Members are reminded of the requirement that they give notice of conflict of interest prior to consideration of any matter on the Board open and closed session agendas

BOARD OF GOVERNORS MEETING

1:00 p.m., Thursday, June 23, 2016
Room 4155 Stevenson Hall

1. Adoption of Agenda - Open Session
2. Report of the President (Amit Chakma)
3. Unanimous Consent Agenda - **Appendix I**
   - Includes Open Session Minutes of the Meeting of April 21, 2016
4. Business Arising from the Minutes
5. Reports of Committees:

   Property & Finance Committee - **Appendix II** (Rick Konrad)
   By-Laws Committee - **Appendix III** (Matthew Wilson)
   Senior Operations Committee - **Appendix IV** (Hanny Hassan)
   Audit Committee - **Appendix V** (Jim Knowles)
   Fund Raising and Donor Relations Committee - **Appendix VI** (Laura Gainey)

6. Items Referred by Senate - **Appendix VII** (Amit Chakma)
7. Questions from Members
8. Other Business
9. Adjournment to Confidential Session

Meetings of the Board beginning at 1:00 p.m. will normally end by 4:30 p.m. unless extended by a majority vote of those present.

SUMMARY OF AGENDA ITEMS – June 23, 2016 - OPEN SESSION

Adoption of Agenda	ACTION

Report of the President	INFO

Unanimous Consent Agenda – Appendix I	ACTION

Minutes of the Meeting of April 21, 2016 – Open Session only for web	ACTION

Report of the Property & Finance Committee- Appendix II

Rapid Transit Recommendations	ACTION
Federal Infrastructure Program Submissions	INFO
Investment Committee Membership	INFO
Ian McWhinney Chair in Family Medicine – Revisions to Terms of Reference	INFO
Alice Munro Chair in Creativity	INFO
Fowler Kennedy Lease Renewal	INFO
Ontario Auditor General's Report – University Intellectual Property	INFO
UHIP Fees 2016-17	INFO
Ancillary Financial Report	INFO
Quarterly Ratio Report on Non-Endowed Funds	INFO
New Scholarships and Awards	INFO

Report of the By-Laws Committee- Appendix III

Terms of Reference of the Governance & By-Laws Committee	ACTION
Revisions to Terms of Reference of Standing Committees (a) Property & Finance Committee (b) Fund Raising & Donor Relations Committee (c) Senior Operations Committee	ACTION

Senior Operations Committee – Appendix IV

Appointments to the University Discipline Appeals Committee	INFO
Appointments to the Property & Finance Committee	INFO
Appointments to Western Fair	INFO

Audit Committee – Appendix V

Retirement Income Fund Financial Statement for the year ended December 31, 2015	ACTION
Western Retirement Income Fund – KPMG Audit Findings Report	INFO
Western Retirement Plans – Report to the Audit Committee for the year ended December 31, 2015	INFO

<u>Fundraising & Donor Relations Committee</u> – Appendix VI

Fundraising Activity Quarterly Report to April 30, 2016	INFO

<u>Items Referred by Senate</u> - Appendix VII

Appointment Procedures for Senior Academic and Administrative Officers of the University – Revision to Section R. Associate Vice-President (Research)	ACTION
Revisions to MAPP 7.12 Policy for the Use of Animals in Research, Testing and Teaching	ACTION
Report of the Senate ad hoc Committee on Renewal	INFO
Final Report of the URB Task Force Steering Committee on Support for SSAH Research at Western	INFO
Western Degree Outcomes (Undergraduate)	INFO
Draft Indigenous Strategic Plan	INFO
Report of the Academic Colleague	INFO
President’s Medal for Distinguished Service	INFO

Questions from Members	

Western

President & Vice-Chancellor

REPORT OF THE PRESIDENT

To: Board of Governors

From: Amit Chakma

Date: June 15, 2016

Re: President's Report to the Board

For the June 23, 2016 Board meeting, I'm pleased to provide the following update on important developments and achievements since the last meeting of the Board on April 21, 2016.

Provincial government update:

On June 13, Premier Wynne announced a major midterm cabinet shuffle that rebranded the Ministry of Training, Colleges & Universities under the new banner of **Advanced Education & Skills Development (AESD)** and placed the newly named ministry under the leadership of London North Centre MPP Deb Matthews. With the change, Minister Matthews leaves her role as president of the Treasury Board, but will continue to serve as Deputy Premier, in addition to assuming new responsibilities as chair of cabinet as well as leading the newly created Ministry Responsible for Digital Government.

With the announcement, an updated mandate for AESD was released with the following statement:

> Ontario's economic success depends on a highly skilled workforce. Ontario already has one of the Organisation for Economic Co-operation and Development's highest postsecondary attainment rates, at 67 per cent. Measures such as the new Ontario Student Grant, to be implemented in September 2017, will increase access to high-quality college and university education even further. But more must be done to ensure that all Ontarians have the education and training they need to succeed in a modern economy. The ministry will work with the panel on a Highly Skilled Workforce Strategy to bring forward a comprehensive plan to develop a more innovative and skilled workforce. Working with the private sector and post-secondary education institutions, the ministry will help ensure Ontario has the skilled workforce it needs to compete in the global economy.
>
> **The Ministry of Advanced Education and Skills Development** will encompass the current mandate of the Ministry of Training, Colleges and Universities. In addition, employment and training programs in other ministries will be coordinated through the new ministry to create a more seamless experience for workers and job seekers and to help Ontarians prepare for the jobs of the future.

Western University | Stevenson Hall, Suite 2107 | London, ON, Canada N6A 5B8
t. 519.661.2111 ext. 83745 f. 519.661.3139 www.westernu.ca

As Ontario's first ever Minister Responsible for Digital Government, Matthews has been given a mandate "to ensure Ontario is the most modern and digital government in Canada... and becomes a North American leader in accelerating the way citizens engage and interact with their government through the power of digital technology."

Also implicated in the cabinet shuffle was former Training, Colleges & Universities minister Reza Moridi, who will now lead the expanded Ministry of Research, Innovation & Science. Supporting Moridi in his new role will be a Chief Science Officer, a new position created to help lead the government's efforts to advance both basic and applied research.

I have extended my personal congratulations to both Ministers on behalf of Western, and look forward to working with them in their efforts to help students realize their educational goals and to help researchers break new frontiers in discovery and innovation.

Federal government update:
In response to the new $2-billion ***Post-Secondary Institutions Strategic Investment Fund*** **(SIF)** announced in the March 2016 federal budget, Western has made three separate applications to the first round of the competition, which had a deadline of May 9. SIF offers institutions up to 50% of eligible costs to support and accelerate the improvement and expansion of research and commercialization facilities, along with the projects that reduce greenhouse gas emissions and improve the environmental sustainability of their facilities. The balance of funding for these projects must come from some combination of the institutions themselves and/or other levels of government. Another important stipulation is that projects must be substantially completed by April 30, 2018 to qualify.

Western's three proposals included: 1) "Three C+ Innovation Centre" that will foster innovation and collaboration between Engineering and other disciplines in the areas of sustainability, biomedical engineering, materials and biomaterials science, and information & communication technology; 2) Western Interdisciplinary Research Building, which will be home to the University's first multidisciplinary Cluster of Research Excellence in Cognitive Neuroscience, and; 3) modernization of core medical research facilities, including the creation of a new infectious disease facility and the renewal of animal care facilities. We await word from the government on its allocation decisions which are expected to be made shortly due to the tight timelines on the SIF program implementation.

Meanwhile, the federal government has named a nine-member expert panel, chaired by former University of Toronto president and Western alumnus David Naylor, to conduct a review of how it funds university-based scientific research.

Reporting to Science Minister Kirsty Duncan, the panel has been given a broad mandate to study all three federal granting councils (NSERC, SSHRC and CIHR) along with the ancillary organizations such as the Canada Foundation for Innovation and Genome Canada that also allocate research funding to the post-secondary sector. Collectively, these funding bodies will distribute more than $3 billion to Canadian researchers and their labs this year, and the timing for such a review is important given the increasing demands and expectations placed on government to support innovation in our universities.

When asked what she most wanted the panel to address, Minister Duncan was quoted in a *Globe and Mail* report as saying: “We want to make sure we’re keeping pace in a fast-changing world … so where are the gaps, where are the challenges, how can we do this better?” She added, as an example, the need to address the plight of younger researchers who, in many cases, must wait until they are in their 40s to get federal support.

The expert panel is expected to deliver its report in six months and includes the following members (in addition to David Naylor as Chair):

- Robert Birgeneau, former University Toronto President and former Chancellor of the University of California (Berkeley)
- Martha Crago, Vice-President (Research), Dalhousie University
- Mike Lazaridis, Co-founder, Research in Motion
- Claudia Malacrida, Associate Vice-President (Research), University of Lethbridge
- Arthur McDonald, Nobel Prize winner and Professor Emeritus (Physics), Queen’s University
- Martha Piper, Acting President, University of British Columbia
- Remi Quirion, Chief Scientist, Government of Quebec
- Anne Wilson, Professor (Psychology), Wilfrid Laurier University

Changes to Homecoming:
On May 31, we announced plans to move Homecoming to Saturday, Oct. 22 in an effort to address various concerns associated with the unsanctioned and unsupervised street party that has taken place in recent years on Homecoming weekend. Previously planned Faculty reunions, as well as the Alumni Awards of Merit and Golden Anniversary dinners will still take place as originally planned on Reunion Weekend (September 30 to October 2).

Before making this difficult decision, University administrators, London Police Service, Middlesex-London Emergency Medical Services, City of London officials, and hospital medical staff had held several meetings to share concerns this street party has escalated to such levels that more decisive action is required. Despite our best efforts to dissuade students from attending the unsanctioned street party on Broughdale

Avenue adjacent to Western's campus, it has become an unsafe environment attracting as many as 10,000 young people. This has involved not only Western students, but many others who have no connection to Western, including bus loads from other universities, high school students, as well as individuals police have identified as having criminal histories. These kinds of parties are not unique to London and are occurring with more frequency and severity in university and college towns and cities throughout North America. Our hope is that the increased academic pressures in terms of assignments that are due and exam preparation that is the norm at Ontario universities in late October will not only reduce the number of Western students who attend the party, but also the number of students who come from other universities. As well, there is a better chance the weather will be less favourable for a street party in late October.

Moving Homecoming is only one of the means by which we will be encouraging students to find safer forms of entertainment, and I remain personally committed to doing everything we can to build awareness of how serious the Broughdale issue has become. Western is fortunate to have the support of important community partners such as the London police and we will continue to work collaboratively to address the problem.

Reaction to this decision from alumni, students, faculty and staff has been mixed. I have received feedback demonstrating that there are many people who are understanding and supportive of our decision, while there are others who are disappointed by the move. However, we remain steadfast, and the University will roll out a targeted campaign in the fall to ensure that students understand the legal and safety risks they are taking when they host or attend large parties, including possible repercussions under Western's Code of Student Conduct as well as the dangers of binge drinking.

For decades, Western has prided itself on providing a Homecoming experience second to none in Canada, and hopes to continue providing this to alumni into the future. In terms of plans for 2017, a full debriefing will take place in late October to determine how the University will approach Homecoming moving forward.

Timney to lead COU Quality Assurance Council:

On May 31, the Council of Ontario Universities announced that Brian Timney has been appointed Executive Director of Quality Assurance, effective July 1, 2016. As a former Dean of Social Science, active member of our Board of Governors, and a long-time member and Chair of Western's Senate Committee on Academic Policy and Awards, Brian is ideally suited for this important role at COU, where he will take the lead role in ensuring the quality of programs at Ontario's publicly assisted universities. We wish Brian all the best for success in this new chapter of his career.

ACTIVITIES OF THE PRESIDENT

(April 13, 2016 – June 15, 2016)

April	13-15	San Francisco	External meetings
	14		Alumni Reception
	15		Media interview
	19	London	Ivey Advisory Board meeting
	19		Lunch meeting with faculty member
	19		MTCU teleconference
	19		Faculty Scholars Award Reception
	19		Stem Cells 101 Event
	21		Internal meetings
	21		Board of Governors lunch and Board meeting
	21		Dinner meeting
	22		Hospitality Retreat
	22		Internal meetings
	22		MTCU teleconference
	22		CST Board of Directors teleconference
	25		VP Annual Review (2)
	25		Honorary Degree Committee meeting
	25		External meetings
	25		Distinguished University Professorship Dinner
	26		Ivey School of Business meeting
	26-27	Toronto	Universities Canada Membership meeting
	28	London	Teleconference with external stakeholder
May	2		MTCU teleconference
	2-4	Calgary	Alumni Reception
	3		Meetings with external stakeholders
	4	London	CST Board of Directors teleconference
	5		USC Partners Breakfast
	5		Honorary Degree phone call
	5		Internal meetings
	5	Toronto	Extraordinary Mustang Gala
	6	London	Internal meetings
	6		Telephone calls with external stakeholders
	6		Senate
	9		Internal meetings
	9		Lunch meeting with USC President
	9		Chancellor Rotman Portrait Unveiling
	9		Donor recognition event and dinner
	10		Schulich School of Medicine & Dentistry meeting
	10		Property & Finance Committee meeting
	10		Senior Operations Committee meeting
	11		Telephone calls with external stakeholders
	11	Toronto	Dinner meeting
	12-13	Ottawa	U15 Executive Heads meeting

May	16-17	Grand Bend	Academic Leaders Summer Conference
	18	London	Meetings with external stakeholders
	19	Toronto	Campaign Executive Committee meeting
	19		COU Executive Heads Round Table
	19		Dinner meeting with external stakeholder
	23-2	Hong Kong	Meetings with external stakeholders
	26		Hong Kong Foundation Board meeting and dinner
	29		Hong Kong Ivey Convocation
	30-1	Hong Kong	International Advisory Board meeting
June	3	London	Internal meetings
	3		Meeting with external stakeholder
	3		Senate
	5		Professor Emeritus Receptions (I & II)
	6		Meeting with senior leaders
	6		Meeting with Board Chair
	6		MTCU teleconference
	6		Internal meetings
	6		Long Service Awards
	7		Audit Committee meeting
	7		Property & Finance Committee meetings
	7		Senior Operations meeting
	7		Bylaws Committee meeting
	7		Coach’s Recognition Dinner
	8		Internal meeting
	8 - 9	Toronto	CST Board of Directors meetings
	9	Toronto	CIFAR Event- Our Musical Brain
	10	Whitby	Government announcement
	10	London	Interview
	10		Dinner in honour of Honorary Degree Recipient
	13		Meeting with internal stakeholder
	13		Staff International Engagement Program and Luncheon
	13		Telephone call with external stakeholder
	13		FRDRC teleconference
	14		Convocation Ceremonies (2)
	14		Meeting with Consul General
	14		Dinner in honour of Honorary Degree Recipients
	15		Convocation Ceremonies (2)
	15		Convocation lunch
	15		Dinner in honour of Honorary Degree Recipients

Board of Governors
June 23, 2016

APPENDIX I

UNANIMOUS CONSENT AGENDA

FOR APPROVAL

Any member who wishes to ask a question, discuss, or oppose an item that is listed below may have it removed from the consent agenda by contacting the Secretary of the Board of Governors prior to the meeting or by asking that it be removed before the Chair calls for a mover and seconder for the following motion.

Recommended: That the following items be approved or received for information by the Board of Governors by unanimous consent:

Minutes

1.	Open Session Minutes of the Meeting of April 21, 2016	ACTION

Report of the Property & Finance Committee – Appendix II

2.	Federal Infrastructure Program Submissions	INFORMATION
3.	Investment Committee Membership	INFORMATION
4.	Ian McWhinney Chair in Family Medicine – Revisions to Terms of Reference	INFORMATION
5.	Alice Munro Chair in Creativity - Establishment	INFORMATION
6.	Fowler Kennedy Lease Renewal	INFORMATION
7.	Ontario Auditor General's Report – University Intellectual Property	INFORMATION
8.	UHIP Fees 2016-17	INFORMATION
9.	Ancillary Financial Report	INFORMATION
10.	Quarterly Ratio Report on Non-Endowed Funds	INFORMATION
11.	New Scholarships and Awards	INFORMATION

Senior Operations Committee – Appendix IV

12.	Appointments to University Discipline Appeals Committee	INFORMATION
13.	Appointments to Property & Finance Committee	INFORMATION
14.	Appointments to Western Fair	INFORMATION

Audit Committee – Appendix V

15.	Western Retirement Income Fund – KPMG Audit Findings Report	INFORMATION
16.	Western Retirement Plans – Report to the Audit Committee for the year ended December 31, 2015	INFORMATION

Fundraising and Donor Relations Committee – Appendix VI

17.	Fundraising Activity Quarterly Report to April 30, 2016	INFORMATION

Items Referred by Senate – Appendix VII

18.	Appointment Procedures for Senior Academic and Administrative Officers of the University – Revision to Section R. Associate Vice-President (Research)	ACTION
19.	Revisions to MAPP 7.12 Policy for the Use of Animals in Research, Testing and Teaching	ACTION
20.	Western Degree Outcomes (Undergraduate)	INFORMATION
21.	Report of the Academic Colleague	INFORMATION
22.	President’s Medal for Distinguished Service	INFORMATION

<u>The Unanimous Consent Agenda</u>

The Board's parliamentary authority -- *Sturgis Standard Code of Parliamentary Procedure* -- explains the consent agenda:

> Organizations having a large number of routine matters to approve often save time by use of a *consent agenda*, also called a *consent calendar* or *unanimous consent agenda*. This is a portion of the printed agenda listing matters that are expected to be non-controversial and on which there are likely to be no questions.
>
> Before taking the vote, the chair allows time for the members to read the list to determine if it includes any matters on which they may have a question, or which they would like to discuss or oppose. Any member has a right to remove any item from the consent agenda, in which case it is transferred to the regular agenda so that it may be considered and voted on separately. The remaining items are then unanimously approved en bloc without discussion, saving the time that would be required for individual votes.

A number of Canadian university Boards have employed the consent agenda format to include not only routine approval items, but also information items. One reason for using this format is to allow the Board to focus on major items of business. While approval of an omnibus motion saves time at Board meetings, Board members will want to review the agenda materials carefully in order that they properly discharge their responsibilities.

How it works:

The Secretary identifies action and information items that are routine and/or likely non-controversial. In so doing, she may consult with the Chair of the Board, the relevant committee chair, and principal resource persons. In each Committee's report, these items are noted in the list of items at the beginning of the report. Action and information items on the agenda and in committee reports that are <u>not</u> noted on the consent agenda will be presented singly for discussion and voting (when appropriate).

When members receive their Board agendas, they should review all reports in the usual manner. **If any member wants to ask a question, discuss, or oppose an item that is marked for the consent agenda, he or she can have it be removed from the consent agenda** by contacting the Secretary of the Board of Governors prior to the meeting or by asking that it be removed before the Chair calls for a mover and seconder for the motion to approve or receive, by unanimous consent, the items listed.

At the Board meeting, before the unanimous consent motion is presented for approval, the Chair of the Board (1) will advise the Board of items that are to be removed from the list, based on prior requests from Board members; and (2) will ask if there are any other items that should be removed from the list. The remaining items are then unanimously approved *en bloc* without discussion, saving the time that would be required for individual presentation and voting. Those matters that have been struck from the consent agenda will be handled in the usual way as each Committee's report is presented.

The minutes of the Board meeting will report matters approved as part of the consent agenda as "carried by unanimous consent". Information items received as part of the consent agenda will be reported as received.

MINUTES OF THE MEETING OF THE BOARD OF GOVERNORS

April 21, 2016

The meeting was held at 1:00 p.m., in Room 4155, Stevenson Hall.

PRESENT: Mr. H. Hassan, Chair
Ms. I. Birrell, Secretary

Mr. J. Adams
Dr. S. Armstrong
Dr. C. Beynon
Ms. W. Boye
Ms. C. Burghardt-Jesson
Dr. J. Capone
Dr. A. Chakma
Ms. S. Chrominska ☎
Ms. K. Cole
Dr. J. Deakin
Ms. L. Gainey
Mr. K. Gibbons
Dr. R. Giffin
Mr. J. Green
Mr. P. Jenkins
Mr. J. Knowles
Mr. R. Konrad
Ms. G. Kulczycki
Mr. M. Lerner
Mr. B. Ross
Mr. T. Sutherland
Dr. B. Timney
Dr. J. Toswell
Mr. M. Wilson

By Invitation: K. Campbell, R. Campbell, R. Chelladurai, H. Connell, S. Fazilat, L. Logan, A. Weedon

BG.16-33 **REPORT OF THE PRESIDENT**

The President's report, distributed with the agenda, consisted of the following topics: provincial government update, Advanced Manufacturing Consortium, federal government update, London Rapid Transit update and leadership update. He also reported on Western's budget, the work of the Provost's Task Force on University Budget Models and the work of the University Research Board Steering Committee on Social Sciences, Arts and Humanities Research.

BG-16-34 **UNANIMOUS CONSENT AGENDA** [Appendix I]

It was moved by P. Jenkins, seconded by B. Timney,

> That with the exception of item 14, Campus Community Police Service – 2015 Annual Report, the items listed in Appendix I, Unanimous Consent Agenda, be approved or received for information by the Board of Governors by unanimous consent.
>
> CARRIED

BG.16-35 **Minutes of the Previous Meeting**

The open session minutes of the meeting of January 28, 2016 were approved as circulated.

REPORT OF THE PROPERTY & FINANCE COMMITTEE [Appendix II]

BG.16-36 **2016-17 University Operating and Capital Budgets**

It was moved by R. Konrad, seconded by M. Lerner,

> That the Board of Governors approve the 2016-17 University Operating and Capital Budgets and the Proposed Program Specific Fees and Other Supplemental Fees for 2016-17.

R. Konrad stated that the budget is representative of Western's values and mission and thanked those who were involved in its preparation over many months of work.

Dr. J. Deakin presented a detailed overview of the budget, using slides attached to these minutes as **Appendix 1**. She highlighted the following:

- The internal and external budgetary context, including the provincial deficit, the continued funding formula review and the uncertain tuition framework beyond 2016-17.
- The alignment of the budget with Western's strategic priorities and the slight increase in operating revenues from the forecasted 2.5% to 3.7% in 2015-16, largely due to an unexpectedly high acceptance rate in Engineering.
- The general trend of flattening enrollment in most universities and keeping Western's enrollment numbers at steady-state between 5,100 – 5,500 first-year students.
- Revenue in 2016-17 is forecasted at $728.5M and expenditure at $732.4M, which will create an in-year deficit of $3.9M by year's end.
- In 2016-17, 65.9% of the operating revenues will be channeled to academic units, which is the highest rate among the U15 universities.
- The operating reserve will be drawn down to $9.5M by the end of the four-year cycle in 2018-19, from the current $48M in 2015-16.
- The capital budget will support long-range space plans and a total of $134.4M will be spent on new construction, repairs and modifications.

A member asked if there are plans to close down Ivey's EMBA program in Asia. Dr. Deakin responded that Ivey suspended admissions into the program this year and next, but it is looking for partnerships for the program for the future.

Answering a question regarding potentially increasing enrollments further, Dr. Deakin explained that Western is now at capacity for undergraduate student space and has physical constraints in classroom and study space, recreational facilities, and dining space, especially at UCC; however, there is still room to grow on the graduate side.

A member expressed concerns about the rapidly dwindling operating reserves forecasted in two years. Dr. Deakin explained that this can be curtailed if necessary by adjusting discretionary spending over the years.

The question was called and CARRIED.

BG.16-37 **Student Fee-Funded Units, Ancillaries and Academic Supports**

It was moved by R. Konrad, seconded by S. Chrominska,

> That the Board of Governors approve the 2016-17 budgets for Student Fee Funded Units, Ancillaries, and Academic Units summarized in the report entitled "Student Fee Funded Units, Ancillaries, Academic Support Units and Associated Companies."
>
> CARRIED

BG.16-38 **Student Organization Fee Proposals for 2016-17**

It was moved by R. Konrad, seconded by L. Gainey,

> That the organization fees for the University Students' Council for 2016-17 shown in Table 2 (full-time undergraduates) and Table 3 (part-time undergraduates) be approved, as requested by the USC.
>
> That the organization fees for the Society of Graduate Students shown in Table 2 (full-time graduate students – three terms) and Table 3 (part-time graduate students) be approved as requested by SOGS.
>
> That the organization fees for the Honors Business Administration Association for 2016-17 shown in Table 2, note (b) be approved, as requested by the HBAA.
>
> That the organization fees for the Master of Business Administration Association for 2016-17 shown in Table 2, note (c) be approved, as requested by the MBAA.
>
> CARRIED

BG.16-39 **Annual Report and Recommendations of the Student Services Committee**

It was moved by R. Konrad, seconded by P. Jenkins,

> That the ancillary fees collected by the University be those detailed in Annex 4, as recommended by the Student Services Committee.

In response to a concern regarding the composition of the Student Services Committee, Dr. Deakin responded that the membership is currently under review and once discussions conclude with all student organizations, any proposed changes to the fees protocol and the structure of the committee will be brought forward to the Board.

The question was called and CARRIED.

BG.16-40 **Information Items Reported by the Property & Finance Committee**

The Report of the Property & Finance Committee, detailed in Appendix II, contained the following items that were received for information by unanimous consent:

- Beryl Ivey Chair in One Health – Renaming and Revised Terms of Reference
- Neil McKenzie Chair in Cardiac Care – Establishment
- Vickie Blair Fellowship in Vascular Surgery – Name Change
- Sheldon H. Weinstein Chair in Diabetes Research – Amendments to Terms of Reference
- Quarterly Financial Report (Operating Budgets)
- Investment Committee Report
- Investment Committee Membership
- New Scholarships and Awards

REPORT OF THE BY-LAWS COMMITTEE [Appendix III]

BG.16-41 **Amendment to By-Law No. 1 – Paragraph F.1 – Attendance**

It was moved by M. Wilson, seconded by B. Timney,

> That By-Law No. 1, paragraph F.1 be amended to read as follows (amendment in italics):
>
> > A quorum of the Board consists of ten members, of whom at least five shall be members appointed or elected under clauses (b), (c), (d), and (h) of Section 9.(1) of the Act. *Attendance at special meetings and at up to two regular meetings per calendar year by teleconferencing or other electronic means is permitted*.
>
> CARRIED

BG.16-42 **Special Resolution No. 3 – Banking – Revisions to Officer Titles**

It was moved by P. Jenkins, seconded by B. Timney,

> That Special Resolution No. 3 – Banking be revised to recognize changes in signatories' titles as follows:
>
> > Manager, Treasury & Investments is now Director, Treasury Services
> > Research Accounting Manager is now Director, Research Finance
> > Supervisor of General Accounting/General Accounting System Manager is now Director, Financial Information Systems
>
> CARRIED (By Unanimous Consent)

BG.16-43 **Governance and By-Laws Committee – Draft Terms of Reference**

The draft terms of reference of the Governance and By-Laws Committee, detailed in Appendix III, Annex 3, were provided for information. G. Kulczycki voiced concern about item 4(k) regarding the development of a process for the review of administrative policies. She noted that many of the policies are complicated and this initiative could become very time consuming. M. Wilson took the concern under advisement noting that it is not the intent of the Governance and By-Laws Committee to take ownership of this process but that the other standing committees will be involved in determining the timing of reviews of policies over which they have oversight.

BG.16-44 **Implementation of the Report of the Governance Review Task Force**

Details regarding the implementation of recommendations contained in the report of the Governance Review Task Force, detailed in Appendix III, Annex 4, were received for information. M. Wilson noted that volunteers are sought to assist with the development of a Board performance assessment protocol, orientation, and on-going Board education programs.

REPORT OF THE SENIOR OPERATIONS COMMITTEE [Appendix IV]

BG.16-45 **Affiliation Agreement with Museum of Ontario Archaeology**

It was moved by L. Gainey, seconded by B. Timney,

> That the Board of Governors approve the proposed Affiliation Agreement with the Museum of Ontario Archaeology, attached as Appendix IV, Annex 1.

J. Deakin noted that the changes will make the Museum more independent and allow flexibility in its operations. The new relationship will allow the Museum to take responsibility for its own financial future without impacting the University, while maintaining the academic and research relationship between the two institutions.

The question was called and CARRIED

BG.16-46 **Code of Student Conduct Review Committee**

It was moved by P. Jenkins, seconded by B. Timney,

> That the Board of Governors strike a review committee for the Code of Student Conduct with membership as follows:
>
> A Dean or Associate Dean appointed by the President (Chair)
> Associate Vice-President, Student Experience
> Associate Vice-President, Housing and Ancillary Services (or designate)
> Vice-Provost (Graduate & Postdoctoral Studies) (or designate)
> Chair, University Disciplinary Appeals Committee
> President of USC (or designate)
> President of SOGS (or designate)
> University Legal Counsel
> Associate University Secretary
>
> CARRIED (By Unanimous Consent)

BG.16-47 **Information Items Reported by the Senior Operations Committee**

The report of the Senior Operations Committee, detailed in Appendix IV, contained the following items that were received for information by unanimous consent:

> Appointments to University Discipline Appeals Committee
> Appointment to the Audit Committee

Note: M. Jadd and J. Scarfone were found to be ineligible for membership on UDAC because they are students at an Affiliate University College. Two undergraduate students will be appointed in May to UDAC.

REPORT OF THE AUDIT COMMITTEE [Appendix V]

BG.16-48 **Campus Community Police Service – 2015 Annual Report**

The Campus Community Police Service – 2015 Annual Report, detailed in Appendix V, Annexes 1a and 1b, was received for information. A member voiced concern about the few number of women on the Campus Community Police Service (CCPS). G. Kulczycki provided an overview of staffing: 27 personnel with 12 special constables plus four sergeants for day-to-day operations; four communications staff; one sergeant who does accreditation and one sergeant who oversees Crime Prevention Through Environmental Design (CPTED). There are 20 male employees and seven female employees. All five communications officers are female; one administrative officer is female and the CPTED sergeant is female. Ten female employees since 2007 have been hired away by city police agencies. There is an ongoing effort to attract and retain female police officers.

Responding to a comment that the number of mental health cases dealt with by Campus Police is increasing, G. Kulczycki said that police must be involved in cases where students are in sufficient distress to be taken to the hospital. The development of a mobile crisis team in London has assisted Campus Police on several occasions. However, she noted that Western has a significant number of supports in place for students and currently has no wait lists for other mental health supports such as psychologists, counsellors, social workers, or peer support. The Wellness Education Centre is now open in the UCC and will help students identify what support is available to them.

BG.16-49 **<u>Information Item Reported by the Audit Committee</u>**

The report of the Audit Committee, detailed in Appendix V, contained the following item that was received for information by unanimous consent:

Western Office of the Ombudsperson Annual Report 2014-15

REPORT OF THE FUND RAISING AND DONOR RELATIONS COMMITTEE [Appendix VI]

BG.16-50 **Information Item Reported by the Fund Raising and Donor Relations Committee**

The report of the Fund Raising and Donor Relations Committee, detailed in Appendix VI, contained the following item that was received for information by unanimous consent:

Fundraising Activity Quarterly Report to January 31, 2016

ITEMS REFERRED BY SENATE [Appendix VII]

BG.16-51 **Performance Indicators Report**

The Board received for information the Performance Indicators Report detailed in Appendix VII, Annex 4. J. Deakin provided an overview of the report using slides contained in **Appendix 2**.

A member asked if students' well-roundedness was measured anywhere, as the charts only provide information about entering grades. Dr. Deakin responded that it is not explicitly measured, but a lot of programs use other tools during their admission process, such as portfolios, personal statements or performance tests.

In response to the question whether increased entering grades created an increased level of mental health issues because of pressure on students, Dr. Deakin explained that schools across the province are dealing with the same mental health issues. Given the variability of entrance standards across the system, there would not seem to be a correlation.

A member raised concern about local students not being able to get into Western due to high entering grade requirements, thus creating a potential financial burden for local families whose children might not be able to stay in London. Dr. Deakin responded that the three affiliated university colleges have lower entrance grades, which might alleviate the problem somewhat. She also mentioned that a small number of places will be created in the Faculty of Arts and Humanities this year for students with lower entering averages on a trial basis, as one measure to help that Faculty boost its enrollment.

BG.16-52 **Information Items Reported by Senate**

Appendix VII, Items Referred by Senate, contained the following items that were received for information by unanimous consent:

- 2016-17 University Operating and Capital Budgets
- 2016 Entrance Standards for Undergraduate First-Year Admissions
- Five Year Enrolment Projections
- Report on Year One Class and Entering Averages
- Report from the Provost's Task Force on University Budget Models
- Report of the Graduate Funding Subcommittee on the Provost's Task Force on Budget Models
- Working Group on Information Security (WGIS) 2015 Annual Report
- Report of the Academic Colleague
- Teaching Award Recipients 2015

- Report of the Honorary Degrees Committee
- Board Report on Senate Agenda

<u>QUESTIONS FROM MEMBERS</u>

BG.16-53 **<u>University Maintenance</u>**

Responding to a question about maintenance on campus and the recent closure of the University bridge, G. Kulczycki said that regular inspections occur and that a preventative maintenance program is in place. An infrastructure study is underway to review safety as well as adequacy. This report will come to the Board in due course.

The meeting adjourned to the *confidential session*.

H. Hassan
Chair

I. Birrell
Secretary

2016-17 Operating and Capital Budgets

Board of Governors
April 21, 2016

Western

1

External Context

- Provincial Deficit and Debt continue at very high levels
- Funding Formula Review
  - Future of enrolment growth funding ?
- Current Tuition Framework ends with 2016-17

Western

2

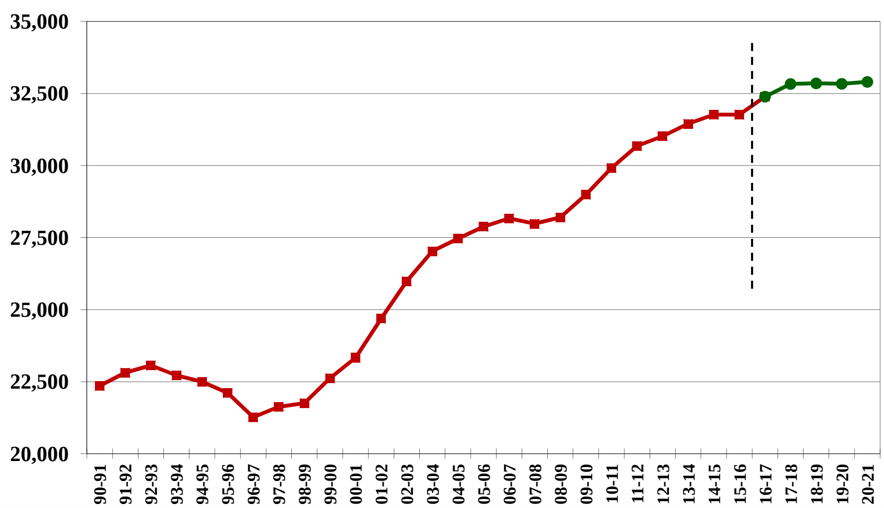
Western's Planning Parameters

- Moving to Second Year of 4-Year Plan
- Recommendations Guided by Strategic Plan
- Enrolments reaching Steady-State
  - Undergraduate: First-Year Class of about 5,100
    - With 550 International – growing to 600
  - Graduate: as per Faculty Plans
- Revenue Sharing Continues (contingent on enrolments)
- Tuition Rates for 2016-17
  - Domestic Rates at Maximum of 3% Overall
  - Undergrad Int'l: still moving towards Ontario-U6 levels

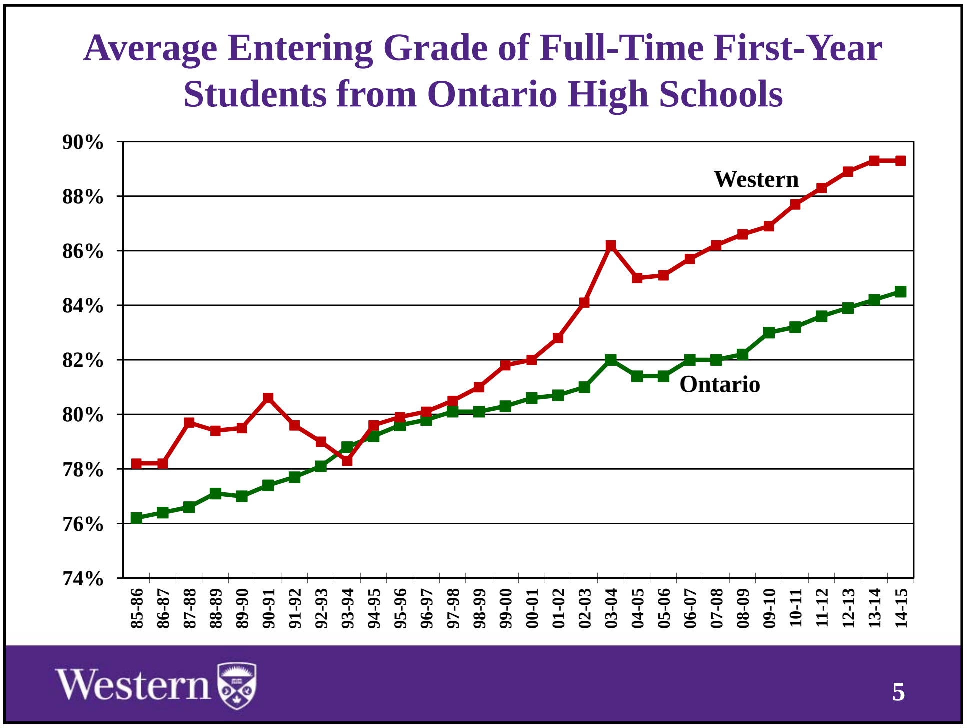
Western 3

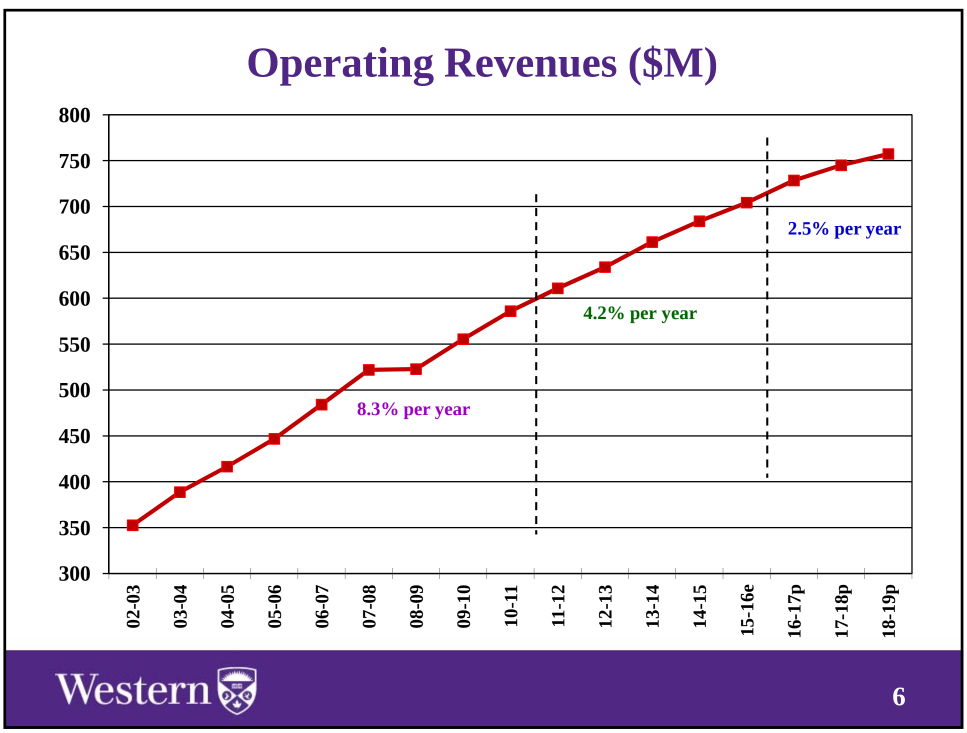
Western: Total Constituent FTE Enrolment

(Full-Time plus Part-time FTEs)



Western 4


Average Entering Grade of Full-Time First-Year Students from Ontario High Schools
90%
88%
86%
84%
82%
80%
78%
76%
74%
Western
Ontario
85-86
86-87
87-88
88-89
89-90
90-91
91-92
92-93
93-94
94-95
95-96
96-97
97-98
98-99
99-00
00-01
01-02
02-03
03-04
04-05
05-06
06-07
07-08
08-09
09-10
10-11
11-12
12-13
13-14
14-15
Western
5


Operating Revenues ($M)
800
750
700
650
600
550
500
450
400
350
300
8.3% per year
4.2% per year
2.5% per year
02-03
03-04
04-05
05-06
06-07
07-08
08-09
09-10
10-11
11-12
12-13
13-14
14-15
15-16e
16-17p
17-18p
18-19p
Western
6

The 2016-17 Operating Budget

Western

7

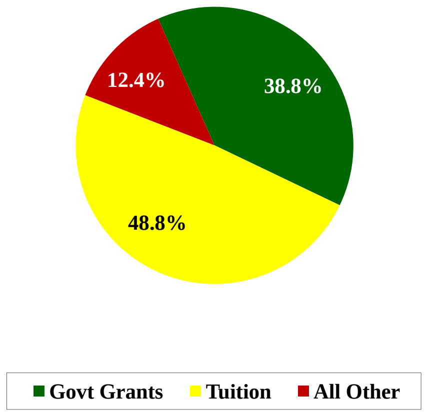
Summary of the 2016-17 Operating Budget
(Table 2)

- Revenue Forecast = $ 728.5M
  - Increase of 3.4%
- Expenditure Plan = $ 732.4M
  - Increase of 5.3%
- Projected In-Year Position = $ -3.9M
- Projected Operating Reserve = $ 44.1M
  - Forecast to be at $9.5M at end of 4-year period

Western

8

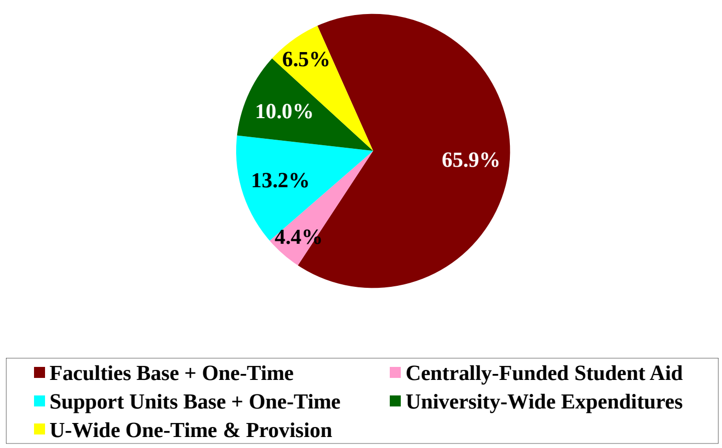
Projected 2016-17 Operating Revenues (Total = $728.5M)



Western

9

2016-17 Operating Expenditures (Total = $732.4M)



Western

10

Our Strategic Plan Priorities

Pillar	Priority
1	RAISING OUR EXPECTATIONS: CREATE A WORLD-CLASS RESEARCH AND SCHOLARSHIP CULTURE
2	LEADING IN LEARNING: PROVIDE CANADA'S BEST EDUCATION FOR TOMORROW'S GLOBAL LEADERS
3	REACHING BEYOND CAMPUS: ENGAGE ALUMNI, COMMUNITY, INSTITUTIONAL & INTERNATIONAL PARTNERS
4	TAKING CHARGE OF OUR DESTINY: GENERATE AND INVEST NEW RESOURCES IN SUPPORT OF EXCELLENCE

Investments and New Initiatives in this Budget

Initiative	Investment	Strategic Plan Pillars
Support for the Long-Range Space Plan *The Integrated Learning & Innovation Centre*	$15 M One-Time	1, 2
Strategic Expansion of Engineering	$5.5 M One-Time & $800K Base (self-funding plan)	1, 2, 4
Scholarship Initiatives in SSHRC Disciplines Endowment	$5 M One-Time & One-Time $200K	1, 4
Pedestrian-Friendly Initiatives & Campus Safety	$2 M One-Time	2
Strengthen Library Acquisitions Budget	$1.1 M One-Time & $250 K Base (in each of next 3 years)	1, 2, 4
Energy Conservation Initiatives	$1.5 M One-Time	4
Entrepreneurship Initiatives	$1 M One-Time	1, 2

Investments and New Initiatives in this Budget

Investment / New Initiative	Investment	Strategic Plan Pillars
Alice Munro Endowed Chair in Creativity	$500 K One-Time	1 3, 4
University Advertising Initiatives	$500K One-Time	3
Major Facilities/Infrastructure Needs in Faculties	$6.6 M One-Time	2

Western 13

The 2016-17 Capital Budget

Western 14

Overview of the 2016-17 Capital Budget

- **Supports Long-Range Space Plan** (Table 14)
- Major Projects: Underway or Soon-to-Start
  - Music Building
  - Academic Building to House FIMS and Nursing
  - Medical Research Facilities (M & I)
  - Modernization of University College
  - Interdisciplinary Research Building
  - New Engineering Building
  - Follow-on Projects in HSA and NCB
  - Integrated Learning and Innovation Centre
  - University-wide Infrastructure Projects
  - Parking-related Projects

Western 15

Overview of the 2016-17 Capital Budget

- Major Projects in Various Planning Stages
  - Modernization of Thames Hall
  - Follow-on Projects in Natural Sciences Centre
  - New Initiatives/Partnerships at the Research Parks
  - Renewal/Replacement/Expansion of Medical Facilities
  - Multi-level Parking Structures
    - Will require re-alignment of parking lot categories and increases to parking rates
  - Renewal of Spencer Engineering Building

Western 16

Overview of the 2016-17 Capital Budget

- **Total Spending of $134.4M** (Table 15, line 21)
  - $55.7M for New Construction (Table 18)
  - $25.9M for Major Renovations (Table 18)
  - $52.8M for All Other Expenditures
    - Utilities and Infrastructure
    - Modernization of Academic Facilities
    - General Maintenance and Modernization
    - Housing Renovations

Western 17

END

Western 18

Annual Report on Performance and Activity Indicators

Board of Governors
April 21, 2016

Metric A

Attract the brightest students as demonstrated through the highest entering grade average and the highest number of students with external awards among Canada's leading research-intensive universities.

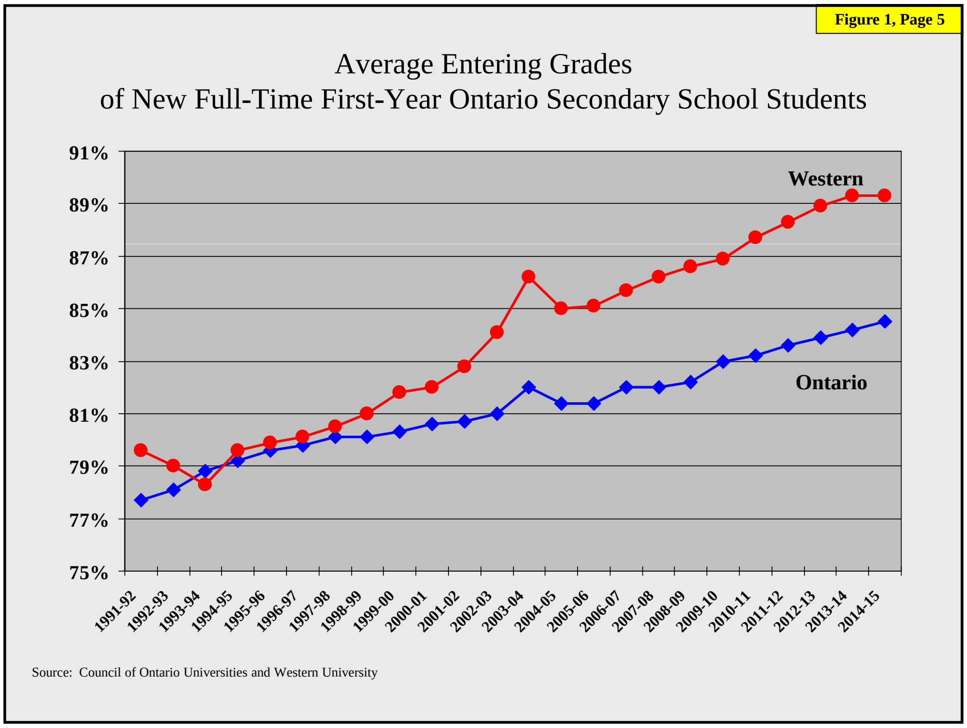


Figure 1, Page 5
Average Entering Grades
of New Full-Time First-Year Ontario Secondary School Students
91%
89%
87%
85%
83%
81%
79%
77%
75%
Western
Ontario
1991-92
1992-93
1993-94
1994-95
1995-96
1996-97
1997-98
1998-99
1999-00
2000-01
2001-02
2002-03
2003-04
2004-05
2005-06
2006-07
2007-08
2008-09
2009-10
2010-11
2011-12
2012-13
2013-14
2014-15
Source: Council of Ontario Universities and Western University

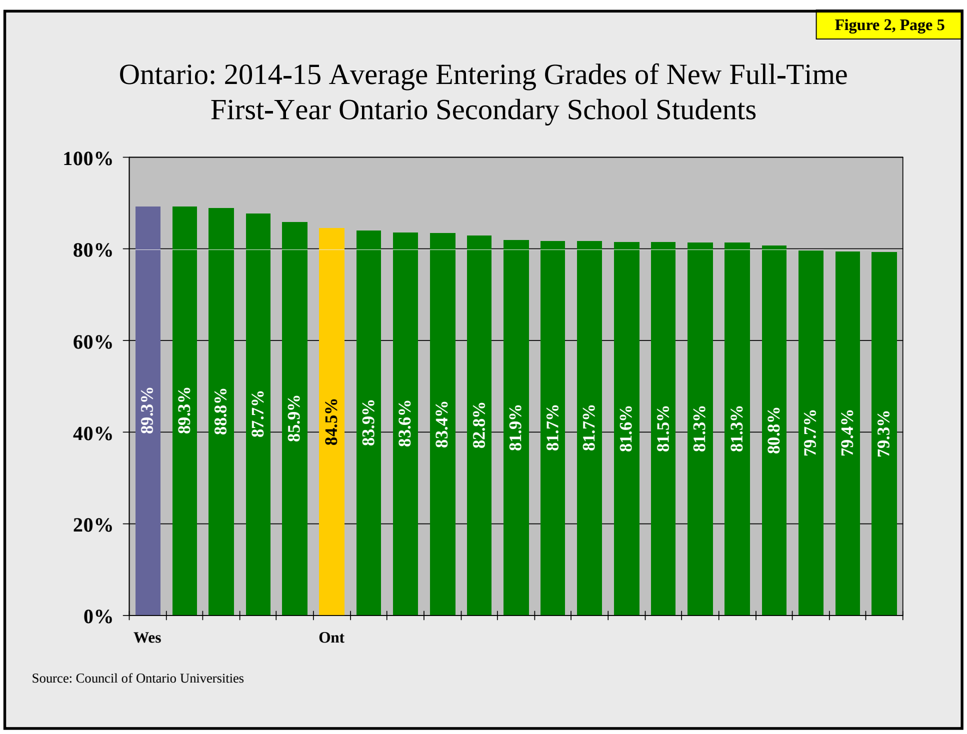


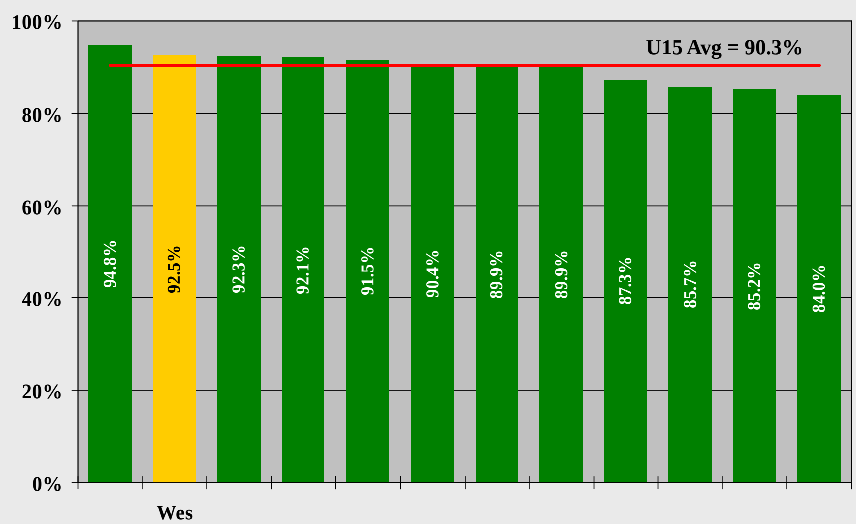
Figure 2, Page 5
Ontario: 2014-15 Average Entering Grades of New Full-Time
First-Year Ontario Secondary School Students
100%
80%
60%
40%
20%
0%
89.3%
89.3%
88.8%
87.7%
85.9%
84.5%
83.9%
83.6%
83.4%
82.8%
81.9%
81.7%
81.7%
81.6%
81.5%
81.3%
81.3%
80.8%
79.7%
79.4%
79.3%
Wes
Ont
Source: Council of Ontario Universities

Metric B

Achieve the highest student retention and graduation rates among Canada's leading research-intensive universities.

Figure 5, Page 9

U15: Year 1 to Year 2 Retention Rates
2013-14 Entering Cohort



Source: August 2015 CSRDE Peer Institutional Reports. Excludes Alberta, Laval, and Saskatchewan

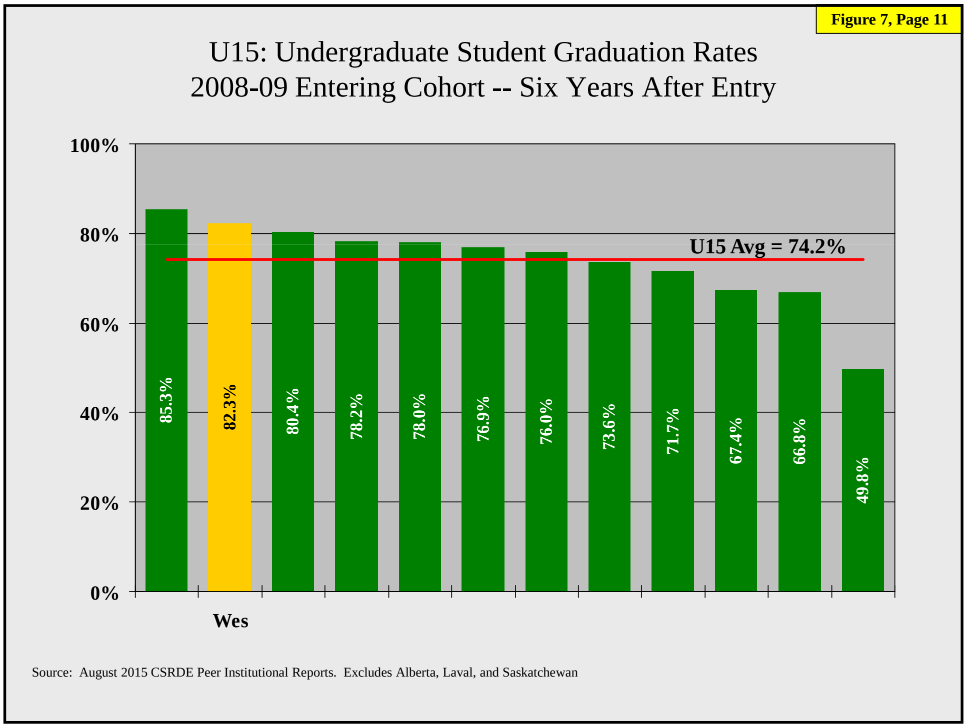


Figure 7, Page 11
U15: Undergraduate Student Graduation Rates
2008-09 Entering Cohort -- Six Years After Entry
100%
80%
60%
40%
20%
0%
U15 Avg = 74.2%
85.3%
82.3%
80.4%
78.2%
78.0%
76.9%
76.0%
73.6%
71.7%
67.4%
66.8%
49.8%
Wes
Source: August 2015 CSRDE Peer Institutional Reports. Excludes Alberta, Laval, and Saskatchewan

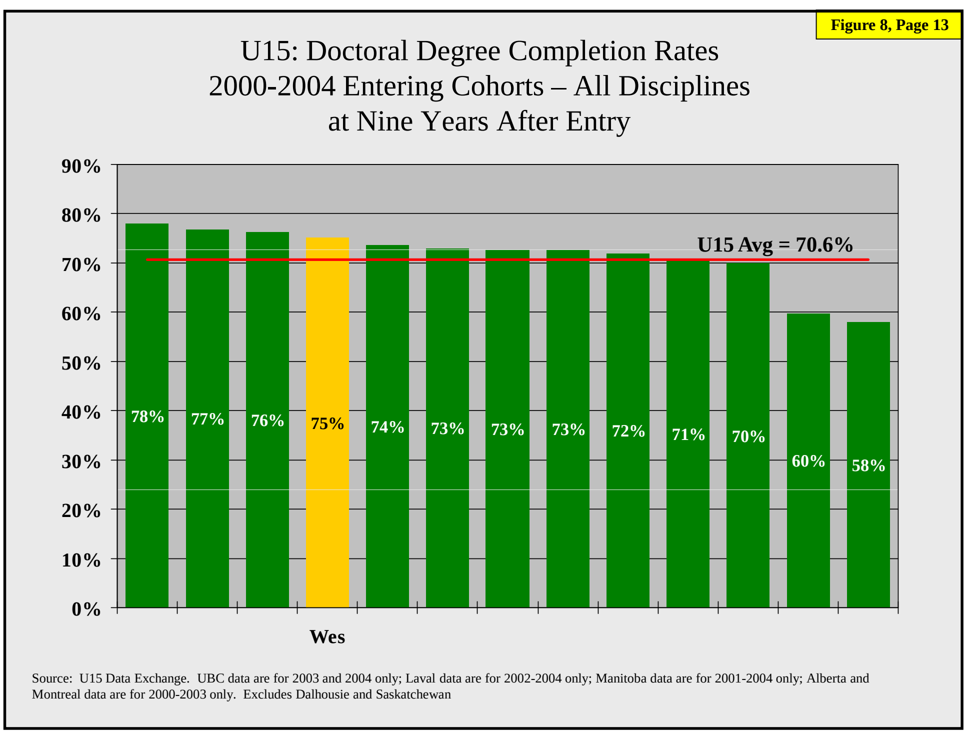
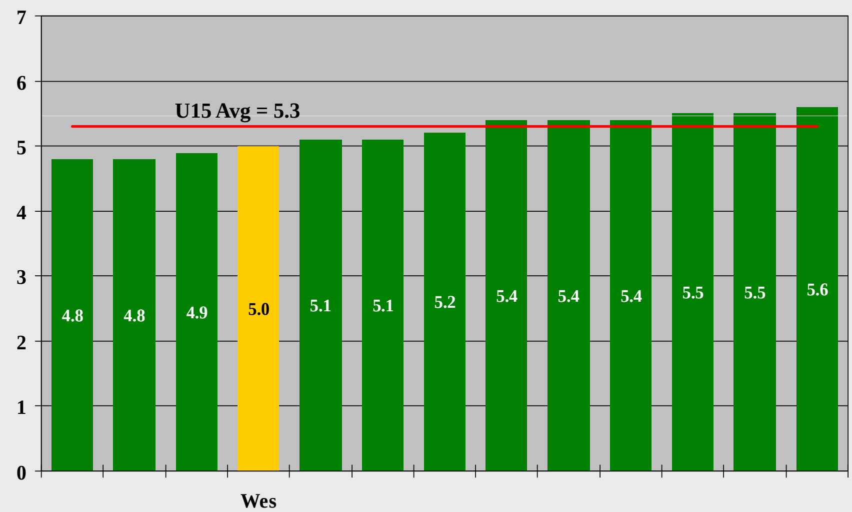


Figure 8, Page 13
U15: Doctoral Degree Completion Rates
2000-2004 Entering Cohorts – All Disciplines
at Nine Years After Entry
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
U15 Avg = 70.6%
78%
77%
76%
75%
74%
73%
73%
73%
72%
71%
70%
60%
58%
Wes
Source: U15 Data Exchange. UBC data are for 2003 and 2004 only; Laval data are for 2002-2004 only; Manitoba data are for 2001-2004 only; Alberta and Montreal data are for 2000-2003 only. Excludes Dalhousie and Saskatchewan

Figure 9, Page 13

U15: Average Number of Years to Doctoral Degree Completion
2000-2004 Entering Cohorts – All Disciplines



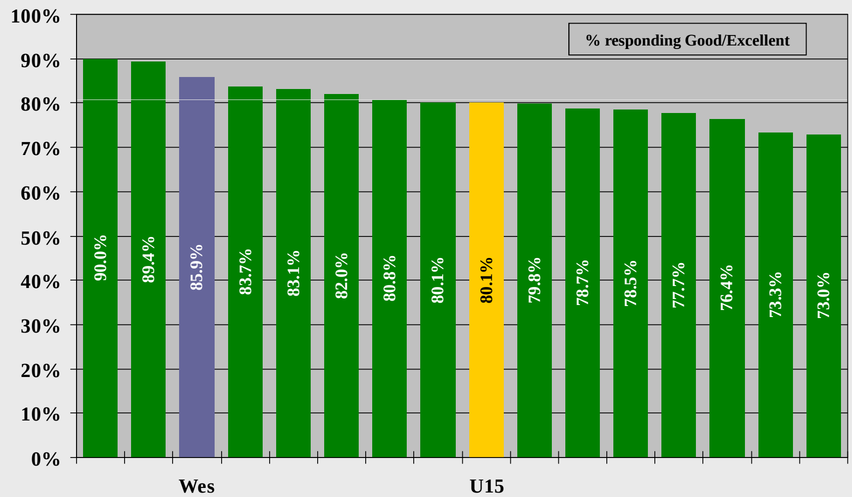
Source: U15 Data Exchange. UBC data are for 2003 and 2004 only; Laval data are for 2002-2004 only; Manitoba data are for 2001-2004 only; Alberta and Montreal data are for 2000-2003 only. Excludes Dalhousie and Saskatchewan

Metric C

Enhance the learning experience by providing a community-based experiential learning opportunity, an international learning opportunity, or a research learning opportunity for all undergraduates who wish to pursue one as part of their degree.

Figure 12, Page 17

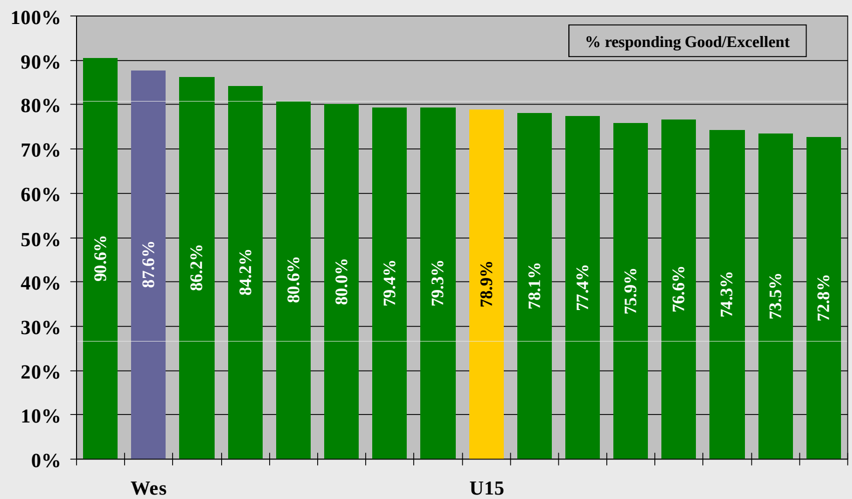
U15: How Would You Evaluate Your Entire
Educational Experience at this Institution? -- First Year Students



Source: NSSE 2014 -- U15 Data Exchange

Figure 13, Page 17

U15: How Would You Evaluate Your Entire
Educational Experience at this Institution? -- Senior Year Students



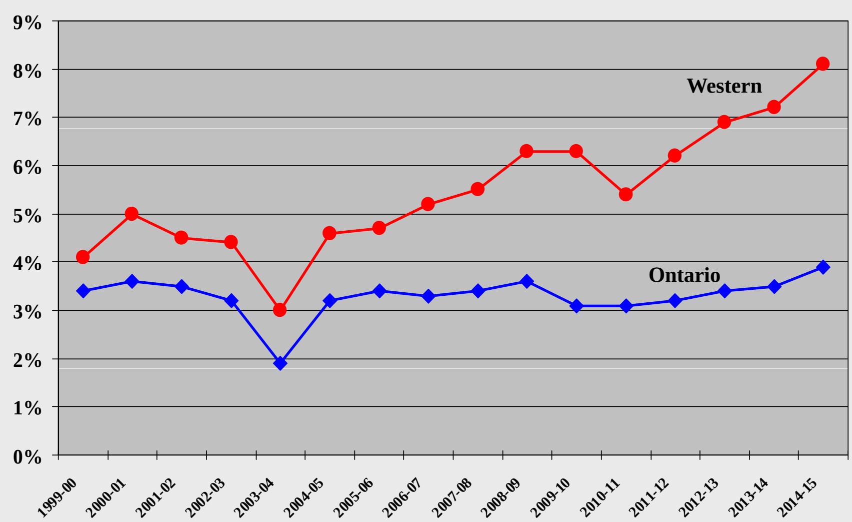
Source: NSSE 2014 -- U15 Data Exchange

Metric D

Increase international undergraduate student enrolment to at least 15% and domestic out-of province student enrolment to at least 10% of the undergraduate student body.

Figure 15, Page 21

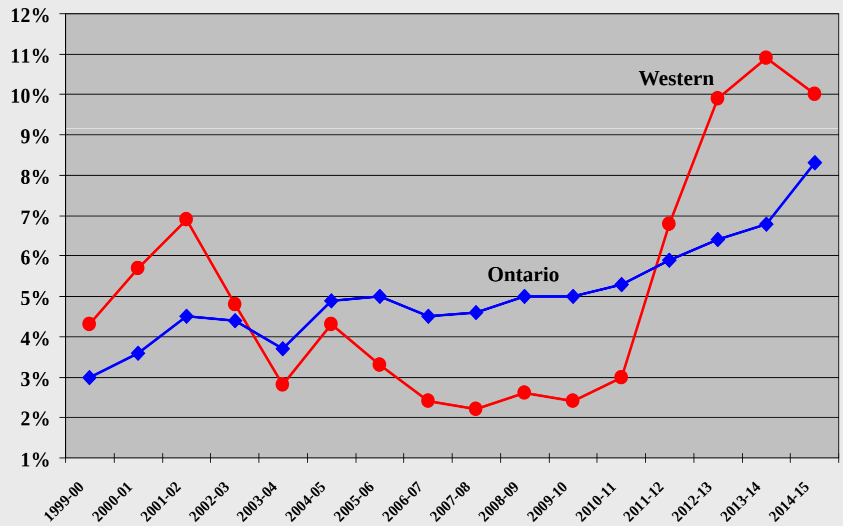
Proportion of First-Year Students from Other Canadian Provinces



Source: Council of Ontario Universities and Western University

Figure 16, Page 21

International Students as a Proportion of Total First-Year Students



Source: Council of Ontario Universities and Western University

Metric E

Increase graduate student enrolment to at least 20% of the total student body.

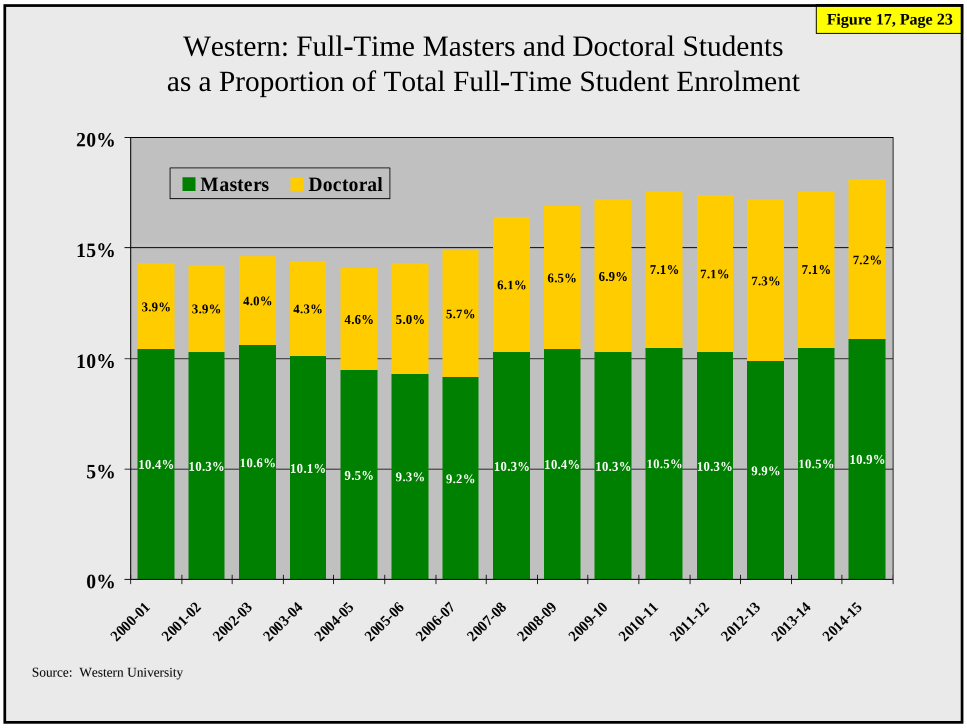


Figure 17, Page 23
Western: Full-Time Masters and Doctoral Students
as a Proportion of Total Full-Time Student Enrolment
Masters
Doctoral
20%
15%
10%
5%
0%
3.9%
3.9%
4.0%
4.3%
4.6%
5.0%
5.7%
6.1%
6.5%
6.9%
7.1%
7.1%
7.3%
7.1%
7.2%
10.4%
10.3%
10.6%
10.1%
9.5%
9.3%
9.2%
10.3%
10.4%
10.3%
10.5%
10.3%
9.9%
10.5%
10.9%
2000-01
2001-02
2002-03
2003-04
2004-05
2005-06
2006-07
2007-08
2008-09
2009-10
2010-11
2011-12
2012-13
2013-14
2014-15
Source: Western University

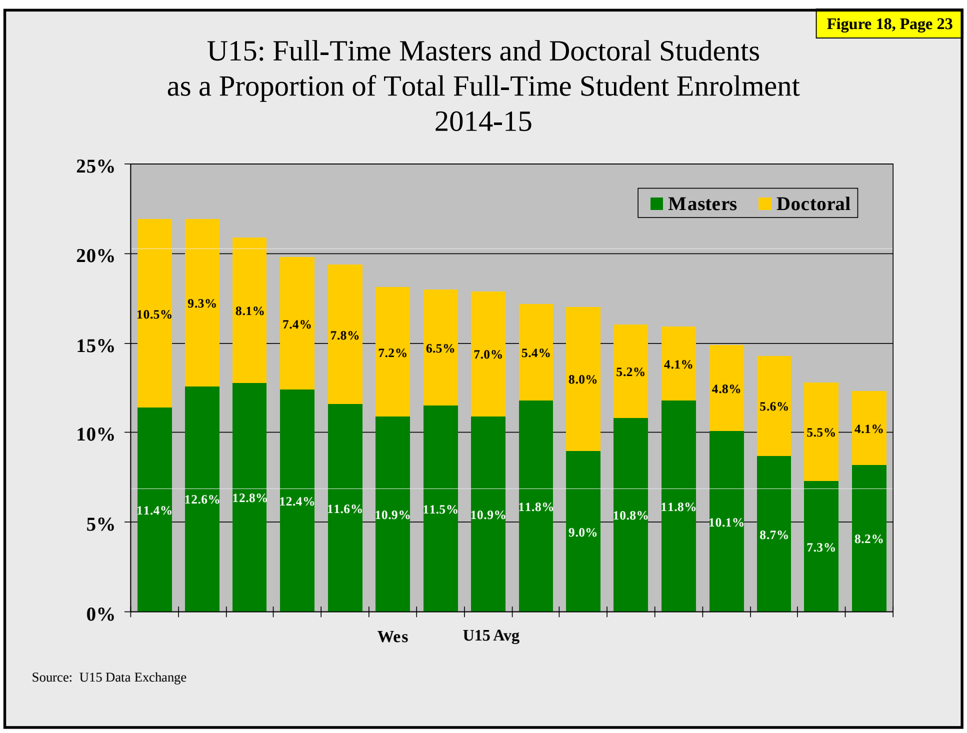


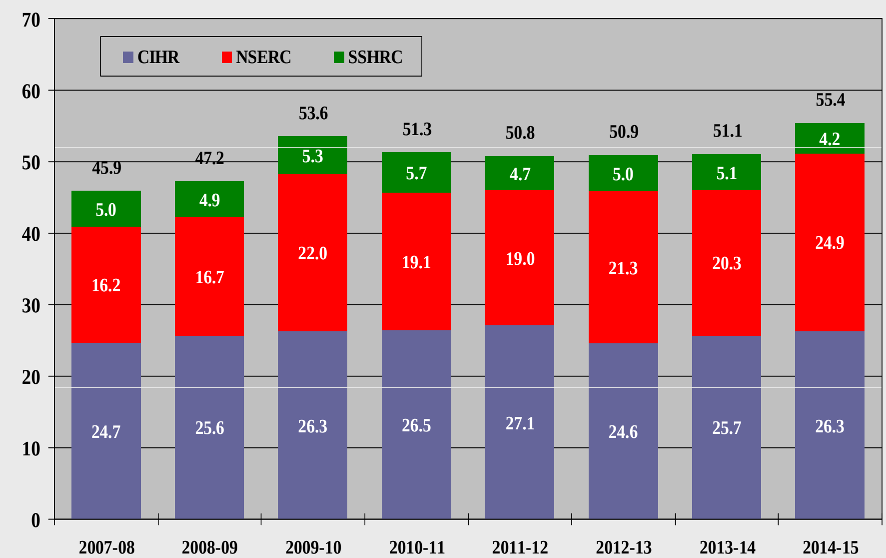
Figure 18, Page 23
U15: Full-Time Masters and Doctoral Students
as a Proportion of Total Full-Time Student Enrolment
2014-15
Masters
Doctoral
25%
20%
15%
10%
5%
0%
10.5%
9.3%
8.1%
7.4%
7.8%
7.2%
6.5%
7.0%
5.4%
8.0%
5.2%
4.1%
4.8%
5.6%
5.5%
4.1%
11.4%
12.6%
12.8%
12.4%
11.6%
10.9%
11.5%
10.9%
11.8%
9.0%
10.8%
11.8%
10.1%
8.7%
7.3%
8.2%
Wes
U15 Avg
Source: U15 Data Exchange

Metric H

Increase our national share of funding awarded from each of the Federal Tri-councils.

Figure 26, Page 33

Western: Tri-Council Funding ($M)



Source: Western University

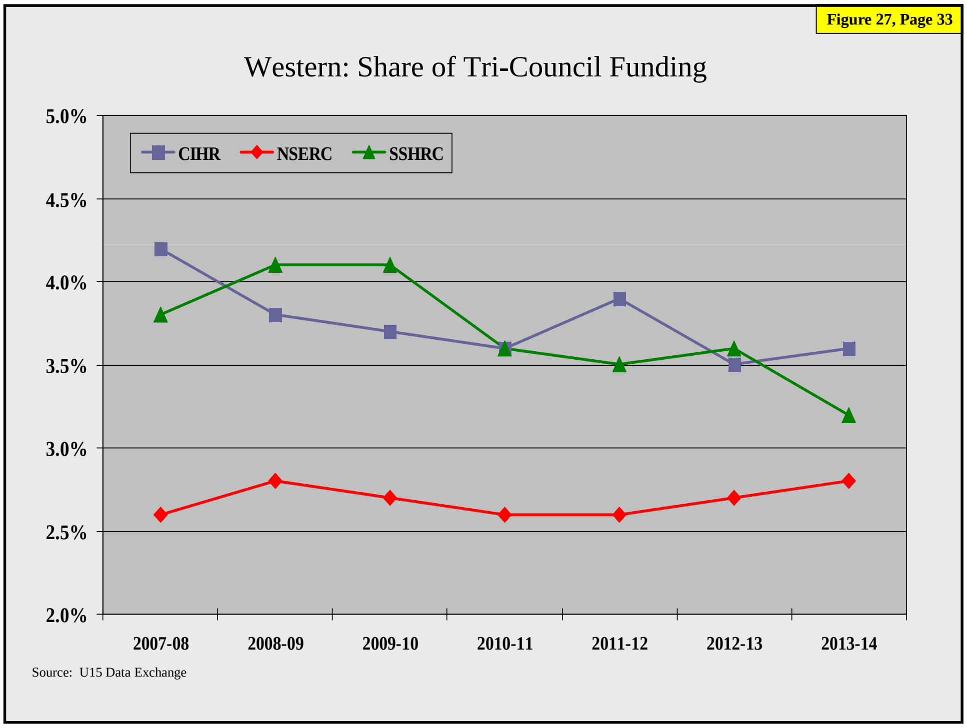


Figure 27, Page 33
Western: Share of Tri-Council Funding
5.0%
4.5%
4.0%
3.5%
3.0%
2.5%
2.0%
CIHR
NSERC
SSHRC
2007-08
2008-09
2009-10
2010-11
2011-12
2012-13
2013-14
Source: U15 Data Exchange

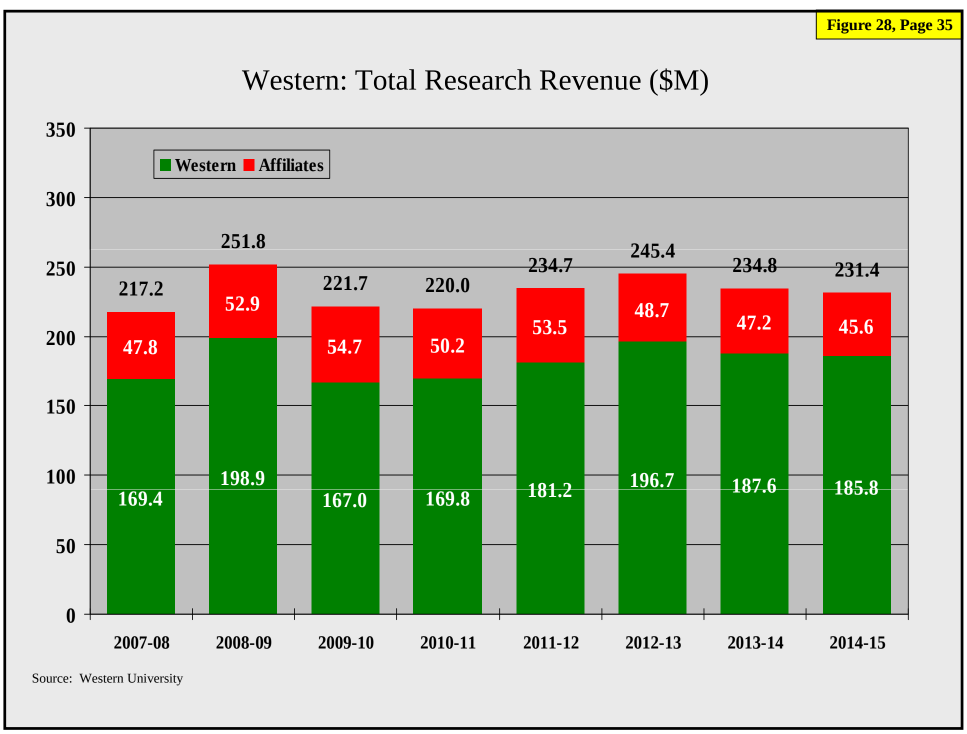


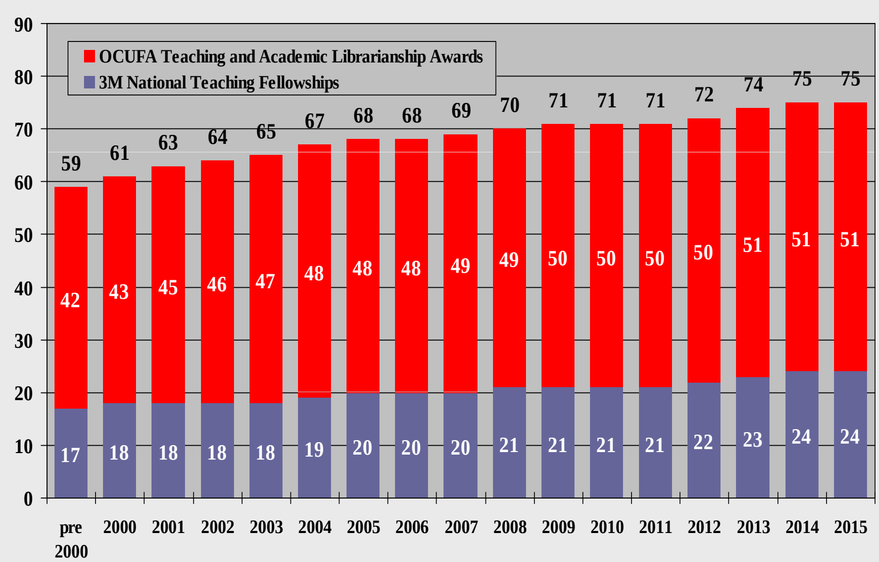
Figure 28, Page 35
Western: Total Research Revenue ($M)
350
300
250
200
150
100
50
0
Western
Affiliates
217.2
251.8
221.7
220.0
234.7
245.4
234.8
231.4
47.8
52.9
54.7
50.2
53.5
48.7
47.2
45.6
169.4
198.9
167.0
169.8
181.2
196.7
187.6
185.8
2007-08
2008-09
2009-10
2010-11
2011-12
2012-13
2013-14
2014-15
Source: Western University

Metric I

Increase the number of faculty members who have won national and international teaching /research awards and similar distinctions.

Figure 29, Page 37

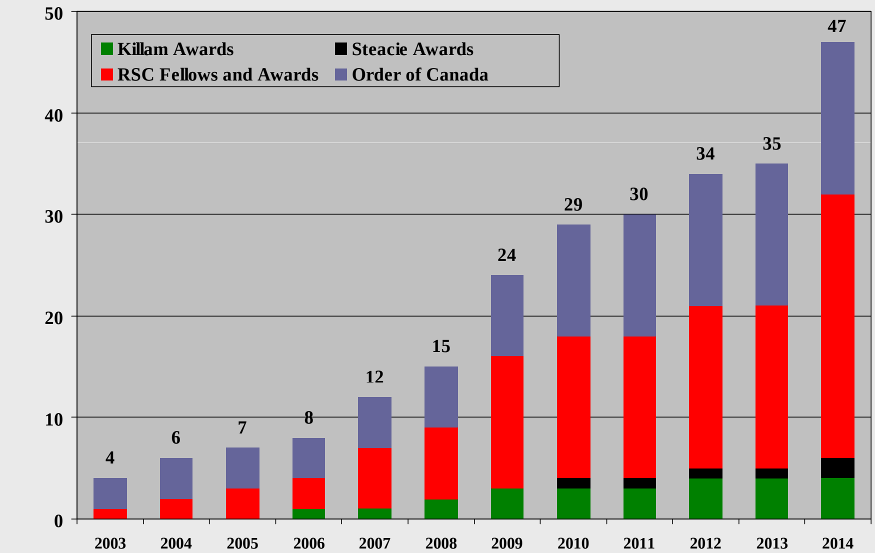
Western: Cumulative Teaching Awards



Source: Western University

Figure 30, Page 37

Western: Cumulative Research Awards



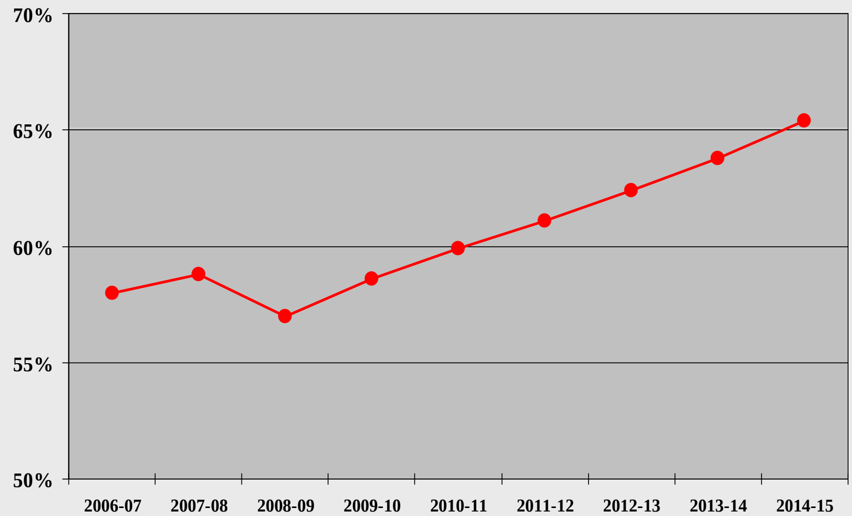
Source: Western University

Metric K

Increase share of operating budget from non-Provincial sources by 1% per year.

Figure 33, Page 41

Western: Share of Operating Budget from Non-Provincial Sources



Source: Western University -- Operating Budget Document. i.e. excluding Core/On-Going Provincial Government Grants

Metric L

Surpass our $750-million " Be Extraordinary" fundraising campaign goal and grow the university's endowment to at least $500 million by 2018.

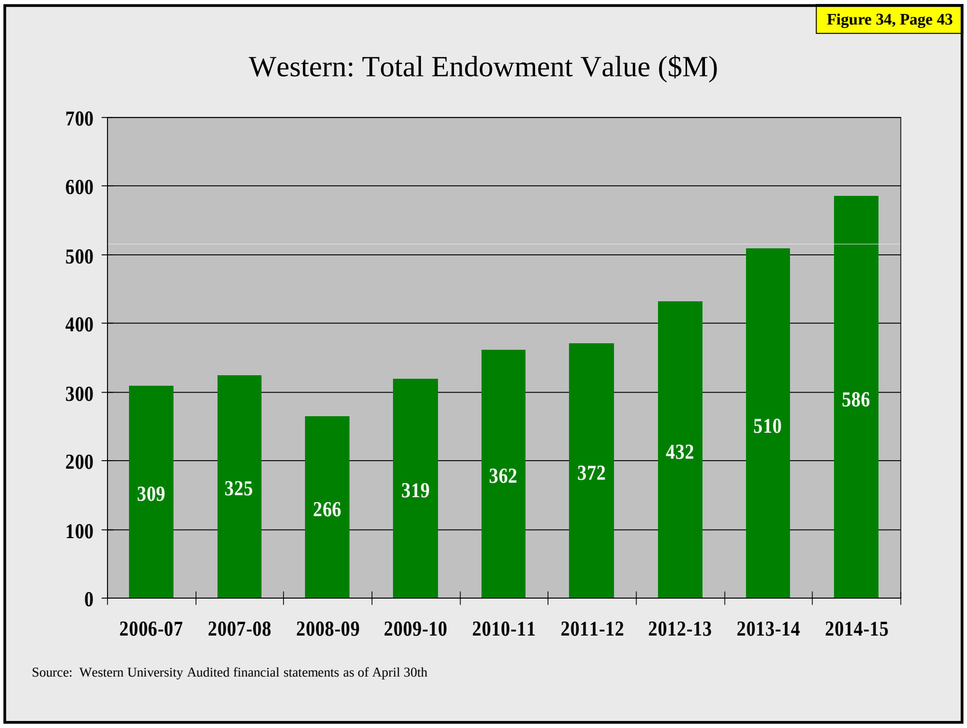


Figure 34, Page 43
Western: Total Endowment Value ($M)
700
600
500
400
300
200
100
0
309
325
266
319
362
372
432
510
586
2006-07
2007-08
2008-09
2009-10
2010-11
2011-12
2012-13
2013-14
2014-15
Source: Western University Audited financial statements as of April 30th

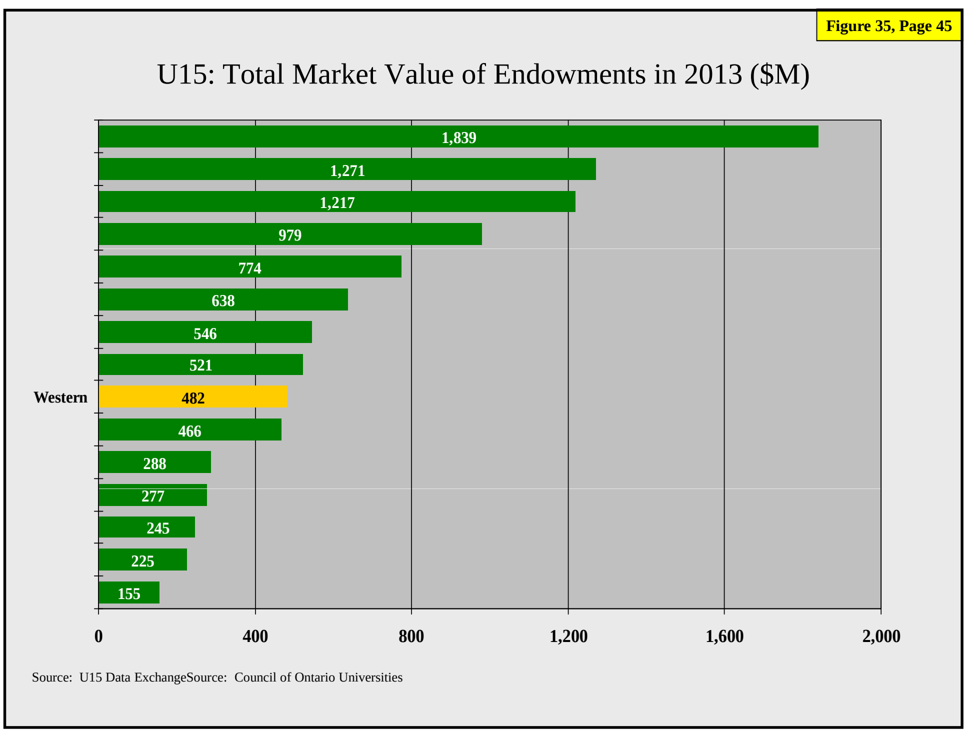
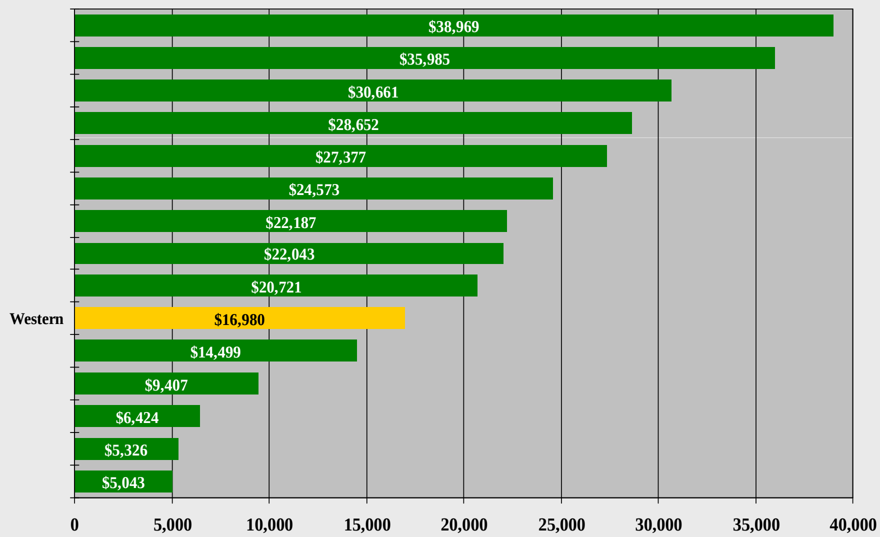


Figure 35, Page 45
U15: Total Market Value of Endowments in 2013 ($M)
1,839
1,271
1,217
979
774
638
546
521
Western
482
466
288
277
245
225
155
0
400
800
1,200
1,600
2,000
Source: U15 Data ExchangeSource: Council of Ontario Universities

Figure 36, Page 45

U15: Endowment Assets per Full-Time Student in 2013



Source: U15 Data ExchangeSource: Council of Ontario Universities

Metric M

Build institutional capacity to sustain fundraising beyond the current campaign, with an eventual goal of increasing annual fundraising achievements to $100 million.

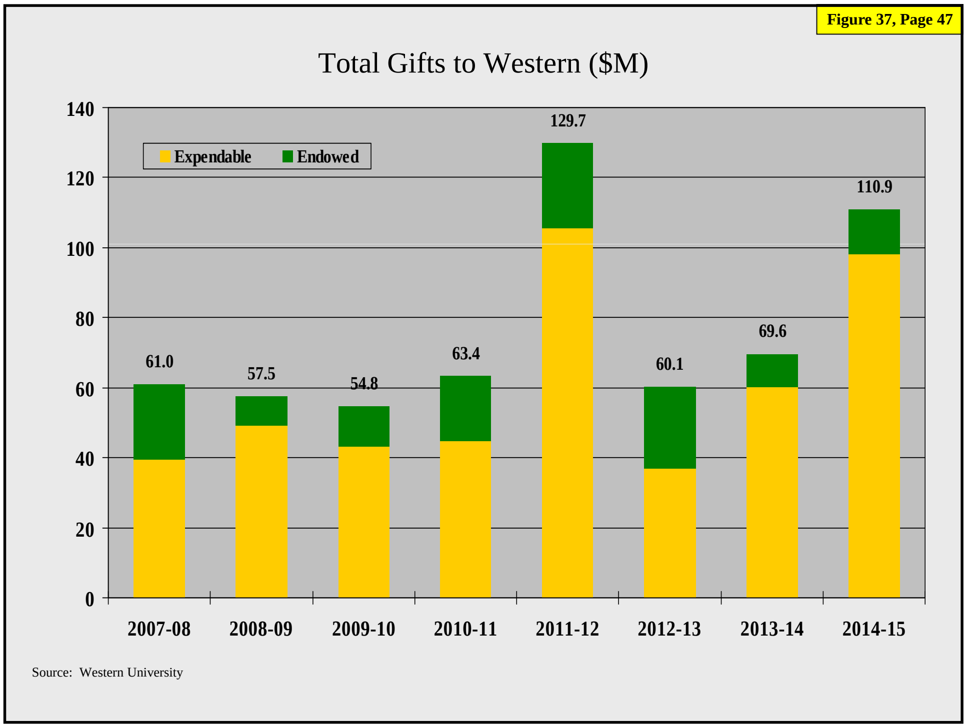


Figure 37, Page 47
Total Gifts to Western ($M)
Expendable
Endowed
140
120
100
80
60
40
20
0
61.0
57.5
54.8
63.4
129.7
60.1
69.6
110.9
2007-08
2008-09
2009-10
2010-11
2011-12
2012-13
2013-14
2014-15
Source: Western University

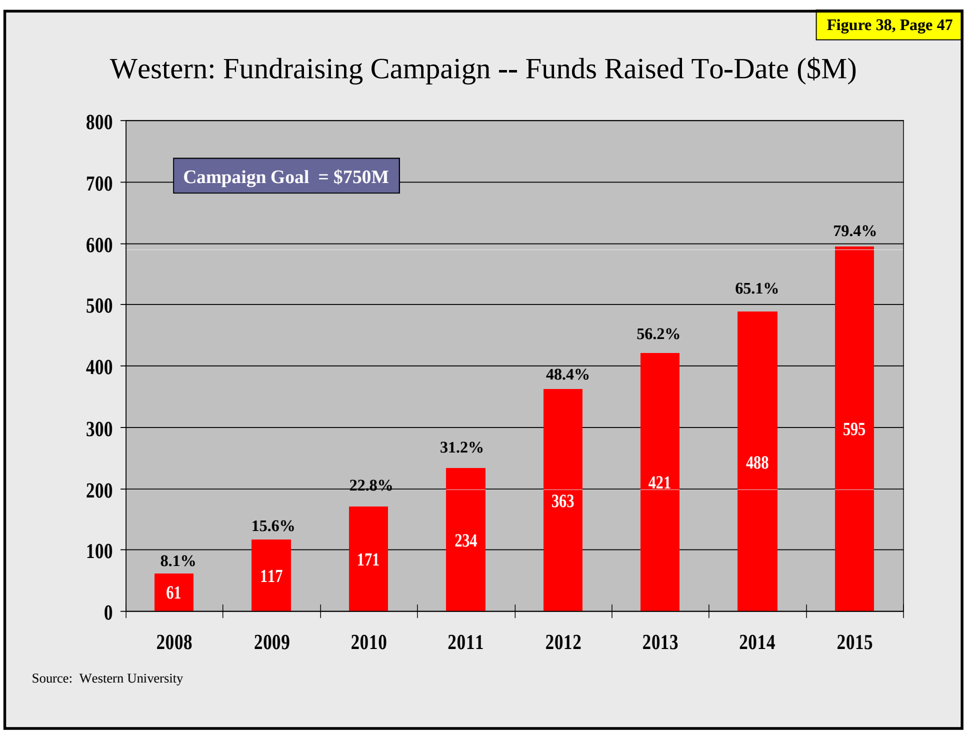


Figure 38, Page 47
Western: Fundraising Campaign -- Funds Raised To-Date ($M)
Campaign Goal = $750M
800
700
600
500
400
300
200
100
0
8.1%
15.6%
22.8%
31.2%
48.4%
56.2%
65.1%
79.4%
61
117
171
234
363
421
488
595
2008
2009
2010
2011
2012
2013
2014
2015
Source: Western University

REPORT OF THE PROPERTY AND FINANCE COMMITTEE

Contents	Consent Agenda
Rapid Transit Recommendations	No
Federal Infrastructure Program Submissions	Yes
Investment Committee Membership	Yes
Ian McWhinney Chair in Family Medicine – Revisions to Terms of Reference	Yes
Alice Munro Chair in Creativity - Establishment	Yes
Fowler Kennedy Lease Renewal	Yes
Ontario Auditor General's Report – University Intellectual Property	Yes
UHIP Fees 2016-17	Yes
Ancillary Financial Report	Yes
Quarterly Ratio Report on Non-Endowed Funds	Yes
New Scholarships and Awards	Yes

FOR APPROVAL

1. Rapid Transit Recommendations

Recommended:

1. That the Board of Governors approve the following position statements with respect to the introduction of rapid transit in the City of London:

   - Western supports the introduction of rapid transit in London.
   - Western supports rapid transit coming to its campus.
   - Western supports its students' desire to see improvements in transit services.
   - Western supports options for light rail or bus rapid transit to service the campus via routings on Richmond Street and Western Road.
   - In keeping with Western's campus master plan (approved in 2015), which has a long term focus on promoting safety and security on campus through the establishment of pedestrian and cycling networks near the centre and vehicles at the periphery, and noting that the university has embarked on planning to enhance safety on campus through a transformation to a more pedestrian-friendly space including limiting vehicular traffic, Western does not support light rail traversing through campus, nor bus rapid transit traversing through campus if it is a condition precedent that such bus rapid transit be convertible to light rail.

2. That prior to taking a formal position on bus rapid transit traversing through campus, the university develop the plan for a pedestrian-focused campus, with limitations on vehicular traffic.

Background:

The report of the University Rapid Transit Working Group is attached as **Annex 1**.

FOR INFORMATION

2. **Federal Infrastructure Program Submissions**

At its meeting of April 21, 2016, the Board of Governors delegated to the President the authority to determine projects to be submitted to the Federal government's infrastructure program competition, recognizing the very tight deadlines set by the government. It was noted that any project selected would come forward through the Board's normal approval processes with respect to budget approval at the appropriate time.

Three projects were submitted from Western and summaries of them are attached (**Annexes 2-4**) for information.

3. **Investment Committee Membership**

The Property & Finance Committee approved the reappointment of Jim Knowles to the Investment Committee for a four-year term ending May 31, 2020. Mr. Knowles has been a member of the Investment Committee since May 2012 and a member of the Board of Governors since 2008.

