

# **Analysis of ARL Statistics 2016-17:**

Summary of U of S versus U15 Peers

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#### **Disclaimer**

Prior to reviewing this report, please see the following quote from an ARL published report<sup>1</sup> as the same principles apply for the tables and graphs presented in this report: "The tables presented in this publication are not indicative of performance and outcomes and should not be used as measures of library quality. In comparing any individual library to ARL medians or to other ARL members, one must be careful to make such comparisons within the context of differing institutional and local goals and characteristics."

#### **Overview**

In 2015, at the University of Saskatchewan (U of S), the <u>University Library Assessment Program</u> was released reflecting progress toward the achievement of the Library's vision, mission, and core strategies in the <u>University Library Strategic Plan</u> and demonstrating the library's commitment to evidence-based decision-making. Aligned with the library's strategic planning process, the University Library's program of assessment is linked to the three broad purposes of the University's Framework for Assessment (<u>A Framework for Assessment: Beyond Systematic Program Review</u>), namely: *quality improvement, quality assurance*, and *accountability*. Four elements currently make up the assessment program: *library data and statistics, library surveys, key performance indicators and benchmarking*, and *other assessment related activities*.

On an annual basis, the University Library submits data to the Association of Research Libraries (ARL) along with all other ARL member libraries. This includes data on library collections and expenditures; library salary expenditures; overall library expenditures; library personnel; library use, facilities, and services; and doctor's degrees, faculty, and enrolment. ARL uses this data to publish annual statistics for a number of indicators, percentages and ratios, and the library investment index, which provides a wealth of information for all member libraries.

The U of S is part of a select group of 15 research-intensive universities in Canada known as the <u>U15 Group of Canadian Research Universities</u>. The annual publication of ARL statistics allows the University Library to track progress over time and benchmark with our U15 peer institutions<sup>2</sup>. The current report represents the University Library's analysis of ARL Statistics 2016-17<sup>3</sup> summarizing the results for the U of S versus U15 peers.

This report corresponds to the broad purposes of *quality improvement* (as many of the statistics are measures tied to the core strategies in the University Library Strategic Plan) and *accountability* (as this report is a means of communicating results to the University community and general public demonstrating openness and transparency). This report also demonstrates the University Library's commitment to move beyond submitting annual library statistics to analyzing and using published results in order to determine trends and benchmark to our U15 peers.

<sup>&</sup>lt;sup>1</sup> ARL Statistics 2013-2014, Association of Research Libraries, Washington, DC. Retrieved from <a href="http://publications.arl.org/ARL-Statistics-2013-2014/">http://publications.arl.org/ARL-Statistics-2013-2014/</a>

<sup>&</sup>lt;sup>2</sup> ARL data available for the following U15 universities: Alberta, British Columbia, Calgary, Laval, Manitoba, McGill, McMaster, Ottawa, Queen's, Saskatchewan, Toronto, Waterloo, Western. Missing Dalhousie and Montreal (not ARL members).

<sup>&</sup>lt;sup>3</sup> ARL Statistics 2016-2017, Association of Research Libraries, Washington, DC. Retrieved from <a href="https://publications.arl.org/ARL-Statistics-2016-2017/">https://publications.arl.org/ARL-Statistics-2016-2017/</a>

# ARL Background<sup>4</sup>

The Association of Research Libraries (ARL) is a non-profit organization consisting of 124 research libraries in the US and Canada consisting of the largest research libraries in North America. This includes 114 university libraries and 10 public, governmental, and non-profit research libraries. Although ARL libraries represent a small subset of libraries in North America, they account for a large portion of academic library resources (e.g. assets, budget, and number of users served).

ARL Member	University	Public, Governmental, and	
Libraries	Libraries	Non-profit Research Libraries	Total
US	99	9	108
Canada	15	1	16
Total	114	10	124

## ARL Indicators<sup>5</sup>

ARL releases annual statistics as part of a series of publications describing the collections, staffing, expenditures, and service activities of its 124 libraries. Statistics are available for the following indicators for Canadian ARL libraries including U15 research intensive universities except for Dalhousie and Montreal (not ARL members).

#### **Library Collections and Expenditures**

Titles held; volumes in library; electronic books; one-time resource purchases; ongoing resource purchases; collection support; total expenditures for library materials

#### **Library Salary Expenditures**

Salaries and wages for professional staff, support staff, and student assistants; total salaries and wages; fringe benefits (\$ and designated %)

#### **Overall Library Expenditures**

Total expenditures for library materials; total salaries and wages; other operating expenditures; total library expenditures; expenditures from external sources (bibliographic utilities, consortia/networks, etc.)

#### **Library Personnel**

Professional staff; support staff; student assistants; total staff

#### Library Use, Facilities, and Services

Library presentations to groups; participants in group presentations; reference transactions; initial circulations; full-text article requests; regular searches; federated searches; total items loaned/borrowed; annual gate count

#### **Doctor's Degrees, Faculty, and Enrollment**

Doctor's degrees awarded; doctor's degree fields; instructional faculty; total students (full-time); total students (part-time); graduate students (full-time); graduate students (part-time)

<sup>&</sup>lt;sup>4</sup> ARL Statistics 2016-2017, Association of Research Libraries, Washington, DC. Retrieved from <a href="https://publications.arl.org/ARL-Statistics-2016-2017/">https://publications.arl.org/ARL-Statistics-2016-2017/</a>

<sup>&</sup>lt;sup>5</sup> Results not shown for the following four ARL indicators due to lack of U of S and/or U15 peer data and/or consistency issues with data collected: fringe benefits (designated %); expenditures from external sources (bibliographic utilities, consortia/networks, etc.); regular searches; federated searches

# **ARL Percentages and Ratios**

Using data from the indicators listed on the previous page, ARL calculates and publishes the following percentages and ratios to help provide a picture of ARL university libraries.

