have o/s balances and new fall payment plans.

Conclusion:

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- Reduced tuition revenue by \$32 million for ~20% international participation reduction, domestic revenues held flat.
- Risk of reduced international enrolment hoped to be offset by domestic actions, albeit other universities may be deploying the same strategy



Research

- VPR working with ADRs to assess essential research continuing
- Deploying safe closures/wind-downs of non-essential research
- Monitoring supply chains (Nitrogen Supply/PPE)
- Prioritizing new research start-ups for COVID Research
- Quantifying research wind-down and pause costs
- Some research costs arising may not be eligible research costs or the research project account may not be able to fully absorb, in which case additional funding strategies will be explored
- Areas contributing PPE to research/healthcare needs

Conclusion:

- Research revenues are matched to research expenditures (no bottom line impact in NFPOs), therefore no adjustments to the consolidated budget have been made.
- If central funding is used to defray costs a budget impact will occur

Philanthropic Support

- Brighter World Research Initiative planning underway
- Looking for opportunities to leverage matching opportunities for:
 - Emergency Student Financial Aid
 - Donations of PPE to Healthcare
 - COVID Research
- Deploying the trust/endowment spend plans, including using some of the reserve (equivalent to two years of spending needs), if necessary, on funds that do not allow encroachment
- Considering extra communication strategies on market volatility and endowment spend strategies for donor assurance

Conclusion:

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No immediate financing impact (potential opportunity area).



Ancillary Supports

- Closed operations in March, exceptions for ~490 students in residence
- Increased refunds for Housing, Hospitality (food), Parking
- Exploring Hamilton Healthcare support models with procurement, Housing/Food (self-isolation residence)
- Campus Stores/MPS moving resources to online, in partnership with AVP Faculty

Conclusion:

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- In 2020, two months sales removed, plus contingency for refunds (estimated range \$4M-\$7M)
- In 2021, May August shut-down assumed, with 20% reduction in international students impacting ancillary sales



Variable Costs

- Vendor/work refusals, supply chain risk due to closures.
- Post-Pandemic demand / price increase concerns.
- Increases VPN licenses for work-from-home strategy, increased adoptions of Zoom, Teams, virtual pedagogy tools, virtual resources.
- Temp/Casual staff only paid for worked hours after April 5th.
- Temp/Casual contracts ending where possible, mandating vacation use
- Working with Unions on leave provisions, and monitoring legislation.

Conclusion:

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- Conservatism 2020 and 2021 left full salary, wages, benefit costs flat
- Increased contingency spending by \$5M in 2020, and \$5M in 2021 for pedagogy transitions, severance costs, emergency funds, other



Fixed Costs

- Faculty costs fixed, risk if Faculty become ill and the University cannot find suitable interim, short- or long-term replacements
- Pedagogy support and transition costs moving virtual with online or eresources
- Building operating costs, must be maintained, working to minimize risks/security, maximizing maintenance opportunities
 - Building closure plans underway, where appropriate

Conclusion:

- Conservatism left building costs status quo, noting closed buildings will have lower operating expenses. Utility rates may be lowered as a form of stimulus
- Increased contingency spending by \$5M in 2020, and \$5M in 2021 for pedagogy transitions, severance costs, emergency funds, other



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Capital

- Ongoing capital project impacts, possible delayed new project starts.
- Capacity implications linked to enrolment outcomes
- Capital plan priorities may require a reset post-Pandemic based on the new-normal and what it involves
- Additional debt remains a key priority and remains included in financial plans to support both strategic- and capital- plans
- Credit rating associated with debt costs may be under pressure due to both Provincial pressures and enrolment related financial ratios

Conclusion:

- Capital plans will be examined in the 2021 review cycle, which begins in the fall of 2020
- Additional debt remains in plans but may be at risk of increased cost if credit rating is adjusted (note: due to the lower interest rate environment this impact may be minimal)



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Markets

- Investment markets projecting -18% return in 2020 and reduced return projection in 2021 to 4%
- Longer term, stimulus spending expected to improve returns
- Interest rates by the Bank of Canada have been reduced by 0.75%
- The impact of market volatility and lower interest and return rates:
 - Higher Pension Plan liabilities triggering solvency payment risk
 - Investment losses are unitized to endowment funds reducing value and invested working capital losses affects the Investment Reserve

Conclusion

• Pension Plan funding requirements included in budget, next Salaried Valuation: July 1, 2021, we anticipate some improvement by then.



UNIVERSITY FINANCIAL POSITION

PANDEMIC IMPACTS

PREPARED BY: AVP (ADMIN) & CFO

WITH REVIEW & CONSULTATION: UNIVERSITY CONTROLLER, UNIVERSITY TREASURER, VP ADMIN



Investment Income (net)

TOTAL REVENUES

tion of Deferred Capital Contributions

Revenues from New Capital Projects venues from Internal Loan Repayment

No Staff Savings Factored in for Conservatism

Salaries & Wages 521,219 539,566 **Employee Benefits** 120,623 126,654 Supplies & Services 308,107 320,431

Increased Supplies & Services by 10% in 2021

558,181 **Investment Pool** 129,187 365,292 2020 - 18% Interest on Long-Term Debt 13,300 13,196 13,155 2021 4% Amortization of Capital Assets 72,769 87,556 93,391 Expenses from New Capital Projects 16,793 16,793 Contingent expenses (in \$000's) 20,000 20,000 1,036,018 1,195,999 TOTAL EXPENSES 1,124,196 1,239,805 1,291,1/1

70,820

38,835

9.092

1,193,010 1,074,940

(59,877)

45,963

9,937

ESS OF REVENUES OVER EXPENSES 156,992 (49,256)(12,946)50,104 52,356

> McMaster University ?

2021

International

460.585

Ancillaries

2020 -17% \$13M

2021 -15% \$10M

1,343,527

48,122

45,033

17,382

1,289,909

1,183,052

Operating Fund Budget & Projections

	Actual	Projected	Budget	Plan	Plan
Operating Fund	2019	2020	2021	2022	2023
Grant + Tuition	615,216	626,437	622,924	694,465	733,452
Other_	103,340	105,407	107,515	109,665	111,859
Operating Revenues	718,556	731,844	730,439	804,130	845,310
Calarias Q Manas Danafita	205 540	220,000	240 502	200 000	272 740
Salaries & Wages, Benefits	325,510	336,968	348,593	360,690	373,746
Benefits	139,504	146,479	149,409	152,397	155,445
Other Expenses	228,583	237,726	271,008	281,848	293,122
Contingency_		20,000	15,000	15,000	25,000
Operating Expenses	693,597	741,173	784,010	809,935	847,314
Net Surplus/(Deficit)	24,959	(9,329)	(53,571)	(5,805)	(2,004)
_					
Unexpended Operating Fund Carryforwards	167,657	158,328	104,757	98,952	96,949



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University Financial Position

Conclusions

- 2020 loss is predominantly investment market driven
- 2021 loss is linked to reduced enrolment, which may be greater than the 20% international reduction factored into the budget, however no salary and wage decreases have been reflected to add conservatism. Reserves (including Faculty appropriations) are strong and can carry activities through operational adjustments for a new normal
- University liquidity remains strong, with a \$75 million committed line of credit available (zero drawn to date)
- Deferring/delaying capital plans can be considered, where necessary
- Debt remains in plans for 2022 based on the Central Bank position
- Learnings from the 2008/09 Financial Crisis has served well for University financial resiliency through this Pandemic Crisis



APPENDIX SUPPLEMENTAL INFORMATION McMaster University BRIGHTER WORLD | mcmaster.ca 16

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Reserves at April 30, 2019

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(thousands of dollars)	2019	2018
Pensions (a)	\$ (106,244)	\$ (4,170)
Other retirement and post employment benefit plans (net) (b)	(180,865)	(164,518)
Employee future benefits	(287,109)	(168,688)
Unexpended departmental carryforwards (c)	167,657	142,699
Research (d)	44,271	35,129
Employee benefit (e)	11,630	11,463
Ancillaries (f)	9,642	10,971
Specific purpose (g)	101,902	82,767
Other (h)	14,491	15,199
Sinking funds (i)	34,733	29,873
Internally financed capital projects (j)	(69,860)	(78,559)
Capital reserves (k)	112,444	113,246
Facilities services projects (I)	19,625	40,051
Other internal reserves	446,535 🖈	402,839

Net assets:		
Unrestricted	10,755	9,781
Internally restricted (note 11)	159,426	234,151
Equity in capital assets (note 12)	399,463	317,879
Endowments (note 13):		
Internal	150,410	145,777
External	500,819	483,335
	1,220,873	1,190,923

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17

\$ 234,151

\$ 159,426



University Rating Summary (DBRS University Chart)

LAST UPDATED: MARCH 23, 2020



Province	Ontario	Québec	Ontario	Ontario	Ontario	Ontario	Ontano	British Columbia	Ontario	Ontario	Ontario	Québec	Ontario	Ontario
- Provincial rating	AA (low)	AA (low)	AA (tow)	AA (low)	AA (low)	AA (low)	AA (low)	AA (high)	AA (low)	AA (low)	AA (low)	A (high)	AA (low)	AA (low)
City	St. Catherines	Montrdal	Guelph	Waterloo	Hamilton	Ottawa	Kingston	Vanbouver	Taronto	Peterborough	Oshawa	Montreal	Windsor	Toronto
- Local population	429,036	4.3 million	165,236	567,740	786,641	1.4 million	173,450	2.7 million	6.3 million	131,283	405,631	4.3 million	354,917	6.3 million
Enrolment (FTEs)	20,303	29,911	22,790	18,326	30,990	47,087	26,181	27,015	80,682	9,650	8,905	26,952	15,568	46,767
Type of institution ²	Comp	Comp	Comp	Comp	Med	Med	Med	Comp	Med	Comp	Comp	Comp	Comp	Comp
Operating Performance (CAD	Millions)													
Reference Year	2018-2019	2018-2019	2018-19	2017-2018	2018-2019	2018-2019	2017-2018	2018-2019	2018-2019	2018-2019	2018-2019	2017-2018	2018-2019	2018-2019
Surplus (deficit) 2	\$15.9	(\$10.7)	\$46.7	\$12.7	\$187.0	\$91.8	\$74.9	\$49.8	\$505.0	\$13.8	\$6.9	\$3.1	\$1.9	\$100.5
- % of revenues	4.5%	(1.7%)	5.4%	3.3%	13.2%	8.1%	7.9%	6.4%	14.1%	7.0%	3,2%	0.6%	0.5%	8.3%
Revenues	\$353.9	\$641.6	\$865.9	\$383.0	\$1,193.0	\$1,136.2	\$947.7	\$780.7	\$3,593.0	\$196.5	\$211.6	\$529.8	\$382.6	\$1,215.3
- Year-over-year (YOY) change Revenue mix	5.0%	11.4%	4.9%	4.7%	8.2%	4.0%	0.3%	7.4%	6.3%	6.8%	(0.3%)	3.6%	6.2%	5.0%
Government (prov. & fed.)	33.4%	57.0%	44.6%	34.0%	37.5%	44.7%	40.7%	45.8%	31.8%	36.1%	45.8%	72.4%	35.3%	34.6%
Student fees	50.5%	25.0%	34.9%	52,1%	28.6%	38.6%	37.4%	35.5%	48.1%	40.2%	37.9%	14.2%	80.9%	52.0%
Ancillary	9.4%	4.0%	11.7%	6.6%	6.6%	4.6%	10.1%	5.3%	10.1%	16.7%	7.7%	0.0%	8.4%	5.5%
Investments & donations	1.0%	4.0%	5.0%	3.3%	11.6%	6.1%	6.6%	7.0%	8.5%	4.1%	1.7%	0.4%	3.7%	3.4%
Other	5.7%	10.0%	3.8%	4.0%	15.7%	6.0%	5.2%	6.4%	1.5%	2.9%	6,9%	13.0%	4.7%	4.5%
Expense	\$338.0	\$652.3	\$819.2	\$370.3	\$1,036.0	\$1,044.3	\$872.8	\$730.8	\$3,088.0	\$182.7	\$204.7	\$526.6	\$380.7	\$1,114.8
-YOY change	4.0%	11.2%	6.4%	3.9%	4.0%	2.1%	2.0%	7.4%	6.0%	7.7%	4.0%	2.5%	7.6%	4.1%
Debt and Liquidity (CAD Milli	ons)													
Total debt (univ. supported)	\$144.2	\$390.7	\$229.7	\$219.8	\$254.7	\$365.2	\$275.8	\$155.0	\$711.0	\$81.5	\$202.4	\$144.3	\$186.3	\$502.0
-Per FTE (\$)	\$7,019	\$13,062	\$10,165	\$11,993	\$8,218	\$7,577	\$10,536	\$5,738	\$8,816	\$8,446	\$22,731	\$5,356	\$11,965	\$10,734
Interest coverage (times)	5.1	3.2	7.5	3.9	14.1	6.2	6.8	10.7	11.6	4.8	2.5	2.6	2.5	6.0
Total endowment *	\$107.0	\$114.0	\$360.8	\$91.9	\$651.2	\$294.0	\$930.9	\$360.2	\$2,593.0	\$72.6	\$21.8	\$25.4	\$118.7	\$496.0
-Per FTE (\$)	\$5,209	\$3,811	\$15,830	\$5,012	\$21,014	\$6,099	\$41,461	\$13,332	\$32,150	\$7,525	\$2,453	5944	\$7,627	\$10,606
Expendable resources	\$87.0	\$71.3	\$438.4	\$81.5	\$607.7	\$453.4	\$504.3	\$80.5	\$1,744.D	\$19.7	\$35.D	-	\$33.9	\$880.7
-% of total debt	39.5%	18.1%	189.6%	37.1%	238.6%	124.1%	182.8%	51.9%	245.3%	24.2%	17.3%	0.0%	18.2%	109.7%
Pension fund status *	\$3	(\$66)	\$23	(\$44)	(\$B3)	\$163	\$9	\$38	(\$308)	(\$76)	\$0	(\$23)	(\$36)	\$59
the second second second	Comment.	Manager .	VANAGA	Address:	America.	Annual Control	(Access)	(America)	(minute)		46	Advance).	denni	A Common

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Debt Policy and Monitoring Ratios

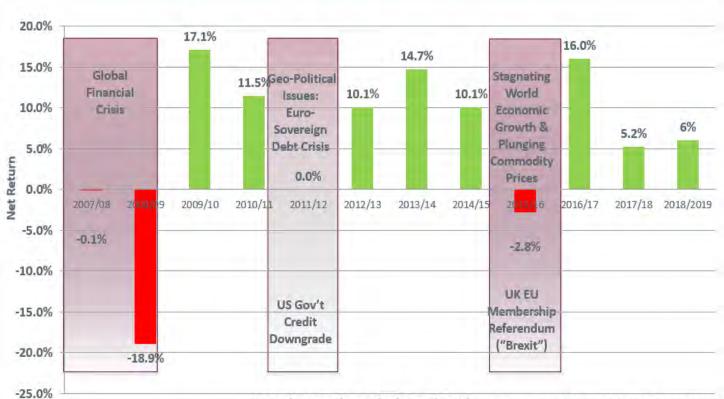
McMASTER DEBT MANAGEMENT POLICY RATIOS	2019	2020	2021	2022	2023
Expendable Net Assets to Debt (Target >1.0x)	2.2	1.6	1.1	1.0	1.1
Interest Burden	1.4%	1.3%	1.2%	1.4%	1.5%
Debt per FTE (<\$12,000)	8,864	8,628	8,693	11,999	11,764
McMASTER DEBT MANAGEMENT POLICY RATIOS	2019	2020	2021	2022	2023
Net Income/(Loss) Ratio (McMaster Target >1.0%)	13.2%	-4.6%	-1.1%	3.9%	3.9%
Net Operating Revenues (McMaster Target >2.0%)	16%	1%	2%	9%	9%
Primary Reserves Ratio (McMaster Target >91 days)	215	142	91	110	120
Viability Ratio	2.3	1.7	1.1	1.0	1.1

Policy Ratios stay at or better than targets. The Ministry monitoring ratios do not have Ministry targets, McMaster's policy establishes targets and in 2020 and 2021 the Net (Loss) Ratio will be negative and the internal targets will not be met in 2020 or 2021, thereafter balancing activity meet targets.



Investment Pool Performance

Long term Performance (10 yr.): 9%*



Fiscal Periods ended April 30th

*annualized return: 2009/10 to 2018/2019



Pension Position - Plan 2000 Summary

(000'S)	01.07.18	01.07.17
Going Concern Financial Status		
Smoothed value of assets	\$1,983,556	\$1,828,584
Going concern funding liabilities	\$1,892,602	\$1,859,365
Provision for adverse deviations in respect of the going concern liabilities	\$234,374	N/A
Funding excess (shortfall)	(\$143,420)	(\$30,781)
Hypothetical Wind-up Financial Position		
Wind-up assets	\$2,055,505	\$1,902,836
Wind-up liability	\$2,252,753	\$2,244,977
Wind-up excess (shortfall)	(\$197,248)	(\$342,141)
Transfer ratio	91%	85%

Next Valuation: July 1, 2021 however special filing provisions expected to allow a 1-year Skip if solvency is above 85% at last filing – McMaster was 91%

McMaster

University 👯

Pension Position - Hourly Plan Summary

	01.07.2019	01.07.2016
Going Concern Financial Status		
Market Smoothed value of assets	\$60,925	\$53,452
Going concern funding liabilities	\$57,586	\$51,871
Provision for adverse deviations in respect of the going concern liabilities	\$6,324	N/A
Funding excess (shortfall)	(\$2,985)	\$1,581
Hypothetical Wind-up Financial Position		
Wind-up assets	\$61,361	\$52,761
Wind-up liability	\$77,925	\$73,210
Wind-up excess (shortfall)	(\$16,564)	(\$20,449)
Wind-up ratio	79%	72%

Paid \$4.7M in March 2020 for Solvency to be 85% for the next valuation July 1, 2020 Due to Pandemic: Special solvency / filing provision anticipated.

University 👯

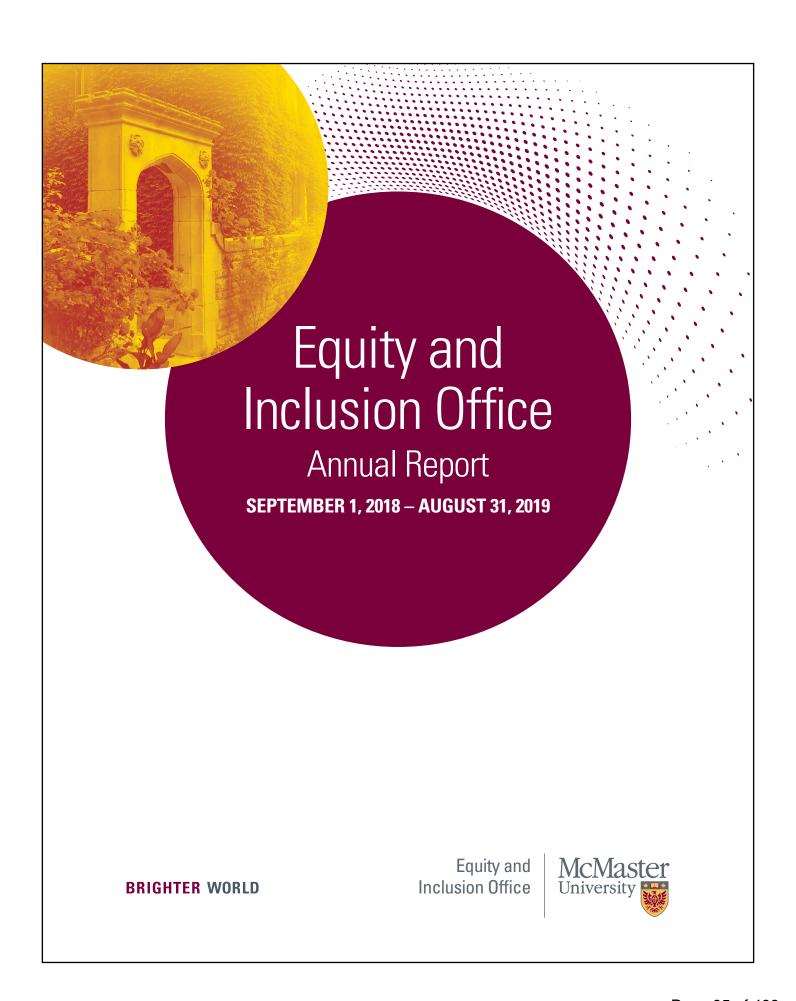
Central Bank Position

Central Bank Continuity Schedule ('000s)	April 2019 Actual	April 2020 Projected	April 2021 Budget	April 2022 Plan	April 2023 Plan
PERMENANT SOURCES OF FUNDS					
2052 Bond	120,000	120,000	120,000	120,000	120,000
2065 Bond (Net of Sinking Fund)	120,000	120,000	120,000	120,000	120,000
2062 Bond (Net of Sinking Fund)	-	-	-	112,500	112,500
Gross Central Bank	240,000	240,000	240,000	352,500	352,500
Less: 2052 Sinking Fund	(6,000)	(6,000)	(6,000)	(6,000)	(6,000)
Less: 2065 Sinking Fund	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)
Less: 2062 Sinking Fund				(12,500)	(12,500)
Net Permanent Sources of Funds	224,000	224,000	224,000	324,000	324,000
TEMPORARY SOURCES OF FUNDS					
Unexpended Departmental Carry forwards	167,657	158,328	104,757	98,952	96,949
10% of Deferred Contributions for Future Exp.	36,317	36,317	36,317	36,317	36,317
Investment Reserve > \$50M	51,902	4,000	10,000	20,000	30,000
Net Temporary Sources of Funds:	255,876	198,645	151,074	155,269	163,266
Net Central Bank Sources of Funds:	479,876	422,645	375,074	479,269	487,266
Less: Net Capital Reserve Commitments Schedule	(109,416)	(174,437)	(206,027)	(197,119)	(179,483)
Less: Central Bank Loans Schedule	(69,709)	(148,854)	(194,635)	(233,403)	(233,567)
Net Central Bank Position	300,751	99,354	(25,588)	48,747	74,216

Note: Salary and wage savings are not factored into the department reserve position, which will improve these figures. Further, a larger temporary encroachment on deferred funding is possible.



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Equity and Inclusion Office

Annual Report

- 3 Executive Summary
- 5 Program Highlights
- 13 Statistical Report

Relevant Links

Accessibility Hub: accessibility.mcmaster.ca

Discrimination and Harassment Policy:

secretariat.mcmaster.ca/app/uploads/Discrimination-and-Harassment-Policy.pdf

Equity & Inclusion Office: equity.mcmaster.ca

Equity & Inclusion on Facebook: <u>www.facebook.com/EIOMcMaster</u>

President's Advisory Committee on Building an Inclusive Community: pacbic.mcmaster.ca

Sexual Violence Policy: secretariat.mcmaster.ca/app/uploads/Sexual-Violence-Policy.pdf

Sexual Violence Prevention and Response Office: svpro.mcmaster.ca

Executive Summary

The Annual Report is broken down into two main sections: Program Highlights and the Statistical Report.

Program Highlights

This section provides an overview of respective programming, training initiatives, collaborative events, notable successes and opportunities across each Equity and Inclusion Office service area:

- Access Mac Program;
- · Equity & Inclusion Education Program;
- · Sexual Violence Prevention & Response Office; and
- · Human Rights & Dispute Resolution Program.

Collectively, the education, training, and outreach initiatives across these programs and service areas reached more than seven thousand (7,000) individuals.

In February of 2019, the Hamilton Anti-Racism Resource Centre (HARRC) - a pilot project and program to which the Equity and Inclusion Office contributed, overseen through a partnership agreement between the City of Hamilton, the Hamilton Centre for Civic Inclusion, and McMaster University - was paused to allow the partners to review and renew plans to achieve the Centre's envisioned goals.

Also, in 2019, the <u>Sexual Violence Prevention and Response Office</u> (SVPRO), within the Equity and Inclusion Office, was expanded to deliver on its renewed mandate, as outlined in the revised <u>Sexual Violence Policy</u> (January 2020).

Statistical Report

This section comprises detailed information on complaints, consultations, and dispute resolution for matters falling under McMaster University's Discrimination and Harassment Policy (formerly, the Policy on Discrimination and Harassment: Prevention & Response) and/or the Sexual Violence Policy.

2019 was the second year operating with an Intake Team model, and, as such, comparative data from last year has been incorporated into this report.

Over the past academic year (September 1, 2018 to August 31, 2019) Intake Offices handled a total of 44 complaints. The most cited ground was sex, followed by personal harassment, and then race. 50% of the complaints investigated resulted in policy violations and the average length for an investigation was 6.7 months.

For consultations, Intake Offices recorded a total of 405. The most cited ground was personal harassment, followed by disability, and then sex.

110 matters were resolved through alternate dispute resolution facilitated through one of the Intake Offices.



Program Highlights — 2018/19

Accessibility Program

Type of Program	# of Sessions	# of Participants
Educational	 35 in-person 7 online sessions AODA and Human Rights Code 4 online Accessible Education (FLEX Forward) 	1,000 2,570 278
HEART Series workshops	• Accessibility 101	28
International Day of Persons with Disabilities Events / Commemoration	 Disability Discussions: Disability and Stigma Brown Bag Lunch and Learn Series: What is Accessibility? Disability and Mad Studies Reading Group: Disability Stigma 	60
Support (persons with lived experience)	 6 sessions / presentations Disability Discussions Employee Network meetings 27 consultations / referrals / meetings 	Approximately 15-20 participants at each support session
Employee Accessibility Network	• 2 meetings (Feb 2019, April 2019)	

Highlights of Notable Successes and Opportunities

Training

- Development and launch of the Accessible Workplace Accommodation Training for Managers, Supervisors and Leaders, in collaboration with HR and in consultation with the EAN (Oct 2018 pilot, Nov 2018 launch) à Approximately 130 managers / leaders participating in 4 sessions trained from Nov 2018-Aug 2019.
- Accessibility and McMaster Intramurals Our Approach (training for all Athletics and Recreation intramural staff and student staff – partners EIO and Athletics and Recreation)
- Timeless: An Intergenerational Social Program (training on ageism, equity and accessibility for Residence Life: Timeless Living and Learning Community EIO collaboration)
- Inclusive Student Leadership Training (for student leaders partners EIO, HR and Faculty of Social Sciences)

Large Consultations

- Pilot / Consultation process with the Employee Accessibility Network on the Accessible Workplace Accommodation Training (Oct 2018)
- Extensive consultation on Modules 3&7 of the newly developed "Hippo-on-campus" mental health training for instructional staff, under the Mental Health Strategy
- Work with Registrar's Office to incorporate live captioning into all Convocation Ceremonies
 - promoting Convocation Accessibility available now from main Convocation Information web page
- Accessibility incorporated into John Hodgins Engineering Building Renovation Guidelines

Publications (Community)

- Completion of the User Testing Project for Web Accessibility Report, in partnership with the MacPherson Student Partner Program, to provide web accessibility auditing feedback on centrally-produced web templates
- Inaugural publishing of the Accessibility and Disability Inclusion Update, 2017-2018, on December 3rd.
 The Accessibility and Disability Inclusion Update is a collective campus community publication facilitated
 through the Equity and Inclusion Office, which highlights and celebrates the Accessibility and Disability
 Inclusion work that takes place within community, student work, faculties, and service units on an annual
 basis à Approximately 40 submissions published in first edition

Notable Events / Events Series

- Unpacking Graduate School for Students with Disabilities Series of 3 events for Graduate and Undergraduate students with disabilities in partnership with MSU Maccess, School of Graduate Studies and the Disability and Mad Studies Reading Group
- Beyond a One Dimensional Framework: Race and Disability Discussion Presentation for students, staff and faculty by the Disability Justice Network of Ontario Youth Council.