The Committee membership is now:

Two current or former members of the Board of Governors, appointed by the P&F Committee	
Rosamond Ivey	(August 2018)
Jim Knowles	(May 2020)
Five members appointed by the P&F Committee on recommendation of the Investment Committee	
Lee Sienna	(March 2021)
Richard Konrad	(March 2018)
Doug Greaves	(August 2017)
David Stenason	(December 2021)
Doug Porter	(February 2018)

4. **Ian McWhinney Chair in Family Medicine – Revisions to Terms of Reference**

See **Annex 5.**

5. **Alice Munro Chair in Creativity**

On behalf of the Board of Governors, the Property & Finance Committee approved the establishment of the Alice Munro Chair in Creativity with terms as outlined in **Annex 6.**

6. **Fowler Kennedy Lease Renewal**

At its meeting on June 7, 2016, the Property & Finance Committee approved the renewal of the lease to the London Health Sciences Centre of the space for the Fowler Kennedy Sports Medicine Clinic until April 30, 2017, with an option to LHSC for a further two-year renewal until April 30, 2019.

Fowler Kennedy Clinic has operated in its current location in the 3M Building for approximately 20 years, under an agreement with LHSC that provides benefits for the university in terms of specialized expertise for student athletes, as well as teaching and research benefits for the Faculty of Health Sciences and Schulich. The current lease expired in April 2015, and we have been operating on a month to month basis while Intercollegiate Athletics conducted a review of its needs and discussions took place about a possible move of the Clinic to the Research Park. IA determined that the Clinic was meeting its needs, and while discussions continue about a possible move, space is not available elsewhere currently and both the Clinic and the University wish to formalize the lease arrangements for the near future, resulting in the proposed renewal for a definite term until April 2017, with the availability of a renewal for a further two years if satisfactory new space is not found.

7. **Ontario Auditor General's Report – University Intellectual Property**

See **Annex 7.** Both the Audit Committee and the Property & Finance Committee received the report for information. It was agreed that at a future meeting, the Board should receive a comprehensive briefing on intellectual property and related issues at Western.

8. **UHIP Fees 2016-2017**

The Property & Finance Committee has delegated authority from the Board of Governors to deal with proposed supplementary and ancillary fees that are not available at the time the budget is approved. New fees or continuing fees that are more than 10 per cent greater than the amount estimated in the budget document are submitted to the Committee for approval. Continuing fees that are lower than the estimated amount or no more than 10 per cent higher are reported to the Committee for information.

9. **UHIP Rates 2016-2017**

University Health Insurance Plan for International Students		2015-16 Amount	2016-17 Amount	% change
Undergraduates, Full-time and Part-time	12 month term	612.00	612.00	-0%
Graduates, excluding MBA	per term	204.00	204.00	-0%
Graduates, MBA	12 month term	612.00	612.00	-0%
Exchange students	per term	204.00	204.00	-0%

These insurance rates are negotiated annually.

10. **Ancillary Financial Report**

See **Annex 8.**

11. **Quarterly Ratio Report on Non-Endowed Funds**

See **Annex 9**.

12. **New Scholarships and Awards**

See **Annex 10**.

CITY OF LONDON RAPID TRANSIT PROPOSAL

Report of the University Rapid Transit Working Group

From the outset, the university has been supportive of Shift – London's Rapid Transit Initiative. To that end, in February of 2016 our President & Vice-Chancellor Amit Chakma provided letters of support for London's requests for funding to both the provincial and federal governments. These letters as well as a response from Mayor Matt Brown are included as **Sub-Appendix A**.

The University Rapid Transit Working Group has completed its analysis and community consultations regarding the possibility of having light rail rapid transit travel through the campus. The consulting firm of Parsons, which has expertise in transportation, was engaged to advise the University. We are pleased to present our findings.

We provided several weeks (from a February 10, 2016 launch until the transit email account was closed for submissions on March 24, 2016) for our community to provide feedback. The response was large and an overview of the feedback provided via the email account, as well as feedback provided through other venues is included as **Sub-Appendix B**.

We have developed an inventory of academic and research equipment and labs that could be impacted by electromagnetic interference, vibration and noise impacts of light rail. Please refer to **Sub-Appendix C**.

We had a recent experience of operating a shuttle service on campus in conjunction with bridge repairs. This provided some interesting insights into students' willingness to walk from more distant transit locations. Please refer to **Sub-Appendix D**.

We received from the London Transit Commission (LTC) some preliminary information regarding the rationalization of bus routes and numbers on campus with the introduction of light rail. Please refer to **Sub-Appendix E**.

Our last Academica Group survey of undergraduate student applicants to Western provided some interesting and relevant information about why students chose Western. Please refer to **Sub-Appendix F**.

We have previously shared with the Board the results of our campus traffic study conducted (by Parsons) in December of 2015. **Sub-Appendix G** includes both a summary of the key findings for ease of reference, as well as a high level overview of the results in presentation format, for purposes of completeness of this report.

As is noted particularly in Sub-Appendices B and C, the City's preferred identified routes through campus raised significant concerns. **Sub-Appendix H** analyzes the two routes preferred by the City along with other options identified by the University Rapid Transit Working Group, by Parsons, and by the extensive consultations we undertook. As noted in Sub-Appendix H, at its heart, the City-preferred routes create incremental pedestrian safety concerns, interrupt the academic, research and performance enterprise of the university, entail significant incremental costs, and do not respect the campus master plan principles and initiatives. By the same token, an option that has light rail coming north on Western Road or across a new bridge on Huron via Philip Aziz to Western Road is positive for all those criteria (and others). It is for these reasons that the motion supports a routing on Western Road (including on Huron via Philip Aziz), as well as a routing on Richmond Street stopping at the university gates.

Having completed our analysis and consultations regarding the possibility of having light rail move through the campus, we are now turning our focus to the direction articulated in the 2016-17 budget document: "We are in the early stages of a multi-year plan to transform our campus into a pedestrian-friendly and safe campus – including reducing/eliminating vehicular traffic, improved pedestrian and bicycle access, and moving parking to the periphery of campus." We are grateful for the support of a $2.0M allocation to commence our efforts. Our group heading these efforts will be joined by undergraduate and graduate student representatives. Of note, the new USC president's platform included a priority for pedestrian safety on campus and, hence, he was most pleased to be invited to appoint a representative. LHSC also will be continuing their involvement, given the presence of University Hospital on our campus and implications and opportunities for them. In the meantime, I would like to acknowledge the significant work and contributions of the following members of the University Rapid Transit Working Group:

Carmen Bertone, Executive Director, Facilities Operations
John Carson, Director, Campus Community Police Services
Helen Connell, Associate Vice-President (Communications & Public Affairs)
Saher Fazilat, Executive Director, Facilities Development & Engineering
Susan Grindrod, Associate Vice-President (Housing & Ancillary Services)
Lynn Logan, Associate Vice-President (Finance & Facilities Management)
Glenn Matthews, Housing Mediation Officer
Michael McLean, Director, Facilities Planning & Design
Peter White, Executive Director, Government Relations & Strategic Partnerships

Gitta Kulczycki
Vice-President (Resources and Operations)

Western

President & Vice-Chancellor

February 19, 2016

The Honourable Stephen Del Duca
Minister of Transportation
3rd Floor, Ferguson Block
77 Wellesley Street West
Toronto, Ontario
M7A 1Z8

Dear Minister Del Duca,

RE: Support for Shift – The City of London's Rapid Transit Initiative

On behalf of Western University, I am pleased to submit this letter of support for Shift – London's Rapid Transit Initiative. We commend the Government of Ontario for its continued commitment to improving infrastructure and transportation throughout the province, including $15 billion outside the Greater Toronto Hamilton Area. This transformative investment will facilitate significant economic, social and environmental benefits for all Ontarians.

London is the largest city in Canada without a Rapid Transit system. Our students, faculty and staff depend on London's public transit system, and would benefit significantly from a transformative investment to improve it. Western fully supports the City of London's request for $388 million in provincial funding to help construct a new 22km Hybrid LRT/BRT System in our city. Rapid Transit will also lead to better connectivity across the province through seamless integration with Ontario's planned High Speed Rail network.

We strongly encourage the Ontario Government to invest in Rapid Transit in London, which will generate economic, social and environmental benefits for Western, the City of London, and all 2.5 million people of Southwestern Ontario.

Sincerely,

Amit Chakma
President & Vice-Chancellor
Western University

cc. The Honourable Kathleen Wynne, Premier of the Province of Ontario
The Honourable Deb Matthews, Deputy Premier and MPP, London North Centre
The Honourable Glen Murray, Minister of the Environment and Climate Change
The Honourable Brad Duguid, Minister of Economic Development, Employment and Infrastructure
Ms. Teresa Armstrong, MPP, London-Fanshawe
Mr. Jeff Yurek, MPP, Elgin-Middlesex-London
Ms. Peggy Sattler, MPP, London West
Mayor Matt Brown, City of London

Western

President & Vice-Chancellor

February 19, 2016

The Honourable Amarjeet Sohi
Minister of Infrastructure and Communities
House of Commons
Parliament Buildings
Ottawa, Ontario
K1A 0A6

Dear Minister Sohi,

RE: Support for Shift – The City of London's Rapid Transit Initiative

On behalf of Western University, I am pleased to submit this letter of support for Shift – London's Rapid Transit Initiative. We commend the Government of Canada for its commitment to the renewal and revitalization of infrastructure across the country, particularly public transit. This transformative investment in infrastructure will facilitate significant economic, social and environmental benefits for all Canadians over the coming years.

London is the largest city in Canada without a Rapid Transit system. Our students, faculty and staff depend on London's public transit system, and would benefit considerably from a transformative investment to improve it. Western fully supports the City of London's request for $388 million in Federal funding to construct a new 22km Hybrid Light Rail / Bus Rapid Transit System in our city. . Rapid Transit in London is a "shovel worthy" project that will have a significant positive impact of the quality of life for the people of the region.

We strongly encourage the Government of Canada to invest in Rapid Transit in London which will generate economic, social and environmental benefits for Western, the City of London, and all 2.5 million people of Southwestern Ontario.

Sincerely,

Amit Chakma
President & Vice Chancellor
Western University

cc. The Right Honourable Justin Trudeau, Prime Minister
The Honourable Bill Morneau, Minister of Finance
The Honourable Marc Garneau, Minister of Transport
The Honourable Catherine McKenna, Minister of Environment and Climate Change
Mr. Pablo Rodriguez, Parliamentary Secretary to the Minister of Infrastructure and Communities, MP, Honoré-Mercier, QC
Ms. Kate Young, Parliamentary Secretary to the Minister of Transport and MP, London West
Mr. Peter Fragiskatos, MP, London North Centre
Ms. Irene Mathyssen, MP, London-Fanshawe
Ms. Karen Vecchio, MP, Elgin-Middlesex-London
Mayor Matt Brown, City of London

London
CANADA

OFFICE
OF MAYOR
MATT BROWN

March 1, 2016

Dear Dr. Chakma,

Thank you for your letter of support for Shift – London's Rapid Transit Initiative. London is our nation's 11th largest city, and the largest city in Canada without a Rapid Transit system. Your support for this initiative is an important part of turning our plans for Rapid Transit into a reality.

Rapid Transit will facilitate substantial economic, social and environmental benefits for London and Southwestern Ontario, benefiting the students, staff and faculty of Western University. A Rapid Transit system would run along London's busiest corridors, connecting neighbourhoods, business and institutions in our community.

Please pass along my sincere thanks to your colleagues at Western University for all of the work they have done to make Rapid Transit a truly community centered conversation. Western University students, faculty and staff make up a city within a city, with unique needs and perspectives. Your voice and participation is essential in the success of this initiative. I am looking forward to continuing to collaborate with you on our shared plans for Rapid Transit in London.

Shift is about more than transportation. It's about jobs, productivity and the economy. It's about families and quality of life. We are building a more sustainable and connected London for generations to come.

Once again, thank you for your letter of support.

Sincerely,

Mayor Matt Brown

300 Dufferin Avenue
P.O. Box 5053
London, ON Canada
N6A 4L9

THE CITY OF LONDON
T. 519.661.4920
F. 519.661.5308
mayor@london.ca
LONDON.CA

Overview of Written Feedback

Summary: In the collective memory of the University Rapid Transit Working Group (with two having more than thirty years tenure at Western) no other single initiative or issue has garnered as much response from the Western community as the Rapid Transit Proposal, with over 700 written submissions as well as active participation in university meetings held to discuss this important initiative. Many who wrote expressed their appreciation for the consultation and the opportunity to provide input.

Feedback coming through the Email Account: transit@uwo.ca

There were a total of 703 submissions, 159 from staff and faculty, 541 from students, and 3 from individuals not within the Western Community. I've not included any analysis of the last category. The email account was established on February 10 and closed for submissions on March 24.

Staff and faculty feedback: Of the total 157 individual submissions:

41 commented in favour of having light rail come through the campus

96 were opposed to having light rail come through the campus

28 were in favour of a vehicle-free campus

And finally 57 suggested alternate routes other than the two identified by the City.

Just an explanatory note in understanding these numbers: 57 who commented either in favour or (mostly) in opposition to light rail coming through campus, then went on to suggest an alternate route. The most frequently mentioned alternatives were Richmond Street (but not through campus) and Western Road.

On February 10 our Leaders' Forum was dedicated to the topic: "Pedestrians, Cars, Buses and Trains". This Forum is a gathering of all the senior academic and administrative leaders from across campus, approximately 200 in number. We have these Forums three or four times in the academic year, on topics of interest to the broader campus leadership. This was the first opportunity we had to present the results of the traffic study undertaken in December. This Forum generated a great deal of interest and subsequent written submissions, not only from those in attendance but subsequently from leaders' teams. It's fair to observe that Forum attendees were surprised at the volume of vehicular and pedestrian traffic on campus and at key intersections and in general expressed a desire for the university to address this. We used this Forum as the launch of the website containing information about the Shift proposal and the traffic study (and subsequently other materials) and established the email account to receive feedback.

Staff and faculty took the time to provide commentary beyond expressing their preferences. Here's an overview of what they had to say:

- Many made note of the traffic fatalities that occurred on campus in 2015.
- There was a great deal of concern expressed about the safety of pedestrians and the volume of traffic. Many wrote to say we need to stop cut through traffic. Many gave examples of other campuses that are eliminating vehicular traffic. Here are two indicative quotes: "Traffic free campuses are a real joy and the future of top universities" and "traffic free campuses are serene and beautiful, not a loud traffic hazard." A variety of suggestions were offered as to how we might go about reducing cut through traffic.
- Independent of their view of the Shift proposal, many expressed a desire to see a better transit system in London and noted a number of particular deficiencies either in routing or areas serviced.
- Those who spoke in favour of having light rail travel through campus mentioned it as a wonderful opportunity for London and for Western, and part of being world class and creating a thriving city. Many thought it could be combined with the elimination of cars on campus to enhance both the pedestrian experience as well as pedestrian safety. A number who were in favour expressed a preference for the route on Lambton, or other choices (meaning other than the Middlesex Hill route). Often expressed were terms such as modern, convenient and efficient. Also noted were the improvements this would bring in accessibility for aging community members and in that vein suggesting additional stops be incorporated.
- Those who were against having light rail travel through campus mentioned a variety of concerns. Certainly concerns about safety and volume of traffic was a common theme. A number of researchers, and a few from the Faculty of Music wrote to express their worry about a negative impact to academic and research pursuits as a result of electromagnetic interference, vibration and noise. Some researchers provided very specific information, one even asking who was going to bear the costs not only of the remediation required for the equipment and building, but who would bear the lost productivity costs. A former Dean of Music wrote to convey the experience of York University's building a new home for the School of the Arts, Media, Performance and Design close to Steeles Avenue, when the Toronto Transit Commission announced plans to install rail and bus routes along Steeles. In that case, because the building was at an early stage of construction additional sound and vibration buffering could be added into the music spaces; noting this is not possible with our new music building having just been completed. More generally a number expressed concerns about the cost of introducing light rail as taxpayers, with some wondering what the business case could be or even providing reference to studies done elsewhere where light rail did not have the intended economic impact. A number of staff in particular noted it is cheaper to park on campus than it is to take the transit system and wondered what the costs of the new system would be, whether the cost of the student transit pass would increase, and whether the university would subsidize transit, or encouraging that we do so. And finally on the cost side, there was concern about the buildings and research facilities

that would have to be moved, re-purposed, or re-designed at immense cost. Quite a number expressed concerns about the negative impact to the beautiful appearance and atmosphere on campus, noting this is a reason faculty and students come here and noting the need for campus to be a place to think and contemplate. Some telling quotes: “it needs to be removed from the hustle and bustle of an urban setting;” “a tranquil less busy environment is more conducive for research and teaching;” and “we are not an urban campus.” Also noted was a recent Academica Group survey undertaken of why students choose Western, noting that the attractiveness of campus is the third highest reason (more on this survey is covered elsewhere in the Property & Finance Committee report). The theme of “to and from campus, but not through campus” was common.

Student feedback: Of the total 541 submissions from students, 8 were on behalf of student groups numbering at least 1,060 students (for 2 of the 8 – the Faculty of Health Sciences Student Council, and the Hippocratic Council/Dentistry Students Council (covering medical/dental students) there is no indication of the size of the student groups represented.) First to the individual submissions representing individual students:

27 commented in favour of having light rail come through the campus

502 were opposed to having light rail come through the campus

5 were in favour of a vehicle-free campus, and

Finally 324 suggested alternate routes other than the two identified routes coming through the campus.

Of the 8 group submissions, 7 representing at least 1,060 students were opposed to having light rail come through the campus. One from the Hippocratic Council/Dentistry Students Council was in favour of light rail coming through the campus.

Just an explanatory note in understanding these numbers: 324 students who commented either in favour or in opposition to light rail coming through campus, then went on to suggest an alternate route. The most common refrain here (from over 300 students) was “light rail to campus, but not through campus.”

Significantly fewer students (as compared to staff and faculty) provided explanatory comments. Approximately 300 of the individual student submissions appeared as a vote, clearly responding to some sort of organized activity going on within the student body. These were generally in the vein of “I, so and so, am a student and I support light rail to, but not through campus.” A very few were in support.

As big transit users, a number of students commented on their frustrations and challenges with transit as it exists today: full buses driving by, infrequent service and unreliable service. Students want better access around the city; downtown and Masonville in particular were noted. There were questions as to how this proposal would help those students west of campus and whether they would see service improvements.

For those students who wrote in favour of having light rail come through campus and who added comments (of which there were very few) , they noted it as a great investment; that it would provide significant improvement and improve their commuting experience.

For those students who provided comments in opposition to light rail coming through campus, the most common concern was the negative impact on Western's beautiful surroundings. Students spoke of Western being their home away from home, and noting the beautiful campus as a reason they chose the school. They providing comments noting their search for a tranquil place of learning, or an intellectual oasis, and noting "our campus is beautiful and full of nature." Interestingly this is very much in keeping with the results of the Academica Group survey that was done of applicants to Western and why students chose Western (more on this survey is covered elsewhere in this report). Other comments were expressed also: safety concerns asking that we not put convenience over safety and noting the deaths on campus in 2015, many made the link to physical and mental health, noting the introduction of light rail would impact that negatively, concerns around the cost of the system and noting the negative impacts to research and to music. A number referenced the official position of the 2015-2016 University Students Council (USC), noting the president in no way reflects the opinion of the student body on this matter.

There was petition or motion activity within certain student groups:

A petition from a graduating class Facebook group for kinesiology of 90 students noting they were opposed.

A group submission on behalf of 22 Kinesiology Students' Association Council were opposed.

A group submission from 113 students who are varsity athletes (plus 6 family members) were opposed.

A group submission from 65 students including varsity athletes (different sports than the submission noted above) as well as other students were opposed.

A group submission led by the President of the Undergraduate Chapter of the International Fraternity of Phi Gamma Delta at Western representing 63 students were opposed.

A group submission from the Interfraternity Council at Western, representing 11 independent fraternal organizations, comprising nearly 600 students noted unanimous opposition. "We, the Greek Community, strongly believe that the installation of light rail transit through campus would be a terrible mistake."

A group submission on behalf of the Faculty of Health Sciences Student Council indicated that after a presentation and question and answer session there was a majority vote against any rail lines through campus. There was no indication of the size of this group.

Finally, there was a submission on behalf of the Hippocratic Council of the Schulich School of Medicine and the Dental Student Society noting their strong support of a transit plan that would bring light rail through campus. Again there was no indication of the size of this group. They noted benefits to medical and dental students including improved safety of students, enhanced student quality of life, better connections to hospitals and placement sites, and bolstered ties to allied health students.

Feedback submitted directly to Gitta Kulczycki and/or directed to the University Rapid Transit Working Group

There were a total of 8 submissions received through means other than the email account. Of the 8, one was a short note from a faculty member commenting favourably on a routing through campus, a second was from a Huron alumnus also commenting in favour, and a third was from another faculty member commenting strongly against. One was from the Alumni Association Board encouraging a principles-based approach to making the decision, without taking a position. The remainder (4) all commented negatively on the proposal:

Our former Provost, Fred Longstaffe, noted the importance of "the Keepers of the Campus" taking the long view for the university and our collective sense of pride of place and space. In that vein we should be removing traffic from the centre of our campus rather than adding more.

Two health sciences faculty members together submitted an extensive analysis of light rail coming through the campus using the criteria identified by the Rapid Transit Working Group and also adding "health" as an important objective/criteria. Their conclusion was negative to having light rail come through the campus, but positive to other possible routes. They added a number of ideas to better manage and reduce vehicular traffic and improve pedestrian safety. One of those faculty members (from Kinesiology) is Al Salmoni whose 3rd year class focused on pedestrian safety on campus in the aftermath of the death of the first year health sciences student in October of 2015. The other faculty member wrote separately to identify questions and commenting on the lack of evidence to support some of the City's position as presented in the town halls. He concluded by noting that Western had just funded his group for an Interdisciplinary Initiative to build a program of education and research that enhances resilient mental health in our students and that the main tools to do so are the natural environment combined with physical activity. The idea of having trains through the centre of campus would be diametrically opposed to that philosophy in trade for convenience, he noted.

And finally, one of the 8 was a petition, endorsed by the Dean of Health Sciences and signed by 74 individual students, staff and faculty in Kinesiology in support of light rail to campus, but not through campus.

Feedback submitted directly to the Board of Governors

The Board received 4 direct submissions on this matter. Because of their significance, they are individually highlighted.

The 2015-2016 President of the USC, Sophie Helpard, wrote on behalf of the Council and undergraduate students at Western supporting students having direct access to transit, noting that a reliable transit system linked with our physical campus is part of a world-class experience. She referenced their public endorsement of the LRT/BRT system that City Council unanimously endorsed in November of 2015, noting that "…rapid transit on Western's campus is a priority for the USC and for our students."

The former Dean of the Faculty of Health Sciences, Jim Weese, wrote to express his support for keeping light rail on the periphery of campus, and not through the campus. He noted his deeper concern that we embrace having fewer cars and buses on campus and support more pedestrian traffic. He then went on to offer some specific suggestions on how we might change the use and configuration of our campus roads and bridge.

In April, the senior administrators reporting directly to the Provost signed a joint letter expressing their unanimous opposition to the construction of light rail rapid transit through campus. Their letter spoke of support for the City's initiative for rapid transit to and from campus more quickly, efficiently and safely than the current system. However they recommended rejection of any routing crossing the bridge on University Drive. Their letter referenced pedestrian safety, reduced vehicular traffic, avoiding negative effects on teaching and research, and preserving the beauty of our historic residential campus as important imperatives.

Also in April, the Deans of all the Faculties signed a joint letter advising of their collective opposition to the City's proposed plans for light rail through campus. In fact, they noted any option to bring light rail lines through campus, regardless of access point, should be rejected. The letter referenced the promotion of healthy lifestyles by encouraging members of Western's community to walk and cycle across campus. They spoke to the deleterious effort of noise, vibration and electromagnetic interference on research, teaching and performance on campus. Finally they noted the integrity of our physical campus as a central feature in student recruitment and part of the "best student experience" for which we are known.

The Board has previously seen the first two submissions noted. The last two are appended as part of Appendix A.

Western

Vice-Provost (Academic Planning, Policy & Faculty)

April 11, 2016

Mr. Hanny Hassan
Chair, Board of Governors
Western University
C/O University Secretariat
Suite 4101, Stevenson Hall
1151 Richmond Street
London, Ontario N6A 5B8

Dear Mr. Hassan:

RE: City of London proposed routing for Light Rapid Transit though campus

As Western's senior administrators reporting directly to the Provost, we are writing to express our unanimous opposition to the plans recently publicized by the City of London that propose construction of Light Rapid Transit (LRT) through the University campus.

Over the past months, faculty, staff, academic leaders, postdoctoral scholars, graduate students, and undergraduate students from across Western's campus have debated the potential merits and detriments of LRT routes running through the center of this beautiful campus. We note that this discussion takes place at the same time as we are increasingly concerned about pedestrian safety on campus in light of the large volume of vehicular traffic on campus. As senior administrators, we have participated in these discussions and listened to the voices of our campus community. As a group, we are unanimous and passionate in our opinion and wish to express our common perspective directly to the Board of Governors as it deliberates on how to officially respond to the City's LRT proposal on the University's behalf.

We enthusiastically support the City's efforts to explore options for a rapid transit system that would move students, faculty, staff and other members of the public to and from campus more quickly, efficiently and safely than the current public system. However, in considering the potential impacts of routes that include the LRT system crossing the bridge on University Drive at the Thames River, we are adamant that these routes should be rejected. We advocate that plans for the LRT system must include the following imperatives:

- increase personal safety by reducing or eliminating all vehicular traffic on campus;
- avoid negative effects, on research and teaching in Western's buildings, of vibration and noise, and, if a rail system is used, of electro-magnetic radiation;

.../2

- preserve the aesthetic beauty of our historic residential campus which is a significant recruitment factor for both domestic and international students;
- preserve the land necessary for future growth of the university; and,
- promote healthy lifestyles on campus that include active transport (e.g., walking, cycling).

We understand that Western's Traffic/Rapid Transit Task Team will make a formal written submission to the Board that will describe these and other concerns in more detail. We appreciate your consideration of our position on this critically important issue. Decisions on this issue will impact significantly Western's future development and reputation for decades to come.

Sincerely,

M. Karen Campbell, Vice-Provost Elect
(Academic Planning, Policy & Faculty)

Ruban Chelladurai, Associate Vice-President
(Planning, Budgeting & Information Technology)

John Doerksen, Vice-Provost
(Academic Programs)

Jana Luker, Associate Vice-President
(Student Experience)

Julie McMullin
Vice-Provost & Associate Vice-President (International)

Linda Miller, Vice-Provost
(Graduate & Postdoctoral Studies)

Catherine Steeves
Vice-Provost & Chief Librarian

Glen Tigert
University Registrar

Alan Weedon
Alan Weedon, Vice-Provost
(Academic Planning, Policy & Faculty)

Copy:

Amit Chakma, President & Vice-Chancellor
Janice Deakin, Provost & Vice-President (Academic)
Gitta Kulczycki, Vice-President (Resources & Operations)
John Capone, Vice-President (Research)
Kelly Cole, Vice-President (External)
Peter White, Executive Director, Government Relations & Strategic Partnerships
Irene Birrell, University Secretary

Western
FIMS
Faculty of Information & Media Studies

April 11, 2016

Mr. Hanny Hassan
Chair, Board of Governors
Western University
C/O University Secretariat
Suite 4101, Stevenson Hall
1151 Richmond Street
London, Ontario N6A 5B8

Dear Mr. Hassan:

On behalf of my decanal colleagues, I am writing to formally advise of our collective opposition to the City of London's proposed plans to construct Light Rail Transit (LRT) lines through Western's campus.

During the past several weeks, the Western community has engaged in an extensive and passionate dialogue concerning the pros and cons that LRT lines running through campus could have for the future of our University. This dialogue has invited and included the voices of students, faculty, staff, senior administrative and academic leaders alike. Notwithstanding the divergent opinions submitted to Western's Transit Task Team, our group wants to ensure you are made aware of our shared viewpoint on this issue as the Board contemplates its formal response to the City's LRT proposal on Western's behalf.

As Western's senior academic leaders, we support the City's efforts to improve the efficiency and safety of public transportation that students, faculty, staff and other members of the public use to get to and from campus. However, we strongly believe that bringing LRT lines through campus, regardless of access point, should be rejected.

Prominent among our numerous concerns is our responsibility to ensure personal safety on campus. To that end, our aim should be to reduce rather than increase traffic through campus. At a time when universities throughout Canada are moving to become vehicle-free, the plan to drive an LRT line through the middle of our campus is counter-intuitive and even retrograde. In addition, we see the effort to traverse campus with an LRT as diametrically opposed to the promotion of healthy lifestyles, which we do by encouraging members of our University community to walk and cycle across campus.

Furthermore, after consultation with our colleagues, we are convinced that the noise, vibration, and electromagnetic interference that LRT lines will introduce to our campus will have a deleterious effect on research, teaching and performance — activities core to our mission as a postsecondary institution.

Finally, we know that the integrity of our physical campus is a central feature in our student recruitment and is a major component of the "best student experience" for which Western is celebrated across the country. An LRT line would have a pernicious impact on that physical integrity, and ultimately upon the quality of the student experience and our efforts to recruit the best students to Western.

We understand that Western's Transit Task Team will make a formal written submission to the Board that will describe these and other concerns in more detail. Thank you for your consideration of our position on this critically important issue, the decisions on which may significantly impact Western's future development and reputation for decades to come.

Sincerely,

Thomas Carmichael,
Dean, Faculty of Information and Media Studies

Robert Andersen,
Dean, Faculty of Social Science

Charmaine Dean,
Dean, Faculty of Science

Jayne Garland,
Dean, Faculty of Health Sciences

Andrew N. Hrymak,
Dean, Faculty of Engineering

Robert Kennedy,
Dean, Ivey School of Business

Michael Milde
Dean, Faculty of Arts and umanities

Vicki Schwean,
Dean, Faculty of Education

W. Iain Scott,
Dean, Faculty of Law

Michael J. Strong,
Dean, Schulich School of Medicine & Dentistry

Betty Anne Younker,
Dean, Don Wright Faculty of Music

Copy:

Amit Chakma, President & Vice-Chancellor
Janice Deakin, Provost & Vice-President (Academic)
Gitta Kulczycki, Vice-President (Resources & Operations)
John Capone, Vice-President (Research)
Kelly Cole, Vice-President (External)
Peter White, Executive Director, Government Relations & Strategic Partnerships
Irene Birrell, University Secretary

Western
UNIVERSITY · CANADA

Amit Chakma, President & Vice-Chancellor
Janice Deakin, Provost & Vice-President (Academic)
Gitta Kulczycki, Vice-President (Resources and Operations)
Ruban Chelladurai, Associate VP (Planning, Budgeting & IT)
Hanny Hansen, Chair, Western`s Board of Governors
Suite 2107 Stevenson Hall
Western University
London, Ontario N6A 5C1

December 23, 2015

Re: Thanks and Campus Transit Plan

Dear Colleagues:

Let me begin this letter by thanking you for your dedicated service to advancing our great university. I appreciate your dedication and commitment, as well as your willingness to listen to issues of collective concern.

I have been following the proposed plans to bring a city rapid transit system (including a light rail system) to our campus. I believe that an investment in public transit is a wise decision and one that is both futuristic and environmentally prudent. It is my hope that public transportation systems will be safe, convenient, and help reduce the number of cars and buses traversing our campus. However, please know that I do not support the suggestion of routing a rapid transit system through our beautiful, idyllic campus. We must keep this form of transportation on the periphery of our campus and return our site to a pedestrian campus.

I have heard a number of colleagues comment on this idea from a number of fronts. Discussions about an in-campus rail service are often coupled with references to the potential negative impacts of noise, vibration, and/or electromagnetic interference on our teaching and research centres and laboratories. I know that these things impacts can be measures and either supported or discounted. My concerns run much deeper. I believe that we should take this important opportunity to embrace fewer cars and buses on our campus and support more pedestrian traffic.

As you know, we have had a number of accidents on campus this year involving pedestrians and vehicles. Some have resulted in fatalities. In my opinion there are too many vehicles of all types traversing our campus. I envision a campus that places a higher value on safety and health. Let's support bus and train transit systems, but similar to the situations found on other North American campuses, let's have both of these forms of transit load and unload passengers in covered depots positioned outside the gates of our beautiful campus. While we are at it, let`s move our parking lots to the periphery areas of campus in an effort to promote walking and a safer, healthier campus. Let's also alter inner-campus traffic patterns to heighten pedestrian safety.

As you know, our campus population and campus footprint have changed considerably over the past few years. The addition of London Hall, Ontario Hall, the Western Student Recreation Centre, The Thompson Engineering Building, the Arthur and Sonia Labatt Health Science Building, the TD Stadium and the synthetic playing fields, and the new FIMS/Nursing Building have resulted in more students, staff and faculty navigating the south end of our campus. This has significantly altered pedestrian traffic flow. We need to respond accordingly and protect the north-south pedestrian corridor supporting student, staff and faculty travelling to and from these structures. I suggest that we reduce east-west vehicular flow by restricting traffic on Lambton Drive to service and emergency vehicles (i.e., responder gate on the east side of the Alumni Hall Circle). Another consideration should be maintaining the campus bridge over the Thames River as a two-lane vehicle/pedestrian/bicycle bridge. These changes would help – but we need to do even more.

We have a number of pedestrians and vehicles simultaneously using the Philip Aziz Drive. I propose the immediate installation of a walkway (perhaps carved into the north bank of the mound bordering the road. I also ask for enriched lighting along this road and around the Alumni Circle. Both are very dangerous areas for pedestrians in the evening hours. I also request that significant safety rails, traffic calming, and significant speed reduction features be implemented along the Huron, Lambton and Perth Roads where in 2015 we have witnessed two tragic deaths due to excessive speed. The high guard rails would also reduce the high levels of `J-walking` that we witness on a daily basis. Finally I ask that we consider implementing "Barnes Dance" pedestrian crossings at the Western Road/Sarnia Road and Middlesex/Perth intersections. These crosswalks are effective in moving people and vehicles in a safe and efficient fashion.

As University leaders we have an obligation to encourage and enact change that heightens the safety and security of our current and future campus constituents. In addition, we believe that we all need to think about the implications of decisions rendered. We feel strongly that the purity, tranquility and safety of our campus all need to be preserved and we need to significantly reduce in-campus traffic. The introduction of a rapid transit light rail system inside the boundaries of our campus would be a regrettable decision. This idea needs to be summarily rejected and the suggestions offered above need to be seriously considered and hopefully implemented. The safety and health needs of our current and future campus population are counting on us to take appropriate action.

Let's not let them down.

Once again, I thank you for providing me the opportunity to weigh in on this matter. I would prefer to make these points in Deans' meetings but given my pending departure from the leadership table, I decided to send them to you in this format.

Respectfully yours,

W. James Weese, Professor and Dean
Faculty of Health Sciences

Impact to Teaching and Research

In order to inform the University's response to the proposal, it was important for us to understand the potential implications to all activities on campus including to academic activities, research and performance.

We requested information from researchers (and the Faculty of Music) about tolerances specifically related to ground-borne noise and vibration and electromagnetic fields. We asked them to consider not only their current equipment, but any equipment that could be anticipated.

This is an excerpt from the memo distributed January 19 to the Deans and Associate Deans (Research) in requesting information. It may be helpful as background for Property & Finance Committee Members:

"Precision equipment that can be affected by noise and vibration is utilized in research involving particle or laser beams for magnification or measurement, and medical equipment such as magnetic resonance imaging (MRI) machines. The information gathered will help to address two potential impacts from vibration generated by LRT (Light Rail Transit), perceptible (ground-borne) vibration levels and the sound caused by the vibration (vibration induced sound). Most manufacturers of this type of precision equipment have performed vibration analysis on the equipment and are providing some level of noise and vibration specifications with their equipment.

Precision equipment can also be sensitive to electromagnetic fields (EMF). MRI and NMR imaging systems can experience interference from both external AC and DC magnetic fields. A wide variety of laboratory equipment (such as a gas chromatograph) is typically sensitive to interference from external magnetic field sources. Precision robotic systems can also be affected by these fields, if located near sources of elevated AC and DC magnetic fields. Again, most manufacturers of these types of equipment will have specifications on the sensitivity of their equipment to electromagnetic fields, including all operating conditions of the equipment and those modes of operation where it is most sensitive to EMF.

Other academic and research related activities may be impacted by LRT, including animal research and musical studies and performances. While information for these types of activities may not be as technical or prescribed as it is for research equipment, it is important to communicate to the City the potential impacts in these areas as well. Any information you can provide would be appreciated."

Our researchers and the Faculty of Music were responsive to this request, in many cases providing extremely detailed information. To best assemble this, a google map was created capturing in which building and which floor the installation is, who the researcher is, what equipment we need to be concerned about, and more specifically whether the issue is ground-borne noise, vibration, or EMI issues and what the threshold value is, where available. This can be accessed here:

https://www.google.com/maps/d/edit?mid=zQtlhXLgHuQ8.kNkbfm8A7mRI&usp=sharing

Each of the bubbles contains the relevant information. Unsurprisingly, the route up Middlesex Hill through Elgin Road (where medicine and science buildings are located) has a large number of installations where equipment sensitivities have been identified. However, the Lambton Road, Alumni Circle route is not without installations of concern. A significant one that would require additional careful study (and remediation) is the Faculty of Music buildings where sound and vibration buffering could be required.

We do know that it is possible to address these issues introduced by the installation of light rail; indeed the three campuses in the US have done (or in the case of the University System of Maryland is doing) so. What is important here is the proximity of the buildings/labs/equipment of concern to the roadways where the light rail would be installed. Our buildings are located in close proximity to our campus roads. Indeed, as an example we have one piece of equipment that is within 10 metres of the roadway, and its tolerance from electromagnetic interferences requires 100 metres clearance. The costs to move, re-purpose or re-design the buildings and research facilities that would be impacted has not been estimated, but based upon what the US institutions have had to spend, the figure would be many millions of dollars.

Use of Shuttle Service during Recent Bridge Repairs

The university had a recent occurrence which provided potentially interesting insights into students' willingness to walk from more distant transit locations.

In March of 2016 we undertook repairs on the bridge over the Thames River on University Drive. The engineering firm hired to inspect the bridge determined that the 60-foot articulated (extended) buses should not be crossing the bridge until such time as the repairs were completed and load testing done to verify that these heavier buses could use the bridge. Because of that the London Transit Commission (LTC) decided not to bring any buses (regular or articulated) across the bridge until the work was completed. They didn't have the bus capacity to switch entirely to the regular buses, and hence there was potential to cause transit rider confusion as to whether service was or was not available. Instead, they determined that the buses would stop at the university gates on Richmond Street. This impacted 3 service routes (and a great number of students).

Starting Monday March 7 the university implemented a free continuous temporary shuttle service to run Monday to Friday from 7:30 a.m. to 10:30 p.m. for riders on the three impacted routes. In our communications around the shuttle service, we did indicate that it was a temporary limited shuttle service so encouraging those who were physically able to walk to their campus destination, to do so. On Friday March 11, LTC implemented an enhanced detour route using a service road at University Hospital. We then shifted our shuttle service to run from the front of University Hospital on a continuous loop through campus. Shuttle service time (to make the full loop) was 10 minutes from the Richmond gates, and 8 minutes from University Hospital. With the bridge repairs done and load testing conducted satisfactorily, LTC resumed normal service on Tuesday March 22 so our shuttle service was discontinued as of day's end on March 21.

Communication of service changes is always a challenge. We used the university's main website, email blasts, social media, LTC's website, local media, our student organizations, physical signage and we even had university personnel stationed at the shuttle sites, particularly when the service was first mounted and when the routing changed, but we also had some general monitoring throughout. Hence we had staff pointing out to students the shuttle location, many times with the shuttle actually waiting right there to board. We started with three buses servicing the campus continuously, but adjusted that based upon ridership as we gained experience.

Some of the buses had average ridership of 7 riders per shuttle trip (capacity was approximately 25) but the overall average for the time we operated the service was 1.4 riders per shuttle bus. While we were operating the routes to the Richmond gates, the average ridership was 2.9. When we moved to the University Hospital site (and noting that LTC was better able to service the interior of campus with the use of the University Hospital service road) average ridership dropped to 0.8 riders per shuttle bus. The vast majority of students chose to walk. The start of our shuttle service coincided with some lovely weather; no doubt that made a difference. However, even in the heavy rainy days we were surprised at the low shuttle ridership.

Preliminary Bus Rationalization Plan

On December 8, 2015 we received from the London Transit Commission (LTC) preliminary information regarding the rationalization of bus routes and numbers of buses on campus with the possible introduction of light rail using the City's preferred routing. This information follows.

Currently there are 13 routes and 49 buses per peak hour.

In 2019, absent light rail, they project 11 routes and 56 buses per peak hour.

With light rail rapid transit, there will be 10 routes and 48 buses per peak hour. This would be in addition to the 12 streetcars in each direction for a total of 24 per hour.

It is also important to note that the buses require separate lay-bys so as not to impede the smooth (rapid) flow of streetcars at established stops.

Why Undergraduate Students Choose Western

In 2011, Western commissioned Academica Group to do a survey of 11,777 applicants to Western to determine why they chose to come here. We had a response rate of 37% and a 95% confidence level of plus or minus 0.7%. This is the most recent applicant survey that has been done.

Here is how the question was asked: How much impact did each of the following factors have on you making your first choice? The impact could be positive (i.e. It was appealing and attracted you to the institution) or the impact could be negative (i.e. It was a drawback). The rating scale was:

-3 is Strong negative impact, 0 is Neutral or NO impact, and +3 is Strong positive impact.

So students could select -3, -2, -1, 0, +1, +2, +3

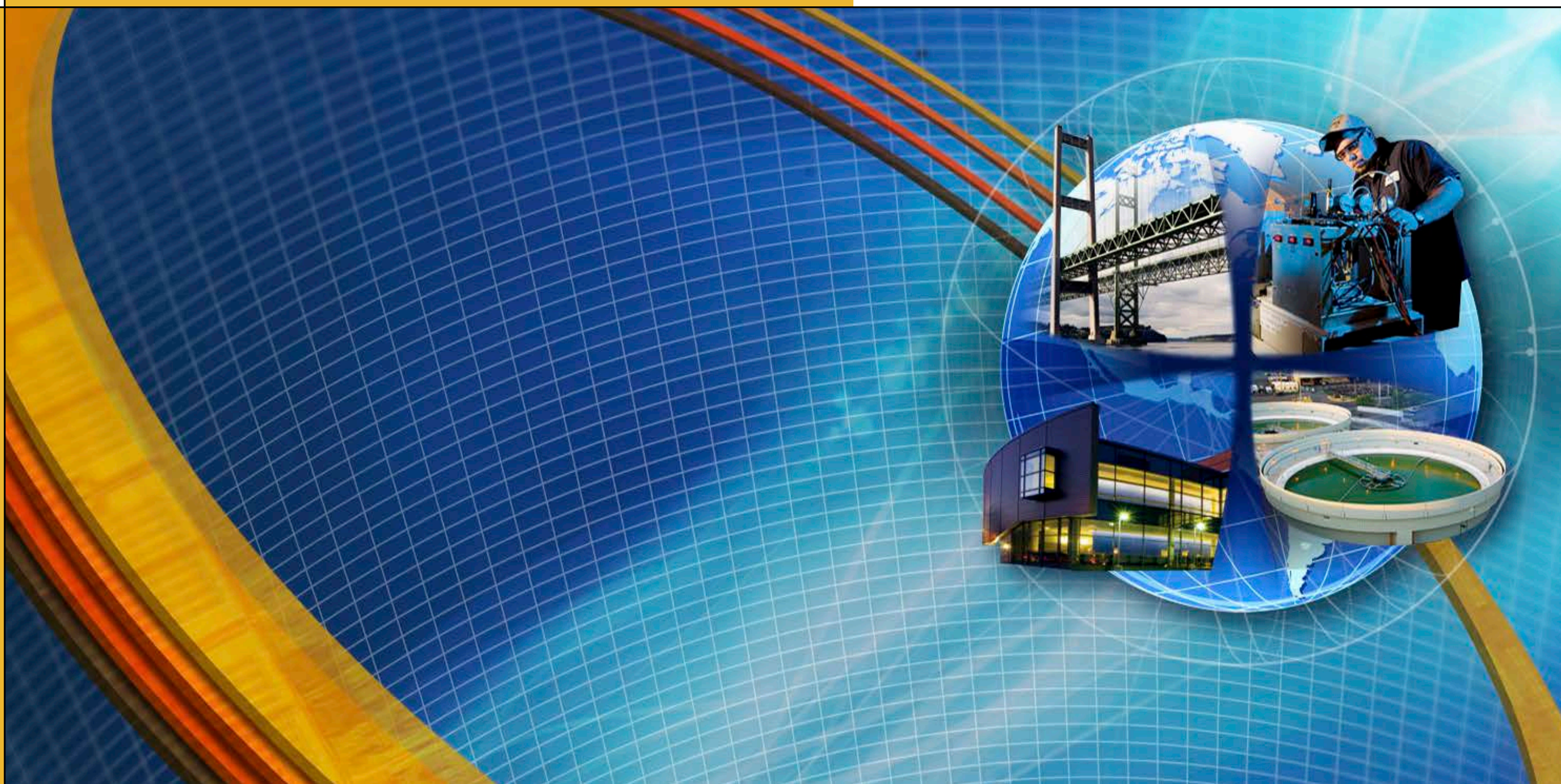
The top 10 Western First Choice Applicants Mean Influence Factors noted in order of importance were as follows:

Academic reputation of institution	2.3
Academic reputation of program/major	2.2
Reputation for student experience	2.1
Attractive campus	2.1
Quality of faculty	1.9
Graduates get high-quality jobs	1.8
Recreational sports/fitness facilities	1.7
Clubs and social activities	1.6
Grads get into top professional and grad schools	1.5
Campus housing/residences	1.4

As the information above shows, the attractiveness of our campus ranks as third most important for why students choose Western. Consequently a central focus of our recruitment strategy is to get applicants to visit campus and experience its beauty. A potential risk of compromising the attractiveness of campus with light-rail rapid transit infrastructure is weakening our standing as a destination university for undergraduate students.

Traffic Study 2015 / 2016

Activities To-date



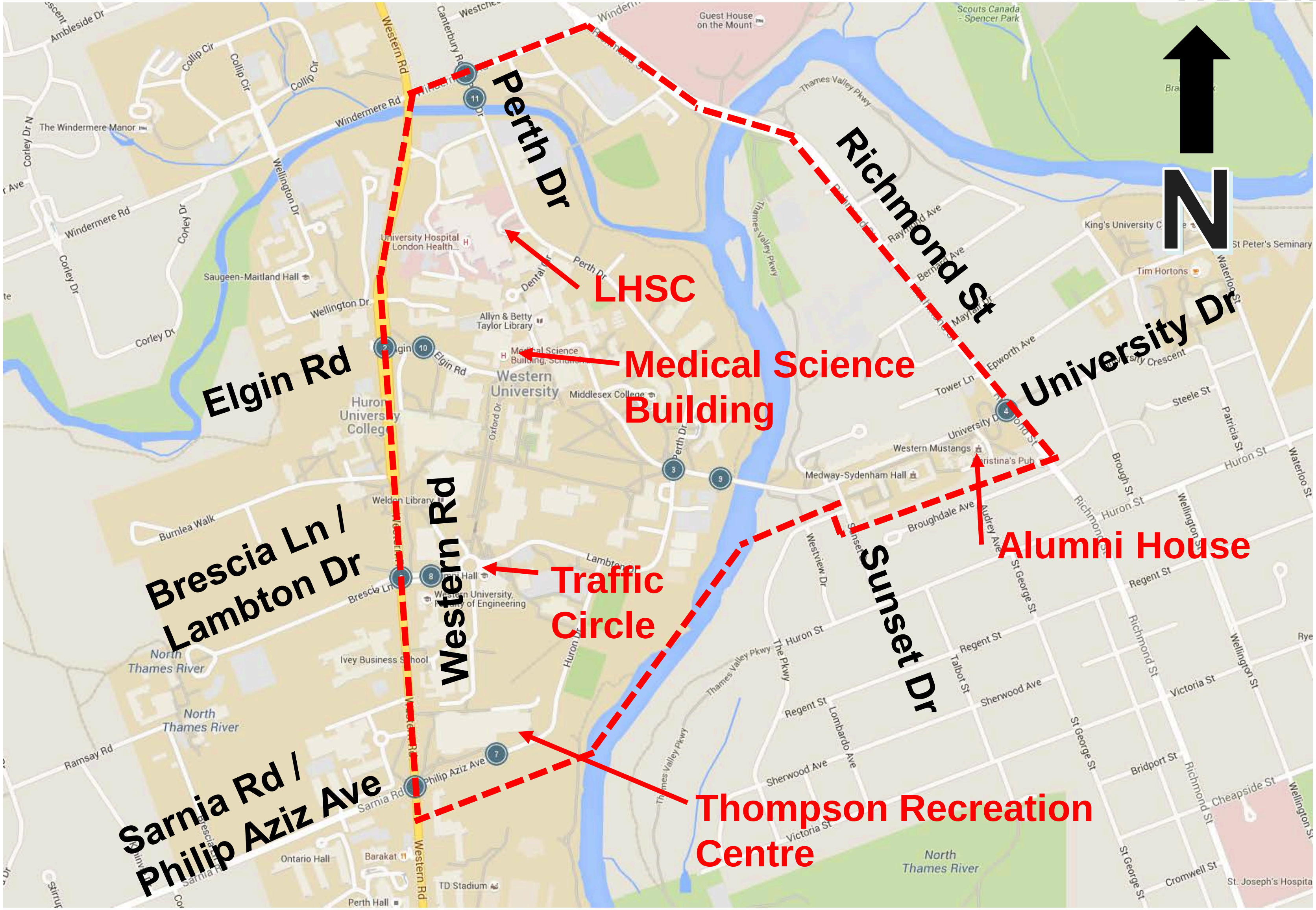
Activities To-date

PARSONS

- Support Traffic / Rapid Transit Task Team
  - Inform
  - Advise
- Benchmark existing conditions
  - Characterize vehicular traffic
  - Quantify transit activity
- Characterize road use
  - "Linked trips" or "Kiss-n-Ride" activity
  - "Cut-through" activity
- Model future "Master Plan" scenarios
  - Reduction / elimination of motor vehicles within campus core

Campus Map

PARSONS

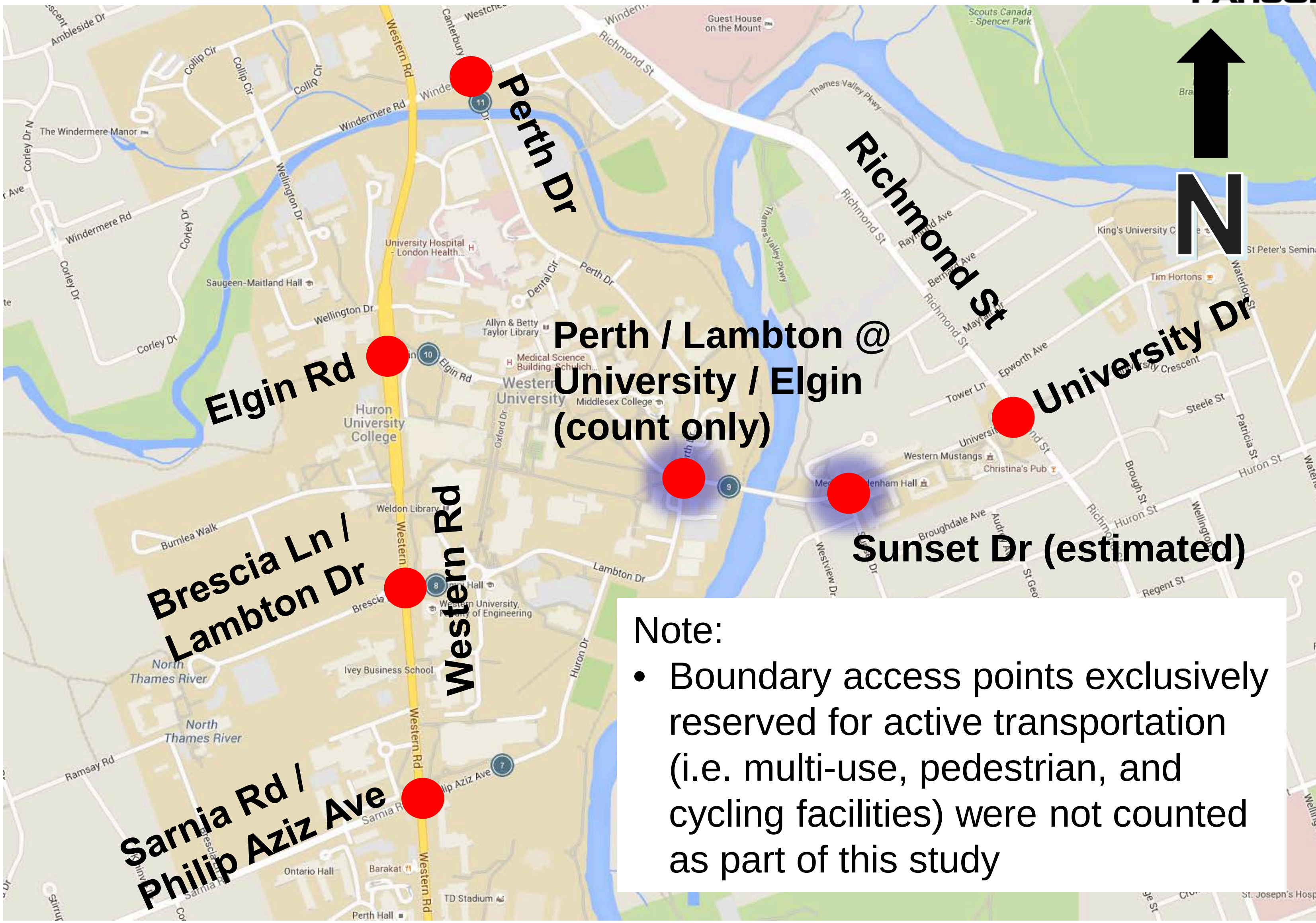


Data Collection

PARSONS

- **Five boundary intersections**
  - Western Road @ Sarnia Road/Philip Aziz Avenue;
  - Western Road @ Lambton Road;
  - Western Road @ Elgin Drive;
  - Windermere Road @ Perth Drive; and
  - Richmond Street @ University Drive.
- **Intersection Turning Movements –** summaries of all vehicles, cyclists, pedestrians entering intersection, and their departing route
- **Automated Vehicle Tracking -** movements of individual inbound and outbound vehicles with time-stamps

Data Collection Locations



Note:

- Boundary access points exclusively reserved for active transportation (i.e. multi-use, pedestrian, and cycling facilities) were not counted as part of this study

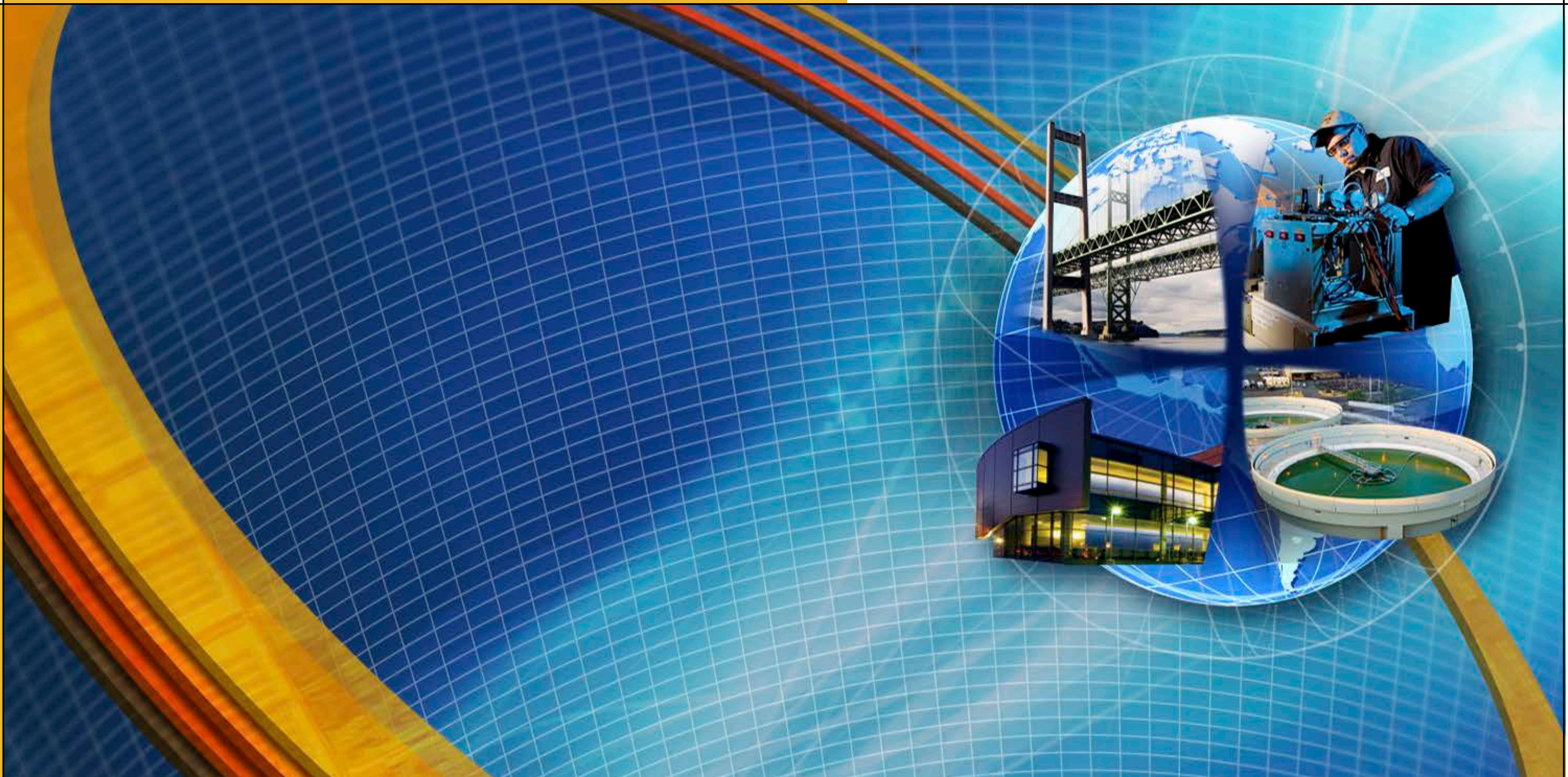
Data Collection Period

PARSONS

- Tuesday, December 2nd; Wednesday, December 3rd; and Tuesday, December 8th 2015
- Data from December 2nd and 3rd used to confirm December 8th was a "typical" day for traffic – just prior to exams
- Peak Periods
  - Morning Peak Period – 07:00-10:00
  - Noon Peak Period – 12:00-14:00 (2 PM)
  - Evening Peak Period – 15:00-19:00 (3 PM to 7 PM)
- Peak Hours
  - AM Peak Hour – 08:00-09:00
  - Noon Peak Hour – 12:00-13:00 (12 PM to 1 PM)
  - PM Peak Hour – 16:00-17:00 (4 PM to 5 PM)

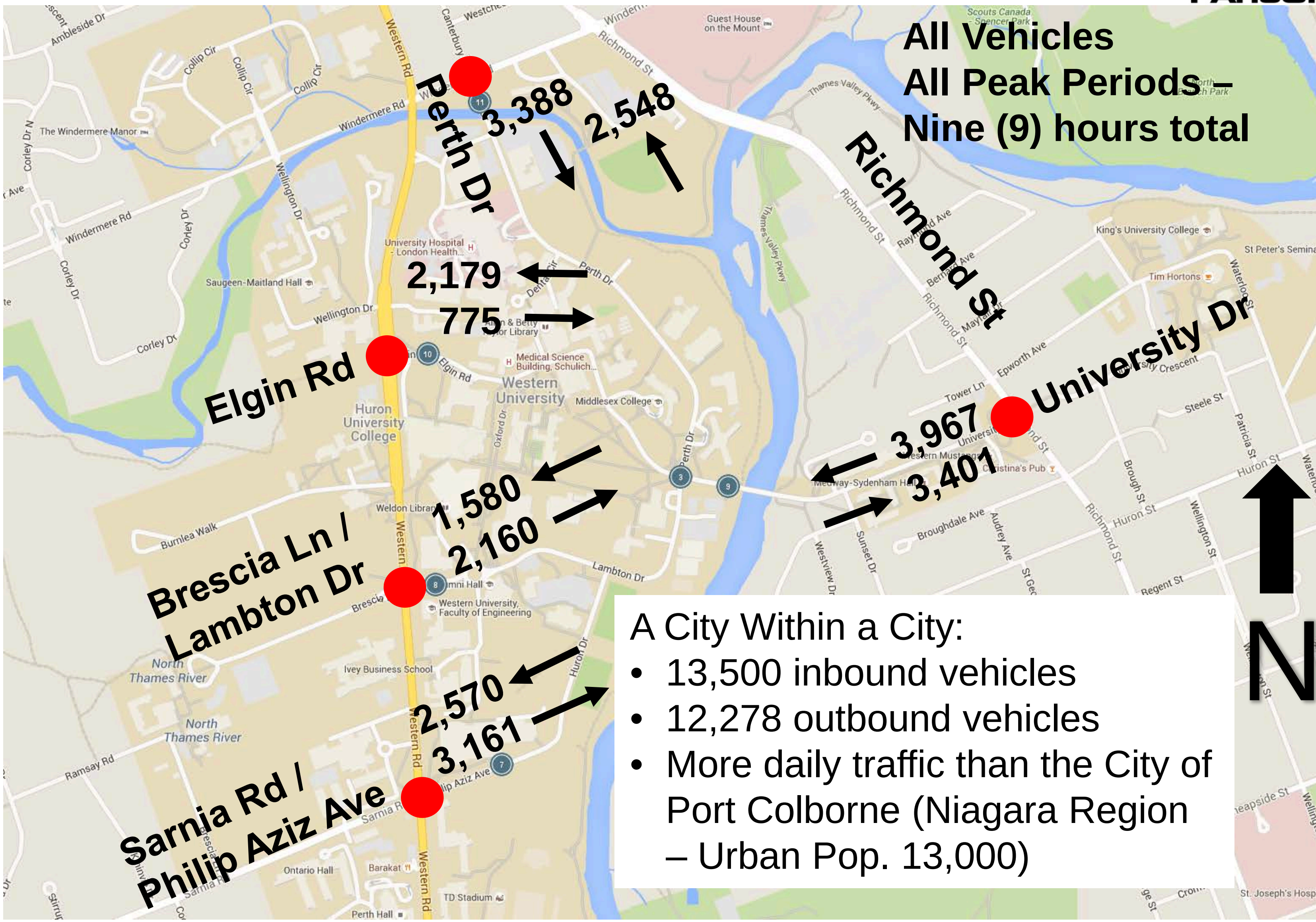
FINDINGS
Turning Movement Studies

Inbound and Outbound Traffic



All Motor Vehicles

PARSONS

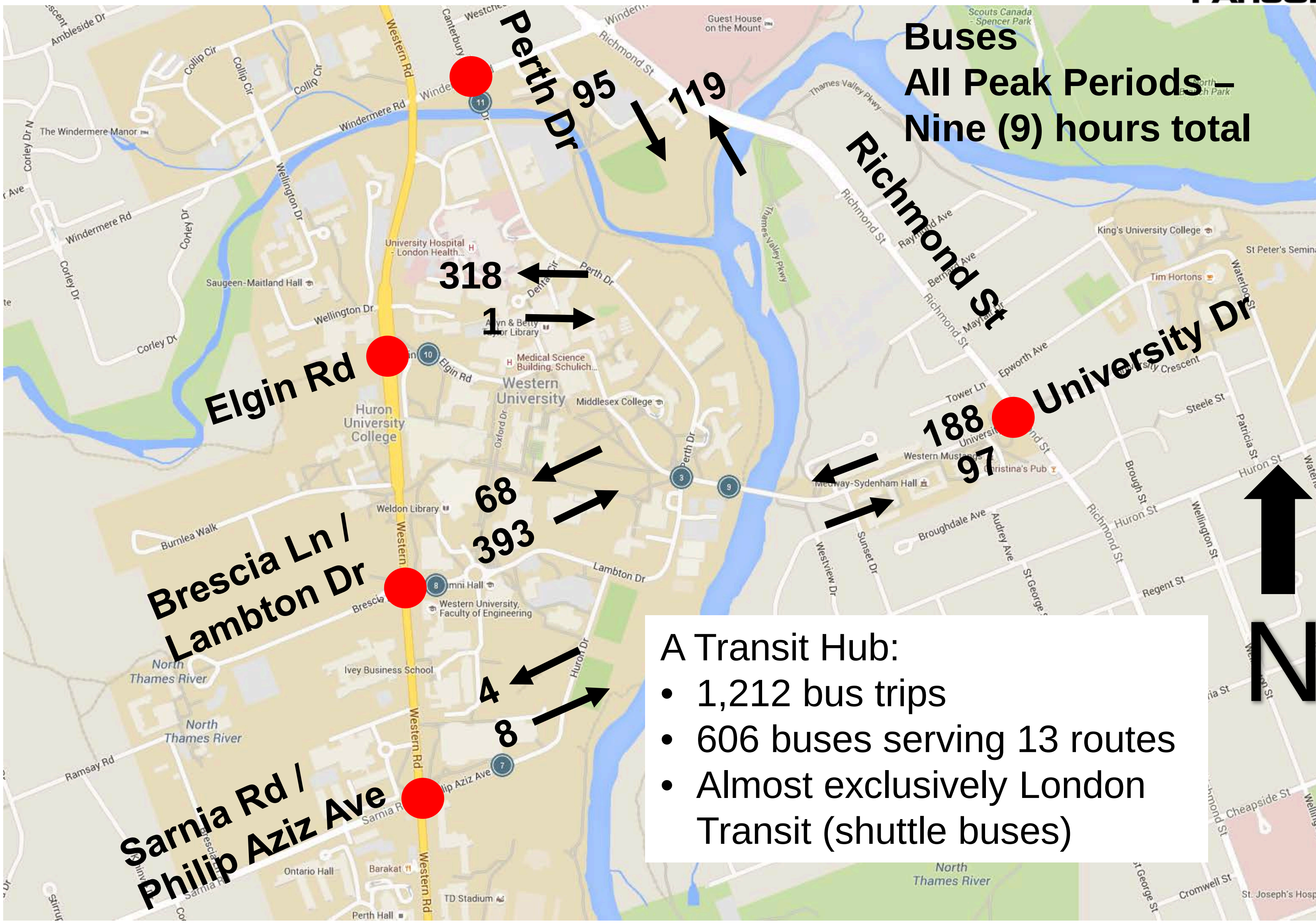


A City Within a City:

- 13,500 inbound vehicles
- 12,278 outbound vehicles
- More daily traffic than the City of Port Colborne (Niagara Region – Urban Pop. 13,000)

Buses and Trucks

PARSONS

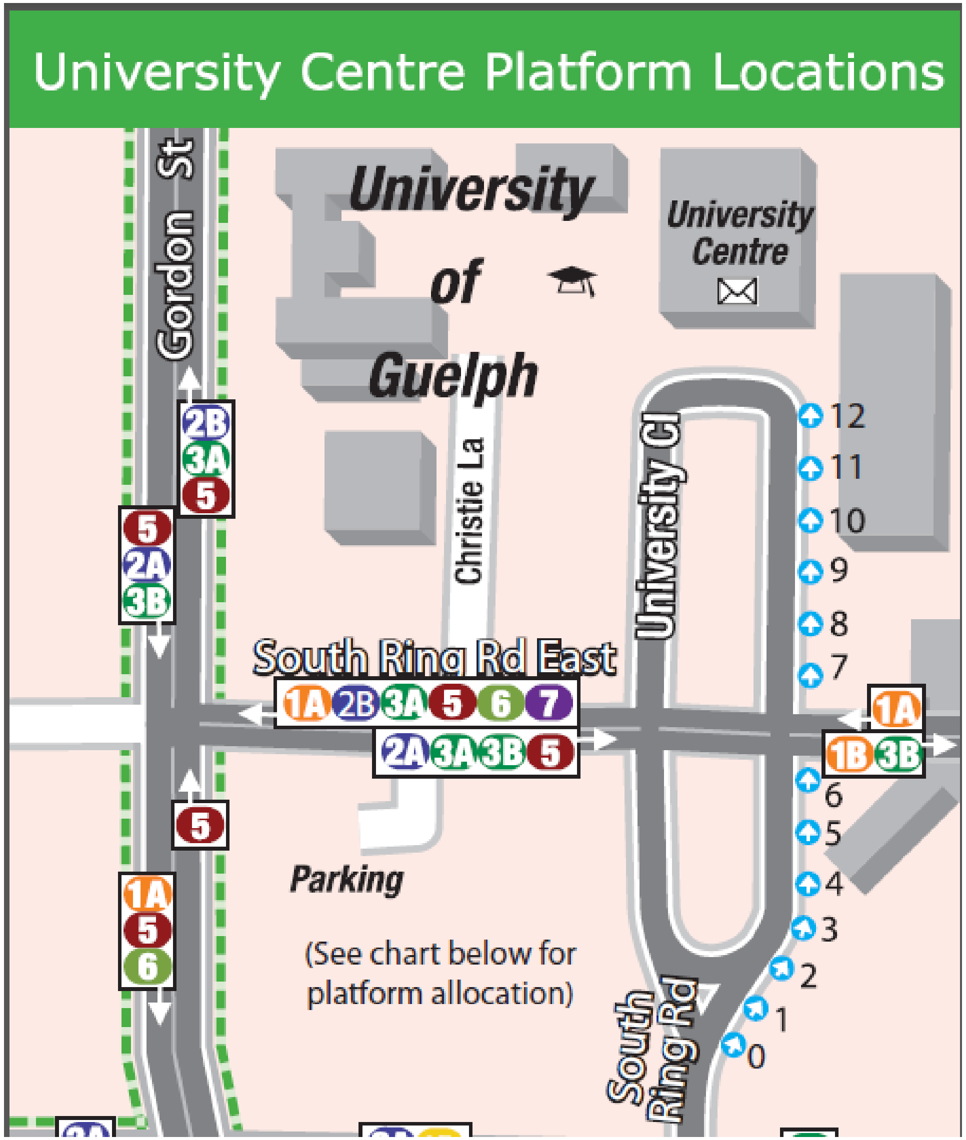


A Transit Hub:

- 1,212 bus trips
- 606 buses serving 13 routes
- Almost exclusively London Transit (shuttle buses)

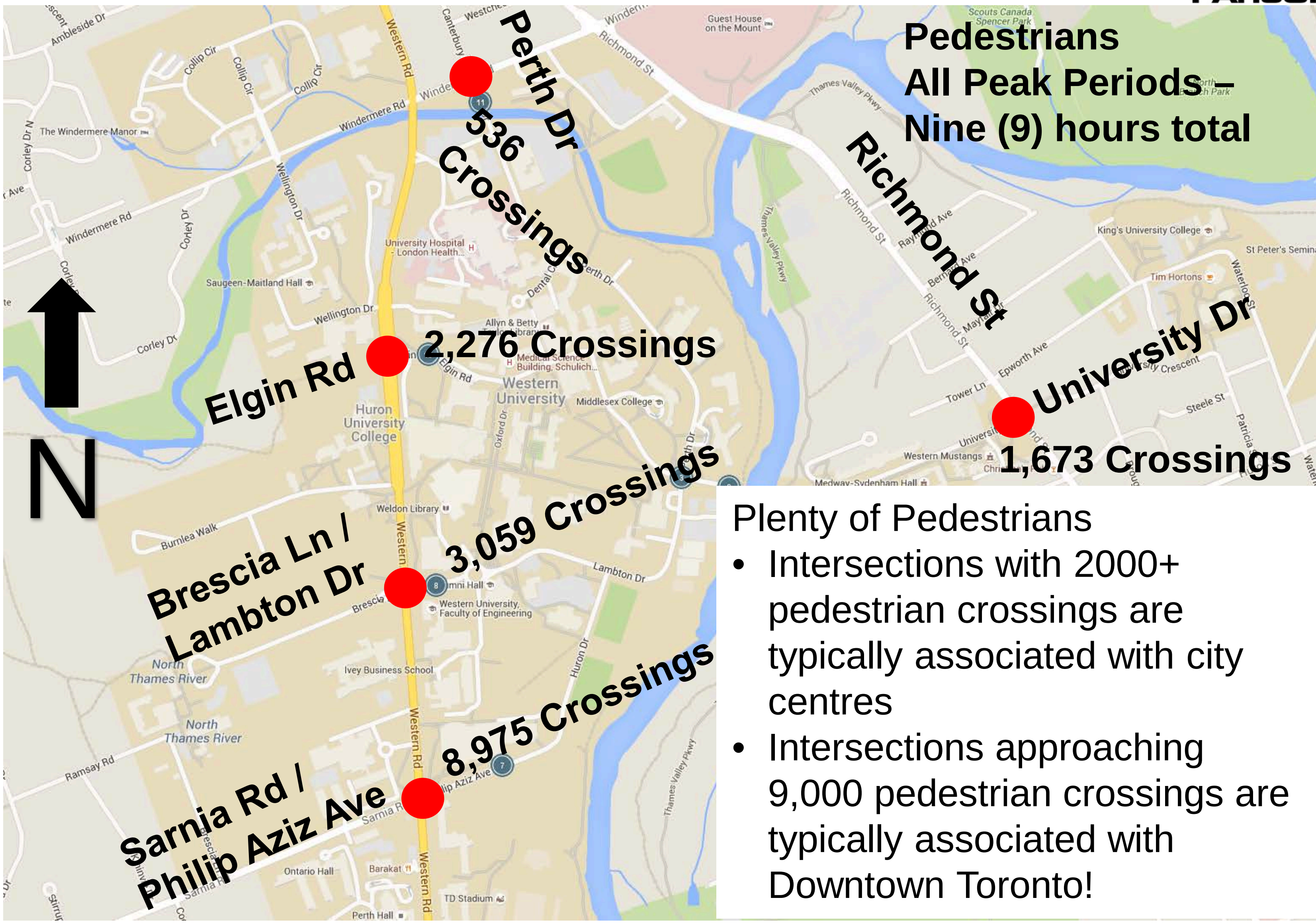
Context – City of Guelph / University

PARSONS



Pedestrians and Cyclists

PARSONS

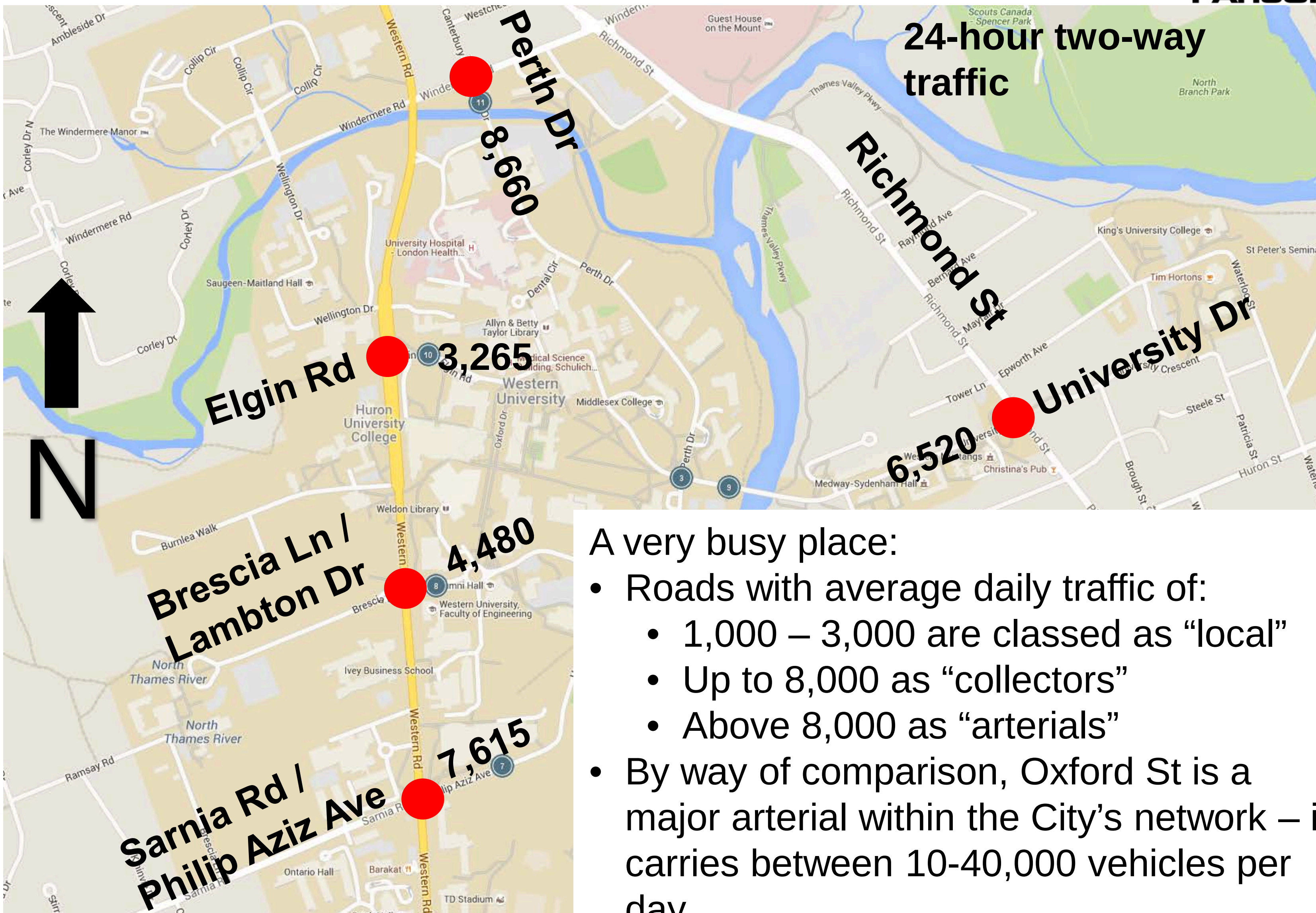


Plenty of Pedestrians

- Intersections with 2000+ pedestrian crossings are typically associated with city centres
- Intersections approaching 9,000 pedestrian crossings are typically associated with Downtown Toronto!

Average Daily Traffic (Road Sections)

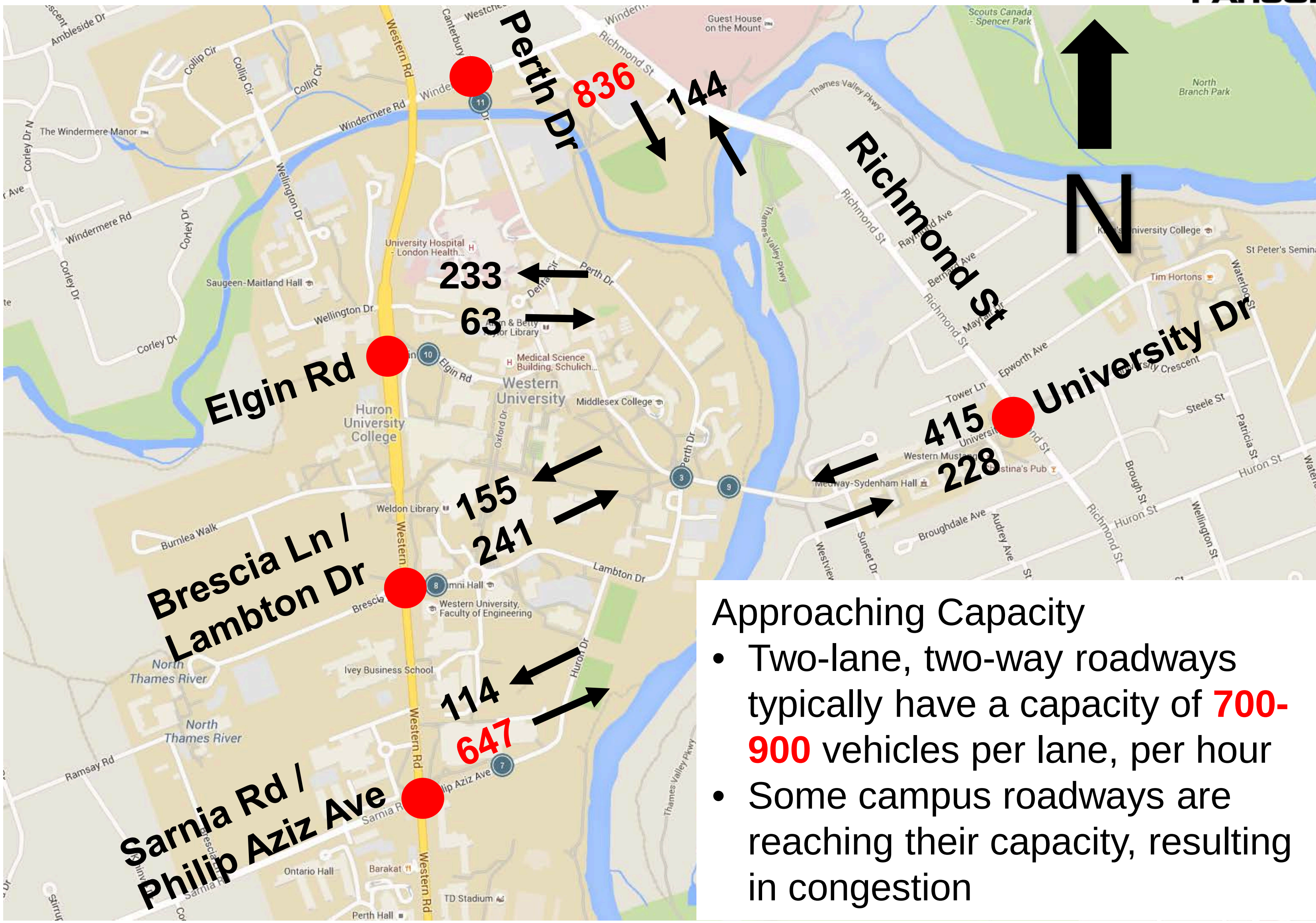
PARSONS



A very busy place:

- Roads with average daily traffic of:
  - 1,000 – 3,000 are classed as “local”
  - Up to 8,000 as “collectors”
  - Above 8,000 as “arterials”
- By way of comparison, Oxford St is a major arterial within the City’s network – it carries between 10-40,000 vehicles per day

AM Peak Hour (08:00-09:00)

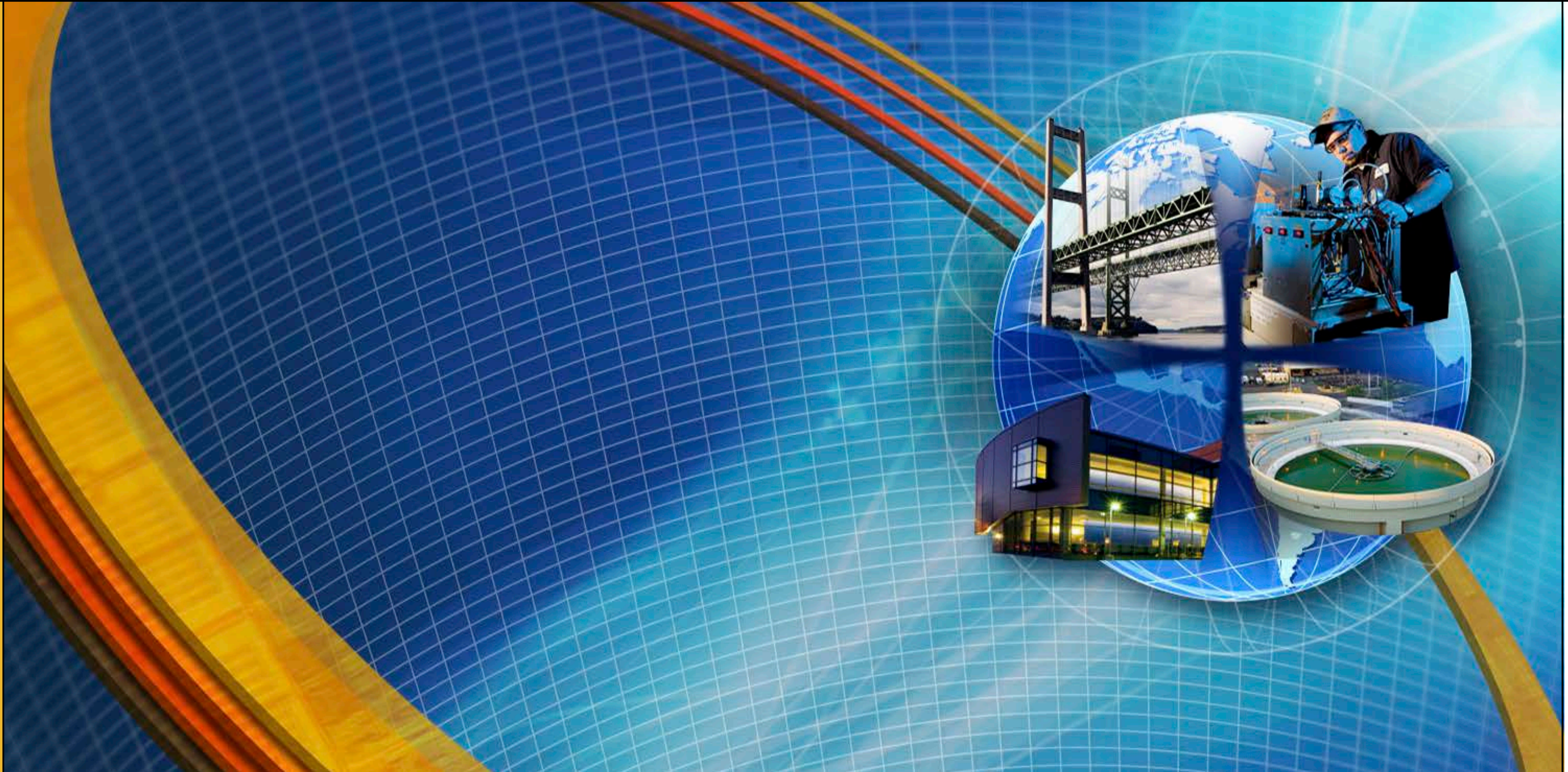


Approaching Capacity

- Two-lane, two-way roadways typically have a capacity of **700-900** vehicles per lane, per hour
- Some campus roadways are reaching their capacity, resulting in congestion

FINDINGS
Vehicle Tracking

07:00-10:00; 12:00-14:00; and 15:00-17:00
Nine (9) Hours



Origin-Destination Tracking

PARSONS

- Matched inbound and outbound movements of vehicles which entered / left campus within nine (9) hour study period
  - Entering time and location
  - Departing time and location
  - Derived "dwell" time on-campus

Definitions

PARSONS

“Linked” or Multi-purpose Trips – (thought to include **“Kiss-n-Ride”** (i.e. person picked-up or dropped-off on-campus)

- In-and-out
- Origin and destination off-campus
- Short dwell time on-campus

Definitions

PARSONS

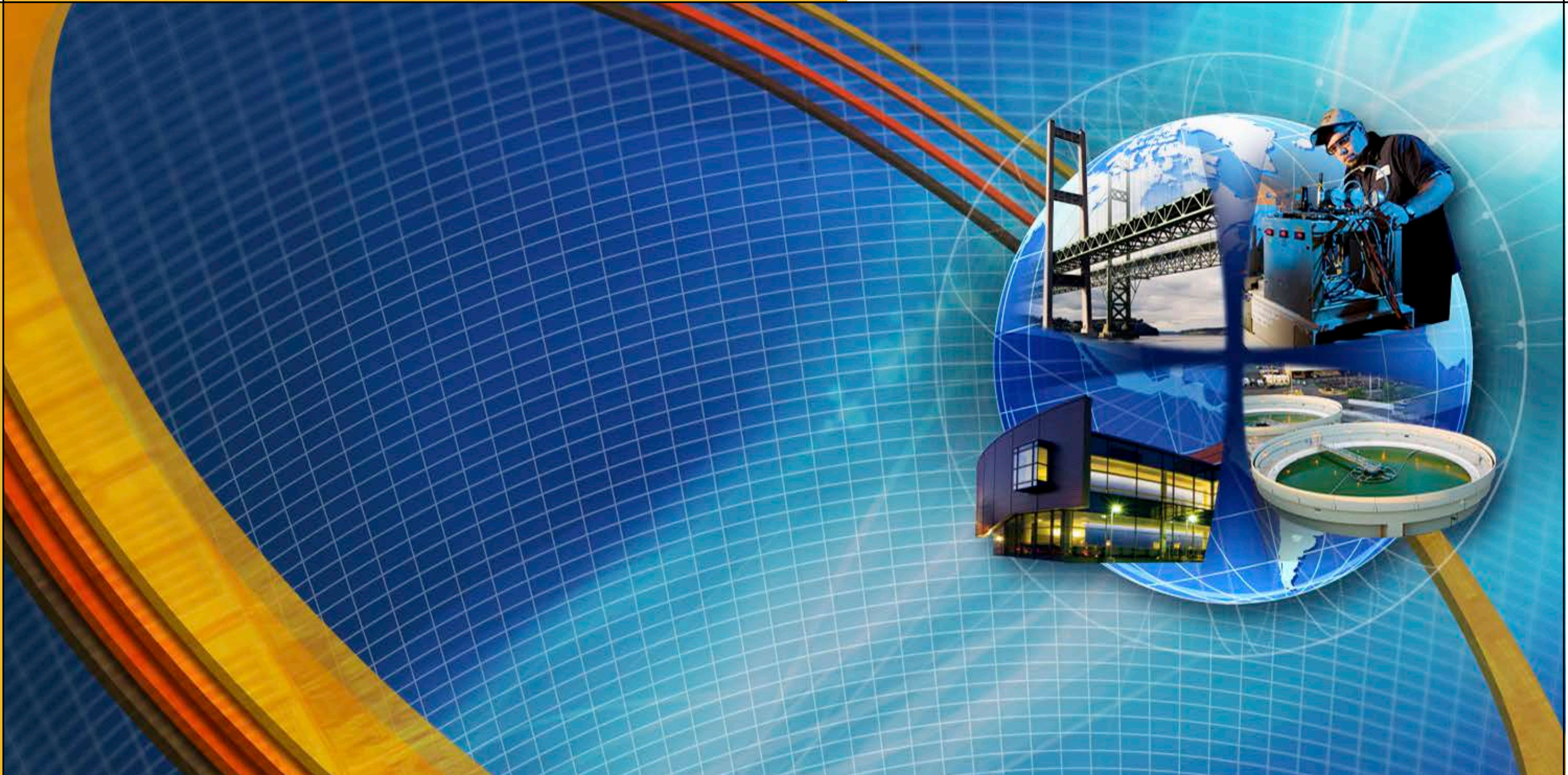
- "Cut-through" or Short-cutting Trips,
  - No "business" on-campus
  - Pass-through (origin and destination off-campus)
  - Very short dwell time on-campus
- Cannot separate from linked trip w/o interview

Turn-over Rate

- **Turn-over rate** - about nine of ten vehicles (89%) arriving during the study period, also left during the study period
- When vehicles arriving on-campus which left less than twenty (20) minutes later are isolated, they represent about 51% of all trips
- In other words, about half of all vehicle trips into and out of campus have a duration of less than 20 minutes

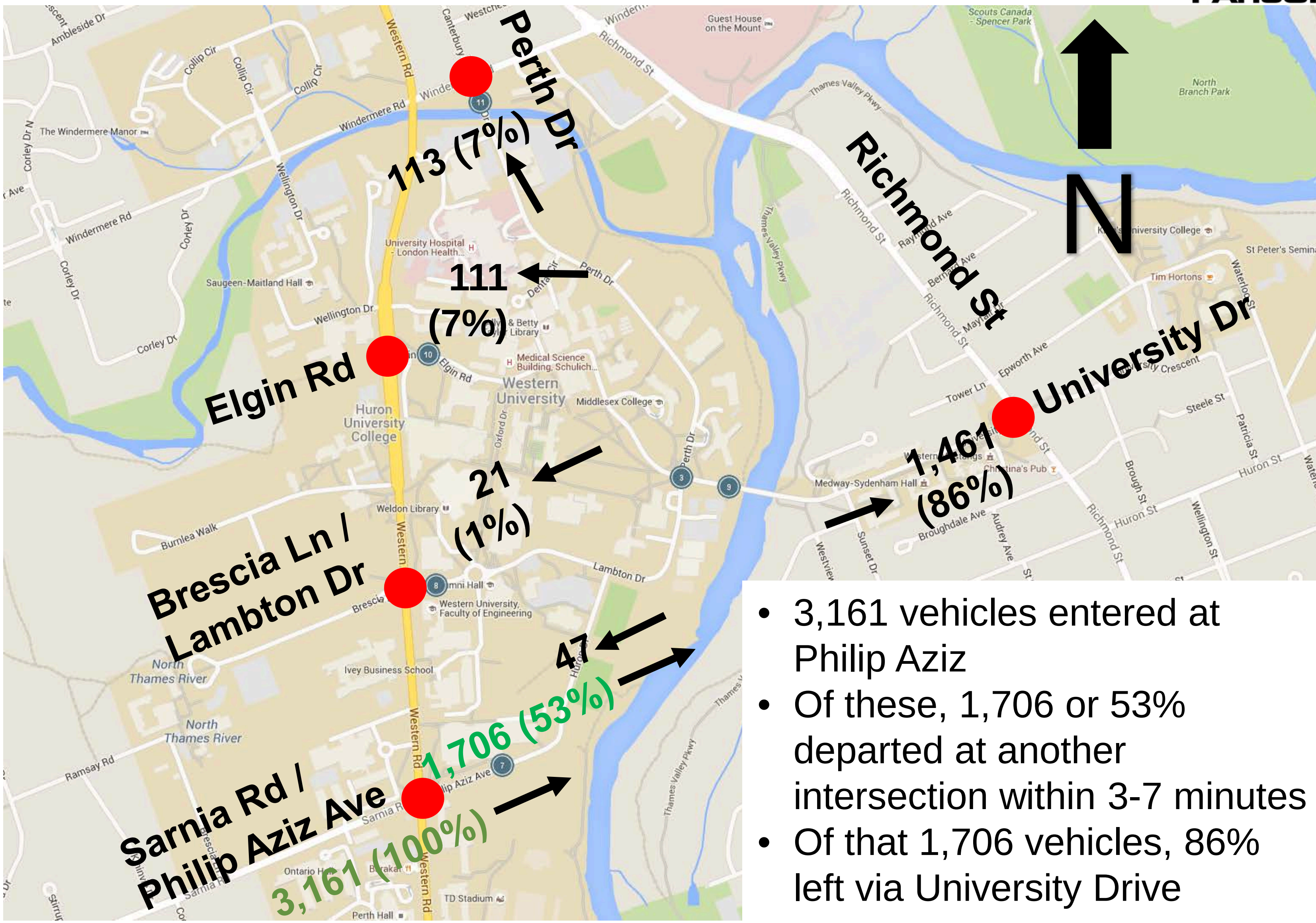
FINDINGS
Short-term Inbound – Outbound Activity

3-7 minutes dwell time



Inbound @ Philip Aziz Avenue

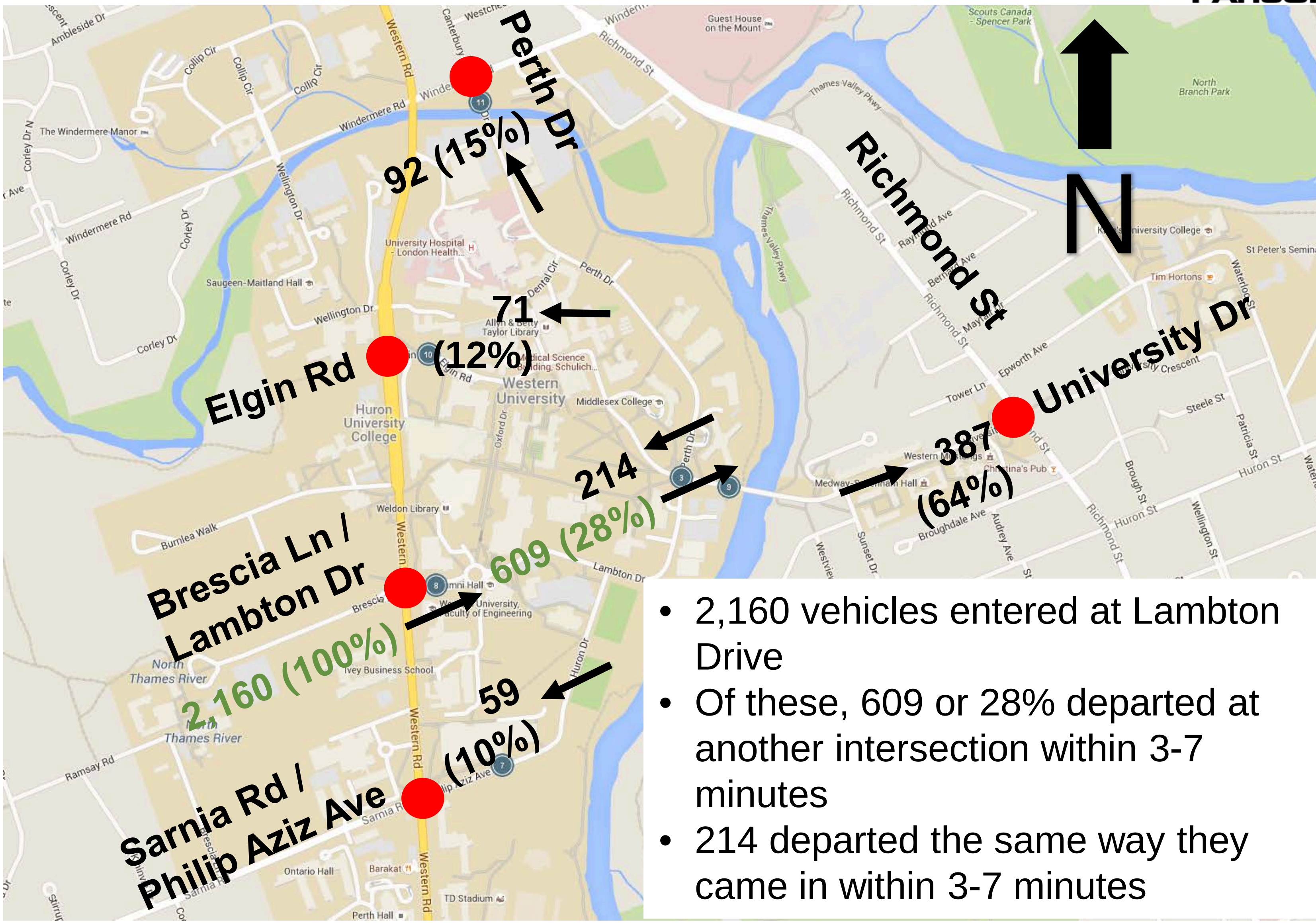
PARSONS



- 3,161 vehicles entered at Philip Aziz
- Of these, 1,706 or 53% departed at another intersection within 3-7 minutes
- Of that 1,706 vehicles, 86% left via University Drive

Inbound @ Lambton Drive

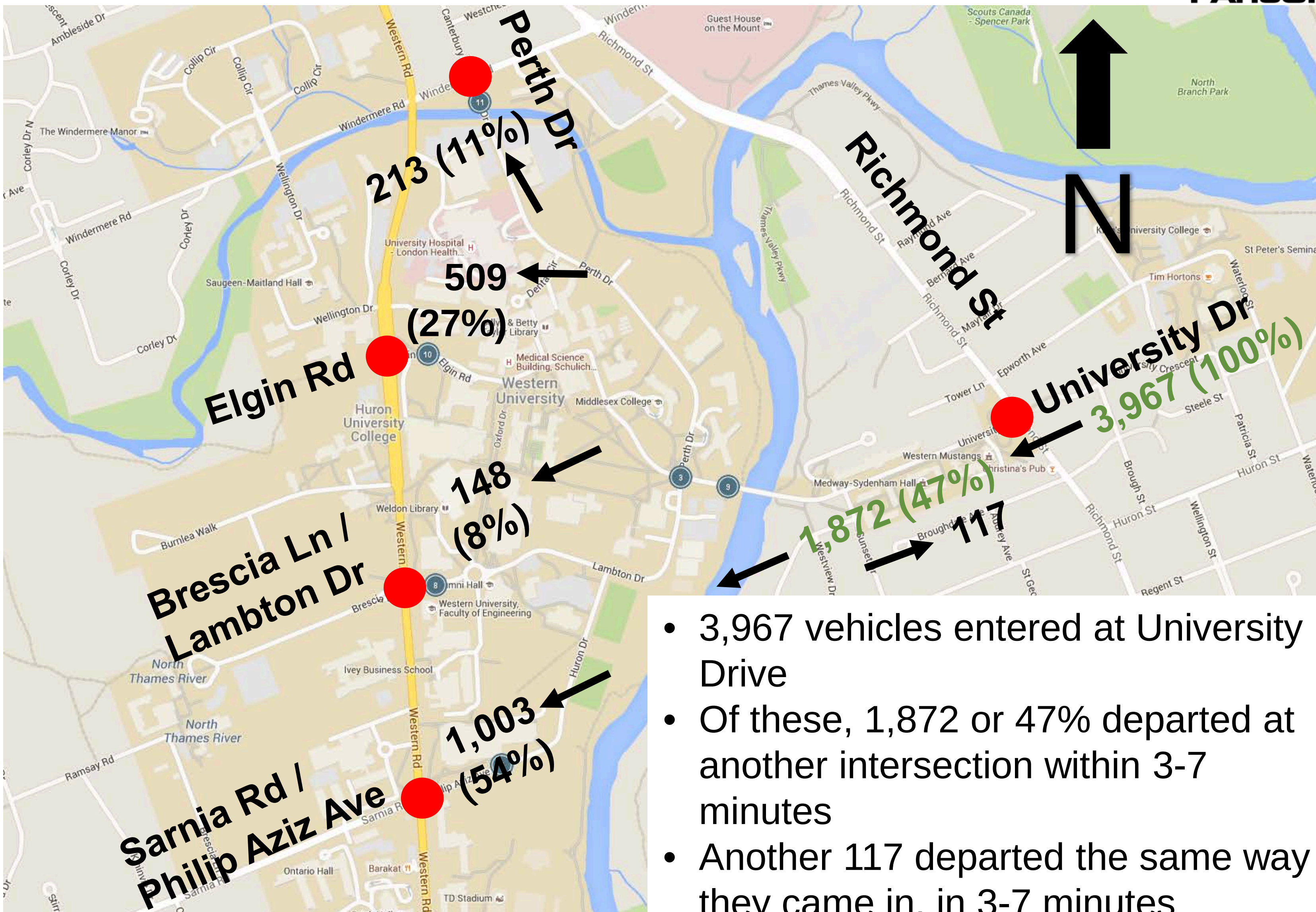
PARSONS



- 2,160 vehicles entered at Lambton Drive
- Of these, 609 or 28% departed at another intersection within 3-7 minutes
- 214 departed the same way they came in within 3-7 minutes

Inbound @ University Drive

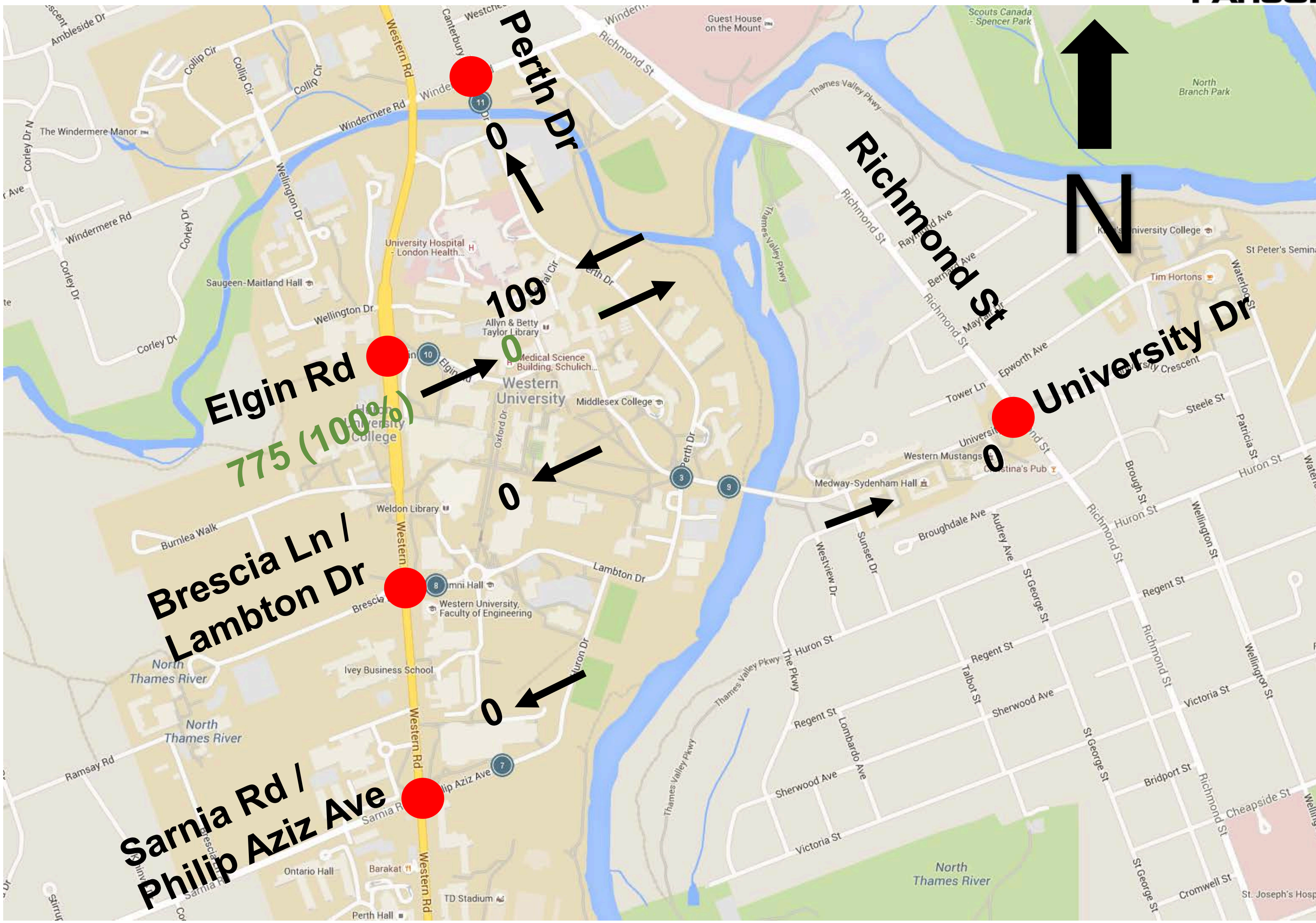
PARSONS



- 3,967 vehicles entered at University Drive
- Of these, 1,872 or 47% departed at another intersection within 3-7 minutes
- Another 117 departed the same way they came in, in 3-7 minutes

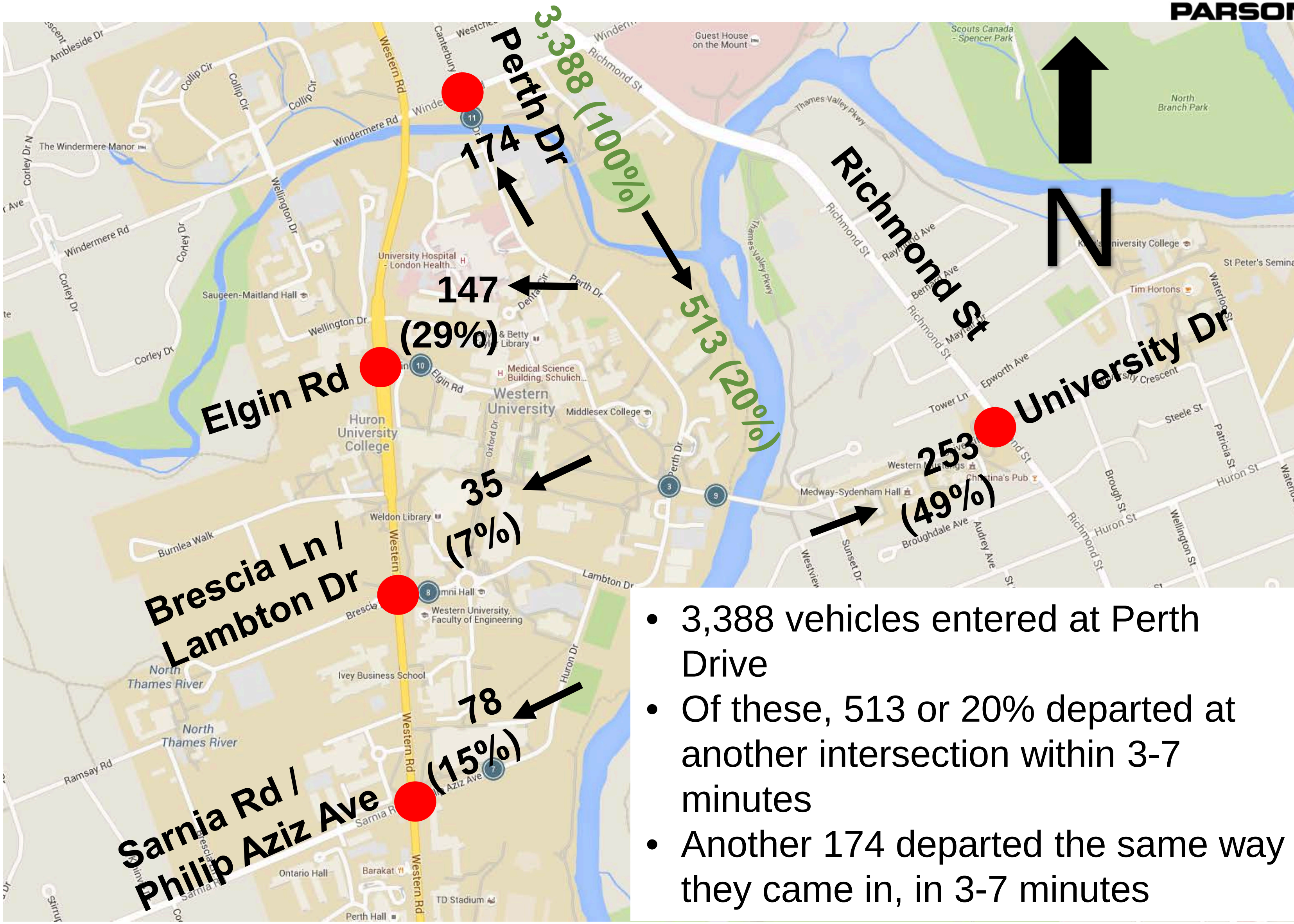
Inbound @ Elgin Road

PARSONS



Inbound @ Perth Drive

PARSONS



- 3,388 vehicles entered at Perth Drive
- Of these, 513 or 20% departed at another intersection within 3-7 minutes
- Another 174 departed the same way they came in, in 3-7 minutes

Summary

PARSONS

- **5,361 vehicles (40%) left within 3-7 minutes**
  - 4,701 (35%) left by a different entrance
  - 660 (5%) left by the same entrance

- This cohort is assumed to include:
  - **"Linked" or Multi-purpose (Kiss-n-Ride) Trips -** pick-up and drop-offs on-campus
  - **"Cut-through" or Short-cutting Trips**, with no "business" on-campus

Observations

PARSONS

- If **all linked trips and cut-through trips** were eliminated, campus traffic would be reduced by almost 5,400 vehicles per day, or 40%.
- If **all transit trips** were shifted to peripheral roads, with curb-side stops, campus traffic would be reduced by another 600 trips or 5%.
- In total, this would represent **a 45% reduction in vehicles using campus roads**.