- Professional Staff as a percent of Total Staff
- Support Staff as a percent of Total Staff
- Student Assistant Staff as a percent of Total Staff
- Ratio of Professional to Support Staff (excluding Student Assistant Staff)
- Ratio of Items Loaned to Items Borrowed
- Total Library Materials Expenditures as a percent of Total Library Expenditures
- Salary and Wages Expenditures as a percent of Total Library Expenditures
- Other Operating Expenditures as a percent of Total Library Expenditures
- Library Expenditures per Faculty
- Library Expenditures per Full-Time Student
- Library Expenditures per Full-Time Graduate Student
- Library Expenditures per Full-Time User
- Library Expenditures per User
- Library Expenditures per PhD Awarded
- Library Staff per PhD Awarded
- Professional Library Staff per PhD Awarded

# **ARL Library Investment Index**

ARL also releases a ranking based on the Library Investment Index which is calculated based on the following four variables:

- 1) Total Library Expenditures
- 2) Total Library Materials Expenditures
- 3) Salaries & Wages Professional Staff
- 4) Professional + Support Staff (FTE)

### **Results: ARL Indicators**

The following table summarizes the 2016-17 University of Saskatchewan (U of S) ARL results compared to 2015-16 (including % change) and to the U15 average (2016-17). The overall U of S ranking among U15 peers is also shown for each indicator. The graphs in Appendix A illustrate U of S results compared to the U15 average for each ARL indicator from 2012-13 to 2016-17. The graphs in Appendix B show U of S results/ranking among U15 peers for 2015-16 and 2016-17 for each ARL indicator.

ADL L. P L	Ud	of S	Cha	ange	U15 Average	Ranking vs
ARL Indicators	2015-16	2016-17	<b>↑</b> ↓	%	2016-17	U15*
Library Collections and Expenditures (USD)						
Titles Held	2,287,908	2,292,656	<b>†</b>	0.2	3,884,406	10th (13
Volumes in Library	2,861,681	2,864,017	<b>†</b>	0.1	5,034,390	10th (13
Electronic Books	738,818	767,560	<b>†</b>	3.9	1,269,571	
One-time Resource Purchases	\$1,039,116	\$1,744,786	<b>†</b>	67.9	2,519,023	6th (13
Ongoing Resource Purchases	\$9,172,250	\$9,545,884	<b>†</b>	4.1	9,809,395	5th (13
Collection Support	\$449,358	\$402,410	<b>+</b>	-10.4	502,663	7th (13
Total Library Materials	\$10,660,724	\$11,693,080	<b>†</b>	9.7	12,831,081	5th (13
Library Salary Expenditures (USD)						
Salaries & Wages Professional Staff	\$4,980,671	\$5,314,882	<b>†</b>	6.7	5,860,052	5th (13
Salaries & Wages Support Staff	\$2,644,216	\$2,752,116	<b>†</b>	4.1	4,320,579	11th (13
Salaries & Wages Student Assistants <sup>1</sup>	\$374,495	\$347,721	<b>+</b>	-7.1	568,382	5th (13
Total Salaries & Wages	\$7,999,381	\$8,414,719	<b>†</b>	5.2	10,749,012	8th (13
Fringe Benefits	\$1,298,555	\$1,341,605	<b>†</b>	3.3	2,388,250	
Overall Library Expenditures (USD)	. , ,	. ,			, ,	Ì
Total Library Materials	\$10,660,724	\$11,693,080	<b>†</b>	9.7	12,831,081	5th (13
Total Salaries & Wages	\$7,999,381	\$8,414,719		5.2	10,749,012	
Other Operating Expenditures	\$1,384,115	\$991,731		-28.3	1,871,271	
Total Library Expenditures	\$20,044,220	\$21,099,530		5.3	25,451,363	
Library Personnel						·
Professional Staff (FTE)	61	58	+	-4.9	81	9th (13
Support Staff (FTE)	73	74	<b>†</b>	1.4	109	
Student Assistants (FTE) <sup>2</sup>	13	14	<b>†</b>	7.7	32	
Total Staff (FTE)	147	146		-0.7	216	· ·
Library Use, Facilities, and Services			·	0.7		
Library Presentations to Groups	568	558	+	-1.8	726	9th (13
Participants in Group Presentations	11,399	15,131		32.7	18,628	
Reference Transactions	14,279	13,160		-7.8	53,011	
Initial Circulations	75,832	70,317		-7.3	181,213	
Full-Text Article Requests <sup>3</sup>	2,127,428	2,396,890		12.7	4,233,345	
Annual Gate Count	1,791,565	1,822,173	<b>†</b>	1.7		
Total Items Loaned to Other Libraries	5,789	5,323		-8.0		
Total Items Borrowed from Other Libraries	5,173	6,060		17.1	9,448	·
Doctor's Degrees, Faculty, and Enrollment	Í	,			,	
Doctor's Degrees Awarded	450	470	<b>†</b>	4.4	484	7th (13
Doctor's Degree Fields <sup>4</sup>	47	47		0.0		
Total Full-time Students	18,781	19,046	<b>†</b>	1.4	34,168	
Total Part-time Students	2,198	2,395		9.0		
Graduate Full-time Students	2,756	2,776		0.7	6,393	
Graduate Part-Time Students	391	455		16.4	1,185	· ·
Full-time Instructional Faculty	1,006	965		-4.1	1,660	

<sup>\*</sup>Number in brackets = Total U15 institutions with ARL data available. Missing Dalhousie and Montreal (not ARL members).