Equity & Inclusion Programming

Type of Program	# of Sessions	# of Participants
Educational	75	3,000
H.E.A.R.T. Workshops	16	320
Black History Month	22	625
Support	75	30
Let's Talk About Race! Drop-In	7	150

Highlights of Notable Successes and Opportunities

- Partnered with the Human Book Collection to offer the Human Library on campus
- · Partnered with Mohawk College to bring Tarana Burke to Hamilton
- · Partnered with Athletics and Recreation for "Marauder Pride Night"
- Dr. Malinda Smith facilitated the Black History Month February Let's Talk About Race! Session and a keynote address that was very well attended
- Offered the KAIROS Blanket Exercise to various areas on campus including the Library Staff
- Disability Justice Network of Ontario (DJNO) partnered with EIO and R3 for an event on Disability and Racism and the intersections
- The Anti-Violence Network (AVN) hosted a farewell event acknowledging all of the accomplishments
 while recognizing the group is no longer needed as there are a number of other services filling the
 AVN's role
- ANIMA Deep Diversity Institute was well attended and a cross section of McMaster staff and faculty were in attendance

Sexual Violence Prevention & Response

Disclosures

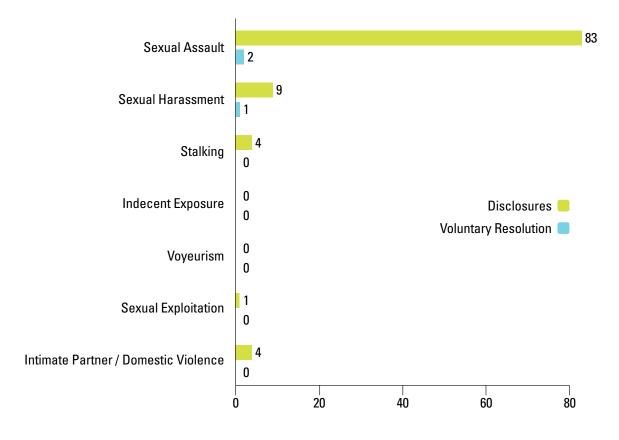
Disclosures over the past academic year are highlighted below.

A disclosure is made when an individual informs someone in the University community about an experience of sexual violence because they wish to access support, accommodations and/or information about their options. A person may wish to disclose, seek support, and take no further action. This is an option for individuals under McMaster's Sexual Violence Response Protocol and Sexual Violence Policy.

Categories for reporting are based on provincial requirements, as set out in Common Institutional Metrics Reporting Guidelines document.

Consultations conducted by the Consultant, Sexual Violence Prevention & Response, are reflected in Intake Office statistical section of this report.

Disclosures: Type of Sexual Violence



Туре	Disclosures	Voluntary Resolution
Sexual Assault Non-consensual sexual contact or activity, including the threat of such activity, done by one person or a group of persons to another. Sexual assault can range from unwanted sexual touching, kissing, or fondling to forced sexual intercourse. Sexual assault can involve the use of physical force, intimidation, coercion, or the abuse of a position of trust or authority.	83	2
Sexual Harassment A course of vexatious comment, conduct and/or communication based on sex, sexual orientation, gender, gender identity, or gender expression that is known or should have been known to be unwelcome.	9	1
Stalking Behaviours that occur on more than one occasion and which collectively instill fear in the person or threaten the person's safety or mental health, or that of their family or friends. Stalking includes non-consensual communications (e.g., face to face, phone, electronic); threatening or obscene conduct or gestures; surveillance and pursuit; and sending unsolicited gifts.	4	
Indecent Exposure The exposure of the private or intimate parts of the body in a lewd or sexual manner, in a public place when the perpetrator may be readily observed. Indecent exposure includes exhibitionism.		
Voyeurism The surreptitious observing of a person without their consent and in circumstances where they could reasonably expect privacy. Voyeurism may include direct observation, observation by mechanical or electronic means, or visual recordings.		
Sexual Exploitation Taking advantage of another person through non-consensual or abusive sexual control. This may include the digital or electronic broadcasting, distributing, recording and or photographing of people involved in sexual acts without their consent.	1	
Intimate Partner Violence Harm caused by an intimate partner, who is defined a person with whom someone has or had a close personal relationship that could be characterized by an emotional connection, or ongoing physical contact or sexual behaviour. Persons may identify as a couple, or refer to each other as spouse or partner. IPV is sometimes referred to as domestic violence, though this can include other types of relationships (e.g., with children or older adults). IPV includes: physical abuse (including a threat or attack made with a fist of object, pushing, shoving, slapping, kicking, choking, hitting or beating), sexual abuse, emotional and psychosocial abuse (words or actions to frighten, intimidate, control, isolate, humiliate, and/or belittle) financial abuse (adapted from RCMP).	4	
TOTAL	101	3

Highlights of Notable Successes and Opportunities

- Engaged an expert in bystander intervention to train faculty, staff and students, with plans to enhance and expand this training program
- Redesigned and delivered sexual violence prevention and response training sessions for faculty, staff
 and students to help community members understand the myths about sexual violence, how McMaster's
 Sexual Violence Response Protocol works and how to recognize, respond and refer a disclosure
 (including training for Residence Life staff; Welcome Week student leaders for Residences and Faculties;
 Students Union student leaders and management; and faculty, staff and students at large)
- Provided sexual violence prevention and response presentations for student support units, including Student Wellness counselling staff; Indigenous Studies and Student Services staff
- Provided sexual violence prevention and response training to all Welcome Week leaders and McMaster Students Union leadership, Teaching Assistants and other student groups
- Established and launched a new psycho-educational group for student survivors of sexual assault (PEGASUS), which run for 10 weeks in the fall and again in the winter term
- The university also undertook a campus consultation process through the summer and fall of 2019 to review and update its 2017 Sexual Violence Policy. The new Policy was approved in December of 2019.

In 2019, the Sexual Violence Prevention and Response Office (SVPRO), within the Equity and Inclusion Office, was expanded to deliver on its renewed mandate, as outlined in the revised Sexual Violence Policy (January 2020). The Office will have two full-time staff: a Director (SVPRO) and a Prevention Education Coordinator. The Director — a specialist in the area of sexual and intimate partner violence — will provide leadership to establish a more centralized, holistic, and coordinated response for any community members seeking consultation, disclosure support, and complaint intake. The Director will work with campus partners, and other Intake Offices, to ensure timely and consistent triage, support, and follow-up should individuals choose to pursue university complaint processes. The Prevention Education Coordinator will focus on broad community awareness-raising events and social norms campaigns, as well as tailored education and training programs and activities on such topics as: debunking sexual violence myths and misconceptions, promoting healthy masculinity, and creating a culture of consent, for example. The SVPRO will offer Sexual Violence Response Protocol training to ensure community members are equipped to recognize, respond to, and refer a disclosure with care and compassion.

Human Rights and Dispute Resolution Program

Consolidated numbers on complaints, consultations and alterative dispute resolution are listed in the statistical report below.

Highlights of Notable Successes and Opportunities

- Specialized Training in alternative dispute resolution: intake office colleagues took part in extensive
 training on Alternative Dispute Resolution. While the office has always focussed on helping parties
 to resolve issues and concerns informally where they wish to do so, it looks forward to utilizing the
 additional skillset to help facilitate the resolution of disputes in a way that provides the parties an
 opportunity to collaborate and gain a better understanding of one another's interests. Such an approach
 not only allows the parties an opportunity to resolve the dispute in question, but can often help to restore
 relationship breakdown.
- Hamilton Anti-Racism Resource Centre (HARRC): pilot project paused in February 2019 to allow partners to review and renew plans to achieve the Centre's envisioned goals.
 - In its first 10 months of operation, HARRC recorded 75 individual case complaints, conducted 17 anti-racism seminars and attended 46 ethno-racial consultations and events in the community.
 - Dr. Ameil Joseph in the School of Social Work at McMaster University works with both HARRC and the Hamilton Centre for Civic Inclusion (HCCI) and provides research expertise for quantitative and qualitative data collection; Dr. Joseph reviewed HARRC's data and prepared a report outlining his findings and analysis.
 - In addition to Dr. Joseph's report, representatives from McMaster, HCCI, and the City of Hamilton
 consulted with community groups, and posted an online survey via the City's website to obtain
 community feedback on HARRC,
 https://www.hamilton.ca/sites/default/files/media/browser/2019-10-29/harrc-2019-surveysummary.pdf.
 - Based on the online survey results and the lessons learned during the first ten months of the pilot program, the Committee Against Racism (CAR) and HARRC partners developed four possible operating models for community consideration. The models were shared and feedback obtained during a community engagement event held on October 29, 2019 at the David Braley Health Sciences Centre, https://www.hamilton.ca/sites/default/files/media/browser/2019-12-05/harrc-survey-summary-report-for-web.pdf.



Statistical Report

Report Parameters

Under section 52 of the *Discrimination and Harassment Policy* (formerly the *Policy on Discrimination and Harassment: Prevention & Response*) and section 53 of the *Sexual Violence Policy*, the Equity and Inclusion Office is responsible for gathering and analyzing statistics on consultations, disclosures, complaints, investigations, sanctions and outcomes, and for reporting on that data to the Senate and the Board of Governors.

Unless stated otherwise, this report covers data collected from September 1, 2018 to August 31, 2019.

The report includes 1) data gathered by the Equity and Inclusion Office; and 2) data provided to the Office by Human Resources Services, Faculty of Health Sciences Professionalism Office, and Student Support & Case Management.

Defintions

Complaint: A complaint under McMaster University's *Discrimination and Harassment Policy* or *Sexual Violence Policy* is made when an individual seeks to initiate the institution's investigation and adjudication procedures, by completing and submitting complaint forms to one of the four Intake Offices on campus. Upon receipt of a complaint, the policy Assessment Team convenes to review the materials with a view to making recommendations to the respective Decision Maker. Complaints are either investigated or not investigated. If the complaint is not investigated, the complainant is informed of their right to make a written request for review of the decision to the appropriate Vice-President.

Consultations: A consultation takes place when an individual seeks advice and/or guidance on a matter related to discrimination, harassment, and/or sexual violence from an Intake Office representative in one of the four Intake Offices on campus. Consultations are confidential, subject to limits of confidentiality, outlined in the Policies.

Dispute Resolution: Dispute resolution is a service provided by Intake Office representatives to help facilitate the successful resolution of issues and concerns related to discrimination, harassment, and/or sexual violence. It is a voluntary process and is not appropriate in all cases. It seeks to resolve matters in an efficient manner and reduces the need for complaints to be filed.

Intake Offices: the four¹ intake offices listed in McMaster University's *Discrimination and Harassment Policy* and *Sexual Violence Policy* are the Equity & Inclusion Office, Employee/Labour Relations, Faculty of Health Sciences Professionalism Office and Student Support & Case Management.

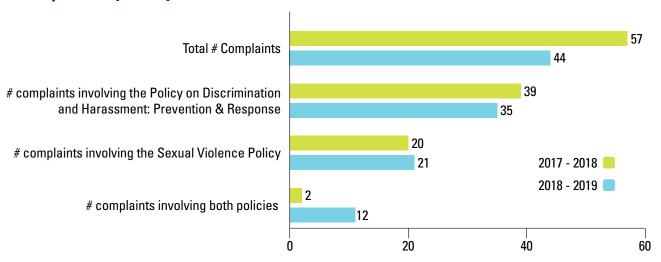
¹ as of January 2, 2020, with the adoption of the new Sexual Violence Policy and expanded capacity, the Sexual Violence Prevention and Response Office will act as the central Intake Office for sexual violence complaints, working collaboratively and in partnership with the other four Intake Offices.

Complaints

1. Complaints: Overview of complaint numbers

Reporting Year	Total # Complaints	Open at start of year	New	Closed
September 1, 2017 - August 31, 2018	57	16	41	47
September 1, 2018 - August 31, 2019	44	10	34	32

Complaints by Policy



Complaints Investigated

Reporting Year	Percent investigated	Percent resulting in policy violations	Average Length of investigation ¹ process (months)	
2017 - 2018	51%	50%	6.1	
2018 - 2019	69%	50%	6.7	

¹The length of an investigation process is calculated as the time between the date the parties are first notified of the process and the date the parties receive the findings and outcomes of the process

Complaints not investigated

Complaints are not investigated for a variety of reasons, including: the complainant elects to withdraw the complaint; the parties reach a resolution; the complaint proceeds under another University process, such as Academic/Research Integrity, Student Appeal Procedures or Student Code of Rights & Responsibilities; the Assessment Team and Decision Maker decide not to investigate because, for example, there is no jurisdiction, the complaint is out of time, or there is no prima facie case.

In the past academic year, approximately 30% of complaints did not proceed to investigation.

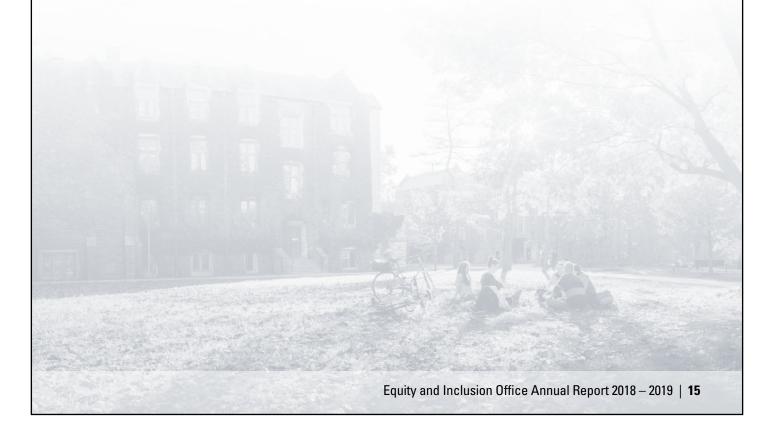
Interim measures

Interim measures are temporary steps put in place while an investigation is in progress to safeguard the working, learning and/or living environments of all individuals. Interim measures do not extend beyond the final resolution of a matter and are reviewed on an on-going basis to ensure they remain appropriate in the circumstances.

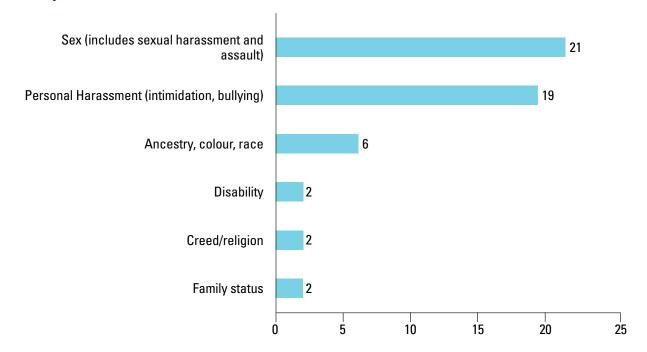
Interim measures were necessary in 45% of the cases investigated and closed this past academic year. At times, in order to implement appropriate interim measures, relevant staff and faculty are asked to assist in discussions to explore options, and to assist with implementation and oversight.

Outcomes

When policy violations are found to occur, outcomes vary, depending on the circumstances of each case. Examples of outcomes during the 2018/19 academic year include: remedial educational initiatives; mandated training; professional coaching; instituting no contact orders between individuals; designating individuals as PNG (persona non grata) from campus; documented discussions; and termination of employment.

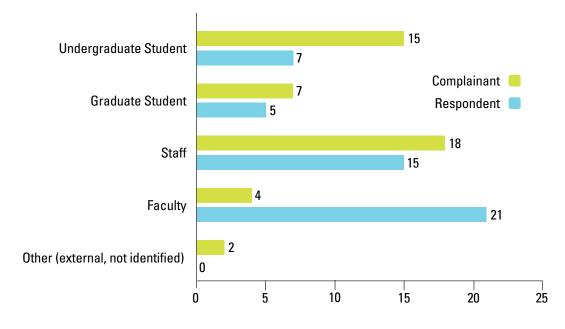


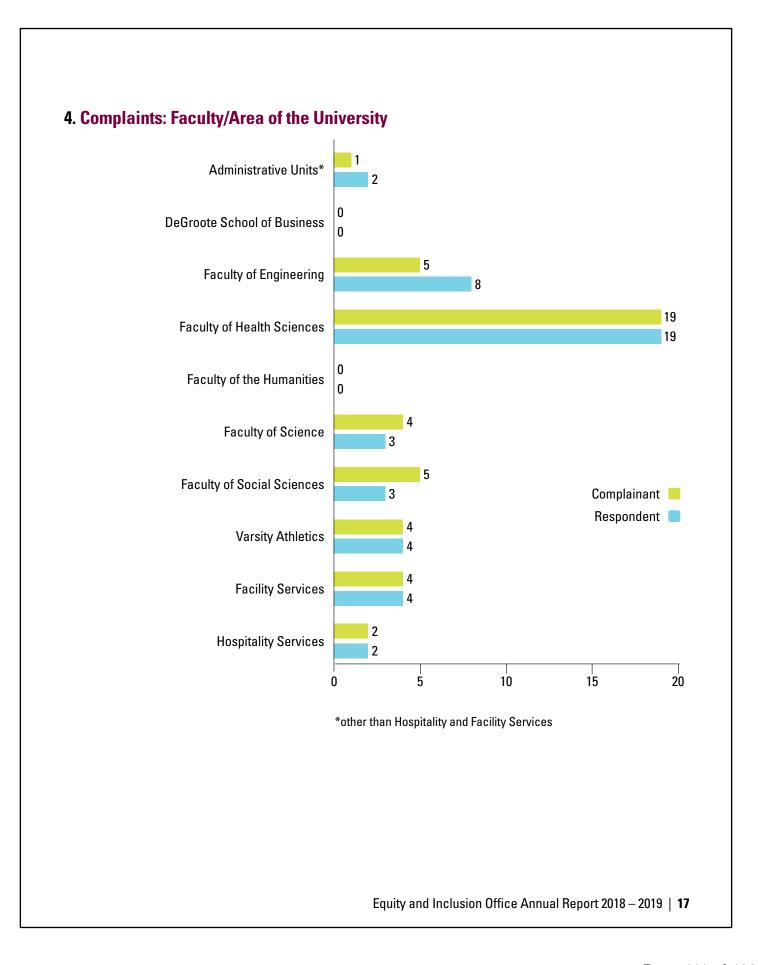


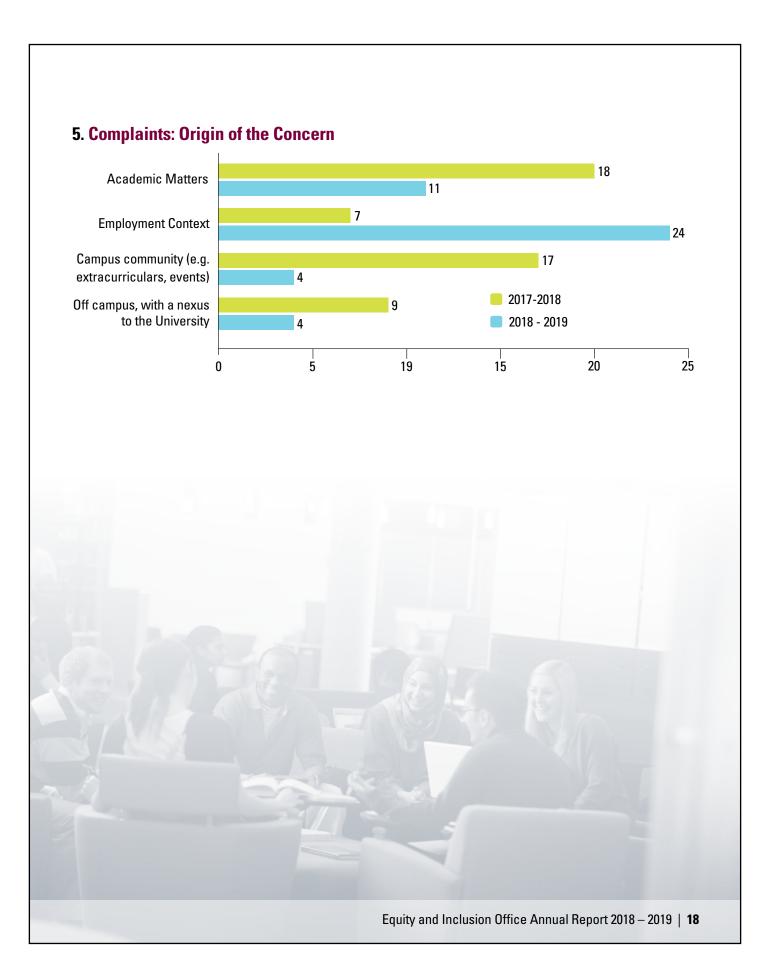


Note: Some complaints involve more than one ground.

3. Complaints: Participant Type







Consultations

As set out above, a consultation takes place when an individual seeks advice and/or guidance on a matter related to discrimination, harassment, and/or sexual violence from an Intake Office representative in one of the four Intake Offices on campus. Consultations are confidential, subject to limits of confidentiality, outlined in the Policies.

Numbers

For the 2018-2019 academic year, the four Intake Offices recorded a total of 405 consultations, which is similar to last year's number of 355².

Themes

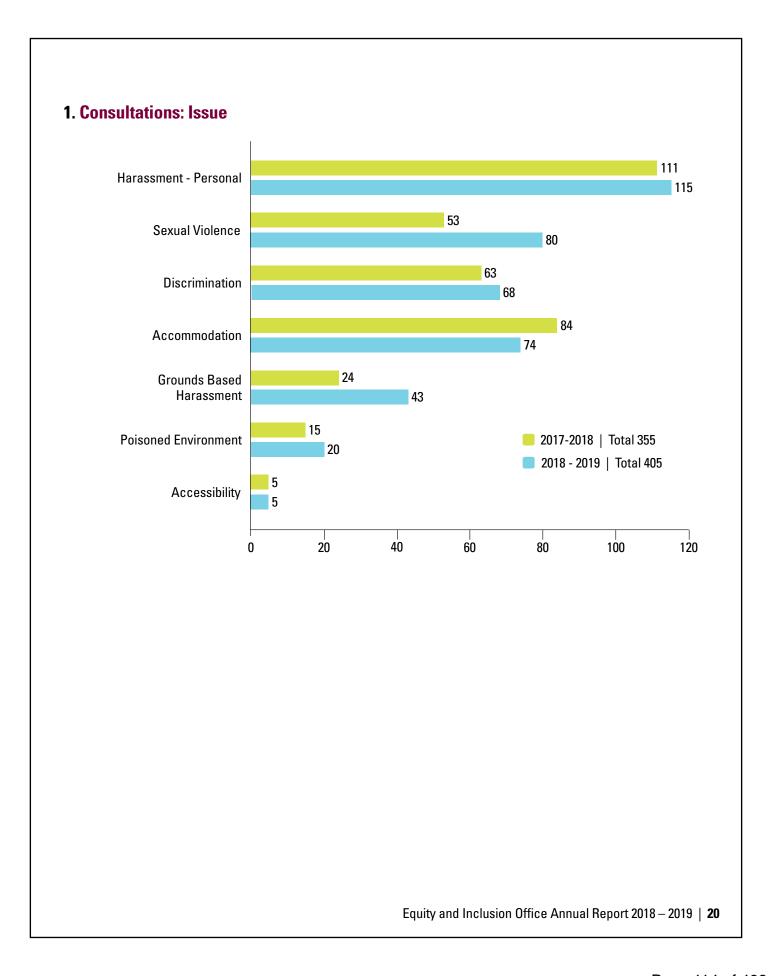
Themes this past year included queries on navigating concerns related to workplace bullying, retroactive academic accommodation processes for students with disabilities, sexual harassment, requests for accommodation on religious grounds, and microaggressions in the classroom or workplace related to race.

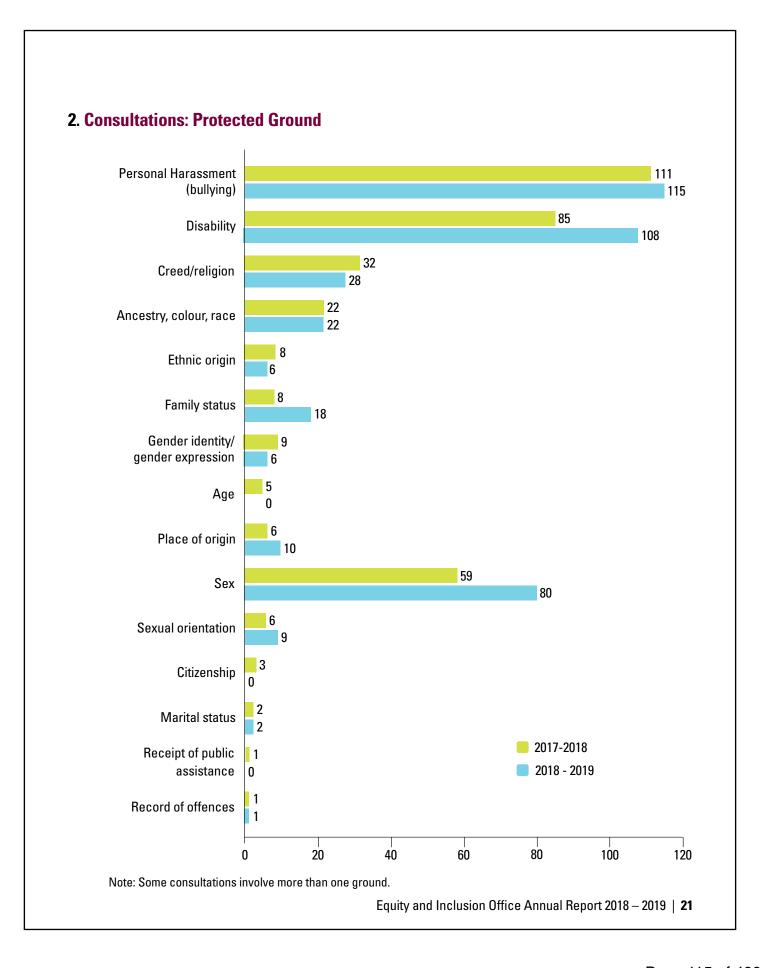
Top five grounds:

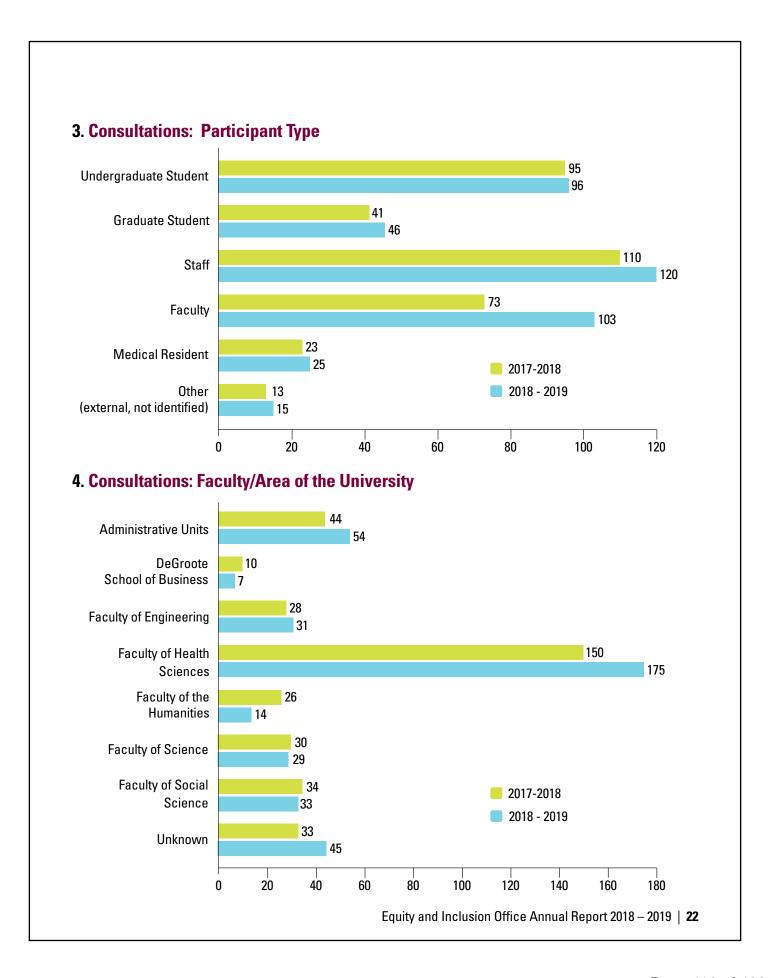
- · non-ground based harassment (bullying, threatening, intimidating behaviour),
- · disability,
- sex,
- · religion, and
- race

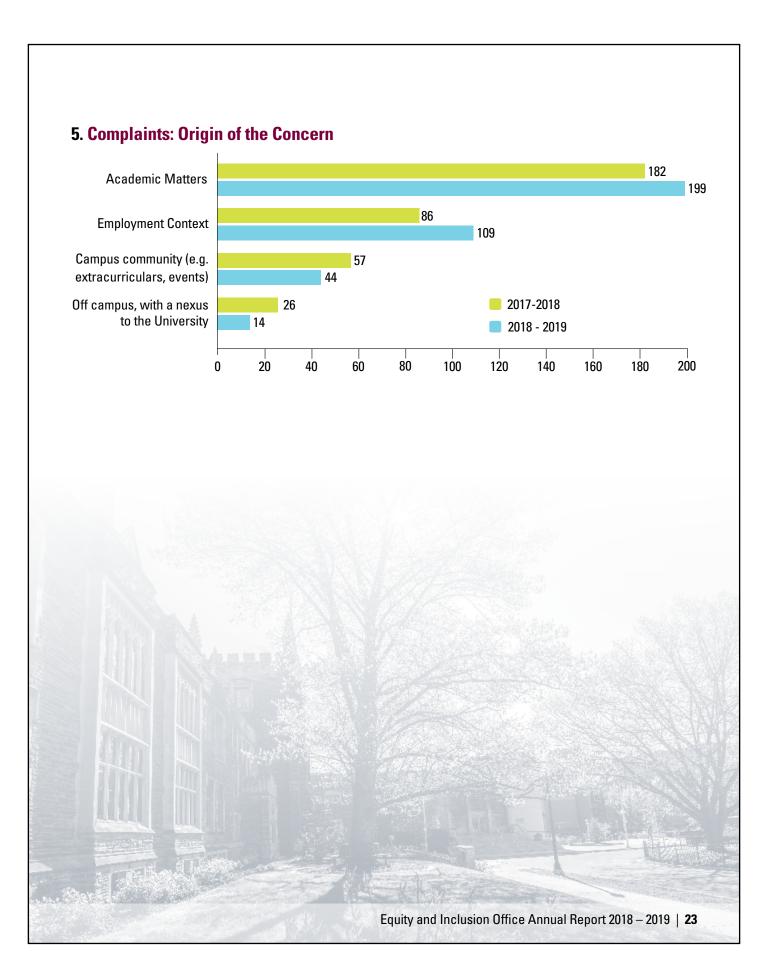
This year, to reduce the number of tables and graphs, we consolidated consultations on discrimination, harassment, and sexual violence.