Observations

PARSONS

- Moving these trips onto public streets (i.e. Western Road, Windermere Road, and Richmond Street) may add to congestion on these roads – particularly at key intersections
- Turn-outs for stopping/standing on these roads, and/or an off-road transit hub and/or kiss-n-ride facility would be needed to
  - Preserve / free up road capacity; and
  - Improve the safety of vulnerable road users boarding and alighting from vehicles.

Possibilities

PARSONS

1. **Existing linked trips and cut-through traffic** could "go around" campus via Western Road, Windermere Road, and Richmond Street (-5,360 trips)

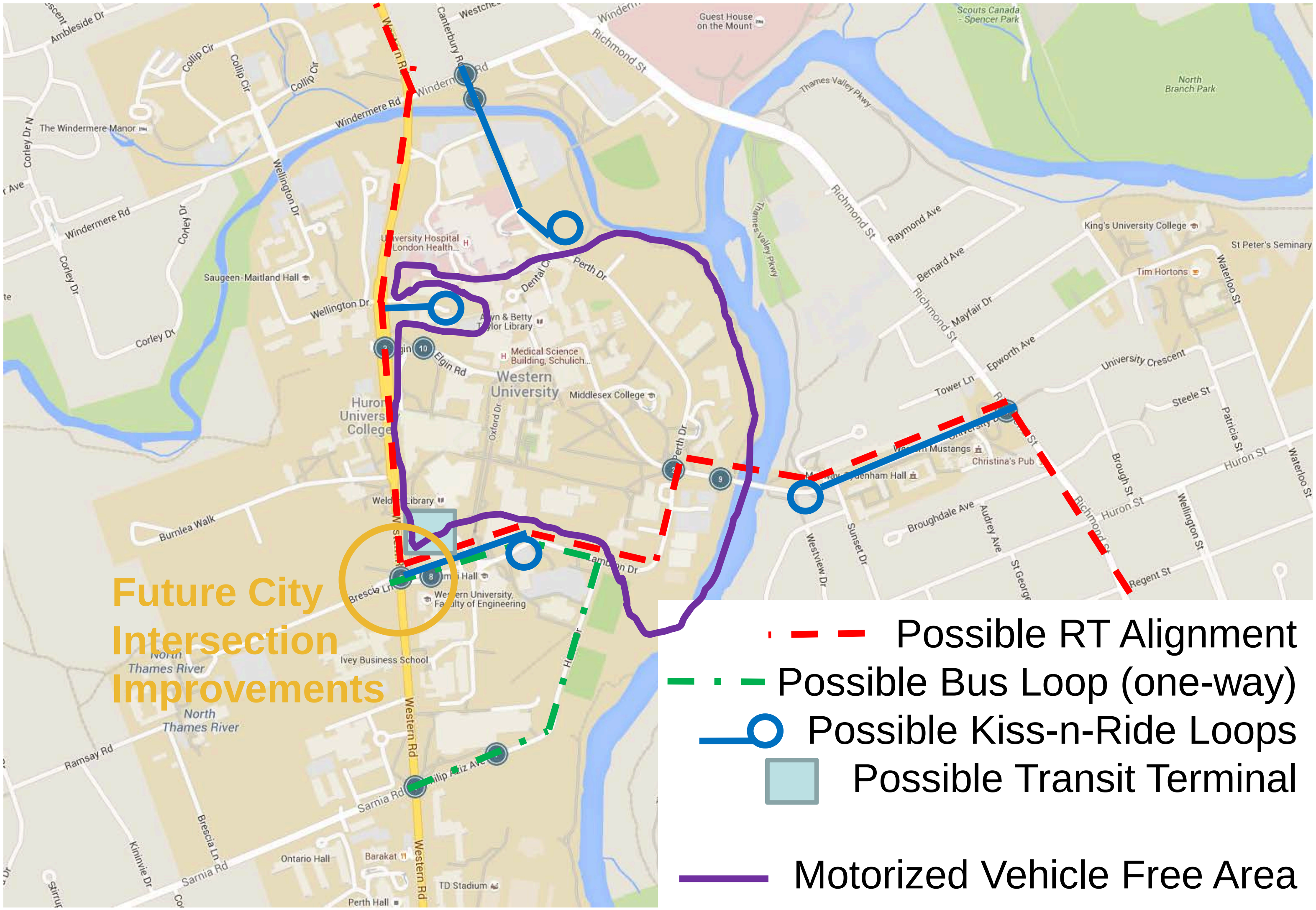
2. **Pick-ups / drop-offs** could occur at the (improved) curb on public roadways or at a dedicated Kiss-n-Ride Loop (-660 trips)

3. **Transit vehicles** could also go around, and pick-up and drop-off along public roadways or at a dedicated bus loop (-606 trips)

4. **Movements on-campus between points of access could be restricted** (e.g. to / from University Dr. @ Richmond St.)
   - The remaining motorized traffic entering / exiting campus would then consist of:
     1. Those permitted to park in on-campus, located at the periphery of a motor-vehicle-free zone (enter / exit at same location)
     2. Deliveries (enter / exit at same location)
     3. Campus vehicles (unrestricted)
     4. Emergency vehicles (access provisions)

Possibilities (Consultant Blue-sky)

PARSONS



Shared Opportunities

PARSONS

- The University, LHSC, the City, and London Transit all have a stake in safe and efficient traffic operations on and off-campus
- Coordinated planning and execution is essential to the success of:
  - Western's Master Plan goals,
  - LHSC's expansion aspirations, and
  - the City and Transit Authority's introduction / integration of Rapid Transit.

Evaluation of Route Options to Service Western's Campus

In order to assist in assessing transit route options a number of principles and objectives were established at the outset. They are replicated below:

1. Moving the students to campus
2. Campus safety, especially pedestrian safety
3. Respecting the collegiate gothic vistas and architecture
4. Significantly reducing cut-through traffic
5. Creating car-free zones
6. We would not anticipate any large incremental costs
7. We cannot disrupt academic and research activities (during or after implementation)
8. Rationalize the transit routes on campus
9. Respecting campus master plan principles and initiatives.

Note these are not meant to be rank ordered; all are important. These have been broadly shared including with the City, LTC and the Western community.

Five alternative routes were examined:

1. University Drive – Middlesex Drive – Elgin Drive – Western Road (one of the City's two preferred alternatives) (In the Summary Analysis identified as U-M-E-W)
2. University Drive – Lambton Drive – Alumni Circle – Western Road (the City's other preferred alternative) (In the Summary Analysis identified as U-L-A-W)
3. Richmond Street with a stop at University Drive (not entering campus at all) (In the Summary Analysis identified as Richmond)
4. Light rail joining Western Road somewhere south of campus with stop(s) at campus (In the Summary Analysis identified as W Road)
5. Huron Street accessing campus via a new bridge across the Thames River, joining Philip Aziz Avenue – Western Road (In the Summary Analysis identified as Huron)

Each of them was assessed against the above evaluation criteria by the university working group and separately by Parsons. The results are on the following pages. The first is a Summary Analysis for all five alternatives showing separately the group's assessment (noted as "WU") and Parsons' assessment. Following this Summary Analysis is an individual page for each alternative route showing the ranking against the criteria and relevant comments, as well as a map highlighting the route.

What are the overall results? Looking at the alternative routes from Western's perspective against our established criteria, number 4 – Western Road is ranked first, followed by the Huron Street route (number 5). For the City's two preferred alternatives, U-M-E-W (number 1) had the lowest score and U-L-A-W (number 2) had the second lowest score. These overall rankings are consistent between the university working group and Parsons, although Parsons utilized a slightly different ranking methodology (in the case of Parsons if an evaluation criteria was in their view very important and strongly met they assessed a ranking of "●●" and a score of 4 points). In general Parsons also evaluated the criteria somewhat higher than did the university team, but the overall rankings were not affected.

At its heart, alternatives 1 and 2 create incremental pedestrian safety concerns, interrupt the academic, research and performance enterprise of the university, entail significant incremental costs, and do not respect the campus master plan principles and initiatives. By the same token, an option that has light rail coming north on Western Road or across a new bridge on Huron to join Philip Aziz is positive for all those criteria (and others).

The memo from the City Manager Art Zuidema dated May 5, 2016 has a recommendation endorsing bus rapid transit, but at the same time containing a direction to design the system for future transition to light rail technology. It is for this reason that the motion before Property and Finance has the following clause: "RESOLVED, That to the extent bus rapid transit has as a condition precedent the route be convertible to light rail transit, Western University does not support bus rapid transit traversing through campus." That is not to say if it does not have such a condition precedent that we would proceed. We have not studied the possibility of bus rapid transit (only) through campus and would want to do so in the context of developing the plan for transforming the campus into a pedestrian-friendly and safe one.

Evaluation of Options

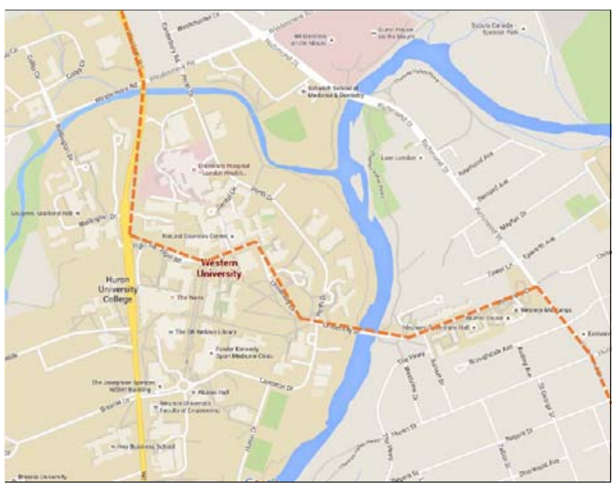
Summary Analysis for Light Rail Options

Evaluation criteria	U-M-E-W		U-L-A-W		Richmond		W Road		Huron	
	WU	Parsons	WU	Parsons	WU	Parsons	WU	Parsons	WU	Parsons
Moving students to campus	●	●	●	●	◗	○	●	●	●	●
Campus safety, esp. pedestrian safety	○	◗	○	◗	●	●	●	●	◗	●
Respecting collegiate gothic vistas/architecture	○	○	○	●	●	●	●	●	●	●
Significantly reducing cut-through traffic	◗	●	◗	●	◗	●	◗	●	◗	●
Creating car-free zones	●	●	●	●	◗	●	◗	●	●	●
No large incremental costs	○	○	○	◗	●	◗	●	●	●	○
Cannot disrupt academic/research activities	○	○	◗	◗	●	●	●	●	●	●
Rationalize transit routes on campus	○	◗	○	◗	○	●	○	●	○	●
Respecting campus master plan principles/initiatives	◗	◗	○	◗	◗	◗	●	●●	●	●●
Score	7	9	7	13	12	14	14	20	13	18
Rank	5	5	4	4	3	3	1	1	2	2

Ranking	Points	
●	2	Meets criteria/positive outcome
◗	1	Partially meets criteria
○	0	Does not meet criteria/negative outcome

Evaluation of Options
U-M-E-W
(University Drive - Middlesex - Elgin - Western)

Evaluation Criteria	Western Ranking	Western Rationale	Parsons Ranking	Parsons Rationale
Moving students to campus	●	Moves students to heart of campus.	●	Alignment brings RT through on-campus areas with potentially the shortest walk distances, and greatest potential ridership density. Provides connectivity to Downtown and to potential, future housing north of campus, but does not serve housing northwest, west, and southwest of campus (1).
Campus safety, esp. pedestrian safety	○	In isolation, it could worsen pedestrian safety, but if combined with car free zones, could help.	◗	Alignment positions RT as viable alternative mode for many trips to/from campus. At the same time however, this alignment would bring RT vehicles directly into areas most heavily-travelled by pedestrians (2).
Respecting collegiate gothic vistas/architecture	○	Electrical Distribution systems, rails, shelters will negatively impact vistas. Western could stipulate which sections of campus must be void of overhead wires.	○	This alignment juxtaposes the modern technology of an RT facility against the gothic vistas and architecture of campus. While this aesthetic mix of old and new may appeal to some, it certainly will not appeal to all and would be difficult to minimize. For example, technologies that eliminate catanery (overhead) wires add considerable expense and are unproven in harsh winter environments.
Significantly reducing cut-through traffic	◗	May or may not help cut through traffic.	●	Combined with bus loop(s), kiss-n-ride facilities, control or elimination of cut-through traffic, and parking demand management measures, this alignment option could provide strong rationale/support for the reduction/elimination of motor vehicle traffic on campus.
Creating car-free zones	●	This may be the impetus for creating car free zones.	●	As above
No large incremental costs	○	There will be significant costs to relocate and / or isolate research equipment (implementation costs to be covered by RT). There will be increased costs for grounds maintenance. Infrastructure / construction projects will become more costly.	○	Significant risk of increased costs associated with preventing disruption of current and potential, future academic / research activities; accommodating RT alignment in siting and design of future facilities.
Cannot disrupt academic/research activities	○	Significant implications with research equipment and EMF, noise and vibration issues.	○	Research indicates significant risk of disruption to sensitive academic / research activities. Mitigation, where possible, is costly both in terms of initial capital costs and sustainment costs to both campus and RT authorities.
Rationalize transit routes on campus	○	This option provides the best chance of rationalization, but numbers do not show much opportunity.	◗	The presence of one or more RT stations on campus, as well as the potential for RT/conventional bus sharing of facilities, suggests that transit routes on campus could be consolidated to one or more hubs, with bus loops to facilitate interlining between modes. That said, the need for campus to continue to serve as an interlining hub between RT and conventional bus transit is unlikely to result in a reduction in the number of routes / buses to be managed.
Respecting campus master plan principles/initiatives	◗		◗	Meets many transportation, parking, and land use goals and objectives in that availability of RT allows for development while reducing car use, cut-through traffic, and parking supply. However, much the same could be achieved by other routes through campus, or routes that parallel campus boundaries adjacent to the greatest concentration of potential riders. Some benefit to development objectives west of Western Road.



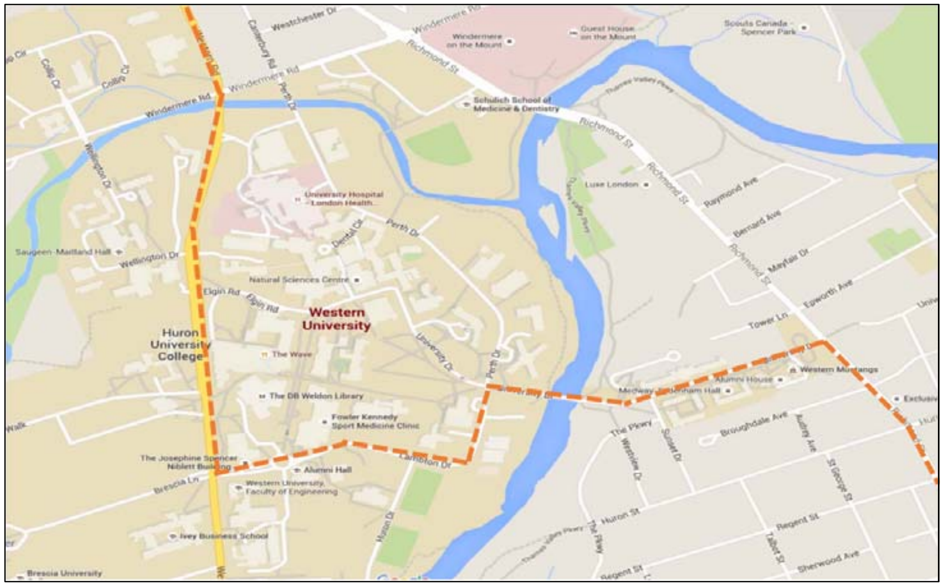
Legend	
Ranking	
●	Meets criteria/positive outcome
◗	Partially meets criteria
○	Does not meet criteria/negative outcome

(1) Assumes replacement of University Drive Bridge with at least two vehicle lanes (shared RT plus conventional bus transit) plus space for active transportation modes (cycling lanes, sidewalks)

(2) Assumes that RT vehicles will incorporate the latest in pedestrian safety technologies; operating speeds will be low (less than 40 km/h); and that RT travel-ways will be made conspicuous to all.

Evaluation of Options
U-L-A-W
(University Drive - Lambton - Alumni - Western)

Evaluation Criteria	Western Ranking	Western Rationale	Parsons Ranking	Parsons Rationale
Moving students to campus	●	Moves students into campus but not the heart of campus.	●	Alignment brings RT across the southerly portion of campus, and up Western Road through to the west of on-campus areas with walk distances in the 200-400 m range. Provides connectivity to Downtown and to potential, future housing north of campus, but does not serve housing northwest, west, and southwest of campus (1).
Campus safety, esp. pedestrian safety	○	In isolation, it could worsen pedestrian safety, but if combined with car free zones, could help.	◗	Alignment positions RT as viable alternative mode for many trips to/from campus. At the same time however, this alignment would bring RT vehicles directly into areas most heavily-travelled by pedestrians (2).
Respecting collegiate gothic vistas/architecture	○	Electrical Distribution systems, rails, shelters will negatively impact vistas. Route not through the oldest section of campus however.	●	This alignment will remain peripheral to key campus vistas.
Significantly reducing cut-through traffic	◗	May or may not help cut through traffic.	●	Combined with bus loop(s), kiss-n-ride facilities, control or elimination of cut-through traffic, and parking demand management measures, this alignment option could provide strong rationale/support for the reduction/elimination of motor vehicle traffic on campus.
Creating car-free zones	●	This may be the impetus for creating car free zones.	●	As above.
No large incremental costs	○	There will be some costs to relocate and / or isolate research equipment. There will be increased costs for grounds maintenance. Infrastructure / construction projects will become more costly.	◗	Some risk of increased costs associated with preventing disruption of potential, future academic / research activities, and accommodating RT alignment in siting and design of future facilities.
Cannot disrupt academic/research activities	◗	Some implications with research equipment and EMF, as well as noise and vibration issues. There are also noise and vibration implications for performance activities. Further study would be required with potentially significant costs to implement solutions.	◗	Minor potential for disruption to existing sensitive academic / research activities. May impact plans for future facilities within the Lambton Drive corridor.
Rationalize transit routes on campus	○	This option provides the best chance of rationalization, but numbers do not show much opportunity.	◗	The presence of one or more RT stations on campus, as well as the potential for RT/conventional bus sharing of facilities, suggests that transit routes on campus could be consolidated to one or more hubs, with bus loops to facilitate interlining between modes. That said, the need for campus to continue to serve as an interlining hub between RT and conventional bus transit is unlikely to result in a reduction in the number of routes / buses to be managed.
Respecting campus master plan principles/initiatives	○	May impact ability to revitalize the Alumni Circle and Main Western Gates.	◗	Meets many transportation, parking, and land use goals and objectives in that availability of RT allows for development while reducing car use, cut-through traffic, and parking supply. However, much the same could be achieved by other routes through campus, or routes that parallel campus boundaries adjacent to the greatest concentration of potential riders.



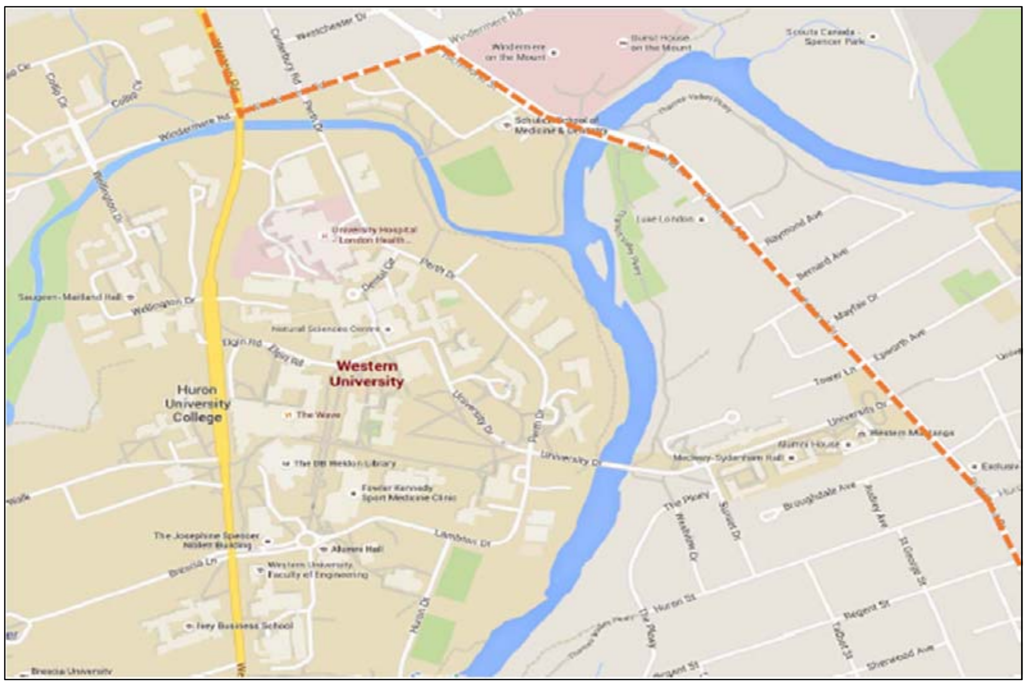
Legend	
Ranking	
●	Meets criteria/positive outcome
◗	Partially meets criteria
○	Does not meet criteria/negative outcome

(1) Assumes replacement of University Drive Bridge with at least two vehicle lanes (shared RT plus conventional bus transit) plus space for active transportation modes (cycling lanes, sidewalks)

(2) Assumes that RT vehicles will incorporate the latest in pedestrian safety technologies; operating speeds will be low (less than 40 km/h); and that RT travel-ways will be made conspicuous to all.

Evaluation of Options
Richmond Street
(Stop University Drive at Richmond)

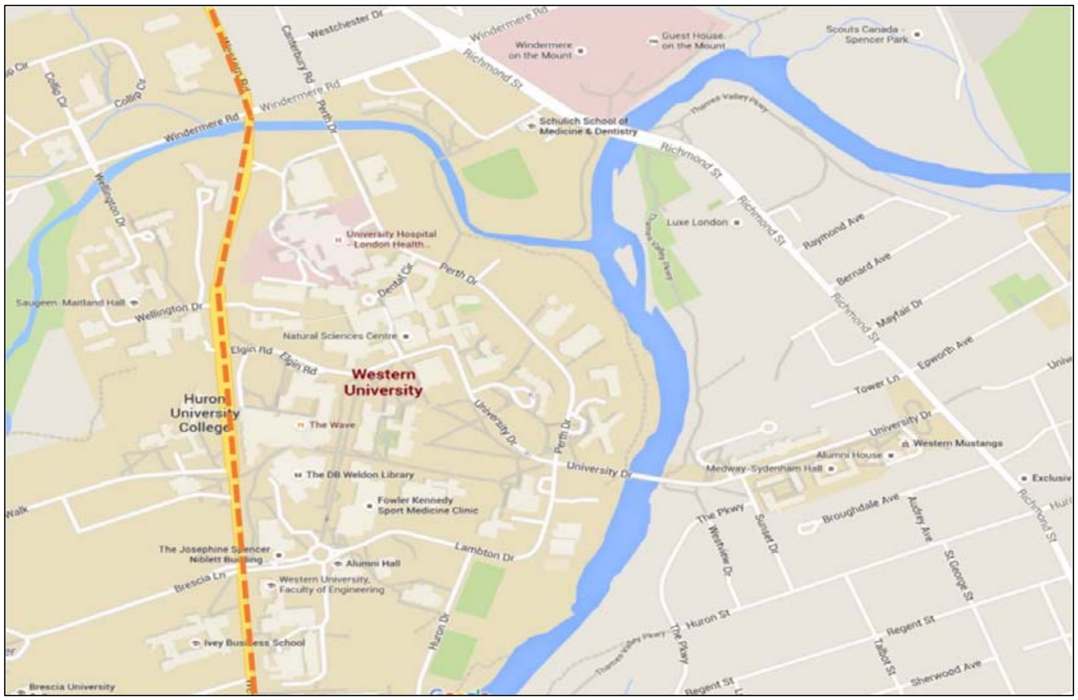
Evaluation Criteria	Western Ranking	Western Rationale	Parsons Ranking	Parsons Rationale
Moving students to campus	◗	Would get students to campus but not into campus. Students would still have to walk over 1 km in many cases to get into heart of campus.	○	Least-favourable option for achieving ridership, as walk distance to Richmond Street @ University Drive intersection 1,200 m plus from centroid of campus. Little likelihood of LTC adding "spur" to serve campus due to design constraints, operational issues, and adverse impacts on efficiency.
Campus safety, esp. pedestrian safety	●	LRT would not come through campus. There would be no negative impact on Pedestrian Safety.	●	Does not add RT to campus traffic. Does not preclude implementing traffic reduction/elimination measures now or in the future, other than making RT a potentially less-favored transportation choice and thus less efficient in supporting parking demand management.
Respecting collegiate gothic vistas/architecture	●	LRT would not come through campus. There would be no negative impact on vistas / architecture.	●	No adverse impact expected.
Significantly reducing cut-through traffic	◗	Cut through traffic could be worse depending on city traffic issues / flows when RT launches.	●	Positive impact unlikely, but does not preclude implementing traffic reduction/elimination measures now or in the future.
Creating car-free zones	◗		●	As above.
No large incremental costs	●	Potential costs to relocate main gates (RT should pay).	◗	No significant impacts on WU costs, unless on-campus shuttle to Richmond Street @ University Drive becomes necessary.
Cannot disrupt academic/research activities	●	Noise impact to Public Health & Family Medicine?	●	No adverse impact expected.
Rationalize transit routes on campus	○		●	Positive impact unlikely, but does not preclude implementing traffic reduction/elimination measures now or in the future.
Respecting campus master plan principles/initiatives	◗	Master Plan shows development along Western Rd. This option does not help move more people closer to Western Rd development sites.	◗	Respects vistas and motor-vehicle free vision; may not fully support development objectives if ability of RT to capture ridership is impaired by distance from key concentrations of potential ridership. Limited benefit to development objectives west of Western Road.



Legend	
Ranking	
●	Meets criteria/positive outcome
◗	Partially meets criteria
○	Does not meet criteria/negative outcome

Evaluation of Options
Western Road
(Join Western Road south of campus and stop(s) at campus)

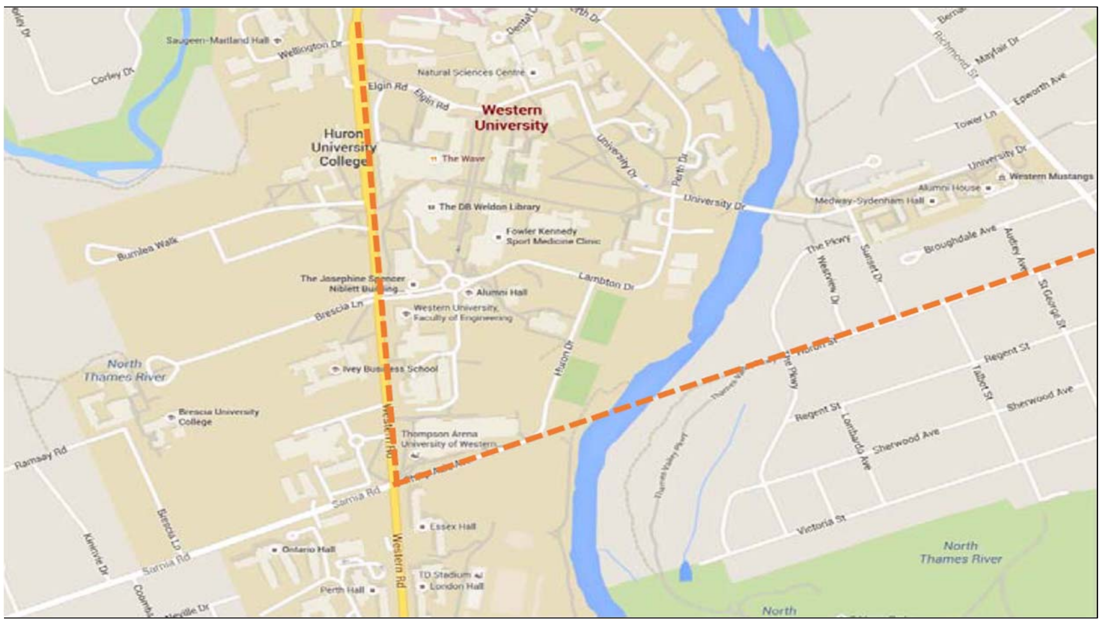
Evaluation Criteria	Western Ranking	Western Rationale	Parsons Ranking	Parsons Rationale
Moving students to campus	●	Would get students to campus but not into campus. However as the campus grows it will become the centre. Students would get closer to heart of campus than Richmond Gates.	●	Places all portions of campus west of Thames River within 400-600 m walk of RT. Alignment brings RT up Western Road. Provides connectivity to Downtown and to potential, future housing north of campus, but does not serve housing northwest, west, and southwest of campus.
Campus safety, esp. pedestrian safety	●	LRT would not come through campus. There would be no negative impact on campus on Pedestrian Safety. Western Rd safety implications possible but can be mitigated (i.e. Tunnel, coordination of transit stops).	●	Does not add RT to campus traffic. Does not preclude implementing traffic reduction/elimination measures now or in the future, other than making RT a potentially less-favored transportation choice and thus less effieicnt in supporting parking demand management.
Respecting collegiate gothic vistas/architecture	●	LRT would not come through campus. Potential impact at Western Rd. Gates.	●	No adverse impact expected.
Significantly reducing cut-through traffic	◗	Cut through traffic could be worse depending of city traffic issues / flows when RT launches.	●	Positive impact unlikely, but does not preclude implementing traffic reduction/elimination measures now or in the future.
Creating car-free zones	◗		●	As above.
No large incremental costs	●	Road widening could have implications for infrastructure, access roads and pedestrian crossings.	●	No adverse impact expected.
Cannot disrupt academic/research activities	●	Some minor impact possible along Western Rd.	●	No adverse impact expected.
Rationalize transit routes on campus	○		●	Positive impact unlikely, but does not preclude implementing traffic reduction/elimination measures now or in the future.
Respecting campus master plan principles/initiatives	●	Master Plan shows development along Western Rd. This option helps move more people closer to Western Rd development sites.	●●	Respects vistas and motor-vehicle free vision; supports development objectives involving lands both east and west of Western Road.



Legend	
Ranking	
●	Meets criteria/positive outcome
◗	Partially meets criteria
○	Does not meet criteria/negative outcome

Evaluation of Options
Huron Street
(Huron across a new bridge, joining Philip Aziz to Western)

Evaluation Criteria	Western Ranking	Western Rationale	Parsons Ranking	Parsons Rationale
Moving students to campus	●	Would get students to campus but not into campus. Students would get closer to south end of campus only.	●	Places all portions of campus west of Thames River within 400-600 m walk of RT. Alignment brings RT up Western Road. Provides connectivity to Downtown and to potential, future housing north of campus, but does not serve housing northwest, west, and southwest of campus.
Campus safety, esp. pedestrian safety	◗	In isolation, it could worsen pedestrian safety, but if combined with car free zones, could help.	●	Does not add RT to campus traffic. Does not preclude implementing traffic reduction/elimination measures now or in the future, other than making RT a potentially less-favored transportation choice and thus less efficient in supporting parking demand management.
Respecting collegiate gothic vistas/architecture	●	LRT would not come through heart of campus.	●	No adverse impact expected.
Significantly reducing cut-through traffic	◗	Could improve if Phillip Aziz traffic was restricted to transit / Western vehicles only.	●	Positive impact unlikely, but does not preclude implementing traffic reduction/elimination measures now or in the future.
Creating car-free zones	●	Could improve if Phillip Aziz traffic was restricted to transit / Western vehicles only.	●	As above.
No large incremental costs	●	Road widening could have implications for infrastructure, access roads and pedestrian crossings.	○	Potentially large increase in incremental cost of project to span Thames River and other sensitive lands between west terminal of Huron Street and east limit of Philip Aziz Avenue. Incremental return on added investment (better service west of Western Road)would need to be examined further.
Cannot disrupt academic/research activities	●		●	No adverse impact expected.
Rationalize transit routes on campus	○		●	Positive impact unlikely, but does not preclude implementing traffic reduction/elimination measures now or in the future.
Respecting campus master plan principles/initiatives	●	Master Plan shows development along Western Rd. This option helps move more people closer to Western Rd development sites.	●●	Respects vistas and motor-vehicle free vision; supports development objectives involving lands both east and west of Western Road.



Legend	
Ranking	
●	Meets criteria/positive outcome
◗	Partially meets criteria
○	Does not meet criteria/negative outcome

Ministry of Training, Colleges and Universities

Government of Canada's Post-Secondary Institutions Strategic Investment Fund (SIF) Provincial Notification Template

This form is intended to capture the information that your postsecondary institution has submitted to the federal government.

Institution Name	WESTERN UNIVERSITY		
Contact Name	Ruban Chelladurai	Phone Number	office: 519-661-3536

Project Information

Priority 2: Federal and Institutional Cost Share

Project Title	The Western Interdisciplinary Research Building (WIRB)	Project Ranking	1
Campus	Main Campus	City	London
Address	1151 Richmond Street		
Estimated Start Date *(mm/dd/yy)*	05/15/16	Estimated End Date *(mm/dd/yy)*	04/30/18

Project Summary *(maximum 1,800 characters, or about 250 words)*

The Western Interdisciplinary Research Building (WIRB) is a central component of our strategic priorities in the areas of research, innovation, technology transfer, and commercialization. The facility will be home to the University's first multi-disciplinary Cluster of Research Excellence -- the Cognitive Neuroscience (CNS) which includes the Brain & Mind Institute and the Rotman Institute of Philosophy.

Collectively, this research and innovation facility will bring together over 120 researchers and scholars across many Faculties in complementary areas -- to promote integrative research and innovation, to facilitate the training of highly qualified personnel, and to foster national and international collaborations.

The facility will be 10,900 gross square metres (or 117,500 GSF) -- at an estimated cost of $45 million.

Project Costs and Sources of Funding

	Amount ($)
Total SIF Requested Funding	$45,000,000.00
Federal Funding	$22,500,000.00
Provincial Funding – FRP	$0.00
Provincial Funding – Other (Committed)	$0.00
Institution Funding	$22,500,000.00
Municipal Funding	
Borrowing *(specify)*	
Other Funding Sources *(specify)*	

Federal Categories and Criteria

Please check box where applicable

Categories	
☒	Improve the scale or quality of facilities for research and innovation, including commercialization spaces
☐	Improve the scale or quality of specialized training facilities at colleges focused on industry needs
☒	Improve the environmental sustainability of research and innovation related infrastructure at post-secondary institutions and/or college training infrastructure
Assessment Criteria	
☒	Generate direct economic activity including any evidence that the project is accelerated or expanded relative to what would have occurred in the absence of SIF support
☒	Promote innovation and long-term economic growth by improving the use or functionality and efficacy of research and innovation or commercialization space
☒	Advance Canada's climate change and sustainability goals by increasing energy efficiency and reducing energy use in a research, innovation or training context
☐	Increase capacity and functionality of specialized training facilities at colleges focused on meeting industry needs
☒	Benefit Aboriginal populations

Provincial Notifications

Please check box where applicable		Please summarize where applicable *(maximum 500 characters)*
☒	Align with your institution's Strategic Mandate Agreements (SMAs)	As noted in our SMA, Western's interdisciplinary research strengths include imaging, neuroscience, and philosophy of science. The proposed building will be home to these world-class research groups.
☐	Reduce operating costs and improve environmental sustainability, including renewal and modernization	
☐	Support digital infrastructure, including e-learning and institutions preparedness for the future	
☒	Support "experiential learning" opportunities for students	The facility will be home to nearly 200 graduate students and will be designed to help our students engage/develop in their multi-disciplinary research/scholarship aspirations -- with access to world-class mentors, state-of-the-art equipment, and collaborative research and work spaces. The ultimate goal for our students is to transform into highly-qualified personnel in their respective areas of speciality.

Ministry of Training, Colleges and Universities

Government of Canada's Post-Secondary Institutions Strategic Investment Fund (SIF) Provincial Notification Template

This form is intended to capture the information that your postsecondary institution has submitted to the federal government.

Institution Name	WESTERN UNIVERSITY		
Contact Name	Ruban Chelladurai	Phone Number	office: 519-661-3536

Project Information

Priority 2: Federal and Institutional Cost Share

Project Title	ThreeC+ Innovation Centre	Project Ranking	2
Campus	Main Campus	City	London
Address	1151 Richmond Street		
Estimated Start Date *(mm/dd/yy)*	05/15/16	Estimated End Date *(mm/dd/yy)*	04/30/18
Project Summary *(maximum 1,800 characters, or about 250 words)*	The ThreeC+ Innovation Centre (a new Engineering Facility) will foster innovation, discovery, and reflection -- and the sharing of ideas between researchers and students and between Engineering, Business, and other disciplines. The spaces will serve to encourage groups of multi-disciplinary researchers to work together to make a real world impact. The building will support four inter-disciplinary research areas: (1) Sustainability, Environment, Resiliency, and Adaptive Systems, (2) Biomedical Engineering, Technology in Health and Medicine, (3) Innovative Materials and Biomaterials, and (4) Ubiquitous Information and Communication. The facility will seek LEED PLATINUM to reflect that sustainability is one of the four research pillars. The building will also include a Student Entrepreneurship Spoke -- as part of Western's Entrepreneurship Ecosystem Strategy -- which will will offer a range of programs/resources designed to help our students develop, and launch their ideas, with access to mentors and collaborative work/innovation spaces, and the opportunity to pursue their own innovation projects, ventures, or entrepreneurship experiences. The facility will be 9,800 gross square metres (or 105,000 GSF) -- at an estimated cost of $45 million.		

Project Costs and Sources of Funding

	Amount ($)	
Total SIF Requested Funding	$45,000,000.00	
Federal Funding	$22,500,000.00	
Provincial Funding – FRP	$0.00	
Provincial Funding – Other (Committed)	$0.00	
Institution Funding	$22,500,000.00	
Municipal Funding		
Borrowing *(specify)*		
Other Funding Sources *(specify)*		

Federal Categories and Criteria

Please check box where applicable

Categories	
☒	Improve the scale or quality of facilities for research and innovation, including commercialization spaces
☐	Improve the scale or quality of specialized training facilities at colleges focused on industry needs
☒	Improve the environmental sustainability of research and innovation related infrastructure at post-secondary institutions and/or college training infrastructure
Assessment Criteria	
☒	Generate direct economic activity including any evidence that the project is accelerated or expanded relative to what would have occurred in the absence of SIF support
☒	Promote innovation and long-term economic growth by improving the use or functionality and efficacy of research and innovation or commercialization space
☒	Advance Canada's climate change and sustainability goals by increasing energy efficiency and reducing energy use in a research, innovation or training context
☐	Increase capacity and functionality of specialized training facilities at colleges focused on meeting industry needs
☒	Benefit Aboriginal populations

Provincial Notifications

	Please check box where applicable	Please summarize where applicable *(maximum 500 characters)*
☒	Align with your institution's Strategic Mandate Agreements (SMAs)	As noted in our SMA, Western's interdisciplinary research strengths include Materials & Biomaterials and Sustainability & Harsh Environments. The building will be home to these research groups. The facility will also support two other priorities identified in our SMA -- experiential-learning and work-integrated learning opportunities for our students -- by providing space for an Entrepreneurship Spoke to enable research, innovation, and entrepreneurship opportunities for our students.
☐	Reduce operating costs and improve environmental sustainability, including renewal and modernization	
☐	Support digital infrastructure, including e-learning and institutions preparedness for the future	
☒	Support "experiential learning" opportunities for students	The new building will transform how we deliver the Western Engineering Experience -- by providing practical and inspiring spaces (in the Entrepreneurship Spoke noted above -- as part of the Western Entrepreneurship Ecosystem) where our students integrate classroom theory with hands-on-learning as they innovate, design, build, test, and refine ideas.

Ministry of Training, Colleges and Universities

Government of Canada's Post-Secondary Institutions Strategic Investment Fund (SIF) Provincial Notification Template

Ontario

This form is intended to capture the information that your postsecondary institution has submitted to the federal government.

Institution Name	WESTERN UNIVERSITY		
Contact Name	Ruban Chelladurai	Phone Number	office: 519-661-3536

Project Information

Priority 2: Federal and Institutional Cost Share

Project Title	Modernization of Core Medical Research Facilities			Project Ranking	3
Campus	Main Campus	City	London		
Address	1151 Richmond Street				
Estimated Start Date *(mm/dd/yy)*	06/01/16	Estimated End Date *(mm/dd/yy)*	04/30/18		

Project Summary *(maximum 1,800 characters, or about 250 words)*

The project involves the transformation of spaces in the ageing medical and dental sciences buildings into modern state-of-the art core medical research facilities -- and will result in substantially reduced operating and utilities costs. The two major components of this project are (a) the creation of a new Level 2/3 Infectious Disease Pathogenesis & Imaging (IDPI) Facility and (b) the renewal of animal care facilities to meet the Canadian Council on Animal Care's current standards in the areas of ventilation, humidity control, temperature control, and adequate storage.

The project will directly support our world-class clusters of research excellence in Cognitive Neuroscience and Musculoskeletal Health as well as leading-edge multi-disciplinary research in the area of viral and bacterial diseases in humans -- including areas such as HIV, pandemic influenza, and Tuberculosis.

The project involves modernization of 3,800 gross square metres (or 41,000 GSF) -- at an estimated cost of $30 million.

Project Costs and Sources of Funding

	Amount ($)	
Total SIF Requested Funding	$30,000,000.00	
Federal Funding	$15,000,000.00	
Provincial Funding – FRP	$0.00	
Provincial Funding – Other (Committed)	$0.00	
Institution Funding	$15,000,000.00	
Municipal Funding		
Borrowing *(specify)*		
Other Funding Sources *(specify)*		

Ministry of Training, Colleges and Universities

Government of Canada's Post-Secondary Institutions Strategic Investment Fund (SIF) Provincial Notification Template

Ontario

Federal Categories and Criteria

Please check box where applicable

Categories

☒	Improve the scale or quality of facilities for research and innovation, including commercialization spaces
☐	Improve the scale or quality of specialized training facilities at colleges focused on industry needs
☒	Improve the environmental sustainability of research and innovation related infrastructure at post-secondary institutions and/or college training infrastructure

Assessment Criteria

☒	Generate direct economic activity including any evidence that the project is accelerated or expanded relative to what would have occurred in the absence of SIF support
☒	Promote innovation and long-term economic growth by improving the use or functionality and efficacy of research and innovation or commercialization space
☒	Advance Canada's climate change and sustainability goals by increasing energy efficiency and reducing energy use in a research, innovation or training context
☐	Increase capacity and functionality of specialized training facilities at colleges focused on meeting industry needs
☐	Benefit Aboriginal populations

Provincial Notifications

Please check box where applicable		Please summarize where applicable *(maximum 500 characters)*
☒	Align with your institution's Strategic Mandate Agreements (SMAs)	Western's mandate and vision -- as noted in our SMA -- commit to discovery research and innovation and the intensity and impact of its world-class research. Our Schulich School of Medicine & Dentistry is home to world-renowned centres of excellence known for advanced training and cutting-edge research. The proposed project is in direct support of these commitments/priorities.
☒	Reduce operating costs and improve environmental sustainability, including renewal and modernization	The overall project -- which includes replacement of and upgrades to ageing infrastructure will result in substantial reduction in utilities costs as well as improved operational efficiencies.
☐	Support digital infrastructure, including e-learning and institutions preparedness for the future	
☐	Support "experiential learning" opportunities for students	

Ian McWhinney Chair in Family Medicine – Revisions to Terms of Reference

Approved by Property & Finance Committee, June 7, 2016

Recommended: That the terms for the Ian McWhinney Chair in Family Medicine be revised as outlined below.

Donor and Funding: The Department of Family Medicine, together with individuals who support Family Medicine and those who wished to honour Ian McWhinney have donated to support this Chair. The endowment fund now holds in excess of $5 million.

Since the Chair was approved in 1985, policies at the university have changed and evolved and so the Department of Family Medicine wishes to update the terms to allow for the best use of the funds available in keeping with the original intent of the fund, "To further the academic and scientific base of the discipline of Family Medicine."

Effective Date: July 1, 2016

Purpose: This Chair was established to honour Dr. Ian McWhinney, founder of Western's Department of Family Medicine and family medicine in Canada. A world-renowned medical educator, Dr. McWhinney's approach to health care is now the basic model used in the training of family physicians.

The income from the endowment fund will be used to support the academic program of the holder of the Chair. Funds available may be directed towards salary and benefits or direct research support, or some mixture thereof. Funds may also support a lecture series or student research projects in Family Medicine. The Chair must hold a primary appointment within the Department of Family Medicine.

The administration of the spending of resources will be the responsibility of the Dean of the Schulich School of Medicine & Dentistry in collaboration with Chair of the Department of Family Medicine.

Criteria: The holder of the Chair will be a family physician. The major part of the Chair's time will be devoted to research in the field of Family Medicine and related scholarly activities. The Chair will hold a primary appointment within the Department of Family Medicine, and be committed to academic activity and program development within family medicine research.

Appointments to the Ian McWhinney Chair in Family Medicine will be conducted in accordance with university policies and procedures on academic appointments and will be for a five-year term, normally renewable once upon the recommendation of a review panel, and at the discretion of the Dean.

Renewal of appointments to the Ian McWhinney Chair in Family Medicine will be conducted in accordance with university policies and procedures and guidelines established by the Schulich School of Medicine & Dentistry for reviewing endowed chairs.

Reporting: The university will provide a copy of the financial report for the endowment to the Department of Family Medicine.

Background: The Chair has been primarily funded by the Department of Family Medicine and has been named in tribute to Dr. Ian McWhinney since its establishment in 1985.

Alice Munro Chair in Creativity

FOR INFORMATION

At its meeting on June 7, 2016, the Property and Finance Committee approved establishment of the Alice Munro Chair in Creativity with academic appointment in the Faculty of Arts and Humanities with the terms of reference outlined below.

Donor and Funding: Donors from the Western, Canadian, and global literary communities have made gifts totaling approximately $1 million to be matched with $2 million from the university to create a $3 million endowment to fund the Chair.

Amounts made available for spending from the overall endowment will be used to support the academic program of the holder of the Chair.

Effective Date: July 1, 2016

Purpose: The Alice Munro Chair in Creativity will recognize and honour our Nobel laureate, inspire student writers and foster creative expression. Alice Munro is counted among the university's most extraordinary alumni. Her first connection to the Department of English came while she was an undergraduate pursuing an English major. In 1976, the university recognized Munro's literary achievements with an honorary degree, the only such honour she has ever accepted. In October 2013, Munro was awarded the Nobel Prize in Literature.

The income from the endowment fund will be used exclusively to support the Alice Munro Chair in Creativity. Such support may be directed towards salary and benefits of the incumbent, his/her research program, or some combination thereof as developed in consultation with the Chair of English and Writing Studies and approved by the Dean of the Faculty of Arts and Humanities.

The administration of the spending of resources will be the responsibility of the Dean of the Faculty of Arts and Humanities.

Criteria: Funds available through the establishment of this prestigious Academic Chair will enable the University to recruit a stellar creative writer, an exceptional teacher and scholar who will advance our tradition of excellence in developing the talents of students and future writers.

The Alice Munro Chair in Creativity will:

- Lead the creative culture of the Faculty of Arts and Humanities, serving as a mentor and a model;
- Focus on the production of creative work, alongside a study of creativity;
- Assume a leadership role between the university and the local creative community;
- Allow the university to enhance and expand the Writer-in-Residence program;
- Provide the university with access to a world of writing beyond Canada, allowing the university to attract international authors as speakers and to its writers-in-residence program.

Appointments to the Chair will be conducted in accordance with the relevant policies and procedures of the university and will be for a three-year term, renewable.

Reporting: The university, through the Faculty of Arts and Humanities, will report to donors regarding the activities of the Chair once appointed, and will also provide an annual financial report regarding the endowment.

University Intellectual Property – Auditor General's Report

Summary for Western Audit Committee

FOR INFORMATION

The Ontario Auditor General's 2015 Report included a section on University Intellectual Property which is attached as Appendix A. Three universities were selected and their processes related to the management of intellectual property generated from university research were assessed for effectiveness. The following report provides the recommendations made by the Auditor General, a summary of the response to the recommendation made by those selected universities, which is then followed by the practice(s) Western has in place and our recommendations to improve practices based on the Auditor General's report.

There were fifteen recommendations in total but recommendations 1 – 6 are specifically for the Ministry of Research & Innovation and are therefore, not summarized in this report.

Recommendation 7

In conjunction with government sponsors, universities should develop socio-economic performance measures to better communicate the outcomes of their research and commercialization efforts.

Summary of Universities' Responses

The universities agree that socio-economic performance measures would be useful for assessing outcomes of research and commercialization efforts, but all noted that collecting such data would be challenging given the breadth and volume of research activity occurring at universities.
One university stated that since funding agencies typically drive what is required for research reporting purposes, government agencies should collectively take a leadership role in establishing harmonized reporting requirements. This would allow for the measurement and comparison of the socio-economic impact of government-sponsored research.
Two universities indicated that they would explore collaborating with government sponsors to identify appropriate socio-economic performance measures. Another university indicated that it would consider systematic approaches to collect socio-economic measures.

Western's Current State

Research Western (RW) and WORLDiscoveries (WD) publish an annual report.

Recommended Changes to Current State

Work with Research Western to see where communication could be improved. Will continue to use AUTM metrics.

Recommendation 8

Universities should review their research reporting requirements on performance measures, and identify opportunities to report more detailed information in the annual research report and in management reports going to senior management.

Summary of Universities' Responses

The universities agreed with this recommendation. Two universities stated that they will continue to review indicators for relevance and update them as necessary. The third university indicated it will undertake a review of its research reporting requirements in consultation with key stakeholders and consider what information should be reported in an annual research report and in management reports.

Western's Current State

Variety of metrics reported in WORLDiscoveries annual report as well as Summary of Annual Letters that is submitted to the VPR and Deans.

Recommended Changes to Current State

Current Metrics seem to cover all, will look at adding # of startups that survive past 5 years.

Recommendation 9

To ensure that all intellectual property created with university resources is disclosed, universities should:

- develop guidelines to help faculties assess university resources in the creation of intellectual property and to require such assessments be documented;
- clearly communicate invention disclosure requirements during technology transfer office presentations to staff and students;
- require all faculties to use only disclosures made directly to the technology transfer office for performance review purposes; and
- use research grant status reports sent to research funders to anticipate and track completeness of disclosures.

Summary of Universities' Responses

The universities were generally in agreement with this recommendation.
For the two universities we visited that require disclosure even when the inventor does not intend to commercialize, one indicated that it will consider developing formal guidelines to help assess the university resources used in the creation of intellectual property. The other did not provide an action plan because, under the university's policy, the creator is the owner of the intellectual property.
All universities agreed with clearly communicating invention disclosure requirements through presentations and on their websites.

With respect to the recommendation to require all faculties to use only disclosures made directly to the technology transfer office for performance review purposes, one university stated that it would consider the feasibility of such a process. Another university said it was in the process of ensuring sufficient reporting of disclosure information to faculties. The third said it expects this recommended action to be addressed by the upcoming implementation of online reporting for invention disclosures.
With respect to the recommendation to use research grant status reports to track disclosures, two universities said they would consider it. The other university did not feel the need to track potential disclosures since, under its intellectual property policy, the university did not have any rights to ownership.

Western's Current State

UWOFA clearly outlines that all inventions must be disclosed to the University.

Presentations are made to staff & students on a regular basis (# of presentations per year have already been added to the WORLDiscoveries Business Development Manager goals (part of the PDG review)).

No known policy linking disclosures to performance review.

No mechanism in place to track grants against disclosures.

Recommended Changes to Current State

Performance review – Executive Director of WD contacted Science, Schulich and Engineering regarding disclosures tracked as part of annual review.

Grants vs. Disclosures – look to see if this can be more closely tracked through collaboration with WD & RDS.

Recommendation 10

In the absence of objective criteria to assess the commercial potential of disclosures, university technology transfer offices should develop a formal process to discuss and challenge decisions on commercial potential, including assessments undergoing a second level of review.

Summary of Universities' Responses

One university indicated that having better processes to discuss and challenge decisions is of value. This university stated it will formalize its process of discussing and challenging decisions, and will improve documentation. Another university stated that it will consider a formal secondary review of all disclosures with respect to staffing, workload and timeline considerations. The third university stated it would continue with its current practice of taking up to one year engaging market participants to determine whether there is a market for the technology.

Western's Current State

Hybrid model of formal/informal review which includes Patent Prior Art Searching and Market Research reporting. A technology assessment tool is in the process of being developed.

The Executive Director signs off on all correspondence to inventors and on all patent filings so that in itself is a 2nd review.

External reviews also apply to all techs that apply for WIF grants and are selected for the Proteus Competition.

Recommended Changes to Current State

Formalize the technology assessment pool in conjunction with the Patent Prior Art Search and Market Research Report.

Recommendation 11

To help ensure commercialization assessments are completed within a reasonable timeframe to avoid delays in patent filings, university technology transfer offices should:

- establish time frames to complete assessments based on technology type or complexity of invention; and
- formally track and review how long it takes to complete assessments, and address any delays identified.

Summary of Universities' Responses

All universities generally supported the recommendation and have implemented internal time frames for the completion of commercialization assessments. Two indicated they will establish formal tracking mechanisms to determine compliance with established timelines.

Two universities indicated there may be reasons to delay a patent filing. These can include securing further research data to support broader and more defensible claims, and prudently managing the timeline to patent to defer cost escalation.

Western's Current State

Procedures in place dictate acknowledgement on receipt, four weeks for the inventor to decide if they wish to assign and three months for WD to review and decide if the tech will be accepted for commercialization. This three-month review deadline is tracked in Inteum and technologies past the three-month mark are brought up at WD monthly meetings to help address any reasons for the delay. This metric is also part of the BDM's PDG review. This measurement has been added to the annual metrics report.

Recommended Changes to Current State

This measurement could also be added to our internal quarterly metrics reports.

<u>Recommendation 12</u>

To help ensure intellectual property is properly protected, universities and/or their technology transfer offices, as applicable, should:

- ensure contracts with faculty associations and researchers include provisions to make them aware of the importance of not disclosing inventions prior to filing for patent protection; and
- file for patent protection as early as possible, where appropriate, to minimize the risk of others filing first and precluding them from obtaining a patent.

Summary of Universities' Responses

Two universities were of the opinion that existing policies for invention disclosures were adequate. The third university indicated that the creation of intellectual property and its commercialization were not a core mandate of the university, and therefore provisions on the importance of not disclosing inventions prior to filing should not be included in faculty association agreements.
One university stated that academic freedom to publish without constraint is a core university principle. Another university stated that faculty members are best positioned to make decisions on when to publish their results. It further stated that the primary mandate is to ensure the appropriate and timely dissemination of research that has been largely publicly funded.

Western's Current State

Information with regard to publishing is included in the "Receipt of ROI Letter" and on the WORLDiscoveries Website. WORLDiscoveries will continue to educate researchers on publication during presentations that are given.

Prior art is reviewed as part of the technology assessment process and as such, the filing of a provisional patent is dependent on many factors. WORLDiscoveries does not feel there is any need to change our current practice of when we file, as there is no evidence to suggest we have missed out on protecting IP due to slow filing of a provisional patent.

Recommended Changes to Current State

WORLDiscoveries will review UWOFA IP clause for disclosing and publishing.

Clause 15 of the current UWOFA agreement states:

"15. If the IPC(s) assign(s) rights for protection and/or exploitation to the Employer, and the Employer agrees to protect the PIP and/or exploit it for commercial gain, then:

a) the Employer assumes the responsibility for protection and/or exploitation of the PIP. This may include, but is not limited to, application for patents or other registered statutory protection, and the negotiation of sales, assignments, licences or other dispositions of that PIP. IPC(s) shall make reasonable efforts to assist the Employer in this endeavour, and shall complete all necessary documentation (including assignments) as may be required. The Employer shall use such efforts as it believes are reasonable in the circumstances to exploit the PIP for commercial gain. All such steps shall be taken at no financial cost to the IPC(s) responsible for creation of the PIP;

b) the IPC(s) shall not disclose or publish any details of the PIP for a period of twelve months following the Employer's notification to the IPC(s) of its decision to protect the PIP and/or exploit it for commercial gain, unless such disclosure or publication has been agreed to in writing by the Employer. Such agreement shall not be unreasonably withheld, particularly when the IPC will be considered for Tenure within eighteen months of the disclosure required under Clause 6 of this Article. For the purposes of determining the start of this eighteen month period, consideration for Tenure begins at the time of application of the provisions of Clauses 15.1 or 15.2 of the Article *Promotion Intellectual Property and Tenure*;

c) …."

Clause 16.1 states:

"16.1 If at any time following the periods specified in Clauses 12 and 13 of this Article, neither the Employer nor the IPC(s) choose(s) to protect and/or exploit, or continue to protect and/or exploit the PIP, then the IPC(s) shall be free to publish or disclose the details of the PIP."

No action required on patent filing speed – many factors to consider including but not limited to how crowded the space is, publishing deadlines and whether the work is part of a grant. Twice yearly Technology assessment reviews ensure appropriate (and timely) management of filing.

Recommendation 13

To permit efficient management review of commercialization decisions and efforts and to help facilitate knowledge transfer among personnel in case of staff turnover, universities should:

- develop case management documentation guidelines; and
- ensure that commercialization decisions and actions are clearly and consistently documented in accordance with the guidelines to be developed.

Summary of Universities' Responses

All universities were in agreement with this recommendation.

Western's Current State

Loose guidelines exist, working on finalizing the technology assessment tool. All IP decisions are documented in Inteum and correspondence is sent to Inventors with reasons for go/no go decisions. Twice yearly technology assessments are also documented.

Recommended Changes to Current State

Formalize the technology assessment tool. Continue with correspondence to inventors and biannual technology portfolio review.

Recommendation 14

To manage costs incurred in the effort to commercialize intellectual property, university technology transfer offices should implement formal policies and guidelines regarding cost management, and track costs incurred by type (e.g. legal costs, patent fees, and marketing) for each disclosure.

Summary of Universities' Responses

All three universities were generally in agreement with the recommendation. One university said it would consider the need for formal policies and guidelines regarding cost management, and another university said it will develop general guidelines to ensure appropriate cost-management practices.

Western's Current State

Western does this (through Inteum) and all costs are reported to IP creators (and Deans, Chairs, VPR) on a yearly basis.

Recommended Changes to Current State

No action required.

Recommendation 15

To help ensure the timely and accurate collection of revenue owing, all universities should:

- ensure they have an accurate and up-to-date tracking payment schedule that includes due dates, so that universities can bill one-time payments in advance and remind licensees to submit royalty payments on time;
- obtain sales and revenue reports from licensees to support the amount of royalties remitted;
- develop criteria to help assess when it is worthwhile to ask for an audit report (for example, when royalty payments are dependent on sales generated); and
- enforce the interest penalties stipulated in contracts to encourage licensees to submit revenue payments on time.

Summary of Universities' Responses

All universities were in agreement with this recommendation. The two universities to which most of the findings in this section related stated that they are addressing the concerns.

Western's Current State

Payments - Western has a comprehensive data base (Inteum) that keeps track of all revenue obligations and due dates. Invoices and payments are tracked on a weekly basis.

Support of royalties received – Western does have a formal reporting process – Licensees submit quarterly/yearly reports. If a report is not received, a template report is sent to the licensee to assist them with their reporting requirements. Reporting template has been part of all new license agreements since late 2014 to encourage licensees to report in a standardized way and in a timely fashion.

Audit Criteria – no formal audit process exists and to date, no audits have been performed on licensees.

Penalties for late payments - interest is charged on past due invoices but if companies do not pay the interest but pay the owed royalties, the interest portion is not pursued. Some license agreements do have enforced penalties.

Recommended Changes to Current State

WORLDiscoveries will review current practices on delinquent reporters and will consult with AUTM information to help develop criteria around when/if an audit should be undertaken.

Interest seems to be collected more effectively if an invoice is actually issued for the interest rather than it just appearing on a statement – WORLDiscoveries will review on a case by case basis.

Chapter 3
Section
3.14

University Intellectual Property

1.0 Background

1.1 Definition and Importance of Intellectual Property

Intellectual property refers to creations of the mind such as inventions, literary and artistic works, designs, and symbols, names and images used in commerce. In this audit, we focus on inventions and scientific discoveries made at universities through research activities – for example, new technologies, or new or improved manufacturing processes. If commercialized, such discoveries could have the potential to spur economic growth and enhance Ontarians' quality of life. Commercialization refers to the process of taking a discovery or invention to the market.

1.2 Ontario's Research and Commercialization Ecosystem

Research in Ontario is conducted by universities and other organizations, including not-for-profit research institutions and research hospitals. These organizations conduct research alone, in collaboration with other organizations, or in partnership with industry under a contractual arrangement. Funding for research is generally provided to universities through government grants, corporate and individual contributions, and internal funds of the university, such as endowments and investment income. Only a small amount of research activity results in an invention or discovery. Once a discovery is made, the university can start a process to protect the intellectual property and get it into the hands of private companies, who are generally the ones that commercialize an invention, or bring it to market.

1.3 Provincial Government

1.3.1 Ontario's Innovation Agenda

In 2008, the province released Ontario's Innovation Agenda to focus attention on research and innovation as priorities and key factors in economic development. The agenda identified the Ministry of Research and Innovation as the lead responsible for ensuring that the province's efforts to strengthen its innovation culture are co-ordinated and comprehensive. The goal was to create "a high and sustainable level of prosperity, and healthy communities, that provide high-quality jobs and better lives for people in Ontario." The agenda highlighted five key objectives, the first of which was to "extract more value from all provincial investments in research and innovation."

According to the agenda, research in post-secondary institutions, particularly at the post-graduate level, is central to creating knowledge. However, it noted that industry is often unaware of the intellectual property generated within Ontario research institutions.

1.3.2 Ministry of Research and Innovation

The Ministry's mandate is to support productivity and innovation in Ontario's research, business and entrepreneurship ecosystems, toward building sustainable economic and social prosperity. In 2014/15, the Ministry of Research and Innovation provided $276 million in research grants to post-secondary institutions, research hospitals and not-for-profit research institutions, of which Ontario universities received 48%. The remainder went to not-for-profit research institutions (39%), research hospitals (12%), and colleges (1%). The Ministry provided an additional $119 million for commercialization activities (such as, networking events to connect companies with research institutions, access to funding for further development of early-stage technology, and accelerators and incubators that provide space, mentoring and advisory services to start-up companies). In addition, corporate income tax credits—offered to businesses to invest in research and innovation in universities, other research institutions and the private sector—cost the province $193 million in refundable tax credits in 2014/15 and an estimated $170 million in forgone corporate income tax revenue in 2014. **Appendix 1** lists the Ministry's key programs that support research activity in Ontario and facilitate the commercialization of discoveries and inventions made in the province.

There are three main research grant programs for universities. *The Research Excellence program* funds direct and indirect operating costs of research that is intended to be transformational and globally significant. *The Research Infrastructure program* funds state-of-the-art equipment and facilities needed to conduct research. *The Early Researcher Awards program* is intended to help recently appointed Ontario researchers build research teams; its goal is to attract and retain the best and brightest research talent who will train the next generation of researchers and innovators.

The Ministry's commercialization programs are intended to provide services, such as access to capital, business acceleration services, mentoring, training and networking to innovative companies, entrepreneurs and researchers. The Ministry does not provide funding directly to universities to commercialize intellectual property. Instead, funding is provided to a network of organizations called the Ontario Network of Entrepreneurs (ONE). ONE includes the Ontario Centres of Excellence, MaRS, Regional Innovation Centres and Sector Innovation Centres. These organizations in turn fund and/or provide services to universities, colleges and other research institutions, as well as start-ups, entrepreneurs and companies. Since 2013, the Ministry refers to key commercialization activities collectively as the ONE program.

The Ontario Centres of Excellence (OCE) was formally established in 1987 as seven independent centres focusing on commercialization of intellectual property. These centres were amalgamated into one independent not-for-profit organization in 2004 to create productive working partnerships between university and college research departments, research hospitals and Ontario industry, in order to help quality research be utilized to its full potential by industry. It is intended to focus on areas and projects that align with the Ontario's Innovation Agenda and help commercialize research with the greatest potential for economic benefits and/or positive social impact. Aside from the Ministry of Research and Innovation, the OCE is also funded by the Ministry of Government and Consumer Services, federal government agencies and contributions from industry. In 2014/15, the OCE received $49 million from the Ministry of Research and Innovation to deliver initiatives, including the Industry-Academic Collaboration program, and the Campus-Linked Accelerator program.

MaRS is an independent registered charity which opened in 2005. MaRS works with a network of private and public sector partners to help entrepreneurs launch and grow innovative companies such as start-up ventures. In 2014/15 MaRS received $17.3 million from the Ministry to deliver initiatives such as the Business Acceleration Program, which supports the growth and development of regional innovation ecosystems across Ontario. MaRS also provides funding to 17 Regional Innovation Centres across the province to provide services such as business mentorship and investor readiness. MaRS also offers programs to college and university student entrepreneurs.

1.4 University Research Environment

Ontario has 21 publicly funded universities, one of which is entirely federally funded (the Royal Military College of Canada). The general purpose of university research is to create knowledge and discoveries that promote university outcomes, develop solutions to address societal challenges, and play a key role in the education experience for both professors and students. Where research results in intellectual property with potential commercial value, universities need to be effective in their commercialization activities and in protecting their intellectual property. Each university has a vice-president of research responsible for managing and co-ordinating the university's research and commercialization activities.

The vice-president of research typically oversees three offices – the research office, the research ethics board, and the technology transfer office. The research office is responsible for facilitating and supporting research activities; the research ethics board sets standards for ethical conduct in every aspect of research and is responsible for ensuring they are maintained; and the technology transfer office helps researchers transfer their discoveries to the marketplace through various activities, such as securing intellectual property protection, evaluating intellectual property for commercial potential, and acting as an agent representing the interests of both the institution and the inventor. Some smaller universities that lack a technology transfer office may use services provided by external technology transfer organizations instead.

Typically, inventors are academics or graduate students who specialize in particular areas of study and lack the time and/or business acumen to take an idea to market. Technology transfer offices are to fill this gap by sharing their expertise and industry connections with inventors, increasing the likelihood that a technology or invention will come to the attention of those most capable of bringing it to market—that is, the industry—and will benefit society. In exchange for this assistance, inventors often agree to give up some or all of their rights to ownership and/or future profits to the university in accordance with the university's policies.

Figure 1 summarizes the typical process of bringing an invention to market (a.k.a. commercialization).

Figure 1: Taking an Invention to Market Through a University's Technology Transfer Office (TTO)

Source of data: Modified from the Stanford University Office of Technology Licensing, Inventors Guide

Research	Invention Disclosure	Assessment	Protection of Intellectual Property	Marketing to Find Licensee	Licensing	Commercialization	Royalties/Revenue
Observations and experiments during research activities often lead to discoveries and inventions.	Confidential written notice of invention to technology transfer office.	TTO reviews the invention, including patent searches, market assessment and potential to commercialize.	TTO files for protection for the invention, such as applying for a U.S. provisional patent.	TTO staff identify and contact potential industry partners, or develop potential for a start-up company.	TTO negotiates and executes licensing agreement.	Licensing company continues to develop the invention and make it ready for the market. Steps can include further research, regulatory approvals, etc.	TTO receives revenue from the licensees and distributes to inventors and university departments.

Appendix 2 shows the typical governance structure of a university, with an emphasis on research activity, highlighting the key reporting relationships, roles and responsibilities. **Appendix 3** outlines the mandate for overall research activity and for the technology transfer office at each of the universities we visited.

1.5 Sources of Funding for University Research

Universities receive substantial amounts of funding for research. For their five fiscal years ending in 2014, Ontario universities received $13 billion in sponsored research funding. As shown in **Figure 2**, the primary funding sources were the federal government (48%), grants or contracted funds from non-government sources (26%), the Ontario government (15%) and other sources (11%).

1.5.1 Federal Funding for University Research

Federally, most university research funding comes from the Tri-Council Agencies, which comprise the Canadian Institute for Health Research, the National Science and Engineering Research Council, and the Social Sciences and Humanities Research Council. Other significant funders are the Canada Foundation for Innovation and Canada Excellence Research Chairs. In 2013/14, these agencies combined, provided Ontario universities with 80% of total federal funding for research. Some of this funding is intended to help commercialize intellectual property by accelerating the development of promising technology (e.g. covering the costs of building prototypes) or covering the costs of technology transfer activities (e.g. patents, market studies, and networking costs).

Appendix 4 describes the main federal research funding agencies and their contributions to Ontario universities for the fiscal year ending 2014 for universities, the most recent fiscal year for which information is available.

1.5.2 Provincial Funding for University Research

In the fiscal year ending 2014 for universities, 15 provincial ministries provided universities with research funding, according to the Council of Ontario Universities. The largest funding providers were the ministries of Research and Innovation; Health and Long-term Care; Training, Colleges and Universities; and Agriculture, Food and Rural Affairs. **Appendix 5** details provincial research funding to Ontario universities for the five fiscal years ending 2014, the most recent information available.

Figure 2: University Research Funding in Ontario by Source

Source of data: Council of Ontario Universities' annual Financial Report of Ontario Universities, 2009/10–2013/14

	2009/10	2010/11	2011/12	2012/13	2013/14	5-year Total	
Funding Source	($ million)	($ million)	($ million)	($ million)	($ million)	($ million)	(%)
Federal government[1]	1,201	1,213	1,223	1,328	1,316	**6,281**	**48**
Ontario government[2]	362	375	389	480	343	**1,949**	**15**
Non-government	396	716	818	747	750	**3,427**	**26**
Other Income (e.g., donations, investment income, etc.)	563	167	199	221	232	**1,382**	**11**
Total	**2,522**	**2,471**	**2,629**	**2,776**	**2,641**	**13,039**	**100**

1. See Appendix 4 for federal research funding programs, 2013/14.
2. See Appendix 5 for provincial funding for university research by ministry and agency, 2009/10–2013/14.
Please note, "Fiscal year" denotes that of the university which runs from May 1 to April 30.

1.5.3 University Endowment Funding for University Research

Universities typically have endowment funds. These are restricted to the purposes agreed upon by the university and donors (such as student aid, scholarships and research activity) or as determined by the university's governing council. Endowments are typically invested to preserve the capital in real dollars, adjusted for inflation, with only a set amount of income generated available for use each year. The largest university we visited had research endowment funds totalling $219 million in 2014, and its annual spending rate was 3% to 5% of the endowment's market value.

Appendix 6 provides a glossary of terms used in this report.

2.0 Audit Objective and Scope

Our audit objectives were to assess whether:

- the Ministry of Research and Innovation has co-ordinated and put effective processes in place to provide research funding to universities, monitor the use of research funding, and assess the benefits to Ontarians; and
- select universities have effective processes in place to manage intellectual property generated from university research, including identifying, protecting, assessing and commercializing intellectual property.

Senior management at both the Ministry of Research and Innovation and the universities we visited, reviewed and agreed to our audit objectives and criteria.

We conducted our audit primarily at the Ministry of Research and Innovation, and at the technology transfer offices of three universities – University of Toronto, McMaster University (in Hamilton) and the University of Waterloo. We selected universities that received significant amounts of research funding; collectively, these three received almost half of all university research funding provided by the province in 2013/14. As well, in order to observe a cross-section of practices, we selected universities with different intellectual property ownership models and that used different technology transfer offices to facilitate commercialization.

As background for the universities we selected, **Figure 3** shows the world rankings for the three universities visited according to research performance and output, in relation to universities ranked top 10 in the world from 2012 to 2014, and to universities ranked top 10 in Canada in 2014. **Figure 4** shows how the universities we visited ranked in 2014, nationally and internationally, in six fields of research. The rankings are generally based on the number of research articles issued, the number of times the research is cited elsewhere, and whether research articles appear in high impact scientific journals. The University of Toronto ranked first in Canada overall and in the top 100 in the world in all fields of research. McMaster ranked in the top 100 in the world in clinical medicine and social sciences, and the University of Waterloo ranked in the top 100 in the world in engineering.

In conducting our audit, we reviewed relevant documents (including research funding agreements and university policies regarding intellectual property ownership and disclosure requirements); analyzed information; and interviewed appropriate Ministry and university staff. We also obtained research grant information for review from the ministries of Health and Long-term Care; Training, Colleges and Universities; and Agriculture, Food and Rural Affairs. In addition, in April we attended the Ontario Centres of Excellence's Discovery 2015, a two-day conference in Toronto that brought together key players from industry, academia and government, as well as students and entrepreneurs, for networking opportunities. At this conference, we obtained knowledge about services offered by federal and provincial government organizations, such as the Canadian Intellectual Property Office, the Ontario Centres of Excellence, and risk capital

Figure 3: Ranking for Universities Visited Relative to the Top 10 Research Universities Worldwide (2012–2014) and Top 10 in Canada (2014)

Source of data: National Taiwan University Ranking

	World			Canada
University	**2012**	**2013**	**2014**	**2014**
Harvard University	1	1	1	
Johns Hopkins University	2	2	2	
Stanford University	3	3	3	
University of Toronto	**7**	**8**	**4**	**1**
University of Washington, Seattle	4	4	5	
University of California, Los Angeles	5	5	6	
University of Michigan, Ann Arbor	6	7	7	
University of California, Berkeley	8	6	8	
University of Oxford	9	9	8	
Massachusetts Institute of Technology	10	10	8	
Canadian Universities				
University of British Columbia	28	27	27	2
McGill University	33	34	33	3
University of Alberta	78	77	79	4
University of Montreal	106	109	86	5
McMaster University	**98**	**118**	**116**	**6**
University of Calgary	148	151	144	7
University of Ottawa	199	199	161	8
Western University	190	193	206	9
Laval University	225	235	226	10
University of Waterloo	**279**	**256**	**261**	**11**

Note: The National Taiwan University Ranking, first published in 2007, ranks universities on research performance and output. About 500 universities were ranked worldwide; 22 were in Canada. The ranking is based on an assessment of research productivity (based on the number of research articles) research impact (based on the number of times research articles are cited elsewhere) and research excellence (based on whether the articles appear in high-impact journals).

Figure 4: Top Universities by Research Field, 2014

Source of data: National Taiwan University Ranking

	University of Toronto		McMaster University		University of Waterloo	
Field	**World**	**National**	**World**	**National**	**World**	**National**
Agriculture	38	3	244	16	232	15
Clinical medicine (e.g., psychiatry)	3	1	50	4	n/a	n/a
Engineering	30	1	193	8	65	2
Life sciences (e.g., biology)	11	1	148	7	n/a	n/a
Natural sciences (e.g., chemistry)	30	1	260	8	172	6
Social sciences (e.g., economics)	8	1	54	4	133	10

Note: See Note for Figure 3 for how these were assessed.

programs offered by the Ministry of Research and Innovation. As well, for comparison purposes and to determine whether best practices exist elsewhere, we researched other jurisdictions and analyzed survey results on performance indicators for technology transfer offices collected by the Association of University Technology Managers from many Canadian and U.S. universities. And finally, we reviewed the results of inspections of the administration of research funding by universities by the Canada Foundation for Innovation (a federal research funding agency that, together with Ontario, provides funding for research infrastructure).

Our audit work on the ONE program, including services delivered by the Ontario Centres of Excellence and MaRS, was limited to a review of key performance indicators and results. We also did not look at the universities' administration of research funding.

3.0 Summary

3.1 Provincial Government

In 2008, the government determined that it needed to extract more value from all provincial investments in all research, including from research funding provided to universities. The Ministry of Research and Innovation was made accountable for achieving this objective. However, our audit found that the Ministry does not co-ordinate or track the province's investments in research and innovation. It lacks key information from other research-granting ministries and agencies. As well, it lacks key information from service delivery agents, such as the Ontario Centres of Excellence to which the Ministry provides funding to provide commercialization support to universities. Equally important, the Ministry has not been attempting to measure the extent to which value has been created from these investments.

In our audit, we estimated that in the last five years, at least $1.9 billion in funding has been provided for university research. This amount excludes Ministry funding provided to service delivery agents (like regional innovation centres) to deliver commercialization services, and tax incentives offered to private companies that invest in university research. Without knowing the payback from either benefits to society or economic benefits through commercialization activities, it is difficult for the government to determine whether it is getting value for money from its significant investment in university research.

Our specific observations regarding the Ministry of Research and Innovation are as follows:

Time to Better Measure Value for Money

- The Ministry needs to develop an implementation plan to monitor whether it is achieving value for money from its investments in research and innovation in accordance with the strategic direction outlined in its 2008 Innovation Agenda. Although some performance measures are in place, this would also involve improving on performance measurement by establishing outcome and potentially socio-economic measures to use in assessing the impact of the Ministry's investments in university research and commercialization.
- The Ministry has a comprehensive selection process for awarding university grants and is generally following its guidelines for awarding these grants. However, it does not subsequently confirm that research outcomes align with those identified in grant proposals.
- In 2009 the Ministry, universities and other stakeholders identified several barriers to commercialization, including a fragmented system of collaboration lacking co-ordination, lack of adequate venture capital and too much regulation and bureaucracy within the commercialization system. In order to address barriers to commercialization, the Ministry

needs to develop a strategy and action plans with timelines to monitor success in breaking down such barriers.

Potential to Benefit Further From Research Funding

- The provincial government has virtually no rights to intellectual property resulting from the research it funds. This is not unusual when compared to a sample of Canadian and international jurisdictions. However, we noted that U.S. Federal government agencies can use inventions made with federal funding royalty-free for their own purposes. We recommended that the Ministry consider the pros and cons of implementing a similar practice in future situations where there may be value to the province. Currently the Ministry of Agriculture, Food and Rural Affairs in Ontario shares in revenue generated by intellectual property created at the University of Guelph with government funds, and a non-exclusive right to use the intellectual property royalty-free for non-commercial internal purposes, perpetually. As a result, it received $3.3 million in net licensing revenues over the past five years.

3.2 Universities

Ontario universities receive a significant amount of money from governments, private industry and other sources to conduct research. In the five years ending April 30, 2014, universities received more than $13 billion for research activity from all sources combined. According to past reviews by the Canada Foundation for Innovation, the universities we visited had proper controls in place to manage research funding provided for research infrastructure. We further found that staff working in Technology Transfer Offices at the universities we visited had experience with assessing the commercialization potential of invention disclosures.

However, universities' technology transfer offices have the opportunity to make some improvements in a few research and intellectual property oversight areas as follows:

Time to More Fully Measure Value for Money

- While universities do track key commercialization indicators and results of their technology transfer offices, they do not yet measure the socio-economic impact of their research activities and commercialization efforts. It may be time to take on this challenge to further confirm value for money is being achieved.

Opportunity to Better Protect and Benefit From Intellectual Property

- Patent protection may not always be taken out on a timely basis at the universities, increasing the risk that others may obtain a patent based on publicly communicated information about the invention. At three universities we visited, the average time ranged between 80 and 188 days for a U.S. provisional patent and between 25 to 211 days for all other types of patent filings.
- None of the Technology Transfer Offices we visited highlighted revenue generation as one driving force. In most years they spent more to operate their office than they gained from intellectual property holdings, before distribution to inventors and other parties. We also noted, that although universities had a significant number of active licences at the year ending April 30, 2013, the number of licences that generated income varied – only 3% at one university, 25% at another and 44% at the third. Comparatively, the average income from licences at Canadian universities was $61,000 and the average income from licences at U.S. universities was $130,000.
- None of the technology transfer offices we visited had formal guidelines or policies on

managing costs associated with commercialization efforts. As well, in a number of cases there were delays in the collection of revenues from intellectual property revenue generating agreements.

- From our review of files in technology transfer offices, documentation was not available to confirm that formal processes were used to assess the feasibility of commercialization and track decisions/actions being taken.

Although our findings relate specifically to the three universities we visited, we encourage other universities across Ontario to review our recommendations, as noted in **Appendix 7**, and act on those that may apply to their individual circumstances.

This report contains 15 recommendations, consisting of 27 actions to address the findings noted during this audit.

OVERALL MINISTRY RESPONSE

The Ministry of Research and Innovation is in agreement with the Auditor General's recommendations stemming from the audit on University Intellectual Property. The Ministry plans to take action to address those directed to it.

The 2008 Ontario Innovation Agenda provided a strategic framework for Ontario. The Ministry has been using this framework to guide its activities. To help with commercialization and innovation, the Ministry also has the Ontario Network of Entrepreneurs (ONE), which is a network of 90 centres across Ontario that provide in-person and online advice, referrals, programs, funds, resource materials, training and connections for people who want to start and grow successful businesses.

The Ministry supports research excellence and talent development through its programs. The Ministry appreciates the Auditor General's recognition that we have a comprehensive selection process for awarding university grants with over 75% of funding decisions being aligned with Ontario's Innovation Agenda. In addition, four of the top 10 Canadian research universities are located in Ontario, including the University of Toronto, McMaster University, the University of Ottawa and Western University. However, the Ministry recognizes that further improvements are needed to be able to better measure the benefits to Ontarians.

The Ministry will continue to assess and refine the programs it offers to support innovation in Ontario.

4.0 Detailed Observations

4.1 Government Research-related Investments and Activities

4.1.1 Lack of Co-ordination of the Province's Investments in Research and Innovation Activities

The Ministry Is Not Tracking Total Funding for Research and Innovation Province-wide

Ontario's 2008 Innovation Agenda recognized that a wide range of ministries and agencies carry out the government's innovation-related investments and activities, including research funding. It identified the Ministry of Research and Innovation as the lead ministry responsible for ensuring that Ontario's efforts to strengthen the province's innovation culture are co-ordinated and comprehensive. However, during our audit, we found that the Ministry was still not effectively co-ordinating the province's investments in research and innovation activities.

In particular, the Ministry did not know the total amount of provincial funding provided annually, either directly or indirectly, for research and commercialization activities. To illustrate:

- Although the Ministry was able to provide us with a list of the research-granting programs that it managed, it was not able to provide us with a comprehensive list of provincial programs from across all government ministries and agencies that fund research. We would expect that, because it is the lead ministry, the Ministry of Research and Innovation would be the custodian of comprehensive financial information on all provincial government funding programs for research and innovation. Using information collected by the Council of Ontario Universities, we determined that the total amount of provincial funding provided to universities for research activities was at least $1.9 billion for the 5-year period ending April 30, 2014 (see **Appendix 5**). However, this is not the total amount the provincial government spent on research and innovation. It does not include research grants it provided to not-for-profit research institutes, research hospitals and colleges, as well as ministry funding provided to service delivery agents (like regional innovation centres) to deliver commercialization services, and provincial tax incentives offered by the Ministry of Finance to private companies that invest in university research.

- The Ministry does not provide funding directly to universities for commercialization activities. Instead, the Ministry makes transfer payments to the Ontario Centres of Excellence and MaRS, which provide commercialization support to universities. During our audit, we noted that the Ministry has not tracked or asked the Ontario Centres of Excellence and MaRS to provide details on the funding or assistance given to universities.

We also noted that the Ministry does not always know whether the research it has funded has resulted in intellectual property. Recipients of research funding submit their final performance report to the Ministry in the last year of funding, noting any accomplishments to date. However, where there is research value or impact, it likely occurs years later following commercialization efforts by the university technology transfer offices, and long after the initial funding agreement's reporting requirements have ended.

Further, the Ministry does not have a process in place to make other ministries aware of new technologies and innovations developed with provincial funding. It does not track if government ministries or agencies, who had initially indicated support for a research project, are using inventions that may have resulted from the research or are benefitting in any other way from funding provided. Applicants for research funding are encouraged to submit letters of support with their research proposals to secure funding. These letters are generally from the private sector, but in some cases they may be from government ministries and agencies with which researchers have established contact. The Ministry of Research and Innovation informed us that the onus to follow up on those research outcomes rests with the ministries and agencies providing the letters of support.

RECOMMENDATION 1

As the lead ministry in ensuring Ontario's efforts to strengthen its innovation culture are co-ordinated and comprehensive, the Ministry of Research and Innovation should establish processes to track and monitor the total direct and indirect provincial funding for research and innovation and the new technologies and inventions resulting from that funding.

MINISTRY RESPONSE

The Ministry agrees to evaluate methods to track and monitor total direct and indirect provincial funding for research and innovation and the new technologies and inventions resulting from that funding.

For example, in the 2015 Budget, the government committed to implementing a common registration process for all transfer-payment recipients. This enables insight into and oversight of the full financial relationship between the government and service delivery partners.

When fully implemented, this will facilitate accurate and complete aggregation of information detailing the funding relationship that the province has with transfer-payment recipients, including institutions receiving research and innovation funding.

No Plan Developed to Implement the 2008 Innovation Agenda

The Ministry has not developed a broad-based and multi-year plan to implement the strategic direction outlined in the 2008 Innovation Agenda. The Innovation Agenda was a strategy for research and innovation which identified key sectors of the economy for investment where Ontario had a strategic advantage and global position. It did not serve as an implementation plan since key initiatives, formal deliverables, timelines and targets were absent from the Agenda. A more detailed plan would provide for a measure of oversight to ensure action was taken within assigned timelines.

Since the release of the Innovation Agenda in 2008, the Ministry has issued three additional strategic planning documents that relate to specific sectors: Ontario's Life Sciences Commercialization Strategy (2010), Ontario Cleantech Asset Map (2010), and Ontario's Water Sector Strategy (2014). While these documents provide strategic direction, they do not serve as implementation plans since they lack detail on all the key initiatives, deliverables, performance measures and targets that would be useful to implement these strategies.

RECOMMENDATION 2

The Ministry of Research and Innovation should develop and implement a multi-year plan to cover the Innovation Agenda's strategic direction as well as provincial goals and initiatives on research and innovation. This plan should provide enough detail to clearly summarize the deliverables, and establish timelines and targets to deliver on key strategies, initiatives and research and innovation programs.

MINISTRY RESPONSE

The Ministry agrees to develop and implement a multi-year plan to cover the Innovation Agenda's strategic direction as well as provincial goals and initiatives on research and innovation.

Although the Ministry did not have a formal multi-year plan linked specifically to the Innovation Agenda, the Ministry has implemented programs that are consistent with the Innovation Agenda—for example, the Ontario Network of Entrepreneurs (formerly the Ontario Network of Excellence), support for venture capital and innovation financing, and investment in research programs.

Province Has Not Sufficiently Monitored Progress on the 2008 Innovation Agenda

As mentioned above, Ontario's 2008 Innovation Agenda had no timeframe for implementation and no established performance targets. Nevertheless, the province committed to developing a scorecard to measure and report on the progress of its investments in innovation and to allow comparisons with other jurisdictions.

In 2010, the Ministry of Research and Innovation developed a scorecard with 23 key indicators and measured the province's innovation performance based on data available at the time. The province ranked "weak" in two categories (commercialization and private investment), "satisfactory" in four areas (technology development and transfer, economic performance, linkages and support, and companies with research and development capacity), and "good" in three areas (public investment, research and education as it relates to innovation performance, and higher education and public research as it relates to innovation capacity). The Ministry selected nine jurisdictions, based on population size and gross domestic product, to compare against the same 23 indicators. They included three Canadian provinces (British Columbia, Alberta and Quebec), two American states (Massachusetts and Pennsylvania), and three other countries (Israel, Australia and Sweden). In general, Ontario performed favourably compared to the other provinces, but tended to perform worse than the foreign jurisdictions.

In the absence of a subsequent assessment by the Ministry, we reviewed the innovation report card (How Canada Performs, A Report Card on Canada) issued by the Conference Board of Canada for 2015. Ontario was the highest rated provincial jurisdiction in innovation. However, the Conference Board of Canada gave Ontario its lowest rating ("D") in the categories of business enterprise R&D investment, patents and labour productivity. The Conference Board's rating would indicate a need for the province to improve in these areas.

The results of the Ministry's 2010 assessment were not made public, and no subsequent assessment was performed. This means there has been no assessment done by the Ministry on whether provincial spending on research over the last five years has been effective.

Publicly Available Indicators Show Little Progress in Ontario's Innovation

During our audit, we noted that the Ministry of Research and Innovation often referred to the Global Start-up Ecosystem Ranking to identify how provincial ecosystems ranked globally. The Global Start-up Ecosystem Ranking periodically ranks the world's top start-up ecosystems for technology companies. Silicon Valley took first place and served as the baseline for comparison and measurement of all other ecosystems. In 2012, two Ontario cities were among the top 20 ecosystems in the world –Toronto was 8th and Waterloo was 16th. In 2015, both Toronto and Waterloo dropped in ranking to 17th and 24th place, respectively. Though the report did not specify the reason for the significant drop in ranking for Toronto and Waterloo, it should be cause for concern and requires further investigation by the province.

RECOMMENDATION 3

To assess progress on the province's 2008 Innovation Agenda and provide comparisons between Ontario and its peer jurisdictions, the Ministry of Research and Innovation should conduct assessments periodically against the indicators in the scorecard and report the results publicly.

MINISTRY RESPONSE

The Ministry agrees to periodically assess the progress of the Ontario Innovation Agenda against indicators in the scorecard and report the results publicly.