<sup>&</sup>lt;sup>1</sup>Includes Laval and Manitoba in U15 average with \$0 salaries and wages for student assistants

<sup>&</sup>lt;sup>2</sup>Missing Laval and Manitoba from U15 average

<sup>&</sup>lt;sup>3</sup>Missing Alberta and Western from U15 average

<sup>&</sup>lt;sup>4</sup>Missing Alberta from U15 average

# **Results: ARL Percentages and Ratios (2016-17 tables)**

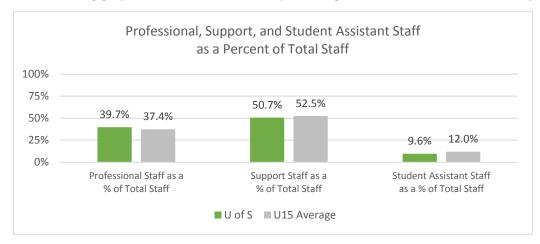
The following two tables summarize 2016-17 ARL percentages and ratios for the U of S compared to the U15 average.

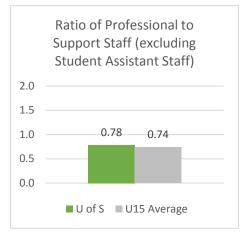
ARL Percentages and Ratios (2016-17)	ARL Indicators	U of S	U15 Average	U of S Ratio	U15 Ratio	U of S % Difference	At the U of S	Compared to the U15 average, at the U of S
Professional Staff as a % of Total Staff	Professional Staff	58	81	-39.7%	37.4%	-28.2	Professional staff make	Professional staff make up a greater proportion of total staff (28% less professional staff; <b>32% less total staff</b> )
	Total Staff	146	216	33.770		-32.4		
Support Staff as a % of Total Staff	Support Staff	74	109	-50.7%	52.5%	-31.9	Support staff make up	Support staff make up a smaller proportion of total staff (31.9% less support staff; <b>32.4% less total staff</b> )
	Total Staff	146	216			-32.4		
Student Assistant Staff as a % of Total Staff	Student Assistants	14	32	9.6%	12.0%	-55.6	make up 10% of total	Student assistant staff make up a smaller proportion of total staff (56% less student assistant staff; 32% less total staff)
	Total Staff	146	216	9.0%		-32.4		
Ratio of Professional to Support Staff (excluding Student Assistant Staff)	Professional Staff	58	81	0.78	0.74	-28.2	levery support staff	There are slightly more professional staff for every support staff (28% less professional staff; <b>32% less support</b> staff)
	Support Staff	74	109	0.78		-31.9		
Ratio of Items Loaned to Items Borrowed	Items Loaned to Other Libraries	5,323	13,529	-0.88	1.56	-60.7	There are 0.88 items loaned for every item borrowed	There are less items loaned for every item borrowed (61% less items loaned; 36% less items borrowed)
	Items Borrowed from Other Libraries	6,060	9,448			-35.9		
Expenditures as a % of Total Library Expenditures	Total Library Materials (USD)	\$11,693,080	\$12,831,081	FF 40/	51.8%	-8.9	Library materials expenditures make up 55% of total	Library materials expenditures make up a greater proportion of total (9% less materials expenditures; <b>17% less total expenditures</b> )
	Total Library Expenditures (USD)	\$21,099,530	\$25,451,363	55.4%		-17.1		
Salary and Wages Expenditures as a % of Total Library Expenditures	Salary and Wages (USD)	\$8,414,719	\$10,749,012	20.00/	41.4%	-21.7	140% of foral	Salary and wages expenditures make up a smaller proportion of total (22% less salaries and wages expenditures; 17% less total expenditures)
	Total Library Expenditures (USD)	\$21,099,530	\$25,451,363	39.9%		-17.1		
	Other Operating Expenditures (USD)	\$991,731	\$1,871,271	4.7%	6.8%	-47.0	expenditures make up	Other operating expenditures make up a smaller proportion of total (47% less other operating expenditures; 17% less total expenditures)
	Total Library Expenditures (USD)	\$21,099,530	\$25,451,363	4.7/0		-17.1		