²Last year's report displayed a consolidated number for consultations and dispute resolutions. The total was 442. Disaggregated, there were 355 consultations meeting the definition outlined above, and 87 dispute resolutions.









Dispute Resolution

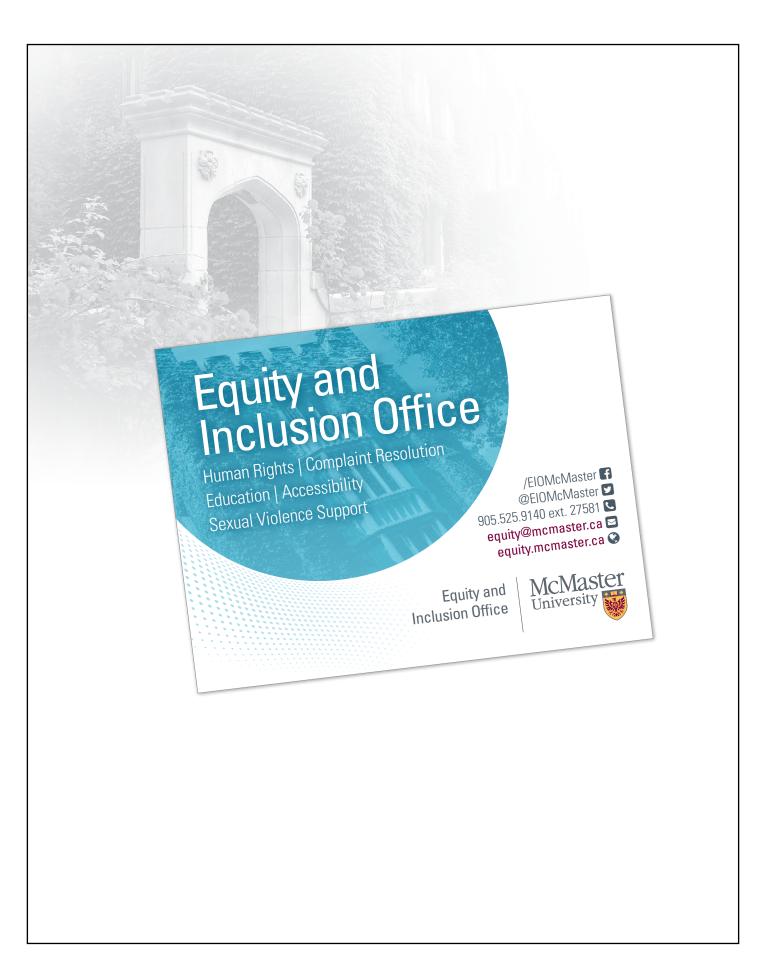
As indicated above, dispute resolution is a service provided by Intake Office representatives to facilitate the resolution of issues and concerns related to discrimination, harassment, and/or sexual violence. In previous annual reports, these matters were reported as informal resolutions and aggregated with consultations. Given the importance and unique nature of this work, it is important to reflect it separately.

Dispute resolution seeks to resolve matters in an efficient and amicable manner and, if successful, reduces the likelihood of a complaint being filed. Engagement in the process is voluntary, and parties may withdraw from the process at any point in time.

Situations involving human rights go to the very core of people's being; it is not surprising that addressing and assisting parties to work through such matters entails mediating emotionally charged, highly sensitive, and multifaceted interpersonal conflicts. The Intake Offices draw upon their acquired expertise in conflict coaching, negotiation, and other alternative dispute resolution techniques to facilitate the resolution of disputes.

2018-2019 Numbers

- For the 2018-2019 academic year, the four Intake Offices recorded a total of 110 dispute resolution matters, which is up from last year's number of 87.
- Non-grounds harassment (bullying, intimidation) and accommodation matters relating to disability, religion and family status were the most common matters where individuals requested dispute resolution.
- Undergraduate students and staff were the most common groups requesting assistance to resolve an
 issue, while staff and faculty were the most common groups asked to participate in a process in order to
 resolve an issue.
- The majority of matters pertained to academics, followed by employment.





UNIVERSITY SECRETARIAT

Board of Governors

Senate

Gilmour Hall, Room 210 1280 Main Street West Hamilton, Ontario, Canada Phone: 905.525.9140Ext. 24337 Fax: 905.526.9884 E-mail: univsec@mcmaster.ca http://www.mcmaster.ca/univsec

REPORT TO THE BOARD OF GOVERNORS from the SENATE

a. SPS A1 – Recruitment and Selection of Faculty Members

At its meeting on April 8, 2020, Senate approved the proposed revisions to SPS A1 – Recruitment and Selection of Faculty Members.

Senate now recommends,

that the Board of Governors approve the amendments to the Policy SPS A1 – Recruitment and Selection of Faculty Members, as circulated, effective July 1, 2020.

b. Canadian Centre for Electron Microscopy (CCEM)

At the same meeting, Senate approved the establishment of the Canadian Centre for Electron Microscopy (CCEM). The proposal was also reviewed and approved by the University Planning Committee on March 18, 2020.

Senate now recommends,

that the Board of Governors approve the establishment of the Canadian Centre for Electron Microscopy (CCEM).

Board of Governors: FOR APPROVAL

April 16, 2020



Date of Original Approval(s)

Policies, Procedures and Guidelines

<u>Complete Policy Title</u> <u>Policy Number (if applicable):</u>

SPS A1

Policy on Recruitment and Selection of Faculty

Members

<u>Approved by</u> <u>Date of Most Recent Approval</u>

Senate / Date 2020/ Board of Governors Date 2020

December 11, 1996 (SPS 2)

December 14 / 15, 2011

Supersedes/Amends Policy dated

Responsible Executive Policy Specific Enquiries

Provost and Vice-President (Academic) Provost and Vice-President (Academic)

General Policy Enquiries

Policy (University Secretariat)

DISCLAIMER: If there is a Discrepancy between this electronic policy and the written copy held

by the policy owner, the written copy prevails.

I. PURPOSE AND SCOPE

- This Policy furthers academic excellence by ensuring equitable, inclusive and meritocratic consideration of prospective applicants for faculty appointments through the preparation, advertising, assessment, and selection phases of search processes.
- 2. The Policy applies to all classes of faculty appointment, excluding full-time Clinical Faculty and those individual appointments that fall within the purview of SPS A3 <u>Procedures for Other Appointment (except in Health Sciences)</u> or SPS A4 <u>Procedures for Other Appointments within the Faculty of Health Sciences</u>. The Policy is intended for use principally by Departments, but some aspects also apply at Faculty and Senate levels. Under certain exceptional circumstances, and where there is a strong hiring rationale, the Provost may approve a hiring process that deviates from this Policy.
- 3. There are some exclusions to the application of this Policy, including:
 - a) faculty recruitment which would fall under the provisions of SPS A7 Spousal Hiring;
 - faculty appointments converted to a different stream which fall under the provisions of SPS A2 Conversion of an Individual Faculty Appointment; and
 - c) special strategic recruitment programs (e.g., accelerated diversity and inclusive excellence recruitment programs), which require the approval of the relevant Faculty Dean and Provost and Vice-President (Academic), in consultation with the Associate Vice President Equity and Inclusion, and the Assistant Vice President and Chief Human Resources Officer, to ensure the programs are in compliance with University policies and human rights legislation.
- 4. Department Chairs¹ and Search Committees are expected to consult the companion Faculty Recruitment and Selection Handbook ("the Handbook") for guidance on how to implement the Policy through all four phases of the search process. For ease of reference, the procedural tools and resources in the Handbook are organized under relevant headings and subheadings which are aligned with those used in the Procedures section of this Policy.
- 5. This Policy and Procedures shall be reviewed in three years in consultation with the McMaster University Faculty Association (MUFA). Any revisions must be endorsed by the MUFA executive and the Senate Committee on Appointments before being presented to the Senate.

II. ACCOUNTABILITY

- 6. Department Chairs are accountable to their Deans, and Deans to the Provost & Vice-President Academic ("Provost") for following this Policy.
- 7. Chairs are responsible for maintaining Search Committee documentation and completing the online Search Summary Report for Deans to review before finalizing an offer and appointment.

McMaster University

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¹ "Department Chair" also means "Director" of a School or an Area Chair.

III. PRINCIPLES

Inclusive Excellence

8. McMaster's faculty hiring processes aim to attract a diverse talent pool from which to identify qualified candidates who are suited to position requirements, and to the strategic goals of the relevant Department, Faculty and the University. To achieve this aim, faculty hiring processes will be guided by inclusive excellence principles, which maintain that diversity is integral to quality and which call for expanded ways to assess merit in research, teaching and service.

Fairness and Equity

9. The qualifications for positions and criteria for assessing merit will be established in a fair, equitable and transparent manner, which seeks to surface and mitigate explicit or implicit biases. If, among the selection finalists, there are self-identified members of equity-seeking groups², departments shall consider the University's employment equity gaps and goals in the active recruitment of women, persons with disabilities, First Nations, Métis and Inuit peoples, persons who are members of racialized communities [visible minorities], and LGBTQ+ identified persons, thereby advancing inclusive excellence. Aggregate-level data on the representation of equity-seeking groups is available from Human Resources Services.

Confidentiality

10. Hiring processes involve the disclosure of personal information. All personal information relating to the search for and appointment of faculty is to remain strictly confidential and shared only among the Search Committee membership. Any personal information collected, stored, used or disclosed in a hiring process under this Policy will be managed in accordance with the University's <u>Statement on Collection of Personal Information and Protection of Privacy</u> (Policy Statement) and any other applicable information management and security policies.

IV. PROCEDURES

Preparation for the Search Process

Review Applicable Policies/Consider Workforce Gaps

11. Hiring processes involve the disclosure of personal information. All personal information relating to the search for and appointment of faculty is to remain strictly confidential and shared only among the Search Committee membership. Any personal information collected, stored, used or disclosed in a hiring process under this Policy will be managed in accordance with the University's <u>Statement on Collection of Personal Information and Protection of Privacy</u> (Policy Statement) and any other applicable information management and security policies.

² For the purposes of this policy, the term "equity-seeking groups" will refer to groups of people who have historically faced, and continue to face, barriers in the labour market. The Employment Equity Act identifies these groups as: women, First Nations, Métis and Inuit Peoples, persons with disabilities and persons who are members of racialized communities in accordance with the Act's definition of "visible minorities". McMaster University also recognizes persons who identify as LGBTQ+ (Lesbian, Gay, Bisexual, Transgender, Queer and sexual orientation and gender identity minority identities) in employment equity strategies.



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- 12. Department Chairs and Selection Committee Chairs should familiarize themselves with this Policy and the Employment Equity Policy and Recruitment Statement, and be guided by the resources and tools outlined in the companion Handbook.
- 13. Preparation for the search should include reviewing the workforce analysis summary to identify institutional, Faculty, and, where feasible, Departmental workforce gaps in relation to *equity-seeking groups*.

Drafting the Advertisement

- 14. Position postings should:
 - d) be accurate and informative;
 - e) use inclusive, welcoming, and unbiased language; and
 - f) include reference to any policies which make McMaster more competitive in the search for members of equity-seeking groups.
- 15. The Department Chair shall take steps to ensure that the proposed advertisement meets the institution's goal of inclusive excellence, including consulting with the Employment Equity Specialist and/or the Employment Equity Facilitator as needed.
- 16. Advertisements for faculty positions must include the following:
 - a) the proposed rank and title of the position, and may also include a statement indicating that salary and academic rank will be commensurate with experience;
 - b) the expectations of the role/nature of duties;
 - c) the range of qualifications sought;
 - d) the campuses/locations from which the incumbent will be expected to work;
 - e) specific details on the documentation that applicants must submit as part of the application package;
 - f) a request to submit a brief statement describing the contributions they have made or plan to make to inclusive excellence in teaching, research, or service in academic, professional or community contexts;
 - g) unless the Department employs a discipline-specific job applicant site/portal, a request that all documentation be provided through the Mosaic career opportunities application process, and the contact information for a person to whom inquiries should be addressed;
 - h) external postings must include the link to the Mosaic posting, and/or the posting number;
 - i) McMaster's standard statement of commitment to employment equity as outlined in the McMaster University Employment Equity Policy and Recruitment Statement;
 - j) McMaster's standard immigration statement; this statement is required by Employment and Social Development Canada (ESDC) and does not preclude the ability to advertise and recruit simultaneously in Canada and abroad;
 - McMaster's templated invitation to complete a voluntary online self-identification survey through Mosaic;
 and



- McMaster's standard accommodation statement as required by the Accessibility for Ontarians with Disabilities Act.
- 17. The Chair must determine, prior to posting the job advertisement, when letters of recommendation (typically three to five) will be required and reviewed by the Committee.
 - a) If letters of recommendation will be requested only for candidates who have been selected either for the long list, for those on the short list, or for the finalists instructions not to submit letters of recommendations with the application should be clearly outlined in the job advertisement. Chairs will reach out to referees at the appropriate point in the process and send a templated communication to each referee.
 - b) If letters of recommendation are requested as part of the job application, the job advertisement will include instructions for candidates to guide referees' focus on qualifications to mitigate unconscious bias.
- Formal or informal references from external sources will not be solicited without the explicit consent of candidates.
- Unsolicited references or recommendation letters provided by or received about a candidate will not be considered or shared.
- 20. The Department will invite the applicant to (a) provide an updated and full *CV* and (b) describe the impact that career interruptions have had on research productivity, if applicable.
- 21. In the Faculty of Health Sciences, advertisements must be approved by the office of the Dean and Vice-President. In all other Faculties, advertisements must be approved by the Office of the Provost before being posted.

Obtaining Approval to Recruit and Budget Authorization

- 22. Department Chairs must submit a request to the Dean for each faculty position to be recruited, including expectations regarding rank, salary, space, and proposed start date. Departments should also include expected distribution of time (e.g., teaching, research, service and administration, as applicable). Any additional resource implications should also be provided if known. A draft advertisement should accompany this request.
- 23. Budget authorization by the Provost and President (where applicable) must be obtained before the search commences. Approval of the recruitment is completed through Mosaic. Once all parties agree to the financial details and the content of the advertising, the position will be posted.

Assembling and Training the Search Committee

- 24. Members of the search committee should be thoughtfully chosen for their expertise in the field and experience working constructively on a committee, as well as their capacity to promote inclusive excellence through the hiring process.
- 25. The Chair of the Search Committee will be approved by the Dean of the Faculty.



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- 26. The Committee Chair is responsible for implementing a selection or election process that ensures the constitution of a Committee that values and embodies diversity. The Committee Chair shall strive to constitute a Committee which includes representation from *equity-seeking group* members. The Committee membership will be approved by the Dean of the Faculty.
- 27. The Committee Chair should engage an individual trained to act in an Employment Equity Facilitator capacity, to consult with the Selection Committee to ensure that equity and inclusion best practices are followed throughout the search and that committee members are appropriately kept informed and engaged in these efforts.
- 28. Committee members are expected to complete the University's recruitment and selection training, as updated from time to time.

Establishing Job Criteria and Developing an Evaluation Guide

- 29. Departments shall carefully consider and determine what qualifications are relevant for the position before the search commences.
- 30. Job criteria to be evaluated should be specific, measurable, and aligned with the requisite knowledge, skills and demonstrated performance required to teach, undertake research, and/or perform scholarly activities in the advertised field at the university level.
- 31. Contributions to equity, diversity and inclusion as well as inclusive excellence shall be assessed relevant to the criteria established by the Department.
- 32. The Search Committee shall discuss the job criteria, and how the candidates' qualifications will be assessed in relation to the criteria in order to avoid unstated, vague or shifting standards and priorities among committee members. The job criteria to be assessed should be documented.
- 33. All aspects of the evaluation shall be applied equitably to all candidates throughout the process.

Advertising and Outreach

Finalizing and Placement of the Advertisement

- 34. The advertisement placement plan should aim to reach the broadest range of qualified applicants. Utilizing diverse recruitment platforms and networks will achieve a larger pool of applicants from which to make a selection decision.
- 35. Positions should be advertised through professional societies, industry groups, research organizations and associations of *equity-seeking groups* both in Canada and internationally. Departments should consult with the Provost's Office (or the FHS Faculty Relations office) regarding advertising strategies that comply with current ESDC regulations.
- 36. As faculty searches are open to international candidates, positions must be posted for a minimum of four weeks through Mosaic and two additional national or international sites or journals, to ensure sufficient time for exposure of the vacancy to Canadians and permanent residents as required by the Ministry of Immigration, Refugees, and Citizenship Canada to obtain a positive Labour Market Impact Assessment (LMIA) and avoid delays in international recruitment, unless a waiver of advertising has been approved by the Provost or the Dean of Health Sciences.

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37. To encourage online applications external postings must reference the Mosaic posting number.

Active Targeted Recruitment Strategy

- 38. If there is access to data, past departmental searches should be reviewed by the Department Chair to determine how many members of *equity-seeking groups* applied as a percentage of the total applicant pool and what work may need to be done to improve the size and diversity of the pool of candidates.
- 39. Search committee members are encouraged to use their existing national and international networks to encourage broad and targeted advertising and outreach to equity-seeking groups.
- 40. The Chair of the Department shall establish protocols for off-site recruitment activities (e.g., job placement events, conferences, networking opportunities, etc.), which shall adhere to principles of confidentiality, fairness and equity.

Assessment of Applicants

Screening Applicants

- 41. The Committee will utilize an equitable and efficient screening process to eliminate applications that are not viable (e.g., do not meet credential/level of education requirement, etc.). The Committee may assign viable applications to a subset of its members, who will work independently to screen assigned applications using agreed upon screening criteria, if not the evaluation guide.
- 42. The Committee Chair will review, with the Employment Equity Facilitator, the aggregate self-ID data of the viable applicant pool to assess the representation of *equity-seeking groups*, as determined by comparisons with Labour Market Availability data collected by Human Resource Services. The Department Chair may discuss the aggregate self-ID data with the Dean as required.
- 43. If, in the opinion of the Committee Chair and in consultation with the Employment Equity Facilitator, the applicant pool does not include a sufficient proportion of self-identified members of *equity-seeking groups* underrepresented at the Faculty/Department Level *or* the institutional level, the Committee Chair in consultation with the Dean, will examine possible contributing factors and determine whether to:
 - a) extend the timelines of the search process to allow for more broad-reaching and targeted recruitment;
 - b) carry on with the search process and document the rationale for doing so; or
 - c) restart the process, making necessary changes.

Developing the Longlist (if applicable)

- 44. On the basis of Committee screening of applicants, the Committee Chair will develop a preliminary long list for committee discussion.
- 45. The aggregate self-ID data of the longlist indicating the representation of *equity-seeking groups should be reviewed* in contrast with the Labour Market Availability data collected by Human Resources Services.



46. If, in the opinion of the Committee Chair, and in consultation with the Employment Equity Facilitator, the longlist does not include a sufficient proportion of self-identified members of *equity-seeking groups*, the applicant pool will be re-examined to add any strong *equity-seeking group* applications to the longlist for further discussion among the Committee.

Preparing the Shortlist of Candidates to be Interviewed

- 47. The Committee will assess the applicants to determine which of them most fully meet the job requirements in order of their importance. This will be based on the job criteria assessment guide established in the planning stage.
- 48. The Committee will consider all of the criteria relevant to the **department's** goals and strategic priorities, including the advancement of equity and inclusion priorities.
- 49. The Committee will adhere to agreed-upon criteria and evidence informed assessments to mitigate evaluation bias.
- On the basis of search committee member assessment of applicants, a shortlist will be developed for committee discussion.
- 51. The Committee Chair will review, in consultation with the Employment Equity Facilitator, the aggregate self-ID data of the shortlist to assess the representation of *equity-seeking groups* in contrast with the profile of the longlist pool.
- 52. If, in the opinion of the Committee Chair, and in consultation with the Employment Equity Facilitator, the shortlist does not include any or have a sufficient proportion of self-identified members of *equity-seeking groups*, the Chair will review the applications of strong candidates from *equity-seeking groups* and consider adding them to the shortlist for interview.
- 53. If a Department employs a "Committee of the Whole" approach to the search, the Chair of the Department shall establish a process whereby all department faculty members and other invited academic community members who choose to provide feedback on the merits of applications may do so in a manner that adheres to principles of confidentiality, fairness and equity.

Interviews and Associated Activities

- 54. When inviting a candidate to interview, the Committee Chair must clearly communicate who the candidate may contact should they require accommodations to participate in the hiring process.
- 55. Each short-listed candidate should be provided with advance details of the interview process, including an itinerary.
- 56. All Committee members and any additional individuals involved in the interviewing process will receive information about those areas where questioning is prohibited by the Ontario Human Rights Code.
- 57. All short-listed candidates must be asked consistent interview questions, which have been vetted to ensure adherence to the Ontario Human Rights Code.

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- 58. A list of suggested interview questions will be developed by the Committee Chair in consultation with the Employment Equity Facilitator and circulated to the committee for comment, revision, and approval.
- 59. The Committee may undertake preliminary video-conference or tele-conference interviews.
- 60. The Committee Chair must strive to ensure that all interview and campus visit processes are accessible.
- 61. All short-listed candidates should have equal opportunities to meet and interact with potential colleagues through the selection process.
- 62. All short-listed candidates should have at least one interview opportunity with the Committee.
- 63. The interview experience should be designed to provide an equivalent opportunity for engagement by each short-listed candidate, and to enable equal methods for collecting opinions and evaluating them. For example:
 - a) if one candidate is asked to give a lecture on an aspect of their research, every candidate should be asked to give a lecture of this kind;
 - b) all candidates shall normally be asked the same questions in the committee interview.
 - c) supplemental or probing questions related to the specific questions asked are encouraged to ensure completeness of responses from candidates; and
 - d) the Committee Chair should strive to ensure that the structure and format of additional candidate meetings with individual committee members, other departmental colleagues or academic community members are relatively consistent with each other.
- 64. Feedback from the above meetings or lectures will be provided, in confidence, to the search committee for consideration in the committee's deliberations and finalist(s) recommendations to the Faculty Appointments Committee.
- 65. If appropriate at this stage in the search process, the Committee Chair will notify the finalist(s) that they are being actively considered and that letters of recommendation will be requested from their referees. The finalist(s) will be asked to submit the names of 3-5 referees they consent to be approached; the Committee Chair will send a templated communication to each referee.

Selection of Finalist(s)

The Employment Offer

- 66. When the assessment of the candidates' qualifications, based on the previously established criteria, is complete, the finalist(s) who are best qualified to meet the requirements of the job, the needs of the Department, and the priorities and goals of the Faculty and University, shall be recommended to the Faculty Appointments Committee.
- 67. If several candidates are found to be relatively equally qualified, preference will be given to candidate(s) of an equity-seeking group, considering the greatest gaps in representation of equity-seeking groups within the Department, Faculty and institution, thereby enhancing the University's ability to reach its employment equity goals and advance inclusive excellence.

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- 68. If the selected finalist is not a Canadian citizen or Permanent Resident, the University must apply for a labour market impact assessment³ (LMIA). When such a candidate is selected, the offer letter must explicitly state that employment at McMaster University is contingent upon the individual obtaining and maintaining the appropriate authorization to live and work in Canada. Full details will be relayed in discussion with the Provost's Office or the Faculty of Health Sciences Faculty Relations Office.
- 69. In the Faculty of Health Sciences, preliminary letters of offer are made by the Department Chair, with the approval of the Faculty Dean. In all other Faculties, preliminary employment offers are made by the Faculty Dean, with formal offers drafted by the Provost's Office, signed by the President, and presented by the Provost's Office. Terms of employment in the offer must comply with all relevant statutes and University policies.
- All offers of employment will notify the successful applicant of McMaster's policies and program for accommodating and supporting employees with disabilities, as required by the Accessibility for Ontarians with Disabilities Act.
- 71. Chairs and Deans are responsible for implementing and documenting strategies to avoid inequities in negotiations related to the level of institutional support provided to faculty upon acceptance of the position, including: starting salary; expected distribution of time between teaching, research, service and administration; availability of additional research funds, an RA-ship or other forms of administrative support, office space, lab equipment, mentoring, etc.

Record Keeping

- 72. Each stage of the recruitment and selection process, and the rationale for decisions made, shall be documented.
- 73. The documentation shall include aggregate self-ID data, pertaining to *equity-seeking groups* who have applied, been shortlisted, offered, accepted or declined a position. The data should be used to inform future recruitment processes to ensure greater equity, diversity and inclusion.
- 74. As an accountability mechanism to ensure consistent application of best practices outlined in these Procedures, a Search Committee Summary Report shall be completed by the Committee Chair at the conclusion of the search process, submitted to the Dean for their review and endorsement, and presented to the Senate Committee on Appointment for information. The Employment Equity Specialist will have access to the Summary Reports for Employment Equity reporting and analysis.
- 75. Records should be kept for a minimum of two years to comply with the Freedom of Information and Protection of Privacy Act of Ontario. In the case of a Labour Market Impact Assessment (LMIA), all records and any other documents that demonstrate compliance with the program conditions set out in the LMIA decision letter and annexes must be kept for six years.

McMaster University

³ International workers may be LMIA exempt if they are eligible for a work permit through the provisions of a free trade agreement.



Vice-President (Research)

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Tel: 905.525.9140 Ext. 27270 Fax: 905 521 1993 Email: vprsrch@mcmaster.ca http://www.mcmaster.ca/research

March 10, 2020

TO: University Planning Committee

Quelissonan Dr. Karen Mossman, Acting Vice-President, Research FROM:

RE: Canadian Centre for Electron Microscopy (CCEM)

The Committee on Research Institutes and Centres has reviewed the attached Proposal for the Canadian Centre for Electron Microscopy (CCEM) as per the policies and guidelines, and has been unanimously approved.

Please include this as an agenda item for the next University Planning Committee Meeting on Wednesday, March 18, 2020. Dr. Mossman will be available to attend the University Planning Committee meeting to discuss the proposed Institute in further detail.

KM:jt

Attach.

Acting Provost and Vice-President (Academic) Dean and Vice-President, Health Sciences Vice-Provost and Dean of Graduate Studies Dean of Engineering Dean of Science Dean of Social Sciences

University Secretariat and Freedom of Information and Protection of Privacy Officer



Vice-President (Research) Gilmour Hall, Room 208 1280 Main Street West Hamilton ON Canada L8S 4L8 Tel: 905.525.9140 Ext. 27270 Fax: 905.521.1993 Email: vprsrch@mcmasler.ca http://www.mcmaster.ca/research

February 18, 2020

The Committee on Research Centres and Institutes

Re: the Canadian Centre for Electron Microscopy

Dear Fellow Committee Members:

Attached please find a proposal to establish the Canadian Centre for Electron Microscopy (CCEM) as a Senate-approved Centre.

The CCEM is an established Centre at McMaster University, originally housed within the Brockhouse Institute for Materials Research (BIMR). It provides world-class electron microscopy capabilities and expertise to Canadian researchers and industry working in a broad range of fields.