The Ministry has been tracking performance measurements (such as patents, private-sector and public-sector research and development personnel, and research infrastructure investment) that capture different facets of the innovation system from publicly available sources, such as Statistics Canada, Thomson Reuters, the Canadian Foundation for Innovation and Tri-Council publications.

4.1.2 No Strategy but Some Action Taken by Ministry to Address Barriers to Commercialization

The Ministry has not developed a comprehensive commercialization strategy to eliminate the barriers to commercialization for intellectual property. In 2009, the Ministry of Research and Innovation and Industry Canada held a roundtable on commercialization barriers to university research. Participants included representatives of industry, university technology transfer offices and MaRS, the Toronto-based regional innovation centre. The group identified several barriers to commercialization and proposed actions to address some of them. Some of the more significant barriers to commercialization identified were:

- fragmented system of collaboration lacking any degree of co-ordination;

- lack of strategic focus on technologies and areas of science;
- weak system of knowledge management, with no means of understanding who is doing what and where;
- need for a stronger focus on partnerships and alliances in the realm of technology transfer;
- too much regulation and bureaucracy within the commercialization system;
- lack of adequate venture capital; and
- indicators such as patents, licences and disclosures are too narrow to measure the true outcomes of commercialization.

In the last several years, the Ministry of Research and Innovation has introduced many commercialization programs and, in conjunction with the Ministry of Finance, has created corporate tax credits and exemptions, which could address some of the barriers. However, it has not put a system in place to monitor its progress in addressing the commercialization barriers that were identified in 2009.

In 2008, the Ontario Tax Exemption for Commercialization was created to allow start-up companies in the field of information and communication technology that commercialize intellectual property developed at Canadian universities and colleges to get a refund on all corporate income tax and corporate minimum tax paid in the first 10 years of operations. However, this tax exemption, designed to promote commercialization, has been ineffective. Eligible companies have to apply for a certificate of eligibility issued by the Ministry of Research and Innovation. To date, only one certificate has been issued and no claims have been filed in regards to this tax exemption.

RECOMMENDATION 4

To address barriers to commercialization of intellectual property, the Ministry of Research and Innovation should consult again with stakeholders for a current review of barriers, develop a strategy and action plan with a timeline for implementation, and monitor its progress on addressing those barriers.

MINISTRY RESPONSE

The Ministry will review the broad range of commercialization outcomes annually and will consult with members of the ecosystem (that is, members of ONE) to adjust and develop programs that respond to the current economic and ecosystem conditions.

The Ministry notes that commercialization programs were created to respond to barriers. For example, ONE was formed and structured to address concerns by:

- making it easier for entrepreneurs to start and grow their businesses in Ontario across all sectors of the economy;
- helping entrepreneurs access the programs and services they need;
- mobilizing knowledge and resources within colleges and universities to support business-led innovation and commercialization;
- co-ordinating provincial, federal, regional and private-sector programming and resources; and
- ensuring the roles of each organization do not overlap and are complementary to each other.

4.1.3 Selection of Research Projects

Applicant Selection Criteria for Research Funding Tied to Innovation Agenda

The 2008 Innovation Agenda highlighted four areas of the economy for initial strategic investment where Ontario already held a position of global importance: bio-economy and clean technologies, advanced health technologies, pharmaceutical research and manufacturing, as well as digital media and information and communications technologies. The Ministry has established a comprehensive selection process for awarding grants under the Research Excellence, Research Infrastructure and Early Researcher Awards. For funding awarded under each program for the last five years, see **Appendix 1**. The Ministry's guidelines for these three key research grant programs, through which it funds university research, state that preference is given to the project proposals in the targeted areas identified in the 2008 Innovation Agenda. We reviewed all projects that have been awarded a research grant since the release of the 2008 Innovation Agenda and noted that at least three-quarters of the funding went to projects in the targeted sectors. Specifically, 76% of Early Researcher Awards, 79% of Research Infrastructure awards for large infrastructure, and 97% of Research Excellence awards went to projects proposing research in the targeted sectors.

Proposals for funding under the Research Excellence program are evaluated in four categories, one of which is the potential research impact. Research impact is based on the factors of commercialization (for example, market potential), economic benefits (for example, potential to increase Ontario's productivity and competitiveness) and societal benefits (for example, preserving the environment). Successful applicants require a score of at least 85% in this area. Proposals for funding under the Research Infrastructure program are evaluated, among other things, on the potential economic and societal impacts. Successful applicants require a score of at least 80% in these areas.

4.1.4 Ministry's Oversight on the Use of Funding

No Comparison of Final Research Outcomes with Potential Outcomes Noted at Proposal Stage

Although the Ministry of Research and Innovation has established a comprehensive selection process for awarding grants under the Research Excellence and Research Infrastructure programs, we confirmed with the Ministry that they do not compare actual results regarding impact with those noted in the grant applicants' original proposals at the time they applied for funding. This type of analysis would be useful to determine whether universities are overstating the proposed benefits of their research in order to secure funding.

Improvements Needed to Measure the Impact of the Ministry's Investments in Research and Commercialization

The Ministry has developed performance indicators for its three key research grant programs for universities. **Figure 5** lists the performance indicators tracked by the Ministry and the combined results for all three research grant programs over the past five fiscal years. The Ministry uses these indicators to assess knowledge transfer; the quality of research; and the ability to enhance the knowledge, training and skill of research talent in the province. Information used to assess performance is obtained from annual progress reports submitted to the Ministry by grant recipients under the Research Infrastructure, Research Excellence and Early Researcher Awards programs. For the Research Infrastructure program, additional performance information is obtained from the Canada Foundation for Innovation, which is a co-sponsor and also collects performance data from grant recipients. The Ministry compiles this information by individual grant program and by all three grant programs combined.

The Ministry has also developed performance indicators for the commercialization activities it funds. Key performance indicators used to assess commercialization activities are listed in **Figure 6**. These include results for the last two fiscal years only because the Ontario Network of Entrepreneurs (ONE Program) was established in 2013 and the Ministry used different performance measures prior.

The performance results for research funding indicate that over the last five years (2009/10-2013/14), research grants have resulted in the creation of 172 start-up companies with 830 new employees. In addition, performance results indicate that over the last two years (2013/14-2014/15)

Figure 5: Ministry Performance Measures and Results for Major Research Grant Programs, 2009/10–2013/14

Source of data: Ministry of Research and Innovation

What Indicator is Measuring	#	Indicators[1]	2009/10	2010/11	2011/12	2012/13	2013/14	5-Yr Total/ Since Inception
Knowledge transfer	1	Invention disclosures	197	191	212	263	212	**1,075**
	2	Patent applications	117	161	193	219	152	**842**
	3	Patents granted	54	33	84	60	105	**336**
	4	Active Licences	41	49	74	78	98	**340**
	5	Spinoff/Start-up companies[2]						**172**
	6	Employees in spinoff companies[2]						**830**
Quality of research	7	Citations	29,017	32,650	85,195	60,424	48,376	**255,662**
	8	Publications	5,647	5,683	8,307	5,169	5,586	**30,392**
Ability to enhance research talent	9	Highly qualified people in university research projects	14,718	13,575	17,557	15,040	13,078	**73,968**
		Researcher	3,514	3,025	3,947	2,676	3,029	**16,191**
		Post-doctoral fellows	1,430	1,485	1,917	1,218	1,528	**7,578**
		PhD	2,672	2,146	3,269	3,121	2,524	**13,732**
		Master	2,899	3,043	3,423	1,819	2,172	**13,356**
		Undergraduate	3,059	2,421	3,540	3,958	2,272	**15,250**
		Other	1,144	1,455	1,461	2,249	1,553	**7,862**
	10	Degrees awarded to research team members[1]	1,104	1,328	1,695	1,283	1,350	**6,760**
		PhD	180	213	314	268	330	**1,305**
		Master	417	403	672	479	491	**2,462**
		Undergraduate	507	712	709	536	529	**2,993**

1. Annual results are combined for all Ministry of Research and Innovation flagship research grant programs – Research Infrastructure, Research Excellence and Early Researcher Awards – except for indicator 10, which combines results for only the latter two.
2. Results are since inception of the Research Infrastructure, Research Excellence and Early Researcher Awards programs.

Ministry-funded commercialization activities led to the creation of 1,055 new companies, over 10,800 new jobs, and the retention of almost 16,500 jobs. However, the accuracy of these results is in question.

This and other concerns with the approach used by the Ministry to assess research and commercialization performance are as follows:

- Performance indicators for both research grant programs and commercialization programs are primarily activity-based measures and do not measure impact. Aside from tracking jobs created, jobs retained and start-up companies, the Ministry does not have a mechanism for measuring the impact or benefits to Ontarians (also referred to as socio-economic benefits). Ontario is not alone in this respect. No other jurisdiction we researched in Canada and abroad had any publicly available socio-economic performance measures. In 2010, the Canada Foundation for Innovation, a federal funding agency, released a study identifying six types of socio-economic benefits (including, improvements in health care treatments, environmental benefits, and improved regulatory measures) against

Figure 6: Key Ministry Performance Measures and Results for Commercialization Activities, 2013/14 and 2014/15
Source of data: Ministry of Research and Innovation

Performance Indicators	2013/14	2014/15	Total
Economic			
New jobs created	6,482	4,350	**10,832**
Jobs retained	9,773	6,679	**16,452**
New firms created	811	244	**1,055**
New customers – Canadian	3,534,984	8,547,914	**12,082,898**
Sales revenue – Canada ($ million)	230	211	**441**
Total sales revenue ($ million)	463	406	**869**
Intellectual Property			
Published peer-reviewed publications	286	172	**458**
Patent applications submitted	999	804	**1,803**
Patent applications granted	290	301	**591**
Licenses established	32	35	**67**
Disclosures filed	185	65	**250**
Product Development			
Prototypes developed	2,365	3,052	**5,417**
Process improvements developed	1,395	1,390	**2,785**
Products launched/brought to market	1,667	2,588	**4,255**
Services launched/brought to market	1,497	2,270	**3,767**
Process improvements launched/brought to market	1,767	4,183	**5,950**

which research can be evaluated, but it too had not yet developed performance measures to capture their impact. From our discussions with representatives from the Canada Foundation for Innovation, the Ontario Council of University Research (a working group of the Ontario Council of Universities), and technology transfer staff at the universities we visited, this may be an area for all stakeholders to collectively develop useful measures to assess the impact and benefits to Ontarians. The 2008 Ontario Innovation Agenda recognized the need to measure and report on outcomes relating to how they impact the economy and quality of life. As well, the Higher Education Quality Council of Ontario, an independent advisory agency of the provincial government, issued a report in 2015 on Measuring the Economic Impact of Postsecondary Institutions, which highlighted the need for governments and universities to measure outcomes from using research that affect society.

- The Ministry does not distinguish between funding for basic and applied research. Basic research, also called pure research, is scientific research that improves understanding of natural or other phenomena and advances fundamental knowledge. Applied research uses scientific theories and new ideas derived from basic research to develop new technology or techniques to intervene and alter natural phenomena or solve practical problems. So although basic research usually does not lead directly to inventions or discoveries with commercial potential, there is merit in basic research in that it creates the means to move forward on applied research. According to an academic research study from the University of Regina, basic and applied research go hand in hand whereas, without continuous generation of basic knowledge, there will be no applied research and commercially viable innovation in the longer term. Basic research would therefore appear to not perform well when judged against knowledge transfer indicators (such as, number of invention disclosures, patents and licences). Therefore, performance indicators for basic research would have to differ from performance measures for applied research.

- Performance results for commercialization programs are incomplete and unreliable. Performance indicators for commercialization initiatives are based on client surveys conducted by service delivery agents (for example, the Ontario Centres of Excellence and MaRS). Clients receiving commercialization support are typically small and medium sized enterprises, including start-up companies. The Ministry acknowledged that there were limitations in the performance results because they were based on surveys. These limitations included low response rates and a change in the mix of respondents from one year to the next. For example, results in the 2014/15 annual report for the Business Acceleration program, administered by MaRS, were based on a survey response rate of 30%. In another example, according to the Ministry only 4% of the clients for one of the regional innovation centres responded to the 2014/15 survey. Similar problems were not found with recipients of research grant funding because funding is contingent on meeting reporting requirements. The Ministry informed us that service delivery agents were expected to have revised their contracts with clients by April 2016 in order to improve response rates.
- There is also a risk of duplicate information. The Ministry informed us that clients receiving commercialization support from more than one Ministry-funded commercialization program and who report to more than one service delivery agent could be submitting the same performance results to all programs, hence overstating overall performance. There is also no assurance that information reported to commercialization programs on the number of inventions, patents and licences were not already included in performance measures for the research grant.
- Performance results on research funding and commercialization programs are not publicly reported. Performance results are used by the Ministry for internal purposes but are not transparent to the public, despite the recommendation of the Ontario Research and Innovation Council, the advisory to the Ministry, to be accountable and transparent. The need for regular public reporting has been reiterated by the government. In 2014, the Premier notified the Minister of Research and Innovation in writing that one of the Ministry's priorities was to promote openness and accountability by developing a website that highlights outcomes for all government investments in innovation, whether successful or not, including their impact on employment, growth and secondary innovations.

RECOMMENDATION 5

To ensure the Ministry of Research and Innovation (Ministry) is getting value for money for its investment in research and commercialization activities, the Ministry should:

- track what portion of research funding goes to basic vs. applied research, and develop appropriate indicators for each type of research;
- collaborate with stakeholders to collectively develop useful performance measures that assess the socio-economic benefits to Ontarians;
- increase the reliability of performance results by implementing measures to increase the response rate from clients receiving commercialization supports and

developing processes to eliminate duplicate reporting; and
- publicly report performance results on research funding and commercialization programs.

MINISTRY RESPONSE

The Ministry agrees to develop methods to track basic versus applied research. The Ministry notes that the delineation between basic and applied research is often not clear and is also dependent on the sector. The Ministry sees value in maintaining a standard and consistent reporting template in order to reflect the spectrum of indicators and to minimize the reporting burden.

The Ministry agrees to continue to work toward the development of socio-economic indicators.

As noted in the audit report, the Ministry has been working with its data collection partner to improve survey responses. The Ministry is aware of the challenges of collecting reliable and complete data for early stage companies and start-ups. Despite these challenges, the data gathered by the Ontario Network of Entrepreneurs (ONE) is held up as unique in the world in terms of the quantity of data collected. The Ministry agrees to continue to improve its data collection practices to address these challenges.

The Ministry agrees to publicly report on research and commercialization funding performance results.

4.2 Intellectual Property Rights

Intellectual property rights refer to the right to own intellectual property, the right to share in future income from the sale or licence of intellectual property, or the right to use intellectual property royalty-free. Research funding agreements and university policies typically specify the rights of inventors, universities and research sponsors.

Figure 7 summarizes policies on intellectual property ownership and profit sharing at the three universities visited.

4.2.1 The Province Does Not Typically Claim Rights to Intellectual Property Resulting from the Research It Funds

We reviewed a sample of contracts and funding agreements between provincial ministries, universities and the Ontario Centres of Excellence and found that none gave the province any ownership rights to intellectual property created with government funding.

The contracts were either silent on the issue or deferred to the institutions' policy on intellectual property ownership. In addition, except in one case, the contracts did not give the government the right to share in future profits from the sale or licence of intellectual property, or any right to use intellectual property royalty-free. The exception was the master research agreement between the Ministry of Agriculture, Food and Rural Affairs (OMAFRA) and the University of Guelph. The contract gives the Ministry a share in revenue and a perpetual non-exclusive right to use the intellectual property royalty-free for non-commercial internal purposes. Over the past five years OMAFRA received \$3.3 million in net licensing revenue, which represents a share of about 35%.

4.2.2 Intellectual Property Rights Vary Among University Research Sponsors

When comparing sponsors of university research, we found that the federal government and Ontario shared a similar lack of intellectual property rights. Industry partners also had similar ownership rights, except in cases where industry personnel were involved in conducting the research with university members and/or resources. But, unlike the government of Ontario, industry partners usually had the right to share in future income.

Figure 7: Intellectual Property Ownership and Profit-sharing Policies at Universities Visited
Prepared by the Office of the Auditor General of Ontario

University	Ownership Policy	Distribution-of-Income Policy
University of Toronto	Owned jointly by the university and the inventor(s) at time of creation, unless these rights have been given up (in whole or in part) to a third party under a prior written agreement. When it comes time to commercialize, sole ownership is assigned to the university if the inventor(s) wants the university to assist and support. Sole ownership is assigned to inventor(s) if inventor(s) choose to commercialize through their own efforts.	• When university commercializes: 60% to inventor and 40% to university (to technology transfer office, department, or to a fund that supports future research). • When inventor commercializes: 75% to inventor and 25% to university (to department or to a fund that supports future research).
McMaster University	Owned by the university, unless rights have been given up to a third party under a prior written agreement. The inventor (academic researchers only) can get sole ownership if approved by the Intellectual-property Board.	• When university commercializes: 50% to universities and 50% to inventors or reinvested in future research (breakdown determined by Intellectual-property Board). • When inventor commercializes: 25% to universities.
University of Waterloo	Owned by the creator(s), unless rights have been ceded to a third party under a sponsorship agreement.	• When university commercializes: Generally, 75% to inventor and 25% to university (of which half stays with corporate level and half flows back to originating faculty). • When inventor commercializes: 100% to inventor.

Universities also had rights to intellectual property that the Ontario government did not have. Two of the universities we visited had some level of ownership (100% if they became the commercialization agent), and shared in future profits whether or not the university became the commercialization agent. The third university had no ownership rights and shared in future profits only if it was responsible for commercialization. Unlike the province, all three universities had the right to use intellectual property royalty-free for non-commercial purposes (for instance, research, teaching and administrative), even in cases where the intellectual property was owned entirely by the inventor and the university was not involved in commercialization.

4.2.3 Other Government Jurisdictions Typically Do Not Claim Intellectual Property Rights

By comparing other Canadian and international jurisdictions that fund university research, we found that practices regarding ownership and income sharing were similar to those in Ontario. They typically do not maintain ownership of any resulting intellectual property or have the right to any future income. Regarding the right to use intellectual property royalty-free for non-commercial purposes, all but one international jurisdiction had a similar practice to Ontario. The U.S. federal government, under the 1980 *Bayh-Dole Act* which served to transfer intellectual property ownership from the federal government to institutions and inventors, still reserved the right to a royalty-free licence for its own use for inventions created with federal funding.

The Ministry informed us that Ontario's rationale of not having intellectual property rights on provincially funded research projects, including license income and/or royalty-free use, is based on the view that "government ownership of IP impedes the speed of commercialization." The Ministry describes the current approach as "consistent with best jurisdictional practices, federal policy and academic/industry preference." In addition, government ownership of intellectual property was viewed as not being cost effective since there appears to be a presumption that resources required to manage intellectual property rights may be more costly than the income generated.

Although there may be costs involved with owning intellectual property and managing licencing agreements, royalty-free use of intellectual property has the potential to provide future cost savings to the government. Also, intellectual property rights should not be viewed as an impediment to commercialization without further detailed analysis of the impact and potential value to Ontario.

RECOMMENDATION 6

The province should re-visit and assess the pros and cons of including provisions in selective research funding agreements that would allow it to share in future income from the sale or licence of resulting intellectual property, and/or to have the non-exclusive right to use the intellectual property royalty-free for non-commercial internal purposes, where there may be value to do so.

MINISTRY RESPONSE

The Ministry agrees to assess the pros and cons of adopting this approach.

4.3 University Oversight of Research and Intellectual Property

4.3.1 Proper Controls in place to Manage Research Funding according to the reviews by the Canada Foundation for Innovation

Every three or four years the Canada Foundation for Innovation, which provides universities with funding to build research infrastructure, conducts reviews at universities to assess the controls in place to properly manage the funding provided. Specifically, the assessment includes review of controls and procedures to ensure the timely implementation of projects, mitigation of the risk of cost escalation, the use of funds, the university's actions to sustain infrastructure over its useful life, and the optimal management of the portfolio of funded projects. The universities confirmed that processes and practices evaluated by the Canada Foundation for Innovation are also used to manage research funding provided by the province. As a result, to avoid duplication, the Ministry of Research and Innovation relies on the results of the reviews conducted by the Canada Foundation for Innovation.

For the universities visited, all three universities had reviews conducted in the last two years, but only two universities had recent reports. These two universities received satisfactory ratings in all the key evaluation criteria that were rated. The third university was expecting to receive the report of its results by December 2015.

4.3.2 Performance Measures

The Association of University Technology Managers (AUTM) surveys universities annually on a number of performance measures. This allows universities to compare commercialization results across Canada. **Figure 8** compares key indicators for the universities visited and for other Canadian and U.S. universities for the 2013/14 fiscal year. The universities we visited typically did not have any

Figure 8: Key Commercialization Indicators and Results for Technology Transfer Offices, for Fiscal Year Ending 2014

Source of data: FY2014 Licensing Activity Surveys by the Association of University Technology Managers

	Ontario Universities Visited			Canadian Universities for Comparison			U.S. Universities for Comparison		
	Universities[1]			Universities[2]			Universities[3]		
	1	2	3	1	2	3	1	2	3
Total Research Expenditures[4] ($ million)	424	275	181	564	411	463	812	1,605	887
Patent applications filed	78	83	32	119	105	81	543	555	590
US Patents issued	17	2	5	32	23	22	89	94	187
Invention disclosures received	147	71	29	128	128	90	452	453	481
Disclosures included in licences executed	62	24	4	27	44	39	n/a	139	106
Start-up companies formed	20	3	12	3	6	5	10	13	23
Active licences at Y/E	203	183	298	328	239	239	699	713	1,400
Licences generating income each year	65	154	7	83	55	32	270	376	655
Licences generating income over $1M during the year	3	0	0	2	1	0	3	2	6
Total licence income in year[4] ($ 000)	34,664[5]	2,284	320	5,897	4,819	557	17,332	16,527	108,605

1. 1 is the University of Toronto; 2 is McMaster University; and 3 is the University of Waterloo (only university visited without a medical school).
2. Universities in large Canadian provinces.
3. Universities in the United States with significant research activity.
4. In Canadian or U.S. dollars as applicable.
5. This is an anomoly that inlcudes a $27 million payment from one technology that achieved a significant milestone in 2014 with the initiation of a phase 3 trial. The total licence income averaged $4.6 million over the previous 5-year period.

n/a – No information was included in the data set. The prior year figure was 106.

performance measures for the technology transfer offices beyond what they reported in the AUTM survey.

Universities Do Not Measure Socio-economic Impact of Research and Innovation

As is the case with the Ministry of Research and Innovation, universities also use activity-based measures that do not comprehensively capture the socio-economic impact of their research activities and commercialization efforts. In addition, some of the existing measures are not useful; for example, it would be more useful to know how many start-up companies have been in business for at least five years, in addition to how many were created in the year. This issue of assessing economic and social benefits to Ontarians was discussed in more detail earlier in **Section 4.1.4**.

Intellectual Property Generating Little Revenue for Universities

None of the technology transfer offices highlighted revenue generation as a key driver. They told us their goals were primarily to help build successful partnerships among industry, business, government and the university research community, and to turn ideas into commercially viable products and services, companies and jobs for societal and economic benefit.

Similar to universities in other jurisdictions, the three technology transfer offices we visited generally operated at a deficit. As shown in **Figure 9**, from 2011/12 to 2013/14, two offices generated

Figure 9: Revenue Collected From Intellectual Property Compared to Expenses of the Technology Transfer Office, for Each University Visited

Source of data: Technology Transfer Offices for the three universities visited.

	2011/12 ($ 000)	2012/13 ($ 000)	2013/14 ($ 000)
University of Toronto			
Revenue before distribution	6,102	3,005	34,664
Revenue to University*	1,192	1,489	9,469
Expenses of the Technology Transfer Office	2,965	2,767	2,260
Net income/loss to University	(1,773)	(1,278)	7,209
McMaster University			
Revenue before distribution	2,120	2,370	2,284
Revenue to University*	1,014	1,119	1,110
Expenses of the Technology Transfer Office	1,903	1,780	2,179
Net income/loss to University	(889)	(661)	(1,069)
University of Waterloo			
Revenue before distribution	706	559	320
Revenue to University*	n/a	n/a	n/a
Expenses of the Technology Transfer Office	1,371	1,438	1,601
Net income/loss to University	n/a	n/a	n/a

* Revenue to University is any revenue retained by any office within the university e.g. technology transfer office, research office, faculties, etc.

n/a – data not available

less money from their intellectual property holdings than it cost to operate their office in all three years. The other one brought in less money from intellectual property than it cost to operate its office for two of the three years. According to a 2009 study, more than half of the university technology transfer offices surveyed in the U.S. brought in less money than the cost of operating the program. Furthermore, only 16% of U.S. university technology transfer offices were self-sustaining and generated enough revenue, after distributions to inventors, to cover operation costs.

A number of studies outline the reasons it is difficult for technology transfer offices to cover their operating costs with revenue accrued to the university from inventions. An expert federal panel reported in 2011 in *Review of Federal Support to Research and Development* that it was difficult for innovative firms with high growth potential (that is, start-ups) to get the capital needed to achieve commercial viability. A 2014 academic study also highlighted the fact that the amount of licensing income generated is not under the direct control of the technology transfer offices due to the effectiveness of the technology, the market, and the licensing company's efforts.

In order to gain insight into how effective technology transfer offices were in commercializing intellectual property at the three universities visited, we gathered data on (1) the overall average income received each year from income-generating licences (using data submitted to the Association of University Technology Managers for the five-year period from 2009/10 to 2013/14) and (2) the overall average percentage of income-generating licences making more than $1 million annually (using the same data). We noted the following:

- For (1), we compared the annual average income from the three universities visited to that for all reporting Canadian universities combined and that for all reporting U.S. universities combined. The nation-wide averages were $130,000 for all reporting U.S. universities combined and $61,000 for all reporting Canadian universities combined. The three universities we visited had averages of $13,000, $59,000 and $160,000.

- For (2), we compared the annual average percentages from the three universities visited to that for all reporting Canadian universities combined and that for all U.S. universities combined. The nation-wide averages were 1.07% for all reporting U.S. universities combined and 0.81% for all Canadian universities combined. Only one of the universities we visited reported holding licences that made over $1 million annually (representing 2.3% of its total income-generating licences). One of the other two universities told us that it had a single technology that generated over a million dollars annually but that this was generated through several non-exclusive licensing agreements and therefore would not be captured by the data. The other university told us that it focused its efforts on the creation of start-up companies and that the university defers collecting revenue until the start-ups become profitable.

Better Public Reporting of Performance Required

At each of the universities visited, we reviewed the performance information reported by the technology transfer offices to the Vice President of Research, and noted that only one university's technology transfer office reported on its performance measures regularly.

Only two universities we visited issued annual research reports that were available publicly. In both cases, these reports included information on research funding, recognition awards and citations. Only one university reported against some performance measures for commercialization efforts carried out by the technology transfer office.

Significant Research Discoveries at the Three Universities Visited

We asked the universities to tell us some of their most significant research discoveries to date. **Figure 10** summarizes the discoveries or inventions identified.

RECOMMENDATION 7

In conjunction with government sponsors, universities should develop socio-economic performance measures to better communicate the outcomes of their research and commercialization efforts.

SUMMARY OF UNIVERSITIES' RESPONSES

The universities agree that socio-economic performance measures would be useful for assessing outcomes of research and commercialization efforts, but all noted that collecting such data would be challenging given the breadth and volume of research activity occurring at universities.

One university stated that since funding agencies typically drive what is required for research reporting purposes, government agencies should collectively take a leadership role in establishing harmonized reporting requirements. This would allow for the measurement and comparison of the socio-economic impact of government-sponsored research.

Two universities indicated that they would explore collaborating with government sponsors to identify appropriate socio-economic performance measures. Another university indicated that it would consider systematic approaches to collect socio-economic measures.

Figure 10: Significant Discoveries and Inventions as Identified by the Universities Visited
Source of data: Universities visited

Discovery/ Invention	University of Toronto	McMaster University	University of Waterloo
1	Insulin (1921) – discovery and first commercial production.	IBDQ (1997) – quality of life questionnaire for patients suffering from intestinal bowel disease; used by pharma/biotech companies doing clinical trials to treat diseases.	FORTRAN Compilers (1960s) – WatFOR and WATFIV compilers revolutionized computing.
2	Pablum (1930) – invention of first processed baby cereal.	Early Development Instrument (2007) – electronic tool used to assess and measure child development.	Text Search Engine (1988) – Oxford English Dictionary searchable text database software developed which lead to the creation of Open Text Corporation.
3	Anti-blackout suit (1942) – invention ultimately becomes space suit.	Respiratory Virus Panel technology (2006) – biomarker technology tool incorporated into a diagnostic device for the detection of respiratory viruses.	Permeable Reactive Barriers (1990s) – groundwater treatment technology used globally to clean up industrial contaminated sites.
4	Electron microscope (1938) – world's first electron microscope developed.	OSCAR (2005) – electronic medical record software widely adopted in Canada and around the world.	Quantum Processing (2007) – current world record for a 12-qubit quantum information processor.
5	Artificial cardiac pacemaker (1951) – first artificial cardiac pacemaker pioneered.	Multivariate analytics (2002) – patented process to analyze large batches of data to correlate with process improvements or product quality; used to monitor and optimize manufacturing systems for the chemical, food and energy industries.	Structural Similarity (SSIM) index (2004-14) – Engineering Emmy® Award (2014) winning software that accurately predicts how humans perceive image/video quality.

RECOMMENDATION 8

Universities should review their research reporting requirements on performance measures, and identify opportunities to report more detailed information in the annual research report and in management reports going to senior management.

SUMMARY OF UNIVERSITIES' RESPONSES

The universities agreed with this recommendation. Two universities stated that they will continue to review indicators for relevance and update them as necessary. The third university indicated it will undertake a review of its research reporting requirements in consultation with key stakeholders and consider what information should be reported in an annual research report and in management reports.

4.4 Commercialization Activity at Universities

4.4.1 Disclosure of Inventions to the University

A disclosure is a confidential written notification to a university's technology transfer office that an invention has been created using university resources by faculty, employees, students or persons from the private sector working in collaboration with the university. It is the first official acknowledgement to the university of the creation of intellectual property.

Policies at each of the universities visited require all staff and students to disclose intellectual property discovered to their university's technology transfer office. Each university has a standard invention disclosure form to be completed by inventors and submitted to the university's technology transfer office. This disclosure form usually includes a description of the invention, the sources of funding that supported its creation, the inventors and contributors behind the invention (whether internal or external) and whether details of the intellectual property have been disclosed publicly.

Figure 11 shows the number of inventions disclosed from 2009/10 to 2013/14 to the technology transfer offices at the universities visited. We compared total research expenditures with the number of invention disclosures for the same year and noted that, over the five-year period, two universities spent on average almost $5 million research dollars for every invention disclosure generated, and one spent $2.6 million. In comparison, using AUTM data for the 5-year period 2008/09-2012/13, we noted that the average spent by all Canadian and U.S. universities to generate a disclosure was $3.3 million and $2.7 million respectively. Two universities we visited require disclosure even when the inventor does not intend to commercialize. The other university, with the lowest number of invention disclosures and the highest research spending per disclosure, did not take any ownership rights and did not require inventors to disclose their inventions if they had no intention of having them commercialized by the university's technology transfer office. A few issues regarding the invention disclosure process are described in the following subsections.

Universities Could do More to Ensure All Inventions are Disclosed

The onus is on researchers to disclose their discoveries to the technology transfer office. The universities visited are, thus, unable to ensure that all intellectual property is being disclosed. Each university posts disclosure policies regarding intellectual property on its website. In addition, the technology transfer offices make presentations to interested staff and students to inform them about their services and policies related to intellectual property. We reviewed copies of the presentation material and noted that presentations made by the technology transfer offices did not make it clear that the universities require researchers to disclose any inventions.

At the three universities we visited, the number of invention disclosures may be one of the factors considered during annual performance reviews of faculty members and could affect future promotions, merit increases and tenure. However, during our audit, we noted that faculty departments had to obtain the information required for annual performance reviews, such as the number of research discoveries or invention disclosures directly from

Figure 11: Number of Invention Disclosures by Universities Visited and Research Dollars Spent for Every Invention Disclosed, 2009/10–2013/14

Source of data: Universities visited and the Association of University Technology Managers

	Number of Invention Disclosures					5-Year Averages		
	2009/10	2010/11	2011/12	2012/13	2013/14	# of Invention Disclosures	Total Research Spending ($ 000)	Research Spending Per Invention Disclosure ($ 000)
University of Toronto	136	192	158	166	147	160	422,807	2,646
McMaster University	54	68	77	65	71	67	291,408	4,349
University of Waterloo	45	43	26	47	29	38	186,268	4,902

the faculty member, rather than independently through the technology transfer office. We confirmed with technology transfer office staff that information on discoveries reported by faculty members for performance review purposes were not shared or reconciled with the invention disclosures made to the technology transfer office. If faculty departments used only disclosures made to the technology transfer office for performance review purposes, there may be more incentive for faculty members to disclose their inventions to the office.

We also noted that the technology transfer offices did not monitor status reports prepared periodically by research grant recipients, sometimes with the help of the university research office, and submitted to their funders to help ensure completeness of invention disclosures. As previously mentioned, the Ministry of Research and Innovation requires research grant recipients to submit a progress report to summarize the project status and highlight any achievements. Similar reporting requirements also exist in funding agreements with the federal government and private industry. Monitoring these reports can help identify any undisclosed inventions.

Researchers Need Guidance on Use of University Resources to Create Intellectual Property

There is a risk that discoveries using significant university resources are undisclosed at two universities we visited that require disclosure even when the inventor does not intend to commercialize. This could lead to a loss in revenue for the university, or the new technology could be taken out of province and commercialized elsewhere. When no significant university resources are used, inventors inherently own their own intellectual property without any obligation to report, disclose or share future revenues with the university. It is up to the researchers' respective faculties to confirm that no significant university resources were used. However, the technology transfer offices do not provide any guidelines outlining the nature and extent of work that faculties need to do to verify that university resources were not used. We found that both technology transfer offices did not retain documentation of the work done by faculties to confirm whether significant university resources were used.

RECOMMENDATION 9

To ensure that all intellectual property created with university resources is disclosed, universities should:

- develop guidelines to help faculties assess university resources in the creation of intellectual property and to require such assessments be documented;
- clearly communicate invention disclosure requirements during technology transfer office presentations to staff and students;
- require all faculties to use only disclosures made directly to the technology transfer office for performance review purposes; and
- use research grant status reports sent to research funders to anticipate and track completeness of disclosures.

SUMMARY OF UNIVERSITIES' RESPONSES

The universities were generally in agreement with this recommendation.

For the two universities we visited that require disclosure even when the inventor does not intend to commercialize, one indicated that it will consider developing formal guidelines to help assess the university resources used in the creation of intellectual property. The other did not provide an action plan because, under the university's policy, the creator is the owner of the intellectual property.

All universities agreed with clearly communicating invention disclosure requirements through presentations and on their websites.

With respect to the recommendation to require all faculties to use only disclosures made directly to the technology transfer office for performance review purposes, one university stated that it would consider the feasibility of such a process. Another university said it was in the process of ensuring sufficient reporting of disclosure information to faculties. The third said it expects this recommended action to be addressed by the upcoming implementation of online reporting for invention disclosures.

With respect to the recommendation to use research grant status reports to track disclosures, two universities said they would consider it. The other university did not feel the need to track potential disclosures since, under its intellectual property policy, the university did not have any rights to ownership.

4.4.2 Assessments of Invention Disclosures

Once a discovery or invention is disclosed to the technology transfer office, the first step in the technology transfer process is to assess whether the disclosure warrants the investment of additional resources for further development and commercialization.

The technology transfer offices we visited assessed inventions against four factors:

- technical merits of invention;
- inventors' level of commitment to support the invention through the commercialization process;
- marketability (considering barriers to entry, time to market, potential growth, industry trends, and customer base); and
- patentability, or determining whether prior patent filings exist for the same invention.

The assessment generally begins when transfer office staff meet with inventors to get a better understanding of the invention's technical merits and gauge their level of commitment to supporting the invention through the commercialization process. Technology transfer office staff told us that without inventor support or a solid technological basis for the invention, it is challenging to proceed with commercialization; the offices are often looking for private industry to license an invention, so its technology must be sound. To obtain a patent, the technology transfer office must go through a process of proving to a patent office why the invention warrants one. Because inventors are often the greatest source of information and technological expertise regarding the invention, their involvement is required to increase the likelihood of obtaining a patent. The assessment process also involves reviewing the technical aspects of the disclosure contained in the disclosure form, conducting patent searches (if applicable), and analyzing the market and competitive technologies to assess the invention's commercialization potential and likelihood of success, which will guide the commercialization strategy.

Overall we noted that transfer office staff who assessed the commercialization potential of invention disclosures were qualified to make the assessments. We found that many of the staff who performed the assessments held master's degrees and PhDs, and were generally assigned to assess disclosures in the fields most closely related to their educational background and experience.

Our issues with the assessment of invention disclosures are noted below.

Assessment of Commercial Potential of Disclosures is Subjective

Technology transfer office staff explained to us that more specific criteria for the assessment of commercial potential do not exist because of the unique nature of each disclosure. As such, the assessment process is subjective. Our review of assessment practices in other jurisdictions did not identify additional or more specific assessment criteria. This makes the assessment process subjective. Given the subjectivity involved, it may be prudent for assessments to undergo a second level of review by another technology transfer staff member, particularly for the more complex disclosures. However, a formal second-level review process was not in place at the universities we visited. Technology transfer offices told us that staff meet regularly to discuss issues relating to disclosures and to seek input from co-workers, but this did not constitute a formal second-level review prior to acceptance.

Technology Transfer Offices Do Not Formally Track How Long Assessments Take

Timely assessment of invention disclosures is important for patent protection because delays in filing patents create a risk that others could file for patent protection first. We noted that each of the technology transfer offices we visited had established a different target for completing initial assessments: four weeks, 45 days, and three months. However, none formally tracked compliance with their targets.

Commercialization Decisions Lack Documentation

We found that documentation to support the decision to accept a disclosure for commercialization varies according to technology transfer office. One office typically used an external organization to assess just over half of the disclosures it received. At this external office, a formal assessment form was used to record initial patentability and marketability assessments, but this document was missing from the files in 30% of the projects we reviewed. The other two offices did not formally document their assessment decisions. We were told that they informed inventors of their decisions either verbally or via email.

Only one technology transfer office had a policy requiring an annual review of decisions to determine whether to continue or terminate efforts to protect and commercialize inventions. However, we could not confirm that any review took place because none of the reviews were documented. The other two offices did not have a formal policy for project re-evaluation. All three offices said disclosures are constantly evaluated during the commercialization process as staff work to negotiate and secure licensing deals, determine whether to pursue and file patent protection, arrange additional development funding, and communicate with inventors. We reviewed the files but were unable to confirm whether this type of ongoing evaluation actually occurred because of limitations in the available documentation, as described below.

RECOMMENDATION 10

In the absence of objective criteria to assess the commercial potential of disclosures, university technology transfer offices should develop a formal process to discuss and challenge decisions on commercial potential, including assessments undergoing a second level of review.

SUMMARY OF UNIVERSITIES' RESPONSES

One university indicated that having better processes to discuss and challenge decisions is of value. This university stated it will formalize its process of discussing and challenging decisions, and will improve documentation. Another university stated that it will consider a formal secondary review of all disclosures with respect to staffing, workload and timeline considerations. The third university stated it would continue with its current practice of taking up to one year engaging market participants to determine whether there is a market for the technology.

RECOMMENDATION 11

To help ensure commercialization assessments are completed within a reasonable timeframe to avoid delays in patent filings, university technology transfer offices should:

- establish time frames to complete assessments based on technology type or complexity of invention; and
- formally track and review how long it takes to complete assessments, and address any delays identified.

SUMMARY OF UNIVERSITIES' RESPONSES

All universities generally supported the recommendation and have implemented internal time frames for the completion of commercialization assessments. Two indicated they will establish formal tracking mechanisms to determine compliance with established timelines.

Two universities indicated there may be reasons to delay a patent filing. These can include securing further research data to support broader and more defensible claims, and prudently managing the timeline to patent to defer cost escalation.

4.4.3 Protection of Intellectual Property

The objective of protecting intellectual property is to encourage the creation of valuable ideas and prevent them from being stolen. Protection comes in different forms depending on the nature of the intellectual property. Copyrights are used to protect original literary, musical, dramatic or artistic works; trademarks are used to protect a logo, word, slogan, symbol or design that distinguishes a product or service; and patents are used to protect inventions and new technologies such as machines, devices, materials, processes, and improvements of any of these. A patent provides inventors and those who hold rights to inventions the exclusive right, for a limited time, to prevent anyone else from making, using or selling the invention. Most jurisdictions worldwide, including Canada, operate on a first-to-file patent system in which the first inventor to file a patent application has priority over others wishing to file for the same invention.

Only after a patent has expired may anyone other than the patent holder freely make, use or sell the invention. In Canada, a patent is granted for a maximum period of 20 years after the application date. Rights offered by a Canadian patent extend throughout Canada, but not to other countries. Similarly, foreign patents do not protect an invention in Canada. Therefore, inventors would need to apply for patent rights in each country separately.

Patent costs are borne initially by the technology transfer office and later by a private sector partner who buys or licenses the technology for commercial purposes. Patenting costs can be significant over the 20-year-life of a patent. Fees paid to the patent office alone over those 20 years could amount to $5,600 for a regular Canadian patent and about $13,000 for a regular U.S. patent. Legal costs incurred to obtain a patent generally range in the tens of thousands of dollars but can go higher depending on the complexity of the situation and whether one is applying for a patent in more than one jurisdiction.

A U.S. patent is usually sought for most inventions because the United States is a larger market for companies that are willing to license new technologies and for users of inventions, and because it offers a provisional patent for $150 that can be converted into a Canadian patent filing. A provisional patent provides some patent protection by establishing a patent filing date, giving the inventor first right to obtain the patent, and giving the technology transfer office 12 months to initiate formal patent filings in jurisdictions of its choosing. During this time, the technology transfer office works on securing an industry partner and performing market validation to determine whether continued efforts are justified.

Our issues in this area were as follows:

- The time it takes to file the first patent varies among universities and may in some cases be too long. Delays in patent filings increase the risk of not being able to obtain a patent since a previous patent for the same technology may already exist. We reviewed the time taken to file an initial patent protection of any type, i.e. U.S. provisional patent, patent corporation treaty, or formal patent in any country, for a sample of disclosures generally made between 2011/12 and 2013/14 at the universities visited, from the date the disclosure was received. The average time ranged from 80-188 days for a U.S. provisional patent and 25-211 days for all other types of patent filings, as shown in **Figure 12**.

- Some inventions were publicized before any patent protection was in place. Publicly discussing an invention before it is patented can jeopardize one's ability to seek patent protection. Based on our review of invention disclosure forms submitted at each university visited, from 2011/12 to 2013/14, 24%–40% of inventors indicated that they had publicly disseminated information about their invention before disclosing it to the technology transfer office. Agreements between faculty and universities as well as research funding agreements for select grant programs we reviewed at the universities visited did not contain restrictions on publicly disseminating research results before considering the existence of intellectual property and arranging for its protection. Furthermore, while some faculty may become aware of these requirements through optional information sessions delivered by technology transfer offices, only one university we visited had a formal policy on its website warning about public disclosure of discoveries.

RECOMMENDATION 12

To help ensure intellectual property is properly protected, universities and/or their technology transfer offices, as applicable, should:

- ensure contracts with faculty associations and researchers include provisions to make them aware of the importance of not disclosing inventions prior to filing for patent protection; and
- file for patent protection as early as possible, where appropriate, to minimize the risk of others filing first and precluding them from obtaining a patent.

SUMMARY OF UNIVERSITIES' RESPONSES

Two universities were of the opinion that existing policies for invention disclosures were adequate. The third university indicated that the creation of intellectual property and its commercialization were not a core mandate of the university, and therefore provisions on the importance of not disclosing inventions prior to filing should not be included in faculty association agreements.

One university stated that academic freedom to publish without constraint is a core university principle. Another university stated that faculty members are best positioned to make decisions on when to publish their results. It further stated that the primary mandate is to ensure the appropriate and timely dissemination of research that has been largely publicly funded.

Figure 12: Time Taken to First Apply for a Provisional or Formal Patent,[1] for a Sample of Disclosures Received Between 2011/12 and 2013/14

Source of data: Prepared by the Office of the Auditor General of Ontario from university data

	U.S. Provisional Patent (days)		Formal Patent in Any Jurisdiction (days)	
	Average	Longest	Average	Longest
University of Toronto	188	647	211	290
McMaster University	108	385	n/a[2]	n/a[2]
University of Waterloo	84	279	25	49

1. A formal patent application includes any application other than a U.S. provisional patent application.
2. For the sample of disclosures selected for testing, all first filings were U.S. provisional patents.

AUDITOR GENERAL RESPONSE

We continue to believe that the implementation of our recommended actions would be prudent.

4.4.4 Documentation of Commercialization Processes Falls Short / Commercialization efforts lack standard documentation

None of the technology transfer offices had a proper case-management system to document key decisions or actions taken on each invention disclosed to them. Failing to document the full nature of commercialization efforts in a consistent and standardized manner poses the risk that transferring knowledge among personnel will be inefficient and unreliable, particularly when there is a change in management or staff turnover. Outgoing staff may not be available to share knowledge, and specific details could be lost or forgotten with the departure of staff who spent years working on individual projects.

We reviewed a sample of disclosures accepted for commercialization at each technology transfer office between the 2008/09 and the 2014/15 fiscal years and found a number of factors relating to documentation that made it difficult to assess the sufficiency and scope of commercialization efforts:

- Key decisions and actions were not documented on a summary sheet.
- There was no requirement for technology transfer office staff to document any of the wide variety of commercialization activities, such as holding meetings or having phone discussions with potential licensees.
- There was no checklist indicating the full suite of commercialization activities to be undertaken.
- Technology transfer offices found it challenging to gather all relevant data relating to each disclosure that would show the extent of commercialization efforts. For example, their information systems captured hundreds of emails relating to the management of any given invention; it was difficult for staff to review and single out only those that would provide a cohesive picture of their efforts. As a result, without the presence of commercialization managers to explain what actions they had taken to date on the disclosures assigned to them, the electronic files alone could not depict the full scope of commercialization efforts related to each disclosure.

We also inquired into the nature of oversight performed by technology transfer office management. There was no evidence that management used formal reports to assess efforts to facilitate commercialization. Rather, management told us they held informal meetings with staff to discuss problems or issues in the commercialization process, but these were not documented.

RECOMMENDATION 13

To permit efficient management review of commercialization decisions and efforts and to help facilitate knowledge transfer among personnel in case of staff turnover, universities should:

- develop case management documentation guidelines; and
- ensure that commercialization decisions and actions are clearly and consistently documented in accordance with the guidelines to be developed.

SUMMARY OF UNIVERSITIES' RESPONSES

All universities were in agreement with this recommendation.

4.4.5 Managing Intellectual Property Projects

No Formal Guidelines to Manage Costs Incurred to Commercialize Intellectual Property

None of the offices we visited have written policies or guidelines on managing costs. This increases the risk that commercialization efforts and costs could be incurred on projects with limited potential. Technology transfer office expenditures are primarily salaries and benefits (60% to 70%), patent costs and legal costs (20% to 30%), and other expenditures (5% to 10%). One technology transfer office informed us that it has an informal guideline of generally not exceeding $50,000 to $60,000 in patent costs without a potential licensee being identified and engaged in discussions. We reviewed the costs incurred for all disclosures made to this office since 2006 and identified nine disclosures that had incurred costs in excess of $60,000 without generating any income. Of these, five were still not licensed or optioned at the time of our audit. The other two offices did not have a policy on the maximum costs permitted by project and were not tracking costs accumulated per project.

Improvements Needed in Revenue Collection

We identified a number of concerns with regard to revenue collection at the technology transfer offices we visited, including issues with timely billing and collection of amounts owing, and lack of verification of the amounts paid. For the three universities visited, we identified all revenue-generating agreements in place with regards to intellectual property, and tested a sample of revenue received in the past three years. Specifically, we noted the following:

- Some amounts owing were not collected on a timely basis. Overall, 69% of licensing fees due were billed late, and 62% of licensing fees and 23% of royalties were received late. These were typically one-time licence fees or annual minimum payments due on predetermined dates. Technology transfer office staff told us there were various reasons for the delays. Sometimes companies were having internal difficulties. In other cases the problem rested with the universities. For example, two universities informed us they did not have a system in place to alert them when payments were due. One university has since corrected the problem by implementing a receivable reminder system.
- At one university, we saw a case where a 75,000-euro payment due June 15, 2010 was not billed until November 2011. The payment was collected in March 2012. In another example, the same university, as a shareholder in a start-up company, did not receive a $275,000 dividend that was declared in October 2011 until November 2013. The university did not provide us with a reason.
- Two universities did not always receive adequate documentation to support the royalties remitted to them. Contracts for royalty fees normally required the licensee to submit reports, often certified by an officer of the company, to support the sales generated or the quantity of items sold in that period. Of the royalty fees we tested, supporting documentation to verify the amount remitted was not provided in 13% of the cases sampled at one university and in 43% of the cases sampled at another. At the third university, revenue reports were submitted for all cases sampled, but were not always certified by an officer of the company as required. Where supporting documents were received, we generally found little or no evidence of review.
- Although many agreements allowed technology transfer offices to request an audit when royalties depended on the amount of sales generated or units sold, in all of the tested cases the offices did not request audits. The universities told us that this was usually because the amounts received were too small to justify the cost of an audit. However, none of the universities visited had criteria on when to ask for an audit report. According to the contracts we reviewed, the technology transfer office would typically bear the cost of the audits unless they showed an error over a certain percentage to the detriment of the university.

- Overall, approximately 30% of licensing agreements included a provision for interest charges on late fees. However, for the sample tested, interest charges were never applied.

RECOMMENDATION 14

To manage costs incurred in the effort to commercialize intellectual property, university technology transfer offices should implement formal policies and guidelines regarding cost management, and track costs incurred by type (e.g. legal costs, patent fees, and marketing) for each disclosure.

SUMMARY OF UNIVERSITIES' RESPONSES

All three universities were generally in agreement with the recommendation. One university said it would consider the need for formal policies and guidelines regarding cost management, and another university said it will develop general guidelines to ensure appropriate cost-management practices.

RECOMMENDATION 15

To help ensure the timely and accurate collection of revenue owing, all universities should:

- ensure they have an accurate and up-to-date tracking payment schedule that includes due dates, so that universities can bill one-time payments in advance and remind licensees to submit royalty payments on time;
- obtain sales and revenue reports from licensees to support the amount of royalties remitted;
- develop criteria to help assess when it is worthwhile to ask for an audit report (for example, when royalty payments are dependent on sales generated); and
- enforce the interest penalties stipulated in contracts to encourage licensees to submit revenue payments on time.

SUMMARY OF UNIVERSITIES' RESPONSES

All universities were in agreement with this recommendation. The two universities to which most of the findings in this section related stated that they are addressing the concerns.

Appendix 1—Ministry of Research and Innovation Funding by Program, 2010/11–2014/15

Prepared by the Office of the Auditor General of Ontario using Public Accounts and Ministry of Research and Innovation program information

	Applicable to University Research	2010/11 ($ 000)	2011/12 ($ 000)	2012/13 ($ 000)	2013/14 ($ 000)	2014/15 ($ 000)	Total ($ 000)
Research Funding Programs							
Ontario Institute for Cancer Research		81,971	82,092	89,800	77,000	77,000	**407,863**
Research Infrastructure	✓	67,270	68,524	86,149	80,210	88,426	**390,579**
Research Excellence	✓	61,854	70,702	112,000	65,032	74,786	**384,374**
SickKids Research and Learning Tower		–	45,000	30,000	–	–	**75,000**
Early Researcher Awards	✓	12,352	10,157	3,870	2,713	9,763	**38,855**
Perimeter Institute		–	5,000	5,000	10,000	10,000	**30,000**
Grants in support of research and innovation	✓	4,876	641	–	11,850	7,970	**25,337**
Minor capital investments	✓	–	1,459	15,559	290	197	**17,505**
Ontario Brain Institute		849	6,590	7,560	–	–	**14,999**
International Collaborations		–	854	1,300	2,331	2,866	**7,351**
Neurotrauma Program		–	–	–	–	4,680	**4,680**
Ontario Post Doctoral Fellowships	✓	2,264	–	430	65	121	**2,880**
University of Windsor Institute for Diagnostic Imaging Research	✓	–	1,341	1,341	–	–	**2,682**
Premier's Discovery Awards	✓	1,600	75	–	150	250	**2,075**
Renewable Energy Project	✓	–	300	300	300	–	**900**
Premier's Catalyst Awards		580	300	–	20	–	**900**
Subtotal		**233,615**	**293,035**	**353,309**	**249,961**	**276,059**	**1,405,980**
Programs to Facilitate Commercialization							
Industry-Academic Collaboration Programs (Ontario Centres of Excellence)	✓	–	34,286	31,564	31,002	32,400	**129,252**
Business Ecosystem Support Fund		11,807	14,673	15,534	17,978	2,019	**62,011**
Innovation Demonstration Fund		15,578	14,707	11,439	2,652	9,163	**53,539**
Regional Innovation Centres	✓	–	–	24,836	5,812	6,366	**37,014**
Business Acceleration Program (MaRS)		–	8,771	10,835	8,420	8,598	**36,624**
Youth Jobs Strategy - Youth Innovation Fund	✓	–	–	–	15,000	15,000	**30,000**
Next Generation of Jobs Fund - Biopharmaceutical Investment Program		6,836	7,771	1,964	1,907	–	**18,478**
Centre for Research and Innovation in the Bio-economy		2,500	3,000	4,000	3,500	3,000	**16,000**

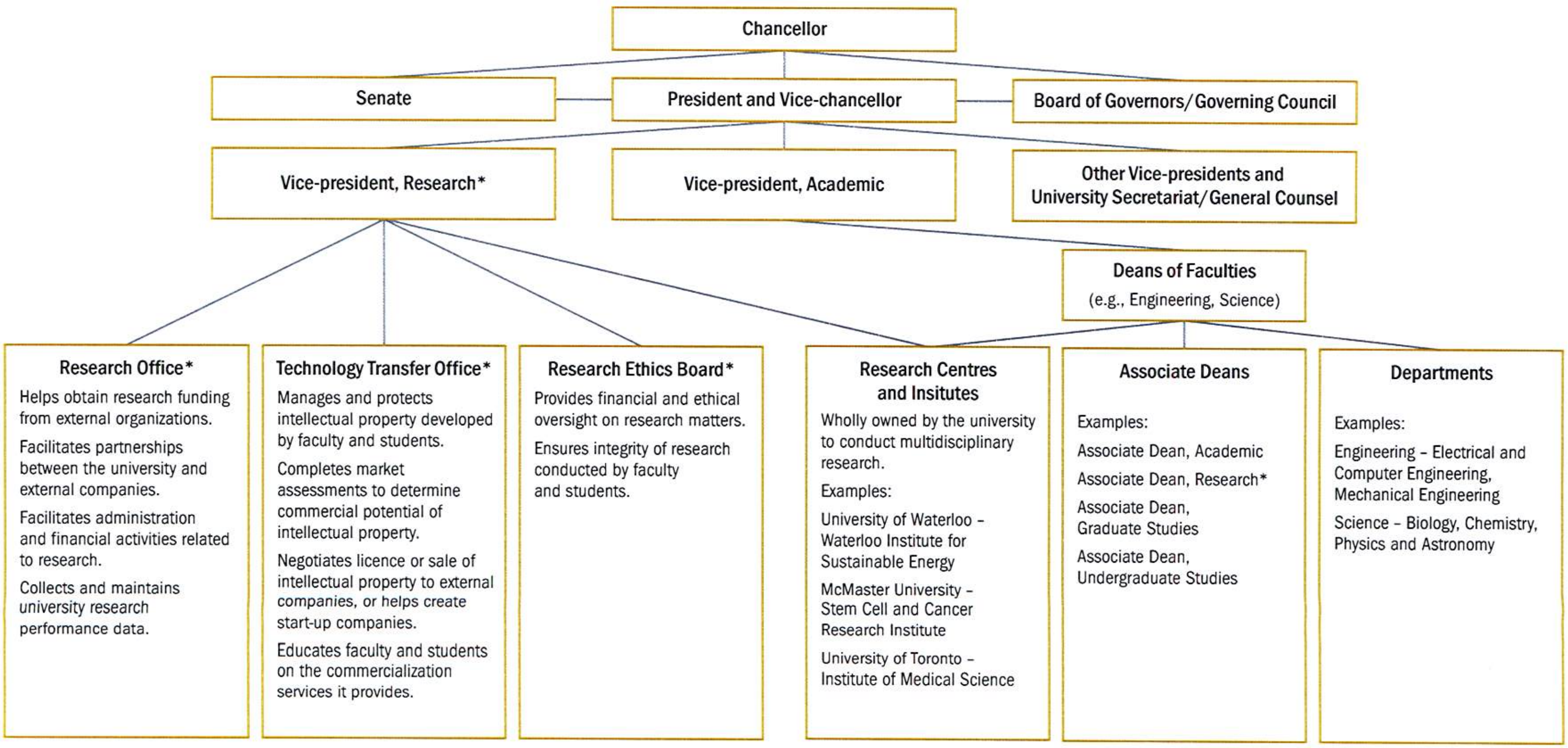
	Applicable to University Research	2010/11 ($ 000)	2011/12 ($ 000)	2012/13 ($ 000)	2013/14 ($ 000)	2014/15 ($ 000)	Total ($ 000)
Ontario Life Sciences Commercialization Strategy		6,040	5,745	718	1,137	1,483	**15,123**
Next Generation Baycrest Initiative		–	–	4,700	4,915	4,485	**14,100**
MaRS core funding	✓	–	–	–	5,000	5,000	**10,000**
Sector Innovation Centres		–	–	–	346	5,325	**5,671**
Small Business Enterprise Centres		–	–	–	–	4,215	**4,215**
Subtotal		**42,762**	**88,953**	**105,590**	**97,669**	**97,053**	**432,027**
Risk Capital							
Ontario Emerging Technologies Fund		23,067	27,436	14,500	14,997	8,000	**88,000**
Northleaf Venture Catalyst Fund		–	–	30,000	20,000	–	**50,000**
Investment Accelerator Fund		9,667	8,117	8,375	6,522	1,553	**34,234**
Life Sciences Seed Venture Capital Fund		–	–	–	–	10,000	**10,000**
Youth Investment Accelerator Fund		–	–	–	5,000	2,000	**7,000**
Angel Network Program		–	506	612	663	688	**2,469**
Subtotal		**32,734**	**36,059**	**53,487**	**47,182**	**22,241**	**191,703**
Tax Credits and Initiatives							
Ontario Innovation Tax Credit [R]		–	–	249,834	223,199	172,393	**645,426**
Ontario Business-Research Institute Tax Credit [R]	✓	–	–	13,111	12,262	20,245	**45,618**
Ontario Research and Development Tax Credit [NR]		n/a	n/a	n/a	n/a	n/a	**0**
Ontario Tax Exemption for Commercialization	✓	–	–	–	–	–	**0**
Subtotal		**–**	**–**	**262,945**	**235,461**	**192,638**	**691,044**
Total		**309,111**	**418,047**	**775,331**	**630,273**	**587,991**	**2,720,753**

[R] Refundable tax credit.

[NR] Non-refundable tax credit. Tax credit is deducted at time of calculating taxes owing, therefore no disbursement by province is necessary. The Ministry of Finance has estimated the amount of taxes forgone for calendar years 2010–2014 to be $865 million.

Appendix 2—Governance Structure of a Typical University

Prepared by the Office of the Auditor General of Ontario



— Reporting relationship

* Member of the Research Council/Advisory Board
The council/advisory board provides guidance on research activities and the university's research direction; develops partnerships with other institutions; addresses all aspects of research across campuses and related hospitals including commercialization matters as well as industry relations; acts as liaison on research matters with federal and provincial governments; and provides guidance on the university's strategic international research activity and helps determine effective performance indicators for the university's research.

Appendix 3—University Mandates for Overall Research Activity and Technology Transfer Office, for the Universities Visited

Source of data: Universities' website and strategic plans.

Mandate	University of Toronto	McMaster University	University of Waterloo
University Research Activity	To advance research capacity and productivity by attracting and retaining superb talent; by building strategic research programs and linkages of research, education and training; and by leveraging strategic partnerships and resources for the benefit of Canada and the world.	To achieve the next level of research results and reputation by building on existing and emerging areas of excellence; and to attract and retain high-quality faculty and students by making discovery the centre of the learning experience.	Overall, to be recognized as one of the top innovation universities in the world. Specifically, to increase the worldwide impact and recognition of the university's research.
Technology Transfer Office	To help build successful partnerships between industry, business, government, and the University research community and manage the university's portfolio of intellectual property - turning ideas and innovation into products, services, companies and jobs.	To help researchers move their research into society. Specifically, through working with industry, obtaining funding for collaborative research with industry and commercialization funding, protecting work with patents, trade-marks and copyrights, commercializing work, and connecting to support networks.	To promote the commercialization of leading edge intellectual property opportunities by supporting entrepreneurial activities leading to startup company creation, securing licensing partnerships with existing companies, and promoting ongoing research partnerships with commercialization partners; and to support entrepreneurial minded faculty and students in creating startup companies.

Appendix 4—Federal Research Funding Programs, 2013/14

Source of data: Compiled by the Office of the Auditor General of Ontario from federal funding websites and the Council of Ontario Universities' 2013-14 Financial Report of Ontario Universities

		Funding Amount to Ontario Universities	
Name	**Role**	**($ 000)**	**(%)**
Canadian Institute for Health Research* (CIHR)	Mandate is to excel in the creation of new knowledge and its translation into improved health for Canadians, more effective health services and products, and a strengthened health-care system. CIHR's 13 institutes provide funding in four research areas: biomedical; clinical; health systems services; and social, cultural, environmental and population health.	346,879	26
Natural Science and Engineering Research Council* (NSERC)	Supports university students in advanced studies, promotes and supports discovery research, and fosters innovation by encouraging Canadian companies to participate and invest in post-secondary research projects.	288,873	22
Canada Foundation for Innovation (CFI)	Provides funding to develop state-of-the-art facilities and equipment in universities, colleges, research hospitals and non-profit research institutions.	208,720	16
Indirect Costs of University Research Program	Covered a portion of the indirect costs associated with research funded by NSERC, SSHRC, and CIHR. These are costs borne by the institution that cannot be attributed to a particular project, such as costs for energy or maintaining IT infrastructure, meeting regulatory requirements or managing intellectual property.	125,141	10
Social Sciences and Humanities Research Council* (SSHRC)	Promotes and supports post-secondary-based research and research training in the humanities and social sciences.	109,140	8
Canada Research Chairs/Canada Excellence Research Chairs (CERC)	Supports universities in efforts to build Canada's reputation as a global leader in research and innovation. It awards researchers and their teams up to $10 million over seven years to establish ambitious research programs at Canadian universities. Awards are made in priority areas identified in the federal government's science and technology strategy. Priority areas as of December 2014 are: environment and agriculture; health and life sciences; natural resources and energy; information and communications technologies; and advanced manufacturing.	102,018	8
Other		135,482	10
Total		**1,316,253**	**100**

* These three agencies are often referred to collectively as the Tri-Council Agencies or the Tri-Agency.

Appendix 5—Provincial Funding for University Research by Ministry and Agency, 2009/10–2013/14

Source of data: Council of Ontario Universities' Financial Reports of Ontario Universities

	2009/10 ($ 000)	2010/11 ($ 000)	2011/12 ($ 000)	2012/13 ($ 000)	2013/14 ($ 000)	5-Yr Total ($ 000)	(%)
Ministries							
Ministry of Research and Innovation (MRI)	160,015	184,820	139,190	217,676	136,394	**838,095**	43
Ministry of Agriculture, Food and Rural Affairs	48,341	49,502	53,060	52,587	48,044	**251,534**	13
Ministry of Health and Long-Term Care (MOHLTC)	52,199	44,693	50,254	47,086	51,556	**245,788**	13
Ministry of Training, Colleges and Universities (MTCU)	30,248	28,379	28,811	29,148	33,167	**149,753**	8
Ministry of Economic Development, Employment and Infrastructure	2,270	1,518	42,333	53,634	19,072	**118,827**	6
Ministry of Education	2,547	2,876	4,690	2,761	1,203	**14,077**	1
Ministry of the Environment and Climate Change	2,709	2,847	1,929	2,267	3,098	**12,850**	1
Ministry of Natural Resources and Forestry	2,473	1,518	1,435	1,231	1,279	**7,936**	0
Ministry of Transportation	1,129	2,135	319	943	1,627	**6,153**	0
Ministry of Children and Youth Services	1,232	649	465	653	226	**3,225**	0
Ministry of Community and Social Services	514	1,742	557	88	101	**3,002**	0
Ministry of Municipal Affairs and Housing	0	0	1,000	2,000	0	**3,000**	0
Ministry of Northern Development and Mines (MNDM)	2	1,024	1,254	0	0	**2,280**	0
Ministry of Finance	0	0	0	904	1,070	**1,974**	0
Ministry of Labour (MOL)	0	0	0	800	1,083	**1,883**	0
Ministry of Citizenship and Immigration	0	0	750	280	0	**1,030**	0
Ministry of Tourism, Culture and Sport	0	187	38	0	393	**618**	0
Ministry of Energy	0	0	0	0	92	**92**	0
Subtotal	**303,679**	**321,890**	**326,085**	**412,058**	**298,405**	**1,662,117**	**85**
Other Government Agencies or Organizations Delivering Government Services							
Ontario Institute for Cancer Research (MOHLTC)	25,233	24,899	28,007	29,761	0	**107,900**	6
Ontario Centres of Excellence (MRI)	15,623	10,841	13,339	10,649	0	**50,452**	3
Cancer Care Ontario (MOHLTC)	3,813	2,250	3,730	4,347	5,105	**19,245**	1
Workplace Safety and Insurance Board (MOL)	2,267	3,287	3,461	1,724	583	**11,322**	1
Northern Ontario Heritage Fund Corporation (MNDM)	1,938	1,429	2,067	2,509	1,624	**9,567**	0
Ontario Problem Gambling Research Centre* (MOHLTC)	644	519	987	1,241	0	**3,391**	0
Higher Education Quality Council of Ontario (MTCU)	210	362	267	292	0	**1,131**	0
Office of the Premier	675	0	75	0	0	**750**	0
Public Health Ontario (MOHLTC)	0	689	0	0	15	**704**	0
Other grants not listed above	8,132	8,758	11,150	17,735	36,865	**82,640**	4
Subtotal	**58,535**	**53,034**	**63,083**	**68,258**	**44,192**	**287,102**	**15**
Total	**362,214**	**374,924**	**389,168**	**480,316**	**342,597**	**1,949,219**	**100**

* Renamed Gambling Research Exchange Ontario in April 2015.

Appendix 6—Glossary of Terms

Prepared by the Office of the Auditor General of Ontario

Accelerators—Provide office space and management training to start-up companies dedicated to developing and commercializing technology in exchange for equity in a technology. Services include mentorship, access to equipment for prototyping and demonstrations, peer networking, and connecting to investor and alumni networks and access to financing. Time in the space is typically limited to a 3-4 month period and provides start-ups with a small cash investment.

Angel Investor—An individual who invests private capital in a small or newly established enterprise.

Association of University Technology Managers (AUTM)—A U.S. based not-for-profit association of technology managers and business executives who manage intellectual property. The AUTM surveys universities annually on a number of performance measures.

Centres of Excellence—Independent not-for-profit organizations that support and invest in early-stage projects where the likelihood of commercialization is high, as well as provide training and development of innovators and entrepreneurs. There are 49 federal Centres of Excellence and 7 provincial Centres of Excellence in Ontario.

Citation—Acknowledges a source used in a formal academic paper.

Commercialization—The process of taking a discovery or invention to the marketplace.

Disclosure—Communication of key information to a technology transfer office regarding a discovery or new technology for the purpose of allowing the office to make an informed decision on how best to proceed.

Encumbered Disclosure—A disclosure owned by one party (the inventor or university) on which a second party (industry sponsor who provided funding or in-kind contributions) reserves the right to claim ownership.

Entrepreneurship—The capacity and willingness to develop, organize and manage a business venture along with any of its risks in order to make a profit.

First to File—A patent system in which the first person to file a patent application for a specific invention is entitled to the patent. In Canada and in most other countries, the first person to file has priority over other people claiming rights for the same invention.

Highly Qualified Personnel (HQPs)—Individuals with university degrees.

Incubators—Similar to accelerators except that start-ups can stay in the space for a much longer period of time and incubators take a much larger amount of equity in exchange for their services.

Innovation—An invention, new technology or new process that is not currently available in the marketplace; an improvement to an existing technology/process that significantly improves functionality, cost or performance; or a significant modification to the application of existing technologies/processes that are applied in a setting or condition for which current applications are not possible or feasible.

Innovation Ecosystem—The participants and resources that transform knowledge into products, processes and services that lead to economic growth and development to improve the standard of living.

Innovation Park—A community of innovators and specialists where academia, industry, government and not-for-profits work together to cultivate ideas, identify and transform important technological discoveries, and propel innovations into the marketplace.

Intellectual Property—Creations of the mind such as inventions; literary and artistic works; designs; and symbols, names, and images used in commerce. They are protected by law through patents, copyrights or trademarks.

Intellectual Property Disclosure Form—A formal document used to declare a new technology and subsequently analyze it for commercial or public value.

Intellectual Property Rights—Ownership of intellectual property and associated rights, such as future income sharing, and royalty-free use.

Licence Agreement—Grants the licensee the right to make, use and sell the specific technology described in the licence. This right can be exclusive (i.e., no one else including the inventor has this right), or non-exclusive (i.e., others may be granted similar rights; in this scenario, the lessee's rights may be limited to a defined geographic area, or for a specific field of use or application).

Licensing an Invention—Allowing a business or individual to manufacture and sell an invention, usually in exchange for royalties.

Licensing Fee–An amount of money that is paid to an owner of intellectual property for the right to manufacture, use or sell the intellectual property. This is usually a fixed amount to be paid at a fixed time as stipulated in a licensing agreement.	
Milestone Payment–An interim payment, which is linked to delivering a service or commodity, such that if the service is not delivered, the agreement can be terminated.	
Non-disclosure Agreement–A legal contract to protect information considered proprietary or confidential. The parties agree not to disclose information covered by the agreement.	
Patent–A government grant giving the inventor the right to exclude others from making, using or selling an invention, from the day on which the patent application is filed with the patent office to a maximum of 20 years. To be granted this exclusive right, the invention must be new, non-obvious and useful with commercial applicability.	
Patent Cooperation Treaty (PCT)–An international treaty for standardized filing procedures for foreign patents. The treaty allows for filing patents in a large number of jurisdictions.	
Prior Art Status–Anything published before the filing date of a patent that describes the same or similar invention, and therefore could call into question a patent application's claim of originality.	
Proof of Concept–The stage during the development of a product when it is established that the product will function as intended.	
Prototype–An original or early model of something from which other forms are copied or developed. It is developed to test the feasibility of a concept or hypothesis within a systematic investigation or search.	
Provisional Patent Application–A patent application in the United States that preserves the rights of a patent applicant for one year during which time a decision must be made on whether to file a regular patent application. A provisional patent application is not examined but serves as the priority date for applications filed later.	
Public Disclosure–Communication of information through verbal presentations, abstracts, posters and papers, in which a person is not obligated to keep the information confidential and may replicate the innovation.	
Regional Innovation Centres (RICs)–18 not-for-profit corporations located in Ontario that support technologically innovative firms with high growth potential with appropriate business acceleration services that focus on educational programming, advisory and mentorship programming and access to capital programs.	
Research Agreement–A contract to provide funding for a research project. It contains terms and conditions governing the conduct of the project, as well as obligations of the recipient and funder. The agreement also sets out the roles and responsibilities of the parties involved.	
Research Park–A property-based venture for research and commercialization that creates partnerships with universities and research institutions, encourages the growth of new companies, translates technology, and drives technology-led economic development.	
Research Publications–Typically, academic journals in which scholars publish research that brings discoveries or ideas to the public domain.	
Risk Capital–Funds made available to start-up companies and small businesses with growth potential.	
Royalty–A percentage of sales or profit paid by the lessee to the owner of intellectual property under a licensing arrangement.	
Seed Money–Money allocated to initiate a project.	
Start-up/Spinoff Company–A company created by inventors to exploit their intellectual property. This method of commercialization holds the highest risk but can lead to the highest potential rewards for inventors.	
Technology transfer–The process of transferring scientific findings from one organization to another for the purpose of further development and commercialization.	
Technology Transfer Office–An office at a university that facilitates commercialization by bringing together the institution and industry to transfer research discoveries to the marketplace.	

Appendix 7—Recommendations Applicable to Universities

Prepared by the Office of the Auditor General of Ontario

Recommendations 1–6 are applicable to the Ministry of Research and Innovation.

Recommendation 7:

In conjunction with government sponsors, universities should develop socio-economic performance measures to better communicate the outcomes of their research and commercialization efforts.

Recommendation 8:

Universities should review their research reporting requirements on performance measures, and identify opportunities to report more detailed information in the annual research report and in management reports going to senior management.

Recommendation 9:

To ensure that all intellectual property created with university resources is disclosed, universities should:

- develop guidelines to help faculties assess university resources in the creation of intellectual property and to require such assessments be documented;
- clearly communicate invention disclosure requirements during technology transfer office presentations to staff and students;
- require all faculties to use only disclosures made directly to the technology transfer office for performance review purposes; and
- use research grant status reports sent to research funders to anticipate and track completeness of disclosures.

Recommendation 10:

In the absence of objective criteria to assess the commercial potential of disclosures, university technology transfer offices should develop a formal process to discuss and challenge decisions on commercial potential, including assessments undergoing a second level of review.

Recommendation 11:

To help ensure commercialization assessments are completed within a reasonable timeframe to avoid delays in patent filings, university technology transfer offices should:

- establish time frames to complete assessments based on technology type or complexity of invention; and
- formally track and review how long it takes to complete assessments, and address any delays identified.

Recommendation 12:

To help ensure intellectual property is properly protected, universities and/or their technology transfer offices, as applicable, should:

- ensure contracts with faculty associations and researchers include provisions to make them aware of the importance of not disclosing inventions prior to filing for patent protection; and
- file for patent protection as early as possible, where appropriate, to minimize the risk of others filing first and precluding them from obtaining a patent.

Recommendation 13:

To permit efficient management review of commercialization decisions and efforts and to help facilitate knowledge transfer among personnel in case of staff turnover, universities should:

- develop case management documentation guidelines; and
- ensure that commercialization decisions and actions are clearly and consistently documented in accordance with the guidelines to be developed.

Recommendation 14:

To manage costs incurred in the effort to commercialize intellectual property, university technology transfer offices should implement formal policies and guidelines regarding cost management, and track costs incurred by type (e.g. legal costs, patent fees, and marketing) for each disclosure.

Recommendation 15:

To help ensure the timely and accurate collection of revenue owing, all universities should:

- ensure they have an accurate and up-to-date tracking payment schedule that includes due dates, so that universities can bill one-time payments in advance and remind licensees to submit royalty payments on time;
- obtain sales and revenue reports from licensees to support the amount of royalties remitted;
- develop criteria to help assess when it is worthwhile to ask for an audit report (for example, when royalty payments are dependent on sales generated); and
- enforce the interest penalties stipulated in contracts to encourage licensees to submit revenue payments on time.

Schedule 2

Western University

Student Fee-Funded Units, Ancillary Units, Academic Support Units, and Associated Companies
2015-16 Preliminary Results Summary ($ 000)

		2015-16 Projected Year-End			2015-16 Preliminary Actual			% Change		April 30, 2016 Reserves	
		Revenues	Expenses	Rev-Exp	Revenues	Expenses	Rev-Exp	Revenues	Expenses	Operating	Capital
1	**A - Student Fee-Funded Units**										
2	SRS: Campus Recreation	5,661.4	5,668.9	-7.5	5,584.5	5,687.5	-103.0	-1.36%	0.33%	658.2	448.5
3	SRS: Intercollegiate Athletics	6,295.0	6,311.0	-16.0	6,286.0	6,400.2	-114.2	-0.14%	1.41%	1.5	
4	SRS: Thompson Recreation & Athletic Centre	1,208.1	1,185.7	22.4	1,205.4	1,192.5	12.9	-0.22%	0.57%	300.6	-414.3
5	Financial Aid Office	1,072.6	1,072.8	-0.2	1,053.7	1,060.1	-6.4	-1.76%	-1.18%	53.9	
6	International Student Services	437.4	437.3	0.1	433.3	433.4	-0.1	-0.94%	-0.89%	-0.3	
7	Indigenous Services	726.6	715.6	11.0	701.0	700.8	0.2	-3.52%	-2.07%	53.0	
8	Services for Students with Disabilities	442.1	442.1	0.0	435.9	430.8	5.1	-1.40%	-2.56%	22.4	74.2
9	Student Development Centre	2,323.9	2,315.9	8.0	2,291.4	2,275.0	16.4	-1.40%	-1.77%	301.9	
10	Student Success Centre	1,468.2	1,557.7	-89.5	1,455.7	1,530.3	-74.6	-0.85%	-1.76%	196.9	
11	Student Health Services	4,412.2	4,340.3	71.9	4,395.0	4,305.9	89.1	-0.39%	-0.79%	1,201.3	
12	Off-Campus Housing & Housing Mediation Svcs	437.9	415.7	22.2	439.3	409.6	29.7	0.32%	-1.47%	131.6	
13	Western Foot Patrol	182.5	182.2	0.3	177.3	180.3	-3.0	-2.85%	-1.04%	25.1	33.0
14	**Sub-Total**	**24,667.9**	**24,645.2**	**22.7**	**24,458.5**	**24,606.4**	**-147.9**	**-0.85%**	**-0.16%**	**2,946.1**	**141.4**
15	**B - Ancillary Units**										
16	Family Practice Clinic and Workplace Health Svcs	549.8	517.6	32.2	577.8	536.8	41.0	5.09%	3.71%	140.7	
17	Housing Services	70,004.5	66,240.0	3,764.5	69,583.7	63,700.0	5,883.7	-0.60%	-3.83%	47,907.9	
18	Parking Services	4,879.1	4,896.5	-17.4	4,715.7	4,800.9	-85.2	-3.35%	-1.95%	4,807.2	
19	Retail Services	33,254.7	33,193.4	61.3	33,742.7	33,651.5	91.2	1.47%	1.38%	1,449.7	
20	**Sub-Total**	**108,688.1**	**104,847.5**	**3,840.6**	**108,619.9**	**102,689.2**	**5,930.7**	**-0.06%**	**-2.06%**	**54,305.5**	**0.0**
21	**C - Academic Support Units**										
22	Animal Care & Veterinary Services	4,060.9	4,054.5	6.4	4,198.9	4,097.5	101.4	3.40%	1.06%	138.4	
23	Boundary Layer Wind Tunnel	2,328.3	2,214.8	113.5	2,280.7	2,117.3	163.4	-2.04%	-4.40%	663.4	300.0
24	University Machine Services	1,752.4	1,644.2	108.2	1,759.2	1,722.3	36.9	0.39%	4.75%	299.4	
25	Fraunhofer Project Centre	837.6	972.4	-134.8	872.7	1,038.1	-165.4	4.19%	6.76%	-998.3	
26	Surface Science Western	1,817.4	1,766.1	51.3	1,707.8	1,600.1	107.7	-6.03%	-9.40%	268.5	424.6
27	Continuing Studies at Western	2,487.2	2,589.4	-102.2	2,489.2	2,499.2	-10.0	0.08%	-3.48%	427.7	
28	**Sub-Total**	**13,283.8**	**13,241.4**	**42.4**	**13,308.5**	**13,074.5**	**234.0**	**0.19%**	**-1.26%**	**799.1**	**724.6**
29	**D - Associated Companies**										
30	Western Research Parks (incl. Windermere Manor & AMP)	7,191.4	7,592.1	-400.7	7,403.0	7,586.4	-183.4	2.94%	-0.08%	-13,712.6	
31	Richard Ivey School of Business Foundation	25,009.0	22,463.0	2,546.0	26,093.0	23,584.0	2,509.0	4.33%	4.99%	9,661.0	
32	Richard Ivey School of Business - Asia	4,376.0	5,068.0	-692.0	5,231.0	5,199.0	32.0	19.54%	2.58%	-5,943.0	
33	**Sub-Total**	**36,576.4**	**35,123.1**	**1,453.3**	**38,727.0**	**36,369.4**	**2,357.6**	5.88%	3.55%	**-9,994.6**	**0.0**
34	**Grand Total**	**183,216.2**	**177,857.2**	**5,359.0**	**185,113.9**	**176,739.5**	**8,374.4**	**1.04%**	**-0.63%**	**48,056.1**	**866.0**

QUARTERLY RATIO REPORT ON NON ENDOWED FUNDS

FOR INFORMATION

The attached report shows the non-endowed fund quarterly activity from 1996/97 to the end of the fourth quarter of 2015/16 (April 30). The balance in the Undistributed Investment Returns Account at April 30, 2016 was $211.2 million. At April 30, 2016 the 12-quarter moving average of the total non-endowed investments to the obligations of the portfolio was 1.71 (column 10), well above the target ratio of 1.08.

- Net returns / (losses) (column 1) amounted to $6.6 million for the quarter.
- Allocations to accounts (column 2), represents income distributed to the non-endowed funds. The non-endowed rate is based on the 30-day Treasury bill rate less administrative and management fees of 0.42%. The rate is adjusted quarterly and is applicable to non-endowed fund balances with the exception of Robarts. The non-endowed rate for the period April 1 – June 30 is 0.06%. In the case of Robarts, in accordance with the operating agreement, the long term portion of their fund balance will earn the rate of return generated by the Operating & Endowment portfolio. For fiscal 2016, the net return generated by the Operating & Endowment Portfolio was -.034%
- The allocation to the operating budget (column 3) for fiscal 2016 is zero as approved by the Board.
- Other allocations (column 4) for fiscal 2016 were $1.9 million. This amount includes the annual cost-to-carry related to the debenture issue and the year end accounting adjustment related to the RBC financing for Ontario Hall.
- The non-endowed investments increased $45.5 million (column 6) due to an additional investment in the Operating & Endowment Portfolio during the quarter.
- The total market value of the non-endowed fund’s portion of the externally managed portfolio at April 30, 2016 amounted to $516.9 million (column 7).
- The obligations of the portfolio amounted to $305.7 at April 30, 2016 (column 8).
- The ratio of investments to obligations stood at 1.69 (column 9) at April 30, 2016.

The University of Western Ontario
Non-Endowed Funds: Quarterly Values

Quarter		Net Returns (1)	To Accounts (2)	Allocations To Operating Budget (3)	Other (4)	Change in amount Owed (5)	Net Change (6)	Value at the end of Quarter: Total Investments (7)	Total Obligations (8)	Ratio of Investments to obligations (9)	Ratio of Investments to obligations Average for 12 Quarters (10)
1996/1997		**4.0**	**(0.4)**	**(1.7)**	**(2.8)**	**(4.6)**	**(5.4)**	**103.4**	**85.1**	**1.22**	**1.16**
1997/1998		**5.2**	**(0.4)**	**(2.1)**	**(2.5)**	**4.0**	**4.2**	**97.7**	**74.5**	**1.32**	**1.24**
1998/1999		**1.2**	**(0.5)**	**(1.5)**	**(0.1)**	**(4.3)**	**(5.2)**	**97.2**	**82.7**	**1.18**	**1.24**
1999/2000		**2.4**	**(0.6)**	**(1.5)**	**(0.3)**	**4.0**	**4.0**	**88.0**	**74.3**	**1.18**	**1.23**
2000/2001		**0.9**	**(0.8)**	**(2.1)**	**(0.2)**	**5.9**	**3.7**	**113.7**	**101.0**	**1.13**	**1.16**
2001/2002		**0.8**	**(0.7)**	**(1.5)**	**0.0**	**5.9**	**4.6**	**127.0**	**125.5**	**1.01**	**1.10**
2002/2003		**(2.6)**	**(0.3)**	**(0.3)**	**0.0**	**0.4**	**(2.7)**	**120.6**	**132.3**	**0.91**	**1.02**
2003/2004		**6.3**	**(0.5)**	**0.0**	**0.0**	**1.3**	**7.1**	**140.7**	**135.5**	**1.04**	**0.99**
2004/2005		**2.9**	**(0.4)**	**0.0**	**0.0**	**3.6**	**6.2**	**157.7**	**141.1**	**1.12**	**1.03**
2005/2006		**7.0**	**(0.7)**	**0.0**	**0.0**	**2.9**	**9.3**	**199.4**	**160.4**	**1.24**	**1.13**
2006/2007		**7.6**	**(1.2)**	**(1.3)**	**0.0**	**6.2**	**11.4**	**236.9**	**179.1**	**1.32**	**1.22**
2007/2008		**0.4**	**(1.0)**	**(1.6)**	**(0.3)**	**2.7**	**0.2**	**258.7**	**197.7**	**1.31**	**1.29**
2008/2009		**(12.2)**	**0.3**	**0.0**	**(0.2)**	**(2.5)**	**(14.6)**	**213.3**	**197.7**	**1.08**	**1.24**
2009/2010		**10.5**	**(0.7)**	**0.0**	**(0.6)**	**(3.6)**	**5.7**	**219.1**	**181.2**	**1.21**	**1.20**
2010/2011											
	1	(3.6)	0.0	0.0	0.0	5.2	1.6	223.8	180.6	1.24	1.19
	2	14.8	0.0	0.0	0.0	(4.5)	10.3	234.1	176.1	1.33	1.18
	3	10.0	0.0	0.0	0.0	(6.4)	3.6	237.7	169.7	1.40	1.19
	4	6.2	(1.9)	0.0	(1.5)	1.9	4.7	242.4	171.6	1.41	1.21
2011/2012											
	1	(6.2)	0.0	0.0	0.0	6.1	(0.1)	242.3	177.7	1.36	1.22
	2	(5.1)	0.0	0.0	0.0	0.0	(5.1)	237.2	177.7	1.33	1.24
	3	9.0	(0.2)	0.0	0.0	33.4	42.2	279.4	211.1	1.32	1.27
	4	6.9	(0.4)	0.0	(1.4)	0.1	5.2	284.6	211.2	1.35	1.29
2012/2013											
	1	(1.6)	(0.1)	0.0	0.0	13.0	11.3	295.9	224.2	1.32	1.31
	2	11.6	(0.3)	0.0	0.0	(9.2)	2.1	298.0	215.0	1.39	1.33
	3	18.6	(0.2)	0.0	0.0	14.5	32.9	330.9	229.5	1.44	1.35
	4	14.2	(2.4)	0.0	(3.7)	(3.5)	4.6	335.5	226.0	1.48	1.37
2013/2014											
	1	10.6	(0.2)	0.0	0.0	7.9	18.3	353.8	233.9	1.51	1.39
	2	19.2	(0.2)	0.0	0.0	1.6	20.6	374.4	235.5	1.59	1.41
	3	17.7	(0.3)	0.0	0.0	(4.3)	13.1	387.5	231.2	1.68	1.43
	4	14.1	(3.4)	0.0	(6.4)	29.9	34.2	421.7	261.1	1.62	1.45
2014/2015											
July, 2014	Q1	13.2	(0.2)	0.0	0.0	1.9	14.9	436.6	263.0	1.66	1.47
October 31, 2014	2	6.8	(0.2)	0.0	0.0	(3.7)	2.9	439.5	259.3	1.69	1.50
January 31, 2015	3	22.8	(0.3)	0.0	0.0	(14.5)	8.0	447.5	244.8	1.83	1.55
April 30, 2015	4	14.0	(2.8)	0.0	(3.5)	5.2	12.9	460.4	250.0	1.84	1.59
2015/2016											
July 31, 2015	Q1	12.7	(0.1)	0.0	0.0	14.6	27.2	487.6	264.6	1.84	1.63
October 31, 2015	2	(9.6)	(0.1)	0.0	0.0	2.2	(7.5)	480.1	266.8	1.80	1.67
January 31 2016	3	(6.8)	0.0	0.0	0.0	(1.9)	(8.7)	471.4	264.9	1.78	1.69
April 30, 2016	4	6.6	0.0	0.0	(1.9)	40.8	45.5	516.9	305.7	1.69	1.71

General notes:

[A] For 1995/96 through to 2008/09 the figures are the average for the four quarters.

Columns (1) to (6) refer to changes during the quarter, column (7) to (10) refer to the end of each quarter.
All figures are millions of dollars, except columns (9) and (10). Column (9) is the ratio of column (7) to column (8).
Column (10) is the average of the ratios in column (9) over 12 quarters (i.e. over 3 year period).

Notes:

(1) Net investment returns, including changes in unrealized capital gains, net of consulting and investment management fees. This total includes returns on internally managed funds and other sundry investment earnings less overdraft interest and interest paid to employee benefit accounts.

(2) Allocations from the fund to all accounts and associated companies, except the Operating budget and Other allocations (column 4)

(3) Allocations to the Operating budget.

(4) In April 2014 a special allocation of $10.0 was made to capital. The amount was netted by a cost recovery of 3.6 million associated with year end adjustments related to the debenture and the new residence financing.
The April 2015 amount is related to a year end mark-to-market value adjusted on the RB SWAP interest agreement
The April 2016 amount is related to a year end mark-to-market value adjusted on the RB SWAP interest agreement as well as the cost to carry related to unused debenture proceeds.

(5) The change in the amount owed to other funds for the quarter is the net cash flows into the accounts less any transfers to Western's bank account.

(6) Quarterly net change, is the sum of columns (1) to (5) and is the change in the value of the fund in column (7), which is the change in the market value of investments during the quarter.

(7) Total non-endowed externally managed funds. Endowed funds are not included.

(8) Total of the non-endowed externally managed funds that are owed to University accounts and other creditors.

(9) The ratio of column (7) to column (8).

(10) The average of this ratio over the previous 12 quarters. The Board target for this ratio is an average of 1.08.

NEW SCHOLARSHIPS AND AWARDS

FOR INFORMATION

At its meeting on May 10, 2016, the Property and Finance Committee approved on behalf of the Board of the Governors the following terms of reference for new scholarships, awards, bursaries and prizes.

Gregory Brandt Award in Constitutional Law (Law)
Awarded annually to a full-time student completing first year in the Faculty of Law who has attained the highest standing in Constitutional Law. The scholarship committee in the Faculty of Law will select the recipient each May. This award was established by a generous gift from Mr. Henry Ka-Shi Ho (JD Law '77) in honour of Gregory Brandt, Professor Emeritus in the Faculty of Law.

Value: 1 at $1,500
Effective Date: 2015-2016 to 2019-2020 academic years inclusive

J. Malcolm Slack Earth Sciences Award (Earth Sciences)
Awarded annually to a full-time graduate student enrolled in a Masters or Doctoral Program in Earth Sciences, with preference given to a student who is specializing in research in the field of agrominerals. The student will be selected by a Committee in the Graduate Department of Earth Sciences. At least one member of the committee must hold current membership in the School of Graduate and Postdoctoral Studies. This award was established by Mrs. Carol Slack in memory of her husband, Mr. J. Malcolm Slack (BA '63, MBA '70).

Value: 1 at $1,200
Effective Date: May 2016

J. Malcolm Slack was a renowned mining engineer and executive. He was very passionate about research involving finding alternatives to conventional fertilizers. His research findings from 25 years ago, are still being utilized today in both mining and organic agriculture. He was a true visionary. Malcolm died in 2016 at age 82.

Dr. Michael Yuhasz Leadership Award (Kinesiology)
Awarded annually to a full-time undergraduate student entering Year 4 in Kinesiology (minimum 70% average) who has a high level of involvement in extra-curricular activities such as varsity athletics, campus recreation or student government. The recipient should also demonstrate leadership, engagement, perseverance, and commitment to their studies and campus life—the characteristics that Dr. Michael Yuhasz exhibited. Candidates must submit a one-page statement outlining their leadership skills and involvement in extra-curricular activities to the School of Kinesiology by September 30th. The Scholarship and Awards Committee in the School of Kinesiology will select the recipient. This award was established by friends and colleagues to honour Dr. Michael Yuhasz (BA, Honors Physical Education, '50), and the many contributions he made to the discipline of physical education.

Value: 1 at $1,500
Effective Date: 2016-2017 academic year

Dr. Yuhasz was a graduate of Western's first Physical Education class in 1950 when he also played football, basketball and wrestled. He returned to Western in 1954 as a lecturer, moving through the ranks of Professor, Acting Dean in 1989, Chair of the graduate program, and then Professor Emeritus in 1993. He coached football for 16 years and wrestling for 13. He also directed the intramural program and started the first university physical fitness research laboratory in 1955. He received his PhD in Physical Education in 1962 from the University of Illinois, and was the first to do so in Ontario. His many honours include Western's coach of the year, the Canada Medal, a certificate of recognition for contributions to Olympic wrestling, long-service awards, and induction into Western's Wrestling and Sports Hall of Fame.

<u>Archaeological Dig Travel Award</u> (Arts and Humanities, Classical Studies)
Awarded annually to a full-time graduate or undergraduate student in a Classical Studies program, based on academic achievement and financial need, to assist with travel costs to an archaeological site or archive. Preference will be given to graduate students, but undergraduates are encouraged to apply. An online application, provided by the Department of Classical Studies, that outlines travel plans and costs must be submitted by April 15th. The recipient will be selected by the Awards Committee in the Department of Classical Studies (one representative must hold current membership in the School of Graduate and Postdoctoral Studies). This award was established through various donations to the Department of Classical Studies.

Value: 1 at $500
Effective Date: May 2015 to April 2018 inclusive *(with value to be reviewed in the final year)*

<u>Men's Hockey Team (1985-1989) Award</u> (Any Undergraduate or Graduate Program, Athletic Award [Men's Hockey])
Awarded annually to a full-time undergraduate or graduate student in any year of any degree program at Western, including the Affiliated University Colleges, who is making a contribution as a member of the Mustang Men's Hockey team. Candidates who are intercollegiate student athletes must be in compliance with current OUA and CIS regulations. As per OUA and CIS regulations, an entering student athlete must have a minimum admission average of 80% and a non-entering student must have an in-course average of 70%. The Western Athletic Financial Awards Committee will select the recipient based on its evaluation of academic performance/potential (20%) and the written recommendations from the Head Coach assessing athletic performance/potential and team/campus leadership (weighted as 60% and 20% respectively). This award was established by Western Mustang Men's Hockey Team (1985-1989).

Value: 1 at $4,500
Effective Date: 2016-2017 to 2019-2020 academic years (with value to be reviewed after this)

<u>Freedom 55 Financial Athletic Leadership Award</u> (Any Undergraduate or Graduate Program, Athletic Award [Varsity Team])
Awarded annually to full-time undergraduate (Year 2, 3 or 4) or graduate students (one male and one female) in any degree program at Western, including the Affiliated Colleges, who are student-athletes on a varsity team (with a minimum 80% average from the previous year), and have demonstrated outstanding leadership on and off the playing field or court. Candidates must be in compliance with OUA and CIS regulations. The Western Athletic Financial Awards Committee will select the recipients based on its evaluation of academic performance/potential (20%) and the written recommendations from the Head Coaches assessing athletic performance/potential and team/campus leadership (weighted as 60% and 20% respectively). This award was established by a generous donation from Freedom 55 Financial, London Life Insurance Company.

Value: 2 at $2,500
Effective Date: 2016-2017 to 2017-2018 academic years (with review of funding after this)

<u>Pauline C. Stokes Music Award</u> (Music)
Awarded annually to a full-time undergraduate student entering Year 2, 3 or 4 of a Bachelor of Music program, based on academic achievement and demonstrated financial need. Online financial assistance applications are available through Student Center and must be submitted by September 30th. The Scholarship Review Subcommittee in the Don Wright Faculty of Music will select the recipient after the Registrar's Office assesses financial need. A recipient in one year will be eligible for selection in a subsequent year(s). This award is offered through the Ontario Student Opportunity Trust Fund (OSOTF) program, and recipients must meet Ontario residency requirements.

Value: 1 at $1,500
Effective Date: 2016-2017 academic year

Shamrock Foundation Continuing Award in Engineering (Engineering)
Awarded to two full-time undergraduate students entering Year 2 in the Faculty of Engineering, who have a minimum 70% average and demonstrated financial need. One award will be made to a female student and one to a male student. This award will continue into Year 3 and 4 provided that the recipient maintains an average of 70%, a full-time course load, and continues to demonstrate financial need each year. If the recipient enters a dual degree program, the award will continue for an additional year, providing they continue to meet the academic and financial criteria. Online financial assistance applications are available through Student Center and must be submitted by September 30th. The Scholarship and Awards Committee in the Faculty of Engineering will select the recipients after the Office of the Registrar has assessed financial need. Only two students can hold this award at any one time. If a student fails to retain the award, another student from the same year, who meets the criteria, will be selected. This award was established by a generous gift from Terrance Killackey (BESc ’85) and Andrea Killackey (BESc ’85), through their family foundation, the Shamrock Foundation.

Value: 2 at $5,000
Effective Date: 2016-2017 to 2018-2019 academic years (a review of the award and funding will take place in the third year 2018-2019)

Joan Pemberton Global Opportunities Award (Education)
Awarded to a full-time student (undergraduate or graduate) in the Faculty of Education who is participating in a Western University international experience or study abroad program for which academic credit or approval from their department or faculty will be obtained. This includes academic exchange programs; approved study abroad programs; curriculum based international field courses/research, international community service learning; volunteer opportunities and internships led by Western University. Students must have completed their prescribed academic program the previous year and currently be registered in a full-time course load (minimum 3.5 full courses). Students may apply for this award in advance of being accepted into an eligible international learning program with receipt of the award contingent upon acceptance into the program. Students may only receive a Global Opportunities award once during their academic career at Western. Online applications are available on the Global Opportunities website, Western International. Transcripts are required for students who studied elsewhere in their previous academic year. Applications are due on March 15th (for decisions in early May). The student will be selected based on a combination of academic achievement, as well as a statement outlining how this experience will contribute to their development as a global citizen, what they expect to learn through their program of study and how they will be an effective Ambassador for Western. This award was established by a generous gift from Ms. Joan Pemberton (BA ‘55).

Value: 1 at $2,000
Effective Date: 2015-2016 academic year only

**1,000 from the Donor will be matched by $1,000 through the University Global Opportunities Matching Program.*

At its meeting on June 7, 2016, the Property and Finance Committee approved on behalf of the Board of the Governors the following terms of reference for new scholarships, awards, bursaries and prizes.

London Music Award for Performance Excellence (Music)
Awarded annually to full-time undergraduate students in Year 2, 3 or 4 in the Don Wright Faculty of Music, who have been identified as excellent performers at the Faculty of Music, and who demonstrate financial need. Online financial assistance applications are available through Student Center and must be submitted by September 30th. The scholarship committee in the Don Wright Faculty of Music will select the recipients after the Registrar’s Office assesses financial need. This award was established through the generosity of the London Music Scholarship Foundation. This award is offered through the Ontario Student Opportunity Trust Fund program and recipients must meet Ontario residency requirements.

Value: 2 at $3,000
Effective Date: 2016-2017 academic year

Paul W. Robertson Music Scholarship (Music)
Awarded annually to full-time undergraduate students in any year of a Bachelor of Music or Bachelor of Musical Arts program in the Don Wright Faculty of Music, demonstrating academic achievement and strong musical ability. Preference will be given to students specializing in voice, piano, guitar, woodwind, brass, or percussion. The scholarship committee in the Don Wright Faculty of Music will select the recipients each year. This scholarship was established with a generous gift from Shaw Communications Inc. in memory of Paul W. Robertson (HBA '77).

Value: 2 at $5,000
Effective Date: 2016-2017 to 2025-2026 academic years inclusive

Paul served as Executive Vice President of Shaw Communications Inc. and President of Shaw Media. He loved his career in media and was highly respected in the industry. Paul is fondly remembered for his great sense of humour, positive attitude, collaborative management style and zest for life. Paul died in 2014 at age 59.