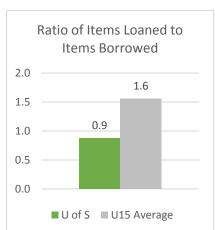
ARL Percentages and Ratios (2016-17)	ARL Indicators	U of S	U15 Average	U of S Ratio	U15 Ratio	U of S % Difference	At the U of S	Compared to the U15 average, at the U of S
Library Expenditures per Faculty	Total Library Expenditures (USD)	\$21,099,530	\$25,451,363	\$21,865	\$16,354	-17.1	\$21,865 is spent for	We spend more per faculty (17% less library expenditures; <b>42% less faculty</b> )
	Faculty	965	1,660	Ψ21,003		-41.9	every faculty member	
Library Expenditures per FT Student	Total Library Expenditures (USD)	\$21,099,530	\$25,451,363	\$1,108	\$746	-17.1	\$1,108 is spent for every FT student	We spend more per FT student (17% less library expenditures; <b>44% less FT students</b> )
	FT Student	19,046	34,168	31,100		-44.3		
Library Expenditures per FT Graduate Student	Total Library Expenditures (USD)	\$21,099,530	\$25,451,363	\$7,601	\$4,327	-17.1	\$7,601 is spent for every FT graduate student	We spend more per FT graduate student (17% less library expenditures, 57% less FT graduate students)
	FT Graduate Student	2,776	6,393	77,001		-56.6		
Library Expenditures per FT User (Faculty + FT Students)	Total Library Expenditures (USD)	\$21,099,530	\$25,451,363	\$1,054	\$709	-17.1	\$1,054 is spent for every FT user	We spend more per FT user (17% less library expenditures; <b>44% less FT users</b> )
	FT User	20,011	35,829	31,034		-44.1		
Library Expenditures per User (Faculty + FT and PT Students)	Total Library Expenditures (USD)	\$21,099,530	\$25,451,363	\$942	\$618	-17.1	\$942 is spent for every user	We spend more per user (17% less library expenditures; <b>46% less users</b> )
	User	22,406	41,636	7542		-46.2		
Library Expenditures per PhD Awarded	Total Library Expenditures (USD)	\$21,099,530	\$25,451,363	\$44,893	\$62,076	-17.1	\$44,893 is spent for every PhD awarded	We spend less per PhD awarded (17% less library expenditures; 3% less PhDs awarded)
	PhD Awarded	470	484	544,633		-2.9		
Library Staff per PhD Awarded	Total Staff	146	216	0.24	0.50	-32.4	There are 0.31 library staff for every PhD awarded	There are less library staff for every PhD awarded (32% less library staff; 3% less PhDs awarded)
	PhD Awarded	470	484	0.31		-2.9		
Professional Library Staff per PhD Awarded	Professional Staff	58	81	0.12	0.19	-28.2	There are 0.12 professional library staff for every PhD awarded	There are slightly less professional library staff for every PhD awarded (28% less professional library staff; 3% less PhDs awarded)
	PhD Awarded	470	484			-2.9		

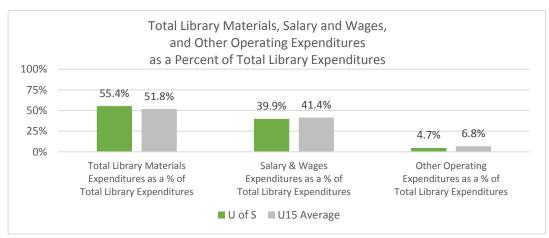
# Results: ARL Percentages and Ratios (2016-17 graphs)

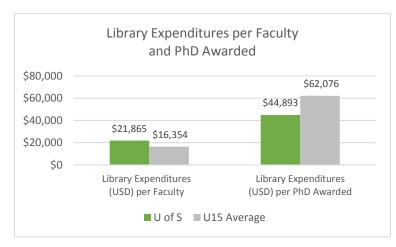
The following graphs illustrate 2016-17 ARL percentages and ratios for the U of S compared to the U15 average.