The Centre was established in 2008 through funding from the Canada Foundation for Innovation (CFI) and the Ontario Innovation Trust (OIT). A highly successful Centre serving researchers across Canada, the CCEM has since been awarded significant levels of research funding, including that provided through the CFI Major Science Initiatives (MSI) program. This designation as an MSI-funded facility is a result of the success of the centre's support for research and its effective management and governance practices.

The CCEM supports research that advances society, using best practices and cutting-edge technologies. It supports collaborative work and thinking across Faculties and disciplines, and supports partnerships with governments, institutions and the private sector. This high-profile Centre fits the criteria of being a Senate-approved Centre and we now seek such designation in recognition of these strengths. Given the cross-disciplinary nature of the research supported by the CCEM, the Centre will report to the Vice-President Research, in accordance with McMaster's Guidelines for the Governance and Review of Research Institutes, Centres and Groups.

Sincerely,

Karen Mossman,

Acting Vice-President, Research

ulisaman

Encl.

Overview

Official Name of Research

Centre Canadian Centre for Electron Microscopy

Dr. Nabil Bassim, Associate Professor,

Submitted by Department of Materials Science and Engineering

CCEM is a user facility, and as such, does not have official membership, outside of the Scientific Director, Deputy Director, and Director of User Operations. Faculty members are welcome to use the facility on a per-hour basis. Several faculty members serve on the User Group Executive Committee.

Name	Position & Expertise
Nabil Bassim	Scientific Director, Focused Ion Beam and Transmission Electron Microscopy
Drew Higgins	Deputy Director, Catalysis and In Situ Microscopy Methods
Gianluigi Botton	Founding Director, Transmission Electron Microscopy and EELS Spectroscopy
Leyla Soleymani	User Group Executive Committee, Bio-Nano Devices, In situ Microscopy
John Bradley	User Group Executive Committee, Photonic Devices

McMaster users of the CCEM who have current active projects include faculty members and their teams from the following departments:

Faculty	Department				
Engineering	Electrical & Computing Engineering				
	Materials Science & Engineering				
	Engineering Physics				
	Mechanical Engineering				
	Chemical Engineering				
	Civil Engineering				
Health Sciences	Biochemistry & Biomedical Science				
	Medicine				
	Pathology & Molecular Medicine				
Science	Chemistry & Chemical Biology				
	Biology				
	Geography & Earth Sciences				
	Physics & Astronomy				
Social Sciences	Anthropology				

In addition, users of the CCEM who have current active projects include faculty members and their teams from the following academic Institutions:

Brock University	Concordia University	Dalhousie University
Lakehead University	Universite du Quebec a Trois-Riviere	University of Ottawa
Laval University	University of Acadia	University of Saskatchewan
McGill University	University Alberta	University of Toronto
Polytechnique Montreal	University of British Columbia	University of Victoria
Queens University	University of Calgary	University of Waterloo
Royal Military College	University of Guelph	University of Windsor
Ryerson University	University of Manitoba	Western University
Simon Fraser University	University of Montreal	Wilfrid Laurier University
Trent University	University of New Brunswick	York University
Université de Sherbrooke	University of Ontario Inst of Technology	

And from outside of Canada: (among others)

Institut Pascal	University of Connecticut	University of Missouri
University of Buffalo	Kansas State University	Uppsala University
Universite de Grenoble	Temple University	Penn State University
Vanderbilt University	Massachusetts Institute of Technology	Trinity College Dublin

Space Needs	Sq. Ft	New space requ	ired?	Yes		No	Х
			ABB B161A, B161C-W				
			ABB B169A, B & C				
	7,629	Location?	ABB B150, & 328	Confirmed	Х	Proposed	
		Space cost all	location covered by lead Faculty?	Yes		No	
		As the CCEM	will report to the VPR, per the Budg	ıet			
		Model Facult required	y coverage of space costs is not				Х
	An annual report will be provided to the Governir					ard.	
		Frequency of	A full review will be completed e	sooner at the request			
		Internal:	of the Governing Board				
Plans for Org	anizational	Frequency of	The CCEM receives MSI funding,	which requires a	n anr	nual report, a	
Review		External:	mid-term review (undertaken in	2019) and a rene	ewal r	eport in 2022	
Plagga provid	la namas halai	wand chack hav ta	verify that approval has been obtain	and:		Check	hov
				ieu.		CHECK	UUX
Department	Chair/ Area Di	rector	n/a				

Dr. Karen Mossman Proposal

Background

Faculty Dean or Director of Administration

Vice-President Research (Acting)

The Canadian Centre for Electron Microscopy (CCEM) provides world-class electron microscopy capabilities and expertise to Canadian researchers and industry working in a broad range of fields.

n/a

The CCEM was established in 2008 through funding from the Canada Foundation for Innovation (CFI) and the Ontario Innovation Trust, which together provided over \$14M in funding for research infrastructure. The proposal was supported by 22 universities across Canada, 12 Government laboratories (NRC, NRCan and Environment Canada), and several international institutions. A series of awards from the federal and provincial governments along with funding from McMaster University has since that time provided an additional \$39M in infrastructure funding.

In addition to awards for establishment of research infrastructure, the CCEM was awarded over \$6M in funding for operation and maintenance from the CFI Major Science Initiatives (MSI) program in the 2014 and 2017 MSI competitions. Following completion of the mid-term review in the fall of 2019, the CCEM was awarded an additional \$2M in CFI MSI funding. CFI has unique requirements for governance structures of facilities supported by MSI funding and the CCEM has evolved to meet those requirements. The additional funding awarded to the CCEM is a result of the

success of the centre and CFI's approval of its research activities, resulting outcomes, and effective management and governance practices.

The CCEM supports research through training and provision of infrastructure. This infrastructure includes 4 transmission electron microscopes (TEMs). 2 of these microscopes have aberration-correction electron optics (Titan High Base, Titan Low Base), which allow the microscopes to resolve atom resolution images, with accompanying spectroscopy that can obtain chemical identification and bonding information from single atomic columns. One of the aberration-corrected instruments is configured to have high energy and spatial resolution with a wide pole-piece gap, which permits the performance of dynamic experiments inside the microscope (i.e. observing chemical reactions, melting, or the electrical biasing of an electronic device). The other two microscopes perform lower resolution but very critical measurements. These include an instrument that can acquire very rapid chemical mapping from nanoscale materials (Talos 200FX), and another teaching microscope (Talos 120C) that performs many of the main tasks critical for standard materials imaging, including electron diffraction, chemical identification and size analysis. A 5th TEM is planned for installation in 2021 (Nion HERMES), which will be one of the worlds highest energy resolution spectroscopy instruments, coupled with cryogenic capabilities, enabling the study of quantum states of materials.

The CCEM also possesses a suite of scanning electron microscopes (J6610, J7000F, and Magellan 200) capable of imaging the surface of materials at high resolution and performing electron-based x-ray analysis and electron backscattered diffraction measurements to obtain crystal orientation information. This surface analysis is complemented by an Auger electron microscope, which obtains information from the top 2-3 nm of a material, enabling high resolution studies of nanomaterials and corrosion.

In order to perform nanoscale 3-D analysis and to prepare site-specific samples for TEM and Atom probe (see below) analysis, the CCEM also possesses a pair of focused ion beam (FIB) microscopes. One instrument (NVision400) uses a gallium source and is the primary feeder for all of the TEMs at the CCEM. The other employs a plasma xenon source and is capable of milling away large volumes of materials, exposing mesoscale materials features. The plasma FIB is the only one available in Canada to a large user base.

Finally, the CCEM possesses the only atom-probe tomography system in Canada, which is capable of constructing 3-D information about materials on an atom-by-atom basis. This is useful for studying nanomaterials, defects, grain boundaries and interfaces in materials, which are critically important for their bulk properties.

In order to operate all of this instrumentation, the CCEM has a staff of 11 (9 full-time and 2 part time). These are highly skilled personnel, with six having Ph.Ds and two having Master's degrees, and technicians having at least 2 years' training. One of the staff members acts as the manager of the entire operation on a day-to-day basis, including troubleshooting, managing some access and training certification, and technical details of the centre. 5 of the staff holding Ph.Ds have training in the advanced operation of high-end characterization equipment, and also undertake elaborate scientific research projects in collaboration with CCEM users. The technical staff is usually responsible for a specific instrument or a pair of instruments in order to support the CCEM User base. One technician is responsible for maintaining ageing equipment and facilities. One staff member is in charge of user and customer outreach, including organizing and planning workshops associated with the CCEM (see below).

The CCEM currently relies on ROADS for MSI management, the Vice-President Research Office for account management, and an external bookkeeper for the financial operation.

Objectives and Proposed Activities

The CCEM has the following objectives critical to its sustainability and flourishment as a nationally-and internationally-recognized scientific user facility:

□ Elevate national and international status of the CCEM as a world-class facility for electron microscopy

□ Provide state-of-the-art equipment and exceptional user support to enable research advances and technology development

□ Ensure benefits to Canadians by providing unparalleled HQP training and support for technology transfer

In order to pursue these objectives, we acquire, maintain and develop world-class instrumentation that reflects the cutting edge of electron microscopy-based research. These include the aforementioned microscopes that are currently in-house, as well as a planned \$11M renovation and upgrade of the existing facilities. The renovations that are forthcoming are (as of this writing) in the form of the Nion microscope, a replacement microscope for the Titan HB (coming in 2022), and the recent upgrades to the 2 Talos microscopes.

The plan in the very near future (Q1 FY20-21) is to further professionalize the administration of the CCEM to incorporate professional management and governance through the addition of the position of Executive Director (ED). The ED position will be funded through the CFI MSI program (part of the additional allocation towards the centre). The ED will be responsible for Board Relations, national and international strategic planning, budgeting, grant writing, pursuit of funding opportunities and outreach administration. Furthermore, the CCEM plans to hire a full time financial manager (also funded by CFI) to help with budgets, purchases, human resources tasks and billing.

Our training and outreach program (satisfying objective 3) is quite elaborate. The CCEM hosts at least three workshops per year at McMaster, with attendance by 100-150 users. In November 2019 speakers from Canada and the United States presented their work on the use of SEM, energy dispersive X-ray spectroscopy, secondary electron imaging, backscattered electron imaging, transmission kikuchi diffraction, electron backscattered diffraction, SEM with electron energy loss spectroscopy, and computer simulations. The workshop included basic theory of SEM signal generation and applications on a broad range of materials such as mineral, metals, and Canadian artwork.

The CCEM also participates regularly in off-site training and workshops, including among others the Microscopical Society of Canada's (MSC) workshop sessions, the FIB-SEM User Group meeting (hosted every three years at McMaster). The CCEM will host an international conference (IUMAS), coincident with the MSC annual conference in Banff in 2021.

The CCEM hosts the CCEM Summer School on Electron Microscopy, a tradition spanning 13 years. This weeklong course brings the best and brightest students from around the world, as well as the world's most prestigious instructors, to deliver a short course on transmission electron microscopy. Our goal is to provide students advice in solving characterization problems with the help of experts. The course includes lectures given by invited experts in the use of the techniques from various international research labs and provides students with hands-on training. This exposure allows the CCEM to maintain its status as a center of excellence in microscopy in the world.

The CCEM provides a series of successive training sessions to students at McMaster and from outside McMaster in order to use the microscopes independently. It trains over 400 users per year, with work associated with many different academic disciplines. Online training modules are also provided.

From an academic perspective, the CCEM supports training within the Department of Materials Science for the Capstone design class, the graduate Electron Microscopy of Materials (MATLS 724), and in the department of Chemistry and Chemical Biology, with training sessions for basic electron microscopy. In these sessions, there are full laboratories offered, employing the microscopes to advance the training of McMaster students.

Rationale for Establishment of the Centre

The CCEM is an established Centre at McMaster University. It has developed into a truly national facility of international reputation with both large capital investments and significant funding from CFI to support operations and maintenance. Given the success and growth of the CCEM, it was in 2019 separated from the BIMR and established as an independent Centre with its own financial and governance structures.

The CCEM has allowed McMaster to build a critical mass of researchers and has facilitated interdisciplinary research and cross-sectoral collaboration, increasing the visibility of research at McMaster. For example, the CCEM has supported collaborative research undertaken with researchers at the Massachusetts Institute of Technology, IBM-Zurich, IBM-US, Hewlett-Packard, Cambridge University and Strasbourg. It enabled researchers working in collaboration from U. Pierre Marie-Curie, U. Paris-Diderot, CNRS Lyon and McMaster to uncover how nanomaterials used in cancer phototherapies degrade inside living tissues and how these materials could be protected from degradation using Au.

The CCEM has facilitated linkages between research and education and been critical to the training of highly qualified personnel. The success of research supported by the CCEM has increased McMaster's ability to secure research funding both for infrastructure and operations. With these significant outcomes, this high-profile Centre fits the criteria of being a Senate-approved Centre and we now seek such designation in recognition of these strengths.

Alignment with McMaster's Strategic Research Plan:

Research supported by the CCEM is in keeping with the core values outlined in McMaster's Strategic Research Plan (SRP). The CCEM supports research that advances society, using best practices and cutting-edge technologies. It supports collaborative work and thinking across Faculties and disciplines, and supports partnerships with governments, institutions and the private sector. The CCEM is seen as a valuable resource to industry and in fact each year provides industry with over 50 technical reports, demonstrating the impact of the technology to the user community. The CCEM extends the boundaries of knowledge through research, providing exceptional training opportunities for research personnel.

This proposal builds directly on our institutional research strengths and interdisciplinary capacity, as well as significant investments already made in infrastructure and people. The CCEM supports a wide range of research activity across disciplines. Key areas of research supported are biomedical devices, quantum materials, and additive manufacturing. The CCEM has helped established interactions with industries and academic institutions working in the area of additive manufacturing, one of the cornerstones of advanced manufacturing. Advanced Materials and Manufacturing has been a strategic priority at McMaster for more than three decades and a priority outlined in our SRP as a focus for future directions. The CCEM supports new approaches to manufacturing and the development of new materials, the importance of which is outlined in the SRP. It supports fundamental research as well as knowledge transfer and commercialization, SRP priorities which will also support McMaster's success in meeting the metrics of SMA3. McMaster's SRP speaks to the importance of building partnerships, including partnership with other sectors, in order to solve complex problems, spur economic growth and create a more skilled workforce, all areas in which the CCEM excels.

The focus of the CCEM is aligned with that of the Brockhouse Institute for Materials Research (BIMR) - the first interdisciplinary materials research institute in North America - the McMaster Manufacturing Research Institute, the Centre for Automotive Materials and Corrosion, the Biointerfaces Institute, and the Centre for Emerging Device Technologies. Together, these facilities have developed internationally competitive research programs ranging from soft materials and biointerfaces, to materials processing, corrosion, and steels.

Alignment with the Strategic Mandate Agreement

Critical to meeting the metrics in SMA3 are: supporting McMaster's researchers, scholars and students to encourage and promote research excellence and advance interdisciplinary research; improving McMaster's share of Tri-Agency funding; maintaining and enhancing research partnerships including partnership with and funding from other sectors; and engaging in knowledge mobilization and tech transfer. Examples of how the CCEM will advance some of these priorities are as follows:

The CCEM has enabled a number of industry users from various sectors to solve relevant problems. It has supported the automotive sector (Stackpole, General Motors), the aerospace industry (Trilotus Aerospace, Collins Aerospace), the steel industry (Stelco, US Steel, Evraz), the semiconductor industry (Techinsights, ON Semiconductor, Ranovus, 3SP Technologies SAS), the nuclear industry (Kinectrics, Canadian Nuclear Laboratories) and the pharmaceutical industry (Dalton Pharmaceuticals). In the aerospace sector, the CCEM has helped determine premature failures of gas turbines for Trilotus Aerospace which led to the company being able to repair the failed parts. The CCEM has also studied novel aluminum alloys for the development of aircraft braking systems. In the semiconductor industry, the CCEM provides first-class failure analysis and reverse engineering services. The CCEM has also been a key contributor to the development of novel pharmaceuticals by providing analysis services to Dalton Pharmaceuticals, for a project that involved TEM imaging and chemical mapping.

The CCEM, the McMaster Steel Research Centre and Stelco Inc., have collaboratively developed a new Zinc coating process for steel. This allows production of thinner gauge sections leading to a significant weight reduction and outstanding, cost- effective corrosion protection. The parts are being used in the automotive industry and lead to increased life span and quality of the steel coating and the overall durability of the automotive body. Furthermore, the associated weight reduction leads to lighter cars with lower CO2 emissions, helping our fight against climate change.

With support of the CCEM, General Motors is working on a radically new separator between anode and cathode, preventing diffusion of some of the Mn ions negatively effecting the nature of the anode, leading to capacity loss and safety issues for batteries and range of electric vehicles. This detailed work, carried out at the CCEM with PFIB and advanced SEM, has led to an improvement of a factor of 2x of the lifetime of commercial batteries. This research enables keeping the R&D base associated with electric car technology with high Canadian participation.

<u>Vision</u>

The vision of the CCEM is to be one of the leading electron microscopy facilities in the world for the quality of the scientific research and to be the go-to provider of electron microscopy services to Canadian and international researchers and industry working on a broad range of materials research. Our mission includes playing a leading role in promoting interactions amongst researchers in various fields nationally and internationally and providing unparalleled training in electron microscopy.

Organizational Structure

The following robust organizational structure has met the requirements of CFI, which provides operation and maintenance funding for the Centre.

Scientific Director:

The Scientific Director will be appointed for a 5 year term. The Scientific Director of the CCEM reports directly to McMaster's Vice-President, Research, or designate, on matters concerning CCEM staff appointments. The Scientific

Director of the CCEM reports directly to the CCEM Governing Board on matters concerning strategic planning, operational management, risk management, and financial management of the CCEM.

Dr. Bassim has been Acting Scientific Director of the CCEM since May 2019. Following the recommendation of the Governing Board, and a selection committee representing the stakeholders and chaired by the Acting Associate Vice-President Research, Dr. Bassim was recommended as Scientific Director by the Senate. Approval by McMaster's Board of Governors is pending.

Nabil Bassim is Associate Professor in the Department of Materials Science and Engineering. He received his Ph.D. from the University of Florida in 2002 with research centered on the fundamentals of low-temperature growth of oxide and nitride thin films for electronic applications. He had a postdoctoral appointment at the U.S. Naval Research Laboratory (NRL) followed by a term at the National Institute of Standards and Technology in the USA, before returning to NRL as a staff Materials Research Engineer. In 2016, he joined the Department of Materials Science and Engineering at McMaster University and quickly established one of the larger and most productive research teams in the department. His research is primarily focused on developing novel electron and ion microscopy techniques and applying them to a wide variety of materials systems, including structural materials, nanomaterials, 2-dimensional materials, and related image processing integrating machine learning and Al. He is widely recognized as an international leader in Focused Ion Beam microscopy and has delivered several dozen invited talks on FIB and microscopy. With nearly 100 publications and 3 patents, his work is widely known in the microscopy and materials communities. He is a councillor of the Microscopical Society of Canada and was the Chair of the Microscopy and Microanalysis meeting in 2018 (the largest microscopy meeting in the world). He received the prestigious Woody Award for outstanding service to the Profession from the Materials Research Society in 2015. He currently serves as the Acting Scientific Director of the Canadian Centre for Electron Microscopy (CCEM), Canada's premier microscopy facility.

Governing Board:

The CCEM is overseen by a Governing Board (GB). The Governing Board has overall responsibility for the governance and management of the CCEM. The Governing Board fulfills its mandate by providing direction and oversight to the CCEM with regard to strategic planning, risk management, and financial monitoring. Members of the GB were selected to ensure expertise in the following areas: Facilities Management; Materials; Strategic Planning and Leadership; Stakeholder Engagement; Risk Management & Audit; Financial Management; Director/Manager Experience; Board & Committee Experience. A skills matrix was developed to ensure appropriate expertise in each of these areas.

There will be at least two (2) meetings per year of the Governing Board per year.

The Governing Board will be composed of a minimum of eight (8) and a maximum of eleven (11) individuals with a right to cast votes (not including ex officio members) (the "Members"). The precise number of Members of the CCEM Governing Board from time to time will be determined by a resolution passed at a meeting of the Governing Board.

To ensure that the needs of researchers across Canada are represented, the Chair is appointed by the Governing Board and will have a two-year term. Two standing members will be the designate of the Deans of the Faculties of Engineering and Science at McMaster University for a two-year renewable term. A minimum of six Rotating members will be appointed for a one-year or two-year renewable term. The two ex officio members will be the Associate Vice-President, Research and the Scientific Director of the CCEM.

The GB is in place and meets the unique governance requirements of a CFI-MSI funded research facility serving the national and international community. Membership of the Governing Board is as follows:

- Gianni Parise, Associate Dean Research and External Relations, Faculty of Science, McMaster (standing)
- John Preston, Associate Dean Research and External Affairs, Faculty of Engineering, McMaster (standing)
- Neil Branda, Professor, Simon Fraser University and Scientific Director, 4D Labs

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- Patricia Hawkins, Manager, Strategic Partnerships and Innovation Services, Xerox Research Centre of Canada
- Guillermo Ordorica-Garcia, Director General, Nanotechnology Research Centre, National Research Council of Canada
- Sara Iverson, Professor, Dalhousie University and Scientific Director, Ocean Tracking Network
- Keana Scott, Research Scientist, Group Lead, Materials Characterization, National Institute of Standards and Technology, USA
- Anja Geitman, Dean and Professor, Faculty of Agriculture and Environmental Sciences, McGill
- Andrew Knights, Acting Associate Vice-President, Research, McMaster (ex officio)
- Nabil Bassim, Acting Scientific Director, CCEM (ex officio)
- Bob Walker (Chair of Governing Board), (Ret.), Former CEO of Canadian Nuclear Laboratories, Ottawa

Scientific Advisory Committee

A Scientific Advisory Committee (SAC) will provide advice to the Governing Board with regard to the operations of the facility, scientific or scholarly priorities and direction for the CCEM. Specifically, the Scientific Advisory Committee will make recommendations to the CCEM Governing Board with regard to improving operations, raising awareness of the CCEM and monitoring scientific output, as well as strategic planning activities, reports pertaining to the use of the facility and the research that the facility has enabled, the productivity of the centre and possible upgrades to existing instrumentation and the acquisition of new instrumentation.

There will be at least two (2) meetings per year of the Scientific Advisory Committee.

The Scientific Advisory Committee will be composed of a minimum of five (5) individuals with a right to cast votes (not including ex officio members). The precise number of members of the CCEM Scientific Advisory Committee from time to time will be determined by a resolution passed at a meeting of the CCEM Governing Board. A minimum of four Rotating members will be appointed by the Members, in consultation with and with approval of the Governing Board, for a three-year renewable term. The Scientific Director of the CCEM will be an ex officio member.

Current members of the Scientific Advisory Committee are:

- Eric Stach, Brookhaven National Laboratory (Chair)
- Quentin Ramasse, SuperSTEM Facility, UK
- Guozhen Zhu, University of Alberta
- Keana Scott, National Institute of Standards and Technology, US
- Tom Zega, University of Arizona
- Nabil Bassim, McMaster University, Acting Scientific Director, CCEM (ex officio)
- Leanna Fong, ROADS, McMaster University (Secretary; ex officio)

Planning and Operations Committee

The Planning and Operations Committee will ensure that the CCEM has the resources required to operate effectively and efficiently. The Planning and Operations Committee fulfills its mandate by: monitoring and making recommendations to the CCEM Governing Board regarding the CCEM's financial performance indicators; ensuring that the CCEM financial activities are aligned with best practices; securing financial support for the CCEM from government, university and other resources; communicating with University and municipal government offices regarding space requirements (including construction/ renovation needs) and necessary environmental conditions; identifying and proposing risk management strategies (including financial and personnel); making recommendations to the CCEM Governing Board regarding long-term financial planning (considering revenues from grants, university support and user fees); and coordinating additional support for CCEM leadership (including teaching relief for the CCEM leadership for major grant applications, communications support from the CCEM Communications Director, financial and logistics support for special events such as workshops, mini-conferences, international conferences led by the CCEM, and the summer schools).

The Planning and Operations Committee will be composed of a minimum of seven (7) individuals with a right to cast votes (not including ex officio members). The precise number of members of the CCEM Planning and Operations Committee from time to time will be determined by a resolution passed at a meeting of the CCEM Governing Board.

The following individuals will be standing members of the Planning and Operations Committee by virtue of their office: The Scientific Director of the CCEM; The Deputy Director of the CCEM; The Director of User Operations of the CCEM; The Associate Dean, Research and External Affairs, Faculty of Engineering, McMaster University; and he Associate Dean, Research and External Relations, Faculty of Science, McMaster University; A minimum of two Rotating members will be appointed by the existing Members for a three-year renewable term. The Manager of the CCEM will be an ex officio member. The Chair is selected by majority of votes present at the Planning and Operations Committee meeting. The appointment is communicated to the CCEM Governing Board for approval. The Chair is appointed for a three-year renewable term.

Current members of the Planning and Operations Committee are as follows:

- Nabil Bassim, Acting Scientific Director, Planning and Operations Committee Chair
- Drew Higgins, ENG, McMaster University, CCEM Deputy Director
- Mohsen Mohammadi, University of New Brunswick, CCEM Director of User Operations
- John Preston, Associate Dean Research and External Affairs, Faculty of Engineering
- Gianni Parise, Associate Dean Research and External Relations, Faculty of Science
- Sherisse Webb, Director, ROADS
- Andreas Korinek, CCEM Facility Manager (ex officio)
- Dave Reinhart, Director, McMaster Research Finance

There will be at least two (2) meetings per year of the Planning and Operations Committee.

Users Group Executive

All users of the facility are members of the "Users Group". The Users Group Executive is composed of individuals from the Users Group and provide insight and feedback to the CCEM Governing Board on user needs, user access levels, training quality, outreach events and workshop.

The Users Group Executive will be composed of a minimum of five (5) individuals with a right to cast votes (not including ex officio members). The Users Group Executive of the CCEM fulfills its mandate by making suggestions to the CCEM Governing Board regarding CCEM operations from the user's perspective, including workshop topics, training topics, instrumentation (not available in the CCEM) of interest to users, and areas of improvements in infrastructure; and providing feedback to the CCEM Governing Board on access, training quality, Standard Operating Procedures, and operational issues (access times and tools operation windows) for improvement to the CCEM user experience

There will be at least three (3) meetings per year of the Users Group Executive.

The Users Group Executive will reflect the diversity of the user base and be composed as follows:

- The Chair, who is selected by majority of votes present at the Users Group Executive meeting. The appointment is communicated to the CCEM Governing Board for approval. The Chair is appointed for a three-year renewable term.
- A minimum of four (4) Rotating Members are selected from their peers for a three-year renewable term by a majority of votes present at the Users Group meeting and will include at least one (1) student member.
- The Director of User Operations of the CCEM will be a standing member of the Users Group Executive by virtue of his or her office.

Current members of the Users Group Executive are as follows:

Nabil Bassim, Acting Scientific Director, CCEM

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- Jonathan Bradley, McMaster
- Babak Shalchi Amirkhiz, CanMet
- Samantha Stambula, CCEM
- Chris Thomsen, student representative
- Dakota Binkley, student representative
- Mohsen Mohammadi, Director of User Operations (DUO), CCEM, Professor (University of New Brunswick) and Director, Marine Additive Manufacturing Centre of Excellence (MAMCE)
- Samuel Norris, Johns Hopkins University, Materials Characterization and Processing
- Leyla Soleymani, McMaster University

Organizational Review

Annual Review:

The GB monitors the activity of the CCEM every year and the Scientific Director will report to the GB on, at minimum, an annual basis. The GB reports annually to the VPR. Authority for all matters concerning CCEM staff appointments rests with the VPR. As required by CFI policy for CFI MSI-funded Centres, the authority for all matters regarding the direction and operation of the CCEM rests with the Governing Board.

Five-year Review:

The CCEM will be reviewed at least every 5 years by a Centre Review Board (CRB). The composition of the CRB will be determined by the GB and will comprise 3 high caliber scholars who will be arms' length from the Centre. The CRB will assess the performance of the Centre's Scientific Director and its research program. The CRB will be furnished with documents describing the University's policy on Research Institutes and will be asked whether performance is compatible with expectations described in the policy. The CRB is expected to use accepted measures of performance such as publication numbers and impact to assess the Institute's contributions in comparison with those of (a) the Centre during the preceding 5 years and (b) the performance of centres of similar size in the same field of research. The recommendations of the CRB will include the renewal of the Scientific Director, and whether the Centre's performance is consistent with that of a Centre at McMaster University.