Faculty of Education Students' Council Award for Student Leadership (Education)
Awarded annually to a full-time undergraduate student graduating from Year 2 of any Bachelor of Education program (with a minimum 70% average). Students must demonstrate leadership and participation in extra-curricular activities within the Faculty of Education, Western or the London community. To apply, students must submit a one-page statement outlining their extracurricular involvement to the Dean's Office of the Faculty of Education by March 31st. The scholarship and awards committee, Faculty of Education, will select the recipient. This award was established by a generous gift from the 2014-2015 Faculty of Education Students' Council, to recognize future teachers and the diverse skill set required for excellence in the teaching profession.

Value: 1 at $1,500
Effective Date: 2016-2017 to 2020-2021 academic years inclusive

SASAH Travel Award (Arts and Humanities)
Awarded annually to undergraduate students enrolled in the School for Advanced Studies in the Faculty of Arts and Humanities, based on academic achievement, to assist with travel costs for study/research at sites/institutions anywhere in the world. Candidates will be required to apply to the Director of SASAH in order to be considered for this Travel Award. The award recipients will be selected by the Director of the SASAH School.

Value: number of awards will vary, valued at a minimum of $500 and a maximum of $750 each
Effective Date: 2016-2017 to 2020-2021 academic years inclusive

Faculty of Education Students' Council Global Opportunities Award (Education)
Awarded to full-time undergraduate students in the Faculty of Education who are participating in a Western University international experience or study abroad program for which academic credit or approval from their faculty will be obtained. By participating in education abroad, service learning opportunities, or international field schools, students develop the skills, perspectives and knowledge required to become global citizens and educators. Students must have completed their prescribed academic program the previous year and currently be registered in a full-time course load (minimum 3.5 full courses). Students may apply for this award in advance of being accepted into an eligible international learning program with receipt of the award contingent upon acceptance into the program. Students may only receive a Global Opportunities award once during their academic career at Western. Online applications are available on the Global Opportunities website, Western International. Transcripts are required for students who studied elsewhere in their previous academic year. Applications are due on November 15th (for decisions in early January) and March 15th (for decisions in early May). The students will be selected based on a combination of academic achievement, as well as a statement outlining how this experience will contribute to their development as a global citizen, what they expect to learn through their program of study and how they will be an effective Ambassador for Western. This award was established by a generous gift from the 2014-2015 Faculty of Education Students' Council.

Value: 15 at $1,000*
Effective Date: 2016-2017 academic year only

**$7,500 from the Donor will be matched by $7,500 through the University Global Opportunities Award Program.*

Faculty of Education Global Opportunities Award (Education)
Awarded to full-time undergraduate students in the Faculty of Education who are participating in a Western University international experience or study abroad program for which academic credit or approval from their faculty will be obtained. By participating in education abroad, service learning opportunities, or international field schools, students develop the skills, perspectives and knowledge required to become global citizens and educators. Students must have completed their prescribed academic program the previous year and currently be registered in a full-time course load (minimum 3.5 full courses). Students may apply for this award in advance of being accepted into an eligible international learning program with receipt of the award contingent upon acceptance into the program. Students may only receive a Global Opportunities award once during their academic career at Western. Online applications are available on the Global Opportunities website, Western International. Transcripts are required for students who studied elsewhere in their previous academic year. Applications are due on November 15th (for decisions in early January) and March 15th (for decisions in early May). The students will be selected based on a combination of academic achievement, as well as a statement outlining how this experience will contribute to their development as a global citizen, what they expect to learn through their program of study and how they will be an effective Ambassador for Western. This award was established by generous Donors to the Faculty of Education.

Value: 10 at $2,000*
Effective Date: 2016-2017 academic year only

**$10,000 from the Donors will be matched by $10,000 through the University Global Opportunities Award Program.*

Rob Atkinson Women's Volleyball Award (Athletic Award (Women's Volleyball)
Awarded annually to a full-time undergraduate or graduate student in any year of any degree program at Western, including the Affiliated University Colleges, who is making a significant contribution as a member of the Women's Volleyball Team. As per OUA and CIS regulations, an entering student athlete must have a minimum admission average of 80% and a non-entering student must have an in-course average of 70%. Candidates must be in compliance with current OUA and CIS regulations. The Western Athletic Financial Awards Committee will select the recipient based on its evaluation of academic performance/potential (20%) and the written recommendations from the Head Coach assessing athletic performance/potential and team/campus leadership (weighted as 60% and 20% respectively). This award was established by the friends and colleagues of Mr. Robert Gordon Atkinson (BA '80, Physical Education) in honour of his contributions as the Women's Volleyball Coach from 1980 to 1982.

Value: 1 at $1,000
Effective Date: 2016-2017 academic year

Dr. Frank J. Butson Resident Award in Family Medicine (Family Medicine)
Awarded annually to a postgraduate trainee completing a residency program in any area of Family Medicine, who has demonstrated a commitment to comprehensive Family Medicine, adhering to Dr. Ian McWhinney's Nine Principles of Family Medicine. Candidates must submit a one-page statement to the Office of Family Medicine by January 31st outlining their commitment to these principles. Final selection will be made by the Awards Committee in Family Medicine. This award was established by Mrs. Margery (Nonnie) Butson in memory of her husband, Dr. Frank J. Butson (MD '50).

Value: 1 at $1,000
Effective Date: 2016-2017 academic year

Dr. Butson played an integral role in establishing the Department of Family Medicine at Western. He was also a faculty member in the Department of Family Medicine from 1968-1988 and served as a mentor and role model to many students aspiring to become family medicine physicians. Dr. Butson was a founding member of the College of Family Physicians of Canada. He was also a dedicated and respected family physician in London for over 40 years. Dr. Butson died in 2016 at the age of 94.

<u>Dean Family Student Refugee Award</u> (Any undergraduate program)
Available annually to undergraduate students who are entering or have recently entered Canada as refugees (within the last 2 years). The recipients must meet Western admission and English language requirements and be admitted for full-time studies at Western's main campus in an undergraduate degree program. The Office of the Registrar will liaise with Western International and World University Service of Canada (WUSC) or another similar agency to select the recipients. This award was established by Dr. Noureen Huda, and her husband Mr. Hamid Dean.

Value: 2 at $2,500
Effective Date: 2016-2017 to 2020-2021 academic years (*with review of award value after this)*

<u>Michael A. R. Wilson Family HBA Scholarship</u> (Ivey Business School)
Awarded annually to a full-time undergraduate student at Western who has been accepted into Ivey's Advanced Entry Opportunity (AEO), based on academic achievement (minimum 80% academic average) and demonstrated leadership skills. A strong preference will be given to a candidate from the Ottawa, Ontario area. If a recipient from the Ottawa area is not found, preference will be given to a student from Eastern Ontario. The recipient will receive this award upon entering HBA 1. If for some reason, the AEO recipient does not enter HBA 1 at Ivey she/he will forfeit the award, and another HBA 1 student who meets the criteria will be selected. The award will be renewed for HBA 2 provided the candidate maintains a minimum 80% average. The selection of the recipient will be made by the HBA Scholarship Review Committee. This scholarship was established by a generous gift from Michael A. R. Wilson, HBA '90.

Value: 1 at $5,000 continuing
Effective Date: 2016-2017 academic year

<u>T. Merritt Brown Summer Paper Prize</u> (Economics)
The T. Merritt Brown Summer Paper prize is awarded for the best Economics Summer Paper produced by a graduate student at the end of the second year of the PhD program. The winning paper is determined by the Economics Graduate Awards Committee based on the criteria established by the Department. The prize is valued at $400. The prize may not be awarded each year. This prize was established by the friends and colleagues of Professor T. Merritt Brown.

Value: 1 at $400
Effective Date: May 2016

Professor Merritt Brown was a dedicated scholar and teacher and one of the pioneers of econometrics in Canada. He obtained his degree in Mathematics and Physics from Western University in 1934. He received his PhD in Economics in 1958 and began teaching at Queen's in 1962. In 1967 he joined the Faculty at Western and taught until his death in 1973 at age 59.

<u>Rob and Joline Brant Religious Education Award</u> (Education)
Awarded annually to a student in the Junior Intermediate or Senior Intermediate stream of the Bachelor of Education program who has Religious Education as a teachable subject. Selection will be based on academic achievement and demonstrated financial need. Online financial need assessment forms are available through the Office of the Registrar's website and must be completed by September 30. The Faculty of Education scholarship committee will select the recipient once the Office of the Registrar has determined financial need. This award was established at Foundation Western by a generous gift from Rob (BA '88) and Joline Brant.

Value: 1 at $1,000
Effective Date: 2015-2016 academic year

FUNDED BY OPERATING

The David Wolfe Scholarship on Research on Violence Prevention (Education)
Awarded annually to a graduate student in the Faculty of Education, based on academic achievement, who is conducting research on violence prevention and student well-being in schools. The student will be selected by a committee in the Faculty of Education. At least one member of the committee will hold membership in the School of Graduate and Postdoctoral Studies.

Value: 1 at $1,500
Effective Date: May 2015 to April 2019

Dr. David Wolfe is a Senior Research Scholar and Professor with the Centre for Research and Education on Violence Against Women and Children at the Faculty of Education at Western University. He held the inaugural RBC Chair in Children's Mental Health from 2002 to 2012 and served as Editor-in-Chief of Child Abuse & Neglect: The International Journal from 2007 to 2012. Dr. Wolfe has provided extensive assessment and consultation to child protective services, schools, and the courts with respect to issues of child abuse and violence.

The Ray Hughes Scholarship on Innovative Practices in Violence Prevention (Education)
Awarded annually to a pre-service teacher in the Faculty of Education who has demonstrated innovative practices in violence prevention curriculum or programming in schools. The recipient will be selected by a committee in the Faculty of Education.

Value: 1 at $1,500
Effective Date: 2015-2016 to 2018-2019 academic years inclusive

Ray Hughes is the National Coordinator for the 4thR program with the Centre for School Mental Health at the Faculty of Education at Western University. He had a distinguished career in education with over 35 years of experience as a teacher, Department Head, university lecturer, and consultant. Ray was involved in coordinating the implementation of violence prevention programs for 190 schools and 80,000 students in his position as the Learning Coordinator for Violence Prevention with the Thames Valley District School Board in London, Ontario.

REPORT OF THE BY-LAWS COMMITTEE

Contents	Consent Agenda
Governance and By-Laws Committee – Terms of Reference	No
Revisions to Standing Committee Terms of Reference **(a) Property & Finance Committee** **(b) Fund Raising & Donor Relations Committee** **(c) Senior Operations Committee**	No

FOR APPROVAL

Note: Current terms of reference for all Board standing committees can be found at:

http://www.uwo.ca/univsec/board/committees/index.html

1. **Governance and By-Laws Committee – Terms of Reference**

Recommended: That the revised Special Resolution No. 1-A, Terms of Reference of the By-Laws Committee, including the change of name to "Governance and By-Laws Committee", detailed in **Annex 1**, be approved.

Background:

The revised terms of reference were presented at the May meeting of the Board with an invitation for comments or suggestions. None has been received. The terms are reflective of the recommendations in the Report of the Task Force on Governance

2. **Standing Committee Terms of Reference**

Recommended: That revisions to the following terms of reference, be approved:

(a) Special Resolution No. 1-B, Terms of Reference of the Property and Finance Committee (**Annex 2**);
(b) Special Resolution No. 1-C, Terms of Reference of the Fund Raising and Donor Relations Committee (**Annex 3**); and
(c) Special Resolution No. 1-M, Terms of Reference of the Senior Operations Committee, including the re-naming of the Committee (**Annex 4**).

Background:

All terms of reference of standing committees are being reviewed in response to the Report of the Governance Review Task Force. The terms of the Audit Committee are still under review and any amendments will be brought forward to the September 2016 meeting of the Board. Two key provisions are being added to the terms of reference of each standing committee: requirements for the development of an annual work plan (in consultation with the appropriate members of the senior administration) and for review of the terms of reference on at least a three-year basis.

(a) Property & Finance Committee

The proposed changes are editorial, making authorities more clear and eliminating redundancies, as well as reflecting newer responsibilities such as approval of debt instruments that were not contemplated the last time the terms were updated.

(b) Fund Raising and Donor Relations

The change is the addition of a note with respect to an annual work plan. FRDRC conducted a comprehensive review of its terms of reference and its work flow in 2015 and sees no need for additional changes.

(c) Senior Operations Committee

The changes clarify the role and responsibilities of the committee, consistent with the recommendations of the Report of the Governance Task Force. These include changes with respect to provision of strategic advice and support to the President and the Board, and with respect to emerging issues. There has been some reordering and organization around the range of issues dealt with by the committee to provide further focus to the Task Force's recommendations. There is also explicit acknowledgement of the fact that while the committee has responsibility for approving the president's contract, it does so within parameters to be established by the Board.

There was considerable discussion about the name of the committee. It has been proposed by the Senior Operations Committee that it be changed to Senior Policy and Operations Committee and that is what is used in the draft revised terms attached hereto. Both the Senior Operations Committee and the By-Laws Committee considered a range of options, none of which seemed to reflect adequately the leadership role of the committee nor the range of responsibilities within its mandate. Two alternatives were proposed by the By-Laws Committee for further consideration by the Senior Operations Committee: "Senior Operations & Policy Committee" (to address a concern about a possible acronym) and "Policy, Operating & Nominating Committee (to eliminate the use of 'Senior'). After discussion, the name preferred by the members of the Senior Operations Committee continues to be "Senior Policy and Operations Committee." However, there was also some support for "Senior Operations & Policy Committee" if that were to be the Board's preference. "Policy, Operating & Nominating Committee" was seen as less acceptable because it did not reflect the breadth of the committee's responsibilities nor its leadership role in providing strategic advice and support, including through the collective oversight by committee chairs of issues coming to the Board that cross committee mandate boundaries.

Governance and By-Laws Committee

Terms of Reference

1. The Governance and By-Laws Committee is a standing committee of the Board with responsibility for oversight of corporate governance policies and practices. In developing such policies and practices, and in their ongoing review, the Committee has a responsibility to be aware of and apply best practices in higher education governance. Effective governance policies and practices will:

    - Be consonant with the Board's responsibilities under the Act
    - Provide means by which the Board can fulfill its fiduciary duties
    - Enhance transparency and the Board's ability to make decisions effectively
    - Include accountability measures for Board decisions
    - Allow for the effective and efficient flow of business to the Board
    - Delegate authority appropriately to Board Officers, committees appointed by the Board, the President, and Senior Academic and Administrative Officers of the university
    - Promote effective communication and interaction with Senate to sustain the principles of shared governance

2. In carrying out its responsibilities, the Committee shall

    (a) recommend to the Board processes for periodic Board performance reviews and implement those processes;
    (b) design and implement orientation and on-going member education processes;
    (c) establish and implement processes for the periodic review of governance documents, policies, procedures, special resolutions and by-laws, and make recommendations to the Board with respect to amendments to those instruments as warranted (the Committee has delegated authority to make amendments of a non-substantive or editorial nature on behalf of the Board);
    (d) advise on and make recommendations to the Board on the structure of Board agendas and meeting processes;
    (e) recommend to the Board and periodically review roles for the Board, its Officers, committee chairs, Board members and non-Board members of committees;
    (f) oversee periodic reviews of the Board's standing committees' terms of reference and make recommendations to the Board with respect to amendments as warranted by those reviews and as recommended by the individual standing committee;
    (g) make recommendations and provide advice to the Board with respect to new or restructured standing committees, as may be proposed from time to time by the Governance and By-Laws Committee or by individual standing committees;
    (h) develop guidelines for the filling of vacancies on the Board, including needs analyses and processes for identifying potential Board members;
    (i) oversee electoral policies and procedures, including recommending changes to the Board as warranted, and adjudicating issues forwarded by the Chief Returning Officer for Board elections;
    (j) develop and oversee conflict of interest policies and practices for members of the Board and its committees;

(k) develop a process for periodic review of the university's administrative policies and monitor the implementation of that process;
(l) advise the Board with respect to the Board's relationship with Senate and recommend the establishment of practices and procedures to enhance that relationship as appropriate; and
(m) annually review its own performance as measured against these terms of reference.

3. The membership of the Governance and By-Laws Committee shall be:

The Chair of the Board
The Vice-Chair of the Board
The President & Vice-Chancellor or Designate

Six members of the Board, appointed by the Board, including two external members, one member of faculty, one member of the administrative staff, one student, and one additional member from any constituency.

The Secretary of the Board (non-voting)

4. The Chair of the Committee shall be designated by the Board of Governors annually. The Vice-Chair of the Board shall be the Vice-Chair of the Committee. The Secretary of the Board shall be Secretary of the Committee.

5. The Committee normally meets four times per year with additional meetings as necessary at the call of the Chair.

Western UNIVERSITY · CANADA

Committees of the Board of Governors
Terms of Reference

Property & Finance Committee

Special Resolution: **No. 1-B - Terms of Reference of the Property & Finance Committee**

Effective Date: **June 23, 2016**

Previous Revisions: **2014, November 30, 2000, September 28, 2000, June 27, 1991**

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1. The Property & Finance Committee is a standing committee of the Board constituted for the review and approval of policy, and decision-making in respect of the property and financial resources of the University.

2. The Committee makes recommendations to the Board with respect to the following:

   (a) campus planning and development, including the use of land, buildings and facilities and the acquisition or disposal of land or property.

   (b) construction and maintenance projects and associated activities in accordance with Board policy [**Policy 2.15**];

   (c) annual and long-term financial planning and budgeting, including operating, capital and ancillary budgets;

   (d) long-term debt strategies and assumption of debt with appropriate debt instruments;

   (e) investment policies and governance as recommended by the Investment Committee;

   (f) the fixing of fees in accordance with Board policy [**Policy 2.4**];

   (g) policy related to intellectual property;

   (h) policies concerning the use of space and facilities

   (i) policy related to the use of the University's name, coat of arms, logos and marks.

3. On behalf of the Board, the Committee has delegated authority to:

   (a) authorize the expenditure of funds and/or approve contracts for operating purposes in accordance with Board policies;

   (b) exercise authority delegated to it by the Board with regard to approval of individual construction and maintenance projects [**Policy 2.15**];

   (c) approve the establishment of scholarships, fellowships, prizes, bursaries and other awards, as may be recommended by the Senate and in accordance with Board policies

   (d) approve the establishment of designated chairs, professorships, and faculty fellowships, as may be recommended by the Senate and in accordance with Board policies; and

(e) authorize the issuance of debt instruments, in accordance with Board decisions as needed

MEMBERSHIP AND PROCEDURE

4. The Committee shall consist of:

   The Chair of the Board
   The Vice-Chair of the Board
   The Chair of the Audit Committee
   The President & Vice-Chancellor
   The Provost & Vice-President (Academic) (non-voting)
   The Vice-President (Resources & Operations) (non-voting)
   The Vice-President (Research) (non-voting)
   The Vice-President (External) (non-voting)
   The Chair of the Senate Committee on University Planning (non-voting)
   The Secretary of the Board (non-voting)

   At least six Board members appointed by the Board.

   Resource persons (non-voting):

   Associate Vice-President (Finance & Facilities)
   Executive Director, Facilities Engineering and Development
   Associate Vice-President (Planning, Budgeting and Information Technology)

5. The Committee shall have a Chair and a Vice-Chair, appointed annually by the Board. The Secretary of the Board (or designate) shall be Secretary of the Committee.

6. The Committee shall normally meet ten days in advance of a regular meeting of the Board, or at the call of the Chair.

7. The Committee shall establish an annual work plan, in consultation with the President and Vice-Presidents.

8. The Committee shall review its terms of reference every three years.

9. The Committee shall establish, in consultation with the Vice-President (Resources & Operations), a schedule for regular review of policies within its purview.

Western UNIVERSITY · CANADA

Committees of the Board of Governors
Terms of Reference

Fund Raising & Donor Relations Committee

Special Resolution: No. 1-C - Terms of Reference of the Fund Raising & Donor Relations Committee

Effective Date: June 23, 2016

Previous Revisions: January 28, 2016, June 24, 2010, September 24, 1998, March 25, 1993, March 27, 1992

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1. The Fund Raising & Donor Relations Committee is a standing committee of the Board, constituted for the purpose of ensuring active involvement of the Board of Governors in setting policy for, providing strategic guidance for, and directly supporting, ongoing generation of philanthropic dollars for the University and providing oversight and support to the relationship between the University and its donors. The Committee has responsibility to educate and engage the members of the Board with respect to their roles and responsibilities in helping to achieve fund raising success.

2. The principal responsibilities of the Committee are:

   (a) To guide the Board in its leadership of Western's philanthropic culture as an integral support of the University's mission.

   (b) To set a policy framework that encourages philanthropy that is donor focused and to ensure that fund raising activities support the mission and strategic priorities of the University.

   (c) To provide policy guidance, strategic guidance and oversight to all fund raising and donor relations programs.

   (d) To recommend long-term institutional fund raising plans to support the academic strategy of the University, and to recommend annual financial targets for fund raising to the Board.

   (e) To monitor and evaluate progress at least quarterly in meeting fund raising financial targets and plans and to report openly and regularly to the University community on the impact, efficiency and efficacy of fund raising activities.

   (f) To ensure appropriate volunteer resources are mobilized to support fund raising activities and that the appropriate staff resources and functions are in place to support volunteer activities.

   (g) To ensure that adequate budgetary resources are allocated to support institutional fund raising and to set standards for and monitor the total cost of raising funds, providing accountability to donors and the University community in the efficiency and effectiveness of fund raising efforts.

   (h) To set, monitor and evaluate policies, criteria, standards and activities for donor relations and stewardship of gifts made to the University, serving as the principal volunteer body to lead and participate in donor relations activities.

(i) To establish criteria for the recognition of donor gifts to the University, including the naming of physical spaces, endowments, academic positions and programs to recognize donors' gifts, and to approve and/or recommend naming to the Board in accordance with Board policies.

(j) To ensure that marketing, communications and branding programs and activities are in place to support the University's philanthropic objectives.

(k) To review these Terms of Reference at least biennially, and recommend amendments to the Board of Governors as necessary; and

(l) To evaluate annually the effectiveness of the Committee against these Terms of Reference; and

(m) To develop an annual work plan, in consultation with the President and the Vice-President (External).

MEMBERSHIP AND PROCEDURES

3. The membership of the Committee shall be:

The Chair of the Board
The Vice-Chair of the Board
The Chancellor
The President & Vice-Chancellor

The Vice-President (External) (non-voting)
The Secretary of the Board (non-voting)
The Chair of the Ivey Development Committee (or designate) (non-voting)
The President of The University of Western Ontario Alumni Association (or designate) (non-voting)
The Campaign Chair (or designate) (when applicable)

At least five members of the Board, appointed by the Board
Four additional members, appointed by the Board

4. The quorum for meetings shall be 8 members, at least 5 of whom must be voting members.

5. The terms of appointed members shall be two years, renewable.

6. The Chair and the Vice-President (External) will determine, from time to time, which staff from the Division of External Relations shall be assigned to the Committee as non-voting Resource Persons:

7. The Chair and Vice-Chair of the Committee shall be appointed by the Board. The Secretary of the Board (or designate) shall be Secretary of the Committee.

Special Resolution: No. 1-C - Terms of Reference of the Senior Policy and Operations Committee

Effective Date: June 23, 2016

Previous Revisions: January 29, 2015, January 25, 2001, June 25, 1998

<u>Terms of Reference</u>

1. The Senior Policy and Operations Committee is a standing committee of the Board with the duties, responsibilities and authorities as set out below.

2. The Committee's principal responsibilities are:

   (a) Strategic advice and support, including:

      (i) providing strategic advice and policy support to the Board and the President

      (ii) providing guidance to the senior administration on timely or emerging issues on behalf of the Board

      (iii) receiving from the President the President's proposed priorities for each forthcoming academic year and making a recommendation thereon to the Board

   (b) Promoting community relations (internal and external) and the University's reputation, including:

      (i) general relationships with the external community
      (ii) affiliation and other agreements which require Board approval, or as may be referred by the President
      (iii) vehicles of community relations (e.g., publications, special events, media relations)
      (iv) general University/student relations in non-academic matters, including student disciplinary codes
      (v) responses for requests for access to the Board (in accordance with the process outlined in **Appendix A**, attached hereto)

   (c) Compensation issues, including:

      (i) establishing mandates for, reviewing, and making recommendations to the Board on negotiated collective agreements

      (ii) within parameters established by the Board, negotiating and approving the terms of the contract with the President, and any subsequent renewal or amendment of such contract.

      (iii) reporting to the Board on the President's final contract and any subsequent amendments thereto.

(iv) establishing parameters for and, on the recommendation of the President or appropriate Vice-President, fixing and providing for the remuneration, retirement and superannuation of the following employees of the University:

Vice-Presidents
University Librarian
Vice-Provosts
Associate Vice-Provosts
Associate Vice-Presidents
Registrar
University Secretary
Deans
Associate Deans
And such other senior administrative positions as may be created from time to time which are not encompassed by collective or other group agreements

(v) when not so determined by approved policies, group plans or collective agreements, authorizing expenditures of such sums as may be required to establish funds for the payment of gratuities, retirement allowances, pensions, life insurance or other insurance (including health insurance) for the benefit of employees

(vi) reviewing annually the performance of the President and receiving from the President and the appropriate vice-presidents the performance appraisals of the other employees listed in (iv) above;

(vii) reporting annually to the Board on the review of the President's performance;

In all of the foregoing, the Committee shall have due regard for collective agreements which have been approved by the Board.

(d) Human Resource Policies and Procedures

(i) recommending to the Board new or amended human resource policies as proposed by the Vice-President (Resources & Operations) or the Provost and Vice-President (Academic)

(ii) reviewing and approving or recommending to the Board as appropriate, recommendations from the President in human resource matters which fall outside existing University policies

(e) as the Nominating Committee of the Board,

(i) making recommendations to the Board for the appointment of external members in the Board-elected constituency, in accordance with Guidelines for the Identification and Appointment of External Board Members as may be approved by the Board from time to time

(ii) developing and maintaining, in accordance with the Board-approved Guidelines for Filling of Vacancies, a skills and needs matrix against which to assess potential candidates for Board membership

(iii) recommending to the Board annual membership slates for Board standing committees, including recommendations for chairs and vice-chairs of committees

(iv) filling vacancies in the membership of committees and subcommittees as necessary in the succeeding twelve months following the Board's approval of the initial list in January of each year, reporting any such appointments to the Board for information at the subsequent meeting of the Board.

(v) recommending to the Board the appointment of Board members to special or ad hoc committees (such as selection committees) as may be necessary from time to time.

Membership and Procedure

3. The membership of the Committee shall be:

   Chair of the Board, who shall be Chair of the Committee
   Vice-Chair of the Board, who shall be Vice-Chair of the Committee
   Chairs of the Standing Committees of the Board
   Immediate Past Chair of the Board
   An "at large" external member of the Board (as required)

   The seat assigned to the immediate Past Chair of the Board is filled only when that individual remains a member of the Board.

   The "at large" seat is filled when, in the view of the Chair and the Committee, a particular skill set or experience might be useful to the Committee's work. As with all other Board committee appointments, such appointments would be for the duration of one year with the prospect of reappointment for further terms.

   Notwithstanding the ex officio membership of the Committee, in light of the mandate of the Committee with respect to personnel, employee contracts and remuneration issues, all members of the Committee must be external members of the Board.

4. The Committee shall meet as directed by the Board, at the call of the Chair, or as requested by the President.

5. The Committee will prepare an annual work plan, in consultation with the President.

6. The Committee will provide a summary report to the Board semi-annually on its activities.

7. The Committee will review its terms of reference every three years.

Special Resolution 1-M **APPENDIX A**

Requests for Access to the Board

1. Requests from members of the community for access to the Board for particular issues should be submitted to the Board Secretary who will forward them to the Board Chair and the President.

2. The Board Chair will consult with the President on the appropriate response.

3. When appropriate, the Chair will deputize a member of the Board to discuss the issue with the requester(s) and the appropriate member(s) of the administration will be involved in that discussion.

4. The Board member will report to the Senior Policy and Operations Committee on the issue, the discussion and any steps that might follow (i.e., whether the matter should be referred back to the administration for consideration, whether it should be referred to a Board committee for review, whether it should be referred to the full Board, or whether no further action is appropriate).

5. The Senior Policy and Operations Committee will then make the determination as to how to proceed.

6. The Committee will report its decision and the processes followed to the Board of Governors at a subsequent meeting of the Board.

Board of Governors
June 23, 2016

APPENDIX IV

REPORT OF THE SENIOR OPERATIONS COMMITTEE

Contents	Consent
Appointments to the University Discipline Appeals Committee	Yes
Appointments to the Property & Finance Committee	Yes
Appointments to Western Fair	Yes

FOR INFORMATION

1. Appointments to the University Discipline Appeals Committee

On behalf of the Board of Governors, the following appointments to the University Discipline Appeals Committee, effective July 1, 2016 to June 30, 2019, have been approved:

- Dr. Angie Mandich, Faculty of Health Sciences
- Dr. Paul Ragogna, Faculty of Science (reappointment)
- Mr. Arjun Singh, Student
- Mr. Arman Bachmann, Student

2. Appointments to the Property & Finance Committee

On behalf of the Board of Governors, the following appointments to the Property & Finance Committee have been approved, effective July 1, 2016, to replace members of the Board whose terms are ending:

- Nicolette Noonan, Graduate Student
- Jonathan Green, Undergraduate Student
- Kibret Mequanint, Faculty

3. Appointments to Western Fair

On behalf of the Board of Governors, the following reappointments to Western Fair have been approved for 2016-17, effective July 1, 2016:

- Frank Miller, Director, Hospitality Services
- Gary West, Alumnus

REPORT OF THE AUDIT COMMITTEE

Contents	Consent Agenda
Retirement Income Fund Financial Statement for the year ended December 31, 2015	No
Western Retirement Income Fund – KPMG Audit Findings Report	Yes
Western Retirement Plans – Report to the Audit Committee for the year ended December 31, 2015	Yes

FOR APPROVAL

1. Retirement Income Fund Financial Statement for the year ended December 31, 2015

Recommended: That the audited financial statements for The University of Western Ontario Retirement Income Funds for the calendar year 2015 be approved.

Background:

The UWO Retirement Income Funds are individual retirement products that have been administered by the University for former faculty and staff and their spouses. The program was initiated in 2000 and the investments are selected and monitored by the academic and administrative staff pension boards in a manner consistent with the pension plans sponsored by the University. In May 2015, the University Board of Governors signed an agreement with Sun Life Financial as the preferred provider of the Retirement Income Fund for the University's retirees. Existing members of the RIF had the option to join the new program or exit the plan. All member assets had been removed from the plan by December 31, 2015. The net assets of the Retirement Income Fund amount to nil at December 31, 2015.

The Board of Governors is asked to approve only the RIF financial statements (**Annex 1**). The academic and administrative staff pension boards have been delegated the authority by the Board of Governors to approve the Master Trust financial statements and the financial statements for each of the pension plans. On May 11, 2016 the Joint Pension Board approved the audited financial statements for the Master Trust (**Annex 2**), the academic staff pension plan and the administrative staff pension plan.

FOR INFORMATION

2. Western Retirement Income Fund – KPMG Audit Findings Report

See **Annex 3**.

3. Western Retirement Plans – Report to the Audit Committee for the year ended December 31, 2015

See **Annex 4**.

DRAFT Financial Statements of

THE UNIVERSITY OF WESTERN ONTARIO
RETIREMENT INCOME FUND

Year ended December 31, 2015

INDEPENDENT AUDITORS' REPORT

To the Board of Governors of The University of Western Ontario

We have audited the accompanying financial statements of the University of Western Ontario Retirement Income Fund, which comprise the statement of financial position as at December 31, 2015, the statement of changes in net assets available for retirement income payments for the year then ended, and notes, comprising a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with the Canadian accounting standards for pension plans; this includes determining that the basis of accounting is an acceptable basis for the preparation of these financial statements in the circumstances, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform an audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements present fairly, in all material respects, the financial position of the University of Western Ontario Retirement Income Fund as at December 31, 2015 and its changes in net assets available for retirement income payments for the year then ended in accordance with Canadian accounting standards for pension plans.

Chartered Professional Accountants, Licensed Public Accountants

June 7, 2016

London, Canada

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THE UNIVERSITY OF WESTERN ONTARIO

RETIREMENT INCOME FUND

Statement of Financial Position

DRAFT

December 31, 2015, with comparative information for 2014

	2015	2014
Assets		
Cash	$ 213,530	$ 2,209,109
Accrued income	-	686,819
Investment in Master Trust	-	261,378,893
Transfer from Academic plan	-	1,287,501
Transfer from Administrative plan	-	1,847,267
	213,530	267,409,589
Liabilities		
Accrued expenses	213,530	851,430
Retirement income payments payable	-	1,760,940
	213,530	2,612,370
Net assets available for retirement income payments	-	264,797,219
Retirement income fund obligations (note 2(a))	-	264,797,219
Surplus (deficit)	$ -	$ -

See accompanying notes to financial statements.

On behalf of the Board of Governors:

________________________ Chair ________________________ Secretary

THE UNIVERSITY OF WESTERN ONTARIO

RETIREMENT INCOME FUND

Statement of Changes in Net Assets Available for Retirement Income Payments

DRAFT

Year ended December 31, 2015, with comparative information for 2014

	2015	2014
Investment income (note 4)	$ 10,137,355	$ 22,656,708
Increase in net assets:		
Transfers (note 5)	1,266,164	28,819,164
Decrease in net assets:		
Benefit payments (note 6)	(276,193,202)	(32,040,113)
Administrative costs recovered by the University (note 8)	442,856	(337,765)
Fund managers' fees (note 9)	(274,435)	(271,622)
Agency fees	(113,000)	(113,000)
Custodian fees	(58,324)	(90,795)
Transaction costs	(4,633)	(28,743)
	(276,200,738)	(32,882,038)
Net increase (decrease) for the year	(264,797,219)	18,593,834
Net assets available for retirement income payments, beginning of year	264,797,219	246,203,385
Net assets available for retirement income payments, end of year	$ -	$ 264,797,219

See accompanying notes to financial statements.

THE UNIVERSITY OF WESTERN ONTARIO

RETIREMENT INCOME FUND

DRAFT Notes to Financial Statements

Year ended December 31, 2015

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1. Description of program:

The University of Western Ontario Retirement Income Fund (the "RIF" or "Fund") was a periodic payment program that provided income to former members of the University of Western Ontario Pension Plans for Academic Staff and Administrative Staff (the "University pension plans"). The Fund was initiated effective October 1, 2000 and was discontinued effective December 1, 2015. The following description of the Fund is a summary only. For more complete information, reference should be made to the Declaration of Trust, registered under the Income Tax Act, Canada, registration number RIF 1220.

In May 2015, the University entered into an agreement with Sun Life Financial to be the preferred provider of Retirement Income Funds for the University's retirees. Existing members of the RIF were requested to exit the Fund by December 2015, with the option to join the new program or transfer funds to another provider. All member assets had been redeemed from the RIF by December 31, 2015. There were no net assets remaining in the RIF at December 31, 2015 (2014 - $264,797,219).

Former members of the University pension plans were able to allocate all or a portion of their entitlement accrued under the pension plans to either a Registered Retirement Income Fund ("RRIF"), a Life Income Fund ("LIF") or a Locked in Retirement Income Fund ("LRIF"). These transfers were made directly from the pension plans or from another registered retirement vehicle trusteed by another financial institution, provided the funds originated in the University pension plans. Surviving spouses and former spouses of the former members of the University pension plans were also able to make transfers to the Fund, provided the funds originated from the University pension plans.

During the operation of the RIF, Funds were invested at the discretion of the annuitant into units of the Master Trust for the Academic and Administrative Staff Pension Plans and Retirement Income Fund Program (the "Master Trust"). Annuitants were issued units in the Master Trust based on the unit value at the end of the month in which any transfers were made. Investment income, net of custodian fees and fund managers' fees, were credited to unit holders each month.

The contributions or transfers of each annuitant were credited to an individual account in the annuitants' name and accumulated together with pro-rata net investment earnings. This account was fully vested and payable to the annuitant on termination of the retirement income fund or to the annuitants' beneficiary on death.

THE UNIVERSITY OF WESTERN ONTARIO

RETIREMENT INCOME FUND

DRAFT Notes to Financial Statements (continued)

Year ended December 31, 2015

---

1. Description of program (continued):

Upon death, the annuitant's total accumulated entitlement was equal to the amount allocated plus the pro-rata share of net investment earnings less cumulative retirement income payments that have been made. If the annuitant had a spouse at the date of death, that individual may continue to receive periodic payments or may transfer the funds to another registered retirement vehicle on a tax deferred basis. If there was a spouse at the date of death, the balance of the funds were payable to the last named beneficiary in a taxable lump sum payment. At any time, the annuitant was able to choose to transfer his or her funds to a registered retirement vehicle trusteed by another financial institution or use the funds to purchase a life annuity.

The investment policies of the Master Trust are determined jointly by the Academic and Administrative Pension Boards. The Master Trust consists of eighteen separate investment unitized funds across a diversified portfolio of pooled funds and individual securities covering various investment types.

THE UNIVERSITY OF WESTERN ONTARIO

RETIREMENT INCOME FUND

DRAFT Notes to Financial Statements (continued)

Year ended December 31, 2015

---

2. Basis of presentation:

(a) Basis of presentation:

The Fund was a participant in the University of Western Ontario Master Trust which was established by the University to facilitate the collective management of investment assets for the Pension Plans for the Academic and Administrative Staff and the Retirement Income Fund of the University.

The Fund has prepared these financial statements in accordance with Canadian accounting standards for pension plans.

In selecting or changing accounting policies that do not relate to its investment portfolio, Canadian accounting standards for pension plans require the Fund to comply (on a consistent basis) with either International Financial Reporting Standards ("IFRS") in Part I of The CPA Canada Handbook - Accounting or Canadian accounting standards for private enterprises ("ASPE") in Part II of the CPA Canada Handbook - Accounting. The Fund has chosen to comply on a consistent basis with ASPE.

The Fund was a retirement income fund with retirement income payments determined by the assets held in the annuitant's account and the performance of the Fund. Actuarial valuations were not required as the retirement income fund obligation equals the net assets available for retirement income payments.

These financial statements have been prepared by management in accordance with Canadian accounting standards for pension plans and present the information of the Fund as a separate financial reporting entity independent of the University and the Fund's annuitants.

(b) Basis of measurement:

The financial statements have been prepared on the historical cost basis, except for investments and derivative financial instruments which are measured at fair value through the statement of changes in net assets available for retirement income payments.

THE UNIVERSITY OF WESTERN ONTARIO

RETIREMENT INCOME FUND

DRAFT Notes to Financial Statements (continued)

Year ended December 31, 2015

---

3. Significant accounting policies:

(a) Revenue:

Interest earned on investments, within the pooled funds held by the Master Trust, is recorded on an accrual basis. Dividends are recorded as income, within the pooled funds held by the Master Trust, on the date the dividend is declared. Investment income is allocated each month among the annuitants' accounts under the assumption that all interfund transfers of assets occurred at the month end following the request for transfer. Transfers into the Fund are allocated to annuitants' records effective the end of the month in which the transfer occurs.

(b) Financial assets and financial liabilities:

Under a management and administration agreement for the Fund, the Academic and Administrative Staff Pension Boards of the University of Western Ontario have been delegated the responsibility for investing the Fund's assets. The assets available for investment were pooled with the Academic Staff Pension Plan and the Administrative Staff Pension Plan in the Master Trust.

Investment transactions are recorded on the trade date of the transactions, which is the date that the Master Trust becomes a party to the contractual provisions of the instrument. Transaction costs related to investments are recognized in the statement of changes in net assets available for retirement income payments when incurred.

The assets of the Master Trust are exposed to market, interest rate, exchange rate and liquidity risks. The Master Trust uses derivatives with the primary investment objective to gain market exposure on a passive basis and to manage currency risk at the portfolio level. As a policy, the Master Trust does not speculate in currencies when using derivatives. The notional amounts of these derivative financial instruments is not recognized in the financial statements when initiated. The Master Trust's present use of derivative financial instruments is restricted to pooled funds that invest in exchange traded, unleveraged, U.S. and foreign equity index futures, currency forwards and swaps. The derivative financial instruments are recorded at fair value as part of investments in the statement of net assets available for retirement income payments.

THE UNIVERSITY OF WESTERN ONTARIO

RETIREMENT INCOME FUND

DRAFT Notes to Financial Statements (continued)

Year ended December 31, 2015

---

3. Significant accounting policies (continued):

(b) Financial assets and financial liabilities (continued):

Investments are stated at their fair value. The change in the difference between the fair value and cost of investments at the beginning and end of each year is reflected in the statement of changes in net assets available for retirement income payments as net unrealized change in fair value of investments. On sale of an investment, the difference between the carrying amount of the asset and consideration received is recognized in the statement of changes in net assets available for retirement income payments as a net realized gain (loss) on sale of investments.

All other financial assets and liabilities, being cash, accrued income, accrued expenses and retirement income payments payable are measured at amortized cost.

(c) Fair value measurement:

Fair value is the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction on the measurement date.

In determining fair value, the Master Trust has early adopted the guidance in IFRS 13, Fair Value Measurement ("IFRS 13"), in Part I of the CPA Canada Handbook - Accounting. As allowed under IFRS 13, if an asset or a liability measured at fair value has a bid and an ask price, the price within the bid-ask spread that is the most representative of fair value in the circumstances shall be used to measure fair value. The Master Trust uses closing market price as a practical expedient for fair value measurement.

When available, the Master Trust measures the fair value of an instrument using quoted prices in an active market for that instrument. A market is regarded as active if quoted prices are readily and regularly available and represent actual and regularly occurring market transactions on an arm's length basis.

If a market for a financial instrument is not active, then the Master Trust establishes fair value using a valuation technique. Valuation techniques include using recent arm's length transactions between knowledgeable, willing parties (if available), reference to the current fair value of other instruments that are substantially the same, discounted cash flow analyses and option pricing models.

THE UNIVERSITY OF WESTERN ONTARIO

RETIREMENT INCOME FUND

DRAFT Notes to Financial Statements (continued)

Year ended December 31, 2015

---

3. Significant accounting policies (continued):

(c) Fair value measurement (continued):

The best evidence of the fair value of a financial instrument at initial recognition is the transaction price, i.e. the fair value of the consideration given or received, unless the fair value of that instrument is evidenced by comparison with other observable current market transactions in the same instrument or based on a valuation technique whose variables include only data from observable markets. When transaction price provides the best evidence of fair value at initial recognition, the financial instrument is initially measured at the transaction price and any difference between this price and the value initially obtained from a valuation model is subsequently recognized in profit or loss on an appropriate basis over the life of the instrument but not later than when the valuation is supported wholly by observable market data or the transaction is closed out.

Within the Master Trust all changes in fair value, other than interest and dividend income and expense, are recognized in the statement of changes in net assets available for retirement income payments as part of the net unrealized change in fair value of investments. Fair values of the underlying investments held within the pooled funds are determined as follows:

(i) Publicly traded bonds, debentures and equities are valued at published closing market quotations where available.

(ii) Short-term notes, treasury bills and term deposits maturing within a year are stated at cost, which together with accrued interest income approximates fair value given the short-term nature of these investments.

(iii) Guaranteed investment certificates, term deposits maturing after a year, mortgages and real estate debentures are valued at the present value of estimated future cash flows discounted at interest rates in effect on the last business day of the year for investments of a similar type, quality and maturity.

(iv) Units in pooled funds are valued based on published unit values supplied by the pooled fund administrator, which represents the Plan's proportionate share of underlying net assets at fair values determined using closing market prices.

(v) Illiquid securities are valued based on a calculation performed by the investment manager using a discounted cash flow model.

THE UNIVERSITY OF WESTERN ONTARIO

RETIREMENT INCOME FUND

DRAFT Notes to Financial Statements (continued)

Year ended December 31, 2015

---

3. Significant accounting policies (continued):

(d) Foreign currency translation:

These financial statements are presented in Canadian dollars, which is the Fund's functional currency. Transactions in foreign currencies are accounted for using the exchange rates in effect at the transaction date. At year end, investments in foreign currencies are accounted for at the rates of exchange in effect at year end and the resulting unrealized gains or losses are included in the net unrealized change in fair value of investments.

(e) Capital risk management:

The Fund defines capital as the net assets available for retirement income payments. The capital is managed individually by the participating annuitants of the Fund. The payments an annuitant receives under this fund are not predetermined. Income payments are based on the assets within the annuitants individual retirement plan account. The annuitant has the ability to determine which investments his/her transfers are invested in from a selection of the pooled investment funds as described in note 1. This allows the individual to create a portfolio suited to his/her own investment goals and tolerance for risk. The amount of money in an individual’s account is based on the amount of transfers into their account over the years and the earnings these investments have made.

The main use of net assets is for retirement income payments to annuitants. There are no regulatory requirements relating to the level of net assets to be maintained by the Fund. There is no change in the way capital is managed in the current year.

(f) Related party transactions:

Related party transactions with the University, in the form of administrative cost recoveries, are in the normal course of operations and are measured at the exchange amount, which is the amount of consideration established and agreed to by both parties.

(g) Estimates:

The preparation of financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of changes in net assets available for retirement income payments during the year. Actual amounts could differ from these estimates.

THE UNIVERSITY OF WESTERN ONTARIO

RETIREMENT INCOME FUND

DRAFT Notes to Financial Statements (continued)

Year ended December 31, 2015

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4. Investment income:

The investment income of the Master Trust consists of the following:

	2015	2014
Interest	$ 1,314,420	$ 2,373,694
Dividends	7,943,546	9,130,080
Net realized gain on sale of investments	125,439,044	94,523,290
Net unrealized change in fair value of investments	(56,593,345)	16,224,240
	$ 78,103,665	$122,251,304
Allocated to:		
Academic Staff Pension Plan	$ 37,879,461	$ 58,616,314
Administrative Staff Pension Plan	30,086,849	40,978,282
Retirement Income Fund	10,137,355	22,656,708
	$ 78,103,665	$122,251,304

5. Transfers:

Total transfers received or receivable by the Fund from the University pension plans are as follows:

	2015	2014
From the:		
Academic Staff Pension Plan	$ 700,000	$ 23,804,242
Administrative Staff Pension Plan	566,164	5,014,922
	$ 1,266,164	$ 28,819,164

Annuitants are allowed to redistribute past transfers among the investment funds. They may also choose which investment fund(s) that periodic retirement income payments should be made from.

THE UNIVERSITY OF WESTERN ONTARIO

RETIREMENT INCOME FUND

DRAFT Notes to Financial Statements (continued)

Year ended December 31, 2015

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6. Benefit payments:

	2015	2014
Retirement benefit payments	$ 16,148,878	$ 17,615,786
Termination benefit payments	259,019,978	10,718,959
Death benefit payments	1,024,346	3,705,368
	$276,193,202	$ 32,040,113

7. Income taxes:

The Fund was governed by the Income Tax Act, Canada. Provided that all assets were invested and administered as qualified investments for Registered Retirement Income Funds, the Fund was not liable for any income taxes.

THE UNIVERSITY OF WESTERN ONTARIO

RETIREMENT INCOME FUND

DRAFT Notes to Financial Statements (continued)

Year ended December 31, 2015

8. Administrative costs recovered by the University:

Non-investment administrative expenses for participants of the Fund are incurred by the University on behalf of the Fund and are funded by various methods as follows:

(i) A portion of the costs are recovered, by the University, from annuitants through monthly redemptions of investments from the individual annuitants' accounts.

(ii) All remaining costs are paid by the University out of the corporate benefits budget.

The following summarizes the total non-investment administrative expenses incurred by the University for the Fund and the recovery of those costs.

	2015	2014
Administrative expenses incurred:		
Salaries and benefits	$ 169,514	$ 165,468
Other professional fees	131,508	124,030
HST accrual on deemed services	41,720	34,286
Audit fees	6,282	7,329
	349,024	331,113
Recoveries:		
Expenses (recovered) paid by the University out of corporate benefits budget	791,880	(6,652)
Administrative costs (paid) recovered by the University	(442,856)	337,765
	349,024	331,113
	$ -	$ -

As at December 31, 2015, administrative costs to be recovered by the University of $185,280 (2014 - $628,136) have been accrued but not yet paid.

9. Fund managers' fees:

Fund managers' fees include any fees paid by the custodian to the various fund managers. Fund managers' fees of certain pooled funds are netted against the unit value of those pooled funds.

Financial Statements of

THE UNIVERSITY OF WESTERN ONTARIO

MASTER TRUST FOR THE PENSION PLANS FOR THE ACADEMIC AND ADMINISTRATIVE STAFF AND THE RETIREMENT INCOME FUND

Year ended December 31, 2015

KPMG LLP
140 Fullarton Street Suite 1400
London, ON N6A 5P2
Canada

Telephone (519) 672-4880
Fax (519) 672-5684
Internet www.kpmg.ca

INDEPENDENT AUDITORS' REPORT

To the Academic Staff Pension Board and the Administrative Staff Pension Board of the University of Western Ontario

We have audited the accompanying financial statements of the University of Western Ontario Master Trust for the Pension Plans for the Academic and Administrative Staff and the Retirement Income Fund, which comprise the statement of net assets available for benefits and retirement income payments as at December 31, 2015, the statement of changes in net assets available for benefits and retirement income payments for the year then ended, and notes, comprising a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Canadian accounting standards for pension plans; this includes determining that the basis of accounting is an acceptable basis for the preparation of these financial statements in the circumstances, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform an audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements present fairly, in all material respects, the statement of net assets available for benefits and retirement income payments of the University of Western Ontario Master Trust for the Pension Plans for the Academic and Administrative Staff and the Retirement Income Fund as at December 31, 2015 and its changes in net assets available for benefits and retirement income payments for the year then ended in accordance with Canadian accounting standards for pension plans.

KPMG LLP

Chartered Professional Accountants, Licensed Public Accountants

May 11, 2016

London, Canada

THE UNIVERSITY OF WESTERN ONTARIO

MASTER TRUST FOR THE PENSION PLANS FOR THE ACADEMIC AND ADMINISTRATIVE STAFF AND THE RETIREMENT INCOME FUND

Statement of Net Assets Available for Benefits and Retirement Income Payments

December 31, 2015, with comparative information for 2014

	2015	2014
Assets		
Cash	$ 11,539,777	$ 16,655,256
Accrued income	1,824,896	4,104,816
Investments (note 4(a))	1,094,072,865	1,333,151,174
	1,107,437,538	1,353,911,246
Liabilities		
Accrued expenses	3,056,516	2,859,676
Benefits and retirement income payments payable	9,397,299	12,065,242
	12,453,815	14,924,918
Net assets available for benefits and retirement income payments	$1,094,983,723	$1,338,986,328

See accompanying notes to financial statements.

On behalf of the Joint Pension Board:

______________________ Chair   L. Koza ______________________ Pension Board Secretariat

THE UNIVERSITY OF WESTERN ONTARIO

MASTER TRUST FOR THE PENSION PLANS FOR THE ACADEMIC AND ADMINISTRATIVE STAFF AND THE RETIREMENT INCOME FUND

Statement of Changes in Net Assets Available for Benefits and Retirement Income Payments

Year ended December 31, 2015, with comparative information for 2014

	2015	2014
Investment income(note 4(b)):		
Investment income	$ 9,257,966	$ 11,503,774
Net realized gain on sale of investments	125,439,044	94,523,290
Net unrealized change in fair value of investments	(56,593,345)	16,224,240
	78,103,665	122,251,304
Increase in net assets:		
Contributions (note 7)	53,090,258	51,415,471
Transfers in to plans and fund	3,659,882	2,057,025
	56,750,140	53,472,496
Decrease in net assets:		
Benefit payments (note 8)	(375,997,320)	(99,303,612)
Fund managers' fees (note 9)	(2,134,298)	(1,385,400)
Administrative costs recovered by the University (note10)	(122,179)	(897,576)
Custodian fees	(453,581)	(463,100)
Agency fees	(113,000)	(113,000)
Transaction costs	(36,032)	(146,603)
	(378,856,410)	(102,309,291)
Net increase (decrease) for the year	$ (244,002,605)	$ 73,414,509
Allocation of net increase (decrease) for the year:		
Academic Staff Pension Plan	$ 2,315,367	$ 25,004,686
Administrative Staff Pension Plan	15,344,479	32,950,757
Retirement Income Fund	(261,662,451)	15,459,066
	$ (244,002,605)	$ 73,414,509
Net assets available for benefits and retirement income payments, beginning of year:		
Academic Staff Pension Plan	$ 616,403,556	$ 591,398,870
Administrative Staff Pension Plan	460,920,321	427,969,564
Retirement Income Fund	261,662,451	246,203,385
	$1,338,986,328	$1,265,571,819
Net assets available for benefits and retirement income payments, end of year:		
Academic Staff Pension Plan	$ 618,718,923	$ 616,403,556
Administrative Staff Pension Plan	476,264,800	460,920,321
Retirement Income Fund	-	261,662,451
	$1,094,983,723	$1,338,986,328

See accompanying notes to financial statements.

THE UNIVERSITY OF WESTERN ONTARIO

MASTER TRUST FOR THE PENSION PLANS FOR THE ACADEMIC AND ADMINISTRATIVE STAFF AND THE RETIREMENT INCOME FUND

Notes to Financial Statements

Year ended December 31, 2015

---

1. Description of plan:

These financial statements of The University of Western Ontario Master Trust (the "Master Trust") present the combined activity of the Pension Plans for the Academic and Administrative Staff and the Retirement Income Fund (the "Plans" and "Fund", or "RIF" respectively). The following description of the Plans and Fund is a summary only. For more complete information, reference should be made to the plan agreements registered under the Income Tax Act, Canada, registration numbers 0358747, 0312710 and RIF 1220.

The Plans are primarily contributory defined contribution plans (some members have a defined benefit guarantee) for members of the Academic and Administrative staff of The University of Western Ontario (the "University") and other participating employers. The Plans are sponsored by the University and the legal plan Administrators are the Academic Staff Pension Board and the Administrative Staff Pension Board (the "Pension Boards"). The Pension Boards are independent of the University and are responsible for selecting the Plans' custodian, investment managers, auditors and professional advisors. The Fund is managed by the University. The Northern Trust Company, Canada ("Northern Trust") is the custodian of each of the funds and trustee to the RIF.

Under the terms of the pension plans, members, the University and other participating employers contribute to the Plans. Upon retirement, death or termination of employment, an employee's total accumulated entitlement is equal to the amounts he or she has contributed and those that have been contributed on his or her behalf plus the pro-rata share of net investment earnings. On retirement, the employee's pension is provided through the purchase of annuity contracts from life insurance companies selected by the Administrators of the Plans, or at the direction of the member, the funds may be transferred to a registered retirement savings plan ("RRSP") or a retirement income fund ("RIF"). Locked in funds, which are transferred, must go to a locked in retirement account ("LIRA"), a life income fund ("LIF") or a locked in retirement income fund ("LRIF"). The University may purchase deferred annuities on behalf of members eligible for retirement under the Plans. The assets related to these purchases are transferred at the time of purchase.

In May 2015, the University entered into an agreement with Sun Life Financial to be the preferred provider of Retirement Income Funds for the University's retirees. Existing members of the RIF were requested to exit the Fund by December 2015, with the option to join the new program or transfer funds to another provider. All member assets had been redeemed from the RIF by December 31, 2015. There were no net assets remaining in the RIF at December 31, 2015 (2014 - 264,797,219).

THE UNIVERSITY OF WESTERN ONTARIO

MASTER TRUST FOR THE PENSION PLANS FOR THE ACADEMIC AND ADMINISTRATIVE STAFF AND THE RETIREMENT INCOME FUND
Notes to Financial Statements (continued)

Year ended December 31, 2015

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1. Description of plan (continued):

Certain members of the Plans are "special members" and as such are entitled to a minimum defined benefit guarantee. A special member of the Academic Pension Plan is a member who was an employee of the University and who attained age 45 on July 1, 1970. A special member of the Administrative Pension Plan is a member who has been continuously employed by the University since May 1, 1974. Special members receive, on retirement, the greater of the pension provided on a defined contribution basis and the pension payable under the defined benefit provisions that were in effect before the Plans' designs changed to defined contribution. All special members of the Academic Pension Plan, who are entitled to a minimum pension, have now retired and are in receipt of monthly pension payments from the Plan's general account.

In November 2015, the Pension Board approved a group annuity buy-out plan for the existing defined benefit payment recipients from both Plans. Canada Life Assurance (part of the Great West Life group of companies) established continued payments under a group annuity contract for all special members in receipt of monthly pension payments, beginning January 1, 2016.

Contributions and transfers are invested by the members and annuitants, at their option, into units of the Master Trust. The investment policies of the Master Trust are determined jointly by the Academic and Administrative Staff Pension Boards. The Master Trust consists of eighteen separate investment unitized funds as follows:

- Money Market Fund
- Target Date Fund 2016
- Target Date Fund 2018
- Target Date Fund 2020
- Balanced Income Fund
- Balanced Growth Fund
- Diversified Bond Fund
- Canadian Bond Fund
- Canadian Long Term Bond Fund
- Immunized Bond Fund - Administrative
- Immunized Bond Fund - Academic
- Diversified Equity Fund
- Canadian Equity Fund
- U.S. Equity Hedged Fund
- U.S. Equity Unhedged Fund
- Non-North American Equity Fund
- Socially Responsible Global Equity Fund
- Liquidating Trust

THE UNIVERSITY OF WESTERN ONTARIO

MASTER TRUST FOR THE PENSION PLANS FOR THE ACADEMIC AND ADMINISTRATIVE STAFF AND THE RETIREMENT INCOME FUND
Notes to Financial Statements (continued)

Year ended December 31, 2015

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1. Description of plan (continued):

The Balanced Income Fund and the Balanced Growth Fund are portfolios that hold units of the Diversified Bond Fund and Diversified Equity Fund. They were established in September, 2001.

The Master Trust holds units in each of the eighteen investment pooled funds. These pooled funds contain investments in units of external pooled funds and individual securities.

Members and annuitants are issued units based on the unit value at the end of the month in which a contribution was made. Investment income, net of custodian fees and fund managers' fees, are credited to unit holders each month.

Fund units are redeemed at net asset value per unit at the end of the month in which the request for redemption is made by the member. The redemption amount is paid in the following month and includes interest at prevailing short term deposit rates of 0% (2014 - 0%) for the interim period.

The contributions or transfers of each member or annuitant are credited to an individual account in the members' or annuitants' name and accumulated together with pro-rata net investment earnings. This account is fully vested and payable to the member or annuitant on termination of employment or termination of the retirement income fund, or to the members' or annuitants' beneficiary on death.

Members or annuitants can choose, as frequently as each month, the proportion of his or her personal account which is to be invested in any of the active investment funds, subject to limitations imposed on special members and members of the RIF Program. The valuation of each investment fund is established by the fund manager at the end of each month based on policies set by the Pension Boards.

2. Basis of presentation:

(a) Basis of presentation:

These financial statements have been prepared by management in accordance with Canadian accounting standards for pension plans, since these financial statements are primarily prepared for filing with the Financial Services Commission of Ontario, in connection with the requirements of the Plans.

In selecting or changing accounting policies that do not relate to its investment portfolio or pension obligations, Canadian accounting standards for pension plans require the Master Trust to comply (on a consistent basis) with either International Financial Reporting Standards ("IFRS") in Part I of The CPA Canada Handbook - Accounting or Canadian accounting standards for private enterprises ("ASPE") in Part II of the CPA Canada Handbook - Accounting. The Master Trust has chosen to comply on a consistent basis with ASPE.

THE UNIVERSITY OF WESTERN ONTARIO

MASTER TRUST FOR THE PENSION PLANS FOR THE ACADEMIC AND ADMINISTRATIVE STAFF AND THE RETIREMENT INCOME FUND
Notes to Financial Statements (continued)

Year ended December 31, 2015

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2. Basis of presentation (continued):

(a) Basis of presentation (continued):

These financial statements have been prepared by management and are primarily produced for filing with the Financial Services Commission of Ontario in connection with the requirements of the Plans. They present the information of the Master Trust as a separate financial reporting entity independent of the University and pension plan members and annuitants of the RIF.

These financial statements of the Master Trust do not purport to show the adequacy of the Plans' assets to meet their pension obligations. Such an assessment requires additional information, such as the Plans' actuarial reports and information about the University's financial health.

(b) Basis of measurement:

The financial statements have been prepared on the historical cost basis, except for investments and derivative financial instruments which are measured at fair value through the statement of changes in net assets available for benefits and retirement income payments.

3. Significant accounting policies:

(a) Revenue:

Interest earned on investments, within the pooled funds held by the Master Trust, is recorded on an accrual basis. Dividends are recorded as income, within the pooled funds held by the Master Trust, on the date the dividend is declared. Investment income is allocated each month among the members' and annuitants' accounts under the assumption that all interfund transfers of assets occurred at the month end following the request for transfer. All contributions from the University and the members are reflected in the year in which they are due. Any transfers from annuitants are reflected in the year in which they are due. Transfers into the pension plans and RIF are allocated to members' and annuitants' records effective the end of the month in which the transfer occurs.

THE UNIVERSITY OF WESTERN ONTARIO

MASTER TRUST FOR THE PENSION PLANS FOR THE ACADEMIC AND ADMINISTRATIVE STAFF AND THE RETIREMENT INCOME FUND
Notes to Financial Statements (continued)

Year ended December 31, 2015

---

3. Basis of presentation (continued):

(b) Financial assets and financial liabilities:

Investment transactions are recorded on the trade date of the transactions, which is the date that the Master Trust becomes a party to the contractual provisions of the instrument. Transaction costs related to investments are recognized in the statement of changes in net assets available for benefits and retirement income payments when incurred.

The assets of the Master Trust are exposed to market, interest rate, exchange rate and liquidity risks. The Master Trust uses derivatives with the primary investment objective to gain market exposure on a passive basis and to manage currency risk at the portfolio level. As a policy, the Master Trust does not speculate in currencies when using derivatives. The notional amounts of these derivative financial instruments is not recognized in the financial statements when initiated. The Master Trust's present use of derivative financial instruments is restricted to pooled funds that invest in exchange traded, unleveraged, U.S. and foreign equity index futures, currency forwards and swaps. The derivative financial instruments are recorded at fair value as part of investments in the statement of net assets available for benefits and retirement income payments.

Investments are stated at their fair value. The change in the difference between the fair value and cost of investments at the beginning and end of each year is reflected in the statement of changes in net assets available for benefits and retirement income payments as net unrealized change in fair value of investments. On sale of an investment, the difference between the carrying amount of the asset and consideration received is recognized in the statement of changes in net assets available for benefits and retirement income payments as a net realized gain (loss) on sale of investments.

All other financial assets and liabilities, being cash, accrued income, accrued expenses and benefits and retirement income payments payable are measured at amortized cost.

THE UNIVERSITY OF WESTERN ONTARIO

MASTER TRUST FOR THE PENSION PLANS FOR THE ACADEMIC AND ADMINISTRATIVE STAFF AND THE RETIREMENT INCOME FUND
Notes to Financial Statements (continued)

Year ended December 31, 2015

---

3. Basis of presentation (continued):

(c) Fair value measurement:

Fair value is the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction on the measurement date.

In determining fair value, the Master Trust has adopted the guidance in IFRS 13, Fair Value Measurement ("IFRS 13"), in Part I of the CPA Canada Handbook - Accounting. As allowed under IFRS 13, if an asset or a liability measured at fair value has a bid and an ask price, the price within the bid-ask spread that is the most representative of fair value in the circumstances shall be used to measure fair value. The Master Trust uses closing market price as a practical expedient for fair value measurement.

When available, the Master Trust measures the fair value of an instrument using quoted prices in an active market for that instrument. A market is regarded as active if quoted prices are readily and regularly available and represent actual and regularly occurring market transactions on an arm's length basis.

If a market for a financial instrument is not active, then the Master Trust establishes fair value using a valuation technique. Valuation techniques include using recent arm's length transactions between knowledgeable, willing parties (if available), reference to the current fair value of other instruments that are substantially the same, discounted cash flow analyses and option pricing models.

The best evidence of the fair value of a financial instrument at initial recognition is the transaction price, i.e. the fair value of the consideration given or received, unless the fair value of that instrument is evidenced by comparison with other observable current market transactions in the same instrument or based on a valuation technique whose variables include only data from observable markets. When transaction price provides the best evidence of fair value at initial recognition, the financial instrument is initially measured at the transaction price and any difference between this price and the value initially obtained from a valuation model is subsequently recognized in profit or loss on an appropriate basis over the life of the instrument but not later than when the valuation is supported wholly by observable market data or the transaction is closed out.

THE UNIVERSITY OF WESTERN ONTARIO

MASTER TRUST FOR THE PENSION PLANS FOR THE ACADEMIC AND ADMINISTRATIVE STAFF AND THE RETIREMENT INCOME FUND
Notes to Financial Statements (continued)

Year ended December 31, 2015

---

3. Basis of presentation (continued):

(c) Fair value measurement (continued):

All changes in fair value, other than interest and dividend income and expense, are recognized in the statement of changes in net assets available for benefits and retirement income payments as part of the net unrealized change in fair value of investments. Fair values of the underlying investments held within the pooled funds are determined as follows:

(i) Publicly traded bonds, debentures and equities are valued at published closing market quotations where available.

(ii) Short-term notes, treasury bills and term deposits maturing within a year are stated at cost, which together with accrued interest income approximates fair value given the short-term nature of these investments.

(iii) Guaranteed investment certificates, term deposits maturing after a year, mortgages and real estate debentures are valued at the present value of estimated future cash flows discounted at interest rates in effect on the last business day of the year for investments of a similar type, quality and maturity.

(iv) Units in pooled funds are valued based on published unit values supplied by the pooled fund administrator, which represents the Master Trust's proportionate share of underlying net assets at fair values determined using closing market prices.

(v) Illiquid securities are valued based on a calculation performed by the investment manager using a discounted cash flow model.

(vi) The equity investment in 2333635 Ontario Inc., is recorded at the net assets of the entity, which approximates fair value.

THE UNIVERSITY OF WESTERN ONTARIO

MASTER TRUST FOR THE PENSION PLANS FOR THE ACADEMIC AND ADMINISTRATIVE STAFF AND THE RETIREMENT INCOME FUND
Notes to Financial Statements (continued)

Year ended December 31, 2015

---

3. Basis of presentation (continued):

(d) Foreign currency translation:

These financial statements are presented in Canadian dollars, which is the Master Trust's functional currency. Transactions in foreign currencies are accounted for using the exchange rates in effect at the transaction date. At year end, investments in foreign currencies are accounted for at the rates of exchange in effect at year end and the resulting unrealized gains or losses are included in the net unrealized change in fair value of investments.

(e) Capital risk management:

The capital of the Master Trust is represented by the net assets available for benefits and retirement income payments. The capital is managed individually by the participating members of the Plans and annuitants of the RIF, via the investment pooled funds outlined in note 1. The members manage their individual account balance by monitoring the asset allocation among the offered investments for their individual risk tolerances, time horizons and expectations for investment returns.

The benefits a retiree or employee receives at retirement or on termination are not predetermined. Income distribution or benefits are based on the assets within the retiree or member individual retirement plan account at the time they retire. Under this Plan, the member determines which investments his/her contributions, along with the contributions of the University, are invested in from a selection of investment options available within the Plan. This allows the member to create a portfolio suited to his/her own investment goals and tolerance for risk. The amount of money a member has in the group plan account at retirement is based on the amount of contributions made over the years and the earnings these investments have made.

THE UNIVERSITY OF WESTERN ONTARIO
MASTER TRUST FOR THE PENSION PLANS FOR THE ACADEMIC AND ADMINISTRATIVE STAFF AND THE RETIREMENT INCOME FUND
Notes to Financial Statements (continued)

Year ended December 31, 2015

---

3. Basis of presentation (continued):

(e) Capital risk management (continued):

For special members, the objective of the Plan is to sustain a certain level of net assets in order to meet the pension obligations of the University. To meet this obligation the University invests primarily in the Immunized Bond Fund.

Increases in net assets of the Master Trust are a direct result of investment income generated by investments held in the Master Trust and contributions into the Master Trust by members and by the University. No contributions remain past due at December 31, 2015.

The net assets of the Plans are invested in accordance with the Statement of Investment Policies and Procedures (the "SIPP") for the Pension Plans for Members of the Academic and Administrative Staff, which is reviewed annually by the Pension Boards. The SIPP was last amended in March, 2015, to update for changes in investment managers and the actuary. The SIPP enables the engagement of knowledgeable investment managers who are charged with the responsibility of investing the pooled funds available to the members, in accordance with the approved SIPP. Comprehensive reviews relating to the Plans are conducted at meetings of the Pension Board, which includes measurement of returns, comparison of returns to appropriate benchmarks, evaluation of investment managers, contributions and allocation decisions of members, and returns and risk analysis.

Although there are no regulatory requirements relating to the level of net assets and/or funding to be maintained by the Master Trust, the Master Trust does file financial statements with the Financial Services Commission of Ontario in connection with the requirements of the Plans. There is no change in the way capital is managed this year.

(f) Related party transactions:

Related party transactions with the University, in the form of employer contributions and administrative cost recoveries, are in the normal course of operations and are measured at the exchange amount, which is the amount of consideration established and agreed to by both parties.

(g) Estimates:

The preparation of financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of changes in net assets available for benefits and retirement income payments during the year. Actual amounts could differ from these estimates.

THE UNIVERSITY OF WESTERN ONTARIO

MASTER TRUST FOR THE PENSION PLANS FOR THE ACADEMIC AND ADMINISTRATIVE STAFF AND THE RETIREMENT INCOME FUND
Notes to Financial Statements (continued)

Year ended December 31, 2015

4. Investments and investment income:

(a) The investments of the Master Trust are as follows:

	2015		2014	
	Cost	Market	Cost	Market
Balanced Growth Fund	$122,901,746	$180,936,398	$112,939,157	$162,643,632
Balanced Income Fund	51,556,817	58,557,863	42,977,612	57,122,971
Canadian Bond Fund	9,132,089	13,141,025	52,801,751	74,160,715
Canadian Equity Fund	51,788,659	55,700,992	68,933,663	83,450,666
Canadian Long Term Bond Fund	12,835,818	13,937,470	22,748,816	25,163,926
Diversified Bond Fund	122,519,194	195,107,447	144,404,642	200,799,766
Diversified Equity Fund	326,140,601	403,467,994	387,776,765	511,318,615
Immunized Bond Fund - Academic	570,506	708,893	2,628,394	3,185,991
Immunized Bond Fund - Administrative	172,025	240,229	1,095,299	1,478,218
Liquidating Trust	9,120,629	9,441,947	13,677,410	14,241,863
Money Market Fund	49,160,698	49,179,627	57,923,264	57,932,422
Non-North American Equity Fund	18,032,076	22,053,300	16,519,313	17,235,811
Socially Responsible Global Equity Fund	6,652,458	7,386,513	5,846,574	6,789,498
Target Date Fund 2016	10,585,989	11,508,158	27,975,731	30,303,931
Target Date Fund 2018	8,639,406	9,391,729	18,352,916	19,515,685
Target Date Fund 2020	2,818,337	3,030,882	5,639,830	5,826,946
U.S. Equity Hedged Fund	22,815,032	22,056,746	22,260,868	23,451,085
U.S. Equity Unhedged Fund	21,418,817	38,225,652	24,843,855	38,529,433
	$ 846,860,897	$1,094,072,865	$1,029,345,860	$1,333,151,174

THE UNIVERSITY OF WESTERN ONTARIO

MASTER TRUST FOR THE PENSION PLANS FOR THE ACADEMIC AND ADMINISTRATIVE STAFF AND THE RETIREMENT INCOME FUND
Notes to Financial Statements (continued)

Year ended December 31, 2015

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4. Investments and investment income (continued):

(a) (continued):

The underlying investments of the Master Trust are categorized as follows:

	2015		2014	
	Cost	Market	Cost	Market
Cash equivalents	$ 49,160,700	$ 49,179,626	$ 57,923,264	$ 57,932,422
Fixed income securities	249,127,492	351,467,860	353,088,172	463,170,513
Canadian equities	52,185,460	71,518,861	61,296,198	89,847,452
Pooled funds	496,387,245	621,906,518	557,038,226	722,200,787
	$846,860,897	$1,094,072,865	$1,029,345,860	$1,333,151,174
Allocated to:				
Academic Staff Pension Plan	$480,159,428	$619,695,499	$472,770,320	$614,210,010
Administrative Staff Pension Plan	366,701,469	474,377,366	350,725,006	457,562,271
Retirement Income Fund	-	-	205,850,534	261,378,893
	$846,860,897	$1,094,072,865	$1,029,345,860	$1,333,151,174

THE UNIVERSITY OF WESTERN ONTARIO

MASTER TRUST FOR THE PENSION PLANS FOR THE ACADEMIC AND ADMINISTRATIVE STAFF AND THE RETIREMENT INCOME FUND
Notes to Financial Statements (continued)

Year ended December 31, 2015

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4. Investments and investment income (continued):

(b) The investment income of the Master Trust consists of the following:

	2015	2014
Interest	$ 1,314,420	$ 2,373,694
Dividends	7,943,546	9,130,080
Net realized gain on sale of investments	125,439,044	94,523,290
Net unrealized change in fair value of investments	(56,593,345)	16,224,240
	$ 78,103,665	$122,251,304
Allocated to:		
Academic Staff Pension Plan	$ 37,879,461	$ 58,616,314
Administrative Staff Pension Plan	30,086,849	40,978,282
Retirement Income Fund	10,137,355	22,656,708
	$ 78,103,665	$122,251,304

THE UNIVERSITY OF WESTERN ONTARIO

MASTER TRUST FOR THE PENSION PLANS FOR THE ACADEMIC AND ADMINISTRATIVE STAFF AND THE RETIREMENT INCOME FUND
Notes to Financial Statements (continued)

Year ended December 31, 2015

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4. Investments and investment income (continued):

(c) The maturity dates of individual debt securities of the Master Trust consists of the following:

2015

	One year or less	One to five years	Five to ten years	More than ten years	No maturity date	Total $	Total %
Short-term:							
Individual holdings	$ 65,480,800	$ -	$ -	$ -	$ -	$ 65,480,800	17.7
Bonds and debentures:							
Individual holdings Canadian:							
Government bonds	11,835,518	36,740,208	16,407,569	31,787,594	-	96,770,889	26.2
Corporate bonds	1,588,342	12,710,802	6,584,022	10,926,578	-	31,809,744	8.6
Individual holdings Global:							
Government bonds	3,048,526	13,976,706	47,237,988	30,553,869	2,159,773	96,976,862	26.2
Corporate bonds	1,164,095	31,582,131	23,627,859	22,168,406	-	78,542,491	21.3
	$ 83,117,281	$ 95,009,847	$ 93,857,438	$ 95,436,447	$ 2,159,773	$369,580,786	100.0
Percentage of total	22.5%	25.7%	25.4%	25.8%	0.6%	100.0%	

THE UNIVERSITY OF WESTERN ONTARIO

MASTER TRUST FOR THE PENSION PLANS FOR THE ACADEMIC AND ADMINISTRATIVE STAFF AND THE RETIREMENT INCOME FUND

Notes to Financial Statements (continued)

Year ended December 31, 2015

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4. Investments and investment income (continued):

(c) (continued):

2014

	One year or less	One to five years	Five to ten years	More than ten years	No maturity date	Total $	Total %
Short-term:							
Individual holdings	$ 61,970,401	$ -	$ -	$ -	$ -	$ 61,970,401	13.0
Bonds and debentures:							
Individual holdings Canadian:							
Government bonds	1,331,057	89,636,372	33,265,155	55,387,855	-	179,620,439	37.7
Corporate bonds	20,629,521	19,454,265	11,217,114	18,842,597	-	70,143,497	14.7
Individual Holdings Global:							
Government bonds	2,050,864	32,004,166	40,708,476	24,229,509	6,033,382	105,026,397	22.0
Corporate bonds	935,139	16,470,345	24,997,199	17,422,085	-	59,824,768	12.6
	$ 86,916,982	$157,565,148	$110,187,944	$115,882,046	$ 6,033,382	$476,585,502	100.0
Percentage of total	18.2%	33.1%	23.1%	24.3%	1.3%	100.0%	

THE UNIVERSITY OF WESTERN ONTARIO

MASTER TRUST FOR THE PENSION PLANS FOR THE ACADEMIC AND ADMINISTRATIVE STAFF AND THE RETIREMENT INCOME FUND
Notes to Financial Statements (continued)

Year ended December 31, 2015

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4. Investments and investment income (continued):

(d) The weighted average market yield rates for individual debt securities of the Master Trust consists of the following:

2015

	One year or less	One to five years	Five to ten years	More than ten years
Short-term:				
Individual holdings	0.7 %	-	-	-
Bonds and debentures:				
Individual holdings:				
Canadian government bonds	1.8 %	1.3 %	1.9 %	2.8 %
Canadian corporate bonds	1.1 %	2.3 %	3.5 %	3.9 %
Global government bonds	5.7 %	2.3 %	1.9 %	2.8 %
Global corporate bonds	1.3 %	2.5 %	3.8 %	4.4 %

2014

	One year or less	One to five years	Five to ten years	More than ten years
Short-term:				
Individual holdings	0.1 %	-	-	-
Bonds and debentures:				
Individual holdings:				
Canadian government bonds	1.0 %	0.9 %	1.4 %	2.5 %
Canadian corporate bonds	0.2 %	1.8 %	3.0 %	3.6 %
Global government bonds	1.1 %	1.3 %	1.3 %	2.6 %
Global corporate bonds	- %	2.2 %	3.3 %	4.0 %

THE UNIVERSITY OF WESTERN ONTARIO

MASTER TRUST FOR THE PENSION PLANS FOR THE ACADEMIC AND ADMINISTRATIVE STAFF AND THE RETIREMENT INCOME FUND
Notes to Financial Statements (continued)

Year ended December 31, 2015

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5. Individually significant investments:

The following information is provided in respect of individual investments in the Master Trust with a cost or market value in excess of 1% of the cost or fair value of the Master Trust as at December 31, 2015, as required by the Pension Benefits Act (Ontario).

The Master Trust consists of eighteen separate investment pools as described in note 1 and as disclosed in note 4(a). Within these pools some investments are in units of pooled funds and some investments are in individual securities.

	Cost	Market
UWO Alliance Global Plus Bond Fund	$130,818,574	$182,619,451
Greystone Canadian Equity Fund	73,249,412	71,146,529
Connor Clark & Lunn Core Fund	72,761,767	71,921,131
T. Rowe Price Global Equity Fund	64,966,510	67,664,768
UWO SSGA Canadian Bond Fund	62,812,029	88,652,807
SSGA S&P 500 U.S. Equity Fund, Hedged	58,722,633	75,958,937
Beutel Canadian Equity Fund	51,195,261	71,506,332
Alliance Bernstein Equity Cap Fund	45,316,352	56,628,436
SSGA U.S. Managed Volatility Fund	44,323,017	55,882,507
MFS International Equity Fund	34,249,337	55,348,098
Harris Associates Global Large Cap LP	24,229,899	67,955,525
William Blair Emerging Markets	22,912,609	26,795,533
2333635 Ontario Inc.	21,525,000	31,928,038
SSGA S&P 500 U.S. Equity Fund, Unhedged	21,418,816	38,225,652
Franklin Global Small-Mid Cap Fund	19,435,132	28,598,095

6. Income taxes:

The Master Trust is governed by the Income Tax Act, Canada. The Plans are registered pension plans and the Fund is a group RIF under the Income Tax Act, Canada, and are not liable for any income taxes. Some of the investment accounts have been registered as Quasi-Mutual Fund Trusts and are subject to income tax on income within the trusts but the net income and net capital gains from these trusts have been distributed to the pension plans and the RIF prior to the end of the year.

THE UNIVERSITY OF WESTERN ONTARIO

MASTER TRUST FOR THE PENSION PLANS FOR THE ACADEMIC AND ADMINISTRATIVE STAFF AND THE RETIREMENT INCOME FUND
Notes to Financial Statements (continued)

Year ended December 31, 2015

7. Contributions:

Contributions received by the Plans were as follows:

2015

	Regular	Voluntary	Total
Members	$ 16,006,197	$ 5,004,328	$ 21,010,525
The University of Western Ontario	31,018,093	-	31,018,093
Other participating employers	1,061,640	-	1,061,640
	32,079,733	-	32,079,733
	$ 48,085,930	$ 5,004,328	$ 53,090,258

2014

	Regular	Voluntary	Total
Members	$ 14,064,517	$ 5,017,678	$ 19,082,195
The University of Western Ontario	31,315,485	-	31,315,485
Other participating employers	1,017,791	-	1,017,791
	32,333,276	-	32,333,276
	$ 46,397,793	$ 5,017,678	$ 51,415,471

8. Benefit payments:

	2015	2014
Retirement benefit payments	$ 16,619,890	$ 18,265,835
Termination benefit payments	355,932,605	73,452,687
Death benefit payments	3,444,825	7,585,090
	$375,997,320	$ 99,303,612

9. Fund managers' fees:

Fund managers' fees include any fees paid by the custodian to the various fund managers. Fund managers' fees of certain pooled funds are netted against the unit value of those pooled funds.

THE UNIVERSITY OF WESTERN ONTARIO

MASTER TRUST FOR THE PENSION PLANS FOR THE ACADEMIC AND ADMINISTRATIVE STAFF AND THE RETIREMENT INCOME FUND
Notes to Financial Statements (continued)

Year ended December 31, 2015

10. Administrative costs recovered by the University:

Non-investment administrative expenses for participants of the Plans and annuitants of the RIF Program are incurred by the University, a related party, on behalf of the members and annuitants and are funded by various methods as follows:

(i) For active employees of the University, the costs are paid by the University out of the corporate benefits budget.

(ii) For employees of other participating employers and former employees of the University, certain costs are recovered by the University through bi-annual redemptions of investments from the individual members' accounts.

(iii) For annuitants of the RIF, a portion of the costs are recovered through monthly redemptions of investments from the individual annuitants' accounts. In 2015, the cost of administration exceeded total redemptions from annuitants.

The following summarizes the total non-investment administrative expenses incurred by the University for the Master Trust and the recoveries of those costs:

	2015	2014
Administrative expenses incurred:		
Salaries and benefits	$ 1,130,091	$ 1,103,118
Other professional fees	998,909	984,802
HST accrual on deemed services	278,135	228,574
Audit fees	41,881	48,861
	2,449,016	2,365,355
Recoveries:		
Paid by the University out of corporate benefits budget	2,326,837	1,467,779
Administrative costs recovered by the University	122,179	897,576
	2,449,016	2,365,355
	$ -	$ -

THE UNIVERSITY OF WESTERN ONTARIO

MASTER TRUST FOR THE PENSION PLANS FOR THE ACADEMIC AND ADMINISTRATIVE STAFF AND THE RETIREMENT INCOME FUND
Notes to Financial Statements (continued)

Year ended December 31, 2015

10. Administrative costs recovered by the University (continued):

Administrative costs were funded as follows:

	2015	2014
Fees from former employees	$ 439,435	$ 439,411
Fees from other participating employers	125,600	120,400
Fees from RIF annuitants	(442,856)	337,765
	$ 122,179	$ 897,576

As at December 31, 2015, administrative costs to be recovered by the University of $1,857,470 (2014 - $1,735,291) have been accrued but not yet paid.

11. Financial instruments:

(a) Fair values:

The fair values of investments are as described in note 4(a). The fair values of other financial assets and liabilities, being cash, accrued income, accrued expenses and benefits and retirement income payments payable approximate the carrying values due to the short-term nature of these financial instruments.

Fair value measurements recognized in the statement of net assets are categorized using a fair value hierarchy that reflects the significance of inputs used in determining the fair values.

- Level 1 - unadjusted quoted prices in active markets for identical assets or liabilities;
- Level 2 - inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly or indirectly; and
- Level 3 - inputs for assets and liabilities that are not based on observable market data.

All of the Trust's investments have been classified as Level 2, except for the investment in 23334635 Ontario Ltd., which is a Level 3 investment. There were no changes in the classification of investments during 2015.

THE UNIVERSITY OF WESTERN ONTARIO

MASTER TRUST FOR THE PENSION PLANS FOR THE ACADEMIC AND ADMINISTRATIVE STAFF AND THE RETIREMENT INCOME FUND
Notes to Financial Statements (continued)

Year ended December 31, 2015

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11. Financial instruments (continued):

(a) Fair values (continued):

The following table reconciles the Master Trust's Level 3 fair value measurement from January 1, 2015 to December 31, 2015.

	2015	2014
Balance, beginning of year	$ 47,862,460	$ 44,547,528
Net unrealized change in fair value of investment	2,584,548	3,314,932
Redemption of units	(18,425,733)	-
Realized loss on sale of investment	(93,237)	-
Balance, end of year	$ 31,928,038	$ 47,862,460

(b) Associated risks:

(i) Market price risk:

Market price risk is the risk that value of an instrument will fluctuate as a result of changes in market prices, whether caused by factors specific to an individual investment, its issue or all other factors affecting all instruments traded in the market. As all of the Master Trust's financial instruments are carried at fair value with fair value changes recognized in the statement of changes in net assets available for benefits and retirement income payments, all changes in market conditions will directly affect the change in net assets available for benefits and retirement income payments. Market price risk is managed by the Administrator by making available to the members and annuitants a diversified portfolio of instruments traded on various markets and across various industries. In addition, market price risk may be hedged using derivative financial instruments such as futures contracts.

(ii) Foreign currency risk:

Foreign currency risk is the risk that fair value or future cash flows of a financial instrument will fluctuate because of changes in foreign currency rates. The Master Trust invests in financial instruments and enters into transactions denominated in currencies other than the Canadian dollar. Consequently, the Master Trust is exposed to risks that the exchange rate of the foreign currency may change in a manner that has an adverse affect on the value of the portion of the Master Trust's assets or liabilities denominated in currencies other than Canadian dollars. The Master Trust's overall currency positions and exposures are monitored on a regular basis by the Administrator.

THE UNIVERSITY OF WESTERN ONTARIO

MASTER TRUST FOR THE PENSION PLANS FOR THE ACADEMIC AND ADMINISTRATIVE STAFF AND THE RETIREMENT INCOME FUND
Notes to Financial Statements (continued)

Year ended December 31, 2015

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11. Financial instruments (continued):

(b) Associated risks (continued):

(iii) Interest rate risk:

A portion of the Master Trust's financial assets and liabilities are interest bearing and as a result, the Master Trust is subject to a certain level of interest rate risk. In general, bond returns are sensitive to changes in the level of interest rates, with longer term bonds being more sensitive to interest rate changes than shorter term bonds.

(iv) Liquidity risk:

Liquidity risk is the risk that the Master Trust will not be able to meet its obligations as they fall due. The Master Trust maintains an investment policy, as approved by the Administrator, which contains asset mix guidelines which help to ensure the Master Trust is able to liquidate investments to meet its pension benefit or other obligations.

(v) Credit risk:

Credit risk related to the risk of financial loss due to a counterparty failing to meet its contractual obligations. The Master Trusts' most significant exposure to credit risk is its investment in debt securities. The carrying amounts of cash and cash equivalents and bond investments as disclosed in note 4(a) represent the maximum credit risk exposure at the date of the statement of net assets available for benefits and retirement income payments. The Master Trust mitigates this risk by investing mostly in debt securities with an investment grade credit rating. One portfolio is able to invest in non-investment grade securities, however, the Master Trust requires the average portfolio quality to be a minimum of A.

KPMG
cutting through complexity

AUDIT

University of Western Ontario

Retirement Income Fund

Audit Findings Report
For the year ended December 31, 2015

KPMG LLP

Licensed Public Accountants

Prepared for our meeting with the Board of Governors on June 7, 2016

kpmg.ca

The contacts at KPMG in connection with this report are:

Jim Cassidy
Lead Audit Engagement Partner

Tel: 519-660-2177
jfcassidy@kpmg.ca

Silvia Di Cicco
Audit Senior Manager

Tel: 519-660-2142
sdicicco@kpmg.ca

Devon Bauman
Audit Manager
Tel: 519-660-2126
dbauman@kpmg.ca

Table of Contents

Executive summary	**3**
Other matter	**4**
Appendices	**5**
Appendix 1: Required communications	**6**
Appendix 2: Audit Quality and Risk Management	**7**

At KPMG, we are **passionate** about earning your **trust**. We take deep **personal accountability**, individually and as a team, to deliver **exceptional service and value** in all our dealings with you.

At the end of the day, we measure our success from the **only perspective that matters – yours**.

Executive summary

Purpose of this report*

The purpose of this Audit Findings Report is to assist you, as a member of the Board of Governors ("Board"), in your review of the results of our audit of the financial statements of The University of Western Ontario Retirement Income Fund (the "RIF") as at and for the year ended December 31, 2015.

This Audit Findings Report builds on the Audit Plan we presented to the Joint Pension Board on February 3, 2016 for the Master Trust.

Finalizing the audit

As of May 31, 2016 we have completed the audit of the financial statements, with the exception of certain remaining procedures, which include amongst others:

- receipt of signed management representation letter;
- completing our discussions with the Board; and
- obtaining evidence of the Board's approval of the financial statements.

We will update the Board on significant matters, if any, arising from the completion of the audit, including the completion of the above procedures. Our auditors' report will be dated upon the completion of any remaining procedures.

Changes from the Audit Plan

There have been no significant changes regarding our audit from the Audit Planning Report previously presented to Joint Pension Board.

Significant accounting policies and practices

There have been no initial selections of, or changes to, significant accounting policies and practices to bring to your attention.

Financial statement presentation and disclosure

The presentation and disclosure of the financial statements are, in all material respects, in accordance with the RIF's relevant financial reporting framework. The form, arrangement, and content of the financial statements are considered to be adequate.

Adjustments and differences

We did not identify differences that remain uncorrected in the financial statements.

We did not identify any adjustments that were communicated to management and subsequently corrected in the financial statements.

Control and other observations

We did not identify any control deficiencies that we determined to be significant deficiencies.

Independence

We reconfirm that we are independent with respect to the RIF within the meaning of the relevant rules and related interpretations prescribed by the relevant professional bodies in Canada and any other standards or applicable legislation or regulation.

*** This Audit Findings Report should not be used for any other purpose or by anyone other than the Board of Governors. KPMG shall have no responsibility or liability for loss or damages or claims, if any, to or by any third party as this Audit Findings Report has not been prepared for, and is not intended for, and should not be used by, any third party or for any other purpose.**

Other matter

Significant findings from the audit relating to other matters are as follows:

Other matters	Our significant findings from the audit
Discontinuation of the Retirement Income Fund ("RIF")	• In May 2015, the University entered into an agreement with Sun Life Financial as the external provider of the RIF. Existing members of the RIF were given the option to join the new program or exit the plan. • A total of $265 million of RIF assets were either transferred to Sun Life or removed by members as they exited the plan. • Of the total, $217 million of assets were transferred via 3 payments to Sun Life in April, June and November. • The remaining $48 million of assets were removed due to members exiting the plan. • As of December 31, 2015, there were no net assets of the RIF remaining in the Master Trust. *Our findings* • We agreed the total amounts transferred out of the RIF during the year to proof of cash disbursements and ensured appropriate note disclosure was included in the notes to the financial statements. • No issues were noted.

Appendices

Appendix 1: Required communications

Appendix 2: Audit Quality and Risk Management

Appendix 1: Required communications

In accordance with professional standards, there are a number of communications that are required during the course of and upon completion of our audit. These include:

- **Auditors' report** – the conclusion of our audit is set out in our draft auditors' report, as attached with the draft financial statements.
- **Management representation letter** –In accordance with professional standards, copies of the management representation letter are provided to the Board of Governors. The management representation letter is attached.

KPMG LLP
140 Fullarton Street, Suite 1400
London, Ontario N6A 5P2

June 7, 2016

Ladies and Gentlemen:

We are writing at your request to confirm our understanding that your audit was for the purpose of expressing an opinion on the financial statements (hereinafter referred to as "financial statements") of The University of Western Ontario Retirement Income Fund ("the Fund"), which comprise the statement of financial position as at December 31, 2015, the statement of changes in net assets available for benefits for the year then ended, and notes, comprising a summary of significant accounting policies and other explanatory information. The financial statements were prepared in accordance with Canadian Accountant Standards for Pension Plans.

We confirm that the representations we make in this letter are in accordance with the definitions as set out in **Attachment I** to this letter.

The term materiality in this letter has been defined as $5,300,000.

We confirm that, to the best of our knowledge and belief, having made such inquiries as we considered necessary for the purpose of appropriately informing ourselves:

GENERAL:

1) We have fulfilled our responsibilities, as set out in the terms of the audit engagement letter dated January 26, 2011 and amended April 2, 2012, January 16, 2013, January 7, 2014 and January 21, 2015, for:

   a) the preparation and fair presentation of the financial statements and believe that these financial statements have been prepared and present fairly in accordance with the relevant financial reporting framework

   b) providing you with all relevant information, such as all financial records and related data, including the names of all related parties and information regarding all relationships and transactions with related parties, and complete minutes of meetings, or summaries of actions of recent meetings for which minutes have not yet been prepared, of shareholders, board of directors and committees of the board of directors that may affect the financial statements, and access to such relevant information

c) such internal control as management determined is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error

d) ensuring that all transactions have been recorded in the accounting records and are reflected in the financial statements.

INTERNAL CONTROL OVER FINANCIAL REPORTING:

2) We have communicated to you all deficiencies in the design and implementation or maintenance of internal control over financial reporting of which management is aware.

FRAUD & NON-COMPLIANCE WITH LAWS AND REGULATIONS:

3) We have disclosed to you:

a) the results of our assessment of the risk that the financial statements may be materially misstated as a result of fraud

b) all information in relation to fraud or suspected fraud that we are aware of and that affects the Fund and involves: management, employees who have significant roles in internal control, or others, where the fraud could have a material effect on the financial statements

c) all information in relation to allegations of fraud, or suspected fraud, affecting the Fund' financial statements, communicated by employees, former employees, analysts, regulators, or others

d) all known instances of non-compliance or suspected non-compliance with laws and regulations, including all aspects of contractual agreements, whose effects should be considered when preparing financial statements

e) all known actual or possible litigation and claims whose effects should be considered when preparing the financial statements

SUBSEQUENT EVENTS:

4) All events subsequent to the date of the financial statements and for which the relevant financial reporting framework requires adjustment or disclosure in the financial statements have been adjusted or disclosed.

RELATED PARTIES:

5) We have disclosed to you the identity of the Fund's related parties.

6) We have disclosed to you all the related party relationships and transactions/balances of which we are aware.

7) All related party relationships and transactions/balances have been appropriately accounted for and disclosed in accordance with the relevant financial reporting framework.

ESTIMATES:

8) Measurement methods and significant assumptions used by us in making accounting estimates, including those measured at fair value, are reasonable.

NON-SEC REGISTRANTS OR NON-REPORTING ISSUERS:

9) We confirm that the Fund is not a Canadian reporting issuer (as defined under any applicable Canadian securities act) and is not a United States Securities and Exchange Commission ("SEC") Issuer (as defined by the Sarbanes-Oxley Act of 2002). We also confirm that the financial statements of the Fund will not be included in the consolidated financial statements of a Canadian reporting issuer audited by KPMG or an SEC Issuer audited by any member of the KPMG organization.

Yours very truly,

____
Jane O'Brien, Associate Vice President, Human Resources

____
Louise Koza, Director, Human Resources

____
Martin Belanger, Director, Investments

Attachment I – Definitions

MATERIALITY

Certain representations in this letter are described as being limited to matters that are material. Misstatements, including omissions, are considered to be material if they, individually or in the aggregate, could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements. Judgments about materiality are made in light of surrounding circumstances, and are affected by the size or nature of a misstatement, or a combination of both.

FRAUD & ERROR

Fraudulent financial reporting involves intentional misstatements including omissions of amounts or disclosures in financial statements to deceive financial statement users.

Misappropriation of assets involves the theft of an entity's assets. It is often accompanied by false or misleading records or documents in order to conceal the fact that the assets are missing or have been pledged without proper authorization.

An error is an unintentional misstatement in financial statements, including the omission of an amount or a disclosure.

RELATED PARTIES

In accordance with Accounting Standards for Private Enterprises, a *related party* is defined as:

- When on party has the ability to exercise, directly or indirectly, control, joint control or significant influence over the other. Two or more parties are related when they are subject to common control, joint control or common significant influence. Related parties also include management and immediate family members.

In accordance with Accounting Standards for Private Enterprises, a *related party transaction* is defined as:

- A transfer of economic resources or obligations between related parties, or the provision of services by one party to a related party, regardless of whether any consideration is exchanged. The parties to the transaction are related prior to the transaction. When the relationship arises as a result of the transaction, the transaction is not one between related parties.

Appendix 2: Audit Quality and Risk Management

KPMG maintains a system of quality control designed to reflect our drive and determination to deliver independent, unbiased advice and opinions, and also meet the requirements of Canadian professional standards.

Quality control is fundamental to our business and is the responsibility of every partner and employee. The following diagram summarises the six key elements of our quality control systems.

Visit http://www.kpmg.com/Ca/en/services/Audit/Pages/Audit-Quality-Resources.aspx for more information.

- Other controls include:
  - Before the firm issues its audit report, the Engagement Quality Control Reviewer reviews the appropriateness of key elements of publicly listed client audits.
  - Technical department and specialist resources provide real-time support to audit teams in the field.
- We conduct regular reviews of engagements and partners. Review teams are independent and the work of every audit partner is reviewed at least once every three years.
- We have policies and guidance to ensure that work performed by engagement personnel meets applicable professional standards, regulatory requirements and the firm's standards of quality.
- All KPMG partners and staff are required to act with integrity and objectivity and comply with applicable laws, regulations and professional standards at all times.

- We do not offer services that would impair our independence.
- The processes we employ to help retain and develop people include:
  - Assignment based on skills and experience;
  - Rotation of partners;
  - Performance evaluation;
  - Development and training; and
  - Appropriate supervision and coaching.
- We have policies and procedures for deciding whether to accept or continue a client relationship or to perform a specific engagement for that client.
- Existing audit relationships are reviewed annually and evaluated to identify instances where we should discontinue our professional association with the client.

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Western Retirement Plans
Report to the Audit Committee
June 2016

Prepared on May 30, 2016

FOR INFORMATION

1. Summary

This report covers the calendar year January 1, 2015 to December 31, 2015. The Academic and Administrative Staff Pension Boards are responsible for the administration and oversight of two pension plans (the Academic Staff Pension Plan and the Administrative Staff Pension Plan) and the investment of assets for individual Retirement Income Funds (RIF) which are sponsored by the University. This report provides an overview of the plans, reviews the changes made to the plans in 2015 and describes the projects under way at the end of the year. Supplementary documents which have been distributed include the *Financial Statements* for the Master Trust, for each of the pension plans and the RIF.

2. Plan Overview

Asset Values, Membership and Investment Returns

The combined plans include about 6,800 investors and assets with an approximate market value of $1.1 billion. The *Master Trust* holds funds for both retirement plans and the individual RIF investors (as of December 31, 2015 all RIF assets have been redeemed and the RIF program discontinued). As defined contribution pension plans, members direct the investment of both their contributions and the University's contributions among 15 different investment options. The fund options are designed in tiers, in an attempt to match the level of education or willingness to make independent diversification decisions. The funds are outlined below:

Tier 1: Comprehensive Funds	**Asset Value at 31/12/15**	**Number of Investors** **(can be in more than 1 fund)**	**Investment Returns in 2015**
Balanced Income	$58.6m	998	4.79%
Balanced Growth	$180.9m	3032	6.89%
Tier 2: Broad Asset Class Funds			
Diversified Bond	$195.1m	2685	3.17%
Diversified Equity	$404.7m	3285	8.41%
Tier 3: Regional and Specific Strategy Funds			
Money Market	$49.5m	1046	0.69%
Target Date Funds	$24.0m	239	1.20% to 2.83%
Canadian Bond	$13.2m	480	3.26%
Long Term Bond	$13.9m	437	3.41%
Canadian Equity	$55.7m	1304	-5.41%
US Equity Hedged	$22.1m	672	0.74%
US Equity Unhedged	$38.2m	619	21.33%
Non North American Equity	$22.4m	716	21.53%
SRI Global Equity Fund	$7.3m	344	2.74%
Liquidating Trust	$9.4m	3353	2.16%

The Investments and Investment Income for each fund can be found in ***note 4 of the Master Trust*** *financial statements.*

Communication and Education

Members have access to various reports and material to assist them in the monitoring of their retirement funds. These resources include monthly investment return sheets, an annual report, newsletter, and access to external manager research, to name a few. These resources are in addition to the personalized annual member pension plan statements that were sent out to members in April 2016, including all information as required by pension statute.