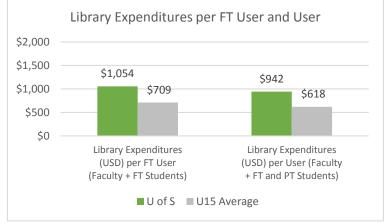


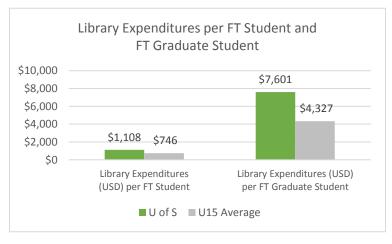


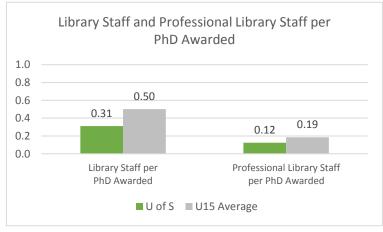






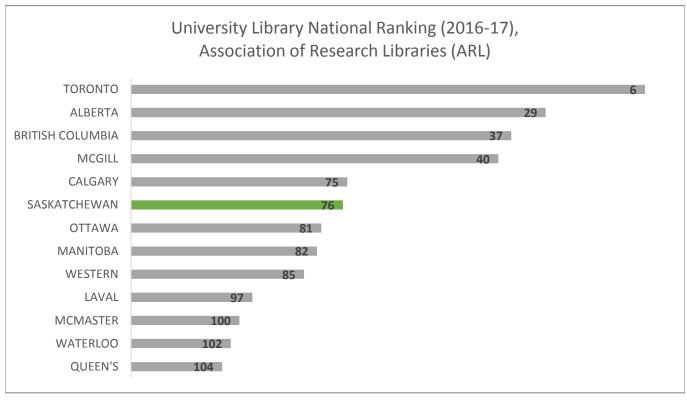


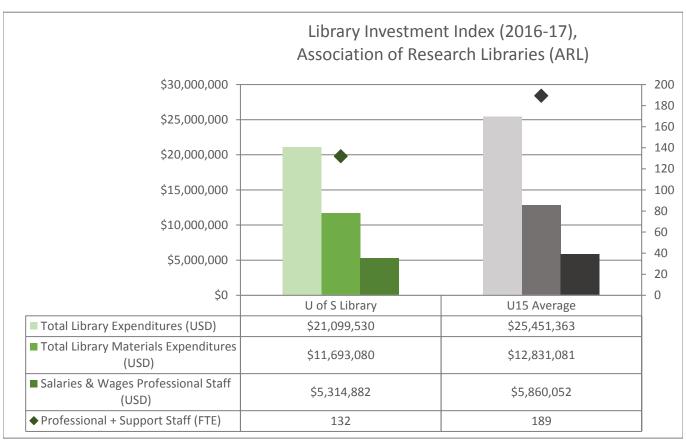




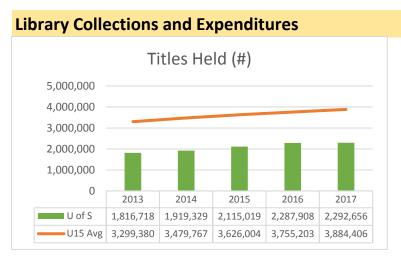
# **Results: ARL Library Investment Index**

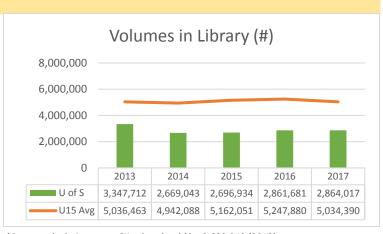
The first graph depicts the ARL Library Investment Index ranking for thirteen U15 institutions in 2016-17 (except Dalhousie and Montreal). The second graph shows the values for each of the four variables used to calculate the Library Investment Index at the U of S compared to the average of thirteen U15 peer institutions in 2016-17.



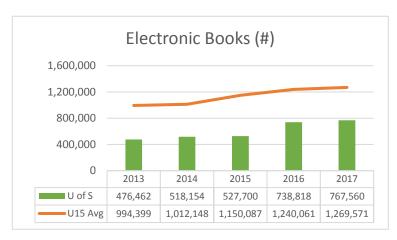


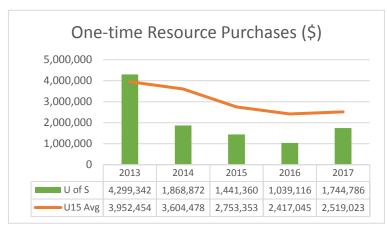
# Appendix A: ARL Indicators – U of S versus U15 average (2012-13 to 2016-17)





<sup>\*</sup>Due to calculation error, SK value should be 2,622,249 (2013)



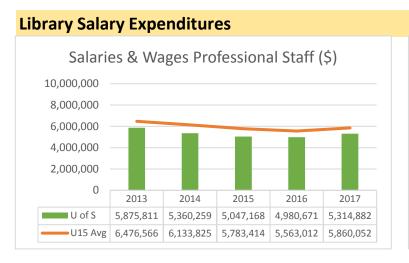


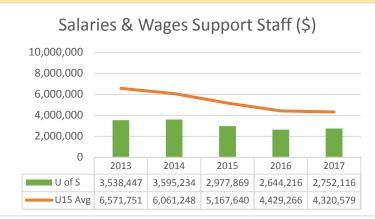


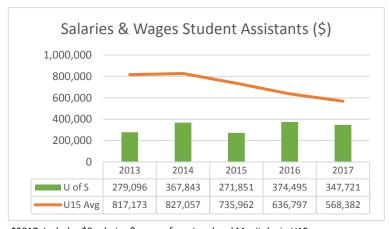


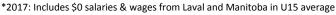
\*2014 and 2015: Includes \$0 collection support from McGill in U15 average





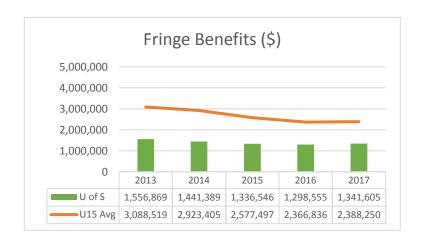






<sup>\*2016:</sup> Includes \$0 salaries & wages from Laval in U15 average

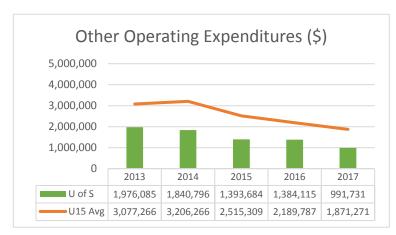
<sup>\*2014:</sup> Laval missing from U15 average



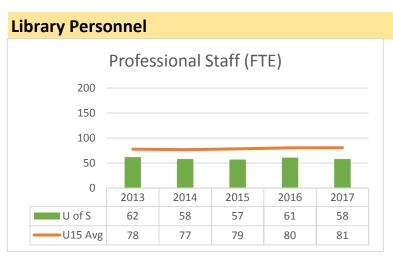


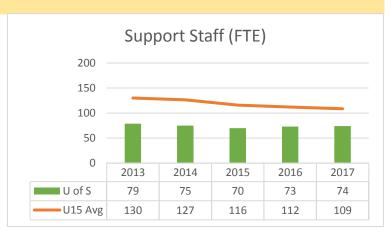
# Overall Library Expenditures Total Materials (\$) 16,000,000 12,000,000 4,000,000 0 2013 2014 2015 2016 2017 U of S 14,211,586 11,708,485 11,509,745 10,660,724 11,693,080 U15 Avg 14,424,985 14,018,695 13,081,782 12,624,578 12,831,081