The report of the CRB will be submitted in confidence to the VPR, who will share the report or major recommendations with either the current Scientific Director, or the successor to the current Director, so that the leadership of the CCEM benefits from the perspective of the CRB.

Explanation of revenues and expenses

Revenue:

Carry-Forward: The CCEM is an existing Centre within the VPR envelope. It is currently projecting a surplus for this year, resulting in a carry-forward of \$472,144 as it enters F21.

The Vice-President Research is providing \$150K/year for F21 through 25.

User Fees: The CCEM anticipates user fees will generate \$1.3M for Fiscal 21. While the user base is increasing, this will take some time as many users will need to reconfigure their expected experiments as a result of changes in fees and capabilities while a new microscope (Nion) comes online. With the increasing user base and changes in fees, etc. we are projecting an increase in user fee revenue of approximately 5% per year. Ultimately expanded access to tools and adjustment to user fees based on updated and new instrumentation will help the CCEM realize increased user fees over the coming years.

MSI funding: The CCEM received its first round of CFI MSI funding in support of expenses beginning in 2014. Following the first 3 year award, the CCEM was successful in securing funding for an additional five years, with each year a significant increase over the previous award. Based on the success of the 2019 mid-term review, CFI increased their contributions and in fact provided funding for an additional year. For the final three years of this award, CFI will provide an average of \$1.18M/year, a significant increase over the first three years, which provided on average \$490K/year.

The reviewers of the mid-term report highlighted that the CCEM was a vibrant, functional centre with a varied user base and that it had an excellent impact on industry. They also noted the highly skilled technical expertise and excellent outreach and training programs. Given the significantly increased support from the CFI MSI program, we are confident that continued funding will be provided through the next MSI competition. Should levels of funding from the MSI program decrease however, we will seek funding from other sources. If necessary, we will review our staffing levels and maintain the positions that are most critical to maintaining the facility for our use base.

The Faculty of Engineering has committed \$125K/year through F23. The Faculty will consider providing \$125K/year for each of F24 and 25 if those funds are needed. The Faculty anticipates however that, with the increasing infrastructure in the CCEM, user fees will at that time have increased beyond the current conservative projection, eliminating the need for that support.

CFI/ORF-RI or **McMaster Funding** – The CM12 was in urgent need of replacement. A new item was purchased in F20, with plans to recoup the costs from CFI/ORF-RI applications currently under review. Should those proposals not be successful, the required \$610K has been secured via commitments from the University Fund, VPR and Faculties.

Operational Expenses:

Personnel:

As mentioned, the CCEM has a staff of 11 (9 full-time and 2 part time). These are highly skilled personnel, with six having Ph.Ds and two having Master's degrees, and technicians having at least 2 years' training. Five of the staff holding Ph.Ds have training in the advanced operation of high-end characterization equipment, and also undertake elaborate scientific research projects in collaboration with CCEM users.

One staff member is the manager, overseeing operations on a day-to-day basis.

Technical staff are responsible for a specific instrument or a pair of instruments in order to support the CCEM User base. One technician is responsible for maintaining ageing equipment and facilities.

One staff member is in charge of user and customer outreach, including organizing and planning workshops associated with the CCEM.

As part of the CFI MSI mid-term review, funding for three new positions was requested. CFI reviewers stated that each of these positions was critical and awarded funds to cover these costs. We expect to have two of these positions in place early in F21. The CCEM will hire an Executive Director, who will be responsible for Board Relations, national and international strategic planning, budgeting, grant writing, pursuit of funding opportunities and outreach administration. A full-time financial manager will be hired to assist with budgets, purchases, human resources tasks and billing and a new technical position to support CCEM instrumentation will be established at the end of F21

Personnel costs assume 2% increase per year. Costs in the budget include fringe benefits.

Materials and Supplies:

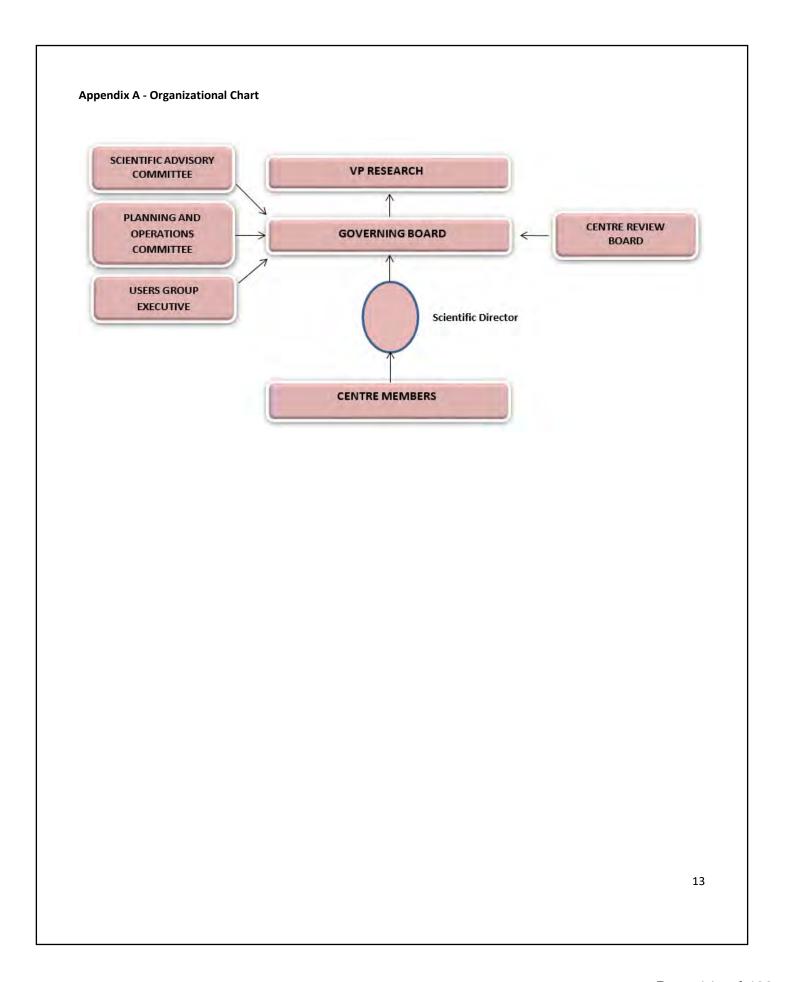
Costs of supplies include gases for all instruments, including the sample preparation tools (i.e. nitrogen, oxygen, argon and occasional use of SF6 replacement when venting the FEG vessels of the Titans), liquid nitrogen for cold traps of Titans, 2010F, CM12 and for the Si(Li) EDS detectors (on the 2010F, Titan1, CM12), chemicals for cleaning and sample preparation (Ethanol, Methanol, Acetone), FIB, SEMs, TEMs consumables not charged to researchers (such as O-rings replacements, thermionic filaments for the SEM 6610LV, CM12), cutting wheels, cutting wires for the wire saw and for the spark erosion, pump oil, Ag paste, Cu tape, sputtering targets for coating SEM imaging (such as Au, Pt, W, Cr) etc. Since some diffraction work needs to be carried out on negatives (for imaging and simple diffraction a digital camera is used), chemicals for negative development are occasionally used for the dark room and need to be available for users. Users are charged for the cost of each negative used.

Equipment Costs:

CM12 Purchase: The CM12 is a 35 year old microscope that is used to obtain, for example, diffraction information, examine nanoparticle sizes, and measure a material's microstructure. It is also used to train new users so they can graduate to higher-end instruments, and to train undergraduates in Materials Science & Engineering and Chemistry & Chemical Biology. Unfortunately, due to its age, the CM12 was on the verge of failure and could not be repaired. A replacement to the CM12 (new Talos 120C) was therefore purchased in F20.

Service Contracts: Costs for service contracts will support the JSM-7000F, JSM-6610, LEAP Atom Probe, nVision F, PFIB, Titans, Magellan, Nion, and Talos 200 and 120 instrumentation.

Costs for Travel and Meeting Expenses are included, as is the cost of General Repairs. Many of the CCEM instruments are supported through service contracts. To serve the research community and reduce downtime on instrumentation, a small amount of funding is set aside each year to cover general repairs that fall outside of service contracts.



Appendix B – Budget and Sources of Funds

	F21	F22	F23	F24	F25			
OPENING BALANCE/CARRY FORWARD	\$ 472,144	\$ 515,998	\$ 348,592	\$ 137,584	\$ 55,656			
REVENUE	Insert year	Insert year	Insert year	Insert year	Insert year	Total	\$ Secured	\$ Anticipated
CCEM carry-forward from F20	\$ 472,144					\$ 472,144	\$ 472,144	
VPR Contribution	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 750,000	\$ 750,000	
User Fees	\$ 1,300,000	\$ 1,353,403	\$ 1,426,073	\$1,497,377	\$1,572,246	\$ 7,149,099		\$ 7,149,099
Research-CFI-MSI Funding (Proj#20005260)	\$ 1,222,000	\$ 1,172,000	\$ 1,147,000	\$1,200,000	\$1,200,000	\$ 5,941,000	\$3,541,000	\$ 2,400,000
McMaster-Engineering contribution (Proj#20007	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 625,000	\$ 375,000	\$ 250,000
McMaster-University Fund, Faculty & VPR contributions to CM12 equipment	\$ 610,000					\$ 610,000	\$ 610,000	
TOTAL REVENUE	\$ 3,879,144	\$ 2,800,403	\$ 2,848,073	\$2,972,377	\$3,047,246	\$15,547,243	\$5,748,144	\$ 9,799,099
EXPENSES	F21	F22	F23	F24	F25	Total	\$ Secured	\$ Anticipated
Operating Expenses:			•	•		•		
Personnel costs including fringe						\$ -		
PostDoc Fellow	\$ 154,239	\$ 155,699	\$ 158,360	\$ 161,527	\$ 164,758	\$ 794,583		
Support Salaries	\$ 995,767	\$ 1,143,251	\$ 1,165,558	\$1,142,217	\$1,171,327	\$ 5,618,120		
Office Supplies:						\$ -		
Materials and Supplies	\$ 50,760	\$ 50,760	\$ 50,760	\$ 50,760	\$ 50,760	\$ 253,800		
Bank Charges	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 7,500		
Equipment						\$ -		
CM12 purchase	\$ 610,000					\$ 610,000		
Service Contracts	\$ 1,407,659	\$ 1,473,378	\$ 1,539,683	\$1,555,079	\$1,570,630	\$ 7,546,429		
Travel:						\$ -		
Travel	\$ 67,060	\$ 67,060	\$ 67,060	\$ 67,060	\$ 67,060	\$ 335,300		
Meeting expenses:						\$ -		
Meeting expenses	\$ 16,532	\$ 16,532	\$ 16,532	\$ 16,532	\$ 16,532	\$ 82,660		
Communications:						\$ -		
Communication expense	\$ 1,782	\$ 1,782	\$ 1,782	\$ 1,782	\$ 1,782	\$ 8,910		
Renovations:						\$ -		
General Repairs	\$ 57,847	\$ 57,847	\$ 57,847	\$ 57,847	\$ 57,847	\$ 289,235		
Ongoing costs for space: No change to current CCEM space. Per the budget model, as CCEM reports to the VPR, space is not charged directly.						\$ - \$ -		
TOTAL EXPENSES	\$ 3,363,146	\$ 2,967,809	\$ 3,059,081	\$3,054,304	\$3,102,196	\$15,546,536		
IN-YEAR (Surplus/ Deficit)	\$ 515,998	-\$ 167,406	-\$ 211,008	-\$ 81,928	-\$ 54,950	\$ 706		



UNIVERSITY SECRETARIAT

• Board of Governors

Senate

Gilmour Hall, Room 210 1280 Main Street West Hamilton, Ontario, Canada Phone: 905.525.9140Ext. 24337 Fax: 905.526.9884 E-mail: univsec@mcmaster.ca http://www.mcmaster.ca/univsec

REPORT TO THE BOARD OF GOVERNORS from the EXECUTIVE AND GOVERNANCE COMMITTEE

a. Terms of Reference – Human Resources Committee

At its April 8, 2020 meeting, the Executive and Governance Committee reviewed and approved proposed revisions to the Terms of Reference for the Human Resources Committee within the Board of Governors By-laws. Details of the proposed revisions are contained within Attachment I of the circulated report.

The Executive and Governance Committee now recommends,

that the Board of Governors approve in principle, the attached revisions to The Human Resources Committee Terms of Reference within the Board of Governors By-Laws, as circulated.

b. Terms of Reference – Executive and Governance Committee

At the same meeting, the Executive and Governance Committee reviewed and approved proposed revisions to the Terms of Reference for the Executive and Governance Committee within the Board of Governors By-laws. Details of the proposed revisions are contained within Attachment II of the circulated report.

The Executive and Governance Committee now recommends,

that the Board of Governors approve in principle, the attached revisions to The Executive and Governance Committee Terms of Reference within the Board of Governors By-Laws, as circulated.

c. Revisions to Board By-Laws – Execution of Instruments

At the same meeting, the Executive and Governance Committee reviewed and approved proposed revisions to Appendix E - Resolution Respecting the Execution of Instruments By McMaster University within the Board of Governors By-Laws. Details of the proposed revisions are contained within Attachment III of the circulated report.

The Executive and Governance Committee now recommends,

that the Board of Governors approve in principle, the attached revisions to Appendix E - Resolution Respecting the Execution of Instruments By McMaster University within the Board of Governors By-Laws, as circulated.

d. **Request for Observer Status** At the same meeting, the Executive and Governance Committee reviewed and approved proposed revisions to list of official observers within the Board of Governors By-Laws. Details of the proposed revisions are contained within Attachment IV of the circulated report. The Executive and Governance Committee now recommends that the Board of Governors approve in principle, the attached revision to By-Law 12. (1) within the Board of Governors By-Laws, as circulated. **Board of Governors: NOTICE OF MOTION April 16, 2020**

(i) HUMAN RESOURCES COMMITTEE

The Human Resources Committee shall be composed of the Chair, the Vice-Chair(s), the Chair of the Remunerations Committee of the Board and the Chair of the Planning and Resources Committee of the Board. A majority of the members of the Committee shall constitute a quorum.

The Committee shall:

- Negotiate and approve the terms of the President's contract of employment. A
 summary of the contractual terms shall be reported to the Board for information
 and prior to the relevant Board meeting a complete copy of the contract shall be
 made available through the office of the Secretary of the Board for Board
 members to review;
- 2. Evaluate, at least annually, the performance of the President;
- 3. Annually determine the remuneration of the President, including the payment of any bonuses or other awards. The Committee shall report the outcome of its deliberations, together with any agreed changes to the terms of the President's contract, to the Board for information;
- 4. Review and approve the terms of the Vice-Presidents' contracts of employment prior to appointment or renewal. A summary of the terms of such contracts shall be reported to the Board for information;
- 5. Annually review the President's assessment of the performance of the Vice-Presidents and approve any resultant recommendations regarding remuneration or the payment of any bonuses or other awards. Any such changes to remuneration or other contractual terms shall be reported to the Board for information;
- 6. Receive, at least annually, a report on the performance of assistant and associate vice-presidents, as well as other senior executives as requested by the Committee;
- 7. Review the contracts of employment of such other senior executive staff as the Committee shall determine or the Board shall request from time to time and report any concerns arising from such reviews to the Board.
- 8. Annually receive a report on succession planning at the senior executive level and assist the administration where appropriate;

The Committee shall be provided with such current, comprehensive market and comparative data regarding compensation and contractual terms as it shall require in order to undertake its work.

To assist the Committee in the evaluation of the President's performance as specified in paragraph 2 above, a Human Resources Advisory Panel shall be established by the Board, upon recommendation of the Nominating Committee, composed of:

a) At least one member from each of the:

Senate appointees to the Board Alumni appointees to the Board Teaching staff elected to the Board Non-Teaching staff elected to the Board

- b) The Graduate student elected to the Board
- c) The Undergraduate student elected to the Board

with the Chair to be elected by and from the Panel.

The Committee shall determine the assistance required from the Human Resources Advisory Panel each year and shall then meet with the Panel to review both the evaluation process and the work to be undertaken by the Panel. The Panel shall provide such assistance as is requested and shall report to the Committee in such manner and by such deadline as is agreed.

Presidents Performance Review Process:

The evaluation of the President's performance as specified in paragraph 2 above, shall include the following:

- 1. The Committee shall receive and review, annually, a written report from the President describing the President's accomplishments progress against the specific goals and priorities approved by the Committee at the beginning of the assessment period. In addition to accomplishmentshighlighting progress made against those goals, the report should also outline additional initiatives, matters and issues addressed during the assessment period, as well as any specify any shortfalls or disappointments areas of concern, along with commentary on what will be done to address these going forward.
- 2. The Committee shall adopt a "Knowledgeable Other" process to assess the leadership-effectiveness of the President. Annually, the HR Committee and the President shall mutually agree on a reasonable number of Knowledgeable Others who have had exposure and are familiar with aspects of the President's performancework and priorities over the past year. The Board Chair shall seek input in writing from the Knowledgeable Others and shall consolidate the feedback (on an anonymous basis) into appropriate themes for sharing and discussion with the HR committee, and with the President.
- 4.3. Should the Committee desiredetermine in any particular assessment period that more comprehensive input on the President's performance from a broader group of stakeholders is needed, the HR Committee may establish an "HR Advisory Panel", whose members shall be decided in the sole discretion of the HR Committee. The HR Advisory Panel shall be provided with a "Terms of Reference" for gathering and consolidating input from specific stakeholders, potentially both internal and external to the University. The HR Advisory Panel shall compile a written report of its findings to be shared and discussed with the HR Committee, and with the President.

(b) EXECUTIVE AND GOVERNANCE COMMITTEE

The Executive and Governance Committee of the Board shall be composed of the Chair and the Vice-Chair(s) of the Board, and all Committee Chairs, including but not limited to:

- the Chair of the Planning and Resources Committee Chair
- Audit and Risk Committee Chair
- University Advancement Committee Chair
- Pension Trust Committee Chair
- Investment Pool Committee Chair
 - Remunerations Committee Chair, six additional members of the Board, and as ex officio members, the Chancellor and the President. The Chair of the Board shall be the Chair of the Committee. Five members of the Committee shall constitute a quorum.

The Executive and Governance Committee shall, between meetings of the Board, consider and take appropriate action on matters pertaining to the affairs of the Board, as referred to it by the Chair of the Board, the Standing Committees of the Board, the President or the Vice-Presidents. All decisions made by the Committee on behalf of the Board shall be reported to the Board at its next meeting and shall be subject to confirmation by the Board except that when unusual or urgent matters require decision the action of the Committees hall be brought to the attention of the Board at its next meeting for information only.

The Executive and Governance Committee shall make recommendations to the Board on the appropriate form of all by-laws of the Board and on any alteration or other matter pertaining to such by-laws.

The Executive and Governance Committee shall:

- Annually review and endorse the Strategy & Priorities put forward by the President for the upcoming Academic year, to be provided to the Board for approval.
- Annually review and endorse the list of key performance metrics to be presented by University leadership to the Board throughout the year.
- Annually develop a Board Workplan, taking into account the President's priorities and other areas of interest to the Board for the upcoming Academic year.
- Annually review Terms of Reference and Calendar/Workplan for each Committee and make recommendations to Committee Chairs consistent with the Governance Agenda.
- Annually review the performance and effectiveness of the Board of Governors, and make recommendations to the Board regarding board composition, processes & practices, training, and other matters that may serve to improve overall University Governance.

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Appendix E

RESOLUTION RESPECTING THE EXECUTION OF INSTRUMENTS BY McMASTER UNIVERSITY

I JURISDICTION AND PURPOSE

- 1. The 1976 Act, Section 9, vests in the Board the government, conduct, management, and control of the University and of its property, revenues, business and affairs. In Board By-law No. 5, the Board has authorised officers of the University to sign deeds, transfers, assignments, contracts and obligations on behalf of the University.
- 2. The purpose of this resolution is to designate clearly which persons are authorised to sign deeds, transfers, assignments, contracts, obligations, agreements or documents on behalf of the University when such documents have been approved by the appropriate body or official of the University. These include all documents related to the University receiving money, to the purchase or lease of goods and services and to agreements having no financial commitment.
- 3. All dollar amounts cited in this document are exclusive of duties, taxes and shipping charges. Contracts that span over a period of greater than one (1) year should not be broken down into annual amounts when assessing the appropriate level of contract execution.
- 4. This resolution shall not apply to the signing on behalf of the University of the certificates and other academic documents arising from the actions of the Senate in accordance with the 1976 Act, Section 13.

II RESPONSIBILITIES AND CONFLICT OF INTEREST

- 1. Persons with signing authority have the responsibility to exercise their authority in the manner of a prudent University administrator. Where the commitment involves Real Estate, the Vice-President (Administration) shall review the documents. Depending upon the nature and complexity of the agreement to be signed, the responsibility of persons with signing authority shall include an assessment of some or all of the following:
 - a) the ability of the University to meet any financial obligations resulting from the agreement;
 - b) the ability of the other party(ies) to meet its (their) obligations;
 - c) compliance with labour legislation, employee collective agreements, sponsor guidelines, tax legislation, other legislative and regulatory requirements, and applicable University policies;
 - d) whether all approvals required by any applicable policy or practice have been obtained for the contract;
 - e) whether terms and conditions of the contract should be reviewed by Strategic Procurement;
 - f) in association with the Vice-President (Administration), whether legal advice is needed;
 - g) the financial and other benefits that are expected to flow to the University as a result of the contract;

- h) whether the overhead rate, if any, included in the contract is consistent with University guidelines;
- i) the provisions regarding intellectual property requirements, physical, bodily injury and personal injury indemnities, and environmental liabilities.
- 2. Persons designated or appointed under this resolution shall not exercise their signing authority in circumstances where conflicts of interest exist or could be seen to exist; in addition, such persons shall inform their immediate supervisor when such circumstances exist. [Persons designated or appointed under this resolution are referred to "Conflict of Interest Policy for Employees" (2012), the "Statement on Conflict of Interest in Research" (2009) and "Statement of Ethics for Senior Executive Officers" (1990).]
- 3. One of the original signed contracts (if retained by the University) must be deposited with the Vice-President (Administration) or be maintained in a location approved by the Vice-President (Administration).
- 4. Vice Presidents must ensure a register of contractual documents pertaining to their portfolio is maintained, excluding documents for the purchase of goods and services which are maintained by Strategic Procurement.

That register is to include:

- a) a list of contractual documents signed by the appropriate individuals and the corresponding execution date;
- b) the name of any other party or parties signing the documents and their respective execution dates:
- c) a brief description of the subject matter contained in the documents;
- d) the effective start and termination date and the actual or estimated amount of each contractual obligation.

III RESOLUTION

The Board hereby resolves:

- 1. That each of the following University officers be and is hereby authorised, where required, to affix the corporate name and seal of the University on all deeds, transfers, assignments, contracts, obligations or documents on behalf of the University, provided that the agreement has been signed in accordance with the provisions of this policy: the Chair of the Board, the Vice-Chair(s) of the Board, the Chair of the Planning and Resources Committee, the Secretary of the Board, the President, the Provost, the Vice-President (Administration), the Dean and Vice-President (Health Sciences), the Vice-President (Research) and the Vice-President (University Advancement).
- 2. Notwithstanding provisions found elsewhere in this resolution, any contract or agreement to which the corporate seal is to be affixed must include the signature of an officer authorised by the Board of Governors to affix to seal.

Page	3

3. The personnel authorised to execute contracts and agreements relating to the operation and development of the University and to bind the University to the terms thereof shall depend on the dollar amount of such contracts and agreements, the subject matter of such contracts and agreements as set out below and whether or not the University is receiving or paying out money under the contract or agreement. For agreements that span over a period of greater than one (1) year, dollar amounts, including annual maintenance fees, should be aggregated across all years and should not be broken down into per annum amounts when assessing the proper authorisation required.

Authority Matrices

Contracts

Signing authority for contracts and agreements above \$100,000, and to bind the University to the terms thereof, must be executed by a minimum of two approvers from the charts below, one of whom must be from the highest level.

No contract over \$10,000 for the purchase of goods or services may be released until approved through the University's enterprise electronic system using the charts below.

Where a purchase represents a renewal the thresholds below apply to the total cost of the previous term(s) and new term.

Purchase requisitions related to the purchase or lease by the University of Goods and Services and/or Real Estate will be approved in the electronic system by the authorities given in the charts below.

A.1 All Funds: excluding the Research Fund (see A.2) and Capital Fund (see A.3 and A.4)

	Department and/or Project Holder (Account Holder)	Only for Technology -Chief Technology Officer (Hardware or software related goods or services)	One of area: AVP^, Dean, VP	Following Planning and Resources Committee Approval: One of: AVP(Administration) and Chief Financial Officer, VP(Administration), Provost, President	Following Board of Governors Approval: One of: VP(Administration), Provost, President, Board Secretary, Board Chair
< \$100,000	X	ĺ			
\$100,000 up to \$ \$1,999,999	X	X	X		
\$2,000,000 up to \$9,999,999	X	X		X	
Over \$10,000,000	X	X			X
			Additional Signature must be at least one level up from 1st	The individual approving si Board/Committee approval	

AVP[^] signing officers include: Assistant Vice-President, Associate Vice-President, Vice-Provost, Registrar, University Librarian, Treasurer, Director of Faculty Administration, Director of Research Finance Administration, Associate Dean of Education Services (Faculty of Health Sciences), and Controller.

A.2	Research Fund	
A.Z	Kesearch Fund	

	Project Holder (Account Holder)	Secondary Research Office (Central/ FHS-HRS)	Only for Technology - Chief Technology Officer (Hardware or software related goods or services)	One of: AVP*, VP	Following Planning and Resources Committee Approval: One of: AVP(Administration) and Chief Financial Officer, Area VP, VP(Administration), Provost, President	Following Board of Governors Approval: One of: VP(Administration), Provost, President, Board Secretary, Board Chair
< \$100,000	X	X	Í		·	
\$100,000 up to \$1,999,999	X	X	X	X		
\$2,000,000 up to \$9,999,999	X	X	X		X	
Over \$10,000,000	X	X	X			X
				Additional Signature must be at least one level up from 1st		

The individual approving signs to confirm Board/Committee approval.

AVP*^ signing officers include: Associate Vice-President (Research), Assistant Vice-President, Research Administration, Associate Dean, Health Sciences (Research), Director of Research Finance Administration, Assistant Vice-President (Faculty of Health Sciences), and Assistant Dean, Research Infrastructure.

A.3 Capital Fund (Project Approval)

A.5 Capi	itai i unu (170jet	ripprovari			,
	One of, Director of Design and Construction, Director of Maintenance	AVP (Facilities Services) or Director, Design and Construction	VP (Administration) or AVP (Administration) and Chief Financial Officer	Following Planning and Resources Committee Approval: One of: AVP(Administration) and Chief Financial Officer, VP (Administration) Provost, or President.	Following Board of Governors Approval: One of: Provost, President, Board Secretary, Board Chair
< \$100,000	X				
\$100,000	X	X			
up to \$499,999					
\$500,000 up to \$1,999,999	X	X	X		
\$2,000,000 up to \$9,999,999	X	X		X	
Over \$10,000,000	X	X			X
Cumulative cost overruns exceeding the lesser of (i) 25% of the original approved overall project budget, or (ii) \$500,000, require reapproval by the highest original approver. *		Additional Signaleast one level	•	The individual approvin Board/Committee appro	

^{*}N.B. If cost overruns result in a total revised value that coincides with a higher approval threshold, then the approval of the higher level approver must also be obtained.

^{*}Cost overruns on Board or Planning and Resources Committee approved projects will be reported to the Planning and Resources Committee at its next meeting.

A.4 Capital Fund (Award of Purchase Orders/Contracts) including Professional Consultants*

л.т Сар.	One of, Director of Design and Construction, or, Director	AVP (Facilities Services) or Director, Design and Construction	VP (Administration) or AVP (Administration) and Chief Financial	Following Planning and Resources Committee Approval: One of: AVP(Administration) and Chief Financial	Following Board of Governors Approval: One of: Provost, President,
	Maintenance	Consti uction	Officer	Officer, (VP Administration) Provost, or President.	Board Secretary, Board Chair
< \$100,000	X				
\$100,000 up to \$499,999	X	X			
\$500,000 up to \$1,999,999	X	X	X		
\$2,000,000 up to \$9,999,999	X	X		X	
Over \$10,000,000	X	X			X

Change Orders to existing Contracts/Purchase Orders which do not increase the approved Overall Project Budget require approval in accordance with the thresholds and roles noted above.

If change orders, alone or cumulatively, result in an increase to the overall project budget, approval for the increased overall project budget must be sought subject to cost overrun approval limits.