Various workshops are also available to assist members with their investment and retirement decisions. A total of 31 workshops and retirement plan member consultations (RPP & RIF) were attended by over 800 members and/or spouses in 2015.

Some of these workshops were facilitated by an external provider. Morneau Shepell, Western's pension and benefits consultant, took over as provider of pre-retirement and financial planning workshops in August 2014, following the departure of key personnel at our previous provider. Four full-day workshops took place in 2015 and they were attended by 80 members, including spouses. Feedback on these workshops and the presenter remains highly positive. Attendees appreciated that content was holistic and included all sources of income: CPP and OAS as well as defined benefit pensions, and LIF/RRIF and annuity options for their Western pension. The budgeting tools, tax information and income splitting details have been identified as helpful content. As with the past provider, the workshops include a session on lifestyle in retirement; this topic continues to get mixed reviews; some people have already thought about what they'll be doing in retirement while others find it really useful because they've only focused on the financial pieces.

We announced last year that the pension team was reviewing the on-line financial education curriculum and tools (The Financial Educator ™ website) that have been available to our members since 2007. This was due to its relatively poor usage, its now-stagnant content, its cost, and the growing availability of websites providing quality financial information and education at no cost. Furthermore, in December 2015 we received notice from The Financial Education Institute of Canada that they were discontinuing The Financial Educator ™, effective February 29, 2016.

The team, supported by external consultants, evaluated alternative websites available for free and at a cost and determined that the products available at a cost did not adequately meet the needs of our members. Instead, the team assembled a list of online tools from reputable sources and have linked to the following from the HR website. The need for decision making tools and a new provider for planning workshops contributed to the team's review of all pension operations and service providers beginning in October 2015.

Pension Governance and Operations

Each of the pension boards consist of 7 members: 4 elected by the membership and 3 appointed by the University. These boards work jointly in the design of investment, communication and administrative policy (Joint Pension Board). The design and implementation of policy is completed with significant assistance from staff in human resources and financial services (10 full time dedicated staff). The board and staff also rely on the expert advice of external service providers to fulfill their duties including investment consultants, investment management firms, custodian and trustee, software vendors, actuarial consultants, legal consultants and auditors.

In total, the non-investment operational expenses are approximately ($2.4 million) or .22% of assets under management. The investment management and custodian costs are approximately .40% of assets under management. When compared to other Universities and institutional operations this level of operational costs is extremely lean.

Despite the efficient operations, the Human Resource leadership team asked the Joint Pension Board to review the risks associated with the current pension operations and the delegation of accountabilities to internal and external agents. Specifically, the Joint Pension Board was asked to review the delegation to Northern Trust, the current custodian, trustee and benefit payer, who was primarily responsible for an error in our unitization in 2009. In conjunction with this review, Western Human Resources encouraged the Joint Pension Board to evaluate external service providers who can take on a larger role in the operations, including providing member recordkeeping, cash flow management, member education, client servicing and advisory services, investment reporting and in some cases investment management and oversight. The document which provided background information for the discussions of this matter at the Joint Pension Board December 21, 2015 meeting was circulated to the Audit Committee in January 2016.

The Joint Pension Board has approved Human Resource Leadership's request to continue to pursue and discuss services and support of the pension plan operations with Sun Life Financial. Sun Life was invited to present their services to the Joint Pension Board on February 3, 2016. This work culminated with the Joint Pension Board approving the following on March 1, 2016:

- Delegate the custody, recordkeeping, education and client servicing for each of the Pension Plan for Academic Staff and the Pension Plan for Administrative Staff to Sun Life Financial, under an annuity contract.
- Seek concerns and questions from employee groups and members.
- Address all concerns and questions raised prior to a contractual relationship with Sun Life being finalized.

Special Members

Prior to July 1970 (Academic) and March 1974 (Administrative Staff), the University pension plans were a defined benefit design: annual pension income at retirement was promised based on a formula. At the beginning of 2015, there were still some retired employees and active members who were entitled to that promised pension formula as a minimum guaranteed benefit. These individuals are referred to as “Special Members”.

During the year, each of the respective boards approved a recommendation to purchase annuities to support the periodic payments payable to retired members and beneficiaries under each plan. The Canada Life Assurance Company (annuity provider, part of the Great-West Life Assurance Company) was selected following a competitive bidding process coordinated by Morneau Shepell. The purchase was effective December 1, 2015 with the first payments made by Canada Life effective January 1, 2016. The cost of purchasing annuities was $2,227,547 for the Academic Staff Pension Plan and $1,112,741 for the Administrative Staff Pension Plan. At that time, there were 14 members remaining in the Academic Staff Pension Plan (all retired) and 34 in the Administrative Staff Pension Plan, 12 of which were still active and 22 who were retired.

Following this purchase, there are no defined benefit liabilities remaining in the Academic Plan and liabilities for only active members under the Administrative Staff Plan. Only three of the 12 active members are expected to have any value under the minimum guaranteed benefit. All other active Special Members are projected to receive a higher pension from their defined contribution account than that determined using the minimum guarantee benefit formula. Depending on the future performance of active Special Member defined contribution accounts, the number of Special Members projected to receive a supplementary pension under the minimum guarantee provisions of the plan may change. There are restrictions on how these Special Members can invest the funds in their regular account. They can invest up to 70% of their assets in equity funds.

Although the Academic Plan has no liabilities remaining, there is still $709,000 left in the general account of the pension plans. The remaining assets (surplus) may be used to fund operational costs for the entire Academic Pension Plan, subject to the approval of the Academic Pension Board.

The projected accrued pension liabilities for the active members of the Administrative Staff Plan total $330,000 as at December 1, 2015 and assets were approximately $240,000. To fund this deficit of $90,000, the University must make special payments (contributions to the trust) of a minimum of approximately $1,650 per month over the next 5 years. The University may choose to fund the entire deficit earlier or re-evaluate the plan once the active members have all retired, if that occurs within the next three years.

The remaining assets for both plans are currently invested in short-term debt securities, using the Money Market Fund that is available on the defined contribution platform.

3. Changes Made in 2015

No changes to the investment line-up were made in 2015. The pension team focused on completing two large administrative projects.

The first of these projects was to provide remedial payments to members of the Western Retirement Plans who were impacted by the pension unitization error, back in 2009. Following a positive ruling from the Canada Revenue Agency

(CRA) which confirmed that payments to members would not impact their registered retirement savings room, staff proceeded with the implementation of the remedial payments. All accounts that were negatively impacted by the error were adjusted and were also credited for the return realized by the Diversified Equity Fund since 2010. Members who benefited from the error were not asked for reimbursement.

The second project that the pension team worked on in 2015 was the discontinuing of the Western RIF program, which was successfully completed during the year. As was announced last year, after a very extensive search, Sun Life Financial was selected as a preferred provider of a retirement income funds option for Western retirees. The evolution of the financial services industry justified this decision. A number of financial institutions have developed a suite of products, tools and education programs that were determined to be superior to what Western could offer directly and at a lower cost. More specifically, members of the Western Pension Plan looking to retire will see the following benefits: access to the same investment options they used to have on the Western Pension Plan; additional investment options targeted at investors in the decumulation stage of their life; investment fees similar or lower than in the Western RIF; daily valuation of accounts and the option to do investment changes on any business day; ability for spouses and partners to transfer their assets to Sun Life Financial at the same fees; access to investment advice; eligibility of non-Canadian residents for the plan; and eligibility of non-registered assets.

The transfer was a major undertaking and involved significant contributions from every member of the pension team. After Sun Life Financial was announced as preferred provider in December 2014, information sessions were held throughout 2015 to educate Western RIF members and soon-to-be retiring pension plan members about the new Sun Life Retirement & Savings Plan for Western Retirees. In total, 340 people attended the 20 group consultation and information sessions.

During 2015, individual meetings with Sun Life Retirement Consultants were also made possible for Western RIF and pension plan members exploring retirement income options. In total, 514 meetings were held during the year.

Looking at Western RIF members' decisions and feedback, we can conclude that the RIF transfer was successful. Approximately 82.5% of Western RIF members with assets totaling $215 million moved over to Sun Life. In addition, in a survey distributed to 357 members (some who moved to Sun Life and some who did not) 77% of those responding said they would definitely or probably recommend Sun Life to others.

The Sun Life Retirement & Savings Plan for Western Retirees has been positively received by retiring members as well. In 2015, 35% of employees who retired and made a decision regarding their pension chose to move to the Sun Life Plan. From January through April 2016, 42% of retiring members have elected to move to the Sun Life Retirement & Savings Plan for Western Retirees. These numbers reflect a positive change from the declining enrolment trend seen previously with the Western RIF.

4. Projects Underway as at December 31, 2015

Although the pension unitization error project is now complete from a members' point of view, the University is still in the process of negotiating compensation with Northern Trust, its custodian. The University received a preliminary opinion on the merits of pursuing litigation with Northern Trust from the law firm Lenczner, Slaght, Royce, Smith, Griffin LLP (Lenczner Slaght) on January 18, 2016. It is the view of Lenczner Slaght that the University has a reasonable claim for breach of contract and negligence against Northern Trust. Following the reception of the preliminary opinion, senior university officials met with Northern Trust representatives to discuss a settlement. Based on the discussions held, on April 27, 2016, Western sent a letter to Northern Trust requesting a cash payment of $1,321,000, representing the net amount of the error that occurred in 2009.

As noted earlier, the primary focus in 2016 will be on the following:

- Delegate the custody, recordkeeping, education and client servicing for each of the Pension Plan for Academic Staff and the Pension Plan for Administrative Staff to Sun Life Financial, under an annuity contract.
- Seek concerns and questions from employee groups and members.
- Address all concerns and questions raised prior to a contractual relationship with Sun Life being finalized.

We appreciate the opportunity to present this report to the Board of Governors and welcome any comments or questions you may have.

Academic Pension Board Membership

Stephen Foerster, Ivey School of Business (Chair)
Michelle Loveland, Management and Org. Studies
John de Bruyn, Physics and Astronomy
John Ciriello, Physiology and Pharmacology

Administrative Staff Pension Board Membership

Joanna Asuncion, Faculty of Information and Media Studies (Chair)
Ab Birch, Financial Services
Jim Loupos, Internal Audit
Josh Morgan, Political Science

Appointed University Representatives on Each Board

Lynn Logan, Associate Vice-President, Finance & Facilities (Designate of VP Administration)
Jane O'Brien, Associate Vice-President Human Resources
Louise Koza, Director Human Resources (Total Compensation)

REPORT OF THE FUND RAISING AND DONOR RELATIONS COMMITTEE

Contents	Consent Agenda
Fundraising Activity Quarterly Report to April 30, 2016	Yes

FOR INFORMATION

1. **Fundraising Activity Quarterly Report to April 30, 2016**

See **Annex 1**.

Western

Fund Raising Initiatives Quarterly Report
as at April 30, 2016
(with comparative figures from the fiscal year 2013/14 to 2014/15)

PLEDGE DATA 1

	May 1, 2015 to April 30, 2016 (000's)			Fiscal Year 2015 (000's)	Fiscal Year 2014 (000's)
	Target	Actual	Actual as a % of Target	Year End May to April	Year End May to April
Pledges outstanding May 1,	161,936	161,936	N/A	111,191	101,618
New Gifts & Pledges (Gross)	65,000	49,020	75.42%	110,976	69,908
Pledges cancelled/amended on new/prior pledges	-3,066	-2,598	84.72%	-3,905	-3,154
Net New Pledges/Gifts	**61,934**	**46,422**	**74.95%**	**107,072**	**66,754**
Contributions received in payment of pledges/gifts: 2					
Western University	115,594	102,170	88.39%	55,936	57,174
Richard Ivey School of Business (Asia) Limited	383	471	122.92%	391	7
Total contributions received	**115,978**	**102,641**	88.50%	**56,327**	**57,181**
Net Pledges Outstanding	**107,893**	**105,717**	**97.98%**	**161,936**	**111,191**

COST PER DOLLAR RAISED[†]

	May 1, 2015 to April 30, 2016 (000's)			May 1, 2014 to April 30, 2015 (000's)			May 1, 2013 to April 30, 2014 (000's)		
Advancement Fund Raising Units	Net Pledges/Gifts	Expenses	Cost per Dollar Raised	Net Pledges/Gifts	Expenses 3	Cost per Dollar Raised	Net Pledges/Gifts	Expenses 3	Cost per Dollar Raised
Alumni Relations & Development 3	36,463	8,382	$0.23	103,870	5,522	$0.05	57,575	5,153	$0.09
Richard Ivey School of Business	11,558	1,408	$0.12	7,011	1,202	$0.17	12,035	1,556	$0.13
Total Expenses/Cost Per Dollar Raised 4	**48,021**	**9,790**	**$0.20**	**110,881**	**6,724**	**$0.06**	**69,610**	**6,709**	**$0.10**
3-Year Average Cost Per Dollar Raised 5	**76,171**	**7,741**	**$0.10**	**250,102**	**20,142**	**$0.08**	**259,552**	**20,248**	**$0.08**

[†]Ratio of costs to revenue over fiscal year CRA guidelines under 35%

RETURN ON INVESTMENT

	Revenue Cash Received	Expenses	Return on Investment	Revenue Cash Received	Expenses	Return on Investment	Revenue Cash Received	Expenses	Return on Investment
Fundraising/Development/Advancement 6,7	40,653	9,790	$4.15	47,913	8,779	$5.46	53,323	9,047	$5.89
Total Return on Investment	**40,653**	**9,790**	**$4.15**	**47,913**	**8,779**	**$5.46**	**53,323**	**9,047**	**$5.89**

1 Includes total activity of:
- Western University
- The University of Western Ontario Inc.
- The University of Western Ontario (UK) Foundation
- The University of Western Ontario (HK) Foundation
- Richard Ivey School of Business (Asia) Limited

2 Represents all contributions including cash, gift in kind and gift in purchase discounts entered in the Contributor Relations System within reporting period and may differ from the general ledger reporting period.
3 FY15, FY14 expenses do not include FDDP, CPA and Advancement Operations salary and benefits.
4 Ratio of costs to revenue over fiscal year CRA guidelines under 35%.
5 3 Year Rolling Average - reflects the major gift factor and the post campaign period.
6 Includes all operating expenses including Faculty paid Development Officers and Communication Staff directly involved in preparing, producing, distributing and evaluating fundraising documents.
7 Revenue Cash Received equals total cash received less non-cash items.

ITEMS REFERRED BY SENATE

Contents	Consent Agenda
Appointment Procedures for Senior Academic and Administrative Officers of the University – Revision to Section R. Associate Vice-President (Research)	Yes
Revisions to MAPP 7.12 Policy for the Use of Animals in Research, Testing and Teaching	Yes
Report of the Senate ad hoc Committee on Renewal	No
Final Report of the URB Task Force Steering Committee Support for SSAH Research at Western	No
Western Degree Outcomes (Undergraduate)	Yes
Draft Indigenous Strategic Plan	No
Report of the Academic Colleague	Yes
President's Medal for Distinguished Service	Yes

FOR APPROVAL

1. **Appointment Procedures for Senior Academic and Administrative Officers of the University – Revision to Section R. Associate Vice-President (Research)**

Recommended: That Section R. Associate Vice-President (Research) of the Appointment Procedures for Senior Academic and Administrative Officers of the University be revised as shown in **Annex 1**.

Background:

The Vice-President (Research) intends to have two Associate Vice-Presidents (Research) going forward. The revisions to the appointment procedures are to indicate that there are now two positions. The University Research Board is supportive of this change.

2. **Revisions to MAPP 7.12 Policy for the Use of Animals in Research, Testing and Teaching**

Recommended: That changes to the Policy for the Use of Animals in Research, Testing and Teaching (MAPP 7.12) be approved as set out in **Annex 2**.

Background:

Deans, Vice-Deans, Associate-Deans and Chairs/Directors were added to the list of institutional leaders with shared accountability for supporting the Vice President (Research) in fulfilling his responsibility for Western's animal care and use programs. This is in keeping with the recommendations of the Canadian Council on Animal Care (CCAC).

FOR INFORMATION

3. **Report of the Senate *ad hoc* Committee on Renewal**

See **Annex 3**.

4. **Final Report of the URB Task Force Steering Committee Support for SSAH Research at Western**

See **Annex 4**.

5. **Western Degree Outcomes (Undergraduate)**

Senate, at its meeting on May 6, approved "The Western Degree Outcomes (Undergraduate)" as shown in **Annex 5a**. The Report of the Working Group on Western Degree Outcomes is attached as **Annex 5b**.

6. **Draft Indigenous Strategic Plan**

See **Annex 6**.

8. **Report of the Academic Colleague**

See **Annex 7**.

9. **President's Medal for Distinguished Service**

The Honorary Degrees Committee announces that Dr. Dalin Jameson is the 2016 recipient of the President's Medal for Distinguished Service. He will be honored at the 10:00 a.m. convocation ceremony on Tuesday, June 21, 2016.

Appointment Procedures for Senior Academic and Administrative Officers of the University

R. ASSOCIATE VICE-PRESIDENTS (RESEARCH)

Composition of Selection Committee

A committee to select an Associate Vice-President (Research) shall consist of:

(a) the Vice-President (Research), who shall be Chair
(b) 4 persons elected by the Senate, one of whom shall be a graduate student
(c) 2 persons elected by the Board of Governors

Procedure

- The Chair shall convene the Committee.
- The Chair shall undertake negotiations with prospective candidates.
- The Chair shall report to Senate through the President & Vice-Chancellor.

Terms

An Associate Vice-President (Research) may be a member of faculty or a member of staff.

If appointed from the faculty, the term for an Associate Vice-President (Research) is five years, renewable. In the case of renewal of an appointment where the incumbent takes a Study Leave at the end of the first term, the term of reappointment will be six years.

If appointed from the staff, the term for an Associate Vice-President (Research) will be agreed upon between the Vice-President (Research) and the appointee at the time of the initial appointment, with such terms to include provision for review and renewal as appropriate.

Western
UNIVERSITY · CANADA

Manual of Administrative Policies and Procedures

POLICY 7.12 – Policy for the Use of Animals in Research, Testing and Teaching

Policy Category:	Research
Subject:	Use of Animals in Research, Testing, Teaching and Display
Approving Authority:	Board of Governors
Responsible Officer:	Vice-President (Research)
Responsible Office:	Office of the Vice-President (Research)
Related Procedures:	Procedures for the Use of Animals in Research, Testing & Teaching
Related University Policies:	MAPP 7.0 – Academic Integrity in Research Activities
	MAPP 7.10 – Standardized Training in Animal Care and Use
	MAPP 7.15 – Post Approval Monitoring Program
Effective Date:	**June 23, 2016** ~~November 26, 2015~~
Revised:	September 26, 2006, November 26, 2009, November 22, 2012, **November 26, 2015**

I. PURPOSE & SCOPE

This policy and its associated procedures apply to all instances of research, testing, teaching and display involving animals at Western, its affiliated hospitals, affiliated university colleges and research institutes, to field research that involves more than simple observation (e.g. trapping, artificial provisioning), and to Principal Investigators (PIs) using animals owned by the public, and to all PIs and/or instructors and their staffs.

The policy outlines the responsibilities and accountabilities of university officers and the various committees and subcommittees established in accordance with the regulations of the Canadian Council on Animal Care (CCAC) and the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA).

Failure to comply with this policy and its associated procedures may prevent approval of *Animal Use Protocols* (AUPs), and may result in the withdrawal of AUP approval by ACC. As warranted by the severity of circumstances, this may also include revoking University approval for animal-based research, testing, teaching and displaying, and notification of this decision to Department Chairs, Institute Heads, and appropriate granting and licensing agencies.

II. POLICY

1. The University Council on Animal Care (UCAC), chaired by the Vice-President (Research), is responsible to Senate for all aspects of procurement, maintenance, use and ethical treatment of animals in research, testing, teaching and display as defined by the Canadian Council on Animal Care (CCAC), hereafter referred to as “animals.” UCAC must ensure adequate institutional oversight according to the outlined procedures in this document, and as outlined within its *Terms of Reference*.

2. The Vice-President (Research) is the senior administrative officer of the University responsible for the care and use of animals at the University and its affiliated institutions - London Health Sciences Centre/Lawson Health Research Institute, St. Joseph’s Hospital, Robarts Research Institute, Siebens-Drake Medical Research Institute, Huron University College, Kings University College, Brescia University College, Child and Parent Resource Institute, as outlined within the *Senior Administrator’s Terms of Reference* (see **Appendix 1**).

3. The institution’s Animal Care Committee (ACC) of UCAC, under the leadership of its Chair and Vice Chairs, is responsible to UCAC for ensuring that the care and use of animals associated with the University’s animal-based research, testing, teaching and display activities are in compliance with all Federal, Provincial, and University policy statutory requirements, regulations and guidelines, as outlined within its *Terms of Reference*.

4. The Department of Animal Care and Veterinary Services (ACVS), under the leadership of its Director and directly accountable to the Vice-President (Research), serves the University and its affiliated institutions, its associated committees, and the research community, by ensuring animal care and use meets all Federal, Provincial, and University policy statutory requirements, regulations, and guidelines, and by facilitating the research of scientists using CCAC-defined animal models.

5. ACVS, Institutional Compliance Officers, Animal Care Facility Supervisors, Principal Investigators, and their respective staffs share responsibility for the ongoing assessment and maintenance of ethically appropriate animal care and welfare.

6. Any Principal Investigator or instructor intending to use animals for research, testing, teaching or display in association with the University or its affiliates must be a University faculty member, an ACVS-veterinarian, or a LHSC-Lawson appointed scientist, unless otherwise approved by the ACC.

Appendix 1

Western

Institutional Senior Administrator Responsible for Western's Animal Care and Use Program
Terms of Reference

Purpose

The Canadian Council on Animal Care's (CCAC) *policy statement for senior administrators responsible for animal care and use programs* (2008),[1] requires that an institution have a single senior administrator ultimately responsible for ensuring appropriate animal care and use in partnership with institutional members and with the CCAC. While the institution ultimately bears responsibility for its animal care and use program **through institutional leaders**, the senior administrator is the individual responsible to coordinate efforts, ensure that all organizational responsibilities are met, and ensure the Institution provides adequate resources to fulfill its commitments.

As a signatory to the Tri-Agencies' Agreement on the Administration of Agency Grants and Awards by Research Institutions", Western has committed to this obligation.

The senior administrator ultimately responsible for the Western Research Community's animal care and use program is Western's Vice President (Research). **Other institutional leaders with shared accountability for supporting the Vice President (Research) in fulfilling these responsibilities include Deans, Vice-Deans, Associate Deans, and Chairs/Directors.**

Responsibilities

Western's senior administrator is responsible to ensure that:

a) A CCAC Certificate of GAP – Good Animal Practice – is in place for all areas associated with animal-based science under the authority of Western's Animal Care Committee (ACC),

b) At minimum one Animal Care Committee (ACC) is appropriately composed, structured and well-functioning in accordance with CCAC's policy statement on terms of reference for animal care committees; that this committee is provided with sufficient human resources to function appropriately and effectively,

c) Appropriate animal care and use operations are in place to meet the institution's scientific goals of research, teaching and testing; appropriate and sufficient animal facilities are in place to accommodate the species and types of work to be undertaken,

[1] Canadian Council on Animal Care (2008) Retrieved from http://www.ccac.ca/Documents/Standards/Policies/Senior_administrators.pdf

d) Sufficient, well-structured and knowledgeable veterinary and animal care staffs are in place to provide effective support to animal-based researchers within Western's Research Community; adequate resources are provided to these roles to support their continuing education and training specific to their fields,

e) Animal care and use is conducted appropriately, according to institutional and CCAC policies and guidelines and the Animals for Research Act (Ontario Ministry of Agriculture and Rural Affairs-Ontario),

f) Animal users are well-informed with regard to all aspects of Western's animal care and use program; animal users understand that animal use is a privilege granted conditionally upon adherence to all regulatory and institutional standards of animal care and use,

g) A sound structure is in place to support solid pre- and post-approval monitoring programs that eliminates unnecessary barriers to animal-based research, that fosters effective communications between animal users, the ACC and veterinary and animal care staffs and that results in prompt resolution of concerns; in the event of serious differences of opinion that cannot be readily resolved between researchers and the ACC, the senior administrator will provide direct support to the ACC in order to seek prompt resolution that aligns with regulatory and institutional standards,

h) Institutional measures are in place to protect those who may be exposed to animals from related hazards, including an occupational health and safety and a crisis management program,

i) Western's Research Community appropriately prepares for and contributes to every CCAC assessment visit; key roles associated with the animal care and use program, including the senior administrator, are made available to respond to questions; the senior administrator acts as the main institutional contact with CCAC by receiving and sending all formal CCAC communications; comprehensive responses from the senior administrator are provided in a timely manner to address CCAC recommendations about institutional program deficiencies.

Report of the Senate ad hoc Committee on Renewal

May 26, 2016

A. INTRODUCTION

The events of April 2015 revealed the degree to which members of the Western community both care about their university and desire a strong voice in its governance. Recognizing this, Western's Senate took the opportunity to examine, reflect upon, and renew itself by creating the ad hoc Committee on Renewal in June 2015. The Committee's mandate has been to examine the status of collegial governance at Western, with a focus on Western's Senate. We were directed to consult widely with the Western community, as well as review Senate's constitutional documents in order to formulate recommendations that would improve our current practices. To provide context for our recommendations, we begin this report with a brief history of university governance and the characteristics defining collegial governance based on our review of the relevant literature. The Committee's consultation and review processes are then described, followed by ten recommendations. The recommendations align broadly with themes identified in our interim report: Transparency, Representation, Structure, and Senate-Board Relations, and are intended to lead to positive changes in Western's governance culture.

B. BACKGROUND ON UNIVERSITY GOVERNANCE

Governance[1] in the context of the post-secondary education system refers to the "process of policy making and macro-level decision making within higher education…It is a multilevel phenomenon including various bodies and processes with different decision making functions. Certain entities have authority over specific kinds of decisions." (Kezar & Eckels, 2004, p. 375). As early as 1906, the Flavelle Commission laid the foundation for bicameral or 'shared' governance models in Canadian universities, assigning authority for academic matters to members of the university community (faculty and academic administrators) and authority for the administrative affairs of the institution to a board of citizens (Jones, Shanahan, & Goyan, 2001 p. 136). Provincial legislation established Western's bicameral governance structure (a Board of Governors and an Academic

[1] Governance is distinct from administration in that the latter pertains to the day to day implementation of policy. Leadership or leadership style should also be distinguished from governance in that it determines the manner in which policy is implemented.

Senate) via a 1923 amendment to The University of Western Ontario Act, specifying that governance at Western is a shared process and responsibility.

Over the last several decades, debates about university governance have intensified in Canada and across the globe. As governments worldwide recognized higher education's role in promoting economic competitiveness in a global knowledge economy (OECD, 2008), provincial governments in Canada renewed their focus on ensuring the quality and accountability of Canadian universities. At the same time, in Ontario, public funding for universities has been regularly reduced, with the resulting financial vulnerability experienced by Ontario's universities posing a potential threat to institutional autonomy.

In 1966, The Association of Universities and Colleges of Canada (AUCC, now Universities Canada) and the Canadian Association of University Teachers (CAUT) jointly established the Duff-Berdahl Commission to undertake a review of the governance practices of all universities in Canada. The review was commissioned in response to increasing "demands for more transparent governance processes and greater faculty and student participation" (Jones, Shanahan, & Goyan, 2001, p. 137). Its final report unequivocally endorsed the bicameral governance model, argued for the inclusion of students on senates, and urged universities to scrupulously safeguard their autonomy from the threats posed by undue external influence. While the report confirmed the role of boards of governors in overseeing the fiscal affairs of the university, it specifically argued that senate should function as a "deliberative body" with "substantial powers" and comprise "the central educational forum" of the university (Duff & Berdhahl,1996, p. 28-32). Twenty-seven years later, in 1993, the CAUT established the Independent Study Group of University Governance (ISGUG) because, in its view, many of the concerns that motivated the Duff-Berdahl Report had yet to be adequately addressed. The ISGUG focused on internal university structures and on the university's accountability to governments and the public. The report found that faculty viewed senate as merely a "rubber stamp" for administrative initiatives, and administrators saw senate as slow and often ineffective. The ISGUG made 19 recommendations, among them that the chair of senate should be elected from the floor and should not hold an administrative position, and that all faculty members should be eligible to vote for and serve as senators (Benjamin, Bourgeault, & McGovern, 1993, p. 12).

Much of the academic study on the topic of university governance has focused primarily on the efficiency and effectiveness of governance structures, but some has also focused on the human factors that impact governance (Kezar & Eckel, 2004). Jones and Slonick (1997) conducted the first rigorous study of Canadian university governing boards, examining composition and roles of both board members and the boards themselves. Although there were differences across Canadian universities, findings suggested that additional clarification of the role of governing boards in academic decision-making and in the relationship between board and academic decision-making bodies was warranted. Jones, Shanahan, and Goyan (2004) replicated that study with a focus upon Canadian university academic senates. Surveying senators from 38 institutions, they found that there was:

a) a lack of clarity among senate members regarding their responsibilities in relation to their boards and their own role in academic decision making,
b) ambiguity in how academic decisions are defined and understood,
c) mixed perceptions regarding areas within which senate should play a role and whether it was perceived to be playing a role in those areas,
d) the challenge of enhancing the representative nature of membership on senate,
e) discontinuity between incoming and outgoing senators, as well as there being considerable variability in the level of orientation and prior governance knowledge among senators, both of which create problems for achieving smooth transitions,
f) the belief on the part of many senators that academic decision making was shifting to senior administrators and the boards, and finally,
g) that few senates devote any effort to assessing their work or performance.

Pennock, Jones, Leclerc, and Li (2013) conducted essentially the same survey and found that many of the same responding universities (including Western) had made some changes to their bylaws and committee structures but many of the concerns that originated in the Duff-Berdahl (1966) report remained. The authors specifically noted that further clarification of the roles and responsibilities of senates and regular reviews of senates' work were needed. Challenges facing university governance identified more than fifty years ago are persistent and common to universities worldwide. Pennock et al. (2015)

concluded that “the road to increased senate effectiveness likely lies in open, frank, and engaged discussions and work in these areas as much as, if not more than through structural changes.” (p. 517).

The ad hoc Committee on Renewal (see Committee Membership, Terms of Reference) was created in response to similar concerns about our Senate’s effectiveness as a governance body and the perceived lack of university community participation in decision-making processes at Western. The Board of Governors created its own review task force to examine its effectiveness. These were the first reviews of Western’s governance in almost 20 years since a review was last mandated by the UWO Act in 1996.

C. CHARACTERISTICS OF COLLEGIAL GOVERNANCE

Shared governance in higher education depends on collegial interactions among community members, shared decision-making and joint responsibility. Indeed, in 1996, the joint Board/Senate committee review of the UWO Act emphasized that collegial decision-making is consistent with “the University’s character as a public, collegial enterprise” (Final Report of Review of UWO Act, 1996).

Yet characteristics of collegial governance are often implied rather than explicit. Collegial governance entails cultural, structural and behavioural components (Bess,1988). At its best, it should express the university community’s values and beliefs about what is appropriate for the institution. To accomplish this goal, the institution’s formal decision-making structures — the Board of Governors and the Senate — should then strive to reflect and develop these institutional values so that the university’s culture and structure can guide the behaviour and interactions among members of the community; how each member experiences and expresses the institutional values. For those things to happen, it is crucial that trust be earned and maintained, between individual members of the university community and between members of the community and their governing structures (Bess, 1988; Tierney, 2004). “The governance-trust nexus is therefore a dynamic process whereby parties are involved in a series of interactions in which some risk or faith is required on the part of one or all parties” (Tierney, 2006). Changing cultural and behavioural aspects of governance will, therefore, involve more than simply making structural changes because changing those aspects requires sustained and focused efforts in order to break down ‘status quo’ patterns of interaction (Minor, 2004).

In carrying out its mandate, this Committee adopted the assumption that collegial shared governance expressed in and through the senate is central to the identity and well-being of a university. Especially in times of multiplying external pressures and demands, effective senates are crucial to maintaining the autonomy and success of the university system (Final Report of Review of UWO Act, 1996). The characteristics of good collegial governance include a commitment to values that promote participatory democracy, such as: a) the right to speak without fear of reprisal, b) the requirement to listen respectfully to others, c) the need to respect differences and acknowledge the impact of power differentials where they arise, d) the willingness to act with a sense of shared collective responsibility which entails both accountability to a constituency and to the general welfare of the institution, e) a commitment to inclusiveness, and f) a commitment to collaborative decision-making or advisement through timely access to information and engaged participation (Austin & Jones, 2015; Burnes, Wend, & By, 2014). This Committee's discussions were, therefore, guided by the attempt to create conditions that would enhance Western's commitment to these values.

D. PROCESS

In order to carry out the tasks assigned by Senate, the Committee determined that two processes were necessary: a review of Senate documents (including The University of Western Ontario Act (1982; 1988) and the 1996 review of that Act, bylaws, and Senate committee terms of reference), and extensive consultations with the university community to determine the lived experience of collegial governance at Western. This review process was consistent with those typically used throughout the university in reviewing programs and units. The Committee reviewed the constitutional documents in August 2015. We also met with Chairs (current and former) of Senate standing committees in March 2016 following a review of our document summaries. A website on the Secretariat homepage was established in September 2015 to serve as a collection point for communications with the Committee. By the beginning of the Fall 2015 academic term, calls for submissions were made through a variety of channels. These included:

- E-mail requests to campus organizations and groups to provide written submissions and follow-up consultation meetings,
- A broadcast e-mail to the community at large,
- Targeted e-mails to current and former Senators, including Principals of the Affiliates,

- Advertisements in *The Western News* and *The Gazette* (print and online) on two occasions,
- Publication of a link to our website in the electronic *Western Alumni News,*
- Open town hall meetings with each Faculty,
- One-on-one consultations with members of the community who indicated an interest in talking with a Committee member,
- Several calls for feedback to Senators following submission of the Interim Report, and
- A final consultation with the Board's Bylaws Committee whose members have been charged with implementing the recommendations from the Board's governance review committee.

The Committee's objective was to provide multiple avenues for feedback to ensure that the voices of all who wished to address the Committee and the issues within its purview would be heard. An executive summary of the objectives of the Committee, along with an overview of Western's governance structure, was made available to the community as a whole through the Committee's website and was distributed to participants attending town hall meetings. Consultations were largely completed by the end of November 2015, although several that could not be scheduled prior to that date were held in the Winter term of 2016.

The interim report was presented to Senate on January 22, 2016. The report focussed on emerging themes regarding the current state of collegial governance and the Senate. The intention was to elicit feedback from Senators and the community regarding recurring patterns identified to that point. Major themes that were identified included: Transparency, Consultation and Communication, Representation, Engagement, and Culture and Leadership. Aside from comments querying the limitations of the conventional data collection strategy we employed, the feedback received supported the Committee's process and thematic interpretations.

During the Winter term, the Committee considered the suggestions and recommendations it had received, and also formulated some of its own. Our literature review of university governance informed these discussions. The following recommendations focus on outcomes that would address as comprehensively and coherently as possible the themes we identified in the Interim Report. We considered ways of a) improving the community's understanding of Senate, b) communicating Senate decisions and explaining clearly the processes through which these decisions are reached, c) improving community engagement, d) enhancing the effectiveness of Senators, e) improving information flow and the conduct of Senate meetings, f) enhancing the representativeness of Senate, and g) improving specific Senate committees' terms of reference.

E. RECOMMENDATIONS

Senate charged this Committee with the task of recommending ways to establish more robust and transparent decision-making processes based on a review of Senate structures and processes. Thus, many of the recommendations below focus on structural change. If implemented, these structural changes may create the conditions for positive changes in the culture, however, in and of themselves, they are not sufficient to greatly improve collegial governance. As much of the relevant literature notes (Kezar & Eckel, 2004; Tierney, 2004), cultural change is essential, and changing the culture is often quite difficult to accomplish. However, we believe that our recommendations might begin the cultural changes necessary to strengthen collegial governance at Western and, particularly, as it relates to Western's Senate.

Senate also tasked us with listening to the opinions and suggestions from a wide variety of members of the campus community. In doing so, we heard a broad range of perceptions about how Senate operates. For example, some in the community perceived that their questions or comments at Senate were not welcomed, while others feared negative consequences for expressing a dissenting or potentially unpopular position. Some felt their input had not been considered because they could see no evidence of it in the decisions that were eventually taken. As a result of these perceptions, many individuals simply chose to stop talking or participating in governance altogether; they did not feel that their voices counted. While some might argue that these people simply do not adequately understand governance processes, at some level, 'perception is reality' and it is critical that these perceptions be acknowledged and addressed in order for governance at Western to improve.

These feelings and experiences of alienation and disengagement may not directly relate to governance structure, however, they are a commentary on the culture of governance and leadership. Indeed, throughout our consultations we heard concerns about a top-down leadership style in Senate and in other areas of the university. While the evaluation of leadership is not in our mandate, we would state that collegial leadership is essential to good collegial governance, and effective university leadership necessarily involves a strong commitment to Senate, collegiality, consultation, and transparency.

During the consultation process, members of the community were asked to share not only their experiences of collegial governance, but also potential solutions to the challenges we face. The Committee appreciated the many creative ideas provided by members of the community. We listened and worked to extract the essence of those suggestions during our deliberations. In our many discussions, it became clear that there were a variety of ways to achieve the aspirations behind the recommendations. Thus, we often present a 'package' of actions, which are intended to be viewed as a 'menu' of options for Senate's consideration.

The recommendations that follow are the result of extensive discussion and debate by Committee members. While we did not always achieve unanimous agreement, these recommendations are the result of our best efforts at achieving consensus. The ten recommendations are organized into four categories based primarily on the themes from which they emerged. We also recognize that some of the recommendations are not resource neutral, nonetheless, we do not hesitate to make them because we believe that improving governance is worthy of financial support.

I. Transparency, Communication, and Accountability

Preamble**:** Much of what was revealed during the consultation process spoke to issues of transparency, accountability, misunderstanding, or lack of communication and knowledge about our governance structures and processes, including the role and responsibilities of Senators and the differences between governance and administration. The following six recommendations are intended to address these issues.

Recommendation 1: Improve the visibility of Senate's decision-making processes

Rationale: In order to improve the transparency of Senate's and its committees' decision-making processes, we suggest that the following actions could increase awareness of Senate's work.

a. Consistent with collegial governance and with the roles and responsibilities of the position, Senators should regularly communicate with their constituencies, both to consult and inform.

b. Senate should consider whether committee meetings should be open, either to all members of Senate or to the full Western community.

c. Reports that come from Senate committees (oral and written) should be annotated to include the context for decisions and the factors considered in decision-making.

d. The Senate website should be revised to illustrate the flow of information in the decision-making processes, beginning at the local level through Senate committees to Senate itself, and provide links to other key representative groups on campus (such as USC, SOGS, etc.).

e. Standing committee agendas should be posted so that the community can be informed of the issues that are being deliberated in committees.

Recommendation 2: Improve efforts to educate and inform the entire Western Community about Senate and university governance.

Rationale: An informed community is critical to good governance. Since many in the Western community are unaware of the role and responsibilities of Senate, efforts to better inform the community should lead to enhanced transparency and accountability. Suggestions below target both initial education of new members and ongoing education for all members of the Western community.

a. Education should be provided for all new members of the community (e.g., faculty, staff, student leaders) about Senate, its role, responsibilities and processes.

b. Ongoing education should be provided to units and organizations on campus.

c. All members of the community should be encouraged to attend a Senate meeting.

d. Communication of Senate decisions should be enhanced through publishing (1) summary reports following monthly Senate meetings and (2) an annual report to the university community on Senate's activities over the year.

Recommendation 3: Articulate the roles and responsibilities for Senators

Rationale: Clearly stating roles and responsibilities enhances governance effectiveness (Kezar & Eckels, 2004), improves accountability and could begin to create conditions for cultural change. Following the principles of collegial governance, such a statement should insist that Senators:

a. Conduct themselves with a sense of shared collective responsibility.

b. Are accountable to both their constituency and to the general welfare of the institution.

c. Prepare more fully prior to Senate and Senate committee meetings in order to make informed decisions at those meetings.

d. Behave with tolerance and respect toward different views and differences in levels of knowledge.

Recommendation 4: Enhance education of and communication among Senators.

Rationale: Consultations revealed that it often took Senators quite a while to understand how Senate worked (for example, what the roles and responsibilities of Senators are) and to feel confident and prepared to become actively engaged in the work of Senate. In addition, it was noted that there was little opportunity for informal interaction between Senators. While addressing these concerns could be challenging with more than 100 Senate members, the following actions are recommended to facilitate conditions for engagement:

a. Provide a more comprehensive orientation.

b. Provide ongoing education processes.

c. Provide opportunities for both informal social and discussion interactions among Senators.

Recommendation 5: Make Senate a more proactive body by dealing more efficiently with transactional business and increasing time spent in strategic discussion.

Rationale: Prominent among the comments pertaining to engagement in Senate were perceptions of top-down information flow and of Senators merely 'rubber stamping' decisions made elsewhere. Since much of Senate's work is done by its standing committees, it can easily appear as though much of what is done in Senate as a whole is purely transactional and reactive. During our consultations, many expressed a desire for more debate and discussion of substantive issues at Senate. While we recognize that Senate has already expanded its existing question period to allow for more discussion, we offer the following suggestions for actions that we believe will continue to build and support a culture of robust strategic discussions consistent with principles of collegial governance.

a. <u>Change the information flow such that major institutional issues:</u>

i) are brought to Senate first for strategic discussion and initial advice,
ii) then are directed to the appropriate Senate or administrative committee for detailed work, culminating in
iii) reports brought back to Senate for appropriate action (e.g., approval, transmittal, advice, etc.).

To realize the potential of this change in information flow, a deliberately developed annual plan for strategic discussions would likely be required, recognizing that what issues are considered to be major issues will change over time. This would not preclude the possibility of discussing any issue relevant to the broader university community as it arises. These discussions can be conducted informally during Senate meetings, allowing consideration of strategic issues with the rules of debate relaxed.

b. <u>Consider adoption of a 'consent agenda'</u> in order to free up meeting time for strategic discussions. This would prevent the transactional work from consuming the entire meeting, and increase time for substantive discussion. Consent agendas present items to be acted on as a whole, but at the start of each Senate meeting any Senator would be able to remove an item from the consent agenda so that it could be discussed separately.

Recommendation 6: Conduct regular periodic reviews including: a) a full structural review every 10 years, b) an annual Senate performance evaluation conducted collectively and via individual Senators' self-reflection and c) reviews of standing committees' Terms of Reference every three years.

Rationale: Concerns about the accountability of Senate as a whole to the community and of individual Senators to their constituencies were raised frequently during our consultations. Periodic review of the effectiveness of governance structures and processes is an important element of good governance, ensuring the protection of our institutional values in the face of a rapidly changing post-secondary education landscape. These performance reviews could be confidentially conducted, summarized and made a part of an annual discussion in Senate.

II. Representation on Senate

***Preamble*:** Since our last governance review 20 years ago, the composition of the university's academic staff has changed significantly, but our structures and processes have not kept pace with these changes. Eligibility to vote and serve on Senate is tied to the rank of Assistant Professor (or higher) in the UWO Act. The Committee spent many hours discussing the mechanisms by which representation on Senate could be enhanced, as well as the ramifications of those mechanisms. Multiple sources were consulted including University legal counsel. Our deliberations led to two possible mechanisms: 1) open the UWO Act, which would then present the Provincial Legislature with the opportunity to insert itself more prominently into the internal governance of the university or 2) create ranks that were equivalent to the rank of Assistant Professor internally through negotiations. Both would be protracted processes with uncertain outcomes. It is, of course, possible that the University's Legal Counsel and the Office of Faculty Relations may be able to find an alternative way to achieve this important objective.

Recommendation 7a: All individuals who meet the Act's definition of Academic Staff[2] should be eligible to vote for members of Senate. In addition, those Academic Staff who also have at least two years of continuous service should be eligible to run for a Senate seat.

Rationale: All who contribute on an ongoing basis to the academic mission of the university should be able to participate in Senate. This practice would promote a culture of inclusivity and collegiality, and enhance effective decision-making. Two possible paths Senate may consider are:

i. Recommend that the Board of Governors and Senate debate and discuss opening the UWO Act to reword section 25 of the Act such that the minimum rank of Academic staff eligible for Senate membership be broadened to include lecturers, assistant, associate and full librarians.

ii. Recommend to the University and UWOFA that, through the process of either constructing a memorandum of agreement and/or of collective bargaining during the next contract negotiation sessions, equivalent ranks to Assistant Professors be created so that those with Academic staff qualifications meet all provisions of the Act for voting rights and membership in Senate (i.e., section 25).

Recommendation 7b: Members of those constituencies which do not meet the definition of Academic Staff (e.g., post doctoral fellows) or those who do not hold the rank of Assistant Professor should be considered for seats on relevant Senate committees.

Rationale: In order to ensure that all relevant expertise is available for committee deliberations and collegial governance principles of inclusivity are upheld, postdoctoral fellows and other constituencies should be considered for seats on relevant committees. Senate bylaws or committees' terms of reference could be revised to accommodate their inclusion.

[2] Section 1(a) 'academic staff' means those persons employed by the University whose duties are primarily those of performing and administering teaching and research functions and who are included in the instructor, lecturer and professorial ranks;

Recommendation 7c: An additional seat on Senate should be created in the administrative staff constituency.

Rationale: Given the increased number of individuals across the university who are in the administrative staff category, the Committee determined that an additional seat on Senate is warranted. The addition of a representative to an existing constituency would require a two-thirds vote of support in Senate and a subsequent request to the Lieutenant Governor in Council in the Provincial Legislature, however, it would not require opening the UWO Act.

III. Committee Structures and Processes

***Preamble*:** Our review of committee constitutional documents and multiple consultations revealed that many of the same concerns about collegial governance in Senate as a whole were relevant to standing committees as well. The transparency and accountability of committee decision-making processes, Senators' preparation for and understanding of their role on standing committees, and the adequacy of representation were all of concern, albeit more so for some committees than others. Recommendation 8 pertains to all standing committees (and their subcommittees); recommendation 9 refers to particular committees we felt required specific attention.

Recommendation 8: The roles and responsibilities of committee members should be specified in all committees' terms of reference. New committee members should be briefed on these at the first meeting of their term.

Rationale: Clarity in roles and responsibilities are essential to committee effectiveness and to enhancing accountability to others on the committee, their constituencies and the community at large.

Recommendation 9: The Terms of Reference of three standing committees should be revised concerning membership, mandate, and transparency of their operations.

Rationale: Consultations and document reviews revealed significant concerns with the structures and processes of the following committees:

a. *University Research Board (URB):* Historically, this committee has served an advisory role to the Vice-President (Research) but, in the 20 years since the last governance review, the prominence of research in the academic life of the institution has grown significantly. The Terms of Reference of the URB should be reviewed with consideration of the following:

   i. The URB's mandate should parallel that of SCAPA. It should be tasked to "formulate, review, and recommend new or revised research policies to Senate for approval." Policy formulation could follow similar subcommittee and administrative committee paths as those followed by SCAPA.

   ii. A URB subcommittee should be established to provide peer review of internal funding competitions with members elected by Senate and chaired by the VP Research.

   iii. Membership on the URB should be expanded to include Deans of all Faculties.

   iv. Membership on the URB should be expanded to include a Senate-elected member from each Faculty, who does not hold administrative responsibilities and has a strong record of research.

   v. The phrase 'strong record of research' should be defined.

   vi. With the above-noted expansion of membership, members of the URB should consider whether a designated seat for a senior member or director of a Centre or Institute is still necessary.

b. *Senate Committee on University Planning (SCUP):* SCUP serves in an advisory capacity to Senate and its work entails critical appraisal of major policy documents, many of which are detailed and complex. Our consultations revealed that critical appraisal and debate do not always take place during SCUP meetings. We feel that the composition of SCUP and an information imbalance among members may contribute to this situation. While many ex officio members may already be very familiar with the issues and documents SCUP reviews, having participated in discussions and debates during document preparation, elected members are far less likely to be familiar with those issues and documents. SCUP's Terms of Reference should be reviewed so that they reflect a more balanced representation of elected to ex officio members.

We recommend the addition of four more elected members, which would bring the elected membership to eight. Doing so would enhance opportunities for debate and add voices of individuals having differing perspectives.

c. *Nominating Committee and Related Processes:* There is a perception in the community that slates of nominees for Senate committees have been predetermined by the administration. Further, our consultations also revealed that elected members of the Nominating Committee often did not bring nominees to the deliberations, leaving many slates to be acclaimed at the Committee level. Thus, we recommend consideration of the following menu of actions intended to change both the preparation of committee members for considering nominees and the information made available to Senate and the community at large regarding the parameters used to create slates of candidates:

i. Any Senators who have put their names forward should be given full consideration by the Nominating Committee in developing nomination slates for Senate.

ii. If no nomination for a vacant Faculty seat on Senate has come forward for election once the nomination period has been closed, the need for a candidate(s) should be referred to the Faculty-level Nominating Committee. If a Faculty does not have a Nominating Committee, Senate should require its Faculty Council to create one.

iii. Committee members should provide brief statements that describe nominees and the reasons why they should be considered for the position to be filled. Candidates who self-nominate or nominations from a Faculty Nominating Committee should also provide such statements. Doing so would enhance informed voting and potentially diminish the tendency for voting based on name recognition.

iv. The Terms of Reference of the Senate Nominating Committee should articulate the parameters/principles used to balance slates of nominees.

v. Reports to Senate at the time a slate is presented should include a reference to the particular factors that were considered in developing the slate.

vi. When nominations are made from the floor of Senate, an electronic ballot following the meeting should be conducted so that statements about all nominees can be circulated prior to a vote. The practice of conducting immediate paper ballots should be discontinued.

IV. Senate - Board Relations

Recommendation 10: Strengthen the connections and cooperation between the Senate and Board of Governors

Rationale: Our committee recognizes that means now exist to improve communication and relations between Senate and the Board, such as the Board providing a regular report of its activities to Senate. Additionally, both our Committee and the Board's Bylaws Committee recognize the need for some joint orientation activities. Senate might encourage the development of additional joint activities, such as an annual meeting between its Operations and Agenda Committee and the Board's Bylaws Committee or an annual invitation to the Chair of the Board to speak to Senate.

F. CONCLUSION

Universities are expert systems; they rely on trust, reciprocity, clear communication, and transparency mediated through robust processes of collegial governance in order to best thrive. The term “universitas” itself refers to a group of people who govern themselves (Haskins, 1965). Quite simply, there is no ‘university’ without collegial governance. At Western, Senate is the place where our community's shared values are determined, debated and transformed.

While Western and other universities in Canada face significant external pressures and expectations that often require flexible, timely decision-making, there are significant advantages to the slower, more democratic deliberations required by collegial governance. These advantages include the ability to utilize internal expertise, the promotion of community and trust, and the ability to arrive at better decisions. Most importantly, collegial governance ultimately strengthens the integrity and quality of the university as a whole.

The recommendations made above attempt to address the challenge of governing Western in a timely and effective manner while, at the same time, respecting collegial governance, including fair representation and meaningful consultation and debate in Senate. We hope that our report is just the first step in Senate's deliberations about how to foster and strengthen its democratic processes. There are many innovative models used at other institutions, such as electing a Speaker or Chair of Senate from the floor, that could be discussed in the future. We strongly encourage Senate to continue the conversation about its purpose and identity on an on-going basis.

At the core of much of what we heard throughout our consultations was the need to reinvigorate a culture of trust and inclusion across the university in general, to bridge the rifts between the various constituent groups, and to empower those groups who have so far been denied the opportunity to participate in governance processes. We are extremely grateful for the insightful contributions of a wide variety of people across Western who took part in our consultations. They spoke passionately about their desire to see Western improve. Listening to their commitment, creativity, and concern inspired us throughout our deliberations, and strengthened our belief in the power of collaboration, consultation, and collegiality.

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URB Task Force Steering Committee
Support for Research in Social Sciences, Arts, and Humanities at Western

Final Report
May 16, 2016

Contents:

1. Background
2. Social Sciences, Arts, and Humanities Research – The Western Context
3. Value and Recognition of Social Sciences, Arts, and Humanities Research at Western
4. Infrastructure to Support Research at Western
5. Funding and Other Resources for Research at Western
6. Conclusions

Appendices:
1 – Report of Working Group 1 (including updates to the Interim Report)
2 – Report of Working Group 2
3 – Report of Working Group 3

1. Background

The priorities of the Western University Strategic Plan are built upon a "shared ambition to seek always the betterment of the human condition" (*Achieving Excellence*, 2014, p. 4). This choice of words is both apt and profound. Indeed, the human condition is both acted upon and improved by "academic freedom," "autonomy," "accountability," "diversity," "integrity," "openness," and "social responsibility" (*Achieving Excellence*, 2014, pp. 19-20). For Western, this means "creating a culture that places a higher value on scholarship and innovation, one that strives more intently to increase the impact and productivity of our research and scholarly activities across and between the disciplines" (*Achieving Excellence*, 2014, p. 7). For this kind of culture to thrive there must be appropriate infrastructure and support. The Strategic Plan specifically recognizes this need in the commitment to

> "….focus more attention and resources promoting and rewarding (1) excellence in scholarship and innovation; (2) knowledge creation; and (3) the translation and mobilization of that knowledge into languages and applications useful in the public realm." (*Achieving Excellence*, 2014, p. 7)

The social sciences, arts, and humanities are central to Western's vision and mission. Indeed, world-class researchers in these disciplines are found across the University in eight of Western's Faculties. However, changes in both the internal and external contexts make it timely to examine how social science, arts, and humanities research is valued and supported at this institution. Thus, while the mission and vision of Western's Strategic Plan is the foundation upon which this report is built, the goal of this report is to reclaim the idea of creating a culture of scholarship and integrity in order to move from concept to action.

1.2 The value of social sciences, arts, and humanities research

There have been many eloquent statements about the value of the research of social scientists, artists and humanists. A recent example, the 2014 *Leiden Statement* on *The Role of The Social Sciences and Humanities in the Global Research Landscape*, was signed by the U15 Group of Canadian Research Universities (of which Western is a member) and six other international research university networks. The Leiden Statement declares that:

> "The social sciences [arts] and humanities are indispensable to understanding and addressing contemporary global challenges and to grasping emerging opportunities. *Every challenge the world faces has a human dimension, and no solution can be achieved without enlisting the support and efforts of individuals, communities and societies*. [These disciplines] cultivate knowledge about human expression, behaviour, and social life that is essential to understanding the human context of these challenges and crafting viable solutions to them. Because of the centrality of these disciplines to these issues, as well as their intrinsic value, it is *essential within the global research landscape to promote, nurture, and cultivate social science [artistic] and humanistic research*." (emphasis added) (http://media.leidenuniv.nl/legacy/leiden-statement.pdf, p. 1)

Others have noted that,

> "research [in these disciplines] teaches us about the world beyond the classroom, and beyond a job. Humanities scholars [for example] explore ethical issues, and discover how the past informs the present and the future. Researchers delve into the discourses that construct gender, race, and class. We learn to decode the images that surround us; to understand and use the language necessary to navigate a complex and rapidly shifting world" (Gretchen Busl, http://www.theguardian.com/higher-education-network/2015/oct/19/humanities-research-is-groundbreaking-life-changing-and-ignored).

Furthermore, an examination of the top five universities ranked in the Leiden Ranking 2015 (http://www.leidenranking.com/ranking/2015) indicates that a strong social science, arts, and humanities sector is critical to the strong showing of those research-intensive institutions. Four of the five universities (MIT, Harvard, Stanford, Princeton) were also ranked in the top five in the areas of social sciences and humanities. MIT and Princeton had their highest ranks in this area, as does Western.

1.3 Task Force Steering Committee Directives

The Task Force Steering Committee was formed by the University Research Board at the request of the Vice-President (Research) in September 2015. The mission of the Committee was to examine the environment of social sciences, arts, and humanities research at Western – both internal and external to the institution – and ultimately recommend strategies to better support success, growth, and leadership in research in these disciplines.

The Committee identified, and the URB approved, three main areas of focus. In consultation with the URB and the Associate Deans Research (ADRs), three working groups were constituted, one for each of the main objectives. Members of the Steering Committee acted as coordinators for the working groups, which included representation from all eight faculties linked to the social sciences, arts, and humanities. The main areas of focus for the respective working groups revolved around three broad questions:

1. How do external entities, including funding agencies and professional organizations, define leading edge scholarly activity in social sciences, arts, and humanities disciplines?
    a. What are their priorities now?
    b. Where are they going in the next five years?

    Working Group 1 members consulted directly with the major funding agencies in Ottawa and professional organizations to fully understand the external context. This was followed by an examination of how Western might best position its researchers to take advantage of existing and emerging opportunities.

2. What are the strengths, weaknesses, opportunities for and threats to social sciences, arts, and humanities research at Western?
    a. How do units at Western define leading edge scholarly activity?
    b. How is research in the social sciences, arts, and humanities valued and measured at Western?
    c. How is research in the social sciences, arts, and humanities valued and measured outside of Western?
    d. In what ways are these values and measurements aligned with the external context?

    Working Group 2 engaged in direct consultation with social science, arts and humanities scholars in faculties across campus in order to understand perceptions of the research environment at Western. Personal consultations (interviews, focus groups) with 152 researchers were complemented by an online survey completed by 347 colleagues. This represents a participation rate of 60% or more (the figure is approximate as it is difficult to determine the exact number of social science, arts, and humanities researchers on campus due to overlapping areas of interest in the Faculties). The findings of Working Group 2 are represented in each of the sections of this report.

    In addition, a senior graduate student working group was assembled and conducted a focus group discussion that paralleled the personal consultations with faculty members. Their reports have been communicated directly to SGPS and are included here as part of the Working Group 2 material.

3. How is research in the social sciences, arts, and humanities supported at Western and how can this be improved?
    a. Specifically, how can (i) administrative practices and processes, (ii) funding, and (iii) recognition be improved?
    b. How can Western better communicate the results of leading edge scholarly activities in social sciences, arts, and humanities disciplines?

c. How can Western advocate for social sciences, arts, and humanities research more effectively?

Working Group 3 focused on understanding the process and pattern of research communication at Western, across campus and within faculties. This included a review of administrative practices and processes in Research Development Services and the Department of Communications and Public Affairs. Staff in individual Faculties with responsibility for promotion and celebration of research were consulted, as were individuals at other universities, to understand best practices here and elsewhere and how other universities deployed internal funding resources. Working Group 3 was also interested to understand how researchers promote and communicate their own work and how they can be encouraged and supported to do that more effectively.

This report is a summary of the input from all the Working Groups, and as such cannot present the full richness of detail that our Committee received. The summary reports from the Working Groups are attached to this document as appendices and we strongly encourage a careful reading of those documents. We have deliberately chosen to strike a constructive tone in this report, but we acknowledge that there are deep currents of discord within the social sciences, arts, and humanities community at Western, and the reader is directed to the consultation report in Appendix 2 to get a better sense of the mood of the community.

2. Social Science, Arts, and Humanities Research at Western – The Western Context

The *Leiden Statement* and recent "defense of" writings regarding the value of research in the social sciences, arts, and humanities are indicative of the broad perception that these areas are in crisis, even in research-intensive institutions. Our consultations with scholars across campus clearly demonstrate that this perception is felt at the local level within Western as well.

Our findings suggest a considerable sense of malaise and discontent among the majority of those consulted. The critical concerns are around the valuing of research within Western, the lack of suitable internal funding mechanisms, and limited research infrastructure support. These issues are addressed here and in subsequent sections.

The consultations revealed an impressive array of social sciences, arts, and humanities research at Western, the vibrancy of which is overlooked by a model of research that is founded on assumptions about practices and success that are not necessarily aligned with the needs, traditions and goals of many of these disciplines. Such a model is, therefore, unable to recognize, support or communicate the value and impact of social sciences, arts, and humanities research at Western. The pervasive feeling is that the university tends to support and celebrate the accomplishments and contributions of researchers according to a hierarchical system of values that recognizes and celebrates high-budget research that is tied to technological "innovation" and industry interests, and particular kinds of research output (e.g., numerous and often multiple-authored publications).

The great diversity in social sciences, arts, and humanities research at Western reflects both the strength and authority of the University. A research-intensive university such as Western must make the most of this diversity by leveraging resources, and ensuring the optimization of researchers' time and focus. Within the broad scope of research in these disciplines, there are some social sciences, arts, and humanities researchers who find Western's research climate to be supportive and who have been successful in securing internal and external funding. Even those who are successful within the prevailing model, however, note that the value ascribed to their work by the University pales in comparison to that given to big budget projects. Other social sciences, arts, and humanities researchers work within scholarly traditions that embrace different models of research and success. Some do not require large amounts of funding, such as is seen with Tri-Council monies, yet experience great difficulty finding sources for the smaller amounts of funding they do need. There are other people who do not require funding in order to undertake their research but do require other sorts of support. They are looking for, but not often finding, is institutional recognition that research 'value' is not synonymous with research funding.

If Western is truly to realize its aspirations to become a world-class, research-intensive institution, it is critical that it acknowledge, value, and support all types of researchers and their respective needs. Researchers within social sciences, arts, and humanities disciplines typically work alone or in small collaborative groups, requiring time to but little to no funding to do their research. Researchers who work within this model report feeling pressure to satisfy metrics-based evaluative processes, which are inappropriate to fully capture the value and impact of their academic work. Furthermore, for social scientists, artists, and humanists who do not require large budgets, application for external grants (such as Tri-Council) is not an efficient use of time, since the 'return on investment' for these applications is very low (given the combination of low competition success rates and a low budget request – see Appendix 3), time and effort could be spent more effectively conducting research rather than seeking funds to do the same. In addition, the increased Tri-Council emphasis on team-based grants makes it more difficult for the solitary scholar to be successful. It is in the University's best interests to work creatively to find other ways to support this work.

Within the social sciences, arts, and humanities there is a strong tradition of research practice where researchers work alone to produce sole-authored publications, often in the form of books. This mode of research typically requires time-intensive analytic, writing, and publication processes that are often, though not exclusively, driven by a sole author. Social sciences, arts, and humanities researchers working explicitly from critical, social justice perspectives— indeed those who are seeking "always…the betterment of the human condition" (*Achieving Excellence*, 2014, p. 4), and who work collaboratively with community, regional, national and/or international partners to effect long term social change through incremental impacts, are particularly disadvantaged within this hierarchical model.

Mid-career researchers are often disenfranchised as they find their programs of research difficult to sustain given current internal funding conditions. For these researchers, ineligibility for internal research programs coupled with the absence of sufficient and appropriate institutional supports stifles research productivity and research and threatens the optimal use of Western's human capital and resources that are vital to making it a world-class, research-intensive institution.

The Faculties at Western that house the social sciences, arts, and humanities researchers are not only diverse in terms of the research they undertake, but also in terms of the resources that they can mobilize to support research at the Faculty level. In size alone, these eight Faculties range from the

University's largest to smallest Faculties. While the larger among these Faculties are able to mobilize some research support, smaller faculties (with associated smaller budgets) are much less able to do so. Music, Law and FIMS, for example, only recently joined forces to hire a joint research officer, while some Faculties on campus have at least one if not several such staff members. Effective support of all faculty members' research requires a combination of resources available at the local and central levels, with specific recognition of the relatively limited resources available in smaller faculties.

The University's recent decision to contribute $5M from the 2016-17 budget to an endowed fund to support social science, arts, and humanities research is clearly a step in the right direction and one which must be recognized and applauded.

3. Value and Recognition of Social Science, Arts, and Humanities Research

Central to any discussion of research advocacy and communications is the notion of value. The very act of advocating and communicating presupposes that there is value to what is being communicated. But how and in what ways does Western value research, particularly in the social sciences, arts, and humanities? What standards are used in that valuation? How does valuation take account of the diversity of work going on at the University? Does the rhetoric of valuation match the practice?

The value of research is expressed at a variety of levels within the University. At one level, the value of research is indicated by how the institution chooses to deploy tangible internal resources such as funding and infrastructure. At another level, the value of research is indicated by what and how the University chooses to communicate to internal and external audiences. Finally, the value of research is assessed and expressed at the Faculty and Department levels related to promotion and tenure (P&T), communications, and Annual Performance Evaluation (APE).

Achieving Excellence on the World Stage recognizes the diversity of research at this institution:

> "… research outcomes and their dissemination … mean different things to different people—from citations in the most prestigious disciplinary journals, to monographs and books published by leading presses; from keynote speaking engagements at national and international conference plenary sessions, to musical performances on the world's international stages; from scholarship that shapes public policy, to business cases that inform entrepreneurial decision-making; or from curiosity-driven enquiry, to scientific and technological innovations that can be commercialized for application in health care and by private industry." (*Achieving Excellence*, 2014, p. 8)

The value of research is often discussed in terms of *impact.* How to measure that impact is a wide-ranging and ongoing discussion that we cannot completely capture here. Interestingly, the potential impact of the diversity of research outcomes and their dissemination through a wide range of mechanisms is generally not acknowledged within the University and its faculties and departments. This is in spite of the fact that the Federation of Humanities and Social Sciences has published a working paper entitled *Humanities, Social Sciences and Arts Research: A framework for identifying impact and indicators* (http://www.ideas-idees.ca/sites/default/files/2014-05-05-impact-project-update-en.pdf) identifying five categories that can be used to characterize the impact of this research: (1) impact on scholarship, (2) impact on capacity (through teaching and mentoring), (3) impact on the economy, (4) impact on society and culture, and (5) impact on practice and policy. Each of these several subcategories goes far beyond the simplistic assessment of impact by means of the size of grants, citation counts and journal impact factors. Our consultations clearly indicate that social science, arts, and humanities researchers at Western feel that the University does not recognize these other areas where their research has impact. There is substantial concern among some scholars that simplistic metrics/indicators such as citation counts could become externally-mandated standards for faculty assessments (such as Annual Performance Evaluation, and Promotion and Tenure adjudications). While some schools and departments may find metrics to be appropriate for evaluative purposes, researchers remain adamant that the evaluative use of metrics *must not* be imposed on all units as *the* method of assessing faculty or individual researcher performance. The SSHRC ADRs submitted a document to the AVPR in February of 2016 that outlines the complexity of this issue within the social science, arts, and humanities disciplines. That document offers a summary of the kinds of metrics and other assistance that would help researchers from diverse disciplinary backgrounds to document research impact and excellence. It is attached as part of Appendix 2.

The value and impact of research are also considered at the Faculty and departmental level through the P&T and APE processes. While these processes are supposed to be based on disciplinary norms, they do not recognize many of the aspects of the research of social scientists, artists and humanists. This includes the longer timeline for community-engaged research (given the need to first develop strong community relationships), and many aspects of knowledge mobilization such as reports generated for research partners that do not appear in peer-reviewed journals, and public engagement (e.g. media, public lectures etc.). If Western is to support its researchers in their efforts to align themselves with Western's strategic priorities as well as those of the Tri-Councils, it must find a way to recognize these additional activities (see Appendices 1 and 2).

An examination of advocacy strategies being deployed by the Tri-Councils clearly demonstrates that knowledge mobilization in all its forms is the key to having impact on the academy and society at large. In particular, the term "engaged research," with myriad modifiers (patient-engaged, community-engaged, public-engaged) is replacing the idea of "outreach," as it emphasizes the bi- (or multi) directional flow of information that increasingly characterizes engaged research, particularly that done in the social sciences, arts, and humanities. However, such engaged research faces a number of requirements, including the need for extensive lead time and consultation before research can even begin, negotiations with partner communities and other Universities that have their own research protocols that may or may not dovetail with those of Western, and outcomes that may not fit traditional academic models of impact. The training of graduate students in this area is also of particular importance. The outcomes of such engaged research surely bring Western closer to truth (*Veritas*). However, immediate usefulness (*Utilitas*) may not be as apparent nor may it fit neatly into the "typically defined… research groups" (Strategic Research Plan Summary, p. 1)

The communication of research results in venues beyond the usual scholarly publications and academic conferences serves many purposes beyond satisfying external granting agencies. It is a way to recognize success and offer public congratulations for a research achievement. It is a way to boost a researcher's profile (whether faculty members or graduate students), which in turn may bring new and different opportunities for research and engagement. It is a way for the institution to demonstrate the breadth and quality of its research work to prospective students, faculty members, and donors, to governments, and to the private sector. It is a way to build a campus community, with researchers in seemingly disparate disciplines being made aware of the research taking place throughout the eight Faculties. Effective communication of research successes is also a means of publicly acknowledging the support of the Tri-Councils and of reinforcing to them the value of the research they fund. In all of these ways, the communication process serves to validate the scholarship of each researcher.

Western uses a number of tools as part of its broader communication and public relations strategy. These activities are coordinated by the Office of Communications & Public Affairs (hereafter CPA), under Associate Vice-President Communications Helen Connell. This office includes Alumni & Development Communications, Media & Community Relations, Creative Services, and Editorial Services. Many faculties have their own communications officers/teams. Further details regarding the research communications environment are outlined in Appendix 3. Our consultations revealed a strong and consistent sense among social sciences, arts, and humanities researchers that their work is not adequately publicized by the University, and that the publicity spotlight shines much more frequently on research in the STEM areas. Indeed, more than 80% of Working Group 2's online survey respondents indicated that social sciences, arts, and humanities research deserves both better recognition by the University and better promotion to improve visibility outside of the University (see Appendix 2).

A tabulation of "mentions" of research activity across the various public communication platforms at Western over the past five to seven years show some broad trends (see Appendix 3). Our analysis reveals that a research achievement in the STEM disciplines is four to five times more likely to receive institutional publicity than an achievement in the social sciences, arts or humanities disciplines. We do not mean to suggest that this disparity is intentional, and it must be stressed that the relatively poor promotion of social sciences, arts, and humanities research is not for lack of trying by CPA. Over a period of years, CPA has developed several initiatives to engage with scholars in these disciplines and begin conversations that could lead to greater publicity, with very limited success. Our findings suggest that this pattern appears to be the result of several phenomena: (1) the challenge of the CPA gaining access to information about social science, arts, and humanities research, (2) considerable differences in the support for communications among the various faculties (it is typically better supported in the STEM faculties than in social sciences, arts, and humanities disciplines), and (3) a reluctance on the part of many social scientists, artists and humanists to engage with the communications team(s).

3.1 Recommendations

Western should:

- initiate broad discussion within the University about how research is valued and impact assessed at the level of the institution. The VPR's office initiated a discussion on this issue, and the SSHRC social science. arts, and humanities ADRs responded with a statement on indicators, but more discussion is needed, particularly in terms of how the University can be an advocate for its researchers
- engage in a new and critical discussion of contributions and impacts that are considered in promotion and tenure, Annual Performance Evaluation and graduate student assessment files.

It is clear that the external context is shifting in terms of contributions that the Tri-Councils value, so Western should respond to support its researchers

- establish better mechanisms to connect the Communications & Public Affairs office with the Faculties and social science, arts, and humanities researchers

For this process to be effective, researchers themselves need to recognize the value of advocacy / knowledge mobilization / public engagement / dissemination to their own work, and become partners with communications professionals across campus in publicizing their research achievements.

4. Infrastructure to Support Research

In order to enhance research productivity and impact, it is critical that Western ensure social scientists, artists and humanists have the infrastructure support to develop research projects, prepare and submit research grants, conduct research, and initiate the "reciprocal and complementary flow and uptake of knowledge between researchers, knowledge brokers and knowledge users" (SSHRC, 2016 http://www.sshrc-crsh.gc.ca/funding-financement/programs-programmes/definitions-eng.aspx#km-mc).

Based on the findings of the Working Groups (see all Appendices) our Committee identified four areas in which infrastructure should be strengthened to enhance social sciences, arts, and humanities research.

4.1 Support for the preparation of research proposals

Supports for faculty members applying for grant funding include: the identification of grant opportunities, application review, assistance with budgeting, identification of knowledge mobilization activities and development of knowledge mobilization plans. As discussed in Section 2 (above), some Faculties have the resources to provide some assistance to researchers in these areas, but access is not universal. Consultants in RDS are available to help with large grant applications, but their capacity to support more basic applications is very limited. Access to these and other relevant support services will enable researchers to prepare stronger grant applications and efficiencies would be gained if some supports were centralized, since this would promote coordination, avoid duplication and ensure access.

Researchers in the social sciences, arts, and humanities, in formulating their research programs from the outset would benefit from assistance in developing coordinated knowledge mobilization programs that include traditional modes of mobilization but also mechanisms such as research narratives, media releases, and community outreach. Research and Development Services, Western Libraries (e.g. Scholarship@Western), the Community Engaged Learning group and Communications Western would be key partners in this important initiative. In addition, knowledge mobilization plans will benefit from strong relationships with municipal, provincial and federal governments, policy makers, not-for-profit agencies, and other potential research users. Assistance with identifying, developing, and maintaining these relationships would help to strengthen both the awareness and the impact of social science, arts, and humanities research. In turn, this will enhance the competitiveness of our researchers in external grant applications by aligning them with the priorities of the external funding agencies.

To assist with budget development and justification, Western should develop a University-wide framework for the identification and valuation of institutional in-kind contributions. Increasingly, these types of contributions are required for external grant applications, and researchers need support to identify and document the in-kind contributions offered by the University. Two additional administrative areas were identified as being problematic: ROLA and the new HR regulations around hiring research assistants. ROLA is widely perceived by faculty members to be arcane and user-unfriendly. The ADRs have noted that ROLA is not useful as a means of tracking research application activity in their faculties.

Once a grant is awarded, faculty members highlighted that the new HR regulations surrounding the hiring of research assistants have significantly increased the workload of administrative staff, resulted in a longer hiring process and greatly increased the administrative burden on researchers, particularly those with large and complex grants. These regulations act as a particular disincentive to researchers with smaller grants, for whom the cumbersome hiring process may not be commensurate with the resources they have to devote to research assistants.

Given the highly competitive nature of external funding, social science, arts, and humanities scholars would benefit from access to an internal peer-review system. The system should provide timely and constructive feedback to enhance the quality of submitted research grants.

4.2 Research ethics review and approval

It is widely acknowledged that research involving human participants must reflect high ethical standards, and we recognize the importance and value of faculty and staff contributions to the research ethics process at Western. Nonetheless, in our consultations, many faculty and students expressed frustration with the University's ethics approval process, citing, in particular, Research Ethics Board comments that go beyond the accepted purview of ethics review and significant delays in procuring ethics approval. In addition, researchers involved in multi-university projects experience difficulties and delays in coordinating ethics approval across institutions.

Our Committee recognizes that the REB is aware of these challenges and is taking steps to address them. Documents detailing the steps taken to improve efficiency in the Office of Research Ethics are included as materials in Appendix 3. We support their efforts and encourage the University to ensure that they are given adequate resources, both in terms of finances and training of personnel, to promote timely review of submissions. Finally, if the REB is to reflect the ideal of local peer-review for ethical acceptability, social scientists, artists and humanists must dedicate their time to serving as members of the Board.

4.3 Access to research tools

Many research tools, such as quantitative analysis software that is commonly used in the sciences and in some of the social sciences, arts, and humanities, are centrally supported and are therefore widely available to students and faculty members at Western. There is not, however, comparable access to tools that would be of use particularly to social science, arts, and humanities researchers, such as qualitative analysis software and online survey software. Some Faculties are able to provide to their researchers access to these resources, but others do not have the funds to make these tools available. Thus, coordinated centralized support for these resources would be of inestimable benefit to social science, arts, and humanities research on campus.

4.4 Fostering interdisciplinary and collaborative research

External funding agencies promote interdisciplinary projects that involve multiple researchers and students distributed across institutions, and participation in these large multisite grants is an important aspect of research practice. In our consultations, the Committee heard about the need for strong support for interdisciplinary and collaborative research. The development of fruitful collaborative relationships requires time and careful consultation; moreover, the outcomes of these collaborations will take diverse forms. Support for interdisciplinary and collaborative research projects must be structured in light of these facts.

Western's Strategic Plan clearly acknowledges the importance of interdisciplinary research:

> "Recognizing that solutions to many of the world's most significant and complex challenges are often found where disciplines intersect, we will promote and support collaboration while building capacity for interdisciplinary research and teaching." (p. 19)

This strategic focus is aligned with the Tri-Councils' increasing emphasis on interdisciplinarity. In keeping with this commitment, Western does provide some support for interdisciplinary research, particularly through the InterDisciplinary Initiative (IDI) program. However, there remain many barriers to conducting interdisciplinary research, and support for this kind of research should be broadened and enhanced. Barriers were reported by faculty members who have appointments in two or more units, particularly with regard to P&T and APE. Progress has been made in this area in the Collective Agreement, but apparently there is work yet to do. Supports could include both physical spaces on campus and events that promote conversations between disciplines and with partners outside of the University would be beneficial to the entire Western community. Creating venues and multiple ways in which the University can continue to encourage, facilitate, and support interdisciplinary research involving social scientist, artist, and humanist researchers and graduate students will strengthen the value of research across disciplines at the University level and beyond. Further, administrative support could be provided by people who are knowledgeable about community partnerships and international collaboration (such as the Community Engaged Learning group and Western International). Finally, the significant amount of time that goes into cultivating relationships in community based and interdisciplinary research—before grants can be applied for and research can be undertaken—should be recognized and valued (see Appendix 1 and 2).

4.5 Recommendations

Western should:

- Centralize some elements of grant support activities, such as the identification of granting opportunities, grant preparation support, peer review, determination of the nature and strategies for in-kind support, knowledge mobilization strategies and community engaged research facilitation and support
- Streamline basic administrative requirements and undertake a broad based review to increase efficiencies and decrease the load on the researcher
- Continue to support the search for improvements and efficiencies in the ethics approval process, noting the improvements that have taken place in the last year
    - expand the negotiated agreements with other institutions to allow ethics review to be delegated to a single institution.
    - encourage faculty members to become involved in REB committees
- Centralize support for key research tools, such as Qualtrics and NVivo
- Provide more support for interdisciplinary research
    - encourage the continued support for the IDI program
    - work for improvements in cross-unit appointments
    - create spaces that promote collaboration and cross-unit communication

5. Funding and Other Resources for Research

Western is to be applauded for the amount of central resources it invests in its internal funding program. Western contributes approximately $2M/year in its internal funding programs, while some universities (e.g., McGill) only use funds made available from the Tri-Councils through the SSHRC Institutional Grant and SSHRC/NSERC Grant Residual Funds. Some universities have endowments that support internally-funded research (e.g., University of Toronto's sizable Connaught Fund, and University of Alberta's and University of British Columbia's Killam Funds) (see Appendix 3).

The diversity of interests and needs of social science, arts, and humanities researchers means that a "one size fits all" approach to the provision of support is inappropriate. We work within an external funding environment that stresses interdisciplinary projects and collaborative teams and partnerships. However, many scholars at Western and elsewhere work alone and/or require only small amounts of money to do their research. These scholars find themselves in a difficult position, since their projects and research needs do not fit the external funding model, and internal funding models have not been designed to fill the gap. Many researchers in the social sciences, arts, and humanities maintain an impressive research output without large grants, since their research costs are low relative to those seen in other disciplines, and they do not typically support labs or large numbers of graduate students. It is in the University's best interests to deploy internal funding programs that support the range of social sciences, arts, and humanities research. This would include support intended to enhance success in external grant applications as well as support for high-quality research that does not require larger-scale external funding.

To better understand existing supports for research, our Committee examined the internal funding environment for social sciences, arts, and humanities research. Prior to 2013, Western had a menu of internal granting programs that included the Academic Development Fund (large and small), the SSHRC Internal Grants (research and travel), and the International Research Grant, among others. In 2013, the internal granting program was repackaged, with funds going to the social science, arts, and humanities faculties under the Faculty Research Development Fund (FRDF) and into the Tri-Council-specific Western Strategic Support for Success Funds (WSSS). This funding structure is still in place. With the FRDF, funds are deployed at the discretion of the Faculties, while the WSSS focuses exclusively on preparing researchers for the development of an application to the Tri-Councils.

Some perceived problems with this structure were uncovered by our Committee. The distribution of the FRDF funds was based on a formula (which has apparently not been recorded and cannot be reconstructed) that considered each Faculty's previous success in internal funding competitions and was thus heavily dependent on the size of the Faculty. Thus, some Faculties receive larger allocations, while others receive smaller allocations. With regard to the WSSS, the size of the grants (up to $25k), their exclusive focus on the development of Tri-Council proposals, and the restrictive eligibility criteria for applicants (one must have held a SSHRC grant within two years or have recently received a 4A rating on a SSHRC application) means that larger amounts of money are concentrated among a smaller group of researchers. There is a widespread belief that the current internal funding program fails to recognize the breadth and variety of social sciences, arts, and humanities research at Western, and that many researchers have been effectively shut out from internal support. This strategy may be consistent with the University's Strategic Plan, but it has had the consequence of eliminating support for many researchers, with a significant negative impact on faculty morale. In all, the changes have led to the perception of many researchers that they are unable to apply for internal support.

A focus of our Committee was to explore and identify concerns with the existing internal funding programs, but further consultation is required to determine specific means to address these issues. Thus, we recommend that the URB strike a subcommittee to oversee re-organization of the internal funding mechanisms. To aid the work of that subcommittee, we have identified a range of initiatives, based on our consultations at Western and a review of internal funding programs at other institutions that could enhance internal research support at Western. These are presented below in no particular order (see Appendices 2 and 3).

5.1 Existing Funding Programs

While emphasizing that a one-size-fits-all approach does not work across the social sciences, arts, and humanities disciplines, there are some merits to the current internal funding model. In particular, the distribution of research funds to the Faculties through the FRDF program, while imperfect, has allowed for effective, focused local investments determined by Faculty priorities. In addition, something like the Strategic Support for Success program makes sense in better preparing our faculty members to be competitive at the Tri-Councils. However, beside the perceptions of inequities that are described above, there is some question as to whether these funds are actually achieving their stated aim. An analysis of the total value of SSHRC funds held at Western from 2011 to 2015, and an anecdotal accounting of the success at SSHRC application of WSSS recipients is presented in Appendix 3, suggesting that the WSSS program could be improved. At the very least, eligibility should be extended to collaborators or co-applicants on Tri-Council grants, those holding external grants from agencies other than Tri-Council granting agencies, and those who have made recent Tri-Council applications where feedback indicates strategies that could feasibly lead to success on reapplication.

5.2 Possible New Forms of Internal Grants

An analysis of the internal funding programs at Western in light of our researchers' overall funding success at SSHRC revealed that the current strategic focus for Tri-Council success did not appear to be functioning as desired. Furthermore, a reflection back to the upward trajectory in funding from 2011 to 2013 suggests that a diversified, flexible and multilevel internal grants program actually permits more creativity and innovation and ultimately breeds more success than a program that assumes that one-size-fits-all. This is clearly the model followed by the leading international research-intensive universities (see Appendix 3).

To that end, a sequence of possible new forms of internal grants was developed from the input received as part of our consultation as well as the examination of internal granting programs at other universities (see Appendix 2 and 3).

Competitive Teaching Release

Lack of time was identified as a major barrier to research progress by many faculty members working in the social sciences, arts, and humanities. While this concern is no doubt also familiar to researchers from other disciplines, the form and demands of much social science, arts, and humanities research exacerbates the issue. Specifically, many of these researchers work alone, within a research model that is characterized by prolonged and intensive engagement with research materials, often involving work off-site. For these researchers, the most valuable research support – and the support that would offer the greatest impact in terms of enhanced research productivity – is relief from teaching in order to make meaningful gains in their work. Competitive internal grants that allow for teaching release would help to facilitate research momentum and productivity in social sciences, arts, and humanities.

Mid-career Research Awards

Mid-career researchers commonly observed that they are disadvantaged by the current internal funding mechanisms (e.g., seed, bridge, accelerator grants) that restrict eligibility to early career faculty or that tie eligibility to recent success in securing Tri-Council funding. Mid-career researchers who have not previously held Tri-Council funding and who wish to seek external support are constrained by restrictive eligibility requirements in their efforts to seek support for preparatory/pilot research, and are thus unlikely to be successful in preparing competitive grant proposals and in procuring external funding. They require internal support in order to develop competitive external funding applications. One proposal to support mid-career researchers in getting new projects off the ground is to offer a one-time "Kick Starter Grant" that would be available to researchers at a critical point in their careers, designed to help them build toward future external grant success.

Small Grants Program

Western University should actively support research that can be carried out on small budgets. Many of the participants in our consultations mourned the loss of the SSHRC Internal Grants and the Academic Development Funds, which were identified as valuable support programs for this type of low-budget research. Smaller grants should be made available to researchers in social sciences, arts, and humanities in the forms of small competitive grants (e.g. $10,000 or less) and support for dissemination. The focus of these programs should be to support smaller budget research where there is no anticipation of external grant applications; instead, these projects should be considered on their own merit and with respect to the outcomes and impact they are anticipated to achieve.

Grants to support the preparation of large and complex proposals (e.g., Partnership Grants)

All three of the Tri-Council granting agencies stress multi-site and multi-investigator grants with an emphasis on interdisciplinary initiatives that include partnerships between academic institutions as well as community-academy partnerships. Researchers who work in these areas emphasize the significant time and effort involved in setting up these large-scale partnerships. Western should provide grants to support the preparation of these large-scale grants (e.g., SSHRC Partnership and Partnership Development Grants) in order to enhance success in these applications.

Research Grant In Lieu of Salary

As discussed in Appendix 3, our consultations revealed that many researchers frequently resort to self-funding their research or conference travel. A program (formerly known as the University Research Grant) does exist under which researchers can allot a portion of their salary as a research grant, allowing them to claim those expenses against their taxes. However, the language of the program is not clear, and a recent Canada Revenue Agency bulletin has been interpreted to mean that only sabbaticants can apply for this grant. There are some suggestions, however, that this interpretation is overly restrictive. If this is the case, the program is going unused by many of the researchers who could benefit from it.

5.3 Recommendations

Western should:

- re-examine its internal funding program to better understand whether current programs are achieving their goals, being cognizant of the variability in the kinds of support that researchers need. This could include:
    - revisiting the current FRDF and Strategic Support for Success Grants, doing an analysis of the effectiveness of these programs and the equity of the distribution of funds
    - broaden the existing internal funding program, considering new possibilities such as:
        - competitive teaching release grants
        - mid-career kick starter grants
        - small research grants
        - grants to support the preparation of large and complex proposals

- reviewing the URG and how it is being utilized as a means of making it more "user friendly" for faculty members who must, or choose, to self-fund. This may involve seeking a ruling from the CRA on the issue of whether non-sabbaticants can apply.

We feel that a diverse internal funding program will achieve two ends. The first is to support basic ongoing research and associated research outcomes in the social sciences, arts, and humanities. The second will be to better position our researchers to achieve success in their efforts to obtain external funds. Both these ends will be of benefit to the researchers themselves and to the University as a whole.

6. Conclusions

The strength in this report lies in the voices that are represented. Over that past year, we have spoken with multiple stakeholders. Conversations with representatives at the different Tri-Councils provided a frame of reference, as did dialogue with Western administrative staff, managers, and Deans. But above all it was the discussions and conversations with our colleagues and students in the social sciences, arts, and humanities faculties that were most formative to this report. At the heart of being valued is the simple act of being heard. This is not to deny the very real concerns and perceptions the researchers expressed: these are tangible and require immediate attention and action. It is to realize, however, that through conversations and discussions a deeply profound value can be co-created. One thing we have come to know is that there is a deep sense of care and pride for Western. Care should be the foundation for any ethical engagement and the processes of education and research is always that: ethical.

We trust the reader will find a detailed but also actionable set of recommendations within this report that would be of benefit not just to the social sciences, arts, and humanities, but to the entire Western community. This past year has revealed deep currents of frustration and disillusionment, but out of grievance a pathway forward is thus laid.

Respectfully submitted,

The URB Task Force Steering Committee – Support for Research in Social Sciences, Arts, and Humanities at Western

Andrew Nelson (Chair)	Social Science (Anthropology)
Cathy Benedict	Director of Research, Don Wright Faculty of Music
Jacquie Burkell	ADR, FIMS
Alison Doherty	Health Sciences (Kinesiology)
Jonathan Vance	Social Science (History)
Charles Weijer	Arts & Humanities (Philosophy)

Appendix 1
URB Social Sciences, Arts, and Humanities Task Force
Working Group 1 Summary Report and Attachments

Contents:

1. The External Context - Interim Report Updates

2. New Analysis
    a. Engagement/Knowledge Mobilization/Communications/Advocacy

Attachment - URB SSAH Task Force, Working Group 1 Draft Report; The Ways in Which External Funding Agencies Are Pursuing Communication and Advocacy Strategies – Prepared by: Cathy Benedict (Faculty of Music) and Joshua Lambier (Faculty of Arts)

Working group's initial remit:

How do external entities, including funding agencies and professional organizations, define leading edge scholarly activity in social sciences, arts, and humanities disciplines?
a. What are their priorities now?
b. Where are they going in the next five years?

1 The External Context - Interim Report Updates

Federal Budget - The most important development since the interim report was presented to the URB was the Federal Budget, released on March 22, 2016 (http://www.budget.gc.ca/2016/docs/plan/toc-tdm-en.html). It included $95M in new funds for the Tri-Councils: $30M each to CIHR and NSERC, $16M to SSHRC and $19 million for the Research Support Fund (to support the indirect costs) (some additional funds were promised in the last budget so the reporting of numbers in different sources is quite variable). Of particular importance is that these funds were not targeted, leaving it up to the individual councils to decide how to spend the funds. The budget supported a variety of other programs targeting student support and STEM research, including Genome Canada, industry partnerships, the Perimeter Institute, etc. In addition, the budget included $2 billion over three years, starting in 2016–17, for a new Post-Secondary Institutions Strategic Investment Fund, for 50% of eligible funds for research infrastructure (see http://www.ic.gc.ca/eic/site/051.nsf/eng/home). Finally, the budget included new funds for the Mitacs Globalink program, which some SSAH researchers can access. With the reintroduction of the long form census and other measures, it is clear that this government has a very different approach to research both in the sciences and SSAH disciplines than pertained under the Conservatives.

SSHRC – The main update for SSHRC is how it instructed committees to handle budgets in the most recent round of Insight Grants. The committees were instructed to be more stringent in terms of their scrutiny of budgets, which is quite different from the last several years when budgets were generally not touched. This has led to an increase in success rate (from 24% last year to 31% this year. SSHRC also moved away from the old 4A system to giving individual grants sextile rankings. It will be interesting to see how universities respond to this in terms of the 4A reapplication programs that almost every institution (including Western) has had.

SSHRC has also made a firm commitment to support policy research that will address the recommendations in the final report of the Truth and Reconciliation Commission: http://www.sshrc-crsh.gc.ca/about-au_sujet/president/index-eng.aspx .

NSERC – On April 21, 2016, NSERC announced that it was undertaking a review of Discovery Funding allocation (http://www.nserc-crsng.gc.ca/Media-Media/ProgramNewsDetails-NouvellesDesProgrammesDetails_eng.asp?ID=832) . The committee in charge of this review will, among other things, help to decide how future budget increases are to be allocated. Professor Dean, Dean of Western's Faculty of Science is on the Advisory Committee (http://www.nserc-crsng.gc.ca/_doc/Professors-Professeurs/MembershipAdvisoryCommittee_e.pdf) .

CIHR – Like SSHRC, CIHR made a commitment to support Indigenous Health Research (http://www.cihr-irsc.gc.ca/e/49620.html). It is not clear if this commitment is related to the recommendations of the Truth and Reconciliation report.

NCE – The NCE evaluations team shared with us the information that 20% of researchers in the networks reported being from SSAH disciplines, with 65% from natural sciences and engineering and 31% from the health sciences (multiple responses were permitted).

The NCE recently announced the 2017 International Knowledge Translation Platforms (NCE-IKTP) competition (http://www.nce-rce.gc.ca/Competitions-Competitions/Current-EnVigueur/NCEIKTP-SITCRCE-2017/Index_eng.asp) . The competition funds networking and administration costs associated with knowledge translation and commercialization, but not research activities, students or stipends.

In March, MITACS (which started as an NCE) and the University of Waterloo partnered to bring together grad and post doc students in philosophy to "solve hands-on innovation challenges using philosophical approaches in collaboration with local partners." http://www.mitacs.ca/en/newsroom/news-release/philosophy-researchers-address-ethical-and-social-challenges-through-industry . MITACS tends to be STEM oriented, but they are interested to support projects from the SSAH disciplines, as this project demonstrates.

Canada Council for the Arts – The emphasis on culture and the arts that was outlined in the federal budget included $550M over the next five years for the Canada Council. These funds will allow the Canada Council to open "a new chapter on the artistic and cultural history of this country" (http://canadacouncil.ca/council/blog/2016/03/budget16-canadacouncil) .

Ontario's Culture Strategy – This program was not mentioned in the interim report, but bears watching closely (see https://www.ontario.ca/page/ontarios-culture-strategy) . This is an effort by the Province to "set a vision for arts and culture, define priorities and guide support for the sector in the years to come". The strategy is still being developed and they are seeking input (see the web site).

2 New Analysis - Engagement/Knowledge Mobilization/Communications/Advocacy

A new research paradigm is emerging in the granting councils and many Universities' strategic plans: the "engaged research" paradigm. The key component of this new paradigm is the fact that an increasing body of scholarship now no longer operates as a unidirectional transfer of knowledge from the academy to recipient knowledge users. Rather, knowledge users are engaged right from the beginning in a bidirectional (or multidirectional) exchange in order to define research questions, lay out research programs and to ensure the adequate and targeted mobilization of knowledge that arises from the research. The research is therefore inherently collaborative, engaging communities, the public, patients, industry etc. The nature of the engagement will necessarily vary depending on the nature of the partnership.

Engagement at the Tri-Councils is expressed in a variety of ways. SSHRC talks about "community engagement" (http://www.sshrc-crsh.gc.ca/society-societe/community-communite/index-eng.aspx) , CIHR uses the terms "citizen engagement" (http://www.cihr-irsc.gc.ca/e/41592.html) and "patient engagement" (http://www.cihr-irsc.gc.ca/e/45851.html) and the Canada Council uses the term "public engagement" (http://canadacouncil.ca/council/news-room/news/2014/simon-brault-apm) (NSERC's concept of "community engagement" appears to refer to the community of researchers rather than external partners; see http://www.nserc-crsng.gc.ca/NSERC-CRSNG/Reports-Rapports/Visits-Visites_eng.asp). Engaged research is happening in all faculties at Western, but community based research is commonly found within the SSAH disciplines, including, to name only a few, projects that are Aboriginal, archaeological, geographic, educational, sociocultural anthropological, migration and ethnic relations, and transitional justice in nature.

While engaged research is a new and emerging paradigm that is being enthusiastically embraced by the Federal granting councils (and many other granting agencies), it must be noted that not all academic research can be accommodated within this model. However, the increasing emphasis on knowledge mobilization at all granting councils means that researchers in all disciplines must be more attentive to their audience.

2.1 Western's Position on Knowledge Mobilization and Engaged Research

Western's most recent strategic plan: *Achieving Excellence on the World Stage* (http://president.uwo.ca/strategic_planning/index.html), lists 4 fundamental strategic priorities, one of which is: *Raising Our Expectations: Create a world-class research and scholarship culture*. Within this strategic priority is a goal to: *Partner with other institutions and communities*. This text does not use the rhetoric of "engaged" research, but its intent could be

consistent with the engagement paradigm, particularly the quote that "We must identify and pursue more opportunities to advance and apply knowledge in partnership with the private sector, non-profit sector, and specific communities within the broader public (e.g., Aboriginal and immigrant communities)."
http://president.uwo.ca/strategic_planning/priorities/expectations.html
The strategic plan notes that Western will support this core priority *by "focusing more attention and resources promoting and rewarding (1) excellence in scholarship and innovation; (2) knowledge creation; and (3) the translation and mobilization of that knowledge into languages and applications useful in the public realm."* This statement does emphasize knowledge mobilization, but it does not use the rhetoric of engagement and it does not recognize the bidirectional flow of knowledge or the act and process of collaboration and co-creation.

2.2 Impediments to the Implementation and Recognition of Engaged Research – Case Study

However, it is clear that there are some fundamental structural impediments to the goal of engaging with other institutions and communities. An examination of Aboriginal research can serve as a case study of some of the most important of these issues. The Tri-Councils' strategic focus on Aboriginal research (discussed in the interim report and above) presents both an opportunity and a challenge to SSAH researchers at Western. The opportunity arises from Western's current efforts to develop an Indigenous Strategic Plan and the strong research base in this area that exists within the University. The challenges include:

- the community engaged nature of Aboriginal research, meaning that such research projects often cannot be developed and executed within the term of a single grant
- an increasing number of Indigenous communities in Canada have research protocols that researchers must agree to in order to move ahead with the project. These contracts specify what is important for the community, and this might not cohere with what is seen as important by the university, making Indigenous research a challenging venture for university based researchers. In other words, the researchers must be accountable to two groups, each of which has their own standards and priorities.
- the outcomes of Aboriginal research do not necessarily fit university definitions of "leading edge" research. This particularly applies to outputs such as mandated reports, the need for enhanced relationships with government and/or service organizations, the development and dissemination of plain language texts that need to be completed for Aboriginal organizations/groups and social media projects. These are usually done "in addition to" journal publications and do not merit serious consideration on the Annual Performance Evaluations, even though the Indigenous community has deemed them just as (if not more) important than the academic outputs
- there are different forms of community peer-review of research output that are usually undertaken for Indigenous research that are not seen as valid by institutionalized authorities, leading to important questions about whose knowledge is most important -- the institution or the community involved in the research -- *which is at the heart of this ongoing debate*. Furthermore, even when journal articles result from such research, they are usually published in journals that do not have high "impact factors" or are open-source so that the broader Indigenous community can readily access the information

In order for Western to live up to its stated commitment to "improving the accessibility and success in higher education for Indigenous peoples" (*Strategic Plan - Achieving Excellence on the World Stage*), there must be a corresponding commitment to enhance the type of research that is valued and validated at Western. This can be done by incorporating the principles of engaged research into all research aspects of the University, from funding internal grants, going into the community and bringing the community to Western, to reconsidering how research is valued broadly and how it is assessed at the level of the Annual Performance Evaluation, thus demonstrating that Western is serious about cultivating institutionalized change. It can also be achieved by incorporating complementary resources on campus, such as the Community Engaged Learning group in the Student Support Centre. This requires the attention, commitment, and support of both the University and the communities to work together effectively within this new paradigm, so that Western can live up to its promise to be a "leading edge" research institution for Indigenous people in Canada and globally.

This case study focused on Aboriginal research, but the same issues arise with any project practicing engaged research. Simply put, the resources are not available to support the development of such projects, nor is there institutional or local level recognition of the value of this research.

2.3 Engaged Research, Knowledge Mobilization, Communications and Advocacy

It should be clear from the discussion above that the distinction between *knowledge mobilization* and *engaged research* is becoming increasingly blurred. Indeed, SSHRC's definition of knowledge mobilization is very similar to the definition of engaged research presented above:

> *"Knowledge mobilization*: The reciprocal and complementary flow and uptake of research knowledge between researchers, knowledge brokers and knowledge users—both within and beyond academia—in such a way that may benefit users and create positive impacts within Canada and/or internationally, and, ultimately, has the potential to enhance the profile, reach and impact of social sciences and humanities research. Knowledge mobilization initiatives must address at least one of the following, as appropriate, depending on research area and project objectives, context, and target audience:
>
> Within academia:
> informs, advances and/or improves:
> research agendas; theory; and/or methods.
> Beyond academia:
> informs:
> public debate; policies; and/or practice;
> enhances/improves services; and/or informs the decisions and/or processes of people in business, government, the media, practitioner communities and civil society."
> http://www.sshrc-crsh.gc.ca/funding-financement/programs-programmes/definitions-eng.aspx#km-mc

Thus, it can be argued that the "reciprocal and complementary flow and uptake of research knowledge between researchers, knowledge brokers and knowledge users" must emerge from an engaged research program. Knowledge mobilization is also part of two other key priorities for SSHRC – open access and data management/curation.