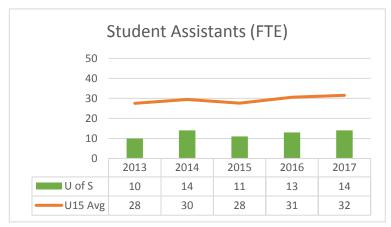


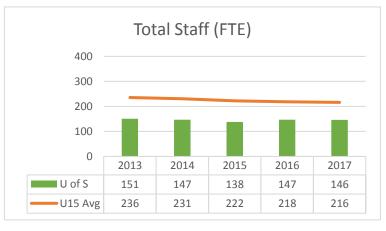










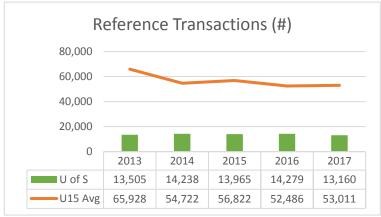


<sup>\*2016</sup> and 2017: Laval and Manitoba missing from U15 average

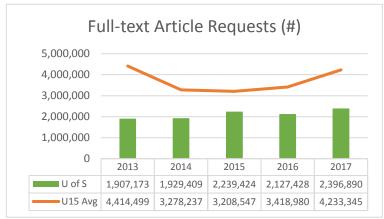
<sup>\*2014:</sup> Laval missing from U15 average

#### Library Use, Facilities, and Services Library Presentations to Groups (#) 1,200 1,000 800 600 400 200 0 2013 2014 2015 2016 2017 U of S 524 582 532 568 558 1,014 U15 Avg 771 754 761 726

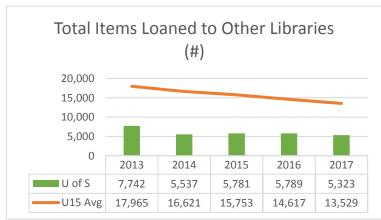
\*2013: Laval and McGill missing from U15 average



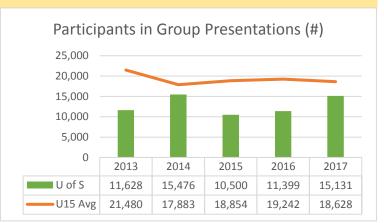
\*2013: Laval missing from U15 average



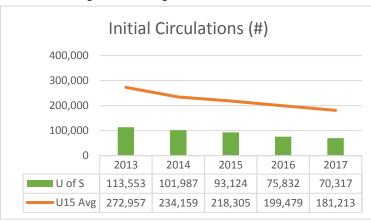
- \*2017: Alberta and Western missing from U15 average
- \*2016: Alberta, McMaster, Toronto, Western missing from U15 average
- \*2015: Alberta, Calgary, Toronto, Western missing from U15 average
- \*2014: Alberta, McGill, Toronto, Western missing from U15 average
- \*2013: Laval, McGill, Western missing from U15 average



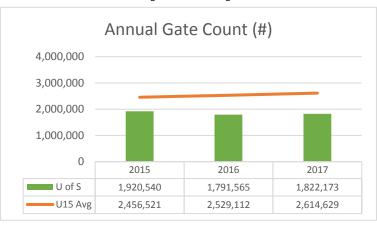
\*2013: Laval missing from U15 average



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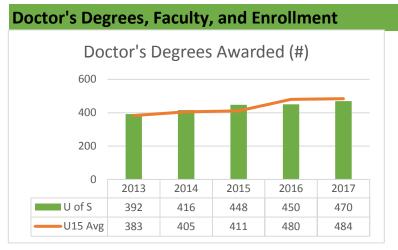
\*2013: Laval and Manitoba missing from U15 average

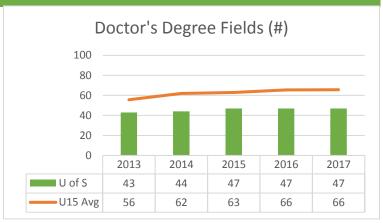


- \*2016: Waterloo missing from U15 average
- \*2015: Queen's missing from U15 average

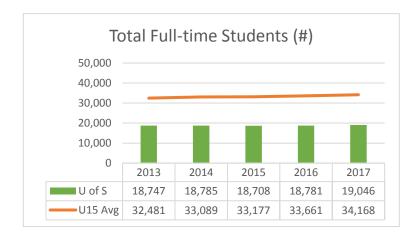


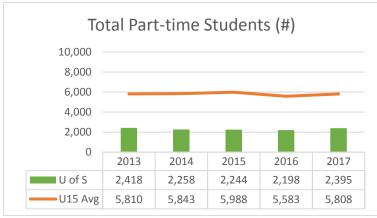
\*2013: Laval missing from U15 average

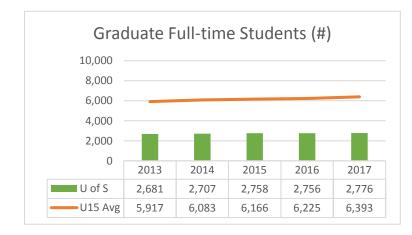


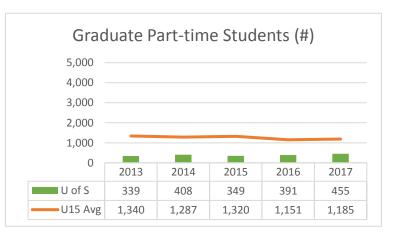


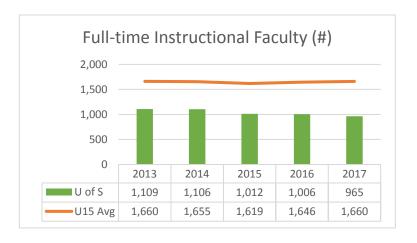
\*All years: Alberta missing from U15 average