^{*} Includes Architects, Engineers, Design Consultants and Construction Managers.

In no case may a signing officer sign as first approver and highest approver. The minimum two signatures must be different individuals.

All purchases of goods and services and leases must be executed using the duly authorised processes developed and supported by the Department of Strategic Procurement.

All Investments must be executed by the Treasurer, using the duly authorized processes of the appropriate committees of the Board of Governors.

B. Human Resources

- Employment related contracts will follow collective agreement provisions as ratified by the Board of Governors, or defined salary policies or guidelines, such as the applicable policies governing compensation discussions for members of the McMaster University Faculty Association, and the terms of reference of the Human Resources Committee of the Board of Governors.
- 2. This policy does not restrict remittance to the Receiver General as required by law for Payroll. This includes remittances such as Canada Pension Plan, Employment Insurance premiums, Income Tax, Employer Health Tax or other contributions as may be required by Federal or Provincial legislation.
- 3. This policy does not restrict remittance for monthly or quarterly payments to approved employee benefit and insurance providers (such as Health, Dental, Group RRSP, Group Life Insurance, Pension, Post-Retirement benefits, and liability insurance plans) for delivery of contracted services. Approval of benefit, benefit administration, and insurance contracts awarded through the Request for Proposal process will follow the charts in this policy.

C. For All Non-Competitive Consulting Services (as defined by the Broader Public Sector Procurement Directive)

i. Up to \$999,999

Shall be executed by the Approvers identified in the appropriate chart in Section A above and the President,

ii. \$1,000,000 and Over

Shall be executed by the approvers identified in the appropriate chart in Section A above after approval has been given by the Board of Governors or by its Executive and Governance Committee.

- D. For All Agreements where the University is Receiving Donations, Bequests or Gifts (see Gift Acceptance Policy (2011))
- i. Over \$1,000,000,

Shall be executed by the President and the Vice-President, University Advancement.

ii. Less than \$1,000,000,

Shall be executed by the Vice-President, University Advancement.

- iii. Acceptance of any gift that involves a proposal to name is conditional upon final approval of the naming by the Board of Governors.
- E. For All other Agreements, not involving Research and Intellectual Property, where the University is Receiving Money, or where the Agreement Does Not Deal with the Payment by Either Party of Money
- i. Under \$2,000,000.00 or wWhere the agreement does not deal with the payment by either party of money

Shall be executed by two (2) of the officers as identified in the charts in Section A, one of whom must be an identified Dean, AVP^ or Vice President of the University, and the second must be a Vice-President or the President.

ii. Amounts up to \$2,000,000

Shall be executed in accordance with the signing authorities identified in the charts in Section A.1.

iii. Over \$2,000,000 and less than \$10,000,000

Shall be executed by one of the officers identified in the charts in Section A, after approval has been given by the Planning and Resources Committee of the Board of Governors.

iv.iii. \$10,000,000 and over

Shall be executed by one (1) of the officers designated in section III.1, after approval has been given by the Board of Governors or by its Executive and Governance Committee.

- F. Research And Intellectual Property: For All Agreements, Involving Research And Intellectual Property, Or Resulting From A Peer Or Merit Review Process Where
 - The University Is Receiving Money;
 - The University Is Transferring Funds To A Collaborating Partner Institution; or
 - The Agreement Does Not Deal With The Payment By Either Party Of Money
- i. Under \$2,000,000, including where the agreement does not deal with the payment by either party of money

only one signature is required, from the chart F.1. below.

ii. \$2,000,000 and over

In the case of agreements involving research funding that result from a peer or merit review process, authority is delegated to two (2) of the officers designated in section III.1.



By-laws of the Board of Governors of McMaster University December 12, 2019

In the case of where receipt of research funds requires the expenditure of incremental McMaster cash specific to the proposed research, approval for this incremental cash contribution will follow the charts in Section A.

F.1.

	One of AVP`^, VP	Two (2) of the signing officers designated in Section III.1
Under \$2,000,000	X	
\$2,000,000 and over		X

AVP' signing officers include: Executive Director of the McMaster Industry Liaison Office, Associate Vice-President (Research), Associate Dean Health Sciences (Research), Director, Health Research Services, Director, Research Office for Administration, Development and Support, and Assistant Vice-President, Research Administration.

IV COMMENCEMENT

1. This resolution shall take effect on 18th day of April, 2019 and from that date shall supersede a Board of Governors' resolution that took effect on the 7th day of June, 2018.

Related Policies

Strategic Procurement

http://www.mcmaster.ca/bms/policy/purchase/SP-01.pdf

Internal Audit Department Policy Statement

 $\frac{https://secretariat.mcmaster.ca/app/uploads/2019/06/Internal-Audit-Department-Policy-Statement.pdf}{}$

Construction And Maintenance Projects Policy

 $\underline{https://secretariat.mcmaster.ca/app/uploads/Approval-Authorities-for-Construction-and-Maintenance-Projects.pdf}$

Statement of Ethics for Senior Executive Officers

https://secretariat.mcmaster.ca/app/uploads/2019/06/Ethics-Statement-for-Senior-Executives.pdf

Statement on Conflict of Interest in Research

http://www.mcmaster.ca/policy/faculty/Research/StatementOnConflictOfInterestInResearch.pdf

Conflict of Interest Policy for Employees

https://secretariat.mcmaster.ca/app/uploads/Conflict of Interest Policy.pdf

Gift Acceptance Policy

https://secretariat.mcmaster.ca/app/uploads/2019/06/Gift-Acceptance-Policy.pdf

Intellectual Property Policy

http://milo.mcmaster.ca/policies/ip-policy

Board of Governors Meeting Dates

http://www.mcmaster.ca/univsec/bog/schedules.cfm

Board of Governors December 12, 2019



President and Vice-Chancellor

1280 Main Street West Hamilton, Ontario, Canada 18S 418

Ext. 24340 Fax: 905.522.3391 E-mail: presdnt@mcmaster.ca http://www.mcmaster.ca

Phone: 905 525 9140

April 1, 2020

TO: Members of the Executive and Governance Committee, Board of Governors

FROM: David Farrar, President and Vice-Chancellor

RE: REQUEST FOR OBSERVER STATUS, BOARD OF GOVERNORS

In addition to the thirty-seven members of the Board of Governors, the Board has accorded Observer status to a number of key individuals within the University, including the Vice-Presidents, the Chief Internal Auditor, and representatives of certain student and employee associations. As specified in section 12, By-law No. 1 of the Board By-laws, Observers receive notices and other materials distributed to members of the Board and are invited to attend meetings of the Board. Although Observers attend the closed session portion of Board meetings, they are not entitled to attend "Members Only" discussions, unless specifically invited.

Having reviewed the current list of Observers, I would like to recommend that the following positions be accorded Observer status:

Assistant Vice-President (Administration) & Chief Financial Officer Assistant Vice-President (Administration) & Chief Facilities Officer Assistant Vice-President (Administration) & Chief Human Resources Officer

These three positions are all of critical importance to the work of the Board and the incumbents are frequently required to attend the closed session portion of Board meetings to present agenda items and respond to questions and issues raised. According Observer status to these positions would formalize this arrangement and also allow for the provision of Board materials to Ms. Henne, Ms. Martin and Ms. McKenna in advance of meetings.

I understand that, as part of this discussion, a review of the overall Observer list is planned, and I welcome this approach.

I look forward to discussing this at our meeting on April 8.

Thank you.

Memo_Executive and Governance Committee_Observer Status_1Apr20.doc



UNIVERSITY SECRETARIAT

Board of Governors

Senate

Gilmour Hall, Room 210 1280 Main Street West Hamilton, Ontario, Canada L8S 4L8 Phone: 905.525.9140Ext. 24337 Fax: 905.526.9884 E-mail: univsec@mcmaster.ca http://www.mcmaster.ca/univsec

REPORT TO THE BOARD OF GOVERNORS from the PLANNING AND RESOURCES COMMITTEE

i. Capital Plan 2020/2021

At its April 2, 2020 meeting, the Planning and Resources Committee approved, for recommendation to the Board of Governors, the 2020/2021 Capital Plan. Details of the 2020/2021 Capital Plan are contained within Attachment I of the circulated report.

It is now recommended,

that the Board of Governors approve the 2020/2021 Capital Plan, as circulated.

Board of Governors: FOR APPROVAL April 16, 2020

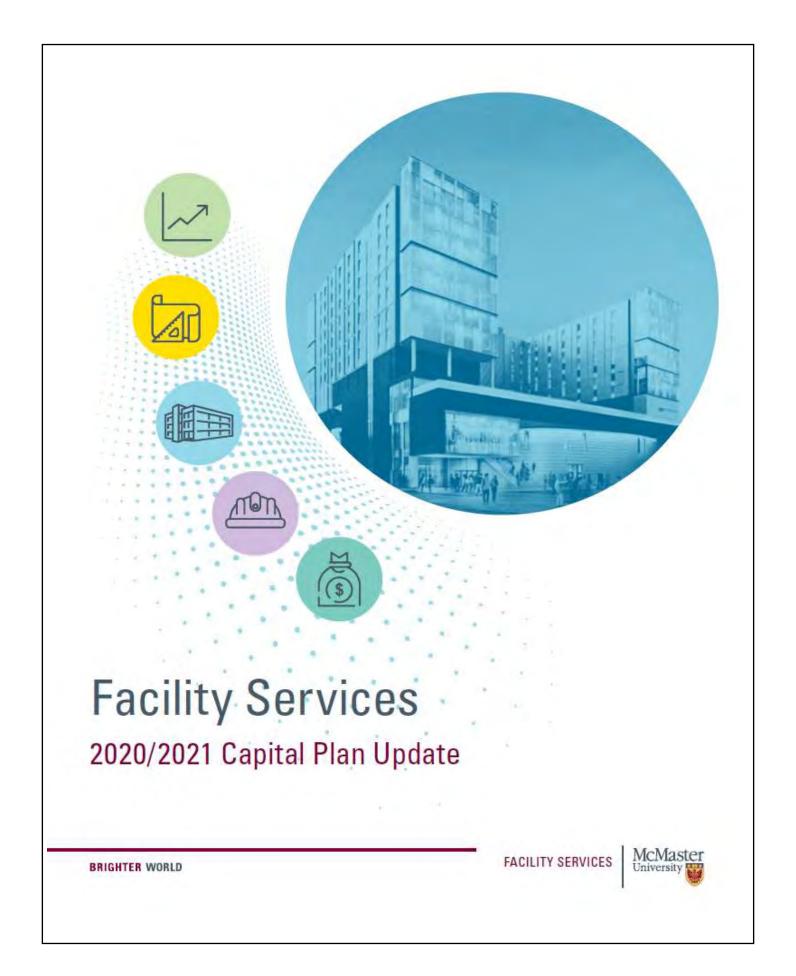


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1 INTRODUCTION

1.1 Scope of the Capital Plan

McMaster University's 2020/2021 Capital Plan is a planning document that supports the University's strategy Forward with Integrity (2011) and the Strategic Mandate Agreement (2014-17 and 2017-20) and will evolve as the President develops his strategic priorities over the coming year. The intended purpose of this Capital Plan is to guide the growth of physical assets at McMaster University and it includes planning through fiscal year 2025/2026. The Capital Plan encompasses all buildings under the purview of McMaster, both on and off the main campus.

The Capital Plan is a Board-approved document helping to guide the University's priority setting and planning of capital projects over a period of time. It is intended to be responsive to the University's strategic vision both at present and in future. As a result, the Capital Plan is viewed as a dynamic document that is subject to change in order to align itself with the shifting priorities and opportunities of the University. According to the capital planning process, this plan is updated annually. Additionally, the plan is supported by detailed documents that elaborate on various concepts and initiatives related to infrastructure such as academic and enrolment plans, research priorities, the Campus Master Plan, the Campus Capacity Study, the Asset Management Plan, the Campus Accessibility Action Plan and the Energy Management Plan.

1.2 What is a Capital Plan?

The Capital Plan represents McMaster University's existing approved priorities and a number of additional projects (funded, partially funded, or unfunded) for capital investment. It will set forth a framework to guide the growth of physical assets such as buildings and land and infrastructure. The IT Strategy 2019-21, which sets the strategy for information systems, is a separate document.

The Capital Plan provides an overview of the capital needs, issues and projects in various stages of development. Additionally, the plan summarizes the status of current and planned capital activities that are directly related to various planning processes. Furthermore, the Capital Plan encompasses other capital projects' activities related to the current condition of the University's building infrastructure, energy management capital projects and building accessibility capital investments.

Table 1 illustrates the relationship of the Capital Plan within the hierarchy of key capital plans and other documents prepared for the University.

Table 1

Level of Planning/Reporting	Key Capital Plans and Reports at McMaster University	Audience	Review
Strategic: University's	McMaster Capital Plan	Public	Annual
overall philosophy and	Campus Master Plan	Public	Every 5 -
approach to managing			10 years
capital; highest level of	Asset Management Plan	Public	Annual
planning; fundamental decisions and actions	Energy Management Plan	Public	Annual
directed to achieving institutional goals	Campus Accessibility Action Plan	Public	Annual
	Campus Capacity Study	Public	2011
Portfolio	McMaster Capital Plan	Public	Annual
Governance:	Capital Funding and	Planning and	Every
Updates/funding status of capital projects for Board; delineate McMaster's management, oversight and monitor capital projects approved/under construction	Expenditure Report	Resource Committee	meeting
Project Management:	Key Technical/Managemer	nt Documents (Asset R	eports)
Identify strategic and specific capital requirements along with plans and strategies intended to resolve the most urgent and highest priority needs	Asset Management Plan	Public	Annual

2 BACKGROUND AND THE CURRENT STATE OF CAPITAL INFRASTRUCTURE

2.1 The First 30 Years in Hamilton

In 1930, the University moved from Toronto to Hamilton, the forty-first academic session opening on the present site. The University's lands and new buildings were secured through gifts from graduates, members of the churches of the Baptist Convention of Ontario and Quebec and citizens of Hamilton.

2.2 Buildings Procured 1960 – 2019

For detailed information about the development of McMaster facilities during this period, refer to "McMaster University, Facility Services, Planning and Infrastructure Development History: 1960 – 2019" posted at https://facilities.mcmaster.ca/app/uploads/2019/05/2019-04-16-History.pdf.

In the past 60 years McMaster has not only acquired infrastructure through new build construction and renovation/addition projects but has also procured the use of various existing off-campus buildings. For example:

- McMaster's family practice teaching unit, established in the early 1970's at Henderson Hospital, was relocated in the early 1990's to the south mountain as the Stonechurch Family Health Centre.
- McMaster Innovation Park (procured for use in 2004).
- 100 Main St West (David Braley Health Science Centre opened in 2015)
- 88 Forsyth Avenue (purchased in 2015).
- 47 Whitton Road (acquired in May 2015 and used for research purposes).
- 182 Sterling Street (purchased in 2015).
- One James North (leased from 2015).
- 96 Forsyth Avenue North (purchased in 2017).
- Existing houses bound by Forsyth Avenue South, Traymore Avenue, Dalewood Avenue and Main Street West (purchased in 2017).
- 106 Forsyth Avenue North (purchased in 2018).
- 132 Mayfair Crescent (purchased in 2019).
- 8 Mayfair Crescent (purchased in 2019).

Furthermore, McMaster has expanded to house remote campuses in space procured or leased in municipalities other than Hamilton:

- The Waterloo Regional campus was established by McMaster at the University of Waterloo in 2007 and focuses on Health and Medical Sciences.
- In 2012, McMaster opened Educational Services space in St. Catharine's at Brock University's Cairns Family Health and Bioscience Research Complex.
- In 2010, McMaster built the Ron Joyce Centre in Burlington.
- The Welland McMaster Family Health Team has been in operation since 2011.

2.2.1 Summary

Since 1960, McMaster has added a total of 41 buildings on campus to its existing infrastructure through new construction. These buildings total 4,952,836 gross square feet of added infrastructure, during the past 60 years. McMaster has also invested in several renovation/addition projects to existing infrastructure since 1960. During this time, McMaster has completed major renovations/additions, totaling 1,029,656 SF, on 21 campus buildings. Renovations and additions were often completed in order to update technological, electrical and utility infrastructure as well as add usable space. These construction projects have been supplemented with infrastructure growth off

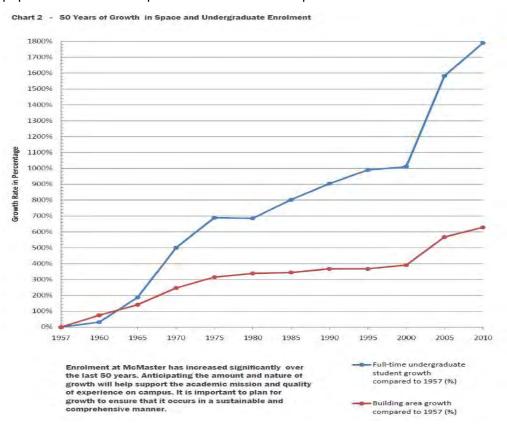
campus, particularly in the last decade, through the procurement of buildings and property.

Facility Services has undertaken significant growth in projects over the last 4 years with the capital spend on new building expansion and renovation; this is depicted in the chart below compared to capital asset additions per our audited financial statements.

Chart 1 - Capital Spending



In addition to the above the following Chart 2 below indicates the growth in student population and the comparative amount of new space added to McMaster.



2.3 Existing Usage, Ownership and Condition of McMaster's Physical Assets

McMaster University was home to a total enrolment of 33,147 students (undergraduate and graduate¹). The University employs more than 10,000 staff and 1,011 full-time instructional faculty. Concerning the critical space categories, space is dispersed as indicated in Table 2, current as of November 1, 2016 and reported to the Council of Ontario Universities (COU) Committee on Space Standards and Reporting to inform the triennial "2016-17 Inventory of Physical Facilities of Ontario Universities."

Table 2: 2016 Space by Category

Category	Area (net assignable square feet (NASF))	Area (net assignable square metres (NASM))
1 Classrooms	284,372	26,419
2 Class Labs	194,515	18,071
3 Research Labs	620,712	57,666
4 Office Academics	644,898	59,913
5.1 Library Stacks	104,937	9,749
5.3 Library Support	10,419	968
5.4 Library Study	49,439	4,593
6 Athletics	185,602	17,243
9 Maintenance Shop	36,619	3,402
10 Office Administration	195,139	18,129
7,8,12,13,14,15 Central Services	257,925	23,962
Total	2,584,577	240,115

McMaster's most recent Campus Capacity Study (2011) cites critical needs for administrative office and related space, graduate student offices, assembly facilities and service space. A similar study is being considered to update this information.

McMaster has 55 buildings on the main campus, including 13 residences, a nuclear reactor, a stadium complex and a hospital. McMaster owns or otherwise operates out of several more buildings throughout Hamilton and the province, such as the Ron Joyce Centre in Burlington and the David Braley Health Sciences Centre in downtown Hamilton. The main campus itself sits on 296 acres of land with approximately 6,293,464 gross square feet of building area. Appendix E includes a list of McMaster properties.

¹ McMaster Fast Facts

Chart 3 and Chart 4 shows the breakdown of McMaster's building age and area (facilities as listed in Appendix D).

Chart 3: Number of Bldgs based on Age

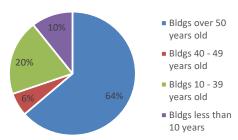


Chart 4: Bldg Gross Area based on Age

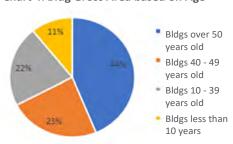
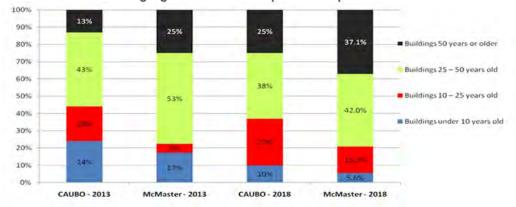


Chart 5 shows building age (as a percentage of total building area) at Canadian campuses compared to that at McMaster.

Chart 5: Building Age: Canadian Campuses compared with McMaster



^{*} This chart includes existing buildings only. Potential new development is not included.

The Deferred Maintenance backlog was identified in 2012 as a high-risk item. Facility Services developed an Asset Management Plan which is updated on an annual basis.

Currently the University funds deferred maintenance from the operating budget. The asset management base was increased by \$2 million in each of 2013/14, 2014/2015, 2015/16 and 2016/17; i.e., until the allocation reached an annual base increase of \$8 million per year. This allocation continued for years 2017/18 and 2018/19. In 2019/2020 McMaster allocated \$600,000 for DM requirements at MUMC, however, after reviewing the DM requirements of MUMC, the annual allocation was increased by another \$700,000 for a total of \$1.1 million per year. In 2020/21, an additional \$1.0 million was approved on a continued basis, dedicated initially to the tunnels, buried utilities and

other failing infrastructure upgrades. The total budget for deferred maintenance for 2020/21 is \$14.09 million, which includes the \$9.7 million base allocation, along with \$3.39 million from the Ministry of Colleges and Universities for deferred maintenance needs and \$1 million in additional operating funding within Facilities Services. The 2020/21 approved project list for deferred maintenance items is attached as Appendix F.

The Council of Ontario Universities (COU) Space Management Committee's Triennial Report was published in June, 2018 as the Inventory of Physical Facilities of Ontario Universities 2016-17 and shows that McMaster's current interior classroom space totals 284,382 net assignable square feet. It also shows that overall, the institution has increased its inventory of classroom space from having approximately 84% of the space it needs (2013) to 85% (2016) according to COU standards (for more details see Section 5.1.). This report will be updated in 2020.

2.3.1 Computerized Maintenance Management System

PeopleSoft's Maintenance and Asset Management modules are used to maintain McMaster University's facilities and grounds. These modules integrate with McMaster's Finance landscape (Asset Management, Project Costing, Expenses, Procurement and Payables and General Ledger). Proper maintenance of an organization's asset infrastructure is key to ensuring safety, complying with regulations and achieving the financial and operational targets that are established by the leadership team. This software enables the organization to create work orders, schedule resources and track costs associated with asset maintenance and repair. In addition, McMaster employees can create an online self-service request to report or request maintenance, repairs, renovations, cleaning, moves and other service activities. When required, a work order is generated from the service request and associated costs can be billed back to the requestor. Business process mapping of the work order process has begun in 2019 to ensure the most efficient process is in place.

2.4 Land Assets, Physical Growth Opportunities

The McMaster University Campus Master Plan was originally prepared in 2002 and updated in 2008 and again in 2017. The 2017 process included the sourcing of campus user input by way of on-campus visioning stations, online polling and meetings with stakeholders in a working committee that included students, staff and faculty.

The Campus Master Plan provides an overall physical framework for campus growth and renewal. The Plan outlines a vision for the campus and recommends that this be updated every five to ten years. Specifically, it establishes a framework for future development that extends the structure of the campus' historic core to its periphery while respecting the surrounding built and open space context. Although it does not advocate for growth, it identifies area for potential new development, with supporting open space amenities and infrastructure initiatives. The current capacity available for new development is estimated to be 3,000,000 gross square feet of floor area on the Main Campus. As outlined in the Campus Master Plan, physical capacity on McMaster's main campus has been largely determined by its physical structure, which contains a well-established hierarchy of streets and natural features. This clear structure has

provided a strong setting and logic for development and infrastructure investments to continue to evolve in an integrated manner. The Campus Master Plan is intended to be flexible, to accommodate the changing needs of various departments and Faculties and to enhance learning by providing the physical environment in which to gain knowledge, live and work.

An important component of the implementation of the vision outlined in the Campus Master Plan was the identification of several potential development sites that could support incremental growth throughout the University campus. However, it is understood that some of these sites may not be developed and that McMaster may need to consider further off-campus development in appropriate locations.

The identified development sites are primarily within the Core Campus, North Campus and West Campus.

- Within the Core Campus, there are several opportunities to introduce new buildings and/or building additions: north of Bates Residence beside the President's Residence, Forsyth Avenue frontages and a significant gateway/landmark development site at the location of existing building to be removed, T-13. Parking Lot 'l' at Cootes Drive and Main Street was being planned for development of a transit hub with the LRT development however the University is still looking at options even after the cancellation of the LRT.
- Even with years of substantial building activity in the North Campus (the David Braley Athletic Centre, Stadium and Les Prince Hall), there remains development potential in the area. The Peter George Centre for Living and Learning opened in 2019 at the location of previously demolished buildings T28, T29 and T18. The McMaster Athletics and Recreation Complex Facility Assessment and Master Plan Study, October 2016, identified a number of potential additions that are either under consideration for future development or otherwise are already at the initial construction stage, i.e., the Student Activity and Fitness Expansion (SAFE) project.
- West Campus has substantial potential to accommodate new buildings, subject
 to more detailed investigations. There is current interest in developing the West
 Campus as a potential living laboratory. The development of a strategy for this
 area of campus, and connecting it to the Campus Master Plan, is ongoing.

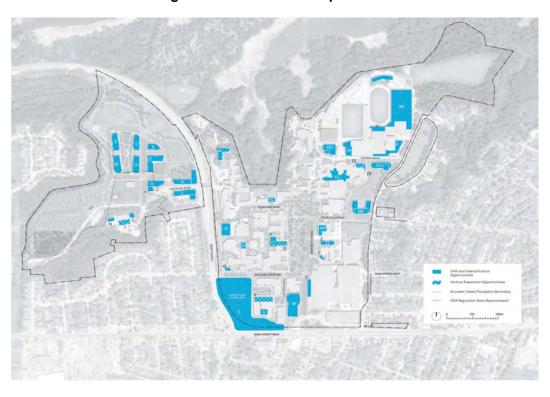


Figure 1: Potential Development Sites

Off campus, McMaster has acquired the land adjacent to the Ron Joyce Centre in Burlington, which would allow for more construction in an expansion of that campus. In downtown Hamilton, McMaster has built the David Braley Health Sciences Centre; the north parcel of that building site includes an existing parking lot facing King Street West and Bay Street South, which remains vacant and could be developed (Hamilton Integrated Research Centre proposed for this site that would house some of McMaster's growing research programs in Health Sciences and other collaborative areas with a building size estimated similar to current DBHSC). Also, McMaster's property at Lower Lions Club Road, currently used in part by the Faculty of Science, could see limited future development to further that Faculty's efforts.

McMaster has recently acquired seven existing houses in the Westdale neighbourhood; 88 Forsyth Avenue North has been transformed into the new Home of the Bertrand Russell Archives and Research Centre. The Faculty of Engineering is using 47 Whitton Road as a "Smart House", i.e., as a space to monitor elderly health in a typical home; 182 Sterling Street is now being used by Student Affairs for recipients of the Wilson Leadership Scholar Award; both 106 and 96 Forsyth are managed by the University (Housing and Conference Services and the President's Office) for small meetings. In 2019, McMaster purchased 132 Mayfair Avenue (under construction) and 8 Mayfair Avenue, both of which will be managed by Housing and Conference Services.

McMaster also owns land and a grouping of houses bound by Main Street West, Traymore Avenue, Dalewood Avenue and Forsyth Avenue South. This is a prime development location, immediately adjacent to the main campus. The University has received Board approval to build an undergraduate student residence at this location as part of a P3 partnership. It is anticipated that this building will be open in 2023 pending planning approvals.

McMaster also received Board approval to build a Graduate student residence on the south-west corner of King Street West and Bay Street South in downtown Hamilton; this is also part of a P3 partnership. The University anticipates construction to begin in the fall of 2020 and completion in the summer of 2023.

2.5 Accessibility

2.5.1 McMaster University Accessibility Plan 2012-2025

In September 2012, the McMaster Accessibility Council (MAC) published the McMaster University Accessibility Plan 2012-2025 in order to comply with the evolving Accessibility for Ontarians with Disabilities Act (AODA). This plan reflects a commitment by the University to engage in incremental initiatives in accordance with the AODA and the expectation that the University will be free of attitudinal, physical and social barriers by the year 2025.

2.5.2 Campus Accessibility Action Plan (CAAP)

The Campus Accessibility Action Plan (CAAP) Phase 2 (2018-2023) is a multi-year plan to address the identified accessibility issues on campus buildings. The Plan is posted at: https://facilities.mcmaster.ca/app/uploads/2018/10/Campus-Accessibility-Plan-2018-2013-V5-20Apr2018.pdf. Funding for the plan is provided by an operating allocation.

2.6 Building Sustainability

The 2020/21 Energy Management Plan identifies and recommends 11 potential energy-saving projects. More information about Sustainability, included the LEED and Energy Management is included in the Energy Management Plan posted on the Facility Services website and Section 5.3, Energy Management Projects and Sustainability.