Further, successful knowledge mobilization strategies that emerge from engaged research programs include communications strategies and can be effective tools in advocacy efforts. This would seem to be the logic underlying the Tri-Councils' push on all four fronts. Effective *story telling* is an increasingly important component of the granting councils' rhetoric (see http://www.sshrc-crsh.gc.ca/society-societe/storytellers-jai_une_histoire_a_raconter/index-eng.aspx). The same can be said for recognizing that *impact* comes in many forms, which indicates that the best way to assess impact is to assess research outputs against the goals that were developed collaboratively within the initial engagement process. This is a more nuanced view of impact as something more than simple bibliometrics and as such requires changes at the institutional and disciplinary levels to facilitate and recognize this kind of research.

Finally, it is very important to note that many of our students are already actively participating in engaged research. We must be in a position to provide them with opportunities, train them in best practices, as well as to recognize non-traditional research outputs, such as blogs, websites, films, oral and digital storytelling projects as valid ways of presenting their research and engaging with their communities. SSHRC has recognized the importance of graduate training in this area with its story telling project (web site above). Students participating in this project are getting additional training in public engagement as well as the writing of op-ed pieces enabling them to mediate the academic and public spheres. Thus, at the same time as we struggle with the value of these outputs at the University and APE level, the generational change is already happening amongst our students.

Working Group 1 membership included:
Andrew Nelson, Charles Weijer, Cathy Benedict, Alan Leschied (Education), Jim Davies (FSS), Jeff Dixon (Schulich), Joshua Lambier (student A&H), Sam Trosow (FIMS/Law), Janice Forsyth (FHS)

This report was informed by additional submissions by:
Cathy Benedict – Faculty of Music
Jim Davies – Faculty of Social Science
Jeff Dixon – Schulich School of Medicine and Dentistry
Janice Forsyth – Faculty of Health Sciences
Stephanie Hayne – Student Support Centre
Lisa Hodgetts - Faulty of Social Science
Joshua Lambier – Faculty of Arts
Joanna Quinn - Faulty of Social Science
Andrew Walsh - Faulty of Social Science
Graduate Student Working Group
NCE and SSHRC

Attachment

URB SSAH Task Force
Working Group 1 Draft Report
The Ways in Which External Funding Agencies Are Pursuing
Communication and Advocacy Strategies
Part 1
Cathy Benedict (Faculty of Music)

Advocacy

The case can be made that the processes, mechanisms and strategies for advocacy are to laud and to appeal to the sensibilities of the status quo. As such, advocacy often stems from the need to protect a system that for whatever reason is unable or unwilling to embrace change. Advocacy, then, has a specific agenda and in the case of external funding agencies that are supported by governmental sources, agenda and status quo will constantly be in flux. Much like public relations, the target of advocacy is fundamental to the success of the message. The directionality of such a message has (until recently) flowed from agency to audience (target), with little care for what will be referred to in these reports as co-creation and shared authority.

The other side of the advocacy coin, the prevailing systems that govern flux, while always already present, more often than not remain unarticulated. That said this report will highlight the ways in which a narrative turn away from metrics represents a distinct embrace of the ways in which people come to know. Fueled in nature by the necessity to be recognized, seen, heard, and supported financially, this turn represents an epistemological shift toward an awareness of the human need to engage in sense making. This report, then, will focus on how language has shifted throughout both external and internal documents and those ways a unilateral focus on numerical metrics as proof of knowledge mobilization and impact has shifted toward the use of narrative.

Communication

In 2007 the *Higher Education* Funding Council for England (HEFCE) moved to create a "broad framework for the assessment of impact" which would be submitted and reported as case studies (Research Excellence Framework- REF). Recognizing that research in Higher Education is manifold across the disciplines it was noted that as such it is "difficult to reduce this diversity to numbers." Thus, the use of "qualitative case studies were found to "capture the diverse connections between research and society" (Grant, 2015, bit.ly/1D7aunD). Aside from the multiple critiques of the REF, research impact in the form of narrative and story has made multiple inroads and is readily observable on several platforms and media sites.

The ability to "[craft] a good story" was recently cited in a March 30th, 2016 column in the journal University Affairs (bit.ly/1orcl0d) as a most effective way to communicate scientific research to the general public. Seminars that address how to better present scientific findings as a story exist (bit.ly/21ZO6mR), as do those that instruct the use of the 140 character tweet (bit.ly/1QSI72Y), not to mention several existing twitter accounts that speak to the importance of finding the story in the data (see for instance @FromTheLabBench, @lunascientific). An entire day was devoted at the 2011 World Science Fair to story telling as a way to "explore the communication of science—on the page, on the screen, and on the stage—illuminating the process of translating science to story" (bit.ly/1SJt3mb) and finally it is worth reading a blog post devoted to interrogating "story" in scientific research as well as thinking through the typology of science stories (bit.ly/1N3LVI3).

Most telling of all, for our context, is the way in which institutions of all kinds (including universities, and government supported programs) have begun to articulate not only the impact of research creation, but also with whom the research begins, evolves and benefits. This narrative presentation moves beyond simple storytelling and perhaps even questions the primacy of meta-narrative or the "Truth" of the numerical presentation of metrics.

The Purpose of These Reports

The following report presents analysis of the communication and advocacy strategies from the following websites in order to underscore not just the ways in which the sciences have moved away from the presentation of metrics to narrative, but also the ways in which research priorities are developed, identified and articulated.

Social Sciences and Humanities Research Council – SSHRC
Natural Sciences and Engineering Research Council of Canada – NSERC
Canadian Foundation for Innovation - CFI
Canada Institutes of Health Research - CIHR
Canada Council for the Arts

SSHRC

One of the prominent links on the SSHRC landing page is Connecting *with* Community (italics added), under which includes Aboriginal connections, Community Engagement, Imagining Canada's Future and Storytellers. Under the Community Engagement link "engagement" for SSHRC is addressed as a "committed to engaging its stakeholder communities" which suggests an interest in reciprocity of knowledge mobilization. Indeed, knowledge mobilization for SSHRC is stated as "The reciprocal and complementary flow and uptake of research knowledge between researchers, knowledge brokers and knowledge users" (http://bit.ly/1fkDA84).

This reciprocity is further exemplified by the kinds of questions SSHRC incorporates to frame a research agenda that suggests a reciprocal relationship between all stakeholders:

Imagining Canada's Future
How is our world changing?
What Challenges lie ahead?
Whose insights do we need?
Are we ready for Tomorrow?
Where must Canada do better?

And finally, since 2012 SSHRC has hosted an annual Storytellers contest which "challenges postsecondary students to show Canadians how social sciences and humanities research is affecting our lives, our world and our future for the better" (http://bit.ly/1btDWjd). Students are encouraged to address and reflect upon where research is taking us, the story of the research, and how it impacts Canadians.

A further conversation with Ursula Gobel underscores the ways in which SSHRC takes reciprocity as their mission:

> SSHRC is about people and humanities, about novel ideas and thinking out of the box – that is our strength. We look at issues and problems from all sides and listen to new ideas and explore pathways – days of sending out the press release is not going to fly- if we truly want to benefit humanity than we need to engage differently. (April 8, 2016, personal communication)

NSERC

The landing page of NSERC offers multiple links as entry points. Phrases such as "feedback loops," "strategic partnerships" and "collaborate research" (http://bit.ly/1sR16J9). Less obvious on this page is a sense of what these terms indicate. If one scrolls down on the landing page there is a link that take you to Impact Stories. At the time of this writing both stories highlighted issues of import to Canada, fresh water and greenhouse gases.

CFI

At left hand top of the landing page is Research in Action. Each of the stories speaks to bringing primary stakeholders together in order to move research forward; trusting and listening to the patient, or bringing young voters together to wonder with them what can be done in order for them to vote. Bringing research stories alive through video furthers the message of care between and not simply a positioning of knowing what's best.

CIHR

One of the three priorities listed on the CIHR landing page makes reference to research strategies that are designed to involve all stakeholders at every stage of development.

> Patient-oriented research refers to a continuum of research that engages patients as partners, focuses on patient-identified priorities and improves patient outcomes.

New Paradigms of Engagement

The following report (Part 2 of Working Group 1) extends and builds on the issue of communication strategies and the construction of engagement. Language signals intent and if Western's intent is to "[build] upon a "shared ambition" that "seek(s) always the betterment of the human condition" (Achieving Excellence, 2014, p. 4) the recommendations presented suggest the acknowledgement of and support for policies that encourage research connected to "interweaving new modes of public engagement into the fabric of the research process".

URB SSAH Task Force
Working Group 1 Draft Report
The Engagement Paradigm and External Communication
Part 2
Joshua Lambier (Faculty of Arts)

In recent years, there has emerged a new paradigm of engagement in higher education to rethink the public mission of universities and colleges across North America and beyond. Canadian universities have increasingly focused attention on the public good as an integral part of the strategic planning process, and integrated robust community engagement activities into institutional vision statements for research, teaching, and service. The new paradigm moves beyond the traditional "one-way" model of expert knowledge delivery, extension, and outreach towards a more dynamic "two-way" approach that emphasizes collaboration, co-creation, and shared authority with public partners. To facilitate this "civic turn," to use David Scobey's term,[1] government funding bodies in Canada have renewed their mandates to support research programs that engage broader publics in the process of knowledge production and dissemination, with particular emphasis on projects that address issues of pressing concern. This section highlights some of the ways in which public and private funders are shifting their communication strategies to foreground initiatives that cultivate open dialogue between the campus and community, which may in turn bolster public support for the vital role that research-intensive universities can play in Canadian society. The Western social science, arts, and humanities community could enhance advocacy efforts beyond the university by studying the evolving conceptual vocabulary underpinning the scholarship of engagement, while incorporating principles (where necessary and desirable) that align our activities with the stated objectives of various social science, arts, and humanities funding agencies.

Like other universities in Canada, Western has recently published a new strategic plan that reaffirms our collective commitment to the public good. From the outset of *Achieving Excellence on the World Stage* (2014), the new mission statement reads as follows: "Western creates, disseminates and applies knowledge *for the benefit of society* through excellence in teaching, research and scholarship. Our graduates will be global citizens whose education and leadership will *serve the public good*" (emphasis added 5). While each of the four strategic goals of the plan respond to emergent themes of engagement, the third goal ("Reaching Beyond Campus: Engage Alumni, Community, Institutional & International Partners") places the greatest stress on the value of collaboration between the university and its publics, whether local, regional, national, or international. In the final section on "Western's Institutional Principles and Values," the plan also underscores the University's commitment to "partnership" and "social responsibility," two critical components for the advancement of an engaged culture on campus. Other universities in Canada, however, have taken additional steps to institutionalize the principles of community

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[1] David Scobey, "Civic Engagement and the Copernican Moment," Plenary Address, Imagining American National Conference. Minneapolis, MN. 21 September 2011. Available at: http://imaginingamerica.org/fg-item/civic-engagement-and-the-copernican-moment/

engagement through the development of strategic documents[2] or community-engaged programs.[3] What each of these frameworks and programs offers is a university-wide consensus for working definitions of key terms along the way towards a new critical vocabulary for engagement. While many successful campus-community projects and exchanges are already taking place in the social science, arts, and humanities disciplines at Western, university leaders could boost our profile by developing a unified framework for public engagement. Just what counts as rigorous engagement should be established clearly and transparently from the outset. One of the most widely adopted definitions comes from the Carnegie Foundation's new Community Engagement Classification: "Community engagement," according to the Carnegie Foundation for the Advancement of Teaching, "describes collaboration between institutions of higher education and their larger communities (local, regional/state, national, global) for the mutually beneficial exchange of knowledge and resources in a context of partnership and reciprocity."[4] Looking ahead to future directions for the social science, arts, and humanities community, Western could open new avenues for community-oriented research by cultivating an inclusive definition that suits the unique culture of our campus and responds to the engagement frameworks of external funding agencies.

With the emergence of engagement as a strategic priority for higher education institutions, funders and other national organizations have also developed the following terms to orient their programming and external communications:
Public Engagement at the Canada Council: "Actively engaging more people in the artistic life of society notably through attendance, observation, curation, active participation, co-creation, learning, cultural mediation and creative self-expression."[5]
Community Engagement at SSHRC: "Through engagement, SSHRC fosters interchange with and among key audiences on university and college campuses, in communities, and across public, private and non-governmental organizations, to enhance informed decision-making on SSHRC programs, policies and directions."[6]
Citizen Engagement at CIHR: "For CIHR, citizen engagement is the meaningful involvement of individual citizens in policy or program development, from agenda-setting and planning to decision-making, implementation and review. It requires two-way communication that is interactive and iterative with an aim to share decision-making power and responsibility for those decisions. This requires bringing together a diverse group of citizens that includes the broader

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[2] See, for example, York's "Towards an Engaged University: President's Task Force Report on Community Engagement," February 2010; Memorial's *Public Engagement Framework*, *2012-2020*; or Simon Fraser's "Community Engagement Strategy"(2013).
[3] The promotion and practice of publicly engaged scholarship is beginning to find regional and national champions, such as Victoria's Institute for Studies & Innovation in Community-University Engagement, Memorial's Office of Public Engagement, Guelph's Community Engaged Scholarship Institute, Simon Fraser's Community Engagement Initiative, McMaster's Centre for Scholarship in the Public Interest, and McGill's Institute for the Public Life of Arts and Ideas, to highlight only a few.
[4] The Carnegie Foundation for the Advancement of Teaching, "Community Engagement Elective Classification," 2008. Available at:
http://www.nerche.org/index.php?option=com_content&view=article&id=341&Itemid=92#CEdef
[5] Canada Council for the Arts, "Public Engagement in the Arts: Discussion Paper," October 2012. p. 3.
[6] See SSHRC's Community Engagement section on the website: http://www.sshrc-crsh.gc.ca/society-societe/community-communite/index-eng.aspx#1

public, not just the usual stakeholders for ongoing dialogue, deliberation and collaboration in informing CIHR's work."[7]
Patient Engagement at CIHR: "Meaningful and active collaboration in governance, priority setting, conducting research and knowledge translation. Depending on the context patient-oriented research may also engage people who bring the collective voice of specific, affected communities."[8]
Community-Campus Engagement at CBRC: "Within the broader context of community-campus engagement, nationally and internationally, CBRC is part of a movement to change the research culture, especially to promote the importance of community and post-secondary sector collaboration to co-create knowledge, advance social innovation, and generate evidence that is timely, robust and appropriate for informing policy and practice."[9]

Though each organization activates the discourse of engagement in a highly distinct way to address their strategic priorities, the various definitions call attention to the common constitutive elements of mutually beneficial partnerships, shared authority, social responsibility, and a collective purpose (or purposes) amongst multiple individuals or groups. While the traditional idea of outreach situates the scholar as the expert who delivers knowledge to the community with a unidirectional approach (e.g., the standard lecture series at the public library), the engaged scholar participates in a two-way process of exchange and co-creation to produce knowledge with, for, and by the community. What each of these reports and policy documents also highlights is the need for social science, arts, and humanities scholars to begin to think of "engagement" as *more than a public relations strategy* to address the rhetoric of crisis that surrounds the cultural disciplines. Indeed, the civic turn in higher education calls attention to the need for the social science, arts, and humanities disciplines at Western to interweave new modes of public engagement into the fabric of the research process.

Public and private funding bodies are now using a similar model to orient their communication strategies around participatory models of community engagement. NSERC, for example, recently completed their "Community Engagement Visits 2015," which were designed to give researchers and other stakeholder groups the opportunity to meet with representatives to discuss various aspects of the Council's programming, including discovery research, scholarships and fellowships, as well as policies and guidelines. In the new strategic plan of the Federation for the Humanities and Social Sciences, too, the first two strategic goals outline the need to "increase our reach with people in Canada" and to "improve our relevance to our members," goals that illustrate the growing desire to develop innovative communication strategies to engage broader audiences within and beyond the university system.[10] To bridge the gap between the academy and the public, funders in the US are also developing new strategies that intertwine engagement with scholarship. The National Endowment for the Humanities, for instance, has introduced new

[7] Canadian Institutes of Health Research, "CIHR's Framework for Citizenship Engagement," p. 14. Available at: http://www.cihr-irsc.gc.ca/e/41270.html
[8] Canadian Institutes of Health Research, "Strategy for Patient-Oriented Research: Patient Engagement Framework" (2014), p. 5. Available at: http://www.cihr-irsc.gc.ca/e/documents/spor_framework-en.pdf
[9] Community Based Research Canada, "Strategic Plan 2014-2018," September 2014. p. 6.
[10] Federation for the Humanities and Social Sciences, "Strategic Plan, 2016-2020," January 2016. Available at: http://www.ideas-idees.ca/sites/default/files/strategic-plan-2016-2020-final-2016-01-13_0.pdf

publicly engaged initiatives like "The Public Scholar Program," which supports "well-researched books in the humanities intended to reach a broad readership."[11] This particular project demonstrates the blurring of distinctions between traditional academic work and publicly engaged scholarship. Rather than thinking of public engagement as a communication strategy distinct from research, public funding agencies are beginning to design initiatives that marry both functions into a cohesive knowledge creation process. Against the grain of the traditional idea of the isolated scholar, the new model privileges scholar-citizens who are trained to narrate a compelling story of their research to broader publics (e.g., SSHRC's Storytellers contest for graduate students).

The turn to engagement, however, presents new challenges. For many social science, arts, and humanities disciplines at Western, the place of both the public scholar and public scholarship has yet to receive sufficient institutional recognition and support. Research programs geared towards the public sphere are often perceived to lack sufficient academic rigour and autonomy, to be ideologically motivated, or simply to be reserved for a few well established professors (i.e., public intellectuals). Younger scholars in the arts and humanities are rarely trained to translate their research to fit policymaking processes or broader forms of engagement, and there remains a widespread resistance on behalf of Canadian universities to include publicly engaged scholarship in considerations for granting promotion and tenure. With these challenges and opportunities in mind, the social science, arts, and humanities community should establish a more meaningful system to recognize, reward, and highlight the public engagements of their researchers, both faculty and students, which will assist their future efforts to attract external grants and awards, especially if they are earmarked for scholars who engage with broader audiences. This new system of evaluation might also encourage a new generation of scholars to pursue projects that connect their public engagement activities with research and teaching strengths of the University.

[11] The National Endowment for the Humanities, "Public Scholar Program," February 2016. Available at: http://www.neh.gov/grants/research/public-scholar-program

Appendix 2

URB Social Sciences, Arts, and Humanities Task Force
Working Group 2 Summary Report and Attachments

May 14, 2016

Contents:

1. Overview of Working Group 2's activities – Prepared by Jacquie Burkell

Attachments:

2. URB SSAH Task Force Working Group 2 Report on Faculty Perspectives - Prepared By: Crystal Gaudet and Jaclyn Nardone in consultation with Jacquelyn Burkell and Jessica Polzer
3. Submission of the SSHRC Associate Dean's Research regarding research indicators - Prepared by Cathy Benedict, ADR, Music, Helene Berman, ADR, Health Sciences, Nandi Bhatia, ADR, Arts, and Humanities, Stephen Bird, ADR, Education, Jacquelyn Burkell, ADR, FIMS, Robert Klassen, ADR, Business, Ken McRae, ADR, Social Sciences, Valerie Oosterveld, ADR, Law
4. URB SSAH Task Force: Graduate Student Consultation Recommendations - Prepared by Joshua Lambier and Diana Moreiras

Working group's initial remit:

1. What are the strengths, weaknesses, opportunities for and threats to social sciences, arts, and humanities research at Western?
    a. How do units at Western define leading edge scholarly activity?
    b. How is research in the social sciences, arts, and humanities valued and measured at Western?
    c. How is research in the social sciences, arts, and humanities valued and measured outside of Western?
    d. In what ways are these values and measurements aligned with the external context?

1. Overview of Working Group 2's Activities

The priorities of the Western University Strategic Plan are built upon a "shared ambition" that "seek(s) always the betterment of the human condition" (Achieving Excellence, 2014, p. 4). We believe that this choice of words both apt and profound. The human condition may be productively viewed as space of freedom co-created by the actions of words and deeds. Indeed, the human condition is both acted upon and improved by "academic freedom, autonomy, accountability, diversity, integrity, openness…and social responsibility" (Achieving Excellence, 2014, pp. 19-20). For Western University this means "creating a culture that places a higher value on scholarship and innovation, one that strives more intently to increase the impact and productivity of our research and scholarly activities across and between the disciplines" (Achieving Excellence, 2014, p. 7). For this kind of culture to thrive there must be an infrastructure supporting this organization and the Strategic Plan recognizes this need.

> "…. Western will focus more attention and resources promoting and rewarding (1) excellence in scholarship and innovation; (2) knowledge creation; and (3) the translation and mobilization of that knowledge into languages and applications useful in the public realm." (Achieving Excellence, 2014, p. 7)

The social sciences, arts, and humanities are central to Western University's vision and mission. Indeed, world-class researchers in these disciplines are found across the university in eight of Western's Faculties and Schools. However, changes in both the internal and external contexts make it timely to examine how social science, arts, and humanities research is valued and funded. Thus, while the mission and vision of Western University's Strategic Plan is the foundation upon which this report is built, the goal of this report is to reclaim these ideas, and move from concept to action supported by infrastructure.

Social science, arts, and humanities research and outcomes

> "… research outcomes and their dissemination….mean different things to different people—from citations in the most prestigious disciplinary journals, to monographs and books published by leading presses; from keynote speaking engagements at national and international conference plenary sessions, to musical performances on the world's international stages; from scholarship that shapes public policy, to business cases that inform entrepreneurial decision-making; or from curiosity-driven enquiry, to scientific and technological innovations that can be commercialized for application in health care and by private industry." (Achieving Excellence, 2014, p. 8)

The breadth of social science, arts, and humanities research at Western includes projects that are single investigator-driven, as well as multi-site, collaborative and community-based projects on regional, national and international scales, and research that draws on an array of disciplinary-specific theoretical perspectives, research methodologies (e.g., ethnography, discourse analysis, surveys, experimental research) and methods (quantitative and qualitative). These diverse projects yield a wide variety of research outputs, including single- and multiple-authored publications, which encompass peer-reviewed journal articles and presentations, books, book chapters, reports, as well as other forms of research dissemination, including artistic creation and performance, contributions to policy consultation, dissemination through news and social media, and community-based presentations. This impressive array of social science, arts, and humanities research is at the heart of what makes Western University a global university achieving excellence on the world stage.

Infrastructure to support research

> Western recognizes that "research" and "scholarship" mean different things to different people across our campus. For example, funding requirements and sources vary considerably from one discipline to the next. Additionally, research and scholarship

> outcomes differ significantly in their production, validation, dissemination, and application—even in the ways we celebrate them. (Achieving Excellence, 2014, p. 7)

Social scientists, artists, and humanists must be encouraged and supported to apply for external funding wherever appropriate and available. Careful attention must be paid to return on investment for such applications. Large-budget projects, including unidisciplinary projects and those comprised of interdisciplinary teams, require considerable investment of time and resources in preparing the application, and are associated with a reasonable probability of a high return. But, in the current external funding environment, small-budget projects require a similar investment of time and resources for the preparation of an application, and are associated with a low probability of success and a small return. Accordingly, resources for small-budget projects might be better deployed in *conducting* research rather than seeking funding.

In order to maximize funding successes, the University should provide grants facilitation support to social scientists, artists, and humanists. While appropriate and indeed excellent support is available in some units across campus, the availability of these resources is inconsistent, and in general social science, arts, and humanities faculties have relatively little funding to devote to these initiatives. A strong and universally available program of grants facilitation would assist social scientists, artists, and humanists to apply for and secure external grant funding. Initiatives should include:

1) Grant writing support: Assistance with grant writing and an internal review process prior to submission would benefit social scientists, artists, and humanists applying for external funds. While this assistance is available to researchers in some units, access is not universal and this should be remedied. Moreover, some tasks related to grant applications may be better addressed centrally (e.g., preparation of in-kind contribution letters). Specific assistance that would benefit grant applicants includes:
    a. Assistance with preparation of ROLA forms;
    b. Assistance with preparation of budgets;
    c. Procurement and documentation of in-kind and matching contributions;
    d. Assistance with knowledge mobilization plans; and,
    e. Internal review of grants prior to submission.

2) Access to research tools: The University currently provides access to quantitative analysis software at no cost to graduate students and at a reduced cost to faculty members. Comparable tools that would be of use to social science, arts, and humanities researchers include qualitative analysis software and online survey software. The negotiation of free access or reasonably priced site licenses for these resources would be of benefit to social science, arts, and humanities research on campus.

3) Knowledge mobilization: social scientists, artists, and humanists would benefit from assistance in promoting their own work through mechanisms such as research narratives, media releases, and community outreach. In addition, knowledge mobilization plans will benefit from strong relationships with municipal, provincial and federal governments, policy makers, not-for-profit agencies, and other potential research users. Assistance with identifying, developing, and maintaining these relationships would help to strengthen

both the awareness and impact of social science, arts, and humanities research. In turn, this will enhance the competitiveness of our researchers in external grant applications.

Funding for research

As a research-intensive university, Western must ensure that it supports the full range of research activities that characterizes research at this institution. Some social science, arts, and humanities research requires large amounts of external grant funding, and researchers have been successful in securing these funds. At the same time, many social scientists, artists, and humanists work alone on projects that require only small amounts of funding. External granting agencies are not currently oriented toward funding low-budget research projects. Indeed there are few external granting programs that will provide these researchers with what they need the most: small amounts of funding, and time to conduct their research. To support the full range of social science, arts, and humanities research, the University should address this gap through a range of programs that should include:

1) Competitive course releases: Course releases awarded to researchers on a competitive basis for research purposes such as off-site data collection and manuscript preparation.

2) Small grants program: Competitive funding for low-budget research projects that do not require or lead to external funding applications. We envision this program to support research with budgets of $10,000 or less, explicitly targeted to projects that do not require or lead to external funding applications.

3) Mid-career research awards: One-time funding available to mid-career researchers who are changing research direction, or who are planning to seek external funding for a previously unfunded project.

Working Group 2 membership included:
Jacquelyn Burkell (Working Group 2 Chair, FIMS)*, Cathy Benedict (Faculty of Music)*, Alison Doherty (Faculty of Health Sciences)*, Charles Weijer (Faculties of Arts and Humanities and Medicine)*, Emily Ansari (Faculty of Music), June Cotte (Ivey Business School), Amanda Grzyb (FIMS), Valerie Oosterveld (Faculty of Law), Don Abelson (Faculty of Social Science), Chris Brown (Faculty of Arts and Humanities), Stephen Bird (Faculty of Education), Jessica Polzer (Health Sciences, Women’s Studies), Diana Moreiras (SGPS)

Attachment 1 - URB SSAH Task Force Working Group 2 Report on Faculty Perspectives -
Prepared By: Crystal Gaudet and Jaclyn Nardone, in consultation with Jacquelyn Burkell and Jessica Polzer.
- Thursday March 31, 2016

Table of Contents

EXECUTIVE SUMMARY 2

OBJECTIVES AND MISSION 4

THEMES 6

1. ACKNOWLEDGING THE DIVERSITY OF SSAH RESEARCH AT WESTERN 6

2. DEMORALIZING INSTITUTIONAL CLIMATE 6

3. NEED FOR AN INCLUSIVE INTERNAL FUNDING MODEL 8

4. EXPANDING INSTITUTIONAL SUPPORTS 9

5. INTERDISCIPLINARY & COLLABORATIVE WORK 12

6. RECONCEPTUALIZING VALUE 13

7. RECOGNIZING AND COMMUNICATING THE IMPACT OF SSAH RESEARCH 15

8. FACULTY CONSULTATION RECOMMENDATIONS 15

APPENDIX 18

Executive Summary

This report summarizes the findings of Working Group 2 of the URB Task Force, which explored faculty member perspectives on the strengths, weaknesses, opportunities, and threats associated with current support mechanisms for research in the Social Sciences, Arts and Humanities (SSAH research) at Western. The themes and recommendations that emerged from 152 SSAH researchers in individual and group consultations coupled with online survey responses from 347 respondents (in total representing more than 60% of faculty members in the 8 SSAH faculties) are outlined below.

The consultations revealed an impressive array of SSAH research at Western, the vibrancy of which is overlooked by a model of research that is founded on assumptions about research practices and success that are incommensurate with the needs, traditions and goals of much SSAH research, and that is therefore unable to recognize and communicate the value and import of SSAH research at Western.

The SSAH researchers consulted for this report emphasized the need for the University to shift its focus from *high budget* to *high impact* research. The University should reconsider the values that are embedded within and expressed by internal research funding programs and faculty evaluation practices – values that include a focus on external (specifically tri-council) research funding, that equate research impact with the amount of funding received, and that generally favour *input* rather than *outcome* measures of research as reflections of quality. A revised focus on a broad range of research outcomes as appropriate indicators of research excellence will better reflect the range of high-quality research carried out by SSAH and other researchers within our institution.

Some SSAH researchers fit, and have been very successful within, the model of research currently endorsed at Western that defines success in terms of high grant values and a high rate of production of multi-authored journal publications. Even researchers successful within this model, however, note that the institutional value of their external grants pales in comparison to that awarded to the larger grants typically seen in disciplines with higher base costs for conducting research. It is critical that the University recognize the achievements of SSAH researchers who secure tri-council funding for their research in an intensely competitive funding environment. Western must also provide strong administrative and research services support to ensure their future success in securing external grants.

Other SSAH researchers work within scholarly traditions that embrace different models of success, and these different approaches must be acknowledged and supported within Western University. If Western University is truly to realize its aspirations to become a world-class, research-intensive institution, it is critical that we acknowledge, value, and support the full range of research and researchers working within this institution. Within SSAH disciplines, there is a strong tradition of research practices where researchers work alone produce sole-authored publications. These researchers typically require less funding and more time to do their research, and thus produce fewer publications than do their colleagues who work with teams or co-authors. Researchers who work within this model report feeling pressure to publish in order to satisfy metrics-based evaluative processes, which are inappropriate to fully capture the value and impact of their academic work.

In order to support researchers working in a variety of disciplinary contexts, the university should consider alternative outcomes, including pedagogical impact, peer review, policy contributions, citation in legal decisions, performance, and research narratives. The modes of evaluation should be rooted in disciplinary norms, and they should not focus solely on the amount of research funding, the number of publications, and citation counts.

It is critical that Western celebrate the contributions of SSAH research. SSAH research makes important contributions to knowledge, often on very small budgets. Communicating the value - or "telling the story" - of SSAH research requires Western to acknowledge the diversity and excellence of SSAH research, and support SSAH researchers in communicating the value and impact of their research, both within the Western community and beyond the institutional walls. Some SSAH researchers will benefit from assistance to develop and maintain profiles on discipline-appropriate research repositories, as these are becoming increasingly important venues for research promotion and dissemination.

Although many SSAH researchers require relatively small sums of money to conduct and disseminate their work, it is difficult if not impossible to carry out high-quality and high-impact research without some financial or in-kind support. Researchers whose financial requirements are relatively small have found it increasingly difficult to secure financial support for their research. Although the minimum value for SSHRC Insight and Insight Development applications is $7,000, the average value of awards for the 2015/2016 Insight Development competition was $60,000, and the average value of Insight Grants in the same year was $174,000, suggesting that these agencies tend to support grants of much higher value. Moreover, the application process is onerous, regardless of budget, and success rate in the most recent competitions is approximately 20%. Thus, for SSAH researchers who do not require large budgets, it is not an efficient use of researcher time and energy to apply to external agencies for small amounts of funding, since the 'return on investment' for these applications is low, and the intensive effort required for the application process, with little chance of positive outcome, could have a negative impact on other spheres of their academic work.

The University should develop an internal funding model that is focused on supporting high-value and high-impact research, rather than specifically and solely targeted to improving tri-council grant success. This will involve continued support for SSAH researchers who are seeking external grants to support pilot research, to bridge between grants, or to launch new projects. At the same time, a program of smaller value grants for research, dissemination, and teaching release should be developed to support SSAH researchers whose work is not appropriate for external grant support (typically researchers working alone, producing sole-authored publications or other research products).

Recent changes to the internal funding model have been particularly damaging to mid-career researchers and their continued research productivity is at risk. These researchers experience difficulties getting research funding due to restrictive changes in requirements for internal funds. Although many of these researchers fall into the group that do not require high-value external grants, some would be interested in seeking external funding. They require, however, internal support in order to develop competitive external funding applications. One proposal to support mid-career researchers in getting new projects off the ground is to offer a one-time "Kick Starter Grant" that would be available to every researcher at a critical point in their careers, designed to help researchers build toward future success.

In addition to an inclusive internal funding model, consultations revealed the need to build a supportive institutional infrastructure that includes knowledgeable and adequately staffed administrative assistance, and access to necessary research tools. One of the most significant supports requested by SSAH researchers is more time to do their research, attend conferences, and travel for the purpose of gathering data. Thus, it is recommended that the University offer competitive grants for teaching release time.

Strong administrative supports at all levels—department/school, faculty, and central—are required for tri-council and non tri-council funding. Sufficient and knowledgeable administrative support at all three levels will enable sensitivity to disciplinary differences and help to strengthen and streamline supports throughout the University. Existing successful approaches to administrative support at the University, faculty, and departmental levels may serve as useful models for fortifying administrative support across campus.

Many faculty members feel isolated and excluded from the model of research currently endorsed by Western and express a desire to create a more collaborative intellectual community. Providing matching funds and in-kind supports for interdisciplinary seminars and providing physical spaces on campus specifically for interdisciplinary research would help to bring academics together across faculties and disciplines and foster a more vibrant research culture at Western.

Objectives and Mission

The social sciences, arts, and humanities are central to Western's profile as a research-intensive institution. Indeed, world-class researchers in these disciplines are found across the University in eight of Western's Faculties and Schools. Recent changes in the internal and external contexts make it timely to examine how social science, arts, and humanities (SSAH) research is valued and funded at Western. The URB Task Force Steering Committee was established and approved by Senate on Sept. 18th 2015 to recommend strategies and concrete action plans that will better support success, growth and leadership in research in these disciplines at Western.

The SSAH Task Force, in consultation with the URB and the Deans of Research from the SSAH faculties (ADRs), identified three main questions to examine:

1) How do external entities, including funding agencies and professional organizations, define leading edge scholarly activity in social sciences, arts, and humanities disciplines?

2) What are the strengths, weaknesses, opportunities of and threats to social sciences, arts, and humanities research at Western?
3) How is research in the social sciences, arts, and humanities supported at Western and how can this be improved?

Working Group 2 was formed to focus on question 2 (above). In consultation with the ADRs, and recognizing that each unit deals with research issues differently, a Working Group was established that included members from each Faculty/School. The group members included:

Jacquelyn Burkell (Working Group 2 Chair, FIMS)*
Cathy Benedict (Faculty of Music)*
Alison Doherty (Faculty of Health Sciences)*
Charles Weijer (Faculties of Arts and Humanities and Medicine)*
Emily Ansari (Faculty of Music)
June Cotte (Ivey Business School)
Amanda Grzyb (FIMS)
Valerie Oosterveld (Faculty of Law)
Don Abelson (Faculty of Social Science)
Chris Brown (Faculty of Arts and Humanities)
Stephen Bird (Faculty of Education)
Jessica Polzer (Health Sciences, Women's Studies)
Diana Moreiras (SGPS)

* indicates a member of the SSAH Task Force

Qualitative (individual and group consultations, face to face and by email) and quantitative (survey) consultations were conducted from November 2015 to March 2016. Qualitative consultations were conducted with 152 faculty members across the eight SSAH faculties (Arts and Humanities, Business, Education, Information and Media Studies, Law, Music, and Social Science) and focused on the following questions:

a) How do units at Western define leading edge scholarly activity?
b) How is research in the social sciences, arts, and humanities valued and assessed at Western?
c) How is research in the social sciences, arts, and humanities valued and measured outside of Western?
d) In what ways are these values and measurements aligned with the external context?

An online survey covering the same issues was made available to all SSAH faculty members, and a total of 347 individuals completed the survey. This report incorporates the qualitative and survey results.

Themes

Seven overarching themes emerged from the individual and group consultations and the survey data. The themes are identified and explained in more detail below, followed by a list of recommendations.

In these themes, our intention is to highlight the particular difficulties and inequities that many SSAH researchers at Western experience. We recognize, however, that many of these concerns and issues are not specific to SSAH research, but instead are experienced by at least a subset of researchers working in all areas. In relaying these themes, therefore, we have chosen not to use divisive "us vs. them" (e.g., STEM vs. non-STEM) language, in the hope that our findings will lead to further dialogue with those in other disciplines who may experience similar challenges.

1. Acknowledging the Diversity of SSAH Research at Western

The consultations revealed the diverse range of SSAH research that is conducted by Western's faculty members across a number of its faculties and disciplines. In this regard, it important that SSAH research not be conflated with SSHRC research. Some of the researchers consulted did not see their research as fitting neatly within SSHRC's mandate, and consultees included faculty members who apply to SSHRC, CIHR and non-tri-council funding agencies.

The breadth of SSAH research at Western includes projects that are investigator-driven, as well as multi-site, collaborative and community-based projects on regional, national and international scales, and research that draws on an array of disciplinary-specific theoretical perspectives, research methodologies (e.g., ethnography, discourse analysis, surveys, experimental research) and methods (quantitative and qualitative). These diverse projects yield a wide variety of research outputs or "products", including single –and multiple-authored publications, which encompass peer-reviewed journal articles and presentations, books, book chapters, reports, as well as other forms of research dissemination, including artistic creation and performance, contributions to policy consultation, dissemination through news and social media, and community-based presentations. This impressive array of SSAH research is a testament to what makes Western a "comprehensive university" in terms of research and impact.

2. Demoralizing Institutional Climate

"The current research climate at Western is one that is inimical, not only to responsible and effective teaching in the Arts and Humanities, but to Humanities "research" itself."

"The shifts in internal funding and the emphasis on large grants sends a message to faculty who are very productive researchers (and widely published) that their research is not valued. If having a large grant is the only criteria for getting another grant, it acts as a barrier and is completely demoralizing."

Within this broad scope of SSAH research, there is a select group of researchers who find Western's institutional climate supportive and who have been successful in securing internal and external funding. However, the consultations uncovered a general malaise and sense of discontent among the majority of consulted SSAH researchers who feel that their work is not valued within an institutional context that celebrates a corporate model of research, a model that neglects the unique needs of many SSAH researchers.

Within this context, the intrinsic motivations of many SSAH researchers are quelled, as their research outcomes often go unrecognized within Western and as the significant time and energy they invest in sustaining their research programs through the development of funding applications (internal and external) go unrewarded. This has resulted in a deep sense of demoralization for many SSAH researchers at Western, a sense that is shared by some consultees who are or have been tri-council grant holders.

Among the faculty members who were discouraged by Western's research climate, mid-career researchers are particularly disenfranchised as they find their programs of research difficult to sustain given current internal funding conditions. Coupled with the absence of sufficient and appropriate institutional supports (see theme 4), this demoralization stifles the research productivity and capacities of the SSAH research community and threatens the optimal use of Western's human capital and resources that are vital to making it a world-class, research-intensive institution.

Many SSAH faculty members expressed deep frustration that the University tends to celebrate the accomplishments and contributions of researchers according to a hierarchical system of values that recognizes and celebrates high budget research that is tied to technological "innovation" and industry interests, oriented towards transformative change, and yields high rate of research output (e.g., numerous and often multiple-authored publications). This implicit model of 'ideal' research is incommensurate with the nature and rhythm of much SSAH research, which does not typically require large sums of money and is often driven by one or a few investigator/s who require/s sustained blocks of time to implement their research methodologies in ways that meet professional and disciplinary standards (e.g., time to travel to research sites and to maintain research momentum). In contrast to the celebrated corporate model, the rate of research output for high quality SSAH research is comparatively low, as the mode of research requires more time-intensive analytic, writing, and publication processes that are often, though not exclusively, driven by a sole author. SSAH researchers working explicitly from critical, social justice perspectives and who work collaboratively with community, regional, national and/or international partners to effect long term social change through incremental impacts are particularly disadvantaged within this hierarchical model.

3. Need for an Inclusive Internal Funding Model

"For a mid-career tenured faculty member, it is difficult to obtain the small grants necessary to launch a new research project."

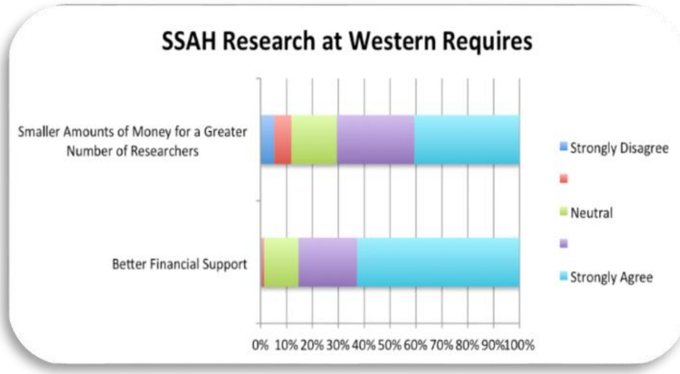
A consistent theme that emerged from consultations with SSAH faculty was the failure of current internal funding mechanisms to recognize the research needs of the variety and breadth of researchers at Western. Although these mechanisms work for a small group of consulted SSAH faculty, they reinforce inequities between faculty members whose research aligns with the model outlined above and the many SSAH faculty members who are disadvantaged and "excluded" by the current system and who thus feel "unvalued". Current internal funding mechanisms are a main contributor to the discouraging institutional climate for many of the consulted SSAH faculty who described them as "counterintuitive", "demoralizing", and "punitive". This reinforces what many faculty described as a corporate model of research funding, which privileges a small group of SSAH researchers, contributes to the growing sense of disenfranchisement among SSAH researchers and is incommensurate with Western's stated identification as a "research intensive" university.

Consultees identified the previous funding mechanisms, including the Internal SSHRC, SSHRC Travel, Academic Development Fund, and International Research Awards (none of which are in existence currently), as extremely important in enabling them to conduct pilot research to make SSHRC and CIHR proposals competitive. These funding schemes were critical for early career researchers to launch their research programs, and also enabled mid- and late-career SSAH faculty to extend their research programs in meaningful and creative ways.

The consultations further revealed that there are a number of disincentives for SSAH researchers to apply for tri-council funding. Some feel that it is not worth their time to apply, while others feel that their research does not fit the requirements for a SSHRC grant. For example, research that is necessarily conducted by a principal investigator working alone or research that is highly technical and disciplinary-specific is not perceived to be consistent with SSHRC's requirements for highly qualified personnel (HQP) and a broad knowledge mobilization component.

Mid-career researchers commonly identified that they are particularly disadvantaged by the current internal funding mechanisms (e.g., seed, bridge, accelerator grants) that restrict eligibility to early career faculty or tie eligibility for funding to early career or recent previous success in securing tri-council funding. Within this context, mid-career researchers without previous SSHRC or CIHR funding are particularly at-risk of losing momentum for their programs of research. Moreover, mid-career researchers who wish to respond to the current restrictive internal funding environment by seeking external support are constrained by restrictive eligibility requirement in their efforts to seek support for preparatory/pilot research, and are thus unlikely to be successful in preparing competitive grant proposals and in procuring external funding. SSHRC researchers working at the intersection of health and social science are another specifically disadvantaged group, since they have been forced by changes in SSHRC eligibility to reorient their programs from SSHRC to CIHR, where they find little receptivity to their

SSAH-oriented research. Rather than supporting researchers who find themselves caught in this situation, the current internal funding program further disadvantages them by mirroring tri-council eligibility requirements in the internal competitions.



4. Expanding Institutional Supports

Funding

"If I could change the internal funding program at Western, I would create a system that recognized that worthy, institution-building, reputation-enhancing research can be carried out with comparatively small amounts of funding ($5,000 - $10,000 per year), and that would ensure that active researchers would have access to such funding."

The costs associated with SSAH research typically include travel (e.g., to conferences, to archive sites, for collaboration with partners), dissemination costs (e.g., manuscript preparation, such as costs associated with indexing and editing) and costs associated with training graduate students (e.g., for research that requires research assistants). These costs are typically low, and SSAH researchers do not require large grants in order to be able to carry out excellent research with significant impact. This is something to be celebrated rather than discounted; moreover, Western should explore innovative research support programs that enhance the ability of SSAH researchers to access the small amounts of funding they require to support their work.

As the chart to the right indicates, an overwhelming majority of survey respondents agreed or strongly agreed that SSAH research requires better financial support (over 70%), including a greater number of smaller grants distributed among a greater number of researchers (over 80%). Additionally, a number of researchers suggested that Western consider implementing a base level of non-competitive funding (e.g., $2,500-$6,000 per researcher) to support research costs. Providing financial support at this level to SSAH researchers would have significant positive impact in terms of research productivity and output at a very low cost.

Time

"The biggest challenge for me is to balance the teaching and service commitments with research time."

Lack of time was identified as a major barrier to SSAH faculty members wanting to advance their research. While this concern is no doubt also familiar to researchers from other disciplines, the form and demands of much SSAH research exacerbates the issue. Specifically, many SSAH researchers work alone, within a research model that is characterized by prolonged and intensive engagement with research materials, often involving work off-site. Many of the consultees emphasized that they require sustained blocks of time so that they can conduct the activities associated with their research with the quality and at a level that is expected by their respective professional communities. These researchers consistently reported the need for time to think about their research inquiries, uninterrupted by the increasing demands imposed on them in the areas of service and teaching.

A number of SSAH researchers reported that the institutional pressure to apply for large external grants results in a major investment of time with little promise of return, particularly if the value of the grant sought is low (and this is the case for many SSAH researchers, who require relatively little in the way of funding for research). As such, the effort put into low-value competitive grant applications does not represent an efficient use of institutional resources, and the time and energy of these researchers would be better spent conducting their research and producing the high-quality research outcomes that can be achieved with little in the way of financial support. A number of mid-career researchers suggested that it was a much better use of their energies to self-fund their research, given the restrictions placed on internal funding opportunities and the time investment required to prepare external applications. Self-funding was viewed by some of these researchers as helping them overcome the demoralization and frustration associated with the amount of time spent on preparing external grant applications that are not successful. By placing SSAH researchers in positions where they feel compelled to finance their research out of their own personal resources in order to maintain their research productivity, the institutional pressure to apply for large external grants, and the celebrated model that informs this pressure, reinforce an institutional hierarchy of research that systematically rewards the careers of some faculty literally at the expense of other faculty. Note that several respondents reported the use of personal funds to fund research.

Faculty members also suggested providing relief time from teaching in order to make meaningful gains in their research. Competitive internal grants that allow for teaching release would help to facilitate research momentum and productivity, particularly since SSHRC no longer funds teaching release.

Administrative Research Infrastructure at Department/School, Faculty and University Levels

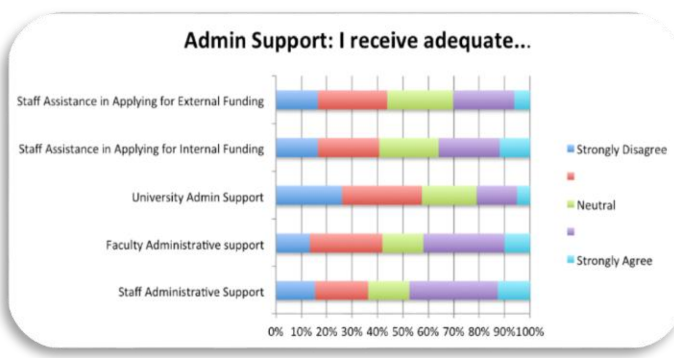
"The Office of Research Ethics has been understaffed for years. This means it is now taking months and months for a research ethics review application to be processed – often longer than it takes me to collect my data."

SSAH researchers would benefit from strong and coordinated administrative supports at all levels – department/school, faculty, and central - to help them understand and access tri-council and non tri-council funding. The level and quality of administrative support available to faculty members within their particular units and faculties varies considerably, and smaller SSAH faculties in particular have little in the way of research support. Faculty members in these smaller faculties, therefore, face additional challenges when seeking external funding for research, and they do not benefit from the significant assistance available to faculty members in larger units. Moreover, efficiencies would be gained if *some* supports were centralized, since this would help to ensure coordination of activities, avoid duplicated effort across faculties, and ensure universal access to required supports.

Specifically, faculty members require assistance to:

1) identify funding opportunities;
2) review and provide feedback on grant applications;
3) navigate the university's software (that "the paperwork" associated with applying for funding – especially ethics and ROLA);
4) identify ‘in-kind’ contributions for granting opportunities requiring matching funds;
5) establish contacts with non-governmental agencies, governments, industry, policy-makers, educators, etc. for knowledge translation.

A number of SSAH researchers identified other models of administrative support at other institutions that they felt were more effective and that helped to relieve some of the time demands associated with applying for and administering research grants. For example, some universities have dedicated staff who develop budgets, along with computer software to help in this regard. Assistance with the budget development and justification and with constructing and updating common cvs would reduce the amount of time that faculty must spend on such administrative tasks. The institution should develop a University-wide framework for the identification and valuation of institutional in-kind contributions. Increasingly, these types of contributions are required (or requested) for external grant applications (e.g., SSHRC Connection and Partnership grants), and researchers need support to identify and document the in-kind contributions offered by the institution. Similarly, as the granting agency emphasis on knowledge mobilization increases, SSHRC researchers would benefit from institutional support to identify appropriate knowledge users in business, government, and not-for-profit sectors and to establish and maintain ongoing relationships with these knowledge users. In this respect, Western should pursue membership in the *ResearchImpact* network (www.researchimpact.ca). Participation in this network will assist researchers at Western to ensure the broadest possible impact of their work.



Many faculty expressed frustration with inadequate staff support for the Research Ethics Board, which led to long processing times for ethics reviews for research involving human subjects. SSAH researchers report experiencing inappropriate delays, which hold up research progress and impede productivity. It was also recommended that the ROMEO and ROLA systems be streamlined.

SSAH researchers also called for free or subsidized access to the research support tools/software that are required for their work. Western provides free access to quantitative analysis software for graduate students, and the University has negotiated a site license agreement so faculty members can purchase reasonably priced annual licences for SPSS. In contrast, Western currently does not provide central support for access to other basic research tools and software, including qualitative analysis software (e.g., HyperResearch, NVivo) and online survey software (e.g., Qualtrics). As a research-intensive university, Western should ensure that *all* faculty members and graduate students have access to the basic industry-standard quantitative and qualitative software needed to conduct their research at a reasonable cost.

5. Interdisciplinary & Collaborative Work

"Given the demands for interdisciplinarity at SSHRC, especially for those of us in the Arts and Humanities, this lack of university support is a significant barrier to including our research and recognizing its value to the development of larger interdisciplinary research projects. Interdisciplinary research takes resources and support. It might help if we had an office of interdisciplinary research whose objective is to aid in the creation of interdisciplinary projects across faculties, with special attention to ensuring that the Arts and Humanities are included and supported -- *and in a meaningful way."*

Strong support for interdisciplinary and collaborative research was identified by SSAH consultees who noted the disjuncture between the policies and commitments of the granting councils and the research activities and approaches that are supported by Western. In particular, granting agencies promote interdisciplinary projects that involve multiple researchers distributed across institutions, and participation in these large multisite grants is an important aspect of research practice. The University, however, does not place the same positive emphasis on these types of research activities; some SSAH researchers reported negative evaluative consequences as a result of their participation in large interdisciplinary research initiatives.

Consultees noted that multi-researcher initiatives, particularly those that cross institutional boundaries, include participants from multiple disciplines, and involve community as well as academic partners, can be slow to produce identifiable impact. The development of fruitful collaborative relationships requires time and careful consultation; moreover, the outcomes of these collaborations will take forms that include but are not restricted to traditional academic dissemination, such as community presentations, performances, or participation in policy and service planning initiatives. Collaborative research projects must be considered and valued in light of these realities.

In keeping with this, administrative support is needed where people are knowledgeable about community partnerships and international collaboration. Furthermore, the significant amount of time that goes into cultivating relationships in community based and interdisciplinary research – before grants can be applied for and research can be undertaken - should be rewarded not penalized.

6. Reconceptualizing Value

"To say you're not doing it right if you're not getting a $500,000 grant is toxic, dangerous, and inimical to research that can stand on its own merits. If I can make contributions for $10,000 a year, the university administration should embrace me, not punish me."

"The modes of evaluation should be rooted in disciplinary norms and not based on the amount of research funding."

Many SSAH faculty conduct high quality research that does not conform to the model of research endorsed at Western, with the result that this research is less valued because it does not fit the traditional model. The University should broaden its definitions of "impact" and think *beyond* indicators like "impact factor" to consider how research shapes scholarship and academic debate. Western needs to recognize that "impact" can be incremental rather than transformative, local rather than on a broader geographic scale, and with effect that is realized only over the long term. One way to do this is by considering the local "impact" of research in and beyond the University, and by recognizing and understanding that work focused on social change has a slow pace. A number of SSAH researchers (as well as graduate students) point to the reciprocal relationship between teaching and research as integral to how they conceptualize value/impact.

Curiosity-driven research is critical, yet it is easily undervalued, especially when there is a focus on "excellence" and a disparagement of curiosity-driven research that is not partnered with industry. While much curiosity-driven research - indeed, perhaps *most* - will have little "impact," it is impossible to predict a priori which lines of inquiry will, in the end, be most productive and lead to the greatest innovation. Leading edge research can only be known in retrospect. Anyone can say they are doing leading-edge research, but only time, uptake by scholars, and public response will tell. Researchers need room to pursue their passions.

In many cases, high quality SSAH research does not require large amounts of money, and researchers carrying out this work therefore do not need or seek out large external grants. Indeed, many SSAH researchers make *significant* scholarly contributions on very small budgets, an achievement which should be celebrated by the administration. Often, though not exclusively, this research is conducted by one researcher and has demonstrated impact outside the traditional realm of academic publishing, including contribution to legal decisions, artistic creation, contribution to policy, or contribution to community well-being. Respondents noted that valuing research according to monetary inputs discourages collegiality and contributes to a demoralizing institutional climate. Researchers at Western experience a climate that values large grants over other measures of research impact or success, suggesting that research *inputs* (i.e., financial support for research activities) are conflated with research *outputs* (i.e., impact of research activities, which can take a variety of forms). This conflation sends a strong message to SSAH researchers that their work is not worthy of recognition unless it brings in a great deal of external funding.

A more appropriate reflection of research quality or value is research output, in the various forms this takes for SSAH research. High-quality SSAH research is marked by meaningful outputs with the potential for significant impact within academia and in the broader community. As discussed, much SSAH research requires little in the way of funding, and SSAH researchers can carry out and disseminate high-quality research if they have access to the small amounts required for their research and dissemination activities. Given this support, SSAH researchers will continue to make significant and meaningful research contributions, including contributions to Western's reputation for research excellence.

Many respondents noted that SSAH researchers often write sole-authored publications, and many SSAH researchers disseminate their work in the form of monographs. These forms of publishing are time-intensive, and as a result SSAH researchers tend to publish relatively infrequently.

SSAH researchers identify a number of inadequacies of existing assessment processes (in particular, APE) in capturing the value of SSAH research. Many felt that the time taken to apply for large grants should be recognized in the APE scores whether or not the application was successful. Additionally, some research that is attractive to other, non tri-council funding bodies is not valued in APE procedures or reflected in APE scores. Concerns were also raised that since APE scores are tied to a certain amount of merit pay, it may encourage "quantity over quality" This reinforces the idea that greater productivity is necessarily better, a sentiment with which many faculty disagree.

In this regard, traditional research metrics (e.g., citation counts) do not adequately reflect the impact and quality of much SSAH research. Metrics, when appropriate, must be applied *within* a disciplinary context, in order to account for different publishing and citation practices. The University must consider alternative methods of assessing outcomes, including pedagogical impact, peer review, policy contributions, legal decisions and research narratives. The modes of evaluation should be rooted in disciplinary norms and not based on standardized research metrics that privilege some modes of research production over others.

There is significant concern among some SSAH faculty members that particular metrics/indicators could become externally mandated standards for faculty assessments (e.g., Annual Performance Review, Promotion and Tenure). While some schools and departments will use metrics for evaluative purposes, SSAH researchers remain adamant that the evaluative use of metrics *must not* be imposed as the method of assessing faculty or individual researcher performance. In this respect, it is critical to remember that, although these tools may provide insight into the contributions and impact of an individual researcher or group of researchers, metrics/indicators are not easily comparable across disciplines or across researchers.

7. Recognizing and Communicating the Impact of SSAH Research

Better Storytelling and Knowledge Translation

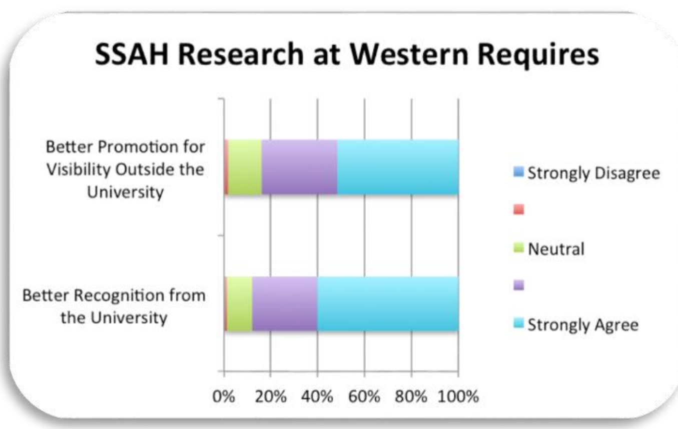
"I would love to have a dedicated external affairs group that would work to distil my research and make it public. I find it a very daunting and onerous to think that I need to do the research and also build my own brand and popular outlets for disseminating that work outside of academia. Someone (a graphic designer) to make infographics, executive summaries with nice graphics, make tweets or blog posts would be amazing. This is work that I feel is necessary […] but I do not have these skills."

SSAH researchers, like other researchers across campus, would benefit from assistance to 'tell their own story' and promote their own research to the world at large (communities, policy, local and global contexts). Research dissemination begins with traditional publication and conference presentation, but now extends to open access publishing, and contributing to and maintaining a profile on research repositories. Increasingly, researchers are required to engage in knowledge translation beyond academia to professional audiences and to the general public, through means that include developing and maintaining an online and social media presence, reaching the public through traditional media, participation in professional conferences, and participation in public lecture series.

As illustrated in the chart above, over 80% of the survey respondents noted that SSAH research requires both better recognition by the University and better promotion to improve visibility outside of the University. The University must celebrate research contributions and not just research funding, and must recognize a broad range of impacts. For example, SSAH researchers make important contributions to policy and legal decisions, and engage in non-traditional forms of research dissemination, such as performance, which indeed serves as a great avenue for knowledge mobilization. These contributions should be promoted within the community, thereby promoting a strong relationship between the community and the institution.

Countering Exclusion by Cultivating a Vibrant Research Culture

"Every day, I look at those giant posters on the sides of our buildings and I feel that my students and I don't belong here. The university only celebrates tech research, medical research, and entrepreneurialism. In fact, the vast majority of the research on this campus is about the social, about the world and its problems, about helping others, about critical thinking."



Respondents' comments about their experiences of feeling excluded from the Western culture of research reveals the gap between the research that is typically valued and celebrated and the diversity and scope of SSAH research that is being conducted at Western.

Several SSAH researchers report feeling isolated and expressed a desire to create a more collaborative intellectual community at Western. Researchers indicated that they would like more opportunities for collegial exchange, discussion, and collaboration on campus, as well as more venues for sharing between cognate disciplines. Several faculty said they felt that one of the reasons no one in the faculty knows what they do is because there is no place to meet and talk which signals the need to promote communication and camaraderie within Western. Communal spaces are important for faculty to share ideas as well as their accomplishments in the realm of research, which include receipt of major awards, keynote speeches, SSHRC grants, new books and journal article publications. Participation in interdisciplinary reading groups, the space to contemplate with others should be valued and supported. The University can help to cultivate a vibrant research culture at Western by providing support for some of these initiatives such as speaker series.

8. Faculty Consultation Recommendations

Based on consultations it is recommended that the University should:

1) Find ways to support and value the activity of curiosity-driven research that makes *significant* contributions to scholarship, policy and to the community and world at large. The University needs to privilege high impact research, not only high budget research.

2) Explicitly promote and identify with values that reflect research in a diversity of disciplines, including SSAH, without privileging the values of some research over others (i.e. committing to social justice and other values is more important than "branding," which reflects business model and its associated values).

3) Support and value the contributions of all SSAH research, not just award-winning research. SSAH researchers request assistance in telling their stories, in a way that clearly communicates and promotes the value and impact of their research. See McMaster for good examples of how research is communicated across range of disciplines and in a way that makes all the featured research sound important and exciting.

4) Assist SSAH researchers to promote their own work by providing centralized resources and training for developing research narratives, identifying community outreach opportunities, reaching out to media, developing and maintaining a social media presence, and developing and maintaining profiles on relevant institutional and extra-institutional research repositories.

5) Identify and develop more nuanced forms of evaluation that recognize the work and accomplishments of diverse disciplines and scholarly fields. Change evaluation mechanisms to recognize the impact of SSAH Research and to reward community based and interdisciplinary research, some of which receives tri-council funding.

6) Recognize that people need money for research, but not everyone requires large sums. Smaller pots of money need to be made available to SSAH researchers in the form of standard research support, small competitive grants, and support for dissemination. One option supported by many SSAH researchers is for the University to introduce standard, non-competitive research support (between $2000 and $5000) that can be used for the purposes of research including data collection and dissemination. In addition to basic faculty level research support, it is recommended that the University implement a centrally administered competition for low budget projects (e.g., those requiring $20, 000 or less). Such research has the potential to offer significant value per research dollar spent.

7) Mid-career researchers are at particular risk for their continued research performance due to a lack of existing institutional support. One solution is to offer a "Kick Starter Grant" that would be available to every researcher at one point in their career. This could include a one time/per career place you can get a reasonable amount of money $10, 000 – to help researchers build toward future success – (potentially at the SSHRC level). It would have to be used toward a project that has scientific validity and that would also be evaluated. Mid-career researchers would also benefit from formal mentorship similar to that received by new faculty.

8) Strong administrative support is required at all levels – department, faculty and central - for researchers accessing both SSHRC and non-tri council funding. There are a number of SSAH researchers who need, go after and are successful at SSHRC/CIHR and they need be supported as much as possible in their efforts. One possibility is for Western to create a Research Support Centre (like the Teaching Support Centre) to foster research skills as well as grant application skills. This Centre could train faculty members on handling different workflows (ensuring that research does not become deprioritized), how to use bibliographic software, how best to undertake dissemination of research, how to measure our own impact, etc. Western should pursue membership in the ResearchImpact network to enhance support to researchers for knowledge mobilization activities.

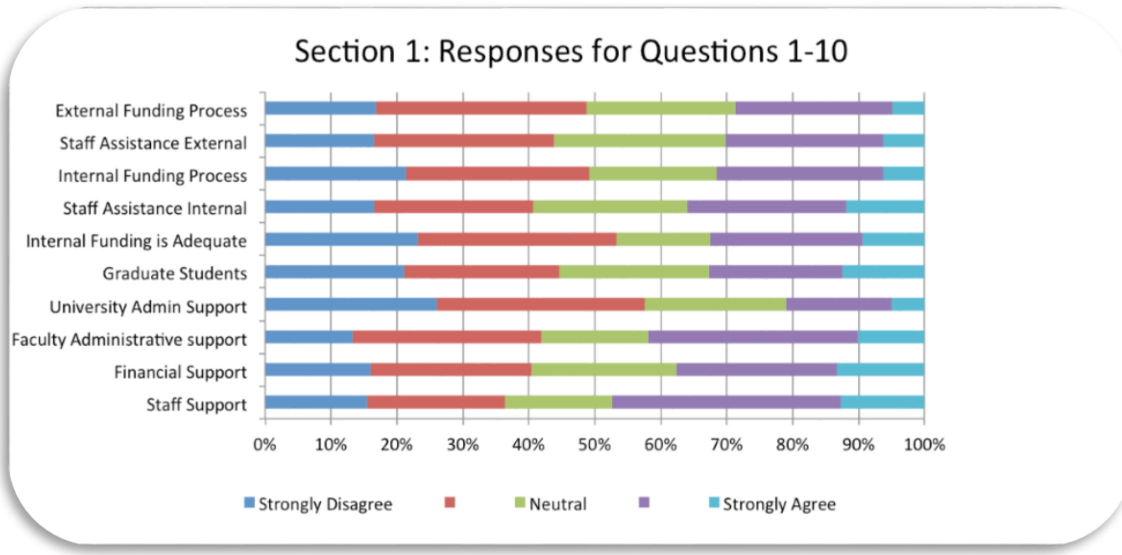
9) Introduce competitive grants for teaching release, which would work to alleviate some of the time pressures experienced by SSAH researchers, particularly tenured faculty.

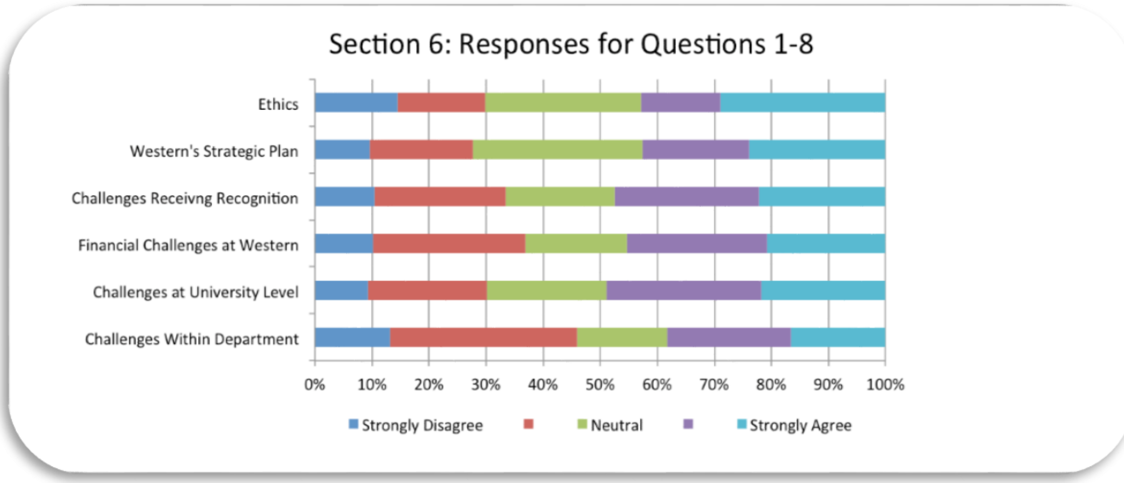
10) Devote resources to address unreasonably long processing times for ethics, which holds up research. Streamline the ROMEO and ROLA to make it easier for SSAH researchers interact with these systems.

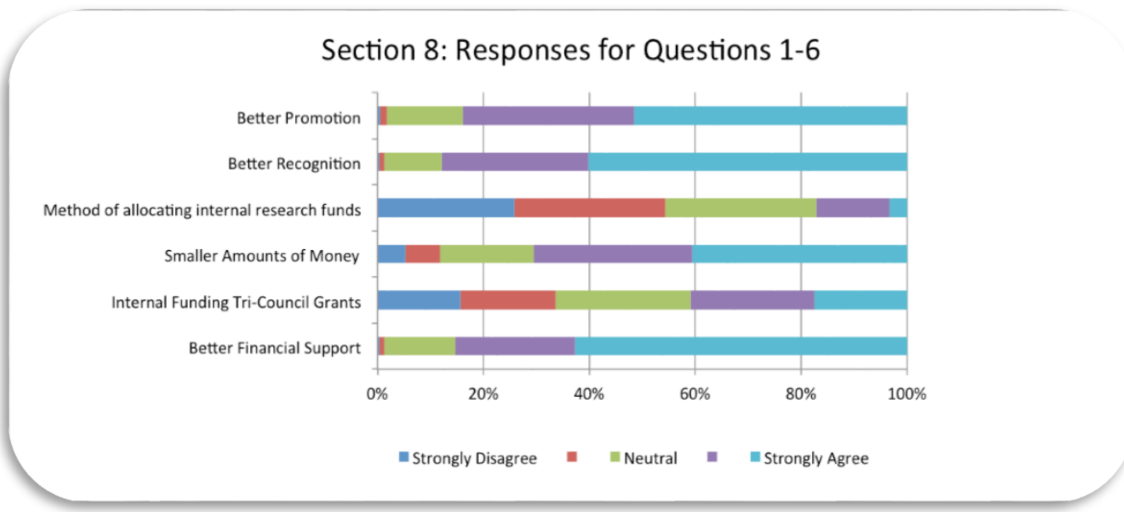
11) Provide SSAH researchers with adequate research support tools, such as N-Vivo (qualitative analysis software) and Qualtrics. These are two examples of research tools that researchers are required to interact with and should therefore be available to all researchers at Western at a reasonable cost.

12) Cultivate a collaborative interactive and interdisciplinary research community by providing funding, opportunities and space for researchers to share ideas and talk. Supporting speaker series and reserving spaces on campus specifically for SSAH researchers across disciplines to gather would go a long way in producing a vibrant research culture at Western.

Appendix




Section 6: Responses for Questions 1-8
Ethics
Western's Strategic Plan
Challenges Receivng Recognition
Financial Challenges at Western
Challenges at University Level
Challenges Within Department
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Strongly Disagree
Neutral
Strongly Agree


Section 8: Responses for Questions 1-6
Better Promotion
Better Recognition
Method of allocating internal research funds
Smaller Amounts of Money
Internal Funding Tri-Council Grants
Better Financial Support
0%
20%
40%
60%
80%
100%
Strongly Disagree
Neutral
Strongly Agree

Attachment 3 – Submission of the SSHRC Associate Dean's Research regarding research indicators

This report was developed in response to a request by the Assistant Vice-President of Research, Mark Daley, to provide input on the issue of metrics that could be used (where appropriate) to reflect research output and research quality in the social sciences, arts, and humanities. The response was prepared jointly by the deans of research in the faculties of Health Sciences, Information and Media Studies, Music, Business, Arts and Humanities, Law, and Social Science, who consulted in turn with members of their respective faculties. The response does not represent a wholehearted endorsement of the use of metrics, but is rather a joint attempt to document indicators of research impact and outcome appropriate for the range of research activities in the social sciences, arts, and humanities.

Thank you for the opportunity to provide input on the measurement of research impact/outcome. This is a complex issue in part because there is no single set of indicators that can capture the impact of all research. Moreover, some types of impact simply can't be captured through quantitative metrics. Some faculty members have expressed concern that the use of research metrics legitimizes a general trend toward the metrification of quality in academia – in fact, for some faculty this concern is so significant as to lead them to reject the very idea of research metrics. Our discussions also lead us to understand that researchers need assistance in documenting the impact of their own work. Therefore, what we're offering here is a summary of the kinds of metrics and other assistance that would help researchers from diverse disciplinary backgrounds to document research impact and excellence.

We understand that the goal of identifying research metrics/indicators is to provide *researchers* with the tools that they need to document the impact of their own work. To the extent that metrics are being used in this manner, they will be helpful for many (although not all) researchers across campus. To provide support to the broadest range of researchers at Western, it is critical that we support a wide range of approaches to identifying and documenting research impact, including traditional citation metrics, alternative metrics that capture a range of non-traditional sources where research and researchers could have an impact, and qualitative narrative approaches that support individual and individualized accounts of research impact using outcomes that are relevant to a specific researcher and/or a specific project. We also wish to stress that much of the support that would be helpful comes in the form of ***people*** rather than *tools*. If the goal is to enhance Western's reputation, the importance of personnel who are talented at story telling cannot be overemphasized. That is, regardless of the tools/packages that might be purchased to document research success, personnel will be needed to ensure that these packages will be deployed in an accurate and useful manner.

Finally, it is worth making some general points, arising from our discussions, about access to metric supports/systems. First, we believe it is critical to ensure university-wide access to whatever metrics we purchase/license. *All* faculty members must have the option to use the tools that we license or purchase for tracking research impact – i.e., access to these resources should *not* be determined on a faculty-by-faculty basis. Standard metrics, for example, may not be appropriate for all SSAH faculty; there are, however, some SSAH researchers whose work (or at least aspects thereof) is/are well represented by standard metrics, and we would not want to see their access to the appropriate tools restricted because there is not widespread applicability within their specific faculty. Second, faculty members who use any metrics system must have open access to their profiles, with the ability to monitor, revise, and correct errors or omissions. It would not be possible for one person to collate correctly data for any individual faculty member, let alone a large group of faculty members. There are too many issues with respect to, for example, properly counting citations from even something like SciVal, which, at least at first glance, seems like it should be straightforward. There are definite issues with regard to similarity among names, changing names across time or publications, and the changing name of our university. No central staff member will be able to hone in on the full correct set of citations in something like SciVal, let alone locating the correct white papers, policy briefs, and other important evidence of impact. This work can be done by staff, but we believe those staff will have to be situated within a given department, so that errors and confusions around the data can be resolved within the unit.

1. Expansion of existing metrics (citations of/citations in): SSAH and other researchers present their research in a variety of formats, including but not limited to peer-reviewed journal articles. When summarizing research citations, it is important that citations in and citations of the following types of outputs be included in a comprehensive citation tracking system:
   a. Monographs, edited collections, critical editions
   b. Chapters in monographs, edited collections, critical editions
   c. Refereed conference proceedings
   d. Theses
   e. Papers in research repositories (e.g., Social Sciences Research Network (http://www.ssrn.com/en/), ResearchGate (https://www.researchgate.net), Scholarship@Western, etc.)

2. Citations of and citations in 'grey literature': Beyond even the expanded list of 'traditional' academic outputs listed above, SSAH research is disseminated and cited in a variety of 'grey literature' forms. These are not captured in traditional citation tracking systems, but they represent important avenues for dissemination and areas for potential impact of SSAH research:
   a. Canadian and international court decisions (citation in, particularly for Law)
   b. Hansard citations
   c. Government reports
   d. Corporate reports
   e. White papers
   f. Policy briefs

3. Non-citation researcher and research impact indicators: Systems like *altmetrics* are beginning to track research impact reflected, not in formal citations, but in social media discussions, media presence, and other forms of discussion/presentation. Collectively,

these reflect an influence on the field, on Western, and/or on society more broadly. These include:

a. Social media mentions (blogs, twitter, etc.)
b. Press interviews
c. Keynote lectures
d. Exhibitions/exhibits
e. Contribution to policy (e.g., invitation to participate on consultation panels)
f. Contribution to course outlines, educational curricula and programs
g. Student training and placement
h. 'Collaboration' maps that show disciplinary and interdisciplinary research collaborations
i. There are currently several projects underway that seek to measure the impact of artists' work on audiences (see Quality Metrics (http://www.artscouncil.org.uk/what-we-do/research-and-data/quality-work/quality-metrics/ , in the UK, and Culture Counts (https://culturecounts.cc/about/) in Australia.) We should seek to better understand these efforts to see if they are relevant to constituencies of the SSAH community.

4. Getting the message out: "getting the message out" about research can be a time-intensive and challenging exercise – and SSAH researchers, like all researchers across campus, would benefit from hands-on assistance in this area. Specifically, we have two suggestions:
   a. Western should focus on enhancing the presence of Western researchers in a select number of online research repositories (e.g., SSRN, ResearchGate, academia.edu). Research repositories are increasingly important for access to (and therefore citation of) relevant scholarly research. If Western were to choose a small number of such repositories with the intention of enhancing the presence of research from Western (and researchers from Western) on those sites, there could be significant benefit for both the institution and individual researchers in terms of enhanced research visibility. The problem is that setting up and maintaining these profiles is time-intensive. One solution is to provide practical support to interested faculty members to develop and maintain profiles on the identified sites (e.g., assistance with setting up the profile, uploading relevant publications, ensuring that copyright provisions are respected, etc.).
   b. Staff resources to assist individual researchers to develop a specific research impact 'story'. Many SSAH researchers and research projects would benefit from an individual approach to research impact – the projects and researchers aren't well reflected in standard metrics, but require instead a qualitative storytelling approach to research impact. Assistance with developing and writing these stories would be of benefit – and we have expertise at Western in this area.

Cathy Benedict, ADR, Music; Helene Berman, ADR, Health Sciences; Nandi Bhatia, ADR, Arts and Humanities; Stephen Bird, ADR, Education; Jacquelyn Burkell, ADR, FIMS; Robert Klassen, ADR, Business; Ken McRae, ADR, Social Science; Valerie Oosterveld, ADR, Law

Attachment 4 - URB SSAH Task Force: Graduate Student Consultation Recommendations
Prepared by Joshua Lambier and Diana Moreiras
- May 04, 2016

Executive Summary
While SSAH graduate researchers share many of the prevailing concerns expressed by faculty, the former also experience unique pain points that will remain invisible without careful attention to the important and distinctive challenges that arise for doctoral students at The University of Western Ontario.

2) The Western Context
With the growing prominence of STEM disciplines, SSAH graduate students have noted an intensified pressure to shift the topics and methods of their research to adapt to the “STEM-bias” in evaluation criteria for internal and external grants, awards, and distinctions. Graduate students have also pointed out that the rhetoric of this University’s leadership is increasingly dichotomized into the needs of “STEM” and “non-STEM” disciplines, which flattens and diminishes the contributions of the social sciences and humanities. Students recognize that this rhetoric is a response to a general shift of tone coming from funding bodies in Canada, but would encourage senior leaders to advocate for the vital contributions of SSAH research.

3) Recognition/Advocacy
Graduate students have expressed their desire to see university leaders make a more robust case for the value of SSAH research at its best within and beyond the university system. There is also a general impression that research is especially valued when it can demonstrate direct application or “impact,” which overlooks the intrinsic value of SSAH research (i.e., the humanities for the humanities’ sake). If policymakers and the broader public have a better idea of the value of SSAH research, the career options of SSAH graduates might also improve. Recent reports indicate that only 20-30% of all humanities PhDs in Canada will secure a position in universities or colleges, highlighting the urgent need to make the case for the value of doctoral education beyond the academy.[1] Finally, participants noted that the University should profile and publicize the research excellence of *all students*, not just those who win national/international awards.

Training for Research Careers: Graduate students would like a broader range of professionalization activities to develop their scholarship and career opportunities, including an enhanced focus on collaboration, project management, grant writing, and knowledge exchange. Students noted the lack of opportunities to mobilize their research projects beyond their disciplinary boundaries, which limits the translatability of their projects to careers outside of the University.

Graduate Level Teaching: SSAH graduate students pointed out the high value of teaching while carrying out their research given that they gain valuable insights and perspectives on issues related to their research allowing them to feed ideas back into their research, thus fostering their interpretations. Graduate students hope more weight can be placed on this in relation to SSAH research by creating more opportunities to teach at the graduate level.

4) Need for general research infrastructure supports

Removing Obstacles for Engaged Graduate Research: Though the dissertation is the traditional outcome of a successful doctoral program in the social sciences and the humanities, graduate students are advocating for PhD programs that are designed for greater modes of participation with broader publics, including recognition for a *wider and more inclusive continuum of scholarly artifacts* beyond the article and the dissertation (e.g., research blogs, films, websites, digital and oral storytelling initiatives, community-based projects). Graduate researchers pointed to a dynamic list of publicly engaged projects they were building or working on as part of their doctoral education with little or no recognition of their efforts in terms of the adjudication of their success as a student, even if these activities ultimately make them stronger candidates for careers within and beyond the University. There is also an urgent demand to see new models for PhD programs, with the option to replace the dissertation with a coherent series of artifacts (e.g., dissertation by articles, applied PhDs, Workshop PhDs, project-based PhDs, internships, among others).

Interdisciplinarity: Doctoral research projects are enriched by interdisciplinary collaboration, and Western should encourage innovative opportunities for graduate students to approach new questions, methods, and communities. Many of the most intractable problems occur in the liminal spaces between disciplines, and require novel strategies for cross-fertilization between traditional disciplines. The University could enhance existing graduate programming by increasing resources for interdisciplinary clusters, by removing unnecessary barriers for graduate scholars to engage with faculty across the disciplines, and by recognizing research outcomes that might otherwise fall outside of the standard process of evaluation (e.g., community-based projects). Doctoral students also emphasized the need to foster “bottom-up” approaches to interdisciplinary collaboration, which would allow researchers to forge their own creative pathways.

Ethics: Graduate students are in need of better support in relation to the research ethics process. There is a need for faster turn-over timelines from the Ethics Board. Moreover, graduate students would find it much more beneficial to receive relevant feedback on their SSAH-specific research projects from SSAH faculty members (i.e., instead of the STEM-focused/quantitative feedback some SSAH graduate students have encountered in this process). Additionally, graduate students find it more appropriate and logistically sound to have the option to take more ownership of their research through the ROMEO system. We recommend to open up the option for graduate students to choose to be the principal investigator on ROMEO as well as developing a more clear and helpful guide on the UWO website about the Ethics procedures and corresponding forms.

Graduate Designated Spaces: Having physical spaces available on campus which are catered to the graduate researchers’ needs were highlighted as crucial (i.e., these are different from undergraduate student spaces). Specific spaces designed for graduate level research activities (i.e., reading, studying, writing, meetings, break rooms/lounges) are currently lacking in some SSAH departments and this situation turns more complicated for graduate student researchers who are over their funding period. As a result, senior graduate students are pushed off campus, isolating them from the collegial community and research environment of the university. We recommend that the University finds feasible opportunities to create spaces with graduate students' needs in mind such as reading and writing rooms, office spaces available beyond year four, and faculty/graduate break rooms/lounges for each SSAH discipline.

5) Allocation of Internal Funds

International Students: Given that international graduate students pay more tuition and are ineligible to apply for most governmental grants and scholarships (with the exception of the OGS which is limited to eight students across campus), they are left with minimal or no funds to allocate to their research projects. As such, we recommend that the University finds ways to create internal scholarships/awards with the main purpose of supporting international students, exclusively, with their research-related expenses (e.g., field and/or laboratory work, research dissemination, etc.).

Transparency for Adjudicating Grant Proposals: Students advocated for a more transparent process of evaluating grant applications at the major funding bodies (e.g., SSHRC). Graduate researchers are also concerned that innovative interdisciplinary projects are not being evaluated fairly in the "jury process" of review at the TriCouncils, especially if the project "falls between the cracks" of established disciplines (e.g., Humanities and Health Sciences) or funding councils (e.g., SSHRC and CIHR).

Open Source Journal Publishing Subsidy: It would be very beneficial for the University to have a specific fund which graduate students could apply to in order to help subsidize the cost of publishing in open source journals. This would encourage more graduate students to publish their work during their degree and have their research become more accessible, beyond their own field of study.

6. Conclusions:

With the growing recognition and support of mental health issues on campus, graduate students would like to see adequate health services and resources. In some cases, the needs of graduate students may exceed those of undergraduate students (e.g., students with families and children). *"A healthy grad student,"* as one student said, *"equals a more productive grad student."*

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[1] "White Paper on the Future of the PhD in the Humanities," Institute for the Public Life of Arts and Ideas, McGill University, December 2013.

Appendix 3

URB Social Sciences, Arts, and Humanities Task Force
Working Group 3 Summary Report and Attachments
Andrew Nelson

Contents:

1. Administrative practices and processes
2. Funding
3. Recognition / Communications
4. Advocacy

Attachments:

1. re: REB - memo on April 22nd, 2016 from Erika Basile, Director, Office of Research Ethics to the Deans and ADRs to be distributed to the research community, informing everyone that a new non-medical Vice Chair has been appointed, Prof. Randal Graham and providing further details of recent developments in the ORE.
2. Other Canadian and International Universities' internal funding programs – prepared by Andrew Nelson and Jane Toswell
3. URB Social Sciences, Arts, and Humanities Task Force Working Group 3 Report on Research Communications – prepared by Jonathan Vance

Working group's initial remit:

1. How is research in the social sciences, arts, and humanities supported at Western and how can this be improved?
    a. Specifically, how can (i) administrative practices and processes, (ii) funding, and (iii) recognition be improved?
    b. How can Western better communicate the results of leading edge scholarly activities in social sciences, arts, and humanities disciplines?
    c. How can Western advocate for social sciences, arts, and humanities research more effectively?

1. Administrative Practices and Processes

Based on the findings of the Working Groups, our Committee identified four areas in which infrastructure should be strengthened to enhance social sciences, arts, and humanities research.

- Support for the preparation of research proposals
- Research ethics review and approval
- Access to research tools
- Fostering interdisciplinary and collaborative research

Preparation of Research Proposals

Respondents to our Committee's consultation process revealed that there are large disparities among the different faculties in terms of the kinds and amounts of administrative assistance that they can provide individual researchers. Strong praise was in evidence for the quality of support from Research and Development Services, particularly in the area of grant preparation, but that support is currently limited to specific programs (e.g. ORF, CFI, SSHRC Partnership and Partnership Development grants), leaving many faculty members dependent on variable and typically more limited resources in their home faculty. Furthermore, specific kinds of support, such as staff members knowledgeable in areas such as granting agency regulations, best practices around the eligibility and evaluation of in-kind supports, and the details of graduate support are very unevenly distributed across the faculties. Thus, there was a strong sense that there should be a greater centralized presence in the areas of opportunity identification, grant preparation, the handling of in-kind supports, the facilitation of community based research, and research mobilization. In addition, the areas increasingly being emphasized by the Tri-Councils, including open access publishing, data curation, and knowledge mobilization are areas of strategic importance that would benefit from administrative assistance.

Several impediments to the grant application process were identified by individuals consulted by this Committee, focusing particularly on ROLA and recent changes in administrative practice.

ROLA – ROLA has long been an irritant to researchers and some administrators at Western. It is indeed a valuable tool for gathering signatures in a fast and efficient manner, but its interface is non-intuitive, the software is unforgiving of mistakes and its budget module seldom matches the modules of the actual grant application. From an administrative perspective, it does not easily allow ADRs to check specific items of information, the budgets are incomplete, there is no way to track Faculty or University commitments to grant proposals and there is no facility to monitor a Faculty's grant activities over time. Finally, it does not track the information necessary for many of the internal processes in RDS, including the allocation of internal funds and information for research contracts. A software package recently obtained by Western, Qlik, does allow the querying of the ROLA database and the production of reports (data that make up part of this report was obtained this way), but it is currently only available to a few individuals.

Recent discussions with Patrick Callaghan indicated that there is a willingness to examine the ROLA interface and the kinds of data that ROLA gathers. The Committee applauds this openness (which has not been apparent on this topic in the past) and encourages that a range of stakeholders be consulted to improve this product.

Recent changes in administrative practice – Several researchers, particularly those with large grants that require extensive administrative and HR support, have noted that the administration of these projects is extremely burdensome. In addition, the process of hiring research assistants has become very complex, and there appears to be increasing bureaucracy involved in making purchases and payments. A thorough review of administrative procedures and processes with an eye to increasing efficiencies and decreasing the load on the researcher would be timely and welcome.

Research Ethics Review and Approval

Many researchers and students consulted by this committee expressed frustration with the University's ethics approval process, citing, in particular, Research Ethics Board comments that go beyond the accepted purview of ethics review and significant delays in procuring ethics approval. In addition, researchers involved in multi-university projects experience difficulties and delays in coordinating ethics approval across institutions.

Our Committee acknowledges that the REB is aware of these challenges and is taking steps to address them. Documents detailing the steps taken to improve efficiency in the Office of Research Ethics are included as an attachment here and are itemized below. We support their efforts and encourage the University to ensure that they are given adequate resources, both in terms of finances and training personnel, to promote timely review of submissions. Finally, if the REB is to reflect the ideal of local peer-review for ethical acceptability, social scientists, artists and humanists must dedicate their time to serving as members of the Board.

Actions undertaken in the last year in order to improve efficiency at the Office of Research Ethics (from an email from Erika Basile):

- "We have hired 2 new Ethics Officers (one for the Health Science review and the other for the Non-Medical REB)
- Documentation: In response to feedback, we have updated templates and guidance documents on our website to better support researchers in preparing their ethics submissions. These updates will help researchers interpret policies and regulations, and to create study documentation. Due to the breadth of research activities across campus, we have updated our non-medical application form to clarify information the REB requires for review.
- We are in the process of finalizing the contract with a vendor for a new REB management system to replace ROMEO. The goal is to have this new system in place by the end of the year.
- Re: the coordinated REB review with UofWaterloo, more information about this can be found at http://www.uwo.ca/research/services/ethics/about/coordinated_review.ht
- We have some new REB members from Cardiac Surgery and a new community member which has been a tremendous help. We also have some new post doc REB members aiding in the review of medical applications (mainly delegated submissions). This has been a big help on our health science REB side.

  Some challenges remain, however. We have heard the research community's frustrations about delays and inconsistent reviews. This is where we need the research community's help. REB members play a vital role in the research ethics process by assessing whether research protocols adequately protect the rights and welfare of participants and researchers.

  We greatly appreciate the work our current and past members have done; however, to review the number of submissions we receive monthly in a timely manner — and with sufficient expertise — we urgently require new REB members knowledgeable in various

> subject areas. We require additional NMREB support from most faculties to help current members when they are unable to provide a review. Despite my initial Memo from Jan/2016 asking for additional REB membership and Grace's engagement with faculty we have not acquired any additional REB membership for the Non-Medical REB.
>
> With respect to the HSREB, we are currently shorthanded in many areas, including, but not limited to: neurological sciences, dentistry, family medicine, medical imaging, oncology, ophthalmology and surgery. We need to ensure sufficient REB membership from the various faculties engaging in research involving human participants."

Our Committee is grateful for the leadership being provided by Ms. Basile and the steps that have been taken over the past year. We support these ongoing efforts and trust that things will continue to improve. We also encourage faculty members to respond to Ms. Basile's requests for engagement. Clearly, further improvement requires coordinated effort.

See Attachment 1 for additional information.

Access to Research Tools

Many research tools, such as quantitative analysis software that is commonly used in the sciences and in some of the social sciences, arts, and humanities, are widely available to students and faculty members at Western either free or at a reasonable cost through a university-negotiated site license. There is not, however, comparable access to tools that would be of use particularly to social science, arts, and humanities researchers, such as qualitative analysis software and online survey software. Some Faculties are able to provide to their researchers access to these resources, but others do not have the funds to make these tools available. Lack of universal low-cost access to these tools compromises the ability of faculty members and graduate students to carry out research; moreover, it places grant applicants at a disadvantage relative to faculty members at other institutions because they must build into their budget relatively high acquisition costs for these tools. Thus, coordinated centralized support for these resources would be of inestimable benefit to social science, arts, and humanities research on campus.

Research tools that have specifically been raised include Qualtrics and NVivo which are used by researchers and students across all the social sciences, arts, and humanities disciplines. These tools should be as readily available as SPSS is to researchers and students who utilize quantitative methods.

Fostering Interdisciplinary and Collaborative Research

The increased emphasis on interdisciplinarity at all the Tri-Councils makes support for this kind of research a strategic priority for the University. The current InterDisciplinary Initiatives program is widely recognized as a very important tool in this area that has fostered many vital and dynamic programs. The recently named clusters, the Brain and Mind and Bone and Joint Institutes, both held IDIs at some point along their development. Other research enterprises, graduate and undergraduate programs have emerged from this program as well.

At an individual level, however, faculty members who carry out interdisciplinary research report ongoing challenges. Our consultations revealed that there are still difficulties encountered by individuals who hold appointments that cross units, particularly in terms of the hiring and promotion and tenure process. In addition, there are clearly still rigid silos in many parts of the University. Thus, an ongoing concerted effort is required to further develop interdisciplinarity at Western.

One suggestion that came out of the consultations, both with faculty members and students, was that Western should "cultivate a collaborative interactive and interdisciplinary research community by providing funding, opportunities and space for researchers to share ideas and talk." The libraries could play an important role in the establishment of such an environment as it exists outside of the disciplinary silos.

2. Internal Funding

Our consultation revealed a belief that recent changes in the internal funding program at Western, while aligned with the Strategic Plan, had shut many researchers out from one of the key supports for their research programs, which in turn has profoundly affected researcher morale.

As discussed elsewhere in this Task Force's final report, many social sciences, arts, and humanities researchers do not require large sums of money to undertake their research. The minimum grant request for both SSHRC's Insight and Insight Development Grants is $7,000, suggesting that these should be fruitful opportunities for researchers seeking to support small projects. However, data shared with this Committee by SSHRC revealed that the smallest amount actually funded from the fall 2015 Insight Grant round was approximately $65,000 while the average award was 2 to 3 times that size. Figures for the January 2016 Insight Development Grant were also well above the $7000 floor, at approximately $20,000 for the smallest request, with an average request of approximately 3 times that size (the awarded amounts are not yet available). These data make it evident that successful SSHRC projects do not have small budget projects, which is consistent with the Tri-Councils emphasis on multidisciplinarity and team grants. Although we have no direct evidence that lower budget projects would have a more limited chance of success, recent success rates in the low 30% range suggest that the return on investment for such applications would be limited at best.

Thus, it is important for universities to be creative about other ways to support small to modest research projects. SSHRC does provide Institutional Grants to eligible institutions and they allow institutions to retain unused grant funds (Grant Residual Funds) for repurposing. As discussed in the Summary Report on Working Group 1, these are the only funds that some universities deploy for internal funding. However, Western adds considerably more money from its operating budget to the internal support budget, for a total of ca. $2M/year.

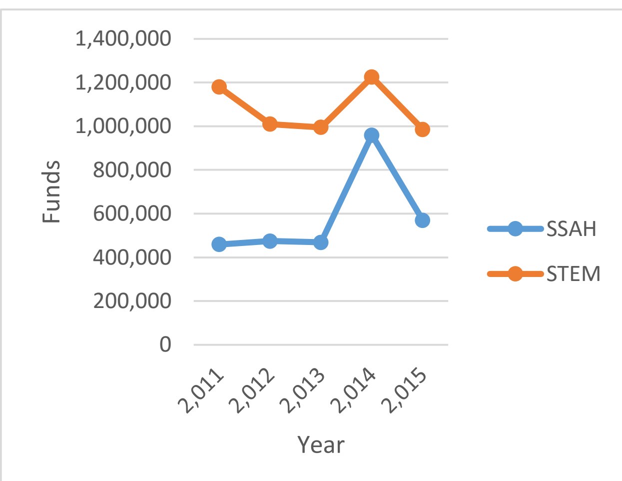
Patrick Callaghan, the Interim Executive Director, Research, generously provided some data derived from the ROLA database, allowing the Committee to undertake some basic analysis of how the internal funds were being deployed, and what effect that had on external funding success. A small portion of that analysis is presented here.

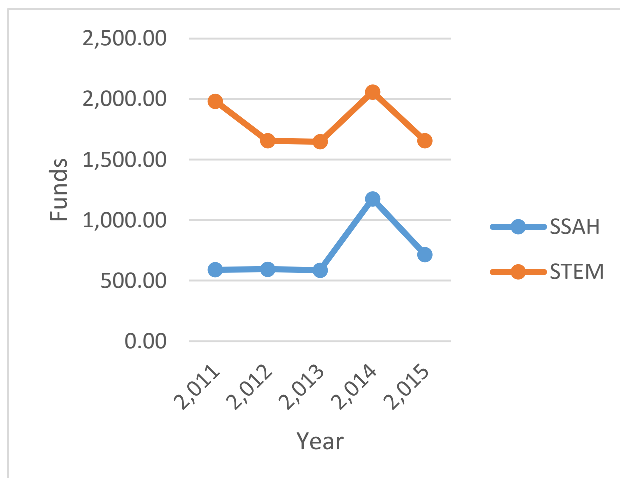
First, a tabulation of internal funds allocated to all Faculties indicates a somewhat fluctuating, but reasonably steady investment of funds for internally supported research:

2011	2012	2013	2014	2015
$2,006,772	$2,019,403	$2,107,511	$2,661,279	$1,876,173

The brief rise in internal funds in 2014 is likely due to the overlap of programs that were being phased out, and new programs instituted in, 2013. The reason for the reduction in funding below $2M in 2015 is not clear.

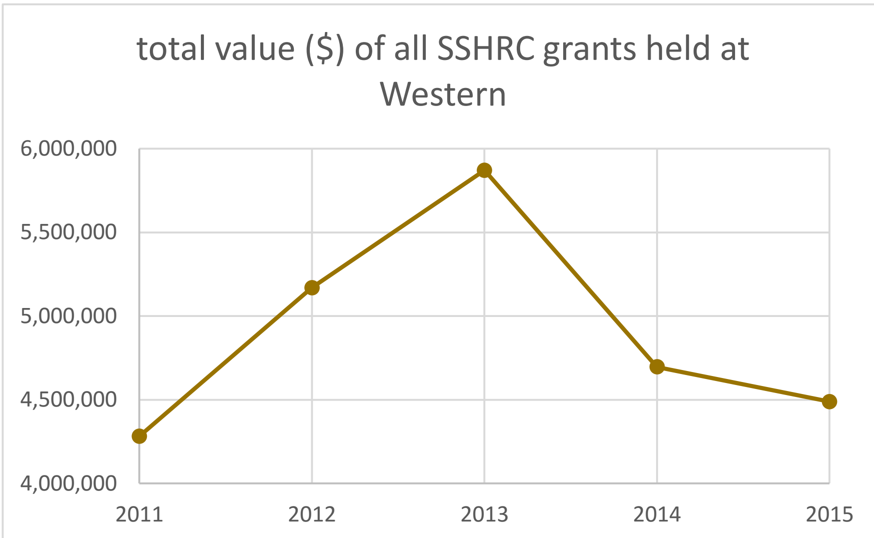
An examination of the core funds that faculty members can apply for directly (pre 2013 = Academic Development Fund large and small grants, SSHRC Internal Research and Travel Grants, International Research Grants; post 2013, Western Strategic Support for Success Grants and Faculty Directed Research Funds) showed that the social sciences, arts, and humanities disciplines in aggregate receive approximately 30% to 40% of the funds apportioned to the STEM disciplines. The average social scientist, artist or humanist also receives about 30% to 40% of the amount of internal funds as the average STEM researcher.





This observation is not a rallying cry suggesting a systematic bias against the social sciences, arts, and humanities disciplines and researchers. Rather, it is an important observation that deserves further discussion. Elsewhere in this report, we have noted that social sciences, arts, and humanities researchers tend to require smaller budgets than STEM researchers. However, there are more social scientists, artists and humanists at Western than there are STEM researchers, so one might also expect a more equitable distribution of resources. It is not the objective of this report to come to a conclusion on this matter; we merely seek to point out that this is something that should be explored more thoroughly in an examination of the internal funding program.

A third analysis undertaken is of the total value of SSHRC grants held at Western. There are many reasons that this number could vary over time, including a few very large grants, overall changing success rates at SSHRC, vagaries of the pool of researchers applying in any given year and so on. However, given that the funding regime instituted in 2013 had its explicit goal to increase success rates at SSHRC, this is a valuable indicator of the success of the Western Strategic Support for Success Program. The figures for the total value of SSHRC grants held at Western are plotted below:



The plot shows a sharp increase in SSHRC funds held under the pre-2013 funding programs, but a sharp decline thereafter under the Western Strategic Support for Success program. A detailed analysis of the specific outcomes for WSSS recipients at SSHRC application has not yet been undertaken, but an analysis of those received by the Faculty of Social Science by December of 2015 provides some anecdotal evidence of the effectiveness of this program. During the term of the WSSS program, FSS received 11 of these grants. Of those 11, only 2 were ultimately linked to successful SSHRC applications. This clearly merits a more detailed exploration.

A quote from one of the individuals consulted by our Committee might prove revealing in light of this analysis:

> "*We need one-time stand-alone funding internal opportunities for research and conferences and less funding tied to massive tri-council projects and the pursuit of these… Ironically there is little room for testing novel ideas and projects given our current obsession with research projects that are massive and bureaucratic. There is little chance for small scale innovation and experimentation in our system.*"

The upward trajectory from 2011 to 2013 may well reveal that a diversified, flexible and multilevel internal grants program actually permits more creativity, innovation and ultimately breeds more success than a program that assumes that one-size fits all. Suffice to say, a more thorough analysis of the internal funding program is warranted.

The feedback we received during our consultation definitely showed that social scientists, artists and humanists at Western would prefer a more diversified portfolio of funding opportunities than currently exists. Suggestions include a Competitive Teaching Release, Mid-career Research Awards, and a Small Grants Program. An examination of internal funding programs at other institutions in Canada suggested precedents for each of these ideas (see Attachment 2). Discussions with the Associate Deans of Research of the social sciences, arts, and humanities Faculties suggests that there is strong support for the continuation of some sort of FRDF funding, that there is some value in strategic support initiatives to support grant success (although possibly in a modified way). ADR discussions and the enumeration of support programs at other institutions also suggested that grants to support the preparation of large and complex proposals (e.g., Partnership Grants) prior to the LOI stage would be valuable. These are discussed further in the final report document.