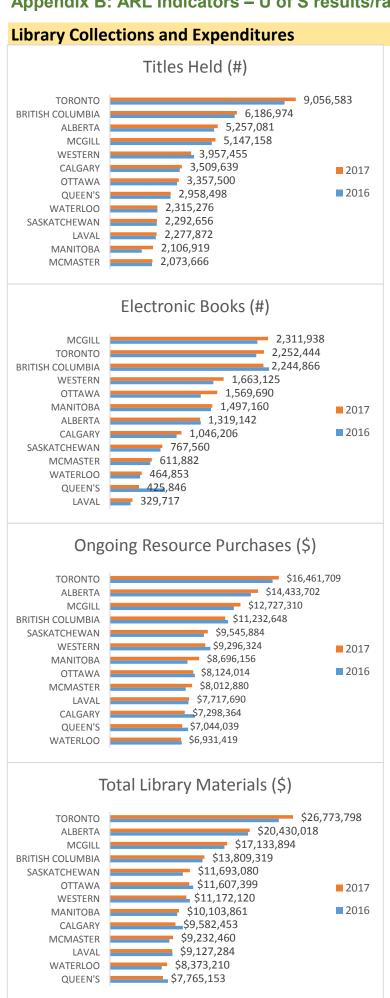


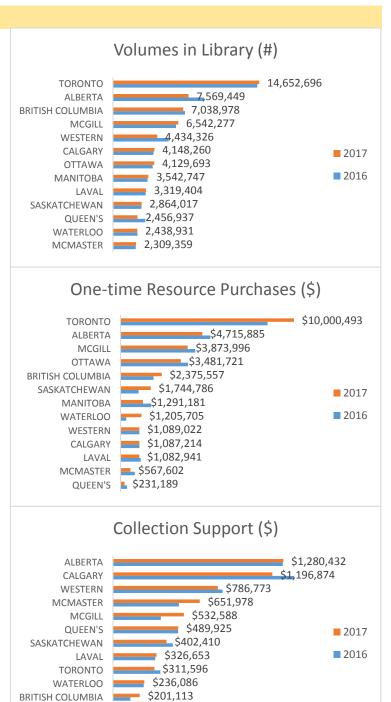






# Appendix B: ARL Indicators – U of S results/ranking among U15 (2016-17 & 2015-16)





\$116,524

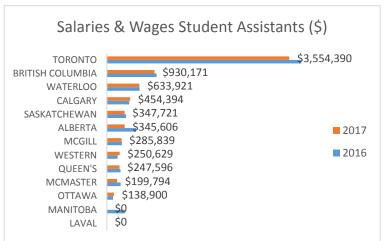
\$1,664

MANITOBA

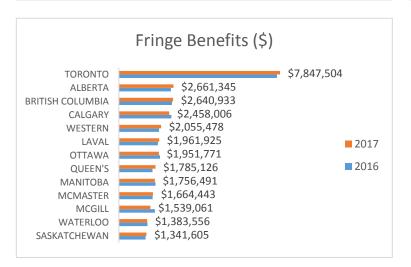
OTTAWA







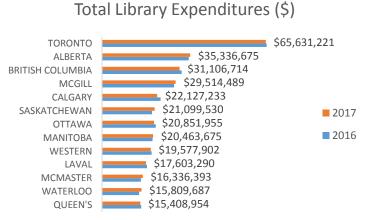




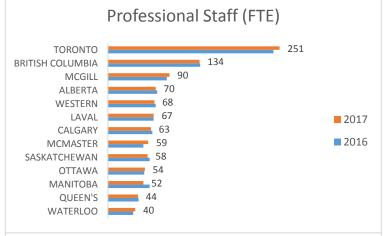
#### **Overall Library Expenditures** Total Library Materials (\$) \$26,773,798 **TORONTO** \$20,430,018 **ALBERTA** MCGILL \$17,133,894 \$13,809,319 **BRITISH COLUMBIA SASKATCHEWAN** \$11,693,080 \$11,607,399 **OTTAWA** 2017 WESTERN \$11,172,120 2016 \$10,103,861 **MANITOBA** \$9,582,453 **CALGARY** \$9,232,460 **MCMASTER** LAVAL \$9,127,284 WATERLOO \$8,373,210 \$7,765,153 QUEEN'S Other Operating Expenditures (\$) \$5,927,782 **TORONTO** \$3,171,250 ALBERTA **BRITISH COLUMBIA** \$3,098,740 \$2,569,316 **MCGILL** \$1,858,174 MANITOBA