2.6.1 **LEED**®

McMaster currently has fifteen LEED® certified, or anticipated to be certified, projects. New buildings and major additions at McMaster are to be constructed according to McMaster's Sustainable Building Policy, which in turn references the LEED® Rating System. The LEED Rating system has recently undergone some revisions, which will need to be reflected in an updated Sustainable Building Policy moving forward.

Table 3: LEED® Certified Projects

Building	Construction Date / Renovation Date	Gross Area (S.F.)	Attained/ Anticipated LEED® Certification Level			
New Construction						
Les Prince Hall	2006	106,016	LEED® Certified			
David Braley Athletic Centre	2007	140,479	LEED® Certified			
Engineering Technology			LEED® Gold			
Building	2009	125,600				
Ron Joyce Centre (Burlington)	2010	105,745	LEED® Gold			
CANMET Materials Technology						
Laboratory (MIP)	2010	145,000	LEED® Platinum			
Halton McMaster Family Health						
Centre – Burlington	2014	10,647	LEED® Gold			
David Braley Health Sciences						
Centre – Downtown Hamilton	2014	192,081	LEED® Gold			
L. R. Wilson Hall	2015	177,927	LEED® Gold			
Peter George Centre for Living						
and Learning (PGCLL)	2019	335,167	LEED® Silver*			
Total New Construction		1,338,662				
Renovation/Addition						
C.E. Burke Science Building	2005	196,401				
Nuclear Research Building	2011	23,605				
Ivor Wynne Centre	2012	20,010	LEED® Silver			
McMaster Automotive						
Resource Centre (MARC)	2013	85,000	LEED® Silver*			
Gerald Hatch Centre for						
Engineering Experiential			LEED® Silver*			
Learning	2017	28,007				
ABB Addition	2018	63,173	LEED® Silver*			
Total Renovation/Addition		416,196				
TOTAL New & Reno Constructi	on	1,754,858	gross square feet			

^{*} denotes anticipated certification level

2.6.2 Trends of Energy Consumption

See link below to the Energy Management Plan:

https://facilities.mcmaster.ca/app/uploads/2019/08/Energy-Management-Plan-April-29-2019-EC.pdf

2.7 Environmental Compliance

McMaster University retained the services of an external environmental consultant in late 2012 to survey all campus buildings in terms of their compliance with the Ontario Ministry of Environment (MOE) air and noise emission regulations. A multi-year Environmental Compliance Action Plan (ECAP) was developed in the fall of 2013.

The approved Phase 1 of the plan authorized spending of \$400,000 per year for 5 years (2014/15 to 2018/19) from the deferred maintenance funds to achieve compliance for all buildings on campus except the E.T. Clarke building. While this was ongoing, in 2017, as part of the co-gen project Environmental Compliance Approval (ECA) process, the MOE asked McMaster to apply for a campus-wide ECA. This changed the mitigation requirements and a re-audit of all campus buildings was undertaken again in 2017. A campus wide ECA application was made in June 2017 and McMaster received a conditional ECA in November of 2017. The ECA require McMaster to replace the non-compliant cooling towers at E. T. Clarke building and achieve compliance before 2028.

Phase 2 of the ECAP is for 2019/20 – 2027/28. Facility services engaged mechanical, structural and an environmental consultant to prepare a feasibility report for replacing the cooling towers. The consultant report estimates \$15.19 million in 5 phases for replacing the ten existing cooling towers, roof replacement, additional structural reinforcements and the acoustical sound barrier. This will be funded from the deferred maintenance funds of years 2020/21 to 2027/28 (8 years).

3 RESEARCH PRIORITIES GUIDING FUTURE CAPITAL DEVELOPMENT

McMaster University continues to submit applications to the Canada Foundation for Innovation's (CFI) competitions and to the Province of Ontario seeking funding for new construction and renovation projects to support McMaster's innovative and transformative research and technology development activities.

During the last year McMaster has been awarded more than \$5.8M from the CFI John Evans Leaders Fund (JELF) and the Ontario Research Fund-Research Infrastructure programs to provide McMaster researchers with the infrastructure they require to achieve advances in a variety of strategic research areas. Three of the ten awarded projects include minor renovations which are expected to be completed in 2020. Electrical upgrades to the Central Animal Facility, the installation of new fume hoods in the Life Sciences Building, and security upgrades to L.R. Wilson Hall will

contribute to our understanding healthy aging, sustainable aquatic systems, and the use of artificial intelligence to support democracy and human rights.

McMaster also recently received funding from the CFI Major Science Initiatives (MSI) program in support of the Canadian Centre for Electron Microscopy (CCEM) and the Canadian Research Data Centre Network (CRDCN). The CCEM has been recognized by the CFI as a national facility and, as such, was awarded over \$6M in funding through the 2014 and 2017 competitions for operation and maintenance of the more than \$50M in state-of-the-art infrastructure that it houses. CFI MSI funding to the CCEM was recently increased by \$2M following a successful mid-term review of the current award. The additional funding will assist with the operation and maintenance of \$11M in new infrastructure to be installed in the CCEM following renovations of approximately \$1M. The anticipated completion date for the project is 2021.

The CRDCN was also recognized by the CFI as a national facility with an award of almost \$6M in 2017. Like the CCEM, the CRDCN succeeded in securing more than \$2M in additional CFI MSI funding following favorable review of its mid-term review report. The additional funding will assist with operation and maintenance of the high-performance computing infrastructure which constitutes the \$10M "Canadian Research Data Centre Network Transition to High Performance Computing: Liberating Data for Research and Policy" project. In 2017 the multi-institutional infrastructure project was awarded \$2.8M from CFI and \$2.6M from various provincial governments across Canada. The project includes minor security upgrades to L.R. Wilson Hall and has an anticipated completion date of 2023.

4 PLANNING AND GROWTH ASSUMPTIONS

4.1 Enrolment Growth

McMaster has experienced rapid growth in recent years in part due to population increases in the Greater Toronto Area and Hamilton Region. This institutional growth has been further accelerated because of the rising prominence of many of the University's diverse academic offerings, particularly in the fields of Health Sciences and Engineering. With continued enrolment growth expected and the ongoing development of new academic programs, McMaster is ideally positioned to become one of North America's most prominent universities.

International student enrolment has been steadily increasing. In 2006, 1,714 international students made up 7.8% of the McMaster student population. In 2019, 4,075 international students made up 13.5% of the McMaster student population.

4.2 Technological Development

The McMaster IT Strategic Plan 2019-2021 was published in January 2019. The Plan is focused on the Strategic Pillars of a Connected McMaster community, a Seamless Foundation and Transformative Information Technologies and Services. This new IT strategy addresses classroom and technology needs for the future.

4.3 Efficient Space Management

In order to actively and responsibly plan for future growth, McMaster is presently reviewing its current space management practices. The McMaster University Space Management Policy was last approved in 1987 and will be reviewed in 2020. Space processes such as maintenance of the space inventory database, control of scheduling, maintenance of facilities, new project approval, evaluation of space requests, etc., will be reviewed through this policy revision.

The University has a need for more and better classroom space. For this type of space, McMaster's I/G (Inventory of Space / Generated, or needed space based on COU standards) is 85%. In 2014, a Classroom Design Subcommittee was struck, co-chaired by the AVP Facilities and the AVP Leadership and Learning, to study and analyze the current utilization of classroom spaces. This activity has resulted in a Reconfiguration Plan which calls for the upgrading of existing classrooms and which also lays out a strategic approach to designing new, needed, teaching and learning space.

In early 2019, the Board of Governor's approved a \$2 million annual allocation for 5 years to renovate classrooms on campus. Classrooms have been prioritized based on data from a survey completed in 2018 of faculty and students along with health, safety and legislative requirements. Funding will be used to replace seating, upgrade lighting, flooring, electrical, accessibility and audio visual in classrooms identified. To date, classrooms in Togo Salmon Hall have been renovated, along with planned renovations in Chester New Hall in the summer of 2020.

4.4 Student Residences

In May of 2017, The Government of Ontario released an update to the June 16, 2006 Growth Plan for the Greater Golden Horseshoe, under the terms of the provincial Places to Grow Act, 2005. A core objective of the Growth Plan policies is accommodating and directing new population and employment growth to built-up areas through intensification. Directing growth in this manner is intended to create complete communities that offer options for living, working, shopping and playing; providing greater choice in housing types; and curbing development sprawl.

McMaster's objective is to guarantee all first-year entrants a space in residence if they so desire. Currently, admission is given using an incoming average percent cut-off. This cut-off percentage changes from year to year based on factors including number of applicants, existing capacity and department cut-off percentages.

Since 2012, configurations to campus residences – such as changing bunk and loft rooms to double rooms – have impacted total capacity. McMaster has thirteen different residence buildings on campus, with a variety of room types and lifestyle themes for a total capacity across all buildings of 4,298 students living on campus. Given enrolment growth as noted above, more capacity is needed. To this end, new residence buildings (approved by Board) are being planned which includes the following:

- A new Main Street Undergraduate student residence bordering Main Street West, Traymore Avenue, Forsyth Avenue and Dalewood Avenue and is now moving through the approval stages with the City of Hamilton. This new residence will include 1,373 beds and is part of a P3 partnership.
- A new 30-storey Graduate Student Residence also working in partnership with a P3 developer and an integrated McMaster parking garage, will be located on the south-west corner of King Street West and Bay Street South in downtown Hamilton. This new residence will be home to 630 graduate students.

Research shows that students who stay in residence develop stronger relationships and support networks, leading to a more positive overall student experience. McMaster is one of only two universities in Ontario that cannot guarantee residence to all first-year students, for lack of space.

5 PROJECTS AND INITIATIVES TO SUPPORT THE CAPITAL PLAN

5.1 Addressing Research, Program and Enrolment Growth

Space at McMaster is tracked relative to its need. McMaster's inventory vs. generated (I/G) ratio represents the amount of net assignable space that McMaster has versus how much is ideal based on standards set by the Council of Ontario Universities. The construction of new buildings and additions, the fluctuation in the number of students and professors and consideration of different needs for different types of spaces, are some of the factors that impact this ratio.

The Council of Ontario Universities (COU) published the results of the most recently prepared triennial report on space, i.e., from 2016. Facilities Services compared these results to those from 2013 and will complete the survey again this year. Once this survey has been completed and analyzed, we will update comparisons of McMaster to our peer institutions.

McMaster's I/G for classroom space and athletics and recreation space kept relatively stable compared to the 2013 triennial report, at 85.3% and 68.6% respectively. In these cases, student population growth kept close pace with net building floor area growth.

For library space, McMaster's I/G is 78.6%. This was a decrease over the previous report, resulting from a change in COU standards that required study space to be split into library and (a new separate category) non-library space.

As noted in part in the Campus Capacity Study, the most critical space needs at McMaster were for administrative offices, graduate student offices, assembly facilities, service space, classrooms, research space, recreation space and quiet study space. The new Peter George Centre for Living and Learning (PGCLL) is anticipated to address the need for new large classrooms. A new addition has recently been completed on the A. N. Bourns Science Building (ABB) as part of a Strategic Innovation Fund (SIF) project. Another project is underway to increase athletics and recreation

space. This project is building additions to the David Braley Athletics Centre and the Ivor Wynne Centre

5.1.1 Projections of Growth in Research

Recent trends (five years of McMaster's financial statements as reported to the Canadian Association of University Business Officers (CAUBO)) indicate a sponsored research income of approximately \$205 - \$220 million per year, not including intake for affiliated hospitals.

5.1.2 Ongoing Projects and Initiatives

The following summarizes the ongoing major capital projects at McMaster. These are also summarized in Appendix A.

- Peter George Centre for Living and Learning
 - In recognition of the strong need at McMaster for more classroom, exam-writing, residence, administrative and daycare space, this project recently received substantial completion at the previous location of temporary buildings #T28, #T29 and #T18, including 335,000 gross square feet at a total cost of \$122 million.
- o Athletics and Recreation Pulse and Student Space Expansion
 - In March 2017 students voted in a referendum to have a significant expansion and improvement of campus activity and athletic recreation space, including adding nearly 100,000 square feet of fitness studios, study areas, multi-faith prayer space and meeting facilities. The plan calls for the expansion of the Pulse fitness area, providing all students with Pulse memberships, a small grocery store and rooms for events and meetings. The expanded facilities will contribute to a revitalization of the north end of campus, which is also the site of the Peter George Living and Learning Centre.
- DSB Expansion (at Innis Library) The McLean Centre for Collaborative Discovery
 - To address the need for new administrative and academic space at the DeGroote School of Business, this \$89.7 million, 160,000 sq. ft. project will allow for additional floor levels to be built north of the existing DSB building.
- Research Capital Commercialization Project
 - McMaster is investing \$50 million into the renovation of the warehouse at 200 Longwood at MIP. This space will be sublet by McMaster to research intensive companies in the next phase of commercialization of research. This space will allow for a continued commitment to research by the University.

- Graduate Student Residence Partnership and Parking Structure (P3)
 - In partnership with Knightstone Capital, a new Graduate Residence will support student recruitment and retention and will also further enhance the student experience at McMaster. A total of 630 new graduate student beds and 265 parking spaces will be housed in a 30-storey building located in downtown Hamilton. This project's integrated parking structure has been designed to meet the needs of the building and provide public parking in the downtown core.
- McMaster Main Street Residence (P3)
 - The University, in partnership with Knightstone Capital, continues to work with stakeholders as plans progress for a proposed undergraduate student residence on Main Street West. The proposal is for a mixed-use student residence building on a site owned by the University, on Main Street between Forsyth and Dalewood. The current plan envisions a two-phased project housing approximately 1,373 students.
- Global Hub / International Affairs / One-Stop Shop (Student Affairs)
 - This major renovation was originally planned for select spaces at Gilmour Hall, Togo Salmon Hall and Kenneth Taylor Hall. Current plans have a portion of the group located in one of the two shell floors in the new McLean Centre for Collaborative Discovery. The project is to include front-facing student service space, back-of-house office space and consolidation of existing functions.
- o Existing Building Infrastructure Asset Management and Renewal
 - See the Asset Management Plan, posted on the Facility Services website, for details.
- Energy Management Projects and Sustainability
 - Projects included with listing of other projects in Appendix 'A' In addition, the Energy Management Plan is updated yearly.
- Campus Accessibility Action Plan (CAAP)
 - The approved Campus Accessibility Action Plan (CAAP) now invests \$337,000 annually for accessibility-related improvements to McMaster buildings. The CAAP Phase 1 ran from 2012-2013 through to 2016-2017. Phase 2 of CAAP (2018-2023) is underway.
- o Environmental Compliance
 - The Cogeneration project completed at the E.T. Clarke Centre required an Environmental Compliance Approval (ECA) and the Ministry of the Environment asked McMaster to submit a campus wide ECA application. Some of the major noncompliance noise sources such as cooling towers will be mitigated as part of a multi-year plan. McMaster is implementing a 9 year phased plan given that most of the noncompliant sources are at the end of their service life and are identified

for replacement as part of the deferred maintenance/Asset Management Plan.

5.1.3 Planned Projects and Initiatives

5.1.3.1 Major Projects (see Appendix B and Appendix C)

Appendix B provides a summary of potential future capital projects for the University in several categories of prioritization. These projects are at various stages of planning/development and available funding. Appendix C summarizes the funding for capital projects over a planning horizon until 2027. The following projects can be found within the Appendix B. All projects will flow through appropriate governance as the projects evolve.

A - High Priority Projects - Partially Funded

- o Bates Residence Retrofit
 - This \$44 million, multi-year, multi-phase project calls for major upgrades to nearly all building systems at Bates Residence and includes interior finish replacements and suite re-arrangements (currently funded at \$24M).
- Greenhouse (Construction and Demolition)

This \$14.4 million project involves demolishing the existing Greenhouse and relocating it to land between Life Sciences and Divinity College. This project will now be combined with some interior renovations in LSB.

- JHE Interior Renovation
 - The Faculty of Engineering has initiated the planning of upgrades to JHE in a series of steps over the coming years. This includes some much-needed upgrades to washrooms, which will be funded with some deferred maintenance funding as much as feasible. Upgrades to corridors and the addition of collaborative spaces are part of the longterm project, estimated project cost of \$5 million.
- o JHE Tower The PIVOT
 - The Faculty of Engineering is reimagining the curriculum, beginning with Level 1, and working through all levels to increase integration, experiential learning, PBL, innovation, etc. Space to support this transition is needed; with an estimated project cost of \$50 million.

B - High Priority Projects Unfunded

- Peak Shaver Installation and Boiler
 - This project is expected to include a \$10M investment (approximate) in electric boilers, funded through savings from peak shavers, installed and operated by an external company The peak shavers' electrical

output is synchronized with the electrical grid. The peak shaver generators would only be operated at times when the IESO is experiencing the potential of a coincidental peak demand. With the operation of the peak shavers, this would reduce McMaster's typical 9-11MW electrical demand down to approximately 6 MW, resulting in a reduction of GA costs by 30%. This savings stream will provide payback to central bank to purchase and install 2 Boilers that would replace the current 1962 boiler that is at the end of its useful life. Facilities is exploring both gas and battery-powered generators.

Lot K Parking Structure

This \$12 million project will build a parking structure on the current Lot K parking footprint. The University is in need of additional off central campus parking spaces. The University currently leases land at Ward Ave and this lease is set to expire in Fiscal 2024 with no option to renew.

Life Science Building Deep Renovation

Revitalization of the buildings envelope, systems and infrastructure. The proposed \$59.5 million deep retrofit will solve existing building envelope deficiencies of barrier leaks, thermal bridging, and roof leaks. Student study space and an identifiable entrance is lacking within the current configuration. With a growing enrolment for the programs, additional space is needed to increase capacity and must be located within close proximity to required services. Overall this project would offer a platform for future development and growth of life sciences research and education. It would also bring an aging building in line with current industry standards for both research and operations.

Fit Out of Floors 7&8 DSB Expansion

The University has made the decision to shell in floors 7 and 8 of the DSB Expansion project for future growth at a cost of \$5.6 million (total for both floors). One of these floors will be occupied by the One Stop Shop hub (already approved) and the other is under discussion.

o Athletics & Recreation - Aquatic Centre/Pool Replacement

■ This phase includes the demolition and re-construction of the pool, to be known potentially as the Bay Area Community Pool and Aquatic Centre at McMaster University (BACPAC@MAC). Further, this phase includes a new student gym and major retrofits. A total of 23,190SF of new/renovated space is included in this project. This project is outlined in the Athletics and Recreation Business Case (November 3, 2017); project estimated cost of \$56 million.

o Hamilton Integrated Research Centre - downtown

 To be constructed on the parking lot adjacent to the DBHSC building on Bay Street, downtown Hamilton. This research centre, intended to be similar to The Francis Crick Institute in Paris, France, would house some of McMaster's growing research programs in Health Sciences and other collaborative areas. Building size estimated similar to DBHSC with parking requirements met through the Graduate Student Residence on King Street; estimated cost of \$100 million. This project replaces the previous STEM building on previous capital lists.

- Central Animal Facility (CAF) Renovation
 - The Central Animal Facility (CAF), located in the MUMC building, is in need of a complete renovation in order to meet accreditation requirements by the Canadian Council on Animal Care. The facility has undergone minor renovations in the past several years, including an overhaul of the ventilation system, but a more extensive complete renovation is now an urgent need. An external consultant has been engaged and the current estimate is a \$20M investment in order to meet the current requirements; estimated total project cost of \$36 million.
- Arts Quad Renovation
 - L. R. Wilson Hall (phase 1), allowed for the migration of teaching and learning spaces from the Arts Quad to this new building. Phase 2 – Arts Quad Renovation is to allocate \$63 million toward critically needed design and construction renovation improvements in the teaching and learning spaces within the existing Arts Quad.
- Land Acquisition Downtown (adjacent to GSR)
 - 0.76 acres of land adjacent to the Graduate Student Residence property downtown is available through Knightstone Capital for a partnership opportunity. In the interim, the land is being sub-leased to the City for parking, and this could continue for the foreseeable future; land cost \$8 million.

C - Medium Priority Projects unfunded

- Thode Library High Density Shelving
 - This is a multi-phase project to thoroughly renovate and expand library space on campus.
- Housing and Conference Services Exterior Spaces plan (multi year plan)
 - Housing has a multi-year plan to upgrade and install landscape/hardscape in the residence areas around campus. This plan will likely be a 20+ year plan, with funding set aside each year to accomplish small projects.

D - Low Priority Projects unfunded

Please see the following chart, projects listed here will only be elevated if funding becomes available or circumstances change that change the priority:

Transit Hub - Academic and Commercial Building (Phase 2)	\$34,900,000
Transit Hub - Academic Classroom (Phase 3)	\$56,250,000
Athletics and Recreation - Phase 3 Expansion	\$37,900,000
Arts Quad Cover	\$47,500,000
Thode Library Phase 2: Major Renovations	\$6,000,000
Mills Library Phase 1 Research Collections	\$4,000,000
Mills Library Phase 2: Library Entrance, Washrooms	\$2,500,000
Mills Library Phase 3: Staff Spaces, General Learning and Collections Reno #1	\$4,500,000
Mills Library Phase 4: Staff Spaces, General Learning and Collections Reno #2	\$4,000,000
MAC Forest (Ancaster) - proposed teaching and research building	\$4,000,000
IAHS Expansion with Mohawk	\$20,000,000

E - McMaster Innovation Park Projects

McMaster Innovation Park also has several capital projects under various stages of development/planning. These projects are highlighted in the MIP strategy presentation annually to the McMaster Board of Governor's and Planning and Resources Committee.

Hotel	\$23,000,000
ETC#1 (Gowlings)	\$35,000,000
44 Frid Street (Hamilton Spectator)	\$30,000,000
Glass Warehouse	\$110,000,000
Park Complete Build-out	TBD

5.2 Design Principles and Standards

All projects will be executed in accordance with appropriate campus planning principles, design standards, code compliance and functional requirements; and all major projects are to adhere to McMaster policy on sustainable buildings.

The overall planning policies for the McMaster Campus follow from the twelve principles as detailed in Section 3.4, Westdale Campus Master Plan. They are intended to guide the University's growth and renewal over time. They are supplemented by area-specific policies for the campus found elsewhere in the Campus Master Plan.

In all cases, the policies are intended to reflect the intent of the University's Environmental Policies, including its Sustainable Building Policy, the City of Hamilton's Official Plan and Zoning By-law, the principles of Hamilton's Vision 2020 document and the planning and environmental policies of the Hamilton Conservation Authority and Royal Botanical Gardens.

Also, the space standards from the McMaster Space Management Policy (1987) need to be reviewed and revised, to more appropriate and up-to-date minimum standards, based on current minimum space standards outlined by the Council of Ontario Universities and the analysis of McMaster's current spatial data to reflect how space is actually being used on campus.

6 CONCLUSIONS AND RECOMMENDATIONS

McMaster has recently successfully completed a great deal of new construction, addition/renovation projects and has acquired new space by lease arrangements. As identified by the Campus Master Plan areas for development still exist on the Main Campus, and these locations need to be the focus of future growth. McMaster's many currently ongoing addition/renovation projects and plans for new residence buildings and new teaching facilities, will help support existing needs and any new growth over the next few years.

In regards to existing infrastructure asset management, it should be noted that out of the 66 buildings, 46 buildings (70%) and 67% of our total gross building area are over 40 years old. With a total deferred maintenance backlog for all buildings and infrastructure including Residences and MUMC of \$713.87 million, and \$419.77 million for all buildings and infrastructure excluding Residences and MUMC, funding for deferred maintenance remains a high priority. McMaster University is currently funding deferred maintenance for the academic portfolio at \$9.4 million and MUMC at \$1.3 million/year (includes a loan payment), for a total allocation of \$10.7 million/year, an investment that will only maintain control of the top priority deferred maintenance items in the short term.

In the interest of sustainability, energy conservation and cost savings, McMaster has implemented several energy management programs.

7 EXECUTIVE SUMMARY

This 2020/2021 Capital Plan is an update of Version 4, published by McMaster University Facility Services in May 2019.

The amount of classroom space on campus is close to 86% of what is needed by COU standards. Full-Time Student Enrolment and the subsequent critical demands for space, is increasing. As such, McMaster University needs to identify and take advantage of existing opportunities for physical growth. McMaster needs to seek out off-campus expansion opportunities and to take advantage of the area available for development on the main campus. It will also be essential to increase efficiencies in planning for the utilization of existing space.

Over its rich history, McMaster has accumulated a wealth of physical assets. The challenge today is to manage this inventory of aging buildings and infrastructure as best suits anticipated needs. To this effect, McMaster University has increased the deferred maintenance funding for the academic portfolio and is allocated to spend \$14.09 million (including funds from the Ministry of Colleges and Universities) in 2020/21. This investment will maintain control of the top priority deferred maintenance items in the short term.

In addition, McMaster needs to further embrace sustainable construction and energy management practices. Accessibility needs to be increased for compliance with today's standards, including new installations of barrier-free ramps, washrooms, fire alarm strobe lights, water fountains, etc.

Numerous documents and reports have been produced to inform McMaster's efforts. Chief among them are McMaster President and Vice-Chancellor Patrick Deane's 2011 letter, "Forward with Integrity" (FWI), his 2012 letter, "Forward with Integrity: The Emerging Landscape" and the follow up document "Forward with Integrity: Next Phase" issued in October 2015. The Strategic Mandate Agreements (2014-17 and 2018-20) have also been prominent in outlining priorities and principles which help shape the University's development. Also, McMaster has joined the world's health-promoting universities and colleges in signing the Okanagan Charter, dedicated to advancing human and societal health and wellbeing.

Appendix A: 2019/20 Governance Approved Capital Projects

Active Projects at December 2019 (greater than \$2M)*		Funding Source
Innovation Hub - The Clinic	3,100,000	Donor/University
Athletic and Rec - Pulse and Student Space Expansion	64,000,000	University /Student
DSB Expansion (at Innis Library)	89,730,000	Donor/ University
Classroom Reconfiguration Plan	12,000,000	University
Research Capital Commercialization Project	50,000,000	University
Residence Renewal	18,000,000	University
Energy Management Projects and Sustainability	27,830,778	Gov't/ University
Peter George Centre for Living and Learning	122,320,000	University
Advanced Manufacturing Centre	9,060,000	University
ABB - SIF (Renovation, addition, DM)	56,220,000	Gov't/ University
Existing Building Infrastructure Asset Management and Renewal	80,000,000	University
Deferred Maintenance Projects	50,200,000	Gov't/ University
Environmental Compliance	2,800,000	University
Campus Accessibility Action Plan (CAAP)	2,359,000	University
CFI 2017 (University contribution)	4,664,976	University
One Stop Shop/International Affairs	9,000,000	University
CFI Research Future Matching Funds	5,403,044	University
Graduate Student Residence Downtown	30,600,000	P3
Main Street Student Residence (Traymore)	12,900,000	P3
LRT Transit Hub and Parking Garage	8,980,000	P3/ University
ABB 5 th Floor (Engineering and Science)	2,815,000	University
Parking and Security Relocation	2,300,000	University
CFI 2014 and 2015 (University contribution)	1,280,538	University
Mayfair Properties	5,600,000	University
Forge expansion at MIP parking garage	1,800,000	Gov't/ University
Fraunhofer Center IZI at MIP - BEAM	17,400,000	Gov't/ University
SANS for Nanostructured Materials (Gaulin CFI)	8,920,669	Gov't/ University
L.R. Wilson Hall and Parking	66,054,595	Donor/Gov't/ University
McMaster Health Campus	84,644,854	Donor/Gov't/ University

^{*}Note: the above includes any projects that will remain open/active during May 1, 2020 to April 30, 2021 with a budget greater than \$2M. In addition, the highlighted projects are substantially complete.