Finally, our survey reported that many faculty members have resorted to self-funding small research projects and/or research and conference travel. This "grant" is actually the allocation of a portion of a researcher's own salary as an amount against which they can claim research expenses against taxes. This allows the researcher to recover at least part of their investment in research. There used to be two versions: one that would pertain when a researcher was on sabbatical, the other during a regular year. A CRA ruling in 2013 has been interpreted by many as ruling out the URG during a regular year, and Western's current version (http://www.uwo.ca/facultyrelations/) applies only to sabbaticals. The description of this program is presented in complex jargon that is difficult for most non-lawyers to understand. It is therefore rarely utilized.

Similar programs exist at other universities, but the interpretation of the CRA position varies (see Attachment 2). Queen's has apparently has limited the use of grant in any form and the Committee was told that it is "controversial". Toronto's version is "under moratorium" (http://www.research.utoronto.ca/wp-content/uploads/2012/10/SFRG-Moratorium-April-2013.pdf). Lakehead has one that appears to support sabbatical and regular years (https://www.lakeheadu.ca/research-and-innovation/forms/research-services/node/15025) as does the University of Alberta (http://www.rso.ualberta.ca/Applying/SponsorsPrograms/UofAFunding.aspx). The committee received input from Ann Bigelow, a Lecturer in Management and Organizational Studies with expertise in the Income Tax Act. Ms. Bigelow suggested that Section 51(1)(o) of the Income Tax Act was subject to interpretation and that the employer should consider asking the CRA for a ruling on the restriction of this grant to sabbaticants only, and to clarify other aspects of this program (http://www.cra-arc.gc.ca/E/pub/tp/ic70-6r7/ic70-6r7-e.html). Given the lack of clarity on this matter, other universities would also benefit from clarification.

3. Communications

The promotion and celebration of research achievements is a critical part of the research process. Researchers must feel that their work is valued by their institution and that success in all disciplines is equally valued. Communicating research achievements is also critical because of the priority that funding bodies place on public engagement, knowledge mobilization, broader impact, etc.

Anecdotal evidence from consultations thus far, indicates a perception among social sciences, arts, and humanities scholars that there is some inequality at Western, and that the institution places a higher premium on a STEM research achievement than it does on research achievement in the social sciences, arts, and humanities.

The detailed discussion of Research Communications can be found here as Attachment 3. The key observations are that:

1. there are vastly differing capacities and emphasis on communications between the different faculties at Western. Some have very sophisticated and well-resourced communications units, others have very small units, while many have no communications support at all
2. Western has an Office of Communications and Public Affairs (hereafter CPA), under Associate Vice-President Communications Helen Connell that is responsible for the overall communications strategy of the University. This office includes Alumni & Development Communications, Media & Community Relations, Creative Services, and Editorial Services.
3. there is a perceived and actual difference in the number of appearances of social sciences, arts, and humanities stories versus the number of STEM stories in Western communications releases.
4. this situation is the product of two competing processes
    a. the difficulty that the CPA has in engaging social sciences, arts, and humanities researchers in the communications enterprise
    b. a reluctance of social sciences, arts, and humanities researchers to engage in the communications exercise.

The key recommendation to emerge from this exercise is that Western needs to establish better mechanisms to connect the Communications and Public Affairs office with the Faculties, and social science, arts, and humanities researchers and social scientists, artists and humanists need to be better coached in the value of the communications enterprise. The latter involves examining how these efforts are valued and recognized within existing structures at the University, including annual performance evaluations and promotion and tenure.

4. Advocacy

The last component of the mission of this Task Force was to consider the question "How can Western advocate for social sciences, arts, and humanities research more effectively?" The answer to this question is a multifaceted one that draws on much of the material discussed above.

First, the clear message emerging from the consultation exercise is that the social scientists, artists and humanists on the Western campus do not feel that their efforts and accomplishments are valued by the current University administration. The University has already taken a major stride toward addressing that concern with the establishment in the 2016-17 budget of a $5M endowment for the support of the social sciences, arts, and humanities at Western. This effort is to be embraced and encouraged.

A very simple and clear confirmatory/advocacy message would be for the University to embrace the Leiden declaration on *The Role of The Social Sciences and Humanities in the Global Research*

Landscape (http://media.leidenuniv.nl/legacy/leiden-statement.pdf) that celebrates the value of research in the social sciences and humanities and is signed by Canada's U-15 (of which Western is a part). However, this declaration is currently invisible on Western's website and in any of its literature. A quick look at other members of the U-15 suggests that our sister universities are not any quicker to the mark, so Western could be a leader in Canada in this regard.

An important external advocacy measure would lie in strengthening our relationships with the Tri-Councils and other granting agencies and national associations such as the Federation of Humanities and Social Sciences. The SSHRC Leader in particular has an important role to play in making our researchers' and students' concerns known to SSHRC, and in bringing policy and practice information back to the University. A more active relationship with the Federation would benefit our researchers, particularly with regard to their efforts to better understand *impact* in the social sciences, arts, and humanities.

Active and effective advocacy for the social sciences, arts, and humanities will require a concerted and coordinated effort on all fronts. It is our hope that this report will be an important contribution to these efforts.

Working Group 3 membership included: Jonathan Vance (FSS), Andrew Nelson (FSS), Kelly Olson (A&H), Tamara Hinan (student, FSS), Vicki Schwean (Education), Scott MacDonald (student FIMS), Jane Toswell (A&H)

This report was informed by additional submissions by:

- Ann Bigelow (FSS)
- Erika Basile (ORE)
- Patrick Callaghan (Research Western)
- staff members from the: Office of Communications and Public Affairs, Alumni & Development Communications, Media & Community Relations, Creative Services, and Editorial Services
- communications officers from Faculties across campus

REB - memo on April 22nd, 2016 from Erika Basile, Director, Office of Research Ethics to the Deans and ADRs to be distributed to the research community, informing everyone that a new non-medical Vice Chair has been appointed, Prof. Randal Graham and providing further details of recent developments in the ORE.

Western Research

Research Ethics

April 22, 2016

RE: New Non-Medical Research Ethics Board Vice-Chair

Dear members of Western's research community,

It brings me great pleasure to let you know Faculty of Law professor Randal Graham has accepted our invitation to serve as Vice-Chair of the Non-Medical Research Ethics Board (NMREB), effective July 1, 2016. Professor Graham has served as a valued member of the board since February 2012.

Professor Graham was appointed to Western's Faculty of Law in 2002 and currently holds the Goodmans LLP Faculty Fellowship in Legal Ethics. His principal teaching and research interests include ethics, statutory interpretation and legal theory. Professor Graham continues to act as a litigation strategist and technical consultant in matters related to his primary research areas, and his most-recent book – a satirical novel – will be published in 2017.

We anticipate this move will help relieve some of the administrative burden on NMREB Chair professor Riley Hinson and reflects the team's ongoing efforts to improve service delivery and turnaround times. As has been communicated previously, these efforts have included recruitment of two new ethics officers, implementation of new templates and guidance documents, and establishment of a new process for coordinated reviews for multi-site research with University of Waterloo.

Western's HSREB is also a qualified Board of Record for Clinical Trails Ontario (CTO). The CTO REB of Record Review process endorses any 'CTO-Qualified' REB in Ontario to provide ethical review and oversight of multi-centre clinical research – including industry-sponsored or investigator-initiated studies – on behalf of multiple research sites across the province.

Western University, Research, Support Services Bldg., Rm. 5150
London, ON, Canada N6G 1G9 t. 519.661.3036 f. 519.850.2466 www.uwo.ca/research/ethics

Similarly, we are in the final stages of an agreement to replace ROMEO with a better REB management system. I will provide more information, including a timeframe for implementing this new system, once the agreement has been finalized.

Please do not hesitate to reach out to any member of the team if you have any specific questions.

Sincerely,

Erika Basile,
Director, Human Research Ethics
Western University
519-661-2111 ext. 86764 | ebasile@uwo.ca

Attachment 2 - Other Canadian and International Universities' internal funding programs
Andrew Nelson and Jane Toswell

Canadian Universities
- prepared by Andrew Nelson
- abbreviated version – full version available on request

Executive Summary

SSHRC provides funds to Universities under the SSHRC Institutional Grant (SIG) program. SSHRC and NSERC also allow Universities to retain funds that are unspent at the end of the terms of research grants. These are called General Research Funds (GRF). The SIG funds are determined using the following guidelines:

> "SSHRC provides annual block grants for three-year terms. These are calculated according to the following formula:
> $50 for each faculty member whose discipline falls within SSHRC's mandate; plus an amount based on the postsecondary institution's average performance, over the three previous competition years, in all SSHRC research support funding opportunities, calculated at the rate of:
> - 23 per cent of the first $100,000 awarded;
> - 20 per cent of the next $400,000 awarded; and
> - 14 per cent of the remainder, if any.
>
> This formula recognizes multi-institutional grants by distributing credit for performance to all co-applicants.
> Grants will be calculated once per three-year funding cycle.
> SSHRC guarantees a minimum grant of $5,000 to each eligible institution deemed through the merit review process to meet the evaluation criteria."
> http://www.sshrc-crsh.gc.ca/funding-financement/programs-programmes/institutional_grants-subventions_institutionnelles-eng.aspx

The SIG and GRF funds seem to form the basis of internal funding programs at most Universities. At McGill and McMaster the entire internal funding program appears to be based on SIG+GRF funds, so no internal funds are available for CIHR researchers. Most Universities supplement these funds with additional budget support. UofT, UBC, UofA and Waterloo rely heavily on endowment funds. In the case of UofT, the Connaught Fund is worth more than $97M. UBC and UofA have funds from the Killam Foundation. Waterloo has the Bob Harding and Lois Claxton Humanities and Social Sciences Endowment Fund which was established with $1M from a donor and $1M from the University (during Amit Chakma's term).

Most Universities have a small research grant, a conference grant, and 4A funding, many have international research grants and several emphasize strategic priorities. Some are very focused, including Queen's & McGill, while others offer a wider menu of options, including Lakehead and Waterloo.

Highlights of the offerings that we may want to consider include:

- time release grants (esp. in light of the internal survey) – see Lakehead's University Research Chair
- grants to support the development of large and complex grants such as Partnership Grants – see UTS, UTM, UofA and Waterloo. Note that the Waterloo has two programs in this area: one for International Partnerships and the other specifically for EU Partnerships. This is in alignment with SSHRC's work on the Transatlantic Platform and Digging into Data
- grants specifically aimed at Arts projects – see Queen's The Arts Fund, and McMaster's Creative and Performing Arts component of the Arts Research Board
- equivalents to our University Research Grant. This is particularly relevant to the comments in the survey about people self-funding their research. This "grant" is actually the allocation of a portion of a researcher's own salary as an amount against which they can claim research expenses. There used to be two versions: one that would pertain when a researcher was on sabbatical, the other during a regular year. A CRA ruling in 2013 has been interpreted by many as ruling out the URG during a regular year, and Western's current version (http://www.uwo.ca/facultyrelations/) applies only to sabbaticals. However, UofT has suspended the program completely and other Universities appear to be continuing as before the 2013 ruling.
    - see summary report above for additional information

Other Canadian Universities' internal funding programs

Queen's
http://www.queensu.ca/vpr/sites/webpublish.queensu.ca.vprwww/files/files/QROF%20Page/15-0138%20VPR%20Research%20Opportunities%20Fund%20brochure_access.pdf
http://www.queensu.ca/vpr/sites/webpublish.queensu.ca.vprwww/files/files/Internal%20Awards/20151005%20FAQs%20(revised%20December%202015%20for%20website%20update).pdf

Queen's Research Opportunity Fund
- result of a review in 2014 to align internal research programs with Queen's institutional priorities
- The Queen's Research Opportunities Funds will provide up to $1 Million in research funding for its first year and a minimum of $500,000 in funding for each of the next four years. The funds will be tracked annually to gauge how they are dispersed across scholarly disciplines and to determine the impact they are having in advancing the objectives of the Strategic Research Plan.
- $500,000 will be available for the Research Leaders' Fund in its first year.
- Preference will be given to researchers who use these internal research funding opportunities to leverage or match external funding, or to develop an external grant proposal. The Queen's Research Opportunities Funds are not intended to replace external research funding.

Opportunity	Amount	Comment
The Research Leaders' Fund	$10,000 to $25,000	for strategic institutional commitments to aspirational research in support of the University's research strengths and priorities
The International Fund	$10,000/year for a maximum of two years	to assist in augmenting the University's international reputation through increased global engagement
The Arts Fund - support for artistic production - visiting artist in residence	 $5,000 $25,000	designed to support artists and their contributions to the scholarly community and to advancing Queen's University
The Post-Doctoral Fund - fellowship - travel fund	one year of salary support pre collective agreement $1,000	to both attract outstanding post-doctoral fellows to Queen's and to support their contributions to research and to the University

- Queen's has also historically offered 4A funding
- with the adoption of the activity based funding model, much of this sort of stuff will be handled at lower levels
- limited use of a URG-like grant… "controversial"

Lakehead
https://www.lakeheadu.ca/research-and-innovation/research-services/funding-prizes/internal

Internal seed grants at Lakehead University are available from the Senate Research Committee and other sources to enhance research capacity development including the facilitation of external grant applications, and scholarly productivity of Lakehead University faculty members.

(this list does not include recognition awards)

Opportunity	Amount	Comment
Research Development Fund	$7,000	facilitate successful tricouncil grants
Open Access Fund	$2,500	
Conference Travel Grants	$1,000	
Publication Assistance Funds	$500	hard costs associated with publishing
Visiting Scholar Grant	$1,000	
Leave/Non-Leave Research Grant in Lieu of Salary		Lakehead's equivalent of the URG
CFI IOF		
Lakehead University Research Chairs	$50,000	research costs can include teaching buy out
Regional Research Fund	$1,500-$5,000	applied research relevant to Northern Ontario
VP RI Strategic Fund		funds from SIG
- SSHRC 4A	$3,000	
- Sustainability Studies Research Grant	$5,000	innovative solutions to sustainability challenges
- Strategic Research Opportunity Grant	open	support opportunities that cannot be supported through other means
- University of Minnesota Duluth (UMD) Research Collaboration Grant	$3,000	support collaborative research with UMD
- Emergency Research Equipment Repair Fund	must be more than $1,000	support emergency repairs

- Lakehead University's Research Bridge Fund - International Research Collaboration Fund	$10,000 over 2 years $5,000	for faculty to restart research after administrative apt or personal issues support international collaborations
Internal Peer Review Programs - CIHR - NSERC - SSHRC Enhancement	 $5,000 $5,000 $1,000	to encourage early completion of applications and submission for internal peer review funds awarded if the grant is not successful but meets a specific bar - the SSHRC funds here are to support the preparation of an application (note the 4A fund above is separate)

UBC

SPARC - Support Programs to Advance Research Capacity - https://sparc.ubc.ca/sparc
- sounds like RDS & consultants
- supports all tricouncil & CRC applications

Internal Funding Program - http://www.ors.ubc.ca/contents/internal-ubc-funding-sources
- access denied
- apparently in the process of being "re-jiggered"

UBC is one of the Killam institutions. Thus, they have funds for SSAH related research.
https://www.grad.ubc.ca/scholarships-awards-funding/killam-awards-fellowships
They have a number of grad and post-doc and teaching awards, as well as
Killam Research Fellowships - $15,000 salary top up for a researcher on leave (who has presumably been given a reduced salary) + $3,000 for research or travel

Opportunity	Amount	Comment
Killam Research Fellowship	$15,000 salary supplement + $3,000 for research or travel	Assisting promising faculty members who wish to devote full time to research and study in their field during a recognized study leave SSAH disciplines
Killam Faculty Research Prize	$5,000	in recognition of outstanding research and scholarly contributions 5 prizes for NSERC/CIHR, 5 for SSHRC/Canada Council

UBC shows a number of additional prizes/awards, but these do not appear to be research grants.

McMaster

The Arts Research Board oversees a number of competitions
The key objective of the Arts Research Board is to cultivate a strong research base among the Faculties of Humanities, Social Sciences and Business. Specifically, ARB supports a) research programs of new faculty, b) new and/or collaborative, interdisciplinary and/or multidisciplinary research initiatives, c) ongoing research that has a budget less than the minimum required for SSHRC applications, d) research related conference travel and e) publication of peer-reviewed articles. It is expected that funding will lead to increased individual and group participation and success in external grant competitions.
http://roads.mcmaster.ca/forms/forms-and-templates

Opportunity	Amount	Comment
Arts Research Board		
- Conference Attendance and Representational Activities grant	$4,000	
- Major Collaborative Project Seed Grants program	$15,000 over 24 months	- designed to provide critical seed funding to facilitate the subsequent development of strong, competitive proposals of an interdisciplinary and/or multidisciplinary nature for submission to external research sponsors.
- Standard Research and Creative & Performing Arts and Scholarly Publications grants	$7,000	

On this page, http://roads.mcmaster.ca/forms/forms-and-templates, there is a form for "Request for Internal Research Funds (IRF)", but there is no obvious information about terms, amount etc.

McMaster also has a "Forward with Integrity" program that funds projects that support and advance the principles of the program http://fwi.mcmaster.ca/fwi-projects/
- each project can get $5,000
The program is intended to: reinvigorate activity in four key and interconnected areas;

- the student experience,
- McMaster's research environment,
- our relationship with the surrounding community and
- McMaster's commitment to global activities.

University of Toronto

UofT Mississauga
https://www.utm.utoronto.ca/vp-research/funding-opportunities/internal-funding-competitions

Opportunity	Amount	Comment
Outreach, Conference and Colloquia Fund	$500, $1000 or $1,500	The purpose of this fund is to provide financial support to organize conferences, colloquia, or other outreach activities that enhances the UTM research profile at local, national, and international levels.
Research and Scholarly Activity Fund	“normally” $5,000-$10,000	The purpose of this fund is to support direct costs of research and scholarly activity that will improve the competitiveness of external grant applications submitted by UTM faculty members, with an emphasis on Tri-Council grant applications, including collaborative and strategic grants.
Research Planning Grants	no amount specified	The objective of this funding is to provide support for UTM researchers to plan meetings that bring together a team of researchers and partners to develop *major* grant proposals (such as CFI Infrastructure Fund, Networks of Centre of Excellence, SSHRC or NSERC Strategic Partnerships, Global Challenge Awards, etc).

UofT Scarborough
http://www.utsc.utoronto.ca/research/university-toronto-internal-funding-programs

Opportunity	Amount	Comment
Major Research Project Management Fund	expected to range from $10,000 to $100,000 - must be matched 1:1 by supporting units	The objective of the MPRM is to enhance the competitiveness of UofT-led research funding applications - for the development of large, complex, multi-institutional type grants
Research Completion Award	no specific amount – just that funds are limited	funds from NSERC & SSHRC GRF - to be used to complete the project or to advance the original project to be better positioned for the next one

UofT main campus does not appear to have a specific internal funds program.

Their self-funded research grant is currently inactive http://www.research.utoronto.ca/wp-content/uploads/2012/10/SFRG-Moratorium-April-2013.pdf

UofT also as a suite of programs under the Connaught Fund
http://connaught.research.utoronto.ca/about/
The Connaught Fund was founded in 1972 when U of T sold the Connaught Medical Research Laboratories for $29 million. Connaught is the largest internal university research funding program in Canada. Since 1972, it has awarded approximately $130 million to U of T scholars. The original $29 million was endowed. Today, Connaught is worth over $97 million.

Opportunity		Amount	Comment
Global Challenge Award	1 full award	$1,030,000	currently under moratorium
New Researcher Award	~ 60 awards up to $10K ~16 awards topped up to $35K	$1,000,000	to help new tenure stream faculty members establish competitive research programs
Innovation Award	Approximately 10 awards	$500,000	to help accelerate the development of promising technology and promote commercialization and/or knowledge transfer
Summer Institute Award	Up to 3 awards	$150,000	one new award will be made annually to bring together international graduate students, postdoctoral fellows, other scholars in order to foster rich interdivisional collaboration and creative new methods for research and innovation.
McLean Award	1 award	$50,000	support an emerging research leader conducting basic research in physics, chemistry, computer science, mathematics, engineering sciences and the theory and methods of statistics
International Doctoral Scholarship	Numerous awards	$1,000,000	
Faculty Recruitment Support	Numerous awards	$50,000	

University of Alberta
http://www.research.ualberta.ca/OfficeoftheVice-PresidentResearch/InternalResearchFunding.aspx

link for Killam funds: www.**research**.ualberta.ca/...President**Research**/.../vp**research**/.../**Funding**%20Documents/KRF_edited_guidelines_14nov_2012.pdf

Opportunity	Amount	Comment
Killam Research Fund - Cornerstones grant - Research Operating grant - Cornerstones conference travel grant - Research connections grant	X<\$50,000 X<\$7,000 - amount depends on destination - \$1,200-\$5,000 - X<\$10,000	- Killam Funds available to the arts, humanities and social sciences The aim of Cornerstone Grants is similar to the Research Operating Grants, but usually involving a larger scale of activity, and both grants support similar research expense categories. Research Operating Grants are designed to assist in the development of leading research projects that will lead to peer reviewed external funding (e.g. SSHRC grants). to support *collaborative research activities*, hosted by the UofA
Distinguished Visitors Fund	not stated	This program supports visits by nationally or internationally distinguished scholars, artists, scientists, and professionals who will enhance the intellectual environment on campus.
Scholarly Journals	maximum of \$8,000 per journal per year	
NSERC & SSHRC General Research Funding	not stated	The GRF is intended to be reinvested by the University of Alberta in order to support and enhance the quality of research and training in the fields of natural sciences and engineering or social sciences and humanities. The funds may be used to provide small start-up grants to new professors or professors changing their research direction, bridge funding to professors who are between applications, or additional funds to further support existing research programs.

There is additional UofA funding through the Grants Assist Program:
http://www.research.ualberta.ca/en/ResearchSupport/GrantAssistProgram.aspx

This is a program whose "aim is to help UAlberta researchers improve their funding success via enhanced application preparation and support including concept discussion, internal review, feedback, workshops, and writing and editing."
- however for the SSHRC side there are two small funding pots for people who submitted their proposal for internal pier review
- 4A GAP Fund – worth $5,000
- Partnership Letter of Intent Preparation Grant - - up to $10,000 for technical support, travel for networking, supplies, seminar etc.
http://www.sshrc.ualberta.ca/en/BridgeFunding/PG-LOI-GAPfund.aspx

McGill
https://www.mcgill.ca/research/researchers/funding/internal

The Office of the Vice-Principal, Research and International Relations, Internal Research Funds provide support to full-time academic staff in pursuit of their research programs and projects.

The disbursement of internal research funds is subject to:

- Availability of funds
- Support from the Dean
- Leverage of other funding sources; including matching funds from Faculty offices and departments; and other sources of funding to supplement the research activity.

Opportunity	Amount	Comment
Paper presentation grants	$1,500 (every two fiscal years)	SSHRC researchers only – based on SIG funds
Social Sciences and Humanities Development grants	$2,500 to $7,000	SSHRC researchers only – based on SIG funds emerging scholar grants and seed grants
SSHRC and NSERC General Fund	NSERC – up to one year of funding from the original grant SSHRC – up to 33% value of original grant	- funded from the general residual fund for the "broad purpose of enhancing the quality - of research in the natural sciences and engineering, or in the social sciences and humanities". - unspent grant funds automatically go into the GRF (no extensions). Applicants to this program must have had a grant that had unspent funds within 2 yrs of the application. - applications treated as a new grant

- no central support for CIHR, - the only central programs are SIG & GRF funded

University of Waterloo
https://uwaterloo.ca/research/find-and-manage-funding/find-funding

Opportunity	Amount	Comment
Bordeaux-Waterloo Research Grants	Category A – up to $50,000 Category B – up to $20,000	for collaboration between Waterloo and Bordeaux specific (mostly NSERC) topics specified
International Research Partnership Grants	Up to $20,000 (requires 50% match)	this initiative aims to provide incentives to develop new or existing international research collaborations with institutions known for high quality research and global ranking. It's expected this funding will provide research groups with the enhanced capacity to leverage significant collaborative international research funding
International Research Partnership Grants – European Union	Up to $20,000 (requires 50% match)	this program supports partnerships with researchers/institutions in the European Union. Additional projects will be funded under the International Research Partnership Grants program with the purpose of supporting projects with strong potential to leverage direct funding to Waterloo researchers from major European funding programs.
UW/SSHRC Seed Grants	Up to $5,500	funds from SIG eligibility tied to participation in external SSHRC programs, but cannot hold a SSHRC or be 4A status priority to new and bridge projects
UW/SSHRC Travel Grants	amount depends on destination – between $800 and $2,200	funds from SIG must have held SSHRC within last 3 years or be junior
Bob Harding and Lois Claxton Humanities and Social Sciences Endowment Fund	Up to $5,500	$1M from donor matched by $1M from Waterloo (*under direction of Chakma*) - for projects not eligible for Seed Funding (above)
Waterloo Research Incentive Fund (CIHR)	$8,000	support the improvement of unsuccessful CIHR applications and increase the prospect of success for future CIHR applications.
University of Waterloo Gender Equity Research Grants	Up to $10,000	support research that investigates and addresses gender equity with preference given to projects that advance Waterloo's three IMPACT 10x10x10 commitments or of demonstrated relevance to Waterloo.

International Funding

– prepared by Jane Toswell

What funding is there at other major research universities for the humanities and social sciences?

The first point here is there are some big funding programs at all these universities, but also a lot of small pots. Second, most of the small pots of funding are hidden. For some of these universities I have been able to use personal knowledge or to activate colleagues. Generally, I've learned that the front of the research website tends to offer the bigger and splashier funding, but the nuts and bolts of small funds and options are not easy to find or not findable at all. Also, there is some researcher bias in here, as I found myself digging on the sites that I knew I would better be able to decode, or where I knew I had friends and colleagues. But, I think the remarkable sameness around the world of having lots of small pots of funding, administered by a broad range of faculty members, is telling. Also, I noticed in general that the social sciences and the humanities appeared very much at the front of all the university websites, in various ways. That is, at the large research universities in the world that have a liberal arts curriculum, efforts are very clearly made to put it front and centre on the website. On occasion, this even involved a report about a department in the absence of any specific accomplishment.

Aberdeen

Engagement is apparent on the front page of the university, which has at the top a new Dickens exhibition, and on the front pages of the sub-pages in "Research" and "Business." The "Business" one opens with this sentence: "The University of Aberdeen has an outstanding history of pioneering discoveries which have changed thinking and practice in medicine, science, arts, and humanities over five centuries." (British universities tend to conflate the social sciences into the arts and humanities.) The Business further includes amongst its planned "Strategic Partnerships" something entitled "Public, Cultural and City Engagement." On the "Research" website the top sequence of crawlers includes two which are relevant: one which includes lists of research publications by all faculty members, and another on battlefield archaeology from the Second World War. The same sentence appears here too. And one of the sections of the front page is a list of recent publications from the university. Clearly as every piece is published, faculty members forward information to the central research facility to add to the listing. Research is first listed under four genuinely cross-disciplinary themes: Energy, Environment and Food Security, Pathways to a Healthy Life, and The North. Each theme involves people from the social sciences and humanities, and connects up several programs. For example, "The North" includes programs on climate change, the rise of early medieval kingdoms, the northern temperament, and northern colonialism. These are interdisciplinary themes, and each one receives extensive funding. Aberdeen also has a network of institutes and centres for research, each with stable funding. The College of Arts and Social Sciences is one of the three colleges at the university, and prominent on its website are the REF rankings of its departments and programs. It also features the Aberdeen Humanities Fund, whose mandate is as follows: "the Fund aims to seize the initiative in pursuing our academic ambitions by putting our historic collections, widely conceived, front and centre as we foster the cultural life and legacy of the University. Our approach is inclusive rather than restrictive: 'the humanities' are conceived of broadly, being best

defined by scholars themselves." The Fund has both an academic board and an advisory board, clearly to ensure that awards made from the fund are adjudicated by peers. An incredibly helpful website also focuses on developing researchers and on consolidating information about local funding: http://www.abdn.ac.uk/develop/develop/research-funding-273.php
There appear to be several ways to acquire local funding, as well as highly-developed support systems for the REF process and for developing a career as a researcher, starting with students and moving forward through events for junior researchers. The local funds are called "Principal's Interdisciplinary Fund," "Principal's Excellence Fund," and "Researcher-Led Initiatives Fund." The last of these is the most interesting, as it offers funds only for projects that are not directly relevant to the researcher's own project, but otherwise will fund anything from a conference to a "careers event to an industry visit or even launching your own journal."

Stanford

At the top of the main website Stanford has four crawlers, one of which is an introduction to the Department of Philosophy with the catch-line "Stanford's Philosophy Department trains the leaders and thinkers whose great ideas may change the world". That is, even though there was no specific reason to put a department of humanities on the front of the website, Stanford did. The link to the department's research website includes a description of the work of some members, images of books published in the department, links to the ten workshops and three reading groups, and a link to the North American Nietzsche Society, which the department sponsors. The department compares well to our Department of Philosophy. It has two visiting scholars and one visiting student researcher this year. Its radio programs called "Philosophy Talks" are organized through the Stanford Humanities Center, now in its 35th year. Its funding priorities include the Humanities Center Annual Fund, Manuscript Review Workshops (two to three senior scholars come to campus to read and comment on the book projects of especially junior faculty members), and the International Visitors Program which strengthens "Stanford's global connections in the humanities and social sciences by bringing renowned public intellectuals, scholars, and political leaders to Stanford for short-term, high-impact residencies." There are fifteen funded research workshops in the current academic year, and two manuscript review workshops per term.

In other words, the funding at Stanford runs very differently, in favour of building workshops and synergies, and establishing Stanford as a focus for research in a highly global way. For example, in addition to several endowed lectures each year, and presidential lectures, there is also a project for Humanities Journalism, in which graduate students are funded both to develop their own expertise in disseminating research and learning the precepts of journalism and also too raise the profile of the humanities in the university and abroad.

All of the material to this point is available on the university website. However, it is already clear to me that the kind of funding that we are talking about here–lots of small pots of money–rarely appears on university websites. So, I contacted a colleague at Stanford and asked. Here, stripped of personal references, is what emerged:
There is a lot of money here, even if all the senior managers are insisting there's a squeeze on. We get $7000 a year for our individual research pots, and there are multiple venues for additional funding. These range from money acquired through the Vice Provost for Undergraduate Education and the Vice Provost for Graduate Education, who can provide funding for Research Assistantships

for all kind of projects (usually departmentally sponsored, as opposed to individuals) to the Dean of Research's Office. Awards in the last few months to one person include $10,000 to help organise a conference on artists' books and $3000 to fund the plates for a volume in a Cambridge University Press series. Another colleague just got $5000 from the Dean for a digital project.
Multiple divisions also run funding competitions. For example, the Denning Fund offers up to $25,000 for projects that involve Technology and the Humanities. Four or five of these a year are awarded. Similar awards are made through other competitions throughout campus. There are probably three devoted to Digital Humanities. These are run by senior faculty members.
The Humanities Center also makes awards for workshops and fellowships. The former are important: $8000 a year for three years to create a themed workshop for intellectually focused projects. Departments, too, will fund group collaborative initiatives that are related to Centers or courses. There are pots like the Arts Initiatives, which fund projects to do with music, art, etc. And there is the $1500 ArtsCatalyst fund to finance a trip off campus or a special visitor. All programs have $500 or so for us to bring visiting speakers to campus. The Europe Center and other major centers will assist in funding visiting speakers who speak to the theme. For example, a recent award was $3000 to bring a colleague over from the UK.
The Library has a large amount of money for special purchases, like facsimiles and manuscripts. None of this money for faculty is predicated on the pursuit of large grants, but many colleagues do use the money to prepare their work for a major award.

Stanford is clearly a well-endowed university with a long history of small pots of money for various intellectual endeavours in the humanities and social sciences. More recently, it seems to have invested in the Humanities Center and in developing somewhat more high-profile funds. I find interesting the fact that many senior faculty members seem to run competitions and dole out money; there is not the wholesale centralization that we have at Western. This probably makes it easier for individuals to make good decisions about where to apply; for example, interdisciplinary research cannot be well supported in the faculties since it is so clearly cross-disciplinary in nature. At Stanford, with funding coming through various venues and kinds of competitions, there would be different approaches to adjudication..

Harvard

Harvard is downright fascinating in its presentation of the humanities and social sciences. It's rather as though the whole front of the website is dedicated to the liberal arts, the assumption being that other areas get a sufficiency of notice. It perhaps helps that Toni Morrison gave the first of the Charles Eliot Norton six annual lectures this week, but it looks as though the focus on the liberal arts is a real decision. There's even a quite charming investigation of offices, with pictures and rather elegant details: http://news.harvard.edu/gazette/story/2013/04/office-ours/
The Faculty of Arts and Sciences has twenty departments, and nearly fifty research institutes, centers and societies. The faculty has four divisions, each listed up front with a significant number of departments and research centres (especially for the Arts and Humanities, Social Science and Science divisions). These institutes range from the Harvard Forest to Dumbarton Oaks to the Center for Hellenic Studies to the Carpenter Center for the Visual Arts. These seem to have significant resources: for example, the Center for African Studies has eleven external visitors delivering papers,

and a website where the interested can sign up to register for each event, and receive the paper in advance. The six current Harvard South Africa Fellows all have tuition and expenses paid for the duration of their chosen postgraduate academic program. Other centres offer similar programs, the idea clearly being to bring in outside scholars and senior students for a period of time in which they can interact at Harvard, and also bring Harvard and its ideas back to their home appointments.

On funding, Harvard seems to take a very broad approach. For example, the president last year initiated a "Climate Change Solutions Fund," a series of grants across the university from a twenty-million-dollar fund. In the second round of funding applications, ten projects spanning six departments were awarded funds totally a million dollars. This suggests to me that none of these projects was massive, and indeed several have to do with behavioural changes or new approaches to thinking about climate change. However, the total research funding available each year at Harvard is 800 million dollars. The university categorizes its research, interestingly, under the general heading of "Academics and Research." The Harvard Society of Fellows has a substantial cadre of post-doctoral fellows, junior fellows appointed for three years during which their principal job is to get on with their research.

For smaller pots of money, of which there are dozens both internally and externally, I have to admit I like the rubrics the research support people at Harvard use. Here are two examples: " I want to combine digital technology with the humanities or preserve a collection and/or make it easier for people to access" (nine funding options) or "I want to build the capacity of my home institution to support humanities activities"(three funding options).

And, to close, here are excerpts from a memo from the Dean to the members of the Faculty of Arts and Sciences at Harvard. I admire the tone, the content, and especially the utter certainty that all research is important:

Even in these times of financial stress, we must continue to invest in faculty research—a perennial priority of the FAS. Therefore, it brings me great pleasure to announce the launch of two new initiatives in FY17 that expand FAS support of your scholarship. Together these initiatives represent an investment in faculty research of $25 million over the next five years.

Before I turn to the details, I want to take this opportunity to say how deeply grateful I am to the members of Faculty Council and the Dean's Faculty Resources Committee (DFRC), whose guidance helped identify and shape these programs. DFRC was particularly instrumental in the development of the principles behind these initiatives.

While the FAS continues to raise new funds to improve and strengthen our shared research resources (e.g., libraries, museum collections, core facilities, and research centers), these two new programs specifically increase the amount of research funding the dean's office distributes to individual faculty. This increase comes in two pieces: an increase to the small amount of discretionary money the dean distributes to every ladder faculty member each year; and a new competitive grant fund that will provide faculty with timely research support in an increasingly challenging funding environment.

The letter continues for several pages, increasing the "Dean's Distribution," an annual distribution to faculty members that they can use for anything associated with the Harvard mission. It doubles to two thousand dollars for faculty with other funding, and will increase to four thousand annually for all others. Next the Dean will in 2017 launch a new competitive grant fund adjudicated by a small faculty committee making awards once per semester (the fund has $2.5 million), offering bridge funding, seed funding, and enabling subventions in support of an external fellowship or to purchase needed equipment. The program will require "only a bare minimum of paperwork to apply and no reporting during the award period." The letter also discusses the research administration service, and their ongoing research support programs including publication funds and faculty development funds allowing tenured and tenure-track faculty to assemble scholars to provide feedback on their work (compare Stanford for this kind of project). Several other funds are listed, and the dean also indicates that he plans to launch a working group to review the funding opportunities at Harvard and consider their effectiveness. His particular concern is identifying disciplinary fundraising gaps that he can address. The letter concludes as follows:

I hope these significant investments in our faculty's scholarship buoy your spirits. Each of you – sometimes individually and increasingly collaboratively – is pushing forward the frontiers of knowledge and often simultaneously having an immediate impact in the world. I look forward to seeing what you accomplish with the FAS's additional investment in you. And as always, thank you for all you do to distinguish Harvard.

The entire letter makes it clear that the point and purpose of research funding at Harvard in the Faculty of Arts and Sciences is to buoy up the researchers and support them wholeheartedly.

Oxford

Funding in the humanities and social sciences at Oxford is a whirl of small pots of money. Most researchers hold tutorial appointments in one of the Oxford colleges (more than thirty of them) as well as lecturer appointments from the university. In the colleges, there is almost always a book fund for each fellow or tutorial leader, as well as small travel and research grants. Sabbatical terms are available in most colleges every second or third year (for a term, which is four months usually), and colleges do tend to fund travel and expenses for small conferences and research trips. Funding applications for these are easy and simple, sometimes simply involving a quick email. Inside the Humanities Division, which comprises twelve faculties, there is a significant amount of research funding. Six different funding schemes for early career researchers are highlighted, and the website makes it clear that there are staff members waiting to help with the applications. The Digital Humanities have their own massive website and a significant suite of projects. Notably the John Fell Fund, a transfer from the Oxford University Press of five million pounds per year, focuses on seedcorn and startup grants. Although it aims to stimulate applications to external bodies, it does not duplicate their purpose, and is therefore available for a broad range of purposes.

Inside the Humanities Division are about thirty research centres and institutes, all with separate funding and many with stand-alone locations and internal funding opportunities. For example, the "Future of Humanity Institute" affiliated with the Faculty of Philosophy has current vacancies for three researchers, four major research projects, and detailed information about its many programs on the website. In 2012, the Humanities Division started up a separate entity for interdisciplinary research, called TORCH: http://torch.ox.ac.uk/ Here there is a home for up to ten new interdisciplinary projects per year–23 are currently listed on the front of the website ranging from the "Ancient Dance in Modern Dancers" to "Global Brazil" to "Oxford Phenomenology Network" to "War Crimes Trials and Investigations."

One of the great strengths of Oxford and Cambridge both is the focus on senior graduate students/junior faculty. Oxford has about ten different options at the university level for post-doctoral funding, and at the college level every single undergraduate college offers more than three, and most more than six JRFs or Junior Research Fellowships. Sometimes available to senior graduate students finishing up their theses, but mostly available for post-doctoral research, these fellowships run from one to three years, offering full funding, free accommodation and meals, and in most cases a stipend for other expenses. Moreover, many of the colleges offer visiting research fellowships for outside academics for a term, during which all expenses are paid, free accommodation inside the college is provided, and the only job of the visiting fellow is to wander about doing research and talking about it over meals, providing the fellows a sense of the larger world of research accomplishments (and, as one put it to me, a sense that someday they too would be able to get some real research done). Oxford and Cambridge are both set up to help senior graduate students and early-career individuals in the SSHRC disciplines in far more effective ways that the few available SSHRC post-doctoral scholarships provide.

Finally, I quote here from the Strategic Plan for 2013-18, a short 16 pages of pithy commitments and more detailed engagements:

Commitment 2. To empower the creative autonomy of individuals to address fundamental questions of real significance and applied questions with potential to change the world.

22. The unparalleled breadth and depth of Oxford's expertise enables us to lead the international research agenda across the spectrum of the sciences, the social sciences, and the humanities. Our commitment to the range and depth of our disciplinary work is reflected in sustenance of both applied research and that which may not necessarily yield immediate impact.

There are discussions elsewhere of the role of the independent researcher, clearly a valued commodity at Oxford, and commitments to funding research in innovation and interdisciplinary ways. The front of the website has a sequence of shots of the rainbow flag of the LGBT community along with information about a public lecture on the subject. Below that the three news items include two on social sciences and humanities subjects (an arts blog on health and safety in Tudor England and a sociology lecture on the effect on educational expansion on social mobility).

Concluding Remarks

At this point I'm going to stop, and just offer a few tidbits from other universities that I have encountered. For example, here is the manifesto about research at Cornell:

The body of research, scholarship and creative works emerging from the College of Arts & Sciences is vast, with one common thread -- ALL of our research is curiosity-based. This model of inquiry confers intellectual flexibility, a precursor for innovation, creativity and discovery.

As the nexus of the only Ivy League, land grant university, we encompass both practical and theoretical approaches to knowledge: in science departments that integrate highly skilled experimentalists with researchers pondering the theoretical bases of natural laws; in an English department that joins critical literary theorists with creative writers expanding the boundaries of their genres; or in social science departments that offer rigorous theoretical and empirical analyses of the social, political and economic foundations of modern life.

What a fabulous and straightforward endorsement of research driven by curiosity, and then a clear set of statements about science, the humanities, and the social sciences, all with details and all at the core of the research plans for discovery and for learning. The title for this section is somewhat unexpected: "Research, Scholarship and Creative Works." Mind you, Cornell has a large visual and performing arts mandate, and the incipient strategic plan already lists expanding in that area as critical.

The University of Sydney offers the exception that proves the rule about the transparency of funding at major research universities. Everything is on the front of the website, literally under tabs called "Research support" and "Find and apply for funding." There are some seriously innovative funding envelopes here, including bridging funding for new faculty, the Sydney Research Network scheme for establishing new networks, the Equipment Grant scheme, the Industry Engagement fund, and a suite of three funds to aid researchers with disabilities or diseases, to aid women researchers, and to aid those whose careers have been interrupted by having to deliver sustained primary care (the latter three are together called the Equity Fellowships). Interesting funding all round, laid out very clearly and precisely.

That's my report. I hope it is of some use.

Jane Toswell

Attachment 3 - URB Social Sciences, Arts, and Humanities Task Force Working Group 3 Draft Report on Research Communications

- prepared by Jonathan Vance

The communication of research results, beyond the usual scholarly publications and academic conferences, serves many purposes. It is a way to recognize success and offer public congratulations for a research achievement. It is a way to boost a researcher's profile, which in turn may bring new and different opportunities for research and engagement. It is a way for the institution to demonstrate the breadth and quality of its research work to prospective students, faculty members, and donors, to governments, and to the private sector. It is a way to build a campus community, with researchers in disparate disciplines being aware of the research going in buildings that they might never visit. Government funding bodies increasingly expect that researchers will pay particular attention to outreach, knowledge mobilization/dissemination, and public engagement, so that those who are ultimately funding the research, the taxpayers, can see what is being done with their money. In all of these ways, it serves as a means of validation that a researcher's efforts are valued by more than her or himself.

Western University uses a number of tools as part of its broader communication and public relations strategy. These include, but are not limited to:

- the University's website, www.uwo.ca
- media releases – see http://mediarelations.uwo.ca/media-releases/
- *Western Trending*, a digest of international media coverage featuring Western – see http://www.alumni.uwo.ca/newsletters/western-trending/
- social media (including *Twitter*, *Facebook*, *Instagram*, and *YouTube* – a list of social media links can be found at http://www.uwo.ca/social_media.html)
- recruitment publications, including Viewbooks and faculty guides – for examples in pdf format, see http://communications.uwo.ca/comms/news_publications/recruitment.html
- *Western News* – see http://news.westernu.ca/
- *Western Alumni Gazette* and *Western Alumni Newsletter* – for examples in pdf format, see http://communications.uwo.ca/comms/news_publications/alumni.html
- development publications, including *Impact Western*, *Annual Impact*, *Endowment Report*, and *Western Parent Connection* – for examples in pdf format, see http://communications.uwo.ca/comms/news_publications/development.html
- *Find an Expert* – see http://mediarelations.uwo.ca/category/experts/
- *Western Revealed* (on Rogers TV) – see http://rogerstv.com/show?lid=12&rid=9&sid=5501
- Alumni speakers' series, including *Classes Without Quizzes*, the *Senior Alumni Program*, and *Podcasts/Online Learning*
- the *Images of the Future* digital calendar (for the 2016 version, see http://www.uwo.ca/research/about/publications.html)
- banners displayed on various buildings on campus

These activities are coordinated by the office of *Communications and Public Affairs* [hereafter CPA], under Associate Vice-President Communications Helen Connell. This office includes *Alumni & Development Communications*, *Media & Community Relations*, *Creative Services*, and *Editorial Services*. Its webpage also provides links to faculty-based communications staff, as well as communications professionals at *Research Western* and *Western International*. In addition, communications services are provided at other levels by units not directly connected to the above, such as *Mustang Sports*, the *University Students' Council*, the *McIntosh Gallery*, and *Western Libraries*.

These various communications initiatives serve many purposes – information, recruitment, development and donor relations, community liaison – and not all of them are explicitly and primarily intended to highlight the research done by members of the Western community. However, regardless of the intent, many of them implicitly serve the purpose of validating research by using the University's researchers to attract attention and generate interest in Western. For example, a media release inviting local news outlets to contact members of the Department of Political Science in the context of an upcoming election may not explicitly refer to a particular research project in the department, but it does presuppose a level of research commensurate with the ability to provide expert commentary – and furthermore presupposes that the University values that research.

Consultations undertaken by Working Group 2 revealed a sense among social sciences, arts, and humanities researchers that their research work is not adequately publicized by the institution, and that the publicity spotlight shines much more frequently on research in the STEM areas. More than 80% of Working Group 2's online survey respondents noted that social sciences, arts, and humanities research deserves both better recognition by the University and better promotion to improve visibility outside of the University. Working Group 3 was keen to determine if there was any basis for such opinions. **Do the University's communications efforts *actually* privilege STEM research, at the expense of social sciences, arts, and humanities research?** The sheer amount and variety of public relations activity makes it a challenge to attempt quantification. However, by tabulating mentions of research activity across the various platforms over the past five to seven years (depending on the platform), some broad trends emerge. These are highlighted below.

It should be stressed that this mode of analysis is not without limitations. No attempt was made to distinguish between the different platforms – for example, one building banner has been given the same weight as one media release, although they might have dramatically different reaches. Single research "events" may get multiple mentions within a very short period of time – one mention that it is going to happen, one that it is happening, and another that it has happened. A liberal approach has been taken to the tabulation, counting social sciences, arts, and humanities subjects even where an individual department or researcher is not mentioned specifically and including inter-disciplinary projects that include social sciences, arts, and humanities researchers, regardless of the level of involvement. Nevertheless, the findings of this basic analysis reveal some interesting observations about the relative focus of research communications at Western.

There is wide variance when comparing results in one single platform to results in another. For example, *Western News* compiled a feature entitled *Newsmakers of 2015* (*Western News*, 17 December 2015 - http://news.westernu.ca/2015/12/westernnewsnewsmakers2015/), focusing on eighteen individuals or groups, at least eight of which were connected to social sciences, arts, and humanities research. In contrast, in the booklet *51 Firsts* produced by Research Western (http://www.uwo.ca/research/51_firsts/), only ten of the fifty-one "firsts" relate to social sciences, arts, and humanities research.

When the results are aggregated, they reveal that a research achievement in the STEM disciplines is four to five times more likely to benefit from institutional publicity than one from the social sciences, arts and humanities disciplines. We do not mean to suggest or even imply that this disparity is intentional, and it must be stressed that the poor showing of social sciences, arts, and humanities research is not for lack of trying by CPA. Over a period of years, CPA has come up with many initiatives to involve social sciences, arts, and humanities researchers and begin conversations that could lead to greater publicity for social sciences, arts, and humanities research. In many instances, those initiatives have generated little response from social sciences, arts and humanities researchers.

Some examples:

- the *51 Firsts* booklet was prepared after two years of consultations in which all faculties were asked to suggest research success stories that could be promoted in this way. One faculty that includes social sciences, arts, and humanities researchers was very forthcoming with ideas for inclusion in the booklet. Of the other seven faculties that include social sciences, arts, and humanities researchers, four faculties generated a combined total of ten suggestions; three faculties did not send in anything.

- in 2014, the ADR at one faculty was approached by CPA to secure short (one-page), lay-language research profiles that could be used for publicity purposes to promote the research work done in the faculty. Of the roughly forty faculty members, three responded.

- in 2014, one department canvassed faculty members on three separate occasions with a request to provide information for an expanded webpage promoting the department's research activities. From a department of over forty tenured, tenure-stream, limited-term, and limited-duties faculty members, two responses were received.

- for many years (dating back at least to 1998), CPA has endeavoured to convene meetings with social sciences, arts, and humanities area Deans and ADRs to open channels through which ideas for research stories could be transmitted. Despite the active encouragement of Deans and ADRs, none of these yielded any significant favourable response from faculty members.

Our research and consultations suggest that this lack of interest in research promotion is the product of a number of connected factors, some cultural, others systemic.

The Self-Effacing Scholar

CPA's communications professionals are very well informed about campus-wide research activities, but they cannot be expected to be aware of every research initiative that is underway. For a variety of reasons, social sciences, arts, and humanities researchers (particularly those who consider themselves solitary scholars) are generally less attuned to and comfortable with the idea of using communications professionals to draw attention to and publicize their own research. As one survey respondent observed, "Our Faculty tend to be rather quiet and don't often sing their own praises so uncovering research stories and achievements can be challenging."

The Solitary Scholar

The traditional model of the solitary scholar, still the norm in many social sciences, arts, and humanities disciplines, works against efforts at recognition and advocacy. Large research grants of the kind that are common in other disciplines often include a budget line for communications, to allow a project's publicity to be generated from within. Given that granting agencies are placing increasing emphasis on public engagement and the communication of results beyond the academy, this is eminently sensible. However, it will place small projects at a significant disadvantage. In a $1.5 million research grant, a budget line for a communications professional would not be especially significant in overall spending terms. In a $30,000 research grant, however, hiring even a part-time communications professional would consume most of the budget. The solitary scholar whose research is largely or entirely self-funded cannot be expected to engage their own public relations professional if it reflects added cost.

Faculty-level support

In addition to looking for story ideas from individual researchers, CPA works through the offices of the Deans, where faculty-based communications professionals are generally based. However, there is great variance between faculties in the level of support for communications activities. This will be immediately evident to anyone who follows the links from CPA's page on faculty-based communications staff (http://communications.uwo.ca/comms/our_teams/index.html). Clicking on the *Schulich School of Medicine and Dentistry* brings up a separate page of eight communications professionals (http://www.schulich.uwo.ca/communications/about_us/people.html). At the time the Working Group undertook this study, clicking on *Education* brought up a single communications professional whose name was misspelled. There was no link for *Social Science*, the largest faculty on campus, as it did not have a communications professional in place until a new appointment was announced in early April 2016.

Our research turned up many successful initiatives on campus that might be adopted more broadly by social sciences, arts, and humanities departments and faculties. In the *Faculty of Science*, the office of *Communications, Public Relations and Science Engagement* adopts a team approach, with most departments naming a *Communications Pipeline Departmental Representative* (a faculty member) as well as a *Communications Pipeline Associate* (usually a PhD student). This has the dual benefit of creating a channel through which researchers can publicize their work, and giving the next generation of science researchers experience with such promotional efforts. However, it presupposes the existence of a staff member (or members, as in the *Faculty of Science*) whose dedicated task is to manage the process.

A Vicious Circle

Perceptions tend to be self-perpetuating. According to our consultations, a typical conclusion reached by social sciences, arts, and humanities researchers is that the University must not be particularly interested in their research because they rarely see such research publicized. So, those researchers decide that there is little point in alerting CPA to their research – which means that CPA never hears about it, and therefore cannot publicize it.

Some researchers reported the belief that outreach and engagement efforts are not rewarded in the promotion and tenure process, so they see relatively little to be gained by turning their efforts in that direction. If these researchers are not in receipt of Tri-Council funding, where knowledge dissemination is valued as a condition of holding a grant, there may in fact be little for them to gain by publicizing their work. And so they decline to accept invitations from CPA, which in turn means that CPA has fewer stories about social sciences, arts, and humanities research, and the cycle continues.

Some researchers are simply indifferent to the importance of publicizing their work, even when there are successful outcomes. Others, however, seem to be actively opposed to it. They might be put off by the idea that their research should be condensed and simplified into a one-page media release. In their view, this kind of "dumbing down" compromises the integrity of their work. At the extreme, some researchers expressed an active hostility to promoting their work because it would implicitly promote an institution which, in their view, does not value their work. For these individuals, the notion that research should be "publicized" in the way one might advertise a new kind of soup is part and parcel of what they see as the corporatization of the university. They see it as an affront to the liberal arts ideal of knowledge for its own sake and an outgrowth of the assumption that research is only valued to the degree that it can be monetized.

Breaking this cycle is critical if social sciences, arts, and humanities researchers are to be convinced that their work is valued, and by extension if they are to feel comfortable about publicizing it. Social sciences, arts, and humanities researchers need to be coached to see communications not as a breach of their scholarly integrity but as a way to engage with an audience they would not normally reach.

Summary:

The communication of research results, outside scholarly channels, serves many purposes: to offer public congratulations for a research achievement; to boost a researcher's profile; to demonstrate the breadth of an institution's research; and to build a campus community. Furthermore, government funding bodies increasingly expect that researchers will engage in knowledge mobilization and dissemination. In the broadest sense, recognition is a means of validating and valuing a researcher's efforts. Western University uses a number of tools as part of its broader communication and public relations strategy. These activities are coordinated by the office of *Communications and Public Affairs*, whose webpage also provides links to faculty-based communications staff and communications professionals at *Research Western* and *Western International*. Consultations undertaken by Working Group 2 revealed a sense among social sciences, arts, and humanities researchers that the publicity spotlight shines much more frequently on research in the STEM areas. Working Group 3 was keen to determine if there was any basis for such opinions. **Do the University's communications efforts *actually* privilege STEM research, at the expense of social sciences, arts and humanities research?**

Conclusions:

- a research achievement in the STEM disciplines is four to five times more likely to benefit from institutional publicity than one in the social sciences, arts, and humanities disciplines
- this is in spite of sustained efforts by CPA to engage social sciences, arts, and humanities researchers in the desirability of promoting their research
- there is great disparity in the faculty-level support for communications across campus
- given the research traditions in some social sciences, arts, and humanities fields, there is among researchers a certain amount of unease, indifference, and even resistance to promoting research achievements

Recommendations:

- the University should take steps to ensure that there is a more level playing field in terms of the communications support that is offered at the faculty level
- start the discussion on campus about what is recognized as valid activities for APE assessment. Given the emphasis the funding agencies are putting on knowledge mobilization in all forms, and delivery of research results to the general public, the University should seek to recognize this activity. Note that SSHRC is starting to train graduate students in public presentations and the writing of op eds, so this may be a generational change that is coming.

THE WESTERN DEGREE OUTCOMES (UNDERGRADUATE)

1. Knowledge

Western graduates will have developed a sense of discovery that drives their ability to ask and frame questions, seeking to make connections that are not immediately obvious among phenomena and ideas. Western graduates will be able to explain the differences and linkages between the theories, research methods and core ideas of the disciplines they have studied, and analyze and solve problems according to the accepted methods of their field or fields. With their knowledge, graduates will have the ability to identify opportunities in their disciplines and see connections between other areas of study in order to imagine, create or produce novel solutions, works or performances.

2. Literacies and Interdisciplinarity

Western graduates will be able to use disciplinary discourse, technical language, numerical literacy or other appropriate disciplinary systems of knowledge, research methods or ways of knowing to identify, locate and evaluate oral, print, graphic, numerical, scientific or digital information. They will be able to explore complex problems from a variety of perspectives, recognizing bias, and identifying missing or underrepresented voices. Working under conditions of ambiguity or uncertainty, graduates will be able to use disciplinary knowledge in order to research, reason and solve problems from a range of contexts relevant to practices in their disciplines. In proposing solutions, they will be able to describe limitations of the sources and methods they use.

3. Communication

Western graduates will be able to interact and collaborate effectively with other individuals and groups using the language and reasoning appropriate to the communicative context, within and across their personal and professional communities and cultures. Graduates will be able to present their ideas or perform their works in a way that is clear and accessible to a variety of audiences. Connecting with peers and experts, they will be able to communicate responsibly through digital and other means.

4. Resilience and Life-long Learning

Western graduates will be able to adapt to personal and professional changes and challenges across the life course by being self-aware, resilient, and self-reflexive. In addition to their mastery of discipline specific knowledge and methods, graduates will be able to articulate a clear understanding of their own values, interests, and goals as well as the limitations of their own knowledge and perspectives. Accepting that change is ongoing, graduates will recognize the advantages of stepping outside of their comfort zone to continue to enhance their knowledge and capabilities.

5. Global and Community Engagement

Western graduates will be able to interact ethically and compassionately with others and with the natural and social world. Western graduates will be ready to act locally and imagine globally; practice perspective taking and empathy; understand the interconnectedness of the world as expressed through technology, culture, belief systems, economics, and politics; to understand and to exercise social, political and environmental responsibility both at home and abroad.

6. Critical Inquiry and Creative Thinking

Western graduates will have developed habits of constructive skepticism, differentiation and intellectual adaptability in their approaches to phenomena, artefacts, issues, or arguments. They will be able to identify underlying assumptions, agendas, purposes, audiences, points of view, paradigms, evidence, implications, and logical strategies and thereby arrive at conclusions about reliability. They will bring habits of careful judgement, an appetite for further refinement, aesthetic engagement, and artistic expression or highly developed problem-solving skills to their pursuits.

7. Professionalism and Ethical Conduct

Western graduates will be able to recognize the ways in which their conduct affects others in their field or fields, profession, community, or society. They will be able to work effectively with others practically (e.g. time management, conflict resolution); ethically (e.g. division of intellectual responsibility and credit) and socially (e.g. respecting cultural differences, work preferences). Graduates will be able to apply their studies responsibly to situations they find in the world around them, with the ability to explore ideas, issues, and the world at large from viewpoints other than their own.

Western University

Report of the Working Group on Western Degree Outcomes

March 30, 2016

INTRODUCTION

Background and Mandate

In early February, 2015 a working group of faculty, staff and students with membership from various constituencies, appointed by the Vice-Provost (Academic Programs), began to meet to explore learning outcomes at the institutional level (Western Degree Outcomes) and to develop a campus-wide consultation plan with the goal of obtaining input from faculty, staff, students and the community on Western's degree outcomes. The Working Group considered both undergraduate and graduate degree-level outcomes, but decided to focus on the development of undergraduate degree-level outcomes with the understanding that graduate degree outcomes may be brought forward for approval in the future. The Working Group developed a consultation document to assist constituencies with identifying and reflecting on the attributes of an ideal Western graduate and to ensure that the proposed Western Degree Outcomes reflect the academic priorities of all Faculties. The attributes and themes identified through consultation shaped the development of the proposed Western Degree Outcomes and the recommendations contained in this report.

Members of the Working Group on Western Degree Outcomes

- John Doerksen, Vice-Provost (Academic Programs) (Chair)
- Mark Blagrave, Dean, Faculty of Arts & Social Science, Huron University College
- Erika Chamberlain, Associate Dean (Academic), Faculty of Law
- Debra Dawson, Director, Teaching Support Centre
- Nanda Dimitrov, Associate Director, Teaching Support Centre
- Susan Knabe, Associate Dean – Undergraduate, Faculty of Information and Media Studies
- Felix Lee, Professor, Department of Chemistry, Faculty of Science
- Margaret McGlynn, Assistant Dean, Graduate Affairs, Faculty of Social Science
- Linda Miller, Vice-Provost (School of Graduate and Postdoctoral Studies)
- Kim McPhee, Teaching and Learning Librarian, Western Libraries
- Richard Sookraj, Undergraduate Student Representative
- Tom Sutherland, Graduate Student Representative, Faculty of Science
- Bryce Traister, Chair, Department of English and Writing Studies, Faculty of Arts & Humanities
- Gavan Watson, Associate Director eLearning, Teaching Support Centre

Resources

Internal Resources Consulted

- Achieving Excellence on the World Stage - Western University's Strategic Plan
- Western's Institutional Quality Assurance Framework

- Western Guide to Curriculum Review

External Resources Consulted

- OCAV - Guidelines for University Undergraduate Degree Level Expectations
- Ontario Universities Council on Quality Assurance - Quality Assurance Framework
- George Kuh & Peter Ewell (2010). The State of Learning Outcomes Assessment in the United States
- AACU – High Impact Educational Practices
- The Bologna Process – European Higher Education Area

Internal Resources Developed

Additional resources were developed by the Working Group on Western Degree Outcomes to assist in the consultation process and to keep the campus-community informed about the Western Degree Outcomes Initiative.

The Working Group drafted the Western Degree Outcomes Consultation Document in September, 2015 to assist in the consultation with stakeholder groups. It was intended to provide a brief context for institution-level learning outcomes, to outline the Working Group's consultation plan and to provide stakeholders with additional resources, provide examples of institution-level learning outcomes with aligned program- and course-level learning outcomes and suggest themes identified by the Working Group for potential Western Degree Outcomes to encourage initial reflection and conversation.

The Western Degree Outcomes OWL site was created in February 2015 and is available to anyone with a Western username and password. The purpose of the OWL site was to inform the campus community about the Western Degree Outcomes initiative, to make public the agendas and minutes of the Working Group Meetings, to share the consultation document, to post resources on institutional-level learning outcomes and examples of institutional-level learning outcomes from Canadian and international universities, and to advertise and communicate opportunities for consultation and the open Western Degree Outcomes Town Hall event.

An email address, learning-outcomes@uwo.ca, was created in February 2015 to provide faculty, staff, students and Western community members with the opportunity to contact the Working Group on Western Degree Outcomes directly to provide feedback and ask questions about the Western Degree Outcomes initiative. The email address also provided an opportunity for stakeholders who were not able to participate in a consultation meeting or attend the open Town Hall Meeting to participate in the discussion and development of the degree outcomes. All emails received were responded to by the Chair of the Working Group on Western Degree Outcomes and all questions, comments and feedback received by email were presented at meetings of the Working Group for further discussion.

Consultation Process

Beginning in September 2015, the Working Group on Western Degree Outcomes met with various groups across campus to solicit input and feedback on the themes identified in the Western Degree Outcomes

Consultation document and to reflect on the ideal attributes of a Western graduate. Feedback from these consultation sessions was summarized and the feedback that was received was discussed by the Working Group during their meetings and shaped the development of the draft Western Degree Outcomes.

These stakeholder groups consulted included:

- Faculty of Science, Undergraduate Instructors
- Huron University College, Educational Policy Committee
- Faculty of Health Science, Educational Policy Committee
- Faculty of Science/Medical Science, Educational Policy Committee
- Faculty of Law, Full-time Faculty Members
- Brescia University College, Educational Policy Committee
- King's University College, Educational Policy Committee
- Faculty of Social Science, Educational Policy Committee
- Faculty of Information and Media Studies, Educational Policy Committee
- Department Chairs and Directors, Graduate and Undergraduate
- Faculty of Education, Educational Policy Committee
- Faculty of Music, Educational Policy Committee
- Faculty of Arts and Humanities, Educational Policy Committee
- University Students' Council Executive Council and Student Councillors

The Working Group on Western Degree Outcomes hosted a Town Hall Meeting on Friday, November 20, 2015 in the University Community Centre. The Town Hall Meeting was promoted and advertised widely to all constituencies on campus including students, staff, faculty and alumni.

The Working Group on Western Degree Outcomes made every effort to involve students in all aspects of the consultation process. Both undergraduate and graduate student constituencies had representation on the membership of the Working Group. Student representatives were present and participated in many of the consultation sessions with Educational Policy Committees within the Faculties. The Chair of the Working Group met with the USC President and VP Internal to discuss the Western Degree Outcomes initiative and to facilitate a dedicated consultation session for USC Executive members and student councillors. The open Town Hall Meeting held November 20, 2015 was advertised and promoted to all registered Western and Affiliate College students and every effort was made to provide the opportunity for the student voice to be heard during the Town Hall Q & A and through online posting of questions, comments and suggestions of themes and outcomes on a virtual message board.

Approval Process

This draft report of the Working Group on Western Degree Outcomes was circulated to the campus community for review and feedback in early March, 2016. Comments and suggestions were taken up by the Working Group at its meeting on March 29, 2016. The final draft of this report will be submitted to the Provost for review and to the University Senate for approval.

THE WESTERN DEGREE OUTCOMES

Western Degree Outcomes provide a way to communicate what a degree from Western University means. Degree outcomes serve as a shared language of achievement and skills that any Western undergraduate—regardless of disciplines or degree—might use to describe the result of their years of study to a variety of audiences. One might say that Western Degree Outcomes provide a descriptive anatomy of the curricular body of Western University.

Acknowledging the wealth of learning accumulated by following a course of study, Western Degree Outcomes are a capacious group of indicators of a shared university curriculum that spans the full breadth of academic pre-professional and professional disciplines. They make explicit an inventory of academic, professional, and working world competencies that are already the implicit content of the Western University curriculum. They will provide faculty and students with a common language of academic development and application. It is hoped that today's WDOs will provide inspiration as well as guidance for program- and course-level curricular engagement and innovation in the years to come.

The provincial University Undergraduate Degree-Level Expectations (UUDLEs), which form the basis of the Council of Ontario Universities' Quality Assurance Framework, are the de facto institutional learning outcomes for all Ontario universities. Since 2011 the UUDLEs have served as Western's degree outcomes in our quality assurance process, both in cyclical program reviews and new program approvals. The Quality Assurance Framework indicates that "Each university is expected to develop its own institutional expression of the undergraduate and graduate Degree-Level Expectations and to have them applied to each academic program" (QAF, 2). Western Degree Outcomes are our institutional expression of the UUDLEs. Consequently, in Western's quality assurance process for undergraduate programs, program- and course-level learning outcomes will now align with Western Degree Outcomes.

1. Knowledge

Western graduates will have developed a sense of discovery that drives their ability to ask and frame questions, seeking to make connections that are not immediately obvious among phenomena and ideas. Western graduates will be able to explain the differences and linkages between the theories, research methods and core ideas of the disciplines they have studied, and analyze and solve problems according to the accepted methods of their field or fields. With their knowledge, graduates will have the ability to identify opportunities in their disciplines and see connections between other areas of study in order to imagine, create or produce novel solutions, works or performances.

2. Literacies and Interdisciplinarity

Western graduates will be able to use disciplinary discourse, technical language, numerical literacy or other appropriate disciplinary systems of knowledge, research methods or ways of knowing to identify, locate and evaluate oral, print, graphic, numerical, scientific or digital information. They will be able to explore complex problems from a variety of perspectives, recognizing bias, and identifying missing or underrepresented voices. Working under conditions of ambiguity or uncertainty, graduates will be able to use disciplinary knowledge in order to research, reason and solve problems from a range of contexts relevant to practices in their disciplines. In proposing solutions, they will be able to describe limitations of the sources and methods they use.

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Western graduates will be able to adapt to personal and professional changes and challenges across the life course by being self-aware, resilient, and self-reflexive. In addition to their mastery of discipline specific knowledge and methods, graduates will be able to articulate a clear understanding of their own values, interests, and goals as well as the limitations of their own knowledge and perspectives. Accepting that change is ongoing, graduates will recognize the advantages of stepping outside of their comfort zone to continue to enhance their knowledge and capabilities.

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Western graduates will be able to recognize the ways in which their conduct affects others in their field or fields, profession, community, or society. They will be able to work effectively with others practically (e.g. time management, conflict resolution); ethically (e.g. division of intellectual responsibility and credit) and socially (e.g. respecting cultural differences, work preferences). Graduates will be able to apply their studies responsibly to situations they find in the world around them, with the ability to explore ideas, issues, and the world at large from viewpoints other than their own.

Table 1: Detailed UUDLE - WDO Alignment Chart

University Undergraduate Degree-level Expectations	Western Degree Outcomes
1. Depth and Breadth of Knowledge A. developed knowledge and critical understanding of the key concepts, methodologies, current advances, theoretical approaches and assumptions in a discipline overall, as well as in a specialized area of a discipline B. developed understanding of many of the major fields in a discipline, including, where appropriate, from an interdisciplinary perspective, and how the fields may intersect with fields in related disciplines C. developed ability to: i) gather, review, evaluate and interpret information; and ii) compare the merits of alternate hypotheses or creative options, relevant to one or more of the major fields in a discipline D. developed, detailed knowledge of and experience in research in an area of the discipline E. developed critical thinking and analytical skills inside and outside the discipline F. the ability to apply learning from one or more areas outside the discipline	**1. Knowledge** Western graduates will have developed a sense of discovery that drives their ability to ask and frame questions, seeking to make connections that are not immediately obvious among phenomena and ideas. Western graduates will be able to explain the differences and linkages between the theories, research methods and core ideas of the disciplines they have studied, and analyze and solve problems according to the accepted methods of their field or fields. With their knowledge, graduates will have the ability to identify opportunities in their disciplines and see connections between other areas of study in order to imagine, create or produce novel solutions, works or performances. **2. Literacies and Interdisciplinarity** Western graduates will be able to use disciplinary discourse, technical language, numerical literacy or other appropriate disciplinary systems of knowledge, research methods or ways of knowing to identify, locate and evaluate oral, print, graphic, numerical, scientific or digital information. **6. Critical Inquiry and Creative Thinking** Western graduates will have developed habits of constructive skepticism, differentiation and intellectual adaptability in their approaches to phenomena, artefacts, issues, or arguments. They will be able to identify underlying assumptions, agendas, purposes, audiences, points of view, paradigms, evidence, implications, and logical strategies and thereby arrive at conclusions about reliability. They will bring habits of careful judgement, an appetite for further refinement, aesthetic engagement, and artistic expression or highly developed problem-solving skills to their pursuits.
2. Knowledge of Methodologies A. an understanding of methods of enquiry or creative activity, or both, in their primary area of study that enables the student to: a) evaluate the appropriateness of different approaches to solving problems using	**1. Knowledge** Western graduates will be able to explain the differences and linkages between the theories, research methods and core ideas of the disciplines they have studied, and analyze

well established ideas and techniques; b) devise and sustain arguments or solve problems using these methods; and c) describe and comment upon particular aspects of current research or equivalent advanced scholarship.	and solve problems according to the accepted methods of their field or fields. **2. Literacies and Interdisciplinarity** Western graduates will be able to use…disciplinary systems of knowledge, research methods or ways of knowing to identify, locate and evaluate oral, print, graphic, numerical, scientific or digital information. Graduates will be able to use disciplinary knowledge in order to research, reason and solve problems from a range of contexts relevant to practices in their disciplines. In proposing solutions, they will be able to describe the limitations of the sources and methods they use. **4. Resilience and Life-long Learning** In addition to their mastery of discipline specific knowledge and methods, graduates will be able to articulate a clear understanding of their own values, interests, and goals as well as the limitations of their own knowledge and perspectives.
3. Application of Knowledge A. the ability to review, present and critically evaluate qualitative and quantitative information to: a) develop lines of argument; b) make sound judgments in accordance with the major theories, concepts and methods of the subject(s) of study; c) apply underlying concepts, principles, and techniques of analysis, both within and outside the discipline; d) where appropriate use this knowledge in the creative process. B. the ability to use a range of established techniques to: a) initiate and undertake critical evaluation of arguments, assumptions, abstract concepts and information; propose solutions; b) frame appropriate questions for the purpose of solving a problem; c) solve a problem or create a new work. C. the ability to make critical use of scholarly reviews and primary sources.	**1. Knowledge** Western graduates will have developed a sense of discovery that drives their ability to ask and frame questions, seeking to make connections that are not immediately obvious among phenomena and ideas. .... Graduates will have the ability to identify opportunities in their disciplines and see connections between other areas of study in order to imagine, create or produce novel solutions, works or performances. **6. Critical Inquiry and Creative Thinking** Western graduates will have developed habits of constructive skepticism and intellectual adaptability in their approaches to phenomena, artefacts, issues, or arguments. They will be able to identify underlying assumptions, agendas, purposes, audiences, points of view, paradigms, evidence, implications, and logical strategies and thereby arrive at conclusions about reliability. They will bring habits of careful judgement, an appetite for further refinement, aesthetic engagement, and artistic expression or highly developed problem-solving skills to their pursuits. **2. Literacies and Interdisciplinarity** Western graduates will be able to use disciplinary discourse, technical language, numerical literacy or other appropriate disciplinary systems of knowledge, research methods or ways of knowing to identify, locate and evaluate oral, print, graphic, numerical, scientific or digital

	information.
4. Communication Skills A. the ability to communicate information, arguments, and analyses accurately and reliably, orally and in writing to a range of audiences.	**3. Communication** Western graduates will be able to interact and collaborate effectively with other individuals and groups using the language and reasoning appropriate to the communicative context, within and across their personal and professional communities and cultures. Graduates will be able to present their ideas or perform their works in a way that is clear and accessible to a variety of audiences. Connecting with peers and experts, they will be able to communicate responsibly through digital and other means. **5. Global and Community Engagement** Western graduates will be able to interact ethically and compassionately with others and with the natural and social world.
5. Awareness of Limits of Knowledge A. An understanding of the limits to their own knowledge and ability, and an appreciation of the uncertainty, ambiguity and limits to knowledge and how this might influence analyses and interpretations.	**2. Literacies and Interdisciplinarity** Western graduates will be able to… explore complex problems from a variety of perspectives, recognizing bias and identifying missing or underrepresented voices. Working under conditions of ambiguity or uncertainty, graduates will be able to use disciplinary knowledge in order to research, reason and solve problems from a range of contexts relevant to practices in their disciplines. In proposing solutions, they will be able to describe limitations of the sources and methods they use. **4. Resilience and Life-long Learning** Accepting that change is ongoing, graduates will recognize the advantages of stepping outside of their comfort zone to continue to enhance their knowledge and capabilities. **5. Global and Community Engagement** Western graduates will be ready to act locally and imagine globally; practice perspective taking and empathy; understand the interconnectedness of the world as expressed through technology, culture, belief systems, economics, and politics; to understand and to exercise social, political and environmental responsibility both at home and abroad.
6. Autonomy and Professional Capacity A. Qualities and transferable skills necessary for further study, employment, community involvement and other activities requiring: a) the exercise of initiative, personal responsibility and accountability in both personal and group contexts; b) working effectively with others;	**7. Professionalism and Ethical Conduct** Western graduates will be able to recognize that their conduct affects others in their field or fields, profession, community, or society. They can work effectively with others practically (e.g. time management, conflict resolution); ethically (e.g. division of intellectual

c) decision-making in complex contexts. B. The ability to manage their own learning in changing circumstances, both within and outside the discipline and to select an appropriate program of further study. C. Behaviour consistent with academic integrity and social responsibility.	responsibility and credit) and socially (e.g. respecting cultural differences, work preferences). Graduates will be able to apply their studies responsibly to situations they find in the world around them, with the ability to explore ideas, issues, and the world at large from viewpoints other than their own. **4. Resilience and Life-long Learning** Western graduates will be prepared to adapt to personal and professional changes and challenges across the life course by being self-aware, resilient, and self-reflexive. In addition to their mastery of discipline specific knowledge and methods, graduates will be able to articulate a clear understanding of their own values, interests, and goals as well as the limitations of their own knowledge and perspectives. **5. Global and Community Engagement** Western graduates will be able to interact ethically and compassionately with others and with the natural and social world. Western graduates will be ready to act locally and imagine globally; practice perspective taking and empathy; understand the interconnectedness of world systems through technology, culture, belief systems, economics, and politics; to understand and to exercise social, political and environmental responsibility both at home and abroad.

Table 2: Summary UDLE - WDO Alignment Chart

UDLE	**WDO**
Depth and Breadth of Knowledge	Knowledge Critical inquiry and Creative Thinking Literacies and Interdisciplinarity
Knowledge of Methodologies	Knowledge Literacies and Interdisciplinarity Resilience and Life-long Learning
Application of Knowledge	Knowledge Critical Inquiry and Creative Thinking Literacies and Interdisciplinarity
Communication Skills	Communication Global and Community Engagement
Awareness of Limits of Knowledge	Literacies and Interdisciplinarity Resilience and Life-long Learning Global and Community Engagement
Autonomy and Professional Capacity	Professionalism and Ethical Conduct Resilience and Life-long Learning Global and Community Engagement

WESTERN
UNIVERSITY

Indigenous Strategic Plan
(DRAFT)

Western
UNIVERSITY · CANADA

April 2016

Land Acknowledgement

Western University is situated on the traditional land of the Anishinaabeg, Haudenausaune, Lenape and Attawandaron peoples who have longstanding relationships to the region of southwestern Ontario and the City of London. In close proximity to Western, there are 3 local First Nations communities: the Chippewas of the Thames First Nation, Oneida Nation of the Thames, and Munsee Delaware Nation. In the region of southwestern Ontario, there are 9 First Nations and a growing Indigenous urban population. Western recognizes the significant historical and contemporary contributions of local and regional First Nations and all of the Original peoples of Turtle Island (North America) to the development of Canada.

Context for Western's Indigenous Strategic Plan

THE GLOBAL CONTEXT

An exciting paradigm shift is taking place in Indigenous research, scholarship and education at postsecondary institutions in Canada and around the world. Now more than ever, Indigenous scholars, communities and organizations are participating in the creation of research and teaching on matters of direct relevance to their communities[2,4]. Where education was once seen as a tool of oppression within Indigenous communities, for many, education is now seen as the "New Buffalo" and a tool for empowerment[8]. This Indigenous scholarship movement embraces research and pedagogical approaches that privilege Indigenous knowledges and ways of doing, making meaningful space for Indigenous learners and scholars to achieve success in postsecondary education[5,6].

On the global stage, the emergence of Indigenous scholarship has been fostered through a steadily growing presence of Indigenous scholars, staff and administrators in academic institutions. Increases in Indigenous representation across institutions fosters the Indigenous-led development of respectful and inclusive curricula, student service programming and research innovation, with a goal of creating culturally safe spaces within post-secondary environments that will nurture the social, cultural and educational needs of Indigenous students[6,8]. This movement is expanding the possibilities for Indigenous learning within postsecondary institutions. It does so by incorporating curriculum that is inclusive of Indigenous value systems, languages, and ways of knowing. Indigenous scholarship calls for the development of space within post-secondary institutions that will value the diverse representations of Indigenous communities, including their complex histories.[4,6,9].

CONTEXTUALIZING INDIGENOUS INEQUITY IN CANADA

Indigenous peoples are vastly under-represented in Canada's postsecondary education system as students, professors, staff and administrators[7]. Disparities in educational attainment and a number of other health and social indicators have manifested from a long history of oppression, systemic racism, and discrimination. The residential school system was one manifestation through which education was misused as a tool of oppression, assimilation and abuse. Contemporary products of Canada's colonial history and the residential school system include unequal access to resources such as education, training and employment, social and health care facilities, and limited access to and control over lands and resources[1,3].

While First Nations children are staying in school longer than in the recent past, there remains a lag in completion rates at all levels of education in comparison to the non-Aboriginal population. According to the 2012 Aboriginal Peoples Survey, 72% of First Nations people aged 18 to 44 living off reserve had completed the requirements for a high school diploma or equivalent, compared to 89% among non-Aboriginal peoples aged 18 to 44 in 2013. According to the 2011 Canadian National Household Survey, 9.8% of 25 to 64 year old individuals identifying as Aboriginal had completed a university degree, compared to 26.5% of the non-Aboriginal population of the same age, with trends showing that younger Aboriginals are seeking higher levels of postsecondary education than previous generations.

SEEDING THE ROOTS FOR POSITIVE CHANGE: RECONCILIATION IN POSTSECONDARY EDUCATION

In June 2015, the Truth and Reconciliation Commission (TRC) released a report and set of 92 recommendations to contribute to truth, healing and reconciliation following the traumatic individual, inter-generational, and socio-political impacts of residential school systems in Canada.

> "To the Commission, reconciliation is about establishing and maintaining a mutually respectful relationship between Aboriginal and non-Aboriginal peoples in this country....In order for that to happen, there has to be awareness of the past.... Without truth, justice, and healing, there can be no genuine reconciliation. Reconciliation is not about "closing a sad chapter of Canada's past," but about opening new healing pathways of reconciliation that are forged in truth and justice." [11]
>
> **(Sinclair, Truth and Reconciliation Commission, 2015: 10)**

Justice Murray Sinclair has repeatedly highlighted how "it was the educational system that has contributed to this problem in this country, and it's the educational system that will [be the solution]." The TRC made 11 recommendations specifically for postsecondary institutions, with heavy emphasis placed on the development of curriculum in medical and law schools[10].

In November 2015, university presidents from across Canada came together with Indigenous leaders, Indigenous student leaders, and Indigenous scholars at the University of Saskatchewan to discuss how universities could respond to the TRC's calls to action. This meeting recognized institutional responsibilities of universities for fostering reconciliation through systemic, social and ideological changes that will make universities culturally safe and responsive spaces for Indigenous people.

Western University recognizes its role and responsibility in responding to calls to action from the Truth and

Reconciliation Commission, and the importance of creating a culturally safe, respectful, and empowering environment for Indigenous peoples across all levels of the institution. Indigenous faculty, staff, students and community members have played a crucial role as partners and strong voices informing our goals and priorities moving forward, and will be important partners in realizing the goals set out in this document. This plan summarizes themes, ideas and goals that were informed by vast consultation with the Western community and local Indigenous communities. Advancing reconciliation at Western will be driven by commitment and action from leaders across the institution, constant engagement and partnership with Indigenous staff, faculty, students and communities, and a recognition that all members of our campus community have a role to play in advancing this important work. It is within the spirit of reconciliation that we present Western's first Indigenous Strategic Plan.

Vision, Purpose, and Guiding Principles

Vision

Indigenous peoples are engaging in all levels of work, study and research at Western University enriching campus life for the benefit of all.

Purpose

Western University will elevate Indigenous voices and agency to engage all faculty, staff, students and communities in advancing excellence in Indigenous research, education, and campus life.

GUIDING PRINCIPLES

The Western Community includes all undergraduate and graduate students, postdoctoral scholars, staff, faculty members, and administration. We value:

Academic Excellence: Taking Indigenous approaches to leadership and learning, striving toward excellence in teaching, research, and scholarship, and being a leader in Indigenous postsecondary education.

Balance: All members of the Western community working toward developing mutually beneficial and reciprocal relationships with Indigenous communities both within and outside campus, as the foundation from which institutional growth and change occurs. This approach recognizes that meaningful relationships require time, open listening, and commitment.

Collaboration: Working together as a collective community to build partnerships that increase Indigenous voices and agency, and promoting the reclamation of Indigenous peoples' personal and professional decision-making capacities.

Diversity: Indigenous learners are different and distinct with respect to their experiences, ideas, perspectives, and learning needs. Indigenous communities are similarly diverse in linguistic, cultural, social, and political goals and values.

Equity and Inclusion: Indigenous peoples' experiences are shaped by many complex historical and social factors, making proactive Indigenous initiatives necessary to eliminate barriers and ensure equal access to postsecondary education at the undergraduate and graduate levels. Inclusive education understands that academic programs, student services, and research opportunities are most effective when they are relevant to Indigenous peoples' needs.

Interconnection: We are all connected to the local context as well as the land and place we now call Canada. It is our collective responsibility to understand our shared Canadian history, and play a role in facilitating reconciliatory relationships between Indigenous and non-Indigenous peoples. Interconnection often calls for people to develop cultural competencies for working respectfully and effectively with Indigenous peoples.

Personal and Cultural Identity: Recognizes and supporting Indigenous students, staff, and faculty members' personal, cultural, and community identities, and understanding and valuing the inherent responsibilities that accompany indigeneity.

Respect: Recognizing the complex and diverse nature of Indigenous knowledge systems and languages, and the need to foster congruence between Indigenous paradigms and academic worlds. Respect also requires the recognition and support of Indigenous peoples' inherent constitutional rights to self-determination.

Strategic Directions

Western's Indigenous Strategic Plan will advance Indigenous initiatives under the following broad strategic directions. These are not represented in priority order. Each is recognized as of equal importance to accomplishing outcomes associated with this Strategic Plan.

Strengthen and build relationships with Indigenous communities	Page 7
Nurture an inclusive campus culture that values Indigenous peoples, perspectives, and ways of knowing	Page 7
Enhance Indigenous students' experience at Western	Page 8
Achieve excellence in Indigenous research and scholarship	Page 10
Excel in Indigenous teaching and learning	Page 11
Indigenize Western's institutional practices and spaces	Page 12
Become a university of choice for Indigenous students	Page 13
Increase Indigenous representation in staff and faculty complement	Page 14



Indigenous Strategic Plan Goals Chart

BROAD STRATEGIC DIRECTIONS	GOALS	STRATEGY SUGGESTIONS
Strengthen and build relationships with Indigenous communities	Grow Indigenous youth outreach and pre-university programming in areas of needs.	Sustain existing youth outreach programs such as the Mini University program, and develop new youth outreach programs. Focus on underrepresented areas such as Science, Technology, Engineering and Medicine (STEM) disciplines, day programs for youth under 12, and Indigenous male youth outreach.
	Expand partnerships with Aboriginal institutes and community colleges provincially and nationally.	Maintain and grow Western's position within the university consortium with Six Nations Polytechnic.
	Develop mutually beneficial partnerships with Indigenous communities and organizations. Actively focus on Indigenous relations and foster ongoing Indigenous community engagement.	Increase sponsorship of community events and programs. Enhance communications between Western University and Indigenous communities. Dedicate staff to build sustainable relationships with Indigenous communities and stakeholders. Expand off-campus and community-based language course offerings and language revitalization initiatives in partnership with Indigenous communities.
Nurture an inclusive campus culture that values Indigenous peoples, perspectives, and ways of knowing	**Students** Build awareness about Indigenous peoples, cultures and histories among all Western students. Celebrate and reward leadership among Western students, staff and faculty members in the area of Indigenous initiatives.	Develop informal and formal learning opportunities for all Western students to learn more about Indigenous peoples, cultures and histories (e.g. embed Indigenous perspectives into co-curricular leadership education programs and community engaged learning opportunities, support Indigenous Awareness Week, etc.). Seek funding to develop online learning modules on a variety of topics related to Indigenous peoples and cultures that can be embedded in curricular and co-curricular learning experiences.

BROAD STRATEGIC DIRECTIONS	GOALS	STRATEGY SUGGESTIONS
		Create experiential learning opportunities and programs for all Western students in partnership with Indigenous communities and organizations (e.g. Alternative Spring Break, co-operative education, internships, international exchanges). Develop and offer Indigenous cultural competency training to Western student leaders (e.g. student staff, volunteers, Soph leaders).
	Staff and Faculty Build awareness and cultural competencies for working effectively with Indigenous peoples and cultures among all Western faculty and staff members.	Develop a campus-wide cultural competency training program geared toward different groups at Western (e.g. senior administration, faculty and staff members). Provide tailored training to student-facing roles such as academic counsellors and front-line staff supporting student mental health. Partner with key stakeholders (eg. Teaching Support Centre, Equity and Human Rights Services, Learning and Development, Continuing Studies) on developing and offering cultural competency training. Develop an 'Indigenous Purple Guide' to assist staff and faculty members in working with Indigenous students.
	Provide sustainable and ongoing support for Western's Elders in Residence program	
Enhance Indigenous students' experience at Western	Support Indigenous students' successful transition, retention, and completion of their degrees. Expand holistic and culturally-relevant counselling, student supports, and space available through Indigenous Services. Expand career development opportunities and supports for transitioning to the workforce for Indigenous students. Create a welcoming and inclusive learning environment for Indigenous students at Western.	Increase culturally-relevant counselling supports for Indigenous students with special attention on mental health needs; provide increased resources to support counselling available through Indigenous Services. Support and grow academic transition programs for incoming Indigenous students at the undergraduate and graduate levels (e.g. orientation program/residence practices). Enhance experiential learning opportunities (see Excel in Indigenous Teaching and Learning section).

BROAD STRATEGIC DIRECTIONS	GOALS	STRATEGY SUGGESTIONS
		Increase spaces for Indigenous students to gather, meet and study (indoor and outdoor), including but not limited to Indigenous Services.
	Increase supports for Indigenous student groups at Western.	Support the sustainability of the First Nations Student Association (FNSA) club. Support and grow Western's Supporting Aboriginal Graduate Enhancement (SAGE) group/chapter.
	Support the unique needs faced by Indigenous students navigating a university environment (financial, housing, etc.) Address unique needs of Indigenous student sub-groups (e.g. mature students, parents, students with disabilities, LGBTQ students).	**Housing Needs** Create Indigenous-specific residence options for Indigenous students that accommodate cultural needs and offer safe learning communities. **Financial Needs** Conduct a comprehensive review of Western's financial profile system to reduce systemic barriers faced by Indigenous students. Increase financial supports for Indigenous students by developing new scholarships, bursaries, emergency funding and grant options. **Family Needs** Explore affordable childcare options for Indigenous students with dependents. **Students with Disabilities** Streamline processes for students who require accommodation.
	Nurture ongoing relationships with Western's Indigenous alumni.	Track and identify Indigenous alumni. Develop an Indigenous alumni chapter/group. Host an Indigenous Homecoming event. Profile and celebrate successful Indigenous alumni.

BROAD STRATEGIC DIRECTIONS	GOALS	STRATEGY SUGGESTIONS
Achieve excellence in Indigenous research and scholarship	Advance Indigenous research and scholarship at Western with local, regional and global relevance. Celebrate and reward research in Indigenous areas. Foster innovative and collaborative community-based research partnerships with Indigenous communities that meet community needs. Ensure research with Indigenous communities and peoples is conducted in an ethical and responsible manner.	Establish a cross-faculty and/or collaborative Indigenous Research Centre (eg. a Centre of Excellence in Indigenous Education). Create and enhance opportunities for undergraduate students to conduct community-based research in Indigenous communities Coordinate an annual Indigenous Research Day to profile Indigenous research at Western and connect campus members working in the space. Offer an international summer school on Indigenous Scholarship for graduate students and emerging scholars which could include Indigenous community researchers. Centralize communication vehicles relating to Indigenous research activities at Western. Create a one-stop shop for information about Indigenous research activities. Create Indigenous Research Chair positions. Create Indigenous Visiting Scholar opportunities. Create internal competitive funding opportunities to promote Indigenous research activities at Western. Review Western's ethical review process and guidelines for conducting research with Indigenous communities and peoples to ensure it promotes research while protecting and respecting Indigenous peoples and their communities. Create a webinar that educates scholars on conducting respectful and ethical research with Indigenous communities. Grow Western's Indigenous Health and Wellbeing Initiative Summer School program.

BROAD STRATEGIC DIRECTIONS	GOALS	STRATEGY SUGGESTIONS
Excel in Indigenous teaching and learning	Increase all students' knowledge of Indigenous people and cultures through inclusion of Indigenous content, methods, and approaches in academic programs and courses.	Sustain, grow and celebrate Western's First Nations Studies program. Explore strategies to increase Indigenous content across undergraduate programs. (eg. Embedding Indigenous content into foundational undergraduate courses using common learning outcomes). Leverage expertise from First Nations Studies to assist the University as it moves forward with increasing students' knowledge of Indigenous peoples. Sustain, grow and celebrate the Faculty of Education's Aboriginal Educational graduate program. Increase Indigenous content in the Bachelor of Education program. Develop a new collaborative program in Indigenous scholarship at the graduate level. Actively promote an inventory of Indigenous-related academic programs and courses offered at Western through a central website on Indigenous initiatives.
	Expand reciprocally beneficial, community-defined experiential learning opportunities available to all Western students in partnership with local Indigenous communities, including community placements, community engaged learning opportunities, internships and co-operative education. Increase course offerings available (open access or fee-based) to Indigenous community members.	Develop new partnerships with Indigenous communities to offer reciprocally beneficial community-based experiential learning opportunities (e.g. international experiences, engage Western, community engaged learning courses) Streamline administrative processes for enrolment in community-based course offerings open to Indigenous community members. Enhance community involvement and partnership in development of additional community-based course offerings.
	Embrace Indigenous pedagogical practices for use in classrooms.	Develop and offer training to faculty members on Indigenous pedagogical practices in the classroom (e.g. narrative / storytelling approaches, Elders, land-based learning).

BROAD STRATEGIC DIRECTIONS	GOALS	STRATEGY SUGGESTIONS
	Support and enhance existing and new language revitalization initiatives through the Centre for Research & Teaching of Native Languages.	Emphasize critically endangered languages to support cultural survival. Provide independent study opportunities in Indigenous languages for students. Provide office space for language instructors. Act as a hub for community learning initiatives and community services, as well as repatriation of materials.
Indigenize Western's Institutional Practices and Spaces (Governance, Funding, Policies, Procedures and Facilities)	**Governance** Support the awareness, role, and engagement of Western's Indigenous Postsecondary Education Council (IPEC) on matters related to Indigenous peoples / initiatives. Encourage Indigenous representation on Western's Board of Governors and Senate. Strengthen partnerships with Affiliated Colleges in relation to Indigenous initiatives.	Strike a Provost Task Force to explore the implementation of the Truth and Reconciliation Commission (TRC) recommendations and affirm institutional commitment. Encourage representation of an Indigenous community leader on Western's Board of Governors. Strike a senate working group on Indigenous education; submit semi-annual reports from the Indigenous Postsecondary Education Council through this committee and/or the Senate Committee on Academic Policy and Awards (SCAPA)
	Funding Allocate sustainable operational funding to support core services for Indigenous students, and implementation and monitoring of the Indigenous Strategic Plan. Advance philanthropic and government fundraising efforts to support growth of Indigenous initiatives at Western.	Set clear and aspirational fundraising targets for Indigenous initiatives at Western. Actively seek grant funding opportunities to support Indigenous initiatives across campus.
	Policies and Procedures Create new and/or review existing Western policies and procedures as they relate to Indigenous peoples (eg. Employment Equity Policy (MAPP 3.2) and employee agreement articles on employment equity).	Create an Indigenous cultural practices policy and/or procedure to accommodate smudging and sacred fires at Western. Review and update Western's academic accommodation policy to recognize Indigenous ceremonial obligations. Review and update of Western's employment accommodation policies and practices to ensure recognition of and accommodation for Indigenous ceremonial obligations.

BROAD STRATEGIC DIRECTIONS	GOALS	STRATEGY SUGGESTIONS
		Acknowledge traditional territories in convocation, public documents, plaques, website, and formal activities of the University.
	Facilities Increase Indigenous gathering spaces at Western. Increase the presence of Indigenous cultures, languages and symbols across Western.	Increase dedicated gathering spaces for Indigenous people at Western; intentionally consider use of facilities for Indigenous cultural ceremonies and gatherings in campus master plans. Increase visibility of Indigenous symbols and artwork, outdoor sculptures and naming of buildings across the campus. Increase outdoor spaces for Indigenous people to gather and conduct cultural practices (e.g. fire pit for sacred fires, outdoor pavilion, Indigenous food and medicine garden).
	Communications Enhanced centralized communications tools and development of an institutional communications plan with regards to Indigenous initiatives.	Create a central website with direct link from Western's homepage to profile Indigenous initiatives across campus.
Become a university of choice for Indigenous students	Enhance supports for prospective Indigenous student applicants. Increase special admission pathways and representation of Indigenous students across all Faculties at the undergraduate and graduate levels, with particular focus on underrepresented areas.	Dedicate core funding for staff positions to support Indigenous student recruitment initiatives. Develop a comprehensive Indigenous student recruitment strategy to increase Indigenous student applicants, with expanded focus on graduate students locally, provincially and nationally. Enhance Indigenous communication strategies and partnerships to increase Western's presence in Indigenous communities locally, regionally and nationally. Conduct a program review to enhance Western's undergraduate Aboriginal Admission Access Category and program partners. Actively promote existing and develop new accessible entry options for Indigenous applicants in professional programs (e.g. Medicine, Dentistry, Law, Occupational Therapy).

BROAD STRATEGIC DIRECTIONS	GOALS	STRATEGY SUGGESTIONS
		Explore innovative recruitment strategies to increase Indigenous graduate student representation (e.g. entry scholarships, self-identification question in the application process, and creation of an Indigenous collaborative masters' program).
Increase Indigenous representation in staff and faculty complement	**Staff Members** Increase Indigenous staff members working at Western in underrepresented employee groups.	Review and enhance Western's employment equity policy. Develop an Indigenous employee recruitment and retention strategy including aspirational targets and benchmarks over the next five years. Work in partnership with employee groups to increase accessibility; review and revise equity articles and statements in various employee agreements. Explore hiring an Indigenous human resources consultant to support targeted outreach, partnership building, training of hiring managers, and recruitment of Indigenous peoples in targeted areas. Establish a network of Western faculty and staff who have relationships with Indigenous communities, which can act as a gateway for communications regarding relevant initiatives and employment opportunities. Promote relevant employment opportunities in Indigenous communities through a centralized Indigenous communications plan.

BROAD STRATEGIC DIRECTIONS	GOALS	STRATEGY SUGGESTIONS
	Faculty Members Increase Indigenous faculty members across all faculties at Western, particularly in underrepresented areas. Through promotion and tenure, and annual performance review processes, recognize additional demands placed on time and workload of Indigenous faculty members through involvement in a number of activities that support Indigenous education and scholarship across the institution, including: • Guest lectures • Community based work • Planning / consulting / developing new courses and Indigenous content across the university • Academic advising / support for students • Ongoing expectation to consult on Indigenous- related issues	Develop and implement a strategy to increase recruitment and retention of Indigenous faculty members working at Western (pipeline development / talent acquisition strategy, mentorship programs). Work with Joint Employment Equity committee to assess the efficacy of the current employment equity article in UWOFA collective agreement. Review strategies to reduce gap in Aboriginal peoples' representation (e.g. training of appointment committees, review and revise Employment Equity guide). Conduct a market analysis to determine key disciplinary areas of focus, and work to promote specific faculty positions within Indigenous communities. Expand definitions of service within faculty workload at Western to capture unique demands placed on Indigenous faculty members. Recognize in workload specifications the unique time demands involved in, and diverse research products of, conducting community based research with Indigenous peoples (eg. relationship and partnership building, ethical review process, applied research products) Increase training and supports available to Annual Performance Review Committees to recognize the specific demands articulated in this section.

Implementation & Accountability

While developing a plan is very important the real work begins after it is adopted, making it come to life at Western. Western Faculties, departments and administrative units will be encouraged to connect their internal plans and priorities with the Indigenous Strategic Plan.

UNIVERSITY PLANS AND INITIATIVES RELEVANT TO IMPLEMENTATION OF THE INDIGENOUS STRATEGIC PLAN INCLUDE:

- Provost Task Force on the Implementation of the Truth & Reconciliation Commission (TRC) recommendations and Indigenous Strategic Plan goals and priorities, which will be established upon the launch of the Indigenous Strategic Plan
- Strategic Mandate Agreement (SMA)
- Strategic Enrolment Management (SEM) Framework
- Interdisciplinary Development Initiative (IDI) in Applied Indigenous Scholarship
- Joint Employment Equity Committee
- Western University Institution-wide Learning Outcomes
- Campus Master Plan
- Open Space and Landscape Plan
- Unit and Academic Strategic Plans

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Report to Senate of the Academic Colleague, Council of Ontario Universities
Erika Chamberlain, May 2016

FOR INFORMATION

There was a meeting of the full Council on 7 April 2016 at Ryerson University. This was preceded by the Annual Dinner on April 6, at which departing Colleagues and Executive Heads were honoured.

The primary agenda item was a presentation on a proposed sector-wide communications plan. We heard of some misperceptions about universities (eg., that they are inward-looking institutions, that they don't prepare students for jobs), and of the need to more clearly articulate the value of a university education. While the "Research Matters" campaign has been successful in several areas, it does not necessarily resonate with the broader population or with parents of school-aged children.

It was suggested that there should be a transition to a "University Matters" campaign, which would place more stress on the benefits of universities to undergraduate students. Among other things, this would align well with Sue Herbert's report, *Focus on Outcomes – Centre on Students: Perspectives on Evolving Ontario's University Funding Model*. Further, the current provincial government has clearly demonstrated its interest in the academic and financial needs of undergraduates.

Among Academic Colleagues, there was some concern that a focus on job readiness would downplay some of the factors that make universities unique from colleges or other training programs. We discussed how we might emphasize our strengths, including the integration of teaching and research, and the development of problem-solving skills, innovation and discovery among our students.