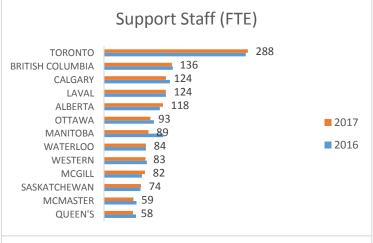


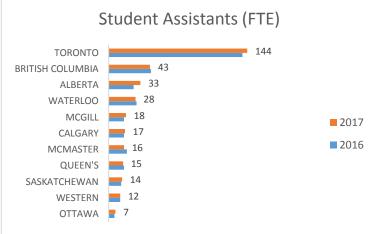


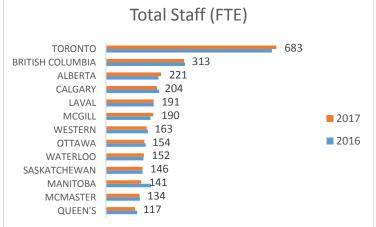


# **Library Personnel**

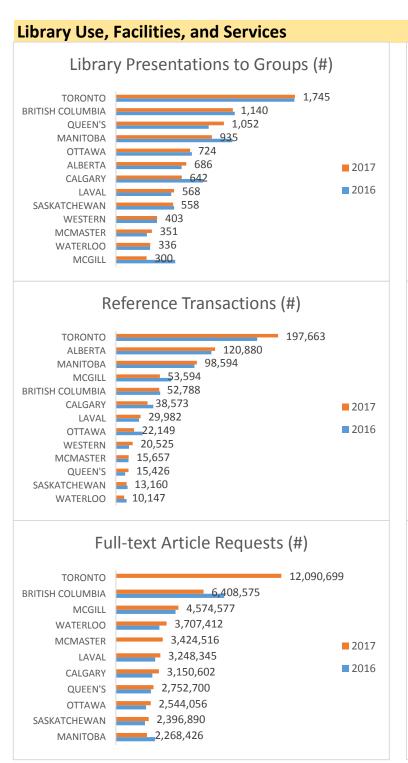


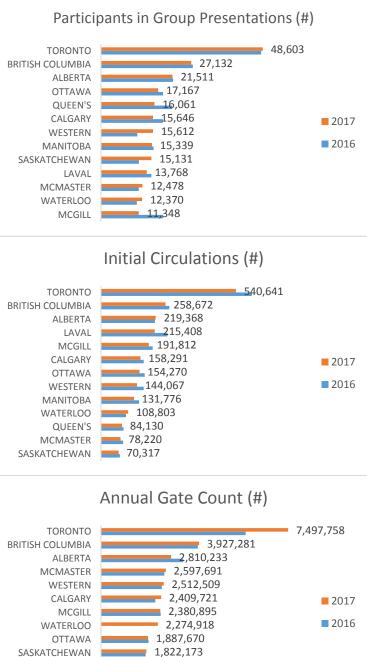


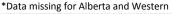


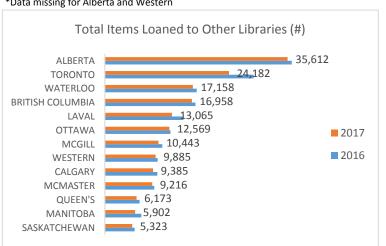


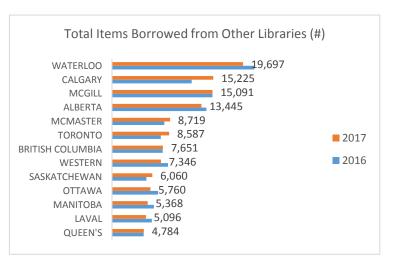
<sup>\*</sup>Data missing for Laval and Manitoba











1,738,631

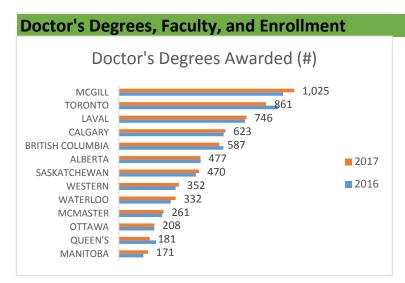
\_\_ 1,480,172

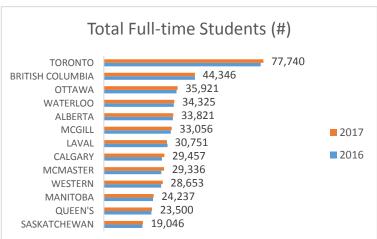
650.521

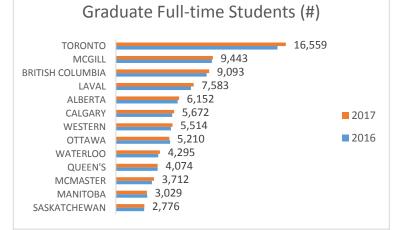
QUEEN'S

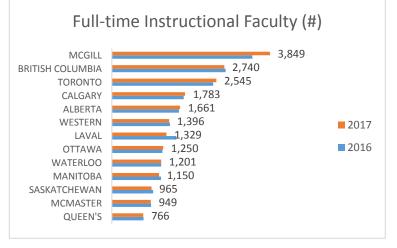
LAVAL

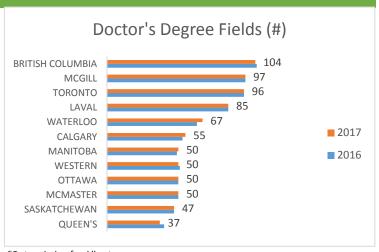
MANITOBA

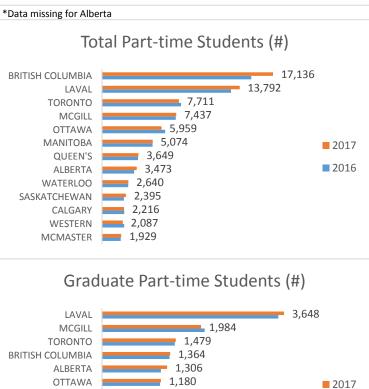












1,170

773

671

455

391

382

**2016** 

WATERLOO

MCMASTER

MANITOBA

SASKATCHEWAN

**OUEEN'S** 

WESTERN

CALGARY