Appendix B: 2020/21 Subject to Approval Capital Projects

Summary Table:

	PVP Approved: High Priority and Partially Funded:	
1	Bates Retrofit (Partially Funded \$24,000,000)	44,000,000
2	Greenhouse new Construction and Demolition (Partially Funded \$5,000,000)	14,400,000
3	JHE Interior Renovation (Fully funded)	5,000,000
4	JHE Tower – The PIVOT (Partially Funded \$15,000,000)	50,000,000
	Contemplated:	
	High Priority Unfunded:	
5	Peak Shaver Installation and Boiler	10,000,000
6	Lot K Parking Structure	12,000,000
7	Life Science Building Deep Renovation	59,500,000
8	Fit Out of Floors 7&8 DSB Expansion (BHSC Expansion, Other – TBD)	5,674,200
9	Athletics & Recreation – Aquatic Centre/Pool Replacement	56,000,000
10	Hamilton Integrated Research Centre – downtown (replacement for STEM)	100,000,000
11	Central Animal Facility (CAF) Renovation	36,000,000
12	Arts Quad Renovation	63,000,000
13	Land Acquisition – Downtown (adjacent to GSR)	8,000,000
	Medium Priority Unfunded:	
14	Thode Library - High Density Shelving	2,000,000
15	Housing and Conference Services Exterior Spaces plan (multi-year plan)	20,000,000
	Low Priority Unfunded:	
16	Transit Hub - Academic and Commercial Building (Phase 2)	34,900,000
17	Transit Hub - Academic Classroom (Phase 3)	56,250,000
18	Athletics and Recreation - Phase 3 Expansion	37,900,000
19	Arts Quad Cover	47,500,000
20	Thode Library Phase 2: Major Renovations	6,000,000
21	Mills Library Phase 1 Research Collections	4,000,000
22	Mills Library Phase 2: Library Entrance, Washrooms	2,500,000
23	Mills Library Phase 3: Staff Spaces, General Learning and Collections Reno #1	4,500,000
24	Mills Library Phase 4: Staff Spaces, General Learning and Collections Reno #2	4,000,000
25	MAC Forest (Ancaster) - proposed teaching and research building	4,000,000
26	IAHS Expansion with Mohawk	20,000,000
	MIP Funded Projects:	
	Hotel	23,000,000
	ETC#1 (Gowlings)	35,000,000
	44 Frid Street (Hamilton Spectator)	30,000,000
	Glass Warehouse	109,795,372
	Park Complete Build-out	TBD

McMaster University, Facility Services, 2020/2021 Capital Plan

Appendix C: Capital Budget – Summary (Refer to Section 5)

- · ·	la 2010	2012	2242	2000	2224	2000	2000		2007	2000	2007	
Projects	Pre 2018	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	Grand Total
Active - Ongoing												(850,512,286)
Innovation Hub - The Clinic			(108,037)	(1,500,000)	(1,491,963)							(3,100,000)
Athletic and Rec - Pulse and Student Space Expansion (SAFE)		(1,590,299)	(1,471,901)	(20,828,099)	(30,109,701)	(10,000,000)						(64,000,000)
DSB Expansion (at Innis Library)		(/===/	(/ / /	(2,000,000)	(29,725,779)	(35,153,026)	(22,851,195)					(89,730,000)
Classroom Reconfiguration Plan	(1,520,000)	(541,594)	(3,000,000)	(2,000,000)	(2,000,000)	(2,938,406)	, , , , , , , , , , , , , , , , , , , ,					(12,000,000)
Research Capital Commercialization Project	1	(20,495)	(4,270,225)	(35,729,775)	(9,979,505)	, , , ,						(50,000,000)
Residence Renewal		(974,578)	(4,534,497)	(490,925)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)		(18,000,000)
Energy Management Projects and Sustainability	(12,546,727)	(6,631,224)	(1,963,073)	(6,689,754)								(27,830,778)
Peter George Center for Living and Learning	(7,116,042)	(28,686,137)	(54,289,582)	(24,124,281)	(8,103,958)							(122,320,000)
Advanced Manufacturing Centre			(68,911)	(8,991,089)								(9,060,000)
ABB - SIF (Renovation, addition, DM)	(3,270,694)	(30,530,655)	(20,362,353)	(2,056,298)								(56,220,000)
Existing Building Infrastructure Asset Management and Renewal (annual)		(8,000,000)	(8,000,000)	(8,000,000)	(8,000,000)	(8,000,000)	(8,000,000)	(8,000,000)	(8,000,000)	(8,000,000)	(8,000,000)	(80,000,000)
Deferred Maintenance Projects (annual)		(4,200,000)	(5,250,000)	(5,020,000)	(5,020,000)	(5,020,000)	(5,020,000)	(5,020,000)	(5,020,000)	(5,020,000)	(5,020,000)	(49,610,000)
Environmental Compliance		(400,000)	(400,000)	(400,000)	(400,000)	(400,000)	(400,000)	(400,000)	(400,000)	(400,000)		(3,600,000)
Campus Accessibility Action Plan (CAAP)		(334,000)	(334,000)	(337,000)	(337,000)	(337,000)	(337,000)	(337,000)	(337,000)	(337,000)		(3,027,000)
CFI 2017 (University contribution)				(4,664,976)								(4,664,976)
One Stop Shop/International Affairs				(500,000)	(6,000,000)	(2,500,000)						(9,000,000)
CFI Research Future Matching Funds						(5,036,666)						(5,036,666)
Graduate Student Residence Downtown (P3)		(277,549)		(500,000)	(13,642,004)	(16,180,447)						(30,600,000)
McMaster Main Street Student Residence (P3)	(6,434,360)	(7,770,304)	(1,645,336)		2,950,000							(12,900,000)
LRT Transit Hub and Parking Garage						(5,926,460)	(3,053,540)					(8,980,000)
ABB 5th Floor (Engineering and Science)				(500,000)	(2,315,000)							(2,815,000)
Parking and Security Relocation			,, :		(2,300,000)							(2,300,000)
CFI 2014 and 2015 (University contribution)		(187,000)	(1,093,538)				-					(1,280,538)
Mayfair Properties			4	(5,600,000)								(5,600,000)
Forge expansion at MIP parking garage - PVP Approved	(+ 555 555)	(10.011.00)	(1,817,210)	(1.010.000)								(1,817,210)
Fraunhofer Center IZI at MIP	(4,099,366)	(10,314,730)	(1,765,941)	(1,219,963)								(17,400,000)
SANS for Nanostructured Materials (Gaulin CFI)	(6,383,952)	(2,548,589)	11,872									(8,920,669)
L.R. Wilson Hall and Parking	(64,371,074)	(1,395,122)	(288,399)	(504.027)								(66,054,595)
McMaster Health Campus	(81,387,375)	(2,402,593)	(162,959)	(691,927)								(84,644,854)
PVP Approved: High Priority and Partially Funded:												(113,400,000)
Bates Retrofit - PVP Approved							(4,000,000)	(20,000,000)	(20,000,000)			(44,000,000)
Greenhouse new Construction and Demolition - HPF				(500,000)	(7,000,000)	(6,900,000)	(1,000,000)	(20,000,000)	(20,000,000)			(14,400,000)
JHE Interior Renovation				(223,223)	(2,500,000)	(2,500,000)						(5,000,000)
JHE Tower - The PIVOT					(=/===/===/	(5,000,000)	(20,000,000)	(20,000,000)	(5,000,000)			(50,000,000)
							` ′ ′	` ' ' '	` ' '			` ' ' '
High Priority Unfunded:												(350,184,440)
PeakShavers and Boilers					(5,000,000)	(5,000,000)						(10,000,000)
Lot K Parking Structure					(12,000,000)	, , , ,						(12,000,000)
Life Science Building Deep Renovation					` ' '	(6,500,000)	(23,500,000)	(23,500,000)	(6,000,000)			(59,500,000)
Fit Out Floors 7&8 - DSB Expansion (BHSC Expansion, Other - TBD)					(5,674,200)							(5,674,200)
Athletics & Recreation - Aquatic Centre						(5,601,024)	(22,404,096)	(22,404,096)	(5,601,024)			(56,010,240)
Hamilton Integrated Research Centre - downtown							(2,000,000)	(32,000,000)	(42,000,000)	(17,000,000)	(7,000,000)	(100,000,000)
Central Animal Facility Renovation					(4,000,000)	(16,000,000)	(16,000,000)					(36,000,000)
Arts Quad Renovations - HPU						(3,000,000)	(31,500,000)	(28,500,000)				(63,000,000)
Land Acquisition - Downtown (adjacent to GSR)					(8,000,000)							(8,000,000)
Medium Priority Unfunded:												(9,000,000)
Thode Library - High Density Shelving					(2,000,000)						-	(2,000,000)
H&CS Exterior Spaces Plan (Multi year to 2041 \$20M)					(1,000,000)	(1,000,000)	(1,000,000)	(1,000,000)	(1,000,000)	(1,000,000)	(1,000,000)	(7,000,000)
Low Priority Unfunded:												(221,550,000)
LRT - Ph 2 - Academic _ Commercial Building - LPU						(4,900,000)	(25,000,000)	(5,000,000)				(34,900,000)
LRT - Ph 3- Academic Classroom - LPU							(11,250,000)	(45,000,000)				(56,250,000)
Athletics and Recreation - Phase 3 Expansion - LPU						(2,900,000)	(4,000,000)	(11,500,000)	(11,500,000)	(8,000,000)		(37,900,000)
Arts Quad Cover - LPU					(500,000)	(20,000,000)	(16,000,000)	(11,000,000)				(47,500,000)
Thode Library Phase 2_Major Renovations - LPU					(3,500,000)	(2,500,000)						(6,000,000)
Mills Library Phase 1 (Sherman) - LPU					(4,000,000)							(4,000,000)
Mills Library Phase 2_Entry, Washroom, CAV Renovations - LPU						(2,500,000)						(2,500,000)
Mills Library Phase 3_Staff, Learning, Collections Area Renovations 1 - LPU						(2,000,000)	(2,500,000)					(4,500,000)
Mills Library Phase 4_ Staff, Learning, Collections Area Renovations 2 - LPU							(2,000,000)	(2,000,000)				(4,000,000)
MAC Forest Research Building - LPU					(200,000)	(2,500,000)	(1,300,000)					(4,000,000)
IAHS Expansion with Mohawk	1					(5,000,000)	(10,000,000)	(5,000,000)				(20,000,000)

Appendix D: Schedule of Facilities

1 University Hall	Buildi ng Code	Building Name	Building Section	Constructi on / Renovation / Acquisition	Current Total Building Gross Area (Square	Current Total Building Gross Area (Square Metres)
Addition 1991 40,632.63 4,520.00					Feet)	
2 Hamilton Hall 1929 51,865.81 4,818.49 4 Refectory 1929 23,365.44 2,170.72 5 Edwards Hall 1929 25,025.44 2,324.94 6 Wallingford Hall 1929 23,461.70 2,179.66 7 Residence) 1929 6,523.90 606.09 8 Alumni Memorial Building 1949 Addition 2003 14,062.10 1,306.41 9 Nuclear Research Building 1950 Addition 2001 Addition 2001 Addition 2001 61,117.00 5,677.96 10 Mills Memorial Library/Alvin A. Lee Building 1950 Addition 1962 Addition 1962 Addition 1963 Addition 1965 Addition 1965 Addition 1965 Addition 1965 Addition 1966 Addition 1967 Addition 1968 Addi	1	University Hall			18 652 83	4 520 00
1929			Addition		·	
Addition					51,865.81	4,818.49
Section Sect	4	Refectory			23 365 44	2.170.72
6 Wallingford Hall 1929 23,461.70 2,179.66 7 Alumni House (Formerly President's Residence) 1929 6,523.90 606.09 8 Alumni Memorial Building 1949 14,062.10 1,306.41 9 Nuclear Research Building 1950 Addition 1957 Addition 2011 61,117.00 5,677.96 10 Mills Memorial Library/Alvin A. Lee Building 1950 Addition 2011 230,069.00 21,374.11 11 Burke Science Building 1962 Addition 1962 230,069.00 21,374.11 11 Burke Science Building 1963 1963 196,401.35 18,246.28 Addition 1963 1964 196,401.35 18,246.28 Addition 1963 196,401.35 18,246.28 Addition 1963 196,401.35 18,246.28 Addition 1963 196,401.35 18,246.28 Addition 1963 196,401.35 18,246.28 Addition 1965 196,401.			Addition			
7						
Residence 1929 0,933.90 000.09	б			1929	23,461.70	2,179.66
Addition 2003 14,002.10 1,300.41		Residence)			6,523.90	606.09
Nuclear Research Building	8	Alumni Memorial Building			14 062 10	1 306 41
Addition 1957			Addition		11,002.10	1,000.11
Addition 2001 Addition 2011	9	Nuclear Research Building				
Addition 2011					04 447 00	5.077.00
10 Mills Memorial Library/Alvin A. Lee Building					61,117.00	5,677.96
Building Addition 1962 Addition 1968 Addition 1990			Addition	2011		
Building Addition 1962 Addition 1968 Addition 1990	10	Mills Memorial Library/Alvin A. Lee		1950		
Addition 1968 Addition 1990 21,374.11	10		Addition			
Addition 1990		Dananig			230,069.00	21,374.11
11 Burke Science Building						
Addition 1958 Addition 1961 196,401.35 18,246.28	11	Burke Science Building				
Addition 1963 Addition 1969		Ŭ	Addition			
Addition 1969			Addition	1961	196,401.35	18,246.28
12 E. T. Clarke Centre			Addition	1963		
Addition 1958			Addition			
Addition 1965	12	E. T. Clarke Centre				
Addition 1968						
Addition 1998 Addition 1996 Addition 2002					53.465.93	4.967.15
Addition 2002					55, .55.05	.,
15 Nuclear Reactor 1957 28,780.8 2,673.8 16 John Hodgins Engineering Building Addition 2017 Addition 2001 Addition 2016 Addition 2017 278,377 25862.06 17 Divinity College 1959 38,148.20 3,544.08						
1958	4.5	Nuclear Deaster	Addition		20 700 0	0.070.0
Addition 2017 Addition 1989 278,377 25862.06	15	Nuclear Reactor			∠ŏ,7ŏU.ŏ	2,6/3.8
16 John Hodgins Engineering Building Addition 1989 Addition 2001 Addition 2016 Addition 2017 278,377 25862.06 17 Divinity College 1959 38,148.20 3,544.08			Addition			
Addition 2001 Addition 2016 Addition 2017 25862.06 Addition 2017 17 Divinity College 1959 38,148.20 3,544.08						
Addition 2016 Addition 2017 17 Divinity College 1959 38,148.20 3,544.08	16	John Hodgins Engineering Building			278,377	25862.06
Addition 2017 17 Divinity College 1959 38,148.20 3,544.08						
17 Divinity College 1959 38,148.20 3,544.08						
	17	Divinity College	, (44)(10)		38.148.20	3.544.08
19 Whidden Hall 1959 69,989.40 6,502.23						

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20	Gilmour Hall		1959	90,127.80	8,373.15
22	General Sciences Building		1962	59,583.20	5,535.46
23	Chester New Hall		1964	87,870.01	8,163.39
			1964	,	•
24	Ivor Wynne Centre	Addition	1972	246,954	22,942.77
		Addition	2011		,•
		7 (4.4.1	1968		
		Addition	2003	-	
25	Arthur N. Bourns Building	Addition	2006	352,648.00	32,762.07
		Addition	2019	-	
26	Matthews Hall	/ tddition	1964	61,808.30	5,742.18
27	McKay Hall		1964	66,824.30	6,208.18
	•		1965		•
28	Commons Building	Addition	1968	56,448.90	5,244.27
		Addition	1965		
29	Togo Salmon Hall	Addition	2000	146,039.68	13,567.53
29	10go Saimon Haii	Addition	2015	140,039.00	10,007.00
30	Biology Greenhouse	Addition	1967	8,377.60	778.30
31	Campus Services Building		1967	51,935.60	4,824.98
JI	Campus Services building		1966	31,933.00	4,024.90
32	Tandem Accelerator Building	Addition	2002	36,493.00	3,390.31
32	Tandem Accelerator building			30,493.00	3,390.31
22	Applied Described Laboratory	Addition	2011	04 400 00	4.005.50
33	Applied Dynamics Laboratory		1967	21,480.00	1,995.56
34	Psychology Building	A al al:4: a .a	1970	102,691.5	9,540.3
25	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Addition	2013	04.044.00	5.077.50
35	Woodstock Hall		1968	64,341.30	5,977.50
36	Brandon Hall		1968	118,354.70	10,995.51
37	Health Sciences Centre ¹	A al al:4: a .a	1970	981,238	91,159
20	Vanath Tardan Hall	Addition	2005	400,000,70	44 707 00
38	Kenneth Taylor Hall		1971	126,990.70	11,797.82
39	Life Sciences Building		1970	106,851.52	9,926.83
40	Bates Residence	A .1.1141	1971	164,055.40	15,241.25
40		Addition	1972	·	0.450.00
42	H. G. Thode Library		1976	87,793.70	8,156.30
43	Communications Research	A 1 1111	1983	28,862	2,681.36
	Laboratory	Addition	1989	· ·	
44	Health Sciences Parking Garage		1986	N/A	N/A
45	Hedden Hall		1989	104,279.10	9,687.85
46	DeGroote School of Business	A 1	1990	74 400 11	0.044.0=
		Addition	1999	74,422.44	6,914.07
		Addition	2001		
48	Institute for Applied Health Sciences ¹		2000	118,652	11,023.13
40			1955		
49	Information Technology Building	Addition	1959	123,725.60	11,494.48
		Addition	2001	7	·
50	Mary E. Keyes Residence		2002	146,195.20	13,581.98
			2002		
51	McMaster University Student Centre		2016	146,830.69	13,641.01
	1		2004		
52	Michael G. Degroote Centre for	Addition	2005	304,365.61	28,276.49
02	Learning and Discovery	Addition	2017	331,330.31	20,210.49
53	Les Prince Hall	, iddition	2006	106,016.20	9,849.23
- 55		I	2000	100,010.20	0,010.20

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54	David Braley Athletic Centre		2007	140,478.85	13,050.91
55	Ron V. Joyce Stadium		2008	56,941.95	5,290.08
56	Engineering Technology Building		2009	138,682	12,883.97
57	Ron Joyce Centre (Burlington)		2010	103,591.87	9,624.00
58	MIP - MARC		2013	85,000	7,896.75
59	MIP – Atrium Building		2009	140,751	13,076.19
73	St. Paul's Anglican Church (Hamilton) – Leased Space		2013	5,808	539.5
74	L.R Wilson Hall		2016	177,927.00	20,438.20
82	88 Forsyth Avenue North		2015	4754	441.66
83	David Braley Health Sciences Centre		2015	232,843.00	21,631.82
85	One James North – Leased Space ¹		2015	52,991	4,923.02
86	47 Whitton Road		2015	3,587	333.24
87	182 Sterling Street		2015	3,937.00	365.76
89	Peter George Centre for Living and Learning (PGCLL)		2019	335,165.00	31,137.85
90	Halton McMaster Family Health Centre/JBH		2013	31,107.70	2,890.00
91	Canadian Martyrs – Licensed Space		2016	4,172	387.59
92	Cairns Research Complex- (Brock University)		2012	10,176	954.49
94	96 Forsyth Avenue North		2017	5,944.78	552.29
95	106 Forsyth Avenue North		2018	5012	465.63
96	132 Mayfair Crescent		2019	2,900	269.42
97	8 Mayfair Crescent		2019	4,600	427.35
T13	Preliminary Laboratory		1967	23,066.60	2,142.96
TB26	Temporary Building, Multi-use (Formerly Scourge Building)		1989	2,112.00	196.21
T31	Stone Church Family Health Care Centre		N/A	15,726.01	1,460.99
T32	Temporary Portables (Offices)		2013	6,031.56	560.35
T33	Temporary Portables (McMaster Children's Centre)		2013	7,805.02	725.11
T34	Temporary Classroom/Offices		2019	5,000.00	464.51
200	Integrated Health Building (Waterloo)		2010	59,816.34	5,557.12
	,	G	rand Total:	7,066,182.13	656,469.79

Note 1: McMaster space in shared building

Appendix E: Schedule of Properties

Of McMaster's on-campus buildings, the following have unique ownership arrangements:

- o Divinity College owned by College of Divinity.
- Health Sciences Centre owned by McMaster and leased to Hamilton Health Sciences (HHS then leases approximately 38% of the building back to the Faculty of Health Sciences).
- Institute for Applied Health Sciences owned jointly by McMaster and Mohawk.
- McMaster University Student Centre operated by McMaster Students Union under the direction of a management committee.
- David Braley Athletic Centre owned by McMaster and operated by Athletics and Recreation; construction paid for from external sources, operating expenses paid for by McMaster and the students.

Additionally, off campus, the University owns or leases the following:

- 4350 South Service Road, Burlington Ron Joyce Centre (east side)
- 4350 South Service Road, Burlington Farmland (west side)
- 200 Longwood Rd South, Hamilton McMaster Automotive Resource Centre (MARC) Warehouse (MIP)
- 175 Longwood Rd South, Hamilton The Atrium Building at McMaster Innovation Park (MIP), aka The Atrium@MIP (Various Suites)
- 155 Chatham Street, Hamilton (MIP) (undeveloped)
- o 270 Longwood Road South, Hamilton BEAM (Fraunhofer)
- o 565 Sanatorium Road, Hamilton Chedoke Hospital (leased space)
- 25 Charlton Avenue East, Hamilton, Suites: 300, 303, and 702 Family Medicine
- 30 Birge Street, Hamilton David Braley Research Institute (leased space)
- 237 Barton Street East, Hamilton Hamilton General Hospital (leased space)
- 699 Concession Street, Hamilton Juravinski Cancer Centre (leased space)
- 100 West 5th Street, Hamilton Juravinski Centre for Integrated Healthcare (leased space)
- o 711 Concession Street, Hamilton Juravinski Hospital (leased space)
- o 1475 Upper Ottawa St, Hamilton Stonechurch Family Health Centre
- 2757 King Street East, Hamilton St. Joseph's Community Health Services (leased space)
- 50 Charlton Avenue East, Hamilton St. Joseph's Healthcare (leased space)
- 1140 King Street West, Hamilton St. Paul's Anglican Church in Westdale (leased space)

- 10B Victoria Street, Kitchener McMaster Michael G. DeGroote School of Medicine in the Integrated Health Building, Waterloo Regional Campus, Education Services, Faculty of Health Sciences
- o 304 Victoria Avenue, Hamilton Victoria Medical Center (leased space)
- 25 Main Street West (leased space)
- o 88 Forsyth Avenue North, Hamilton
- 100 Main Street West, Hamilton David Braley Health Sciences Centre
- (south side)
- 100 Main Street West, Hamilton Parking (north side)
- o One James North, Hamilton -
- (previously known as The Downtown Centre, i.e., DTC) (leased space at Lloyd D. Jackson Square):
 - The Centre for Continuing Education (CCE),
 - Finance,
 - University Advancement (UA),
 - Institutional Research and Analysis (IRA)
- o 47 Whitton Road, Hamilton
- o 182 Sterling Street, Hamilton
- Existing houses bound by Forsyth Avenue South, Traymore Avenue, Dalewood Avenue, and Main Street West
- 1221 Lakeshore Road, Burlington Halton McMaster Family Health Centre at Joseph Brant Hospital
- 1355 Main Street West, Hamilton Canadian Martyrs (licensed space)
- Brock University, Level 200 @ 500 Glenridge Ave., St. Catharines (leased space, Education Services)
- o 96 Forsyth Avenue North, Hamilton
- o 106 Forsyth Avenue North, Hamilton
- 110 King Street West, Hamilton (leased space)
- 199 James Street North, Unit 2, Hamilton (leased space, Sociology)
- 1205 Rymal Road East, Hamilton (leased space, Faculty of Health Sciences)
- 142 Queenston Street, St. Catharines (leased space)
- 16-24 Ontario Street, St. Catharines (leased space, Medical Clinic)
- 180 James Street South, Hamilton (leased space)
- o 249 Caroline St S, Unit A, Hamilton (leased space, School of Nursing)
- 293 Wellington Street North, Hamilton (leased space, Family Medicine -Surgery), Suites: 110, 111
- 3155 Harvester Rd., Burlington (leased space, Family Medicine), Suites: 207, 208, 209
- 495 Woodward Avenue, Hamilton (leased space)
- 1960 Main Street West, Ancaster (leased space)
- o 555 Prince Charles Drive North, Suite 201, Welland (leased space)
- 700 Bay Street, Suite 2303, Toronto (leased space)
- 701 Main St. West, Suite 101, Hamilton Family Medicine Maternity Centre (leased space)
- o 162 Ward Avenue, Hamilton Parking lot (leased lot)
- Lot 56, of Hamilton Plan 1475 (MIP)
- o 245 James Street North, Hamilton (leased space)
- o 200 Victoria Street, Toronto, unit 1506 (leased space)

- Property on the north side of Lower Lions Club Road, east of Louise Drive, Ancaster – (undeveloped 115 acres)
- 120 Forsyth Avenue North, Hamilton (The Oval at Mayfair Crescent: 5.5 acres)
- o Grant Boulevard at Barrie Street, Hamilton (undeveloped)
- 1190 Main Street West, Hamilton (between Forsyth Avenue South and Dalewood Avenue) (undeveloped)
- o 1480 Sandhill Drive, Ancaster (leased space) Suites: 9A
- o 777 Bay Street, Toronto Capital Hill Group (leased space)
- 459 Hume Street, Collingwood Collingwood General and Marine Hospital (leased space)
- o Osler Drive, south side, east of University Plaza (undeveloped)
- o Osler Drive, north side, east of University Plaza (undeveloped)
- o 132 Mayfair Crescent, Hamilton
- o 8 Mayfair Crescent, Hamilton

Appendix F: 2020/21 Approved Project List for Deferred Maintenance Items

Conveyance and Interior Finishes 10 Mills Library 12 Hamilton Hall 13 Ficoring replacement 14 Thode Library 15 Togo Saimon Hall 16 John Hodgins Engineering 16 John Hodgins Engineering 16 John Hodgins Engineering 17 Common washrooms and corridor upgrades 18 Commons Building 19 HVAC upgrades and additional noise mitigation 19 John Hodgins Engineering 20 General Sciences Building 21 HVAC upgrades 22 General Sciences Building 23 HVAC upgrades 24 Thode Library 25 General Sciences Building 26 HVAC upgrades 27 And Sepace AHU 1, 2, 3 and 5 28 Commons Building 29 Replace AHU 1, 2, 3 and 5 20 Mills Library 20 Gilmour Hall 20 Gilmour Hall 21 Replace AHU 1, 2, 3 and 5 22 Gilmour Hall 23 Life Sciences Building 24 Ivor Wynne Centre 25 Gym 26 Gym 26 Gym 27 Sepace Replace Rowater system 28 Commons Building 29 Replace Rowater system 29 Institute of Applied Health Sciences 20 Deferred maintenance work, cost shared with Mohawk 20 Sib-Total 21 Sib-Total 22 Commons Building 23 Replace high voltage sub-station 24 Ivor Wynne Centre 25 Replace high voltage sub-station 26 Commons Building 27 Replace bub-station 28 Commons Building 29 Replace bub-station work, cost shared with Mohawk 29 Life Sciences Building 29 Replace high voltage sub-station 39 Life Sciences Building 39 Life Sciences Building 39 Replace high voltage sub-station 39 Life Sciences Building 30 Replace high voltage sub-station 30 Life Sciences Building 30 Replace high voltage sub-station work and the switchboard 30 Life Sciences Building 30 Replace high voltage sub-station 30 Life Sciences Building 30 Life Sciences Building 31 Replace high voltage sub-station work and the switchboard 32 Life Sciences Building 33 Life Sciences Building 34 Replace high voltage sub-station work and switchboards 35 Life Sciences Building 36 Life Sciences Building 37 Munde Replace Munder of burried cables and utilities - Sub-Total 38 Replace Sub-Total 39 Life Sciences Building 39 Life Sciences Building 39 Life Sciences Building 39 Life Sciences Building 30 Life Sciences Building 30 Life Scien	Estimate (\$)	Building Name Scope
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Exterior Enclosure 2a Vov Wynne Centre 7 Alumen House 8 Replace windows on 2nd floor south offices 7 Alumen House 8 Replace windows 1.5 Nuclear Reactor 8 Replace screens in the Sherman Centre Basement 1.0 Mills Library 1.2 E.T. Clarke 8 Replace mindows 1.3 Nuclear Reactor 8 Replace screens in the Sherman Centre Basement 1.2 E.T. Clarke 8 Sub-Total 5 Sub-Total 6 Sub-Total 7 Sub-Total 7 Sub-Total 8 Sub-Total 8 Sub-Total 8 Sub-Total 8 Sub-Total 8 Sub-Total 9 Sub-Total 1.0 Mills Library 1.1 Sub-Total 1.2 Sub-Total 1.2 Sub-Total 1.3 Sub-Total 1.4 Sub-Total 1.5 Sub-Total 1.5 Sub-Total 1.6 Sub-Total 1.7 Sub-Total 1.7 Sub-Total 1.8 Sub-Total 1.9 Sub-Total 1.9 Sub-Total 1.0 Mills Library 1.0 Mills Library 1.0 Sub-Total		
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Sub-total 5	\$1,100,000	
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McMaster University, Facility Services, 2020/2021 Capital Plan